Law Offices of
BOOTH, AHRENS & WERKENTHIN
A Professional Corporation

Michael J. Booth
Fred B. Werkenthin, Jr.
Wil Galloway
Trey Nesloney

Carolyn Ahrens
Of Counsel

Joseph S. Babb
Of Counsel

WR 82315

June 5, 2013

REVIEWED
JUN 05 2013
By

Facsimile Submission: 512-239-3311

Ms. Bridget C. Bohac, Chief Clerk
TCEQ – MC 105
P.O. Box 13087
Austin, Texas 78711-3087

2013 JUN 5 PM 3:02
CHIEF CLERKS OFFICE
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

RE: Request for Contested Case Hearing regarding Lower Colorado River Authority's Water Rights Application No. 5838A (Water Management Plan)

Dear Ms. Bohac:

We understand from recent correspondence that the Executive Director will be conducting an extended review of LCRA's Application No. 5838A (Water Management Plan) rather than referring the matter to the Commissioners for proceedings on the numerous requests for contested case hearing that have been filed. The matter is separate from LCRA's request that an existing emergency order related to the current water management plan be extended.

In order to avoid confusion in the future, this letter addresses the requests for contested case hearing of LCRA's Application No. 5838A and associated comment, already filed on behalf of the Colorado Water Issues Committee (CWIC), Mr. Laurance Armour, Mr. Daniel Berglund, and Mr. Ronald Gertson. The requests for hearing and associated comment were fax-filed with the Chief Clerk on Friday, May 24, 2013, under single correspondence of the same date. However, due to a clerical error in our office, a paragraph beginning on page 4 of the letter had been inadvertently deleted. That paragraph provided additional detail with regard to Mr. Gertson's active involvement in rice farming.

In order to address the clerical error, and in consultation with the Chief Clerk's office, our firm staff subsequently submitted a corrected letter. The May 24, 2013, letter remains in effect. The only substantive difference between it and the subsequent submission is the paragraph mentioned. The reference line of the second submission also identifies it as "amended."

However, the subsequent letter was logged into the Chief Clerk's database as relevant to the matter of the emergency order, which also was designated in the database as an open file by reference to Water Permit No. 5838. Neither CWIC, nor Mr. Armour, Mr. Berglund, or Mr. Gertson, have made an appearance in the matter of the emergency order extension.

With our apologies for any inconvenience, the corrected letter is attached again here. We would appreciate this letter being logged as supplemental information in the database for Water Rights Application No. 5838A (Item Type AMFL11.122, *not* the emergency order extension), where the original letter also appropriately remains on file with the agency.

Very truly yours,

Carolyn Ahrens,
Of Counsel
State Bar No. 00942030

Michael J. Booth
State Bar No. 02648500

Booth, Ahrens & Werkenthin, P.C.
515 Congress Avenue, Ste 1515
Austin, Texas 78701
512.472.3263

Law Offices of
BOOTH, AHRENS & WERKENTHIN
A Professional Corporation

Michael J. Booth
Fred B. Werkenthin, Jr.
Wil Galloway
Trey Nesloney

Carolyn Ahrens
Of Counsel

Joseph S. Babb
Of Counsel

May 24, 2013

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
2013 JUN -5 PM 3:03
CHIEF CLERKS OFFICE

VIA E-Filing
Ms. Bridget C. Bohac, Chief Clerk
TCEQ – MC 105
P.O. Box 13087
Austin, Texas 78711-3087

RE: Request for Contested Case Hearing regarding Lower Colorado River Authority's Proposed Changes to its Water Management Plan (Water Rights Application No. 5838A) -- AMENDED

Dear Ms. Bohac:

By this letter, the Texas Rice Producer's Legislative Group, through its Colorado Water Issues Committee, and several individuals identified below request a contested case hearing regarding Lower Colorado River Authority's Water Rights Application No. 5838A. The application proposes a new water management plan associated with Certificates of Adjudication Nos. 14-5478 and 14-5482, as amended. The Texas Commission on Environmental Quality ("TCEQ") issued notice of the application on April 15, 2013, followed by published notice in affected counties. These requests for contested case hearing are submitted timely, and also include public comment.

A. Requestors' Information:

Texas Rice Producers Legislative Group (association)
c/o Colorado Water Issues Committee
Ronald Gertson, President
2511 San Bernard Dr.
East Bernard, Texas 77435
phone number: (979) 758-4670
fax number:(979) 234-2920
email address: ronaldg59@gmail.com

Mr. Laurance Armour, III (individual capacity)
Pierce Ranch P.O. Box 538
Pierce, Texas 77467
phone number: (979) 532-4250
fax number:(979) 532-4251
email address: Laurance Armour la3a@flash.net

Mr. Daniel Berglund (individual capacity)
588 Crescent Lane
Wharton, Texas 77488
phone number: (979) 541-7506
fax number: (979) 677-3317
email address: berg6@hughes.net

Mr. Ronald Gertson (individual capacity)
2511 San Bernard Dr.
East Bernard, Texas 77435
phone number: (979) 758-4670
fax number:(979) 234-2920
email address: ronaldg59@gmail.com

The Texas Rice Producers Legislative Group ("TRPLG") is a Texas Non-profit Corporation, with its registered office at 4 N. Washington Street, El Campo Street, El Campo, Texas, 77437. The Group was formed 1989 for the purpose of supporting, maintaining and advancing the Texas rice industry, among other purposes. Its by-laws provide that active membership is open to persons engaged in the production of rice.

TRPLG's by-laws also provide for the appointment of special committees. By resolution in 2009, TRPLG charged the Colorado Water Issues Committee ("CWIC") to administer a Water Issues Fund for facilitating the practical, scientific and legal response to administrative and other actions that threaten the availability of rice irrigation water from the Colorado River. By resolution dated May 13, 2013, TRPLG directed CWIC to submit this request for hearing on TRPLG's behalf and authorized CWIC to act as its representative in matters related to this request.

TRPLG members are interest holders in agricultural lands and farming operations that put surface water of the lower Colorado River basin to beneficial use for growing rice as a food crop. These members stand on the shoulders of individuals, families, and businesses who developed farmlands and contributed to the construction of extensive irrigation canals dating back to the 1880's; lent support for organizing the Lower Colorado River Authority; made way for the construction of the Highland Lakes, including through a 1937 contract to address respective rights to divert and store water; and perfected, through their application of water to beneficial purposes, water rights that LCRA and its system customers use today. TRPLG members benefit directly from provisions in the adjudicated findings associated with LCRA's water rights that require

stored water in excess of actual firm demands to be made available for downstream irrigation according to a TCEQ-approved water management plan. TRPLG members depend for their livelihood on the continued supply of stored surface water, the availability of which will be subject to the new water management plan proposed by LCRA in Application No. 5838A.

Numerous of TRPLG's members have standing to request a contested case hearing in their own right; however, it would be impractical and financially prohibitive for all of them to do so and neither the claims asserted in this matter nor the relief requested requires the independent participation of so many. It is not anticipated that the matter at issue will require fact-intensive individual inquiry, but rather that the matter will be resolved based on hydrologic analyses, widely applicable terms and policies for water availability, proper interpretation and implementation of the adjudication of LCRA water rights, LCRA's duties as the owner of downstream irrigation canals, and legal principles related to beneficial use, conservation, and the water rights and demands involved, among other things. In its representational capacity, TRPLG seeks the same results that its members seek, including revisions to the proposed water management plan that would preserve access to surface water for irrigated agriculture on reasonable terms and lessen the severity and frequency of interruptions in water supply. The benefits of such revisions will inure to TRPLG's members who would be injured-in-fact by the proposed plan, if that plan were adopted by the TCEQ.

Mr. Laurance Armour, III, Mr. Daniel Berglund, and Mr. Ronald Gertson are members of TRPLG. Mr. Berglund is the Chairman of TRPLG. Mr. Berglund and Mr. Gertson also serve as officers of CWIC. In addition to supporting TRPLG's request for contested case hearing as an association of which they are members, Mr. Laurance Armour, III, Mr. Daniel Berglund, and Mr. Ronald Gertson request a contested case hearing in their individual capacities. They are referred to together as the "Individual Requestors."

Each of the Individual Requestors is actively engaged in rice production in the lower Colorado River Basin on lands historically supplied with water diverted to irrigation canals now served by LCRA. Water is diverted to the canals pursuant to historical run-of-the-river rights and contracts, including contracts for the interruptible supply of stored water from the LCRA reservoir system. Canals within LCRA's Lakeside Irrigation Division serve farmland located in Colorado and Wharton Counties, Texas. Canals within LCRA's Gulf Coast Irrigation Division serve farmland located in Wharton and Matagorda Counties, Texas. The Lakeside and Gulf Coast canals are now owned and controlled by LCRA. TRPLG members, including Mr. Armour, also use water delivered by LCRA to the Pierce Ranch canal system in Wharton County. LCRA's proposed water management plan (the activity at issue in the application contested here) sets forth new criteria for the supply of upstream stored water applicable throughout LCRA's irrigation service area, including Pierce Ranch.

Mr. Armour has been actively engaged in rice production in Wharton County, included within the Pierce Ranch Irrigation Division, for more than 30 years. His family

has been similarly engaged for over 100 years. Mr. Armour owns and operates farmland adjoining the Colorado River and also is a partner in BU Growers, Ltd., which produces seed rice and dries and stores grain produced in Matagorda, Wharton and Fort Bend counties. Over the years, Mr. Armour has invested considerable resources in the infrastructure necessary to grow rice, including land leveling, canal maintenance, pump maintenance and equipment investment. He has a contractual right with LCRA for the supply of irrigation water from upstream storage under a surface water right purchase agreement signed in 2001. Mr. Armour has exercised this right in the past, and for example, entered into irrigation-water contracts in years 2002-2011. Mr. Armour has additionally invested in practices to conserve water, including precision land leveling, canal vegetation control, and tail water re-use. During the most recent year that water was available for service to the Pierce Ranch, Mr. Armour irrigated over 5,000 acres of rice. The continued pursuit of Mr. Armour's business depends on the future availability of stored water from LCRA, provided by the terms of LCRA's adjudicated water rights and its water management plan. Mr. Armour fully intends to continue to produce rice as a food crop in the future, if adequate water supply is available.

Mr. Daniel Berglund has been actively engaged in rice production in Matagorda County, relying on LCRA's Gulf Coast Irrigation Division to deliver water to irrigate his rice for more than 23 years. The land he farms has been in rice production, and water has been provided from the Colorado River, for over 100 years. Mr. Berglund leases land adjoining the Gulf Coast Irrigation Division and is a partner in Berglund Farms Joint Venture. Over the years, Mr. Berglund has invested considerable resources in the infrastructure necessary to grow rice including land leveling, permanent levee construction and multiple inlet water delivery systems, all of which has increased his irrigation efficiency. He also has made considerable investments in large and expensive farm equipment that is needed to farm rice. Mr. Berglund has a right to contract with LCRA for the supply of irrigation water from upstream storage because he has a lease to farm land adjacent to the Gulf Coast Irrigation Division canals. Mr. Berglund has exercised this right in the past, and for example entered into such contracts since 1989. During the most recent two years that water contracts were available for service to the Gulf Coast Irrigation Division, 2010-2011, Mr. Berglund planted an average of 735 acres of rice. The continued pursuit of Mr. Berglund's business depends on the future availability of stored water from LCRA, provided by the terms of LCRA's adjudicated water rights and its water management plan. Mr. Berglund fully intends to continue to produce rice as a food crop in the future, if adequate water supply is available.

Mr. Gertson has been actively engaged in rice production in Colorado and Wharton Counties, included within LCRA's Lakeside Irrigation Division, for more than 30 years. His family has been similarly engaged for over 100 years. Mr. Gertson owns an interest in land adjoining the Lakeside canals and is a partner in Gertson Farms Partnership, which partnership contracts for water with LCRA. Over the years Mr. Gertson has invested considerable resources in the infrastructure necessary to grow rice, including interest in an aerial application business, a rice drying and storage operation, an

equipment maintenance facility and specialized rice farming equipment. Mr. Gertson and Gertson Farms Partnership have a right to contract with LCRA for the supply of irrigation water from upstream storage because his land is adjacent to and serviced by LCRA's canals. Gertson Farms Partnership has exercised this right on behalf of Mr. Gertson in the past, and for example entered into such contracts in years 1983 through 2011. Mr. Gertson has additionally invested in practices to conserve water, including the installation of multiple inlets, permanent levees, permanent water control structures and precision graded ground. During the most recent year that water contracts were available (2011) Gertson Farms Partnership irrigated 1727.5 acres of rice using water purchased from LCRA. The continued pursuit of Mr. Gertson's business depends on the future availability of LCRA stored water, provided by the terms of LCRA's adjudicated water rights and its water management plan. Mr. Gertson fully intends to continue to produce rice as a food crop in the future, if adequate water supply is available.

Each of the Individual Requestors is an affected person with personal justiciable interests related to the legal rights, privileges and economic interests at issue in the contested application. Their interests are not common to the general public. TRPLG and the Individual Requestors all have standing to make this request as contemplated in TEX. WATER CODE ANN. § 5.115 (Vernon 2000) and 30 TEX. ADMIN. CODE Chapter 55.

B. Applicant Information:

Lower Colorado River Authority
3700 Lake Austin Blvd.
Austin, Texas 78703

Applicant proposes a water management plan that, among other things, includes new criteria for determining the availability of stored surface water to supply downstream needs for irrigation water. Additional information is included in the notice of Application No. 5838A that was issued by the TCEQ on April 15, 2013.

C. Effect of Proposed Activity:

The proposed water management plan implements LCRA's adjudicated water rights in a way that lessens the availability of stored water to meet the needs of irrigators and increases the severity and frequency of interruption in supplies historically available for use downstream. The complexity of issues associated with the LCRA application will require further research and development, and TRPLG and the Individual Requestors reserve the right to raise additional issues during proceedings on the application. Preliminarily, and among other things, the Individual Requestors and other TRPLG members would be harmed by the following features of the proposed water management plan in ways not common to the general public:

- an unprecedented annual "cap" on deliveries of stored water to the Gulf Coast and Lakeside Irrigation Divisions and Pierce Ranch would limit rice production even when upstream storage reservoirs are full or nearly full;

- total curtailment of irrigation supply is made more likely by increasing the targeted minimum storage level almost three-fold, as compared to the 2010 water management plan;

- the severity and frequency of partial curtailments of supply are increased by steeper curtailment curves;

- the ability to produce a second, or ratoon, harvest is newly limited by the unprecedented parceling and capping of available water between main and ratoon crop irrigation, falling short of assuring the full utilization of available interruptible water supplies; and

- the proposed plan overstates reserves, and fails to maximize beneficial use of water in general and to incorporate an appropriate interpretation of firm demand during drought conditions.

A related order by the Commissioners of the TCEQ's predecessor agency in 1991 underscores a significant inquiry at issue in the proposed application. The order explains that although the Commissioners had been given insufficient information on which to determine whether a trigger level for curtailing interruptible supply was set appropriately, it was unlikely that the trigger would be reached. *Based on both of those circumstances combined*, the Commissioners affirmatively found, "*Accordingly*, it is unnecessary for the Commission to determine *at this time* whether, or to what extent, such trigger level provides more protection to firm supplies than is necessary."[1] Such a surplus of water no longer exists, and curtailment has become a recent reality under orders to temporarily suspend the current water management plan. TCEQ has a duty under the terms of LCRA's adjudicated water rights, to exercise jurisdiction to make available as interruptible water that amount of water which can be released while also meeting the water demands of firm water customers. The Commission must determine the proper allocation in proceedings on this application.

Consecutive emergency curtailments of irrigation supply have demonstrated that the detrimental impacts of water allocation decisions affecting the lower Colorado River basin are actual and imminent, not conjectural or hypothetical. The first of these total curtailments in irrigation supply occurred in 2012. The losses downstream from that interruption included a reduction in rice production of nearly 55,000 acres. In addition to the direct impact on farmers and food supplies, it is becoming increasingly clear that the agricultural infrastructure and rural communities that are integral parts of the lower Colorado River basin's economies and rice farming heritage cannot withstand more frequent repetition of total curtailment.

---

[1] This language is quoted from the 1991 Order Approving LCRA's Drought Management Plan, Finding of Fact No. 8 (emphasis added) (required by the 1989 Water Management Plan Order and integrated by the 1999 Water Management Plan Order).

[2] See, for example, LCRA's Supplemental Brief and Attachments in Support of Application For

D. Conditions in Proposed Permit which may Satisfy Requestors' Concerns:

TRPLG and the Individual Requestors are aware that others currently argue for changes in the proposed water management plan that would amplify the impact on downstream agricultural production substantially. TRPLG and the Individual Requestors do not propose by this request for contested case hearing that firm water customers of the LCRA should be put at unreasonable risk for diminished supply. Nor are requestors insensitive to the impacts of diminished lake levels on the communities that have come to surround and enjoy the indirect benefits of constructed water supply and flood-control reservoirs. However, the importance of maintaining agricultural resources in this state generally, and the significance specifically of downstream rice production, must be recognized.

In addition to changes in the water management plan that would specifically address the effects of the proposed water management plan discussed above, TRPLG and the Individual Requestors believe that different criteria can be identified to protect firm supply at a legal and appropriate level and also lessen the negative impact on downstream food production. For example, there is significant dispute about appropriate storage levels for total curtailment. Further analysis may indicate that the currently proposed level could be increased by some amount without critical impact to downstream irrigation if other measures were taken to better support irrigation supplies and the sustainability of downstream agricultural resources. Also, as LCRA pursues additional downstream infrastructure consistent with its duties as owner and operator of historic irrigation canals and associated water rights, identification of supply criteria to better integrate system resources would be appropriate.

Provisions of the proposed plan that impose an unprecedented "cap" on irrigation water, even when upstream storage is full or nearly full, are contrary to historic principles of beneficial use and supply without discrimination and should be struck. The cap also is unnecessary to serve firm customers who are protected by provisions related to lake levels and curtailment. The cap provisions and others were influenced in the stakeholder process by non-customer interests focused on aesthetic and recreational lake levels. Long-held principles of beneficial use of water will be sacrificed if the yields and usefulness of the state's many water supply reservoirs are diminished by maintaining lake levels to accommodate the inadequate diversion infrastructure of some users,[2] or by choices to support indirect recreational economic activity and aesthetic values. Any finding with that effect will have staggering statewide implications and must be addressed directly.

---

[2] See, for example, LCRA's Supplemental Brief and Attachments in Support of Application For Emergency Authorization Related to Water Management Plan, submitted to the TCEQ n January 11, 2013 (citing raw water intake elevations, among other things, as a basis for curtailing water supply for downstream irrigation).

E. Conclusion:

TRPLG, and Mr. Laurance Armour, III, Mr. Ronald Gertson, and Mr. Daniel Berglund, as members of TRPLG and also in their individual capacities, make this request for contested case hearing in order to pursue their standing and rights under law and the TCEQ's rules. Without waiver of this request for hearing, but in addition to it, TRPLG and the Individual Requestors again ask the Commissioners to initiate resolution procedures to further the possibility of adequate technical oversight by the Executive Director and a negotiated settlement of the issues in dispute between the parties. TRPLG and the Individual Requestors respectfully urge that these requests be granted.

Very truly yours,

Carolyn Ahrens,
Of Counsel
State Bar No. 00942030

Michael J. Booth
State Bar No. 02648500

Booth, Ahrens & Werkenthin, P.C.
515 Congress Avenue, Ste 1515
Austin, Texas 78701
512.472.3263

Cc via electronic transmission:
Mr. Laurance Armour, III
Mr. Daniel Berglund
Mr. Ronald Gertson
Mr. Haskell Simon
Mr. Zak Covar
Ms. Stephanie Bergeron Perdue
Mr. Blas Coy
Mr. Joe Trungale
Ms. Lyn Clancy (for LCRA)

Law Offices of
BOOTH, AHRENS & WERKENTHIN
A Professional Corporation

MICHAEL J. BOOTH
FRED B. WERKENTHIN, JR.
WIL GALLOWAY
TREY NESLONEY

CAROLYN AHRENS
OF COUNSEL

JOSEPH S. BABB
OF COUNSEL

FAX COVER SHEET

TO: MS. BRIDGET C. BOHAC, CHIEF CLERK

FAX: 512-239-3311

FROM: CAROLYN AHRENS

RE: REQUEST FOR CONTESTED CASE HEARING REGARDING LOWER COLORADO RIVER AUTHORITY'S WATER RIGHTS APPLICATION NO. 5838A (WATER MANAGEMENT PLAN)

DATE: JUNE 5, 2013

PAGES: 11, Including Fax Cover Sheet

MESSAGE:

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
2013 JUN -5 PM 3:02
CHIEF CLERKS OFFICE

CONFIDENTIALITY NOTICE

The documents accompanying this telecopy transmission contain confidential information belonging to the sender, which is legally privileged. The information is intended only for the use of the individual(s) or entity(ies) named above. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution or the taking of any action in reliance on the contents of this telecopied information is strictly prohibited. If you have received this telecopy in error, please immediately notify us by telephone to arrange for return of the original documents to us.

515 CONGRESS AVENUE | SUITE 1515 | AUSTIN, TEXAS 78701
OFFICE (512) 472.3263 | FAX (512) 473.2609 | WWW.BAW.COM

Law Offices of
BOOTH, AHRENS & WERKENTHIN
A Professional Corporation

Michael J. Booth
Fred B. Werkenthin, Jr.
Wil Galloway
Trey Nesloney

Carolyn Ahrens
Of Counsel

Joseph S. Babb
Of Counsel

2013 MAY 28 AM 10: 57
CHIEF CLERKS OFFICE
COMMISSION ON ENVIRONMENTAL QUALITY

May 24, 2013

REVIEWED
MAY 29 2013
By

WR 82315

Facsimile Submission: 512-239-3311

Ms. Bridget C. Bohac, Chief Clerk
TCEQ – MC 105
P.O. Box 13087
Austin, Texas 78711-3087

RE: Request for Contested Case Hearing regarding Lower Colorado River Authority's Proposed Changes to its Water Management Plan (Water Rights Application No. 5838A)

Dear Ms. Bohac:

By this letter, the Texas Rice Producer's Legislative Group, through its Colorado Water Issues Committee, and several individuals identified below request a contested case hearing regarding Lower Colorado River Authority's Water Rights Application No. 5838A. The application proposes a new water management plan associated with Certificates of Adjudication Nos. 14-5478 and 14-5482, as amended. The Texas Commission on Environmental Quality ("TCEQ") issued notice of the application on April 15, 2013, followed by published notice in affected counties. These requests for contested case hearing are submitted timely, and also include public comment.

A. Requestors' Information:

Texas Rice Producers Legislative Group (association)
c/o Colorado Water Issues Committee
Ronald Gertson, President
2511 San Bernard Dr.
East Bernard, Texas 77435
phone number: (979) 758-4670
fax number:(979) 234-2920
email address: ronaldg59@gmail.com

Mr. Laurance Armour, III (individual capacity)
Pierce Ranch P.O. Box 538
Pierce, Texas 77467
phone number: (979) 532-4250
fax number:(979) 532-4251
email address: Laurance Armour la3a@flash.net

Mr. Daniel Berglund (individual capacity)
588 Crescent Lane
Wharton, Texas 77488
phone number: (979) 541-7506
fax number: (979) 677-3317
email address: berg6@hughes.net

Mr. Ronald Gertson (individual capacity)
2511 San Bernard Dr.
East Bernard, Texas 77435
phone number: (979) 758-4670
fax number:(979) 234-2920
email address: ronaldg59@gmail.com

The Texas Rice Producers Legislative Group ("TRPLG") is a Texas Non-profit Corporation, with its registered office at 4 N. Washington Street, El Campo Street, El Campo, Texas, 77437. The Group was formed 1989 for the purpose of supporting, maintaining and advancing the Texas rice industry, among other purposes. Its by-laws provide that active membership is open to persons engaged in the production of rice.

TRPLG's by-laws also provide for the appointment of special committees. By resolution in 2009, TRPLG charged the Colorado Water Issues Committee ("CWIC") to administer a Water Issues Fund for facilitating the practical, scientific and legal response to administrative and other actions that threaten the availability of rice irrigation water from the Colorado River. By resolution dated May 13, 2013, TRPLG directed CWIC to submit this request for hearing on TRPLG's behalf and authorized CWIC to act as its representative in matters related to this request.

TRPLG members are interest holders in agricultural lands and farming operations that put surface water of the lower Colorado River basin to beneficial use for growing rice as a food crop. These members stand on the shoulders of individuals, families, and businesses who developed farmlands and contributed to the construction of extensive irrigation canals dating back to the 1880's; lent support for organizing the Lower Colorado River Authority; made way for the construction of the Highland Lakes, including through a 1937 contract to address respective rights to divert and store water; and perfected, through their application of water to beneficial purposes, water rights that LCRA and its system customers use today. TRPLG members benefit directly from

provisions in the adjudicated findings associated with LCRA's water rights that require stored water in excess of actual firm demands to be made available for downstream irrigation according to a TCEQ-approved water management plan. TRPLG members depend for their livelihood on the continued supply of stored surface water, the availability of which will be subject to the new water management plan proposed by LCRA in Application No. 5838A.

Numerous of TRPLG's members have standing to request a contested case hearing in their own right; however, it would be impractical and financially prohibitive for all of them to do so and neither the claims asserted in this matter nor the relief requested requires the independent participation of so many. It is not anticipated that the matter at issue will require fact-intensive individual inquiry, but rather that the matter will be resolved based on hydrologic analyses, widely applicable terms and policies for water availability, proper interpretation and implementation of the adjudication of LCRA water rights, LCRA's duties as the owner of downstream irrigation canals, and legal principles related to beneficial use, conservation, and the water rights and demands involved, among other things. In its representational capacity, TRPLG seeks the same results that its members seek, including revisions to the proposed water management plan that would preserve access to surface water for irrigated agriculture on reasonable terms and lessen the severity and frequency of interruptions in water supply. The benefits of such revisions will inure to TRPLG's members who would be injured-in-fact by the proposed plan, if that plan were adopted by the TCEQ.

Mr. Laurance Armour, III, Mr. Daniel Berglund, and Mr. Ronald Gertson are members of TRPLG. Mr. Berglund is the Chairman of TRPLG. Mr. Berglund and Mr. Gertson also serve as officers of CWIC. In addition to supporting TRPLG's request for contested case hearing as an association of which they are members, Mr. Laurance Armour, III, Mr. Daniel Berglund, and Mr. Ronald Gertson request a contested case hearing in their individual capacities. They are referred to together as the "Individual Requestors."

Each of the Individual Requestors is actively engaged in rice production in the lower Colorado River Basin on lands historically supplied with water diverted to irrigation canals now served by LCRA. Water is diverted to the canals pursuant to historical run-of-the-river rights and contracts, including contracts for the interruptible supply of stored water from the LCRA reservoir system. Canals within LCRA's Lakeside Irrigation Division serve farmland located in Colorado and Wharton Counties, Texas. Canals within LCRA's Gulf Coast Irrigation Division serve farmland located in Wharton and Matagorda Counties, Texas. The Lakeside and Gulf Coast canals are now owned and controlled by LCRA. TRPLG members, including Mr. Armour, also use water delivered by LCRA to the Pierce Ranch canal system in Wharton County. LCRA's proposed water management plan (the activity at issue in the application contested here) sets forth new criteria for the supply of upstream stored water applicable throughout LCRA's irrigation service area, including Pierce Ranch.

Mr. Armour has been actively engaged in rice production in Wharton County, included within the Pierce Ranch Irrigation Division, for more than 30 years. His family has been similarly engaged for over 100 years. Mr. Armour owns and operates farmland adjoining the Colorado River and also is a partner in BU Growers, Ltd., which produces seed rice and dries and stores grain produced in Matagorda, Wharton and Fort Bend counties. Over the years, Mr. Armour has invested considerable resources in the infrastructure necessary to grow rice, including land leveling, canal maintenance, pump maintenance and equipment investment. He has a contractual right with LCRA for the supply of irrigation water from upstream storage under a surface water right purchase agreement signed in 2001. Mr. Armour has exercised this right in the past, and for example, entered into irrigation-water contracts in years 2002-2011. Mr. Armour has additionally invested in practices to conserve water, including precision land leveling, canal vegetation control, and tail water re-use. During the most recent year that water was available for service to the Pierce Ranch, Mr. Armour irrigated over 5,000 acres of rice. The continued pursuit of Mr. Armour's business depends on the future availability of stored water from LCRA, provided by the terms of LCRA's adjudicated water rights and its water management plan. Mr. Armour fully intends to continue to produce rice as a food crop in the future, if adequate water supply is available.

Mr. Daniel Berglund has been actively engaged in rice production in Matagorda County, relying on LCRA's Gulf Coast Irrigation Division to deliver water to irrigate his rice for more than 23 years. The land he farms has been in rice production, and water has been provided from the Colorado River, for over 100 years. Mr. Berglund leases land adjoining the Gulf Coast Irrigation Division and is a partner in Berglund Farms Joint Venture. Over the years, Mr. Berglund has invested considerable resources in the infrastructure necessary to grow rice including land leveling, permanent levee construction and multiple inlet water delivery systems, all of which has increased his irrigation efficiency. He also has made considerable investments in large and expensive farm equipment that is needed to farm rice. Mr. Berglund has a right to contract with LCRA for the supply of irrigation water from upstream storage because he has a lease to farm land adjacent to the Gulf Coast Irrigation Division canals. Mr. Berglund has exercised this right in the past, and for example entered into such contracts since 1989. During the most recent two years that water contracts were available for service to the Gulf Coast Irrigation Division, 2010-2011, Mr. Berglund planted an average of 735 acres of rice. The continued pursuit of Mr. Berglund's business depends on the future availability of stored water from LCRA, provided by the terms of LCRA's adjudicated water rights and its water management plan. Mr. Berglund fully intends to continue to produce rice as a food crop in the future, if adequate water supply is available.

Each of the Individual Requestors is an affected person with personal justiciable interests related to the legal rights, privileges and economic interests at issue in the contested application. Their interests are not common to the general public. TRPLG and the Individual Requestors all have standing to make this request as contemplated in TEX. WATER CODE ANN. § 5.115 (Vernon 2000) and 30 TEX. ADMIN. CODE Chapter 55.

B. Applicant Information:

Lower Colorado River Authority
3700 Lake Austin Blvd.
Austin, Texas 78703

Applicant proposes a water management plan that, among other things, includes new criteria for determining the availability of stored surface water to supply downstream needs for irrigation water. Additional information is included in the notice of Application No. 5838A that was issued by the TCEQ on April 15, 2013.

C. Effect of Proposed Activity:

The proposed water management plan implements LCRA's adjudicated water rights in a way that lessens the availability of stored water to meet the needs of irrigators and increases the severity and frequency of interruption in supplies historically available for use downstream. The complexity of issues associated with the LCRA application will require further research and development, and TRPLG and the Individual Requestors reserve the right to raise additional issues during proceedings on the application. Preliminarily, and among other things, the Individual Requestors and other TRPLG members would be harmed by the following features of the proposed water management plan in ways not common to the general public:

- an unprecedented annual "cap" on deliveries of stored water to the Gulf Coast and Lakeside Irrigation Divisions and Pierce Ranch would limit rice production even when upstream storage reservoirs are full or nearly full;

- total curtailment of irrigation supply is made more likely by increasing the targeted minimum storage level almost three-fold, as compared to the 2010 water management plan;

- the severity and frequency of partial curtailments of supply are increased by steeper curtailment curves;

- the ability to produce a second, or ratoon, harvest is newly limited by the unprecedented parceling and capping of available water between main and ratoon crop irrigation, falling short of assuring the full utilization of available interruptible water supplies; and

- the proposed plan overstates reserves, and fails to maximize beneficial use of water in general and to incorporate an appropriate interpretation of firm demand during drought conditions.

A related order by the Commissioners of the TCEQ's predecessor agency in 1991 underscores a significant inquiry at issue in the proposed application. The order explains that although the Commissioners had been given insufficient information on which to

determine whether a trigger level for curtailing interruptible supply was set appropriately, it was unlikely that the trigger would be reached. *Based on both of those circumstances combined*, the Commissioners affirmatively found, "*Accordingly*, it is unnecessary for the Commission to determine *at this time* whether, or to what extent, such trigger level provides more protection to firm supplies than is necessary."[1] Such a surplus of water no longer exists, and curtailment has become a recent reality under orders to temporarily suspend the current water management plan. TCEQ has a duty under the terms of LCRA's adjudicated water rights, to exercise jurisdiction to make available as interruptible water that amount of water which can be released while also meeting the water demands of firm water customers. The Commission must determine the proper allocation in proceedings on this application.

Consecutive emergency curtailments of irrigation supply have demonstrated that the detrimental impacts of water allocation decisions affecting the lower Colorado River basin are actual and imminent, not conjectural or hypothetical. The first of these total curtailments in irrigation supply occurred in 2012. The losses downstream from that interruption included a reduction in rice production of nearly 55,000 acres. In addition to the direct impact on farmers and food supplies, it is becoming increasingly clear that the agricultural infrastructure and rural communities that are integral parts of the lower Colorado River basin's economies and rice farming heritage cannot withstand more frequent repetition of total curtailment.

D. <u>Conditions in Proposed Permit which may Satisfy Requestors' Concerns:</u>

TRPLG and the Individual Requestors are aware that others currently argue for changes in the proposed water management plan that would amplify the impact on downstream agricultural production substantially. TRPLG and the Individual Requestors do not propose by this request for contested case hearing that firm water customers of the LCRA should be put at unreasonable risk for diminished supply. Nor are requestors insensitive to the impacts of diminished lake levels on the communities that have come to surround and enjoy the indirect benefits of constructed water supply and flood-control reservoirs. However, the importance of maintaining agricultural resources in this state generally, and the significance specifically of downstream rice production, must be recognized.

In addition to changes in the water management plan that would specifically address the effects of the proposed water management plan discussed above, TRPLG and the Individual Requestors believe that different criteria can be identified to protect firm supply at a legal and appropriate level and also lessen the negative impact on downstream food production. For example, there is significant dispute about appropriate storage levels for total curtailment. Further analysis may indicate that the currently proposed level could be increased by some amount without critical impact to downstream irrigation

[1] This language is quoted from the 1991 Order Approving LCRA's Drought Management Plan, Finding of Fact No. 8 (emphasis added) (required by the 1989 Water Management Plan Order and integrated by the 1999 Water Management Plan Order).

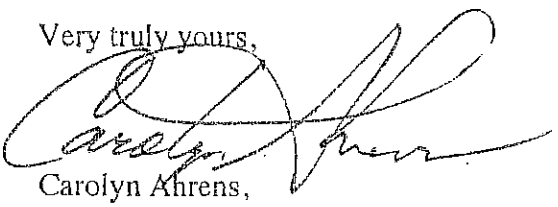
if other measures were taken to better support irrigation supplies and the sustainability of downstream agricultural resources. Also, as LCRA pursues additional downstream infrastructure consistent with its duties as owner and operator of historic irrigation canals and associated water rights, identification of supply criteria to better integrate system resources would be appropriate.

Provisions of the proposed plan that impose an unprecedented "cap" on irrigation water, even when upstream storage is full or nearly full, are contrary to historic principles of beneficial use and supply without discrimination and should be struck. The cap also is unnecessary to serve firm customers who are protected by provisions related to lake levels and curtailment. The cap provisions and others were influenced in the stakeholder process by non-customer interests focused on aesthetic and recreational lake levels. Long-held principles of beneficial use of water will be sacrificed if the yields and usefulness of the state's many water supply reservoirs are diminished by maintaining lake levels to accommodate the inadequate diversion infrastructure of some users,[2] or by choices to support indirect recreational economic activity and aesthetic values. Any finding with that effect will have staggering statewide implications and must be addressed directly.

E. Conclusion:

TRPLG, and Mr. Laurance Armour, III, Mr. Ronald Gertson, and Mr. Daniel Berglund, as members of TRPLG and also in their individual capacities, make this request for contested case hearing in order to pursue their standing and rights under law and the TCEQ's rules. Without waiver of this request for hearing, but in addition to it, TRPLG and the Individual Requestors again ask the Commissioners to initiate resolution procedures to further the possibility of adequate technical oversight by the Executive Director and a negotiated settlement of the issues in dispute between the parties. TRPLG and the Individual Requestors respectfully urge that these requests be granted.

Very truly yours,



Carolyn Ahrens,
Of Counsel
State Bar No. 00942030

Michael J. Booth
State Bar No. 02648500

---

[2] See, for example, LCRA's Supplemental Brief and Attachments in Support of Application For Emergency Authorization Related to Water Management Plan, submitted to the TCEQ n January 11, 2013 (citing raw water intake elevations, among other things, as a basis for curtailing water supply for downstream irrigation).

Booth, Ahrens & Werkenthin, P.C.
515 Congress Avenue, Ste 1515
Austin, Texas 78701
512.472.3263

Cc via electronic transmission:
Mr. Laurance Armour, III
Mr. Daniel Berglund
Mr. Ronald Gertson
Mr. Haskell Simon
Mr. Zak Covar
Ms. Stephanie Bergeron Perdue
Mr. Blas Coy
Mr. Joe Trungale
Ms. Lyn Clancy (for LCRA)

UNITED STATES POSTAGE
PITNEY BOWES
02 1P $ 001.72
0001710511 MAY 24 201
MAILED FROM ZIP CODE 7870

RECEIVED
MAY 28 2013
TCEQ/HC CENTER

LAW OFFICES OF
BOOTH, AHRENS & WERKENTHIN, P.C.
A PROFESSIONAL CORPORATION
515 CONGRESS AVENUE, SUITE 1515
AUSTIN, TEXAS 78701-3503

TO:

Ms. Bridget C. Bohac, Chief Clerk
TCEQ – MC 105
P.O. Box 13087
Austin, Texas 78711-3087

Transmission Report

Date/Time 05-24-2013 03:40:41 p.m.
Local ID 1 512-473-2609

Transmit Header Text
Local Name 1 BAW

WR 82313

This document : Confirmed
(reduced sample and details below)
Document size : 8.5"x11"

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
2013 MAY 28 AM 10: 56
CHIEF CLERKS OFFICE

Law Offices of
BOOTH, AHRENS & WERKENTHIN
A Professional Corporation

MICHAEL J. BOOTH
FRED B. WERKENTHIN, JR.
WIL GALLOWAY
TREY NEBLONEY

CAROLYN AHRENS
OF COUNSEL

JOSEPH S. BABB
OF COUNSEL

FAX COVER SHEET

TO: MS. BRIDGET C. BOHAC, CHIEF CLERK

FAX: 512-239-3311

FROM: Carolyn Ahrens

RE: REQUEST FOR CONTESTED CASE HEARING; WRPERM 5838

DATE: MAY 24, 2013

PAGES: 9, Including Fax Cover Sheet

MESSAGE:

CONFIDENTIALITY NOTICE

The documents accompanying this telecopy transmission contain confidential information belonging to the sender, which is legally privileged. The information is intended only for the use of the individual(s) or entity(ies) named above. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution or the taking of any action in reliance on the contents of this telecopied information is strictly prohibited. If you have received this telecopy in error, please immediately notify us by telephone to arrange for return of the original documents to us.

515 CONGRESS AVENUE | SUITE 1515 | AUSTIN, TEXAS 78701
OFFICE (512) 472.3263 | FAX (512) 473.2609 | WWW.BAW.COM

Total Pages Scanned : 9 Total Pages Confirmed : 9

No.	Job	Remote Station	Start Time	Duration	Pages	Line	Mode	Job Type	Results
001	673	5122393311	03:37:09 p.m. 05-24-2013	00:02:27	9/9	1	EC	HS	CP28800

Abbreviations:
HS: Host send
HR: Host receive
WS: Waiting send
PL: Polled local
PR: Polled remote
MS: Mailbox save
MP: Mailbox print
RP: Report
FF: Fax Forward
CP: Completed
FA: Fail
TU: Terminated by user
TS: Terminated by system
G3: Group 3
EC: Error Correct

Law Offices of
BOOTH, AHRENS & WERKENTHIN
A Professional Corporation

Michael J. Booth
Fred B. Werkenthin, Jr.
Wil Galloway
Trey Nesloney

Carolyn Ahrens
Of Counsel

Joseph S. Babb
Of Counsel

WR 82315

June 5, 2013

REVIEWED
JUN 05 2013
By

Facsimile Submission: 512-239-3311

Ms. Bridget C. Bohac, Chief Clerk
TCEQ – MC 105
P.O. Box 13087
Austin, Texas 78711-3087

2013 JUN 5 PM 3:02
CHIEF CLERKS OFFICE
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

RE: **Request for Contested Case Hearing regarding Lower Colorado River Authority's Water Rights Application No. 5838A (Water Management Plan)**

Dear Ms. Bohac:

We understand from recent correspondence that the Executive Director will be conducting an extended review of LCRA's Application No. 5838A (Water Management Plan) rather than referring the matter to the Commissioners for proceedings on the numerous requests for contested case hearing that have been filed. The matter is separate from LCRA's request that an existing emergency order related to the current water management plan be extended.

In order to avoid confusion in the future, this letter addresses the requests for contested case hearing of LCRA's Application No. 5838A and associated comment, already filed on behalf of the Colorado Water Issues Committee (CWIC), Mr. Laurance Armour, Mr. Daniel Berglund, and Mr. Ronald Gertson. The requests for hearing and associated comment were fax-filed with the Chief Clerk on Friday, May 24, 2013, under single correspondence of the same date. However, due to a clerical error in our office, a paragraph beginning on page 4 of the letter had been inadvertently deleted. That paragraph provided additional detail with regard to Mr. Gertson's active involvement in rice farming.

In order to address the clerical error, and in consultation with the Chief Clerk's office, our firm staff subsequently submitted a corrected letter. The May 24, 2013, letter remains in effect. The only substantive difference between it and the subsequent submission is the paragraph mentioned. The reference line of the second submission also identifies it as "amended."

However, the subsequent letter was logged into the Chief Clerk's database as relevant to the matter of the emergency order, which also was designated in the database as an open file by reference to Water Permit No. 5838. Neither CWIC, nor Mr. Armour, Mr. Berglund, or Mr. Gertson, have made an appearance in the matter of the emergency order extension.

With our apologies for any inconvenience, the corrected letter is attached again here. We would appreciate this letter being logged as supplemental information in the database for Water Rights Application No. 5838A (Item Type AMFL11.122, *not* the emergency order extension), where the original letter also appropriately remains on file with the agency.

Very truly yours,

Carolyn Ahrens,
Of Counsel
State Bar No. 00942030

Michael J. Booth
State Bar No. 02648500

Booth, Ahrens & Werkenthin, P.C.
515 Congress Avenue, Ste 1515
Austin, Texas 78701
512.472.3263

Law Offices of
BOOTH, AHRENS & WERKENTHIN
A Professional Corporation

Michael J. Booth
Fred B. Werkenthin, Jr.
Wil Galloway
Trey Nesloney

Carolyn Ahrens
Of Counsel

Joseph S. Babb
Of Counsel

May 24, 2013

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
2013 JUN -5 PM 3:03
CHIEF CLERKS OFFICE

VIA E-Filing
Ms. Bridget C. Bohac, Chief Clerk
TCEQ – MC 105
P.O. Box 13087
Austin, Texas 78711-3087

RE: Request for Contested Case Hearing regarding Lower Colorado River Authority's Proposed Changes to its Water Management Plan (Water Rights Application No. 5838A) -- AMENDED

Dear Ms. Bohac:

By this letter, the Texas Rice Producer's Legislative Group, through its Colorado Water Issues Committee, and several individuals identified below request a contested case hearing regarding Lower Colorado River Authority's Water Rights Application No. 5838A. The application proposes a new water management plan associated with Certificates of Adjudication Nos. 14-5478 and 14-5482, as amended. The Texas Commission on Environmental Quality ("TCEQ") issued notice of the application on April 15, 2013, followed by published notice in affected counties. These requests for contested case hearing are submitted timely, and also include public comment.

A. Requestors' Information:

Texas Rice Producers Legislative Group (association)
c/o Colorado Water Issues Committee
Ronald Gertson, President
2511 San Bernard Dr.
East Bernard, Texas 77435
phone number: (979) 758-4670
fax number:(979) 234-2920
email address: ronaldg59@gmail.com

Mr. Laurance Armour, III (individual capacity)
Pierce Ranch P.O. Box 538
Pierce, Texas 77467
phone number: (979) 532-4250
fax number:(979) 532-4251
email address: Laurance Armour la3a@flash.net

Mr. Daniel Berglund (individual capacity)
588 Crescent Lane
Wharton, Texas 77488
phone number: (979) 541-7506
fax number: (979) 677-3317
email address: berg6@hughes.net

Mr. Ronald Gertson (individual capacity)
2511 San Bernard Dr.
East Bernard, Texas 77435
phone number: (979) 758-4670
fax number:(979) 234-2920
email address: ronaldg59@gmail.com

The Texas Rice Producers Legislative Group ("TRPLG") is a Texas Non-profit Corporation, with its registered office at 4 N. Washington Street, El Campo Street, El Campo, Texas, 77437. The Group was formed 1989 for the purpose of supporting, maintaining and advancing the Texas rice industry, among other purposes. Its by-laws provide that active membership is open to persons engaged in the production of rice.

TRPLG's by-laws also provide for the appointment of special committees. By resolution in 2009, TRPLG charged the Colorado Water Issues Committee ("CWIC") to administer a Water Issues Fund for facilitating the practical, scientific and legal response to administrative and other actions that threaten the availability of rice irrigation water from the Colorado River. By resolution dated May 13, 2013, TRPLG directed CWIC to submit this request for hearing on TRPLG's behalf and authorized CWIC to act as its representative in matters related to this request.

TRPLG members are interest holders in agricultural lands and farming operations that put surface water of the lower Colorado River basin to beneficial use for growing rice as a food crop. These members stand on the shoulders of individuals, families, and businesses who developed farmlands and contributed to the construction of extensive irrigation canals dating back to the 1880's; lent support for organizing the Lower Colorado River Authority; made way for the construction of the Highland Lakes, including through a 1937 contract to address respective rights to divert and store water; and perfected, through their application of water to beneficial purposes, water rights that LCRA and its system customers use today. TRPLG members benefit directly from provisions in the adjudicated findings associated with LCRA's water rights that require

stored water in excess of actual firm demands to be made available for downstream irrigation according to a TCEQ-approved water management plan. TRPLG members depend for their livelihood on the continued supply of stored surface water, the availability of which will be subject to the new water management plan proposed by LCRA in Application No. 5838A.

Numerous of TRPLG's members have standing to request a contested case hearing in their own right; however, it would be impractical and financially prohibitive for all of them to do so and neither the claims asserted in this matter nor the relief requested requires the independent participation of so many. It is not anticipated that the matter at issue will require fact-intensive individual inquiry, but rather that the matter will be resolved based on hydrologic analyses, widely applicable terms and policies for water availability, proper interpretation and implementation of the adjudication of LCRA water rights, LCRA's duties as the owner of downstream irrigation canals, and legal principles related to beneficial use, conservation, and the water rights and demands involved, among other things. In its representational capacity, TRPLG seeks the same results that its members seek, including revisions to the proposed water management plan that would preserve access to surface water for irrigated agriculture on reasonable terms and lessen the severity and frequency of interruptions in water supply. The benefits of such revisions will inure to TRPLG's members who would be injured-in-fact by the proposed plan, if that plan were adopted by the TCEQ.

Mr. Laurance Armour, III, Mr. Daniel Berglund, and Mr. Ronald Gertson are members of TRPLG. Mr. Berglund is the Chairman of TRPLG. Mr. Berglund and Mr. Gertson also serve as officers of CWIC. In addition to supporting TRPLG's request for contested case hearing as an association of which they are members, Mr. Laurance Armour, III, Mr. Daniel Berglund, and Mr. Ronald Gertson request a contested case hearing in their individual capacities. They are referred to together as the "Individual Requestors."

Each of the Individual Requestors is actively engaged in rice production in the lower Colorado River Basin on lands historically supplied with water diverted to irrigation canals now served by LCRA. Water is diverted to the canals pursuant to historical run-of-the-river rights and contracts, including contracts for the interruptible supply of stored water from the LCRA reservoir system. Canals within LCRA's Lakeside Irrigation Division serve farmland located in Colorado and Wharton Counties, Texas. Canals within LCRA's Gulf Coast Irrigation Division serve farmland located in Wharton and Matagorda Counties, Texas. The Lakeside and Gulf Coast canals are now owned and controlled by LCRA. TRPLG members, including Mr. Armour, also use water delivered by LCRA to the Pierce Ranch canal system in Wharton County. LCRA's proposed water management plan (the activity at issue in the application contested here) sets forth new criteria for the supply of upstream stored water applicable throughout LCRA's irrigation service area, including Pierce Ranch.

Mr. Armour has been actively engaged in rice production in Wharton County, included within the Pierce Ranch Irrigation Division, for more than 30 years. His family

has been similarly engaged for over 100 years. Mr. Armour owns and operates farmland adjoining the Colorado River and also is a partner in BU Growers, Ltd., which produces seed rice and dries and stores grain produced in Matagorda, Wharton and Fort Bend counties. Over the years, Mr. Armour has invested considerable resources in the infrastructure necessary to grow rice, including land leveling, canal maintenance, pump maintenance and equipment investment. He has a contractual right with LCRA for the supply of irrigation water from upstream storage under a surface water right purchase agreement signed in 2001. Mr. Armour has exercised this right in the past, and for example, entered into irrigation-water contracts in years 2002-2011. Mr. Armour has additionally invested in practices to conserve water, including precision land leveling, canal vegetation control, and tail water re-use. During the most recent year that water was available for service to the Pierce Ranch, Mr. Armour irrigated over 5,000 acres of rice. The continued pursuit of Mr. Armour's business depends on the future availability of stored water from LCRA, provided by the terms of LCRA's adjudicated water rights and its water management plan. Mr. Armour fully intends to continue to produce rice as a food crop in the future, if adequate water supply is available.

Mr. Daniel Berglund has been actively engaged in rice production in Matagorda County, relying on LCRA's Gulf Coast Irrigation Division to deliver water to irrigate his rice for more than 23 years. The land he farms has been in rice production, and water has been provided from the Colorado River, for over 100 years. Mr. Berglund leases land adjoining the Gulf Coast Irrigation Division and is a partner in Berglund Farms Joint Venture. Over the years, Mr. Berglund has invested considerable resources in the infrastructure necessary to grow rice including land leveling, permanent levee construction and multiple inlet water delivery systems, all of which has increased his irrigation efficiency. He also has made considerable investments in large and expensive farm equipment that is needed to farm rice. Mr. Berglund has a right to contract with LCRA for the supply of irrigation water from upstream storage because he has a lease to farm land adjacent to the Gulf Coast Irrigation Division canals. Mr. Berglund has exercised this right in the past, and for example entered into such contracts since 1989. During the most recent two years that water contracts were available for service to the Gulf Coast Irrigation Division, 2010-2011, Mr. Berglund planted an average of 735 acres of rice. The continued pursuit of Mr. Berglund's business depends on the future availability of stored water from LCRA, provided by the terms of LCRA's adjudicated water rights and its water management plan. Mr. Berglund fully intends to continue to produce rice as a food crop in the future, if adequate water supply is available.

Mr. Gertson has been actively engaged in rice production in Colorado and Wharton Counties, included within LCRA's Lakeside Irrigation Division, for more than 30 years. His family has been similarly engaged for over 100 years. Mr. Gertson owns an interest in land adjoining the Lakeside canals and is a partner in Gertson Farms Partnership, which partnership contracts for water with LCRA. Over the years Mr. Gertson has invested considerable resources in the infrastructure necessary to grow rice, including interest in an aerial application business, a rice drying and storage operation, an

equipment maintenance facility and specialized rice farming equipment. Mr. Gertson and Gertson Farms Partnership have a right to contract with LCRA for the supply of irrigation water from upstream storage because his land is adjacent to and serviced by LCRA's canals. Gertson Farms Partnership has exercised this right on behalf of Mr. Gertson in the past, and for example entered into such contracts in years 1983 through 2011. Mr. Gertson has additionally invested in practices to conserve water, including the installation of multiple inlets, permanent levees, permanent water control structures and precision graded ground. During the most recent year that water contracts were available (2011) Gertson Farms Partnership irrigated 1727.5 acres of rice using water purchased from LCRA. The continued pursuit of Mr. Gertson's business depends on the future availability of LCRA stored water, provided by the terms of LCRA's adjudicated water rights and its water management plan. Mr. Gertson fully intends to continue to produce rice as a food crop in the future, if adequate water supply is available.

Each of the Individual Requestors is an affected person with personal justiciable interests related to the legal rights, privileges and economic interests at issue in the contested application. Their interests are not common to the general public. TRPLG and the Individual Requestors all have standing to make this request as contemplated in TEX. WATER CODE ANN. § 5.115 (Vernon 2000) and 30 TEX. ADMIN. CODE Chapter 55.

B. Applicant Information:

Lower Colorado River Authority
3700 Lake Austin Blvd.
Austin, Texas 78703

Applicant proposes a water management plan that, among other things, includes new criteria for determining the availability of stored surface water to supply downstream needs for irrigation water. Additional information is included in the notice of Application No. 5838A that was issued by the TCEQ on April 15, 2013.

C. Effect of Proposed Activity:

The proposed water management plan implements LCRA's adjudicated water rights in a way that lessens the availability of stored water to meet the needs of irrigators and increases the severity and frequency of interruption in supplies historically available for use downstream. The complexity of issues associated with the LCRA application will require further research and development, and TRPLG and the Individual Requestors reserve the right to raise additional issues during proceedings on the application. Preliminarily, and among other things, the Individual Requestors and other TRPLG members would be harmed by the following features of the proposed water management plan in ways not common to the general public:

- an unprecedented annual "cap" on deliveries of stored water to the Gulf Coast and Lakeside Irrigation Divisions and Pierce Ranch would limit rice production even when upstream storage reservoirs are full or nearly full;

- total curtailment of irrigation supply is made more likely by increasing the targeted minimum storage level almost three-fold, as compared to the 2010 water management plan;

- the severity and frequency of partial curtailments of supply are increased by steeper curtailment curves;

- the ability to produce a second, or ratoon, harvest is newly limited by the unprecedented parceling and capping of available water between main and ratoon crop irrigation, falling short of assuring the full utilization of available interruptible water supplies; and

- the proposed plan overstates reserves, and fails to maximize beneficial use of water in general and to incorporate an appropriate interpretation of firm demand during drought conditions.

A related order by the Commissioners of the TCEQ's predecessor agency in 1991 underscores a significant inquiry at issue in the proposed application. The order explains that although the Commissioners had been given insufficient information on which to determine whether a trigger level for curtailing interruptible supply was set appropriately, it was unlikely that the trigger would be reached. *Based on both of those circumstances combined*, the Commissioners affirmatively found, "*Accordingly*, it is unnecessary for the Commission to determine *at this time* whether, or to what extent, such trigger level provides more protection to firm supplies than is necessary."[1] Such a surplus of water no longer exists, and curtailment has become a recent reality under orders to temporarily suspend the current water management plan. TCEQ has a duty under the terms of LCRA's adjudicated water rights, to exercise jurisdiction to make available as interruptible water that amount of water which can be released while also meeting the water demands of firm water customers. The Commission must determine the proper allocation in proceedings on this application.

Consecutive emergency curtailments of irrigation supply have demonstrated that the detrimental impacts of water allocation decisions affecting the lower Colorado River basin are actual and imminent, not conjectural or hypothetical. The first of these total curtailments in irrigation supply occurred in 2012. The losses downstream from that interruption included a reduction in rice production of nearly 55,000 acres. In addition to the direct impact on farmers and food supplies, it is becoming increasingly clear that the agricultural infrastructure and rural communities that are integral parts of the lower Colorado River basin's economies and rice farming heritage cannot withstand more frequent repetition of total curtailment.

---

[1] This language is quoted from the 1991 Order Approving LCRA's Drought Management Plan, Finding of Fact No. 8 (emphasis added) (required by the 1989 Water Management Plan Order and integrated by the 1999 Water Management Plan Order).

[2] See, for example, LCRA's Supplemental Brief and Attachments in Support of Application For

D. Conditions in Proposed Permit which may Satisfy Requestors' Concerns:

TRPLG and the Individual Requestors are aware that others currently argue for changes in the proposed water management plan that would amplify the impact on downstream agricultural production substantially. TRPLG and the Individual Requestors do not propose by this request for contested case hearing that firm water customers of the LCRA should be put at unreasonable risk for diminished supply. Nor are requestors insensitive to the impacts of diminished lake levels on the communities that have come to surround and enjoy the indirect benefits of constructed water supply and flood-control reservoirs. However, the importance of maintaining agricultural resources in this state generally, and the significance specifically of downstream rice production, must be recognized.

In addition to changes in the water management plan that would specifically address the effects of the proposed water management plan discussed above, TRPLG and the Individual Requestors believe that different criteria can be identified to protect firm supply at a legal and appropriate level and also lessen the negative impact on downstream food production. For example, there is significant dispute about appropriate storage levels for total curtailment. Further analysis may indicate that the currently proposed level could be increased by some amount without critical impact to downstream irrigation if other measures were taken to better support irrigation supplies and the sustainability of downstream agricultural resources. Also, as LCRA pursues additional downstream infrastructure consistent with its duties as owner and operator of historic irrigation canals and associated water rights, identification of supply criteria to better integrate system resources would be appropriate.

Provisions of the proposed plan that impose an unprecedented "cap" on irrigation water, even when upstream storage is full or nearly full, are contrary to historic principles of beneficial use and supply without discrimination and should be struck. The cap also is unnecessary to serve firm customers who are protected by provisions related to lake levels and curtailment. The cap provisions and others were influenced in the stakeholder process by non-customer interests focused on aesthetic and recreational lake levels. Long-held principles of beneficial use of water will be sacrificed if the yields and usefulness of the state's many water supply reservoirs are diminished by maintaining lake levels to accommodate the inadequate diversion infrastructure of some users,[2] or by choices to support indirect recreational economic activity and aesthetic values. Any finding with that effect will have staggering statewide implications and must be addressed directly.

---

[2] See, for example, LCRA's Supplemental Brief and Attachments in Support of Application For Emergency Authorization Related to Water Management Plan, submitted to the TCEQ n January 11, 2013 (citing raw water intake elevations, among other things, as a basis for curtailing water supply for downstream irrigation).

E. Conclusion:

TRPLG, and Mr. Laurance Armour, III, Mr. Ronald Gertson, and Mr. Daniel Berglund, as members of TRPLG and also in their individual capacities, make this request for contested case hearing in order to pursue their standing and rights under law and the TCEQ's rules. Without waiver of this request for hearing, but in addition to it, TRPLG and the Individual Requestors again ask the Commissioners to initiate resolution procedures to further the possibility of adequate technical oversight by the Executive Director and a negotiated settlement of the issues in dispute between the parties. TRPLG and the Individual Requestors respectfully urge that these requests be granted.

Very truly yours,

Carolyn Ahrens,
Of Counsel
State Bar No. 00942030

Michael J. Booth
State Bar No. 02648500

Booth, Ahrens & Werkenthin, P.C.
515 Congress Avenue, Ste 1515
Austin, Texas 78701
512.472.3263

Cc via electronic transmission:
Mr. Laurance Armour, III
Mr. Daniel Berglund
Mr. Ronald Gertson
Mr. Haskell Simon
Mr. Zak Covar
Ms. Stephanie Bergeron Perdue
Mr. Blas Coy
Mr. Joe Trungale
Ms. Lyn Clancy (for LCRA)

Law Offices of
BOOTH, AHRENS & WERKENTHIN
A Professional Corporation

MICHAEL J. BOOTH
FRED B. WERKENTHIN, JR.
WIL GALLOWAY
TREY RESLONEY

CAROLYN AHRENS
OF COUNSEL

JOSEPH S. BABB
OF COUNSEL

FAX COVER SHEET

TO: MS. BRIDGET C. BOHAC, CHIEF CLERK

FAX: 512-239-3311

FROM: CAROLYN AHRENS

RE: REQUEST FOR CONTESTED CASE HEARING REGARDING LOWER COLORADO RIVER AUTHORITY'S WATER RIGHTS APPLICATION NO. 5838A (WATER MANAGEMENT PLAN)

DATE: JUNE 5, 2013

PAGES: 11, Including Fax Cover Sheet

MESSAGE:

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
2013 JUN -5 PM 3:02
CHIEF CLERKS OFFICE

CONFIDENTIALITY NOTICE

The documents accompanying this telecopy transmission contain confidential information belonging to the sender, which is legally privileged. The information is intended only for the use of the individual(s) or entity(ies) named above. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution or the taking of any action in reliance on the contents of this telecopied information is strictly prohibited. If you have received this telecopy in error, please immediately notify us by telephone to arrange for return of the original documents to us.

515 CONGRESS AVENUE | SUITE 1515 | AUSTIN, TEXAS 78701
OFFICE (512) 472.3263 | FAX (512) 473.2609 | WWW.BAW.COM

Law Offices of
BOOTH, AHRENS & WERKENTHIN
A Professional Corporation

Michael J. Booth
Fred B. Werkenthin, Jr.
Wil Galloway
Trey Nesloney

Carolyn Ahrens
Of Counsel

Joseph S. Babb
Of Counsel

2013 MAY 28 AM 10: 57
CHIEF CLERKS OFFICE
COMMISSION ON ENVIRONMENTAL QUALITY

May 24, 2013

REVIEWED
MAY 29 2013
By

Facsimile Submission: 512-239-3311

Ms. Bridget C. Bohac, Chief Clerk
TCEQ – MC 105
P.O. Box 13087
Austin, Texas 78711-3087

RE: Request for Contested Case Hearing regarding Lower Colorado River Authority's Proposed Changes to its Water Management Plan (Water Rights Application No. 5838A)

Dear Ms. Bohac:

By this letter, the Texas Rice Producer's Legislative Group, through its Colorado Water Issues Committee, and several individuals identified below request a contested case hearing regarding Lower Colorado River Authority's Water Rights Application No. 5838A. The application proposes a new water management plan associated with Certificates of Adjudication Nos. 14-5478 and 14-5482, as amended. The Texas Commission on Environmental Quality ("TCEQ") issued notice of the application on April 15, 2013, followed by published notice in affected counties. These requests for contested case hearing are submitted timely, and also include public comment.

A. Requestors' Information:

Texas Rice Producers Legislative Group (association)
c/o Colorado Water Issues Committee
Ronald Gertson, President
2511 San Bernard Dr.
East Bernard, Texas 77435
phone number: (979) 758-4670
fax number:(979) 234-2920
email address: ronaldg59@gmail.com

Mr. Laurance Armour, III (individual capacity)
Pierce Ranch P.O. Box 538
Pierce, Texas 77467
phone number: (979) 532-4250
fax number:(979) 532-4251
email address: Laurance Armour la3a@flash.net

Mr. Daniel Berglund (individual capacity)
588 Crescent Lane
Wharton, Texas 77488
phone number: (979) 541-7506
fax number: (979) 677-3317
email address: berg6@hughes.net

Mr. Ronald Gertson (individual capacity)
2511 San Bernard Dr.
East Bernard, Texas 77435
phone number: (979) 758-4670
fax number:(979) 234-2920
email address: ronaldg59@gmail.com

The Texas Rice Producers Legislative Group ("TRPLG") is a Texas Non-profit Corporation, with its registered office at 4 N. Washington Street, El Campo Street, El Campo, Texas, 77437. The Group was formed 1989 for the purpose of supporting, maintaining and advancing the Texas rice industry, among other purposes. Its by-laws provide that active membership is open to persons engaged in the production of rice.

TRPLG's by-laws also provide for the appointment of special committees. By resolution in 2009, TRPLG charged the Colorado Water Issues Committee ("CWIC") to administer a Water Issues Fund for facilitating the practical, scientific and legal response to administrative and other actions that threaten the availability of rice irrigation water from the Colorado River. By resolution dated May 13, 2013, TRPLG directed CWIC to submit this request for hearing on TRPLG's behalf and authorized CWIC to act as its representative in matters related to this request.

TRPLG members are interest holders in agricultural lands and farming operations that put surface water of the lower Colorado River basin to beneficial use for growing rice as a food crop. These members stand on the shoulders of individuals, families, and businesses who developed farmlands and contributed to the construction of extensive irrigation canals dating back to the 1880's; lent support for organizing the Lower Colorado River Authority; made way for the construction of the Highland Lakes, including through a 1937 contract to address respective rights to divert and store water; and perfected, through their application of water to beneficial purposes, water rights that LCRA and its system customers use today. TRPLG members benefit directly from

provisions in the adjudicated findings associated with LCRA's water rights that require stored water in excess of actual firm demands to be made available for downstream irrigation according to a TCEQ-approved water management plan. TRPLG members depend for their livelihood on the continued supply of stored surface water, the availability of which will be subject to the new water management plan proposed by LCRA in Application No. 5838A.

Numerous of TRPLG's members have standing to request a contested case hearing in their own right; however, it would be impractical and financially prohibitive for all of them to do so and neither the claims asserted in this matter nor the relief requested requires the independent participation of so many. It is not anticipated that the matter at issue will require fact-intensive individual inquiry, but rather that the matter will be resolved based on hydrologic analyses, widely applicable terms and policies for water availability, proper interpretation and implementation of the adjudication of LCRA water rights, LCRA's duties as the owner of downstream irrigation canals, and legal principles related to beneficial use, conservation, and the water rights and demands involved, among other things. In its representational capacity, TRPLG seeks the same results that its members seek, including revisions to the proposed water management plan that would preserve access to surface water for irrigated agriculture on reasonable terms and lessen the severity and frequency of interruptions in water supply. The benefits of such revisions will inure to TRPLG's members who would be injured-in-fact by the proposed plan, if that plan were adopted by the TCEQ.

Mr. Laurance Armour, III, Mr. Daniel Berglund, and Mr. Ronald Gertson are members of TRPLG. Mr. Berglund is the Chairman of TRPLG. Mr. Berglund and Mr. Gertson also serve as officers of CWIC. In addition to supporting TRPLG's request for contested case hearing as an association of which they are members, Mr. Laurance Armour, III, Mr. Daniel Berglund, and Mr. Ronald Gertson request a contested case hearing in their individual capacities. They are referred to together as the "Individual Requestors."

Each of the Individual Requestors is actively engaged in rice production in the lower Colorado River Basin on lands historically supplied with water diverted to irrigation canals now served by LCRA. Water is diverted to the canals pursuant to historical run-of-the-river rights and contracts, including contracts for the interruptible supply of stored water from the LCRA reservoir system. Canals within LCRA's Lakeside Irrigation Division serve farmland located in Colorado and Wharton Counties, Texas. Canals within LCRA's Gulf Coast Irrigation Division serve farmland located in Wharton and Matagorda Counties, Texas. The Lakeside and Gulf Coast canals are now owned and controlled by LCRA. TRPLG members, including Mr. Armour, also use water delivered by LCRA to the Pierce Ranch canal system in Wharton County. LCRA's proposed water management plan (the activity at issue in the application contested here) sets forth new criteria for the supply of upstream stored water applicable throughout LCRA's irrigation service area, including Pierce Ranch.

Mr. Armour has been actively engaged in rice production in Wharton County, included within the Pierce Ranch Irrigation Division, for more than 30 years. His family has been similarly engaged for over 100 years. Mr. Armour owns and operates farmland adjoining the Colorado River and also is a partner in BU Growers, Ltd., which produces seed rice and dries and stores grain produced in Matagorda, Wharton and Fort Bend counties. Over the years, Mr. Armour has invested considerable resources in the infrastructure necessary to grow rice, including land leveling, canal maintenance, pump maintenance and equipment investment. He has a contractual right with LCRA for the supply of irrigation water from upstream storage under a surface water right purchase agreement signed in 2001. Mr. Armour has exercised this right in the past, and for example, entered into irrigation-water contracts in years 2002-2011. Mr. Armour has additionally invested in practices to conserve water, including precision land leveling, canal vegetation control, and tail water re-use. During the most recent year that water was available for service to the Pierce Ranch, Mr. Armour irrigated over 5,000 acres of rice. The continued pursuit of Mr. Armour's business depends on the future availability of stored water from LCRA, provided by the terms of LCRA's adjudicated water rights and its water management plan. Mr. Armour fully intends to continue to produce rice as a food crop in the future, if adequate water supply is available.

Mr. Daniel Berglund has been actively engaged in rice production in Matagorda County, relying on LCRA's Gulf Coast Irrigation Division to deliver water to irrigate his rice for more than 23 years. The land he farms has been in rice production, and water has been provided from the Colorado River, for over 100 years. Mr. Berglund leases land adjoining the Gulf Coast Irrigation Division and is a partner in Berglund Farms Joint Venture. Over the years, Mr. Berglund has invested considerable resources in the infrastructure necessary to grow rice including land leveling, permanent levee construction and multiple inlet water delivery systems, all of which has increased his irrigation efficiency. He also has made considerable investments in large and expensive farm equipment that is needed to farm rice. Mr. Berglund has a right to contract with LCRA for the supply of irrigation water from upstream storage because he has a lease to farm land adjacent to the Gulf Coast Irrigation Division canals. Mr. Berglund has exercised this right in the past, and for example entered into such contracts since 1989. During the most recent two years that water contracts were available for service to the Gulf Coast Irrigation Division, 2010-2011, Mr. Berglund planted an average of 735 acres of rice. The continued pursuit of Mr. Berglund's business depends on the future availability of stored water from LCRA, provided by the terms of LCRA's adjudicated water rights and its water management plan. Mr. Berglund fully intends to continue to produce rice as a food crop in the future, if adequate water supply is available.

Each of the Individual Requestors is an affected person with personal justiciable interests related to the legal rights, privileges and economic interests at issue in the contested application. Their interests are not common to the general public. TRPLG and the Individual Requestors all have standing to make this request as contemplated in TEX. WATER CODE ANN. § 5.115 (Vernon 2000) and 30 TEX. ADMIN. CODE Chapter 55.

B. Applicant Information:

Lower Colorado River Authority
3700 Lake Austin Blvd.
Austin, Texas 78703

Applicant proposes a water management plan that, among other things, includes new criteria for determining the availability of stored surface water to supply downstream needs for irrigation water. Additional information is included in the notice of Application No. 5838A that was issued by the TCEQ on April 15, 2013.

C. Effect of Proposed Activity:

The proposed water management plan implements LCRA's adjudicated water rights in a way that lessens the availability of stored water to meet the needs of irrigators and increases the severity and frequency of interruption in supplies historically available for use downstream. The complexity of issues associated with the LCRA application will require further research and development, and TRPLG and the Individual Requestors reserve the right to raise additional issues during proceedings on the application. Preliminarily, and among other things, the Individual Requestors and other TRPLG members would be harmed by the following features of the proposed water management plan in ways not common to the general public:

- an unprecedented annual "cap" on deliveries of stored water to the Gulf Coast and Lakeside Irrigation Divisions and Pierce Ranch would limit rice production even when upstream storage reservoirs are full or nearly full;

- total curtailment of irrigation supply is made more likely by increasing the targeted minimum storage level almost three-fold, as compared to the 2010 water management plan;

- the severity and frequency of partial curtailments of supply are increased by steeper curtailment curves;

- the ability to produce a second, or ratoon, harvest is newly limited by the unprecedented parceling and capping of available water between main and ratoon crop irrigation, falling short of assuring the full utilization of available interruptible water supplies; and

- the proposed plan overstates reserves, and fails to maximize beneficial use of water in general and to incorporate an appropriate interpretation of firm demand during drought conditions.

A related order by the Commissioners of the TCEQ's predecessor agency in 1991 underscores a significant inquiry at issue in the proposed application. The order explains that although the Commissioners had been given insufficient information on which to

determine whether a trigger level for curtailing interruptible supply was set appropriately, it was unlikely that the trigger would be reached. *Based on both of those circumstances combined*, the Commissioners affirmatively found, "*Accordingly*, it is unnecessary for the Commission to determine *at this time* whether, or to what extent, such trigger level provides more protection to firm supplies than is necessary."[1] Such a surplus of water no longer exists, and curtailment has become a recent reality under orders to temporarily suspend the current water management plan. TCEQ has a duty under the terms of LCRA's adjudicated water rights, to exercise jurisdiction to make available as interruptible water that amount of water which can be released while also meeting the water demands of firm water customers. The Commission must determine the proper allocation in proceedings on this application.

Consecutive emergency curtailments of irrigation supply have demonstrated that the detrimental impacts of water allocation decisions affecting the lower Colorado River basin are actual and imminent, not conjectural or hypothetical. The first of these total curtailments in irrigation supply occurred in 2012. The losses downstream from that interruption included a reduction in rice production of nearly 55,000 acres. In addition to the direct impact on farmers and food supplies, it is becoming increasingly clear that the agricultural infrastructure and rural communities that are integral parts of the lower Colorado River basin's economies and rice farming heritage cannot withstand more frequent repetition of total curtailment.

D. <u>Conditions in Proposed Permit which may Satisfy Requestors' Concerns:</u>

TRPLG and the Individual Requestors are aware that others currently argue for changes in the proposed water management plan that would amplify the impact on downstream agricultural production substantially. TRPLG and the Individual Requestors do not propose by this request for contested case hearing that firm water customers of the LCRA should be put at unreasonable risk for diminished supply. Nor are requestors insensitive to the impacts of diminished lake levels on the communities that have come to surround and enjoy the indirect benefits of constructed water supply and flood-control reservoirs. However, the importance of maintaining agricultural resources in this state generally, and the significance specifically of downstream rice production, must be recognized.

In addition to changes in the water management plan that would specifically address the effects of the proposed water management plan discussed above, TRPLG and the Individual Requestors believe that different criteria can be identified to protect firm supply at a legal and appropriate level and also lessen the negative impact on downstream food production. For example, there is significant dispute about appropriate storage levels for total curtailment. Further analysis may indicate that the currently proposed level could be increased by some amount without critical impact to downstream irrigation

[1] This language is quoted from the 1991 Order Approving LCRA's Drought Management Plan, Finding of Fact No. 8 (emphasis added) (required by the 1989 Water Management Plan Order and integrated by the 1999 Water Management Plan Order).

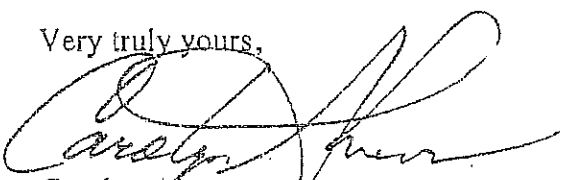
if other measures were taken to better support irrigation supplies and the sustainability of downstream agricultural resources. Also, as LCRA pursues additional downstream infrastructure consistent with its duties as owner and operator of historic irrigation canals and associated water rights, identification of supply criteria to better integrate system resources would be appropriate.

Provisions of the proposed plan that impose an unprecedented "cap" on irrigation water, even when upstream storage is full or nearly full, are contrary to historic principles of beneficial use and supply without discrimination and should be struck. The cap also is unnecessary to serve firm customers who are protected by provisions related to lake levels and curtailment. The cap provisions and others were influenced in the stakeholder process by non-customer interests focused on aesthetic and recreational lake levels. Long-held principles of beneficial use of water will be sacrificed if the yields and usefulness of the state's many water supply reservoirs are diminished by maintaining lake levels to accommodate the inadequate diversion infrastructure of some users,[2] or by choices to support indirect recreational economic activity and aesthetic values. Any finding with that effect will have staggering statewide implications and must be addressed directly.

E. Conclusion:

TRPLG, and Mr. Laurance Armour, III, Mr. Ronald Gertson, and Mr. Daniel Berglund, as members of TRPLG and also in their individual capacities, make this request for contested case hearing in order to pursue their standing and rights under law and the TCEQ's rules. Without waiver of this request for hearing, but in addition to it, TRPLG and the Individual Requestors again ask the Commissioners to initiate resolution procedures to further the possibility of adequate technical oversight by the Executive Director and a negotiated settlement of the issues in dispute between the parties. TRPLG and the Individual Requestors respectfully urge that these requests be granted.

Very truly yours,



Carolyn Ahrens,
Of Counsel
State Bar No. 00942030

Michael J. Booth
State Bar No. 02648500

[2] See, for example, LCRA's Supplemental Brief and Attachments in Support of Application For Emergency Authorization Related to Water Management Plan, submitted to the TCEQ n January 11, 2013 (citing raw water intake elevations, among other things, as a basis for curtailing water supply for downstream irrigation).

Booth, Ahrens & Werkenthin, P.C.
515 Congress Avenue, Ste 1515
Austin, Texas 78701
512.472.3263

Cc via electronic transmission:
Mr. Laurance Armour, III
Mr. Daniel Berglund
Mr. Ronald Gertson
Mr. Haskell Simon
Mr. Zak Covar
Ms. Stephanie Bergeron Perdue
Mr. Blas Coy
Mr. Joe Trungale
Ms. Lyn Clancy (for LCRA)

UNITED STATES POSTAGE
PITNEY BOWES
$ 001.72
MAY 24 2012
MAILED FROM ZIP CODE 78701

RECEIVED
MAY 28 2012
TCEQ MAIL CENTER

LAW OFFICES OF
BOOTH, AHRENS & WERKENTHIN, P.C.
A PROFESSIONAL CORPORATION
515 CONGRESS AVENUE, SUITE 1515
AUSTIN, TEXAS 78701-3503

TO:
Ms. Bridget C. Bohac, Chief Clerk
TCEQ – MC 105
P.O. Box 13087
Austin, Texas 78711-3087

Transmission Report

Date/Time 05-24-2013 03:40:41 p.m.
Local ID 1 512-473-2609

Transmit Header Text
Local Name 1 BAW

WR 82313

This document : Confirmed
(reduced sample and details below)
Document size : 8.5"x11"

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
2013 MAY 28 AM 10: 56
CHIEF CLERKS OFFICE

Law Offices of
BOOTH, AHRENS & WERKENTHIN
A Professional Corporation

MICHAEL J. BOOTH
FRED B. WERKENTHIN, JR.
WIL GALLOWAY
TREY REBLONEY

CAROLYN AHRENS
OF COUNSEL

JOSEPH S. BABB
OF COUNSEL

FAX COVER SHEET

TO: MS. BRIDGET C. BOHAC, CHIEF CLERK

FAX: 512-239-3311

FROM: Carolyn Ahrens

RE: REQUEST FOR CONTESTED CASE HEARING; WRPERM 5838

DATE: MAY 24, 2013

PAGES: 9, Including Fax Cover Sheet

MESSAGE:

CONFIDENTIALITY NOTICE

The documents accompanying this telecopy transmission contain confidential information belonging to the sender, which is legally privileged. The information is intended only for the use of the individual(s) or entity(ies) named above. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution or the taking of any action in reliance on the contents of this telecopied information is strictly prohibited. If you have received this telecopy in error, please immediately notify us by telephone to arrange for return of the original documents to us.

515 CONGRESS AVENUE | SUITE 1515 | AUSTIN, TEXAS 78701
OFFICE (512) 472.3263 | FAX (512) 473.2609 | WWW.BAW.COM

Total Pages Scanned : 9 Total Pages Confirmed : 9

No.	Job	Remote Station	Start Time	Duration	Pages	Line	Mode	Job Type	Results
001	673	5122393311	03:37:09 p.m. 05-24-2013	00:02:27	9/9	1	EC	HS	CP28800

Abbreviations:
HS: Host send
HR: Host receive
PL: Polled local
PR: Polled remote
MP: Mailbox print
RP: Report
CP: Completed
FA: Fail
TS: Terminated by system
G3: Group 3

Law Offices of
BOOTH, AHRENS & WERKENTHIN
A Professional Corporation

Michael J. Booth
Fred B. Werkenthin, Jr.
Wil Galloway
Trey Nesloney

Carolyn Ahrens
Of Counsel

Joseph S. Babb
Of Counsel

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
2013 MAY 24 AM 10: 56
CHIEF CLERK'S OFFICE

May 24, 2013

<u>Via Regular Mail</u>

Ms. Bridget C. Bohac, Chief Clerk
TCEQ – MC 105
P.O. Box 13087
Austin, Texas 78711-3087

RE: Request for Contested Case Hearing regarding Lower Colorado River Authority's Proposed Changes to its Water Management Plan (Water Rights Application No. 5838A)

Dear Ms. Bohac:

Enclosed you will find one original and one copy of the Request for Contested Case Hearing that was fax filed today, May 24, 2013, along with a copy of the transmission report. Please let me know if you have any questions.

Very truly yours,

Marion Henley
Paralegal for
Booth, Ahrens & Werkenthin, P.C.

Law Offices of
BOOTH, AHRENS & WERKENTHIN
A Professional Corporation

Michael J. Booth
Fred B. Werkenthin, Jr.
Wil Galloway
Trey Nesloney

Carolyn Ahrens
Of Counsel

Joseph S. Babb
Of Counsel

2013 MAY 28 AM 10:56
CHIEF CLERKS OFFICE
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

May 24, 2013

REVIEWED
MAY 29 2013
By

Facsimile Submission: 512-239-3311

Ms. Bridget C. Bohac, Chief Clerk
TCEQ – MC 105
P.O. Box 13087
Austin, Texas 78711-3087

RE: Request for Contested Case Hearing regarding Lower Colorado River Authority's Proposed Changes to its Water Management Plan (Water Rights Application No. 5838A)

Dear Ms. Bohac:

By this letter, the Texas Rice Producer's Legislative Group, through its Colorado Water Issues Committee, and several individuals identified below request a contested case hearing regarding Lower Colorado River Authority's Water Rights Application No. 5838A. The application proposes a new water management plan associated with Certificates of Adjudication Nos. 14-5478 and 14-5482, as amended. The Texas Commission on Environmental Quality ("TCEQ") issued notice of the application on April 15, 2013, followed by published notice in affected counties. These requests for contested case hearing are submitted timely, and also include public comment.

A. Requestors' Information:

Texas Rice Producers Legislative Group (association)
c/o Colorado Water Issues Committee
Ronald Gertson, President
2511 San Bernard Dr.
East Bernard, Texas 77435
phone number: (979) 758-4670
fax number:(979) 234-2920
email address: ronaldg59@gmail.com

Mr. Laurance Armour, III (individual capacity)
Pierce Ranch P.O. Box 538
Pierce, Texas 77467
phone number: (979) 532-4250
fax number:(979) 532-4251
email address: Laurance Armour la3a@flash.net

Mr. Daniel Berglund (individual capacity)
588 Crescent Lane
Wharton, Texas 77488
phone number: (979) 541-7506
fax number: (979) 677-3317
email address: berg6@hughes.net

Mr. Ronald Gertson (individual capacity)
2511 San Bernard Dr.
East Bernard, Texas 77435
phone number: (979) 758-4670
fax number:(979) 234-2920
email address: ronaldg59@gmail.com

The Texas Rice Producers Legislative Group ("TRPLG") is a Texas Non-profit Corporation, with its registered office at 4 N. Washington Street, El Campo Street, El Campo, Texas, 77437. The Group was formed 1989 for the purpose of supporting, maintaining and advancing the Texas rice industry, among other purposes. Its by-laws provide that active membership is open to persons engaged in the production of rice.

TRPLG's by-laws also provide for the appointment of special committees. By resolution in 2009, TRPLG charged the Colorado Water Issues Committee ("CWIC") to administer a Water Issues Fund for facilitating the practical, scientific and legal response to administrative and other actions that threaten the availability of rice irrigation water from the Colorado River. By resolution dated May 13, 2013, TRPLG directed CWIC to submit this request for hearing on TRPLG's behalf and authorized CWIC to act as its representative in matters related to this request.

TRPLG members are interest holders in agricultural lands and farming operations that put surface water of the lower Colorado River basin to beneficial use for growing rice as a food crop. These members stand on the shoulders of individuals, families, and businesses who developed farmlands and contributed to the construction of extensive irrigation canals dating back to the 1880's; lent support for organizing the Lower Colorado River Authority; made way for the construction of the Highland Lakes, including through a 1937 contract to address respective rights to divert and store water; and perfected, through their application of water to beneficial purposes, water rights that LCRA and its system customers use today. TRPLG members benefit directly from

provisions in the adjudicated findings associated with LCRA's water rights that require stored water in excess of actual firm demands to be made available for downstream irrigation according to a TCEQ-approved water management plan. TRPLG members depend for their livelihood on the continued supply of stored surface water, the availability of which will be subject to the new water management plan proposed by LCRA in Application No. 5838A.

Numerous of TRPLG's members have standing to request a contested case hearing in their own right; however, it would be impractical and financially prohibitive for all of them to do so and neither the claims asserted in this matter nor the relief requested requires the independent participation of so many. It is not anticipated that the matter at issue will require fact-intensive individual inquiry, but rather that the matter will be resolved based on hydrologic analyses, widely applicable terms and policies for water availability, proper interpretation and implementation of the adjudication of LCRA water rights, LCRA's duties as the owner of downstream irrigation canals, and legal principles related to beneficial use, conservation, and the water rights and demands involved, among other things. In its representational capacity, TRPLG seeks the same results that its members seek, including revisions to the proposed water management plan that would preserve access to surface water for irrigated agriculture on reasonable terms and lessen the severity and frequency of interruptions in water supply. The benefits of such revisions will inure to TRPLG's members who would be injured-in-fact by the proposed plan, if that plan were adopted by the TCEQ.

Mr. Laurance Armour, III, Mr. Daniel Berglund, and Mr. Ronald Gertson are members of TRPLG. Mr. Berglund is the Chairman of TRPLG. Mr. Berglund and Mr. Gertson also serve as officers of CWIC. In addition to supporting TRPLG's request for contested case hearing as an association of which they are members, Mr. Laurance Armour, III, Mr. Daniel Berglund, and Mr. Ronald Gertson request a contested case hearing in their individual capacities. They are referred to together as the "Individual Requestors."

Each of the Individual Requestors is actively engaged in rice production in the lower Colorado River Basin on lands historically supplied with water diverted to irrigation canals now served by LCRA. Water is diverted to the canals pursuant to historical run-of-the-river rights and contracts, including contracts for the interruptible supply of stored water from the LCRA reservoir system. Canals within LCRA's Lakeside Irrigation Division serve farmland located in Colorado and Wharton Counties, Texas. Canals within LCRA's Gulf Coast Irrigation Division serve farmland located in Wharton and Matagorda Counties, Texas. The Lakeside and Gulf Coast canals are now owned and controlled by LCRA. TRPLG members, including Mr. Armour, also use water delivered by LCRA to the Pierce Ranch canal system in Wharton County. LCRA's proposed water management plan (the activity at issue in the application contested here) sets forth new criteria for the supply of upstream stored water applicable throughout LCRA's irrigation service area, including Pierce Ranch.

Mr. Armour has been actively engaged in rice production in Wharton County, included within the Pierce Ranch Irrigation Division, for more than 30 years. His family has been similarly engaged for over 100 years. Mr. Armour owns and operates farmland adjoining the Colorado River and also is a partner in BU Growers, Ltd., which produces seed rice and dries and stores grain produced in Matagorda, Wharton and Fort Bend counties. Over the years, Mr. Armour has invested considerable resources in the infrastructure necessary to grow rice, including land leveling, canal maintenance, pump maintenance and equipment investment. He has a contractual right with LCRA for the supply of irrigation water from upstream storage under a surface water right purchase agreement signed in 2001. Mr. Armour has exercised this right in the past, and for example, entered into irrigation-water contracts in years 2002-2011. Mr. Armour has additionally invested in practices to conserve water, including precision land leveling, canal vegetation control, and tail water re-use. During the most recent year that water was available for service to the Pierce Ranch, Mr. Armour irrigated over 5,000 acres of rice. The continued pursuit of Mr. Armour's business depends on the future availability of stored water from LCRA, provided by the terms of LCRA's adjudicated water rights and its water management plan. Mr. Armour fully intends to continue to produce rice as a food crop in the future, if adequate water supply is available.

Mr. Daniel Berglund has been actively engaged in rice production in Matagorda County, relying on LCRA's Gulf Coast Irrigation Division to deliver water to irrigate his rice for more than 23 years. The land he farms has been in rice production, and water has been provided from the Colorado River, for over 100 years. Mr. Berglund leases land adjoining the Gulf Coast Irrigation Division and is a partner in Berglund Farms Joint Venture. Over the years, Mr. Berglund has invested considerable resources in the infrastructure necessary to grow rice including land leveling, permanent levee construction and multiple inlet water delivery systems, all of which has increased his irrigation efficiency. He also has made considerable investments in large and expensive farm equipment that is needed to farm rice. Mr. Berglund has a right to contract with LCRA for the supply of irrigation water from upstream storage because he has a lease to farm land adjacent to the Gulf Coast Irrigation Division canals. Mr. Berglund has exercised this right in the past, and for example entered into such contracts since 1989. During the most recent two years that water contracts were available for service to the Gulf Coast Irrigation Division, 2010-2011, Mr. Berglund planted an average of 735 acres of rice. The continued pursuit of Mr. Berglund's business depends on the future availability of stored water from LCRA, provided by the terms of LCRA's adjudicated water rights and its water management plan. Mr. Berglund fully intends to continue to produce rice as a food crop in the future, if adequate water supply is available.

Each of the Individual Requestors is an affected person with personal justiciable interests related to the legal rights, privileges and economic interests at issue in the contested application. Their interests are not common to the general public. TRPLG and the Individual Requestors all have standing to make this request as contemplated in TEX. WATER CODE ANN. § 5.115 (Vernon 2000) and 30 TEX. ADMIN. CODE Chapter 55.

B. Applicant Information:

Lower Colorado River Authority
3700 Lake Austin Blvd.
Austin, Texas 78703

Applicant proposes a water management plan that, among other things, includes new criteria for determining the availability of stored surface water to supply downstream needs for irrigation water. Additional information is included in the notice of Application No. 5838A that was issued by the TCEQ on April 15, 2013.

C. Effect of Proposed Activity:

The proposed water management plan implements LCRA's adjudicated water rights in a way that lessens the availability of stored water to meet the needs of irrigators and increases the severity and frequency of interruption in supplies historically available for use downstream. The complexity of issues associated with the LCRA application will require further research and development, and TRPLG and the Individual Requestors reserve the right to raise additional issues during proceedings on the application. Preliminarily, and among other things, the Individual Requestors and other TRPLG members would be harmed by the following features of the proposed water management plan in ways not common to the general public:

- an unprecedented annual "cap" on deliveries of stored water to the Gulf Coast and Lakeside Irrigation Divisions and Pierce Ranch would limit rice production even when upstream storage reservoirs are full or nearly full;

- total curtailment of irrigation supply is made more likely by increasing the targeted minimum storage level almost three-fold, as compared to the 2010 water management plan;

- the severity and frequency of partial curtailments of supply are increased by steeper curtailment curves;

- the ability to produce a second, or ratoon, harvest is newly limited by the unprecedented parceling and capping of available water between main and ratoon crop irrigation, falling short of assuring the full utilization of available interruptible water supplies; and

- the proposed plan overstates reserves, and fails to maximize beneficial use of water in general and to incorporate an appropriate interpretation of firm demand during drought conditions.

A related order by the Commissioners of the TCEQ's predecessor agency in 1991 underscores a significant inquiry at issue in the proposed application. The order explains that although the Commissioners had been given insufficient information on which to

determine whether a trigger level for curtailing interruptible supply was set appropriately, it was unlikely that the trigger would be reached. *Based on both of those circumstances combined*, the Commissioners affirmatively found, "*Accordingly*, it is unnecessary for the Commission to determine *at this time* whether, or to what extent, such trigger level provides more protection to firm supplies than is necessary."[1] Such a surplus of water no longer exists, and curtailment has become a recent reality under orders to temporarily suspend the current water management plan. TCEQ has a duty under the terms of LCRA's adjudicated water rights, to exercise jurisdiction to make available as interruptible water that amount of water which can be released while also meeting the water demands of firm water customers. The Commission must determine the proper allocation in proceedings on this application.

Consecutive emergency curtailments of irrigation supply have demonstrated that the detrimental impacts of water allocation decisions affecting the lower Colorado River basin are actual and imminent, not conjectural or hypothetical. The first of these total curtailments in irrigation supply occurred in 2012. The losses downstream from that interruption included a reduction in rice production of nearly 55,000 acres. In addition to the direct impact on farmers and food supplies, it is becoming increasingly clear that the agricultural infrastructure and rural communities that are integral parts of the lower Colorado River basin's economies and rice farming heritage cannot withstand more frequent repetition of total curtailment.

D. Conditions in Proposed Permit which may Satisfy Requestors' Concerns:

TRPLG and the Individual Requestors are aware that others currently argue for changes in the proposed water management plan that would amplify the impact on downstream agricultural production substantially. TRPLG and the Individual Requestors do not propose by this request for contested case hearing that firm water customers of the LCRA should be put at unreasonable risk for diminished supply. Nor are requestors insensitive to the impacts of diminished lake levels on the communities that have come to surround and enjoy the indirect benefits of constructed water supply and flood-control reservoirs. However, the importance of maintaining agricultural resources in this state generally, and the significance specifically of downstream rice production, must be recognized.

In addition to changes in the water management plan that would specifically address the effects of the proposed water management plan discussed above, TRPLG and the Individual Requestors believe that different criteria can be identified to protect firm supply at a legal and appropriate level and also lessen the negative impact on downstream food production. For example, there is significant dispute about appropriate storage levels for total curtailment. Further analysis may indicate that the currently proposed level could be increased by some amount without critical impact to downstream irrigation

[1] This language is quoted from the 1991 Order Approving LCRA's Drought Management Plan, Finding of Fact No. 8 (emphasis added) (required by the 1989 Water Management Plan Order and integrated by the 1999 Water Management Plan Order).

if other measures were taken to better support irrigation supplies and the sustainability of downstream agricultural resources. Also, as LCRA pursues additional downstream infrastructure consistent with its duties as owner and operator of historic irrigation canals and associated water rights, identification of supply criteria to better integrate system resources would be appropriate.

Provisions of the proposed plan that impose an unprecedented "cap" on irrigation water, even when upstream storage is full or nearly full, are contrary to historic principles of beneficial use and supply without discrimination and should be struck. The cap also is unnecessary to serve firm customers who are protected by provisions related to lake levels and curtailment. The cap provisions and others were influenced in the stakeholder process by non-customer interests focused on aesthetic and recreational lake levels. Long-held principles of beneficial use of water will be sacrificed if the yields and usefulness of the state's many water supply reservoirs are diminished by maintaining lake levels to accommodate the inadequate diversion infrastructure of some users,[2] or by choices to support indirect recreational economic activity and aesthetic values. Any finding with that effect will have staggering statewide implications and must be addressed directly.

E. Conclusion:

TRPLG, and Mr. Laurance Armour, III, Mr. Ronald Gertson, and Mr. Daniel Berglund, as members of TRPLG and also in their individual capacities, make this request for contested case hearing in order to pursue their standing and rights under law and the TCEQ's rules. Without waiver of this request for hearing, but in addition to it, TRPLG and the Individual Requestors again ask the Commissioners to initiate resolution procedures to further the possibility of adequate technical oversight by the Executive Director and a negotiated settlement of the issues in dispute between the parties. TRPLG and the Individual Requestors respectfully urge that these requests be granted.

Very truly yours,

Carolyn Ahrens,
Of Counsel
State Bar No. 00942030

Michael J. Booth
State Bar No. 02648500

[2] See, for example, LCRA's Supplemental Brief and Attachments in Support of Application For Emergency Authorization Related to Water Management Plan, submitted to the TCEQ n January 11, 2013 (citing raw water intake elevations, among other things, as a basis for curtailing water supply for downstream irrigation).

Booth, Ahrens & Werkenthin, P.C.
515 Congress Avenue, Ste 1515
Austin, Texas 78701
512.472.3263

Cc via electronic transmission:
Mr. Laurance Armour, III
Mr. Daniel Berglund
Mr. Ronald Gertson
Mr. Haskell Simon
Mr. Zak Covar
Ms. Stephanie Bergeron Perdue
Mr. Blas Coy
Mr. Joe Trungale
Ms. Lyn Clancy (for LCRA)

Law Offices of
BOOTH, AHRENS & WERKENTHIN
A Professional Corporation

Michael J. Booth
Fred B. Werkenthin, Jr.
Wil Galloway
Trey Nesloney

Carolyn Ahrens
Of Counsel

Joseph S. Babb
Of Counsel

WR 02315

May 24, 2013

REVIEWED
MAY 24 2013
By

CHIEF CLERKS OFFICE
2013 MAY 24 PM 3:59
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Facsimile Submission: 512-239-3311

Ms. Bridget C. Bohac, Chief Clerk
TCEQ – MC 105
P.O. Box 13087
Austin, Texas 78711-3087

RE: **Request for Contested Case Hearing regarding Lower Colorado River Authority's Proposed Changes to its Water Management Plan (Water Rights Application No. 5838A)**

Dear Ms. Bohac:

By this letter, the Texas Rice Producer's Legislative Group, through its Colorado Water Issues Committee, and several individuals identified below request a contested case hearing regarding Lower Colorado River Authority's Water Rights Application No. 5838A. The application proposes a new water management plan associated with Certificates of Adjudication Nos. 14-5478 and 14-5482, as amended. The Texas Commission on Environmental Quality ("TCEQ") issued notice of the application on April 15, 2013, followed by published notice in affected counties. These requests for contested case hearing are submitted timely, and also include public comment.

A. Requestors' Information:

Texas Rice Producers Legislative Group (association)
c/o Colorado Water Issues Committee
Ronald Gertson, President
2511 San Bernard Dr.
East Bernard, Texas 77435
phone number: (979) 758-4670
fax number:(979) 234-2920
email address: ronaldg59@gmail.com

Mr. Laurance Armour, III (individual capacity)
Pierce Ranch P.O. Box 538
Pierce, Texas 77467
phone number: (979) 532-4250
fax number:(979) 532-4251
email address: Laurance Armour la3a@flash.net

Mr. Daniel Berglund (individual capacity)
588 Crescent Lane
Wharton, Texas 77488
phone number: (979) 541-7506
fax number: (979) 677-3317
email address: berg6@hughes.net

Mr. Ronald Gertson (individual capacity)
2511 San Bernard Dr.
East Bernard, Texas 77435
phone number: (979) 758-4670
fax number:(979) 234-2920
email address: ronaldg59@gmail.com

The Texas Rice Producers Legislative Group ("TRPLG") is a Texas Non-profit Corporation, with its registered office at 4 N. Washington Street, El Campo Street, El Campo, Texas, 77437. The Group was formed 1989 for the purpose of supporting, maintaining and advancing the Texas rice industry, among other purposes. Its by-laws provide that active membership is open to persons engaged in the production of rice.

TRPLG's by-laws also provide for the appointment of special committees. By resolution in 2009, TRPLG charged the Colorado Water Issues Committee ("CWIC") to administer a Water Issues Fund for facilitating the practical, scientific and legal response to administrative and other actions that threaten the availability of rice irrigation water from the Colorado River. By resolution dated May 13, 2013, TRPLG directed CWIC to submit this request for hearing on TRPLG's behalf and authorized CWIC to act as its representative in matters related to this request.

TRPLG members are interest holders in agricultural lands and farming operations that put surface water of the lower Colorado River basin to beneficial use for growing rice as a food crop. These members stand on the shoulders of individuals, families, and businesses who developed farmlands and contributed to the construction of extensive irrigation canals dating back to the 1880's; lent support for organizing the Lower Colorado River Authority; made way for the construction of the Highland Lakes, including through a 1937 contract to address respective rights to divert and store water; and perfected, through their application of water to beneficial purposes, water rights that LCRA and its system customers use today. TRPLG members benefit directly from

provisions in the adjudicated findings associated with LCRA's water rights that require stored water in excess of actual firm demands to be made available for downstream irrigation according to a TCEQ-approved water management plan. TRPLG members depend for their livelihood on the continued supply of stored surface water, the availability of which will be subject to the new water management plan proposed by LCRA in Application No. 5838A.

Numerous of TRPLG's members have standing to request a contested case hearing in their own right; however, it would be impractical and financially prohibitive for all of them to do so and neither the claims asserted in this matter nor the relief requested requires the independent participation of so many. It is not anticipated that the matter at issue will require fact-intensive individual inquiry, but rather that the matter will be resolved based on hydrologic analyses, widely applicable terms and policies for water availability, proper interpretation and implementation of the adjudication of LCRA water rights, LCRA's duties as the owner of downstream irrigation canals, and legal principles related to beneficial use, conservation, and the water rights and demands involved, among other things. In its representational capacity, TRPLG seeks the same results that its members seek, including revisions to the proposed water management plan that would preserve access to surface water for irrigated agriculture on reasonable terms and lessen the severity and frequency of interruptions in water supply. The benefits of such revisions will inure to TRPLG's members who would be injured-in-fact by the proposed plan, if that plan were adopted by the TCEQ.

Mr. Laurance Armour, III, Mr. Daniel Berglund, and Mr. Ronald Gertson are members of TRPLG. Mr. Berglund is the Chairman of TRPLG. Mr. Berglund and Mr. Gertson also serve as officers of CWIC. In addition to supporting TRPLG's request for contested case hearing as an association of which they are members, Mr. Laurance Armour, III, Mr. Daniel Berglund, and Mr. Ronald Gertson request a contested case hearing in their individual capacities. They are referred to together as the "Individual Requestors."

Each of the Individual Requestors is actively engaged in rice production in the lower Colorado River Basin on lands historically supplied with water diverted to irrigation canals now served by LCRA. Water is diverted to the canals pursuant to historical run-of-the-river rights and contracts, including contracts for the interruptible supply of stored water from the LCRA reservoir system. Canals within LCRA's Lakeside Irrigation Division serve farmland located in Colorado and Wharton Counties, Texas. Canals within LCRA's Gulf Coast Irrigation Division serve farmland located in Wharton and Matagorda Counties, Texas. The Lakeside and Gulf Coast canals are now owned and controlled by LCRA. TRPLG members, including Mr. Armour, also use water delivered by LCRA to the Pierce Ranch canal system in Wharton County. LCRA's proposed water management plan (the activity at issue in the application contested here) sets forth new criteria for the supply of upstream stored water applicable throughout LCRA's irrigation service area, including Pierce Ranch.

Mr. Armour has been actively engaged in rice production in Wharton County, included within the Pierce Ranch Irrigation Division, for more than 30 years. His family has been similarly engaged for over 100 years. Mr. Armour owns and operates farmland adjoining the Colorado River and also is a partner in BU Growers, Ltd., which produces seed rice and dries and stores grain produced in Matagorda, Wharton and Fort Bend counties. Over the years, Mr. Armour has invested considerable resources in the infrastructure necessary to grow rice, including land leveling, canal maintenance, pump maintenance and equipment investment. He has a contractual right with LCRA for the supply of irrigation water from upstream storage under a surface water right purchase agreement signed in 2001. Mr. Armour has exercised this right in the past, and for example, entered into irrigation-water contracts in years 2002-2011. Mr. Armour has additionally invested in practices to conserve water, including precision land leveling, canal vegetation control, and tail water re-use. During the most recent year that water was available for service to the Pierce Ranch, Mr. Armour irrigated over 5,000 acres of rice. The continued pursuit of Mr. Armour's business depends on the future availability of stored water from LCRA, provided by the terms of LCRA's adjudicated water rights and its water management plan. Mr. Armour fully intends to continue to produce rice as a food crop in the future, if adequate water supply is available.

Mr. Daniel Berglund has been actively engaged in rice production in Matagorda County, relying on LCRA's Gulf Coast Irrigation Division to deliver water to irrigate his rice for more than 23 years. The land he farms has been in rice production, and water has been provided from the Colorado River, for over 100 years. Mr. Berglund leases land adjoining the Gulf Coast Irrigation Division and is a partner in Berglund Farms Joint Venture. Over the years, Mr. Berglund has invested considerable resources in the infrastructure necessary to grow rice including land leveling, permanent levee construction and multiple inlet water delivery systems, all of which has increased his irrigation efficiency. He also has made considerable investments in large and expensive farm equipment that is needed to farm rice. Mr. Berglund has a right to contract with LCRA for the supply of irrigation water from upstream storage because he has a lease to farm land adjacent to the Gulf Coast Irrigation Division canals. Mr. Berglund has exercised this right in the past, and for example entered into such contracts since 1989. During the most recent two years that water contracts were available for service to the Gulf Coast Irrigation Division, 2010-2011, Mr. Berglund planted an average of 735 acres of rice. The continued pursuit of Mr. Berglund's business depends on the future availability of stored water from LCRA, provided by the terms of LCRA's adjudicated water rights and its water management plan. Mr. Berglund fully intends to continue to produce rice as a food crop in the future, if adequate water supply is available.

Each of the Individual Requestors is an affected person with personal justiciable interests related to the legal rights, privileges and economic interests at issue in the contested application. Their interests are not common to the general public. TRPLG and the Individual Requestors all have standing to make this request as contemplated in TEX. WATER CODE ANN. § 5.115 (Vernon 2000) and 30 TEX. ADMIN. CODE Chapter 55.

B. Applicant Information:

Lower Colorado River Authority
3700 Lake Austin Blvd.
Austin, Texas 78703

Applicant proposes a water management plan that, among other things, includes new criteria for determining the availability of stored surface water to supply downstream needs for irrigation water. Additional information is included in the notice of Application No. 5838A that was issued by the TCEQ on April 15, 2013.

C. Effect of Proposed Activity:

The proposed water management plan implements LCRA's adjudicated water rights in a way that lessens the availability of stored water to meet the needs of irrigators and increases the severity and frequency of interruption in supplies historically available for use downstream. The complexity of issues associated with the LCRA application will require further research and development, and TRPLG and the Individual Requestors reserve the right to raise additional issues during proceedings on the application. Preliminarily, and among other things, the Individual Requestors and other TRPLG members would be harmed by the following features of the proposed water management plan in ways not common to the general public:

- an unprecedented annual "cap" on deliveries of stored water to the Gulf Coast and Lakeside Irrigation Divisions and Pierce Ranch would limit rice production even when upstream storage reservoirs are full or nearly full;
- total curtailment of irrigation supply is made more likely by increasing the targeted minimum storage level almost three-fold, as compared to the 2010 water management plan;
- the severity and frequency of partial curtailments of supply are increased by steeper curtailment curves;
- the ability to produce a second, or ratoon, harvest is newly limited by the unprecedented parceling and capping of available water between main and ratoon crop irrigation, falling short of assuring the full utilization of available interruptible water supplies; and
- the proposed plan overstates reserves, and fails to maximize beneficial use of water in general and to incorporate an appropriate interpretation of firm demand during drought conditions.

A related order by the Commissioners of the TCEQ's predecessor agency in 1991 underscores a significant inquiry at issue in the proposed application. The order explains that although the Commissioners had been given insufficient information on which to

determine whether a trigger level for curtailing interruptible supply was set appropriately, it was unlikely that the trigger would be reached. *Based on both of those circumstances combined*, the Commissioners affirmatively found, "*Accordingly*, it is unnecessary for the Commission to determine *at this time* whether, or to what extent, such trigger level provides more protection to firm supplies than is necessary."[1] Such a surplus of water no longer exists, and curtailment has become a recent reality under orders to temporarily suspend the current water management plan. TCEQ has a duty under the terms of LCRA's adjudicated water rights, to exercise jurisdiction to make available as interruptible water that amount of water which can be released while also meeting the water demands of firm water customers. The Commission must determine the proper allocation in proceedings on this application.

Consecutive emergency curtailments of irrigation supply have demonstrated that the detrimental impacts of water allocation decisions affecting the lower Colorado River basin are actual and imminent, not conjectural or hypothetical. The first of these total curtailments in irrigation supply occurred in 2012. The losses downstream from that interruption included a reduction in rice production of nearly 55,000 acres. In addition to the direct impact on farmers and food supplies, it is becoming increasingly clear that the agricultural infrastructure and rural communities that are integral parts of the lower Colorado River basin's economies and rice farming heritage cannot withstand more frequent repetition of total curtailment.

D. Conditions in Proposed Permit which may Satisfy Requestors' Concerns:

TRPLG and the Individual Requestors are aware that others currently argue for changes in the proposed water management plan that would amplify the impact on downstream agricultural production substantially. TRPLG and the Individual Requestors do not propose by this request for contested case hearing that firm water customers of the LCRA should be put at unreasonable risk for diminished supply. Nor are requestors insensitive to the impacts of diminished lake levels on the communities that have come to surround and enjoy the indirect benefits of constructed water supply and flood-control reservoirs. However, the importance of maintaining agricultural resources in this state generally, and the significance specifically of downstream rice production, must be recognized.

In addition to changes in the water management plan that would specifically address the effects of the proposed water management plan discussed above, TRPLG and the Individual Requestors believe that different criteria can be identified to protect firm supply at a legal and appropriate level and also lessen the negative impact on downstream food production. For example, there is significant dispute about appropriate storage levels for total curtailment. Further analysis may indicate that the currently proposed level could be increased by some amount without critical impact to downstream irrigation

[1] This language is quoted from the 1991 Order Approving LCRA's Drought Management Plan, Finding of Fact No. 8 (emphasis added) (required by the 1989 Water Management Plan Order and integrated by the 1999 Water Management Plan Order).

if other measures were taken to better support irrigation supplies and the sustainability of downstream agricultural resources. Also, as LCRA pursues additional downstream infrastructure consistent with its duties as owner and operator of historic irrigation canals and associated water rights, identification of supply criteria to better integrate system resources would be appropriate.

Provisions of the proposed plan that impose an unprecedented "cap" on irrigation water, even when upstream storage is full or nearly full, are contrary to historic principles of beneficial use and supply without discrimination and should be struck. The cap also is unnecessary to serve firm customers who are protected by provisions related to lake levels and curtailment. The cap provisions and others were influenced in the stakeholder process by non-customer interests focused on aesthetic and recreational lake levels. Long-held principles of beneficial use of water will be sacrificed if the yields and usefulness of the state's many water supply reservoirs are diminished by maintaining lake levels to accommodate the inadequate diversion infrastructure of some users,[2] or by choices to support indirect recreational economic activity and aesthetic values. Any finding with that effect will have staggering statewide implications and must be addressed directly.

E. Conclusion:

TRPLG, and Mr. Laurance Armour, III, Mr. Ronald Gertson, and Mr. Daniel Berglund, as members of TRPLG and also in their individual capacities, make this request for contested case hearing in order to pursue their standing and rights under law and the TCEQ's rules. Without waiver of this request for hearing, but in addition to it, TRPLG and the Individual Requestors again ask the Commissioners to initiate resolution procedures to further the possibility of adequate technical oversight by the Executive Director and a negotiated settlement of the issues in dispute between the parties. TRPLG and the Individual Requestors respectfully urge that these requests be granted.

Very truly yours,

Carolyn Ahrens,
Of Counsel
State Bar No. 00942030

Michael J. Booth
State Bar No. 02648500

[2] See, for example, LCRA's Supplemental Brief and Attachments in Support of Application For Emergency Authorization Related to Water Management Plan, submitted to the TCEQ n January 11, 2013 (citing raw water intake elevations, among other things, as a basis for curtailing water supply for downstream irrigation).

Booth, Ahrens & Werkenthin, P.C.
515 Congress Avenue, Ste 1515
Austin, Texas 78701
512.472.3263

Cc via electronic transmission:
Mr. Laurance Armour, III
Mr. Daniel Berglund
Mr. Ronald Gertson
Mr. Haskell Simon
Mr. Zak Covar
Ms. Stephanie Bergeron Perdue
Mr. Blas Coy
Mr. Joe Trungale
Ms. Lyn Clancy (for LCRA)

Law Offices of
BOOTH, AHRENS & WERKENTHIN
A Professional Corporation

MICHAEL J. BOOTH
FRED B. WERKENTHIN, JR.
WIL GALLOWAY
TREY NESLONEY

CAROLYN AHRENS
OF COUNSEL

JOSEPH S. BABB
OF COUNSEL

FAX COVER SHEET

TO: MS. BRIDGET C. BOHAC, CHIEF CLERK

FAX: 512-239-3311

FROM: Carolyn Ahrens

RE: REQUEST FOR CONTESTED CASE HEARING; WRPERM 5838

DATE: MAY 24, 2013

PAGES: 9, Including Fax Cover Sheet

MESSAGE:

2013 MAY 24 PM 3:58
CHIEF CLERKS OFFICE
ON ENVIRONMENTAL QUALITY

CONFIDENTIALITY NOTICE

The documents accompanying this telecopy transmission contain confidential information belonging to the sender, which is legally privileged. The information is intended only for the use of the individual(s) or entity(ies) named above. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution or the taking of any action in reliance on the contents of this telecopied information is strictly prohibited. If you have received this telecopy in error, please immediately notify us by telephone to arrange for return of the original documents to us.

515 CONGRESS AVENUE | SUITE 1515 | AUSTIN, TEXAS 78701
OFFICE (512) 472.3263 | FAX (512) 473.2609 | WWW.BAW.COM

Tracie Donnelly

From:	Carolyn Ahrens <carolyn@baw.com>
Sent:	Wednesday, February 06, 2013 2:57 PM
To:	EXECDIR
Cc:	Blas Coy; Dale Kohler; Stephanie Bergeron Perdue; Robert Martinez; L'Oreal Stepney; Kellye Rila; Ron Ellis; Tracie Donnelly; Ronald Gertson; Haskell Simon; Robby Cook; Sliva Paul
Subject:	CWIC / LCRA Water Management Plan (App. No. 5838A / Filed 2012): Letter to the Executive Director
Attachments:	CWIC_WMP_CovarLetter_020613.pdf

WR 82315

Dennise:

Please find a letter attached, addressed to Zak. The letter relates to LCRA's Application No. 5838A, to amend its Water Management Plan under regular rules and procedures.

We will be sending a hard copy to Zak's attention, as well. However, those listed on the letter as "copied" by electronic mail, will only receive this electronic copy.

As always, thank you for your assistance.

CA

Carolyn Ahrens

Carolyn Ahrens
515 Congress Avenue, Suite 1515
Austin, Texas 78701
512.472.3263
carolyn@baw.com

REVIEWED
APR 15 2013
By

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
2013 APR 15 PM 2:26
CHIEF CLERKS OFFICE

Law Offices of
BOOTH, AHRENS & WERKENTHIN
A Professional Corporation

Michael Booth
Fred B. Werkenthin, Jr.
Wil Galloway
Trey Nesloney

Carolyn Ahrens
Of Counsel

Joe Babb
Of Counsel

February 6, 2013

Mr. Zak Covar, Executive Director
Mail Code 109, TCEQ
P.O. Box 13087
Austin, Texas 78711-3087

Via electronic delivery and regular mail

RE: LCRA 2012 Application to Amend the Water Management Plan (Water Permit Application No. 5838A).

Dear Zak:

Please add my personal thank you to the expression of appreciation extended in Ronald Gertson's correspondence to you last month on behalf of the Colorado Water Issues Committee (CWIC) of the Texas Rice Producers Association Legislative Group. Ronald's letter focused on issues raised by the Lower Colorado River Authority's (LCRA) application for an emergency order affecting curtailment of irrigation uses in year 2013. This letter is related to LCRA's pending application for amendment of its Water Management Plan (WMP) under regular TCEQ rules and procedures.

The proposed WMP revision, filed 2012, remains under the Executive Director's staff review at this time. It is imperative to CWIC's interests, and the rights of downstream irrigators, that your staff look closely at the substantive issues in the plan. Certainly, this level of oversight must occur each and every time that reallocation of supply under the WMP is proposed. The law and the terms of the certificates of adjudication to which the WMP applies require it.

A draft 2012 WMP amendment order prepared by your staff last November disallows LCRA's request for unprecedented discretion to modify irrigation curtailment procedures in dry years without prior TCEQ review. CWIC agrees with your staff's decision. Outside pressures at work in the most recent planning process, without due consideration of historic reliance on water supply or the terms and requirements of the adjudication, underscore the wisdom of retaining meaningful TCEQ oversight. Changes to approved curtailment criteria are changes to LCRA's water rights, and the TCEQ must determine if those changes are consistent with the law and public welfare. We understand that some want to change your staff's November recommendation as it preserves TCEQ's prior review, but CWIC urges you to support that recommendation. TCEQ oversight is absolutely necessary, especially in dry years.

However, on a different issue, CWIC asks that the Executive Director team undertake additional consideration of the 2012 WMP application. The application incorporates key components of LCRA's water availability for downstream irrigation secured within the terms of the adjudication. CWIC is greatly concerned that the application has not received the critical staff analysis that is

due.[1] We understand that your staff has not yet evaluated the technical and legal basis for diminishing the availability of water for downstream irrigation to the degree proposed and, in effect, has not fully addressed allocation between firm and nonfirm customers.

For example, LCRA seeks new, annual caps on the availability of water for irrigation. The proposed order accepts those caps without critical finding regarding the technical basis for calculating them, consistency with the adjudication, or the law for making stored supplies available for use. The application also embeds a substantial "reserve" of water in excess of firm yield despite express provision in the adjudication regarding yield and that supply in excess of actual need is to be made available for nonfirm uses.[2] Staff documents mention the reserve, but do not evaluate it or its impact on present supply. These are only two examples among a number of values and criteria that determine if the WMP is true to the adjudication and maximum beneficial use of state water.[3]

Putting off such issues, the November draft notice of the Executive Director's recommendations explains that "*[t]he ED did not establish the proposed numerical values or curtailment criteria,* which reflect operational and contractual considerations between LCRA and its customers." We respectfully disagree with this characterization of the Executive Director's actions, as LCRA may not through operation or policy vary the terms of adjudicated water rights or the mandated WMP—only the TCEQ may do so. If the Executive Director accepts changed criteria for curtailing the irrigators, then he does affirmatively recommend those criteria subject to Commission approval—in this case without the benefit of technical analysis or consideration of the irrigators' rights under law.

The staff's explanation also furthers a misconception that the factors at issue were derived between LCRA and its customers. The 2010 WMP was prepared in a modified consensus process that put water supply decisions to a vote of the majority of interests identified to be stakeholders (not just customers), and LCRA's governing body ultimately directed the terms of the application. More significantly, the essence of the Executive Director's review and decisions regarding the provision of supply exists in the division of water supply *among* the LCRA customer group, and it goes without saying that the customers are not all in agreement with each other or with LCRA.[4]

A related 1991 order provides a good point of comparison. A finding of fact explains that at the time there was insufficient information on which the agency could determine whether a trigger level was set appropriately, but considers that it was unlikely that the trigger would be reached. The finding goes on that, "*Accordingly*, it is unnecessary for the Commission to determine *at this time* whether, or to what extent, such trigger level provides more protection to firm supplies than is

---

[1] See, for example, the Water Availability Review Memoranda, dated November 9, 2012, which states on page 6 that, "The specific curtailment curves and curtailment procedures were developed by LCRA for its operational purposes with input from its stakeholders" and that "the operational aspects of the curtailment curves and procedures are not part of TCEQ's review."

[2] LCRA water rights adjudication finding 26 (e).

[3] CWIC has provided more detail regarding its concerns on these and other issues to the Executive Director's staff and remains ready to support the staff's technical review as appropriate. See correspondence on CWIC's behalf dated April 30, 2012 and attaching preliminary comments.

[4] The *agency* retains jurisdiction to resolve all disputes regarding allocation of stored water. See, for example, the 1989 WMP Order, Finding of Fact 91 and Conclusion of Law 1(n).

necessary."[5] Such a surplus of water no longer exists, and curtailment has become a recent reality. With or without a convenient guide for the necessary determinations, the time for them is now.

It is implied that staff's decision not to review the terms for curtailment was influenced by the fact that the 2010 WMP Agreed Order expressly required LCRA to do six enumerated things but not to develop specific values and criteria.[6] Consideration of curtailment curves under the first of those items, however, should be interpreted to encompass all aspects of allocation. Also, and *importantly*, because LCRA negotiated and crafted the list of six items only with those parties that had requested a contested case hearing five years before (in 2004), the concerns of irrigation interests were not adequately reflected in the language. The fact that the Agreed Order did not direct LCRA to determine certain criteria does not mean that those values and criteria can escape critical TCEQ review when they *are* developed and used.[7] As LCRA described it at the time, this 2012 application should be recognized as "the most complex revision to the WMP since the first plan was developed and approved by the Commission in 1989."[8]

The 2012 proposed revisions to the WMP are indeed complex, and key provisions of the plan as a whole that are yet to be reviewed by the Executive Director's staff greatly impact how the downstream communities may weather the years until additional downstream water storage is available and proven effective. CWIC welcomes any opportunity to discuss accommodations that may yet be made by LCRA to address CWIC's concerns. Nevertheless, your staff's review remains essential. Also, if staff has reviewed these components for technical correctness, consistency with the adjudication, and in a public welfare and beneficial use analysis or otherwise, we would appreciate receiving documentation related to that review and the opportunity to better understand the staff's evaluation.

Thank you again, and particularly for your attention to this request on behalf of CWIC, for (1) support of your staff's commitment to preserve TCEQ oversight of the curtailment criteria, *especially* in dry years; and (2) before a technical review can be considered complete and a proposed order released for public notice, adequate analysis of technical issues that shape the degree and terms of curtailing irrigation supplies. We appreciate the unusual circumstances of expedited review of this matter and understand that time is short; however, we hope that the rights and interests of affected parties will not be put at risk by those circumstances, at the TCEQ. Please let me know if there is any information that CWIC or I can provide to facilitate your consideration of these requests.

With great regard,

Carolyn Ahrens

Carolyn Ahrens

---

[5] This language is quoted from the 1991 Order Approving LCRA's Drought Management Plan, Finding of Fact No. 8 (emphasis added) (required by the 1989 WMP Order and integrated by the 1999 WMP Order).

[6] See page 6 of the Water Availability Review Memorandum, dated November 9, 2012, first full paragraph, and also Proposed Finding of Fact No. 6 of the draft order prepared on behalf of the Executive Director at that time.

[7] Further, the characterization of the six items as described in Proposed Finding of Fact No. 5, and referenced in Proposed Finding of Fact No. 6, for the 2012 Application is not fully representative of the 2010 Agreed Order itself, which expressly states that the current amendment is to address the list of six "*at a minimum*." (Emphasis added).

[8] See TCEQ DOCKET NO. 2010-0025-WR, LCRA's Comments in Support of Proposed Agreed Order, January 20, 2010, page 2.

Cc via email:
Mr. Blas Coy
Mr. Dale Kohler
Ms. Stephanie Bergeron Perdue
Mr. Robert Martinez
Ms. L'Oreal Stepney
Ms. Kellye Rila
Mr. Ron Ellis
Ms. Tracie Donnelly
Mr. Ronald Gertson
Mr. Haskell Simon
Mr. Robby Cook
Mr. Paul Sliva

Law Offices of
BOOTH, AHRENS & WERKENTHIN
A Professional Corporation

REVIEWED
APR 15 2013
By BP

Michael Booth
Fred B. Werkenthin, Jr.
Wil Galloway
Trey Nesloney

Carolyn Ahrens
Of Counsel
Joe Babb
Of Counsel

WR 82315

2013 APR 15 PM 2:25
CHIEF CLERKS OFFICE
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

March 22, 2013

Mr. Zak Covar, Executive Director
Mail Code 109
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

via electronic delivery and regular mail

RE: LCRA 2012 Application to Amend the Water Management Plan (Water Permit Application No. 5838A)

Dear Zak:

This correspondence on behalf of the Colorado Water Issues Committee of the Texas Rice Producers Legislative Group ("CWIC") addresses information submitted to the Texas Commission on Environmental Quality by the Lower Colorado River Authority ("LCRA") on March 15, 2013, proposing changes to your staff's recommended order in the matter of LCRA's pending Water Permit Application No. 5838A (2012 Water Management Plan Application).

LCRA requests changes to Finding of Fact No. 13 and Conclusion of Law No. 1(e) in order to allow LCRA discretion in dry years to modify the plan's curtailment criteria. The requested discretion would eviscerate agency oversight of the Water Management Plan when that oversight may well be needed most. For reasons explained in correspondence on behalf of CWIC dated February 6, 2013 (attached), the Executive Director correctly refused LCRA's proposition in the original draft order and should flatly refuse that proposition again now.

LCRA also asks the Executive Director to change the proposed finding of fact that describes agency review of the application. Proposed Finding of Fact No. 4 as prepared by your staff states that "The Executive Director's technical review evaluated the impacts of this amendment on existing water rights and the environment." LCRA asks you to state as fact that the Executive Director also has made a technical review of the application sufficient to evaluate protection of public welfare. LCRA's request acknowledges that public welfare is a necessary and *additional* question that the Executive Director must answer.

In light of LCRA's proposed changes to the Executive Director's draft order, this letter renews CWIC's request for staff review of technical issues that shape the degree and terms of curtailing irrigation supplies. That review should occur before a proposed order is recommended for public notice. At minimum, LCRA must be asked to provide information for your review that:

- justifies the level of protection for firm customers in context of the relative impact on historic agricultural uses of the water supply;

- explains whether the new, annual cap on stored water for irrigation is legal and necessary to protect firm water availability; and
- addresses alternatives that could mitigate the impact on water supply for historic agricultural uses without impairing LCRA's ability to meet the actual needs of its firm customers (alternatives analysis being a customary public welfare consideration in water rights matters).

If the Executive Director's staff has not adequately examined these issues and others similar during technical review of LCRA's plan, then the Executive Director cannot propose findings that the plan protects the public welfare or implements the adjudication as intended.

CWIC asks again that you compare the agency's order in 1991. The Commissioners were concerned in 1991 that there was insufficient information on which it could determine whether a trigger level was set appropriately, but considered that the trigger level would not likely be reached during the planning period. The order states, "Accordingly, it is unnecessary for the Commission to determine *at this time* whether, or to what extent, such trigger level provides more protection to firm supplies than is necessary." It follows that when conditions of shortage are anticipated, as they are now, the agency must not simply waive off its duty to evaluate the criteria for allocating supplies between firm and interruptible customers.

Please let me know if there is any information that CWIC or I can provide to facilitate your consideration of these requests.

With great regard,

Carolyn Ahrens

Carolyn Ahrens

Cc via email:
Mr. Blas Coy
Mr. Dale Kohler
Ms. Stephanie Bergeron Perdue
Mr. Robert Martinez
Ms. L'Oreal Stepney
Ms. Kellye Rila
Ms. Tracie Donnelly

Marisa Weber

From: PUBCOMMENT
Sent: Thursday, May 09, 2013 8:49 AM
To: PUBCOMMENT-OCC2
Subject: FW: Public comment on Permit Number WRPERM 5838

H

WR 82315

From: PUBCOMMENT-OCC
Sent: Wednesday, May 08, 2013 3:00 PM
To: PUBCOMMENT
Subject: FW: Public comment on Permit Number WRPERM 5838

From: bbanigan@austin.rr.com [mailto:bbanigan@austin.rr.com]
Sent: Wednesday, May 08, 2013 2:37 PM
To: donotReply@tceq.state.tx.us
Subject: Public comment on Permit Number WRPERM 5838

REGULATED ENTY NAME 11405838000 WRPERM 5838 WATER MANAGEMENT PLAN

RN NUMBER: RN104252267

PERMIT NUMBER: WRPERM 5838

DOCKET NUMBER:

COUNTY: BASTROP, BURNET, COLORADO, FAYETTE, GILLESPIE, LAMPASAS, LLANO, MASON, MATAGORDA, SAN SABA, TRAVIS, WHARTON, WILLIAMSON

PRINCIPAL NAME: LOWER COLORADO RIVER AUTHORITY

CN NUMBER: CN600253637

FROM

NAME: Brian Timothy Banigan

E-MAIL: bbanigan@austin.rr.com

COMPANY:

ADDRESS: 300 CHESAPEAKE BAY LN S
AUSTIN TX 78717-2975

PHONE: 5126993376

FAX:

COMMENTS: As a property owner on Lake Buchanan I am affected by this proposed amendment to the LCRA's Water ManagementPlan in the ways explained below. For these reasons, I request the TCEQ's careful attention to my comments and TCEQ's approval of our request for a hearing. 1) Immediately impose a minimum storage level/ANYTIME CUT-OFF of 850,000 AF rather than the current 600,000 AF 2) Keep the current TCEQ Emergency Order in effect 3) Require LCRA to utilize the hydrologic data from 2009 to the present to immediately update the hydrology of the Colorado River Basin 4) Require LCRA to update immediately actual and projected firm demands, using updated hydrology 5) Require LCRA to begin working immediately with stakeholders on a new WMP that: Properly protects firm users in times of drought; Utilizes the latest hydrologic data available, including the significantly lower inflows to the lakes, to re-evaluate water availability throughout the river basin; and Provides true incentives for conservation by all parties, including proper water pricing and assessment of relative economic benefit created by use of the water. Thank you for your consideration of these important issues. Please let me know if you need any additional information.

Marisa Weber

From:	PUBCOMMENT
Sent:	Tuesday, May 28, 2013 2:35 PM
To:	PUBCOMMENT-OCC2
Subject:	FW: Public comment on Permit Number WRPERM 5838
Attachments:	TX Farm Bureau Hearing Req. and Comments to LCRA WMP.pdf

H

WR 82315

From: PUBCOMMENT-OCC
Sent: Tuesday, May 28, 2013 7:10 AM
To: PUBCOMMENT
Subject: FW: Public comment on Permit Number WRPERM 5838

From: jim@bradburycounsel.com [mailto:jim@bradburycounsel.com]
Sent: Friday, May 24, 2013 4:41 PM
To: donotReply@tceq.state.tx.us
Subject: Public comment on Permit Number WRPERM 5838

REGULATED ENTY NAME 11405838000 WRPERM 5838 WATER MANAGEMENT PLAN

RN NUMBER: RN104252267

PERMIT NUMBER: WRPERM 5838

DOCKET NUMBER:

COUNTY: BASTROP, BURNET, COLORADO, FAYETTE, GILLESPIE, LAMPASAS, LLANO, MASON, MATAGORDA, SAN SABA, TRAVIS, WHARTON, WILLIAMSON

PRINCIPAL NAME: LOWER COLORADO RIVER AUTHORITY

CN NUMBER: CN600253637

FROM

NAME: James D. Bradbury

E-MAIL: jim@bradburycounsel.com

COMPANY: James D. Bradbury, PLLC

ADDRESS: 9442 N CAPITAL OF TEXAS HWY Arboretum Plaza 1, Suite 500
AUSTIN TX 78759-7262

PHONE: 5123433626

FAX: 5123452924

COMMENTS: Please see attached hearing request and comments.

JAMES D. BRADBURY, PLLC

SUNDANCE SQUARE
201 MAIN STREET, SUITE 600
FORT WORTH, TEXAS 76102

ALSO ADMITTED IN ARKANSAS

OFFICE: 817-339-1105
FAX: 817-886-3495
JIM@BRADBURYCOUNSEL.COM

May 24, 2013

VIA Electronic Filing
Ms. Bridget C. Bohac
Office of the Chief Clerk
Texas Commission on Environmental Quality
MC 105
Post Office Box 13087
Austin, Texas 78711-3087

RE: Application No. 5838A, Application to Amend the LCRA Water Management Plan

Dear Ms. Bohac:

Please accept this letter requesting a formal contested case hearing in the above matter on behalf of the Texas Farm Bureau (the "Farm Bureau"). Farm Bureau is a Texas non-profit membership corporation committed to the advancement of agriculture and prosperity for rural Texas. Representing a membership of over 483,000 member families which include farmers, growers, and producers across Texas, Farm Bureau is associated with 206 organized county Farm Bureaus, including counties within the Lower Colorado basin. Having as its mission to be the voice of Texas agriculture, Farm Bureau endeavors "to benefit all Texans through the promotion of a prosperous agriculture for a viable, long-term domestic source of food, fiber and fuel." A critical component of Farm Bureau's work is the preservation of a continued supply and access to surface water from the Colorado River for agricultural production. The Water Management Plan as submitted to TCEQ poses a grave threat to thousands of acres of historical production and to the communities that rely on this industry. Farm Bureau has almost 10,000 member families in the affected area. Farm Bureau submits this letter to request a contested case hearing and offer written comments on Application No. 5838A to amend the Lower Colorado River Authority ("LCRA") Water Management Plan. The Water Management Plan must undergo significant revisions before it can be approved by the Commission.

I. REQUEST FOR CONTESTED CASE HEARING

Pursuant to the requirements of title 30, sections 55.251 through 55.256 of the Texas Administrative Code, Farm Bureau offers the following:

A. General Requirements

LCRA, the Applicant, is seeking to amend its Water Management Plan ("WMP") for the Lower Colorado Basin with respect to Lakes Travis and Buchanan, which if approved as proposed would have a substantial and detrimental impact on Texas agriculture and Farm Bureau's members within the Lower Colorado basin. Farm Bureau requests a contested case hearing.

Farm Bureau is a Texas non-profit corporation that is represented by the undersigned counsel, and therefore, all communications should be directed to Mr. Bradbury at the following address:

James D. Bradbury, PLLC
9442 Capital of Texas Highway N
Plaza 1 Suite 500
Austin, Texas 78759
512-343-3626 (telephone)
512-345-2924 (facsimile)

B. Requirements for Group or Association

An association such as Farm Bureau seeking a contested case hearing must meet three criteria: 1) one or more members of the group or association would otherwise have standing to request a hearing in their own right; 2) the interests the group or association seeks to protect are germane to the organization's purpose; and 3) neither the claim asserted nor the relief requested requires the participation of the individual members in the case.[1]

1. *One or More Members with Standing*

The first prong requires that Farm Bureau's members have standing to sue on their own behalf but does not impose unreasonable obstacles to associational representation.[2] It is sufficient if members are subject to a substantial risk of injury.[3] TCEQ rules provide that affected persons may request a contested case hearing.[4] The rules explain that an affected person is one who has a personal justiciable interest related to a legal right, duty, privilege, power, or economic interest affected by the application that is not common to the general public.[5] In determining affected person

[1] 30 Tex. Admin. Code § 55.252(a). *See also Tex. Ass'n of Bus. v. Tex. Air Control Bd.*, 852 S.W.2d 440, 447 (Tex. 1993) (quoting *Hunt v. Wash. State Apple Adver. Comm'n*, 432 U.S. 1, 9 (1988)).
[2] *Tex. Ass'n of Bus.*, 852 S.W.2d at 447.
[3] *City of Laredo v. Rio Grande H2O Guardian*, 2011 WL 3122205 (Tex. App.—San Antonio 2011, no pet.).
[4] 30 Tex. Admin. Code § 55.251(a)(4).
[5] 30 Tex. Admin. Code § 55.256(a).

status, all relevant factors are considered, which in this case would include the proximity of the person to the LCRA service area and areas impacted by the proposed WMP, whether the interest claimed bears a reasonable relationship to the proposed WMP, the likely impact of the LCRA WMP proposed changes on the health, safety, and use of property of the person, and likely impact of the proposed WMP on use of the impacted natural resource by the person.[6]

Farm Bureau is comprised of nearly 483,000 member families across the state of Texas, with nearly 10,000 member families located within the Colorado downstream area of Wharton, Matagorda and Colorado counties—the subject of LCRA's WMP. Farm Bureau's member families include farmers, growers, producers, and business owners who have a strong interest and concern in the sustainability of Texas agriculture as well as continued access to and sufficient supply of downstream water for irrigation of crops, livestock, and other agricultural production. Farm Bureau has identified five individual members who are affected persons and have standing in their own right to contest LCRA's proposed WMP: Richard Ottis, John Kelley, Robert Reed, Chris Shoppa, and Bryan Wiese. Each of these individual members are affected persons and has standing in his own right to request a hearing on LCRA's WMP.

Mr. Richard Ottis

Mr. Ottis, a Farm Bureau member, is the President and CEO of Rice Belt Warehouse, Inc. that operates grain and rice drying and storage facilities and seed rice processing services. Several of Mr. Ottis' locations are within the LCRA service area, specifically in Matagorda and Wharton counties. Mr. Ottis has been in business for fifty years, and the future of his business depends on continued irrigation by surface water from the Colorado River. He has already faced reduction in his labor force as a result of the sudden loss of irrigation in 2012 and is currently at a critical point such that a further loss of irrigation risks the loss of infrastructure and additional employees. The LCRA WMP limits the overall amount of water available to agriculture in any year—whether a wet or dry year. The proposed curtailment of the irrigation water to grow crops along with the LCRA's denial of water for the past two years has and will continue to result in economic hardship to Mr. Ottis and others similarly situated. Mr. Ottis is an affected person.[7]

Mr. John Wesley "Wes" Kelley, Jr.

Mr. Kelley is a member of Farm Bureau and owns Kelley's Flying Service, which provides a variety of services to local farmers including, planting rice, fertilizing crops, and spraying fields with fungicides, herbicides, and insecticides. Mr. Kelley lives and works in Matagorda County within LCRA's service area. Many, if not all, of the farmers he serves are located within LCRA's service area. The viability of Mr. Kelley's business depends on LCRA's continued supply of surface water from the Colorado River to

[6] 30 Tex. Admin. Code § 55.256(c).
[7] Farm Bureau has attached to this Request for Hearing the Affidavit of Richard Ottis as Exhibit A.

downstream farmers. Mr. Kelley has already felt the economic impact of recent dramatic curtailments in water supply to local farmers. In 2011, Mr. Kelley flew approximately 140,000 acres of rice, and in 2012, this number was reduced to only 17,000 acres with an estimated loss in revenue of at least $800,000. Mr. Kelley's business depends on farmers planting crops, and the planting of these crops depends on continued irrigation from the Colorado River. LCRA's proposed changes to the WMP directly impact the continued irrigation to downstream farmers in Matagorda and other surrounding counties and will result in economic hardship to Mr. Kelley. Mr. Kelley is an affected person.[8]

Mr. Robert E. Reed

Mr. Reed is a member of Farm Bureau and is a farmer located in Matagorda County. Mr. Reed farms 450 acres of land that is irrigated by surface water from the Colorado River. Mr. Reed relies on continued irrigation water from the Colorado River for the economic livelihood of his farm. The proposed LCRA WMP expressly limits the overall amount of water available to agriculture in any year. These changes combined with the already-implemented curtailments of irrigation water have and will continue to threaten Mr. Reed's livelihood and result in economic hardship to Mr. Reed and his neighbors. Mr. Reed is an affected person.[9]

Mr. Chris Shoppa

Mr. Shoppa is a member of Farm Bureau and is the owner of Shoppa's Farm Supply, which operates four John Deere Equipment dealerships in the Lower Colorado River Basin. In operation since 1982, Shoppa's Farm Supply is a family-owned business. Up until this year, Mr. Shoppa operated five dealerships, but as a result of the loss of rice production, he was forced to close his Eagle Lake location. Three of the four remaining locations are heavily dependant on rice production for their business. The proposed LCRA WMP threatens continued rice production and so too threatens Mr. Shoppa's business. The already-implemented curtailments of water to downstream agricultural operations has resulted in negative impacts to Mr. Shoppa's farm supply business and this economic hardship will increase under the proposed WMP. Mr. Shoppa is an affected person.

Mr. Bryan Wiese

Mr. Wiese is a member of Farm Bureau and farms rice and cotton in Wharton County, Texas. Mr. Wiese and his family annually produce 1,700 acres of rice. Each year, Mr. Wiese must borrow $1.2 million to plant rice. As a result of crop insurance, Mr. Wiese has been able to keep his employees notwithstanding the water shortages and their impact on his crops. But 2013 is the last year of crop insurance for his farm,

[8] Farm Bureau has attached to this Request for Hearing the Affidavit of John Wesley "Wes" Kelley, Jr. as Exhibit B.
[9] Farm Bureau has attached to this Request for Hearing the Affidavit of Robert E. Reed as Exhibit C.

and the long-term impacts of LCRA's propose curtailments in the WMP will be financially devastating to Mr. Wiese and his family. Mr. Wiese is an affected person.

None of these interests are common to the general public but are individualized impacts resulting from the proposed LCRA WMP now before the Commission. In fact, the general public has expressed through numerous comments to the LCRA WMP a desire to elevate other uses over agricultural irrigation and is seeking more restrictive or total curtailment of surface water supply to downstream agricultural users. Many of these comments from the general public focus on keeping the lakes full solely for recreational and aesthetic purposes. Residents with lakefront property are concerned about declining property values and do not see the value, benefit, or purpose for providing water to downstream agricultural communities if it risks lowering the lake levels and perhaps property values. Texas law, however, provides that such interests are subordinate to concerns of agricultural irrigation, which is one of many issues Farm Bureau intends to address through this contested case hearing.[10]

2. *Interests Germane to the Association's Purpose*

The second prong of the associational standing criteria requires "mere pertinence between the litigation at issue and the organization's purpose."[11] Agriculture comprises a significant portion of the Texas economy representing more than $100 billion annually. In addition to providing a safe and sustainable food supply, agriculture in Texas is a key employer. One of every seven Texans (14%) is in an agriculture-related job. Texas agriculture also supports numerous ecosystems and wildlife habitats. In recent years, with the drought conditions across Texas, agriculture has endured the water shortages acutely. LCRA's WMP seeks to dramatically curtail or even completely cut-off the supply of water to downstream interruptible water users, which has a direct, critical, and potentially catastrophic impact on agriculture in the lower Colorado region. Without water, meaningful scaled agriculture production will cease.

Farm Bureau has devoted significant effort and resources to water policy and among its published state policies, Farm Bureau believes that water for agricultural purposes should be classified as an essential use of water. Farm Bureau openly opposes the hindrance of agricultural producers in obtaining water for their crops and livestock. Farm Bureau's official policy specifically states in part:

> River authority and other publicly owned water management entities should be required to manage water in such a way as to maximize the beneficial use of water. The use and sale of interruptible water by a river authority or public entity should be considered an allocation of state water and made in accordance with Texas Water Code section 11.024, referring to preferences of use. When a river authority or other publicly owned water management entity implements policy that intentionally or

[10] *See* Tex. Water Code § 11.024.
[11] *Ass'n of Am. Physicians & Surgs. v. Tex. Med. Bd.*, 627 F.3d 547, 551 (5th Cir. 2010).

> unintentionally changes historic water use that benefits recreational users at the expense of other higher priority water users as determined by the Texas Water Code, the beneficiaries should be required to compensate the water management entity so other alternative water supplies can be developed or conservation measures can be implemented to satisfy unmet demands of the higher priority users.[12]

These precise concerns of continued interruptible water supply from the Colorado River for agricultural purposes and the consideration of preferences of agricultural use, requiring conservation of urban, firm water users, and consideration of alternative water supplies are squarely at stake in the LCRA proposed WMP. These are issues on which Farm Bureau has developed and expressed specific policies. Further, the continued supply of water from the Colorado River to agricultural operations falls within Farm Bureau's purpose of promoting a prosperous agriculture, and Farm Bureau has followed this specific issue closely for many years. Farm Bureau was previously a party to Texas Water Commission's consideration and approval of LCRA's WMP and amendments to its Certificates of Adjudication Nos. 14-5478 and 14-5482.[13] Farm Bureau has actively followed and participated in the development of LCRA's WMP to protect continued access to the Colorado River with a specific focus on the economic impacts to Texas agriculture. The issues in the requested hearing are germane to Farm Bureau's purpose.

3. *Participation of Individual Members*

The third prong of the associational standing criteria focuses on the type of relief sought—if an association seeks a declaration, injunction or some other form of prospective relief (i.e., no monetary damages), it can reasonably be assumed that such a remedy will benefit all members actually injured and does not require the participation of individual members.[14] Neither the claims asserted by Farm Bureau nor the relief requested will require the participation of individual members of Farm Bureau. Farm Bureau seeks through this contested case hearing to ensure a proper balancing of interests, conservation efforts targeted at all users and not merely downstream users, consideration of current and appropriate technical data, and a revised WMP that ensures continued supply of water to downstream agricultural users. The five members on whom Farm Bureau relies for associational standing are representative of the affected Farm Bureau membership and the impacts to those five operators are indicative of potential impacts that threaten Farm Bureau members across the lower Colorado River basin. The concerns of Farm Bureau over LCRA's WMP are not focused on any specific farm, business, or operation but rather are a concern for agricultural interests as a whole, and while these concerns are not common to the general public, they will not require the individual participation of Farm Bureau members at a contested case hearing.

---

[12] 2013 State Policies of the Texas Farm Bureau, p. 60, at www.texasfarmbureau.org/PolicyBook/2013 State Policy Book.pdf.
[13] A true and correct copy of the 1989 Order is attached hereto as Exhibit D.
[14] *Tex. Ass'n of Bus.*, 852 S.W.2d at 448.

II. COMMENTS AND ISSUES FOR CONSIDERATION AT CONTESTED CASE HEARING

Farm Bureau submits the following issues for consideration during a contested case hearing on LCRA's proposed WMP:

A. TCEQ must engage in long-term policy-making to reach a plan that adequately reconciles:

1. Declining surface water supplies and drought periods;
2. Agriculture uses versus urban uses (population base cannot determine the answer); and
3. Health and safety versus aesthetic, recreational and property values.

Needs must be separated from wants within "firm" uses and the ultimate weighing of interests must be balanced and made in accordance with applicable law. Further, this broad policy-making cannot be delayed until 2020, when LCRA is next required to submit an amendment to its WMP.

B. TCEQ has the ultimate role in statewide policy making for water management and has a necessary obligation to all regions of the state and their varying interests. To fulfill this role, Farm Bureau believes the following changes to the WMP should be considered:

1) The WMP should (particularly in drought) require enhanced conservation practices from urban "firm" customers. The LCRA adjudication recognizes LCRA's statutory authority to mandate conservation.[15] LCRA has a specific obligation to require and enforce such requirements. The WMP fails to meet this threshold for firm customers under the current drought circumstances. LCRA's plan does not contain enhanced drought related restrictions on urban users. The WMP contains no real reductions to urban customers commensurate to the drought or even commensurate to the reductions forced upon downstream agricultural users by the proposed WMP. LCRA continues to sell water to new firm customers and allows existing firm users to increase consumption with no apparent limit, choosing instead to curtail surface water supplies to downstream agricultural users. LCRA must require enhanced conservation practices from urban firm users, including water oriented planned growth, development guidelines, and mandatory

[15] LCRA Certificate of Adjudication 14-5482, June 28, 1989, at ¶ 2B1(f).

reductions in consumption. That the current reservoirs are located in urban areas should not disadvantage downstream interests.

2) The approval of LCRA's WMP in 1989, resulting from a contested case to which Farm Bureau was a party, necessitated several Findings of Fact that Farm Bureau believes must be considered. Finding of Fact 28 from the Order specifically acknowledges that the reservoirs:

> were not constructed for recreational use, the demands for stability in the reservoir levels by recreation interests present conflicts which are extremely difficult to accommodate. If limits are to be placed on how far down the reservoirs' water levels are allowed to decline, a corresponding limitation on the amount of water that is available to supply the other demands on the reservoir system must also be agreed to.[16]

Over twenty years ago, the need to require limitations on firm water users was recognized as a necessary step in conjunction with restricting water levels in the lakes. And that remains true today. LCRA's proposed WMP takes a significant step back in this regard, failing to require any meaningful water conservation from firm water users and placing the onus of conservation disproportionately upon downstream agricultural users and their communities.

3) The WMP should separate categories of "firm" use (particularly in drought periods) and establish relative priorities: Health and Safety, Power Generation, Outdoor Irrigation, Simple Aesthetics, and Property Values. The proposed Order includes Finding of Fact No. 9 stating that firm demands take precedence over all other uses under the WMP as a purported justification for reducing interruptible water supplies to offset increases in firm demands. Neither LCRA nor TCEQ have provided any information as to how this approach comports with protecting the public welfare or the priorities set forth in the Water Code. At a minimum, TCEQ and LCRA must categorize and prioritize firm uses and strictly apply section 11.024 of the Water Code to ensure a balanced approach between uses.

C. LCRA's use of an advisory stakeholder group as described in Finding of Fact No. 6 in the Proposed Order is not equivalent to or a substitute for TCEQ's key role in gathering, considering and evaluating evidence to determine and appropriately balance Colorado River management policy for the state of Texas. TCEQ must conduct a robust consideration of all interests: upstream/downstream, urban/rural, industry/environment, and conservation/consumption. In particular, Finding of Fact No. 13 of the Proposed Order provides that the Executive Director has made certain

[16] Exhibit D (1989 Order), p. 6, ¶ 28.

determinations including that the amendments of the WMP "are not detrimental to the public welfare" but the underlying analysis is insufficient to support this finding. More is needed.

D. There is an absence of balance in the WMP's proposed curtailments of downstream flows for agriculture. "Firm" customers take precedence over all. TCEQ must make a thorough consideration of the operation of a key river in Texas—it's the allocation of state waters. The proposed curtailment structure tilts the balance too far to urban upstream interests. The requested increased discretion to LCRA should be rejected because it subverts TCEQ and the public process. Farm Bureau supports the Commission's Ordering Provision 1(e) denying LCRA's request for additional discretion.

E. The WMP's proposed triggers give more protection to firm uses than necessary. Economic interests, politics and population have unduly influenced the plan. Science and a balanced consideration of interests will provide a different and more appropriate result. The people and communities of Texas must endure the drought cooperatively and on a principled basis. A WMP must be consistent with public health and welfare as applied to all communities. Further, TCEQ and other state entities that appropriate water, such as LCRA, are required by law to give preference to certain uses. Section 11.024 of the Texas Water Code provides:

> In order to conserve and properly utilize state water, the public welfare *requires* not only recognition of beneficial uses but also a constructive public policy regarding the preferences between these uses, and it is therefore declared to be the public policy of this state that in appropriating state water *preference shall be given* to the following uses in the order named:
>
> (1) domestic and municipal uses, including water for sustaining human life and the life of domestic animals, it being the public policy of the state and for the benefit of the greatest number of people that in the appropriation of water as herein defined, the appropriation of water for domestic and municipal uses shall be and remain superior to the rights of the state to appropriate the same for all other purposes;
>
> (2) agricultural uses and industrial uses, which means processes designed to convert materials of a lower order of value into forms having a greater usability and commercial value, including the development of power by means other than hydroelectric;
>
> (3) mining and recovery of minerals;
>
> (4) hydroelectric power;
>
> (5) navigation;
>
> (6) recreation and pleasure; and
>
> (7) other beneficial uses.[17]

Agricultural uses are second only to municipal and domestic uses for the sustainability of human and domestic animal life.[18] TCEQ must separate those factors in LCRA's plan

[17] Tex. Water Code §11.024 (emphasis added).

for protection of firm users solely for health and welfare from those that merely seek to keep the lake full for recreational purposes or for sustaining high property values. Texans are facing critical water management issues, which are currently compounded by drought and booming population growth. A WMP that is balanced, flexible, and responsive to the water issues facing the region today is the only solution.

F. The WMP's absolute cap on supply to downstream communities and farms is without an adequate legal or factual basis. This provision enables LCRA to cutoff critical downstream flows even when the lakes are full. This element of the WMP attempts to convert a historic river to a lake. Further, Finding of Fact No. 22 recognizes that the WMP amendment will eliminate provision of water to customers outside of the four downstream irrigation districts after 2018, regardless of lake levels, drought, or available water. LCRA has provided no basis for this action or how it comports with Texas law.[19]

G. TCEQ should review and determine whether the provisions within the contract between the City of Austin and LCRA that require supply to the exclusion of other demands are consistent with the Water Code and applicable law and whether such provisions are enforceable as written.

H. TCEQ should perform an analysis on the actual and potential evaporation loss for the Highland Lakes at various pool levels to determine the actual impact that evaporation plays in the available supply and the WMP.

I. Finding of Fact No. 10 to the Proposed Order describes the projected firm demands for 2010 to 2020, which are expected to increase. The WMP lacks any sort of cap or upward restriction on supply for future firm demand. If the WMP must cap flow to agricultural users, LCRA should likewise evaluate a cap for firm users particularly in times of drought. Further, Finding of Fact No. 7 suggests that LCRA's requested changes to the WMP are designed to "address increased demands from its firm customers." This is wholly one-sided however as LCRA has only addressed how to meet the demands without consideration or analysis of how to minimize such demands and the increases in such demands over the coming decades. LCRA must consider the entire range of options and not focus its attention on one subset of users in order to protect another. It is important to note that, absent the addition of new water supplies or the adoption of major water conservation strategies *for all users* (not merely downstream interruptible water users) outside the purview of the proposed WMP, modeling efforts demonstrate a significant probability of negative consequences for the Basin's water users resulting from reduced or no water availability during major droughts.

---

[18] Tex. Water Code §11.024.

[19] *See* Tex. Water Code § 11.024 (explaining that the public welfare requires preferences between the uses and holding that agricultural uses are second only to domestic and municipal uses for water needed for sustaining human and domestic animal life and ranking far above recreation, pleasure or aesthetic uses).

J. The WMP, including the proposed curtailments and timing of curtailments fails to consider the implementation of LCRA's off-channel reservoirs in the downstream portion of the Colorado River. LCRA will construct at least three downstream reservoirs providing an additional 75,000 to 100,000 acre-feet of supply to downstream agriculture interests. These reservoirs are planned for Colorado, Wharton and Matagorda counties, the precise location of Farm Bureau's affected members.[20]

Each year more then 750,000 acre feet of valuable water has been lost over the Bay City dam on the Colorado River. LCRA is not currently capturing this volume of water. The reservoirs will enable capture of this supply depending on river flow and the ability to fill the reservoirs multiple times. The reservoirs will capture and hold waters that enter the river downstream of the Highland lakes as well as water released from the Highland lakes that is not immediately needed by downstream users.

The first of these reservoirs is to be operational in 2017. The effect of the reservoirs and strategic utilization of their capacity should be evaluated and considered as a part of LCRA'S WMP and the curtailment structure. The capacity provided by the reservoirs necessarily alters the WMP and the curtailment limits and any proposed effective dates should be deferred to account for the improved storage and supply for downstream interests.

K. LCRA's proposed WMP does not consider the impact of expanded water supplies. The LCRA Board of Directors has set as a goal to implement projects to expand its water supply in coming years. In the event LCRA is successful at expanding its water supply, the proposed WMP does not consider this contingency and its impact on curtailment or cut-off procedures for downstream users. Under the proposed plan, downstream interruptible water users lose access to water supply no matter the circumstances while upstream users benefit regardless of additional water availability. A fair and balanced WMP that takes into account the public welfare and priorities required by section 11.024 of the Water Code necessitates that LCRA consider additional water supplies and their potential impact on water availability to downstream users.

L. LCRA's proposed WMP mandates a monumental choice not between rights holders to a declining supply, but between vast regions of Texas and the people and economics within them. The state cannot merely endorse the proposed WMP and risk the sacrifice of one region of the state over another. Yet this plan invites TCEQ to do just that. The communities and lands that provide food, fiber, and jobs to a growing Texas and a burdened world, are essential and must be considered in the water planning process. The unequalled growth in the urban cities of Texas cannot result in a vanished rural Texas.

---

[20] *See* Irrigation Districts Map, Vicinity Map and Lane City Reservoir Map, true and correct copies of which are attached hereto as Exhibits E , F, and G.

Farm Bureau further incorporates by reference all other hearing requests and written comments on file regarding this matter that fall within the mission and purpose of the organization and its efforts to maintain continued access to the Colorado River for downstream agricultural uses. Farm Bureau requests consideration of these issues and comments in a contested case hearing on LCRA's proposed amendment to its WMP.

TCEQ has before it a complex undertaking posing key policy questions that impact various regions in the State of Texas. Further, the issues embraced in the current proceeding transcend to other basins and other regions. The decisions made here must be thorough and consistent with statutory and regulatory requirements to ensure that the surface waters belonging to the State are fairly allocated for the long-term viability of the State. Please let me know if there is any information that Farm Bureau or I can provide to facilitate your consideration of these requests. Thank you for your time and consideration of this matter.

Sincerely,

/s/ James D. Bradbury

James D. Bradbury

Enclosures
JDB:cec

Exhibit A

AFFIDAVIT OF RICHARD OTTIS

STATE OF TEXAS

COUNTY OF WHARTON

BEFORE ME, the undersigned authority, this day personally appeared Richard Ottis, who being by me duly sworn, on oath deposes and says:

1. "My name is Richard Ottis. I am over the age of eighteen years. My mailing address is PO Box 1545, El Campo, Texas 77437. I have personal knowledge of the facts pertaining to this matter, each of which are true and correct, and I am fully qualified to make this affidavit.
2. "I am a member of Texas Farm Bureau. I support the Texas Farm Bureau's participation in this case in order to protect the continued availability and use of downstream surface water by local farmers.
3. Rice Belt Warehouse, Inc. is a member of Texas Farm Bureau. Its supports the Texas Farm Bureau's participation in this case in order to protect the continued availability and use of downstream surface water by local farmers.
4. I am President and CEO of Rice Belt Warehouse, Inc. which operates five grain and rice drying and storage facilities and also a seed rice processing plant in Wharton, Matagorda, and Jackson counties. Rice Belt Warehouse, Inc. is a Texas stockholders corporation of which I own stock in the corporation. Our corporation was incorporated in 1963 and has been in business continually for fifty years. The sustainability of our business depends on continued irrigation of rice and other crops by surface water from the Colorado River.
5. In 2012, Rice Belt Warehouse, Inc. was forced to reduce its labor force by approximately twenty percent as a result of the sudden loss of irrigation from the Colorado River. One of our locations has completely ceased taking in rice and now only handles corn, which only generates half of the revenue of rice. Our business is currently at a critical point and if we lose further irrigation from the Colorado River, we risk losing infrastructure and additional jobs.
6. On April 15, 2015, the Executive Director of the Texas Commission on Environmental Quality recommended approval of Application No. 5838A, which is LCRA's proposed amended Water Management Plan for lakes Travis and Buchanan, the lower Colorado River basin's major reservoirs. This proposed plan limits the overall amount of water available to agriculture in any year. This dramatic curtailment of the irrigation water to grow crops along with the LCRA's denial of water for the last two years has and will result in economic hardship to our business and employees.
7. The proposed plan does not adequately balance downstream agriculture interests with upstream municipal, development, and aesthetic lake interests in the Colorado River. I hereby request TCEQ to conduct a contested case hearing to consider evidence regarding the balance of these interests."

FURTHER AFFIANT SAYETH NOT.

Executed this 21ST day of May, 2013.

RICHARD J OTTIS

SWORN TO AND SUBSCRIBED BEFORE ME this 21 day of May, 2013 by Richard J. Ottis, to certify which witness my hand and official seal.

SANDRA STARY
NOTARY PUBLIC
STATE OF TEXAS
My Commission Expires 04-07-2017

NOTARY PUBLIC, STATE OF TEXAS

Exhibit B

AFFIDAVIT OF JOHN WESLEY "WES" KELLEY, JR.

STATE OF TEXAS §
§
COUNTY OF MATAGORDA §

BEFORE ME, the undersigned authority, this day personally appeared John Wesley "Wes" Kelley, Jr., who being by me duly sworn, on oath deposes and says:

1. "My name is John Wesley "Wes" Kelley, Jr. I am over the age of eighteen years. My physical address is 2441 CR 237, Wadsworth, Texas 77483 and my mailing address is P.O. Box 417, Bay City, Texas 77404. I have personal knowledge of the facts pertaining to this matter, each of which are true and correct, and I am fully qualified to make this affidavit.

2. "I am a member of Texas Farm Bureau. I support the Texas Farm Bureau's participation in this case in order to protect the use of surface water by farmers, producers, and growers in Texas.

3. "I am the owner and operator of Kelley's Flying Service, which provides a variety of services to farmers including, planting rice, fertilizing crops, and spraying fields with fungicides, herbicides, and insecticides. I have been in business for over ten years. On average, we fly over a given rice field eight to twelve times each season. The sustainability of my business depends on the continued irrigation of farms by surface water from the Colorado River.

4. "Kelley's Flying Service directly serves producers in Matagorda County.

5. "Historically, we have served 140,000 acres of rice annually. In 2012, as a result of the sudden and dramatic cutoff of Colorado River flow, we flew only 17,000 acres of rice, a reduction of 123,000 acres. I expect to fly even fewer acres of rice in 2013. The reduced acreage has resulted in an estimated decrease in revenue of $800,000 to $900,000 for my business. My business depends on farmers planting crops, and the planting of these crops depends on continued irrigation from the Colorado River.

6. "On April 15, 2013, the Executive Director of the Texas Commission on Environmental Quality recommended approval of Application No. 5838A, which is LCRA's proposed amended Water Management Plan for lakes Travis and Buchanan, the lower Colorado River basin's major reservoirs. This plan absolutely limits the overall amount of water available to agriculture in any year. This curtailment of the irrigation water to grow crops along with the LCRA's denial of water for the last two years has and will result in economic hardship to my business operation and employees.

7. "The proposed plan fails to adequately balance downstream agriculture interests with upstream municipal, development, and aesthetic lake interests in the Colorado River. I hereby request TCEQ to conduct a contested case hearing to consider evidence regarding the balance of these interests."

FURTHER AFFIANT SAYETH NOT.

Executed this 24 day of May, 2013.

JOHN WESLEY "WES" KELLEY, JR.

SWORN TO AND SUBSCRIBED BEFORE ME this 24 day of May, 2013 by John Wesley "Wes" Kelley, Jr., to certify which witness my hand and official seal.

NOTARY PUBLIC, STATE OF TEXAS

KIM LANKSTON
Notary Public, State of Texas
My Commission Expires 02-13-2014

Exhibit C

AFFIDAVIT OF ROBERT E. REED

1. My name is Robert E. Reed. I am over the age of 18. My address is 2630 CR 222, Bay City, TX 77414-2852. I have personal knowledge of the facts pertaining to this matter and am fully qualified to make this affidavit.

2. I am a member of the Texas Farm Bureau. I support the Texas Farm Bureau's participation in this case in order to protect the use of surface water by farmers such as myself.

3. I farm approximately 450 irrigated acres of land in Matagorda County, Texas, that is irrigated by surface water. I've farmed this land since 1980. I rely on irrigation water from the Colorado River for the economic livelihood of my farm.

4. On April 15, 2013, the executive director of the Texas Commission on Environmental Quality, recommended approval of Application No. 5838A, LCRA's proposed amended Water Management Plan for lakes Travis and Buchanan, the lower Colorado River basin's major reservoirs. This plan limits the overall amount of water available to agriculture in any year. This curtailment of the irrigation water to grow my crops along with the LCRA's denial of water for the last two years has and will result in economic hardship to me and my neighbors.

5. The proposed plan does not adequately balance downstream agriculture interests with upstream municipal, development and esthetic lake interests in the Colorado River. I hereby request TCEQ to conduct a contested case hearing to consider evidence regarding the balance of these interests.

FURTHER AFFIANT SAYETH NOT.

Robert E. Reed

Robert E. Reed

SWORN TO AND SUBSCRIBED BEFORE ME on this 15th day of May 15, 2013, to certify which witness my hand and official seal.

Marcia Bales

NOTARY PUBLIC, STATE OF TEXAS
Printed Name: Marcia Bales
My commission expires: 11-15-2014

MARCIA BALES
Notary Public
STATE OF TEXAS
My Comm. Exp. 11/15/2014

Exhibit D

TEXAS WATER COMMISSION

IN RE: CONSIDERATION OF THE LOWER COLORADO RIVER AUTHORITY'S WATER MANAGEMENT PLAN AND AMENDMENTS TO CERTIFICATES OF ADJUDICATION NOS. 14-5478 AND 14-5482	§ § § § § §	BEFORE THE TEXAS WATER COMMISSION

ORDER APPROVING LOWER COLORADO RIVER AUTHORITY'S WATER MANAGEMENT PLAN AND AMENDING CERTIFICATES OF ADJUDICATION NOS. 14-5478 AND 14-5482

On the 7th day of September, 1989, the Texas Water Commission ("Commission") held a public hearing to consider the Lower Colorado River Authority's Water Management Plan and applications to amend Certificates of Adjudication Nos. 14-5478 and 14-5482. At the hearing, the following were named as parties: the Lower Colorado River Authority; the Texas Parks and Wildlife Department; the City of Austin; the Garwood Irrigation Company; the Sierra Club, Lone Star Chapter; the Texas Farm Bureau; the Matagorda County Water Council; Houston Lighting and Power Company as Project Manager for the South Texas Project; Clear, Clean Colorado River Association; Pierce Ranch; the Village of Lakeway; the Executive Director of the Texas Water Commission; and the Public Interest Counsel of the Texas Water Commission. Having considered the evidence and arguments presented, the Commission makes the following Findings of Fact and Conclusions of Law:

FINDINGS OF FACT

1. Notice of the adjudicative public hearing was published on July 26, 1989, in the Blanco County News, Austin American-Statesman and the Colorado County Citizen, newspapers regularly published and generally circulated in Blanco, Travis and Colorado Counties, Texas, respectively; on July 27, 1989, in the San Saba News and Star, Llano News, Highlander and the Bay City Daily, newspapers regularly published and generally circulated in San Saba, Llano, Burnet, and Matagorda Counties, Texas, respectively; on July 28, 1989, in the Fayette County Record, a newspaper regularly published and generally circulated in Fayette County, Texas; on July 29, 1989, in the Wharton Journal-Spectator, a newspaper regularly published and generally circulated in Wharton County, Texas, and on July 31, 1989 in the Bastrop Advisor, a newspaper regularly published and generally circulated in Bastrop County, Texas, the only counties in which persons reside who may be affected by action taken as a result of the hearing. Said notice was published not less than thirty days before the date of the hearing.

2. On July 26, 1989, notice of the public hearing was sent by first-class mail to persons who may be affected by action taken as a result of the hearing and to each person as required by law.

3. The Lower Colorado River Authority (LCRA) is requesting approval of its Water Management Plan for the Lower Colorado River, Colorado River Basin in accordance with the Court's Final Judgment and Decree entered in Cause No. 115,414 A-1, 264th Judicial District, In Re: The Exceptions of the Lower Colorado River Authority and the City of Austin to the Adjudication of Water Rights in the Lower Colorado River Segment of the Colorado River Basin, and is further requesting approval of amendments to Certificates of Adjudication Nos. 14-5478 and 14-5482 to authorize LCRA to divert, release and use the water in Lakes Buchanan and Travis for additional beneficial uses including domestic, recreation, instream flow and bays/estuary purposes.

4. LCRA's Water Management Plan consists of two volumes. Volume I, Policies and Operations, describes the issues and conflicts in the demands on the Colorado River system and lays out the policies and management actions LCRA will use to accommodate the variety of demands on the system. Volume II, Technical Report, describes the models and data sources and the process used for the determination of the Combined Firm Yield and the Annual Rule Curve methodology. Volume II includes a set of Appendices consisting of the Court's Final Judgment and Decree, and the detailed data used to support the recommendations and conclusions discussed in Volumes I and II.

5. The Highland Lakes Reservoirs are operated by LCRA as a system for flood control and water supply. Mansfield Dam is the only structure with a dedicated flood pool and is operated during flooding according to flood-control regulations as published in the Code of Federal Regulations and under the supervision of the U.S. Corps of Engineers.

6. LCRA has a remote data acquisition system referred to as "Hydromet." The Hydromet allows for remote interrogation of a networked system of twenty-one self-reporting rainfall gages, twenty-two remotely monitored streamflow gages and six reservoir elevation gages. Twenty of the streamflow gages also gather rainfall information, giving a total of forty-one rainfall sites. The network is polled each hour, and all data is verified and stored in a real-time data base on a central computer system. Communications are a combination of microwave and UHF radio. The relational data provided by the Hydromet monitors flows above and below the lakes.

7. LCRA has a central computer system that is composed of two Digital Equipment Corporation MicroVAX II mini computers, one

of which is designated as an operations system located at the LCRA System Operations Control Center, and the other designated as a development system located at the Water Resources office. Real time data is logged and maintained on an on-line historical data base for one year. This is available for access by operations models, historical analyses, or other needs.

8. LCRA has developed several hydrologic models that are models used for routine operations of the system. Each model was developed to meet specific operational needs. The Daily Operations Model, analyzes the downstream inflow and demands by accessing streamflow data, totalling demands, and making multiple computer runs of the Model. The Flood Management Model is a user oriented operation tool which accesses real-time data and routes flood flows through the Highland Lakes. The Storage Projection Model uses historical inflow data to estimate the reliability of reservoir system storage subject to storage conditions and water demands.

9. The Daily Allocation Model will determine the extent to which releases from storage are diverted. It will perform a water balance every twenty-four hours at each river gage below Tom Miller Dam, and will allocate the natural flow of the river (whether or not it originated upstream or downstream of the lakes) to major water rights holders to the extent it is available. The remaining portion, if any, of each diversion is assumed to have been from water released from storage. Each amount is then totaled for the week, month and year to determine the total demand on storage.

10. Daily Operations are a joint effort between the System Operations Control Center (SOCC), Hydro Operations personnel located at the dams, and Water Operations personnel located at the Central Office complex. Water Operations personnel determine the required release by contacting downstream customers, operating the Daily Operations Model, and posting the daily release schedule. The SOCC then determines the optimum time and during the day to release the water based on the daily power peak demand, and orders the hydro generation units to begin and end at the necessary times. Hydro Operations personnel at each dam determine which unit to run at each dam.

11. The standard operating levels for the Highland Lakes are: Lake Buchanan, 1020.35 feet; Inks Lake, 887.30 +/- 0.4; Lake LBJ, 824.70 +/- 0.3; Lake Marble Falls, 736.60 +/- 0.4; Lake Travis, 681.00; and Lake Austin, 492.30 +/- 0.5. All levels are referenced to mean sea level.

12. The U. S. Corps of Engineers is evaluating potential flood damages to areas both upstream and downstream of Mansfield

Dam. LCRA is cooperating in this study. The Corps is also performing a reconnaissance study of possible additional flood control and water supply reservoirs. LCRA is cooperating in this study as well.

13. The Highland Lakes System consists of Lakes Buchanan, Inks, LBJ, Marble Falls, Travis and Austin.

14. LCRA's water rights for Lakes Buchanan, Inks, LBJ, Marble Falls and Travis are set forth in Certificates of Adjudication Nos. 14-5478, 14-5479, 14-5480, 14-5481 and 14-5482. LCRA operates Tom Miller Dam (the dam creating Lake Austin) pursuant to agreement with the City of Austin. Austin's water rights for Lake Austin are set forth in Certificate No. 14-5471.

15. LCRA's water rights on the Colorado River below the City of Austin are set forth in Certificates of Adjudication Nos. 14-5437, 14-5473, 14-5474, 14-5475, and 14-5476.

16. LCRA's right to use the waters of the Highland Lakes is subject to the terms and conditions as set out in the final judgment and decree dated April 20, 1988, in Cause No. 115, 414-A-1.

17. LCRA is committed to following the terms and conditions of the final judgment and decree dated April 20, 1988 in Cause No. 115, 414-A-1.

18. LCRA's first step in development of its Water Management Plan was a comprehensive review of LCRA's Board policies and existing programs that guide and shape the way LCRA manages the river system. The LCRA Board of Directors held a series of monthly public meetings and received testimony from LCRA staff, outside experts, and numerous representatives of diversified constituencies including state agencies, environmental groups, business, industry, agricultural interests, and wholesale electric customers. Based upon the evidence the Board received new comprehensive water policies were adopted by the LCRA Board. These policies form the foundation of the Plan.

19. LCRA's next step was the formulation of a Public Task Force. The LCRA staff and public task force met and worked together over a 6 month period.

20. A draft of the Technical Report (Volume II) of the Water Management Plan was transmitted to the Commission on December 30, 1988. A draft of both Volumes I and II of the Plan was submitted to the Commission's staff and distributed to the public in February 1989 for public comment, LCRA held public workshops followed by local meetings in Bay City, Eagle Lake

and at Buchanan Dam. Additionally, public discussions during LCRA Board meetings were held in March, April and May 1989. LCRA formally adopted the Plan in May 1989.

21. LCRA's proposed Water Management Plan was filed with the Commission on July 7, 1989. The Commission acknowledged receipt of LCRA's proposed Plan on July 18, 1989.

22. LCRA's Water Management Plan has essentially four criteria. One is that the Highland Lakes and the Colorado River downstream will be managed together as a single system for downstream water supply purposes. The second is that the beneficial use of the water derived from inflows below the Highland Lakes will be maximized. The third is that LCRA will stretch and conserve the waters stored in the Highland Lakes and advance water quality. The fourth is that adequate flows will be provided to maintain, and where reasonably possible, improve, fish, wildlife, and recreation resources in the Lower Colorado River and to maintain a proper ecological environment and health of related living marine resources in the Lavaca-Tres Palacios Estuary, to the extent it is affected by the lower Colorado River watershed.

23. LCRA will follow five guidelines in implementing its Water Management Plan including:

    a. All demands for water from the Colorado River downstream of the Highland Lakes will be satisfied to the extent possible by run-of-river flows of the Colorado River;

    b. Inflows will be passed through the Highland Lakes to honor downstream senior water rights only when those rights cannot be satisfied by the flow in the river below the Highland Lakes;

    c. The firm, uninterruptible commitments of water from Lakes Travis and Buchanan will not exceed the Combined Firm Yield;

    d. Water from Lakes Travis and Buchanan will be available on an interruptible basis only as long as LCRA's ability to meet the demand for uninterruptible water is not impaired;

    e. Water shall not be released through any dam solely for hydroelectric generation, except during emergency shortages of electricity, and during other times that such releases will be needed for another beneficial purpose.

24. LCRA has the ability to constantly monitor the amount of water in the river available to meet demands through the Hydromet

System which should allow full utilization of the flows originating below Lake Travis prior to making any releases from storage or passing inflows through the reservoirs.

25. Under the Water Management Plan the four downstream irrigation operations (Gulf Coast, Lakeside, Garwood, and Pierce Ranch) will have first priority for the interruptible water in the annual allocation process. This priority will be set by establishing a Conservation Base for LCRA's two irrigation districts. LCRA intends to negotiate a contract which will include a Conservation Base acreage with Pierce Ranch. The Conservation Base acreage for Gulf Coast, Lakeside and Pierce Ranch was determined on the basis of a ten-year (1976-1985) historical average of actual production acreage. The allocation of water for these three users is based on a duty of 5.25 acre-feet of water per acre irrigated. The priority allocation and terms governing the interruption of supply of stored water for Garwood are based upon a contract between Garwood and LCRA. The 5.25 acre-foot-per-acre duty also applies to Garwood irrigated acreage. In the annual allocation process Lakeside has a priority to interruptible stored water in an amount necessary to firm up run-of-river rights to 136,500 acre-feet per year; Gulf Coast an amount necessary to firm up run-of-river rights to 194,250 acre-feet per year and Garwood an amount necessary to firm up run-of-river rights to 168,000 acre-feet per year.

26. When the federal allocation for the number of acres of rice that can be grown exceeds the Conservation Base acreage of Lakeside and Gulf Coast, then in that year LCRA will provide back up stored water for up to 28,300 acres at Lakeside and 42,800 acres at Gulf Coast. These limits represent the maximum number of acres served by each of the two divisions during the 10 year historic period that was used to establish the Conservation Base. For the Lakeside Division, any acreage over 25,000 and up to 28,300 can be served from an alternate source.

27. Lake levels follow an annual cycle--that of filling the conservation storage space in the winter and spring months of the year to be drawn down by larger water uses during the summer months.

28. Because these multiple purpose reservoirs were not constructed for recreational use, the demands for stability in the reservoir levels by recreation interests present conflicts which are extremely difficult to accommodate. If limits are to be placed on how far down the reservoirs' water levels are allowed to decline, a corresponding limitation on the amount of water that is available to supply the other demands on the reservoir system must also be agreed to.

29. To the extent that the annual analysis of the amount of water in storage reveals that there are interruptible water supplies available after meeting the demands of the irrigation operations, interruptible water may be held in the reservoirs to better ensure the security of supply or to maintain lake levels.

30. If additional sales of interruptible water exceed the Conservation Base amounts and the priority allocation for Garwood would draw the lakes below these minimum levels the LCRA Board will not declare any additional interruptible water available for sale in that year. Those levels are 660 feet msl for Lake Travis and 1012 feet msl for Lake Buchanan. LCRA is not guaranteeing minimum lake levels.

31. Another item to help keep the levels of Lakes Buchanan and Travis as high as possible is the agreement that no maintenance, except for emergencies, which would require the lowering of Lakes LBJ, Marble Falls, and Inks will be permitted if the refilling of those lakes would draw the levels of Lakes Travis and Buchanan below the minimum levels. Periodic lowering and refilling of Lake Austin will be done pursuant to the Settlement Agreement (December 10, 1988) between LCRA and the City of Austin.

32. Downstream recreation interests may be enhanced by LCRA's commitment to maintain minimum instream flows. LCRA will develop additional boat launches and recreation areas on the river through LCRA's 10-county district in order to give the public better access to the Colorado River.

33. Hydroelectric power plants located in each of the dams owned and operated by LCRA total 242 megawatts of capacity. Hydropower generally has been subordinated to be a by-product of the release of water for other purposes. LCRA retains the right to make releases solely for hydropower production in times of emergency as part of the Water Management Plan operating policies.

34. LCRA and Texas Parks and Wildlife Department (TPWD) have entered into a Memorandum of Understanding (MOU), wherein the LCRA and TPWD have agreed that LCRA's Water Management Plan would have a goal of maintaining, and where reasonably possible, improving fish, wildlife, and recreation resources in the Lower Colorado Watershed and of maintaining a proper ecological environment and health of related living marine resources in the Lavaca-Tres Palacios Estuary, to the extent that it is affected by that watershed. Some of the provisions addressed in the MOU have been included in LCRA's Water Management Plan.

35. LCRA and TPWD currently are studying the instream flow issue. These studies are scheduled for completion in March 1991.

36. Until the instream flow studies are complete, LCRA will commit to maintaining a minimum monthly mean flow of 200 cfs throughout the lower basin. This flow may, at times, be satisfied from inflows into the river channel and releases made by LCRA to satisfy the demands of downstream users. To assure that sufficient water will be available to satisfy this instream flow demand, LCRA has allocated 25,000 acre-feet of firm water supply to back up this demand on the system and the demand for inflows into the bays and estuaries.

37. Fresh water inflows are essential to maintenance of the productivity of the bays and estuaries. Preliminary data indicate that the amount of inflows needed for the Lavaca-Tres Palacios Estuary may represent the largest single demand on the system. TPWD and the Texas Water Development Board (TWDB) are currently studying the issue of how much fresh water is necessary to maintain the productivity of the bays and estuaries. The study is scheduled for completion by the end of 1989 with public review scheduled during 1990.

38. Until the bays and estuaries study is completed, LCRA has committed to a minimum monthly mean flow of 200 cfs, a minimum seasonal mean flow of 375 cfs, and a minimum annual flow of 272,121 acre-feet for the bays and estuaries. Measurements are to be made at the USGS gage at Bay City. This flow may at times be satisfied from inflows into the river channel, releases of stored water by LCRA for downstream uses and runoff or tailwaters from the rice irrigation operations. These flows will be backed up with 25,000 acre-feet of firm supply water which is also available for instream flow demands.

39. The Texas Water Development Board (TWDB) and the U.T. Bureau of Economic Geology are currently studying the Carrizo-Wilcox and Gulf Coast Aquifers. LCRA is studying the feasibility of the use of groundwater resources in conjunction with interruptible surface water supplies including the evaluation of artificial recharge of depleted aquifer storage space.

40. Under the existing LCRA <u>Water Pricing Policy</u> the rates for purchasing water must recover the costs associated with the Water Management Plan including necessary funds for water quality and conservation activities.

41. The water to be captured by the Stacy Reservoir are waters that otherwise would have flowed into Lake Buchanan. LCRA determined that the appropriate approach at this time was to calculate the firm yield of the Stacy reservoir separately

from the Highland Lakes, then add it back in, to give the total combined firm yield for Lakes Buchanan and Travis.

42. LCRA used a standard single reservoir operation model to determine the firm yield of the Stacy Reservoir. Inputs to the model included: inflow, net evaporation, monthly water demand distribution, and area/capacity curve for the reservoir.

43. LCRA used a multiple reservoir operations model to determine the combined firm yield of Lakes Buchanan and Travis. User defined local water demands were assumed at each of the reservoirs. Inputs to the model included: inflows, net evaporation, local water demands, monthly water demand distribution, minimum and maximum allowable contents, and area/capacity curves for each reservoir.

44. The period of 1941-1965 was used in the determination of the combined firm yield which includes the worst drought of record encountered.

45. Hydrologic data was related to reservoir inflow. The inflow that actually occurred in the record drought was adjusted to simulate a future time period. The monthly values of inflow to Lakes Buchanan and Travis for the period of January 1940 through December 31, 1972 provided to LCRA by TWC water availability model were adjusted. Under the approach used at this time by LCRA to determine the combined firm yield, the simulated operations of Stacy Reservoir did not pass flow to fulfill downstream senior run-of-the-river water rights.

46. LCRA determined how much water was necessary to satisfy daily water demands at a specific location to the extent that flow is available in the river at that point on that specific day. LCRA found that the average annual unsatisfied demand was 520,657 acre-feet; the maximum annual unsatisfied demand was 674,095 acre-feet; and minimum annual unsatisfied demand was 340,500 acre-feet.

47. LCRA determined that the firm yield of the Stacy Reservoir is 90,546 acre-feet. The combined firm yield of Lakes Buchanan and Travis without inflow from upstream of Stacy Reservoir is 445,266 acre-feet/year. Adding the firm yield of Stacy Reservoir results in the combined firm yield for Lakes Buchanan and Travis of 535,812 acre-feet/year which represents the maximum average annual demand that can be met by these two lakes during a repetition of the most critical drought of record on the lower Colorado River. The combined firm yield may also be expressed as a total of 2,679,060 acre-feet over any five consecutive calendar-year period.

48. LCRA developed a rule curve which defines the ability of Lakes Buchanan and Travis to meet annual demands in excess of the combined firm yield, while reserving an adequate supply to meet firm demands.

49. Starting with the reservoirs full, various demands ranging from .781 million acre-feet to 1.5 million acre-feet were placed on the system for the period. It was found that even at a demand of 1.5 million acre-feet per year 100% of the demand was met in 46% of the years; 75% of the demand was met in 63% of the years; and the amount of .781 million acre-feet was met in 80% of the years.

50. This annual rule curve is considered conservative to the degree that the effect of a critical short-term drought equal to or less severe than historical will be negligible only if total firm demands are less than the combined firm yield.

51. The annual operations rule curve will analyze projected annual demands and based on October 1 lake levels will guarantee the supply of water for firm demands and identify an annual amount of water which may be used for non-firm purposes. It will be modified as firm demands increase, and as hydrologic conditions change in the Colorado River Basin.

52. The operational rule curve will be applied to the system on a monthly basis to determine how the system is responding to current conditions as compared to historical operations. This will allow LCRA to optimize reservoir operations on a real time basis and to determine if adjustments to the amount of interruptible water are necessary. This monthly analysis will help LCRA detect early signs of drought and allow LCRA to timely develop and implement drought contingency measures.

53. The amount of water required to meet the firm demand within the system for the preceding year will be calculated in early October. This amount will be compared to the projections for that year, and any variations will be noted and documented. LCRA will solicit information and projections of use from all of its firm supply contract holders and other firm uses provided for by resolution of the LCRA Board. This information will be used to develop a projection of firm demands for the coming year.

54. LCRA will assess the contents of Lakes Travis and Buchanan as of October 1 to project the storage levels for January 1 of the next year. Inflows into Lakes Travis and Buchanan from the upstream tributaries will be added to this preliminary storage level based on the minimum annual inflow from the period of drought. This process will allow LCRA to reserve sufficient water in the system to meet all firm demands for one year beyond the year being considered for allocations.

Estimates for firm demand commitments for the next year will be subtracted from the total water supply available. The amount of water remaining will then be available for interruptible allocation for that year.

55. In October, LCRA will publish the results of the allocation process, notify the LCRA Board, firm contract holders, the Texas Parks & Wildlife Department and any existing or potential interruptible contract holders. During the October LCRA Board meeting information will be presented to the Board and discussed.

56. The recommended annual allocation plan will be published and LCRA will consider public comments and will take into account any significant water events that may have occurred up to the date of publication. The annual allocation plan will be submitted as a recommendation for LCRA Board approval in November of each year.

57. The portion of the combined firm yield that is not yet committed and the firm uninterruptible water that is committed but not yet being used increases the interruptible water that is available each year. The water that is captured and stored from flood flows also adds to the amount of interruptible water that is available. Over time, as the current contracts draw fully on their commitments and the remainder of the firm yield is contracted for, there will be less interruptible water available on an annual basis.

58. LCRA has committed the following amounts out of the combined firm yield amount:

    a. Stacy Reservoir - the maximum impact of Stacy Reservoir on the firm yield of Lakes Travis and Buchanan is an average of 90,546 acre-feet per year.

    b. City of Austin - LCRA has agreed to firm up or supplement Austin's independent water rights to the extent of 290,156 acre-feet per year. A commitment of an average of 148,300 acre-feet per year of stored water is necessary to meet this demand.

    c. Highland Lakes Water Sale Contracts - municipal and industrial contracts total 104,754 acre-feet per year.

    d. Cooling Water for LCRA Power Plants - LCRA Board Resolution of January 22, 1987 committed 15,000 acre-feet for Ferguson; 10,750 acre-feet for Sim Gideon and 38,101 acre-feet for Fayette Power Project for a total of 63,851 acre-feet per year.

e. South Texas Project (STP) - LCRA has a contract to supply industrial water to STP in an amount up to 102,000 acre-feet per year. The commitment is met first by run-of-river water, firmed-up by stored water from Lakes Buchanan and Travis. Simulated operations through the drought of record showed a demand for stored water in one year of 51,700 acre-feet. A commitment of an average of 5,680 acre-feet per year of stored water is necessary to meet this demand.

f. Instream Flows and Bay/Estuary Needs - LCRA is also committing (reserving) 25,000 acre-feet out of the combined firm yield to meet instream flows and bay and estuaries' needs.

59. LCRA is reserving 50,000 acre-feet of the remaining combined firm yield for future uses under LCRA's certificates of adjudication. This reservation will be until water supply and demand assessments for LCRA's 10-county district are completed or within three years whichever is sooner.

60. The uncommitted balance of the combined firm yield of Lakes Buchanan and Travis is 47,681 acre-feet per year.

61. LCRA is in the process of developing a drought management plan and will be submitting the plan to the Commission in 1990.

62. LCRA is conducting county-by-county assessments of alternative water supply sources. This data will be useful in the development of local drought management plans.

63. The goal of LCRA's conservation programs is to promote the development and application of practices and technologies that will improve water use efficiency, increase the beneficial re-use of water, and minimize the waste of water.

64. LCRA's water conservation programs are directed at the two largest users of water, irrigated agriculture and municipal.

65. LCRA's goal for conservation of water used by irrigated agriculture is to reduce agricultural demands for stored water from the Highland Lakes and reduce costs associated with the operation of LCRA-owned irrigation water delivery systems in Colorado, Wharton and Matagorda Counties.

66. LCRA's current irrigated agriculture conservation programs consist of activities aimed at improving the operating efficiency of irrigation water delivery systems and improving on-farm water use efficiency.

67. The major elements of the irrigation canal rehabilitation program include: improved operational control and management

of the system; vegetation removal and control; improved hydraulics characteristics of canals; installation of water control and measurement structures; and automation of water diversion facilities.

68. The irrigated canal rehabilitation program is expected to reduce water use by 30 percent within the Gulf Coast canal system. Preventive maintenance at Lakeside is expected to maintain canal efficiency.

69. The major elements of the on-farm water conservation program include: Direct support through funding and staff for the Cooperative Rice Water Management Research Program; assistance with the transfer of information from the research arena to the rice producer; conservation demonstrations such as the development and testing of an automated levee gate; and the inclusion of water conservation stipulations in LCRA's standard irrigation water sale contract.

70. Preliminary results indicate that on-farm water use can be reduced by 25 to 30 percent.

71. LCRA's municipal water conservation programs are directed towards implementation of urban water conservation and water re-use. Focus is towards encouraging and supporting local level initiatives by more than 300 public water utility systems within LCRA's statutory district.

72. The five major elements of LCRA's municipal water conservation programs are:

    a. Direct technical assistance with the development and implementation of local water conservation programs including public awareness and education; water efficiency standards and guidelines for new construction (e.g., plumbing fixture efficiency standards); retrofit programs to improve water efficiency in existing developments; conservation-oriented water rates and other economic incentives; low-water-use landscaping (i.e., Xeriscape); and water re-use and recycling.

    b. Distribution system audit and leak detection services for local water utilities serving fewer than 10,000 connections.

    c. Integration of water conservation and re-use measures, as appropriate, with other LCRA programs and projects including LCRA water sale contracts; water resource planning and demand forecasting; water and wastewater utility service studies, projects, and service agreements; water rate design; environmental programs; and energy conservation programs.

d. Public awareness and education on the water conservation opportunities, benefits, and measures. On-going activities include distribution of brochures, fact sheets, and videos on water conservation; media promotion (e.g., news articles, public service announcements, talk shows, etc.); presentations to civic and service organizations; and workshops, seminars, and special events.

e. Demonstrations of advanced water conservation and re-use technologies and low-water-use landscaping techniques.

73. LCRA will no later than December 31, 1991 reference and summarize existing information on point and nonpoint pollution sources and loading on the Colorado River including inputs of nutrients, metals, pesticides, oxygen demanding substances and other contaminants that may affect water quality, fish wildlife and recreation resources in accordance with the MOU with TPWD.

74. LCRA will no later than December 31, 1991 identify new data needed to determine the effect of water quality on revision of minimum flow schedule and as soon as reasonably possible will modify its existing monitoring programs or new programs to collect such new data.

75. LCRA is evaluating the potential problems associated with anoxic hypolimnetic releases from reservoirs and the potential for related fish kills due to resulting low dissolved oxygen levels downstream. LCRA will no later than December 31, 1991 reference and summarize this evaluation.

76. LCRA has also applied to the Commission for an amendment to the Certificates of Adjudication Nos. 14-5478 and 14-5482 relating to Lakes Buchanan and Travis.

77. Certificates of Adjudication Nos. 14-5478 (Lake Buchanan) and 14-5482 (Lake Travis) authorize LCRA to divert and use water from Lakes Buchanan and Travis for municipal, industrial, irrigation and mining purposes. LCRA is authorized to use the water impounded in Lakes Buchanan and Travis for recreation purposes with no right of diversion or release. LCRA is authorized to use the bed and banks of the Colorado River, below Lakes Buchanan and Travis to convey water released from Lakes Buchanan and Travis for use by LCRA or others entitled to use such water in the amounts and for the purposes authorized in the Certificates. LCRA is also authorized to divert and use water through Buchanan Dam and Mansfield Dam for the purpose of hydroelectric power generation.

78. The Water Management Plan submitted by LCRA to the Commission for its consideration includes proposed reservoir operating

procedures whereby LCRA will divert or release waters stored in Lakes Buchanan and Travis for several additional purposes of use including domestic, recreation, instream flow and bays/estuary purposes.

79. In order to manage Lakes Buchanan and Travis as proposed in the Water Management Plan, LCRA's Certificates of Adjudication Nos. 14-5478 and 14-5482 need to be amended to authorize LCRA to divert, release and use the water in Lakes Buchanan and Travis for additional beneficial uses including domestic, recreation, instream flow and bay/estuary purposes.

80. As part of these amendments, LCRA is not requesting an additional amount of water. The proposed amendments will not result in an additional consumptive use of state water.

81. A "firm" demand is a contractual obligation or other commitment of LCRA's which must be met 100% of the time through the drought of record. Total firm demands will need to be less than or equal to the combined firm yield to be protected throughout recurrence of the drought of record.

82. Interruptible or "nonfirm" demands are LCRA's contractual obligations or other commitments for stored water which contractually do not have to be met 100% of the time. They will be met to the extent additional water is available each year after firm demands are satisfied.

83. LCRA has formally adopted standard water sale contract forms, and procedures and rules for administering water sale contracts. Existing contracts are written for firm supply of water, subject only to the general laws of availability. A second standard form contract for interruptible supply is presently being developed.

84. LCRA currently has no contracts upstream from the Highland Lakes, except those with upstream reservoirs with junior rights to the Highland Lakes which are more or less operation agreements.

85. Existing upstream operating agreements should be considered firm contracts, and their effect on the combined firm yield should be quantified as was Stacy Reservoir's effect.

86. Junior rights senior to November 1, 1987, will be honored as required by the Court's Judgment and Decree with interruptible supplies. Their diversions will be allocated similar to downstream senior rights.

87. A report which documents LCRA's compliance with the Water Management Plan during the previous year will contain information regarding the adequacy of the hydrologic and

hydraulic data monitoring system as to intensity and accuracy; accuracy of reported or monitored activities; adequacy of the operating rule curve and the adequacy of the daily allocation model and any additional information the Executive Director may request.

88. Under the approach used by LCRA at this time, the combined firm yield of Lakes Buchanan & Travis is 535,812 acre-feet/year. This amount may also be expressed as an average of a total of 2,679,060 acre-feet per year over any five consecutive calendar-year period.

89. LCRA's proposed Water Management Plan does not presently propose any new projects taking, storing or diverting water in excess of 5,000 acre-feet per year.

90. The use of an operational rule curve, as developed by LCRA, is an acceptable approach to insure utilization of the lakes' storage while at the same time guaranteeing that firm demands will be met dependably year after year.

91. LCRA's procedures and guidelines for the allocation of firm water and interruptible water supplies are acceptable, with the understanding that the allocation procedures may be amended at a later time to reflect the results of the instream flow and bay/estuary studies; provided, however, that the Commission shall retain jurisdiction to resolve all disputes regarding allocation of stored water that may arise in the future.

92. LCRA's initiatives regarding point and non-point sources of pollution are commendable.

93. The priorities in LCRA's Water Management Plan for interruptible water are subject to changes after the completion of the studies on the instream flows and bays/estuaries.

94. LCRA's proposed system operations under LCRA's Water Management Plan are consistent with the special conditions set forth in the Court's Final Judgment and Decree regarding LCRA's rights to use the waters of Lakes Buchanan and Travis.

CONCLUSIONS OF LAW

1. The public hearing was held under the authority and in accordance with Chapter 11 of the Texas Water Code, as amended and the Texas Water Commission Permanent Rules.

2. The Texas Water Commission has jurisdiction to consider LCRA's proposed Water Management Plan and applications to amend its Certificates of Adjudication.

3. LCRA's proposed Water Management Plan recognizes the necessity of beneficial inflows from the Colorado River into the Lavaca-Tres Palacios Estuary consistent with Section 11.147 of the Texas Water Code.

4. LCRA's proposed Water Management Plan recognizes the necessity of providing for the protection of fish and wildlife habitats and the water quality of the river as required by Section 11.147 of the Texas Water Code.

5. LCRA's proposed Water Management Plan recognizes the Commission's statutory authority to require water conservation and provides for water conservation consistent with Section 11.134(b)(4) of the Texas Water Code.

6. LCRA's applications to amend its Certificates of Adjudication Nos. 14-5478 and 14-5482 authorizing LCRA to use the waters of Lakes Buchanan and Travis for additional beneficial purposes do not contemplate an additional consumptive use of state water or an increased rate or period of diversion.

7. In order to effectuate the policies of this State relating to the conservation and best utilization of the water resources of this State as set forth in Chapter 11 of the Texas Water Code, LCRA's proposed Water Management Plan should be approved and LCRA's applications to amend Certificates of Adjudication Nos. 14-5478 and 14-5482 should be granted.

NOW, THEREFORE, BE IT ORDERED BY THE TEXAS WATER COMMISSION THAT:

1. LCRA's proposed Water Management Plan is approved with the following conditions:

   a. The Water Management Plan shall be subject to the continuing right of supervision of the Commission, and the Commission, on its own motion, may reconsider any element of the plan at any time in the future.

   b. LCRA's responsibility and authority under the Water Management Plan is limited to operational control of the Highland Lakes and LCRA's facilities downstream, and is limited by the terms of this Order.

   c. LCRA's responsibility and authority under the Water Management Plan is subject to and shall not conflict with the authority of any watermaster operation the Commission may establish on the Colorado River.

   d. LCRA shall make available to the Commission all real-time, historical or allocated streamflow data collected by LCRA.

e. LCRA shall supply interruptible water, in accordance with the provisions and conditions specified in the Final Judgement and Decree, to any downstream water right with a priority date junior to December 1, 1900 and senior to November 1, 1987 that authorizes the diversion of not more than 3000 acre-feet of water per year. Priority shall be given to these water rights in the same manner that LCRA allocates water to the major irrigation operations downstream (Lakeside, Gulf Coast, Garwood and Pierce Ranch).

f. All sales, agreements or LCRA Board commitments for the use of water in or from the Highland Lakes shall be submitted to the Commission within 45 days of the effective date of the document.

g. LCRA shall submit a drought contingency plan within one year from the date the Commission signs this order approving the Water Management Plan. Such plan shall be subject to the review and approval of the Commission.

h. LCRA shall allocate 25,000 acre-feet per annum of its firm water supply to supplement and maintain a minimum monthly mean flow of 200 cfs throughout the lower Colorado River measured at the USGS gage at Bastrop for instream flow purposes and a minimum monthly mean flow of 200 cfs, a minimum seasonal mean flow of 375 cfs and a minimum annual flow of 272,121 acre-feet measured at the USGS gage at Bay City for freshwater inflow to the Lavaca-Tres Palacios estuarine system.

i. Prior to any diversion of surface water for recharge purposes, LCRA shall obtain the necessary authorizations from the Commission.

j. LCRA shall prepare and submit to the Commission, on or before March 1 of each year beginning with March 1, 1990, a report which documents compliance with the approved Water Management Plan and any special conditions thereto during the previous year. Such report shall be in a form approved by the Executive Director.

k. After the instream study by LCRA and TPWD is completed, but in any event no later than March, 1992, LCRA will submit an application to amend its Water Management Plan to reflect the results of the instream flow studies and the studies and evaluations referenced in Findings of fact #73, 74, & 75 above. LCRA shall do all things necessary to ensure that such application is administratively and technically complete within 6 months of submission. The Commission agrees to hold a hearing within one year of the date of LCRA's submission to

consider the amendments of the Plan, or, if the studies are not complete, to determine why such studies are not complete.

l. After completion of the TWDB and TPWD study on freshwater inflows into the bays and estuaries, as applicable to the Lavaca-Tres Palacios Estuary, and in any event no later than March, 1993, LCRA will submit an application to amend its Water Management Plan to reflect the results of the bays/estuary study. LCRA shall do all things necessary to ensure that such application is administratively and technically complete within 6 months of submission. The Commission agrees to hold a hearing within one year of the date of LCRA's submission to consider the amendments of the Plan, or, if the studies are not complete, to determine why such studies are not complete.

m. The combined firm yield as found by the Commission in this Order is subject to adjustment and refinement from time to time as additional studies and simulations are developed that more accurately reflect assumptions and operations as required by law.

n. The Commission retains jurisdiction to resolve any and all disputes regarding the allocation of stored water from Lakes Travis and Buchanan, notwithstanding the procedures and guidelines set forth in the Water Management Plan.

2. LCRA's applications to amend Certificates of Adjudication Nos. 14-5478 and 14-5482 are granted with the following conditions:

a. LCRA's certificates of adjudication shall reflect the combined annual firm yield of Lakes Travis and Buchanan to be as found by the Commission in this Order, and as may be modified by the Commission from time to time.

b. For purposes of perfection, LCRA's authorization to divert, release or use water for recreation purposes is limited to that quantity of water actually sold for that purpose whether used in, or released, or diverted from Lakes Buchanan and Travis.

3. The Chief Clerk of the Texas Water Commission forward a copy of this Order, subject to the filing of motions for rehearing, to all parties.

4. If any provision, sentence, clause or phrase of this Order is for any reason held to be invalid, the invalidity of any portion shall not affect the validity of the remaining portions of the Order.

5. Nothing in the Water Management Plan or this Order shall be construed to impair, or to authorize LCRA or any other person or entity to impair, senior or superior water rights in the Colorado River Basin.

Signed this 20th day of September, 1989.

TEXAS WATER COMMISSION

Buck J. Wynne, III, Chairman

(SEAL)

Brenda W. Foster, Chief Clerk

Exhibit E

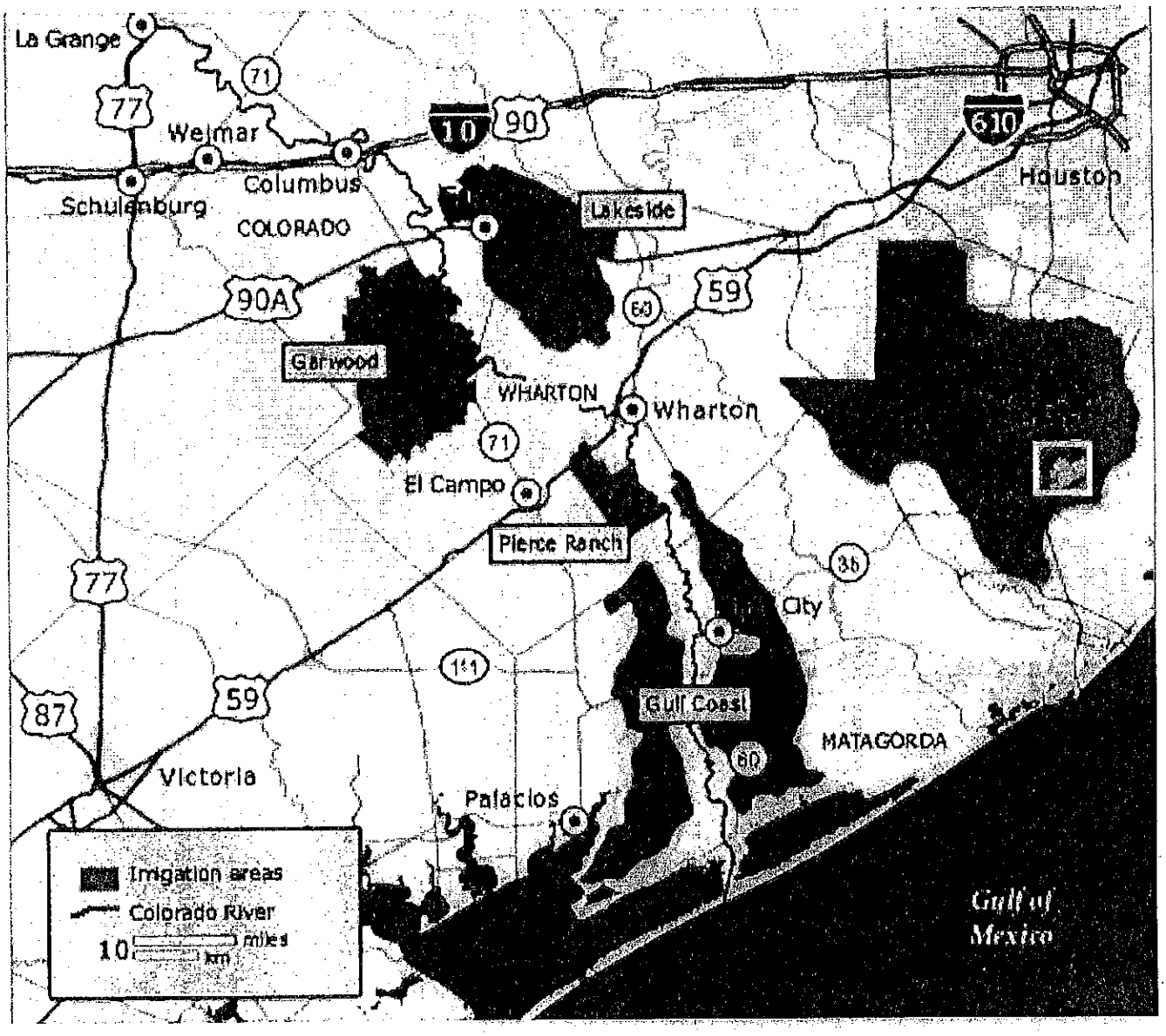

La Grange
77
71
Weimar
10
90
610
Houston
Schulenburg
Columbus
COLORADO
Lakeside
90A
60
59
Garwood
WHARTON
Wharton
71
El Campo
Pierce Ranch
77
36
City
111
87
59
Gulf Coast
MATAGORDA
60
Victoria
Palacios
Irrigation areas
Colorado River
10
miles
km
Gulf of Mexico

Exhibit F

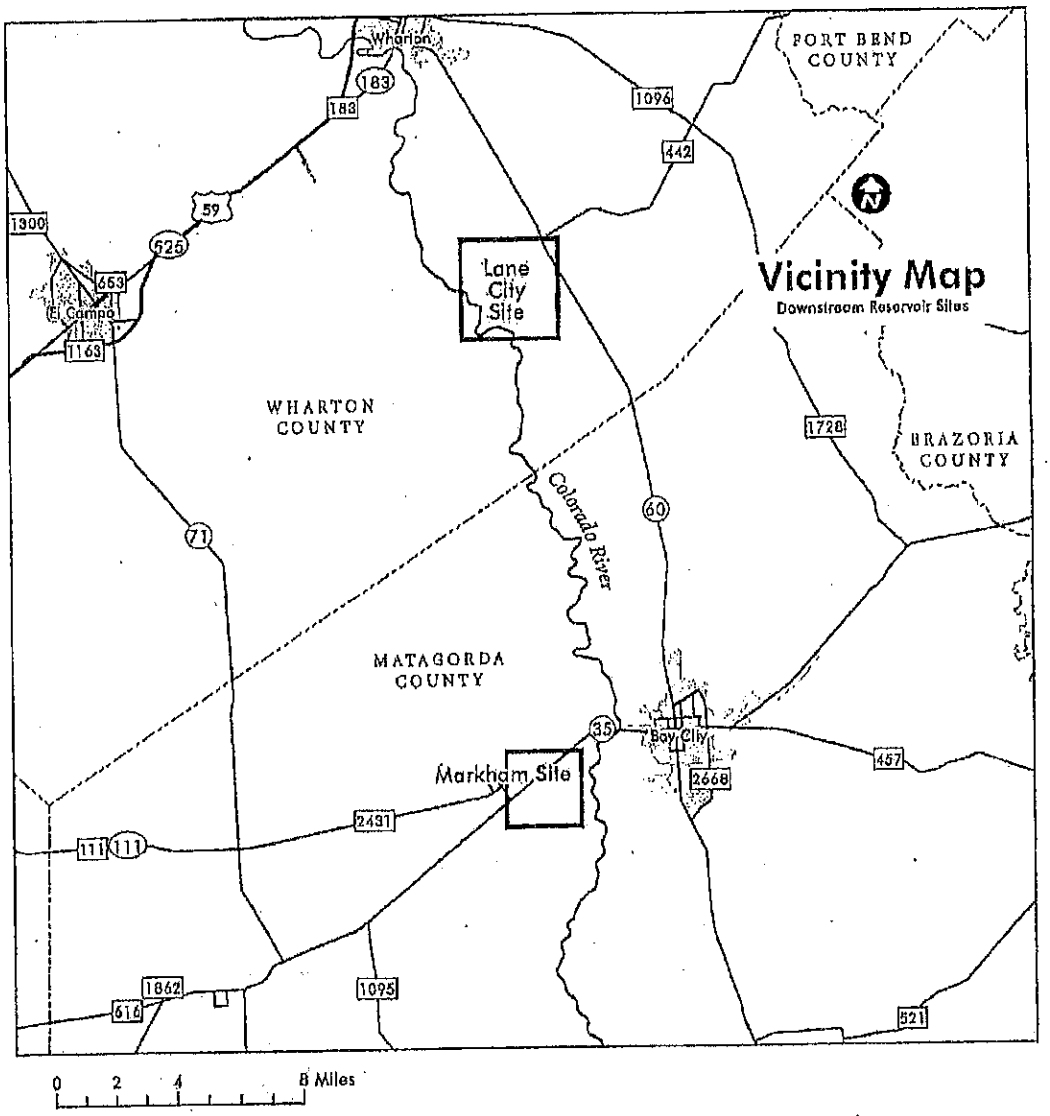
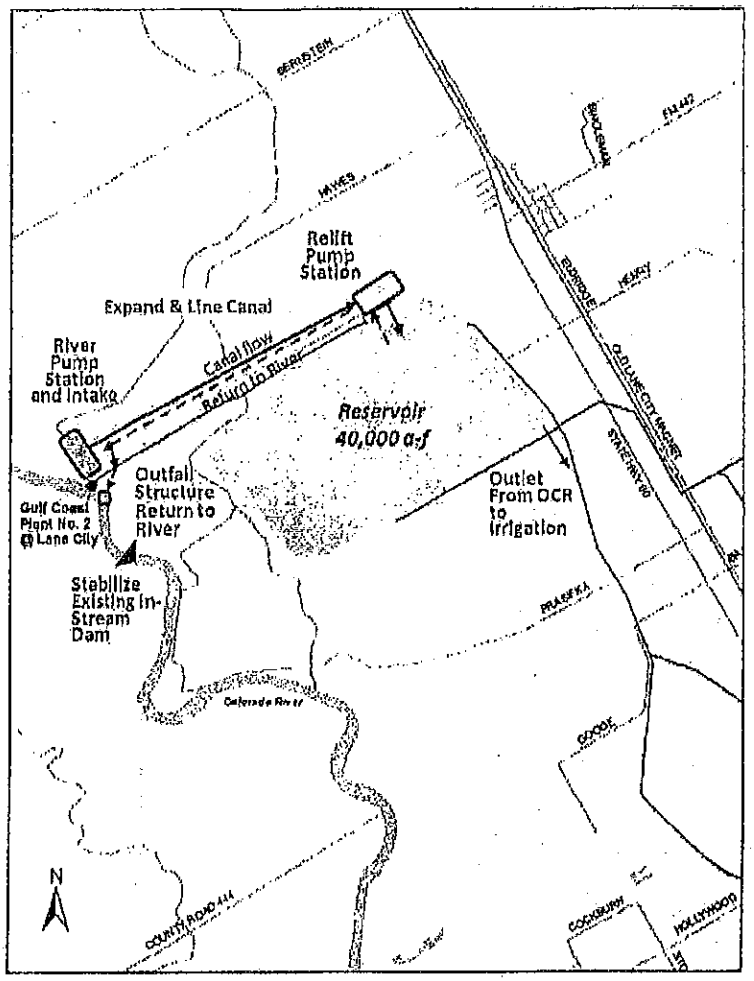

Vicinity Map
Downstream Reservoir Sites
Wharton
El Campo
Bay City
Lane City Site
Markham Site
WHARTON COUNTY
MATAGORDA COUNTY
FORT BEND COUNTY
BRAZORIA COUNTY
Colorado River
183
1096
442
1300
59
525
663
1163
1728
60
71
35
2668
457
2431
111
1862
616
1095
521
0 2 4 8 Miles

Exhibit G



LCRA Moves Forward With Lane City Reservoir

This conceptual drawing shows what the new LCRA water reservoir in Lane City might look like. The LCRA board voted to move forward with purchasing land and the permitting process Wednesday.

May 2013

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

today's events | browse | submit

Popular Commented Facebook Activity

Stories

Orville O'Brian

Florence Henderson

Police Blotter for May 15, 2013

Mildred Hanson

Flea bargains

More

Photos

Videos

Homes Jobs Cars

Homes

1 BR HOUSE IN EL CAMPO.
posted: May 21

IN THE COUNTRY, WHARTON.
posted: May 21

RENTAL PROPERTY & LAND for sale in Wharton city limits.
posted: May 21

More Homes

Enter symbol | Get Quote
Symbol lookup

NYSE NASD S&P

4) Require LCRA to immediately update actual and projected firm demands, using updated hydrology

5) Encourage LCRA to immediately begin working with stakeholders on a new WMP that:

- Properly protects firm users in times of drought;
- Utilizes the latest hydrologic data available, including the significantly lower inflows to the lakes, to re -evaluate water availability throughout the river basin; and
- Provides true incentives for conservation by all parties, including proper water pricing and assessment of relative economic benefit created by use of the water.

FORM LETTER

WR 82315

May ___, 2013

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
2013 MAY 15 AM 10: 22
CHIEF CLERKS OFFICE

Ms. Bridget C. Bohac, Chief Clerk

Office of the Chief Clerk (MC 105)

Texas Commission on Environmental Quality

P.O. Box 13087

Austin, Texas 78711-3087

REVIEWED
MAY 15 2013
By

Re: Comments and Request for Contested Case Hearing on Application to Amend the LCRA Water Management Plan; Application No. 5838A; TCEQ Water Rights Permit No. 5838

Dear Ms. Bohac:

This letter provides our comments on the Lower Colorado River Authority's application to amend its Water Management Plan (Permit No. 5838) and requests a contested

case hearing on this application. Our contact information follows:

NAME: Wayne Bulgerin
407 Bumpy Ridge Dr Burnet 78611

MAILING ADDRESS: 407 Bumpy Ridge Dr
Burnet Tx 78611

DAYTIME PHONE NUMBER(S): 512-793 6821

FAX NUMBER (IF ANY):

EMAIL ADDRESS:

We are affected by this proposed amendment to the LCRA's Water Management Plan in the ways explained below. For these reasons, we request the TCEQ's careful attention to our comments and TCEQ's approval of our request for a hearing.

Lake Buchanan is my only source of water. I have 700' of pipe to reach the lake. I tried to drill a well, but it only had 1 quart of water per hour. I buy water from L.C.R.A. ...

Thank you for your consideration of these important issues. Please let me know if yo u need any additional information.

Sincerely,

Wayne Bulgerin

Mr. Wayne Bulgerin
407 Bumpy Ridge Dr.
Burnet, TX 78611

RIO GRANDE DISTRICT
14 MAY 2013 PM 3 1

Justice
FOREVER

RECEIVED
MAY 15 2013
TCEQ MAIL CENTER
RG

Ms. Bridget C Bohac Chief Clerk
Office of the Chief Clerk (MC 105)
Texas Commission on Environmental Quality
Austin TX 78711-3087

2013 MAY 15 PM 10: 21
CHIEF CLERK'S OFFICE

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

78711308787

Marisa Weber

From:	PUBCOMMENT-OCC
Sent:	Monday, August 17, 2015 8:22 AM
To:	PUBCOMMENT-WWW-WRAS; PUBCOMMENT-ELD; PUBCOMMENT-OCC2; PUBCOMMENT-OPIC
Subject:	FW: Public comment on Permit Number WRPERM 5838
Attachments:	Garwood Irrigation Co and Lehrer Lewis Interests REQUEST FOR HEARING1.pdf

H

WR 82315

From: marsha.smith@bakerbotts.com [mailto:marsha.smith@bakerbotts.com]
Sent: Friday, August 14, 2015 12:41 PM
To: DoNot Reply
Subject: Public comment on Permit Number WRPERM 5838

REGULATED ENTY NAME 11405838000 WRPERM 5838 WATER MANAGEMENT PLAN

RN NUMBER: RN104252267

PERMIT NUMBER: WRPERM 5838

DOCKET NUMBER:

COUNTY: BASTROP, BURNET, COLORADO, FAYETTE, GILLESPIE, LAMPASAS, LLANO, MASON, MATAGORDA, SAN SABA, TRAVIS, WHARTON, WILLIAMSON

PRINCIPAL NAME: LOWER COLORADO RIVER AUTHORITY

CN NUMBER: CN600253637

FROM

NAME: Molly Cagle

E-MAIL: marsha.smith@bakerbotts.com

COMPANY: Baker Botts L.L.P.

ADDRESS: 98 SAN JACINTO BLVD Suite 1500
AUSTIN TX 78701-4082

PHONE: 5123222535

FAX:

COMMENTS: REQUEST OF GARWOOD IRRIGATION COMPANY AND THE LEHRER/LEWIS INTERESTS FOR CONTESTED CASE HEARING

MW

APPLICATION NO. 5838A

APPLICATION OF THE LOWER COLORADO RIVER AUTHORITY TO AMEND THE LCRA WATER MANAGEMENT PLAN	§ § § §	**BEFORE THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**

REQUEST OF
GARWOOD IRRIGATION COMPANY
AND THE LEHRER/LEWIS INTERESTS
FOR CONTESTED CASE HEARING

TO THE HONORABLE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY:

I. REQUEST FOR CONTESTED CASE HEARING

Garwood Irrigation Company ("Garwood") and the Lehrer/Lewis interests ("Lehrer/Lewis") request a contested case hearing on the above-referenced application of the Lower Colorado River Authority ("LCRA") to amend its Water Management Plan ("WMP").

II. GARWOOD IRRIGATION COMPANY

The name, mailing address, daytime phone number, and fax number of Garwood Irrigation Company are as follows:

Garwood Irrigation Company
Attn: Ralph A. Savino
P.O. Box 428
Garwood, Texas 77442
(979) 758-3221
(979) 758-3844 (fax)

Garwood Irrigation Company previously owned the Garwood water right—the earliest-priority major water right in the Colorado River Basin—and it owned and operated the pump stations, canals, and other facilities to supply water for irrigation within the Garwood service area in Colorado and Wharton Counties. Garwood sold the first-priority 133,000 acre-feet-per-year portion of the Garwood water right and other assets to LCRA by a Purchase Agreement dated July 20, 1998 (the "1998 Purchase Agreement").

III. LEHRER/LEWIS

The name, mailing address, daytime phone number, and fax number of Lehrer/Lewis are as follows:

The Lehrer/Lewis Interests
Attn: Ralph A. Savino
P.O. Box 428
Garwood, Texas 77442
(979) 758-3221
(979) 758-3844 (fax)

Lehrer/Lewis own approximately 17,500 acres of land in Colorado and Wharton Counties within the Garwood service area. The land is used to grow rice, and irrigation water for this land is supplied by LCRA. The Lehrer/Lewis interests consist of seven distinct ownership interests of lands within the service area of LCRA's Garwood Division: (1) The William Paul Lehrer Residuary Trust, the Gretchen Lehrer Residuary Trust (formerly the Gretchen L. McMenimen Residuary Trust), the Nancy Lehrer Boyd Residuary Trust, and the Mary Lehrer Armour Residuary Trust (such residuary trusts were created under the will of William Neal Lehrer admitted to probate in Cause No. 9,227 in the County Court of Colorado County, Texas, and such residuary trusts are together referred to herein as the "Lehrer Residuary Trusts"); (2) The Dorothy Lewis Estate Trust (such trust was created under the Last Will and Testament of Dorothy Jane Lehrer Lewis dated October 3, 1983 and First Codicil dated February 12, 2002, and such trust is referred to herein as the "Lewis Trust"); (3) El Seven Ranch, Inc., a Texas corporation; (4) the Lehrer-Lewis 1967 Trusts; (5) the Lehrer-Lewis Joint Venture; (6) the Lehrer Residuary Trusts & Dorothy Lewis Estate Trust, a Texas general partnership; and (7) William Paul Lehrer, Gretchen Lehrer, Nancy Lehrer Boyd, and Mary Lehrer Armour, who own undivided interests as individuals. William Neal Lehrer and Dorothy Jane Lehrer Lewis, both deceased, were brother and sister, and their descendants/heirs are the beneficiaries of the Lehrer Trusts, the Lewis Trust, and the Lehrer-Lewis 1967 Trusts, as well as stockholders of El Seven Ranch, Inc.

IV. GARWOOD AND LEHRER/LEWIS WILL BE AFFECTED BY THE APPLICATION IN WAYS NOT COMMON TO THE GENERAL PUBLIC

Today, two agreements between LCRA and Garwood govern LCRA's supply of water to landowners and irrigators within the Garwood service area. The first is the 1998 Purchase Agreement, by which Garwood sold to LCRA the first-priority 133,000 acre-feet-per-year portion of the Garwood water right and other assets used to supply water for irrigation of lands within the Garwood service area. The second is an agreement between Garwood and LCRA dated December 10, 1987 (the "1987 Agreement;" collectively, "the Garwood Agreements").

LCRA is construing its water supply obligations under the Garwood Agreements incorrectly, to the detriment of Garwood and Lehrer/Lewis.

The Commission's final order and LCRA's amended WMP should reflect the correct construction of the Garwood Agreements if, prior to entry of the final order: (1) LCRA and Garwood reach agreement on LCRA's obligations under the Garwood Agreements; or (2) the respective rights and obligations of the parties under the Garwood Agreements are adjudicated by the courts. Alternatively, the final order and amended WMP should accurately recite not only LCRA's construction of the Garwood Agreements, but also the construction asserted by other parties who have a right to enforce LCRA's obligations under the Garwood Agreements. In addition, the final order and amended WMP should address all relevant issues relating to LCRA's obligations and operations under the different constructions and show alternate consequences based on those different constructions. As set forth below, both Garwood and Lehrer/Lewis have the right to enforce LCRA's obligations under the Garwood Agreements.

As a condition of its sale to LCRA, Garwood insisted on including terms and conditions in the 1998 Purchase Agreement that today govern LCRA's supply of water to landowners and irrigators within the Garwood service area. Among other things, those terms and conditions specify that the 1987 Agreement "shall remain in full force and effect, and LCRA shall continue to honor the terms of the [1987] Agreement." Thus, Garwood has the right to enforce the Garwood Agreements that govern LCRA's supply of water to landowners and irrigators within the Garwood service area.

Lehrer/Lewis have a right to be supplied water for irrigation by LCRA solely because they own lands within a defined irrigation service area of a water right owned by LCRA. Additionally, pursuant to the express terms of the 1998 Purchase Agreement, landowners and irrigators within the Garwood service area are named third-party beneficiaries that have the right to enforce the obligations of LCRA. ("Landowners and irrigators within Garwood's Service Area shall have the right to enforce the obligations of LCRA as set forth in Section 7.08 [of the 1998 Agreement]..." *See* 1998 Purchase Agreement Section 13.07, Binding Effect, Assignment and Third-Party Beneficiaries). Those "obligations of LCRA" include an express obligation to "continue to honor the terms of the [1987] Agreement." Thus, Lehrer/Lewis also have the right to enforce the Garwood Agreements that govern LCRA's supply of water to landowners and irrigators within the Garwood service area.

Accordingly, both Garwood and Lehrer/Lewis are affected persons. Both have a "personal justiciable interest related to a legal right, duty, privilege, power, or economic interest affected by the application." 30 Tex. Admin. Code § 55.256(a). Garwood is the contracting party under the Garwood Agreements with LCRA that govern LCRA's supply of water to landowners and irrigators within the Garwood service area and, as such, has a right to enforce LCRA's obligations under the Garwood Agreements. Lehrer/Lewis are landowners within the Garwood service area and, as such, are third-party beneficiaries under the 1998 Purchase Agreement. And, as noted, the enforcement of LCRA's obligations extends to obligations of LCRA under the 1987 Agreement. These interests are not common to the general public.

V. PRAYER

Garwood and Lehrer/Lewis respectfully request that the Commission hold a contested case hearing on LCRA's application and that Garwood and Lehrer/Lewis be admitted as parties to the hearing. Garwood and Lehrer/Lewis further request that, after hearing, the Commission's final order and LCRA's amended Water Management Plan reflect the correct construction of the Garwood Agreements if, prior to entry of the final order: (1) LCRA and Garwood reach agreement on LCRA's obligations under the Garwood Agreements; or (2) the respective rights and obligations of the parties under the Garwood Agreements are adjudicated by the courts. Alternatively, the final order and amended WMP should accurately recite the different constructions asserted by LCRA, on the one hand, and Garwood and Lehrer/Lewis, on the other hand, and also address all relevant issues relating to LCRA's obligations and operations under the different constructions and show alternate consequences based on those different constructions.

Respectfully submitted,

By: _____

Molly Cagle
State Bar No. 03591800
molly.cagle@bakerbotts.com
Samia R. Broadaway
State Bar No. 24088322
samia.broadaway@bakerbotts.com
BAKER BOTTS L.L.P.
98 San Jacinto Blvd., Suite 1500
Austin, Texas 78701
Tel: 512.322.2500
Fax: 512.322.2501

ATTORNEYS FOR GARWOOD IRRIGATION COMPANY AND THE LEHRER/LEWIS INTERESTS

Marisa Weber

From: PUBCOMMENT
Sent: Thursday, May 23, 2013 3:33 PM
To: PUBCOMMENT-OCC2
Subject: FW: Public comment on Permit Number WRPERM 5838
Attachments: Garwood Hearing Request.pdf

H

WR/82315

From: PUBCOMMENT-OCC
Sent: Thursday, May 23, 2013 3:11 PM
To: PUBCOMMENT
Subject: FW: Public comment on Permit Number WRPERM 5838

From: molly.cagle@bakerbotts.com [mailto:molly.cagle@bakerbotts.com]
Sent: Thursday, May 23, 2013 3:07 PM
To: donotReply@tceq.state.tx.us
Subject: Public comment on Permit Number WRPERM 5838

REGULATED ENTY NAME 11405838000 WRPERM 5838 WATER MANAGEMENT PLAN

RN NUMBER: RN104252267

PERMIT NUMBER: WRPERM 5838

DOCKET NUMBER:

COUNTY: BASTROP, BURNET, COLORADO, FAYETTE, GILLESPIE, LAMPASAS, LLANO, MASON, MATAGORDA, SAN SABA, TRAVIS, WHARTON, WILLIAMSON

PRINCIPAL NAME: LOWER COLORADO RIVER AUTHORITY

CN NUMBER: CN600253637

FROM

NAME: Molly J Cagle

E-MAIL: molly.cagle@bakerbotts.com

COMPANY: Baker Botts L.L.P.

ADDRESS: 98 SAN JACINTO BLVD Suite 1500
AUSTIN TX 78701-4082

PHONE: 5123222535

FAX: 5123222501

COMMENTS: Please see the attached Garwood Hearing Request.

APPLICATION NO. 5838A

APPLICATION OF THE LOWER COLORADO RIVER AUTHORITY TO AMEND THE LCRA WATER MANAGEMENT PLAN	§ § § §	BEFORE THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

REQUEST OF
GARWOOD IRRIGATION COMPANY
AND THE LEHRER/LEWIS INTERESTS
FOR CONTESTED CASE HEARING

TO THE HONORABLE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY:

I. REQUEST FOR CONTESTED CASE HEARING

Garwood Irrigation Company ("Garwood") and the Lehrer/Lewis Interests ("Lehrer/Lewis Interests") request a contested case hearing on the above-referenced application of the Lower Colorado River Authority ("LCRA") to amend its Water Management Plan.

II. GARWOOD IRRIGATION COMPANY

The name, mailing address, daytime phone number, and fax number of Garwood Irrigation Company are as follows:

Garwood Irrigation Company
Attn: Ralph A. Savino
P.O. Box 428
Garwood, Texas 77442
(979) 758-3221
(979) 758-3844 (fax)

Garwood Irrigation Company previously owned the Garwood water right—the earliest-priority major water right in the Colorado River Basin—and it owned and operated the pump stations, canals and other facilities to supply water for irrigation within the Garwood service area in Colorado and Wharton Counties. Garwood sold the first-priority 133,000 acre-feet-per-year portion of the Garwood water right and other assets to LCRA by that certain Purchase Agreement dated July 20, 1998 (the "1998 Agreement").

III. LEHRER/LEWIS INTERESTS

The name, mailing address, daytime phone number, and fax number of the Lehrer/Lewis Interests are as follows:

The Lehrer/Lewis Interests
Attn: Ralph A. Savino
P.O. Box 428
Garwood, Texas 77442
(979) 758-3221
(979) 758-3844 (fax)

The Lehrer/Lewis Interests own approximately 17,500 acres of land in Colorado and Wharton Counties located within the Garwood service area, on which rice is grown and to which water for irrigation is supplied by LCRA. The Lehrer/Lewis Interests consist of five distinct ownership interests: (1) The William Paul Lehrer Residuary Trust, the Gretchen L. McMenimen Residuary Trust, the Nancy Lehrer Boyd Residuary Trust, and the Mary Lehrer Armour Residuary Trust (such residuary trusts were created under the will of William Neal Lehrer admitted to probate in Cause No. 9,227 in the County Court of Colorado County, Texas, and such residuary trusts are together referred to herein as the "Lehrer Trusts"); (2) The Dorothy Lewis Estate Trust (such trust was created under the Last Will and Testament of Dorothy Jane Lehrer Lewis dated October 3, 1983 and First Codicil dated February 12, 2002, and such trust is referred to herein as the "Lewis Trust"); (3) El Seven Ranch, Inc., a Texas corporation, (the "Company"); (4) the Lehrer-Lewis 1967 Trusts; and (5) the Lehrer-Lewis Joint Venture. William Neal Lehrer and Dorothy Jane Lehrer Lewis, both deceased, were brother and sister, and their descendents/heirs are the beneficiaries of the Lehrer Trusts, the Lewis Trust, and the Lehrer-Lewis 1967 Trusts, participants in the Lehrer-Lewis Joint Venture, and stockholders of the Company.

IV. GARWOOD AND THE LEHRER/LEWIS INTERESTS WILL BE AFFECTED BY THE APPLICATION IN WAYS NOT COMMON TO THE GENERAL PUBLIC

Today, two agreements previously entered into by LCRA and Garwood govern LCRA's supply of water to landowners and irrigators within the Garwood service area. The first is the 1998 Agreement, by which Garwood sold to LCRA the first-priority 133,000 acre-feet-per-year portion of the Garwood water right and other assets used to supply water for irrigation of lands within the Garwood service area; and the second is an agreement previously entered into by and between Garwood and LCRA dated December 10, 1987 (the "1987 Agreement").

LCRA is construing its water supply obligations under the 1998 Agreement and 1987 Agreement incorrectly, to the detriment of Garwood and the Lehrer/Lewis Interests.

The final order of the Commission in this matter and LCRA's amended Water Management Plan should reflect the correct construction of these two governing agreements if, prior to entry of the final order: (1) LCRA and Garwood reach agreement on LCRA's obligations under the agreements; or (2) the respective rights and obligations of the parties under the two agreements are adjudicated by the courts. Alternatively, the final order and amended Plan should accurately recite not only the construction asserted by LCRA, but also the construction asserted by other parties who have a right to enforce LCRA's obligations under the agreements, and also show alternate consequences based on those different constructions. As set forth below, both Garwood and the Lehrer/Lewis Interests have the right to enforce LCRA's obligations under both agreements.

As a condition of its sale to LCRA, Garwood insisted on including terms and conditions in the 1998 Agreement that today govern LCRA's supply of water to landowners and irrigators within the Garwood service area. Among other things, those terms and conditions specify that the 1987 Agreement "shall remain in full force and effect, and LCRA shall continue to honor the terms of the [1987] Agreement." Thus, Garwood has the right to enforce both agreements—the 1987 Agreement and the 1998 Agreement—that today govern LCRA's supply of water to landowners and irrigators within the Garwood service area.

The Lehrer/Lewis Interests have a right to be supplied water for irrigation by LCRA solely because they own lands within a defined irrigation service area of a water right now owned by LCRA. Additionally, pursuant to the express terms of the 1998 Agreement, landowners and irrigators within the Garwood service area are named third party beneficiaries that have the right to enforce the obligations of LCRA set forth in Section 7.08 of the 1998 Agreement. ("Landowners and irrigators within Garwood's Service Area shall have the right to enforce the obligations of LCRA as set forth in Section 7.08 [of the 1998 Agreement]. . . ." See 1998 Agreement Section 13.07. Binding Effect, Assignment and Third-Party Beneficiaries.) Those obligations of LCRA include an express obligation to "continue to honor the terms of the [1987] Agreement." Thus, the Lehrer/Lewis Interests also have the right to enforce both agreements—the 1987 Agreement and the 1998 Agreement—that today govern LCRA's supply of water to landowners and irrigators within the Garwood service area.

Accordingly, both Garwood and the Lehrer/Lewis Interests are affected persons as defined under 30 TAC §55.256(a). Both have a personal justiciable interest related to a legal right, duty privilege, power or economic interest affected by the application. Garwood is the contracting party under the two agreements with LCRA that today govern LCRA's supply of water to landowners and irrigators within the Garwood service area and, as such, has a right to enforce LCRA's obligations under both agreements. The Lehrer/Lewis Interests are landowners within the Garwood service area and, as such, are defined third-party beneficiaries under the 1998 Agreement. As noted, the enforcement of LCRA's obligations extends to obligations of LCRA under the 1987 Agreement. These interests are not common to the general public.

V. PRAYER

Garwood and the Lehrer/Lewis Interests respectfully request that the Commission hold a contested case hearing on LCRA's application and that they be admitted as parties to the hearing. Garwood and the Lehrer/Lewis Interests further request that, after hearing, the final order of the Commission and LCRA's amended Water Management Plan reflect the correct construction of the two governing agreements if, prior to entry of the final order: (1) LCRA and Garwood reach agreement on LCRA's obligations under the agreements; or (2) the respective rights and obligations of the parties under the two agreements are adjudicated by the courts. Alternatively, the final order and amended Plan should accurately recite the different constructions asserted by LCRA on the one hand, and Garwood and Lehrer/Lewis Interests on the other hand, and also show alternate consequences based on those different constructions.

Respectfully submitted,

By: Molly Cagle

Molly Cagle
Texas Bar No. 03591800
molly.cagle@bakerbotts.com
BAKER BOTTS L.L.P.
98 San Jacinto Boulevard
Suite 1500
Austin, Texas 78701-4078
(512) 322-2500
(512) 322-2501 (Fax)

Attorneys for Garwood Irrigation Company and the Lehrer/Lewis Interests

PURCHASE AGREEMENT

by and between

Garwood Irrigation Company,

as Seller,

and

Lower Colorado River Authority,

as Buyer

Dated July 20, 1998

TABLE OF CONTENTS

Page

ARTICLE 1
Definitions

1.01 Defined Terms 1
1.02 Other Definitional Provisions; Construction 1

ARTICLE 2
Purchase and Sale

2.01 Sale of Assets 2
2.02 Purchase Price 2
2.03 Initial Payment 3
2.04 Monthly Payments 3

ARTICLE 3
Closing

3.01 Time and Place of Closing 3
3.02 Deliveries by Garwood 3
3.03 Deliveries by LCRA 4

ARTICLE 4
Representations and Warranties of Garwood

4.01 Corporate Existence and Qualification 4
4.02 Authority, Approval and Enforceability 4
4.03 No Default or Consents 4
4.04 Contracts 5
4.05 Title 5
4.06 Proceedings 5
4.07 Compliance With Laws 5
4.08 Permits 5
4.09 Property Taxes 5
4.10 Brokers or Finders 5
4.11 Employees 5
4.12 NO LIABILITY FOR REPRESENTATIONS AND WARRANTIES 5

ARTICLE 5
Representations and Warranties of LCRA

5.01 Existence and Qualification of LCRA 6
5.02 Authority, Approval and Enforceability With Respect to LCRA 6
5.03 No Default or Consents With Respect to LCRA 6

ARTICLE 6
Covenants of Garwood

6.01 Access to Certain Records and Inspections 7
6.02 Reasonable Efforts 7
6.03 LCRA's Application 7
6.04 LCRA's Bond Application 7
6.05 Garwood's Application 7
6.06 NO LIABILITY FOR PRE-CLOSING COVENANTS 8

. 8

ARTICLE 7
Covenants of LCRA

7.01 Reasonable Efforts 8
7.02 Corpus Christi Application 8
7.03 Garwood's Application 8
7.04 LCRA's Application 8
7.05 Consolidation and Other Actions 8
7.06 Confidentiality 9
7.07 LCRA's Bonds 9
7.08 Protection of Landowners and Irrigators Within Garwood's Service Area 10
7.09 Surplus Water 14
7.10 Garwood's Employees 14

ARTICLE 8
Conditions to Closing

8.01 Conditions to Obligations of Garwood 15
8.02 Conditions to Obligations of LCRA 17

ARTICLE 9
Additional Agreements of LCRA and Garwood

9.01 Preservation of Books and Records; Access 18
9.02 Further Assurances 19
9.03 Indemnification Regarding Certain Covenants 19

ARTICLE 10
Operations of the Assets Prior To Closing

10.01 Amendments to Garwood's Right 19
10.02 No Solicitation 20
10.03 No Assignment of Rights Under LCRA Agreement 20
10.04 No Contracts for Diversion or Delivery of Water 20
10.05 Effect of Occurrence of Independence Day 20
10.06 Litigation 21
10.07 No Material Rate Reduction 21

ARTICLE 11
Termination

11.01 Termination 21
11.02 Effect of Termination 23

ARTICLE 12
Scope of Representations; Limitations

12.01 Independent Investigation 24
12.02 Scope of Representations 24

ARTICLE 13
Miscellaneous

13.01 Brokers 25
13.02 Expenses 25
13.03 Notices 25
13.04 **GOVERNING LAW** 26
13.05 Venue 26
13.06 Entire Agreement; Amendments and Waivers 26
13.07 Binding Effect, Assignment and Third-Party Beneficiaries 27
13.08 Specific Performance 27
13.09 Severability 28
13.10 Headings, Schedules and Exhibits 28
13.11 Holidays 28

SCHEDULES

1.01	—	Defined Terms
2.01(a)(ii)	—	Fee Property
2.01(a)(iii)	—	Canal System
2.01(a)(iv)	—	Easements
2.01(a)(v)	—	Contracts
2.01(a)(vi)	—	Permits
2.01(b)	—	Excluded Assets
4.06	—	Proceedings
4.07	—	Notices Regarding Laws
4.11	—	Employees
7.10(a)	—	Employees to be Retained

EXHIBITS

A	—	Water Right Deed; and Deed, General Conveyance and Assignment
B	—	LCRA's Application
C	—	Garwood's Application
D	—	LCRA's Letter Withdrawing Opposition to Corpus Christi Application
E	—	LCRA's Bond Application
F	—	LCRA Agreement
G	—	LCRA's Proposed Water Management Plan (Excerpts)
H	—	Application to Amend Garwood's Remaining Right
I	—	Corpus Christi Agreement
J	—	Corpus Christi Agreement – Amendment
K	—	Corpus Christi Application
L	—	Division of Water Right
M	—	Garwood's Right – Certificate of Adjudication No. 14-5434
N	—	Garwood's Right – Certificate of Adjudication No. 14-5434A

PURCHASE AGREEMENT

This PURCHASE AGREEMENT (this *"Agreement"*), dated July 20, 1998 (the *"Execution Date"*), is by and between Garwood Irrigation Company, a Texas corporation (*"Garwood"*); and the Lower Colorado River Authority, a conservation and reclamation district created pursuant to Article 16, Section 59 of the Texas Constitution and a river authority, as that term is defined in Section 30.003 of the Texas Water Code (*"LCRA"*). Garwood and LCRA are sometimes collectively referred to herein as the *"Parties"* or, individually, as a *"Party."*

RECITALS

LCRA desires to purchase from Garwood, and Garwood desires to sell to LCRA, upon the terms and conditions contained herein, the Assets at the Closing.

NOW, THEREFORE, in consideration of the recitals, agreements and covenants contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged and in reliance upon the mutual representations and warranties contained herein, Garwood and LCRA agree, upon the terms and subject to the conditions contained herein, as follows:

ARTICLE 1

Definitions

1.01 Defined Terms. Capitalized terms used herein shall have the meaning ascribed to them in Schedule 1.01 unless such terms are defined elsewhere in this Agreement.

1.02 Other Definitional Provisions; Construction. The meanings given to terms defined herein shall be equally applicable to both the singular and plural forms of such terms. Unless the context requires otherwise: (a) the gender (or lack of gender) of all words used in this Agreement includes the masculine, feminine and neuter; (b) references to Articles and Sections refer to Articles and Sections of this Agreement; (c) references to Schedules or Exhibits refer to the Schedules and Exhibits attached to this Agreement, each of which is made a part hereof for all purposes; (d) references to Laws refer to such Laws as are in effect from time to time prior to the Closing Date; (e) references to money refer to legal currency of the United States of America; and (f) the word "including" means "including, without limitation."

ARTICLE 2

Purchase and Sale

2.01 Sale of Assets.

(a) Upon the terms and subject to the conditions of this Agreement, at the Closing, Garwood shall sell, assign, convey, transfer and deliver to LCRA the following assets (collectively, the *"Assets"*):

(i) Garwood's Remaining Right, as amended by the TNRCC in response to Garwood's Application;

(ii) the real property owned in fee by Garwood and described on Schedule 2.01(a)(ii) (collectively, the *"Fee Property"*);

(iii) the system comprised of Garwood's main pumping plant on the Colorado River (the *"Pumping Plant"*), the small dam on the Colorado River (the *"Colorado Dam"*), and all other dams, pumps, canals, laterals, ditches and other facilities, as such may currently exist or be modified in the future, that are owned by Garwood and used for the purpose of supplying water within Garwood's Service Area, all as more fully shown on the map attached hereto as Schedule 2.01(a)(iii) (collectively, the *"Canal System"*);

(iv) to the extent assignable, the easements, rights-of-way and other enforceable legal rights of access and use that are described on Schedule 2.01(a)(iv) (collectively, the *"Easements"*);

(v) to the extent assignable, the contracts and agreements described on Schedule 2.01(a)(v) (collectively, the *"Contracts"*); and

(vi) to the extent assignable, the governmental permits, licenses, orders and approvals described on Schedule 2.01(a)(vi) (collectively, the *"Permits"*).

(b) Notwithstanding anything in this Agreement to the contrary, the assets listed on Schedule 2.01(b) (the *"Excluded Assets"*) shall be (i) excluded from the sale hereunder, (ii) retained by Garwood and (iii) deemed not to constitute any portion of the *"Assets"* (or any of the other terms that are defined in Section 2.01(a)). The Excluded Assets shall include the LCRA Agreement, Corpus Christi's Right (whether or not the Corpus Christi Agreement is terminated), the Corpus Christi Agreement (to the extent it is not terminated), and all rights arising out of, and any assets subject to, the Corpus Christi Agreement.

2.02 Purchase Price. (a) Subject to the terms and conditions of this Agreement, the consideration to be paid by LCRA to Garwood for the Assets shall be $75,000,000, less the total of all payments paid by LCRA pursuant to Sections 2.03 and 2.04 (the *"Purchase Price"*).

(b) If this Agreement is terminated prior to Closing for any reason, Garwood shall be entitled to retain or collect, as applicable, all amounts paid or payable prior to termination under Sections 2.03 and 2.04.

2.03 Initial Payment. Simultaneously with the execution of this Agreement, LCRA shall pay Garwood the product of $600,000 multiplied by a fraction, the numerator of which shall be the number of days during the period from February 6, 1998 through the last day of the month in which this Agreement is executed, inclusive, and the denominator of which shall be 365.

2.04 Monthly Payments.

(a) LCRA shall pay Garwood $50,000 per calendar month until Closing. Each such payment shall be due and payable on the first day of each calendar month beginning the first day of the calendar month following the calendar month in which this Agreement is executed.

(b) If LCRA fails to pay when due and payable all or any portion of a payment required to be made under this Section 2.04, then LCRA shall be liable for a late payment charge (the *"Late Payment Charge"*). The Late Payment Charge shall be equal to an additional 18% of the amount due and not timely paid. Garwood may give written notice to LCRA stating both the amount due and not timely paid and the Late Payment Charge. If LCRA fails to pay within 20 days after receipt of such notice both the amount due and not timely paid and the Late Payment Charge, Garwood may, in addition to all other remedies available under law, terminate this Agreement without recourse. LCRA shall be liable for reasonable attorneys fees and other costs of collection or litigation incurred by Garwood in seeking payment of amounts due under this Section 2.04.

ARTICLE 3

Closing

3.01 Time and Place of Closing. Subject to the conditions stated in this Agreement, the closing of the purchase and sale of the Assets (the *"Closing"*) shall occur sixty (60) days following the satisfaction or waiver of the conditions set forth in Article 8, (except for the payment of the Purchase Price by LCRA) in accordance with the applicable provisions of such Article, or on such other date as may be mutually agreed upon by the parties to this Agreement. The date Closing actually occurs is herein called the *"Closing Date."* The Closing shall be held at the offices of Garwood's legal counsel in Houston, Texas, or at such other location as may be mutually agreed upon by Garwood and LCRA.

3.02 Deliveries by Garwood.

(a) Delivery of Documents by Garwood. At Closing, Garwood shall deliver to LCRA:

(i) A Water Right Deed, and a Deed, General Conveyance and Assignment, in the forms attached hereto as Exhibit A, conveying the Assets to LCRA; and

(ii) All other documents, instruments, and writings required to be delivered by Garwood at Closing pursuant to the provisions of Section 8.02.

(b) Delivery of Certain Records. On the Closing Date (or as soon thereafter as practicable), Garwood will deliver to LCRA at Garwood's offices in Garwood, Texas, the originals of all Deliverable Records.

3.03 Deliveries by LCRA. At or prior to Closing:

(a) LCRA shall deliver to Garwood the Purchase Price.

(b) LCRA shall deliver to Garwood all documents, instruments and writings required to be delivered by LCRA at Closing pursuant to the provisions of Section 8.01.

(c) LCRA shall deliver to Garwood copies of all data, analyses, evaluations, reports, and other information acquired or developed by or on behalf of LCRA in connection with any inspections or tests of the Assets, either before the Execution Date or from the Execution Date through the Closing Date, either pursuant to Section 6.01 or otherwise.

ARTICLE 4

Representations and Warranties of Garwood

Garwood represents and warrants to LCRA as follows:

4.01 Corporate Existence and Qualification. Garwood is a corporation duly incorporated, validly existing and in good standing under the laws of the State of Texas.

4.02 Authority, Approval and Enforceability. Garwood has all requisite power and authority to execute and deliver this Agreement and to perform its obligations under this Agreement. The execution and delivery of this Agreement by Garwood and the performance of the transactions contemplated hereby by Garwood have been duly and validly approved by such action, if any, necessary on behalf of Garwood. This Agreement has been duly executed and delivered on behalf of Garwood and constitutes the legal, valid and binding obligation of Garwood, enforceable against Garwood in accordance with its terms, subject to Creditor's Rights. At the Closing, all documents required hereunder to be executed and delivered by Garwood will have been duly authorized, executed and delivered by Garwood and will constitute legal, valid and binding obligations of Garwood enforceable in accordance with their terms, subject to Creditor's Rights.

4.03 No Default or Consents. Neither the execution and delivery of this Agreement nor the consummation of the transactions contemplated herein will:

(a) entitle any Person to exercise any preferential purchase right, option to purchase or similar right with respect to any material Asset; or

(b) result in the creation of any lien, charge or other encumbrance upon any material Asset;

which, with respect to the matters specified in each of clauses (a) and (b), above, would have a Material Adverse Effect.

4.04 Contracts. Garwood is not in default under, nor has any event occurred that with the giving of notice or the passage of time or both would constitute such a default under, any Contracts, other than exceptions to the foregoing that would not have a Material Adverse Effect.

4.05 Title. Garwood has good and marketable title to Garwood's Remaining Right and to the Fee Property, free and clear of all liens and mortgages, except as disclosed on Schedule 2.01(a)(ii).

4.06 Proceedings. Schedule 4.06 contains a true and complete list of all pending Proceedings filed against Garwood with respect to any of the Assets as of the date seven days prior to the Execution Date or, to the Knowledge of the executive officers of Garwood, threatened to be filed against Garwood with respect to any of the Assets as of the date seven days prior to the Execution Date, in either case that, if adversely determined, could have a Material Adverse Effect.

4.07 Compliance With Laws. Except as disclosed in Schedule 4.07, during the ten-year period immediately preceding the Execution Date, Garwood has not received any order, notice, or other written communication from any Governmental Authority alleging any actual or potential violation of or failure to comply with any Environmental Law with respect to any of the Assets.

4.08 Permits. Garwood holds the Permits.

4.09 Property Taxes. Except for filings and payments of assessments the failure of which to file or pay will not have a Material Adverse Effect, all Property Taxes that have become or will become due with respect to Assets for the period ending on the Closing Date, have been or will be timely paid in full.

4.10 Brokers or Finders. Garwood and its agents have incurred no obligation or liability, contingent or otherwise, for brokerage or finders fees or agent's commissions or similar payment in connection with the transactions contemplated by this Agreement.

4.11 Employees. Attached hereto as Schedule 4.11 is a complete and accurate list of the following information for each employee of Garwood who is also listed on Schedule 7.10(a), including each such listed employee on leave of absence or layoff status: job title; current compensation paid or payable and changes in compensation since December 31, 1997; vacation accrued; sick leave accrued; vesting and eligibility for Garwood's employee benefit plans; and claims pending or threatened by any such listed employee against Garwood.

4.12 NO LIABILITY FOR REPRESENTATIONS AND WARRANTIES. REGARDLESS OF WHETHER THE CLOSING OCCURS, NEITHER GARWOOD NOR ANY GARWOOD PARTY SHALL HAVE ANY LIABILITY UNDER THIS AGREEMENT

(PRIOR TO, AT OR AFTER THE CLOSING) FOR ANY BREACH OF GARWOOD'S REPRESENTATIONS OR WARRANTIES CONTAINED IN THIS AGREEMENT, OR IN ANY CERTIFICATE OR OTHER INSTRUMENT REQUIRED TO BE DELIVERED BY OR ON BEHALF OF GARWOOD PURSUANT TO THIS AGREEMENT.

ARTICLE 5

Representations and Warranties of LCRA

LCRA represents and warrants to Garwood as follows:

5.01 Existence and Qualification of LCRA. LCRA is a duly formed and validly existing conservation and reclamation district created pursuant to Article 16, Section 59 of the Texas Constitution and a river authority, as that term is defined in Section 30.003 of the Texas Water Code. LCRA has all requisite power and authority to own, operate and lease its properties and to carry on its business as presently conducted.

5.02 Authority, Approval and Enforceability With Respect to LCRA. LCRA has all requisite power and authority to execute and deliver this Agreement and to perform its obligations under this Agreement. The execution and delivery of this Agreement by LCRA and the performance of the transactions contemplated hereby by LCRA have been duly and validly approved by the Board of Directors of LCRA and by any other action necessary on behalf of LCRA. This Agreement has been duly executed and delivered on behalf of LCRA and constitutes the legal, valid and binding obligation of LCRA enforceable in accordance with its terms. At the Closing, all documents required hereunder to be executed and delivered by LCRA will have been duly authorized, executed and delivered and will constitute legal, valid and binding obligations of LCRA, enforceable in accordance with their terms.

5.03 No Default or Consents With Respect to LCRA. Neither the execution and delivery of this Agreement nor the consummation by LCRA of the transactions contemplated herein will:

(a) conflict with or result in a breach, default or violation of the organizational documents of LCRA or any Law applicable to LCRA;

(b) conflict with or result in a breach, default or violation of any agreement, document, instrument, judgment, decree, order, governmental permit, certificate or license to which LCRA is a party or to which LCRA is subject or by which its property is bound; or

(c) require LCRA to obtain or make any waiver, consent, action, approval, clearance or authorization of, or registration, declaration or filing with, any Governmental Authority (other than the approvals required by the terms of this Agreement);

which, with respect to the matters specified in each of clauses (b) and (c) above, would have an LCRA Material Adverse Effect.

ARTICLE 6

Covenants of Garwood

6.01 Access to Certain Records and Inspections. From the Execution Date through the Closing Date, Garwood shall permit LCRA and its authorized employees, agents, accountants, legal counsel, and other representatives to have reasonable access, at LCRA's sole expense, risk and cost, during normal business hours, to the Deliverable Records. From the Execution Date through the Closing Date, LCRA shall have the right to elect to perform or have performed, at LCRA's sole expense, risk and cost, one or more inspections and tests of the Assets; provided, however, that such inspections or tests (a) shall be conducted during Garwood's normal business hours, (b) shall not be disruptive of Garwood's normal business operations, and (c) shall not cause damage to any of the Assets or Excluded Assets; and provided further, however, that no employee, agent or other representative of LCRA shall enter upon or perform any inspection or test of any of the Assets unless LCRA first gives Garwood written notice of the proposed entry, inspection or test at least 24 hours in advance of such entry, inspection or test. Garwood shall have the right to have one or more of its employees, agents or other representatives accompany LCRA's representatives at all times during any entry upon or inspection or test of any of the Assets, and Garwood shall have the further right to have any sample taken by LCRA split, one-half being under the control of LCRA and one-half being under the control of Garwood. All data, analyses, evaluations, reports, and other information acquired or developed by or on behalf of LCRA in connection with any inspections or tests of the Assets, either before the Execution Date or from the Execution Date through the Closing Date, either pursuant to this Section 6.01 or otherwise, shall be subject to the provisions of Sections 3.03(c) and 7.06.

6.02 Reasonable Efforts. From the Execution Date through the Closing Date, Garwood will use its Reasonable Efforts to obtain the satisfaction of the conditions to Closing set forth in Section 8.02.

6.03 LCRA's Application. From the Execution Date through the Closing Date and except as set forth in this Agreement, Garwood shall support in all respects the application attached hereto as Exhibit B (*"LCRA's Application"*), requesting authorization from the TNRCC for LCRA to use for irrigation purposes water under Garwood's Remaining Right, as may be required pursuant to Section 2(u) of the Lower Colorado River Authority Act.

6.04 LCRA's Bond Application. From the Execution Date through the Closing Date and except as set forth in this Agreement, Garwood shall support in all respects (a) LCRA's Bond Application (as defined in Section 7.07(a)), and (b) if applicable, the Bond Validation Suit (as defined in Section 7.07(a)).

6.05 Garwood's Application. Immediately following the execution of this Agreement, Garwood shall file with the TNRCC the application attached hereto as Exhibit C (*"Garwood's Application"*). From the Execution Date through the Closing Date and except as set forth in this Agreement, Garwood shall pursue Garwood's Application diligently and to seek final action by the TNRCC regarding such application at the earliest practicable date.

6.06 NO LIABILITY FOR PRE-CLOSING COVENANTS. **REGARDLESS OF WHETHER THE CLOSING OCCURS, NEITHER GARWOOD NOR ANY GARWOOD PARTY SHALL HAVE ANY LIABILITY UNDER THIS AGREEMENT (PRIOR TO, AT OR AFTER THE CLOSING) FOR ANY FAILURE OF GARWOOD TO HAVE PERFORMED ANY OF ITS COVENANTS AND AGREEMENTS UNDER THIS AGREEMENT (INCLUDING UNDER THIS ARTICLE 6 AND ARTICLE 10) PRIOR TO THE CLOSING;** provided, however, that this Section 6.06 shall not impair any rights that LCRA may have under Section 13.08 to enforce specific performance by Garwood of any such covenant or agreement.

ARTICLE 7

Covenants of LCRA

7.01 Reasonable Efforts. LCRA shall use its Reasonable Efforts to obtain the satisfaction of the conditions to Closing for which it is responsible as set forth in Section 8.01.

7.02 Corpus Christi Application. LCRA agrees to file, immediately upon the execution of this Agreement, with the TNRCC a letter in the form attached hereto as Exhibit D, by which LCRA withdraws all opposition to the Corpus Christi Application and LCRA's request for a public hearing on such application. From and after the Execution Date, (a) LCRA shall not oppose the Corpus Christi Application in any way, directly or indirectly, publicly or privately, and (b) LCRA's publicly-stated position with respect to such application shall be that it does not oppose such application.

7.03 Garwood's Application. From the Execution Date through the Closing Date, LCRA shall support Garwood's Application in all respects. If and to the extent requested to do so by Garwood, LCRA shall assume all responsibility to pursue Garwood's Application or any portion thereof.

7.04 LCRA's Application. Immediately following the execution of this Agreement, LCRA shall file with the TNRCC LCRA's Application. From the Execution Date through the Closing Date, LCRA shall pursue LCRA's Application diligently and seek final action by the TNRCC at the earliest possible date.

7.05 Consolidation and Other Actions.

(a) From and after the Execution Date, Garwood, in its sole discretion, may request that the TNRCC consolidate proceedings on the Corpus Christi Application and Garwood's Application. LCRA shall support any such request in all respects.

(b) From and after the Execution Date, LCRA, in its sole discretion, may request that the TNRCC consolidate proceedings on Garwood's Application and LCRA's Application, and that the TNRCC issue one notice of the consolidated proceedings. Garwood shall support any such request in all respects.

(c) From and after the Execution Date, Garwood, in its sole discretion, may take any and all actions with respect to the Application to Amend Garwood's Remaining Right that Garwood determines to be necessary or desirable, consistent with the limitation set forth in the second proviso in Section 10.01. LCRA shall support any request by Garwood to the TNRCC to abate further processing and consideration of the Application to Amend Garwood's Remaining Right until Garwood gives notice that it desires proceedings on the Application to go forward.

7.06 Confidentiality. The provisions of this Section 7.06 shall apply to the Deliverable Records and any other information, books, records and files regarding Garwood obtained by LCRA or its representatives pursuant to this Agreement or otherwise in connection with this Agreement or the transactions contemplated hereby or previously contemplated by the Parties (collectively, *"Confidential Information"*).

(a) From and after the Execution Date, unless the Closing occurs, in which case from the Execution Date through the Closing Date, LCRA shall, and shall cause its representatives to, (i) maintain all Confidential Information in strict confidence, (ii) not divulge or disclose any Confidential Information to any other Person, and (iii) not use the Confidential Information in any manner that would be adverse or prejudicial to Garwood or any of the Garwood Parties or any of the Third-Party Beneficiaries.

(b) From and after the Closing, LCRA shall, and shall cause its representatives to, not use the Confidential Information in any manner that would be adverse or prejudicial to Garwood or any of the Garwood Parties or any of the Third-Party Beneficiaries.

The provisions of this Section 7.06 are subject to the following exceptions: (A) information that is, or may become, public knowledge (other than through (I) a breach of this Section 7.06, or (II) a breach by another Person of a confidentiality obligation if LCRA is aware of such breach by such other Person); (B) disclosures or uses that may be required by Laws, provided, however, that before making any disclosure or use described in this clause (B), LCRA shall give Garwood reasonable advance notice and take such reasonable actions as Garwood may propose to minimize the required disclosure or to seek confidential treatment thereof; and (C) disclosures and uses that may be required for LCRA to enforce its rights under this Agreement.

7.07 LCRA's Bonds.

(a) Immediately following the execution of this Agreement, LCRA shall file with the Texas Attorney General the application attached hereto as Exhibit E (*"LCRA's Bond Application"*), requesting preliminary approval from the Texas Attorney General for LCRA to issue and sell its bonds or other securities in an aggregate amount sufficient to finance its payment of the Purchase Price (*"LCRA's Bonds"*). From the Execution Date through the Closing Date, LCRA shall pursue LCRA's Bond Application diligently and seek the preliminary approval of the Texas Attorney General at the earliest possible date. If the Texas Attorney General does not deliver a letter granting such preliminary approval within 90 days after the Execution Date, (i) LCRA shall immediately file, in a court of competent jurisdiction, a bond validation suit seeking judicial approval of LCRA's Bonds (the *"Bond Validation Suit"*); and (ii) from the filing of the Bond Validation Suit through the

Closing Date, LCRA shall pursue the Bond Validation Suit diligently and seek final action by such court at the earliest possible date.

(b) After receiving the preliminary approval of the Attorney General or a final and nonappealable judgment in the Bond Validation Suit, and through the Closing Date, LCRA shall authorize, and pursue diligently the issuance and sale, of LCRA's Bonds so that it will have the proceeds of LCRA's Bonds available on or before the Closing Date to pay the Purchase Price.

7.08 Protection of Landowners and Irrigators Within Garwood's Service Area. From and after the Closing, LCRA shall comply, and cause any other Person that uses, supplies, or is supplied water under Garwood's Remaining Right to comply, with the following provisions of this Section 7.08.

(a) Garwood's Remaining Right shall be divided into two distinct portions at any time, the Reserved Portion (hereinafter defined), and the Surplus Portion (hereinafter defined). The *"Reserved Portion"* of Garwood's Remaining Right at any time shall be that portion of the total amount of water authorized to be used annually under Garwood's Remaining Right at that time equal to the Reserved Amount (hereinafter defined) in effect at that time. The *"Surplus Portion"* of Garwood's Remaining Right at any time shall be that portion of the total amount of water authorized to be used annually under Garwood's Remaining Right at that time in excess of the Reserved Portion at that time. The Reserved Portion of Garwood's Remaining Right shall authorize the diversion of all of the water authorized to be used annually under such portion at the existing point of diversion on the Colorado River (the *"Point of Diversion"*) at a rate of diversion of 600 cfs for the irrigation of up to 32,000 acres of land in any year within Garwood's Service Area with a priority date of November 1, 1900. The Surplus Portion of Garwood's Remaining Right may also authorize the diversion of all of the water authorized under such portion at a rate of diversion of 600 cfs with a priority date of November 1, 1900; provided, however, that the combined rate of diversion at any time under the Reserved Portion and the Surplus Portion may never exceed 600 cfs; and provided further, however, that the priority of the Surplus Portion shall be subordinate in time priority and all other respects to the Reserved Portion. The Reserved Portion of Garwood's Remaining Right shall not be amended at any time: (i) to reduce the amount of water authorized to be diverted at the Point of Diversion and used for irrigation within Garwood's Service Area in any year below the Reserved Amount in effect for that year; (ii) to remove any lands from Garwood's Service Area unless such lands had not been irrigated at all at any time during the Historical Period (hereinafter defined) in effect at that time, or the owner of such lands first authorizes such removal in writing; (iii) to reduce the number of acres authorized to be irrigated in any year within Garwood's Service Area below 32,000 acres, or below the total number of acres in Garwood's Service Area at that time, whichever is less; (iv) to reduce the authorized rate of diversion at the Point of Diversion below 600 cfs; (v) to impair in any way the November 1, 1900 priority of the right to divert water at the Point of Diversion for use for irrigation within Garwood's Service Area; or (vi) to impair in any way the relative seniority and superiority of the Reserved Portion over the Surplus Portion. The *"Reserved Amount"* in effect for any calendar year shall be the maximum amount of water used for irrigation within Garwood's Service Area during any one calendar year within the Historical Period in effect at that time as measured at the Point of Diversion, inclusive of all evapotranspiration, seepage and other losses incurred after diversion; provided, however, that the Reserved Amount in effect for every year during the period consisting of the calendar year in which Closing occurs and the ten calendar years

immediately following that year shall be 100,000 acre-feet; and provided further, however, that the Reserved Amount in effect for any year shall never exceed the Reserved Amount in effect for the previous year. The *"Historical Period"* in effect for any calendar year shall be the period consisting of the ten calendar years immediately preceding that year.

(b) From and after the Closing, LCRA shall maintain, repair and replace the Pumping Plant, the Colorado Dam, and all other dams, pumps, canals, laterals, ditches and other facilities comprising the Canal System, as it exists on the Execution Date, as necessary and keep all such facilities operable in conditions at least as good and at capacities at least as great as those that exist on the Execution Date.

(c) The December 10, 1987 agreement between LCRA and Garwood (the "*LCRA Agreement*"), a copy of which is attached as Exhibit F, shall remain in full force and effect, and LCRA shall continue to honor the terms of the LCRA Agreement. Pursuant to the terms of the LCRA Agreement, LCRA shall supply stored water from the Highland Lakes as may be necessary at any time to firm up and supplement the supply of run-of-river water available under the Reserved Portion of Garwood's Remaining Right at that time, for use for irrigation within Garwood's Service Area, with no charges for stored water to any landowner or irrigator within Garwood's Service Area. The supply of stored water for irrigation within Garwood's Service Area shall be interruptible, but only if and to the extent provided in the LCRA Agreement, and then only under assumptions and criteria that are at least as favorable to landowners and irrigators within Garwood's Service Area as those assumptions and criteria used by LCRA in its proposed Water Management Plan (as such proposed Water Management Plan is defined by filings submitted by LCRA to the TNRCC dated as of and prior to December 29, 1997), as discussed and illustrated in the excerpt of such proposed Water Management Plan attached as Exhibit G. As set forth in Subsection (b), above, LCRA is now responsible for maintaining the Colorado Dam, which is identified in the LCRA Agreement as "Garwood's low water dam."

(d) The demand for water for irrigation within Garwood's Service Area at all times from and after the Closing Date, up to the Reserved Amount in effect for each year, shall be satisfied by diversions of water from the Colorado River at the Point of Diversion by use of the Pumping Plant, and then by distribution and supply of that water via the Canal System. Except to the extent provided otherwise below in this subsection (d) and in subsection (e), below, the demand at any time may be satisfied by diversions of water available in the Colorado River at the Point of Diversion at that time under any right or combination of rights and from any source or combination of sources available at that time, so long as the amount of water available for diversion from the Colorado River for irrigation within Garwood's Service Area from the alternative supply at any time is equal to or greater than the amount that would be available at that time under the Reserved Portion of Garwood's Remaining Right and the LCRA Agreement, assuming no other uses of water under the Reserved Portion. To the extent that the alternative supply does not provide the required amount of water at any time, the demand shall be satisfied from the supply available under the Reserved Portion of Garwood's Remaining Right and the LCRA Agreement.

(e) In any calendar year during the period consisting of the calendar year in which Closing occurs and the ten calendar years immediately following that year, the demand for water for irrigation within Garwood's Service Area, up to the Reserved Amount for that year, shall be satisfied

entirely from the supply available under the Reserved Portion of Garwood's Remaining Right and the LCRA Agreement. During this period of time, no water may be used under the Reserved Portion for any use other than irrigation within Garwood's Service Area.

(f) At any time that the demand for water for irrigation within Garwood's Service Area is required to be satisfied from the supply available in the Colorado River under the Reserved Portion of Garwood's Remaining Right and the LCRA Agreement, the demand will be satisfied first from the supply of run-of-river water available at the Point of Diversion under the Reserved Portion of Garwood's Remaining Right at that time based on a priority date of November 1, 1900, and all other uses of water under the Reserved Portion, if any, shall cease to the extent required to satisfy such demand. Any diversion and use of water under the Surplus Portion of Garwood's Remaining Right, or under the Corpus Christi Right, shall be subordinate, in time priority and all other respects, to the diversion and use under the Reserved Portion of Garwood's Remaining Right of water for irrigation within Garwood's Service Area. If the demand for water for irrigation within Garwood's Service Area at any time is not fully satisfied from the supply of run-of-river water available under the Reserved Portion of Garwood's Remaining Right as set forth above in this subsection (f), the supply shall be firmed up and supplemented by releases of stored water from the Highland Lakes to the extent provided in the LCRA Agreement.

(g) The rates charged for the supply of water for irrigation within Garwood's Service Area in every year during the period consisting of the calendar year in which Closing occurs and the five calendar years immediately following that year shall not exceed the rates last established by Garwood as of December 31, 1997. The rates charged after the five-year period shall not exceed rates based on the reasonable cost of service for the supply of water via the Canal System for irrigation within Garwood's Service Area for that year. The cost of service for water supplied via the Canal System for irrigation within Garwood's Service Area for any year shall not include any charges or costs attributable in any way to payment of any amount of money to Garwood pursuant to this Agreement, or payment of any amount of money for any subsequent transfer of ownership of Garwood's Remaining Right or any portion thereof or the Canal System or any portion thereof, or any debt service charges for or attributable to any facilities comprising the Canal System or any other facilities, or any charges whatsoever for maintaining, repairing, modifying or replacing the Colorado Dam, or any charges whatsoever for any additional pumps, canal extensions or other facilities not part of the Canal System as it exists on the Execution Date, or any charges for the installation of any meters or any modifications that improve the efficiency of the system, or any charges for any water supplied to the Point of Diversion for the Canal System including any run-of-river water supplied under the Reserved Portion of Garwood's Remaining Right, any water supplied from storage in the Highland Lakes, and any water supplied under any other right or from any other source other than the Reserved Portion of Garwood's Remaining Right and the Highland Lakes. The cost of service for water supplied via the Canal System for irrigation within Garwood's Service Area for any year may include costs of keeping the Pumping Plant and all dams (other than the Colorado Dam), pumps, canals, laterals, ditches and other facilities comprising the Canal System, as it exists on the Execution Date, maintained, repaired and replaced as necessary and operable in conditions as good and at capacities as great as those that exist on the Execution Date, and the costs of operating those facilities, to the extent they are used to supply water for irrigation within Garwood's Service Area; provided, however, if such facilities are also used to supply water for municipal or industrial purposes, then the cost of service for water supplied via the Canal System for irrigation within

Garwood's Service Area shall be limited to the incremental costs of maintenance, repair, replacement, and operation of such facilities in excess of the costs needed to supply the water used for municipal and industrial purposes.

(h) No fees, assessments or other charges of any kind shall be made upon any landowner or irrigator within Garwood's Service Area for any meters, improvements to the system, or other modifications to improve the efficiency of the system or that otherwise results in less water being needed per acre irrigated.

(i) Any contract or other commitment to supply water under the Surplus Portion of Garwood's Remaining Right, and any contract or other commitment to supply water under the Reserved Portion of Garwood's Remaining Right for purposes other than irrigation within Garwood's Service Area, and any contract for the conveyance of or instrument conveying Garwood's Remaining Right or any portion thereof or the Canal System or any portion thereof, shall be subject to the commitments and conditions set forth in this Section 7.08 and to all terms, provisions and special conditions contained within the amendment to Garwood's Remaining Right pursuant to the TNRCC's order granting Garwood's Application. Each such contract or other commitment, and each such conveyance instrument, shall contain the following provision:

> "This [Contract/Agreement/Conveyance/etc.] is subject to the commitments and conditions set forth in Section 7.08 of that certain Purchase Agreement, dated July 20, 1998, between Garwood Irrigation Company, as seller, and the Lower Colorado River Authority, as buyer (the "LCRA Purchase Agreement"), and is further subject to all terms, provisions and special conditions contained within that certain water right identified as Certificate of Adjudication No. 14-5434__, issued to Garwood by the Texas Natural Resource Conservation Commission ("TNRCC") on _____ __, ____, a copy of which is attached hereto as Exhibit __ (such water right is referred to herein as "Garwood's Remaining Right, as Amended"). Garwood's Remaining Right, as Amended, is described in the LCRA Purchase Agreement as "Garwood's Remaining Right" (as defined in the LCRA Purchase Agreement), as amended by the TNRCC in response to that certain application to amend defined in the LCRA Purchase Agreement as "Garwood's Application." By executing this [Contract/Agreement/etc.], or by accepting this [Conveyance/etc.], [Purchaser/Buyer/etc.] hereby acknowledges receipt of copies of the LCRA Purchase Agreement and Garwood's Remaining Right, as amended."

(j) No action may be taken, even if such action is otherwise permitted by the other provisions of this Section 7.08, if such action would result in landowners and irrigators within either the Gulf Coast Service Area or the Lakeside Service Area being treated, or being perceived as being treated, more favorably at any time than those within Garwood's Service Area with respect to any matter relating to amendments of the underlying water right or rights for that service area, including amendments to reduce the amount of water authorized to be used for irrigation within the service area or remove lands from the service area or reduce the number of acres within the service area that may be irrigated in any one year, the amounts and firmness of water reserved for supply, the supply of that water, or the rates charged for the supply of that water. Without in any way limiting the generality of the foregoing provision of this Subsection (j), Garwood's Remaining Right may not be

amended to reduce the amount of water authorized to be used for irrigation within Garwood's Service Area or remove lands from Garwood's Service Area or reduce the number of acres within Garwood's Service Area that may be irrigated in any one year, unless the underlying water rights for both the Gulf Coast Service Area and the Lakeside Service Area are also amended using the same criteria used as a basis for, and to the same extent as, the amendment to Garwood's Remaining Right. If, notwithstanding full compliance with the foregoing provisions of this subsection (j) and the other commitments and conditions set forth in this Section 7.08, landowners and irrigators within either the Gulf Coast Service Area or the Lakeside Service Area are being treated more favorably at any time than those within Garwood's Service Area with respect to any such matter, then LCRA agrees to take whatever actions may be necessary to improve the position of landowners and irrigators within Garwood's Service Area so that they are treated at least as favorably as landowners and irrigators within the Gulf Coast and Lakeside Service Areas.

(k) Garwood shall be provided a copy of each of the following:

(i) each contract or other commitment to supply water under the Surplus Portion of Garwood's Remaining Right;

(ii) each contract or other commitment to supply water under the Reserved Portion of Garwood's Remaining Right for purposes other than irrigation within Garwood's Service Area;

(iii) each contract for the conveyance of, and each instrument conveying, Garwood's Remaining Right or any portion thereof or the Canal System or any portion thereof; and

(iv) each application to amend Garwood's Remaining Right, any of the underlying water rights for the Gulf Coast Service Area, and any of the underlying water rights for the Lakeside Service Area;

within 10 days after any such contract or other commitment is entered into by the parties, any such conveyance instrument is delivered to the transferee, or any such application is filed with the TNRCC.

(l) The commitments and conditions set forth in this Section 7.08 shall remain in effect for so long as the Canal System is used to supply any water for any purpose of use.

7.09 Surplus Water. Nothing in this Agreement shall be construed as requiring LCRA to reserve or supply any water under the Surplus Portion of Garwood's Remaining Right for irrigation, or for use within Garwood's Service Area.

7.10 Garwood's Employees.

(a) LCRA to Hire Garwood's Employees. From and after the Closing, LCRA shall hire the employees of Garwood listed on Schedule 7.10(a) to operate the Canal System if such employees are legally authorized to work in the United States.

(b) LCRA's Salaries and Benefits. From and after the Closing, employees of Garwood who are hired by LCRA shall receive at any time salaries and other taxable compensation comparable to the greater of (i) the salaries and other taxable compensation being paid to that employee by Garwood immediately prior to Closing (not to exceed 110% of the salaries and other taxable compensation of such employee as of December 31, 1997 as shown in Schedule 4.11) or (ii) the salaries and other taxable compensation then being paid to LCRA's employees with similar responsibilities at LCRA's other irrigation operations. Each employee hired by LCRA also shall receive standard employee benefits of LCRA and shall be subject to LCRA's standard employment conditions, practices and terms for employees. For all purposes relating to any employee benefits provided by LCRA, except for accrual of benefits under LCRA's Retirement Plan, but including determining eligibility to participate in LCRA's Retirement Plan and determining a Participant's Vested interest in his or her Accrued Retirement Benefit under LCRA's Retirement Plan, as those terms are defined in such Plan, a former employee of Garwood who is hired by LCRA shall be given credit for service while employed by Garwood.

ARTICLE 8

Conditions to Closing

8.01 Conditions to Obligations of Garwood. The obligations of Garwood to proceed with the Closing are subject to the satisfaction at or prior to Closing of all of the following conditions, any one or more of which may be waived in writing in whole or in part by Garwood (which waiver shall be deemed to constitute a waiver of any liability LCRA may have under this Agreement with respect to the event or condition causing such condition not to be satisfied at Closing). Nothing in this Section 8.01 shall limit any of Garwood's rights under Article 11.

(a) Compliance. LCRA shall have complied in all material respects with its covenants and agreements contained herein, and LCRA's representations and warranties contained herein, or in any certificate or similar instrument required to be delivered by or on behalf of LCRA pursuant hereto, shall be true and correct in all material respects on and as of the Closing Date, with the same effect as though made at such time; provided, however, that Section 8.01(h), rather than this Section 8.01(a), shall exclusively govern the failure of any of LCRA's representations and warranties to be true and correct on and as of the Closing Date, or any breach by LCRA of any of its covenants or agreements in this Agreement, in each case as a result of any event occurring, or any matter arising, between the Execution Date and the Closing Date.

(b) Certificate. Garwood shall have received a certificate or certificates dated as of the Closing Date and signed by LCRA's Secretary or the Assistant Secretary, certifying the accuracy and completeness of the copies of, as well as the current effectiveness of, the resolutions to be attached thereto of the appropriate authorizing authority (or any committee thereof) of LCRA authorizing the execution, delivery and performance of this Agreement and the consummation of the transactions contemplated herein, as well as to the incumbency of the officers executing this Agreement on behalf of LCRA and any documents to be executed and delivered by LCRA at Closing.

(c) No Orders. No order, writ, injunction or decree shall have been entered and be in effect by Governmental Authority, and no Law shall have been promulgated or enacted and be in effect, that restrains, enjoins or invalidates the transactions contemplated hereby.

(d) No Proceedings. No Proceeding shall be pending or threatened by any Person (other than a Garwood Party) seeking substantial damages against any of the Garwood Parties in connection with the transactions contemplated by this Agreement, unless LCRA shall have agreed in writing to indemnify, defend, protect, hold harmless and release the Garwood Parties from and against any and all Losses arising out of, resulting from, or related to such Proceeding.

(e) Corpus Christi Application. The TNRCC shall have issued such orders granting the Corpus Christi Application as deemed necessary by Garwood, whether or not the Corpus Christi Agreement is in effect at that time, and such orders shall have become final and nonappealable.

(f) Garwood's Application. The TNRCC shall have issued such orders granting Garwood's Application as deemed necessary by Garwood, including, without limitation, an order directing issuance of an amendment to Garwood's Remaining Right containing all terms, provisions and special conditions as requested in Garwood's Application.

(g) LCRA's Application. The TNRCC shall have issued such orders granting LCRA's Application as deemed necessary by Garwood, and such orders shall have become final and nonappealable.

(h) Material Adverse Change.

(i) No event shall have occurred, or matter arisen, between the Execution Date and the Closing Date that shall have a Material Adverse Effect, including any such event or matter that would (A) cause any representation or warranty of LCRA not to be true and correct on and as of the Closing Date, or (B) constitute a breach by LCRA of any of its covenants or agreements in this Agreement. Before relying on the provisions of this Section 8.01(h), however, Garwood shall first notify LCRA of the event or matter that it believes has a Material Adverse Effect. LCRA shall have a reasonable period (not to exceed 10 days in the case of the case of a failure to pay money, or 30 days in the case of any other failure) in which to attempt (I) to cure such event or matter or (II) to cause it not to have a Material Adverse Effect. If LCRA is successful in its efforts, then the closing condition in this Section 8.01(h) shall be deemed satisfied with respect to such event or matter. If LCRA is unsuccessful in its efforts, then the closing condition in this Section 8.01(h) shall not be deemed satisfied with respect to such event or matter, and Garwood may terminate this Agreement pursuant to Section 11.01(a)(vii) and exercise the rights of Garwood under Article 11 with respect thereto. Except for the closing conditions in Section 8.01(b) through (g), this Section 8.01(h) shall constitute the exclusive closing condition for any event occurring, or matters arising, between the Execution Date and the Closing Date (including any such event or matter that would (x) cause any representation or warranty of LCRA not to be true and correct on and as of the Closing Date, or (y) constitute a breach by LCRA of any of its covenants or agreements in this Agreement).

(ii) To ensure consistency with the provisions of Section 11.01, (A) an uncured breach by LCRA of its covenants in Section 2.03, 2.04, 7.02, 7.03, 7.04, 7.05, 7.06 or 7.07 shall be conclusively deemed to have a Material Adverse Effect for purposes of such Section 8.01(h)(i); and (B) the requirements in Section 8.01(h)(i) that Garwood notify LCRA of a breach, and afford them an opportunity to cure the breach, shall not apply in the case of a breach by LCRA of its covenants in Section 7.02.

8.02 Conditions to Obligations of LCRA. The obligations of LCRA to proceed with the Closing are subject to the satisfaction at or prior to Closing of all of the conditions set forth in this Section 8.02, any one or more of which may be waived in writing in whole or in part by LCRA (which waiver shall be deemed to constitute a waiver of any liability Garwood may have under this Agreement with respect to the event or condition causing such condition not to be satisfied at Closing). Nothing in this Section 8.02 shall limit any of LCRA's rights under Article 11.

(a) Compliance. Garwood shall have complied in all material respects with its covenants and agreements contained herein, and Garwood's representations and warranties contained herein, or in any certificate or similar instrument required to be delivered by or on behalf of Garwood pursuant hereto, shall be true and correct in all material respects on and as of the Closing Date, with the same effect as though made at such time; and provided, that Section 8.02(g), rather than this Section 8.02(a), shall exclusively govern the failure of any of Garwood's representations and warranties to be true and correct on and as of the Closing Date, or any breach by Garwood of any of its covenants or agreements in this Agreement, in each case as a result of any event occurring, or any matter arising, between the Execution Date and the Closing Date.

(b) Certificates. LCRA shall have received a certificate or certificates dated as of the Closing Date and signed by Garwood's Secretary or Assistant Secretary (i) certifying the accuracy and completeness of the copies of, as well as the current effectiveness of the resolutions to be attached thereto of the Board of Directors (or any committee thereof) of Garwood authorizing the execution, delivery and performance of this Agreement and the consummating of the transactions contemplated herein; and (ii) certifying to the incumbency of the officers executing this Agreement on behalf of Garwood and any documents to be executed and delivered by Garwood at Closing.

(c) No Orders. No order, writ, injunction or decree shall have been entered and be in effect by any Governmental Authority, and no Law shall have been promulgated or enacted and be in effect, that restrains, enjoins or invalidates the transactions contemplated hereby.

(d) LCRA's Application. The TNRCC shall have issued such orders granting LCRA's Application as deemed necessary by LCRA, and such orders shall have become final and nonappealable.

(e) Garwood's Application. The TNRCC shall have issued such orders granting Garwood's Application as deemed necessary by LCRA, and such orders shall have become final and nonappealable.

(f) LCRA's Bonds.

(i) The Texas Attorney General shall have approved the issuance of LCRA's Bonds in accordance with the provisions of Article 717k-8 or Article 717q, Vernon's Annotated Texas Civil Statutes; or, if the Bond Validation Suit is filed, a court of competent jurisdiction shall have issued a judgment approving LCRA's Bonds, and such judgment shall have become final and nonappealable.

(ii) LCRA shall have issued and sold LCRA's Bonds.

(g) Material Adverse Change.

(i) No event shall have occurred, or matter arisen, between the Execution Date and the Closing Date that shall have a Material Adverse Effect, including any such event or matter that would (A) cause any representation or warranty of Garwood not to be true and correct on and as of the Closing Date, or (B) constitute a breach by Garwood of any of its covenants or agreements in this Agreement. Before relying on the provisions of this Section 8.02(g), however, LCRA shall first notify Garwood of the event or matter that it believe has a Material Adverse Effect. Garwood shall have a reasonable period (not to exceed 10 days in the case of the case of a failure to pay money, or 30 days in the case of any other failure) in which to attempt (I) to cure such event or matter or (II) to cause it not to have a Material Adverse Effect. If Garwood is successful in its efforts, then the closing condition in this Section 8.02(g) shall be deemed satisfied with respect to such event or matter. If Garwood is unsuccessful in its efforts, then the closing condition in this Section 8.02(g) shall not be deemed satisfied with respect to such event or matter, and LCRA may terminate this Agreement pursuant to Section 11.01(a)(viii) and exercise its rights under Article 11 with respect thereto. Except for the closing conditions in Sections 8.02(b) through (f), this Section 8.02(g) shall constitute the exclusive closing condition for any event occurring, or matters arising, between the Execution Date and the Closing Date (including any such event or matter described in clauses (A) or (B) of the first sentence of this Section 8.02(g)(i)).

(ii) To ensure consistency with the provisions of Section 11.01, an uncured breach by Garwood of its covenants in Section 6.03, 6.04 or 6.05 shall be conclusively deemed to have a Material Adverse Effect for purposes of Section 8.02(g)(i).

ARTICLE 9

Additional Agreements of LCRA and Garwood

9.01 Preservation of Books and Records; Access. For a period of seven years after the Closing Date, LCRA shall (a) preserve and retain the Deliverable Records and all other information, books, records and files of Garwood within the possession of LCRA relating to the ownership or operation of the Assets prior to the Closing Date and (b) permit Garwood and its authorized representatives to have access thereto, during normal business hours, and to meet with employees of LCRA on a mutually-convenient basis in order to obtain additional information and explanations

with respect to such books and records. Notwithstanding the foregoing, during such seven-year period, LCRA may dispose of any such Deliverable Records or other materials that are offered in writing to, but not accepted by, Garwood. Notwithstanding any provision of this Agreement to the contrary, no Party waives the attorney-client privilege and shall not be required to release or disclose information protected thereby.

9.02 Further Assurances. From and after the Closing, Garwood and LCRA shall take all appropriate action and execute any documents, instruments or conveyances of any kind that may be reasonably necessary to effectuate the intent of this Agreement.

9.03 Indemnification Regarding Certain Covenants.

(a) Subject to the remaining provisions of this Section 9.03, LCRA shall indemnify, defend, protect, hold harmless and release Garwood, its Affiliates and its and their respective directors, officers, shareholders, partners, members, employees, successors, assigns permitted under this Agreement and representatives, if any, and all landowners and irrigators within the Garwood Service Area (collectively, the *"Garwood Parties"*) from and against any and all Losses arising out of, resulting from, or related to any one or more of the following: (i) a breach of any of LCRA's representations or warranties in this Agreement; (ii) the failure of LCRA to perform any of its covenants or agreements under this Agreement; and (iii) the failure of LCRA to comply with any term, condition or special condition set forth in Garwood's Remaining Right, as amended.

(b) Subject to the other provisions of this Section 9.03, a Person that is indemnified under this Section 9.03 may submit to LCRA a claim for Losses, specifying the amount thereof and setting forth in reasonable detail the basis for such claim (a *"Claim"*). Any Claim (or portion thereof) that LCRA agrees to is hereinafter referred to as an *"Approved Claim."* Any Claim (or portion thereof) that LCRA objects to is hereinafter referred to as an *"Unapproved Claim."* With respect to any Unapproved Claim, LCRA shall deliver to the Person seeking indemnification, as soon as reasonably practicable, a written notice detailing LCRA's reasons for objecting to such Unapproved Claim. If LCRA and the Person seeking indemnification are unable to resolve such dispute, either may seek resolution thereof through a Proceeding brought in a court of competent jurisdiction in the venue selected in Section 13.05. Any final and nonappealable judgment by such court of competent jurisdiction shall conclusively determine whether such Unapproved Claim should or should not become an Approved Claim. If a Claim becomes an Approved Claim pursuant to this 9.03(b), LCRA shall, within 20 days thereof, pay the indemnified Person the amount of such Approved Claim, subject to the other provisions of this Section 9.03.

ARTICLE 10

Operations of the Assets Prior To Closing

10.01 Amendments to Garwood's Right. Notwithstanding anything in this Agreement to the contrary, LCRA agrees that, except to the extent provided below in this Section 10.01, nothing in this Agreement shall prohibit or restrict Garwood in any way or at any time from seeking whatever amendments to Garwood's Remaining Right or Corpus Christi's Right that Garwood may desire; provided, however, that until either Garwood or LCRA gives notice of termination of this Agreement

pursuant to any of the provisions of Section 11.01(a), Garwood will not, without first obtaining LCRA's written consent (which consent shall not be unreasonably withheld), amend or withdraw Garwood's Application in any way; and provided further, however, that until the earlier to occur of (a) Independence Day, or (b) either Garwood or LCRA giving notice of termination of this Agreement pursuant to any of the provisions of Section 11.01(a), Garwood will not, without first obtaining LCRA's written consent (which consent shall not be unreasonably withheld), amend the Application to Amend Garwood's Remaining Right to seek a reduction in any current authorization under that right, or file any additional separate application to amend Garwood's Remaining Right, seeking a reduction in any current authorization under that right.

10.02 No Solicitation. Until the earlier to occur of (a) Independence Day, or (b) either Garwood or LCRA giving notice of termination of this Agreement pursuant to any of the provisions of Section 11.01(a), Garwood will not, and will cause each of their representatives, attorneys and agents, not to, directly or indirectly, solicit from or make to any Person, any offer to buy or sell the Assets (other than in the Ordinary Course of Business), or any offer relating to merger, consolidation, business combination, or similar transaction involving Garwood.

10.03 No Assignment of Rights Under LCRA Agreement. Until the earlier to occur of (a) Independence Day, or (b) either Garwood or LCRA giving notice of termination of this Agreement pursuant to any of the provisions of Section 11.01(a), Garwood will not enter into any agreement, or amend or take any discretionary action pursuant to any existing agreement, that would assign to any Person or Persons any of Garwood's rights under the LCRA Agreement.

10.04 No Contracts for Diversion or Delivery of Water. Until the earlier to occur of (a) Independence Day, or (b) either Garwood or LCRA giving notice of termination of this Agreement pursuant to any of the provisions of Section 11.01(a), Garwood will not enter into any agreement, or amend or take any discretionary action pursuant to any existing agreement, that would commit Garwood to divert or deliver any water via the Canal System for a term in excess of one year.

10.05 Effect of Occurrence of Independence Day. In addition to any other applicable provisions of this Agreement, the following provisions shall apply in the event of the occurrence of Independence Day, whether or not Garwood or LCRA give notice of termination of this Agreement pursuant to any of the provisions set forth in Section 11.01(a):

(a) Upon the occurrence of Independence Day, whether or not Garwood or LCRA also gives notice of termination of this Agreement pursuant to any of the provisions of Section 11.01(a), the restriction set forth in Section 10.02 shall be removed, and Garwood and its representatives, attorneys and agents shall be free to immediately solicit from and make to any Person, offers relating to any transaction involving the sale of the Assets, or any merger, consolidation, business combination, or similar transaction involving Garwood.

(b) Upon the occurrence of Independence Day, whether or not Garwood or LCRA also gives notice of termination of this Agreement pursuant to any of the provisions of Section 11.01(a), the restriction set forth in the second proviso in Section 10.01 shall be removed, and Garwood shall be free to immediately amend the Application to Amend Garwood's Remaining Right to seek a reduction in any current authorization under that right

that Garwood may desire, and to immediately file any separate application to amend Garwood's Remaining Right seeking a reduction in any current authorization under that right that Garwood may desire.

(c) Upon the occurrence of Independence Day, whether or not Garwood or LCRA also gives notice of termination of this Agreement pursuant to any of the provisions of Section 11.01(a), the restriction set forth in Section 10.03 shall be removed, and Garwood shall be free to immediately enter into any agreement, or amend or take any action pursuant to any existing agreement, that would assign to any Person or Persons any of Garwood's rights under the LCRA Agreement as may be desired by Garwood.

(d) Upon the occurrence of Independence Day, whether or not Garwood or LCRA also gives notice of termination of this Agreement pursuant to any of the provisions of Section 11.01(a), the restriction set forth in Section 10.04 shall be removed, and Garwood shall be free to immediately enter into any agreement, or amend or take any action pursuant to any existing agreement, that would commit Garwood to divert or deliver any water via the Canal System, as may be desired by Garwood.

10.06 Litigation. Garwood will give written notice to LCRA within 10 days of the date of receipt of any of the following: (i) service of any Proceeding filed by or against Garwood with respect to any of the Assets, accompanied by copies of the pleadings and (ii) Knowledge by Garwood of any threatened Proceeding against Garwood with respect to any of the Assets.

10.07 No Material Rate Reduction. Garwood will not reduce its rates for irrigation water below the rates or change the methodology for determining such rates in effect on December 31, 1997.

ARTICLE 11

Termination

11.01 Termination.

(a) This Agreement and the transactions contemplated hereby may be terminated:

(i) at any time prior to Closing, by mutual consent of Garwood and LCRA;

(ii) at any time prior to Closing, by Garwood, or by LCRA, if the Closing shall not have occurred on or before July 4, 2000 (*"Independence Day"*);

(iii) at any time prior to Closing, by Garwood, if LCRA fails to comply with the provisions of Sections 2.03, 2.04, 7.03, 7.04, 7.05, 7.06 or 7.07; subject, however, to the provisions of Section 11.01(b);

(iv) at any time prior to Closing, by Garwood, if LCRA fails to comply with the provisions of Section 7.02;

(v) at any time prior to Closing, by LCRA, if Garwood fails to comply with the provisions of Section 6.03, 6.04 or 6.05; subject, however, to the provisions of Section 11.01(b);

(vi) at any time prior to Closing, by Garwood, if LCRA shall not have obtained the preliminary approval of the Attorney General or a final and nonappealable judgment in the Bond Validation Suit, as described in Section 7.07, on or before the 270th day after the Execution Date;

(vii) at any time prior to Closing, by Garwood, if termination is permitted under Section 8.01(h);

(viii) at any time prior to Closing, by LCRA, if termination is permitted under Section 8.02(g);

(ix) at any time prior to Closing, by Garwood, if the TNRCC sets either Garwood's Application or LCRA's Application for the TNRCC's consideration and action for a date or time earlier than the date or time for which it sets the Corpus Christi Application for its consideration and action;

(x) at any time prior to Closing, by Garwood, if the TNRCC acts on either Garwood's Application or LCRA's Application before it acts on the Corpus Christi Application;

(xi) at any time prior to Closing, by Garwood, if the TNRCC enters an order denying or dismissing, in whole or in part, the Corpus Christi Application, whether or not the Corpus Christi Agreement is in effect at that time;

(xii) at any time prior to Closing, by Garwood, if the TNRCC sets the Application to Amend Garwood's Remaining Right for the TNRCC's consideration and action without Garwood requesting that it do so, or for a date or time earlier than the date or time requested by Garwood;

(xiii) at any time prior to Closing, by Garwood, if the TNRCC acts on the Application to Amend Garwood's Remaining Right without Garwood requesting that it do so, or on a date or time earlier than the date or time requested by Garwood;

(xiv) at any time prior to Closing, by Garwood, if any one or more of the provisions contained in this Agreement or in any document delivered pursuant hereto shall, for any reason, be held to be invalid, illegal or unenforceable in any material respect; or

(xv) at any time prior to Closing, by LCRA, if LCRA is not satisfied with the results of any investigation or test of any of the Assets performed after the Execution Date pursuant to Section 6.01; provided, however, in recognition of the fact that LCRA has had access to the Assets for a substantial period of time prior to the Execution Date, LCRA agrees to pay Garwood a termination fee of $1,000,000 if LCRA terminates for such reason,

unless LCRA demonstrates at that time that there was a material adverse change in condition of the Assets after the Execution Date and that the results of the investigation or test in question would have been substantially more favorable had the change in condition not occurred.

(b) Termination by either Party pursuant to any of the provisions set forth above in Subsection (a) shall be effective immediately upon that Party giving written notice of termination to the other Party. Before relying on the provisions of Section 11.01(a)(iii) or (v), however, the Party desiring to terminate this Agreement shall first notify the other Party of the event or matter that it believes constitutes a failure to comply with a provision listed in such Section 11.01(a)(iii) or (v). The other Party shall have a reasonable period (not to exceed 10 days in the case of the case of a failure to pay money, or 30 days in the case of any other failure) in which to attempt to cure such failure. If such Party is successful in its efforts, then termination shall not be permitted under such Section 11.01(a)(iii) or (v) with respect to such failure. If such Party is unsuccessful in its efforts, then the other Party may exercise its right to terminate this Agreement under Section 11(a)(iii) or (v) with respect to such failure.

11.02 Effect of Termination. In addition to any other applicable provisions of this Agreement, the following provisions shall apply in the event of Garwood or LCRA giving notice of termination of this Agreement pursuant to any of the provisions set forth in Section 11.01(a), whether or not the other Party agrees that this Agreement is thereby terminated:

(a) Upon either Garwood or LCRA giving notice of termination of this Agreement pursuant to any of the provisions set forth in Section 11.01(a), Garwood shall be free to enjoy immediately all rights of ownership of the Assets and to sell, transfer, encumber and otherwise dispose of the Assets to any Person without any restriction under this Agreement.

(b) Upon either Garwood or LCRA giving notice of termination of this Agreement pursuant to any of the provisions set forth in Section 11.01(a), the restriction set forth in Section 10.02 shall be removed (unless such restriction had previously been removed pursuant to Section 10.05(a)), and Garwood and each of its representatives, attorneys and agents shall be free to immediately solicit from and make to any Person, offers relating to any transaction involving the sale of the Assets, or any merger, consolidation, business combination, or similar transaction involving Garwood.

(c) Upon either Garwood or LCRA giving notice of termination of this Agreement pursuant to any of the provisions set forth in Section 11.01(a), the restriction set forth in the first proviso in Section 10.01 shall be removed, and Garwood shall be free to immediately amend or withdraw Garwood's Application in any way that Garwood may desire.

(d) Upon either Garwood or LCRA giving notice of termination of this Agreement pursuant to any of the provisions set forth in Section 11.01(a), the restriction set forth in the second proviso in Section 10.01 shall be removed (unless such restriction had previously been removed pursuant to Section 10.05(b)), and Garwood shall be free to

immediately file any separate application to amend Garwood's Remaining Right seeking a reduction in any current authorization under that right that Garwood may desire.

(e) Upon either Garwood or LCRA giving notice of termination of this Agreement pursuant to any of the provisions set forth in Section 11.01(a), the restriction set forth in Section 10.03 shall be removed (unless such restriction had previously been removed pursuant to Section 10.05(c)), and Garwood shall be free to immediately enter into any agreement, or amend or take any action pursuant to any existing agreement, that would assign to any Person or Persons any of Garwood's rights under the LCRA Agreement as may be desired by Garwood.

(f) Upon either Garwood or LCRA giving notice of termination of this Agreement pursuant to any of the provisions set forth in Section 11.01(a), the restriction set forth in Section 10.04 shall be removed (unless such restriction had previously been removed pursuant to Section 10.05(d)), and Garwood shall be free to immediately enter into any agreement, or amend or take any action pursuant to any existing agreement, that would commit Garwood to divert or deliver any water via the Canal System, as may be desired by Garwood.

(g) Garwood and LCRA hereby agree that the provisions of this Section 11.02 and Sections 2.02(b), 7.02, 7.05, 7.06, 13.01, and 13.02 shall survive any termination of this Agreement pursuant to this Article 11.

ARTICLE 12

Scope of Representations; Limitations

12.01 Independent Investigation. LCRA acknowledges and affirms that: (a) prior to the Execution Date, it has had access to the Assets, Deliverable Records, personnel, officers, professional advisors, and operations of Garwood; (b) from the Execution Date through the Closing Date, it will continue to have access to the Assets, Deliverable Records, personnel, officers, professional advisors, and operations of Garwood; and (c) in making its decision to enter into this Agreement and its decision to consummate the transactions contemplated hereby, it has relied on the representations, warranties, covenants and agreements of Garwood set forth in this Agreement but, other than such reliance, it has relied solely on its own independent investigation, testing, analysis and evaluation of the Assets, information that is of public record or otherwise public knowledge, and information in LCRA's own files or otherwise available to LCRA.

12.02 Scope of Representations. Except to the extent expressly set forth in this Agreement, Garwood makes no representations or warranties whatsoever and disclaims all liability and responsibility for any other representation, warranty, statement or information made or communicated (orally or in writing) to LCRA. Without limiting the generality of the foregoing, except as expressly set forth in this Agreement, Garwood makes no representation or warranty of any type as to the Assets (even as to the return of any portion of the Purchase Price) and **GARWOOD EXPRESSLY DISCLAIMS AND NEGATES ANY IMPLIED OR EXPRESS WARRANTY**

OF MERCHANTABILITY, OF FITNESS FOR A PARTICULAR PURPOSE, AND OF CONFORMITY TO MODELS OR SAMPLES OF MATERIALS.

ARTICLE 13

Miscellaneous

13.01 Brokers. Regardless of whether the Closing shall occur, (a) Garwood shall indemnify, defend, protect, hold harmless and release the LCRA Parties from and against any and all Losses, including brokers' or finders' fees, arising out of, resulting from, or related to any brokers or finders retained or engaged by Garwood in respect of the transactions contemplated by this Agreement, and (b) LCRA shall indemnify, defend, protect, hold harmless and release the Garwood Parties from and against any and all Losses, including brokers' or finders' fees, arising out of, resulting from, or related to any brokers or finders retained or engaged by LCRA or any of its Affiliates in respect of the transactions contemplated by this Agreement.

13.02 Expenses. Except as specifically provided herein, each Party shall pay all legal and other costs and expenses incurred by such Party or any of its Affiliates in connection with this Agreement and the transactions contemplated hereby.

13.03 Notices. Any notice, request, instruction, correspondence or other communication to be given or made hereunder by either Party to the other (herein collectively called *"Notice"*) shall be in writing and (a) delivered by hand, (b) mailed by certified mail, postage prepaid and return receipt requested, (c) sent by facsimile transmission, or (d) sent by Express Mail, Federal Express, or other express delivery service, as follows:

If to Garwood, addressed to:

Garwood Irrigation Company
Attn: William N. Lehrer
P.O. Box 428
Garwood, Texas 77442
Fax Number: (409) 758-3844

If to LCRA:

Lower Colorado River Authority
Attn: General Manager
3701 Lake Austin Blvd.
Austin, Texas 78703
Fax Number: (512) 473-3551

Notice given by hand, Express Mail, Federal Express or other express delivery service or by mail shall be effective upon actual receipt. Notice given by facsimile transmission shall be effective upon actual receipt if received during the recipient's normal business hours, or at the beginning of the recipient's next Business Day after receipt if not received during the recipient's normal business

hours. All Notices by facsimile transmission shall be confirmed promptly after transmission in writing by certified mail or personal delivery. Any Party may change any address to which Notice is to be given to it by giving Notice as provided above of such change of address.

13.04 GOVERNING LAW. **THE PROVISIONS OF THIS AGREEMENT, THE SCHEDULES AND EXHIBITS HERETO, AND THE DOCUMENTS DELIVERED PURSUANT HERETO SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF TEXAS (EXCLUDING ANY CONFLICTS-OF-LAW RULE OR PRINCIPLE THAT MIGHT REFER SUCH MATTERS TO THE LAWS OF ANOTHER JURISDICTION), EXCEPT TO THE EXTENT THAT SUCH MATTERS ARE MANDATORILY SUBJECT TO THE LAWS OF ANOTHER JURISDICTION PURSUANT TO THE LAWS OF SUCH OTHER JURISDICTION.**

13.05 Venue.

(a) The obligations of LCRA under Sections 7.08 and 9.03 shall be performed, or deemed to be performed, in Colorado County, Texas. If and to the extent a Proceeding involving any such obligations brought by a Party to this Agreement, or by any landowner or irrigator within Garwood's Service Area, may be brought in Colorado County, Texas, the Proceeding shall be brought only in Colorado County, Texas.

(b) The obligations of LCRA under Section 7.09 shall be performed, or deemed to be performed, in Colorado County, Texas. If and to the extent a Proceeding involving any such obligations brought by a Party to this Agreement, or by any employee of Garwood as of the Closing Date, may be brought in Colorado County, Texas, the Proceeding shall be brought only in Colorado County, Texas.

(c) The obligations of LCRA under Section 7.02 shall be performed, or deemed to be performed, in Nueces County, Texas. If and to the extent a Proceeding involving any such obligations brought by a Party to this Agreement, or by Corpus Christi, may be brought in Nueces County, Texas, the Proceeding shall be brought only in Nueces County, Texas.

(d) Except as provided otherwise in Sections 13.05(a), (b) and (c), the obligations of the Parties under this Agreement shall be performed, or deemed to be performed, in Travis County, Texas. Except as provided otherwise in Sections 13.05(a), (b) and (c), if and to the extent a Proceeding involving any such obligations may be brought in Travis County, Texas, the Proceeding shall be brought only in Travis County, Texas.

13.06 Entire Agreement; Amendments and Waivers. This Agreement, together with all Schedules and Exhibits hereto, constitutes the entire agreement between the parties hereto pertaining to the subject matter hereof and supersedes all prior agreements, understandings, negotiations and discussions, whether oral or written, of the parties. No supplement, modification or waiver of this Agreement shall be binding unless executed in writing by the Party to be bound thereby. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provision hereof (regardless of whether similar), nor shall any such waiver constitute a continuing waiver unless otherwise expressly provided.

13.07 Binding Effect, Assignment and Third-Party Beneficiaries. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective permitted successors and assigns. Neither this Agreement nor any of the rights, benefits or obligations hereunder shall be assigned, by operation of law or otherwise, by either Party prior to the Closing without the prior written consent of the other Party.

(a) Nothing in this Agreement is intended to confer upon any Person other than the parties hereto and their respective permitted successors and assigns, any rights, benefits or obligations hereunder, except for the following third-party beneficiaries of certain rights under this Agreement:

(i) from and after the Closing, landowners and irrigators within Garwood's Service Area shall have the right to enforce the obligations of LCRA set forth in Section 7.08;

(ii) from and after the Closing, Garwood's employees as of the Closing Date shall have the right to enforce the obligations of LCRA set forth in Section 7.10;

(iii) from and after the Closing, any of the Garwood Parties shall have the right to enforce the obligations of LCRA set forth in Section 9.03.

(iv) Garwood shall have the right and option, in its sole, unilateral discretion to be exercised by written addendum to this Agreement (the *"Optional Beneficiary Notice"*), signed by Garwood and delivered to LCRA, to add Corpus Christi as a third-party beneficiary, with the right, from and after delivery of the Optional Beneficiary Notice, to enforce the obligations of LCRA set forth in Section 7.02

As used herein, the term *"Third-Party Beneficiary"* means (A) the third-party beneficiaries named in Section 13.07(a)(i), (ii), and (iii); and (B) if Garwood delivers the Optional Beneficiary Notice in accordance with Section 13.07(a)(iv), Corpus Christi.

(b) The Third-Party Beneficiaries may exercise their respective rights under this Agreement without the necessity of joining any Party (other than the Party against whom such rights are being exercised) or any other Third-Party Beneficiary or Person. Each Party hereby waives any provision of applicable law that may require a Third-Party Beneficiary to accept, or consent to, the provisions of this Agreement, such acceptance and consent hereby being deemed to have occurred.

(c) There are no third-party beneficiaries or other Persons entitled to rely upon this Agreement except the Parties and the Third-Party Beneficiaries.

13.08 Specific Performance. Because of the unique nature of the Assets and the difficulty of calculating damages for breach of this Agreement, each Party and each Third-Party Beneficiary shall have the right to enforce specific performance by the other Party of its obligations under this Agreement.

13.09 Severability. If any one or more of the provisions contained in this Agreement or in any other document delivered pursuant hereto shall, for any reason, be held to be invalid, illegal or unenforceable in any material respect, such invalidity, illegality or unenforceability shall not affect any other provision of this Agreement or any other such document.

13.10 Headings, Schedules and Exhibits. The headings of the several Articles and Sections herein are inserted for convenience of reference only and are not intended to be a part of or to affect the meaning or interpretation of this Agreement. The Schedules and Exhibits referred to herein are attached hereto and incorporated herein by this reference. Garwood may revise or supplement the Schedules at any time prior to Closing.

13.11 Holidays. In the event that the time for any payment or performance under this Agreement shall fall on a Saturday, Sunday or legal holiday of the State of Texas, the time for such payment or performance shall be extended until the next day that is not a Saturday, Sunday or legal holiday.

EXECUTED on the Execution Date.

GARWOOD:

GARWOOD IRRIGATION COMPANY

By: _____
William N. Lehrer
Chairman and Chief Executive Officer

LCRA:

LOWER COLORADO RIVER AUTHORITY

By: _____
Mark Rose
General Manager

Lower Colorado River Authority
Post Office Box 220 Austin, Texas 78767 AC 512 473-3200

AGREEMENT BETWEEN THE
LOWER COLORADO RIVER AUTHORITY
AND GARWOOD IRRIGATION COMPANY

This Agreement is entered into as of the 10th day of December, 1987, by and between the Lower Colorado River Authority ("LCRA") and Garwood Irrigation Company ("Garwood").

W I T N E S S E T H

Garwood holds rights to use the waters of the Colorado River under Certified Filing No. 398, as amended ("C.F. 398"), as reflected in the Final Determination entered by the Texas Water Commission (the "Commission") on July 29, 1985 in the Adjudication of the Lower Colorado River Segment of the Colorado River Basin (the "Adjudication"). Garwood has the independent right under C.F. 398 to divert and use 168,000 acre-feet of water per year of the run-of-river flow of the Colorado River at a maximum diversion rate of 750 cubic feet per second for the irrigation of 32,000 acres of land within acres T-2000 and T-2010 (as such areas are defined in the Final Determination), with a priority date of November 1, 1900. LCRA holds rights to the Highland Lakes, including rights to Lakes Buchanan and Travis under Permit Nos. 1259 and 1260, respectively. LCRA also holds other rights to use the waters of the Colorado River and its tributaries downstream of the Highland Lakes.

LCRA, Garwood, Lakeside Irrigation Company ("Lakeside") and Gulf Coast Water Company ("Gulf Coast") entered into an agreement in 1937 (the "1937 Contract") regarding their respective water rights. LCRA and Garwood subsequently entered into other agreements, which have expired under their own terms. Pursuant to the 1937 Contract, Garwood obtained from the Texas Board of Water Engineers, predecessor to the Commission, Permit No. 1506, providing for the supply of stored water by LCRA. Garwood also obtained Permit No. 1790, amending Permit No. 1506. Permits Nos. 1506 and 1790 have been renumbered to Certified Filings Nos. 398A and 398B, respectively.

By Interim Agreement dated as of February 27, 1986 (the "Interim Agreement"), Garwood and LCRA agreed to suspend the 1937 Contract. Prior to the Interim Agreement, Garwood paid LCRA a cumulative total of more than $2,000,000 pursuant to the 1937 Contract.

Exhibit F

The facts and circumstances upon which the 1937 Contract was based have changed significantly, and certain assumptions upon which such Contract was based have been shown to be incorrect. For example, the Commission has issued its Final determination in the Adjudication, and it is now clear that Garwood's C.F. 398 has the earliest priority date of all significant water rights in the Colorado River Basin. Additionally, Lakeside and Gulf Coast have been acquired by LCRA, and are now referred to as LCRA's Lakeside and Gulf Coast Divisions. Moreover, others holding water rights similar to Garwood's have never entered into similar contracts with LCRA, as contemplated by the parties to the 1937 Contract. And, Garwood has at a cost to itself of approximately $1,000,000 built a low water dam on the river just downstream of Garwood's diversion point. Such low water dam is authorized under Certified Filing No. 398D. Garwood's low water dam makes it possible to operate the river more efficiently, for the benefit of LCRA and others in the Colorado River Basin.

LCRA and Garwood now wish to redefine their relationship to take into consideration the benefits provided by Garwood's low water dam, the previous payments made by Garwood to LCRA, and the facts and circumstances as they exist today. To the extent that Garwood may need stored water from Lakes Travis and Buchanan to firm up the supply of water available under C.F. 398, LCRA desires to provide such water on a non-firm, interruptible basis. Garwood is willing to be provided stored water on that basis, subject to conditions that assure Garwood that any reduction in supply of stored water to Garwood will be fair, reasonable and non-discriminatory. However, LCRA is not able to make a commitment to supply stored water on a non-firm, interruptible basis until it is assured that it has the necessary rights to supply water from Lakes Travis and Buchanan on that basis. Such rights are presently being determined in the proceeding styled <u>In re: The Exceptions of the Lower Colorado River Authority and the City of Austin to the Adjudication of Water Rights in the Lower Colorado River Segment of the Colorado River Basin</u>, Cause No. 115,414-A-1 in the District Court of Bell County, Texas, 264th Judicial District ("Cause No. 115,414-A-1").

NOW, THEREFORE, in consideration of the mutual benefits and covenants contained herein, Garwood and LCRA hereby agree as follows:

1. The Interim Agreement shall remain in effect until the Effective Date (hereinafter defined), and shall terminate on such date. The 1937 Contract also shall terminate on the Effective Date. Promptly after the Effective Date, Garwood agrees to submit Permits Nos. 1506 and 1790 (Certified Filing Nos. 398A and 398B, respectively) to the Commission for cancellation; provided, however, that such cancellation shall not in any way affect Garwood's independent rights to the run-of-river flow of

the Colorado River, as set forth above. The "Effective Date" is the date that the Court enters an LCRA Judgment (hereinafter defined) in Cause No. 115,414-A-1, or the date which LCRA by written notice to Garwood deems to be the Effective Date, whichever occurs first. An "LCRA Judgment" is any final judgment, partial or otherwise, entered in Cause No. 115,414A-1, which reflects that LCRA is authorized to use a maximum aggregate amount of water from Lakes Travis and Buchanan in peak-use years of not less that 1,500,000 acre-feet for purposes other than the generation of hydroelectric power.

2. Based on the information currently available, it appears that Garwood's demands for water may be able to be satisfied, to the full extent of the limits of C.F. 398, entirely from the run-of-river supply available under C.F. 398. In that regard, LCRA acknowledges that inflows must be allowed to pass through the Highland Lakes to the extend necessary to satisfy demands under C.F. 398. The extent to which run-of-river water is available under C.F. 398 at any given time ultimately will be determined by the Commission.

3. To the extent that stored water from Lakes Travis and Buchanan under Permits Nos. 1260 and 1259 may be required to firm up the supply of water available under C.F. 398 to satisfy demands under C.F. 398, LCRA agrees to release stored water, at Garwood's request, at such times and rates as may be necessary to allow Garwood to divert the amounts required, within the limits of C.F. 398, utilizing Garwood's diversion facilities; provided, however, that LCRA's commitment under this Agreement to supply stored water under Permits Nos. 1260 and 1259 shall not take effect until the Effective Date.

4. The amount of stored water that LCRA must release from Lakes Travis and Buchanan for Garwood and all other users of stored water supplied by LCRA is reduced because of Garwood's low water dam. Based upon current information available, LCRA agrees that, on the average over time, the amount of stored water required to firm up the supply of water available under C.F. 398 will not exceed the amount of stored water saved because of Garwood's low water dam. Additionally, Garwood has paid LCRA significant amounts of money pursuant to the 1937 Contract for water diverted and used by Garwood prior to the Interim Agreement, and others who were supplied stored water by LCRA prior to such time were not charged for such water. Accordingly, LCRA agrees not to charge Garwood for any stored water that may be needed to firm up the supply of water available under C.F. 398 within the limits of C.F. 398, for so long as Garwood maintains its low water dam.

5. LCRA's commitment under this Agreement to supply stored water under Permits Nos. 1260 and 1259 is subject to interruption or curtailment on the basis set forth below. LCRA may supply Garwood less stored water in any year than Garwood's Unrestricted Demand (hereinafter defined) for that year only if LCRA also restricts and reduces the supply of stored water to all users of water for irrigation, including LCRA's Lakeside Division and LCRA's Gulf Coast Division, and to all users of water under all non-firm, interruptible commitments of LCRA for irrigation other than LCRA's commitment hereunder. If LCRA does reduce the supply of stored water to Garwood in any year below Garwood's Unrestricted Demand for that year, then the percentage that Garwood's Unrestricted Demand is reduced, and the timing, notification and other procedures applicable to such reduction, shall be at least as favorable to Garwood as the percentage and procedures applied by LCRA to any user of water for irrigation, including LCRA's Lakeside Division or LCRA's Gulf Coast Division, or to any user of water under any non-firm, interruptible commitment of LCRA for irrigation other than LCRA's commitment hereunder. "Garwood's Unrestricted Demand" for any year is the amount of stored water needed that year to firm up the supply of water available under C.F. 398 during that year to the extent necessary to satisfy Garwood's unrestricted demand for that year.

6. The parties are entering into this Agreement solely for the benefit of themselves and agree that nothing herein shall be construed to confer any right, privilege or benefit on any person or entity other than the parties hereto.

7. Nothing herein shall in any way be considered as a waiver or abandonment by either of the parties of any of their respective water rights, or their respective rights, remedies and positions in the Adjudication process.

8. The parties may by mutual agreement modify this Agreement from time to time in the future based on their evaluation of the facts and circumstances as they exist at the time.

9. LCRA and Garwood agree to file jointly a copy of this Agreement with the Executive Director of the Texas Water Commission, P. O. Box 13087, Capitol Station, Austin, Texas 78711, it being fully recognized by LCRA and Garwood that the effectiveness of this contract is dependent upon compliance with the Rules of the Texas Water Commission.

IN WITNESS WHEREOF, this Agreement is executed on behalf of LCRA and Garwood by their respective authorized officers, in multiple counterparts, each of which shall constitute an original.

LOWER COLORADO RIVER AUTHORITY

By _____
S. David Freeman
General Manager

ATTEST:

_____

GARWOOD IRRIGATION COMPANY

By _____
William N. Lehrer
President

ATTEST:

_____

Marisa Weber

From:	PUBCOMMENT-OCC
Sent:	Monday, August 17, 2015 3:15 PM
To:	PUBCOMMENT-WWW-WRAS; PUBCOMMENT-ELD; PUBCOMMENT-OCC2; PUBCOMMENT-OPIC
Subject:	FW: Public comment on Permit Number WRPERM 5838
Attachments:	HLFWCC Supplement to Hearing Request1.pdf

H

WR 82315

From: tcarls@cmcdlaw.com [mailto:tcarls@cmcdlaw.com]
Sent: Monday, August 17, 2015 2:51 PM
To: DoNot Reply
Subject: Public comment on Permit Number WRPERM 5838

REGULATED ENTY NAME 11405838000 WRPERM 5838 WATER MANAGEMENT PLAN

RN NUMBER: RN104252267

PERMIT NUMBER: WRPERM 5838

DOCKET NUMBER:

COUNTY: BASTROP, BURNET, COLORADO, FAYETTE, GILLESPIE, LAMPASAS, LLANO, MASON, MATAGORDA, SAN SABA, TRAVIS, WHARTON, WILLIAMSON

PRINCIPAL NAME: LOWER COLORADO RIVER AUTHORITY

CN NUMBER: CN600253637

FROM

NAME: Trish Erlinger Carls

E-MAIL: tcarls@cmcdlaw.com

COMPANY: Carls McDonald &Dalrymple Llp

ADDRESS: 901 S. MoPac Expressway Building 1, Suite 280
Austin TX 78746

PHONE: 5126235431

FAX: 5124728403

COMMENTS: HLFWCC Supplement to Request for Contested Case Hearing

mw

IN RE: AMENDED AND RESTATED WATER RIGHTS APPLICATION NO. 5838A OF THE LOWER COLORADO RIVER AUTHORITY FOR AN AMENDMENT TO PERMIT NO. 5838 AND CERTIFICATES OF ADJUDICATION NOS. 14-5478 AND 14-5482, AS AMENDED	§	BEFORE THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

HIGHLAND LAKES FIRM WATER CUSTOMER COOPERATIVE'S SUPPLEMENT TO REQUEST FOR CONTESTED CASE HEARING

TO THE HONORABLE MEMBERS OF THE COMMISSION:

COMES NOW, the Highland Lakes Firm Water Customer Cooperative ("**HLFWCC**") and files this Supplement to Request for Contested Case Hearing, and in support would respectfully show the Commissioners the following:

I. PROCEDURAL HISTORY

A brief summary of the history of this matter and HLFWCC's involvement in it is as follows:

- On March 12, 2012, LCRA submitted an application for an amendment to a water right for Permit No. 5838 and Certificates of Adjudication Nos. 14-5478 (as amended) and 14-5482 (as amended) (collectively, "**LCRA's Certificates of Adjudication**") seeking to amend its Water Management Plan ("**WMP**"), which is LCRA's plan for operating lakes Buchanan and Travis required by court order in *In Re: The Exceptions of the Lower Colorado River Authority and the City of Austin to the Adjudication of Water Rights in the Lower Colorado River Segment of the Colorado River Basin,* No. 115,414-A-1, D.C. Bell County, April 20, 1988 (the "**1988 Court Order**"), and by LCRA's Certificates of Adjudication issued pursuant to the 1988 Court Order. LCRA's initial WMP application, submitted on March 12, 2012, and subsequently amended or revised in response to TCEQ comments, was designated by the TCEQ as Water Rights Application No. 5838A (the "**2012 WMP Application**").
- On May 24, 2013, the HLFWCC filed a request for contested case hearing and public comments on the 2012 WMP Application. Over 150 additional public comments and/or requests for contested case hearing were also received from others.
- On June 3, 2013, based on public comment and the ongoing drought conditions, the Commission's Executive Director determined that further evaluation of the 2012 WMP Application was necessary.

- On May 16, 2014, after review of more recent severe drought data, the Executive Director's staff issued a report with recommended changes to the 2012 WMP Application related to the curtailment of interruptible stored water.
- On October 31, 2014, LCRA submitted an amended and restated WMP application, and requested that it replace the 2012 WMP Application (the "**Amended and Restated WMP Application**").
- The "Notice of and Application to Amend the LCRA Water Management Plan and Public Meeting" (the "**Notice**") pertaining to the Amended and Restated WMP Application was last published on July 17, 2015.
- A Public Meeting was held on July 20, 2015, and HLFWCC made oral and filed written comments at the Public Meeting.

This filing is timely inasmuch as it is submitted within thirty (30) days of the date of the last newspaper publication of the Notice. *See* 30 Tex. Admin. Code §§ 1.7 (regarding computation of time), 55.251(d) (regarding requests for contested case hearing, public comment).

II. UPDATE OF HLFWCC INFORMATION

Since filing of its May 24, 2013 hearing request, HLFWCC has added two additional members – the City of Marble Falls and the City of Lago Vista. Below is a list of HLFWCC's current members along with a description of their firm water contract rights.

HLFWCC Member Entity	LCRA Raw Water Contract Number and/or Contract Date	Firm, Uninterruptible Water Contract Amount (acre/feet/year)
City of Burnet	March 1, 1986, as amended	4,100
City of Cedar Park	June 13, 2001	18,000
City of Leander	August 21, 2007	24,000
City of Pflugerville	Sept. 25, 2002	12,000
Lakeway MUD	July 24, 2008	3,069
Travis County WCID No. 17	June 26, 2003	554 (recreational)
Travis County WCID No. 17	May 23, 2001	8,800 (municipal)
West Travis County Public Utility Agency	EDMS ID 800-019-2092/ April 30, 2012	450 (irrigation)
West Travis County Public Utility Agency	EDMS ID 800-019-2091/ April 30, 2012	9,000 (municipal)
City of Lago Vista	April 27, 1983	6,500
City of Marble Falls	July 25, 1991	2,000
City of Marble Falls	June 12, 2001	1,000
TOTAL		**89,473**

The water provided under these contractual commitments originates in whole or in part from water rights held by LCRA under the LCRA Certificates of Adjudication. Collectively, these member entities of HLFWCC have contracts for 89,473 acre-feet of firm, non-interruptible water per year, or approximately 21% of the total current amount of firm, non-interruptible water that the LCRA has under contract.[1] The member entities of the HLFWCC rely solely or primarily on their contracted firm water rights for their municipal water supply. As such, the HLFWCC members would be devastated if their sole or primary water supply source is adversely affected by the Amended and Restated WMP Application.

As set forth in more detail in HLFWCC's May 24, 2013 hearing request, the contract water rights belonging to HLFWCC members as holders of LCRA's firm, non-interruptible water contracts are directly affected by the Amended and Restated WMP Application and it is these rights and interests that HLFWCC seeks to protect by participating in a contested case hearing. Each of HLFWCC's member entities have standing to request a contested case hearing in their own right; however, it would be impractical and financially prohibitive for all of them to do so, and neither the claims asserted in the matter nor the relief requested require the independent participation of so many. It is not anticipated that the matters at issue will require fact-intensive individual inquiry, but rather that the matter will be resolved based on proper interpretation of the 1988 Court Order and LCRA's Certificates of Adjudication, hydrologic analysis, and data relating to water storage and use. In its representational capacity, HLFWCC seeks the same results that its members seek, including revisions to the proposed water management plan and Commission order that would protect firm water customers. The benefits the revisions to the proposed water management plan and the draft Commission order will inure to the benefit of the individual HLFWCC members. In the alternative, party status for each of HLFWCC's individual member entities is requested.

Contact information for HLFWCC remains as follows:

Earl Foster, Chair
Highland Lakes Firm Water Customer Cooperative
c/o Lakeway Municipal Utility District
1097 Lohmans Crossing
Lakeway TX 78734
Tel: (512) 261-6222 x140
Fax: (512) 261-6681

HLFWCC has authorized the undersigned to receive all correspondence and notices on its behalf regarding the Amended and Restated WMP Application and this request for a contested case hearing.

[1] The firm water contracts are on file with the TCEQ pursuant to 30 Tex. Admin. Code §§ 297.101 and 295.101 and are a matter of public record. Copies of the contracts will be provided upon request. A list of LCRA's firm water contracts is at: http://www.lcra.org/water/water-supply/water-supply-contracts/Documents/firm_contracts.pdf

III. REVISIONS TO DRAFT ORDER AND WMP THAT MAY SATISFY HLFWCC's CONCERNS

HLFWCC has reviewed the proposed changes to the Draft Order dated August 17, 2015 filed by LCRA in this matter (attached hereto as *Exhibit A*) and is generally very supportive of those changes. HLFWCC has some concern about new Ordering Provision 1.h related to use of updated naturalized streamflow datasets in the next WMP update, but is confident that the Executive Director's staff and LCRA can make any refinements needed to ensure that the modeling in the next WMP application uses the most up-to-date information that is reasonably available.

IV. CONCLUSION

The revisions proposed by LCRA and attached hereto as *Exhibit A* go a long way toward addressing HLFWCC's concerns. The changes satisfactorily address most of HLFWCC's prior comments. In fact, HLFWCC will consider withdrawing its pending hearing requests if the Order is modified as set forth on *Exhibit A*, provided that no other person or entity found to have party status by the Commission or SOAH raises those same or other new issues of concern that potentially adversely affect HLFWCC. HLFWCC is committed to expeditiously resolving any additional outstanding issues as quickly as possible so that the Amended and Restated WMP Application and Order can be approved as quickly as possible.

V. EXHIBITS

In addition to the Amended and Restated WMP Application and other documents already on file with the Commission (including, without limitation, HLFWCC's May 24, 2013 hearing request and July 20, 2015 public comments), HLFWCC relies on the following evidence in support of this Supplement to Request for a Contested Case hearing and the same is incorporated herein for all purposes:

Exhibit A LCRA's Proposed Revisions to Certain Draft Order Provisions

Respectfully submitted,

Patricia Erlinger Carls
SBN: 03813425
Carls, McDonald & Dalrymple, LLP
901 S. MoPac Expressway
Building 1, Suite 280
Austin, TX 78746
Tel: (512) 623-5431
Fax: (512) 472-8403
Email: tcarls@cmcdlaw.com

ATTORNEYS FOR HLFWCC

ENERGY • WATER • COMMUNITY SERVICES

August 17, 2015

Via eComment

Bridget C. Bohac, Chief Clerk
Office of the Chief Clerk
Texas Commission on Environmental Quality
P.O. Box 13087, MC-105
Austin, TX 78711-3087

RE: Lower Colorado River Authority's Application for an Amendment to its Water Management Plan; WRPERM 5838; CN 600253637; RN 104252267

Dear Ms. Bohac:

The Lower Colorado River Authority (LCRA) has reviewed the TCEQ's draft order on LCRA's application to amend its Water Management Plan (WMP), Permit No. 5838. We appreciate all of the time TCEQ staff has spent over the past several years with regard to LCRA's application to amend its WMP and are hopeful that the plan will be approved by the Commission later this year.

After further review of the draft order and the comments filed at the public meeting, LCRA has identified some proposed edits, which are included in the attached document, and urges you to include these suggested changes in your final proposed order. LCRA believes these edits would eliminate potential ambiguity in the proposed order that has caused some concern. Further, with specific reference to the trigger for initiating the next update to the WMP, LCRA is suggesting a reasonable modification to the timing in hopes of finding a middle ground.

LCRA is hopeful that the interested stakeholders will support these changes and the ultimate adoption of the WMP without the need for a contested case hearing. In the event that a contested case hearing is granted, however, LCRA requests the opportunity to address these items, in addition to any other proposed changes to the draft order or issues raised by other parties, at the contested case hearing. As the holder of this permit, LCRA would be affected in a way not common to the general public.

LCRA's contact information is as follows:

David Wheelock, P.E.
Manager, Water Supply & Conservation
Lower Colorado River Authority
P.O. Box 220, L200
Austin, TX 78767-0220
Tel: 512-730-6822 / Fax: 512-473-4026
Email: david.wheelock@lcra.org

With a copy to:

Lyn Clancy
Managing Associate General Counsel & Senior Water Policy Advisor
Lower Colorado River Authority
P.O. Box 220, H429
Austin, TX 78767-0220
Tel: 512-730-6849 / Fax: 512-473-4010
Email: lyn.clancy@lcra.org

Again, LCRA appreciates the significant efforts of TCEQ staff in reviewing this application. LCRA stands ready to work through any remaining issues. If you have any questions, or need any additional information, please do not hesitate to contact me.

Sincerely,

Lyn Clancy

Lyn Clancy
Managing Associate General Counsel & Senior Water Policy Advisor

Attachment

cc: Robin Smith, TCEQ
Kim Wilson, TCEQ
Karen Bondy, LCRA

LCRA Proposed Edits to Draft Order
August 17, 2015

Proposed Amendments to Findings of Fact

Finding of Fact No. 1:

LCRA filed another revision to its application on May 21, 2015 to ~~amend the part of its application related to removing from the WMP those elements of LCRA's Raw Water Drought Contingency Plans that are required by TCEQ's rules in 30 Tex. Admin. Code Chapter 288 but not required by prior WMP orders.~~ include its Firm Raw Water Drought Contingency Plan (Firm Customer DCP) in the WMP.

Finding of Fact No. 2:

The WMP for the Lower Colorado River Basin defines LCRA's water management program and policies in accordance with the 1988 Final Judgment and Decree, *In re the Exceptions of the Lower Colorado River Authority and the City of Austin to the Adjudication of Water Rights in the Lower -Colorado River Segment of the Colorado River Basin;* the Enabling Act of the Lower Colorado River Authority; general Law of the State of Texas, particular the Texas Water Code; LCRA's Certificates of Adjudication Nos. 14-5478 and 14-5482, as amended; the Commission's Orders concerning the WMP; and the ~~water~~ policies of the Lower Colorado River Authority's Board of Directors. The LCRA's original and amended and supplemental applications were filed as allowed by these authorities.

Finding of Fact No. 14:

LCRA's proposed revisions to its curtailment policies and procedures are intended to ensure that LCRA can satisfy current and projected firm demands during drought conditions, ~~in part by maintaining a higher minimum storage level through a repeat of a drought of record than was maintained in previous WMPs~~ and to ensure that, in simulations of this WMP, LCRA's release of interruptible stored water does not result in combined storage dropping to the Drought Worse than Drought of Record (DWDR) storage trigger (currently 600,000 acre-feet). LCRA's curtailment methods have been found to be an acceptable approach in earlier Commission orders. The use of various rule curves and procedures continues to be an acceptable approach for addressing the allocation of interruptible stored water because this approach will allow LCRA to be responsive to changes in water supply conditions throughout the year while protecting firm demands.

Finding of Fact No. 17:

The modeled simulations of the proposed curtailment procedures demonstrate that firm customer demands can be met through a repeat of the entire period of record, 1940-2013, including through a repeat of the Drought of Record, which is defined as the drought of the 1940s and 50s for ~~the 2014~~ this WMP, and combined storage in Lakes Travis and Buchanan is maintained above 600,000 acre-feet.

Finding of Fact No. 29:

LCRA's DCP, as required by commission rules (30 Texas Administrative Code §§ 288.20 et seq.), was approved by the LCRA Board of Directors and submitted to the commission in June 2010. In

December of 2011, the commission approved LCRA's Water Curtailment Plan for its firm customers. Under current commission rules, the DCP must be reviewed and updated as necessary every five years. Consistent with the requirements of Chapter 288, in February, 2012 and May, 2015, the LCRA Board approved modifications to the DCP including changes in drought response measures for firm water customers and changes in the allocation procedures for interruptible water customers. Changes to the LCRA Firm Customer DCP adopted by the Board in May 2015 and included in Appendix F of the WMP are incorporated into Chapter 4 of the WMP by reference for all purposes as if set forth in Chapter 4 in full and will become effective upon adoption of this WMP. Further revisions to the Interruptible DCP will be needed to ensure consistency with the amended WMP and prior to LCRA supplying interruptible stored water under the amended WMP. LCRA intends to publish its Interruptible DCP as a stand-alone document, once revised.

Proposed Amendments to Conclusions of Law

Conclusion of Law No. 1:

The commission considered this order under the authority and in accordance with Chapter 11 of the Texas Water Code, as amended and 30 Texas Administrative Code ("TAC") Chapter 295; the 1988 Final Judgment and Decree, In re the Exceptions of the Lower Colorado River Authority and the City of Austin to the Adjudication of Water Rights in the Lower Colorado River Segment of the Colorado River Basin; the Enabling Act of the Lower Colorado River Authority; LCRA's Certificates of Adjudication Nos. 14-5478 and 14-5482, as amended; the Commission's Orders concerning the WMP; and the ~~water~~ policies of the Lower Colorado River Authority's Board of Directors.

Proposed Amendments to Ordering Provisions:

Ordering Provisions 1.a. and 1.b.:

a. LCRA's amended Water Management Plan is subject to all findings, conclusions, and conditions contained in the Commission's Orders dated September 20, 1989, December 23, 1991, December 18, 1992, March 1, 1999, and January 27, 2010 approving and amending the WMP, ~~except~~ to the extent not inconsistent with this order.

b. LCRA's amended Drought Management Plan including LCRA's amended Drought Contingency Plan is subject to all findings, conclusions, and conditions, contained in the commissions' September 20, 1989, December 23, 1991, December 18, 1992, March 1, 1999, and January 27, 2010 Orders and the LCRA's December 7, 2011 commission approved Water Curtailment Plan, ~~except~~ to the extent not inconsistent with this order.

Ordering Provision 1.d.:

LCRA shall conform the text of the Water Management Plan to be consistent with the provisions of this Order, specifically to conform to Findings of Fact numbers 15.s, ~~and~~ 15.t, and 29. The Findings of Fact provide a summary of many of the provisions in LCRA's revised and supplemental WMP application. With the exception of the Findings of Fact noted above, in the event of a conflict between the more general language in the Findings of Fact and the specific language in the WMP application, the WMP application language controls.

Ordering provision 1.f:

f. LCRA shall initiate a process to update the Water Management Plan ~~no later than~~ on the earlier of January 1 ~~December 31~~, 2018 or one year from any of the following occurrences:

Add new Ordering Provision 1.h:

h. LCRA's application to amend the WMP required by this Order must include naturalized streamflow data as follows:
   i) an update initiated prior to January 1, 2018 shall use data updated through 2015; or
   ii) an update initiated on January 1, 2018 shall use data updated through 2016.

CARLS, McDONALD & DALRYMPLE, LLP
ATTORNEYS AT LAW

REVIEWED H
MAY 24 2013
By

May 24, 2013

WR 82315

VIA HAND DELIVERY
Ms. Bridget C. Bohac
Chief Clerk MC 105
Texas Commission on Environmental Quality
Building F
12100 Park 35 Circle
Austin, TX 78753

RE: Water Rights Application No. 5838A of the Lower Colorado River Authority for an Amendment to Permit No. 5838 and Certificates of Adjudication Nos. 14-5478 (as amended) and 14-5482 (as amended)

Dear Ms. Bohac:

Please accept for filing the original and eight (8) copies of the attached Request for Contested Case Hearing and Public Comments filed by the Highland Lakes Firm Water Customer Cooperative. Please file-stamp and return one (1) copy to the awaiting courier.

Thank you for your prompt attention to this matter. If you have any questions or need additional information please do not hesitate to contact me at (512) 623-5431.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
2013 MAY 24 PM 2:42
CHIEF CLERKS OFFICE

Sincerely,
CARLS, McDONALD & DALRYMPLE, LLP

By: Patricia Erlinger Carls

Attachment

BARTON OAKS PLAZA I, 901 SOUTH MOPAC EXPRESSWAY, SUITE 280, AUSTIN, TEXAS 78746 P| 512.472.4845 F| 512.472.8403

IN RE: WATER RIGHTS APPLICATION NO. 5838A OF THE LOWER COLORADO RIVER AUTHORITY FOR AN AMENDMENT TO PERMIT NO. 5838 AND CERTIFICATES OF ADJUDICATION NOS. 14-5478 AND 14-5482, AS AMENDED	§ § § § § § §	**BEFORE THE** **TEXAS COMMISSION ON** **ENVIRONMENTAL QUALITY**

HIGHLAND LAKES FIRM WATER CUSTOMER COOPERATIVE'S REQUEST FOR CONTESTED CASE HEARING AND PUBLIC COMMENTS

TO THE HONORABLE MEMBERS OF THE COMMISSION:

The Highland Lakes Firm Water Customer Cooperative ("**HLFWCC**") hereby requests a contested case hearing on the above-referenced water rights permit application of the Lower Colorado River Authority ("**LCRA**"). Contact information for the HLFWCC is provided below:

2013 MAY 24 PM 2: 47
CHIEF CLERKS OFFICE
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Earl Foster, Chair
Highland Lakes Firm Water Customer Cooperative
c/o Lakeway Municipal Utility District
1097 Lohmans Crossing
Lakeway TX 78734
Tel: (512) 261-6222 x140
Fax: (512) 261-6681

HLFWCC has authorized the undersigned to receive all correspondence and notices on its behalf regarding the LCRA application and this request for a contested case hearing.

I. BACKGROUND

On March 12, 2012, LCRA submitted an application for an amendment to a water right for Permit No. 5838 and Certificates of Adjudication Nos. 14-5478 (as amended) and 14-5482 (as amended) (collectively, the "**Certificates of Adjudication**") seeking to amend its Water Management Plan ("**WMP**"), which is LCRA's plan for operating lakes Buchanan and Travis required by court order in *In Re: The Exceptions of the Lower Colorado River Authority and the City of Austin to the Adjudication of Water Rights in the Lower Colorado River Segment of the Colorado River Basin*, No. 115,414-A-1, D.C. Bell County, April 20, 1988 (the "**1988 Court Order**"), and by the Certificates of Adjudication issued pursuant to the 1988 Court Order. LCRA's permit application, submitted on March 12, 2012, and subsequently amended or revised in response to TCEQ comments, has been designated by the TCEQ as Water Rights Application No. 5838A and is referred to herein as the "**WMP Application.**" Notice of the WMP Application was last published on April 25, 2013. Therefore, this filing is timely inasmuch as it is submitted within thirty (30) days of the date of the last newspaper publication of the notice. *See* 30 Tex. Admin. Code § 55.251(d).

II. THE WMP APPLICATION

The initial WMP was approved by the Commission in 1989, and amendments to the WMP were approved by the Commission in 1991, 1992, 1999, and 2010. The WMP Application currently pending before the Commission requests numerous changes to the WMP that significantly affect the rights of LCRA's firm water customers, as described in more detail below. In general, the requested amendments

include changes to water availability and curtailment policies; implementation of a phased approach for curtailment policies; making a new determination of combined storage for Lakes Travis and Buchanan; and changing the procedures for supplying water for instream flow needs.

III. THE HLFWCC

The HLFWCC is a group or association formed pursuant to that certain "*Interlocal Cooperation Agreement Regarding the Creation of the Highland Lakes Firm Water Customers Cooperative*," dated to be effective on or about March 13, 2013 (Exhibit A) by and among several municipalities, special districts, a public utility agency, that each have contracts with LCRA for firm, non-interruptible water supplies. The water provided under these contractual commitments originates in whole or in part from water rights held by LCRA under the Certificates of Adjudication. As of the date of this filing, the following seven governmental entities are members of the HLFWCC and they have contracts with LCRA for the amounts of firm, non-interruptible water shown in the following chart:

HLFWCC Member Entity	**LCRA Raw Water Contract Number and/or Contract Date**	**Firm, Uninterruptible Water Contract Amount (acre/feet/year)**
City of Burnet	March 1, 1986, as amended	4,100
City of Cedar Park	June 13, 2001	18,000
City of Leander	August 21, 2007	24,000
City of Pflugerville	Sept. 25, 2002	12,000
Lakeway MUD	July 24, 2008	3,069
Travis County WCID No. 17	June 26, 2003	554 (recreational)
Travis County WCID No. 17	May 23, 2001	8,800 (municipal)
West Travis County Public Utility Agency	EDMS ID 800-019-2092/ April 30, 2012	450 (irrigation)
West Travis County Public Utility Agency	EDMS ID 800-019-2091/ April 30, 2012	9,000 (municipal)
TOTAL		**79,973**

Collectively, these member entities of HLFWCC have contracts for 79,973 acre-feet of firm, non-interruptible water per year, or approximately 22 % of the total amount of firm, non-interruptible water that the LCRA has under contract.[1] The member entities of the HLFWCC rely solely or primarily on their contracted firm water rights for their municipal water supply. As such, the HLFWCC members would be devastated if their sole or primary water supply source is restricted or eliminated by the LCRA's actions as is contemplated by the WMP Application. The WMP is the document that dictates how LCRA will manage the competing interests of its firm, non-interruptible water supply customers and its non-firm, interruptible water supply customers.[2] Firm water customers have superior rights over interruptible

[1] The firm water contracts are on file with the TCEQ pursuant to 30 Tex. Admin. Code §§ 297.101 and 295.101 and are a matter of public record. Copies of the contracts will be provided upon request.

[2] The rights of "firm water" customers cannot be cut off or curtailed by LCRA in a drought, and LCRA is required to meet the demands from its firm water customers 100% of the time, without shortage, during repeat of the Drought of Record. In contrast, the rights of "interruptible water" customers can be cutoff or curtailed by LCRA in a drought or if the firm water contracts cannot be satisfied. *See "Order Approving Lower Colorado River Authority's Water Management Plan and Amending Certificates of Adjudication Nos. 14-5478 and 14-5482"* (Sept. 7, 1989) (the **"1989 WMP Order"**) at Findings of Fact Nos. 81 and 82, p. 15.

water customers to stored water in the Highland Lakes pursuant to 1988 Court Order, which states in pertinent part:

> LCRA **shall** interrupt or curtail the supply of water under this certificate [Certificate of Adjudication No. 14-5478] or under Certificate of Adjudication 14-5482 pursuant to commitments that are specifically subject to interruption or curtailment, to the extent necessary to allow LCRA to satisfy **all** demands for water under such certificates pursuant to all firm, non-interruptible commitments. Commitments to supply water on a non-firm, interruptible basis may be interrupted or curtailed as necessary either on a pro rata basis or in accordance with a system of priorities, as may be set forth in various contracts and resolutions that define such commitments.[3]

The contract water rights belonging to holders of LCRA's firm, non-interruptible water contracts such as members of the HLFWCC are directly affected by the WMP Application and it is these rights and interests that HLFWCC seeks to protect by participating in a contested case hearing on the WMP Application.

IV. CONTESTED CASE HEARING REQUEST

A. HLFWCC is an Affected Person

HLFWCC is an "affected person" within the meaning of the applicable Commission rules and is entitled to request a contested case hearing. *See* 30 Tex. Admin. Code §§ 295.171 - .172, 55.251, .256. First, HLFWCC is an organized group or association (*see* Section IV.B, below) whose members have "a personal justiciable interest related to a legal right, duty, privilege, power or economic interest affected by the application." *See* 30 Tex. Admin. Code § 55.256(a). As stated above, HLFWCC's members each have long-term contracts with LCRA for a firm, non-interruptible supply of water from the Highland Lakes on the Colorado River.[4] HLFWCC's interests are to ensure that the WMP Application requires LCRA to manage water in the Highland Lakes such that the demands of HLFWCC members under their contract water rights are met 100% of the time without shortage through a Drought of Record, and that LCRA's releases of water from storage in the Highland Lakes for the benefit of its downstream non-firm, interruptible water customers do not impair LCRA's ability to meet its contractual water supply commitments to HLFWCC members as firm, non-interruptible water customers, as is required by the 1988 Court Order, the Certificates of Adjudication, the Commission's prior orders pertaining to the WMP, Permit No. 5838, Texas Water Code § 11.301 et seq., and Chapters 295 and 297 of the Commission's rules. HLFWCC's interest is also in ensuring that water management practices set forth in the WMP Application do not increase the likelihood of LCRA declaring a Drought Worse Than the Drought of Record, which would force firm, non-interruptible water supply customers such as HLFWCC members to have their contract water rights curtailed. Because they are holders of firm, non-interruptible water supply contracts that would be substantially affected by the WMP Application, the interests of the

[3] *See* 1988 Court Order, at Finding No. 25(g) p. 10 and Conclusion of Law 4(g) p. 15 (Lake Buchanan); Finding No. 32(g) p. 37 and Conclusion of Law 6(g) p. 42 (Lake Travis); Certificate of Adjudication No. 14-5478 at para. (7), p. 4; Certificate of Adjudication No. 14-5482 at para. (7), p. 4. *See also,* Finding of Fact No. 19(f) at p. 5 (Lake Buchanan), and Finding of Fact No. 26(f) at p. 32 (Lake Travis) ("The supply of stored water pursuant to non-firm interruptible commitments should be interrupted or curtailed to the extent necessary to allow LCRA to satisfy all existing and projected demands for stored water pursuant to all firm, uninterruptible commitments.")

[4] The 1988 Court Order and LCRA's Certificates of Adjudication require LCRA to document its "commitments" to supply water in written contracts. *See* 1988 Court Order, at Finding No. 25(c) p. 9 and Conclusion of Law 4(c) p. 14 (Lake Buchanan); Finding No. 32(c) p. 36 and Conclusion of Law 6(c) p. 41 (Lake Travis); Certificate of Adjudication No. 14-5478 at para. (3), p. 3; Certificate of Adjudication No. 14-5482 at para. (3), p. 3. The members of HLFWCC are some of the holders of these contractual commitments for firm, non-interruptible water.

members of the HLFWCC will be affected by the WMP Application in a manner not common to members of the general public. HLFWCC members provide public water supply to an estimated 225,000 people, thousands of businesses, and to public and private institutions. The socio-economic impact on HLFWCC members resulting from impairment by LCRA of their firm, non-interruptible contract water rights could be hundreds of millions of dollars and would cause a direct adverse impact of public health, safety and welfare. Therefore, the members of the HLFWCC have a personal justiciable interest in ensuring that their contract water rights to a firm, non-interruptible supply of water from the Highland Lakes are protected and are not negatively affected or impaired by the water management policies and procedures governing LCRA's administration of contract water rights as set forth in the WMP Application.

Second, HLCWCC's members are governmental entities with authority under state law over issues affected by the WMP Application. For example, the special districts that are members of the HLFWCC are conservation and reclamation districts created pursuant to Article III Section 52 or Article XVI Section 59 of the Texas Constitution and operate pursuant to Texas Water Code Chapters 49, and 51 or 54. Each of the districts has authority under Texas Water Code § 49.211 to supply or store water for use inside and outside its boundaries. Each district is located immediately adjacent to the Colorado River and/or a tributary thereof. These districts are governed by a board of directors that is elected by its residents. The WTCPUA, another HLFWCC member, is a public utility agency governed by Chapter 572 of the Texas Local Government Code, and it is authorized under that statute to conserve, store, transport, treat, or distribute water. Similarly, all of the municipalities that are members of the HLFWCC have jurisdiction over water matters as provided by Chapter 552 of the Texas Local Government Code, and as provided in their charters and ordinances. Each city is located either immediately adjacent to the Colorado River and/or a tributary thereof, or receives its contracted water from pipelines and other infrastructure located in the Colorado River or the Highland Lakes. The municipalities are governed by council members who are elected by its residents. Therefore, as a group or association whose members include governmental entities having authority under state law over issues contemplated by the WMP Application, the HLFWCC is an affected person. *See* Tex. Admin. Code § 55.256(b) and (c)(6).

Third, the interests claimed by HLFWCC are interests protected by the law. HLFWCC's interests are rooted in the 1988 Order and the Certificates of Adjudication, and have been affirmed in the prior Commission orders relating to the WMP. As previously noted, LCRA is obligated under the 1988 Order and the Certificates of Adjudications to meet the demands of its firm, non-interruptible water supply customers 100% of the time without shortage through a repeat of the conditions in the Drought of Record. In the Commission's most recent order approving modifications to the WMP, the Commission expressly required LCRA to submit an application for further amendments to the WMP addressing, "curtailment procedures to ensure that LCRA can satisfy projected firm customer demand should intense drought conditions such as those experienced over the past several decades recur."[5] The WMP Application is LCRA's effort to comply with the 2010 WMP Order. This order requiring LCRA to "ensure that LCRA can satisfy projected firm customer demand" is an express recognition by the Commission that the rights of firm water customers are recognized and protected by law. Therefore, by ordering LCRA to modify the WMP to address the demands of firm customers during "intense drought conditions," the Commission has expressly acknowledged that the rights of firm water customers are rights affected by the WMP Application and that those rights are within the jurisdiction of the Commission.[6] For these reasons, the

[5] *See* "*Agreed Order Approving Amendments to the Lower Colorado Rivery Authority's Water Management Plan*," Order Provision #1(f)(1) and (2), p. 8 (Jan. 27, 2010) (the "**2010 WMP Order**").

[6] *See* Order Approving Lower Colorado River Authority's Water Management Plan and Amending Certificates of Adjudication Nos. 14-5478 and 14-5482," Order Provision # (1)(n) (Sept. 20, 1989) (the "**1989 WMP Order**"). The 1989 WMP Order remains in full force and effect, except as to provisions that were specifically amended by subsequent Commission orders. *See, e.g.*, 2010 WMP Order, at Ordering Provision #1(a). In addition, the 1989

members of HLFWCC have an interest in the WMP Application that is protected by the law under which the application will be considered. *See* 30 Tex. Admin. Code § 55.256(c)(1).

Fourth, as explained above, there is a reasonable relationship between the interests of the members of HLFWCC as holders of firm, non-interruptible water supply contracts whose full demands must be met 100% of this time without shortage through a repeat of the Drought of Record, and LCRA's management of the water supply as set forth in the WMP Application in a manner that ensures that the rights of firm water supply customers are met. *See* 30. Tex. Admin. Code § 55.256(c)(3). The WMP forms the basis by which LCRA determines how much and when water is released from storage in the Highland Lakes downstream to LCRA's non-firm, interruptible water users. Not only do these non-firm, interruptible water customers pay pennies on the dollar compared to the price paid by firm, non-interruptible water customers, but releases of water from storage for the benefit of non-firm, interruptible customers directly affects the interests of HLFWCC members as holders of firm, non-interruptible water supply customers. Any water released from storage in the Highland Lakes is water that is no longer available to firm, non-interruptible water supply customers such as members of the HLFWCC. Therefore, there is a reasonable relationship between the interests of HLFWCC members as firm water supply customers and management of the water supply in the Highland Lakes as contemplated by the WMP Application.

Fifth, there is a significant likely adverse impact of the regulated activity (*i.e.*, adoption of the WMP Application as proposed) on the health, safety, and use of property by members of the HLFWCC because the WMP Application does not require LCRA to adequately curtail non-firm, interruptible water commitments; therefore, the WMP Application does not adequately mitigate the adverse effects on HLFWCC's members resulting from LCRA's releases of water from the Highland Lakes for the benefit of its non-firm, interruptible water supply customers. An example from the current WMP illustrates this point: in 2011, LCRA released approximately 433,000 acre-feet of water from storage in the Highland Lakes for the benefit of non-firm, interruptible water users pursuant to the provisions of the WMP then in effect. The WMP called for even more releases to occur. However, LCRA sought and was granted an emergency order authorizing it to halt additional releases to non-firm, interruptible users because LCRA's modeling showed that making further releases would increase the likelihood of LCRA having to declare a Drought Worse Than the Drought of Record. In other words, but for the Emergency Order, LCRA would have followed the WMP, released even more water from the Highland Lakes, and thus possibly triggered a declaration of a Drought Worse Than the Drought of Record and forcing curtailments of firm customer rights that would otherwise not have been required. The pending WMP Application contains similar defects, and similar unacceptable results can be expected. LCRA's modeling supporting the WMP Application confirms that what happened in 2011 under the current WMP (excessive releases to downstream non-firm, interruptible water users) is predicted to occur again under the WMP Application. If approved, the WMP Application could compel releases of water by LCRA from the Highland Lakes to non-firm interruptible water supply users, causing further dramatic reductions in lake levels and possibly impairing LCRA's ability to meet 100% of the demands without shortage from its firm, non-interruptible water supply customers during a repeat of the conditions in the Drought of Record, and even possibly *trigger* declaration of a Drought Worse Than the Drought of Record. Therefore, there would be irreversible adverse impacts on the health, safety, public welfare, and use of property of HLFWCC members.

In addition, the HLFWCC member entities have invested significant amounts of capital to pump, transport, and treat water from the Highland Lakes under their respective water supply contracts, and

---

Order also says that, "The Commission retains jurisdiction to resolve any and all disputes regarding the allocation of stored water from Lakes Travis and Buchanan, notwithstanding the procedures and guidelines set forth in the Water Management Plan."

those costs have increased substantially as lake levels have dropped. *See* Tex. Admin. Code § 55.256(c)(4). For example, collectively, HLFWCC members including Cedar Park, Leander, Travis County WCID # 17, and Lakeway MUD have spent approximately $8.0 Million to relocate their raw water intakes further out into the deeper part of Lake Travis. Those intake facilities had to be relocated because LCRA's excessive releases of water to downstream non-firm, interruptible customers caused lake levels to decline to such low levels that it impeded or prevented diversion from the then-current intake locations.

Sixth, for all of the reasons detailed herein, there is an adverse impact of the practices that LCRA seeks to have the Commission approve in the WMP Application on the rights of firm, non-interruptible water supply customers such as those who are members of HLFWCC. Water released by LCRA from the Highland Lakes to its non-firm, interruptible customers is, by definition, water that is not available to LCRA's firm, non-interruptible water supply customers such as members of HLFWCC. The protocols set forth in the WMP Application for releasing water from the Highland Lakes to non-firm, interruptible customers impairs the ability of LCRA to fully meet its commitments to firm, non-interruptible customers such as members of the HLFWCC and is contrary to the 1988 Court Order, the Certificates of Adjudication, and the Commission's prior orders pertaining to the WMP. *See* 30 Tex. Admin. Code § 55.256(c)(5).

For all of the reasons set forth herein, HLFWCC is an "affected person" within the meaning of the applicable TCEQ rules, namely, 30 Tex. Admin. Code §§ 55.252 and 55.256, and it is entitled to request a contested case hearing in this matter.

B. HLFWCC meets the requirements applicable to requests for a contested case hearing by a group or association.

In addition to meeting all of the requirements demonstrating that it is an "affected person" within the meaning of the applicable Commission rules, HLFWCC meets the all of the requirements set forth in 30 Tex. Admin. Code § 55.252(a) applicable to groups or associations and is entitled to request a contested case hearing as a group or association.

(1) One or more members of the HLFWCC would otherwise have standing to request a hearing in their own right.

If the WMP Application is approved, each individual member of HLFWCC, as a firm water customer entitled to have its water supply demands met 100% of the time without shortage through a repeat of the Drought of Record, would suffer injuries from the release by LCRA of stored water from the Highland Lakes to downstream, non-firm, interruptible LCRA customers. As of the date of this filing, the following governmental entities are members of the HLFWCC and would have standing individually inasmuch as they each have long-term firm, non-interruptible water supply contracts with LCRA to receive water from the Highland Lakes for the amounts shown below:

HLFWCC Member Entity	LCRA Raw Water Contract Number and/or Contract Date	Firm, Uninterruptible Water Contract Amount (acre/feet/year)
City of Burnet P.O. Box 1369 1001 Buchanan Drive, Suite 4 Burnet, TX 78611	March 1, 1986, as amended	4,100

(512) 756-6093		
City of Cedar Park 450 Cypress Creek Road Cedar Park, Texas 78613 (512) 401 - 5000	June 13, 2001	18,000
City of Leander City Hall 200 W. Willis Leander, TX 78641 (512) 528-2700	August 21, 2007	24,000
City of Pflugerville 100 East Main Street Pflugerville, Texas 78691 (512) 990-6101	Sept. 25, 2002	12,000
Lakeway MUD 1097 Lohmans Crossing Lakeway, TX 78734-4459 (512) 261-6222	July 24, 2008	3,069
Travis County WCID No. 17 3812 Eck Lane Austin, TX 78734 (512) 266 1111	June 26, 2003	554 (recreational)
Travis County WCID No. 17	May 23, 2001	8,800 (municipal)
West Travis County Public Utility Agency 12117 Bee Cave Road Building 3, Suite 120 Bee Cave, Texas 78738 (512) 263-0100	EDMS ID 800-019-2092/ April 30, 2012	450 (irrigation)
West Travis County Public Utility Agency	EDMS ID 800-019-2091/ April 30, 2012	9,000 (municipal)
TOTAL		**79,973**

Each and every member of the HLFWCC would be affected individually by approval of the WMP Application and each meets the criteria to be an affected person for the reasons discussed in Section IV.A., above.

(2) the interests the HLFWCC seeks to protect are germane to its purpose.

The express purpose of HLFWCC is:

. . . aiding, assisting, and acting on behalf of the Local Governments in the performance of their governmental functions, promoting the common good and general welfare within the areas of the Local Governments, their water customers, and their neighboring areas; and assisting the Local Governments to preserve valuable rights. It is a specific purpose of this Agreement to establish a group of firm water supply customers of LCRA having the authority to organize, finance, participate in, and act on behalf of the Cooperative on all LCRA water-related topics and proceedings, including but not limited to proceedings relating to the LCRA's WMP, ..."[7]

[7] *See* Exhibit A, Interlocal Agreement at § 1.02.01.

The HLFWCC Steering Committee has unanimously voted to request a contested case hearing on the WMP Application. *See* Exhibit B, Resolution of Steering Committee. Each of the member entities of the Steering Committee of the HLFWCC have also voted to support the Steering Committee's request for a contested case hearing. *See* Exhibit C, Resolutions of Steering Committee's Member Entities. Therefore, the interests of that HLFWCC seeks to protect on behalf of its members by participating in a contested case hearing are germane to the HLFWCC's purpose.

(3) neither the claim asserted nor the relief requested requires the participation of the individual members in the case.

The HLFWCC is not seeking damages in this proceeding, but is seeking the type of prospective relief approved by the court in *Hunt v. Washington State Apple Adver. Comm'n*, 432 U.S. 333, at 343 (1977)[8] which does not require the participation of the individual members of HLCWCC in the case. HLFWCC, through its Steering Committee, is capable of and expressly authorized to represent all of the individual members of the HLFWCC in this case. *See* Exhibit B, Interlocal Agreement, § 2.01.01; and Exhibit C, Resolutions of Member Entities. HLFWCC has full access to information about the water supply of its member entities. It is less burdensome for the HLFWCC to participate as a party in any proceeding involving the WMP Application than for its individual members to do so.

V. PUBLIC COMMENTS

The WMP Application does not adequately protect the rights of firm water supply customers and thus does not comply with 1988 Order or Certificates of Adjudications. LCRA is mandated to develop the WMP by the 1988 Order and the Certificates of Adjudication. A fundamental purpose of the WMP is to protect the rights of LCRA's firm, non-interruptible water supply customers. The nature of the rights held by firm water supply customers is framed in the definitions of "firm demand" and "firm water." The term "firm demand" is defined (in pertinent part) by the 1989 WMP Order as follows: "A "firm" demand is a contractual obligation or other commitment of LCRA's which must be met 100% of the time through the drought of record."[9] The WMP Application defines the term "firm water" consistently with this definition, as follows: "Firm water – a supply of water that is to be made available without shortage through a repeat of the Drought of Record."[10] Thus, a key purpose of the WMP is to manage the Highland Lakes such that the rights of firm water supply customers are protected and available 100% of the time without shortage during a repeat of the conditions of the Drought of Record. In other words, a key purpose of the WMP is to require LCRA to manage water in the Highland Lakes such that there is no interruption or curtailment of firm water supply customers during repeat of the conditions that occurred during the Drought of Record. Nonetheless, the modeling information accompanying and associated with the development of the WMP Application predicts that, if the procedures in the WMP Application are followed, the releases by LCRA of water stored in the Highland Lakes to satisfy demands of non-firm, interruptible water customers will actually cause the combined storage in the Highland Lakes to drop to levels that would force curtailment of water to firm, non-interruptible water supply customers. In effect,

[8] "[W]hether an association has standing to invoke the court's remedial powers on behalf of its members depends in substantial measure on the nature of the relief sought. If in a proper case the association seeks a declaration, injunction, or some other form of prospective relief, it can reasonably be supposed that the remedy, if granted, will inure to the benefit of those members of the association actually injured." *See Hunt v. Washington State Apple Adver. Comm'n*, 432 U.S. 333, at 343 (1977), cited with approval by the Texas Supreme Court in *Texas Ass'n of Bus. v. Texas Air Control Bd.*, 852 S.W.2d 440, at 447 (Tex. 1993).

[9] *See* 1989 WMP Order, at Finding of Fact No. 81, p. 15.

[10] *See* WMP Application at p. ES-10.

the WMP Application is a blueprint for allowing or requiring LCRA to manage the Highland Lakes right into the same levels as were experienced during the Drought of Record, or even into a Drought Worse Than the Drought of Record. This is a violation of the 1988 Order and the Certificates of Adjudication.

The WMP Application also fails to recognize and account for the fact that the effects of releases by LCRA of water from storage in the Highland Lakes for the benefit of non-firm, interruptible water supply users have persistent detrimental effects on the rights of firm, non-interruptible water supply customers. The low lake levels in 2013 are due in large part to the 2011 releases by LCRA of approximately 433,000 acre-feet of water to its non-firm, interruptible customers under the then-current WMP. Even though no water has been released since then to satisfy the demands of non-firm, interruptible water supply customers, the combined storage of the Lakes Travis and Buchanan is still not anywhere near the pre-release levels and, as such, the firm, non-interruptible water supply customers face possible curtailment in the next few months as a direct result from LCRA's prior releases of water from storage to benefit non-firm, interruptible water users in violation of the 1988 Order and Certificates of Adjudication. Nonetheless, the WMP Application glosses over the current lake conditions and the fact that the firm, non-interruptible water supply customers are facing curtailment as if that information is not relevant to the present exercise of amending the WMP to be more protective of the rights of firm water supply customers. However, the current low-level lake conditions caused in great part by LCRA's release of water from storage for the benefit of its non-firm, interruptible customers and to the detriment of its firm, non-interruptible water supply customers, historically low inflow levels, and dire weather forecasts simply must be accounted for in the pending WMP Application. Otherwise, the WMP Application risks irrelevance and the Commission will be left to manage the Highland Lakes via emergency order.

In addition to ignoring current low lake level conditions caused by LCRA's releases to benefit its non-firm, interruptible water supply customers, the modeling and other analyses in the WMP Application is based on out-of-date data in that it does not include the last several years of low inflow and drought data. As LCRA's own data shows, inflows into the Highland Lakes in 2011 were the lowest on record and inflows for 2012 were the fifth lowest on record.[11] As of this writing, LCRA's latest drought information states that, "This year's dry weather has greatly reduced the flows in the Colorado River and other tributaries that feed the Highland Lakes. So far this year, inflows are comparable with 2011's, the lowest ever recorded, and the weather forecast doesn't offer much hope of relief any time soon."[12] LCRA is <u>required</u> by the 2010 WMP Order to include in the WMP Application procedures that address firm customer demand in intense drought conditions. If data about the most intense drought conditions since the Drought of Record is omitted, the WMP Application cannot be in compliance with the 2010 WMP Order, the 1988 Court Order, or the Certificates of Adjudication.

The WMP Application would also impose a new scheme for determining when and how much non-firm, interruptible water supplies must be curtailed in order to satisfy the demands of the firm, non-interruptible water supply customers. Although LCRA has used computer modeling to allegedly support its conclusion that firm water supply customers will be protected during a repeat of the Drought of Record, that modeling actually predicts negative impacts on the rights of firm water customers and shows that the rights of firm, non-interruptible water supply customers would <u>not</u> be protected during the Drought of Record, in violation of the 1988 Court Order and the Certificates of Adjudication. It is essential that HLFWCC be allowed the opportunity to formally question LCRA's modeling experts in order to protect the firm, non-interruptible contract water rights of its members.

---

[11] *See* LCRA's Brief and Attachments in Support of Application to Extend the Emergency Order Related to Water Management Plan (filed May 6, 2013), at 2.
[12] *See* http://www.lcra.org/

HLFWCC is further concerned that the WMP Application essentially seeks to grant LCRA the ability to manage the drinking water supply for over one million people either at its own discretion, or to manage by state-sanctioned "crisis management" methods, leaving HLFWCC members with little opportunity to protect their rights. "Self-policing" cannot be considered a reliable procedure for meeting LCRA's contractual commitments. Similarly, any WMP that relies on crises management (*i.e.*, emergency orders to halt releases of water from the Highland Lakes that would otherwise be required by the WMP) is evidence of the fact that the WMP Application is not conservative enough to protect the interests and rights of firm water customers. The WMP Application retains both of these flawed management concepts – self policing and reliance on crisis management. Proper planning must ensure that firm water supply customers can experience a repeat of the Drought of Record without curtailment, as required by the 1988 Court Order, the Certificates of Adjudication, the Commission's prior orders pertaining to the WMP, and state law. However, the WMP Application does not properly protect firm water supply customers through a repeat of the Drought of Record, and this s not consistent with the provisions of the 1988 Court Order or the Certificates of Adjudication. HLFWCC is also concerned that it will prove difficult, if not impossible, for HLFWCC's members to assess when their rights are being infringed upon until it is too late – water is released downstream and the public drinking water supply is endangered.

Water conservation practices that result in more water being left in the Highland Lakes by firm, non-interruptible water customers also cause adverse unintended consequences. Such water conservation practices increase the combined storage of the Highland Lakes, which may in turn require releases from lake storage to downstream non-firm, interruptible users, leaving the Highland Lakes at low drought or near-drought levels with less water available to the firm water customers. This is especially inappropriate because most firm water customers are forced by LCRA to pay a "reservation fee" for water they have not actually used but have a right to use under their contracts. In fact what happens is that LCRA collects the reservation fee as consideration for reserving in the Highland Lakes each firm water customer's "firm" water, but then resells that "reserved" firm water to downstream non-firm, interruptible water users, unjustly enriching LCRA but irreversibly harming the firm, non-interruptible water supply customers who cannot recover and use the water once it is released. Once LCRA releases water downstream of the Highland Lakes it is gone and cannot be replenished in its entirety until the Highland Lakes refill again, breaking a drought period. In essence, the WMP Application allows the LCRA to gamble, at the total expense and peril of firm, non-interruptible water supply customers, with water paid for and contracted for by the firm, non-interruptible water supply customers.

Finally, the WMP Application does not address the importance of lake levels as a function of combined storage and completely ignores the fact that members of HLFWCC face real limits on their ability to pump water as lake levels drop. For example, it is physically difficult and very expensive to pump water from the lakes under low water level conditions. Just in the past two years, several HLFWCC members have had to relocate their water intakes to deeper water, and relocate their raw water barges. As stated previously, those relocation costs to date total approximately $8.0 Million. As a practical matter, it may not be physically and/or economically possible to pump water from the Highland Lakes if they reach the low levels predicted by the WMP Application modeling.

The WMP Application is replete with statements and assumptions that the WMP Application is protective of firm water customers, but these statements and assumptions need to be tested and fully vetted in a contested case hearing. HLFWCC has not had an opportunity to conduct a more thorough review of the WMP Application or the draft order and so reserves the right to make additional comments and raise other issues, but the foregoing is a general overview of HLCWCC's areas of concern with the WMP Application. Because the WMP Application would directly and adversely affect the holders of firm water supply contracts such as member of the HLFWCC, HLFWCC hereby requests a contested case hearing.

VI. EXHIBITS

In addition to the WMP Application and other documents already on file with the Commission, HLFWCC relies on the following evidence in support of its Request for a Contested Case hearing and the same are incorporated herein for all purposes:

Exhibit A	Interlocal Cooperation Agreement Regarding the Creation of the Highland Lakes Firm Water Customers Cooperative
Exhibit B	Resolution of HLFWCC Steering Committee
Exhibit C	Resolutions of Member Entities Supporting HLFWCC Steering Committee

VII. PRAYER

For the reasons stated herein, and in compliance with the applicable statues and Commission rules, HLFWCC respectfully requests that the Commission:

1. Find that that HLFWCC is an "affected person" within the meaning of the applicable statutes and Commission rules;
2. Find that the HLFWCC has a personal justiciable interest affected by the WMP Application;
3. Grant HLFWCC party status; and
4. Direct the Chief Clerk to refer LCRA's WMP Application to the State Office of Administrative Hearings ("**SOAH**") for a contested case hearing.

Respectfully submitted,

Patricia Erlinger Carls
SBN: 03813425
Carls, McDonald & Dalrymple, LLP
901 S. MoPac Expressway
Building 1, Suite 280
Austin, TX 78746
Tel: (512) 623-5431
Fax: (512) 472-8403
Email: tcarls@cmcdlaw.com

ATTORNEYS FOR HLFWCC

INTERLOCAL COOPERATION AGREEMENT REGARDING THE CREATION OF "THE HIGHLAND LAKES FIRM WATER CUSTOMERS COOPERATIVE"

This Interlocal Cooperation Agreement (the "Agreement") is made to be effective on the 13th day of March, 2013 (the "Effective Date"), by and between each of the Local Governments who are signatories to this Agreement (collectively, the "Local Governments"). In this Agreement, the Local Governments are sometimes individually referred to as a "Party" and collectively referred to as the "Parties."

RECITALS

WHEREAS, each of the Local Governments is a "local government" within the meaning of Section 791.003(4) of the Texas Government Code;

WHEREAS, each of the Local Governments has a firm water supply contract with the Lower Colorado River Authority ("*LCRA*");

WHEREAS, the Local Governments recognize the importance of preserving a safe, firm, and reliable water supply and maintaining excellent water quality to benefit the health, economic, and recreational interests of their respective customers;

WHEREAS, on or about March 12, 2012 LCRA filed an application with the Texas Commission on Environmental Quality ("*TCEQ*") to amend its water rights permits and/or certificates of adjudication to include a revised Water Management Plan ("*WMP*"), which is LCRA's plan for operating Lake Buchanan and Lake Travis to meet water needs throughout the Lower Colorado River Basin;

WHEREAS, LCRA has also applied to the TCEQ for emergency relief from the requirements of the current (2010) WMP and the 2011 emergency orders related to the WMP;

WHEREAS, the Local Governments desire to participate in all proceedings before the LCRA, TCEQ, and any other court of competent jurisdiction or forum relating to the LCRA WMP, as well as in all other proceedings involving LCRA's water rights and/or certificates of adjudication in order to fully protect all of the interests of the Local Governments and their respective customers;

WHEREAS, the Local Governments also desire to work together on other Water Matters (herein defined) that may arise from time to time;

WHEREAS, the Local Governments have determined that it is more effective and efficient to coordinate and collaborate with other similarly situated entities with regard to Water Matters;

WHEREAS, the Local Governments acknowledge by executing this agreement that each of them waive any legal conflict of interest as between each other, and have been provided, in writing, with an honest attempt by legal counsel at providing full and complete disclosure of

potential conflicts of interest, including the reasons for the conflict rule and the consequences of both waiving and not waiving the possible conflicts of interest;

WHEREAS, this agreement constitutes a written consent to waive such conflicts to permit the joint representation of the Local Governments and constitutes a Joint Defense Agreement as provided by law between the Local Governments for the purposes of this engagement of legal services;

WHEREAS, the Local Governments have been encouraged to seek independent legal counsel as to whether to waive the conflict;

WHEREAS, the Local Governments have engaged their own independent legal counsel as to the value and consequences of waiving any conflict of interest and desire to engage into this Interlocal Cooperation Agreement and establish a Joint Defense Agreement between the Parties; and,

WHEREAS, the Local Governments therefore support the creation of a Cooperative of LCRA firm water supply customers for the purposes of participating in planning activities and legal proceedings related to Water Matters as may be necessary to create and preserve a safe, firm and reliable water supply.

NOW, THEREFORE, the Parties agree as follows:

I. CREATION AND PURPOSE OF THE HIGHLAND LAKES FIRM WATER CUSTOMERS COOPERATIVE

1.01 The foregoing recitals are hereby found to be true and correct and are hereby approved and adopted.

1.02 There is hereby, upon execution of this Agreement by five (5) of the Local Governments represented on the Steering Committee as listed in Section 2.01.01 of this Agreement, created the Highland Lakes Firm Water Customers Cooperative (the "*Cooperative*"). The purpose of this Interlocal Agreement is to allow the Local Governments to form a Cooperative to aid, assist, and act on behalf of the Local Governments in the performance of their governmental functions relating to public health and safety and to preserve valuable rights related to water supply by:

1.02.01 aiding, assisting, and acting on behalf of the Local Governments in the performance of their governmental functions, promoting the common good and general welfare within the areas of the Local Governments, their water customers, and their neighboring areas; and assisting the Local Governments to preserve valuable rights. It is a specific purpose of this Agreement to establish a group of firm water supply customers of LCRA having the authority to organize, finance, participate in, and act on behalf of the Cooperative on all LCRA water-related topics and proceedings, including but not limited to proceedings relating to the LCRA's WMP, permit and/or certificate of adjudication; drought contingency planning; water conservation planning; water supply projects (including new reservoir and groundwater development

projects); water rates and charges; joint water planning per Chapter 36 of the Texas Water Code and State Water Plan matters; and on any other water-related matters that the Steering Committee may determine to be appropriate and desirable to work on cooperatively, including any matter authorized by Section 791.026 of the Government Code (collectively, the "*Water Matters*");

1.02.02 appointing a Steering Committee, to serve as the administrative agency as provided for in Section 791.013 of the Government Code, for the purpose of exercising the powers granted to the Cooperative; and

1.02.03 authorizing the Steering Committee to retain, on behalf of the Cooperative, attorneys, consultants, and experts to assist and act on behalf of the Cooperative on Water Matters subject to the provisions of this Agreement.

1.03 It is expressly understood and agreed by the Parties that the purpose of this Agreement is to provide the Local Governments with an opportunity to work together on Water Matters and act collectively through the Cooperative. Except as expressly authorized herein, the Cooperative has no authority to act on behalf of, or represent any of the Local Governments.

II. ADMINISTRATION OF THE COOPERATIVE

2.01 The Local Governments agree that the Cooperative created pursuant to this Agreement shall be administered as follows:

2.01.01 All powers of the Cooperative shall be vested in a Steering Committee ("*Steering Committee*"). The Steering Committee shall be responsible for performing the activities authorized by and within the scope of **Section 1.02** of this Agreement and shall act on behalf of the Cooperative and the Local Governments. The following entities are hereby appointed as the initial members of the Steering Committee:

City of Burnet
City of Cedar Park
City of Leander
City of Pflugerville
Lakeway Municipal Utility District
Travis County Water Control & Improvement District No. 17
West Travis County Public Utility Agency

A Party having a member on the Steering Committee may change its designated representative on the Steering Committee by giving written notice to the Steering Committee. The Administrator (defined in **Section 2.01.10**) shall promptly notify the other Parties by one of the means set forth in **Section 5.07** of this Agreement.

2.01.02 The Steering Committee may adopt such operational procedures ("Procedures") as it sees fit to accomplish the purposes of this Agreement, provided that the Procedures shall not be inconsistent with this Agreement. The Steering Committee

shall establish a method to amend the Procedures, which shall be effective on adoption by the Steering Committee.

2.01.03 The Steering Committee Procedures may provide a means for changing the composition of the Steering Committee, provided that (a) the number of members on the Steering Committee shall not be less than five (5); and (b) the entity represented on the Steering Committee must have a firm water contract with LCRA and have the highest level of membership as provided for on **Table 1** of this Agreement, or as established by the Steering Committee from time-to-time ; and (c) a Steering Committee member may be removed by a majority vote of the Parties or a unanimous vote of the Steering Committee; and (d) the Steering Committee, by two-thirds affirmative vote, shall have the right to request a Party to change their Authorized Representative (defined in **Section 2.03.02** of this Agreement).

2.01.04 The Steering Committee may hold its meetings at such place or places within Central Texas as the Steering Committee may from time to time determine. All members of the Cooperative shall be entitled to notice of and shall be authorized to attend meetings of the Steering Committee.

2.01.05 The Steering Committee shall designate from among its members such officers as it may determine to be necessary to accomplish the purposes of the Cooperative, and each officer shall serve for the term and have the duties as may be set forth in the Procedures.

2.01.06 Actions of the Steering Committee may be considered and acted upon at a meeting of the Steering Committee at which a quorum of the Steering Committee is present, via video or audio conferencing, or email to all members of the Steering Committee. A majority of the members of the Steering Committee shall constitute a quorum. The act of a majority of the members of the Steering Committee shall constitute an act of the Cooperative, unless a greater number is required by this Agreement or the Steering Committee's Procedures.

2.01.07 Members of the Steering Committee, as such, shall not receive any salary or compensation for their services as members of the Steering Committee. Expense reimbursement, if any, shall be the sole responsibility of the Local Government appointing such Steering Committee member.

2.01.08 The Steering Committee may retain the professional services of attorneys, experts, and consultants to assist it in the performance of its responsibilities under this Agreement, who shall take their direction from the Steering Committee.

2.01.09 The Steering Committee, by two-thirds affirmative vote, may allow additional Local Government or other LCRA firm contract holders, not originally a party to this Agreement, to become members of the Cooperative by execution of an interlocal agreement, or contract, as approved from time to time.

2.01.10 The Steering Committee shall appoint an administrator (the "*Administrator*") to carry out the responsibilities as provided for herein. The initial Administrator shall be the general manager of the Lakeway Municipal Utility District. The Administrator must be a member of the Steering Committee and may be changed by two-thirds affirmative vote of the Steering Committee members that are not then serving as the Administrator. The Administrator shall have the duties assigned to the Administrator under this Agreement, and shall also be responsible for keeping all of the records of the Cooperative.

2.02 The Steering Committee shall not:

2.02.01 Have the authority to amend, alter, waive, renew or otherwise change any of the terms or conditions of any of the Local Governments' existing contracts with LCRA;

2.02.02 Take any actions other than those actions authorized by this Agreement; or

2.02.03 Incur any financial obligation, debt, or encumbrance in excess of funds collected pursuant to this Agreement.

2.03 The Local Governments shall:

2.03.01 Promptly review draft public comments, pleadings, correspondence and other documents and provide comments to the Steering Committee as soon as practicable; and

2.03.02 Designate one person to act as its authorized representative ("*Authorized Representative*"). A Party may change its Authorized Representative from time to time by providing written notice to the Administrator, who shall promptly notify the other Parties. The Authorized Representative shall be solely responsible for reporting to their Local Government, any actions taken by the Steering Committee under this Agreement.

2.03.03 Make any payments required under this Agreement out of current revenues in accordance with Section 791.011(d)(3) of the Government Code.

III. FINANCIAL OBLIGATIONS

3.01 Establishment of an Operating Fund. The Parties agree to establish a separate fund (the "*Operating Fund*") for the purpose of paying for the Operating Expenses (as defined in Section 3.03 of this Agreement). Lakeway Municipal Utility District, as the initial Administrator, will open an initial account for the Operating Fund at Chase Bank, N.A., and the initial signatories on the Operating Fund will be the general manager of Lakeway Municipal Utility District and the general manager of Travis County WCID #17. The depository at which the Operating Fund is held may be changed from time to time by the Administrator, provided that notice of such changes are reported to the Steering Committee. Signatories may be changed at any time by a majority vote of the Steering Committee.

3.02 Operating Fund Administration. The Administrator will have the responsibility and authority to establish the Operating Fund and to disburse funds from the Operating Fund in the manner and for the purposes set forth in this Agreement. All expenditures, including encumbrances, of funds must be approved by the Steering Committee in accordance with **Section 3.03** of this Agreement prior to issuing payment. The Administrator will have the duty to deposit all sums received from the Parties under this Agreement into the Operating Fund and to maintain proper books and records of the Operating Fund as provided for herein. The Operating Fund shall be kept separate and apart from all other accounts of the Administrator. The Party serving as Administrator will furnish a good and sufficient bond, or insurance coverage (which may be provided through the Texas Municipal League Intergovernmental Risk Pool). The cost of such insurance or bond will constitute an expense of the Cooperative. All sums on deposit in the Operating Fund will at all times either be insured by the Federal Deposit Insurance Corporation or collateralized in the manner required by Chapter 2257, Texas Government Code.

3.03. Uses of the Operating Fund. Subject to the provisions of this Agreement, the Operating Fund may be used by the Administrator to pay for Operating Expenses, which may include (i) legal fees, (ii) expert or consultant fees, (iii) court costs and filing fees, (iv) photocopy costs, (v) postage, courier or delivery charges, (iv) other costs and expenses deemed necessary by the Steering Committee ("*Operating Expenses*"). All Operating Expenses shall be approved by a majority vote of the Steering Committee, prior to incurring any encumbrance, or expenditure of funds. Each check, or payment, must bear two signatures: that of the Administrator and that of one other Steering Committee officer designated as a co-signer by the Steering Committee.

3.04. Accounting. The Administrator shall maintain complete books and records showing all deposits into and expenditures of any nature from the Operating Fund, which books and records shall be deemed complete if kept in accordance with generally acceptable accounting principles as applied to governmental entities in Texas. Such books and records shall be available for examination at the offices of the Administrator by the duly authorized officers or agents of the Parties during normal business hours upon request made not less than thirty (30) days prior to the date of such examination. The Administrator shall maintain such books and records throughout the term of this Agreement and for at least four (4) years thereafter. If the Administrator is changed by the Parties, all books and records relating to the Cooperative and Operating Fund will be promptly turned over to the new Administrator. The Administrator will cooperate with the Parties to timely provide all information and confirmations required in connection with the annual audits of the Parties' respective financial statements.

3.05 Initial Funding of the Operating Fund. Each Party shall pay the amount set forth in **Table 1** as the initial Annual Membership Fee (as defined in **Section 3.06(b)** of this Agreement) to initially fund the Operating Fund. Each Party agrees that it shall provide payment to the Administrator within twenty (20) business days of its execution of this Agreement.

3.06. Annual Budget.

a. Initial Fiscal Year. The initial fiscal year shall be for the period from the Effective Date through September 30, 2013 ("*Initial Fiscal Year*"). The Steering Committee shall establish a budget for the Initial Fiscal Year based on current revenues. All subsequent annual budgets following the Initial Fiscal Year shall be for the period from October 1 through September 30.

b. Subsequent Fiscal Years. Commencing with the first annual budget for the year following the Initial Fiscal Year and for each fiscal year thereafter (October 1 through September 30), the Steering Committee shall establish an annual budget, based on estimates from its consultants, past operating experience, and related information (the "*Annual Budget*"). The Steering Committee may amend the Annual Membership Fee, such that it will be sufficient to cover operating and other anticipated expenses (the "*Annual Membership Fee*"). The Annual Membership Fee structure shall be at the sole discretion of the Steering Committee. The Steering Committee may increase or decrease the Annual Budget at any time and may utilize fund balance for any authorized purpose under this Agreement. If there is a budget surplus for any fiscal year, that surplus will be carried over as fund balance to be used at the discretion of the Steering Committee. Failure to make timely payment of the Annual Membership Fee shall be considered a Default of this Agreement.

c. Special Purpose Funds. From time to time, the Steering Committee may elect to undertake specific actions to benefit the Cooperative that require Additional Contributions. Individual Parties, at their sole discretion, may elect to participate by making Additional Contributions to support such efforts. The Steering Committee may elect to utilize fund balance to help fund such efforts. Failure to make an Additional Contribution shall not constitute a default under this Agreement. However, only Parties participating by making the Additional Contribution shall be allowed to vote on actions related to special purpose.

IV. WITHDRAWAL; DEFAULT; DISSOLUTION

4.01 Withdrawal from Participation in the Cooperative. Any Party may withdraw from participation in the Cooperative at any time, upon written notice to the Steering Committee. The Party withdrawing from the Cooperative shall not be entitled to a refund of any previously paid amounts, unless such withdrawal coincides with dissolution of the Cooperative as provided for in **Section 4.03** of this Agreement.

4.02 Event of Default. Failure to cure a default within 30 days of notice of said default may be grounds for removal of the party by a majority vote of the Steering Committee.

4.03 Dissolution. Upon dissolution of the Cooperative, the Steering Committee may: (1) distribute all remaining funds to the membership at the time of dissolution, or (2) transfer remaining funds to a successor organization created by the Steering Committee for the purposes established in this Agreement, or (3) other method as agreed upon by a majority vote of the Parties at the time of dissolution.

ARTICLE V. GENERAL PROVISIONS

5.01. Authority. This Agreement is made in part under the authority conferred in Chapter 791, Texas Government Code.

5.02 Severability. The provisions of this Agreement are severable and, if any provision of this Agreement is held to be invalid for any reason by a court or agency of competent jurisdiction, the remainder of this Agreement will not be affected and this Agreement will be construed as if the invalid portion had never been contained herein.

5.03. Cooperation. The Parties agree to cooperate at all times in good faith to effectuate the purposes and intent of this Agreement.

5.04. Entire Agreement. Except as otherwise expressly provided herein, this Agreement contains the entire agreement of the Parties regarding the subject matters addressed herein, and supersedes all prior or contemporaneous understandings or representations, whether oral or written, regarding the subject matter.

5.05. Amendments. Any amendment of this Agreement must be in writing and will be effective only if approved by the governing body and executed by the authorized representatives of each of the Parties.

5.06. Applicable Law; Venue. This Agreement will be construed in accordance with Texas law. Venue for any action arising hereunder will be mandatory in either Burnet, Travis, or Williamson County, Texas.

5.07. Notices. All notices under this Agreement must be in writing. Any notice given under this Agreement must be given: (i) by depositing it in the United States mail, certified, with return receipt requested, addressed to the Party to be notified and with all charges prepaid; or (ii) by depositing it with Federal Express or another service guaranteeing "next day delivery", addressed to the Party to be notified and with all charges prepaid; (iii) by personally delivering it to the Party, or any agent of the Party listed in this Agreement; or (iv) by facsimile or (v) by email. Each of the Parties may change its respective address to any other address within the United States of America by giving at least five (5) calendar days' written notice to the Administrator.

5.08. Force Majeure. Parties shall not be deemed in violation of this Agreement if prevented from performing any of their obligations hereunder by reasons for which they are not responsible or due to circumstances beyond their control. However, notice of such impediment or delay in performance must be timely given and all reasonable efforts undertaken to mitigate its effects.

5.09. Counterparts. This Agreement may be executed simultaneously in multiple counterparts, each of which will be deemed an original, but all of which will constitute the same instrument.

5.10 Term and Termination. The initial term of this Agreement shall be from the Effective Date until September 30, 2013. Thereafter, this Agreement shall automatically renew for successive one (1) year periods, beginning October 1st, unless earlier terminated.

Signed this 26th day of February, 2013.

City of Burnet

Gary Wideman, Mayor

INITIAL APPOINTMENTS:

The persons named below are hereby appointed by the Local Government as its initial designated representatives under this Agreement:

Steering Committee Member: David Vaughn (if applicable)

Authorized Representative: David Vaughn

5.07. Notices. All notices under this Agreement must be in writing. Any notice given under this Agreement must be given: (i) by depositing it in the United States mail, certified, with return receipt requested, addressed to the Party to be notified and with all charges prepaid; or (ii) by depositing it with Federal Express or another service guaranteeing "next day delivery", addressed to the Party to be notified and with all charges prepaid; (iii) by personally delivering it to the Party, or any agent of the Party listed in this Agreement; or (iv) by facsimile or (v) by email. Each of the Parties may change its respective address to any other address within the United States of America by giving at least five (5) calendar days' written notice to the Administrator.

5.08. Force Majeure. Parties shall not be deemed in violation of this Agreement if prevented from performing any of their obligations hereunder by reasons for which they are not responsible or due to circumstances beyond their control. However, notice of such impediment or delay in performance must be timely given and all reasonable efforts undertaken to mitigate its effects.

5.09. Counterparts. This Agreement may be executed simultaneously in multiple counterparts, each of which will be deemed an original, but all of which will constitute the same instrument.

5.10 Term and Termination. The initial term of this Agreement shall be from the Effective Date until September 30, 2013. Thereafter, this Agreement shall automatically renew for successive one (1) year periods, beginning October 1st, unless earlier terminated.

Signed this 4 day of March, 2013.

Local Government: City of Cedar Park

Brenda Ivens
Name and Title

INITIAL APPOINTMENTS:

The persons named below are hereby appointed by the Local Government as its initial designated representatives under this Agreement:

Steering Committee Member: Katherine Woerner (if applicable)

Authorized Representative: Katherine Woerner

5.10 Term and Termination. The initial term of this Agreement shall be from the Effective Date until September 30, 2013. Thereafter, this Agreement shall automatically renew for successive one (1) year periods, beginning October 1st, unless earlier terminated.

Signed this 8TH day of MARCH, 2013.

Local Government: CITY OF LEANDER

Kent Cagle

Name and Title
KENT CAGLE, CITY MANAGER

INITIAL APPOINTMENTS:

The persons named below are hereby appointed by the Local Government as its initial designated representatives under this Agreement:

Steering Committee Member: PATRICK A. WOMACK (if applicable)

Authorized Representative: PATRICK A. WOMACK

5.10 Term and Termination. The initial term of this Agreement shall be from the Effective Date until September 30, 2013. Thereafter, this Agreement shall automatically renew for successive one (1) year periods, beginning October 1st, unless earlier terminated.

Signed this 13th day of March, 2013.

Local Government
City of Pflugerville:

Brandon Wade, City Manager

INITIAL APPOINTMENTS:

The persons named below are hereby appointed by the City of Pflugerville as its initial designated representatives under this Agreement:

Steering Committee Member: Lauri Gillam, Assistant City Manager

Authorized Representative: Lauri Gillam, Assistant City Manager

5.10 Term and Termination. The initial term of this Agreement shall be from the Effective Date until September 30, 2013. Thereafter, this Agreement shall automatically renew for successive one (1) year periods, beginning October 1st, unless earlier terminated.

Signed this 13th day of March, 2013.

Local Government: LAKEWAY MUD

B.A. Trudeau, President
Name and Title

INITIAL APPOINTMENTS:

The persons named below are hereby appointed by the Local Government as its initial designated representatives under this Agreement:

Steering Committee Member: Ed Lester (if applicable)

Authorized Representative: _____

Local Government: Larry Fox
(West Travis County Public Utility Agency)

Larry Fox, President
Name and Title WTCPUA

INITIAL APPOINTMENTS:

Steering Committee Member: Don Rauschuber (if applicable)

Authorized Representative: Don Rauschuber, General Manager

5.10 Term and Termination. The initial term of this Agreement shall be from the Effective Date until September 30, 2013. Thereafter, this Agreement shall automatically renew for successive one (1) year periods, beginning October 1st, unless earlier terminated.

Signed this 21st day of FEBRUARY, 2013.

ravis County WCID #17
)812 Eck Lane
Austin, TX 78734

Local Government: _____

Name and Title

David Lewis Steed, Board President

INITIAL APPOINTMENTS:

The persons named below are hereby appointed by the Local Government as its initial designated representatives under this Agreement:

Steering Committee Member: Deborah Gernes, General Manager (if applicable)

Authorized Representative: Deborah Gernes, General Manager

TABLE 1

Levels	Annual Membership Fee
Level I (1-500 A/F/yr. Firm Contract)	$500
Level II (501-1,000 A/F/yr. Firm Contract)	$1,000
Level III (1,001-2,500 A/F/yr. Firm Contract)	$2,000
Level IV (2,500 or Greater A/F/yr. Firm Contract)	$4,000

A RESOLUTION OF THE STEERING COMMITTEE OF THE HIGHLAND LAKES FIRM WATER CUSTOMERS COOPERATIVE REGARDING SUBMISSION OF PUBLIC COMMENTS, SEEKING PARTY STATUS, AND REQUESTING A CONTESTED CASE HEARING ON APPLICATION NO. 5838A OF THE LOWER COLORADO RIVER AUTHORITY ("LCRA") SEEKING TO AMEND LCRA'S WATER MANAGEMENT PLAN; AUTHORIZING PARTICIPATION IN PROCEEDINGS RELATED TO LCRA'S APPLICATION NO. 5838A BEFORE THE LCRA, THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY AND THE STATE OFFICE OF HEARINGS EXAMINERS; MAKING OTHER FINDINGS AND DETERMINATIONS RELATING THERETO; AND DECLARING AN EFFECTIVE DATE.

WHEREAS, the Lower Colorado River Authority ("LCRA") is the owner of Permit No. 5838 and Certificates of Adjudication Nos. 14-5478 and 14-5482 issued by the Texas Water Commission (now known as the Texas Commission on Environmental Quality ("TCEQ")) pertaining to surface water rights in the Highland Lakes in the Colorado River Basin;

WHEREAS, on or about March 12, 2012, LCRA filed a permit application with the TCEQ seeking to amend its water rights permit and certificates of adjudication by amending the Water Management Plan (the "**WMP**"), which application has been designated by the TCEQ as Application No. 5838A;

WHEREAS, the WMP is required by LCRA's permits and certificates of adjudication and governs the amount of stored water released from the Highland Lakes; therefore, the WMP's provisions materially and substantially affect the rights of LCRA's firm water customers whose water supply comes from the Highland Lakes;

WHEREAS, the Highland Lakes Firm Water Customers Cooperative (the "**Cooperative**") was created pursuant to that certain "Interlocal Cooperation Agreement Regarding the Creation of the Highland Lakes Firm Water Customers Cooperative," dated to be effective on or about March 13, 2013 (the "**Interlocal Agreement**") to, among other things, "establish a group of firm water supply customers of LCRA having the authority to organize, finance, participate in, and act on behalf of the Cooperative on all LCRA water-related topics and proceedings, including but not limited to proceedings relating to the LCRA's WMP, permit and/or certificate of adjudication;" and

WHEREAS, the participants in the Cooperative are each parties to firm water supply contracts with LCRA; and

WHEREAS, the Cooperative's Steering Committee has determined that it is in the best interest of the Cooperative's member entities for the Cooperative to participate to the fullest extent allowed by law in the proceedings before the TCEQ (and subsequent legal proceedings, if necessary) involving the LCRA WMP application, including filing public comments, seeking party status, and requesting a contested case hearing on LCRA's WMP application, in order to

ensure that member entities of the Cooperative, through the Cooperative, can protect their interests as firm water customers; and

WHEREAS, the governing bodies of the entities having members on the Steering Committee of the Cooperative have each expressed their support for the decision of the Steering Committee to prepare and file public comments with the TCEQ, seek party status, and request a contested case hearing on LCRA's water rights permit Application No. 5838A, and have consented to being represented in the proceedings involving the LCRA WMP by and through the Steering Committee of the Cooperative, as evidenced by the documents attached hereto as "*Exhibit A*."

NOW THEREFORE, BE IT RESOLVED BY THE STEERING COMMITTEE OF THE HIGHLAND LAKES FIRM WATER CUSTOMER COOPERATIVE THAT:

Section 1. The statements set out in the preamble to this resolution are hereby found to be true and correct and are approved and adopted.

Section 2. The Steering Committee of the Highland Lakes Firm Water Customer Cooperative hereby authorizes and directs its attorney, Patricia Erlinger Carls, to prepare and file public comments with the TCEQ, seek party status, and request a contested case hearing on LCRA's water rights permit Application No. 5838A regarding amendments to the LCRA Water Management Plan, substantially in the form approved by the Steering Committee of the Highland Lakes Firm Water Customer Cooperative, and to represent the Cooperative in all proceedings before LCRA, the Texas Commission on Environmental Quality and the State Office of Hearing Examiners related to the LCRA Water Management Plan and LCRA's water rights permit Application No. 5838A.

Section 3. The Steering Committee also authorizes its attorney to retain experts and consultants to assist the Cooperative in preparing for and participating in the proceedings related to the LCRA Water Management Plan, provided that the retention of any such expert or consultant must first be approved by the Steering Committee.

Section 4. The Authorized Representatives and Steering Committee representatives (defined in the Interlocal Agreement) are authorized and directed to support the efforts of the Cooperative consistent with this Resolution, as the Steering Committee may request.

Section 5. This resolution is effective immediately upon its adoption.

ADOPTED: May 22, 2013.

HIGHLAND LAKES FIRM WATER CUSTOMER COOPERATIVE

By: Earl Foster
Printed Name: Earl Foster
Title: Chair
Date: 5-22-13

ATTEST:

By: Katherine Woerner
Printed Name: Katherine Woerner
Title: Secretary
Date: 5/22/13

CERTIFICATION

STATE OF TEXAS

COUNTY OF TRAVIS

I, Katherine Woerner, being the Secretary of the Highland Lakes Firm Water Cooperative, do certify that the foregoing is a true and correct copy of the above-captioned Resolution approved by the Steering Committee of the Highland Lakes Firm Water Cooperative on May 22, 2013.

Witness my hand this 22 day of May, 2013.

By: Katherine Woerner

Printed Name: Katherine Woerner

RESOLUTION R2013-06

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BURNET SUPPORTING THE DETERMINATION OF THE STEERING COMMITTEE OF THE HIGHLAND LAKES FIRM WATER CUSTOMERS COOPERATIVE TO SEEK PARTY STATUS, AND REQUEST A CONTESTED CASE HEARING IF RECOMMENDED BY THE STEERING COMMITTEE ON THE APPLICATION OF THE LOWER COLORADO RIVER AUTHORITY TO AMEND ITS WATER MANAGEMENT PLAN; AUTHORIZING PARTICIPATION IN PROCEEDINGS RELATED TO THE LCRA WATER MANAGEMENT PLAN APPLICATION NO. 5838A CURRENTLY PENDING BEFORE TCEQ THROUGH THE HIGHLAND LAKES FIRM WATER CUSTOMERS COOPERATIVE; MAKING OTHER FINDINGS AND DETERMINATIONS RELATING THERETO; AND DECLARING AN EFFECTIVE DATE.

WHEREAS, the Lower Colorado River Authority ("**LCRA**") is the owner of Permit No. 5838 and Certificates of Adjudication Nos. 14-5478 and 14-5482 issued by the Texas Water Commission (now known as the Texas Commission on Environmental Quality ("**TCEQ**")) pertaining to surface water rights in the Highland Lakes in the Colorado River Basin;

WHEREAS, on or about March 12, 2012, LCRA filed a permit application with the TCEQ seeking to amend its water rights permit and certificates of adjudication by amending the Water Management Plan (the "**WMP**");

WHEREAS, the WMP is required by LCRA's permits and certificates of adjudication and governs the amount of stored water released from the Highland Lakes; therefore, the WMP's provisions materially and substantially affect the rights of LCRA's firm water customers whose water supply comes from the Highland Lakes;

WHEREAS, the City of Burnet (the "**CITY**") and LCRA are parties to a firm water supply contract pursuant to which the CITY obtains its municipal water supply from the Highland Lakes; accordingly, the CITY is a "firm water customer" of LCRA;

WHEREAS, the CITY is a party to that certain "Interlocal Cooperation Agreement Regarding the Creation of the Highland Lakes Firm Water Customers Cooperative," dated to be effective on or about March 13, 2013 (the "**Interlocal Agreement**") and is a member of the Highland Lakes Firm Water Customers Cooperative (the "**Cooperative**") created pursuant to the Interlocal Agreement;

WHEREAS, the CITY has determined that it will support a recommendation, if any, of the Steering Committee to seek party status and request a contested case hearing on the LCRA's WMP permit application in order to fully protect the interests of the CITY and other members of the Cooperative.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF BURNETTHAT:

Section 1. The statements set out in the preamble to this resolution are hereby found to be true and correct and are approved and adopted.

Section 2. The CITY will support a determination, if any, of the Steering Committee of the Highland Lakes Firm Water Customer Cooperative to seek party status and request a contested case hearing on LCRA's WMP permit application No. 5838A currently pending before TCEQ, to ensure representation of by Cooperative of its member entities in any contested case hearing that may be held on the WMP.

Section 3. The CITY consents to representation of its interests by and through the Steering Committee of the Highland Lakes Firm Water Customer Cooperative in all proceedings before the State Office of Administrative Hearings and the Texas Commission on Environmental Quality related to the LCRA Water Management Plan.

Section 3. The CITY's Authorized Representative (defined in the Interlocal Agreement) and other staff are authorized and directed to support the efforts of the Cooperative consistent with this Resolution, as the Steering Committee may request.

Section 4. The meeting at which this resolution was approved was conducted in strict compliance with the Texas Open Meetings Act, Texas Government Code, Chapter 551.

Section 5. This resolution is effective immediately upon its adoption.

ADOPTED: April 23, 2013.

CITY OF BURNET

By: _____
Gary Wideman, Mayor

Date: 4-23-13

ATTEST:

By: _____
Kelly Dix, City Secretary

Date: 4-23-13

CITY OF BURNET TEXAS

CERTIFICATION

STATE OF TEXAS
COUNTY OF TRAVIS

I, Kelly Dix, being the City Secretary of the City of Burnet do certify that the foregoing is a true and correct copy of the above-captioned Resolution approved by the City Council.

Witness my hand and seal of office this 23rd day of April, 2013.

By _____
Kelly Dix, City Secretary

NOTARY PUBLIC STATE OF TEXAS
KELLY DIX
My Commission
Expires May 9, 2013

3516562.1

THE STATE OF TEXAS *

COUNTY OF WILLIAMSON *

CITY OF CEDAR PARK *

I, LeAnn M. Quinn, City Secretary for the City of Cedar Park, Texas do hereby certify that I am the custodian of the public records maintained by the City and that the attached is a true and correct copy of the City Council Minutes from the meeting of April 25th, 2013, as approved and adopted by the City Council of the City of Cedar Park, Texas, at a meeting held on the 23rd day of May, 2013 and duly recorded in the minutes thereof.

CERTIFIED by my hand and seal of the City of Cedar Park, Texas on this 23rd day of May, 2013.

LeAnn M. Quinn, TRMC
City Secretary

CITY OF CEDAR PARK
TEXAS
CEDAR PARK, TEXAS

MINUTES

CITY OF CEDAR PARK
REGULAR SCHEDULED CITY COUNCIL MEETING
CEDAR PARK CITY HALL - COUNCIL CHAMBERS
450 CYPRESS CREEK ROAD, BUILDING FOUR
THURSDAY, APRIL 25, 2013 AT 6:30 P.M.

Mayor Matt Powell
Stephen Thomas, Council Place One
Lyle Grimes, Council Place Three
Lowell Moore, Council Place Four
Mitch Fuller, Mayor Pro Tem
Jon Lux, Council Place Five
Donald J. Tracy, Council Place Six
Brenda Eivens, City Manager

A.1 CALL TO ORDER, QUORUM DETERMINED, MEETING DECLARED OPEN.
Mayor Powell called the meeting to order at 6:32 p.m.
All Council present.

A.2 Invocation. [5]
A moment of silence was held in honor of the victims of the Boston Marathon and the City of West.

Reverend Steve Moss, Good News United Methodist, gave the Invocation.

A.3 Pledges Of Allegiance. (U.S. And Texas)
Boy Scout Troop 2008 led the audience in the Pledges of Allegiance.

A.4 Presentation: Proclamation For National Day Of Prayer - May 2, 2013.

Mayor Powell read and presented to Joe Elliott a Proclamation recognizing May 2, 2013 as National Day of Prayer.

A.5 Presentation: Proclamation For Public Service Recognition Week, May 13 - 17, 2013.

Mayor Powell read and presented to City Staff a Proclamation recognizing May 13-17, 2013 as Public Service Recognition Week.

A.6 Presentation: Proclamation For Celebration Of STEM Education Week In Cedar Park, May 6 - 12, 2013.

Mayor Powell read and presented to Marian Williams, Harmony School, a Proclamation recognizing May 6-12, 2013 as STEM Education Week

A.7 Presentation: Employee Recognition For Service With The City Of Cedar Park.
a. Eric Alcantara, Fire Department - Five Years Of Service.

b. Eric Reesing, Fire Department - Five Years Of Service.

Assistant Chief Randal Blesing, Fire Department, presented Firefighters Eric Alcantara and Eric Reesing with plaques in honor of five years of service with the City.

A.8 Citizens Communications. (Not For Items Listed On This Agenda. Three Minutes Each. No Deliberations With Council. Council May Respond With Factual Information)

Dick Lewis addressed Council regarding his interest in serving on any board or commission where he may best serve the City.

A.9 Mayor And Council Opening Comments.
Councilmember Thomas welcomed Boy Scout Troop 2008 to the meeting and commented on his visit with the Troop.

Mayor Pro Tem Fuller commented on the recent events he attended and judging hamburgers at the Heritage Festival.

Councilmember Grimes commented on the Heritage Festival and Williamson County Day at the Capitol.

Councilmember Lux commented on the Cedar Park Police Department and their recent apprehension of burglary suspects.

Mayor Powell commented on the Heritage Festival and the Cedar Park Police Department.

A.10 City Manager Report: Quarterly Building Permit Activity And Revenue Report - Mark Lewis, Director Of Building Inspections.

Mark Lewis, Building Inspections Director, presented Council with the Quarterly Building Permit and Activity Report.

A.11 City Manager Report: Seasonal Weather And Emergency Management Update - Michael Clanton, Emergency Management Coordinator.

Michael Clanton, Emergency Management Coordinator, provided an overview on staying informed during inclement weather. The City of Cedar Park has placed tornado warning sirens at Veterans Park, Brushy Creek Sports Park and Milburn Park.

CONSENT AGENDA

Pursuant to Council Rule 2.3, the City Council Consent Agenda consists of all matters set forth on Agenda Items B, C, and D.

Motion to approve all items on the Consent Agenda consisting of Agenda Items B and D.

Movant: Mayor Pro Tem Fuller
Second: Councilmember Thomas
Vote: 7-0

B.1 Approval Of Council Minutes From The Regular Scheduled Meeting Of March 14, 2013.
Approved under the Consent Agenda.

B.2 Approval Of Council Minutes From The Regular Scheduled Meeting Of March 28, 2013.
Approved under the Consent Agenda.

B.3 Approval Of Council Minutes From The Regular Scheduled Meeting Of April 11, 2013.
Approved under the Consent Agenda.

B.4 Receipt Of Minutes From The Cedar Park Community Development Corporation Meeting Of March 5, 2013.
Received under the Consent Agenda.

B.5 Receipt Of Minutes From The Tourism Advisory Board Meeting Of February 26, 2013.
Received under the Consent Agenda

C.0 Second Reading Of An Ordinance: No Items For Consideration.

D.1 A Resolution Authorizing A Special Permit To Hold A Field Day Event At Brushy Creek Sports Park.
Approved under the Consent Agenda.

Resolution Number R95.13.04.25.D1

D.2 A Resolution Authorizing And Directing The City Manager To Apply For The Bulletproof Vest Partnership Funding From The Department Of Justice, Bureau Of Justice Assistance.
Approved under the Consent Agenda.

Resolution Number R96.13.04.25.D2

D.3 A Resolution Authorizing And Directing The City Manager To Execute A Change Order With Capital Excavation Under The Cottonwood Creek Trail (RM 1431 To New Hope Drive) Reconstruction Project In The Amount Of $69,838.40.
Approved under the Consent Agenda.

Resolution Number R97.13.04.25.D3

D.4 A Resolution Authorizing And Directing The City Manager To Execute A Change Order With RGM Constructors Under The Brushy Creek Road (183A To Parmer Lane) Reconstruction Project In The Amount Of $52,219.13.
Approved under the Consent Agenda.

Resolution Number R98.13.04.25.D4

D.5 A Resolution For City Acceptance Of Whitestone Oaks At Anderson Mill Road Section 2 Subdivision Improvements.
Approved under the Consent Agenda.

Resolution Number R99.13.04.25.D5

D.6 A Resolution Authorizing The Purchase Of Two Police Motorcycles Through The Vehicle And Equipment Replacement Fund ("VES") Budget.
Approved under the Consent Agenda.

Resolution Number R100.13.04.25.D6

D.7 A Resolution Authorizing And Directing The City Manager To Execute An Addendum To The Consulting Agreement With Crossnore Group, LLC.
Approved under the Consent Agenda.

Resolution Number R101.13.04.25.D7

D.8 Authorization To Excuse The Absence Of Councilmember Lux From The Regular Scheduled Meeting Of April 11, 2013.
Approved under the Consent Agenda.

No Resolution Number assigned.

PUBLIC HEARINGS

E.1 First Reading And Public Hearing Of An Ordinance Amending Chapter 11, Zoning, Article 11.02 Zoning Districts And Regulations, Division 33 Corridor Overlay, Section 11.02.278 To Expand The Boundary Of The Corridor Overlay From 400 Feet To 500 Feet On Either Side Of The Street Right-Of-Way For All Roadways Identified In The Overlay. **The Planning And Zoning Commission Voted 6-0 To Approve This Amendment. (OA-13-001)**

Rawls Howard, Development Services Director, stated the proposed amendment is to expand the boundary of the Corridor Overly from 400 feet to 500 feet on either side of the street right-of-way for all roadways identified in the Overlay.

Mayor Powell opened the Public Hearing.
No Public Comment.

Mayor Powell closed the Public Hearing.

E.2 First Reading And Public Hearing Of An Ordinance Amending Chapter 11 Zoning Ordinance, Article 11.03 Height, Setback And Lot Requirements For All Districts, Division 1 Building Setback, Height And Lot Standards, Sections 11.03.001 And 11.03.011 To Clarify The Minimum Setback Standards And To Reduce The Minimum Distance Between Two Principal Buildings From 15 Feet To 10 Feet For Structures Within The Condominium Residential (CD) Zoning District. **The Planning And Zoning Commission Voted 6-0 To Approve This Amendment. (OA-13-002)**

Rawls Howard, Development Services Director, addressed Council regarding the proposed amendment to eliminate the side setback requirement for cluster condominium units and to revise the building-to-building setback requirements to maintain one standard of 10 feet between principal buildings.

Mayor Powell and Councilmember Lux questioned the 15ft setback and also the reasoning for the original requirement.

Mayor Powell opened the Public Hearing.
No Public Comment.
Mayor Powell closed the Public Hearing.

General discussion followed regarding the detached units and an analysis of what the benchmark cities are doing.

E.3 First Reading And Public Hearing Of An Ordinance Amending Chapter 11, Article 11.01 Zoning Ordinance, Division 3 Administration, Section 11.01.016; And Article 11.02 Zoning Districts And Regulations, Division 35 Conditional And Special Use Permits; And Article 11.08 Performance Standards For All Districts, Division 1 Performance Standards, Section 11.08.001 Providing For Interpretation Of Conflicting Provisions Within The Zoning Ordinance. **The Planning And Zoning Commission Voted 6-0 To Approve This Amendment. (OA-13-003)**

Rawls Howard, Development Services Director, stated the proposed amendments are administrative in nature and are to clarify the interpretation of conflicting provisions within the City's Code of Ordinances or between the City's Code and other applicable State and local requirements

Mayor Powell opened the Public Hearing.
No Public Comment.
Mayor Powell closed the Public Hearing.

E.4 First Reading And Public Hearing Of An Ordinance To Amend Chapter 11 Zoning, Article 11.02 Zoning Districts And Regulations, Division 11 Townhome Residential, Section 11.02.084; And Division 12 Condominium Residential, Sections 11.02.095 And

11.02.096; And Division 20 Commercial Services, Section 11.02.172; And Article 11.04 Accessory Structures, Division 1 Accessory Uses, Section 11.04.002; And Article 11.05 Architectural Design Standards, Division 2 Masonry Standards, Sections 11.05.008 And 11.05.009, Clarifying The Masonry Standards Within The Zoning Ordinance. **The Planning And Zoning Commission Voted 6-0 To Approve The Amendment. (OA-13-004)**

Rawls Howard, Development Services Director, stated the proposed amendments reflect elimination of duplicate or conflicting requirements listed in the individual zoning districts and the Masonry Standards Division in Article 11.05.

Mayor Powell opened the Public Hearing.
No Public Comment.
Mayor Powell closed the Public Hearing.

REGULAR AGENDA (NON-CONSENT)

F.0 Discussion And Possible Action:

F.1 Consideration To Approve A Resolution Setting A Date, Time, And Place For Public Hearings On The Petition By Texas Parks And Wildlife For Voluntary Annexation Of Approximately 34.08 Acres Of Land Located Near The Southeast Corner Of South Bell Boulevard And East Little Elm Trail, Known As The Twin Lakes Park. (ANX-13-001)
Rawls Howard, Development Services Director, stated this is to set the date and time for the two statutory public hearings on the proposed voluntary annexation of approximately 34.08 acres of land located near the southeast corner of South Bell Boulevard and East Little Elm Trail, known as the Twin Lakes Park. Mr. Howard presented four different schedules for consideration.

General discussion followed regarding the schedules and if a special called meeting needed to be conducted.

Motion to approve the Resolution with Option One as presented by Staff.

Movant: Councilmember Grimes
Second: Councilmember Thomas
Vote: 7–0

Resolution Number R102.13.04.25.F1

F.2 Consideration To Approve A Resolution Awarding The Construction Bid For The City Of Cedar Park Gateway Sign On Whitestone Blvd (RM 1431) To Lewis Sign For $53,384.15.
Garrett Bonn, Project Manager, addressed Council regarding the Gateway Sign Project. Four bids were received and evaluated. Staff is recommending the

construction bid be awarded to Lewis Sign, submitter of the lowest bid. This cost is related to construction of the first sign.

Mayor Pro Tem Fuller inquired if a future site would be located at the Cedar Park Center.

Motion to approve the Resolution as presented by staff.

Movant: Mayor Pro Tem Fuller
Second: Councilmember Tracy
Vote: 7-0

Resolution Number R103.13.04.25.F2

F.3 Consideration To Approve Transportation And Park Projects For Submission To Williamson County For Inclusion In November 2013 Bond Election.

Sam Roberts, Assistant City Manager, addressed Council regarding the five projects proposed for submission to Williamson County. The five recommended transportation projects include:

1. **RM 1431 (Cottonwood Creek Trail to Parmer Lane)**
2. **Anderson Mill Road (RM 1431 to Lime Creek Road)**
3. **Little Elm Trail**
4. **New Hope Drive (Cottonwood Creek Trail to Ronald Reagan Blvd.)**
5. **New Hope Drive (Ronald Reagan Blvd. to C.R. 175 / Sam Bass)**

Mayor Pro Tem Fuller inquired about Little Elm Trail and if the proposed cost would complete the entire extension.

James Hemenes, Assistant Parks Director, addressed Council regarding the proposed parks projects. The two proposed projects include:

1. **Brushy Creek Regional Trail Connection**
2. **Lakeline Park Hike and Bike Trails**

Motion to approve the transportation and parks projects for submission to Williamson County for inclusion in the November 2013 Bond Election as presented by Staff.

Movant: Mayor Pro Tem Fuller
Second: Councilmember Moore
Vote: 7-0

Resolution Number R104.13.04.25.F3

F.4 Consideration Of Appointing A Council Representative To Attend The International Council For Shopping Centers Conference As A City Representative For The Purposes Of Promoting Economic Development In Cedar Park. (Fuller)

Mayor Pro Tem Fuller requested this agenda item. He commented on sending a Council representative and stated he would like to attend.

Councilmember Moore stated he was also interested in attending and also believes the Mayor should attend.

Mayor Powell commented on the limited meeting space and stated it is important for the Economic Development Director and City Manager to attend.

General discussion followed regarding the number of representatives to send.

Mayor Powell stated he would allow Councilmember Moore to attend in his place.

Motion for Mayor Pro Tem Fuller and Councilmember Moore to attend the ICSC show.

Movant: Councilmember Tracy
Second: Councilmember Thomas
Vote: 7-0

F.5 Consideration Of City Council Cell Phone Reimbursements. (Fuller)
Mayor Pro Tem Fuller commented on the reimbursement amounts for Council cell phones. He would like to explore reimbursements in general to include but not limited to cell phones, travel and mileage reimbursements.

Councilmember Moore commented on the reimbursement for cell phones being outdated. He stated this would be an appropriate time to review reimbursements for Council expenses.

Mayor Powell recommended reviewing the City's benchmark cities in relation to a general expense reimbursement and amount.

Motion to table agenda item pending a report from staff on benchmark cities.

Movant: Councilmember Tracy
Second: Mayor Pro Tem Fuller
Vote: 7-0

F.6 Consideration Of Google High Speed Internet. (Thomas)
Josh Selleck, Assistant City Manager, stated Staff has contacted Google, Time Warner and AT&T and is working on pulling date together. Staff will report back to Council once additional information has been obtained.

F.7 Update On The Comprehensive Plan Advisory Committee Meetings And Imagine Cedar Park Program. (Fuller)
Rawls Howard, Development Services Director, gave a brief overview of the committee meetings. Two meetings have been conducted and officers were selected.

Mayor Pro Tem Fuller asked about the perception of how the process was going.

Mayor Powell stated the process is going well; however, there appears to be a lack of female participation. He would like to see more outreach to this group for possible input.

General discussion followed regarding about the town hall meetings, economic growth, primary job growth and housing. A realistic document needs to be created that supports the citizens' vision.

F.8 Consideration Of Appointment To Places One, Three And Six On The Parks And Recreation Advisory Board. **(Amendment)**

Motion to appoint Dick Lewis to Place One on the Parks and Recreation Advisory Board.

Movant: Councilmember Thomas
Second: Mayor Pro Tem Fuller
Vote: 7-0

Jessica May addressed Council about her interest in serving on the Parks Board.

Motion to appoint Jessica May to Place Six on the Parks and Recreation Advisory Board.

Movant: Councilmember Tracy
Second: Councilmember Moore
Vote: 7-0

EXECUTIVE SESSION

In accordance with Chapter 551, Government Code, Vernon's Texas Code Annotated (V.T.C.A.) (Open Meetings Law), "The City Council may meet in a Closed Executive Meeting pursuant to provisions of the Open Meetings Law, Chapter 551, Government Code, V.T.C.A. in accordance with the authority contained in the following sections":

Council convened into Executive Session at 8:21 p.m.

G.0 Executive Session:

G.1 Section 551.071 (2) Consultation With Attorney Regarding Matters In Which The Duty Of The Attorney To The Governmental Body Under The Texas Disciplinary Rules Of Professional Conduct Of The State Bar Of Texas Clearly Conflict With This Chapter:
a. Legal Issues Concerning The Water Park Resort. (Fuller)
b. Legal Issues Concerning The Lower Colorado River Authority's (LCRA) Application To The Texas Commission On Environmental Quality (TCEQ) To Amend The Water Management Plan.
c. Legal Issues Concerning The City's Authority To Regulate Land Use And Development Of Property Located At RM 1431/Whitestone Boulevard And Discovery Boulevard And Implications Under The Chapter 380 Economic Development Agreement Executed By The City And CPTC, LP On September 6, 2012.

G.2 Section 551.072 Deliberation Concerning The Purchase, Exchange, Lease Or Value Of Real Property
a. Legal Issues Concerning The Lease Of Rental Space At The City Hall Campus.
b. Legal Issues Concerning The Exchange And Value Of Real Property Within The City Of Cedar Park For Development As Parkland.

G.3 Section 551.074 Deliberate The Evaluation Of A Public Officer Or Employee.
a. City Manager.
b. City Attorney.

G.4 Section 551.087 Deliberation Regarding Economic Development Negotiations
a. Legal Issues Concerning Negotiations With Economic Development Prospects.

The Council Reconvenes into General Session.

OPEN MEETING

Reconvene into Open Meeting and consider action, if any, on items discussed in Executive Session.

H.0 Reconvene into Open Meeting and consider action, if any, on items discussed in Executive Session
Council reconvened from Executive Session into Open Meeting at 9:14 p.m.

Agenda Item G.1b

Motion that the appointed representative, after consultation with the City Council, be authorized and directed to vote for and act upon issues and events pertaining to the goals and objectives of the Highland Lakes Firm Water Customers Cooperative as she deems appropriate.

Movant: Mayor Pro Tem Fuller
Second: Councilmember Grimes
Vote: 7-0

H.1 Mayor And Council Closing Comments.
Councilmember Moore requested two future agenda items for a traffic signalization update and the Former Mayors and Council Coalition.

Councilmember Tracy thanked the Mayor for the STEM Proclamation and commented on the importance of education.

Councilmember Lux commented on the KLBJ coverage of Cedar Park.

H.2 Adjournment.
Mayor Powell adjourned the meeting at 9:20 p.m.

PASSED AND APPROVED THIS 23RD DAY OF MAY, 2013.

Matthew Powell, Mayor

ATTEST:

LeAnn M. Quinn, TRMC
City Secretary

RESOLUTION NO. 13-005-00

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LEANDER, TEXAS SUPPORTING THE DETERMINATION OF THE STEERING COMMITTEE OF THE HIGHLAND LAKES FIRM WATER CUSTOMERS COOPERATIVE TO SEEK PARTY STATUS AND REQUEST A CONTESTED CASE HEARING, IF RECOMMENDED BY THE STEERING COMMITTEE ON THE APPLICATION OF THE LOWER COLORADO RIVER AUTHORITY TO AMEND ITS WATER MANAGEMENT PLAN; AUTHORIZING PARTICIPATION IN PROCEEDINGS RELATED TO THE LCRA WATER MANAGEMENT PLAN APPLICATION NO. 5838A CURRENTLY PENDING BEFORE TCEQ THROUGH THE HIGHLAND LAKES FIRM WATER CUSTOMERS COOPERATIVE; MAKING OTHER FINDINGS AND DETERMINATIONS RELATING THERETO; AND DECLARING AN EFFECTIVE DATE.

WHEREAS, the Lower Colorado River Authority ("**LCRA**") is the owner of Permit No. 5838 and Certificates of Adjudication Nos. 14-5478 and 14-5482 issued by the Texas Water Commission (now known as the Texas Commission on Environmental Quality ("**TCEQ**")) pertaining to surface water rights in the Highland Lakes in the Colorado River Basin;

WHEREAS, on or about March 12, 2012, LCRA filed a permit application with the TCEQ seeking to amend its water rights permit and certificates of adjudication by amending the Water Management Plan (the "**WMP**");

WHEREAS, the WMP is required by LCRA's permits and certificates of adjudication and governs the amount of stored water released from the Highland Lakes; therefore, the WMP's provisions materially and substantially affect the rights of LCRA's firm water customers whose water supply comes from the Highland Lakes;

WHEREAS, the City of Leander (the "**CITY**") and LCRA are parties to a firm water supply contract pursuant to which the CITY obtains its municipal water supply from the Highland Lakes; accordingly, the CITY is a "firm water customer" of LCRA;

WHEREAS, the CITY is a party to that certain "Interlocal Cooperation Agreement Regarding the Creation of the Highland Lakes Firm Water Customers Cooperative," dated to be effective on or about March 7, 2013 (the "**Interlocal Agreement**") and is a member of the Highland Lakes Firm Water Customers Cooperative (the "**Cooperative**") created pursuant to the Interlocal Agreement;

WHEREAS, the CITY has determined that it will support a recommendation, if any, of the Steering Committee to seek party status and request a contested case hearing

on the LCRA's WMP permit application in order to fully protect the interests of the CITY and other members of the Cooperative.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LEANDER TEXAS THAT:

Section 1. The statements set out in the preamble to this resolution are hereby found to be true and correct and are approved and adopted.

Section 2. The CITY will support a determination, if any, of the Steering Committee of the Highland Lakes Firm Water Customer Cooperative to seek party status and request a contested case hearing on LCRA's WMP permit application No. 5838A currently pending before TCEQ, to ensure representation of its member entities in any contested case hearing that may be held on the WMP.

Section 3. The CITY consents to representation of its interests by and through the Steering Committee of the Highland Lakes Firm Water Customer Cooperative in all proceedings before the State Office of Administrative Hearings and the Texas Commission on Environmental Quality related to the LCRA Water Management Plan.

Section 3. The CITY's Authorized Representative (defined in the Interlocal Agreement) and other staff are authorized and directed to support the efforts of the Cooperative consistent with this Resolution, as the Steering Committee may request.

Section 4. The meeting at which this resolution was approved was conducted in strict compliance with the Texas Open Meetings Act, Texas Government Code, Chapter 551.

Section 5. This resolution is effective immediately upon its adoption.

PASSED AND APPROVED this 2nd day of May, 2013 at a Meeting of the City Council of the City of Leander, Texas

CITY OF LEANDER

Christopher Fielder, Mayor

Attest:

Debbie Haile, TRMC, City Secretary

RESOLUTION NO. 1363-13-05-14-0140

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PFLUGERVILLE SUPPORTING THE DETERMINATION OF THE STEERING COMMITTEE OF THE HIGHLAND LAKES FIRM WATER CUSTOMERS COOPERATIVE TO SEEK PARTY STATUS, AND REQUEST A CONTESTED CASE HEARING IF RECOMMENDED BY THE STEERING COMMITTEE ON THE APPLICATION OF THE LOWER COLORADO RIVER AUTHORITY TO AMEND ITS WATER MANAGEMENT PLAN; AUTHORIZING PARTICIPATION IN PROCEEDINGS RELATED TO THE LCRA WATER MANAGEMENT PLAN APPLICATION NO. 5838A CURRENTLY PENDING BEFORE TCEQ THROUGH THE HIGHLAND LAKES FIRM WATER CUSTOMERS COOPERATIVE; MAKING OTHER FINDINGS AND DETERMINATIONS RELATING THERETO; AND DECLARING AN EFFECTIVE DATE.

WHEREAS, the Lower Colorado River Authority ("**LCRA**") is the owner of Permit No. 5838 and Certificates of Adjudication Nos. 14-5478 and 14-5482 issued by the Texas Water Commission (now known as the Texas Commission on Environmental Quality ("**TCEQ**")) pertaining to surface water rights in the Highland Lakes in the Colorado River Basin;

WHEREAS, on or about March 12, 2012, LCRA filed a permit application with the TCEQ seeking to amend its water rights permit and certificates of adjudication by amending the Water Management Plan (the "**WMP**");

WHEREAS, the WMP is required by LCRA's permits and certificates of adjudication and governs the amount of stored water released from the Highland Lakes; therefore, the WMP's provisions materially and substantially affect the rights of LCRA's firm water customers whose water supply comes from the Highland Lakes;

WHEREAS, the City of Pflugerville (the "**CITY**") and LCRA are parties to a firm water supply contract pursuant to which the CITY obtains its municipal water supply from the Highland Lakes; accordingly, the CITY is a "firm water customer" of LCRA;

WHEREAS, the CITY is a party to that certain "Interlocal Cooperation Agreement Regarding the Creation of the Highland Lakes Firm Water Customers Cooperative," dated to be effective on or about March 13, 2013 (the "**Interlocal Agreement**") and is a member of the Highland Lakes Firm Water Customers Cooperative (the "**Cooperative**") created pursuant to the Interlocal Agreement;

WHEREAS, the CITY has determined that it will support a recommendation, if any, of the Steering Committee to seek party status and request a contested case hearing on the LCRA's WMP permit application in order to fully protect the interests of the CITY and other members of the Cooperative.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF PFLUGERVILLE,TEXAS:

Section 1. The statements set out in the preamble to this resolution are hereby found to be true and correct and are approved and adopted.

Section 2. The CITY will support a determination, if any, of the Steering Committee of the Highland Lakes Firm Water Customer Cooperative to seek party status and request a contested case hearing on LCRA's WMP permit application No. 5838A currently pending before TCEQ, to ensure representation by Cooperative of its member entities in any contested case hearing that may be held on the WMP.

Section 3. The CITY consents to representation of its interests by and through the Steering Committee of the Highland Lakes Firm Water Customer Cooperative in all proceedings before the State Office of Administrative Hearings and the Texas Commission on Environmental Quality related to the LCRA Water Management Plan.

Section 3. The CITY's Authorized Representative (defined in the Interlocal Agreement) and other staff are authorized and directed to support the efforts of the Cooperative consistent with this Resolution, as the Steering Committee may request.

Section 4. The meeting at which this resolution was approved was conducted in strict compliance with the Texas Open Meetings Act, Texas Government Code, Chapter 551.

Section 5. This resolution is effective immediately upon its adoption.

ADOPTED: May 14, 2013.

CITY OF PFLUGERVILLE

By: _____
Jeff Coleman, Mayor

Date: 5/14/13

3516562.1

ATTEST:

By: Karen Thompson
Karen Thompson, City Secretary

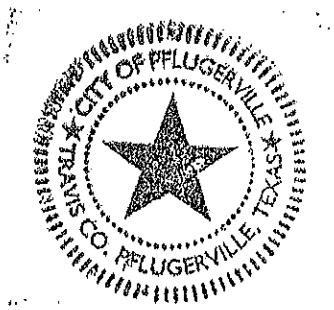
Date: 5/14/13

CERTIFICATION

STATE OF TEXAS
COUNTY OF TRAVIS

I, Karen Thompson, being the City Secretary of the City of Pflugerville do certify that the foregoing is a true and correct copy of the above-captioned Resolution approved by the City Council.

Witness my hand and seal of office this 14TH day of May, 2013.



By: Karen Thompson
Karen Thompson, City Secretary

3516562.1

A RESOLUTION OF THE BOARD OF DIRECTORS OF LAKEWAY MUNICIPAL UTILITY DISTRICT SUPPORTING THE DETERMINATION OF THE STEERING COMMITTEE OF THE HIGHLAND LAKES FIRM WATER CUSTOMERS COOPERATIVE TO SEEK PARTY STATUS, AND REQUEST A CONTESTED CASE HEARING IF RECOMMENDED BY THE STEERING COMMITTEE ON THE APPLICATION OF THE LOWER COLORADO RIVER AUTHORITY TO AMEND ITS WATER MANAGEMENT PLAN; AUTHORIZING PARTICIPATION IN PROCEEDINGS RELATED TO THE LCRA WATER MANAGEMENT PLAN APPLICATION NO. 5838A CURRENTLY PENDING BEFORE TCEQ THROUGH THE HIGHLAND LAKES FIRM WATER CUSTOMERS COOPERATIVE; MAKING OTHER FINDINGS AND DETERMINATIONS RELATING THERETO; AND DECLARING AN EFFECTIVE DATE.

WHEREAS, the Lower Colorado River Authority ("**LCRA**") is the owner of Permit No. 5838 and Certificates of Adjudication Nos. 14-5478 and 14-5482 issued by the Texas Water Commission (now known as the Texas Commission on Environmental Quality ("**TCEQ**")) pertaining to surface water rights in the Highland Lakes in the Colorado River Basin;

WHEREAS, on or about March 12, 2012, LCRA filed a permit application with the TCEQ seeking to amend its water rights permit and certificates of adjudication by amending the Water Management Plan (the "**WMP**");

WHEREAS, the WMP is required by LCRA's permits and certificates of adjudication and governs the amount of stored water released from the Highland Lakes; therefore, the WMP's provisions materially and substantially affect the rights of LCRA's firm water customers whose water supply comes from the Highland Lakes;

WHEREAS, LAKEWAY MUNICIPAL UTILITY DISTRICT (the "**District**") and LCRA are parties to a firm water supply contract pursuant to which the District obtains its municipal water supply from the Highland Lakes; accordingly, the District is a "firm water customer" of LCRA;

WHEREAS, the District is a party to that certain "Interlocal Cooperation Agreement Regarding the Creation of the Highland Lakes Firm Water Customers Cooperative," dated to be effective on or about March 13, 2013 (the "**Interlocal Agreement**") and is a member of the Highland Lakes Firm Water Customers Cooperative (the "**Cooperative**") created pursuant to the Interlocal Agreement;

WHEREAS, the District has determined that it will support a recommendation, if any, of the Steering Committee to seek party status and request a contested case hearing

NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF LAKEWAY MUNICIPAL UTILITY DISTRICT THAT:

Section 1. The statements set out in the preamble to this resolution are hereby found to be true and correct and are approved and adopted.

Section 2. The District will support a determination of the Steering Committee of the Highland Lakes Firm Water Customer Cooperative to seek party status and request a contested case hearing on LCRA's WMP permit application, , to ensure representation of by Cooperative of its member entities in any contested case hearing that may be held on the WMP.

Section 3. The District consents to representation of its interests by and through the Steering Committee of the Highland Lakes Firm Water Customer Cooperative in all proceedings before the State Office of Administrative Hearings and the Texas Commission on Environmental Quality related to the LCRA Water Management Plan.

Section 3. The District's Authorized Representative (defined in the Interlocal Agreement) and other staff are authorized and directed to support the efforts of the Cooperative consistent with this Resolution, as the Steering Committee may request.

Section 4. The meeting at which this resolution was approved was conducted in strict compliance with the Texas Open Meetings Act, Texas Government Code, Chapter 551.

Section 5. This resolution is effective immediately upon its adoption.

ADOPTED: MAY 8, 2013.

LAKEWAY MUNICIPAL UTILITY DISTRICT

By: _____
Karl Ansbach, President

Date: 5/8/2013

ATTEST:

By: _____
Mel Neese, Secretary

Date: 5/8/2013

CERTIFICATION

STATE OF TEXAS
COUNTY OF TRAVIS

I, Mel Neese, being the Board Secretary of the Lakeway Municipal Utility District does certify that the foregoing is a true and correct copy of the above-captioned Resolution approved by the Board of Directors of the Lakeway Municipal Utility District.

Witness my hand and seal of office this 8th day of MAY, 2013.

By _____
Mel Neese, Secretary

20130508

A RESOLUTION OF THE BOARD OF DIRECTORS OF TRAVIS COUNTY WATER CONTROL & IMPROVEMENT DISTRICT NO. 17 SUPPORTING THE DETERMINATION OF THE STEERING COMMITTEE OF THE HIGHLAND LAKES FIRM WATER CUSTOMERS COOPERATIVE TO SEEK PARTY STATUS, AND REQUEST A CONTESTED CASE HEARING IF RECOMMENDED BY THE STEERING COMMITTEE ON THE APPLICATION OF THE LOWER COLORADO RIVER AUTHORITY TO AMEND ITS WATER MANAGEMENT PLAN; AUTHORIZING PARTICIPATION IN PROCEEDINGS RELATED TO THE LCRA WATER MANAGEMENT PLAN THROUGH THE HIGHLAND LAKES FIRM WATER CUSTOMERS COOPERATIVE; MAKING OTHER FINDINGS AND DETERMINATIONS RELATING THERETO; AND DECLARING AN EFFECTIVE DATE.

WHEREAS, the Lower Colorado River Authority ("**LCRA**") is the owner of Permit No. 5838 and Certificates of Adjudication Nos. 14-5478 and 14-5482 issued by the Texas Water Commission (now known as the Texas Commission on Environmental Quality ("**TCEQ**")) pertaining to surface water rights in the Highland Lakes in the Colorado River Basin;

WHEREAS, on or about March 12, 2012, LCRA filed a permit application with the TCEQ seeking to amend its water rights permit and certificates of adjudication by amending the Water Management Plan (the "**WMP**");

WHEREAS, the WMP is required by LCRA's permits and certificates of adjudication and governs the amount of stored water released from the Highland Lakes; therefore, the WMP's provisions materially and substantially affect the rights of LCRA's firm water customers whose water supply comes from the Highland Lakes;

WHEREAS, Travis County Water Control & Improvement District No. 17 (the "**District**") and LCRA are parties to a firm water supply contract pursuant to which the District obtains its municipal water supply from the Highland Lakes; accordingly, the District is a "firm water customer" of LCRA;

WHEREAS, the District is a party to that certain "Interlocal Cooperation Agreement Regarding the Creation of the Highland Lakes Firm Water Customers Cooperative," dated to be effective on or about March 13, 2013 (the "**Interlocal Agreement**") and is a member of the Highland Lakes Firm Water Customers Cooperative (the "**Cooperative**") created pursuant to the Interlocal Agreement;

WHEREAS, the District has determined that it will support a recommendation of the Steering Committee to seek party status and request a contested case hearing on the LCRA's WMP permit application in order to fully protect the interests of the District and other members of the Cooperative.

NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF TRAVIS COUNTY WATER CONTROL & IMPROVEMENT DISTRICT NO. 17 THAT:

Section 1. The statements set out in the preamble to this resolution are hereby found to be true and correct and are approved and adopted.

Section 2. The District will support a determination of the Steering Committee of the Highland Lakes Firm Water Customer Cooperative to seek party status and request a contested case hearing on LCRA's WMP permit application, to ensure representation by Cooperative of its member entities in any contested case hearing that may be held on the WMP.

Section 3. The District consents to representation of its interests by and through the Steering Committee of the Highland Lakes Firm Water Customer Cooperative in all proceedings before the State Office of Administrative Hearings and the Texas Commission on Environmental Quality related to the LCRA Water Management Plan.

Section 3. The District's Authorized Representative (defined in the Interlocal Agreement) and other staff are authorized and directed to support the efforts of the Cooperative consistent with this Resolution, as the Steering Committee may request.

Section 4. The meeting at which this resolution was approved was conducted in strict compliance with the Texas Open Meetings Act, Texas Government Code, Chapter 551.

Section 5. This resolution is effective immediately upon its adoption.

ADOPTED: April 18, 2013.

TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT NO. 17

By: _____
David Lewis Steed, President

Date: April 18, 2013

ATTEST:

By: _____
Jerri Lynn Ward, Secretary

Date: 4-18-13

3516562.1

CERTIFICATION

STATE OF TEXAS
COUNTY OF TRAVIS

I, Jerri Lynn Ward, being the Secretary of the Travis County Water Control and Improvement District No. 17 do certify that the foregoing is a true and correct copy of the above-captioned Resolution approved by the Board of Directors of the Travis County Water Control and Improvement District No. 17.

Witness my hand and seal of office this 18th day of April, 2013.

By _____
Jerri Lynn Ward, Secretary

3516562.1

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY SUPPORTING THE DETERMINATION OF THE STEERING COMMITTEE OF THE HIGHLAND LAKES FIRM WATER CUSTOMERS COOPERATIVE TO SEEK PARTY STATUS, AND REQUEST A CONTESTED CASE HEARING IF NECESSARY ON THE APPLICATION OF THE LOWER COLORADO RIVER AUTHORITY TO AMEND ITS WATER MANAGEMENT PLAN; AUTHORIZING PARTICIPATION IN PROCEEDINGS RELATED TO THE LCRA WATER MANAGEMENT PLAN THROUGH THE HIGHLAND LAKES FIRM WATER CUSTOMERS COOPERATIVE; MAKING OTHER FINDINGS AND DETERMINATIONS RELATING THERETO; AND DECLARING AN EFFECTIVE DATE.

WHEREAS, the Lower Colorado River Authority ("**LCRA**") is the owner of Permit No. 5838 and Certificates of Adjudication Nos. 14-5478 and 14-5482 issued by the Texas Water Commission (now known as the Texas Commission on Environmental Quality ("**TCEQ**")) pertaining to surface water rights in the Highland Lakes in the Colorado River Basin;

WHEREAS, on or about March 12, 2012, LCRA filed a permit application with the TCEQ seeking to amend its water rights permit and certificates of adjudication by amending the Water Management Plan (the "**WMP**");

WHEREAS, the WMP is required by LCRA's permits and certificates of adjudication and governs the amount of stored water released from the Highland Lakes; therefore, the WMP's provisions materially and substantially affect the rights of LCRA's firm water customers whose water supply comes from the Highland Lakes;

WHEREAS, the West Travis County Public Utility Agency (the "**PUA**") and LCRA are parties to a firm water supply contract pursuant to which the PUA obtains its municipal water supply from the Highland Lakes; accordingly, the PUA is a "firm water customer" of LCRA;

WHEREAS, the PUA is a party to that certain "Interlocal Cooperation Agreement Regarding the Creation of the Highland Lakes Firm Water Customers Cooperative," dated to be effective on or about March 13, 2013 (the "**Interlocal Agreement**") and is a member of the Highland Lakes Firm Water Customers Cooperative (the "**Cooperative**") created pursuant to the Interlocal Agreement;

WHEREAS, the Cooperative's Steering Committee has determined that it is in the best interest of the Cooperative's member entities to participate through the Cooperative to the fullest extent allowed by law in the proceedings before the TCEQ (and subsequent legal proceedings, if necessary) involving the LCRA WMP application, including seeking party status, and requesting a contested case hearing on LCRA's WMP

application if necessary, in order to ensure that the PUA, through the Cooperative, can protect its interests as a firm water customer; and

WHEREAS, the PUA concurs with the Steering Committee's recommendations and desires to support the Cooperative's efforts to seek party status, and request a contested case hearing on the LCRA's WMP if necessary in order to fully protect the interests of the PUA and other members of the Cooperative.

NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY THAT:

Section 1. The statements set out in the preamble to this resolution are hereby found to be true and correct and are approved and adopted.

Section 2. The PUA concurs with the determination of the Steering Committee of the Highland Lakes Firm Water Customer Cooperative to seek party status, and request a contested case hearing on LCRA's permit application, if necessary, to ensure representation of the Cooperative's member entities in any contested case hearing that may be held on the WMP.

Section 3. The PUA consents to representation of its interests by and through the Steering Committee of the Highland Lakes Firm Water Customer Cooperative in all proceedings before the State Office of Administrative Hearings and the Texas Commission on Environmental Quality related to the LCRA Water Management Plan.

Section 3. The PUA's Authorized Representative (defined in the Interlocal Agreement) and other staff are authorized and directed to support the efforts of the Cooperative consistent with this Resolution, as the Steering Committee may request.

Section 4. The meeting at which this resolution was approved was conducted in strict compliance with the Texas Open Meetings Act, Texas Government Code, Chapter 551.

Section 5. This resolution is effective immediately upon its adoption.

ADOPTED: 2 May, 2013.

WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY

Larry Fox

Larry Fox, President
Board of Directors
Date: 2 May 2013

3516718.2

ATTEST:

Ray Whisenant, Jr., Secretary
Board of Directors
Date: 5/2/2013

CERTIFICATION

STATE OF TEXAS
COUNTY OF TRAVIS

I, Ray Whisenant, Jr., being the Secretary of the West Travis County Public Utility Agency do certify that the foregoing is a true and correct copy of the above-captioned Resolution approved by the Board of Directors of the West Travis County Public Utility Agency.

Witness my hand and seal of office this 2nd day of May, 2013.

Ray Whisenant, Jr.

3516718.2

Marisa Weber

From:	PUBCOMMENT-OCC
Sent:	Monday, September 21, 2015 12:13 PM
To:	PUBCOMMENT-OCC2
Cc:	PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS; PUBCOMMENT-OPIC
Subject:	FW: Public comment on Permit Number WRPERM 5838
Attachments:	Austin Water Ltr to TCEQ re - Condition for Withdrawal of Hrg Req on LCRA WMP 9-18-151.pdf

WR 82315

From: greg.meszaros@austintexas.gov [mailto:greg.meszaros@austintexas.gov]
Sent: Friday, September 18, 2015 1:06 PM
To: DoNot Reply
Subject: Public comment on Permit Number WRPERM 5838

REGULATED ENTY NAME 11405838000 WRPERM 5838 WATER MANAGEMENT PLAN

RN NUMBER: RN104252267

PERMIT NUMBER: WRPERM 5838

DOCKET NUMBER:

COUNTY: BASTROP, BURNET, COLORADO, FAYETTE, GILLESPIE, LAMPASAS, LLANO, MASON, MATAGORDA, SAN SABA, TRAVIS, WHARTON, WILLIAMSON

PRINCIPAL NAME: LOWER COLORADO RIVER AUTHORITY

CN NUMBER: CN600253637

FROM

NAME: Greg Meszaros

E-MAIL: greg.meszaros@austintexas.gov

COMPANY: City of Austin

ADDRESS: PO BOX 1088
AUSTIN TX 78767-1088

PHONE: 5129720108

FAX:

COMMENTS: Please see attached letter to TCEQ from City of Austin, Austin Water with comments. Thank you.

MW

City of Austin
Austin Water P.O. Box 1088 Austin, Texas 78767 (512) 972-0101

September 18, 2015 VIA Electronic Filing

Bridget C. Bohac, Chief Clerk
Office of the Chief Clerk
Texas Commission on Environmental Quality ("TCEQ")
P.O. Box 13087, MC-105
Austin, TX 78711-3087

Re: Lower Colorado River Authority ("LCRA")
WRPERM5838
CN 600253637, RN 104252267
Application NO. 5838A to Amend the LCRA Water Management Plan
City Prepared to Withdraw Contested Case Hearing Request Upon Conditions

Dear Ms. Bohac:

The applicant, LCRA, has adequately addressed certain key concerns of the City regarding this application in LCRA's proposed modifications to the draft Order submitted to TCEQ on August 17, 2015. As a result, the City of Austin ("City" or "Austin") submits this letter to indicate that the City would be prepared to withdraw its pending request for a contested case hearing on the LCRA Water Management Plan ("WMP"), Application No. 5838A submitted by the City on May 24, 2013 upon certain conditions, which are:

- TCEQ modifies the WMP Order in the manner proposed by LCRA in its comment letter submitted to TCEQ on August 17, 2015 (See attached as Exhibit A),
- there are no further changes made to the Order that are objectionable to the City,
- all other hearing requestors have withdrawn their requests or indicated their willingness to withdraw at the same time as the City of Austin consistent with these conditions, and
- no persons or parties raise any additional protests or issues, in a manner which would require the City of Austin to participate in any process related to this application to protect its position.

The City indicates its preparation to withdraw its request for a hearing in the interest of having the revised WMP move forward and be in operation for the 2016 crop season. The City is optimistic that the applicant will continue to work with the City to address any other outstanding concerns without the City seeking a hearing on the application and the City preserves for the future its rights and remedies on any unresolved issues.

We appreciate the Commission's attention to this important matter.

Sincerely,

Greg Meszaros
Director, Austin Water
City of Austin

cc: Robert Goode, Assistant City Manager
Teresa Lutes, Managing Engineer, Austin Water
Ross Crow, Assistant City Attorney

City of Austin
Law Department
City Hall, 301 W 2nd Street, P.O. Box 1088
Austin, Texas 78767-1088
(512) 974-2268

Writer's Direct Line
(512) 974-2159

Writer's Fax Line
(512) 974-2894

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
2013 MAY 28 PM 3:19
CHIEF CLERKS OFFICE

WR 82315

May 24, 2013 VIA Electronic Filing

REVIEWED
MAY 29 2013
By

Bridget C. Bohac, Chief Clerk
Office of the Chief Clerk
Texas Commission on Environmental Quality ("TCEQ")
P.O. Box 13087, MC-105
Austin, TX 78711-3087

Re: Lower Colorado River Authority ("LCRA")
WRPERM5838
CN 600253637, RN 104252267
Application NO. 5838A to Amend the LCRA Water Management Plan
Requesting Contested Case Hearing

Dear Ms. Bohac:

The City of Austin ("City" or "Austin") files this letter to request a contested case hearing on the LCRA Water Management Plan ("WMP"), Application No. 5838A. The City can be reached by mailing or faxing correspondence to my address/fax number on this letterhead and by telephone at my direct number, 512-974-2159.

The City maintains over 300,000 acre-feet of water rights throughout the Colorado River Basin, especially those recognized by Certificates of Adjudication Nos. 14-5471 (as amended) and 14-5489 (as amended). Austin is a municipal corporation that owns, operates, and maintains facilities for providing municipal, irrigation, and industrial water service to its many citizens and businesses. With regard to a statement explaining the City of Austin's location and distance relative to the activity that is the subject of the application as required under TCEQ rule §55.251, the activity that is the subject of the application is the management of water supplies in lakes Travis and Buchanan. The City of Austin currently maintains two municipal water intakes in Lake Austin at an approximate distance of 20 river miles downstream of Lake Travis. Lake Austin is directly below Lake Travis and receives releases of stored water coming from both lakes Travis and Buchanan through Mansfield Dam on Lake Travis. The City is also constructing a third intake in Lake Travis which is expected to be operational in 2014, so at that intake there is no distance between the City's facility and the activity which includes maintaining

firm water supplies in Lake Travis. Water is released through Mansfield Dam as well to satisfy demands under the City's water right permits.

The number of people provided with water service by the City of Austin is rapidly approaching a million people. The City is an important economic engine for the region and the State of Texas. Reliability of firm water supply is critical to the public health and safety of the people provided water by the City of Austin and to the maintenance of one of the largest local economies in the nation. The reliability of the City's water supply is greatly affected by the provisions of LCRA's WMP.

Although the City of Austin owns water rights for a large amount of water, most of that water is not stored in a reservoir, but instead is water that Austin can divert from the flow of the river. Austin can divert these "run of river" flows to the extent that there is natural flow available in the river and that a more senior water right is not exercising a higher time priority right to divert that flow. Due to a variable climate, the associated variability in run of river flow availability, and use by more senior water rights, there are times when Austin cannot meet its municipal supply needs with just its run of river water rights. Thus the City of Austin at great expense has purchased water from LCRA as a back-up supply to "firm up" its run of river water rights. The City of Austin is a firm water customer of LCRA, meaning the City has paid a premium such that LCRA has an obligation to meet the City's firm water demand 100% of the time through the drought of record.

In 1999, the City of Austin paid $100 million to LCRA, which pre-paid for a large quantity of water and also paid the reservation fee on an even larger quantity of firm water beyond current demands to meet the City's needs for decades into the future. The City of Austin made this significant investment to secure the reliability of its long-term water supply and the City is highly dependent on the reliability of this water supply from LCRA. Stored water in lakes Travis and Buchanan, the two large water supply reservoirs in the Highland Lakes chain, is essential to LCRA's ability to meet its commitments to the City of Austin and other firm water customers. LCRA's WMP dictates the manner in which that large stored water supply in lakes Travis and Buchanan is managed and allocated to meet various demands. Since a formal stakeholder process on the WMP revisions concluded almost two years ago, multiple emergency orders authorizing departure from LCRA's plan and repeated warnings of an imminent threat of firm customer curtailment due to low reservoirs, depleted in significant part by massive interruptible water supply releases during severe drought, have revealed serious weaknesses in both the current and proposed plan. The City is deeply concerned that elements of LCRA's current and proposed WMP inappropriately risk the reliability of the City's "firm" supply from LCRA in a manner that does not comply with LCRA's water right permits for lakes Travis and Buchanan issued by TCEQ (Certificates of Adjudication Nos. 14-5478 (as amended) and 14-5482 (as amended)) (herein also "LCRA's lake permits") or with the 1988 adjudication of water rights in the lower Colorado River basin.

The City believes that major flaws in LCRA's current Water Management Plan have resulted in the current depleted condition of these water supply reservoirs such that LCRA has now warned its firm customers that an emergency condition may be declared in the next few months. If that emergency condition is declared, then LCRA will not meet 100% of firm demand, but rather

require firm customers to curtail their usage by an initial 20% cut back. Despite some necessary improvements in the proposed revisions to LCRA's WMP, the fundamental flaw in the current Water Management Plan that has caused the impending threat of a water supply emergency remains in the proposed Water Management Plan. In short, the proposed plan fails to curtail interruptible supplies to a sufficient degree to avoid reservoirs dropping down to levels that would trigger the declaration of an emergency, thus, by virtue of large interruptible water releases, driving LCRA's firm water customers into curtailment. LCRA has a duty under its permits to curtail interruptible supply to the extent necessary to allow LCRA to satisfy all firm water demands.

In addition to the above-discussed permit compliance issues in the proposed plan, the current submittal has become completely out of date due to the ongoing drought that rivals and may possibly surpass the drought of record in the nineteen fifties. A central purpose of the plan is to assure that firm water supplies will be fully available through a repeat of the most intense and prolonged droughts that have occurred. As data from the current multi-year drought is not included the plan, including data from 2011, which is the year with by far the lowest lake inflows ever, the plan does not protect firm water supplies from a repeat occurrence of this extraordinary period of drought. The City does not believe it complies with LCRA's permits or the 1988 adjudication to leave firm customers unprotected from *known* drought events that are not merely extreme but unprecedented until another round of revisions occurs years in the future. As revisions are being made now and as the revision process is typically a very resource intensive and time consuming undertaking, it is not only logical to include in the current revision this essential hydrology and the additional protections for firm water customers it necessitates, but LCRA's permits require this protection of firm customers.

In addition to the threat of the City's water supplies reaching emergency low levels as discussed, due to the chronically depleted condition of the reservoirs, the City of Austin has implemented its Stage 2 drought measures for 19 of the last 21 months, which among other things restricts all outdoor watering to one day a week. These restrictions, by reducing water sales, have had a significant revenue impact on the City's water utility ("Austin Water"), with estimated revenue losses at approximately $35 million for 2011- April 2013, and any mandatory curtailment of the City's water supply due to a WMP that is insufficiently protective of firm water supplies will result in a greater financial loss for the City. As LCRA's largest firm water customer and the second largest water rights holder in the Colorado Basin, *Austin has a personal justiciable interest* in ensuring that LCRA's WMP properly protects the reliability of the City's firm water supply in accordance with LCRA's permits and the law.

The following is more detailed analysis of the City's status as an affected person under TCEQ's rules. The City of Austin is an affected person under TCEQ's rules at 30 Tex. Admin. Code § 55.256 relating to determination of an affected person. In accordance with § 55.256 (a) the City of Austin has a personal justiciable interest related to a legal right, legal duty and an economic interest affected by the application. Among other things, as discussed, the City has a major water supply agreement with LCRA and LCRA's ability to fully satisfy all of the City's demands under the City's contractual legal rights is affected by the manner in which LCRA's proposed WMP allocates water supplies for interruptible customers. Also with regard to a personal justiciable interest related to a legal right, available water supply under the City's run of river

water rights may be impaired by severely low reservoir levels resulting from the proposed plan's failure to sufficiently curtail interruptible supply in accordance with LCRA's permits, as is LCRA's duty. In addition, amounts of water available for the City's impoundment rights would be affected in the same or similar manner. As mentioned, the economic impact of the proposed plan on the City of Austin could prove to be very significant with negative effects on Austin Water's revenue from water sales by requiring the City's supply to be curtailed under conditions where LCRA still has a duty to fully supply the City's water needs. As businesses and the business climate in Austin could be negatively affected by the proposed plan improperly triggering curtailment of firm water supply and insufficiently curtailing interruptible supply, this can also affect the tax base for the City. As the City's water rights are affected by the proposed plan and due to the City's major water supply agreements with LCRA which are also affected, the City and its interests are affected by the application in a manner that is not common to members of the general public.

In accordance with § 55.256 (b), the City of Austin is a local government with authority under state law over issues contemplated by the application. Water supply is the key issue in LCRA's application, and the City has the legal authority to enter into contracts, including contracts for water supply, in accordance with the General Powers in the City's Charter §3 and authority to provide water supply to its customers under the Local Government Code § 552.001, among other laws. The City also has legal authority to use water under its water rights permits issued by the commission in accordance with state law.

With regard to relevant factors to be considered in determining affected person status under § 55.256 (c), these factors support a determination that the City is an affected person. In accordance with § 55.256 (c)(1) the interest claimed by the City is one protected by the law under which the application will be considered. The interests claimed, which include that the City's contractual water supply is managed under the WMP in accordance with LCRA's lake permits, that the City's firm water demand is met 100% of the time through a drought of record as required by commission order, and that LCRA's ability to meet the City's firm water demand will not be impaired by releases of water for interruptible customers as required by commission order, are interests protected by the law under which the application will be considered including LCRA's Certificates of Adjudication 14-5478 (as amended) and 14-5482 (as amended), the 1988 Adjudication, TCEQ Orders since 1989 accompanying the issue of the WMP, relevant provisions of the Texas Water Code, including among others, § 11.301 et seq. and TCEQ's rules with regard to water rights at 30 Tex. Admin. Code Ch. 295 and 297.

With regard to consideration under § 55.256 (c)(2) of distance restrictions or other limitations imposed by law on the affected interest, distance restrictions do not appear to be applicable to LCRA's WMP application. Also, with regard to "other limitations imposed by law on the affected interest", the limitations imposed by law in this instance are generally not on the City's affected interest, which is unimpaired firm water supply, but rather are limits on the extent to which LCRA can provide interruptible water supply. There are not limitations on the City's affected interest, which is that its firm water demands be met 100% of the time through a Drought of Record, as required, and that the City's permitted water rights are not improperly impaired. Firm customers are only curtailed when the LCRA Board declares a Drought Worse than the Drought of Record. That requirement, when implemented in accordance with

requirements in LCRA's lake permits, does not impose any limitation on the City's affected interest. A key concern being raised by the City herein (and discussed in more detail in public comments being submitted separately during the 30 day public comment period) is that the model simulations, which are the basis of the proposed plan's interruptible curtailment, show that interruptible supply will cause a declaration of a Drought Worse than a Drought of Record, when in fact drought conditions have not actually exceeded the drought of record, and as a result LCRA is not in compliance with its lake permits.

Concerning § 55.256 (c)(3) a reasonable relationship exists between the City's interest claimed and the activity regulated. Again, the City's interest is in not having its water rights improperly impaired and being provided its contracted for firm water supply in a manner that complies with, among other things, the 1988 Adjudication, LCRA's lake permits and TCEQ Orders. Activity regulated by the WMP is the operation of lakes Travis and Buchanan, including the allocation of firm and interruptible supply, which relates directly to the City's interest in protecting its water rights (under permit and contract) by assuring that LCRA meets its obligation under the 1988 Adjudication, its lake permits and TCEQ Orders.

Section 55.256 (c)(4) requires consideration of the likely impact of the regulated activity on the health, safety, and use of property of the person. The regulated activity is the operation of Lakes Travis and Buchanan which are water supply reservoirs for the City of Austin. The number of people served by Austin Water with that water is approaching a million people. As water is essential to many things, including the health and safety of the water customers of the City of Austin, that public health and safety may be placed at risk by a proposed plan that manages water supplies in a manner that, as shown in LCRA's model simulations, will create an emergency water supply situation in a repeat of historic conditions. The extent to which such an emergency may impact municipal water supply for meeting public health and safety needs is currently unknown, however a proposed plan that calls for the depletion of reservoirs significantly below an emergency level leaves the City and its customers vulnerable to serious public health and safety issues. In addition, to the extent that such emergency water levels and continued drought may ultimately impact availability of water for fire protection, the proposed plan could result in serious impacts to property of the City, as well as the property of its residents and businesses.

With regard to the consideration under § 55.256 (c)(5) of the likely impact of the regulated activity on use of the impacted natural resource by the person that point has been fairly well covered in the above statements. The natural resource used by the City is water and its usage may be improperly limited by the operation of the proposed plan in the manner discussed above and as further discussed in the City's public comments. With regard to the consideration under § 55.256(c)(6) of governmental entities statutory authority over or interest in the issues relevant to the application, these points, again, have been discussed above. The City has clearly stated an interest in the issues relevant to the application which is whether water supply from lakes Travis and Buchanan—municipal water supply reservoirs for the City of Austin--will be properly managed in accordance with legal requirements. As discussed, the City does have statutory authority to serve as a water provider and in implementing that essential public function under that authority depends on the reliability of the raw water supply for which it has contracted and to that end expects LCRA to manage its water supply in accordance with its permits.

The City thus meets all requirements to be determined an affected person and herein complies with all other requirements in TCEQ's rule §55.251. This hearing request is being filed within the time period specified in the notice in accordance with TCEQ's rule §55.251. The City's request for a hearing is pursuant to a right to hearing authorized by law. *See* Texas Water Code §§ 11.132 and 11.133 and 30 Tex. Admin. Code § 295.171-.172. (Also, LCRA's Certificates of Adjudication for lakes Travis and Buchanan provide that, "[t]he initial proceeding to consider the adoption of the Management Plan, and any major amendment thereof, shall be pursuant to contested case procedures. . . . The *Commission shall name as* other *parties* [besides Texas Parks and Wildlife Department] *persons who establish a justiciable interest* in the proceeding (emphasis added). " *See, e.g.,* Certificate of Adjudication 14-5482, p. 2-3, 2.B.1.) Thus all of the requirements for granting a hearing under TCEQ's rule §55.255 (b) are met.

Overall, the City has a personal justiciable interest, as described, in making sure that its water rights and water supply are being properly protected and are not negatively impacted by LCRA's Application No. 5838A. For the reasons set forth above, *the City requests a contested case hearing on LCRA's Application to amend the LCRA Water Management Plan, Application No. 5838A and that the City of Austin be included as a party in such contested case hearing.* The City respectfully reserves the right to raise additional issues at or after any public meeting on the WMP. The City stands ready to work with the applicant to address the above concerns.

Very truly yours,

Ross Crow
Assistant City Attorney
City of Austin

cc: Robert Goode, Assistant City Manager
Greg Meszaros, Director, Austin Water
Teresa Lutes, Managing Engineer, Austin Water

Marisa Weber

From:	PUBCOMMENT
Sent:	Tuesday, May 28, 2013 2:34 PM
To:	PUBCOMMENT-OCC2
Subject:	FW: Public comment on Permit Number WRPERM 5838
Attachments:	City of Austin Hearing Request on LCRA Application No. 5838A 5-24-13.PDF

H

WR 82315

From: PUBCOMMENT-OCC
Sent: Tuesday, May 28, 2013 7:10 AM
To: PUBCOMMENT
Subject: FW: Public comment on Permit Number WRPERM 5838

From: ross.crow@austintexas.gov [mailto:ross.crow@austintexas.gov]
Sent: Friday, May 24, 2013 4:08 PM
To: donotReply@tceq.state.tx.us
Subject: Public comment on Permit Number WRPERM 5838

REGULATED ENTY NAME 11405838000 WRPERM 5838 WATER MANAGEMENT PLAN

RN NUMBER: RN104252267

PERMIT NUMBER: WRPERM 5838

DOCKET NUMBER:

COUNTY: BASTROP, BURNET, COLORADO, FAYETTE, GILLESPIE, LAMPASAS, LLANO, MASON, MATAGORDA, SAN SABA, TRAVIS, WHARTON, WILLIAMSON

PRINCIPAL NAME: LOWER COLORADO RIVER AUTHORITY

CN NUMBER: CN600253637

FROM

NAME: Ross Crow

E-MAIL: ross.crow@austintexas.gov

COMPANY: City of Austin

ADDRESS: 302 W 2ND ST P.O. Box 1088
AUSTIN TX 78701-4609

PHONE: 5129742159

mw

FAX: 5129742894

COMMENTS: Attached is the City of Austin's Hearing Request on LCRA Application No. 5838A to Amend the LCRA Water Management Plan. The City of Austin will also be submitting detailed public comments on this application during the comment period which further supports the City's request for a hearing.

City of Austin
Law Department
City Hall, 301 W 2nd Street, P.O. Box 1088
Austin, Texas 78767-1088
(512) 974-2268

Writer's Direct Line
(512) 974-2159

Writer's Fax Line
(512) 974-2894

May 24, 2013 VIA Electronic Filing

Bridget C. Bohac, Chief Clerk
Office of the Chief Clerk
Texas Commission on Environmental Quality ("TCEQ")
P.O. Box 13087, MC-105
Austin, TX 78711-3087

Re: Lower Colorado River Authority ("LCRA")
WRPERM5838
CN 600253637, RN 104252267
Application NO. 5838A to Amend the LCRA Water Management Plan
Requesting Contested Case Hearing

Dear Ms. Bohac:

The City of Austin ("City" or "Austin") files this letter to request a contested case hearing on the LCRA Water Management Plan ("WMP"), Application No. 5838A. The City can be reached by mailing or faxing correspondence to my address/fax number on this letterhead and by telephone at my direct number, 512-974-2159.

The City maintains over 300,000 acre-feet of water rights throughout the Colorado River Basin, especially those recognized by Certificates of Adjudication Nos. 14-5471 (as amended) and 14-5489 (as amended). Austin is a municipal corporation that owns, operates, and maintains facilities for providing municipal, irrigation, and industrial water service to its many citizens and businesses. With regard to a statement explaining the City of Austin's location and distance relative to the activity that is the subject of the application as required under TCEQ rule §55.251, the activity that is the subject of the application is the management of water supplies in lakes Travis and Buchanan. The City of Austin currently maintains two municipal water intakes in Lake Austin at an approximate distance of 20 river miles downstream of Lake Travis. Lake Austin is directly below Lake Travis and receives releases of stored water coming from both lakes Travis and Buchanan through Mansfield Dam on Lake Travis. The City is also constructing a third intake in Lake Travis which is expected to be operational in 2014, so at that intake there is no distance between the City's facility and the activity which includes maintaining

firm water supplies in Lake Travis. Water is released through Mansfield Dam as well to satisfy demands under the City's water right permits.

The number of people provided with water service by the City of Austin is rapidly approaching a million people. The City is an important economic engine for the region and the State of Texas. Reliability of firm water supply is critical to the public health and safety of the people provided water by the City of Austin and to the maintenance of one of the largest local economies in the nation. The reliability of the City's water supply is greatly affected by the provisions of LCRA's WMP.

Although the City of Austin owns water rights for a large amount of water, most of that water is not stored in a reservoir, but instead is water that Austin can divert from the flow of the river. Austin can divert these "run of river" flows to the extent that there is natural flow available in the river and that a more senior water right is not exercising a higher time priority right to divert that flow. Due to a variable climate, the associated variability in run of river flow availability, and use by more senior water rights, there are times when Austin cannot meet its municipal supply needs with just its run of river water rights. Thus the City of Austin at great expense has purchased water from LCRA as a back-up supply to "firm up" its run of river water rights. The City of Austin is a firm water customer of LCRA, meaning the City has paid a premium such that LCRA has an obligation to meet the City's firm water demand 100% of the time through the drought of record.

In 1999, the City of Austin paid $100 million to LCRA, which pre-paid for a large quantity of water and also paid the reservation fee on an even larger quantity of firm water beyond current demands to meet the City's needs for decades into the future. The City of Austin made this significant investment to secure the reliability of its long-term water supply and the City is highly dependent on the reliability of this water supply from LCRA. Stored water in lakes Travis and Buchanan, the two large water supply reservoirs in the Highland Lakes chain, is essential to LCRA's ability to meet its commitments to the City of Austin and other firm water customers. LCRA's WMP dictates the manner in which that large stored water supply in lakes Travis and Buchanan is managed and allocated to meet various demands. Since a formal stakeholder process on the WMP revisions concluded almost two years ago, multiple emergency orders authorizing departure from LCRA's plan and repeated warnings of an imminent threat of firm customer curtailment, due to low reservoirs, depleted in significant part by massive interruptible water supply releases during severe drought, have revealed serious weaknesses in both the current and proposed plan. The City is deeply concerned that elements of LCRA's current and proposed WMP inappropriately risk the reliability of the City's "firm" supply from LCRA in a manner that does not comply with LCRA's water right permits for lakes Travis and Buchanan issued by TCEQ (Certificates of Adjudication Nos. 14-5478 (as amended) and 14-5482 (as amended)) (herein also "LCRA's lake permits") or with the 1988 adjudication of water rights in the lower Colorado River basin.

The City believes that major flaws in LCRA's current Water Management Plan have resulted in the current depleted condition of these water supply reservoirs such that LCRA has now warned its firm customers that an emergency condition may be declared in the next few months. If that emergency condition is declared, then LCRA will not meet 100% of firm demand, but rather

require firm customers to curtail their usage by an initial 20% cut back. Despite some necessary improvements in the proposed revisions to LCRA's WMP, the fundamental flaw in the current Water Management Plan that has caused the impending threat of a water supply emergency remains in the proposed Water Management Plan. In short, the proposed plan fails to curtail interruptible supplies to a sufficient degree to avoid reservoirs dropping down to levels that would trigger the declaration of an emergency, thus, by virtue of large interruptible water releases, driving LCRA's firm water customers into curtailment. LCRA has a duty under its permits to curtail interruptible supply to the extent necessary to allow LCRA to satisfy all firm water demands.

In addition to the above-discussed permit compliance issues in the proposed plan, the current submittal has become completely out of date due to the ongoing drought that rivals and may possibly surpass the drought of record in the nineteen fifties. A central purpose of the plan is to assure that firm water supplies will be fully available through a repeat of the most intense and prolonged droughts that have occurred. As data from the current multi-year drought is not included the plan, including data from 2011, which is the year with by far the lowest lake inflows ever, the plan does not protect firm water supplies from a repeat occurrence of this extraordinary period of drought. The City does not believe it complies with LCRA's permits or the 1988 adjudication to leave firm customers unprotected from *known* drought events that are not merely extreme but unprecedented until another round of revisions occurs years in the future. As revisions are being made now and as the revision process is typically a very resource intensive and time consuming undertaking, it is not only logical to include in the current revision this essential hydrology and the additional protections for firm water customers it necessitates, but LCRA's permits require this protection of firm customers.

In addition to the threat of the City's water supplies reaching emergency low levels as discussed, due to the chronically depleted condition of the reservoirs, the City of Austin has implemented its Stage 2 drought measures for 19 of the last 21 months, which among other things restricts all outdoor watering to one day a week. These restrictions, by reducing water sales, have had a significant revenue impact on the City's water utility ("Austin Water"), with estimated revenue losses at approximately $35 million for 2011- April 2013, and any mandatory curtailment of the City's water supply due to a WMP that is insufficiently protective of firm water supplies will result in a greater financial loss for the City. As LCRA's largest firm water customer and the second largest water rights holder in the Colorado Basin, *Austin has a personal justiciable interest* in ensuring that LCRA's WMP properly protects the reliability of the City's firm water supply in accordance with LCRA's permits and the law.

The following is more detailed analysis of the City's status as an affected person under TCEQ's rules. The City of Austin is an affected person under TCEQ's rules at 30 Tex. Admin. Code § 55.256 relating to determination of an affected person. In accordance with § 55.256 (a) the City of Austin has a personal justiciable interest related to a legal right, legal duty and an economic interest affected by the application. Among other things, as discussed, the City has a major water supply agreement with LCRA and LCRA's ability to fully satisfy all of the City's demands under the City's contractual legal rights is affected by the manner in which LCRA's proposed WMP allocates water supplies for interruptible customers. Also with regard to a personal justiciable interest related to a legal right, available water supply under the City's run of river

water rights may be impaired by severely low reservoir levels resulting from the proposed plan's failure to sufficiently curtail interruptible supply in accordance with LCRA's permits, as is LCRA's duty. In addition, amounts of water available for the City's impoundment rights would be affected in the same or similar manner. As mentioned, the economic impact of the proposed plan on the City of Austin could prove to be very significant with negative effects on Austin Water's revenue from water sales by requiring the City's supply to be curtailed under conditions where LCRA still has a duty to fully supply the City's water needs. As businesses and the business climate in Austin could be negatively affected by the proposed plan improperly triggering curtailment of firm water supply and insufficiently curtailing interruptible supply, this can also affect the tax base for the City. As the City's water rights are affected by the proposed plan and due to the City's major water supply agreements with LCRA which are also affected, the City and its interests are affected by the application in a manner that is not common to members of the general public.

In accordance with § 55.256 (b), the City of Austin is a local government with authority under state law over issues contemplated by the application. Water supply is the key issue in LCRA's application, and the City has the legal authority to enter into contracts, including contracts for water supply, in accordance with the General Powers in the City's Charter §3 and authority to provide water supply to its customers under the Local Government Code § 552.001, among other laws. The City also has legal authority to use water under its water rights permits issued by the commission in accordance with state law.

With regard to relevant factors to be considered in determining affected person status under § 55.256 (c), these factors support a determination that the City is an affected person. In accordance with § 55.256 (c)(1) the interest claimed by the City is one protected by the law under which the application will be considered. The interests claimed, which include that the City's contractual water supply is managed under the WMP in accordance with LCRA's lake permits, that the City's firm water demand is met 100% of the time through a drought of record as required by commission order, and that LCRA's ability to meet the City's firm water demand will not be impaired by releases of water for interruptible customers as required by commission order, are interests protected by the law under which the application will be considered including LCRA's Certificates of Adjudication 14-5478 (as amended) and 14-5482 (as amended), the 1988 Adjudication, TCEQ Orders since 1989 accompanying the issue of the WMP, relevant provisions of the Texas Water Code, including among others, § 11.301 et seq. and TCEQ's rules with regard to water rights at 30 Tex. Admin. Code Ch. 295 and 297.

With regard to consideration under § 55.256 (c)(2) of distance restrictions or other limitations imposed by law on the affected interest, distance restrictions do not appear to be applicable to LCRA's WMP application. Also, with regard to "other limitations imposed by law on the affected interest", the limitations imposed by law in this instance are generally not on the City's affected interest, which is unimpaired firm water supply, but rather are limits on the extent to which LCRA can provide interruptible water supply. There are not limitations on the City's affected interest, which is that its firm water demands be met 100% of the time through a Drought of Record, as required, and that the City's permitted water rights are not improperly impaired. Firm customers are only curtailed when the LCRA Board declares a Drought Worse than the Drought of Record. That requirement, when implemented in accordance with

requirements in LCRA's lake permits, does not impose any limitation on the City's affected interest. A key concern being raised by the City herein (and discussed in more detail in public comments being submitted separately during the 30 day public comment period) is that the model simulations, which are the basis of the proposed plan's interruptible curtailment, show that interruptible supply will cause a declaration of a Drought Worse than a Drought of Record, when in fact drought conditions have not actually exceeded the drought of record, and as a result LCRA is not in compliance with its lake permits.

Concerning § 55.256 (c)(3) a reasonable relationship exists between the City's interest claimed and the activity regulated. Again, the City's interest is in not having its water rights improperly impaired and being provided its contracted for firm water supply in a manner that complies with, among other things, the 1988 Adjudication, LCRA's lake permits and TCEQ Orders. Activity regulated by the WMP is the operation of lakes Travis and Buchanan, including the allocation of firm and interruptible supply, which relates directly to the City's interest in protecting its water rights (under permit and contract) by assuring that LCRA meets its obligation under the 1988 Adjudication, its lake permits and TCEQ Orders.

Section 55.256 (c)(4) requires consideration of the likely impact of the regulated activity on the health, safety, and use of property of the person. The regulated activity is the operation of Lakes Travis and Buchanan which are water supply reservoirs for the City of Austin. The number of people served by Austin Water with that water is approaching a million people. As water is essential to many things, including the health and safety of the water customers of the City of Austin, that public health and safety may be placed at risk by a proposed plan that manages water supplies in a manner that, as shown in LCRA's model simulations, will create an emergency water supply situation in a repeat of historic conditions. The extent to which such an emergency may impact municipal water supply for meeting public health and safety needs is currently unknown, however a proposed plan that calls for the depletion of reservoirs significantly below an emergency level leaves the City and its customers vulnerable to serious public health and safety issues. In addition, to the extent that such emergency water levels and continued drought may ultimately impact availability of water for fire protection, the proposed plan could result in serious impacts to property of the City, as well as the property of its residents and businesses.

With regard to the consideration under § 55.256 (c)(5) of the likely impact of the regulated activity on use of the impacted natural resource by the person that point has been fairly well covered in the above statements. The natural resource used by the City is water and its usage may be improperly limited by the operation of the proposed plan in the manner discussed above and as further discussed in the City's public comments. With regard to the consideration under § 55.256(c)(6) of governmental entities statutory authority over or interest in the issues relevant to the application, these points, again, have been discussed above. The City has clearly stated an interest in the issues relevant to the application which is whether water supply from lakes Travis and Buchanan—municipal water supply reservoirs for the City of Austin--will be properly managed in accordance with legal requirements. As discussed, the City does have statutory authority to serve as a water provider and in implementing that essential public function under that authority depends on the reliability of the raw water supply for which it has contracted and to that end expects LCRA to manage its water supply in accordance with its permits.

The City thus meets all requirements to be determined an affected person and herein complies with all other requirements in TCEQ's rule §55.251. This hearing request is being filed within the time period specified in the notice in accordance with TCEQ's rule §55.251. The City's request for a hearing is pursuant to a right to hearing authorized by law. *See* Texas Water Code §§ 11.132 and 11.133 and 30 Tex. Admin. Code § 295.171-.172. (Also, LCRA's Certificates of Adjudication for lakes Travis and Buchanan provide that, "[t]he initial proceeding to consider the adoption of the Management Plan, and any major amendment thereof, shall be pursuant to contested case procedures. . . . The *Commission shall name as* other *parties* [besides Texas Parks and Wildlife Department] *persons who establish a justiciable interest* in the proceeding (emphasis added). " *See, e.g.,* Certificate of Adjudication 14-5482, p. 2-3, 2.B.1.) Thus all of the requirements for granting a hearing under TCEQ's rule §55.255 (b) are met.

Overall, the City has a personal justiciable interest, as described, in making sure that its water rights and water supply are being properly protected and are not negatively impacted by LCRA's Application No. 5838A. For the reasons set forth above, *the City requests a contested case hearing on LCRA's Application to amend the LCRA Water Management Plan, Application No. 5838A and that the City of Austin be included as a party in such contested case hearing.* The City respectfully reserves the right to raise additional issues at or after any public meeting on the WMP. The City stands ready to work with the applicant to address the above concerns.

Very truly yours,

Ross Crow
Assistant City Attorney
City of Austin

cc: Robert Goode, Assistant City Manager
Greg Meszaros, Director, Austin Water
Teresa Lutes, Managing Engineer, Austin Water

3

TCEQ Public Meeting Form
LCRA Water Management Plan
July 20, 2015

PLEASE PRINT

Name: Ross Crow

Mailing Address: 301 W 2nd St. Austin TX

Physical Address (if different): Same

City/State: Austin, TX **Zip:** 78767

Email: ross.crow@austintexas.gov ✓

E-mail addresses are subject to public disclosure under the Texas Public Information Act

Phone Number: (512) 974-2159

- Are you here today representing a municipality, legislator, agency, or group? ☑ Yes ☐ No

  If yes, which one? City of Austin

☑ **I wish to provide formal *ORAL COMMENTS* at tonight's public meeting.** ✓

☑ **I wish to provide formal *WRITTEN COMMENTS* at tonight's public meeting.** ✓

(Written comments may be submitted at any time during the meeting)

Please give this form to the person at the information table. Thank you.

MW

City of Austin
Law Department
City Hall, 301 W 2nd Street, P.O. Box 1088
Austin, Texas 78767-1088
(512) 974-2268

RECEIVED
JUL 20 2015
AT PUBLIC MEETING

Writer's Direct Line
(512) 974-2159

Writer's Fax Line
(512) 974-2894

July 20, 2015 VIA Hand Delivery

Bridget C. Bohac, Chief Clerk
Office of the Chief Clerk
Texas Commission on Environmental Quality ("TCEQ")
P.O. Box 13087, MC-105
Austin, TX 78711-3087

Re: Lower Colorado River Authority ("LCRA")
WRPERM5838
CN 600253637, RN 104252267
Application NO. 5838A to Amend the LCRA Water Management Plan
Public Comments

Dear Ms. Bohac:

The City of Austin ("City" or "Austin") files the attached public comments on the LCRA Water Management Plan Application No. 5838A. The City can be reached by mailing or faxing correspondence to my address/fax number on this letterhead and by telephone at my direct number, 512-974-2159.

The City respectfully reserves the right to make additional comments and raise additional issues at or after any public meeting on this application during the ongoing comment period. Again, the City stands ready to work with the applicant to address the concerns expressed in these comments.

Very truly yours,

Ross Crow
Assistant City Attorney
City of Austin

cc: Robert Goode, Assistant City Manager
Greg Meszaros, Director, Austin Water
Teresa Lutes, Managing Engineer, Austin Water

Enclosures

Public Comments submitted by the City of Austin in response to Notice of an Application to Amend the LCRA Water Management Plan, Application No. 5838A

July 20, 2015

Overview

There are 4 points of primary concern to the City in TCEQ's proposed WMP Order:

1. Timelines for updating the next WMP with new hydrology (ex. 2014 data) have the potential of leaving firm water supplies inadequately protected for a decade or longer.

2. A need for a clearer articulation of a key principle in revisions of the WMP, which is maintaining the minimum combined storage in simulations of the period of record above the Drought Worse than a Drought of Record (DWDR) storage trigger (600,000 AF in this plan update) through adjustments in curtailment triggers. This will continue to provide critically needed guidance for future revisions as well.

3. A change in the criteria used for the Look-Ahead Test could result in combined storage falling below the DWDR storage level of 600,000 AF in a repeat of the current drought.

4. It needs to be clear that LCRA's recently submitted firm customer Drought Contingency Plan is fully incorporated into the WMP.

Proposed Modifications to Draft Order

The following are recommended changes to address these concerns (with further explanation below):

1. To assure updates to the WMP are made in a timely manner, particularly updates to include additional drought hydrology and make adjustments to curtailment triggers, modify Ordering Provision 1.f. to state:

   > f. LCRA shall initiate a process to update the Water Management Plan no later than ~~December 31, 2018~~ January 1, 2017or one year from any of the following occurrences:
   >
   > i. The March 1, when water use reports are filed, following the calendar year in which Lakes Travis and Buchanan reach a combined capacity of 98%;
   >
   > ii. Firm water use, as reported in LCRA's annual water use reports and annual Water Management Plan report filed with the TCEQ, reaches a level that is 90% or greater of the demands considered in the modeling for the 2014 WMP amendment for a period of two consecutive years;

iii. LCRA has begun operating the off-channel reservoir authorized under certificate of adjudication no. 14-5476C;

iv. LCRA has begun using one or more of its downstream water rights based on non-temporary amendments to those rights obtained after the effective date of this Order.~~, unless LCRA has demonstrated, and the executive director agrees, that modeling of such operations in combination with this Water Management Plan does not result in combined storage dropping below 600,000 acre feet in a repeat of the hydrology considered in this WMP.~~

The WMP update initiated January 1, 2017 must, at a minimum, incorporate the 2014 and 2015 naturalized hydrology data into the WMP simulations and make adjustments to interruptible curtailment triggers to maintain combined storage in the WMP simulations above the DWDR storage trigger (600,000 AF in this WMP) through the period of record. All other updates must include the naturalized hydrology from the years prior to year in which the update process is triggered and any necessary adjustments to interruptible curtailment triggers to maintain combined storage in the WMP simulations above the DWDR storage trigger through the period of record.

And modify Ordering Provision 1.g. to state:

LCRA shall submit an application to amend its WMP no later than two years from the date it initiates a process to update the WMP under Ordering Provision 1.f., except for the revision process initiated January 1, 2017 for which LCRA shall submit an application to amend its WMP by July 1, 2017. Except for the required submittal on July 1, 2017, ~~I~~if one or more of the events described in Ordering Provision 1.f occurs after a revision process has been initiated, and upon written request by LCRA, the time period to submit an application may be extended by a maximum of six months per occurrence by the Executive Director to allow those changed circumstances to be included in the revision process.

2. Regarding the City's second concern regarding a clearer statement of the basic principles for the proposed revisions modify Finding of Fact 12 to state in the last sentence:

The reduction in interruptible supplies is intended to offset the increase in firm demands, as well as account for a higher minimum storage level.

Modify Finding of Fact 14 to provide:

LCRA's proposed revisions to its curtailment policies and procedures are intended to ensure that LCRA can satisfy all current firm demands during drought conditions, in part by maintaining in simulations of the plan a higher minimum storage level through a

repeat of the ~~drought~~ period of record that assures the minimum combined storage is maintained above the Drought Worse than a Drought of Record (DWDR) storage trigger such that a declaration of a DWDR, and resulting firm customer curtailment, will not be triggered due to providing interruptible water supply, consistent with LCRA's permit conditions in Certificates of Adjudication Nos. 14-5478 and 14-5482, as amended. LCRA's permit conditions require that LCRA shall interrupt or curtail the supply of water under these Certificates of Adjudication pursuant to commitments that are specifically subject to interruption or curtailment, to the extent necessary to allow LCRA to satisfy all demands for water under such certificates pursuant to all firm, uninterruptible commitments. For this amendment of the WMP the higher minimum combined storage is the DWDR storage trigger of 600,000 AF (one of three criteria for declaring a DWDR.) ~~than was maintained in previous WMPs~~. LCRA's curtailment policy has been found to be an acceptable approach in earlier Commission orders. The use of various rule curves and procedures continues to be an acceptable approach for addressing the allocation of interruptible stored water because this approach will allow LCRA to be responsive to changes in water supply conditions throughout the year while protecting firm demands. (WMP Section ES. E.)

3. Regarding TCEQ's proposed change to the criteria for the Look-Ahead Test modify Finding of Fact No. 15.t. as follows:

   In making its determination under the Look-Ahead Test, LCRA shall use the 99 percent exceedance probability~~, unless a different trend for inflows and combined storage is being observed~~.[1] ~~However, in no case shall LCRA's determination rely on less than a 95 percent exceedance probability.~~ Exceedance probability refers to the likelihood that a future outcome will be better than the specified value.

4. Modify language in draft Order and/or WMP as needed to indicate that the firm customer Drought Contingency Plan is fully incorporated into the Water Management Plan.

I. Timing for incorporating updated hydrology

Assuming the lakes do not entirely refill to 98% combined capacity on the near term horizon (as discussed below), then an analysis of the only date-certain timelines for updates show these provisions would not result in a plan update until sometime into the next decade. Ordering Provisions 1.f. and 1.g. together provide a deadline for filing a submission to update of December 31, 2020 (December 31, 2018 deadline under 1.f. to *start* revision process plus two years to complete that process under 1.g. and submit an application). Once submitted, the

[1] Note that Finding of Fact 15.t. is stated like an Ordering Provision even though it is in the Findings of Fact.

process at TCEQ on the WMP has historically taken several years. Following this date-certain time frame, even under a expedited process, adoption of **a new WMP would typically not be expected before the year 2022.** It would not be unusual for this type of revision to take longer—putting adoption of an update **possibly in the 2024 to 2026 time frame**, for example. Meanwhile, as discussed in more detail below, consistent with the history of this and the 1950s drought, extraordinary drought conditions may have completely returned and persisted for years during the long update process, leaving firm water supplies exposed to insufficient protections.

The fact that this proposed timeframe for the WMP revision *might* be a little shorter under one of the other scenarios in Ordering Provision 1.f. does not provide assurance that it will be any shorter. For example, under a best case scenario for a shorter time frame under 1.f.i. (update process triggered by reaching 98% combined capacity), the currently proposed plan would be adopted in late 2015 and at a time when the lakes by chance happen to be at a combined capacity of 98%.[2] Ordering Provision 1.f.i. would not start the clock on the timeline for revision until March 1 the following year; in this instance March 1, 2016. From that date, 1.f. provides a year to *initiate* the revision process and under 1.g. there are two more years to complete the process and submit an application to TCEQ. This puts the submittal to TCEQ at March 1, 2019. With a very expedited TCEQ review and approval process, the earliest an adopted plan incorporating 2014-2015 drought data could be expected would be sometime in 2020, to first be implemented in 2021. A later date is more likely. <u>Thus, even the potentially shortest timeframe proposed in TCEQ's draft Order for plan update exposes firm water supply to the very real possibility of a repeat of the extraordinary drought conditions experienced over a four and half year period from October 2010 through March 2015 with insufficient protections that can result in lake storage falling far below emergency levels.</u>

A brief review of the timeframes for updating the plan in Ordering Provision 1.f. ii-iv shows that an update under any of these scenarios can be expected after an even longer timeframe. Draft Ordering Provision 1.f.ii. proposes that when firm water use as reported in LCRA's annual water use report for two consecutive years reaches a level of 90% or greater this triggers an update requirement. Unless LCRA contracts with new firm customers, these levels would not be expected to be reached within the next few years. (Note that as an ordinary aspect of water planning, the 1988 Adjudication requires protecting not only existing but *projected* firm demands.[3]) Even if these levels were reached in 2019, it would first be reported in March 2020.

---

[2] Note that unlike Lake Travis which last filled in 2010, it has been since 2008 for a fill to 1018 msl and since 2005 for a fill to 1020 msl that Lake Buchanan has filled entirely and current Buchanan Dam repairs may make reaching this percentage impossible depending on how 98% combined capacity is defined. **<u>Ordering Provision 1.f. should clarify the meaning of 98% combined capacity by stating a specific combined storage volume and one that can be reached during dam repairs.</u>**

[3] The 1988 Adjudication requires protection of not only existing but also projected firm demands by interruptible stored water curtailment stating:

> The supply of stored water pursuant to non-firm, interruptible commitments should be interrupted or curtailed to the extent necessary to allow LCRA to satisfy all existing and projected demands for stored water pursuant to all firm, uninterruptible commitments.

Then presumably reported again in March 2021 for the second consecutive year. This would start the one year clock for initiating the process followed by the two year clock for the process and submittal to TCEQ, making the earliest submittal March 2024, when the TCEQ process would begin. The earliest implementation could be expected would be 2026.

Regarding the trigger for beginning operation for the Lane City Reservoir under 1.f.iii., LCRA indicates they expect to complete the reservoir in 2018.[4] Assuming there are not delays, as often occur on large projects, and the project is completed and begins operation in the Spring of 2018, this would still put initiation of the revision process one year later in the Spring of 2019 and submittal in the Spring of 2021, followed by TCEQ review which again would be expected to be at least a few years. An expedited process might result in a new plan in place for the 2023 crop year.

It is assumed that 1.f.iv. applies to potential future off-channel reservoir projects, although it apparently to other uses of LCRA's water rights as well. The timeframe for these would be further out than any of the other scenarios discussed above. Any "non-temporary amendments" of LCRA's water rights is going to take a few years just in itself. Thus none of the scenarios provide for an update sooner than 2021 and realistically it would be expected later under the timeframes provided.

The City has requested deletion of language in Ordering Provision 1.f.iv. which establishes an plan update trigger based on any amendment by LCRA. The amendment of non-temporary water rights appears to apply to a broad category of potential water rights amendments including future off channel reservoirs. These would be in a different category than the amendment of downstream run-of-river water rights. The City is particularly concerned that if 1.f.iv. is not changed, then with regard to other potential future off-channel reservoirs that there may be no assurance of any public process at TCEQ, although there may be significant implications for the operation of the WMP and firm customer rights.

Simulation of proposed WMP including synthesized 2014 data shows combined storage falls far below the 600,000 AF emergency level in a repeat of the period of record

---

In re The exceptions of the Lower Colorado River Authority and the City of Austin to the Adjudication of Water Rights in the Lower Colorado River Segment of the Colorado River Basin, No. 115, 414-A-1 (264th Dist. Ct., Bell County, Tex. April 20, 1988) (herein "1988 Adjudication") *See* Attachment No. 2, p. 5, Finding 19.f. (from findings for LCRA's Lake Buchanan water right). Note that during the stakeholder process in 2010-2011, firm customers agreed to shorten the period for which firm demands were projected by agreeing to the use of "interim" demands before using "2020 demands" and these interim demands are essentially the demands being used to simulate this proposed update.

[4] LCRA currently states with regard to the Lane City Reservoir that the reservoir, "is expected to be completed in 2018." See http://www.lcra.org/water/water-supply/highland-lakes-overview/pages/index.aspx (last visited July 20, 2015.)

Working with its hydrologist Richard Hoffpauir, the City of Austin has developed a modeling approach to synthesize what the City believes will reliably approximate the finalized naturalized data set for 2014 hydrology for the Colorado River basin (synthesized 2014 data). This synthesized 2014 data is based on evaporation and precipitation data made available from the Texas Water Development Board. The City included this 2014 synthesized inflow data in a simulation of the proposed WMP. The simulation shows that **if 2014 drought data is included** in the proposed Water Management Plan simulation (as updated by TCEQ in November 2014) that **combined storage is predicted to fall to a low point of around 471,076 AF by January 1, 2015 in a repeat of the period of record.** This is a remarkably close result to what the City simulated using 2013 data as a proxy for 2014 data (the two years are very close in terms of inflow data). Using 2013 data as a proxy for 2014 resulted in combined storage falling to 463,889 AF around October 1, 2014. **However, if the first 3 months of 2015 are included in simulations using proxies for the hydrological data set, it is estimated that combined storage would fall to approximately 433,343 AF by April 1, 2015.**[5] (See attached graphs summarizing the simulation results.)

These simulation results, of course, further confirm the City's concerns about the adequacy of the proposed WMP to protect firm water supplies in a repeat of drought conditions like those just experienced. As discussed herein, a continuation of drought conditions like those just experienced, after a period of some increased inflows, is a common occurrence in multiyear droughts in the Colorado River basin. Also, as has been discussed in many of the City of Austin's comments, in emergency relief applications by LCRA and in Orders and a report by TCEQ, water allocation planning measures which threaten to drop combined storage levels below the 600,000 AF DWDR storage trigger (emergency level) should be avoided. The legal and practical consequences have been detailed in Emergency Orders issued by TCEQ and are partially summarized herein.

By way of further background, the accuracy of the approach the City of Austin used to approximate the 2014 naturalized flow data is supported in a couple of ways. First, the City calibrated the model closely with the actual naturalized flows for the past 10 years. In other words the model results come very close to the actual naturalized flow data results for the previous 10 years (2004-2013). The model results calibration for 2004-2013 on average is within 3.3% of the naturalized flow data results and for the current drought 2008-2013 is within 2.2%. Second, the City used the model to also compute the Combined Firm Yield and the results are essentially the same as the results LCRA has indicated their CFY model shows using preliminary 2014 data (approximately 10,000 AF reduction in the combined firm yield). The

[5] This simulation was done using proxy amounts from the years 2000, 2009 and 2011 all of which have an inflow total for the months of January through the end of March that are very close to the inflow total for 2015 for this same period. The simulation results using the January-March data for these three years for the April 1, 2015 combined storage were averaged together to create the estimated combined storage of 433,343 AF for April 1, 2015.

City's CFY model apparently calibrates closely with LCRA's CFY model using preliminary 2014 data.

Minimum combined storage protection levels return to those in earlier, rejected plan

Considering that simulation results from models including both 2014 and early 2015 data indicate a drop in combined storage to around 433,000 AF, it is critical to note that LCRA's originally proposed plan in 2012 had a minimum combined storage of 420,000 AF (prior to update of hydrology through 2013). This level resulted from using interim demands—which are, with some modifications, essentially the demands used for the currently proposed update. The current drought, particularly in the last few years has caused thinking about water planning in the Colorado River basin to evolve considerably and TCEQ's May 2014 Report reflects that drought-informed perspective on water planning for the Colorado Basin. However, unfortunately, with the inclusion of the 2014-early 2015 drought data, the protection of essential firm water supplies are basically the same as those proposed more than 3 years ago, well before TCEQ issued their report in May 2014, which prompted LCRA to develop a plan using a 600,000 AF minimum combined storage.

Updating WMP with hydrological data subsequent to 2013 can be accomplished in short time frame; no need for several years of process to make this basic update

Although not sought at this time, the update for the 2014 data could actually be accomplished in a short time frame. On an expedited schedule, the currently proposed plan could be updated with the 2014 data, adjustments made to assure combined storage remains above the DWDR storage trigger through the period of record and approval obtained from the Commission in time for the March 1 Evaluation Date in 2016. This would provide the best assurance that firm supplies are protected from potentially dire consequences in a repeat of drought hydrology already experienced, however, the City currently proposes a more extensive timeframe than including the updates in the current proposed plan. The City proposes now a process to update the WMP with 2014 and 2015 hydrology to be *initiated* on January 1, 2017.

A January 1, 2017 deadline allows plenty of time for processing of 2014 and 2015 data and could only be considered short in comparison to an unreasonably long time frame that has been proposed, which would most likely take a decade or more to accomplish this simple update. It is actually quite an extensive timeframe relative to how long it would actually take to accomplish this relatively simple and straightforward task—incorporate the 2014 and 2015 data and adjust the interruptible curtailment triggers to maintain storage above the DWDR storage trigger for the period of record. Considering that LCRA conducted a stakeholder process in less than a month in August-September 2014, and submitted a revised application to TCEQ a little more than a month later, six months should be enough time for essentially this same task. Thus, in light of the urgency threatened by potential continuation of multiyear drought July 1, 2017 is recommended for submittal of a plan update with 2014-15 drought hydrology.

Allowing for water supply to be compromised in a return of extraordinary drought and then attempting to manage through Emergency Orders or other means not a workable or acceptable approach

Neither managing under the use of further emergency orders or an off-channel reservoir should be considered as an acceptable substitute to getting the WMP right in accordance with the LCRA's lake permit conditions and what is needed to properly protect firm water supply.

Relying on prospective emergency orders to make up for deficiencies in currently proposed plan is unworkable, risky and poor policy

Emergency orders authorizing departure from LCRA's 2010 WMP have provided some relief from a WMP that had little interruptible supply curtailment at lower combined storage levels. This proposed plan already has curtailment at lower levels of combined storage, as well as other drought conditions. In other words, it is difficult to identify clearly workable and effective opportunities to depart from this proposed plan with emergency orders, as in drought conditions and at lower combined storage levels, the plan should have already cut off interruptible supplies. Whereas the current plan allows for major releases all the way down to a combined storage of 325,000 AF. Implementing an emergency order for the proposed plan that would provide relief would apparently require an emergency order at a storage level higher than the newly proposed cut off triggers, which seems to be an unlikely prospect. Further effective management under emergency orders is not an option under the new plan. In addition, *planning* to operate under emergency orders is poor policy and a risky water management strategy.

Any prospective benefit to combined storage from an off-channel reservoir is unproven under the proposed plan

Any potential benefits of an off-channel reservoir in terms of the degree of benefit to Highland Lakes storage, particularly in a near-term critical drought scenario, is entirely theoretical at this time and subject to significant variation by many different factors including annual hydrology, operating parameters for the reservoir and the water management plan in effect. In simulations using the current 2010 WMP with estimated 2020 demands, LCRA's estimated benefit to the Highland Lakes from the off-channel reservoir (OCR) by year 2020 is an average of 120,000 AF more storage in the lakes.[6] Note that this estimated benefit is not immediate but an estimated average that accumulates over a period of years. Also, using the proposed WMP in a simulation, instead of the 2010 WMP, could significantly reduce that estimated combined storage benefit, as the proposed plan provides much of this same benefit already to Highland Lakes storage through additional interruptible curtailment. Thus it is likely there would be fewer times the simulation would show the Lane City Reservoir offsetting a portion of the interruptible demand and thereby relieving the Highland Lakes.

[6] From LCRA presentation to Region K titled "Lane City Reservoir: From January 15, 2013, Firm Customer Meeting, Updated for Region K, April 22, 2015".

In addition, no other off-channel reservoirs can be expected within a reasonable time frame to manage for the deficiencies in the currently proposed plan due to the lack of 2014-15 drought data. Again, any benefit from an OCR is untested and unknown under the current plan. The only means to assure proper protection to firm water supplies is the means provided in the 1988 Adjudication and LCRA's lake permits, which is curtailment of interruptible supply.

There are also serious unresolved issues about the integration of an off-channel reservoir into the WMP. To assure compliance with the 1988 Adjudication and LCRA's permits, if an OCR is to be somehow integrated into the WMP, the City believes it should be done after the WMP has been updated with the 2014-5 drought hydrology, including adjustments to interruptible curtailment triggers to account for effects in the simulation from this additional hydrology. Also, in the future the City asks that for any update that may incorporate the operation of an off-channel reservoir, that a base model be developed first using any updated hydrology and firm demands, and any necessary adjustments be made to assure combined storage remains above the DWDR storage trigger, before developing another simulation that incorporates the operation of the off-channel reservoir. The City recommends this approach to assure compliance with LCRA's permit conditions.

Not out of the woods on multiyear drought

Recent inflows reflect pattern of inflows during drought of the fifties

TCEQ's Emergency Order approved by the Commission on July 1, 2015, authorizing LCRA once again to depart from the current WMP, reflects the understanding that the basin is not out of the woods with regard to this historic drought (as discussed further below). LCRA's recent application for this emergency relief documents well many reasons why recent rains and gains in storage may be only temporary relief as is often experienced in the midst of ongoing multiyear droughts. An additional review of the historical inflow data to the Highland Lakes in the 1950s drought underscores this point further by revealing some important aspects of multiyear droughts in the Colorado River basin.

The historical inflow data for May 2015, in terms of quantity, is by no means unusual to occur in the month of May during a historic drought period. In fact, in an examination of historic May inflows during the 1950s drought, some of the May inflow amounts well exceed the May inflow for May 2015 and others are similar. In May 1955 inflows were 717,541 AF and in May 1956 the Highland Lakes received 533,093 AF—more than the 403,050 AF of inflows experienced in May 2015. Note that in 1956 the other months experienced low inflows.

Historical Inflows to Lakes Buchanan and Travis (acre-feet)

Data Obtained from USGS Stream Gages Upstream of Buchanan and Travis and Adjusted with LCRA Runoff Factor

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
AVG	28,040	27,324	41,538	155,311	458,493	163,479	77,305	57,734	179,768	126,922	33,298	30,454	1,369,665
1947	143,729	57,429	75,244	61,889	332,180	72,744	21,619	11,532	13,379	45,908	18,180	54,410	908,242
1948	16,912	30,214	38,935	46,548	100,611	265,373	411,361	51,129	55,145	27,052	14,381	15,054	1,072,715
1949	25,904	72,818	128,140	469,957	389,126	134,792	33,720	33,668	43,267	70,659	30,592	22,819	1,455,462
1950	26,257	42,823	15,519	58,618	119,917	43,492	37,951	23,902	99,920	14,928	8,457	10,144	501,926
1951	10,330	11,738	13,828	14,178	156,258	277,990	17,797	37,948	14,694	3,398	5,476	6,620	570,255
1952	6,927	5,886	6,284	85,224	228,396	53,598	10,046	210	1,346,506	14,885	38,487	101,165	1,897,714
1953	40,121	20,178	88,894	34,492	148,042	4,661	27,519	136,030	30,726	187,939	18,157	10,188	746,946
1954	10,470	6,678	7,267	189,855	330,674	44,368	21,297	1,592	2,194	18,745	23,932	4,484	661,557
1955	12,705	24,666	7,290	11,315	717,541	329,855	230,579	81,419	286,229	70,545	8,737	8,715	1,789,597
1956	8,861	15,771	5,566	17,375	533,093	7,999	3,544	15,189	3,303	82,647	20,631	15,098	729,080
1957	6,228	12,364	69,954	828,968	1,987,583	563,397	34,925	22,449	81,985	859,434	182,532	82,997	4,732,816

The 1950s drought is in fact punctuated with both months and individual *years* of high inflows throughout, some of which well exceed recent inflow events. Besides the often mentioned flood in September 1952 and wet months that followed, in 1955, for example, the Highland Lakes received 1,789,597 AF in inflows and the lakes in fact went all the way to full as defined by the current and proposed Water Management Plans.[7] The overall long-term pattern in the 1950s drought, however, was one of comparatively low inflows. <u>This pattern in the 1950s drought of dry periods, punctuated with numerous instances of wet periods—some lasting for several months—serves to inform us that by no means can it be concluded that the current historic multiyear drought is over.</u>

During the 1950s drought, high inflows tended to occur during May and months close to May. A distinguishing feature of the current drought since 2008 is the fact that unlike the 1950s drought, the Highland Lakes, until 2015, have not experienced a large May inflow. Before May 2015, the highest May inflow for the current drought period 2008 – 2014 was 95,821 AF in May 2010.

[7] Lake storage on June 20, 1955 reached 2,068,890 AF, with lake elevations both above full conservation capacity--Lake Travis elevation at 683.31 msl and Lake Buchanan elevation at 1020.69 msl as indicated in historic lake storage data files provided by LCRA. Under the 2010 Water Management Plan lakes are considered full if both Lakes Travis and Buchanan are at maximum allowable water conservation storage level. (2010 WMP, p. 4-34.) Under the proposed plan on page 4-19, lakes are considered full if combined storage is at or above 98 percent of the combined managed conservation storage or if Lakes Buchanan and Travis reach managed conservation storage capacity within 30 days of each other. Specifically the proposed plan states:

> For purposes of measuring drought duration, the beginning of the drought is based on the last time lakes Buchanan and Travis were both full. For purposes of measuring drought duration under this WMP, full is defined when either of the following criteria are met: 1. Combined Storage is at or above 98 percent of the combined managed conservation storage. This managed conservation storage excludes any water in the flood pool and may vary based on seasonal operational guidelines or other constraints on storage; or 2. Lakes Buchanan and Travis have each been at their respective managed conservation storage capacity within 30 days of each other.

Note that the start and end dates of the 1950s drought are based on a Combined Firm Yield (CFY) analysis and the time period when the lakes are full in the results from that CFY simulation which indicate the historic drought period as 1947 to 1957.

Historical Inflows to Lakes Buchanan and Travis (acre-feet)
Data Obtained from USGS Stream Gages Upstream of Buchanan and Travis and Adjusted with LCRA Runoff Factor

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
AVG	36,301	51,802	44,130	40,718	96,626	25,700	17,078	5,748	28,081	42,825	19,713	17,722	410,048
2008	39,808	35,121	45,290	40,007	42,768	10,297	9,199	11,826	14,736	10,897	10,955	13,558	284,462
2009	13,670	11,139	24,372	71,577	31,981	20,681	9,835	9,294	39,371	166,989	59,109	41,715	499,732
2010	135,618	246,870	118,552	144,575	95,821	33,517	59,905	10,783	86,952	14,385	13,899	16,845	977,722
2011	21,158	16,306	13,811	9,175	11,182	1,340	734	403	922	29,927	6,874	15,969	127,802
2012	35,178	74,699	112,517	19,477	83,699	12,599	8,712	2,041	12,006	19,338	6,042	6,854	393,163
2013	15,117	8,792	10,741	11,127	29,265	5,608	17,423	1,593	30,161	48,444	18,092	18,775	215,138
2014	12,270	9,509	8,235	5,937	75,245	22,832	13,739	4,297	12,418	9,783	23,021	10,341	207,626
2015	17,591	11,978	19,525	23,871	403,050	98,722							574,737

Also there can be very wet periods following a wet May during a historic drought. Again, 1955 is an excellent example of this pattern, following a May with 717,541 AF in inflows with inflows in June of 329,855 AF, in July of 230,579 AF and in September of 286,229 AF, followed by a return to an extremely dry pattern in October 1955 which persisted throughout 1956 except for the month of May. <u>So May 2015, and possibly some subsequent months that may have higher than average inflows, rather than representing a signal that multiyear drought is over, can rather be seen as conforming with a pattern of higher May inflows and sometimes higher subsequent month inflows experienced historically during periods of multiyear drought.</u>

Similarly in the current drought, after a period of low inflows in 2008 and most of 2009 which brought combined storage down to 789,357 AF on September 10, 2009, the Highland Lakes experienced several months of higher inflows between October 2009 and May 2010 taking combined storage to 1,815,264 AF on May 1, 2010,[8] but inflows returned to a severe drought pattern by August 2010. Thus again, as in the 1950s drought, it can be observed that several months of good inflows, taking lake storage to nearly full levels, do not mean that inflows cannot suddenly return to very low inflow conditions for long periods.

Also, it is worth noting that the period between 1957 to 1962 which experienced significant inflows, saw a return to a drought inflow pattern in 1963 which persisted until September 1964. This period of drought in the early sixties may actually represent a continuation of the underlying factors of drought experienced in the 1950s.

LCRA's recent application for emergency relief and TCEQ's Emergency Order confirm that multiyear drought may continue

TCEQ's Emergency Order issued July 10, 2015 granting further emergency relief from the 2010 WMP states:

Finding of Fact 19 acknowledges:

[8] Note that on May 1, 2010 that the lake elevation for Lake Travis was at 681.32 msl, a little above the conservation storage elevation for Lake Travis, whereas, the elevation for Lake Buchanan was at 1010.40 msl, well below the conservation storage elevation of 1020 msl for Lake Buchanan. Runoff in the Lake Buchanan watershed and Lake Buchanan storage has thus far been the limiting factor on the Highland Lakes reaching full refill during this current drought.

> In 1952, inflows to Lakes Buchanan and Travis increased the storage by 970,000 AF, from 621,221 AF to 1,592,000 AF. Yet the drought of the 1950's did not end until 1957.

Similarly Finding of Fact 20 provides:

> On September 10, 2009, the storage level in Lakes Buchanan and Travis was 789,357 AF, or 39 percent of capacity. By May 1, 2010, the storage level was 1,815, 264, or 90 percent of capacity. The drought did not end, however, and was followed by extremely low inflow years.

Finding of Fact 22 notes that while storage had increase above 1.3 MAF by the middle of June 2015 that "storage levels could drop dramatically." The Finding provides the example:

> In May 2012, the lakes refilled to an amount close to 1.1 million AF (to 1.033 million AF on May 22, 2012) and yet without any release to Lakeside, Gulf Coast and Pierce Ranch, the lakes dropped to 637,123 AF on September 19, 2013, the second lowest level on record.

All of this acknowledges that history, including recent history, has shown that increases in combined storage do not equate to an end of multiyear drought and that after such increases hydrological conditions can revert to long-term severe drought. Because of the potential in the near term to return to drought conditions at least as bad as have been experienced in the four and half years from October 2010 through March 2015, it is critical to have a WMP that is designed to effectively manage and protect firm water supplies through a potential repeat of what has already happened.

II. Maintaining Minimum Combined Storage at DWDR Storage Trigger (currently 600,000 AF)

With regard to the City of Austin's request that the draft Order better clarify the significance of maintaining combined storage above the DWDR storage trigger (currently 600,000 AF) that the draft WMP states at P. ES-7:

> The TCEQ 2010 Order also required an evaluation of the minimum Combined Storage in lakes Buchanan and Travis necessary or appropriate to protect Firm Water customers through a DOR condition, or under conditions worse than the Drought of Record. Since the evaluation of expected hydrologic and water demand conditions can only be simulated based on projected information, which is subject to some uncertainty, in all of its prior WMPs LCRA has determined it prudent to designate some minimum Combined Storage level. This served as a safety factor to address model uncertainties and provide for hydrologic conditions other than those simulated. **This WMP establishes a minimum Combined Storage goal of 600,000 acre-feet and the model simulations for this WMP revision maintained storage at or above this goal.** This safety factor **avoids**

the triggering of a Drought worse than Drought of Record in the event of a repeat of historic hydrology, including recent and dramatic drought conditions that have rivaled Filed Oct. 2014 ES-8 the Drought of Record, and is consistent with input received from TCEQ in May 2014 and the emergency orders issued by TCEQ for the 2012, 2013, and 2014 irrigation seasons (emphasis added).

LCRA again makes clear that establishing a 600,000 AF floor throughout a repeat of the historic hydrology is based on input from TCEQ's Executive Director. The proposed plan states, "in response to the exceptional drought conditions in the lower Colorado River basin that prompted three years of emergency orders superseding the 2010 WMP, and based on input from the TCEQ Executive Director, the LCRA Board adopted a four-point framework that underlies this WMP:" (2014 Draft WMP, p. 1-5). The first point in this framework for the proposed WMP is that "1. Combined Storage is maintained above 600,000 acre-feet through a repeat of historic hydrology."

Establishing the minimum combined storage at 600,000 AF is not by any means an arbitrary. It is selected because it is the DWDR storage trigger and it has significant practical and legal implications. If interruptible supply is not sufficiently curtailed it will trigger firm curtailment in direct contradiction to LCRA's permit conditions which require that LCRA must curtail interruptible supply to the extent necessary to allow LCRA to satisfy all firm demands. The City of Austin has commented extensively on this in its public comments submitted to TCEQ on May 28, 2013. The City's comments provided that:

> At no point during the period of record should modeling show that interruptible supply is causing firm water curtailment. The current submittal shows interruptible supply triggering firm curtailment requirements in a simulated repeat of the period of record during hydrological conditions when LCRA is still obligated to meet firm customer demand 100% of the time. This is not in accord with LCRA's permit obligations. Additional interruptible supply curtailment is required for the proposed revisions which assure that firm supply is protected from curtailment driven by interruptible supply.

The City's May 28, 2013 comments further provide that:

> As a result of conditions required in the 1988 Adjudication, LCRA's permits for Lakes Travis and Buchanan state a requirement that is central to the Water Management Plan particularly with regard to the allocation of supplies among firm and interruptible customers. The extent of curtailment of interruptible supply required to protect all firm supply is spelled out with great clarity. LCRA's permits require that:
>
>> LCRA shall interrupt or curtail the supply of water under this certificate or under Certificate of Adjudication 14-5482 pursuant to commitments that are specifically subject to interruption or curtailment, to the extent necessary to allow LCRA to

> satisfy all demands for water under such certificates pursuant to all firm, uninterruptible commitments.[9]

In short, LCRA must curtail interruptible supply to the extent necessary to allow LCRA to satisfy all firm demands. The 1988 Adjudication contains essentially this same required condition almost verbatim, and in addition, has other provisions which express this requirement in similar language.

Minimum Combined Storage set at DWDR storage trigger

The February 27, 2014 TCEQ Emergency Order set forth in detail the legal and practical significance of the DWDR storage trigger in Findings of Fact 9 -13 as well as several findings under the section titled "LCRA's Firm Customers". Finding of Fact 9 provides a table of key combined storage trigger points in the 2010 WMP which with regard to the trigger at 600,000 AF provides under the column "Action Taken" that "[i]f criteria indicate a drought worse than the Drought of Record, then cease interruptible supply and begin curtailment of firm supply." Finding of Fact 11.c. recognizes that 600,000 AF is the DWDR storage trigger providing that, "[u]nder the 2010 WMP, the LCRA Board may declare a Drought Worse than the Drought of Record (DWDR) if it finds that the following three conditions are simultaneously met: . . . c. Lakes Buchanan and Travis combined storage has less than 600,000 AF of water."

Finding of Fact 17 in the February 27, 2014 Order underscores the legal significance and critical importance of managing interruptible water supply through droughts over the period of record to avoid combined storage falling below 600,000 AF:

> On September 19, 2013, the combined storage of these reservoirs fell to the second lowest point in the history of these lakes—637,000 AF—nearing 30% capacity and just shy of the record low at 621,000 AF. Thus in September the lakes rapidly approached the 600,000 AF emergency level at which point the LCRA Board would have declared a DWDR. **Continuing to curtail interruptible stored water releases under the exceptional circumstances presented by this drought, which would drive lake storage below 600,000 <u>is critical to avoiding both an imminent threat to public health and safety and a situation whereby interruptible water supply releases would force declaration of a DWDR and drive firm customers into curtailment</u>** (emphasis added).

Other findings such as Finding of Fact 37 demonstrate the Commission's concern with the prospect that a DWDR might have to be declared on the near term horizon and in Finding of Fact 38 a concern that combined storage "came very close to falling below emergency levels" when "lakes dropped to the second lowest level on record of 637,000 on September 19, 2013."

[9] Certificate of Adjudication No. 14-5482 (as amended), p. 4, 2.B.7. Note that Certificate of Adjudication No. 14-5478 (as amended) has the same condition, changing only the number of the Certificate of Adjudication referenced.

Finding of Fact 72 in the February 27, 2014 Order plainly recognizes a key principle of water planning under the WMP with regard to managing interruptible curtailment to avoid the DWDR storage trigger (600,000 AF) stating:

> **<u>An interruptible stored water curtailment trigger should be set to avert</u>, rather than create, conditions that could require <u>declaration of a DWDR</u>** (emphasis added).

It is for precisely the reason of fulfilling this common sense tenet of water planning, both in this plan and future plans, that the City of Austin seeks articulation of this essential principle in the Order for the WMP. It is also for the fulfillment of this principle that the City seeks an update of the WMP as soon as possible that incorporates additional extraordinary drought hydrology and adjusts curtailment triggers to avoid a DWDR anytime during the period of record. The negative consequences of a DWDR are not only for firm customers as Finding of Fact 33 in the February 27, 2014 Emergency Order recognized that the WMP requires "LCRA cease all releases for interruptible stored water (regardless of the impact on crops) when a DWDR is declared."

The July 10, 2015 Commission Emergency Order granting LCRA emergency relief from the 2010 Water Management Plan, like previous emergency orders, recognizes a critical goal in managing interruptible supply is to avoid triggering a Drought Worse than a Drought of Record (DWDR) in, for example, Finding of Fact 15 stating:

> If conditions return to pre-May 2015 levels, and LCRA has to release stored water, conditions could deteriorate quickly and a DWDR could occur by June 2016.

These above quoted passages from the proposed plan and from emergency orders underscore how this principle of maintaining combined storage above the DWDR storage trigger has been adopted in the WMP process. The proposed language is to assure that this critical principle is adhered to not only in this update of the WMP, but in future updates as well.

Note that in its proposed modification of the draft Order Finding of Fact 14, the City recommends using the terminology "period of record" rather than "drought of record" as maintenance of combined storage above the DWDR storage trigger should be for the entire period of record in simulations. Because the intensity of the current drought which has exceeded the intensity of the 1950s drought for several years, simulations of the period of record may show combined storage above the DWDR storage trigger in the 1950s drought, but combined storage may fall well below this level in a repeat of the current drought. The same protection should be maintained throughout the period of record and there should not be a lack of proper protection through a repeat of the current drought due to the use of nomenclature such as "drought of record" as the period for measuring whether storage has remained above the DWDR trigger.

In sum, the City's requested changes to Finding of Fact 14 are consistent with TCEQ's prior Orders and LCRA's proposed Water Management Plan. It is critical to clearly establish this principle of maintaining a minimum combined storage above the DWDR storage trigger for the period of record for the sake of clarity in future WMP updates.

III. Look-Ahead Test

When LCRA simulated the proposed plan in the stakeholder process in September 2014, the Look-Ahead Test used in the simulation relied on the use of a 99% exceedance line derived from LCRA's stochastic model. LCRA developed a proxy for the 99% exceedance to use in the WAM simulation, which identified a certain combined storage amount on the Evaluation Dates as a cut off trigger. In Technical Paper A-5 for the proposed plan in section 6.7, the combined storage on March 1 and July 1 corresponding to the use of the 99% exceedance line was estimated to be 1.220 MAF and 1.190 MAF respectively. The use of these triggers proves important to maintaining combined storage above the DWDR trigger (600,000 AF) during the simulation of the period of record.

In the current drought the March 1, 2009 simulated combined storage is equal to 1.198 MAF. This is very close to the 99% exceedance line cut off trigger of 1.220 MAF. If this trigger of 1.220 MAF is lowered even a little bit by using a 95% exceedance line as proposed in the draft Order, then the result would be that there would be an interruptible release in 2009 in the model that does not occur when using the 99% exceedance line. This release would cause combined storage to fall below the emergency level of 600,000 AF in the simulation. For example, if the proxy combined storage used to represent the 99% exceedance line on March 1 is lowered slightly (by 2% to 1.196 MAF) to approximate the effect of using a 95% exceedance line, then there will be an interruptible stored water release for first crop in 2009, and simulations by the City of Austin indicate the minimum combined storage will fall below 600,000 AF by October 1, 2013. The consequences of falling below this trigger can be severe in terms of curtailment for both firm and interruptible customers.

In short, the protections to firm water supply achieved by using the 99% exceedance line (i.e. maintaining combined storage above the DWDR trigger for the period of record) are not assured when using the 95% exceedance line. TQEQ should require the Look-Ahead Test to be operated in the manner that was modeled during the stakeholder process, as this assures that the plan works according to the new framework of maintaining combined storage above 600,000 AF. There is no longer an assurance that this framework principle of maintaining 600,000 AF combined storage, as stated on page 1-5 of the proposed plan, can be met and likely it would not be met. Thus the City has requested deletion of language in the draft Order referencing using an exceedance line less than 99%.

IV. Request to clarify that firm customer DCP fully incorporated into WMP

In the current 2010 WMP, regarding LCRA's DCP, the WMP on page 4-2 states:

> As part of this WMP revision, LCRA proposes to fully incorporate into the WMP the LCRA's DCP, with modifications. (emphasis added).

With regard to the firm customer DCP in the proposed plan, it is the understanding of the City of Austin that the intent of including the firm customer DCP is, as stated in the current plan, to "fully incorporate into the WMP the LCRA's DCP" with regard to the firm customer DCP, and the City of Austin requests that the draft Order and/or WMP be modified to expressly state this.

The City of Austin, in a May 15, 2015 letter to LCRA on this matter, which LCRA included with its May 21, 2015 submittal to TCEQ as an addendum to its WMP application in Exhibit F-1B, indicates the City's expectation, which is that LCRA "maintain" the firm customer DCP in the WMP. That is, that the firm customer DCP is already currently in the plan (and fully incorporated as the plan states) and that the DCP would remain in WMP in this manner.

V. Notice

City's proposed changes should not require any renotice of the application

After review of relevant law, and in particular the *Chocolate Bayou* decision, the City concludes that none of the changes requested herein should in any manner require renotice of the application. *Chocolate Bayou Water Co. & Sand Supply v. Texas Natural Res. Conservation Comm'n*, 124 S.W.3d 844, 851 (Tex. App. 2003). The City's review also included subsequent case history and TCEQ rule changes since the *Chocolate Bayou* decision and found nothing to indicate there has been a relevant change to the law regarding renoticing a permit application set forth in the *Chocolate Bayou* decision. The City is prepared to discuss this in more detail with Commission staff.

The City also wants to bring to staff's attention that none of the specifics about timeframes for updating the WMP and modeling criteria for implementing the Look-Ahead Test are included in application notice,[10] so modifying these provisions would not modify the notice. The notice is general in regard to these, as well as for the minimum combined storage. Specifically the notice on page two provides, that under the January 27, 2010 WMP Order LCRA is required to file another amendment to address, among other things, "[e]valuation of the minimum combined storage in Lakes Travis and Buchanan that would be necessary or appropriate to protect firm water customers either during a repeat of the Drought of Record or under worse conditions." The notice is sufficient for the changes suggested by the City in this regard.

Notice, as discussed in *Chocolate Bayou*, is intended to provide interested persons sufficient information to know their interests are at stake and that if they wish to represent their interests, they must seek to participate in the permitting process. ("Because appellants received notice that adequately apprised them that their water-right interests were at risk, appellants' concerns about

[10] TCEQ, Notice of an Application to Amend the LCRA Water Management Plan and Public Meeting, Application No. 5838A, issued July 8, 2015.

the amendment should have been brought through a contested-case hearing." *Id.* at 851.) As a practical matter, the City notes that the TCEQ provides on page 10 of the application notice that the proposed WMP Order is a "draft Order", alerting the interested public that the Order may be modified through the Commission's permitting process, including a response to public comments. In addition, this process has been very public and basin stakeholders with interests in this application have been very involved for years.

VI. Conclusion

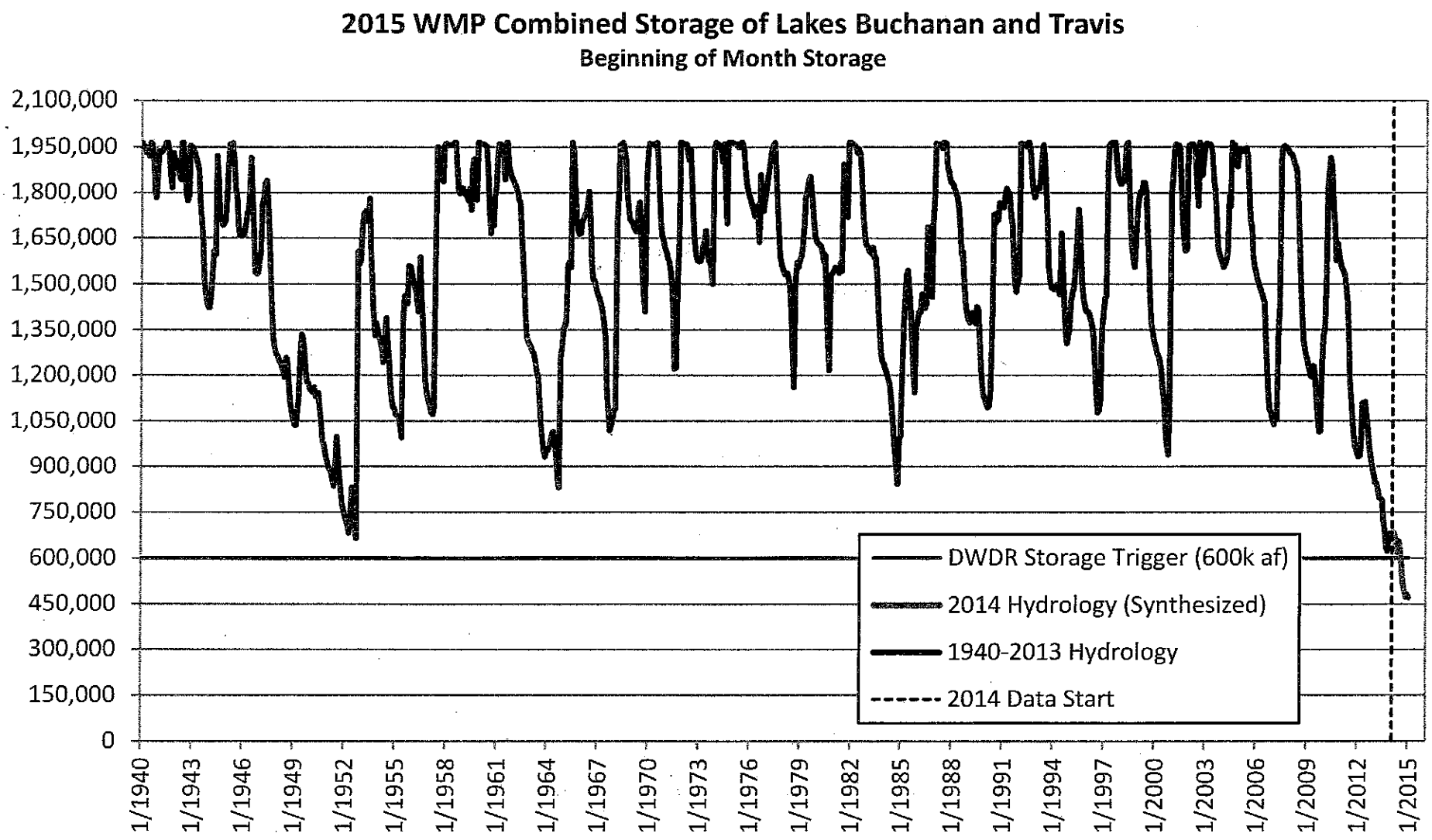
The City respectfully requests TCEQ staff to include the City's proposed changes in the draft Order.

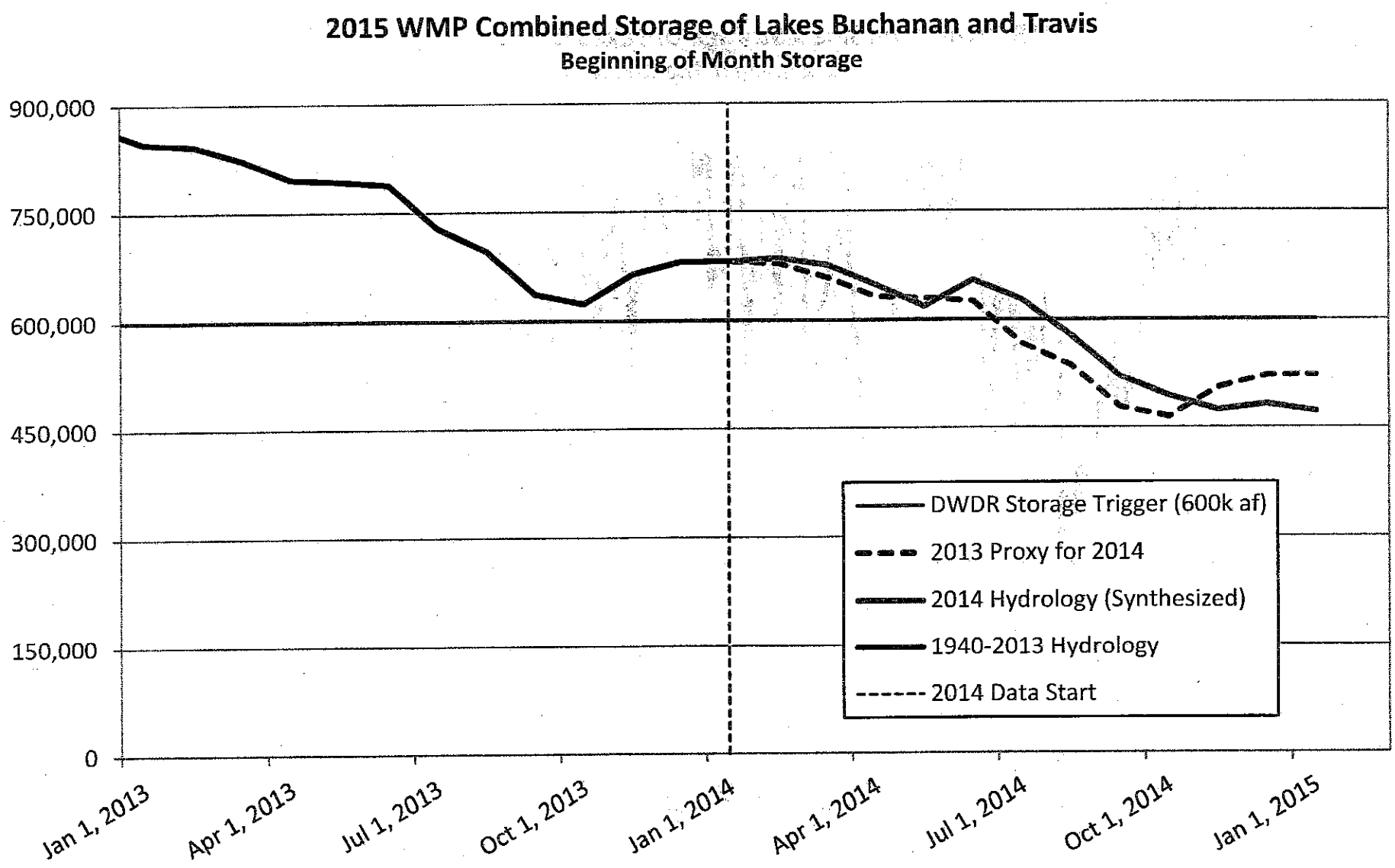
ATTACHMENT TO CITY OF AUSTIN PUBLIC COMMENTS

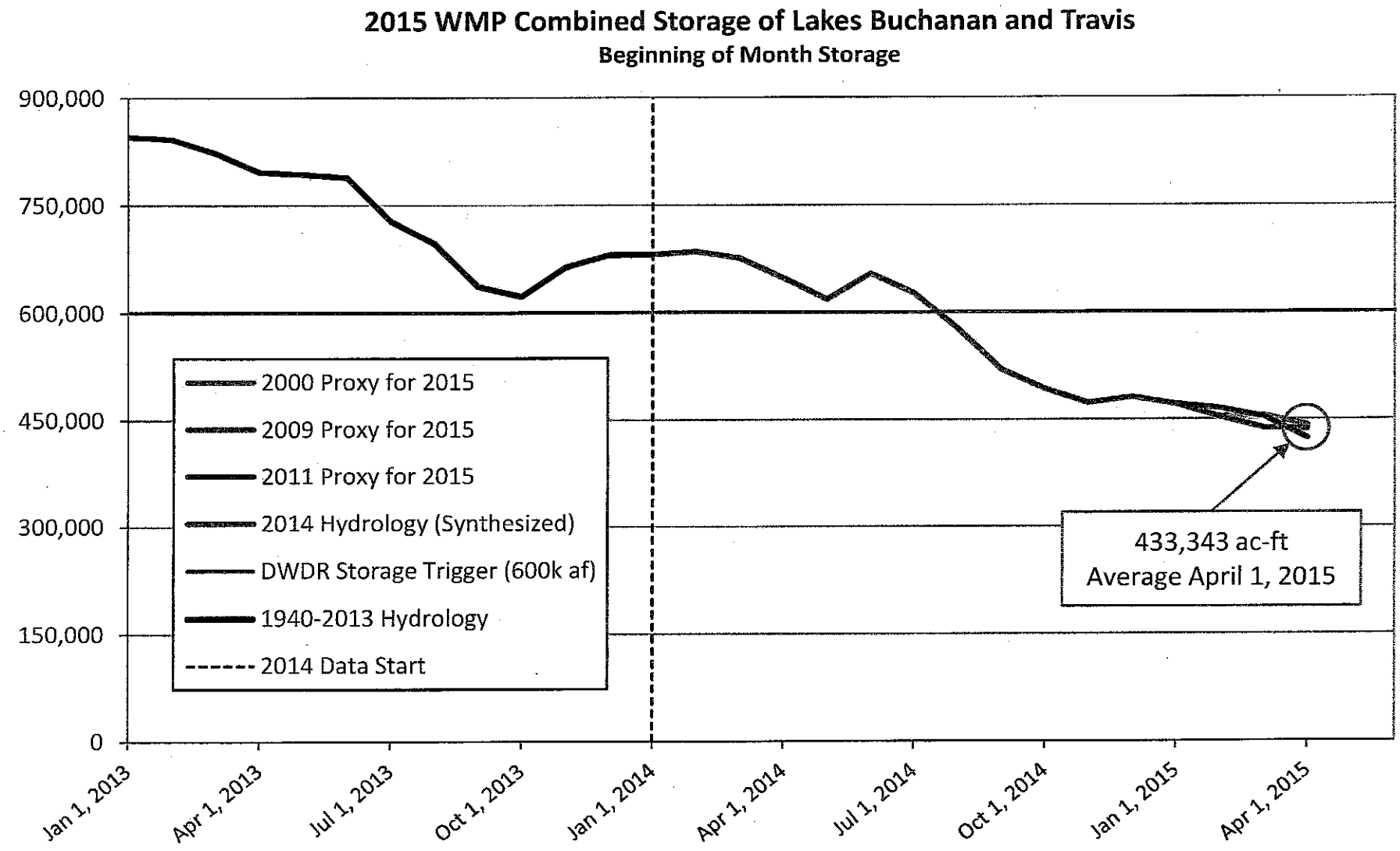
ON APPLICATION TO AMEND LCRA WATER MANAGEMENT PLAN

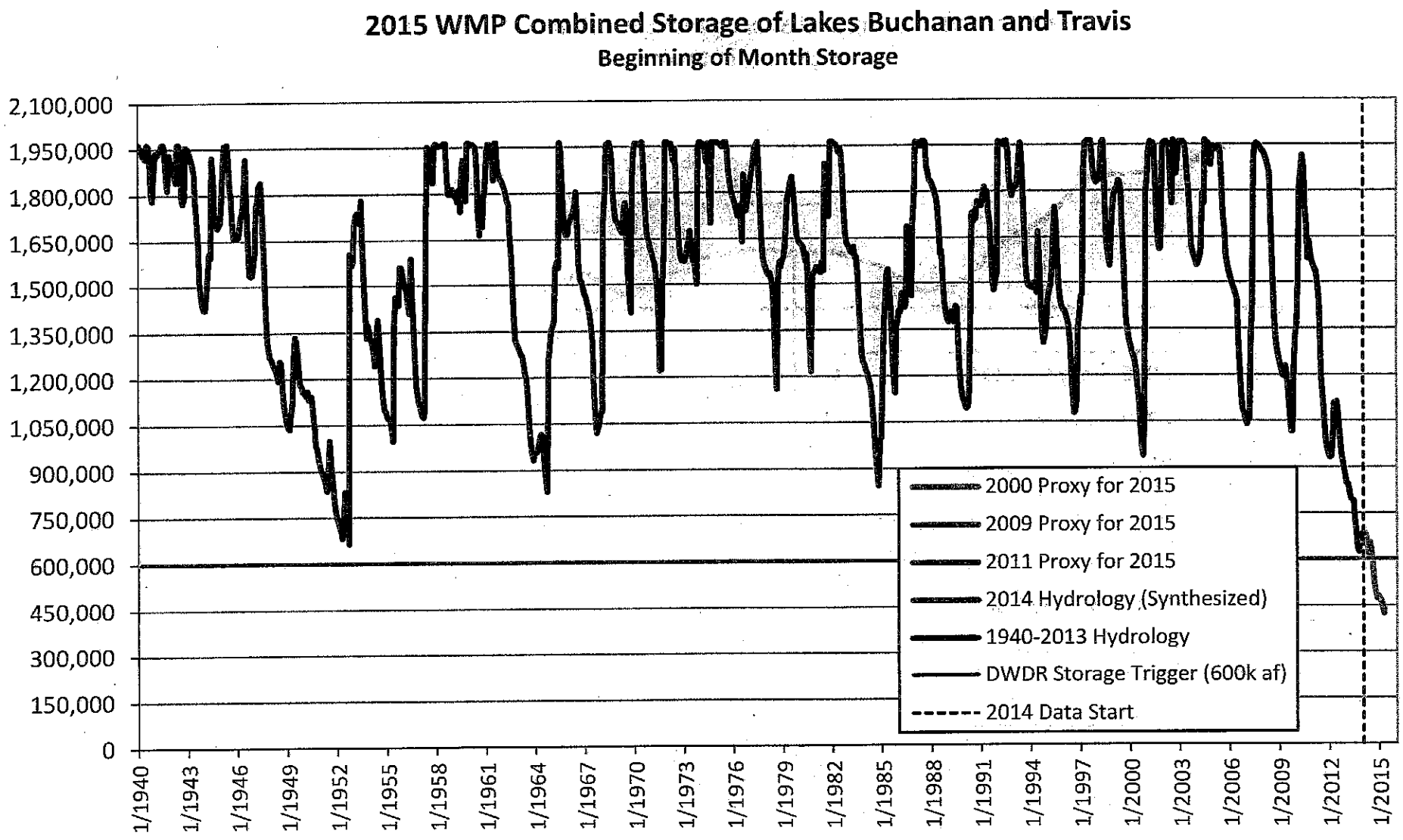
APPLICATION NO. 5838A

July 20, 2015


2015 WMP Combined Storage of Lakes Buchanan and Travis
Beginning of Month Storage
2,100,000
1,950,000
1,800,000
1,650,000
1,500,000
1,350,000
1,200,000
1,050,000
900,000
750,000
600,000
450,000
300,000
150,000
0
1/1940
1/1943
1/1946
1/1949
1/1952
1/1955
1/1958
1/1961
1/1964
1/1967
1/1970
1/1973
1/1976
1/1979
1/1982
1/1985
1/1988
1/1991
1/1994
1/1997
1/2000
1/2003
1/2006
1/2009
1/2012
1/2015
DWDR Storage Trigger (600k af)
2014 Hydrology (Synthesized)
1940-2013 Hydrology
2014 Data Start


2015 WMP Combined Storage of Lakes Buchanan and Travis
Beginning of Month Storage
900,000
750,000
600,000
450,000
300,000
150,000
0
Jan 1, 2013
Apr 1, 2013
Jul 1, 2013
Oct 1, 2013
Jan 1, 2014
Apr 1, 2014
Jul 1, 2014
Oct 1, 2014
Jan 1, 2015
DWDR Storage Trigger (600k af)
2013 Proxy for 2014
2014 Hydrology (Synthesized)
1940-2013 Hydrology
2014 Data Start


2015 WMP Combined Storage of Lakes Buchanan and Travis
Beginning of Month Storage
900,000
750,000
600,000
450,000
300,000
150,000
0
Jan 1, 2013
Apr 1, 2013
Jul 1, 2013
Oct 1, 2013
Jan 1, 2014
Apr 1, 2014
Jul 1, 2014
Oct 1, 2014
Jan 1, 2015
Apr 1, 2015
2000 Proxy for 2015
2009 Proxy for 2015
2011 Proxy for 2015
2014 Hydrology (Synthesized)
DWDR Storage Trigger (600k af)
1940-2013 Hydrology
2014 Data Start
433,343 ac-ft
Average April 1, 2015


2015 WMP Combined Storage of Lakes Buchanan and Travis
Beginning of Month Storage
2,100,000
1,950,000
1,800,000
1,650,000
1,500,000
1,350,000
1,200,000
1,050,000
900,000
750,000
600,000
450,000
300,000
150,000
0
1/1940
1/1943
1/1946
1/1949
1/1952
1/1955
1/1958
1/1961
1/1964
1/1967
1/1970
1/1973
1/1976
1/1979
1/1982
1/1985
1/1988
1/1991
1/1994
1/1997
1/2000
1/2003
1/2006
1/2009
1/2012
1/2015
2000 Proxy for 2015
2009 Proxy for 2015
2011 Proxy for 2015
2014 Hydrology (Synthesized)
1940-2013 Hydrology
DWDR Storage Trigger (600k af)
2014 Data Start

REVIEWED
MAY 29 2013
By

City of Austin
Law Department
City Hall, 301 W 2nd Street, P.O. Box 1088
Austin, Texas 78767-1088
(512) 974-2268

Writer's Direct Line
(512) 974-2159

Writer's Fax Line
(512) 974-2894

2013 MAY 28 PM 3:20
CHIEF CLERKS OFFICE
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

May 28, 2013 VIA Electronic Filing

WR/0235

Bridget C. Bohac, Chief Clerk
Office of the Chief Clerk
Texas Commission on Environmental Quality ("TCEQ")
P.O. Box 13087, MC-105
Austin, TX 78711-3087

Re: Lower Colorado River Authority ("LCRA")
WRPERM5838
CN 600253637, RN 104252267
Application NO. 5838A to Amend the LCRA Water Management Plan
Public Comments Supporting Earlier Filed Request for Contested Case Hearing

Dear Ms. Bohac:

The City of Austin ("City" or "Austin") files the attached public comments on the LCRA Water Management Plan Application No. 5838A which support the City's request for a contested case hearing on this application filed electronically on May 24, 2013. The City can be reached by mailing or faxing correspondence to my address/fax number on this letterhead and by telephone at my direct number, 512-974-2159.

The City respectfully reserves the right to raise additional issues at or after any public meeting on this application. Again, the City stands ready to work with the applicant to address the concerns expressed in these comments.

Very truly yours,

Ross Crow
Assistant City Attorney
City of Austin

cc: Robert Goode, Assistant City Manager
Greg Meszaros, Director, Austin Water
Teresa Lutes, Managing Engineer, Austin Water

Enclosures

Public Comments submitted by the City of Austin in response to Notice of an Application to Amend the LCRA Water Management Plan, Application No. 5838A supplementing the City of Austin's request for a contested case hearing

May 28, 2013

I. Introduction

The City of Austin timely submits these public comments on the Lower Colorado River Authority's ("LCRA") Water Management Plan ("WMP"), Application No. 5838A which further support the City of Austin's request for a contested case hearing. The essence of these comments is that LCRA's proposed Water Management Plan ("WMP") revisions are not in compliance with the terms of the 1988 Adjudication[1] and LCRA's permits for lakes Travis and Buchanan.[2] However, with incorporation of recent hydrology and sufficient curtailment of interruptible water supplies, the City believes LCRA's proposed WMP revisions can be brought into compliance with LCRA's permit requirements. These comments provide detail regarding two major compliance issues concerning LCRA's submittal.

II. Overview

A. In LCRA's 2012 Water Management Plan models, interruptible supply causes firm curtailment. Adjustment to interruptible supply curtailment must be made to avoid this.

At no point during the period of record should modeling show that interruptible supply is causing firm water curtailment. The current submittal shows interruptible supply triggering firm curtailment requirements in a simulated repeat of the period of record during hydrological conditions when LCRA is still obligated to meet firm customer demand 100% of the time. This is not in accord with LCRA's permit obligations. Additional interruptible supply curtailment is required for the proposed revisions which assure that firm supply is protected from curtailment driven by interruptible supply.

B. LCRA's 2012 WMP lacks essential data from the current unprecedented drought. This data must be included, along with adjustments to interruptible curtailment to properly protect firm supply in a repeat of the current drought.

LCRA's current submittal does not include data from the current unprecedented drought and therefore will be extremely deficient in its protection of firm water customers. In 2011 the lakes experienced the lowest inflows on record by far and 2012 followed with the fifth lowest

---

[1] *In re The exceptions of the Lower Colorado River Authority and the City of Austin to the Adjudication of Water Rights in the Lower Colorado River Segment of the Colorado River Basin,* No. 115, 414-A-1 (264th Dist. Ct., Bell County, Tex. April 20, 1988) (herein "1988 Adjudication").

[2] Certificates of Adjudication Nos. 14-5478 (as amended) and 14-5482 (as amended).

historical inflows on record. With very low inflows in late 2010 and inflows lower than 2011 for the first months of 2013 this creates a very long block of time with water supplies suffering from extremely serious drought rivaling the 1950's Drought of Record. Not making changes now will result in the expenditure of enormous resources by multiple entities adopting revisions which have already been made obsolete by this ongoing and unprecedented drought. Modeling for the plan must include data through the current hydrology, including 2010 – 2012 and a reasonable proxy for 2013, such as a repeat of 2011 or some other reasonable proxy. In the WMP revision, interruptible curtailment curves for both the interim and 2020 conditions should then be adjusted accordingly.

C. TCEQ's Order must preserve essential principles of the 1988 Adjudication and LCRA's Certificates of Adjudication

By way of example, TCEQ correctly stated in its order issuing LCRA's first Water Management Plan in 1989 that, "[a] 'firm' demand is a contractual obligation or other commitment of LCRA's which must be met 100% of the time through the drought of record."[3] TCEQ's[4] associated orders authorizing the Water Management Plan have always contained a provision stating that its prior WMP order provisions remain in effect except to the extent that the current order expressly changes a prior order.[5] The modeling in the proposed plan which indicates that firm water supplies actually would be curtailed in a repeat of the drought of record show that the plan does not provide for 100% of firm supply to be met through a drought of record.

III. Need to adjust interruptible curtailment in 2012 WMP to avoid firm curtailment

A. LCRA's permit requirement to curtail interruptible supply to protect firm water supply

As a result of conditions required in the 1988 Adjudication, LCRA's permits for Lakes Travis and Buchanan state a requirement that is central to the Water Management Plan particularly with regard to the allocation of supplies among firm and interruptible customers. The extent of curtailment of interruptible supply required to protect all firm supply is spelled out with great clarity. LCRA's permits require that:

---

[3] Texas Water Commission (now Texas Commission on Environmental Quality) Order Approving Lower Colorado River Authority's Water Management Plan and Amending Certificates of Adjudication Nos. 14-5478 and 14-5482, Sept. 20, 1989, p. 15, Finding of Fact No. 81.

[4] The Texas Commission on Environmental Quality or "TCEQ" as used herein refers to TCEQ and predecessor agencies such as the Texas Water Commission.

[5] *See, e.g.*, Texas Commission on Environmental Quality, Agreed Order Approving Amendments to Lower Colorado River Authority's Water Management Plan, Jan. 27, 2010, p. 6, Ordering Provision No. 1.a., "LCRA's amended Water Management Plan is subject to all findings, conclusions, and conditions contained in the Commission's Order dated September 20, 1989, December 23, 1991, December 18, 1992 and March 1, 1999, approving and amending the WMP, except to the extent that this Order specifically provides otherwise."

> LCRA shall interrupt or curtail the supply of water under this certificate or under Certificate of Adjudication 14-5482 pursuant to commitments that are specifically subject to interruption or curtailment, to the extent necessary to allow LCRA to satisfy all demands for water under such certificates pursuant to all firm, uninterruptible commitments.[6]

In short, LCRA must curtail interruptible supply to the extent necessary to allow LCRA to satisfy all firm demands. The 1988 Adjudication contains essentially this same required condition almost verbatim, and in addition, has other provisions which express this requirement in similar language. One provision states:

> The supply of stored water pursuant to non-firm, interruptible commitments should be interrupted or curtailed to the extent necessary to allow LCRA to satisfy all existing and projected demands for stored water pursuant to all firm, uninterruptible commitments.[7]

As mentioned, TCEQ's 1989 Order approving the first Water Management Plan, in an Order provision contemporary with the 1988 Adjudication and the Certificates of Adjudication for Lakes Travis and Buchanan in accord with these documents states, "A **'firm' demand** is a contractual obligation or other commitment of LCRA's which **must be met 100% of the time through the drought of record**."[8] In other words, LCRA must meet firm water demand such that there is no curtailment of firm supply in a repeat of the drought of record and the curtailment of interruptible supply must be established in a manner to achieve this result.

B. How is this required curtailment of interruptible supply done?

As a means of effectuating such provisions, the 1988 Adjudication and LCRA's Certificates of Adjudication require LCRA to submit to TCEQ for approval a Water Management Plan and provides for periodic updates to this plan. By Order, TCEQ approved the first WMP in 1989 and TCEQ has issued subsequent orders approving updates to the plan.[9] A fundamental aspect of this plan is establishing trigger points at which interruptible water supply will be curtailed. These triggers are based on the combined storage of lakes Travis and Buchanan. When combined storage falls to a certain trigger level, then some degree of interruptible supply curtailment begins. The amount of curtailment generally increases as the combined storage falls.

---

[6] Certificate of Adjudication No. 14-5482 (as amended), p. 4, 2.B.7. Note that Certificate of Adjudication No. 14-5478 (as amended) has the same condition, changing only the number of the Certificate of Adjudication referenced.

[7] 1988 Adjudication, Attachment No. 2, p. 5, Finding 19.f. (from findings for LCRA's Lake Buchanan water right).

[8] Texas Water Commission (now Texas Commission on Environmental Quality) Order Approving Lower Colorado River Authority's Water Management Plan and Amending Certificates of Adjudication Nos. 14-5478 and 14-5482, Sept. 20, 1989, p. 15, Finding of Fact No. 81 (emphasis added).

[9] *See,* Texas Commission on Environmental Quality, Agreed Order Approving Amendments to Lower Colorado River Authority's Water Management Plan, Jan. 27, 2010, p. 6, Ordering Provision No. 1.a. citing dates of prior orders.

Eventually, if storage falls further, all interruptible supply ceases. The increasing curtailment as lake storage decreases is expressed graphically, with combined storage on the x-axis and the amount of interruptible water supply on the y-axis. A curve on the graph depicts the increasing curtailment as lake storage decreases. *See, e.g.,* Proposed 2012 WMP, Figure 4-1 and Figure 4-2.

The effectiveness of an interruptible supply curtailment curve in fully protecting firm supply can be tested by running a model which repeats the hydrology of the past 70-plus years and includes certain assumptions regarding firm customer water demand. In accord with the interruptible curtailment condition in LCRA's lake permits discussed above, **if the results of a model run show that interruptible supply at any time during a repeat of the 70-plus year period of record results in firm water supply being curtailed, then the interruptible curtailment curve must be adjusted "to the extent necessary" that the model does not show any curtailment of firm supply during a repeat of the entire period of record.**

In the current and proposed Water Management Plan, firm curtailment occurs when all of the criteria for a "possible" Drought Worse than a Drought of Record (DWDR) are satisfied simultaneously.[10] There are three criteria for a possible DWDR (discussed below) and when these are met, the LCRA Board will make a declaration, which among other things requires an initial pro rata curtailment of firm supplies of 20%.[11] The models used to support LCRA's proposed WMP revisions, use a repeat of the hydrology of a 70 year period of record (1940 – 2009) with certain assumptions including increased firm water demand. As examined in more detail below, the model results indicate that during the period of record in the portion that represents a repeat of the drought of record (which occurred in the 1950's), that all three criteria for declaring a DWDR are simultaneously triggered even though hydrologically a DWDR could not yet have been reached. **In other words, while still in the Drought of Record (a repeat of historic conditions that is not yet in an actual Drought Worse than the Drought of Record) LCRA's modeling shows results that would require firm customers to undergo significant mandatory curtailment. This is a fundamental permit compliance issue. As discussed above LCRA must meet firm demand 100% of the time through a Drought of Record—not 80% of the time or less as indicated in the model results that form the basis of LCRA's application for these WMP revisions.**

[10] Lakes Buchanan and Travis Water Management Plan and Drought Contingency Plans Submitted to Texas Commission on Environmental Quality by the Lower Colorado River Authority in March 2012, with Supplemental Filing May 2012 (herein "Proposed 2012 WMP"), p. 4-27.

[11] Proposed 2012 WMP, p. 4-25.

C. Interruptible supply in the LCRA proposed 2012 WMP triggers firm customer curtailment and must be adjusted

This section discusses in more specific detail how LCRA's model shows that in the proposed WMP revisions interruptible supply is managed in a manner that is shown to cause firm water supply curtailment in conflict with LCRA's permit requirements.

1. Drought Worse than Drought of Record (DWDR) Criteria triggered during Drought of Record

First, to understand that the DWDR criteria are simultaneously triggered while still hydrologically in a Drought of Record, and not yet in an actual DWDR, it is important to understand that LCRA's model results reflect only a repeat of the Drought of Record (i.e. a repeat of historic conditions which have occurred) and at no point reflect conditions worse than the critical period of the Drought of Record.[12] This is due to the simple fact that data used in running the model is in fact the hydrology of the Drought of Record, again, a repeat of historic conditions. Therefore, any results shown—including the simultaneous triggering of all 3 DWDR criteria requiring curtailment of firm customers—occurs in a repeat of the hydrological Drought of Record. In a simulated repeat of these historic conditions, for LCRA to be in compliance with its lake permits, it should be clear that firm customers receive 100% of their supply.

Put simply, the model shows what happens in a repeat of the hydrological Drought of Record and in this repeat of the Drought of Record it must show that firm demand is met 100% of the time. The model, however, does not show this. Instead, it shows the triggering of the DWDR criteria, which requires curtailment of firm customers. This needs to be corrected.

2. Three DWDR Criteria simultaneously triggered

LCRA's proposed WMP revisions set out the 3 criteria requiring the LCRA Board to Declare a Drought Worse than a Drought of Record:

> The LCRA Board of Directors will make a Drought Worse than Drought of Record declaration when the following three conditions are simultaneously met:
>
> 1. Drought duration of at least 24 consecutive months; and
> 2. Drought intensity greater than that of the Drought of Record as measured by inflows into the Highland Lakes; and

[12] The critical period of the Drought of Record, as determined in a simulation to compute the combined firm yield, is a period of 10 years starting June 1947 and ending May 1957. Proposed 2012 WMP, Technical Paper A-6, p. 3.

3. The combined storage in lakes Buchanan and Travis is less than 600,000 acre-feet.

This information is included in the Proposed 2012 WMP submittal at p. 4-27. Examining the three criteria in turn below, it is a fairly straight forward analysis to see that all three are triggered simultaneously during the Drought of Record in both the Interim and 2020 Demand Phases[13] of the Proposed 2012 WMP, which requires a declaration of a Drought Worse than Drought of Record ("DWDR") and firm water supply curtailment. Attached also as Exhibit A is a graphic representation of the WMP WAM results for the Interim and 2020 Demand Phase showing the points at which all 3 DWDR criteria are triggered during the Drought of Record.[14] In the graph on page 1 of Exhibit A the cumulative inflows for the Drought of Record for the Interim and 2020 Demand Phases are depicted. On those cumulative inflow curves which extend for a longer period than 24 months, there are circles and diamonds which depict the months in which the combined storage is below 600,000 acre-feet in the simulation. This makes it very simple to see visually that when the drought duration is in excess of 24 months, that there are also times when both the inflow criteria (cumulative inflows below the envelope curve as discussed below) and the storage criteria (combined storage below 600,000 acre-feet) is met. ***Wherever a circle or diamond is depicted on the graph on page 1 in Exhibit A, that is a point at which all 3 criteria for the declaration of a DWDR are triggered during the Drought of Record.*** Also included in Exhibit A are tables of data which show LCRA's model results from which the graph is derived.

a. Drought duration criteria triggered

For the purposes of determining drought duration the beginning of the drought is based on the last time lakes Buchanan and Travis were full.[15] Besides the model analysis provided herein by

---

[13] The Proposed 2012 WMP is divided in to two distinct phases based on an increased demand for firm water over time. Model simulations were conducted for both phases. The 2020 Demand Phase is based on an estimated firm water customer demand expected by the year 2020 and the protections needed to assure that demand is met. The Interim Demand Phase is based on a demand that is between the estimated amount of firm water demand in 2010 and the projected 2020 demands in the Proposed 2012 WMP. There are different interruptible water supply curtailment curves for the Interim and 2020 Demand Phases, as these curtailment curves require adjustment to accommodate the change in firm water demand over time.

[14] Exhibit A is a City of Austin analysis of results from LCRA's Proposed 2012 WMP WAM.

[15] Specifically the Proposed 2012 WMP at p. 4-27 states:

> For purposes of measuring drought duration, the beginning of the drought is based on the last time lakes Buchanan and Travis were both full. For purposes of this declaration, full is defined when either of the following criteria is met:
>
> - Combined storage is at or above 98 percent of the combined managed conservation storage. This managed conservation storage may vary based on seasonal operational guidelines or other constraints on storage; or
> - Lakes Buchanan and Travis have each been at their respective managed conservation storage capacity within 30 days of each other.

the City of Austin at Exhibit A as described directly above, a simple visual examination of LCRA's modeling results for both the Interim and 2020 Demand Phases (*See* Exhibit B)[16] shows that during the Drought of Record period, the duration was considerably longer than 24 months and that at least 24 months had elapsed before the combined storage fell from the full condition to below 600,000 acre-feet. As noted, for purposes of measuring drought duration, the beginning of the drought is based on the last time lakes Buchanan and Travis were full and full can be identified in a simulation as the point at which combined storage is at or above 98 percent of the combined managed conservation storage. As shown in the attached model results in Exhibit A at p. 4, for the Interim Demand Phase the reservoirs for the Drought of Record first fell below 98% combined storage in a repeat of June 1946. For the 2020 Demand Phase for the Drought of Record reservoirs first fell below 98% in a repeat of May 1945.

Model results provided in the stakeholder process for both the Interim and 2020 Demand Phases at Exhibit B visually show combined storage first falling below 600,000 in the repeat of 1950. Specifically in the analysis provided by the City of Austin at Exhibit A on page 3 for the Interim Demand Phase model run, the results show the combined storage first falling below 600,000 acre-feet in a repeat of December 1950. At page 5 for the 2020 model run, the City's analysis shows the combined storage first falling below 600,000 acre-feet in a repeat of November 1950. It is clear from this that for both the Interim and 2020 Demand Phases, well over 24 months has elapsed since reservoirs first fell below 98% combined storage to the time when the combined storage is seen falling below 600,000 acre-feet in a repeat of the early fifties. For the Interim Demand Phase the drought duration is 55 months and for the 2020 Demand Phase the drought duration is 67 months when the other 2 criteria are met in the simulation, which is well beyond the 24 month drought duration criterion.

b. Intensity (Inflow) Criteria triggered

The intensity criteria may be triggered when there is a period of low cumulative inflow to the lakes.[17] For the Proposed 2012 WMP, if cumulative inflows for any period of time, when plotted on a graph, are below the cumulative inflows "envelope curve" for the Drought of Record, then this intensity or inflow criterion is satisfied.[18] The envelope curve encapsulates and thus approximates the cumulative inflows during the Drought of Record. In the chart for Exhibit

---

[16] Note that in the attached Water Management Plan Update Scenario Runs dated June 28, 2011 prepared by LCRA, the graph on page 1 depicts the 2020 Plan results in the red dashed line labeled Run 85A and page 2 depicts the Interim Plan results in a blue dashed line labeled Run 85IA.

[17] Specifically the Proposed 2012 WMP at p. 4-27 **(as corrected by LCRA during Technical Review)** states:

> For purposes of measuring drought intensity relative to the Drought of Record, the cumulative inflows since the beginning of the drought will be compared to a Drought of Record inflow envelope curve that reflects the cumulative inflows in the critical periods of the Drought of Record. The envelope curve consists of a uniform slope of 56,141 acre-feet per month for the first 62 months of the drought, a slope of 73,241 acre-feet per month for months 63 to 70, and then a slope of 60,350 ac-ft/month the remainder of the drought.

[18] *See* Proposed 2012 WMP, Technical Paper A-6, p. 3.

A it can be seen visually that for the Interim Demand Phase, the WAM results depict the cumulative inflow during the Drought of Record as being below the cumulative inflow envelope curve at all times after the 24 month duration criteria is met (with the exception of the final month of the 131 month period which does not affect the conclusions herein in any manner). (*See* table in Exhibit A on page 7 with columns comparing the cumulative inflows of the envelope curve with the cumulative inflows of the Interim Demand Phase.) In the chart for Exhibit A it can also be seen visually that for the 2020 Demand Phase the WAM results depict the cumulative inflow during the Drought of Record as being below the cumulative inflow envelope curve at all times when both the 24 month duration criteria and the 600,000 acre-feet storage criteria is met. (*See* table in Exhibit A on page 7 with columns comparing the cumulative inflows of the envelope curve with the cumulative inflows of the 2020 Demand Phase with the months where combined storage falls below 600,000 acre-feet shaded.)

c. Combined storage criteria triggered

This requires little explanation. The model results in both Exhibit A and B show in a repeat of the Drought of Record that the combined storage falls below 600,000 acre-feet for a substantial period of time during a repeat of the early fifties. As stated, the combined storage first falls below 600,000 acre-feet in a repeat of December 1950 for the Interim Demand Phase and November 1950 in the 2020 Demand Phase. *See* Exhibit A tables on pages 3 and 5. Model results for both the Interim and 2020 Demand Phases show that once combined storage has fallen to 600,000 acre-feet in 1950, that except for a repeat of June and July 1951, the combined storage remains below 600,000 acre-feet until a repeat of September 1952. For the Interim Demand Phase the combined storage dips down below 600,000 acre-feet again in April 1955. *See* Exhibit A, p. 3. For the 2020 Demand Phase the combined storage falls below 600,000 acre-feet again in two distinct time periods—October 1954 through April 1955 and January 1957 through March 1957. *See* Exhibit A, p. 5. These same time frames in which combined storage is below 600,000 acre-feet all overlap with the period when both the criteria for drought duration and inflow criteria are also triggered.

D. In 2012 WMP, interruptible supply driving firm customers into curtailment

From the above analysis it is apparent that during the Drought of Record all 3 criteria requiring a declaration of a DWDR are simultaneously triggered which requires an initial curtailment of firm customers of 20% according to LCRA's Drought Contingency Plan. Despite the fact that LCRA models for the 2012 WMP show mandatory curtailment of firm customers triggered during the Drought of Record, the proposed plan makes the statement:

> All projected interim phase and 2020 level demands for **firm water customers can be fully satisfied** under a simulated repeat of hydrologic conditions during the historic period of 1940-2009, **including during the Drought of Record** and during short-term intense droughts experienced in recent decades.

Proposed 2012 WMP. P. 4.9.1 (emphasis added). Although this reflects LCRA's duties under its permits, it is difficult to see how all firm demands "can be fully satisfied under a simulated repeat of hydrologic conditions during the historic period of 1940-2009" when the above assessment of that simulation in fact shows that LCRA would be required to cut back firm demand by at least 20% during this simulated period. Throughout the period of record, including the Drought of Record, all declines in the combined storage at all points in time are due in part to interruptible releases. Hence, **in the period that precedes the triggering of firm curtailment there are interruptible releases, which if further curtailed, would avoid all 3 criteria being triggered simultaneously and thus would avoid firm curtailment.** This interruptible supply curtailment is clearly and expressly required by the 1988 Adjudication and LCRA's permits in the condition that LCRA curtail interruptible supply to the extent necessary that all firm demand is satisfied. Also it is required to fulfill the above quoted statement in LCRA's Proposed 2012 WMP at P. 4.9.1.

In sum, under its permits, LCRA cannot knowingly plan for interruptible releases over the period of record (including the Drought of Record) which LCRA's models show will trigger firm curtailment. If interruptible supply can be reduced to avoid this result in the model, then by the 1988 Adjudication and LCRA's permits, it must be done.

E. Plan cannot by design manage municipal supply into emergency cut backs on firm supply

Regarding managing water supply in a manner to avoid emergencies, the solution—and the requirement by both law and common sense--is not to try to curtail water supply when reservoirs are depleted and about to go into an emergency condition, but to sufficiently curtail interruptible supply well in advance so that supplies never reach the emergency level in the first place. Otherwise the plan *by design* is managing municipal supply into emergency cut backs on firm supply. LCRA's permits require that interruptible supply be curtailed to the extent necessary that all firm demand is satisfied. Allowing for releases of interruptible supply which LCRA's model shows *necessarily* will result in firm supplies being cut back is a direct contradiction of this requirement. LCRA's Proposed 2012 WMP states, "the WMP is designed so that LCRA can meet **all** firm demands through a repeat of the Drought of Record (emphasis added)." Proposed 2012 WMP P. 4-26. LCRA has correctly stated how the WMP must be designed. TCEQ should assure that model simulations for the Proposed 2012 WMP show that this is indeed the case.

It is important to note that the current 2010 WMP did not sufficiently curtail interruptible supply. TCEQ has now approved two emergency orders to correct for its deficiencies. These emergency orders are a good example of how trying to curtail interruptible supply after large interruptible releases have already been made does not fix all the problems. In this instance the brakes were applied even much sooner than hitting the DWDR triggers. Nonetheless, the basin faces the prospect of hitting a DWDR by the end of the summer. Although the Emergency Orders have

been essential, after the fact management, using Emergency Orders is poor management and does not sufficiently protect firm customers who now face curtailment due to large releases in 2011 which should not have happened. It's too late to close the barn door after the cow is out of the barn. For these reasons it is essential to assure that interruptible supply is sufficiently curtailed in the plan such that in the model the interruptible releases at no point in the period of record result in the curtailment of firm supply.

IV. Changed circumstances due to prolonged and unprecedented drought require further WMP revisions

In addition to the above discussed permit compliance issues in LCRA's Proposed 2012 WMP, due to the unprecedented and ongoing drought, the City of Austin no longer believes that the proposed revisions to LCRA's WMP, developed with the assistance of a stakeholder committee that did its primary work from July 2010 to July 2011, is sufficiently or properly protective of firm water supplies. The prolonged drought also caused the City of Austin to re-examine assumptions used in the stakeholder process and as discussed above even absent the unprecedented drought conditions now does not believe the proposed revisions are properly protective of firm supply.

A. LCRA acknowledges deficiencies in proposed revisions

LCRA recognizes deficiencies in its current submittal to TCEQ. At the Senate Natural Resource Committee Hearing on April 9, 2013, LCRA's Board Chair Tim Timmerman provided testimony and in some introductory remarks made by the Chair about the proposed revisions to the Water Management Plan now before TCEQ he commented, "[t]he newest plan we have is already based on out-of-date information and modeling."[19] Although recognizing this, LCRA would like to proceed with its current application. The City of Austin had taken this same view for a long time, however, as this alarming multi-year drought has continued, and as LCRA has succinctly put it this "Intense Drought Rivals Worst in History,"[20] the City has concluded it can no longer ignore the obvious. The proposed revisions already require a major update if the plan is to be properly protective of firm customers, including large municipal customers.

In light of the very lengthy process that will likely be required to get revisions finally approved after any potential legal challenges have been addressed--possibly in a contested case hearing

[19] The Senate of Texas, Senate RealMedia video archives 2013, Senate Committee on Natural Resources (Part I), April 9, 2013, comment found at 1:26:15, http://www.senate.state.tx.us/avarchive/?yr=2013&lim=250 (last visited May 24, 2013).

[20] LCRA, Intense Drought Rivals Worst in History, http://www.lcra.org/library/media/public/docs/water/drought/IntensityofDrought.pdf (last visited May 24, 2013).

and subsequent court actions—it only makes sense to get the plan right now and to go through what could well be a very lengthy and contentious process once instead of twice. In addition, it is not appropriate to leave unprotected for a prolonged period the water supply for over a million people and a major economic engine for the State of Texas. Attempting to manage the basin going forward with additional emergency orders fails to recognize that once large interruptible releases are made, just stopping further interruptible releases cannot spare the basin from a possible crisis if conditions continue to be dry. The basin faces exactly this situation today. As mentioned, since the large releases in 2011, the two emergency orders issued by TCEQ, although essential, still leave firm customers facing the possibility of firm curtailment by the end of this summer or early fall.

LCRA's projections for Highland Lakes storage dated May 1, 2013 show the possibility of storage falling to 600,000 acre-feet as soon as August 1—about two months from now.[21] The 600,000 acre-foot "emergency" level[22] is of great significance since, as described above, the LCRA Board at this point is expected to require firm customers to cut back an initial 20%. The August 1 projection of 600,000 acre-feet is based on "Extreme Drought Conditions" in the coming months. LCRA's projections also show lake storage falling to 600,000 acre-feet by September 1 in "Drought Conditions." Neither is unrealistic considering the severity of the ongoing drought and as LCRA notes, inflows so far for 2013 are comparable to 2011—the year with the lowest inflows to the Highland Lakes.[23]

It is noteworthy that even under "Average Conditions" LCRA's May 1 projections over the next 6 months show a range of between 700,000 and 800,000 acre-feet. Thus even with improvement from drought conditions to average conditions, combined storage will remain well below the 900,000 acre-foot level where LCRA asks its firm customers to place their customers under mandatory restrictions.[24] At 900,000 acre-feet combined storage, Austin implements its Stage 2 drought restrictions, which includes a mandatory one-day-a-week watering schedule. Austin has been in Stage 2 for 19 of the last 21 months.

---

[21] LCRA, Highland Lakes Water Storage and Forecast, May 1, 2013, http://www.lcra.org/library/media/public/docs/water/drought/DroughtUpdate_StorageProjection.pdf (last visited May 24, 2013).

[22] LCRA, Water Supply Status, May 1, 2013, http://www.lcra.org/library/media/public/docs/water/drought/Water_Supply_Dashboard.pdf (last visited May 28, 2013). Note that this document shows that for combined storage levels below 600,000 acre feet that this stage is termed an "Emergency."

[23] LCRA, Drought becoming more intense as weather offers little relief, http://www.lcra.org/water/drought/index.html (last visited May 28, 2013).

[24] Proposed 2012 WMP, p. 4-25.

Again, all of this information is to emphasize the point that emergency orders as issued twice in the past two years, although essential for slowing further reservoir depletion, cannot make up for depletion that has already occurred due to a Water Management Plan that is not properly protective of firm water supplies. The reservoirs have never recovered from the twin occurrence in 2011 of massive interruptible releases and the lowest inflows on record. The pro rata curtailment that firm customers face now in 2013 is directly related to large interruptible stored water releases in 2011, as well as in prior years 2008 through 2010, and, as discussed above, this is the result which LCRA's lake permits expressly require LCRA to prevent. It is for this reason that going forward the WMP include the proper curtailment in the first place and that emergency orders not be relied upon in lieu of proper upfront management, because as important as emergency orders are to slowing further decline of vital lake storage, current experience confirms these orders can be too little too late in regard to the objective of preventing interruptible supply from causing firm curtailment.

B. Overview of the general data that is available since 2009

In 2011 the lakes experienced the lowest inflows on record by far and 2012 followed with the fifth lowest historical inflows on record. LCRA has posted a document on the LCRA website titled "Intense Drought Rivals Worst in History," which indicates that inflows in 2011 measured at 127,802 acre-feet, well below the second lowest year, which is 2008 at 284,462 acre-feet.[25] This same document shows inflows for 2012 at 393,426. For contrast, LCRA's Water Use Summary for 2011 shows the amount of storage used in 2011 for interruptible supply at 433,251 acre-feet.[26] With the exceptionally low inflows so far in 2013, this creates a very long block of time with water supplies suffering from extremely serious drought now rivaling the Drought of Record. As discussed further below, without some adjustment in the curtailment curves, the model will almost certainly show interruptible supply driving reservoirs below 600,000 acre feet and triggering curtailment of firm customers. Again, it is not just permit requirements but common sense which says this is not the manner to manage water supply in this basin.

C. Estimating the impact of the current drought on combined storage levels

Even without the specific data required to run the WAM, it is possible to get a general read on what levels combined storage would be expected to fall to in the simulations if the severe drought hydrology from 2010 to the present is included in the model. Examining the WAM

---

[25] LCRA, Intense Drought Rivals Worst in History, http://www.lcra.org/library/media/public/docs/water/drought/IntensityofDrought.pdf (last visited May 24, 2013).

[26] LCRA Water Use Summary 2011, http://www.lcra.org/library/media/public/docs/water/wmp/water_use_summary_2011.pdf (last visited May 24, 2013).

results provided to the stakeholder group on June 28, 2011 in Exhibit B it can be seen that 60 months into the Drought of Record the simulated combined storage is in the range of 400,000 to 600,000 acre feet. With inflows that are considerably less than the Drought of Record over this same time period since the beginning of the current drought, and other factors generally the same or similar, it can be reasonably postulated that simulated combined storage would be at least at similarly lows levels 60 months plus into the current drought. The curtailment curves of the current plan do not protect firm water customers from this result (combined storage falling below 600,000 AF in the current drought) which would trigger a Drought Worse than a Drought of Record as the other 2 criteria are already met. This requires correction.

The conclusion that model runs for the Interim and 2020 Demand Phases which include the most recent hydrology will show combined storage levels falling below 600,000 acre-feet is supported by the data graphically depicted in Exhibit A. This can be postulated by a comparison of the cumulative WAM inflows during the first 5-plus years of the Drought of Record for the Interim and 2020 Demand Phase with the cumulative inflows since the beginning of the current drought starting in 2008.[27] The graph in Exhibit A indicates that the cumulative inflows since 2008 are less than the Drought of Record cumulative WAM inflows in the simulation for either the Interim or 2020 Demand Phase. The circles and diamonds on the cumulative WAM inflow curves for the Interim and 2020 Demand Phases depict periods when combined storage falls below 600,000 acre-feet. At around 55 months into the Drought of Record, the Interim Demand Phase curve circles appear on the curve indicating a combined storage of less than 600,000 acre-feet. Meanwhile, at 55 months into the current drought the cumulative inflow curve depicts lower inflows than the Drought of Record. It is logical to deduce that similarly low and even lower combined storage levels below 600,000 acre-feet would be depicted in a simulation which includes the most recent drought data. Note also that for the 2020 Demand Phase that the gap between the cumulative inflows for the current drought and the Drought of Record widens to almost one million acre feet. With cumulative inflows falling far short of the 1950's drought, it is reasonable to assume that combined storage amounts in the simulation for the 2020 Demand Phase will also fall to levels reached in the simulations of the Drought of Record—such as combined storage levels between 400,000 and 600,000 acre-feet.

Inflows have continued at extremely lows levels. The inflows for January through April 2013 have all been lower in total than the first four months of 2011,[28] which has the lowest inflows on record. More reason to believe that in a model, low combined storage levels would rival those in the Drought of Record.

---

[27] Proposed 2012 WMP Technical Paper A-6, Figure 1 shows WAM inflows and the LCRA Inflow Set "converge" in recent years and thus recent historical inflows can be used as a proxy for WAM inflows.

[28] For January through April 2013 inflows amounts *see* LCRA, Drought becoming more intense as weather offers little relief, http://www.lcra.org/water/drought/index.html (last visited May 28, 2013).

All of this leads to the unavoidable conclusion that to meet LCRA's permit requirements, more interruptible curtailment will be required than is currently proposed. As the current drought rivals the Drought of Record, the curtailment needed to protect firm customers in a simulated repeat of the current drought may be similar to the curtailment needed to avoid firm curtailment during the simulated repeat of the Drought of Record in LCRA's proposed revisions as discussed in detail above.

V. Conclusion

A. In LCRA's 2012 Water Management Plan models, interruptible supply causes firm curtailment. Adjustment to interruptible supply curtailment must be made to avoid this.

At no point during the period of record should modeling show that interruptible supply is causing firm water curtailment. The current submittal shows interruptible supply triggering firm curtailment requirements in a simulated repeat of the period of record, including the Drought of Record, during hydrological conditions when LCRA is still obligated to meet firm customer demand 100% of the time. This is not in accord with LCRA's permit obligations. Additional interruptible supply curtailment is required for the proposed revisions which assure that firm supply is protected from curtailment driven by interruptible supply.

B. LCRA's 2012 WMP lacks essential data from the current unprecedented drought. This data must be included, along with adjustments to interruptible curtailment to properly protect firm supply in a repeat of the current drought.

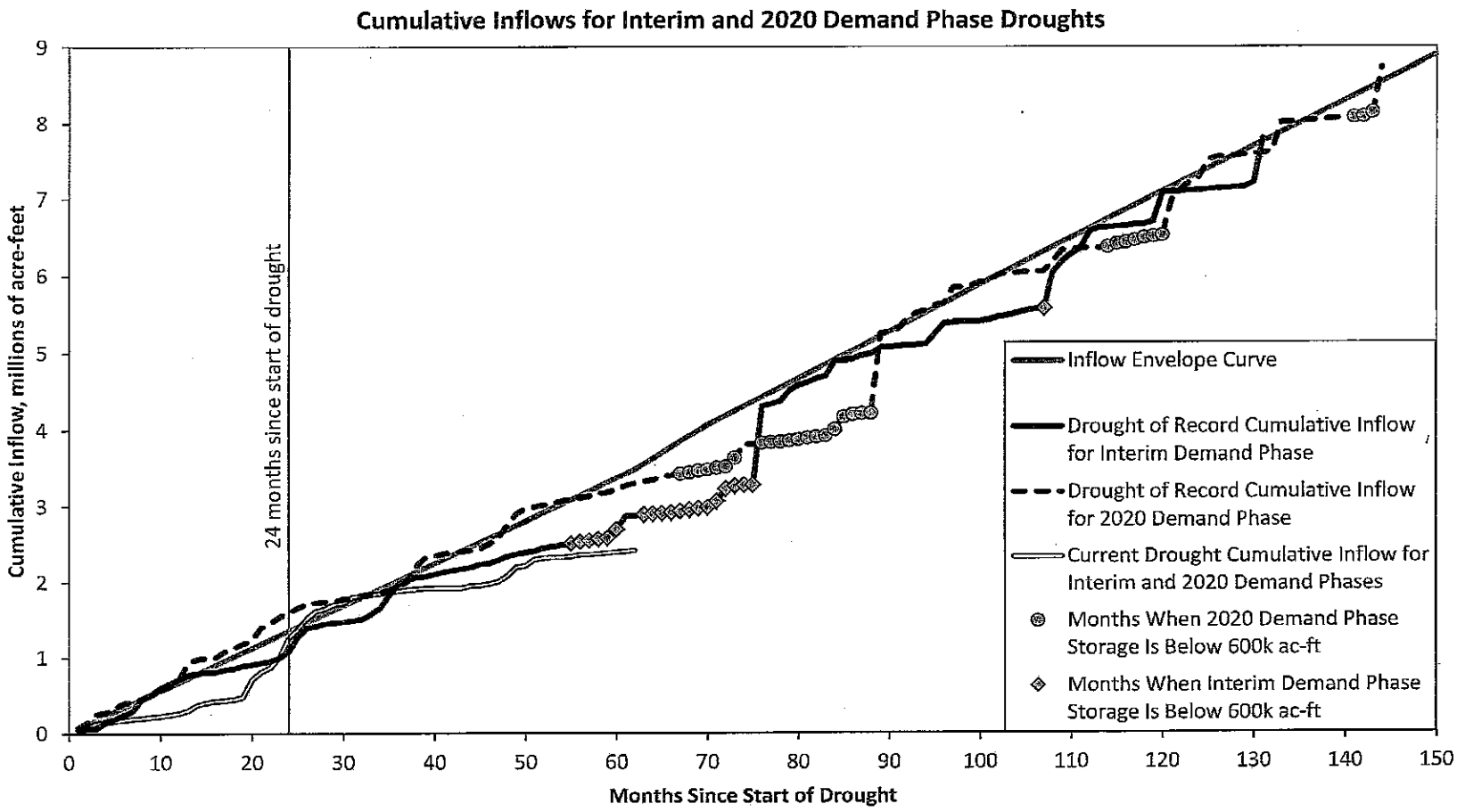
The current submittal does not include data from the current unprecedented drought and therefore will be extremely deficient in its protection of firm water customers. In 2011 the lakes experienced the lowest inflows on record by far and 2012 followed with the fifth lowest inflows on record. With very low inflows in late 2010 and inflows lower than 2011 for the first months of 2013 this creates a very long block of time with water supplies suffering from extremely serious drought now rivaling the Drought of Record. Not making changes now will result in the expenditure of enormous resources by multiple entities adopting revisions which have already been made obsolete by this ongoing and unprecedented drought. **Modeling for the plan must include data through the current hydrology, including 2010 – 2012 and a reasonable proxy for 2013, such as a repeat of 2011 or 2012. Interruptible curtailment curves should then be adjusted accordingly.**

The City of Austin is prepared to work with the applicant to discuss possible means of addressing the City's concerns as set forth in these public comments and the City's request for a contested case hearing on LCRA's Application No. 5838A.

EXHIBIT A

CITY OF AUSTIN
ANALYSIS OF
LOWER COLORADO RIVER AUTHORITY'S
PROPOSED 2012 WATER MANAGEMENT PLAN
WATER AVAILABILITY MODEL

RELATING TO
DROUGHT WORSE THAN DROUGHT OF RECORD TRIGGERS



- Drought of Record (DOR) Cumulative inflows for the Interim Demand Phase cover 131 months from June 1946 through April 1957.
- DOR Cumulative inflows for the 2020 Demand Phase cover 144 months from May 1945 through April 1957.
- Current drought cumulative inflows for the Interim and 2020 Demand Phases cover 62 months from March 2008 through April 2013.
- Both Interim and 2020 Demand Phase begin the current drought with March 2008.
- Interim and 2020 Demand Phase combined storages are only available through January 2009 (month 22 of the current drought).
- DOR cumulative inflows for the Interim and 2020 Demand Phases are based only on the WAM Reference Inflows.
- Current drought cumulative inflows are based on the WAM Reference Inflows from March 2008 through December 2009, and the LCRA Inflow Set from January 2010 through April 2013.
- Year 2013 data in the LCRA Inflow Set are preliminary and subject to revision.

Inflows to Lakes Buchanan and Travis (acre-feet)

Reference Inflows are derived from the LCRA WMP WAM and are provided for years 1940 through 2009
Inflows from the *LCRA Inflow Set* are provided for years 2010 through 2013.

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1940	22,424	43,670	32,658	129,360	116,620	265,230	130,489	81,798	20,713	33,909	136,605	206,905	1,220,381
1941	58,258	172,687	207,724	442,903	771,414	478,528	94,803	47,312	69,470	330,410	51,601	45,473	2,770,583
1942	35,368	27,188	26,700	231,561	272,585	112,174	27,433	114,539	107,427	284,505	82,272	41,596	1,363,348
1943	32,211	26,513	38,387	38,323	29,127	177,487	49,363	10,521	44,796	40,990	18,388	27,311	533,417
1944	77,932	81,610	94,061	39,545	440,687	102,774	25,657	158,295	78,839	72,646	31,603	82,615	1,286,264
1945	142,368	138,575	185,065	233,695	73,455	67,851	110,278	21,410	65,357	61,868	27,484	32,069	1,159,475
1946	48,077	61,824	47,951	91,901	226,003	43,739	15,666	6,220	76,810	46,942	54,133	50,373	769,639
1947	164,110	55,158	86,441	57,855	61,288	54,335	17,218	12,031	7,079	34,082	9,710	39,764	599,021
1948	16,102	18,897	25,381	43,834	78,456	201,135	110,714	21,879	32,995	17,029	10,991	13,544	590,957
1949	21,762	64,347	81,657	173,318	143,890	65,283	25,686	18,621	26,387	30,854	19,768	20,585	692,158
1950	22,331	36,239	14,810	40,349	49,755	27,631	24,179	16,215	45,210	16,993	17,494	19,604	330,810
1951	24,796	14,232	21,619	16,124	117,139	171,521	4,676	16,194	8,733	4,748	11,300	19,412	430,494
1952	19,079	17,174	12,499	81,582	164,021	35,525	11,669	2,622	1,030,289	23,531	36,988	141,681	1,576,660
1953	68,076	35,946	52,698	29,978	197,031	7,613	19,500	45,510	18,318	82,342	10,661	8,989	576,662
1954	10,686	7,253	6,812	125,991	137,558	11,678	10,450	3,132	4,102	17,547	37,761	18,855	391,825
1955	30,214	32,634	18,745	11,457	459,422	141,823	90,529	66,341	230,878	43,886	9,341	8,504	1,143,774
1956	8,865	15,043	6,644	37,059	376,471	8,360	3,774	11,459	4,161	13,680	9,186	9,648	504,350
1957	5,986	9,034	56,389	592,318	1,126,060	420,197	26,562	19,716	40,887	843,933	175,766	76,153	3,393,001
1958	88,820	279,369	194,615	83,798	198,140	248,608	44,858	33,849	102,451	74,062	58,100	42,125	1,446,795
1959	35,353	37,023	29,913	70,386	37,087	281,154	148,167	26,580	19,238	633,812	49,250	79,666	1,447,629
1960	181,319	145,292	78,834	75,926	47,839	16,371	34,589	176,337	27,703	107,491	49,673	122,085	1,063,459
1961	128,093	205,783	81,238	46,183	28,853	486,833	113,782	36,850	60,936	63,751	40,526	36,507	1,329,335
1962	29,731	24,685	24,187	36,398	30,425	62,495	41,824	15,232	29,634	76,731	18,532	19,611	409,485
1963	17,108	16,804	17,435	15,332	75,345	54,961	14,356	20,640	15,057	22,439	52,633	27,447	349,557
1964	37,895	53,209	66,197	48,281	20,428	18,490	10,531	47,875	481,746	74,144	86,499	38,955	984,250
1965	43,179	184,140	54,887	47,659	673,029	124,877	27,200	15,538	64,060	33,457	38,721	56,579	1,363,326
1966	48,276	41,850	48,775	115,099	138,966	34,236	24,386	58,425	143,952	28,257	19,867	19,987	722,076
1967	20,517	27,140	26,858	28,539	78,146	16,785	57,019	14,985	56,298	45,066	42,956	24,043	438,352
1968	606,200	113,265	298,357	259,529	383,098	117,395	62,395	22,740	26,931	19,088	18,610	32,528	1,960,136
1969	21,571	24,649	31,687	113,784	140,758	65,227	25,522	38,209	53,287	544,570	124,409	116,791	1,300,464
1970	88,276	98,917	380,079	129,001	297,880	115,121	32,631	24,900	30,008	24,798	20,997	28,529	1,271,137
1971	25,240	23,014	24,969	19,347	35,979	19,081	181,915	352,890	193,874	392,770	80,664	88,073	1,437,816
1972	61,864	49,307	36,528	36,869	161,523	64,322	26,723	44,626	39,427	27,417	27,279	25,394	601,279
1973	33,172	54,604	57,301	65,728	51,296	93,230	104,728	70,302	27,937	474,614	57,004	45,808	1,135,724
1974	41,788	29,499	30,196	25,004	189,908	25,539	14,742	434,878	404,565	292,702	245,138	98,675	1,832,634
1975	101,147	318,422	91,840	134,338	529,197	208,676	101,682	55,871	45,218	36,571	39,195	38,656	1,700,813
1976	37,125	34,537	39,699	61,043	71,275	86,475	330,876	38,237	99,528	63,338	69,647	59,583	991,363
1977	62,500	60,291	99,708	744,948	219,088	79,493	38,126	27,571	25,160	25,738	31,639	29,284	1,443,546
1978	29,514	32,228	32,175	27,833	28,435	50,747	15,416	453,276	136,084	33,258	39,281	39,642	917,889
1979	57,540	96,039	119,440	129,110	132,018	308,444	68,427	77,879	21,939	16,931	19,056	23,985	1,070,808
1980	28,200	24,934	23,807	21,407	127,637	31,584	11,436	8,652	463,393	66,599	30,609	43,174	881,432
1981	28,079	25,047	98,560	100,266	68,718	431,730	53,315	40,470	45,387	293,273	47,596	35,465	1,267,906
1982	30,963	28,593	53,314	35,163	119,014	146,848	55,048	18,854	14,570	12,909	17,649	20,027	552,952
1983	20,796	31,260	51,381	21,409	113,055	96,995	21,492	16,029	9,378	12,156	17,797	14,089	425,837
1984	21,846	15,153	27,893	13,133	11,430	11,717	10,179	13,940	12,026	167,797	33,232	230,223	568,569
1985	224,377	91,500	134,364	61,936	54,718	85,917	27,444	14,361	16,367	246,012	34,149	53,707	1,044,852
1986	29,437	87,825	32,564	27,197	113,855	407,224	27,049	20,292	95,546	253,709	96,762	269,262	1,460,722
1987	126,522	116,008	181,104	69,405	201,229	775,977	158,897	58,355	99,931	49,685	48,896	44,978	1,930,987
1988	37,908	34,114	33,613	28,121	54,945	72,410	178,907	29,873	23,324	19,143	19,115	23,586	555,059
1989	34,345	55,031	41,018	36,243	156,926	145,040	26,909	19,271	16,701	13,491	20,943	25,744	591,662
1990	21,096	29,554	77,922	280,025	390,717	57,011	210,973	100,005	255,704	47,621	41,186	30,596	1,542,410
1991	60,393	45,431	30,448	37,412	51,346	105,233	26,177	23,472	126,602	95,099	63,118	1,325,378	1,990,109
1992	321,664	1,403,767	592,978	201,267	217,341	310,242	84,014	45,472	83,879	72,616	71,109	67,100	3,471,449
1993	56,377	76,979	99,537	92,849	64,201	49,896	23,408	15,993	59,161	40,307	26,559	29,948	634,715
1994	37,948	42,519	47,409	33,137	322,611	73,959	26,798	24,253	53,215	43,837	56,843	99,801	862,330
1995	57,278	37,465	100,046	145,569	218,317	120,847	39,773	16,792	50,405	23,850	30,166	29,123	869,631
1996	25,256	20,649	21,190	19,754	12,777	45,440	28,566	54,097	71,113	271,303	73,440	88,028	731,613
1997	38,295	441,297	500,364	318,437	191,086	1,158,735	148,378	88,803	36,905	41,672	42,820	55,228	3,062,020
1998	59,802	92,407	309,963	71,938	38,912	30,733	37,111	101,638	46,236	107,378	103,483	75,256	1,074,857
1999	57,229	33,774	102,726	49,365	92,601	61,415	31,484	13,540	11,676	11,247	11,700	14,866	491,623
2000	15,690	27,618	25,976	21,580	31,793	92,720	11,908	11,114	11,579	150,562	751,451	68,606	1,220,597
2001	113,007	121,222	187,406	113,468	104,262	39,238	16,739	13,475	51,643	40,938	329,512	60,028	1,190,938
2002	44,398	35,025	47,066	39,317	30,822	66,467	1,004,433	39,592	45,116	77,874	69,798	94,631	1,594,539
2003	64,775	121,490	109,775	48,964	34,176	129,789	22,832	17,399	64,474	98,154	21,546	19,841	753,215
2004	32,109	37,223	69,882	224,734	69,496	344,487	62,698	161,235	28,660	48,365	756,116	140,172	1,975,177
2005	92,170	191,367	294,386	96,114	88,779	75,871	28,725	124,750	20,113	15,481	16,049	17,585	1,061,390
2006	21,525	17,634	24,515	40,053	91,422	15,698	11,548	8,425	10,841	18,815	10,429	12,196	283,101
2007	41,062	23,103	293,841	123,929	503,278	987,703	482,765	262,557	129,186	47,254	37,374	43,561	2,975,613
2008	35,087	31,768	41,836	40,188	51,164	15,945	12,876	13,577	13,778	11,975	11,988	13,486	293,668
2009	15,171	18,329	37,189	71,270	32,837	20,751	10,703	11,865	32,825	228,128	102,448	60,791	642,307
2010	135,618	246,870	118,552	144,575	95,821	33,517	59,905	10,783	86,952	14,385	13,899	16,845	977,722
2011	21,158	16,306	13,811	9,175	11,182	1,340	734	403	922	29,927	6,874	15,969	127,801
2012	35,178	74,699	112,517	19,477	83,699	12,599	8,712	2,041	12,006	19,338	6,191	6,968	393,425
2013	15,085	8,874	10,888	11,365									46,212

Interim Demand Phase (Run 851A) bined Storage of Lakes Buchanan and Travis (acre-fee

1,964,429 ac-ft maximum simulated interim tion capacity is created by 1,134,456 ac-ft for Travis, and 829,973 a uchanan (year round).

Highlighted months indicate combined storage below 600,000 ac-ft.

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1940	1,950,799	1,952,501	1,930,492	1,929,663	1,925,888	1,964,429	1,945,462	1,889,680	1,788,804	1,764,721	1,875,534	1,952,817
1941	1,951,376	1,954,217	1,955,404	1,956,221	1,964,429	1,964,429	1,939,075	1,860,687	1,827,504	1,927,774	1,912,365	1,897,443
1942	1,878,942	1,862,894	1,839,349	1,959,953	1,964,429	1,923,458	1,811,476	1,801,071	1,818,123	1,926,811	1,936,174	1,921,595
1943	1,908,074	1,887,455	1,869,869	1,838,417	1,753,072	1,696,650	1,612,043	1,485,920	1,433,002	1,403,634	1,385,782	1,387,153
1944	1,445,288	1,511,052	1,575,817	1,564,766	1,916,796	1,861,500	1,732,518	1,740,271	1,713,020	1,714,960	1,713,028	1,770,095
1945	1,896,238	1,960,374	1,957,705	1,961,701	1,916,516	1,833,820	1,800,962	1,704,267	1,677,407	1,678,493	1,657,044	1,652,537
1946	1,680,041	1,722,863	1,738,155	1,794,662	1,934,440	1,831,245	1,699,271	1,585,126	1,580,052	1,573,404	1,599,807	1,623,477
1947	1,778,027	1,800,154	1,848,227	1,861,240	1,804,178	1,682,330	1,536,315	1,425,270	1,318,631	1,285,886	1,261,907	1,260,399
1948	1,245,458	1,237,365	1,221,256	1,196,043	1,167,118	1,206,664	1,187,490	1,102,090	1,045,450	1,016,076	990,370	973,480
1949	969,928	1,011,320	1,055,631	1,185,533	1,244,186	1,186,647	1,096,483	1,021,680	971,366	964,035	947,280	944,436
1950	937,813	951,851	924,122	929,265	899,966	805,303	718,424	662,230	651,941	624,051	602,763	587,580
1951	579,470	569,036	554,351	553,095	596,371	703,704	639,359	581,301	541,200	509,335	481,239	468,198
1952	454,045	441,687	410,730	467,650	573,555	537,378	492,074	426,708	1,384,182	1,349,846	1,361,558	1,481,767
1953	1,514,742	1,524,721	1,509,017	1,486,670	1,572,844	1,413,188	1,283,878	1,208,959	1,135,468	1,179,784	1,154,411	1,135,606
1954	1,122,489	1,093,792	1,055,634	1,058,416	1,093,653	956,547	839,824	748,573	675,072	650,910	636,439	622,283
1955	624,577	633,518	612,347	582,249	975,338	1,053,866	1,071,562	1,070,435	1,241,793	1,241,419	1,218,866	1,196,310
1956	1,175,358	1,166,138	1,124,165	1,091,971	1,297,634	1,163,472	1,045,442	949,135	860,596	829,099	807,260	789,074
1957	764,489	748,774	769,709	1,351,807	1,964,429	1,964,429	1,899,502	1,824,917	1,805,616	1,929,477	1,940,394	1,936,059
1958	1,952,321	1,954,909	1,952,777	1,949,780	1,964,429	1,964,429	1,865,651	1,795,164	1,808,808	1,827,956	1,831,012	1,820,063
1959	1,829,641	1,843,212	1,828,656	1,870,818	1,819,793	1,964,429	1,964,429	1,903,041	1,841,596	1,964,429	1,964,429	1,962,846
1960	1,960,408	1,959,330	1,955,589	1,947,239	1,894,278	1,773,752	1,701,386	1,789,205	1,738,333	1,836,209	1,862,747	1,962,844
1961	1,961,230	1,960,371	1,951,499	1,931,328	1,865,078	1,964,429	1,964,429	1,894,040	1,883,846	1,904,187	1,924,429	1,937,163
1962	1,932,256	1,915,988	1,893,754	1,875,814	1,791,740	1,710,416	1,606,483	1,494,253	1,431,768	1,430,439	1,420,177	1,410,258
1963	1,394,993	1,390,797	1,362,518	1,327,208	1,289,467	1,175,434	1,037,100	952,551	885,791	863,867	885,674	885,039
1964	893,839	918,734	944,240	941,380	871,849	764,936	658,441	629,206	1,065,968	1,099,213	1,160,070	1,169,135
1965	1,187,280	1,363,902	1,381,151	1,372,573	1,964,429	1,954,945	1,846,861	1,743,333	1,706,512	1,692,421	1,681,639	1,703,417
1966	1,722,213	1,747,583	1,758,016	1,791,030	1,843,957	1,734,219	1,595,890	1,550,053	1,553,132	1,529,069	1,508,098	1,493,912
1967	1,477,042	1,462,341	1,438,913	1,408,085	1,366,945	1,199,064	1,095,550	1,011,587	1,008,009	1,024,312	1,054,741	1,059,031
1968	1,664,749	1,761,151	1,957,705	1,960,025	1,964,429	1,964,429	1,921,658	1,823,316	1,767,456	1,738,928	1,729,470	1,715,629
1969	1,702,563	1,703,115	1,700,020	1,781,021	1,822,174	1,725,270	1,604,226	1,527,165	1,481,343	1,918,526	1,964,429	1,962,846
1970	1,960,409	1,960,372	1,957,704	1,950,244	1,964,429	1,926,822	1,820,632	1,725,812	1,684,593	1,667,280	1,644,451	1,626,992
1971	1,607,974	1,590,530	1,563,011	1,517,812	1,415,059	1,240,996	1,237,822	1,510,229	1,635,043	1,964,429	1,964,429	1,962,846
1972	1,959,898	1,950,825	1,922,692	1,892,926	1,939,295	1,848,555	1,736,460	1,675,562	1,622,403	1,607,444	1,597,830	1,583,638
1973	1,597,508	1,634,514	1,656,324	1,690,311	1,652,698	1,635,290	1,640,397	1,603,378	1,568,671	1,964,429	1,964,429	1,962,849
1974	1,960,407	1,941,460	1,919,327	1,885,517	1,940,897	1,802,837	1,669,385	1,964,429	1,964,429	1,964,429	1,964,429	1,962,847
1975	1,958,218	1,959,084	1,948,109	1,943,270	1,964,429	1,964,429	1,944,023	1,886,328	1,837,778	1,813,710	1,791,138	1,777,953
1976	1,778,702	1,758,866	1,740,114	1,778,247	1,758,777	1,708,047	1,931,828	1,852,246	1,820,805	1,856,377	1,897,379	1,933,237
1977	1,951,395	1,948,446	1,945,309	1,951,834	1,964,429	1,881,021	1,763,415	1,663,403	1,581,319	1,555,508	1,542,133	1,523,532
1978	1,510,826	1,520,134	1,499,486	1,466,422	1,378,764	1,257,432	1,118,966	1,472,760	1,535,799	1,521,590	1,543,610	1,557,428
1979	1,591,857	1,668,748	1,763,051	1,815,527	1,846,762	1,870,536	1,834,118	1,797,550	1,724,797	1,689,243	1,673,033	1,673,229
1980	1,670,239	1,666,983	1,648,374	1,615,613	1,644,480	1,490,881	1,337,491	1,228,197	1,530,336	1,554,755	1,543,066	1,558,702
1981	1,555,055	1,550,238	1,538,635	1,584,069	1,576,985	1,918,842	1,859,319	1,798,276	1,763,767	1,964,330	1,964,429	1,962,848
1982	1,956,337	1,948,028	1,940,652	1,918,851	1,944,225	1,935,974	1,841,804	1,733,127	1,640,672	1,606,643	1,596,472	1,585,521
1983	1,578,665	1,587,131	1,608,478	1,574,951	1,599,534	1,555,955	1,453,646	1,368,218	1,291,178	1,266,061	1,255,486	1,240,567
1984	1,231,189	1,212,209	1,193,122	1,150,140	1,045,681	897,891	770,666	692,580	634,496	786,601	793,611	1,001,328
1985	1,197,846	1,271,242	1,374,921	1,391,782	1,351,377	1,308,633	1,207,540	1,108,194	1,043,570	1,260,821	1,278,564	1,310,904
1986	1,308,554	1,370,103	1,347,769	1,321,852	1,356,265	1,628,445	1,512,846	1,432,809	1,461,438	1,709,230	1,788,151	1,962,843
1987	1,958,758	1,960,085	1,951,881	1,938,725	1,964,429	1,964,429	1,963,799	1,888,501	1,879,483	1,848,310	1,847,213	1,842,185
1988	1,845,275	1,831,086	1,812,113	1,778,184	1,719,937	1,629,891	1,652,340	1,548,673	1,458,613	1,424,951	1,403,501	1,390,336
1989	1,401,550	1,426,687	1,412,755	1,386,338	1,449,334	1,451,067	1,339,319	1,245,816	1,164,905	1,135,442	1,119,241	1,104,804
1990	1,092,430	1,097,755	1,135,399	1,359,342	1,641,411	1,557,872	1,601,938	1,580,574	1,680,916	1,673,083	1,663,166	1,649,348
1991	1,696,967	1,717,432	1,704,280	1,705,466	1,665,894	1,650,520	1,555,835	1,461,004	1,428,184	1,476,799	1,487,581	1,962,840
1992	1,960,404	1,960,367	1,957,704	1,948,969	1,964,429	1,964,429	1,928,615	1,850,652	1,804,815	1,776,263	1,796,738	1,816,175
1993	1,846,724	1,903,490	1,957,703	1,958,455	1,929,326	1,853,162	1,737,923	1,601,456	1,542,846	1,521,201	1,505,971	1,494,457
1994	1,503,026	1,520,419	1,504,843	1,482,703	1,706,870	1,620,752	1,498,620	1,408,602	1,367,932	1,395,410	1,427,361	1,510,752
1995	1,543,126	1,556,830	1,619,475	1,717,164	1,837,244	1,805,768	1,700,779	1,599,380	1,554,768	1,526,539	1,524,667	1,522,882
1996	1,510,802	1,492,513	1,470,549	1,431,899	1,314,658	1,190,081	1,065,269	1,050,697	1,070,208	1,302,427	1,347,003	1,407,942
1997	1,415,230	1,839,150	1,957,706	1,963,045	1,964,429	1,964,429	1,964,429	1,931,698	1,865,672	1,848,545	1,836,369	1,846,650
1998	1,883,666	1,959,682	1,957,708	1,964,429	1,864,723	1,701,649	1,574,448	1,541,256	1,523,206	1,626,763	1,713,439	1,764,653
1999	1,787,756	1,785,038	1,846,187	1,843,009	1,836,657	1,746,662	1,649,301	1,527,663	1,424,979	1,391,072	1,363,637	1,345,973
2000	1,326,534	1,313,708	1,294,719	1,267,728	1,199,269	1,150,500	1,033,083	942,180	880,216	997,382	1,731,351	1,773,725
2001	1,872,469	1,960,377	1,957,696	1,961,436	1,963,656	1,845,342	1,725,383	1,657,809	1,632,132	1,614,313	1,912,341	1,928,557
2002	1,936,314	1,929,926	1,912,898	1,885,564	1,807,235	1,732,697	1,964,429	1,902,091	1,870,538	1,923,129	1,963,489	1,962,846
2003	1,959,605	1,960,369	1,952,991	1,920,708	1,841,632	1,802,210	1,698,155	1,609,976	1,580,953	1,608,519	1,595,283	1,578,470
2004	1,587,032	1,603,374	1,634,879	1,815,513	1,803,002	1,964,429	1,927,847	1,964,429	1,898,489	1,923,735	1,964,429	1,962,848
2005	1,960,408	1,959,961	1,954,630	1,941,264	1,921,249	1,825,806	1,716,661	1,712,023	1,619,386	1,589,559	1,568,019	1,549,025
2006	1,530,808	1,515,824	1,499,364	1,475,951	1,444,002	1,307,022	1,182,693	1,085,693	1,021,110	1,007,992	983,431	969,753
2007	997,824	989,136	1,264,412	1,352,564	1,825,649	1,964,429	1,964,429	1,964,429	1,964,429	1,964,429	1,964,429	1,962,848
2008	1,955,848	1,936,172	1,918,908	1,890,534	1,812,029	1,645,213	1,505,477	1,398,391	1,295,804	1,260,610	1,235,625	1,214,601
2009	1,194,863	1,178,117	1,163,316	1,185,603	1,110,525	972,836	849,259	761,325	739,655	957,872	1,041,887	1,083,321

Interim Demand Phase (Run [illegible] Percent Full of Combined Storage of Lakes Buchanan [illegible]avis (%)

1,964,429 ac-ft maximum simulated int[illegible]onservation capacity is created by 1,134,456 ac-ft for Travis, and 829,[illegible]t for Buchanan (year round).

Combine storage contents less than 98% of combined conservation capacity for the Drought of Record and current drought are highlighted.

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1940	99.3	99.4	98.3	98.2	98.0	100.0	99.0	96.2	91.1	89.8	95.5	99.4
1941	99.3	99.5	99.5	99.6	100.0	100.0	98.7	94.7	93.0	98.1	97.3	96.6
1942	95.6	94.8	93.6	99.8	100.0	97.9	92.2	91.7	92.6	98.1	98.6	97.8
1943	97.1	96.1	95.2	93.6	89.2	86.4	82.1	75.6	72.9	71.5	70.5	70.6
1944	73.6	76.9	80.2	79.7	97.6	94.8	88.2	88.6	87.2	87.3	87.2	90.1
1945	96.5	99.8	99.7	99.9	97.6	93.4	91.7	86.8	85.4	85.4	84.4	84.1
1946	85.5	87.7	88.5	91.4	98.5	93.2	86.5	80.7	80.1	80.1	81.0	82.6
1947	90.5	91.6	84.0	94.7	91.8	85.6	78.2	72.6	67.1	65.5	64.2	64.2
1948	63.1	63.0	62.2	60.9	56.4	61.4	60.1	56.1	51.2	51.7	50.4	49.6
1949	49.4	51.5	53.7	60.1	63.3	60.4	55.8	57.0	49.1	49.1	48.7	48.1
1950	47.7	48.5	47.0	47.1	45.8	41.0	36.6	33.7	33.2	31.8	30.7	29.9
1951	29.5	29.0	28.2	27.1	30.1	35.8	32.5	29.6	27.5	25.6	24.5	23.8
1952	23.1	22.5	21.5	23.8	29.2	27.1	25.0	21.7	20.5	63.7	69.3	75.4
1953	77.1	77.6	76.8	75.7	80.1	71.9	65.1	61.5	57.3	60.1	61.8	57.8
1954	57.1	55.7	53.7	53.9	55.7	41.7	42.8	38.1	34.4	33.1	32.1	31.7
1955	31.8	32.7	31.2	29.6	49.6	51.6	54.5	63.5	63.2	63.2	62.0	60.9
1956	59.8	59.4	57.2	55.6	66.1	59.2	53.2	48.1	43.8	42.2	41.1	40.2
1957	38.9	38.1	39.2	68.1	100.0	100.0	96.7	92.9	91.9	98.2	98.8	98.6
1958	99.4	99.5	99.4	99.3	100.0	100.0	95.0	91.4	92.1	93.1	93.2	92.7
1959	93.1	93.8	93.1	95.2	92.6	100.0	100.0	96.9	93.7	100.0	100.0	99.9
1960	99.8	99.7	99.5	99.1	96.4	90.3	86.6	91.1	88.5	93.5	94.8	99.9
1961	99.8	99.8	99.3	98.3	94.9	100.0	100.0	96.4	95.9	96.9	98.0	98.6
1962	98.4	97.5	96.4	95.5	91.2	87.1	81.8	76.1	72.9	72.8	72.3	71.8
1963	71.0	70.8	69.4	67.6	65.6	59.8	52.8	48.5	45.1	44.0	45.1	45.1
1964	45.5	46.8	48.1	47.9	44.4	38.9	33.5	32.0	54.3	56.0	59.1	59.5
1965	60.4	69.4	70.3	69.9	100.0	99.5	94.0	88.7	86.9	86.2	85.6	86.7
1966	87.7	89.0	89.5	91.2	93.9	88.3	81.2	78.9	79.1	77.8	76.8	76.0
1967	75.2	74.4	73.2	71.7	69.6	61.0	55.8	51.5	51.3	52.1	53.7	53.9
1968	84.7	89.7	99.7	99.8	100.0	100.0	97.8	92.8	90.0	88.5	88.0	87.3
1969	86.7	86.7	86.5	90.7	92.8	87.8	81.7	77.7	75.4	97.7	100.0	99.9
1970	99.8	99.8	99.7	99.3	100.0	98.1	92.7	87.9	85.8	84.9	83.7	82.8
1971	81.9	81.0	79.6	77.3	72.0	63.2	63.0	76.9	83.2	100.0	100.0	99.9
1972	99.8	99.3	97.9	96.4	98.7	94.1	88.4	85.3	82.6	81.8	81.3	80.6
1973	81.3	83.2	84.3	86.0	84.1	83.2	83.5	81.6	79.9	100.0	100.0	99.9
1974	99.8	98.8	97.7	96.0	98.8	91.8	85.0	100.0	100.0	100.0	100.0	99.9
1975	99.7	99.7	99.2	98.9	100.0	100.0	99.0	96.0	93.6	92.3	91.2	90.5
1976	90.5	89.5	88.6	90.5	89.5	86.9	98.3	94.3	92.7	94.5	96.6	98.4
1977	99.3	99.2	99.0	99.4	100.0	95.8	89.8	84.7	80.5	79.2	78.5	77.6
1978	76.9	77.4	76.3	74.6	70.2	64.0	57.0	75.0	78.2	77.5	78.6	79.3
1979	81.0	84.9	89.7	92.4	94.0	95.2	93.4	91.5	87.8	86.0	85.2	85.2
1980	85.0	84.9	83.9	82.2	83.7	75.9	68.1	62.5	77.9	79.1	78.6	79.3
1981	79.2	78.9	78.3	80.6	80.3	97.7	94.6	91.5	89.8	100.0	100.0	99.9
1982	99.6	99.2	98.8	97.7	99.0	98.6	93.8	88.2	83.5	81.8	81.3	80.7
1983	80.4	80.8	81.9	80.2	81.4	79.2	74.0	69.6	65.7	64.4	63.9	63.2
1984	62.7	61.7	60.7	58.5	53.2	45.7	39.2	35.3	32.3	40.0	40.4	51.0
1985	61.0	64.7	70.0	70.8	68.8	66.6	61.5	56.4	53.1	64.2	65.1	66.7
1986	66.6	69.7	68.6	67.3	69.0	82.9	77.0	72.9	74.4	87.0	91.0	99.9
1987	99.7	99.8	99.4	98.7	100.0	100.0	100.0	96.1	95.7	94.1	94.0	93.8
1988	93.9	93.2	92.2	90.5	87.6	83.0	84.1	78.8	74.3	72.5	71.4	70.8
1989	71.3	72.6	71.9	70.6	73.8	73.9	68.2	63.4	59.3	57.8	57.0	56.2
1990	55.6	55.9	57.8	69.2	83.6	79.3	81.5	80.5	85.6	85.2	84.7	84.0
1991	86.4	87.4	86.8	86.8	84.8	84.0	79.2	74.4	72.7	75.2	75.7	99.9
1992	99.8	99.8	99.7	99.2	100.0	100.0	98.2	94.2	91.9	90.4	91.5	92.5
1993	94.0	96.9	99.7	99.7	98.2	94.3	88.5	81.5	78.5	77.4	76.7	76.1
1994	76.5	77.4	76.6	75.5	86.9	82.5	76.3	71.7	69.6	71.0	72.7	76.9
1995	78.6	79.3	82.4	87.4	93.5	91.9	86.6	81.4	79.1	77.7	77.6	77.5
1996	76.9	76.0	74.9	72.9	66.9	60.6	54.2	53.5	54.5	66.3	68.6	71.7
1997	72.0	93.6	99.7	99.9	100.0	100.0	100.0	98.3	95.0	94.1	93.5	94.0
1998	95.9	99.8	99.7	100.0	94.9	86.6	80.1	78.5	77.5	82.8	87.2	89.8
1999	91.0	90.9	94.0	93.8	93.5	88.9	84.0	77.8	72.5	70.8	69.4	68.5
2000	67.5	66.9	65.9	64.5	61.0	58.6	52.6	48.0	44.8	50.8	88.1	90.3
2001	95.3	99.8	99.7	99.8	100.0	93.9	87.8	84.4	83.1	82.2	97.3	98.2
2002	98.6	98.2	97.4	96.0	92.0	88.2	100.0	96.8	95.2	97.9	100.0	99.9
2003	99.8	99.8	99.4	97.8	93.7	91.7	86.4	82.0	80.5	81.9	81.2	80.4
2004	80.8	81.6	83.2	92.4	91.8	100.0	98.1	100.0	96.6	97.9	100.0	99.9
2005	99.8	99.8	99.5	98.8	97.8	92.9	87.4	87.2	82.4	80.9	79.8	78.9
2006	77.9	77.2	76.3	75.1	73.5	66.5	60.2	55.3	52.0	51.3	50.1	49.4
2007	50.8	50.4	64.4	68.9	92.9	100.0	100.0	100.0	100.0	100.0	100.0	99.9
2008	99.6	98.6	97.7	96.2	92.2	83.3	76.6	71.2	66.0	64.2	62.9	61.8
2009	60.8	60.0	59.2	60.4	56.5	49.5	43.2	38.8	37.7	48.8	53.0	55.1

2020 Demand Phase (Run 85A) - C[illegible]ed Storage of Lakes Buchanan and Travis (acre-feet) [illegible]

1,957,141 ac-ft maximum simulated 2020 co[illegible]n capacity is created by 1,131,956 ac-ft for Travis, and 825,185 ac-f[illegible]hanan (year round).

Highlighted months indicate combined storage below 600,000 ac-ft.

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1940	1,944,322	1,946,021	1,920,402	1,920,119	1,915,342	1,957,141	1,935,275	1,873,486	1,769,361	1,740,915	1,849,043	1,946,974
1941	1,945,477	1,946,756	1,948,438	1,951,735	1,957,141	1,957,141	1,927,918	1,843,079	1,810,287	1,946,319	1,944,650	1,944,017
1942	1,922,315	1,903,318	1,875,988	1,938,424	1,957,141	1,918,212	1,802,356	1,785,719	1,792,494	1,948,008	1,947,116	1,943,510
1943	1,927,532	1,904,040	1,882,770	1,847,141	1,760,998	1,702,711	1,615,131	1,484,007	1,427,586	1,393,397	1,375,714	1,374,647
1944	1,430,307	1,493,999	1,556,257	1,542,683	1,893,841	1,841,010	1,708,224	1,699,395	1,668,557	1,634,975	1,640,412	1,704,999
1945	1,828,656	1,946,025	1,952,268	1,957,141	1,911,226	1,830,946	1,795,163	1,692,695	1,662,093	1,660,020	1,635,002	1,628,092
1946	1,653,150	1,693,943	1,706,779	1,760,907	1,899,883	1,798,879	1,663,231	1,543,580	1,534,645	1,535,997	1,570,566	1,601,842
1947	1,754,619	1,774,771	1,820,351	1,828,520	1,770,802	1,651,653	1,502,018	1,386,071	1,276,540	1,247,275	1,219,030	1,224,400
1948	1,207,066	1,198,865	1,177,935	1,151,696	1,116,761	1,164,809	1,145,878	1,061,807	1,007,498	973,527	943,623	924,418
1949	918,362	957,662	999,525	1,128,485	1,197,578	1,158,184	1,076,412	1,001,195	953,441	940,956	919,835	914,530
1950	905,510	917,506	887,407	891,804	873,120	798,203	719,415	658,711	645,156	612,203	586,619	574,241
1951	559,959	547,675	530,792	506,978	567,782	672,806	604,670	542,139	499,457	457,267	431,981	416,452
1952	440,497	386,448	361,429	407,624	511,064	474,421	427,568	359,289	1,305,970	1,266,121	1,272,189	1,389,830
1953	1,420,792	1,428,933	1,414,047	1,387,907	1,473,688	1,319,153	1,186,720	1,114,438	1,046,146	1,086,112	1,056,752	1,035,737
1954	1,020,360	990,041	949,843	951,679	1,002,090	892,040	792,365	695,360	617,114	585,981	566,517	548,922
1955	541,725	549,316	527,055	490,570	880,072	956,038	959,094	938,072	1,096,748	1,089,317	1,057,524	1,027,697
1956	1,001,804	990,708	947,069	910,820	1,119,364	1,005,586	906,809	806,441	714,788	669,821	634,603	608,976
1957	579,555	560,931	580,597	1,160,501	1,947,553	1,942,277	1,891,547	1,835,552	1,819,510	1,951,317	1,958,787	1,949,853
1958	1,950,217	1,953,764	1,951,635	1,949,512	1,957,141	1,957,141	1,853,791	1,775,408	1,791,962	1,831,724	1,848,577	1,851,949
1959	1,836,163	1,847,703	1,830,613	1,870,339	1,817,348	1,957,141	1,957,141	1,887,819	1,821,147	1,957,141	1,957,141	1,957,003
1960	1,954,509	1,953,437	1,949,710	1,942,037	1,886,809	1,766,250	1,687,891	1,767,528	1,711,024	1,804,442	1,826,538	1,937,177
1961	1,945,470	1,950,454	1,941,621	1,922,336	1,853,488	1,957,141	1,957,141	1,878,504	1,862,564	1,877,724	1,893,525	1,903,841
1962	1,896,546	1,877,547	1,852,936	1,830,959	1,745,930	1,666,527	1,559,457	1,442,472	1,376,161	1,407,933	1,392,932	1,386,379
1963	1,368,747	1,362,548	1,331,885	1,295,581	1,258,503	1,157,989	1,024,768	946,557	886,696	860,945	869,305	866,244
1964	872,626	895,507	918,553	912,326	852,297	764,372	665,852	627,211	1,060,540	1,087,314	1,143,727	1,150,393
1965	1,166,119	1,341,269	1,356,061	1,351,109	1,957,141	1,952,579	1,841,713	1,733,851	1,693,934	1,674,794	1,675,784	1,711,114
1966	1,727,481	1,719,247	1,727,248	1,788,628	1,840,213	1,731,997	1,589,579	1,537,501	1,548,713	1,520,202	1,495,637	1,478,363
1967	1,458,457	1,440,992	1,414,060	1,379,987	1,339,434	1,177,185	1,070,158	980,958	975,317	986,483	1,013,239	1,015,092
1968	1,618,599	1,713,627	1,952,268	1,955,051	1,957,141	1,957,141	1,909,894	1,806,071	1,746,528	1,711,663	1,698,524	1,687,855
1969	1,672,423	1,670,925	1,665,338	1,742,413	1,783,237	1,689,592	1,566,042	1,483,965	1,435,404	1,933,722	1,957,141	1,957,003
1970	1,954,510	1,955,860	1,952,268	1,945,435	1,957,141	1,920,475	1,809,618	1,708,872	1,663,391	1,641,847	1,615,497	1,594,988
1971	1,572,975	1,552,811	1,522,287	1,473,286	1,371,884	1,204,332	1,198,939	1,467,200	1,590,489	1,941,332	1,957,141	1,957,003
1972	1,954,068	1,945,030	1,913,310	1,879,727	1,916,230	1,829,668	1,715,839	1,648,605	1,591,680	1,571,922	1,559,772	1,543,085
1973	1,554,471	1,589,410	1,608,790	1,640,379	1,602,413	1,587,406	1,589,645	1,545,484	1,505,943	1,957,141	1,957,141	1,957,003
1974	1,954,509	1,933,563	1,907,825	1,870,191	1,921,856	1,788,133	1,651,526	1,957,141	1,957,141	1,957,141	1,957,141	1,956,986
1975	1,952,376	1,953,238	1,942,308	1,938,005	1,957,141	1,957,141	1,933,529	1,869,228	1,816,617	1,788,074	1,761,975	1,758,751
1976	1,737,874	1,715,387	1,693,107	1,731,179	1,710,828	1,662,156	1,882,302	1,796,665	1,809,632	1,839,532	1,876,109	1,909,517
1977	1,935,281	1,942,597	1,940,099	1,951,159	1,957,141	1,877,191	1,757,721	1,653,554	1,568,631	1,538,114	1,521,108	1,499,467
1978	1,483,692	1,490,938	1,477,758	1,440,985	1,353,749	1,236,552	1,095,505	1,445,544	1,507,490	1,488,310	1,505,782	1,517,184
1979	1,549,160	1,623,980	1,715,752	1,799,232	1,828,151	1,851,998	1,812,230	1,769,584	1,693,371	1,652,684	1,631,387	1,619,648
1980	1,614,277	1,609,054	1,590,572	1,553,772	1,583,116	1,435,832	1,280,583	1,166,657	1,539,408	1,557,437	1,558,293	1,571,470
1981	1,566,251	1,562,083	1,612,920	1,664,374	1,656,284	1,957,141	1,893,283	1,826,233	1,788,117	1,957,141	1,957,141	1,957,003
1982	1,948,162	1,935,509	1,924,075	1,898,230	1,917,925	1,912,609	1,816,209	1,704,234	1,609,490	1,568,648	1,554,811	1,540,741
1983	1,531,470	1,537,886	1,556,701	1,521,068	1,545,044	1,503,975	1,398,771	1,312,860	1,239,424	1,209,491	1,194,607	1,177,395
1984	1,165,701	1,144,981	1,122,591	1,079,062	982,776	851,054	729,743	667,831	620,324	767,106	769,703	974,902
1985	1,169,031	1,240,364	1,341,424	1,356,530	1,319,077	1,284,037	1,184,267	1,083,615	1,020,916	1,233,336	1,246,655	1,276,468
1986	1,271,763	1,331,283	1,316,964	1,288,034	1,324,541	1,603,379	1,488,183	1,403,926	1,429,768	1,672,210	1,746,688	1,957,002
1987	1,952,933	1,954,257	1,946,084	1,940,535	1,957,141	1,957,141	1,956,560	1,876,140	1,855,590	1,819,799	1,832,499	1,841,808
1988	1,842,270	1,825,259	1,802,662	1,764,863	1,706,531	1,619,795	1,652,057	1,546,110	1,454,722	1,414,560	1,389,030	1,372,756
1989	1,381,493	1,404,606	1,388,215	1,357,774	1,419,996	1,424,032	1,308,968	1,213,248	1,132,439	1,099,066	1,083,239	1,073,412
1990	1,061,331	1,064,615	1,082,948	1,308,065	1,591,114	1,532,306	1,634,632	1,618,735	1,780,472	1,768,756	1,782,177	1,767,091
1991	1,811,886	1,830,248	1,814,155	1,812,930	1,772,216	1,758,314	1,658,975	1,560,077	1,588,527	1,631,635	1,655,728	1,957,002
1992	1,954,507	1,954,522	1,952,268	1,943,567	1,957,141	1,957,141	1,916,269	1,832,727	1,783,056	1,749,953	1,784,219	1,817,543
1993	1,845,659	1,900,379	1,952,267	1,953,720	1,923,944	1,849,998	1,731,422	1,593,769	1,534,544	1,508,122	1,489,271	1,475,357
1994	1,477,871	1,472,826	1,472,861	1,446,654	1,668,908	1,583,925	1,457,423	1,362,735	1,322,640	1,343,996	1,371,521	1,452,376
1995	1,482,337	1,494,014	1,554,168	1,649,406	1,770,682	1,741,813	1,634,529	1,527,376	1,478,564	1,446,296	1,445,749	1,441,677
1996	1,427,461	1,406,698	1,382,524	1,339,980	1,223,443	1,102,420	975,028	960,908	982,756	1,209,892	1,250,015	1,308,520
1997	1,813,450	1,735,074	1,952,269	1,955,008	1,957,141	1,957,141	1,957,141	1,918,334	1,848,714	1,836,649	1,838,290	1,862,924
1998	1,897,510	1,954,525	1,952,271	1,957,141	1,858,514	1,701,475	1,571,805	1,533,068	1,510,572	1,609,759	1,691,983	1,740,764
1999	1,761,506	1,756,830	1,821,554	1,815,881	1,808,585	1,720,515	1,620,081	1,495,358	1,389,584	1,349,079	1,317,467	1,297,498
2000	1,275,772	1,260,227	1,237,836	1,209,217	1,145,258	1,100,574	985,542	896,991	838,690	950,688	1,679,977	1,719,942
2001	1,816,919	1,909,201	1,952,262	1,957,141	1,957,141	1,841,171	1,717,647	1,643,136	1,609,969	1,603,076	1,915,667	1,945,426
2002	1,945,479	1,937,047	1,918,416	1,886,578	1,807,551	1,735,509	1,957,141	1,887,471	1,850,964	1,898,331	1,934,294	1,957,003
2003	1,953,777	1,954,523	1,947,174	1,915,946	1,835,339	1,793,921	1,685,711	1,590,895	1,558,009	1,566,931	1,549,366	1,530,268
2004	1,536,360	1,550,604	1,579,658	1,775,056	1,761,092	1,957,141	1,913,459	1,957,141	1,886,911	1,906,433	1,957,141	1,957,003
2005	1,954,510	1,954,064	1,948,756	1,941,962	1,921,550	1,829,114	1,717,631	1,694,877	1,599,957	1,563,117	1,537,254	1,515,514
2006	1,494,327	1,476,998	1,456,988	1,429,640	1,394,843	1,262,214	1,134,398	1,034,080	969,554	951,264	922,507	906,392
2007	931,794	921,312	1,193,718	1,278,232	1,753,108	1,957,141	1,957,141	1,957,141	1,957,141	1,952,657	1,953,409	1,957,003
2008	1,950,032	1,927,876	1,906,986	1,874,739	1,796,791	1,635,787	1,493,411	1,384,536	1,280,674	1,239,389	1,210,094	1,186,751
2009	1,164,702	1,145,284	1,126,911	1,147,656	1,078,572	954,243	834,457	744,817	721,575	934,466	1,014,036	1,053,034

2020 Demand Phase (Run 85/[illegible]cent Full of Combined Storage of Lakes Buchanan an[illegible] (%)

1,957,141 ac-ft maximum simulated 20[illegible]nservation capacity is created by 1,131,956 ac-ft for Travis, and 825,18[illegible]or Buchanan (year round).

Combine storage contents less than 98% of combined conservation capacity for the Drought of Record and current drought are highlighted.

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1940	99.3	99.4	98.1	98.1	97.9	100.0	98.9	95.7	90.4	89.0	94.5	99.5
1941	99.4	99.5	99.6	99.7	100.0	100.0	98.5	94.2	92.5	99.4	99.4	99.3
1942	98.2	97.2	95.9	99.0	100.0	98.0	92.1	91.2	91.6	99.5	99.5	99.3
1943	98.5	97.3	96.2	94.4	90.0	87.0	82.5	75.8	72.9	71.2	70.3	70.2
1944	73.1	76.3	79.5	78.8	96.8	94.1	87.3	86.8	85.3	83.5	83.8	87.1
1945	93.4	99.4	99.8	100.0	97.7	93.6	91.7	86.5	78.9	84.8	89.6	83.7
1946	84.5	86.6	87.2	90.0	97.0	91.9	85.0	78.9	78.4	70.5	80.2	81.8
1947	89.7	90.7	93.0	93.4	90.9	84.1	76.7	70.8	65.2	63.7	62.3	62.8
1948	61.7	61.3	60.7	61.8	57.1	59.5	58.5	54.3	51.5	49.7	48.2	47.2
1949	46.9	41.9	56.1	67.7	61.2	59.2	56.0	51.2	47.7	48.1	47.0	46.7
1950	46.3	46.9	45.3	45.6	44.6	40.8	36.8	33.7	31.0	30.5	30.0	29.2
1951	21.6	23.0	27.1	25.9	20.0	34.4	30.9	27.7	26.5	23.0	22.0	21.9
1952	20.5	19.7	18.5	20.3	20.1	24.2	21.8	18.1	16.7	16.7	16.0	21.0
1953	72.6	73.0	72.8	70.9	75.3	67.4	60.6	56.9	53.5	55.5	54.0	52.9
1954	52.1	50.6	48.5	48.6	51.2	45.6	40.5	34.9	31.5	29.9	28.9	27.9
1955	27.7	28.1	26.2	25.0	45.0	48.8	49.0	47.1	98.0	95.7	94.0	92.6
1956	51.2	50.6	41.4	46.5	57.2	51.1	46.3	41.2	36.5	34.2	33.4	31.1
1957	29.6	28.7	29.7	59.3	99.5	99.2	96.6	93.8	93.0	99.7	100.1	99.6
1958	99.6	99.8	99.7	99.6	100.0	100.0	94.7	90.7	91.6	93.6	94.5	94.6
1959	93.8	94.4	93.5	95.6	92.9	100.0	100.0	96.5	93.1	100.0	100.0	100.0
1960	99.9	99.8	99.6	99.2	96.4	90.2	86.2	90.3	87.4	92.2	93.3	99.0
1961	99.4	99.7	99.2	98.2	94.7	100.0	100.0	96.0	95.2	95.9	96.7	97.3
1962	96.9	95.9	94.7	93.6	89.2	85.2	79.7	73.7	70.3	71.9	71.2	70.8
1963	69.9	69.6	68.1	66.2	64.3	59.2	52.4	48.4	45.3	44.0	44.4	44.3
1964	44.6	45.8	46.9	46.6	43.5	39.1	34.0	32.0	54.2	55.6	58.4	58.8
1965	59.6	68.5	69.3	69.0	100.0	99.8	94.1	88.6	86.6	85.6	85.6	87.4
1966	88.3	87.8	88.3	91.4	94.0	88.5	81.2	78.6	79.1	77.7	76.4	75.5
1967	74.5	73.6	72.3	70.5	68.4	60.1	54.7	50.1	49.8	50.4	51.8	51.9
1968	82.7	87.6	99.8	99.9	100.0	100.0	97.6	92.3	89.2	87.5	86.8	86.2
1969	85.5	85.4	85.1	89.0	91.1	86.3	80.0	75.8	73.3	98.8	100.0	100.0
1970	99.9	99.9	99.8	99.4	100.0	98.1	92.5	87.3	85.0	83.9	82.5	81.5
1971	80.4	79.3	77.8	75.3	70.1	61.5	61.3	75.0	81.3	99.2	100.0	100.0
1972	99.8	99.4	97.8	96.0	97.9	93.5	87.7	84.2	81.3	80.3	79.7	78.8
1973	79.4	81.2	82.2	83.8	81.9	81.1	81.2	79.0	76.9	100.0	100.0	100.0
1974	99.9	98.8	97.5	95.6	98.2	91.4	84.4	100.0	100.0	100.0	100.0	100.0
1975	99.8	99.8	99.2	99.0	100.0	100.0	98.8	95.5	92.8	91.4	90.0	89.9
1976	88.8	87.6	86.5	88.5	87.4	84.9	96.2	91.8	92.5	94.0	95.9	97.6
1977	98.9	99.3	99.1	99.7	100.0	95.9	89.8	84.5	80.1	78.6	77.7	76.6
1978	75.8	76.2	75.5	73.6	69.2	63.2	56.0	73.9	77.0	76.0	76.9	77.5
1979	79.2	83.0	87.7	91.9	93.4	94.6	92.6	90.4	86.5	84.4	83.4	82.8
1980	82.5	82.2	81.3	79.4	80.9	73.4	65.4	59.6	78.7	79.6	79.6	80.3
1981	80.0	79.8	82.4	85.0	84.6	100.0	96.7	93.3	91.4	100.0	100.0	100.0
1982	99.5	98.9	98.3	97.0	98.0	97.7	92.8	87.1	82.2	80.1	79.4	78.7
1983	78.3	78.6	79.5	77.7	78.9	76.8	71.5	67.1	63.3	61.8	61.0	60.2
1984	59.6	58.5	57.4	55.1	50.2	43.5	37.3	34.1	31.7	39.2	39.3	49.8
1985	59.7	63.4	68.5	69.3	67.4	65.6	60.5	55.4	52.2	63.0	63.7	65.2
1986	65.0	68.0	67.3	65.8	67.7	81.9	76.0	71.7	73.1	85.4	89.2	100.0
1987	99.8	99.9	99.4	99.2	100.0	100.0	100.0	95.9	94.8	93.0	93.6	94.1
1988	94.1	93.3	92.1	90.2	87.2	82.8	84.4	79.0	74.3	72.3	71.0	70.1
1989	70.6	71.8	70.9	69.4	72.6	72.8	66.9	62.0	57.9	56.2	55.3	54.8
1990	54.2	54.4	55.3	66.8	81.3	78.3	83.5	82.7	91.0	90.4	91.1	90.3
1991	92.6	93.5	92.7	92.6	90.6	89.8	84.8	79.7	81.2	83.4	84.6	100.0
1992	99.9	99.9	99.8	99.3	100.0	100.0	97.9	93.6	91.1	89.4	91.2	92.9
1993	94.3	97.1	99.8	99.8	98.3	94.5	88.5	81.4	78.4	77.1	76.1	75.4
1994	75.5	75.3	75.3	73.9	85.3	80.9	74.5	69.6	67.6	68.7	70.1	74.2
1995	75.7	76.3	79.4	84.3	90.5	89.0	83.5	78.0	75.5	73.9	73.9	73.7
1996	72.9	71.9	70.6	68.5	62.5	56.3	49.8	49.1	50.2	61.8	63.9	66.9
1997	67.1	88.7	99.8	99.9	100.0	100.0	100.0	98.0	94.5	93.8	93.9	95.2
1998	97.0	99.9	99.8	100.0	95.0	86.9	80.3	78.3	77.2	82.3	86.5	88.9
1999	90.0	89.8	93.1	92.8	92.4	87.9	82.8	76.4	71.0	68.9	67.3	66.3
2000	65.2	64.4	63.2	61.8	58.5	56.2	50.4	45.8	42.9	48.6	85.8	87.9
2001	92.8	97.6	99.8	100.0	100.0	94.1	87.8	84.0	82.3	81.9	97.9	99.4
2002	99.4	99.0	98.0	96.4	92.4	88.7	100.0	96.4	94.6	97.0	98.8	100.0
2003	99.8	99.9	99.5	97.9	93.8	91.7	86.1	81.3	79.6	80.1	79.2	78.2
2004	78.5	79.2	80.7	90.7	90.0	100.0	97.8	100.0	96.4	97.4	100.0	100.0
2005	99.9	99.8	99.6	99.2	98.2	93.5	87.8	86.6	81.7	79.9	78.5	77.4
2006	76.4	75.5	74.4	73.0	71.3	64.5	58.0	52.8	49.5	48.6	47.1	46.3
2007	47.6	47.1	61.0	65.3	89.6	100.0	100.0	100.0	100.0	99.8	99.8	100.0
2008	99.6	98.5	97.4	95.8	91.8	83.6	76.3	70.7	65.4	63.3	61.8	60.6
2009	59.5	58.6	57.6	58.6	55.1	48.8	42.6	38.1	36.9	47.7	51.8	53.8

Cumulative Inflows for Interim and 2020 Demand Phase Droughts,

millions of acre-feet

Month of Drought	Envelope Curve	DOR Interim Phase, 06/1946 - 04/1957	DOR 2020 Phase, 05/1945 - 04/1957	Current Drought Interim & 2020 03/2008 - 04/2013
1	0.056	0.044	0.073	0.042
2	0.112	0.059	0.141	0.082
3	0.168	0.066	0.252	0.133
4	0.225	0.142	0.273	0.149
5	0.281	0.189	0.338	0.162
6	0.337	0.244	0.400	0.176
7	0.393	0.294	0.428	0.189
8	0.449	0.458	0.460	0.201
9	0.505	0.513	0.508	0.213
10	0.561	0.600	0.570	0.227
11	0.618	0.657	0.618	0.242
12	0.674	0.719	0.710	0.260
13	0.730	0.773	0.936	0.298
14	0.786	0.790	0.979	0.369
15	0.842	0.802	0.995	0.402
16	0.898	0.809	1.001	0.422
17	0.954	0.843	1.078	0.433
18	1.011	0.853	1.125	0.445
19	1.067	0.893	1.179	0.478
20	1.123	0.909	1.229	0.706
21	1.179	0.928	1.394	0.808
22	1.235	0.953	1.449	0.869
23	1.291	0.997	1.535	1.005
24	1.347	1.076	1.593	1.252
25	1.404	1.277	1.654	1.370
26	1.460	1.387	1.709	1.515
27	1.516	1.409	1.726	1.611
28	1.572	1.442	1.738	1.644
29	1.628	1.459	1.745	1.704
30	1.684	1.470	1.779	1.715
31	1.740	1.484	1.789	1.802
32	1.797	1.506	1.828	1.816
33	1.853	1.570	1.845	1.830
34	1.909	1.652	1.863	1.847
35	1.965	1.825	1.889	1.868
36	2.021	1.969	1.933	1.884
37	2.077	2.034	2.011	1.898
38	2.133	2.060	2.212	1.907
39	2.189	2.078	2.323	1.918
40	2.246	2.105	2.345	1.920
41	2.302	2.136	2.378	1.921
42	2.358	2.155	2.395	1.921
43	2.414	2.176	2.406	1.922
44	2.470	2.198	2.419	1.952
45	2.526	2.235	2.441	1.959
46	2.582	2.249	2.505	1.975
47	2.639	2.290	2.587	2.010
48	2.695	2.340	2.760	2.085
49	2.751	2.367	2.904	2.197
50	2.807	2.391	2.970	2.217
51	2.863	2.408	2.995	2.300
52	2.919	2.453	3.014	2.313
53	2.975	2.470	3.040	2.322
54	3.032	2.487	3.071	2.324
55	3.088	2.507	3.091	2.336
56	3.144	2.532	3.112	2.355
57	3.200	2.546	3.134	2.361
58	3.256	2.567	3.170	2.368
59	3.312	2.584	3.185	2.383
60	3.368	2.701	3.225	2.392
61	3.425	2.872	3.275	2.403
62	3.481	2.877	3.303	2.414
63	3.554	2.893	3.327	
64	3.627	2.902	3.343	
65	3.700	2.907	3.388	
66	3.774	2.918	3.405	
67	3.847	2.937	3.423	
68	3.920	2.956	3.442	
69	3.993	2.974	3.467	
70	4.067	2.986	3.481	
71	4.127	3.068	3.503	
72	4.187	3.237	3.519	
73	4.248	3.267	3.636	
74	4.308	3.270	3.808	
75	4.368	3.281	3.812	

Month of Drought	Envelope Curve	DOR Interim Phase, 06/1946 - 04/1957	DOR 2020 Phase, 05/1945 - 04/1957
76	4.429	4.312	3.829
77	4.489	4.335	3.837
78	4.549	4.372	3.842
79	4.610	4.514	3.853
80	4.670	4.582	3.873
81	4.731	4.618	3.892
82	4.791	4.671	3.909
83	4.851	4.701	3.922
84	4.912	4.898	4.003
85	4.972	4.905	4.167
86	5.032	4.925	4.203
87	5.093	4.970	4.214
88	5.153	4.989	4.217
89	5.213	5.071	5.247
90	5.274	5.082	5.271
91	5.334	5.091	5.308
92	5.394	5.101	5.450
93	5.455	5.109	5.518
94	5.515	5.115	5.554
95	5.575	5.241	5.606
96	5.636	5.379	5.636
97	5.696	5.391	5.833
98	5.756	5.401	5.841
99	5.817	5.404	5.860
100	5.877	5.408	5.906
101	5.938	5.426	5.924
102	5.998	5.464	6.007
103	6.058	5.482	6.017
104	6.119	5.513	6.026
105	6.179	5.545	6.037
106	6.239	5.564	6.044
107	6.300	5.576	6.051
108	6.360	6.035	6.177
109	6.420	6.177	6.314
110	6.481	6.267	6.326
111	6.541	6.334	6.337
112	6.601	6.565	6.340
113	6.662	6.608	6.344
114	6.722	6.618	6.361
115	6.782	6.626	6.399
116	6.843	6.635	6.418
117	6.903	6.650	6.448
118	6.963	6.657	6.481
119	7.024	6.694	6.500
120	7.084	7.070	6.511
121	7.145	7.079	6.970
122	7.205	7.082	7.112
123	7.265	7.094	7.203
124	7.326	7.098	7.269
125	7.386	7.112	7.500
126	7.446	7.121	7.544
127	7.507	7.131	7.553
128	7.567	7.137	7.562
129	7.627	7.146	7.571
130	7.688	7.202	7.586
131	7.748	7.794	7.592
132	7.808		7.629
133	7.869		8.006
134	7.929		8.014
135	7.989		8.018
136	8.050		8.029
137	8.110		8.034
138	8.170		8.047
139	8.231		8.056
140	8.291		8.066
141	8.352		8.072
142	8.412		8.081
143	8.472		8.138
144	8.533		8.730

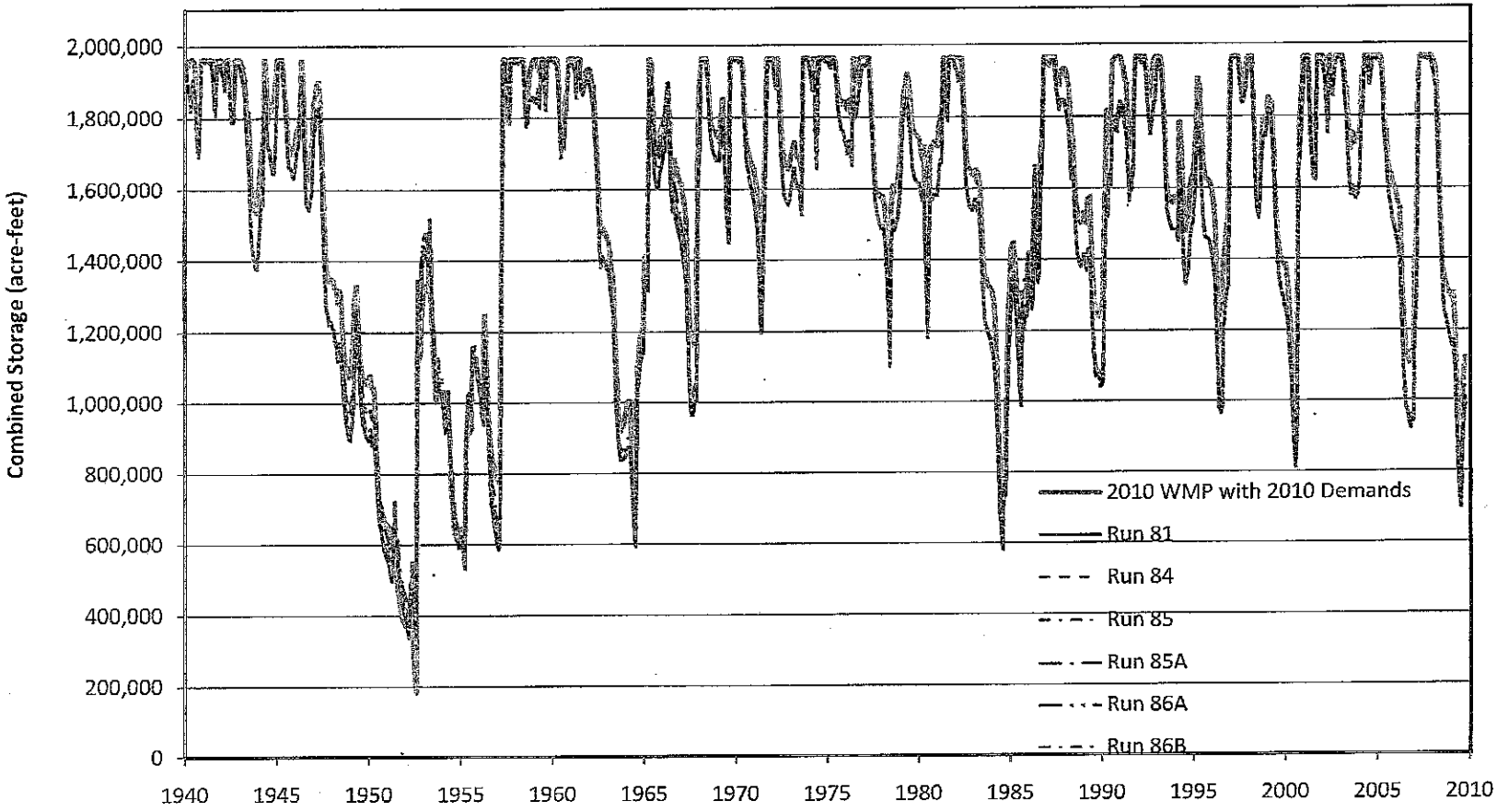
Highlighted months indicate combined storage below 600,000 acre-feet.

EXHIBIT B

LOWER COLORADO RIVER AUTHORITY
WATER MANAGEMENT PLAN UPDATE –
SCENARIO RUNS
LAKES BUCHANAN AND TRAVIS COMBINED STORAGE
Prepared for WMP update meeting on 6/28/2011

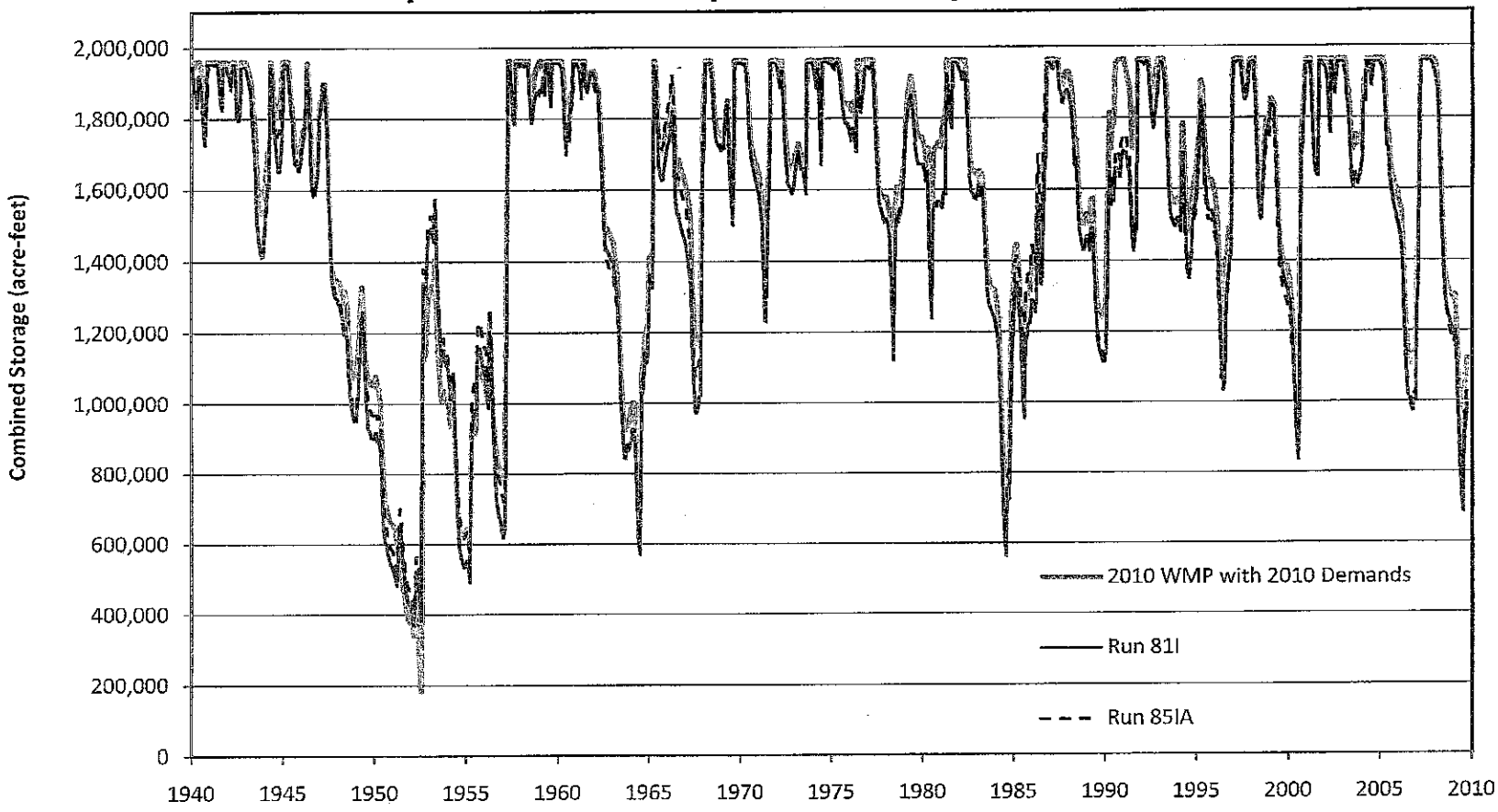
Found at: http://www.lcra.org/library/media/public/docs/water/wmp/2011-07-12_Summary_Graphs_2.pdf (last visited May 28, 2013)

WATER MANAGEMENT PLAN UPDATE - SCENARIO RUNS
LAKES BUCHANAN AND TRAVIS COMBINED STORAGE
Prepared for WMP update meeting on 6/28/2011



This information is for Water Management Plan advisory committee discussion only and represents results from one of the many potential scenarios being evaluated.
This is not a forecast of future conditions.

WATER MANAGEMENT PLAN UPDATE - SCENARIO RUNS
LAKES BUCHANAN AND TRAVIS COMBINED STORAGE
Prepared for WMP update meeting on 6/28/2011



This information is for Water Management Plan advisory committee discussion only and represents results from one of the many potential scenarios being evaluated.
This is not a forecast of future conditions.

Law Offices of
BOOTH, AHRENS & WERKENTHIN
A Professional Corporation

Michael J. Booth
Fred B. Werkenthin, Jr.
Wil Galloway
Trey Nesloney

Carolyn Ahrens
Of Counsel

Joseph S. Babb
Of Counsel

WR 82315

June 5, 2013

REVIEWED
JUN 05 2013
By

Facsimile Submission: 512-239-3311

Ms. Bridget C. Bohac, Chief Clerk
TCEQ – MC 105
P.O. Box 13087
Austin, Texas 78711-3087

2013 JUN 5 PM 3:02
CHIEF CLERKS OFFICE
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

RE: Request for Contested Case Hearing regarding Lower Colorado River Authority's Water Rights Application No. 5838A (Water Management Plan)

Dear Ms. Bohac:

We understand from recent correspondence that the Executive Director will be conducting an extended review of LCRA's Application No. 5838A (Water Management Plan) rather than referring the matter to the Commissioners for proceedings on the numerous requests for contested case hearing that have been filed. The matter is separate from LCRA's request that an existing emergency order related to the current water management plan be extended.

In order to avoid confusion in the future, this letter addresses the requests for contested case hearing of LCRA's Application No. 5838A and associated comment, already filed on behalf of the Colorado Water Issues Committee (CWIC), Mr. Laurance Armour, Mr. Daniel Berglund, and Mr. Ronald Gertson. The requests for hearing and associated comment were fax-filed with the Chief Clerk on Friday, May 24, 2013, under single correspondence of the same date. However, due to a clerical error in our office, a paragraph beginning on page 4 of the letter had been inadvertently deleted. That paragraph provided additional detail with regard to Mr. Gertson's active involvement in rice farming.

In order to address the clerical error, and in consultation with the Chief Clerk's office, our firm staff subsequently submitted a corrected letter. The May 24, 2013, letter remains in effect. The only substantive difference between it and the subsequent submission is the paragraph mentioned. The reference line of the second submission also identifies it as "amended."

However, the subsequent letter was logged into the Chief Clerk's database as relevant to the matter of the emergency order, which also was designated in the database as an open file by reference to Water Permit No. 5838. Neither CWIC, nor Mr. Armour, Mr. Berglund, or Mr. Gertson, have made an appearance in the matter of the emergency order extension.

With our apologies for any inconvenience, the corrected letter is attached again here. We would appreciate this letter being logged as supplemental information in the database for Water Rights Application No. 5838A (Item Type AMFL11.122, *not* the emergency order extension), where the original letter also appropriately remains on file with the agency.

Very truly yours,

Carolyn Ahrens,
Of Counsel
State Bar No. 00942030

Michael J. Booth
State Bar No. 02648500

Booth, Ahrens & Werkenthin, P.C.
515 Congress Avenue, Ste 1515
Austin, Texas 78701
512.472.3263

Marisa Weber

From: PUBCOMMENT
Sent: Wednesday, May 29, 2013 8:21 AM
To: PUBCOMMENT-OCC2
Subject: FW: Public comment on Permit Number WRPERM 5838
Attachments: City of Austin Public Comments on LCRA's App 5838A May 28 2013.PDF

From: PUBCOMMENT-OCC
Sent: Tuesday, May 28, 2013 2:49 PM
To: PUBCOMMENT
Subject: FW: Public comment on Permit Number WRPERM 5838

WR 82315

From: ross.crow@austintexas.gov [mailto:ross.crow@austintexas.gov]
Sent: Tuesday, May 28, 2013 2:35 PM
To: donotReply@tceq.state.tx.us
Subject: Public comment on Permit Number WRPERM 5838

REGULATED ENTY NAME 11405838000 WRPERM 5838 WATER MANAGEMENT PLAN

RN NUMBER: RN104252267

PERMIT NUMBER: WRPERM 5838

DOCKET NUMBER:

COUNTY: BASTROP, BURNET, COLORADO, FAYETTE, GILLESPIE, LAMPASAS, LLANO, MASON, MATAGORDA, SAN SABA, TRAVIS, WHARTON, WILLIAMSON

PRINCIPAL NAME: LOWER COLORADO RIVER AUTHORITY

CN NUMBER: CN600253637

FROM

NAME: Ross Crow

E-MAIL: ross.crow@austintexas.gov

COMPANY: City of Austin

ADDRESS: 301 W 2ND ST P.O. Box 1088
AUSTIN TX 78701-3906

PHONE: 5129742159

FAX: 5129742894

COMMENTS: The City of Austin submits the attached public comments on LCRA's Application No. 5838A supporting the City's request for a contested case hearing which was filed on May 24, 2013 for this application.

City of Austin
Law Department
City Hall, 301 W 2nd Street, P.O. Box 1088
Austin, Texas 78767-1088
(512) 974-2268

Writer's Direct Line
(512) 974-2159

Writer's Fax Line
(512) 974-2894

May 28, 2013 VIA Electronic Filing

Bridget C. Bohac, Chief Clerk
Office of the Chief Clerk
Texas Commission on Environmental Quality ("TCEQ")
P.O. Box 13087, MC-105
Austin, TX 78711-3087

Re: Lower Colorado River Authority ("LCRA")
WRPERM5838
CN 600253637, RN 104252267
Application NO. 5838A to Amend the LCRA Water Management Plan
Public Comments Supporting Earlier Filed Request for Contested Case Hearing

Dear Ms. Bohac:

The City of Austin ("City" or "Austin") files the attached public comments on the LCRA Water Management Plan Application No. 5838A which support the City's request for a contested case hearing on this application filed electronically on May 24, 2013. The City can be reached by mailing or faxing correspondence to my address/fax number on this letterhead and by telephone at my direct number, 512-974-2159.

The City respectfully reserves the right to raise additional issues at or after any public meeting on this application. Again, the City stands ready to work with the applicant to address the concerns expressed in these comments.

Very truly yours,

Ross Crow
Assistant City Attorney
City of Austin

cc: Robert Goode, Assistant City Manager
Greg Meszaros, Director, Austin Water
Teresa Lutes, Managing Engineer, Austin Water

Enclosures

Public Comments submitted by the City of Austin in response to Notice of an Application to Amend the LCRA Water Management Plan, Application No. 5838A supplementing the City of Austin's request for a contested case hearing

May 28, 2013

I. Introduction

The City of Austin timely submits these public comments on the Lower Colorado River Authority's ("LCRA") Water Management Plan ("WMP"), Application No. 5838A which further support the City of Austin's request for a contested case hearing. The essence of these comments is that LCRA's proposed Water Management Plan ("WMP") revisions are not in compliance with the terms of the 1988 Adjudication[1] and LCRA's permits for lakes Travis and Buchanan.[2] However, with incorporation of recent hydrology and sufficient curtailment of interruptible water supplies, the City believes LCRA's proposed WMP revisions can be brought into compliance with LCRA's permit requirements. These comments provide detail regarding two major compliance issues concerning LCRA's submittal.

II. Overview

A. In LCRA's 2012 Water Management Plan models, interruptible supply causes firm curtailment. Adjustment to interruptible supply curtailment must be made to avoid this.

At no point during the period of record should modeling show that interruptible supply is causing firm water curtailment. The current submittal shows interruptible supply triggering firm curtailment requirements in a simulated repeat of the period of record during hydrological conditions when LCRA is still obligated to meet firm customer demand 100% of the time. This is not in accord with LCRA's permit obligations. Additional interruptible supply curtailment is required for the proposed revisions which assure that firm supply is protected from curtailment driven by interruptible supply.

B. LCRA's 2012 WMP lacks essential data from the current unprecedented drought. This data must be included, along with adjustments to interruptible curtailment to properly protect firm supply in a repeat of the current drought.

LCRA's current submittal does not include data from the current unprecedented drought and therefore will be extremely deficient in its protection of firm water customers. In 2011 the lakes experienced the lowest inflows on record by far and 2012 followed with the fifth lowest

---

[1] *In re The exceptions of the Lower Colorado River Authority and the City of Austin to the Adjudication of Water Rights in the Lower Colorado River Segment of the Colorado River Basin,* No. 115, 414-A-1 (264th Dist. Ct., Bell County, Tex. April 20, 1988) (herein "1988 Adjudication").

[2] Certificates of Adjudication Nos. 14-5478 (as amended) and 14-5482 (as amended).

historical inflows on record. With very low inflows in late 2010 and inflows lower than 2011 for the first months of 2013 this creates a very long block of time with water supplies suffering from extremely serious drought rivaling the 1950's Drought of Record. Not making changes now will result in the expenditure of enormous resources by multiple entities adopting revisions which have already been made obsolete by this ongoing and unprecedented drought. Modeling for the plan must include data through the current hydrology, including 2010 – 2012 and a reasonable proxy for 2013, such as a repeat of 2011 or some other reasonable proxy. In the WMP revision, interruptible curtailment curves for both the interim and 2020 conditions should then be adjusted accordingly.

C. TCEQ's Order must preserve essential principles of the 1988 Adjudication and LCRA's Certificates of Adjudication

By way of example, TCEQ correctly stated in its order issuing LCRA's first Water Management Plan in 1989 that, "[a] 'firm' demand is a contractual obligation or other commitment of LCRA's which must be met 100% of the time through the drought of record."[3] TCEQ's[4] associated orders authorizing the Water Management Plan have always contained a provision stating that its prior WMP order provisions remain in effect except to the extent that the current order expressly changes a prior order.[5] The modeling in the proposed plan which indicates that firm water supplies actually would be curtailed in a repeat of the drought of record show that the plan does not provide for 100% of firm supply to be met through a drought of record.

III. Need to adjust interruptible curtailment in 2012 WMP to avoid firm curtailment

A. LCRA's permit requirement to curtail interruptible supply to protect firm water supply

As a result of conditions required in the 1988 Adjudication, LCRA's permits for Lakes Travis and Buchanan state a requirement that is central to the Water Management Plan particularly with regard to the allocation of supplies among firm and interruptible customers. The extent of curtailment of interruptible supply required to protect all firm supply is spelled out with great clarity. LCRA's permits require that:

---

[3] Texas Water Commission (now Texas Commission on Environmental Quality) Order Approving Lower Colorado River Authority's Water Management Plan and Amending Certificates of Adjudication Nos. 14-5478 and 14-5482, Sept. 20, 1989, p. 15, Finding of Fact No. 81.

[4] The Texas Commission on Environmental Quality or "TCEQ" as used herein refers to TCEQ and predecessor agencies such as the Texas Water Commission.

[5] *See, e.g.*, Texas Commission on Environmental Quality, Agreed Order Approving Amendments to Lower Colorado River Authority's Water Management Plan, Jan. 27, 2010, p. 6, Ordering Provision No. 1.a., "LCRA's amended Water Management Plan is subject to all findings, conclusions, and conditions contained in the Commission's Order dated September 20, 1989, December 23, 1991, December 18, 1992 and March 1, 1999, approving and amending the WMP, except to the extent that this Order specifically provides otherwise."

> LCRA shall interrupt or curtail the supply of water under this certificate or under Certificate of Adjudication 14-5482 pursuant to commitments that are specifically subject to interruption or curtailment, to the extent necessary to allow LCRA to satisfy all demands for water under such certificates pursuant to all firm, uninterruptible commitments.[6]

In short, LCRA must curtail interruptible supply to the extent necessary to allow LCRA to satisfy all firm demands. The 1988 Adjudication contains essentially this same required condition almost verbatim, and in addition, has other provisions which express this requirement in similar language. One provision states:

> The supply of stored water pursuant to non-firm, interruptible commitments should be interrupted or curtailed to the extent necessary to allow LCRA to satisfy all existing and projected demands for stored water pursuant to all firm, uninterruptible commitments.[7]

As mentioned, TCEQ's 1989 Order approving the first Water Management Plan, in an Order provision contemporary with the 1988 Adjudication and the Certificates of Adjudication for Lakes Travis and Buchanan in accord with these documents states, "A **'firm' demand** is a contractual obligation or other commitment of LCRA's which **must be met 100% of the time through the drought of record**."[8] In other words, LCRA must meet firm water demand such that there is no curtailment of firm supply in a repeat of the drought of record and the curtailment of interruptible supply must be established in a manner to achieve this result.

B. How is this required curtailment of interruptible supply done?

As a means of effectuating such provisions, the 1988 Adjudication and LCRA's Certificates of Adjudication require LCRA to submit to TCEQ for approval a Water Management Plan and provides for periodic updates to this plan. By Order, TCEQ approved the first WMP in 1989 and TCEQ has issued subsequent orders approving updates to the plan.[9] A fundamental aspect of this plan is establishing trigger points at which interruptible water supply will be curtailed. These triggers are based on the combined storage of lakes Travis and Buchanan. When combined storage falls to a certain trigger level, then some degree of interruptible supply curtailment begins. The amount of curtailment generally increases as the combined storage falls.

---

[6] Certificate of Adjudication No. 14-5482 (as amended), p. 4, 2.B.7. Note that Certificate of Adjudication No. 14-5478 (as amended) has the same condition, changing only the number of the Certificate of Adjudication referenced.

[7] 1988 Adjudication, Attachment No. 2, p. 5, Finding 19.f. (from findings for LCRA's Lake Buchanan water right).

[8] Texas Water Commission (now Texas Commission on Environmental Quality) Order Approving Lower Colorado River Authority's Water Management Plan and Amending Certificates of Adjudication Nos. 14-5478 and 14-5482, Sept. 20, 1989, p. 15, Finding of Fact No. 81 (emphasis added).

[9] *See,* Texas Commission on Environmental Quality, Agreed Order Approving Amendments to Lower Colorado River Authority's Water Management Plan, Jan. 27, 2010, p. 6, Ordering Provision No. 1.a. citing dates of prior orders.

Eventually, if storage falls further, all interruptible supply ceases. The increasing curtailment as lake storage decreases is expressed graphically, with combined storage on the x-axis and the amount of interruptible water supply on the y-axis. A curve on the graph depicts the increasing curtailment as lake storage decreases. *See, e.g.,* Proposed 2012 WMP, Figure 4-1 and Figure 4-2.

The effectiveness of an interruptible supply curtailment curve in fully protecting firm supply can be tested by running a model which repeats the hydrology of the past 70-plus years and includes certain assumptions regarding firm customer water demand. In accord with the interruptible curtailment condition in LCRA's lake permits discussed above, **if the results of a model run show that interruptible supply at any time during a repeat of the 70-plus year period of record results in firm water supply being curtailed, then the interruptible curtailment curve must be adjusted "to the extent necessary" that the model does not show any curtailment of firm supply during a repeat of the entire period of record.**

In the current and proposed Water Management Plan, firm curtailment occurs when all of the criteria for a "possible" Drought Worse than a Drought of Record (DWDR) are satisfied simultaneously.[10] There are three criteria for a possible DWDR (discussed below) and when these are met, the LCRA Board will make a declaration, which among other things requires an initial pro rata curtailment of firm supplies of 20%.[11] The models used to support LCRA's proposed WMP revisions, use a repeat of the hydrology of a 70 year period of record (1940 – 2009) with certain assumptions including increased firm water demand. As examined in more detail below, the model results indicate that during the period of record in the portion that represents a repeat of the drought of record (which occurred in the 1950's), that all three criteria for declaring a DWDR are simultaneously triggered even though hydrologically a DWDR could not yet have been reached. **In other words, while still in the Drought of Record (a repeat of historic conditions that is not yet in an actual Drought Worse than the Drought of Record) LCRA's modeling shows results that would require firm customers to undergo significant mandatory curtailment. This is a fundamental permit compliance issue. As discussed above LCRA must meet firm demand 100% of the time through a Drought of Record—not 80% of the time or less as indicated in the model results that form the basis of LCRA's application for these WMP revisions.**

[10] Lakes Buchanan and Travis Water Management Plan and Drought Contingency Plans Submitted to Texas Commission on Environmental Quality by the Lower Colorado River Authority in March 2012, with Supplemental Filing May 2012 (herein "Proposed 2012 WMP"), p. 4-27.

[11] Proposed 2012 WMP, p. 4-25.

C. Interruptible supply in the LCRA proposed 2012 WMP triggers firm customer curtailment and must be adjusted

This section discusses in more specific detail how LCRA's model shows that in the proposed WMP revisions interruptible supply is managed in a manner that is shown to cause firm water supply curtailment in conflict with LCRA's permit requirements.

1. Drought Worse than Drought of Record (DWDR) Criteria triggered during Drought of Record

First, to understand that the DWDR criteria are simultaneously triggered while still hydrologically in a Drought of Record, and not yet in an actual DWDR, it is important to understand that LCRA's model results reflect only a repeat of the Drought of Record (i.e. a repeat of historic conditions which have occurred) and at no point reflect conditions worse than the critical period of the Drought of Record.[12] This is due to the simple fact that data used in running the model is in fact the hydrology of the Drought of Record, again, a repeat of historic conditions. Therefore, any results shown—including the simultaneous triggering of all 3 DWDR criteria requiring curtailment of firm customers—occurs in a repeat of the hydrological Drought of Record. In a simulated repeat of these historic conditions, for LCRA to be in compliance with its lake permits, it should be clear that firm customers receive 100% of their supply.

Put simply, the model shows what happens in a repeat of the hydrological Drought of Record and in this repeat of the Drought of Record it must show that firm demand is met 100% of the time. The model, however, does not show this. Instead, it shows the triggering of the DWDR criteria, which requires curtailment of firm customers. This needs to be corrected.

2. Three DWDR Criteria simultaneously triggered

LCRA's proposed WMP revisions set out the 3 criteria requiring the LCRA Board to Declare a Drought Worse than a Drought of Record:

> The LCRA Board of Directors will make a Drought Worse than Drought of Record declaration when the following three conditions are simultaneously met:
>
> 1. Drought duration of at least 24 consecutive months; and
> 2. Drought intensity greater than that of the Drought of Record as measured by inflows into the Highland Lakes; and

[12] The critical period of the Drought of Record, as determined in a simulation to compute the combined firm yield, is a period of 10 years starting June 1947 and ending May 1957. Proposed 2012 WMP, Technical Paper A-6, p. 3.

3. The combined storage in lakes Buchanan and Travis is less than 600,000 acre-feet.

This information is included in the Proposed 2012 WMP submittal at p. 4-27. Examining the three criteria in turn below, it is a fairly straight forward analysis to see that all three are triggered simultaneously during the Drought of Record in both the Interim and 2020 Demand Phases[13] of the Proposed 2012 WMP, which requires a declaration of a Drought Worse than Drought of Record ("DWDR") and firm water supply curtailment. Attached also as Exhibit A is a graphic representation of the WMP WAM results for the Interim and 2020 Demand Phase showing the points at which all 3 DWDR criteria are triggered during the Drought of Record.[14] In the graph on page 1 of Exhibit A the cumulative inflows for the Drought of Record for the Interim and 2020 Demand Phases are depicted. On those cumulative inflow curves which extend for a longer period than 24 months, there are circles and diamonds which depict the months in which the combined storage is below 600,000 acre-feet in the simulation. This makes it very simple to see visually that when the drought duration is in excess of 24 months, that there are also times when both the inflow criteria (cumulative inflows below the envelope curve as discussed below) and the storage criteria (combined storage below 600,000 acre-feet) is met. ***Wherever a circle or diamond is depicted on the graph on page 1 in Exhibit A, that is a point at which all 3 criteria for the declaration of a DWDR are triggered during the Drought of Record.*** Also included in Exhibit A are tables of data which show LCRA's model results from which the graph is derived.

a. Drought duration criteria triggered

For the purposes of determining drought duration the beginning of the drought is based on the last time lakes Buchanan and Travis were full.[15] Besides the model analysis provided herein by

---

[13] The Proposed 2012 WMP is divided in to two distinct phases based on an increased demand for firm water over time. Model simulations were conducted for both phases. The 2020 Demand Phase is based on an estimated firm water customer demand expected by the year 2020 and the protections needed to assure that demand is met. The Interim Demand Phase is based on a demand that is between the estimated amount of firm water demand in 2010 and the projected 2020 demands in the Proposed 2012 WMP. There are different interruptible water supply curtailment curves for the Interim and 2020 Demand Phases, as these curtailment curves require adjustment to accommodate the change in firm water demand over time.

[14] Exhibit A is a City of Austin analysis of results from LCRA's Proposed 2012 WMP WAM.

[15] Specifically the Proposed 2012 WMP at p. 4-27 states:

> For purposes of measuring drought duration, the beginning of the drought is based on the last time lakes Buchanan and Travis were both full. For purposes of this declaration, full is defined when either of the following criteria is met:
>
> - Combined storage is at or above 98 percent of the combined managed conservation storage. This managed conservation storage may vary based on seasonal operational guidelines or other constraints on storage; or
> - Lakes Buchanan and Travis have each been at their respective managed conservation storage capacity within 30 days of each other.

the City of Austin at Exhibit A as described directly above, a simple visual examination of LCRA's modeling results for both the Interim and 2020 Demand Phases (*See* Exhibit B)[16] shows that during the Drought of Record period, the duration was considerably longer than 24 months and that at least 24 months had elapsed before the combined storage fell from the full condition to below 600,000 acre-feet. As noted, for purposes of measuring drought duration, the beginning of the drought is based on the last time lakes Buchanan and Travis were full and full can be identified in a simulation as the point at which combined storage is at or above 98 percent of the combined managed conservation storage. As shown in the attached model results in Exhibit A at p. 4, for the Interim Demand Phase the reservoirs for the Drought of Record first fell below 98% combined storage in a repeat of June 1946. For the 2020 Demand Phase for the Drought of Record reservoirs first fell below 98% in a repeat of May 1945.

Model results provided in the stakeholder process for both the Interim and 2020 Demand Phases at Exhibit B visually show combined storage first falling below 600,000 in the repeat of 1950. Specifically in the analysis provided by the City of Austin at Exhibit A on page 3 for the Interim Demand Phase model run, the results show the combined storage first falling below 600,000 acre-feet in a repeat of December 1950. At page 5 for the 2020 model run, the City's analysis shows the combined storage first falling below 600,000 acre-feet in a repeat of November 1950. It is clear from this that for both the Interim and 2020 Demand Phases, well over 24 months has elapsed since reservoirs first fell below 98% combined storage to the time when the combined storage is seen falling below 600,000 acre-feet in a repeat of the early fifties. For the Interim Demand Phase the drought duration is 55 months and for the 2020 Demand Phase the drought duration is 67 months when the other 2 criteria are met in the simulation, which is well beyond the 24 month drought duration criterion.

b. Intensity (Inflow) Criteria triggered

The intensity criteria may be triggered when there is a period of low cumulative inflow to the lakes.[17] For the Proposed 2012 WMP, if cumulative inflows for any period of time, when plotted on a graph, are below the cumulative inflows "envelope curve" for the Drought of Record, then this intensity or inflow criterion is satisfied.[18] The envelope curve encapsulates and thus approximates the cumulative inflows during the Drought of Record. In the chart for Exhibit

---

[16] Note that in the attached Water Management Plan Update Scenario Runs dated June 28, 2011 prepared by LCRA, the graph on page 1 depicts the 2020 Plan results in the red dashed line labeled Run 85A and page 2 depicts the Interim Plan results in a blue dashed line labeled Run 85IA.

[17] Specifically the Proposed 2012 WMP at p. 4-27 **(as corrected by LCRA during Technical Review)** states:

> For purposes of measuring drought intensity relative to the Drought of Record, the cumulative inflows since the beginning of the drought will be compared to a Drought of Record inflow envelope curve that reflects the cumulative inflows in the critical periods of the Drought of Record. The envelope curve consists of a uniform slope of 56,141 acre-feet per month for the first 62 months of the drought, a slope of 73,241 acre-feet per month for months 63 to 70, and then a slope of 60,350 ac-ft/month the remainder of the drought.

[18] *See* Proposed 2012 WMP, Technical Paper A-6, p. 3.

A it can be seen visually that for the Interim Demand Phase, the WAM results depict the cumulative inflow during the Drought of Record as being below the cumulative inflow envelope curve at all times after the 24 month duration criteria is met (with the exception of the final month of the 131 month period which does not affect the conclusions herein in any manner). (*See* table in Exhibit A on page 7 with columns comparing the cumulative inflows of the envelope curve with the cumulative inflows of the Interim Demand Phase.) In the chart for Exhibit A it can also be seen visually that for the 2020 Demand Phase the WAM results depict the cumulative inflow during the Drought of Record as being below the cumulative inflow envelope curve at all times when both the 24 month duration criteria and the 600,000 acre-feet storage criteria is met. (*See* table in Exhibit A on page 7 with columns comparing the cumulative inflows of the envelope curve with the cumulative inflows of the 2020 Demand Phase with the months where combined storage falls below 600,000 acre-feet shaded.)

c. Combined storage criteria triggered

This requires little explanation. The model results in both Exhibit A and B show in a repeat of the Drought of Record that the combined storage falls below 600,000 acre-feet for a substantial period of time during a repeat of the early fifties. As stated, the combined storage first falls below 600,000 acre-feet in a repeat of December 1950 for the Interim Demand Phase and November 1950 in the 2020 Demand Phase. *See* Exhibit A tables on pages 3 and 5. Model results for both the Interim and 2020 Demand Phases show that once combined storage has fallen to 600,000 acre-feet in 1950, that except for a repeat of June and July 1951, the combined storage remains below 600,000 acre-feet until a repeat of September 1952. For the Interim Demand Phase the combined storage dips down below 600,000 acre-feet again in April 1955. *See* Exhibit A, p. 3. For the 2020 Demand Phase the combined storage falls below 600,000 acre-feet again in two distinct time periods—October 1954 through April 1955 and January 1957 through March 1957. *See* Exhibit A, p. 5. These same time frames in which combined storage is below 600,000 acre-feet all overlap with the period when both the criteria for drought duration and inflow criteria are also triggered.

D. In 2012 WMP, interruptible supply driving firm customers into curtailment

From the above analysis it is apparent that during the Drought of Record all 3 criteria requiring a declaration of a DWDR are simultaneously triggered which requires an initial curtailment of firm customers of 20% according to LCRA's Drought Contingency Plan. Despite the fact that LCRA models for the 2012 WMP show mandatory curtailment of firm customers triggered during the Drought of Record, the proposed plan makes the statement:

> All projected interim phase and 2020 level demands for **firm water customers can be fully satisfied** under a simulated repeat of hydrologic conditions during the historic period of 1940-2009, **including during the Drought of Record** and during short-term intense droughts experienced in recent decades.

Proposed 2012 WMP. P. 4.9.1 (emphasis added). Although this reflects LCRA's duties under its permits, it is difficult to see how all firm demands "can be fully satisfied under a simulated repeat of hydrologic conditions during the historic period of 1940-2009" when the above assessment of that simulation in fact shows that LCRA would be required to cut back firm demand by at least 20% during this simulated period. Throughout the period of record, including the Drought of Record, all declines in the combined storage at all points in time are due in part to interruptible releases. Hence, **in the period that precedes the triggering of firm curtailment there are interruptible releases, which if further curtailed, would avoid all 3 criteria being triggered simultaneously and thus would avoid firm curtailment.** This interruptible supply curtailment is clearly and expressly required by the 1988 Adjudication and LCRA's permits in the condition that LCRA curtail interruptible supply to the extent necessary that all firm demand is satisfied. Also it is required to fulfill the above quoted statement in LCRA's Proposed 2012 WMP at P. 4.9.1.

In sum, under its permits, LCRA cannot knowingly plan for interruptible releases over the period of record (including the Drought of Record) which LCRA's models show will trigger firm curtailment. If interruptible supply can be reduced to avoid this result in the model, then by the 1988 Adjudication and LCRA's permits, it must be done.

E. Plan cannot by design manage municipal supply into emergency cut backs on firm supply

Regarding managing water supply in a manner to avoid emergencies, the solution—and the requirement by both law and common sense--is not to try to curtail water supply when reservoirs are depleted and about to go into an emergency condition, but to sufficiently curtail interruptible supply well in advance so that supplies never reach the emergency level in the first place. Otherwise the plan *by design* is managing municipal supply into emergency cut backs on firm supply. LCRA's permits require that interruptible supply be curtailed to the extent necessary that all firm demand is satisfied. Allowing for releases of interruptible supply which LCRA's model shows *necessarily* will result in firm supplies being cut back is a direct contradiction of this requirement. LCRA's Proposed 2012 WMP states, "the WMP is designed so that LCRA can meet <u>all</u> firm demands through a repeat of the Drought of Record (emphasis added)." Proposed 2012 WMP P. 4-26. LCRA has correctly stated how the WMP must be designed. TCEQ should assure that model simulations for the Proposed 2012 WMP show that this is indeed the case.

It is important to note that the current 2010 WMP did not sufficiently curtail interruptible supply. TCEQ has now approved two emergency orders to correct for its deficiencies. These emergency orders are a good example of how trying to curtail interruptible supply after large interruptible releases have already been made does not fix all the problems. In this instance the brakes were applied even much sooner than hitting the DWDR triggers. Nonetheless, the basin faces the prospect of hitting a DWDR by the end of the summer. Although the Emergency Orders have

been essential, after the fact management, using Emergency Orders is poor management and does not sufficiently protect firm customers who now face curtailment due to large releases in 2011 which should not have happened. It's too late to close the barn door after the cow is out of the barn. For these reasons it is essential to assure that interruptible supply is sufficiently curtailed in the plan such that in the model the interruptible releases at no point in the period of record result in the curtailment of firm supply.

IV. Changed circumstances due to prolonged and unprecedented drought require further WMP revisions

In addition to the above discussed permit compliance issues in LCRA's Proposed 2012 WMP, due to the unprecedented and ongoing drought, the City of Austin no longer believes that the proposed revisions to LCRA's WMP, developed with the assistance of a stakeholder committee that did its primary work from July 2010 to July 2011, is sufficiently or properly protective of firm water supplies. The prolonged drought also caused the City of Austin to re-examine assumptions used in the stakeholder process and as discussed above even absent the unprecedented drought conditions now does not believe the proposed revisions are properly protective of firm supply.

A. LCRA acknowledges deficiencies in proposed revisions

LCRA recognizes deficiencies in its current submittal to TCEQ. At the Senate Natural Resource Committee Hearing on April 9, 2013, LCRA's Board Chair Tim Timmerman provided testimony and in some introductory remarks made by the Chair about the proposed revisions to the Water Management Plan now before TCEQ he commented, "[t]he newest plan we have is already based on out-of-date information and modeling."[19] Although recognizing this, LCRA would like to proceed with its current application. The City of Austin had taken this same view for a long time, however, as this alarming multi-year drought has continued, and as LCRA has succinctly put it this "Intense Drought Rivals Worst in History,"[20] the City has concluded it can no longer ignore the obvious. The proposed revisions already require a major update if the plan is to be properly protective of firm customers, including large municipal customers.

In light of the very lengthy process that will likely be required to get revisions finally approved after any potential legal challenges have been addressed--possibly in a contested case hearing

---

[19] The Senate of Texas, Senate RealMedia video archives 2013, Senate Committee on Natural Resources (Part I), April 9, 2013, comment found at 1:26:15, http://www.senate.state.tx.us/avarchive/?yr=2013&lim=250 (last visited May 24, 2013).

[20] LCRA, Intense Drought Rivals Worst in History, http://www.lcra.org/library/media/public/docs/water/drought/IntensityofDrought.pdf (last visited May 24, 2013).

and subsequent court actions—it only makes sense to get the plan right now and to go through what could well be a very lengthy and contentious process once instead of twice. In addition, it is not appropriate to leave unprotected for a prolonged period the water supply for over a million people and a major economic engine for the State of Texas. Attempting to manage the basin going forward with additional emergency orders fails to recognize that once large interruptible releases are made, just stopping further interruptible releases cannot spare the basin from a possible crisis if conditions continue to be dry. The basin faces exactly this situation today. As mentioned, since the large releases in 2011, the two emergency orders issued by TCEQ, although essential, still leave firm customers facing the possibility of firm curtailment by the end of this summer or early fall.

LCRA's projections for Highland Lakes storage dated May 1, 2013 show the possibility of storage falling to 600,000 acre-feet as soon as August 1—about two months from now.[21] The 600,000 acre-foot "emergency" level[22] is of great significance since, as described above, the LCRA Board at this point is expected to require firm customers to cut back an initial 20%. The August 1 projection of 600,000 acre-feet is based on "Extreme Drought Conditions" in the coming months. LCRA's projections also show lake storage falling to 600,000 acre-feet by September 1 in "Drought Conditions." Neither is unrealistic considering the severity of the ongoing drought and as LCRA notes, inflows so far for 2013 are comparable to 2011—the year with the lowest inflows to the Highland Lakes.[23]

It is noteworthy that even under "Average Conditions" LCRA's May 1 projections over the next 6 months show a range of between 700,000 and 800,000 acre-feet. Thus even with improvement from drought conditions to average conditions, combined storage will remain well below the 900,000 acre-foot level where LCRA asks its firm customers to place their customers under mandatory restrictions.[24] At 900,000 acre-feet combined storage, Austin implements its Stage 2 drought restrictions, which includes a mandatory one-day-a-week watering schedule. Austin has been in Stage 2 for 19 of the last 21 months.

---

[21] LCRA, Highland Lakes Water Storage and Forecast, May 1, 2013, http://www.lcra.org/library/media/public/docs/water/drought/DroughtUpdate_StorageProjection.pdf (last visited May 24, 2013).

[22] LCRA, Water Supply Status, May 1, 2013, http://www.lcra.org/library/media/public/docs/water/drought/Water_Supply_Dashboard.pdf (last visited May 28, 2013). Note that this document shows that for combined storage levels below 600,000 acre feet that this stage is termed an "Emergency."

[23] LCRA, Drought becoming more intense as weather offers little relief, http://www.lcra.org/water/drought/index.html (last visited May 28, 2013).

[24] Proposed 2012 WMP, p. 4-25.

Again, all of this information is to emphasize the point that emergency orders as issued twice in the past two years, although essential for slowing further reservoir depletion, cannot make up for depletion that has already occurred due to a Water Management Plan that is not properly protective of firm water supplies. The reservoirs have never recovered from the twin occurrence in 2011 of massive interruptible releases and the lowest inflows on record. The pro rata curtailment that firm customers face now in 2013 is directly related to large interruptible stored water releases in 2011, as well as in prior years 2008 through 2010, and, as discussed above, this is the result which LCRA's lake permits expressly require LCRA to prevent. It is for this reason that going forward the WMP include the proper curtailment in the first place and that emergency orders not be relied upon in lieu of proper upfront management, because as important as emergency orders are to slowing further decline of vital lake storage, current experience confirms these orders can be too little too late in regard to the objective of preventing interruptible supply from causing firm curtailment.

B. Overview of the general data that is available since 2009

In 2011 the lakes experienced the lowest inflows on record by far and 2012 followed with the fifth lowest historical inflows on record. LCRA has posted a document on the LCRA website titled "Intense Drought Rivals Worst in History," which indicates that inflows in 2011 measured at 127,802 acre-feet, well below the second lowest year, which is 2008 at 284,462 acre-feet.[25] This same document shows inflows for 2012 at 393,426. For contrast, LCRA's Water Use Summary for 2011 shows the amount of storage used in 2011 for interruptible supply at 433,251 acre-feet.[26] With the exceptionally low inflows so far in 2013, this creates a very long block of time with water supplies suffering from extremely serious drought now rivaling the Drought of Record. As discussed further below, without some adjustment in the curtailment curves, the model will almost certainly show interruptible supply driving reservoirs below 600,000 acre feet and triggering curtailment of firm customers. Again, it is not just permit requirements but common sense which says this is not the manner to manage water supply in this basin.

C. Estimating the impact of the current drought on combined storage levels

Even without the specific data required to run the WAM, it is possible to get a general read on what levels combined storage would be expected to fall to in the simulations if the severe drought hydrology from 2010 to the present is included in the model. Examining the WAM

---

[25] LCRA, Intense Drought Rivals Worst in History, http://www.lcra.org/library/media/public/docs/water/drought/IntensityofDrought.pdf (last visited May 24, 2013).

[26] LCRA Water Use Summary 2011, http://www.lcra.org/library/media/public/docs/water/wmp/water_use_summary_2011.pdf (last visited May 24, 2013).

results provided to the stakeholder group on June 28, 2011 in Exhibit B it can be seen that 60 months into the Drought of Record the simulated combined storage is in the range of 400,000 to 600,000 acre feet. With inflows that are considerably less than the Drought of Record over this same time period since the beginning of the current drought, and other factors generally the same or similar, it can be reasonably postulated that simulated combined storage would be at least at similarly lows levels 60 months plus into the current drought. The curtailment curves of the current plan do not protect firm water customers from this result (combined storage falling below 600,000 AF in the current drought) which would trigger a Drought Worse than a Drought of Record as the other 2 criteria are already met. This requires correction.

The conclusion that model runs for the Interim and 2020 Demand Phases which include the most recent hydrology will show combined storage levels falling below 600,000 acre-feet is supported by the data graphically depicted in Exhibit A. This can be postulated by a comparison of the cumulative WAM inflows during the first 5-plus years of the Drought of Record for the Interim and 2020 Demand Phase with the cumulative inflows since the beginning of the current drought starting in 2008.[27] The graph in Exhibit A indicates that the cumulative inflows since 2008 are less than the Drought of Record cumulative WAM inflows in the simulation for either the Interim or 2020 Demand Phase. The circles and diamonds on the cumulative WAM inflow curves for the Interim and 2020 Demand Phases depict periods when combined storage falls below 600,000 acre-feet. At around 55 months into the Drought of Record, the Interim Demand Phase curve circles appear on the curve indicating a combined storage of less than 600,000 acre-feet. Meanwhile, at 55 months into the current drought the cumulative inflow curve depicts lower inflows than the Drought of Record. It is logical to deduce that similarly low and even lower combined storage levels below 600,000 acre-feet would be depicted in a simulation which includes the most recent drought data. Note also that for the 2020 Demand Phase that the gap between the cumulative inflows for the current drought and the Drought of Record widens to almost one million acre feet. With cumulative inflows falling far short of the 1950's drought, it is reasonable to assume that combined storage amounts in the simulation for the 2020 Demand Phase will also fall to levels reached in the simulations of the Drought of Record—such as combined storage levels between 400,000 and 600,000 acre-feet.

Inflows have continued at extremely lows levels. The inflows for January through April 2013 have all been lower in total than the first four months of 2011,[28] which has the lowest inflows on record. More reason to believe that in a model, low combined storage levels would rival those in the Drought of Record.

---

[27] Proposed 2012 WMP Technical Paper A-6, Figure 1 shows WAM inflows and the LCRA Inflow Set "converge" in recent years and thus recent historical inflows can be used as a proxy for WAM inflows.

[28] For January through April 2013 inflows amounts *see* LCRA, Drought becoming more intense as weather offers little relief, http://www.lcra.org/water/drought/index.html (last visited May 28, 2013).

All of this leads to the unavoidable conclusion that to meet LCRA's permit requirements, more interruptible curtailment will be required than is currently proposed. As the current drought rivals the Drought of Record, the curtailment needed to protect firm customers in a simulated repeat of the current drought may be similar to the curtailment needed to avoid firm curtailment during the simulated repeat of the Drought of Record in LCRA's proposed revisions as discussed in detail above.

V. Conclusion

A. In LCRA's 2012 Water Management Plan models, interruptible supply causes firm curtailment. Adjustment to interruptible supply curtailment must be made to avoid this.

At no point during the period of record should modeling show that interruptible supply is causing firm water curtailment. The current submittal shows interruptible supply triggering firm curtailment requirements in a simulated repeat of the period of record, including the Drought of Record, during hydrological conditions when LCRA is still obligated to meet firm customer demand 100% of the time. This is not in accord with LCRA's permit obligations. Additional interruptible supply curtailment is required for the proposed revisions which assure that firm supply is protected from curtailment driven by interruptible supply.

B. LCRA's 2012 WMP lacks essential data from the current unprecedented drought. This data must be included, along with adjustments to interruptible curtailment to properly protect firm supply in a repeat of the current drought.

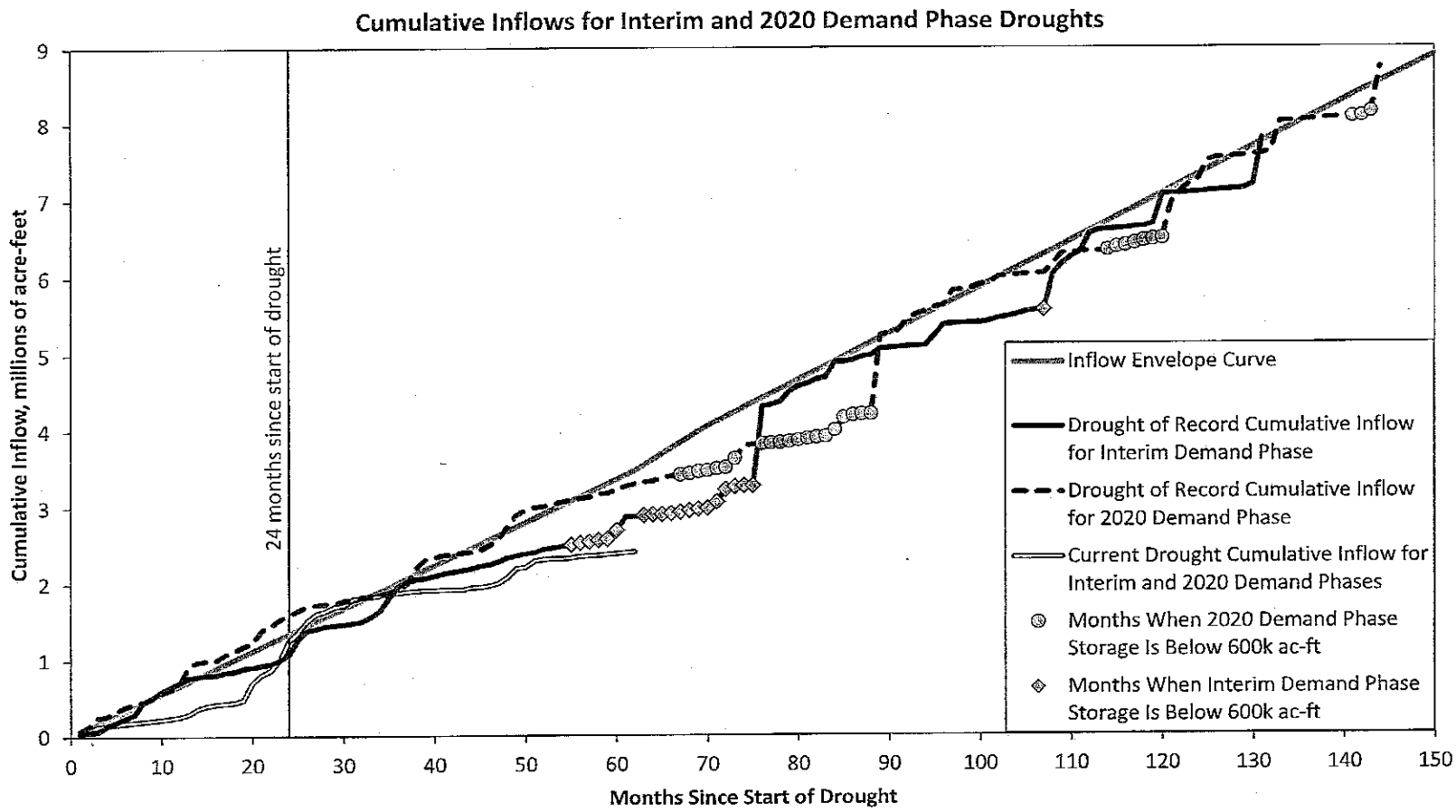
The current submittal does not include data from the current unprecedented drought and therefore will be extremely deficient in its protection of firm water customers. In 2011 the lakes experienced the lowest inflows on record by far and 2012 followed with the fifth lowest inflows on record. With very low inflows in late 2010 and inflows lower than 2011 for the first months of 2013 this creates a very long block of time with water supplies suffering from extremely serious drought now rivaling the Drought of Record. Not making changes now will result in the expenditure of enormous resources by multiple entities adopting revisions which have already been made obsolete by this ongoing and unprecedented drought. **Modeling for the plan must include data through the current hydrology, including 2010 – 2012 and a reasonable proxy for 2013, such as a repeat of 2011 or 2012. Interruptible curtailment curves should then be adjusted accordingly.**

The City of Austin is prepared to work with the applicant to discuss possible means of addressing the City's concerns as set forth in these public comments and the City's request for a contested case hearing on LCRA's Application No. 5838A.

EXHIBIT A

CITY OF AUSTIN
ANALYSIS OF
LOWER COLORADO RIVER AUTHORITY'S
PROPOSED 2012 WATER MANAGEMENT PLAN
WATER AVAILABILITY MODEL

RELATING TO
DROUGHT WORSE THAN DROUGHT OF RECORD TRIGGERS



- Drought of Record (DOR) Cumulative inflows for the Interim Demand Phase cover 131 months from June 1946 through April 1957.
- DOR Cumulative inflows for the 2020 Demand Phase cover 144 months from May 1945 through April 1957.
- Current drought cumulative inflows for the Interim and 2020 Demand Phases cover 62 months from March 2008 through April 2013.
- Both Interim and 2020 Demand Phase begin the current drought with March 2008.
- Interim and 2020 Demand Phase combined storages are only available through January 2009 (month 22 of the current drought).
- DOR cumulative inflows for the Interim and 2020 Demand Phases are based only on the WAM Reference Inflows.
- Current drought cumulative inflows are based on the WAM Reference Inflows from March 2008 through December 2009, and the LCRA Inflow Set from January 2010 through April 2013.
- Year 2013 data in the LCRA Inflow Set are preliminary and subject to revision.

Inflows to Lakes Buchanan and Travis (acre-feet)

Reference Inflows are derived from the LCRA WMP WAM and are provided for years 1940 through 2009.
Inflows from the *LCRA Inflow Set* are provided for years 2010 through 2013.

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1940	22,424	43,670	32,658	129,360	116,620	265,230	130,489	81,798	20,713	33,909	136,605	206,905	1,220,381
1941	58,258	172,687	207,724	442,903	771,414	478,528	94,803	47,312	69,470	330,410	51,601	45,473	2,770,583
1942	35,368	27,188	26,700	231,561	272,585	112,174	27,433	114,539	107,427	284,505	82,272	41,596	1,363,348
1943	32,211	26,513	38,387	38,323	29,127	177,487	49,363	10,521	44,796	40,990	18,388	27,311	533,417
1944	77,932	81,610	94,061	39,545	440,687	102,774	25,657	158,295	78,839	72,546	31,603	82,615	1,286,264
1945	142,368	138,575	185,065	233,695	79,455	67,851	110,278	21,410	65,357	61,868	27,484	32,069	1,159,475
1946	48,077	61,824	47,951	91,901	226,003	43,739	15,666	6,220	76,810	46,942	54,133	50,373	769,639
1947	164,110	55,158	86,441	57,855	61,288	54,335	17,218	12,031	7,079	34,032	9,710	39,764	599,021
1948	16,102	18,897	25,381	43,834	78,456	201,135	110,714	21,879	32,995	17,029	10,991	13,544	590,957
1949	21,762	64,347	81,657	173,318	143,890	65,283	25,686	18,621	26,387	30,854	19,768	20,585	692,158
1950	22,331	36,239	14,810	40,349	49,755	27,631	24,179	16,215	45,210	16,993	17,494	19,604	330,810
1951	24,796	14,232	21,619	16,124	117,139	171,521	4,676	16,194	8,733	4,748	11,300	19,412	430,494
1952	19,079	17,174	12,499	81,582	164,021	35,525	11,669	2,622	1,030,289	23,531	36,988	141,681	1,576,660
1953	68,076	35,946	52,698	29,978	197,031	7,613	19,500	45,510	18,318	82,342	10,661	8,989	576,662
1954	10,686	7,253	6,812	125,991	137,558	11,678	10,450	3,132	4,102	17,547	37,761	18,855	391,825
1955	30,214	32,634	18,745	11,457	459,422	141,823	90,529	66,341	230,878	43,886	9,341	8,504	1,143,774
1956	8,865	15,043	6,644	37,059	376,471	8,360	3,774	11,459	4,161	13,680	9,186	9,648	504,350
1957	5,986	9,034	56,389	592,318	1,126,060	420,197	26,562	19,716	40,887	843,933	175,766	76,153	3,393,001
1958	88,820	279,369	194,615	83,798	198,140	248,608	44,858	33,849	102,451	74,062	56,100	42,125	1,446,795
1959	35,353	37,023	29,913	70,386	37,087	281,154	148,167	26,580	19,238	633,812	49,250	79,666	1,447,629
1960	181,319	145,292	78,834	75,926	47,839	16,371	34,589	176,337	27,703	107,491	49,673	122,085	1,063,459
1961	128,093	205,783	81,238	46,183	28,853	486,833	113,782	36,850	60,936	63,751	40,526	36,507	1,329,335
1962	29,731	24,685	24,187	36,398	30,425	62,495	41,824	15,232	29,634	76,731	18,532	19,611	409,485
1963	17,108	16,804	17,435	15,332	75,345	54,961	14,356	20,640	15,057	22,439	52,633	27,447	349,557
1964	37,895	53,209	66,197	48,281	20,428	18,490	10,531	47,875	481,746	74,144	86,499	38,955	984,250
1965	43,179	184,140	54,887	47,659	673,029	124,877	27,200	15,538	64,060	33,457	38,721	56,579	1,363,326
1966	48,276	41,850	48,775	115,099	138,966	34,236	24,386	58,425	143,952	28,257	19,867	19,987	722,076
1967	20,517	27,140	26,858	28,539	78,146	16,785	57,019	14,985	56,298	45,056	42,956	24,043	438,352
1968	606,200	113,265	298,357	259,529	383,098	117,395	62,395	22,740	26,931	19,088	18,610	32,528	1,960,136
1969	21,571	24,649	31,687	113,784	140,758	65,227	25,522	38,209	53,287	544,570	124,409	116,791	1,300,464
1970	88,276	98,917	380,079	129,001	297,880	115,121	32,631	24,900	30,008	24,798	20,997	28,529	1,271,137
1971	25,240	23,014	24,969	19,347	35,979	19,081	181,915	352,890	193,874	392,770	80,664	88,073	1,437,816
1972	61,864	49,307	36,528	36,869	161,523	64,322	26,723	44,626	39,427	27,417	27,279	25,394	601,279
1973	33,172	54,604	57,301	65,728	51,296	93,230	104,728	70,302	27,937	474,614	57,004	45,808	1,135,724
1974	41,788	29,499	30,196	25,004	189,908	25,539	14,742	434,878	404,565	292,702	245,138	98,675	1,832,634
1975	101,147	318,422	91,840	134,338	529,197	208,676	101,682	55,871	45,218	36,571	39,195	38,656	1,700,813
1976	37,125	34,537	39,699	61,043	71,275	86,475	330,876	38,237	99,528	63,338	69,647	59,583	991,363
1977	62,500	60,291	99,708	744,948	219,088	79,493	38,126	27,571	25,160	25,738	31,639	29,284	1,443,546
1978	29,514	32,228	32,175	27,833	28,435	50,747	15,416	453,276	136,084	33,258	39,281	39,642	917,889
1979	57,540	96,039	119,440	129,110	132,018	308,444	68,427	77,879	21,939	16,931	19,056	23,985	1,070,808
1980	28,200	24,934	23,807	21,407	127,637	31,584	11,436	8,652	463,393	66,599	30,609	43,174	881,432
1981	28,079	25,047	98,560	100,266	68,718	431,730	53,315	40,470	45,387	293,273	47,596	35,465	1,267,906
1982	30,963	28,593	53,314	35,163	119,014	146,848	55,048	18,854	14,570	12,909	17,649	20,027	552,952
1983	20,796	31,260	51,381	21,409	113,055	96,995	21,492	16,029	9,378	12,156	17,797	14,089	425,837
1984	21,846	15,153	27,893	13,133	11,430	11,717	10,179	13,940	12,026	167,797	33,232	230,223	568,569
1985	224,377	91,500	134,364	61,936	54,718	85,917	27,444	14,361	16,367	246,012	34,149	53,707	1,044,852
1986	29,437	87,825	32,564	27,197	113,855	407,224	27,049	20,292	95,546	253,709	96,762	269,262	1,460,722
1987	126,522	116,008	181,104	69,405	201,229	775,977	158,897	58,355	99,931	49,685	48,896	44,978	1,930,987
1988	37,908	34,114	33,613	28,121	54,945	72,410	178,907	29,873	23,324	19,143	19,115	23,586	555,059
1989	34,345	55,031	41,018	36,243	156,926	145,040	26,909	19,271	16,701	13,491	20,943	25,744	591,662
1990	21,096	29,554	77,922	280,025	390,717	57,011	210,973	100,005	255,704	47,621	41,186	30,596	1,542,410
1991	60,393	45,431	30,448	37,412	51,346	105,233	26,177	23,472	126,602	95,099	63,118	1,325,378	1,990,109
1992	321,664	1,403,767	592,978	201,267	217,341	310,242	84,014	45,472	83,879	72,616	71,109	67,100	3,471,449
1993	56,377	76,979	99,537	92,349	64,201	49,896	23,408	15,993	59,161	40,307	26,559	29,948	634,715
1994	37,948	42,519	47,409	33,137	322,611	73,959	26,798	24,253	53,215	43,837	56,843	99,801	862,330
1995	57,278	37,465	100,046	145,569	218,317	120,847	39,773	16,792	50,405	23,850	30,166	29,123	869,631
1996	25,256	20,649	21,190	19,754	12,777	45,440	28,566	54,097	71,113	271,303	73,440	88,028	731,613
1997	38,295	441,297	500,364	318,437	191,086	1,158,735	148,378	88,803	36,905	41,672	42,820	55,228	3,062,020
1998	59,802	92,407	309,963	71,938	38,912	30,733	37,111	101,638	46,236	107,378	103,483	75,256	1,074,857
1999	57,229	33,774	102,726	49,365	92,601	61,415	31,484	13,540	11,676	11,247	11,700	14,866	491,623
2000	15,690	27,618	25,976	21,580	31,793	92,720	11,908	11,114	11,579	150,562	751,451	68,606	1,220,597
2001	113,007	121,222	187,406	113,468	104,262	39,238	16,739	13,475	51,643	40,938	329,512	60,028	1,190,938
2002	44,398	35,025	47,066	39,317	30,822	66,467	1,004,433	39,592	45,116	77,874	69,798	94,631	1,594,539
2003	64,775	121,490	109,775	48,964	34,176	129,789	22,832	17,399	64,474	98,154	21,546	19,841	753,215
2004	32,109	37,223	69,882	224,734	69,496	344,487	62,698	161,235	28,660	48,365	756,116	140,172	1,975,177
2005	92,170	191,367	294,386	96,114	88,779	75,871	28,725	124,750	20,113	15,481	16,049	17,585	1,061,390
2006	21,525	17,634	24,515	40,053	91,422	15,698	11,548	8,425	10,841	18,815	10,429	12,196	283,101
2007	41,062	23,103	293,841	123,929	503,278	987,703	482,765	262,557	129,186	47,254	37,374	43,561	2,975,613
2008	35,087	31,768	41,836	40,188	51,164	15,945	12,876	13,577	13,778	11,975	11,988	13,486	293,668
2009	15,171	18,329	37,189	71,270	32,837	20,751	10,703	11,865	32,825	228,128	102,448	60,791	642,307
2010	135,618	246,870	118,552	144,575	95,821	33,517	59,905	10,783	86,952	14,385	13,899	16,845	977,722
2011	21,158	16,306	13,811	9,175	11,182	1,340	734	403	922	29,927	6,874	15,969	127,801
2012	35,178	74,699	112,517	19,477	83,699	12,599	8,712	2,041	12,006	19,338	6,191	6,968	393,425
2013	15,085	8,874	10,888	11,365									46,212

Interim Demand Phase (Run 85IA) - Combined Storage of Lakes Buchanan and Travis (acre-feet)

1,964,429 ac-ft maximum simulated interim conservation capacity is created by 1,134,456 ac-ft for Travis, and 829,973 ac-ft for Buchanan (year round).
Highlighted months indicate combined storage below 600,000 ac-ft.

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1940	1,950,799	1,952,501	1,930,492	1,929,663	1,925,888	1,964,429	1,945,462	1,889,680	1,788,804	1,764,721	1,875,534	1,952,817
1941	1,951,376	1,954,217	1,955,404	1,956,221	1,964,429	1,964,429	1,939,075	1,860,687	1,827,504	1,927,774	1,912,365	1,897,443
1942	1,878,942	1,862,894	1,839,349	1,959,953	1,964,429	1,923,458	1,811,476	1,801,071	1,818,123	1,926,811	1,936,174	1,921,595
1943	1,908,074	1,887,455	1,869,869	1,838,417	1,753,072	1,696,650	1,612,043	1,485,920	1,433,002	1,403,634	1,385,782	1,387,153
1944	1,445,288	1,511,052	1,575,817	1,564,766	1,916,796	1,861,500	1,732,518	1,740,271	1,713,020	1,714,960	1,713,028	1,770,095
1945	1,896,238	1,960,374	1,957,705	1,961,701	1,916,516	1,833,820	1,800,962	1,704,267	1,677,407	1,678,493	1,657,044	1,652,537
1946	1,680,041	1,722,863	1,738,155	1,794,662	1,934,440	1,831,245	1,699,271	1,585,126	1,580,052	1,573,404	1,599,807	1,623,477
1947	1,778,027	1,800,154	1,848,227	1,861,240	1,804,178	1,682,330	1,536,315	1,425,270	1,318,631	1,285,886	1,261,907	1,260,399
1948	1,245,458	1,237,365	1,221,256	1,196,043	1,167,118	1,206,664	1,187,490	1,102,090	1,045,450	1,016,076	990,370	973,480
1949	969,928	1,011,320	1,055,631	1,185,533	1,244,186	1,186,647	1,096,483	1,021,680	971,366	964,035	947,280	944,436
1950	937,813	951,851	924,122	929,265	899,966	805,303	718,424	662,230	651,941	624,051	602,763	587,580
1951	579,470	569,036	554,351	533,095	596,371	703,704	639,359	581,301	541,200	503,335	481,239	468,198
1952	454,045	441,687	418,730	467,650	573,553	537,378	492,074	426,708	1,384,182	1,349,846	1,361,558	1,481,767
1953	1,514,742	1,524,721	1,509,017	1,486,670	1,572,844	1,413,188	1,283,878	1,208,959	1,135,468	1,179,784	1,154,411	1,135,606
1954	1,122,489	1,093,792	1,055,634	1,058,416	1,093,653	956,547	839,824	748,573	675,072	650,910	636,439	622,283
1955	624,577	633,518	612,347	582,243	975,333	1,053,866	1,071,562	1,070,435	1,241,793	1,241,419	1,218,866	1,196,310
1956	1,175,358	1,166,138	1,124,165	1,091,971	1,297,634	1,163,472	1,045,442	949,135	860,596	829,099	807,260	789,074
1957	764,489	748,774	769,709	1,351,807	1,964,429	1,964,429	1,899,502	1,824,917	1,805,616	1,929,477	1,940,394	1,936,059
1958	1,952,321	1,954,909	1,952,777	1,949,780	1,964,429	1,964,429	1,865,651	1,795,164	1,808,808	1,827,956	1,831,012	1,820,063
1959	1,829,641	1,843,212	1,828,656	1,870,818	1,819,793	1,964,429	1,964,429	1,903,041	1,841,596	1,964,429	1,964,429	1,962,846
1960	1,960,408	1,959,330	1,955,589	1,947,239	1,894,278	1,773,752	1,701,386	1,789,205	1,738,333	1,836,209	1,862,747	1,962,844
1961	1,961,230	1,960,371	1,951,499	1,931,328	1,865,078	1,964,429	1,964,429	1,894,040	1,883,846	1,904,187	1,924,429	1,937,163
1962	1,932,256	1,915,988	1,893,754	1,875,814	1,791,740	1,710,416	1,606,483	1,494,253	1,431,768	1,430,439	1,420,177	1,410,258
1963	1,394,993	1,390,797	1,362,518	1,327,208	1,289,467	1,175,434	1,037,100	952,551	885,791	863,867	885,674	885,039
1964	893,839	918,734	944,240	941,380	871,849	764,936	658,441	629,206	1,065,968	1,099,213	1,160,070	1,169,135
1965	1,187,280	1,363,902	1,381,151	1,372,573	1,964,429	1,954,945	1,846,861	1,743,333	1,706,512	1,692,421	1,681,639	1,703,417
1966	1,722,213	1,747,583	1,758,016	1,791,030	1,843,957	1,734,219	1,595,890	1,550,053	1,553,132	1,529,069	1,508,098	1,493,912
1967	1,477,042	1,462,341	1,438,913	1,408,085	1,366,945	1,199,064	1,095,550	1,011,587	1,008,009	1,024,312	1,054,741	1,059,031
1968	1,664,749	1,761,151	1,957,705	1,960,025	1,964,429	1,964,429	1,921,658	1,823,316	1,767,456	1,738,928	1,729,470	1,715,629
1969	1,702,563	1,703,115	1,700,020	1,781,021	1,822,174	1,725,270	1,604,226	1,527,165	1,481,343	1,918,526	1,964,429	1,962,846
1970	1,960,409	1,960,372	1,957,704	1,950,244	1,964,429	1,926,822	1,820,632	1,725,812	1,684,593	1,667,280	1,644,451	1,626,992
1971	1,607,974	1,590,530	1,563,011	1,517,812	1,415,059	1,240,996	1,237,822	1,510,229	1,635,043	1,964,429	1,964,429	1,962,846
1972	1,959,898	1,950,825	1,922,692	1,892,926	1,939,295	1,848,555	1,736,460	1,675,562	1,622,403	1,607,444	1,597,830	1,583,638
1973	1,597,508	1,634,514	1,656,324	1,690,311	1,652,698	1,635,290	1,640,397	1,603,378	1,568,671	1,964,429	1,964,429	1,962,849
1974	1,960,407	1,941,460	1,919,327	1,885,517	1,940,897	1,802,837	1,669,385	1,964,429	1,964,429	1,964,429	1,964,429	1,962,847
1975	1,958,218	1,959,084	1,948,109	1,943,270	1,964,429	1,964,429	1,944,023	1,886,328	1,837,778	1,813,710	1,791,138	1,777,953
1976	1,778,702	1,758,866	1,740,114	1,778,247	1,758,777	1,708,047	1,931,828	1,852,246	1,820,805	1,856,377	1,897,379	1,933,237
1977	1,951,395	1,948,446	1,945,309	1,951,834	1,964,429	1,881,021	1,763,415	1,663,403	1,581,319	1,555,508	1,542,133	1,523,532
1978	1,510,826	1,520,134	1,499,486	1,466,422	1,378,764	1,257,432	1,118,966	1,472,760	1,535,799	1,521,590	1,543,610	1,557,428
1979	1,591,857	1,668,748	1,763,051	1,815,527	1,846,762	1,870,536	1,834,118	1,797,550	1,724,797	1,689,243	1,673,033	1,673,229
1980	1,670,239	1,666,983	1,648,374	1,615,613	1,644,480	1,490,881	1,337,491	1,228,197	1,530,336	1,554,755	1,543,066	1,558,702
1981	1,555,055	1,550,238	1,538,635	1,584,069	1,576,985	1,918,842	1,859,319	1,798,276	1,763,767	1,964,330	1,964,429	1,962,848
1982	1,956,337	1,948,028	1,940,652	1,918,851	1,944,225	1,935,974	1,841,804	1,733,127	1,640,672	1,606,643	1,596,472	1,585,521
1983	1,578,665	1,587,131	1,608,478	1,574,951	1,599,534	1,555,955	1,453,646	1,368,218	1,291,178	1,266,061	1,255,486	1,240,567
1984	1,231,189	1,212,209	1,193,122	1,150,140	1,045,681	897,891	770,666	692,580	634,496	786,601	793,611	1,001,328
1985	1,197,846	1,271,242	1,374,921	1,391,782	1,351,377	1,308,633	1,207,540	1,108,194	1,043,570	1,260,821	1,278,664	1,310,904
1986	1,308,554	1,370,103	1,347,769	1,321,852	1,356,265	1,628,445	1,512,846	1,432,809	1,461,438	1,709,230	1,788,151	1,962,843
1987	1,958,758	1,960,085	1,951,881	1,938,725	1,964,429	1,964,429	1,963,799	1,888,501	1,879,483	1,848,310	1,847,213	1,842,185
1988	1,845,275	1,831,086	1,812,113	1,778,184	1,719,937	1,629,891	1,652,340	1,548,673	1,458,613	1,424,951	1,403,501	1,390,336
1989	1,401,550	1,426,687	1,412,755	1,386,338	1,449,334	1,451,067	1,339,319	1,245,816	1,164,905	1,135,442	1,119,241	1,104,804
1990	1,092,430	1,097,755	1,135,399	1,359,342	1,641,411	1,557,872	1,601,938	1,580,574	1,680,916	1,673,083	1,663,166	1,649,348
1991	1,696,967	1,717,432	1,704,280	1,705,466	1,665,894	1,650,520	1,555,835	1,461,004	1,428,184	1,476,799	1,487,581	1,962,840
1992	1,960,404	1,960,367	1,957,704	1,948,969	1,964,429	1,964,429	1,928,615	1,850,652	1,804,815	1,776,263	1,796,738	1,816,175
1993	1,846,724	1,903,490	1,957,703	1,958,455	1,929,326	1,853,162	1,737,923	1,601,456	1,542,846	1,521,201	1,505,971	1,494,457
1994	1,503,026	1,520,419	1,504,843	1,482,703	1,706,870	1,620,752	1,498,620	1,408,602	1,367,932	1,395,410	1,427,361	1,510,752
1995	1,543,126	1,556,830	1,619,475	1,717,164	1,837,244	1,805,768	1,700,779	1,599,380	1,554,768	1,526,539	1,524,667	1,522,882
1996	1,510,802	1,492,513	1,470,549	1,431,899	1,314,658	1,190,081	1,065,269	1,050,697	1,070,208	1,302,427	1,347,003	1,407,942
1997	1,415,230	1,839,150	1,957,706	1,963,045	1,964,429	1,964,429	1,964,429	1,931,698	1,865,672	1,848,545	1,836,369	1,846,650
1998	1,883,666	1,959,682	1,957,708	1,964,429	1,864,723	1,701,649	1,574,448	1,541,256	1,523,206	1,626,763	1,713,439	1,764,653
1999	1,787,756	1,785,038	1,846,187	1,843,009	1,836,657	1,746,662	1,649,301	1,527,663	1,424,979	1,391,072	1,363,637	1,345,973
2000	1,326,534	1,313,708	1,294,719	1,267,728	1,199,269	1,150,500	1,033,083	942,180	880,216	997,382	1,731,351	1,773,725
2001	1,872,469	1,960,377	1,957,696	1,961,436	1,963,656	1,845,342	1,725,383	1,657,809	1,632,132	1,614,313	1,912,341	1,928,557
2002	1,936,314	1,929,926	1,912,898	1,885,564	1,807,235	1,732,697	1,964,429	1,902,091	1,870,538	1,923,129	1,963,489	1,962,846
2003	1,959,605	1,960,369	1,952,991	1,920,708	1,841,632	1,802,210	1,698,155	1,609,976	1,580,953	1,808,519	1,595,283	1,578,470
2004	1,587,032	1,603,374	1,634,879	1,815,513	1,803,002	1,964,429	1,927,847	1,964,429	1,898,489	1,923,735	1,964,429	1,962,848
2005	1,960,408	1,959,961	1,954,630	1,941,264	1,921,249	1,825,806	1,716,661	1,712,023	1,619,386	1,589,559	1,568,019	1,549,025
2006	1,530,808	1,515,824	1,499,364	1,475,951	1,444,002	1,307,022	1,182,693	1,085,693	1,021,110	1,007,992	983,431	969,753
2007	997,824	989,136	1,264,412	1,352,564	1,825,649	1,964,429	1,964,429	1,964,429	1,964,429	1,964,429	1,964,429	1,962,848
2008	1,955,848	1,936,172	1,918,908	1,890,534	1,812,029	1,645,213	1,505,477	1,398,391	1,295,804	1,260,610	1,235,625	1,214,601
2009	1,194,863	1,178,117	1,163,316	1,185,603	1,110,525	972,836	849,259	761,325	739,655	957,872	1,041,887	1,083,321

Interim Demand Phase (Run 851A) - Percent Full of Combined Storage of Lakes Buchanan and Travis (%)

1,964,429 ac-ft maximum simulated interim conservation capacity is created by 1,134,456 ac-ft for Travis, and 829,973 ac-ft for Buchanan (year round).
Combine storage contents less than 98% of combined conservation capacity for the Drought of Record and current drought are highlighted.

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1940	99.3	99.4	98.3	98.2	98.0	100.0	99.0	96.2	91.1	89.8	95.5	99.4
1941	99.3	99.5	99.5	99.6	100.0	100.0	98.7	94.7	93.0	98.1	97.3	96.6
1942	95.6	94.8	93.6	99.8	100.0	97.9	92.2	91.7	92.6	98.1	98.6	97.8
1943	97.1	96.1	95.2	93.6	89.2	86.4	82.1	75.6	72.9	71.5	70.5	70.6
1944	73.6	76.9	80.2	79.7	97.6	94.8	88.2	88.6	87.2	87.3	87.2	90.1
1945	96.5	99.8	99.7	99.9	97.6	93.4	91.7	86.8	85.4	85.4	84.4	84.1
1946	85.5	87.7	88.5	91.4	98.5	93.2	86.5	80.7	80.4	80.1	81.4	82.6
1947	90.5	91.6	94.1	94.7	91.8	85.6	78.2	72.6	67.1	65.5	64.2	64.2
1948	63.4	63.0	62.2	60.9	59.4	61.4	60.4	56.1	53.2	51.6	50.4	49.6
1949	49.4	51.5	53.7	60.4	63.9	60.4	55.8	52.0	49.4	49.1	48.2	48.1
1950	47.7	48.5	47.0	47.3	45.8	41.0	36.6	33.7	33.2	31.8	30.7	29.9
1951	29.5	29.0	28.2	27.1	30.4	35.8	32.5	29.6	27.5	25.6	24.6	23.8
1952	23.1	22.5	21.9	23.8	29.2	27.4	25.0	21.7	70.5	68.7	69.3	75.4
1953	77.1	77.6	76.8	75.7	80.1	71.9	65.4	61.5	57.8	60.1	58.8	57.8
1954	57.1	55.7	53.7	53.9	55.7	48.7	42.8	38.1	34.4	33.1	32.4	31.7
1955	31.8	32.2	31.2	29.6	49.6	53.6	54.5	54.5	69.2	63.2	62.0	60.9
1956	59.8	59.4	57.2	55.6	66.4	59.2	53.2	48.3	43.8	42.2	41.1	40.2
1957	38.9	38.1	39.2	68.8	100.0	100.0	96.7	92.9	91.9	98.2	98.8	98.6
1958	99.4	99.5	99.4	99.3	100.0	100.0	95.0	91.4	92.1	93.1	93.2	92.7
1959	93.1	93.8	93.1	95.2	92.6	100.0	100.0	96.9	93.7	100.0	100.0	99.9
1960	99.8	99.7	99.5	99.1	96.4	90.3	86.6	91.1	88.5	93.5	94.8	99.9
1961	99.8	99.8	99.3	98.3	94.9	100.0	100.0	96.4	95.9	96.9	98.0	98.6
1962	98.4	97.5	96.4	95.5	91.2	87.1	81.8	76.1	72.9	72.8	72.3	71.8
1963	71.0	70.8	69.4	67.6	65.6	59.8	52.8	48.5	45.1	44.0	45.1	45.1
1964	45.5	46.8	48.1	47.9	44.4	38.9	33.5	32.0	54.3	56.0	59.1	59.5
1965	60.4	69.4	70.3	69.9	100.0	99.5	94.0	88.7	86.9	86.2	85.6	86.7
1966	87.7	89.0	89.5	91.2	93.9	88.3	81.2	78.9	79.1	77.8	76.8	76.0
1967	75.2	74.4	73.2	71.7	69.6	61.0	55.8	51.5	51.3	52.1	53.7	53.9
1968	84.7	89.7	99.7	99.8	100.0	100.0	97.8	92.8	90.0	88.5	88.0	87.3
1969	86.7	86.7	86.5	90.7	92.8	87.8	81.7	77.7	75.4	97.7	100.0	99.9
1970	99.8	99.8	99.7	99.3	100.0	98.1	92.7	87.9	85.8	84.9	83.7	82.8
1971	81.9	81.0	79.6	77.3	72.0	63.2	63.0	76.9	83.2	100.0	100.0	99.9
1972	99.8	99.3	97.9	96.4	98.7	94.1	88.4	85.3	82.6	81.8	81.3	80.6
1973	81.3	83.2	84.3	86.0	84.1	83.2	83.5	81.6	79.9	100.0	100.0	99.9
1974	99.8	98.8	97.7	96.0	98.8	91.8	85.0	100.0	100.0	100.0	100.0	99.9
1975	99.7	99.7	99.2	98.9	100.0	100.0	99.0	96.0	93.6	92.3	91.2	90.5
1976	90.5	89.5	88.6	90.5	89.5	86.9	98.3	94.3	92.7	94.5	96.6	98.4
1977	99.3	99.2	99.0	99.4	100.0	95.8	89.8	84.7	80.5	79.2	78.5	77.6
1978	76.9	77.4	76.3	74.6	70.2	64.0	57.0	75.0	78.2	77.5	78.6	79.3
1979	81.0	84.9	89.7	92.4	94.0	95.2	93.4	91.5	87.8	86.0	85.2	85.2
1980	85.0	84.9	83.9	82.2	83.7	75.9	68.1	62.5	77.9	79.1	78.6	79.3
1981	79.2	78.9	78.3	80.6	80.3	97.7	94.6	91.5	89.8	100.0	100.0	99.9
1982	99.6	99.2	98.8	97.7	99.0	98.6	93.8	88.2	83.5	81.8	81.3	80.7
1983	80.4	80.8	81.9	80.2	81.4	79.2	74.0	69.6	65.7	64.4	63.9	63.2
1984	62.7	61.7	60.7	58.5	53.2	45.7	39.2	35.3	32.3	40.0	40.4	51.0
1985	61.0	64.7	70.0	70.8	68.8	66.6	61.5	56.4	53.1	64.2	65.1	66.7
1986	66.6	69.7	68.6	67.3	69.0	82.9	77.0	72.9	74.4	87.0	91.0	99.9
1987	99.7	99.8	99.4	98.7	100.0	100.0	100.0	96.1	95.7	94.1	94.0	93.8
1988	93.9	93.2	92.2	90.5	87.6	83.0	84.1	78.8	74.3	72.5	71.4	70.8
1989	71.3	72.6	71.9	70.6	73.8	73.9	68.2	63.4	59.3	57.8	57.0	56.2
1990	55.6	55.9	57.8	69.2	83.6	79.3	81.5	80.5	85.6	85.2	84.7	84.0
1991	86.4	87.4	86.8	86.8	84.8	84.0	79.2	74.4	72.7	75.2	75.7	99.9
1992	99.8	99.8	99.7	99.2	100.0	100.0	98.2	94.2	91.9	90.4	91.5	92.5
1993	94.0	96.9	99.7	99.7	98.2	94.3	88.5	81.5	78.5	77.4	76.7	76.1
1994	76.5	77.4	76.6	75.5	86.9	82.5	76.3	71.7	69.6	71.0	72.7	76.9
1995	78.6	79.3	82.4	87.4	93.5	91.9	86.6	81.4	79.1	77.7	77.6	77.5
1996	76.9	76.0	74.9	72.9	66.9	60.6	54.2	53.5	54.5	66.3	68.6	71.7
1997	72.0	93.6	99.7	99.9	100.0	100.0	100.0	98.3	95.0	94.1	93.5	94.0
1998	95.9	99.8	99.7	100.0	94.9	86.6	80.1	78.5	77.5	82.8	87.2	89.8
1999	91.0	90.9	94.0	93.8	93.5	88.9	84.0	77.8	72.5	70.8	69.4	68.5
2000	67.5	66.9	65.9	64.5	61.0	58.6	52.6	48.0	44.8	50.8	88.1	90.3
2001	95.3	99.8	99.7	99.8	100.0	93.9	87.8	84.4	83.1	82.2	97.3	98.2
2002	98.6	98.2	97.4	96.0	92.0	88.2	100.0	96.8	95.2	97.9	100.0	99.9
2003	99.8	99.8	99.4	97.8	93.7	91.7	86.4	82.0	80.5	81.9	81.2	80.4
2004	80.8	81.6	83.2	92.4	91.8	100.0	98.1	100.0	96.6	97.9	100.0	99.9
2005	99.8	99.8	99.5	98.8	97.8	92.9	87.4	87.2	82.4	80.9	79.8	78.9
2006	77.9	77.2	76.3	75.1	73.5	66.5	60.2	55.3	52.0	51.3	50.1	49.4
2007	50.8	50.4	64.4	68.9	92.9	100.0	100.0	100.0	100.0	100.0	100.0	99.9
2008	99.6	98.6	97.7	96.2	92.2	83.8	76.6	71.2	66.0	64.2	62.9	61.8
2009	60.8	60.0	59.2	60.4	56.5	49.5	43.2	38.8	37.7	48.8	53.0	55.1

2020 Demand Phase (Run 85A) - Combined Storage of Lakes Buchanan and Travis (acre-feet)

1,957,141 ac-ft maximum simulated 2020 conservation capacity is created by 1,131,956 ac-ft for Travis, and 825,185 ac-ft for Buchanan (year round).
Highlighted months indicate combined storage below 600,000 ac-ft.

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1940	1,944,322	1,946,021	1,920,402	1,920,119	1,915,342	1,957,141	1,935,275	1,873,486	1,769,361	1,740,915	1,849,043	1,946,974
1941	1,945,477	1,946,756	1,948,438	1,951,735	1,957,141	1,957,141	1,927,918	1,843,079	1,810,287	1,946,319	1,944,650	1,944,017
1942	1,922,315	1,903,318	1,875,988	1,938,424	1,957,141	1,918,212	1,802,356	1,785,719	1,792,494	1,948,008	1,947,116	1,943,510
1943	1,927,532	1,904,040	1,882,770	1,847,141	1,760,998	1,702,711	1,615,131	1,484,007	1,427,586	1,393,397	1,375,714	1,374,647
1944	1,430,307	1,498,999	1,556,257	1,542,683	1,893,841	1,841,010	1,708,224	1,699,395	1,668,557	1,634,975	1,640,412	1,704,999
1945	1,828,656	1,946,025	1,952,268	1,957,141	1,911,226	1,830,946	1,795,163	1,692,695	1,662,093	1,660,020	1,635,002	1,628,092
1946	1,653,150	1,693,943	1,706,779	1,760,907	1,899,883	1,798,879	1,663,231	1,543,580	1,534,645	1,535,997	1,570,566	1,601,842
1947	1,754,619	1,774,771	1,820,351	1,828,520	1,770,802	1,651,653	1,502,018	1,386,071	1,276,540	1,247,275	1,219,030	1,224,400
1948	1,207,066	1,198,865	1,177,935	1,151,696	1,116,761	1,164,809	1,145,878	1,061,807	1,007,498	973,527	943,623	924,418
1949	918,362	957,662	999,525	1,128,485	1,197,578	1,158,134	1,076,412	1,001,195	953,441	940,956	919,835	914,530
1950	905,510	917,506	887,407	891,804	873,120	798,203	719,415	658,711	645,156	612,203	586,619	571,241
1951	559,969	547,675	530,792	506,973	567,782	672,806	604,670	542,139	499,457	457,267	431,381	416,452
1952	400,397	386,448	361,429	407,624	511,064	471,421	422,668	353,289	1,305,970	1,266,121	1,272,189	1,389,830
1953	1,420,792	1,428,933	1,414,047	1,387,907	1,473,688	1,319,153	1,186,720	1,114,438	1,046,146	1,086,112	1,056,752	1,035,737
1954	1,020,360	990,041	949,843	951,679	1,002,090	892,040	792,365	695,360	617,114	585,581	565,517	546,522
1955	541,725	549,315	527,095	490,570	880,072	956,038	959,094	938,072	1,096,748	1,089,317	1,057,524	1,027,697
1956	1,001,804	990,708	947,069	910,820	1,119,364	1,005,586	906,809	806,441	714,788	669,821	634,603	608,976
1957	579,555	560,931	580,537	1,160,501	1,947,553	1,942,277	1,891,547	1,835,552	1,819,510	1,951,317	1,958,787	1,949,853
1958	1,950,217	1,953,764	1,951,635	1,949,512	1,957,141	1,957,141	1,853,791	1,775,408	1,791,962	1,831,724	1,848,577	1,851,949
1959	1,836,163	1,847,703	1,830,613	1,870,339	1,817,348	1,957,141	1,957,141	1,887,819	1,821,147	1,957,141	1,957,141	1,957,003
1960	1,954,509	1,953,437	1,949,710	1,942,037	1,886,809	1,766,250	1,687,891	1,767,528	1,711,024	1,804,442	1,826,538	1,937,177
1961	1,945,470	1,950,454	1,941,621	1,922,336	1,853,488	1,957,141	1,957,141	1,878,504	1,862,564	1,877,724	1,893,525	1,903,841
1962	1,896,546	1,877,547	1,852,936	1,830,959	1,745,930	1,666,527	1,559,457	1,442,472	1,376,161	1,407,933	1,392,932	1,386,379
1963	1,368,747	1,362,548	1,331,885	1,295,581	1,258,503	1,157,989	1,024,768	946,557	886,696	860,945	869,305	866,244
1964	872,626	895,507	918,553	912,326	852,297	764,372	665,852	627,211	1,060,540	1,087,314	1,143,727	1,150,393
1965	1,166,119	1,341,269	1,356,061	1,351,109	1,957,141	1,952,579	1,841,713	1,733,851	1,693,934	1,674,794	1,675,784	1,711,114
1966	1,727,481	1,719,247	1,727,248	1,788,628	1,840,213	1,731,997	1,589,579	1,537,501	1,548,713	1,520,202	1,495,637	1,478,363
1967	1,458,457	1,440,992	1,414,060	1,379,987	1,339,434	1,177,185	1,070,158	980,958	975,317	986,483	1,013,239	1,015,092
1968	1,618,599	1,713,627	1,952,268	1,955,051	1,957,141	1,957,141	1,909,894	1,806,071	1,746,528	1,711,663	1,698,524	1,687,855
1969	1,672,423	1,670,925	1,665,338	1,742,413	1,783,237	1,689,592	1,566,042	1,483,965	1,435,404	1,933,722	1,957,141	1,957,003
1970	1,954,510	1,955,860	1,952,268	1,945,435	1,957,141	1,920,475	1,809,618	1,708,872	1,663,391	1,641,847	1,615,497	1,594,988
1971	1,572,975	1,552,811	1,522,287	1,473,286	1,371,884	1,204,332	1,198,939	1,467,200	1,590,489	1,941,332	1,957,141	1,957,003
1972	1,954,068	1,945,030	1,913,310	1,879,727	1,916,230	1,829,668	1,715,839	1,648,605	1,591,680	1,571,922	1,559,772	1,543,085
1973	1,554,471	1,589,410	1,608,790	1,640,379	1,602,413	1,587,406	1,589,645	1,545,484	1,505,943	1,957,141	1,957,141	1,957,003
1974	1,954,509	1,933,563	1,907,825	1,870,191	1,921,856	1,788,133	1,651,526	1,957,141	1,957,141	1,957,141	1,957,141	1,956,986
1975	1,952,376	1,953,238	1,942,308	1,938,005	1,957,141	1,957,141	1,933,529	1,869,228	1,816,617	1,788,074	1,761,975	1,758,751
1976	1,737,874	1,715,387	1,693,107	1,731,179	1,710,828	1,662,156	1,882,302	1,796,665	1,809,632	1,839,532	1,876,109	1,909,517
1977	1,935,281	1,942,597	1,940,099	1,951,159	1,957,141	1,877,191	1,757,721	1,653,554	1,568,631	1,538,114	1,521,108	1,499,467
1978	1,483,692	1,490,938	1,477,758	1,440,985	1,353,749	1,236,552	1,095,505	1,445,544	1,507,490	1,488,310	1,505,782	1,517,184
1979	1,549,160	1,623,980	1,715,752	1,799,232	1,828,151	1,851,998	1,812,230	1,769,584	1,693,371	1,652,684	1,631,387	1,619,648
1980	1,614,277	1,609,054	1,590,572	1,553,772	1,583,116	1,435,832	1,280,583	1,166,657	1,539,408	1,557,437	1,558,293	1,571,470
1981	1,566,251	1,562,083	1,612,920	1,664,374	1,656,284	1,957,141	1,893,283	1,826,233	1,788,117	1,957,141	1,957,141	1,957,003
1982	1,948,162	1,935,509	1,924,075	1,898,230	1,917,925	1,912,609	1,816,209	1,704,234	1,609,490	1,568,648	1,554,811	1,540,741
1983	1,531,470	1,537,886	1,556,701	1,521,068	1,545,044	1,503,975	1,398,771	1,312,860	1,239,424	1,209,491	1,194,607	1,177,395
1984	1,165,701	1,144,981	1,122,591	1,079,062	982,776	851,054	729,743	667,831	620,324	767,106	769,703	974,902
1985	1,169,031	1,240,364	1,341,424	1,356,530	1,319,077	1,284,037	1,184,267	1,083,615	1,020,916	1,233,336	1,246,655	1,276,468
1986	1,271,763	1,331,283	1,316,964	1,288,034	1,324,541	1,603,379	1,488,183	1,403,926	1,429,768	1,672,210	1,746,688	1,957,002
1987	1,952,933	1,954,257	1,946,084	1,940,535	1,957,141	1,957,141	1,956,560	1,876,140	1,855,590	1,819,799	1,832,499	1,841,808
1988	1,842,270	1,825,259	1,802,662	1,764,863	1,706,531	1,619,795	1,652,057	1,546,110	1,454,722	1,414,560	1,389,030	1,372,756
1989	1,381,493	1,404,606	1,388,215	1,357,774	1,419,996	1,424,032	1,308,968	1,213,248	1,132,439	1,099,066	1,083,239	1,073,412
1990	1,061,331	1,064,615	1,082,948	1,308,065	1,591,114	1,532,306	1,634,632	1,618,735	1,780,472	1,768,756	1,782,177	1,767,091
1991	1,811,886	1,830,248	1,814,155	1,812,930	1,772,216	1,758,314	1,658,975	1,560,077	1,588,527	1,631,635	1,655,728	1,957,002
1992	1,954,507	1,954,522	1,952,268	1,943,567	1,957,141	1,957,141	1,916,269	1,832,727	1,783,056	1,749,953	1,784,219	1,817,543
1993	1,845,659	1,900,379	1,952,267	1,953,720	1,923,944	1,849,998	1,731,422	1,593,769	1,534,544	1,508,122	1,489,271	1,475,357
1994	1,477,871	1,472,826	1,472,861	1,446,654	1,668,908	1,583,925	1,457,423	1,362,735	1,322,640	1,343,996	1,371,521	1,452,376
1995	1,482,337	1,494,014	1,554,168	1,649,406	1,770,682	1,741,813	1,634,529	1,527,376	1,478,564	1,446,296	1,445,749	1,441,677
1996	1,427,461	1,406,698	1,382,524	1,339,980	1,223,443	1,102,420	975,028	960,908	982,756	1,209,892	1,250,015	1,308,520
1997	1,313,450	1,735,074	1,952,269	1,955,008	1,957,141	1,957,141	1,957,141	1,918,334	1,848,714	1,836,649	1,838,290	1,862,924
1998	1,897,510	1,954,525	1,952,271	1,957,141	1,858,514	1,701,475	1,571,805	1,533,068	1,510,572	1,609,759	1,691,983	1,740,764
1999	1,761,506	1,756,830	1,821,554	1,815,881	1,808,585	1,720,515	1,620,081	1,495,358	1,389,584	1,349,079	1,317,467	1,297,498
2000	1,275,772	1,260,227	1,237,836	1,209,217	1,145,258	1,100,574	985,542	896,991	838,690	950,688	1,679,977	1,719,942
2001	1,816,919	1,909,201	1,952,262	1,957,141	1,957,141	1,841,171	1,717,647	1,643,136	1,609,969	1,603,076	1,915,667	1,945,426
2002	1,945,479	1,937,047	1,918,416	1,886,578	1,807,551	1,735,509	1,957,141	1,887,471	1,850,964	1,898,331	1,934,294	1,957,003
2003	1,953,777	1,954,523	1,947,174	1,915,946	1,835,339	1,793,921	1,685,711	1,590,895	1,558,009	1,566,931	1,549,366	1,530,268
2004	1,536,360	1,550,604	1,579,658	1,775,056	1,761,092	1,957,141	1,913,459	1,957,141	1,886,911	1,906,433	1,957,141	1,957,003
2005	1,954,510	1,954,064	1,948,756	1,941,962	1,921,550	1,829,114	1,717,631	1,694,877	1,599,957	1,563,117	1,537,254	1,515,514
2006	1,494,327	1,476,998	1,456,988	1,429,640	1,394,843	1,262,214	1,134,398	1,034,080	969,554	951,264	922,507	906,392
2007	931,794	921,312	1,193,718	1,278,232	1,753,108	1,957,141	1,957,141	1,957,141	1,957,141	1,952,657	1,953,409	1,957,003
2008	1,950,032	1,927,876	1,906,986	1,874,739	1,796,791	1,635,787	1,493,411	1,384,536	1,280,674	1,239,389	1,210,094	1,186,751
2009	1,164,702	1,145,284	1,126,911	1,147,656	1,078,572	954,243	834,457	744,817	721,575	934,466	1,014,036	1,053,034

2020 Demand Phase (Run 85A) - Percent Full of Combined Storage of Lakes Buchanan and Travis (%)

1,957,141 ac-ft maximum simulated 2020 conservation capacity is created by 1,131,956 ac-ft for Travis, and 825,185 ac-ft for Buchanan (year round).
Combine storage contents less than 98% of combined conservation capacity for the Drought of Record and current drought are highlighted.

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1940	99.3	99.4	98.1	98.1	97.9	100.0	98.9	95.7	90.4	89.0	94.5	99.5
1941	99.4	99.5	99.6	99.7	100.0	100.0	98.5	94.2	92.5	99.4	99.4	99.3
1942	98.2	97.2	95.9	99.0	100.0	98.0	92.1	91.2	91.6	99.5	99.5	99.3
1943	98.5	97.3	96.2	94.4	90.0	87.0	82.5	75.8	72.9	71.2	70.3	70.2
1944	73.1	76.3	79.5	78.8	96.8	94.1	87.3	86.8	85.3	83.5	83.8	87.1
1945	93.4	99.4	99.8	100.0	97.7	93.6	91.7	86.5	84.9	84.3	83.5	83.2
1946	84.5	86.6	87.2	90.0	97.1	91.9	85.0	78.9	78.4	78.5	80.2	81.8
1947	89.7	90.7	93.0	93.4	90.5	84.4	76.7	70.8	65.2	63.7	62.3	62.6
1948	61.7	61.3	60.2	58.8	57.1	59.5	58.5	54.3	51.5	49.7	48.2	47.2
1949	46.9	48.9	51.1	57.7	61.2	59.2	55.0	51.2	48.7	48.1	47.0	46.7
1950	46.3	46.9	45.3	45.6	44.6	40.8	36.8	33.7	33.0	31.3	30.0	29.2
1951	28.6	28.0	27.1	25.9	29.0	34.4	30.9	27.7	25.5	23.4	22.0	21.3
1952	20.5	19.7	18.5	20.8	26.1	24.1	21.6	18.1	66.7	64.7	65.0	71.0
1953	72.6	73.0	72.3	70.9	75.3	67.1	60.6	56.9	53.5	55.5	54.0	52.9
1954	52.9	50.6	48.5	48.6	51.2	45.6	40.5	35.5	31.5	29.9	28.0	27.9
1955	27.7	28.1	26.9	25.1	45.0	48.3	49.0	47.9	56.0	55.7	54.0	52.5
1956	51.2	50.6	46.4	46.5	57.2	51.4	46.3	41.2	36.5	34.2	32.4	31.1
1957	29.6	28.7	29.7	58.3	99.5	99.2	96.6	93.8	93.0	99.7	100.1	99.6
1958	99.6	99.8	99.7	99.6	100.0	100.0	94.7	90.7	91.6	93.6	94.5	94.6
1959	93.8	94.4	93.5	95.6	92.9	100.0	100.0	96.5	93.1	100.0	100.0	100.0
1960	99.9	99.8	99.6	99.2	96.4	90.2	86.2	90.3	87.4	92.2	93.3	99.0
1961	99.4	99.7	99.2	98.2	94.7	100.0	100.0	96.0	95.2	95.9	96.7	97.3
1962	96.9	95.9	94.7	93.6	89.2	85.2	79.7	73.7	70.3	71.9	71.2	70.8
1963	69.9	69.6	68.1	66.2	64.3	59.2	52.4	48.4	45.3	44.0	44.4	44.3
1964	44.6	45.8	46.9	46.6	43.5	39.1	34.0	32.0	54.2	55.6	58.4	58.8
1965	59.6	68.5	69.3	69.0	100.0	99.8	94.1	88.6	86.6	85.6	85.6	87.4
1966	88.3	87.8	88.3	91.4	94.0	88.5	81.2	78.6	79.1	77.7	76.4	75.5
1967	74.5	73.6	72.3	70.5	68.4	60.1	54.7	50.1	49.8	50.4	51.8	51.9
1968	82.7	87.6	99.8	99.9	100.0	100.0	97.6	92.3	89.2	87.5	86.8	86.2
1969	85.5	85.4	85.1	89.0	91.1	86.3	80.0	75.8	73.3	98.8	100.0	100.0
1970	99.9	99.9	99.8	99.4	100.0	98.1	92.5	87.3	85.0	83.9	82.5	81.5
1971	80.4	79.3	77.8	75.3	70.1	61.5	61.3	75.0	81.3	99.2	100.0	100.0
1972	99.8	99.4	97.8	96.0	97.9	93.5	87.7	84.2	81.3	80.3	79.7	78.8
1973	79.4	81.2	82.2	83.8	81.9	81.1	81.2	79.0	76.9	100.0	100.0	100.0
1974	99.9	98.8	97.5	95.6	98.2	91.4	84.4	100.0	100.0	100.0	100.0	100.0
1975	99.8	99.8	99.2	99.0	100.0	100.0	98.8	95.5	92.8	91.4	90.0	89.9
1976	88.8	87.6	86.5	88.5	87.4	84.9	96.2	91.8	92.5	94.0	95.9	97.6
1977	98.9	99.3	99.1	99.7	100.0	95.9	89.8	84.5	80.1	78.6	77.7	76.6
1978	75.8	76.2	75.5	73.6	69.2	63.2	56.0	73.9	77.0	76.0	76.9	77.5
1979	79.2	83.0	87.7	91.9	93.4	94.6	92.6	90.4	86.5	84.4	83.4	82.8
1980	82.5	82.2	81.3	79.4	80.9	73.4	65.4	59.6	78.7	79.6	79.6	80.3
1981	80.0	79.8	82.4	85.0	84.6	100.0	96.7	93.3	91.4	100.0	100.0	100.0
1982	99.5	98.9	98.3	97.0	98.0	97.7	92.8	87.1	82.2	80.1	79.4	78.7
1983	78.3	78.6	79.5	77.7	78.9	76.8	71.5	67.1	63.3	61.8	61.0	60.2
1984	59.6	58.5	57.4	55.1	50.2	43.5	37.3	34.1	31.7	39.2	39.3	49.8
1985	59.7	63.4	68.5	69.3	67.4	65.6	60.5	55.4	52.2	63.0	63.7	65.2
1986	65.0	68.0	67.3	65.8	67.7	81.9	76.0	71.7	73.1	85.4	89.2	100.0
1987	99.8	99.9	99.4	99.2	100.0	100.0	100.0	95.9	94.8	93.0	93.6	94.1
1988	94.1	93.3	92.1	90.2	87.2	82.8	84.4	79.0	74.3	72.3	71.0	70.1
1989	70.6	71.8	70.9	69.4	72.6	72.8	66.9	62.0	57.9	56.2	55.3	54.8
1990	54.2	54.4	55.3	66.8	81.3	78.3	83.5	82.7	91.0	90.4	91.1	90.3
1991	92.6	93.5	92.7	92.6	90.6	89.8	84.8	79.7	81.2	83.4	84.6	100.0
1992	99.9	99.9	99.8	99.3	100.0	100.0	97.9	93.6	91.1	89.4	91.2	92.9
1993	94.3	97.1	99.8	99.8	98.3	94.5	88.5	81.4	78.4	77.1	76.1	75.4
1994	75.5	75.3	75.3	73.9	85.3	80.9	74.5	69.6	67.6	68.7	70.1	74.2
1995	75.7	76.3	79.4	84.3	90.5	89.0	83.5	78.0	75.5	73.9	73.9	73.7
1996	72.9	71.9	70.6	68.5	62.5	56.3	49.8	49.1	50.2	61.8	63.9	66.9
1997	67.1	88.7	99.8	99.9	100.0	100.0	100.0	98.0	94.5	93.8	93.9	95.2
1998	97.0	99.9	99.8	100.0	95.0	86.9	80.3	78.3	77.2	82.3	86.5	88.9
1999	90.0	89.8	93.1	92.8	92.4	87.9	82.8	76.4	71.0	68.9	67.3	66.3
2000	65.2	64.4	63.2	61.8	58.5	56.2	50.4	45.8	42.9	48.6	85.8	87.9
2001	92.8	97.6	99.8	100.0	100.0	94.1	87.8	84.0	82.3	81.9	97.9	99.4
2002	99.4	99.0	98.0	96.4	92.4	88.7	100.0	96.4	94.6	97.0	98.8	100.0
2003	99.8	99.9	99.5	97.9	93.8	91.7	86.1	81.3	79.6	80.1	79.2	78.2
2004	78.5	79.2	80.7	90.7	90.0	100.0	97.8	100.0	96.4	97.4	100.0	100.0
2005	99.9	99.8	99.6	99.2	98.2	93.5	87.8	86.6	81.7	79.9	78.5	77.4
2006	76.4	75.5	74.4	73.0	71.3	64.5	58.0	52.8	49.5	48.6	47.1	46.3
2007	47.6	47.1	61.0	65.3	89.6	100.0	100.0	100.0	100.0	99.8	99.8	100.0
2008	99.6	98.5	97.4	95.8	91.8	83.6	76.3	70.7	65.4	63.3	61.8	60.6
2009	59.5	58.5	57.6	58.6	55.1	48.8	42.6	38.1	36.9	47.7	51.8	53.8

Cumulative Inflows for Interim and 2020 Demand Phase Droughts,

millions of acre-feet

Month of Drought	Envelope Curve	DOR Interim Phase, 06/1946 - 04/1957	DOR 2020 Phase, 05/1945 - 04/1957	Current Drought Interim & 2020 03/2008 - 04/2013
1	0.056	0.044	0.073	0.042
2	0.112	0.059	0.141	0.082
3	0.168	0.066	0.252	0.133
4	0.225	0.142	0.273	0.149
5	0.281	0.189	0.338	0.162
6	0.337	0.244	0.400	0.176
7	0.393	0.294	0.428	0.189
8	0.449	0.458	0.460	0.201
9	0.505	0.513	0.508	0.213
10	0.561	0.600	0.570	0.227
11	0.618	0.657	0.618	0.242
12	0.674	0.719	0.710	0.260
13	0.730	0.773	0.936	0.298
14	0.786	0.790	0.979	0.369
15	0.842	0.802	0.995	0.402
16	0.898	0.809	1.001	0.422
17	0.954	0.843	1.078	0.433
18	1.011	0.853	1.125	0.445
19	1.067	0.893	1.179	0.478
20	1.123	0.909	1.229	0.706
21	1.179	0.928	1.394	0.808
22	1.235	0.953	1.449	0.869
23	1.291	0.997	1.535	1.005
24	1.347	1.076	1.593	1.252
25	1.404	1.277	1.654	1.370
26	1.460	1.387	1.709	1.515
27	1.516	1.409	1.726	1.611
28	1.572	1.442	1.738	1.644
29	1.628	1.459	1.745	1.704
30	1.684	1.470	1.779	1.715
31	1.740	1.484	1.789	1.802
32	1.797	1.506	1.828	1.816
33	1.853	1.570	1.845	1.830
34	1.909	1.652	1.863	1.847
35	1.965	1.825	1.889	1.868
36	2.021	1.969	1.933	1.884
37	2.077	2.034	2.011	1.898
38	2.133	2.060	2.212	1.907
39	2.189	2.078	2.323	1.918
40	2.246	2.105	2.345	1.920
41	2.302	2.136	2.378	1.921
42	2.358	2.155	2.395	1.921
43	2.414	2.176	2.406	1.922
44	2.470	2.198	2.419	1.952
45	2.526	2.235	2.441	1.959
46	2.582	2.249	2.505	1.975
47	2.639	2.290	2.587	2.010
48	2.695	2.340	2.760	2.085
49	2.751	2.367	2.904	2.197
50	2.807	2.391	2.970	2.217
51	2.863	2.408	2.995	2.300
52	2.919	2.453	3.014	2.313
53	2.975	2.470	3.040	2.322
54	3.032	2.487	3.071	2.324
55	3.088	2.507	3.091	2.336
56	3.144	2.532	3.112	2.355
57	3.200	2.546	3.134	2.361
58	3.256	2.567	3.170	2.368
59	3.312	2.584	3.185	2.383
60	3.368	2.701	3.225	2.392
61	3.425	2.872	3.275	2.403
62	3.481	2.877	3.303	2.414
63	3.554	2.893	3.327	
64	3.627	2.902	3.343	
65	3.700	2.907	3.388	
66	3.774	2.918	3.405	
67	3.847	2.937	3.423	
68	3.920	2.956	3.442	
69	3.993	2.974	3.467	
70	4.067	2.986	3.481	
71	4.127	3.068	3.503	
72	4.187	3.232	3.513	
73	4.248	3.267	3.636	
74	4.308	3.279	3.808	
75	4.368	3.281	3.812	

Month of Drought	Envelope Curve	DOR Interim Phase, 06/1946 - 04/1957	DOR 2020 Phase, 05/1945 - 04/1957
76	4.429	4.312	3.829
77	4.489	4.335	3.837
78	4.549	4.372	3.842
79	4.610	4.514	3.853
80	4.670	4.582	3.873
81	4.731	4.618	3.892
82	4.791	4.671	3.909
83	4.851	4.701	3.922
84	4.912	4.898	4.003
85	4.972	4.905	4.167
86	5.032	4.925	4.203
87	5.093	4.970	4.214
88	5.153	4.989	4.247
89	5.213	5.071	5.247
90	5.274	5.082	5.271
91	5.334	5.091	5.308
92	5.394	5.101	5.450
93	5.455	5.109	5.518
94	5.515	5.115	5.554
95	5.575	5.241	5.606
96	5.636	5.379	5.636
97	5.696	5.391	5.833
98	5.756	5.401	5.841
99	5.817	5.404	5.860
100	5.877	5.408	5.906
101	5.938	5.426	5.924
102	5.998	5.464	6.007
103	6.058	5.482	6.017
104	6.119	5.513	6.026
105	6.179	5.545	6.037
106	6.239	5.564	6.044
107	6.300	5.576	6.051
108	6.360	6.035	6.177
109	6.420	6.177	6.314
110	6.481	6.267	6.326
111	6.541	6.334	6.337
112	6.601	6.565	6.340
113	6.662	6.608	6.344
114	6.722	6.618	6.361
115	6.782	6.626	6.399
116	6.843	6.635	6.418
117	6.903	6.650	6.448
118	6.963	6.657	6.481
119	7.024	6.694	6.500
120	7.084	7.070	6.511
121	7.145	7.079	6.970
122	7.205	7.082	7.112
123	7.265	7.094	7.203
124	7.326	7.098	7.269
125	7.386	7.112	7.500
126	7.446	7.121	7.544
127	7.507	7.131	7.553
128	7.567	7.137	7.562
129	7.627	7.146	7.571
130	7.688	7.202	7.586
131	7.748	7.794	7.592
132	7.808		7.629
133	7.869		8.006
134	7.929		8.014
135	7.989		8.018
136	8.050		8.029
137	8.110		8.034
138	8.170		8.047
139	8.231		8.056
140	8.291		8.066
141	8.352		8.072
142	8.412		8.081
143	8.472		8.138
144	8.533		8.730

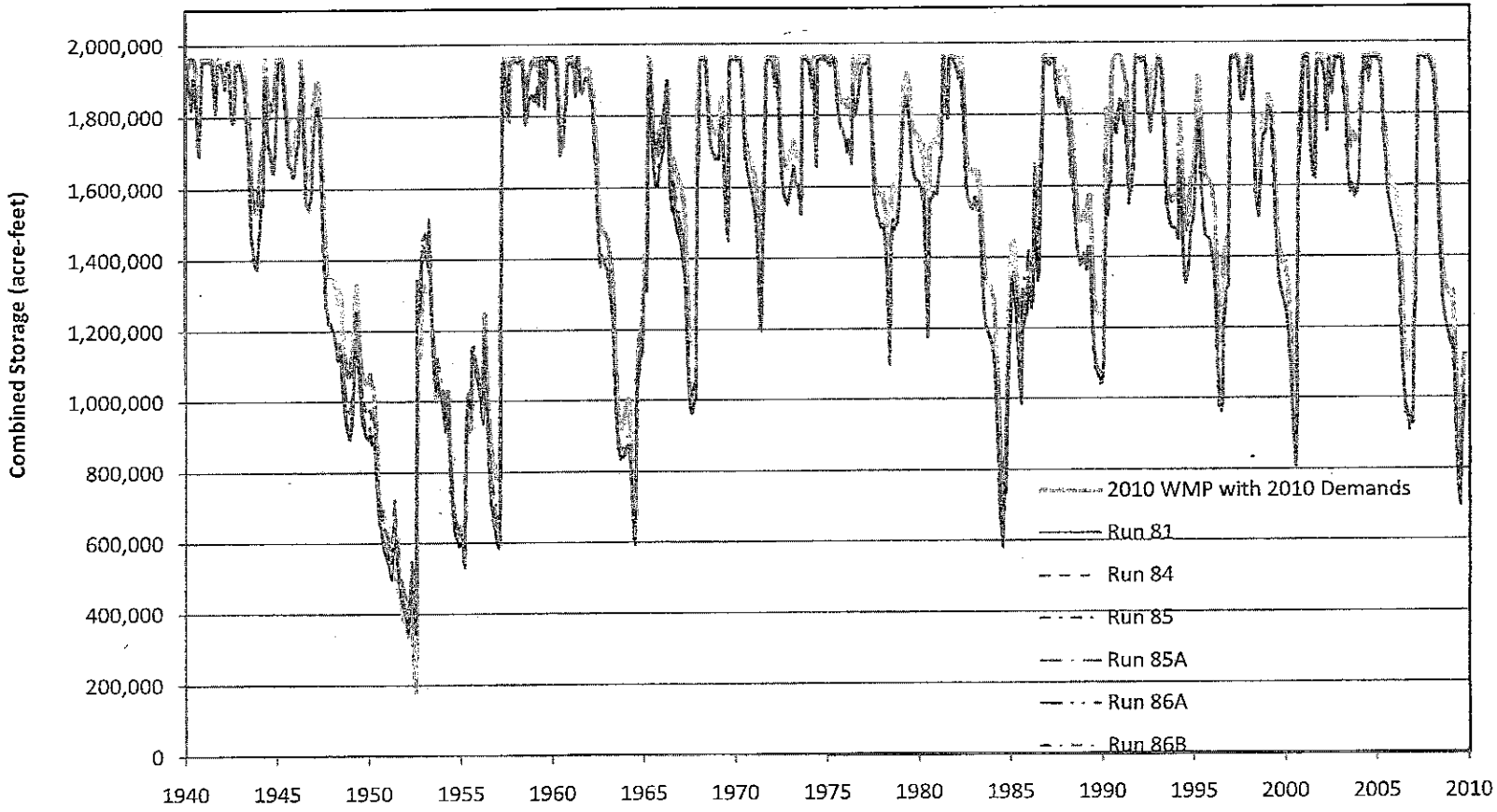
Highlighted months indicate combined storage below 600,000 acre-feet.

EXHIBIT B

LOWER COLORADO RIVER AUTHORITY
WATER MANAGEMENT PLAN UPDATE –
SCENARIO RUNS
LAKES BUCHANAN AND TRAVIS COMBINED STORAGE
Prepared for WMP update meeting on 6/28/2011

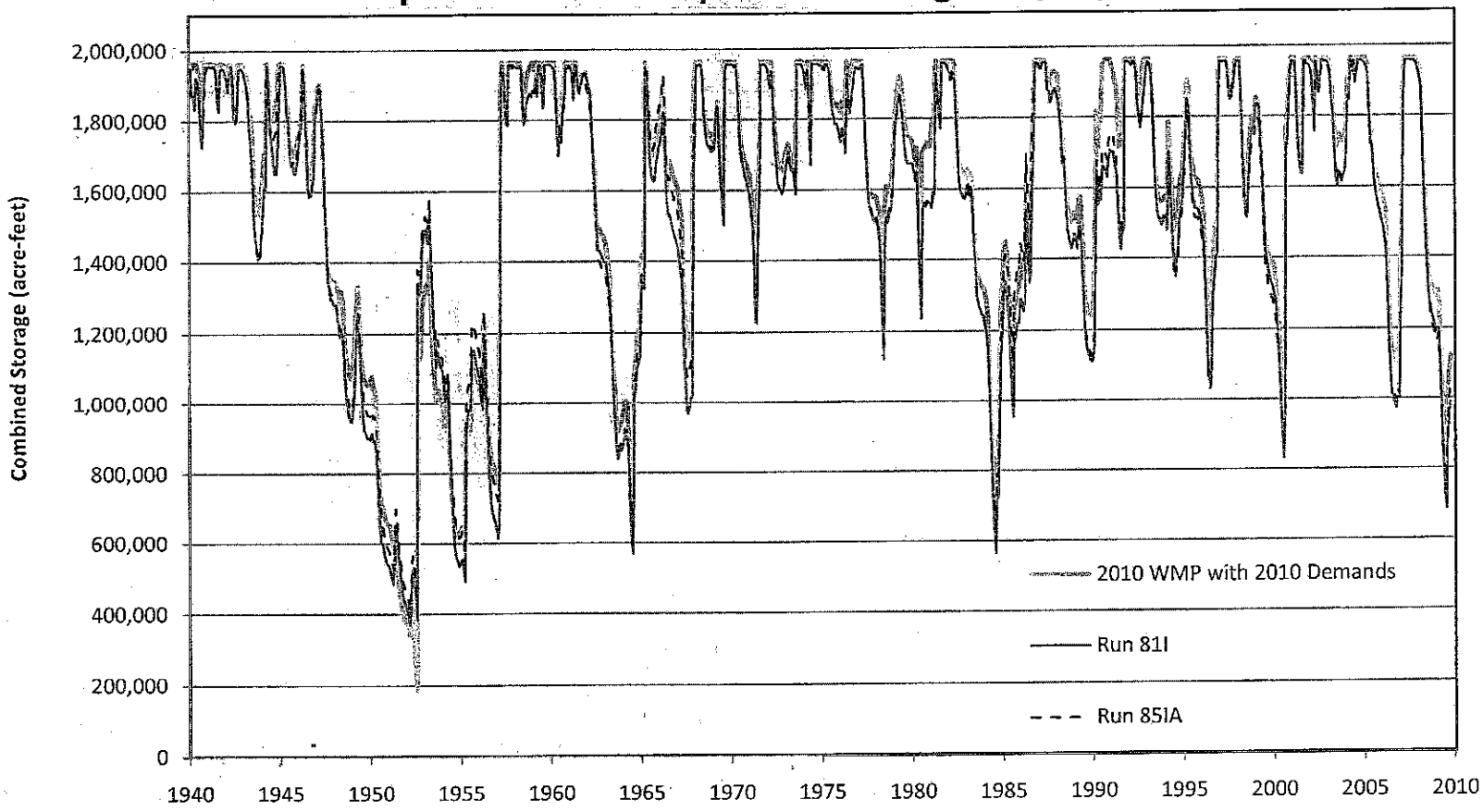
Found at: http://www.lcra.org/library/media/public/docs/water/wmp/2011-07-12_Summary_Graphs_2.pdf (last visited May 28, 2013)

WATER MANAGEMENT PLAN UPDATE - SCENARIO RUNS
LAKES BUCHANAN AND TRAVIS COMBINED STORAGE
Prepared for WMP update meeting on 6/28/2011



This information is for Water Management Plan advisory committee discussion only and represents results from one of the many potential scenarios being evaluated.
This is not a forecast of future conditions.

WATER MANAGEMENT PLAN UPDATE - SCENARIO RUNS
LAKES BUCHANAN AND TRAVIS COMBINED STORAGE
Prepared for WMP update meeting on 6/28/2011



This information is for Water Management Plan advisory committee discussion only and represents results from one of the many potential scenarios being evaluated. This is not a forecast of future conditions.

Marisa Weber

From: PUBCOMMENT
Sent: Wednesday, May 22, 2013 10:15 AM
To: PUBCOMMENT-OCC2
Subject: FW: Public comment on Permit Number WRPERM 5838

H

WR 02315

From: PUBCOMMENT-OCC
Sent: Wednesday, May 22, 2013 9:33 AM
To: PUBCOMMENT
Subject: FW: Public comment on Permit Number WRPERM 5838

From: kimbraj5@gmail.com [mailto:kimbraj5@gmail.com]
Sent: Tuesday, May 21, 2013 9:39 PM
To: donotReply@tceq.state.tx.us
Subject: Public comment on Permit Number WRPERM 5838

REGULATED ENTY NAME 11405838000 WRPERM 5838 WATER MANAGEMENT PLAN

RN NUMBER: RN104252267

PERMIT NUMBER: WRPERM 5838

DOCKET NUMBER: ~~2013-0225-WR~~

COUNTY: TRAVIS

PRINCIPAL NAME: LOWER COLORADO RIVER AUTHORITY

CN NUMBER: CN600253637

FROM

NAME: MS KIMBRA K HENRY

E-MAIL: kimbraj5@gmail.com

COMPANY: KELLER WILLIAMS

ADDRESS: 2201 LAKEWAY BLVD UNIT 11
LAKEWAY TX 78734-5191

PHONE: 5125854635

FAX:

COMMENTS: May 21, 2013 Ms. Bridget C. Bohac, Chief Clerk Office of the Chief Clerk (MC 105) Texas Commission on Environmental Quality P.O. Box 13087 Austin, Texas 78711-3087 Re: Comments and Request for Contested Case Hearing on Application to Amend the LCRA Water Management Plan; Application No. 5838A; TCEQ Water Rights Permit No. 5838 Dear Ms. Bohac: This letter provides our comments on the Lower Colorado River Authority's application to amend its Water Management Plan (Permit No. 5838) and requests a contested case hearing on this application. Our contact information follows: NAME: __Kimbra henry_____ MAILING ADDRESS: ____ ____2201 Lakeway Blvd #11_____ ___Lakeway, TX 78734_____ DAYTIME PHONE NUMBER(S): _____512-585-4635_____ FAX NUMBER (IF ANY): _____ EMAIL ADDRESS: _____kimbraj5@gmail.com_____ We are affected by this proposed amendment to the LCRA's Water Management Plan in the ways explained below. For these reasons, we request the TCEQ's careful attention to our comments and TCEQ's approval of our request for a hearing. _____ lack of consideration for the severity the current drought _____ _extreme growth of our area in the last year_____ _economic impact of our area businesses and individuals_____ _draining the lake to such a low level it becomes a crisis_____ _we must consider what has hapened in austin and to the lake to the present-not just up to 2009_____ _____... Thank you for your consideration of these important issues. Please let me know if yo u need any additional information. Please take this seriously. our area is growing at an astounding rate! We must preserve our lake and the quality of our water. Sincerely, Kimbra Henry

NATIONAL WILDLIFE FEDERATION

SOUTH CENTRAL REGIONAL CENTER
44 East Avenue, Suite 200
Austin, Texas 78701

512.476.9805
FAX 512.476.9810
www.nwf.org

2013 MAY 29 AM 9: 57
CHIEF CLERKS OFFICE
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

May 28, 2013

WR 8233

REVIEWED
MAY 29 2013
By

H

Ms. Bridget Bohac
Office of the Chief Clerk
MC 105, TCEQ
P.O. Box 13087
Austin, TX 78711-3087

Re: Request for Contested Case Hearing in the Matter of the Lower Colorado River Authority Application to Amend the LCRA Water Management Plan; Water Right Application No. 5838A

Dear Ms. Bohac:

The National Wildlife Federation ("NWF") hereby requests a contested case hearing on the above-referenced application. NWF provides the following information in support of that request.

This request for a contested case hearing is submitted on behalf of the National Wildlife Federation through its South Central Regional Center. The contact information for NWF in this matter is as follows:

Myron J. Hess
National Wildlife Federation
44 East Avenue, Suite 200
Austin, TX 78701
Ph: 512-610-7754
Fax: 512-476-9810
email: hess@nwf.org

This is a **REQUEST FOR A CONTESTED CASE HEARING** on the Application to Amend the Lower Colorado River Authority's ("LCRA") Water Management Plan ("WMP"), application number 5838A.

The National Wildlife Federation would be affected in a way that is not common to the general public because NWF is a national, non-profit organization dedicated to protecting the ecosystems that are most critical to native wildlife in America. NWF's members are dedicated to protecting fish and wildlife resources and the right of people to use and enjoy those resources. In particular, NWF actively works, through its South Central Regional Center in Austin, to ensure adequate protection of stream and river flows to support fish and wildlife resources in Texas. NWF is

pursuing that goal through a variety of avenues, including the filing of this hearing request. NWF has over forty thousand members in Texas and those members use and enjoy those resources both recreationally and for economic benefit. NWF's participation in the hearing does not require the participation of individual members in any capacity other than possibly to establish standing.

The application by LCRA that is the subject of this hearing request has the potential to significantly affect the fish and wildlife resources of the Colorado River watershed, including Matagorda Bay, and NWF members. Among the members of NWF whose interests would be affected is Ms. Jami Smith-Hanchey who leases river-front property and owns and operates the Rising Phoenix Adventure Tours and Events business, which includes offering kayak and canoe tours, on the Colorado River in Bastrop, Texas. Ms. Smith-Hanchey is concerned about the adequacy of flows in the river to maintain good water quality, healthy fish and wildlife populations, and an attractive environment for kayakers and canoeists. Ms. Smith-Hanchey's personal and business interests are affected by the levels of flow in the river.

Through this application, LCRA seeks approval of amendments to the WMP that, among other things, determine when water will be passed through, or released from, the Highland Lakes to meet instream flow and freshwater inflow needs downstream. The aspects of the WMP affecting water supplied for downstream irrigation also significantly affect flows available for fish and wildlife resources. As a result, the specifics of the WMP play a critical role in determining the amount of water flowing in the river downstream of Austin and into Matagorda Bay. NWF has been an active participant in the stakeholder process provided by LCRA for developing potential amendments to the WMP. NWF was represented, as one of the formally recognized stakeholders for environmental interests, on LCRA's stakeholder committee and voiced its concerns and suggestions about protection of fish and wildlife resources throughout that process.

NWF recognizes the importance of achieving a balanced approach to meeting various needs for water and participated in the stakeholder committee process with that goal in mind. If no other party had requested a contested case hearing, NWF would have been prepared to live with the overall parameters of the recommendations developed through the stakeholder committee process. NWF does have concerns about specific aspects of LCRA's proposed implementation of those recommendations, including how compliance with instream flow requirements is proposed to be assessed. More significantly, NWF is aware that various other interested parties are requesting contested case hearings to advocate for changes to the stakeholder committee recommendations and to LCRA's proposed WMP, many of which could have the effect of substantially reducing the amount of instream flows and freshwater inflows provided, particularly during dry periods.

Accordingly, NWF finds it necessary to file this request to ensure its ability to fully participate in the WMP decision process in order to advocate for protection of the fish and wildlife resources of the Colorado River watershed, including Matagorda Bay. As described above, NWF's interests in protecting fish and wildlife resources could be adversely affected by the granting of this application, as could its interests in protecting the ability of its members and others to enjoy those resources in and along the river and Matagorda Bay.

Please contact me at the phone number or address listed above if you have any questions or need additional information.

Sincerely,

Myron K. Hess

Myron K. Hess
Manager, Texas Water Programs/Counsel

NATIONAL WILDLIFE FEDERATION

Inspiring Americans to protect wildlife for our children's future.

Gulf States Natural Resource Center
44 East Avenue, Suite 200 Austin, TX 78701-4385

UNITED STATES POSTAGE
PITNEY BOWES
$000.46⁰
C 21P
0001064639 MAY 28 2013
MAILED FROM ZIP CODE 78701

RECEIVED
MAY 29 2013
TCEQ MAIL CENTER
JR

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
CHIEF CLERK'S OFFICE
2013 MAY 29 AM 5:51

Office of the Chief Clerk
MC 105
TCEQ
P.O. Box 13087
Austin, TX 78711-3087

78711308787

NATIONAL WILDLIFE FEDERATION
SOUTH CENTRAL REGIONAL CENTER
44 East Avenue, Suite 200
Austin, Texas 78701
512.476.9805
FAX 512.476.9810
www.nwf.org

REVIEWED
MAY 29 2013
By

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
2013 MAY 28 PM 12: 43
CHIEF CLERKS OFFICE

WR 82315

May 28, 2013

Ms. Bridget Bohac
Office of the Chief Clerk
MC 105, TCEQ
P.O. Box 13087
Austin, TX 78711-3087

Re: Request for Contested Case Hearing in the Matter of the Lower Colorado River Authority Application to Amend the LCRA Water Management Plan; Water Right Application No. 5838A

Dear Ms. Bohac:

The National Wildlife Federation ("NWF") hereby requests a contested case hearing on the above-referenced application. NWF provides the following information in support of that request.

This request for a contested case hearing is submitted on behalf of the National Wildlife Federation through its South Central Regional Center. The contact information for NWF in this matter is as follows:

Myron J. Hess
National Wildlife Federation
44 East Avenue, Suite 200
Austin, TX 78701
Ph: 512-610-7754
Fax: 512-476-9810
email: hess@nwf.org

This is a **REQUEST FOR A CONTESTED CASE HEARING** on the Application to Amend the Lower Colorado River Authority's ("LCRA") Water Management Plan ("WMP"), application number 5838A.

The National Wildlife Federation would be affected in a way that is not common to the general public because NWF is a national, non-profit organization dedicated to protecting the ecosystems that are most critical to native wildlife in America. NWF's members are dedicated to protecting fish and wildlife resources and the right of people to use and enjoy those resources. In particular, NWF actively works, through its South Central Regional Center in Austin, to ensure adequate protection of stream and river flows to support fish and wildlife resources in Texas. NWF is

pursuing that goal through a variety of avenues, including the filing of this hearing request. NWF has over forty thousand members in Texas and those members use and enjoy those resources both recreationally and for economic benefit. NWF's participation in the hearing does not require the participation of individual members in any capacity other than possibly to establish standing.

The application by LCRA that is the subject of this hearing request has the potential to significantly affect the fish and wildlife resources of the Colorado River watershed, including Matagorda Bay, and NWF members. Among the members of NWF whose interests would be affected is Ms. Jami Smith-Hanchey who leases river-front property and owns and operates the Rising Phoenix Adventure Tours and Events business, which includes offering kayak and canoe tours, on the Colorado River in Bastrop, Texas. Ms. Smith-Hanchey is concerned about the adequacy of flows in the river to maintain good water quality, healthy fish and wildlife populations, and an attractive environment for kayakers and canoeists. Ms. Smith-Hanchey's personal and business interests are affected by the levels of flow in the river.

Through this application, LCRA seeks approval of amendments to the WMP that, among other things, determine when water will be passed through, or released from, the Highland Lakes to meet instream flow and freshwater inflow needs downstream. The aspects of the WMP affecting water supplied for downstream irrigation also significantly affect flows available for fish and wildlife resources. As a result, the specifics of the WMP play a critical role in determining the amount of water flowing in the river downstream of Austin and into Matagorda Bay. NWF has been an active participant in the stakeholder process provided by LCRA for developing potential amendments to the WMP. NWF was represented, as one of the formally recognized stakeholders for environmental interests, on LCRA's stakeholder committee and voiced its concerns and suggestions about protection of fish and wildlife resources throughout that process.

NWF recognizes the importance of achieving a balanced approach to meeting various needs for water and participated in the stakeholder committee process with that goal in mind. If no other party had requested a contested case hearing, NWF would have been prepared to live with the overall parameters of the recommendations developed through the stakeholder committee process. NWF does have concerns about specific aspects of LCRA's proposed implementation of those recommendations, including how compliance with instream flow requirements is proposed to be assessed. More significantly, NWF is aware that various other interested parties are requesting contested case hearings to advocate for changes to the stakeholder committee recommendations and to LCRA's proposed WMP, many of which could have the effect of substantially reducing the amount of instream flows and freshwater inflows provided, particularly during dry periods.

Accordingly, NWF finds it necessary to file this request to ensure its ability to fully participate in the WMP decision process in order to advocate for protection of the fish and wildlife resources of the Colorado River watershed, including Matagorda Bay. As described above, NWF's interests in protecting fish and wildlife resources could be adversely affected by the granting of this application, as could its interests in protecting the ability of its members and others to enjoy those resources in and along the river and Matagorda Bay.

Please contact me at the phone number or address listed above if you have any questions or need additional information.

Sincerely,

Myron J. Hess
Manager, Texas Water Programs/Counsel

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
2013 MAY 28 PM 12: 43
CHIEF CLERKS OFFICE

NATIONAL WILDLIFE FEDERATION

FAX TRANSMITTAL

SOUTH CENTRAL REGIONAL CENTER

Date: May 28, 2013 Number of pages with cover 4

To: Office of the Chief Clerk

Organization: TCEQ

FAX number: **512-239-3311**

From: Myron J. Hess, National Wildlife Federation

Telephone: (512)-610-7754

Marisa Weber

From: PUBCOMMENT-OCC
Sent: Tuesday, August 18, 2015 2:27 PM
To: PUBCOMMENT-WWW-WRAS; PUBCOMMENT-ELD; PUBCOMMENT-OCC2; PUBCOMMENT-OPIC
Subject: FW: Filing on Permit Number/Docket Number WRPERM 5838
Attachments: NWF.SC.comments.Proposed TCEQ Order.8.17.2015.pdf

---

From: EFiling
Sent: Tuesday, August 18, 2015 2:19 PM
To: PUBCOMMENT-OCC
Subject: FW: Filing on Permit Number/Docket Number WRPERM 5838

WR 823/5

From: hess@nwf.org [mailto:hess@nwf.org]
Sent: Monday, August 17, 2015 3:23 PM
To: DoNot Reply
Subject: Filing on Permit Number/Docket Number WRPERM 5838

FILING CONFIRMATION NUMBER 184553992015229

REGULATED ENTY NAME 11405838000 WRPERM 5838 WATER MANAGEMENT PLAN

RN NUMBER: RN104252267

PERMIT NUMBER: WRPERM 5838

DOCKET NUMBER: 2015-0817-WR

COUNTY: BASTROP

PRINCIPAL NAME: LOWER COLORADO RIVER AUTHORITY

CN NUMBER: CN600253637

FROM

FILED BY:

FILED FOR NAME: Myron Hess

E-MAIL: hess@nwf.org

COMPANY: National Wildlife Federation

ADDRESS: 44 EAST AVE Suite 200
AUSTIN TX78701-4384

PHONE: 512-610-7754

DOCUMENT NAME: NWF.SC.comments.Proposed TCEQ Order.8.17.2015.pdf

Based on 30 TAC Section 1.10(h), the TCEQ General Counsel has waived the filing requirements of Section 1.10(c) to allow the filing of documents using this online system. The General Counsel also has waived the requirements of Section 1.10(e) so that the time of filing your documents is the time this online system receives your filings. Filings are considered timely if received by close of business (usually 5:00 p.m. CST) on the deadline date unless otherwise ordered. If your document is 20 pages or less (including cover letter, mailing list, and attachments) and it is for Commission consideration at an open meeting, the General Counsel has also waived the requirement of Section 1.10(d) to file paper copies with the Office of the Chief Clerk.

August 17, 2015 Via Electronic Filing

Bridget C. Bohac, Chief Clerk
Office of the Chief Clerk
Texas Commission on Environmental Quality
P.O. Box 13087, MC-105
Austin, TX 78711-3087

Re: Application No. 5838A by Lower Colorado River Authority to Amend the LCRA Water Management Plan

Dear Ms. Bohac:

These comments on the water management plan (WMP) and proposed draft order are submitted on behalf of the National Wildlife Federation (NWF) and the Lone Star Chapter of the Sierra Club. We appreciate the careful review by staff of the Texas Commission on Environmental Quality (TCEQ) of this application. We also greatly appreciate the openness of the staff and leadership of the Lower Colorado River Authority (LCRA) to public input and to careful evaluation and consideration of that input throughout the amendment process.

NWF has a pending request for a contested case hearing on this application. NWF is not withdrawing that hearing request at this time. NWF is willing to discuss its concerns about the application and order and remains open to consideration of withdrawal of that request at an appropriate time when the disposition of these comments, comments of other parties, and other hearing requests has become clear.

Comments on the draft TCEQ Order are set out below by reference to specific provisions in the Order. Where we have proposed specific changes to language in the order, we have either described those changes or have shown proposed additions with underlining and proposed deletions with strike-through.

Proposed Finding of Fact 15) t.: We would appreciate an explanation of the rationale for the selection of the 95 percent exceedance probability as the least protective level allowable under any circumstances. Although we acknowledge the appropriateness of using a conservative test reflective of conditions on the ground, particularly when forecasting the potential for reservoir storage to drop below 600,000 acre-feet, the rationale for the specification of the 95 percent exceedance probability as the least protective level to be used regardless of actual inflow conditions, even when forecasting the potential to drop below 900,000 acre-feet during an irrigation season is less clear.

Proposed Finding of Fact 21) b.: This proposed FOF is accurate regarding the dates previously discussed and evaluated for determining instream flow requirements, but the text of the WMP actually includes

conflicting information on this point. At page 4-13, Table 4.4, the WMP indicates January 1 and July 1 as the dates on which determinations about instream flow levels will be made. The WMP discussion at p. 4-11 accurately reflects the March 1 and July 1 dates that match stakeholder discussions and modeling evaluations. As reflected below in these comments, we suggest that the order direct LCRA to conform the WMP to match this FOF.

Proposed Finding of Fact 23) b.: This proposed finding indicates that all five levels of freshwater inflows are defined using two-month operational criteria. That actually is not true for the threshold inflows. Accordingly, we propose that the phrase ", with the exception of threshold criteria," be inserted in the second line of this proposed finding after "and" and before "are."

Proposed Finding of Fact 23) i.: This proposed finding indicates that whenever releases of Interruptible Stored Water are cut off for Gulf Coast, Lakeside and Pierce Ranch, only the Threshold requirement is in effect. However, as noted in proposed FOF 23) j., that is not always true. Accordingly, we propose that the phrase "Except as provided in j," be inserted at the beginning of this Proposed FOF.

Proposed Finding of Fact 25): As currently drafted, the proposed FOF is inaccurate. The instream flow and freshwater inflow criteria included in the WMP are not consistent with the pulse flow recommendations of the BBEST or the BBASC and are not consistent with the attainment frequency recommendations of the BBEST. The WMP actually includes no pulse flow requirements. The attainment frequencies for most of the levels of freshwater inflows fall well below the attainment frequencies recommended by the BBEST. In order to be accurate, we propose that the phrase ", exclusive of pulse flows and attainment frequencies," be inserted in the first line of this proposed FOF after "criteria" and before "are".

Proposed Findings of Fact 31)-33): The language of these proposed FOFs seems to suggest that updating the WAMs could somehow affect the trigger levels and curtailment curves in the newly updated WMP. We do not understand that to be true. We have no objection to Findings acknowledging that updated models and changes in firm water use may result in changed calculations which, in turn, may result in future changes to the WMP through a subsequent amendment process. Accordingly, we propose that these proposed FOFs be revised to read substantially as follows:

> 31) The naturalized flows in the Colorado WAM were updated through 2013 for this WMP. At this time Lakes Buchanan and Travis have not refilled. Updating the WAMs to include additional years of naturalized flows could result in the calculation of different ~~affect the~~ trigger levels and curtailment curves than those included in the 2014 WMP amendment or of a different ~~the~~ combined firm yield of Lakes Buchanan and Travis.
>
> 32) The models used to support LCRA's 2014 WMP include certain assumptions about LCRA's use of its downstream water rights that, if changed, could result in the calculation of different ~~affect the~~ trigger levels or curtailment curves than those included in the 2014 WMP amendment.
>
> 33) Actual water use by firm customers could increase in the future above the levels considered in the models used to support LCRA's 2014 WMP amendment in a way that could result in the calculation of different ~~affect the~~ trigger levels or curtailment curves.

Proposed Ordering Provisions 1)a.: This provision currently indicate the amended Water Management Plan is subject to findings, conclusions, and conditions contained in various previous Orders "except to the extent not inconsistent with this order." That appears to be a double negative, indicating that the parts of those previous orders consistent with (i.e. not inconsistent with) this order do not apply but that other portions do. The likely intent is to provide that the amended Water Management Plan is subject to those previous Orders "except to the extent inconsistent with this order." We propose that it be revised accordingly.

Proposed Ordering Provision 1)b.: This provision has the same double negative issue as Provision 1)a. and we propose that it also be revised accordingly.

Proposed Ordering Provision 1)d.: This provision appears to be intended to indicate that, with only two limited exceptions, the contents of the Water Management Plan control over the provisions of the Order. However, the language of the first sentence is somewhat ambiguous. Also, as discussed in the comments on proposed FOF 21)b., the WMP has internally inconsistent language regarding the date for determining instream flow requirements, which also should be conformed to the language of that FOF. Accordingly, we recommend that the first sentence of this provision be revised to read substantially as follows: "LCRA shall conform the text of the Water Management Plan to be consistent with Findings of Fact numbers 15)s., 15)t., and 21)b."

In addition, the second and third sentences of this provision indicate that, except as provided in the first sentence of the provision, the specific language of the "WMP application" controls over the more general language of the Findings. Because, there are numerous documents included in the "WMP application," we propose that this language be revised to refer to the text of the amended Water Management Plan as controlling rather than to the language in the application.

Proposed Ordering Provision 1)f.: We believe the introductory language in this provision is somewhat ambiguous. More significantly, it is not apparent to us that it is necessary or appropriate to delay the initiation of an update process until one year after LCRA begins operating its proposed off-channel reservoir. In fact, it is questionable that LCRA should be allowed to operate the reservoir without at least some form of advance authorization under the WMP. We believe the operation of the reservoir has significant potential to decrease inflows reaching Matagorda Bay by intercepting river flows that would otherwise have reached Matagorda Bay. Unfortunately, we have not been successful in obtaining information from LCRA about modeling LCRA has undertaken to evaluate those potential impacts or about operational approaches that LCRA intends to employ. In the absence of some showing that LCRA will avoid adverse impacts to bay inflows beyond those evaluated in the current amendment application, we do not support a delay in the initiation of an update process until one year after LCRA has begun operating the new off-channel reservoir.

We propose that the introductory language to this provision be revised to read substantially as follows: "LCRA shall initiate a process to update the Water Management Plan by the earlier of December 31, 2018, the date that paragraph iii. is first satisfied, or one year after any of the occurrences listed in paragraphs i., ii., or iv."

We appreciate the opportunity to provide these comments and look forward to the opportunity to discuss them further.

Respectfully submitted,

Myron J. Hess
Manager, Texas Water Programs/Counsel
National Wildlife Federation
44 East Avenue Suite 200
Austin, TX 78701
Ofc: 512-610-7754
hess@nwf.org

Jennifer Walker
Water Resources Coordinator
Sierra Club, Lone Star Chapter
1202 San Antonio Street
Austin, TX 78701
Ofc: 512-605-6371
jennifer.walker@sierraclub.org

Nuclear Operating Company

South Texas Project Electric Generating Station P.O. Box 289 Wadsworth, Texas 77483

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

2013 MAY 30 AM 9:46

CHIEF CLERKS OFFICE

Peter G. Nemeth
Secretary and General Counsel

May 23, 2013

REVIEWED

MAY 30 2013

By

H

Via Facsimile: 512-239-3311
Electronic Transmission: http://www.tceq.state.tx.us/about/comments.html

Ms. Bridget C. Bohac
Chief Clerk
TCEQ – MC 105
P.O. Box 13087
Austin, Texas 78711-3087

WR 82315

Re: Request for Contested Case Hearing regarding Lower Colorado River Authority Water Rights Application No. 5838A (Water Management Plan) Permit No. WRPERM 5838

Dear Ms. Bohac:

By this letter, STP Nuclear Operating Company ("STPNOC") requests a contested case hearing regarding Water Rights Application No. 5838A, submitted by the Lower Colorado River Authority ("LCRA"). Application No. 5838A proposes a new water management plan affecting the use of water from the Colorado River generally and pursuant to Certificates of Adjudication Nos. 14-5478 and 14-5482 specifically.

Requestor Information:

STP Nuclear Operating Company
ATTN: Peter G. Nemeth, General Counsel
P.O. Box 289
Wadsworth, Texas 77483
Telephone: (361) 972-8017
Facsimile: (713) 425-7965
Email: pgnemeth@STPEGS.COM

STPNOC makes this request for contested case hearing in its capacity as the operator of the South Texas Project Electric Generating Station (the "South Texas Project") on its own behalf and on behalf of the STP Owners (NRG South Texas LP, the City of San Antonio, acting by and through its City Public Service Board, and the City of Austin). STPNOC is a Texas non-profit corporation that was created and is financed by the STP Owners to maintain and operate the South Texas Project in Matagorda County, Texas.

Applicant Information:

Lower Colorado River Authority
P.O. Box 222
Austin, Texas 78767-0220
Permit No. WRPERM 5838

STPNOC's Standing to Request Hearing:

STPNOC and the STP Owners are affected persons with personal justiciable interests in the matters put at issue by Application No. 5838A that are not common to the general public. STPNOC has standing to make this request and to participate as a party in settlement negotiations and in hearing, as contemplated in Texas Water Code Section 5.115 and in Chapter 55 of the Texas Commission on Environmental Quality's rules.

The South Texas Project is one of the newest and largest nuclear power facilities in the nation. The two generating units at the South Texas Project produce 2,700 megawatts of carbon-free electricity, providing clean energy to two million Texas homes. Water for cooling is a necessary component of the power generation process at the South Texas Project. Certificate of Adjudication No. 14-5437, as amended, which STPNOC refers to as the "River Permit," authorizes STPNOC and LCRA to divert and use up to 102,000 acre-feet of water per year from the Colorado River. The River Permit further authorizes STPNOC to maintain an existing 202,600 acre-foot capacity off-channel reservoir and a secondary reservoir.

STPNOC's River Permit water supply is backed-up by a "firm water" contract with LCRA. In conjunction with the settlement of litigation, STPNOC entered an Amended and Restated Contract with LCRA, effective as of January 1, 2006, under which the River Permit is dedicated for STPNOC's sole use. The contract also continues LCRA's obligation to make water available to STPNOC from stored supplies according to a defined water delivery plan. By this contract, STPNOC also is a "firm-water" customer within the meaning of LCRA's proposed water management plan. The proposed water management plan includes provisions necessary to accommodate the STPNOC contractual water delivery plan in operations and management of LCRA's upstream reservoirs.

STPNOC's diversions under both the River Permit and the Amended and Restated Contract currently are from the furthest downstream point authorized on the Colorado River, so its ability to divert water is dependent on downstream flow levels. In addition to time priority, the River Permit includes a special condition for environmental purposes that limits diversion to fifty-five percent of the flow in excess of 300 cfs at its existing diversion point. Also, STPNOC's ability to divert is affected particularly by water quality at the diversion point, as diminished downstream flow allows upstream intrusion of brackish water from the Gulf of Mexico.

STPNOC and its predecessor entities have engaged in prior proceedings related to LCRA water management plans, including the South Texas Project project manager's participation as a named party in the adjudicative public hearing related to adoption of the first plan in 1989. Most recently, and as evidenced by the Texas Commission on Environmental Quality's January 12, 2010, agenda notice,

STPNOC was one of the five hearing requesters who participated in the Agreed Order that adopted the current, 2010 water management plan. STPNOC participated actively also in the extensive stakeholder process that convened during development of the specific plan at issue in Application No. 5838A.

The matters at issue in Application No. 5838A, including provisions for allocating stored supplies for LCRA firm customers, LCRA's ability to meet its obligations under the Amended and Restated Contract, and the impact on maintaining downstream water quantity and salinity levels at STPNOC's diversion point, are integral to STPNOC's water supply and therefore to electric power for millions of Texans.

Conditions in Proposed Permit which may Satisfy Requestor's Concerns:

At this time, STPNOC has not identified any changes or new conditions that it seeks in the proposed water management plan, either as requested by LCRA in Application No. 5838A or as recommended by the Texas Commission on Environmental Quality's Executive Director. STPNOC intends to focus its participation as a party in proceedings on the application to those issues that are necessary in order to protect its interests under its Settlement Agreement with LCRA, the River Permit, and its Amended and Restated Contract with LCRA.

Conclusion:

In consideration of the matters above, STPNOC requests a contested case hearing and asks that the Commission recognize its party status in negotiations and proceedings on Application No. 5838A.

Respectfully submitted,

Peter G. Nemeth

cc: Ms. Peggy Travis
Mr. Michael Murray
Mr. Dave Rencurrel

Ms. Lyn Clancy (for LCRA)

CRAIN
CATON
&
JAMES

17TH FLOOR
FIVE HOUSTON CENTER
1401 MCKINNEY STREET
HOUSTON, TEXAS 77010-4035

081841-000001

28 MAY 2013 P

012H16203209

Hasl

$00.40

05/28/2013

Mailed From 77010

US POSTAGE

MS BRIDGET C BOHAC
CHIEF CLERK
TCEQ – MC 105
P O BOX 13087
AUSTIN TX 78711-3087

RECEIVED
MAY 30 2013
TCEQ MAIL CENTER
AR

2013 MAY 30 AM 9:46
CHIEF CLERKS OFFICE

TEXAS
COMMISSION
ON ENVIRONMENTAL
QUALITY

78711308787

STP Nuclear Operating Company
South Texas Project Electric Generating Station P.O. Box 289 Wadsworth, Texas 77483

Peter G. Nemeth
Secretary and General Counsel

WR 92315

May 23, 2013

Via Facsimile: 512-239-3311
Electronic Transmission: http://www.tceq.state.tx.us/about/comments.html

Ms. Bridget C. Bohac
Chief Clerk
TCEQ – MC 105
P.O. Box 13087
Austin, Texas 78711-3087

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
2013 MAY 28 AM 11: 25
CHIEF CLERKS OFFICE

Re: **Request for Contested Case Hearing regarding Lower Colorado River Authority Water Rights Application No. 5838A (Water Management Plan) Permit No. WRPERM 5838**

Dear Ms. Bohac:

By this letter, STP Nuclear Operating Company ("STPNOC") requests a contested case hearing regarding Water Rights Application No. 5838A, submitted by the Lower Colorado River Authority ("LCRA"). Application No. 5838A proposes a new water management plan affecting the use of water from the Colorado River generally and pursuant to Certificates of Adjudication Nos. 14-5478 and 14-5482 specifically.

Requestor Information:

STP Nuclear Operating Company
ATTN: Peter G. Nemeth, General Counsel
P.O. Box 289
Wadsworth, Texas 77483
Telephone: (361) 972-8017
Facsimile: (713) 425-7965
Email: pgnemeth@STPEGS.COM

REVIEWED
MAY 29 2013
By

STPNOC makes this request for contested case hearing in its capacity as the operator of the South Texas Project Electric Generating Station (the "South Texas Project") on its own behalf and on behalf of the STP Owners (NRG South Texas LP, the City of San Antonio, acting by and through its City Public Service Board, and the City of Austin). STPNOC is a Texas non-profit corporation that was created and is financed by the STP Owners to maintain and operate the South Texas Project in Matagorda County, Texas.

Applicant Information:

Lower Colorado River Authority
P.O. Box 222
Austin, Texas 78767-0220
Permit No. WRPERM 5838

STPNOC's Standing to Request Hearing:

STPNOC and the STP Owners are affected persons with personal justiciable interests in the matters put at issue by Application No. 5838A that are not common to the general public. STPNOC has standing to make this request and to participate as a party in settlement negotiations and in hearing, as contemplated in Texas Water Code Section 5.115 and in Chapter 55 of the Texas Commission on Environmental Quality's rules.

The South Texas Project is one of the newest and largest nuclear power facilities in the nation. The two generating units at the South Texas Project produce 2,700 megawatts of carbon-free electricity, providing clean energy to two million Texas homes. Water for cooling is a necessary component of the power generation process at the South Texas Project. Certificate of Adjudication No. 14-5437, as amended, which STPNOC refers to as the "River Permit," authorizes STPNOC and LCRA to divert and use up to 102,000 acre-feet of water per year from the Colorado River. The River Permit further authorizes STPNOC to maintain an existing 202,600 acre-foot capacity off-channel reservoir and a secondary reservoir.

STPNOC's River Permit water supply is backed-up by a "firm water" contract with LCRA. In conjunction with the settlement of litigation, STPNOC entered an Amended and Restated Contract with LCRA, effective as of January 1, 2006, under which the River Permit is dedicated for STPNOC's sole use. The contract also continues LCRA's obligation to make water available to STPNOC from stored supplies according to a defined water delivery plan. By this contract, STPNOC also is a "firm-water" customer within the meaning of LCRA's proposed water management plan. The proposed water management plan includes provisions necessary to accommodate the STPNOC contractual water delivery plan in operations and management of LCRA's upstream reservoirs.

STPNOC's diversions under both the River Permit and the Amended and Restated Contract currently are from the furthest downstream point authorized on the Colorado River, so its ability to divert water is dependent on downstream flow levels. In addition to time priority, the River Permit includes a special condition for environmental purposes that limits diversion to fifty-five percent of the flow in excess of 300 cfs at its existing diversion point. Also, STPNOC's ability to divert is affected particularly by water quality at the diversion point, as diminished downstream flow allows upstream intrusion of brackish water from the Gulf of Mexico.

STPNOC and its predecessor entities have engaged in prior proceedings related to LCRA water management plans, including the South Texas Project project manager's participation as a named party in the adjudicative public hearing related to adoption of the first plan in 1989. Most recently, and as evidenced by the Texas Commission on Environmental Quality's January 12, 2010, agenda notice,

STPNOC was one of the five hearing requesters who participated in the Agreed Order that adopted the current, 2010 water management plan. STPNOC participated actively also in the extensive stakeholder process that convened during development of the specific plan at issue in Application No. 5838A.

The matters at issue in Application No. 5838A, including provisions for allocating stored supplies for LCRA firm customers, LCRA's ability to meet its obligations under the Amended and Restated Contract, and the impact on maintaining downstream water quantity and salinity levels at STPNOC's diversion point, are integral to STPNOC's water supply and therefore to electric power for millions of Texans.

Conditions in Proposed Permit which may Satisfy Requestor's Concerns:

At this time, STPNOC has not identified any changes or new conditions that it seeks in the proposed water management plan, either as requested by LCRA in Application No. 5838A or as recommended by the Texas Commission on Environmental Quality's Executive Director. STPNOC intends to focus its participation as a party in proceedings on the application to those issues that are necessary in order to protect its interests under its Settlement Agreement with LCRA, the River Permit, and its Amended and Restated Contract with LCRA.

Conclusion:

In consideration of the matters above, STPNOC requests a contested case hearing and asks that the Commission recognize its party status in negotiations and proceedings on Application No. 5838A.

Respectfully submitted,

Peter G. Nemeth

cc: Ms. Peggy Travis
Mr. Michael Murray
Mr. Dave Rencurrel

Ms. Lyn Clancy (for LCRA)

CRAIN
CATON
&
JAMES

A PROFESSIONAL CORPORATION
ATTORNEYS AND COUNSELORS

TELEPHONE: 713.658.2323
FACSIMILE: 713.658.1921

17TH FLOOR
FIVE HOUSTON CENTER
1401 MCKINNEY STREET
HOUSTON, TEXAS 77010-4035

FAX COVER SHEET

To:	Bridget C. Bohac Chief Clerk	**Fax No.:**	512-239-3311
CC:	Shareholder		
From:	Peter Nemeth	**NUMBER OF PAGES:** (Including Cover Page):	4
Date:	May 28, 2013		
C/M#	STPNOC 81841-1		
Subject:	Request for Contested Case Hearing re Lower Colorado River Authority		

Original will follow by:

☒ Regular Mail ☐ Overnight Delivery ☐ Certified Mail ☐ Hand Delivery

Comments:

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
2013 MAY 28 AM 11: 25
CHIEF CLERKS OFFICE

PLEASE CHECK TRANSMISSION AFTER THE LAST PAGE.
IF YOU ARE NOT RECEIVING CLEARLY, OR IF YOU
HAVE ANY PROBLEMS WITH THE TRANSMISSION,
PLEASE CALL US BACK IMMEDIATELY AT 713.658.2323.

THE ENCLOSED MATERIAL IS INTENDED FOR THE RECIPIENT NAMED ABOVE AND UNLESS OTHERWISE EXPRESSLY INDICATED, IS CONFIDENTIAL AND PRIVILEGED INFORMATION. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION OR COPY OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE IMMEDIATELY NOTIFY US BY TELEPHONE AND RETURN THE ORIGINAL MESSAGE TO US AT THE ABOVE ADDRESS VIA THE U.S. POSTAL SERVICE.

Marisa Weber

From:	PUBCOMMENT
Sent:	Tuesday, May 28, 2013 2:33 PM
To:	PUBCOMMENT-OCC2
Subject:	FW: Public comment on Permit Number WRPERM 5838
Attachments:	Request for Contested Case Hearing 5-23-13.pdf

H

WR 82315

From: PUBCOMMENT-OCC
Sent: Tuesday, May 28, 2013 11:20 AM
To: PUBCOMMENT
Subject: FW: Public comment on Permit Number WRPERM 5838

From: pgnemeth@STPEGS.COM [mailto:pgnemeth@STPEGS.COM]
Sent: Tuesday, May 28, 2013 10:38 AM
To: donotReply@tceq.state.tx.us
Subject: Public comment on Permit Number WRPERM 5838

REGULATED ENTY NAME 11405838000 WRPERM 5838 WATER MANAGEMENT PLAN

RN NUMBER: RN104252267

PERMIT NUMBER: WRPERM 5838

DOCKET NUMBER:

COUNTY: BASTROP, BURNET, COLORADO, FAYETTE, GILLESPIE, LAMPASAS, LLANO, MASON, MATAGORDA, SAN SABA, TRAVIS, WHARTON, WILLIAMSON

PRINCIPAL NAME: LOWER COLORADO RIVER AUTHORITY

CN NUMBER: CN600253637

FROM

NAME: Peter G Nemeth

E-MAIL: pgnemeth@STPEGS.COM

COMPANY: STP Nuclear Operating Company

ADDRESS: PO BOX 289
WADSWORTH TX 77483-0289

PHONE: 7137528665

FAX: 7134257965

COMMENTS: See attached Request for Contested Case Hearing

Nuclear Operating Company
South Texas Project Electric Generating Station P.O. Box 289 Wadsworth, Texas 77483

Peter G. Nemeth
Secretary and General Counsel

May 23, 2013

Via Facsimile: 512-239-3311
Electronic Transmission: http://www.tceq.state.tx.us/about/comments.html

Ms. Bridget C. Bohac
Chief Clerk
TCEQ – MC 105
P.O. Box 13087
Austin, Texas 78711-3087

Re: **Request for Contested Case Hearing regarding Lower Colorado River Authority Water Rights Application No. 5838A (Water Management Plan) Permit No. WRPERM 5838**

Dear Ms. Bohac:

By this letter, STP Nuclear Operating Company ("STPNOC") requests a contested case hearing regarding Water Rights Application No. 5838A, submitted by the Lower Colorado River Authority ("LCRA"). Application No. 5838A proposes a new water management plan affecting the use of water from the Colorado River generally and pursuant to Certificates of Adjudication Nos. 14-5478 and 14-5482 specifically.

Requestor Information:

STP Nuclear Operating Company
ATTN: Peter G. Nemeth, General Counsel
P.O. Box 289
Wadsworth, Texas 77483
Telephone: (361) 972-8017
Facsimile: (713) 425-7965
Email: pgnemeth@STPEGS.COM

STPNOC makes this request for contested case hearing in its capacity as the operator of the South Texas Project Electric Generating Station (the "South Texas Project") on its own behalf and on behalf of the STP Owners (NRG South Texas LP, the City of San Antonio, acting by and through its City Public Service Board, and the City of Austin). STPNOC is a Texas non-profit corporation that was created and is financed by the STP Owners to maintain and operate the South Texas Project in Matagorda County, Texas.

Applicant Information:

Lower Colorado River Authority
P.O. Box 222
Austin, Texas 78767-0220
Permit No. WRPERM 5838

STPNOC's Standing to Request Hearing:

STPNOC and the STP Owners are affected persons with personal justiciable interests in the matters put at issue by Application No. 5838A that are not common to the general public. STPNOC has standing to make this request and to participate as a party in settlement negotiations and in hearing, as contemplated in Texas Water Code Section 5.115 and in Chapter 55 of the Texas Commission on Environmental Quality's rules.

The South Texas Project is one of the newest and largest nuclear power facilities in the nation. The two generating units at the South Texas Project produce 2,700 megawatts of carbon-free electricity, providing clean energy to two million Texas homes. Water for cooling is a necessary component of the power generation process at the South Texas Project. Certificate of Adjudication No. 14-5437, as amended, which STPNOC refers to as the "River Permit," authorizes STPNOC and LCRA to divert and use up to 102,000 acre-feet of water per year from the Colorado River. The River Permit further authorizes STPNOC to maintain an existing 202,600 acre-foot capacity off-channel reservoir and a secondary reservoir.

STPNOC's River Permit water supply is backed-up by a "firm water" contract with LCRA. In conjunction with the settlement of litigation, STPNOC entered an Amended and Restated Contract with LCRA, effective as of January 1, 2006, under which the River Permit is dedicated for STPNOC's sole use. The contract also continues LCRA's obligation to make water available to STPNOC from stored supplies according to a defined water delivery plan. By this contract, STPNOC also is a "firm-water" customer within the meaning of LCRA's proposed water management plan. The proposed water management plan includes provisions necessary to accommodate the STPNOC contractual water delivery plan in operations and management of LCRA's upstream reservoirs.

STPNOC's diversions under both the River Permit and the Amended and Restated Contract currently are from the furthest downstream point authorized on the Colorado River, so its ability to divert water is dependent on downstream flow levels. In addition to time priority, the River Permit includes a special condition for environmental purposes that limits diversion to fifty-five percent of the flow in excess of 300 cfs at its existing diversion point. Also, STPNOC's ability to divert is affected particularly by water quality at the diversion point, as diminished downstream flow allows upstream intrusion of brackish water from the Gulf of Mexico.

STPNOC and its predecessor entities have engaged in prior proceedings related to LCRA water management plans, including the South Texas Project project manager's participation as a named party in the adjudicative public hearing related to adoption of the first plan in 1989. Most recently, and as evidenced by the Texas Commission on Environmental Quality's January 12, 2010, agenda notice,

STPNOC was one of the five hearing requesters who participated in the Agreed Order that adopted the current, 2010 water management plan. STPNOC participated actively also in the extensive stakeholder process that convened during development of the specific plan at issue in Application No. 5838A.

The matters at issue in Application No. 5838A, including provisions for allocating stored supplies for LCRA firm customers, LCRA's ability to meet its obligations under the Amended and Restated Contract, and the impact on maintaining downstream water quantity and salinity levels at STPNOC's diversion point, are integral to STPNOC's water supply and therefore to electric power for millions of Texans.

Conditions in Proposed Permit which may Satisfy Requestor's Concerns:

At this time, STPNOC has not identified any changes or new conditions that it seeks in the proposed water management plan, either as requested by LCRA in Application No. 5838A or as recommended by the Texas Commission on Environmental Quality's Executive Director. STPNOC intends to focus its participation as a party in proceedings on the application to those issues that are necessary in order to protect its interests under its Settlement Agreement with LCRA, the River Permit, and its Amended and Restated Contract with LCRA.

Conclusion:

In consideration of the matters above, STPNOC requests a contested case hearing and asks that the Commission recognize its party status in negotiations and proceedings on Application No. 5838A.

Respectfully submitted,

Peter G. Nemeth

cc: Ms. Peggy Travis
Mr. Michael Murray
Mr. Dave Rencurrel

Ms. Lyn Clancy (for LCRA)

Marisa Weber

From: PUBCOMMENT
Sent: Wednesday, May 08, 2013 8:18 AM
To: PUBCOMMENT-OCC2
Subject: FW: Public comment on Permit Number WRPERM 5838

H

From: PUBCOMMENT-OCC
Sent: Wednesday, May 08, 2013 7:23 AM
To: PUBCOMMENT
Subject: FW: Public comment on Permit Number WRPERM 5838

WR 82315

From: patport@gmail.com [mailto:patport@gmail.com]
Sent: Tuesday, May 07, 2013 6:47 PM
To: donotReply@tceq.state.tx.us
Subject: Public comment on Permit Number WRPERM 5838

REGULATED ENTY NAME 11405838000 WRPERM 5838 WATER MANAGEMENT PLAN

RN NUMBER: RN104252267

PERMIT NUMBER: WRPERM 5838

DOCKET NUMBER:

COUNTY: BASTROP, BURNET, COLORADO, FAYETTE, GILLESPIE, LAMPASAS, LLANO, MASON, MATAGORDA, SAN SABA, TRAVIS, WHARTON, WILLIAMSON

PRINCIPAL NAME: LOWER COLORADO RIVER AUTHORITY

CN NUMBER: CN600253637

FROM

NAME: Patricia P Porter

E-MAIL: patport@gmail.com

COMPANY:

ADDRESS: 13303 MANSFIELD DR
AUSTIN TX 78732-1728

PHONE: 5127974531

MW

FAX:

COMMENTS: I request a contested case hearing on this application. My family and I will be seriously affected by the proposed amendments to Permit 5838.The value of our homestead will diminish more than 50% from its current value and would be very difficult to sell. My reason for purchasing this property was to enjoy panoramic lake views and make a long-term investment in lake view property that would increase or as a worst case maintain its worth. The implementation of Permit 5838 will have a devastating impact on Austin's economy and will substantially reduce the area's quality of life.

SUSAN DENN & ROBERT SCHMIDT
3422 SOUTH LAMAR BLVD.
AUSTIN, TEXAS 78704

May 8, 2013

WR 02315

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
2013 MAY -9 PM 3:08
CHIEF CLERKS OFFICE

Ms. Bridget C. Bohac, Chief Clerk
Office of the Chief Clerk (MC 105)
Texas Commission on Environmental Quality
P. O. Box 13087
Austin, TX 78711-3087

Re.: Comments and Request for Contested Case Hearing on Application to Amend the LCRA Water Management Plan;
Application No. 5838A;
TCEQ Water Rights Permit No. 5838

Dear Ms Bohac:

This letter is to send to you and the Commissioners our comments on the LCRA's application to amend its Water Management Plan, and requests a contested case public hearing on this application. In addition to being City of Austin residents at the above address, we also own seven acres of Lake Travis waterfront property located at 14901 Arrowhead Drive in Volente.

We respectfully request that serious consideration be given to the following recommendations:

1. Immediately impose a minimum storage level of 850,000 acre-feet, rather than the current 600,000 acre-feet.
2. Keep the current TCEQ Emergency Order in effect.
3. Require the LCRA to utilize the hydrologic data from 2009 to the present to immediately update the hydrology data base of the Colorado River Basin, and to use this data to immediately update actual and projected demands for water.
4. Encourage the LCRA to immediately begin working with stakeholders on a new Water Management Plan that properly protects current firm users in these times of drought, properly considers the significantly lower inflows to the Highland Lakes, and provides true and fair incentives for conservation by all parties, both large and small, residential and commercial.

Thank you so much for your kind and careful consideration of these very vital matters.

REVIEWED
MAY 09 2013
By

Yours very truly,

Susan Denn Robert Schmidt

Susan Denn and Robert Schmidt

Denn and Schmidt
3422 South Lamar Blvd.
Austin, TX 78704

AUSTIN TX 787
RIO GRANDE DISTRICT
08 MAY 2013 PM 2 L

USA | forever

RECEIVED
MAY 09 2013
TCEQ MAIL CENTER
AJ

Ms. Bridget C. Bohac, Chief Clerk
Office of the Chief Clerk (MC 105)
Texas Commission on Environmental Quality
P. O. Box 13087
Austin, TX 78711-3087

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
2013 MAY -9 PM 3:08
CHIEF CLERKS OFFICE

78711308787

Melissa Chao

From: Haskell Simon <aquainfo@sbcglobal.net>
Sent: Friday, May 24, 2013 6:18 PM
To: CHIEFCLK
Cc: Gail Janssen
Subject: Fw: TCEQ Contested Case Hearing HLS
Attachments: TCEQ Contested Case Hearing HLS 0524013 060144.pdf

WR 82315

Attached please find my Request for a **Contested Case Hearing** regarding the Application to Amend the LCRA Water Management Plan, Application #5838A.

Haskell L. Simon
P. O. Box 106
Bay City, Texas 77404
Phone/Fax 979/245-1708
aquainfo@sbcglobal.net

REVIEWED
MAY 29 2013
By

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
2013 MAY 28 AM 8:38
CHIEF CLERKS OFFICE

Haskell L. Simon
P. O. Box 106
Bay City, Texas 77404-0106

979-245-1708 Telephone
979-245-1708 Facsimile
aquainfo@sbcglobal.net

Office of the Chief Clerk
TCEQ – MC 105
P. O. Box 13087
Austin, Texas 78711-3087

RE: Request for Contested Case Hearing on the Application to Amend the Lower Colorado River Authority Water Management Plan, Application No. 5838A, Permit No. 5838.

REVIEWED
MAY 29 2013
By_____

My name and contact information is:
Haskell L. Simon
P. O. Box 106
Bay City, Texas 77404
Phone/FAX 979-245-1708
aquainfo@sbcglobal.net

I am requesting the Contested Case Hearing to address provisions in the Proposed Amendment that will have serious detrimental effects on my ability to utilize my land for the production of rice. The land has been in production for almost one hundred (100) years and has been dependent on having water from the Colorado River to support the crops. For over twenty (20) years I have been a customer of the Lower Colorado River Authority through annual water supply contracts. This has enabled crop production on an annual basis and enhances the value of the land. Also Lower Colorado River Authority canals are located on my land.

The proposed amendment constitutes substantial deviations from the prior Water Management Plan which it is to supplant. Actually, the Amendment represents major changes in substance and intent from all previous versions of the Water Management Plan.

The long term beneficial use of waters from the Colorado River as provided by the conditions of the Water Right held by the Lower Colorado River Authority may be curtailed or indeed eliminated by implementation of the Amended Plan. Being deprived of the water supply will be financially devastating.

I ask the Commissioners to consider and approve my request for a Contested Case Hearing.

Sincerely,

Haskell L. Simon

HLSmgj/File TCEQ Contested Cast Hearing Request/Locator Desktop/HLS Folder/HPP5/Friday May 24 2013/172041

Melissa Chao

From:	Haskell Simon <aquainfo@sbcglobal.net>
Sent:	Friday, May 24, 2013 6:09 PM
To:	CHIEFCLK
Cc:	Gail Janssen
Subject:	Fw: TCEQ Contested Case Hearing Request HLS 05/24/2013
Attachments:	TCEQ Contested Cast Hearing Request HLS 05242013 172041.doc

WR 82315

Attached is my request for a Contested Case Hearing with the Texas Commission on Environmental Quality regarding the Application to Amend the LCRA Water Management Plan Application #5838A.

Haskell L. Simon
P. O. Box 106
Bay City, Texas 77404
Phone/Fax 979-245-1708
Email aquainfo@sbcglobal.net

REVIEWED
MAY 29 2013
By

Thanx,

Haskell

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
2013 MAY 28 AM 8:38
CHIEF CLERKS OFFICE

Haskell L. Simon
P. O. Box 106
Bay City, Texas 77404-0106

979-245-1708 Telephone
979-245-1708 Facsimile
aquainfo@sbcglobal.net

Office of the Chief Clerk
TCEQ – MC 105
P. O. Box 13087
Austin, Texas 78711-3087

RE: Request for Contested Case Hearing on the Application to Amend the Lower Colorado River Authority Water Management Plan, Application No. 5838A, Permit No. 5838.

My name and contact information is:
Haskell L. Simon
P. O. Box 106
Bay City, Texas 77404
Phone/FAX 979-245-1708
aquainfo@sbcglobal.net

I am requesting the Contested Case Hearing to address provisions in the Proposed Amendment that will have serious detrimental effects on my ability to utilize my land for the production of rice. The land has been in production for almost one hundred (100) years and has been dependent on having water from the Colorado River to support the crops. For over twenty (20) years I have been a customer of the Lower Colorado River Authority through annual water supply contracts. This has enabled crop production on an annual basis and enhances the value of the land. Also Lower Colorado River Authority canals are located on my land.

The proposed amendment constitutes substantial deviations from the prior Water Management Plan which it is to supplant. Actually, the Amendment represents major changes in substance and intent from all previous versions of the Water Management Plan.

The long term beneficial use of waters from the Colorado River as provided by the conditions of the Water Right held by the Lower Colorado River Authority may be curtailed or indeed eliminated by implementation of the Amended Plan. Being deprived of the water supply will be financially devastating.

I ask the Commissioners to consider and approve my request for a Contested Case Hearing.

Sincerely,

Haskell L. Simon

Tracie Donnelly

From: Haskell Simon <aquainfo@sbcglobal.net>
Sent: Tuesday, December 03, 2013 3:18 PM
To: Kathy Alexander
Cc: Tracie Donnelly; Gail Janssen
Subject: Re: Status of the Announced TCEQ Evaluation of the Proposed Changes to the LCRA Water Management Pan (WMP)

WR 82315

Thank you Kathy.
I do appreciate your reply, especially at this time with all of the demands on your office.

Thanx, Haskell

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
2014 APR -7 PM 2:42
CHIEF CLERKS OFFICE

----- Original Message -----
From: Kathy Alexander
To: Haskell Simon ; WRAS
Cc: Tracie Donnelly ; Gail Janssen
Sent: Tuesday, December 03, 2013 12:33 PM
Subject: RE: Status of the Announced TCEQ Evaluation of the Proposed Changes to the LCRA Water Management Pan (WMP)

Haskell,
We have completed the data collection phase of the project and are now compiling the data. We did receive your comments and will be considering all of the comments as we proceed with the project. Let me know if you have any additional questions or comments.
Kathy

Kathy Alexander, Ph.D.
Technical Specialist
Water Availability Division
Texas Commission on Environmental Quality
MC 160, P.O. Box 13087
Austin, Texas 78711-3087
(512) 239-0778

REVIEWED
APR 08 2014
By

From: Haskell Simon [mailto:aquainfo@sbcglobal.net]
Sent: Sunday, November 10, 2013 7:52 PM
To: WRAS; Kathy Alexander
Cc: Tracie Donnelly; Gail Janssen
Subject: Status of the Announced TCEQ Evaluation of the Proposed Changes to the LCRA Water Management Pan (WMP)

Dear Dr. Alexander,
At the Stakeholder Meeting on June 26, 2013 you announced that the TCEQ determined that further evaluation of the submitted application from the LCRA for proposed changes to the LCRA WMP would be appropriate and that the TCEQ would accept comments by July 31, 2013.

Prior to that, on June 3, 2013 notification was sent to Rebecca Motal from Executive Zac Covar and included an approximate timeline for the further evaluation:
Data collection (including a stakeholder meeting)-3 months
Compile data-4 months
Reports and modeling-3 months

I will appreciate an update on the status of the evaluation of the indicated segments Also, the attachment includes comments that I forwarded and I will further appreciate confirmation that they have been entered for the record.

Thanx, Haskell Simon

Tracie Donnelly

From:	Haskell Simon <aquainfo@sbcglobal.net>
Sent:	Sunday, November 10, 2013 7:52 PM
To:	WRAS; Kathy Alexander
Cc:	Tracie Donnelly; Gail Janssen
Subject:	Status of the Announced TCEQ Evaluation of the Proposed Changes to the LCRA Water Management Pan (WMP)
Attachments:	Scan0062.pdf

WR 82315

Dear Dr. Alexander,

At the Stakeholder Meeting on June 26, 2013 you announced that the TCEQ determined that further evaluation of the submitted application from the LCRA for proposed changes to the LCRA WMP would be appropriate and that the TCEQ would accept comments by July 31, 2013.

Prior to that, on June 3, 2013 notification was sent to Rebecca Motal from Executive Zac Covar and included an approximate timeline for the further evaluation:

Data collection (including a stakeholder meeting)-3 months
Compile data-4 months
Reports and modeling-3 months

I will appreciate an update on the status of the evaluation of the indicated segments Also, the attachment includes comments that I forwarded and I will further appreciate confirmation that they have been entered for the record.

Thanx, Haskell Simon

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
2014 APR -7 PM 2:42
CHIEF CLERKS OFFICE

REVIEWED
APR 08 2014
By

Haskell Simon

From: "Haskell Simon" <aquainfo@sbcglobal.net>
To: "Kathy Alexander" <wras@tceq.texas.gov>; "Kathy Alexander" <kalexand@tceq.state.tx.us>
Cc: "Gail Janssen" <rella6@sbcglobal.net>
Sent: Wednesday, July 31, 2013 5:14 PM
Subject: Fw: LCRAWMP-#5838A

In response to your notice for additional comments to be submitted by July 31, 2013, I am offering the following:

The reasons stated that further evaluation of the Application are appropriate due to information raised from the public comments and for consideration for changes in stream flow data. It was further indicated that recent drought experience may also be considered in evaluating basic model assumptions. Unfortunately this approach does not take into account the real basics that must be considered regarding adoption of amendments to the LCRA WMP.

1. There are numerous references to mandate that the LCRA has to all interests in the District. A review of historical documents, including the origination legislation, enabling legislation, subsequent amendments and modifications. Before the Adjudication Final Judgment Decree of April 20, 1988, there was no reference to "winners" and "losers", rather all water user interests were to be treated equally.

2. The 1985 Adjudication diverted from the original mandate by establishing two main categories as recipients for allocations of water, Firm and Interruptible. With the provision to curtail "Interruptible" supplies in favor to the "Firm" demands. This is certainly in opposition to the prior obligations of the LCRA. To arbitrarily and unilateraterally deprive one element to favor another is not historically or legally justifiable.

3. One of the documents that did address that LCRA has an obligation to the downstream interests is the 1937 contract included in the Adjudication and clearly indicated the obligation to provide water without reservation or deference to other demands.

4. The permits that provide for water to the lower basin (LCRA's Gulf Coast Irrigation Division) were legitimately and legally acquired by substantial and recorded use to at least 1900.

5. Interpretations that have resulted in curtailments or indeed "cutoffs", as is contemplated by revisions to the WMP interpretation are obviously flawed in light of the above statements. Indeed, some provisions in the Adjudication itself must be reviewed.

6. Therefore, before any WMP revisions are considered, a comprehensive review of the Adjudication and how it is interpretated must be accomplished to insure that

all of the requirements including federal documents, legal, historical, and legislated mandates are being addressed in the interests of achieving a proper allocation from the LCRA system.

Haskell L. Simon
P. O. Box 106
Bay City, TX 77404-0106
Telephone: 979-245-1708 Phone/Fax/Recorder
aquainfo@sbcglobal.net

Bryan W. Shaw, Ph.D., *Chairman*
Carlos Rubinstein, *Commissioner*
Toby Baker, *Commissioner*
Zak Covar, *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

June 3, 2013

Rebecca S. Motal
General Manager
Lower Colorado River Authority (LCRA)
P.O. Box 220
Austin, Texas 78767-0220

RE: Application No. 5838A to Amend LCRA's Water Management Plan

Dear Ms. Motal:

The Texas Commission on Environmental Quality (TCEQ) has been actively working with LCRA on its review of the proposed changes to LCRA's Water Management Plan (WMP). The WMP is a complex document that attempts to balance many diverse interests, and I understand the importance of the WMP to all of the stakeholders in the basin. In addition, the Colorado River Basin is currently experiencing severe drought conditions with no immediate relief in sight.

The comment period for the WMP ended on May 28, 2013 and the TCEQ received many comments on the draft WMP provisions, as well as requests for contested case hearing. Based on public comment and continuing drought conditions, I have determined that further evaluation of your application is appropriate in order to take into account information raised in the public comments, such as recent streamflow data. Accordingly, I will not be forwarding the LCRA's application to the Commission for action on the hearing requests until the additional evaluation is complete. An approximate timeline for conducting this evaluation is provided below:

Data collection (including a stakeholder meeting) – 3 months
Compile data – 4 months
Reports and modeling – 3 months

TCEQ staff will continue to work with your staff as this phase of staff's evaluation proceeds. If you have any questions or would like to discuss further, please contact me at (512) 239-3900.

Sincerely,

Zak Covar
Executive Director

Bryan W. Shaw, Ph.D., *Chairman*
Carlos Rubinstein, *Commissioner*
Toby Baker, *Commissioner*
Zak Covar, *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

June 5, 2013

Dear Colorado River Basin Stakeholder:

The comment period for the Lower Colorado River Authority's (LCRA) application to amend its Water Management Plan (WMP) ended on May 28, 2013. In response to comments TCEQ received on the application, and in consideration of continuing severe drought conditions in the Colorado River Basin, the TCEQ has determined that further evaluation of the WMP is appropriate. The enclosed letter, dated June 3, 2013, communicated that intention to the LCRA.

TCEQ is holding a stakeholder meeting to obtain input from Colorado River Basin stakeholders in support of TCEQ's further evaluation of LCRA's WMP. We are specifically seeking data on diversions, water use, and lake operations; however any information is welcome.

The stakeholder meeting will be held on Wednesday, June 26, 2013, at 2:00 p.m., at TCEQ's Offices at 12100 Park Thirty-Five Circle, Building E, Room 201, Austin, Texas. If you are unable to attend the scheduled meeting, you may submit written comments by July 31, 2013. Address mailed comments to Kathy Alexander, Texas Commission on Environmental Quality, P.O. Box 13087, MC 160, Austin, Texas 78711-3087. Submit electronic comments to wras@tceq.texas.gov. Please include the text "LCRA WMP" in the subject line of your e-mail.

The stakeholder meeting will be webcast at http://www.texasadmin.com/tceqs.shtml. Please be aware that real player is required to view from this website. You may access the broadcast beginning at 1:45 p.m.

Please note that this is an opportunity to provide input to staff during the continued evaluation process. Responses will not be prepared for comments received at this meeting.

If you have any further questions, please contact Ron Ellis 512-239-1282 or at ron.ellis@tceq.texas.gov.

Sincerely,

L'Oreal W. Stepney, P.E., Deputy Director
Office of Water

Tracie Donnelly

From: Kathy Alexander
Sent: Wednesday, July 31, 2013 5:18 PM
To: Tracie Donnelly
Subject: FW: LCRAWMP-#5838A

REVIEWED
APR 08 2014
By

For the book

From: Haskell Simon [mailto:aquainfo@sbcglobal.net]
Sent: Wednesday, July 31, 2013 5:14 PM
To: WRAS; Kathy Alexander
Cc: Gail Janssen
Subject: Fw: LCRAWMP-#5838A

WR 82315

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
2014 APR -7 PM 2:41
CHIEF CLERKS OFFICE

In response to your notice for additional comments to be submitted by July 31, 2013, I am offering the following:

The reasons stated that further evaluation of the Application are appropriate due to information raised from the public comments and for consideration for changes in stream flow data. It was further indicated that recent drought experience may also be considered in evaluating basic model assumptions. Unfortunately this approach does not take into account the real basics that must be considered regarding adoption of amendments to the LCRA WMP.

1. There are numerous references to mandate that the LCRA has to all interests in the District. A review of historical documents, including the origination legislation, enabling legislation, subsequent amendments and modifications. Before the Adjudication Final Judgment Decree of April 20, 1988, there was no reference to "winners" and "losers", rather all water user interests were to be treated equally.

2. The 1985 Adjudication diverted from the original mandate by establishing two main categories as recipients for allocations of water, Firm and Interruptible. With the provision to curtail "Interruptible" supplies in favor to the "Firm" demands. This is certainly in opposition to the prior obligations of the LCRA. To arbitrarily and unilateraterally deprive one element to favor another is not historically or legally justifiable.

3. One of the documents that did address that LCRA has an obligation to the downstream interests is the 1937 contract included in the Adjudication and clearly indicated the obligation to provide water without reservation or deference to other demands.

4. The permits that provide for water to the lower basin (LCRA's Gulf Coast Irrigation Division) were legitimately and legally acquired by substantial and recorded use to at least 1900.

5. Interpretations that have resulted in curtailments or indeed "cutoffs", as is contemplated by revisions to the WMP interpretation are obviously flawed in light of the above statements. Indeed, some provisions in the Adjudication itself must be reviewed.

6. Therefore, before any WMP revisions are considered, a comprehensive review of the Adjudication and how it is interpretated must be accomplished to insure that all of the requirements including federal documents, legal, historical, and legislated mandates are being addressed in the interests of achieving a proper allocation from the LCRA system.

Haskell L. Simon
P. O. Box 106
Bay City, TX 77404-0106
Telephone: 979-245-1708 Phone/Fax/Recorder
aquainfo@sbcglobal.net

Marisa Weber

From: PUBCOMMENT-OCC
Sent: Monday, August 17, 2015 4:00 PM
To: PUBCOMMENT-WWW-WRAS; PUBCOMMENT-ELD; PUBCOMMENT-OCC2; PUBCOMMENT-OPIC
Subject: FW: Public comment on Permit Number WRPERM 5838
Attachments: CTWC Comments and Request for Hearing August 2015.pdf

H

From: cindy@smileylawfirm.com [mailto:cindy@smileylawfirm.com]
Sent: Monday, August 17, 2015 3:41 PM
To: DoNot Reply
Subject: Public comment on Permit Number WRPERM 5838

WR 82315

REGULATED ENTY NAME 11405838000 WRPERM 5838 WATER MANAGEMENT PLAN

RN NUMBER: RN104252267

PERMIT NUMBER: WRPERM 5838

DOCKET NUMBER:

COUNTY: BASTROP, BURNET, COLORADO, FAYETTE, GILLESPIE, LAMPASAS, LLANO, MASON, MATAGORDA, SAN SABA, TRAVIS, WHARTON, WILLIAMSON

PRINCIPAL NAME: LOWER COLORADO RIVER AUTHORITY

CN NUMBER: CN600253637

FROM

NAME: Cynthia Smiley

E-MAIL: cindy@smileylawfirm.com

COMPANY: Smiley Law Firm, P.C.

ADDRESS: 6000 SHEPHERD MOUNTAIN CV UNIT 2107
AUSTIN TX 78730-4910

PHONE: 5123947121

FAX:

COMMENTS: Central Texas Water Coalition's Comments and Request for Hearing

SMILEY
LAW FIRM, P.C.

6000 Shepherd Mountain Cove
Suite 2107
Austin, Texas 78730

Telephone: 512.394.7121
Facsimile: 512.394.7141
cindy@smileylawfirm.com

August 17, 2015

VIA ELECTRONIC SUBMITTAL

Ms. Bridget C. Bohac, Chief Clerk
Office of the Chief Clerk (MC 105)
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Re: Supplement to Comments and Request for Contested Case Hearing from Central Texas Water Coalition, Inc. Regarding Application of Lower Colorado River Authority to Amend its Water Management Plan; Application No. 5838A; TCEQ Water Rights Permit No. 5838

Dear Ms. Bohac:

This letter is intended to supplement the comments and request for a contested case hearing filed by the Central Texas Water Coalition, Inc. (CTWC) in May 2013 regarding the Lower Colorado River Authority's (LCRA's) Application to amend its Water Management Plan (WMP). This filing is timely made in response to the Texas Commission on Environmental Quality's (TCEQ's) July 8, 2015 Notice of the LCRA's Application to amend its WMP and the draft TCEQ Order approving the amendments to the WMP.

As detailed in CTWC's May 27, 2013 comments and request for a contested case hearing on the LCRA WMP Amendment Application, the LCRA's management of the water in Lakes Travis and Buchanan is critically important to the CTWC and its members. The LCRA Application now pending before the TCEQ has addressed and resolved a number of important and critical issues, as generally outlined in the most recent TCEQ Notice. In recent months, CTWC and others have provided additional comments and suggested clarifications, and CTWC is hopeful that its comments will be satisfactorily addressed by the Applicant and the TCEQ, so that the newest LCRA WMP may be immediately approved without the need for a contested case hearing.

Contact Information for CTWC

Please send all official communications and documents for CTWC relating to this proceeding to CTWC's legal counsel:

Cynthia C. Smiley
Shana L. Horton
Smiley Law Firm, P.C.
6000 Shepherd Mountain Cove #2107
Austin, Texas 78730
Phone number (512) 394-7121
Fax number (512) 394-7145
Email: cindy@smileylawfirm.com

Again, while CTWC remains hopeful that it will withdraw its hearing request, in the event that this matter is considered by the TCEQ Commissioners for a determination of affected persons and the commencement of a contested case hearing on this LCRA Application, we respectfully renew our request for a Commission determination that the CTWC is an affected person and that its request for a hearing should be granted. Thank you, and please contact me or Shana Horton at 512.394.7121 if there are any questions.

Sincerely,

Cynthia C. Smiley

Cynthia C. Smiley
Shana L. Horton
Smiley Law Firm, P.C.
On Behalf of the Central Texas Water Coalition, Inc.

cc: Ms. Jo Karr Tedder, CTWC

SMILEY
LAW FIRM, P.C.

6000 Shepherd Mountain Cove
Suite 2107
Austin, Texas 78730

Telephone: 512.394.7121
Facsimile: 512.394.7141
cindy@smileylawfirm.com

WR 82315

May 27, 2013

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
2013 MAY 28 PM 2:16
CHIEF CLERKS OFFICE

REVIEWED
MAY 29 2013
By GP

VIA ELECTRONIC SUBMITTAL
Ms. Bridget C. Bohac, Chief Clerk
Office of the Chief Clerk (MC 105)
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Re: Submittal of Comments and Request for Contested Case Hearing from Central Texas Water Coalition, Inc. Regarding Application of Lower Colorado River Authority to Amend its Water Management Plan; Application No. 5838A; TCEQ Water Rights Permit No. 5838

Dear Ms. Bohac:

This letter transmits the comments and request for a contested case hearing from the Central Texas Water Coalition, Inc. ("CTWC"), a Texas nonprofit corporation, in response to the Texas Commission on Environmental Quality's ("TCEQ's") notice (issued on April 15, 2013) of the Lower Colorado River Authority's ("LCRA's") Application to amend its Water Management Plan ("WMP") and the draft TCEQ Order approving the amendments to the LCRA's WMP. This letter is timely submitted, as it is filed within the 30-day deadline (adjusted by holidays) from the date of the last newspaper publication of the TCEQ's Notice of this Application.

I. Background Information on CTWC

The CTWC has approximately 600 members, including individuals, businesses, home/property owners associations, business associations, marinas, water supply entities, ranchers, conservation organizations, property owners, and local governments.

As stated in the Certificate of Formation filed with the Texas Secretary of State, the CTWC was formed to address water issues of the Lower Colorado River Basin and to advocate for the preservation and conservation of the Highland Lakes' water supply and water levels for health, safety and recreation, and for recognition of the Highland Lakes as an irreplaceable economic engine for the State of Texas. The CTWC holds a Certificate of Filing dated June 22, 2011 from the Texas Secretary of State's Office and operates under bylaws that recite the

purposes of this entity, which focus on water supply and water management in the Highland Lakes. A copy of the Certificate of Filing is attached as ATTACHMENT A.

In addition, CTWC is a §501(c)(4) nonprofit corporation that was organized to address water needs and issues of the Lower Colorado River Basin and advocate for the preservation and conservation of the Highland lakes' water supply and water levels for health, safety, and recreation, as well as supporting property values, related businesses and associated tax base and for recognition of the Highland Lakes as an irreplaceable economic engine for the State of Texas. As an entity formed to facilitate research and advocacy on the preservation of the Highland Lakes as an irreplaceable natural resource and economic driver, the CTWC also assists in regional efforts to market the Highland Lakes as a tourist destination, focusing on the opportunities for fishing, camping, boating, cabins, lodges, inns, and dining that draw hundreds of thousands of visitors to the Highland Lakes each year.

II. CTWC is an "Affected Person" and CTWC's Hearing Request Meets the Criteria for Granting a Contested Case Hearing

Under the TCEQ rules governing eligibility for a hearing, 30 Texas Administrative Code ("TAC") §55.205 lists three requirements that an association must meet in order to have standing to request a contested case hearing:

(1) One or more members of the group or association would otherwise have standing to request a hearing in their own right;
(2) The interests the group or association seeks to protect are germane to the organization's purpose; and
(3) Neither the claim asserted nor the relief requested requires the participation of the individual members in the case.

Standing of Individual Members. Many of the members of the CTWC have standing to request a hearing in their own right, and have taken the liberty to do so. These members include, but are not limited to, the Bonanza Beach Property Owner's Association ("POA") and the Windermere Oaks Water Supply Corporation, as a few examples. The Bonanza Beach POA represents property owners within its community located on the east side of Lake Buchanan. The POA has a firm water contract from LCRA for irrigation of its community park, and it has a boat ramp that is now more than 200 yards away from the water. The entity's contact information is as follows:

Mr. Frank Closner, President
Bonanza Beach POA
101 CR 138
Burnet, TX 78611
Phone: (210) 872-1185

The Windermere Oaks Water Supply Corporation provides drinking water to its community with surface water from Lake Travis that it purchases from LCRA as a firm water

customer. If the surface water elevation of Lake Travis drops another 10 feet, its intake pumps will cease to pump water. The entity's contact information is as follows:

Mr. Pat Mulligan, President
Windermere Oaks WSC
424 Coventry Road
Spicewood, TX 78669
Phone: (512) 573-0311

Other CTWC members include the Barton Creek Lakeside POA and the Barton Creek Lakeside Irrigation Company, which holds a firm water contract with LCRA for the purchase of water from Lake Travis. In this community, many waterfront residents hold individual domestic use contracts with LCRA, but the property along the coves has been without lake water for one to two years. The Irrigation Company was formed to support domestic irrigation needs within the larger community and to provide a backstop for the community's drinking water and fire protection supplies. If Lake Travis drops to elevation 618' above mean sea level, the pumps will no longer have water. In addition to these water supply issues, the community's marina is unusable, the boat ramp has been dry for over two years, and the waterfront property values have declined significantly. This entity's contact information is as follows:

Mr. David Batchelor, President
Barton Creek Lakeside Irrigation Company
P.O. Box 58
Spicewood, TX 78669
Phone: (512) 750-1980

The CTWC membership also includes businesses, such as the Vanishing Texas River Cruise, a local business on the upper reaches of Lake Buchanan that operates a bird-watching and native wildlife tour for visitors to observe bald eagles, ducks, and other waterfowl and wildlife around the lake. As a result of the low lake levels, this business has experienced a dramatic decline. The Thunderbird Resort, also located on Lake Buchanan, reports that its lakefront property is now about 400 yards away from any water. Even more devastating has been the experience of businesses such as the Hi-Line Lake Resort on Lake Buchanan, which gained a reputation as an attractive waterfront location for guests, but which faced bankruptcy as its guests departed and its revenue declined below a subsistence level.

In addition to the CTWC members highlighted above, the marinas and boat slips on Lakes Buchanan and Travis have faced serious challenges to their continuing existence. According to the LCRA website, Lake Buchanan was about 29 feet below conservation pool and Lake Travis was about 53 feet below conservation pool on May 24, 2013. The Marina Association of Lake Travis, a CTWC member, reports that the lower lake levels have resulted in reduced revenues and increased expenses for these businesses, and some have paid hundreds of thousands of dollars to re-configure and re-locate these structures as the water recedes. The marinas on Lake Travis pay almost $600,000 each year in marina fees and permits to the LCRA. These fees, which are based on the surface water "footprint" (in square footage) that the marina occupies, are flat fees that are assessed by LCRA regardless of whether the marina is in contact

with any water. On Lake Buchanan, LCRA continues to assess fees for boat dock facilities that have been without water for a year or more. Without any control over the lake levels, these businesses face financial hardships that are exacerbated by LCRA's continued assessment of fees, without reduction for current conditions, even when a facility is sitting on a dry lake bed. To further illustrate the conditions that now exist, visitors to Lake Travis have recently observed cars and trucks parked in the grounded boat slips near a restaurant. Such images bring an alarming reality to the severity of the conditions in this once thriving area of the lake. The contact information for this business association is as follows:

Mr. Doug Powell, President
Marina Association of Lake Travis
105 Calypso
Lakeway, TX 78734
Phone: (512) 266-1535

CTWC's Interests are Germane to its Purpose. Clearly, the interests that are affected by the pending LCRA Application governing its management of water in the Highland Lakes and the lower Colorado River system are the very same interests that CTWC was formed to protect and which it has been actively seeking to protect for several years. In other words, the CTWC's involvement in this proceeding, in which it seeks to assure the proper management of water in the Highland Lakes, is entirely germane to CTWC's mission of advocating for the conservation and preservation of the Highland Lakes' water supply and water levels, as demonstrated in its Certificate of Formation, its bylaws, and in its past and ongoing efforts to assure that the water resources of Central Texas are conserved and managed in accordance with the best available science and laws. Further, the focus on the economic interests of its members with businesses that rely upon reasonable levels of water in the lakes, such as lodges, marinas and tourist services, are well-within the mission statement of the CTWC. The economic benefits of the Highland Lakes and the negative impacts of declining lake levels are documented and validated in recent economic impact studies for the Upper Highland Lakes:

(http://www.burnetcountytexas.org/users/0006/HighlandLakes_Final_Report_092012.pdf)

and for Lake Travis:

(http://www.co.travis.tx.us/commissioners_court/lake_travis_economic_impact_report.asp).

CTWC Represents its Members. There is no participation required of CTWC's individual members for the claim asserted or the relief requested in this case. Proper management of the water in the Highland Lakes is a universal concern for its members, who support the CTWC leadership in their efforts to address and resolve these vital issues. Further, the attached Resolution memorializes the decision by CTWC's Board of Directors for CTWC to fully participate in any and all proceedings that arise out of the LCRA Application to amend its WMP (TCEQ Water Rights Permit No. 5838). The Board of Directors has chosen its President, Jo Karr Tedder, and whomever else she appoints, to act as the representative of CTWC. The Board of Directors has also chosen Smiley Law Firm, P.C. to act as legal representation for CTWC in these proceedings. The CTWC Board has taken specific action to file these comments

and request a hearing, as shown in the Board Resolution dated May 23, 2013 as ATTACHMENT B.

Upon review of the information presented above, we respectfully request the TCEQ's concurrence that the Central Texas Water Coalition, Inc. has successfully demonstrated its interests in this important proceeding on behalf of its members who are directly impacted by the LCRA's management of the water in the Highland Lakes in many different ways, including their increasingly limited ability to obtain water from Lakes Travis and Buchanan for drinking water, the increasingly limited operations of on-the-water businesses as the surface water area of Lakes Buchanan and Travis diminishes, the negative impacts on waterfront property values as lake levels decline, and the other impacts described in these comments. The CTWC seeks the TCEQ's determination that it is an affected person and its hearing request should be granted, so that it may become a party to the TCEQ proceedings on this LCRA Application.

III. Approval of the Proposed WMP Would Drive the Highland Lakes Into a Drought Worse than the Drought of Record and Bring Disastrous Consequences for Firm Water Customers and the Economic Strength of Central Texas

The CTWC provides the following list of comments on the proposed WMP and the draft TCEQ Order approving the WMP. Additional comments may be offered as this matter proceeds.

A. Comments on the LCRA Application to Amend its WMP

1. The proposed WMP fails to recognize and utilize the latest scientific data available on the hydrology and water availability of the lower Colorado River Basin.
    a. Average inflows to the lakes have significantly declined in recent years. The recent five-year average is approximately 450,000 acre-feet/year, while the LCRA appears to be assuming (and relying upon) an average historic inflow of over 1,200,000 acre-feet/year. This is a huge disconnect from reality, with serious consequences for water planning and management decisions.
    b. The Water Availability Modeling performed by the LCRA and submitted to the TCEQ included a hydrologic period of record from 1940-2009. The hydrologic period of record should be extended through 2012, and reasonable projections of future inflows should be included in all calculations and modeling on water availability.
    c. By omitting the hydrologic data from 2010, 2011 and 2012 in its calculations and modeling, the Applicant is proposing to move forward with critical water management decisions in the face of data showing that the hydrology of this river system experienced a downward shift in the natural flow regime that began in 1999. These concerns regarding the current drought and its implications have been validated in a technical report prepared by hydrologists at INTERA in Austin, Texas. A copy of the report, which includes

recommendations, is included as ATTACHMENT C to these comments.

2. The failure to recognize and utilize current hydrology and appropriate data leads to assumptions and conclusions with potentially devastating results.
    a. The calculation of the Combined Firm Yield for Lakes Travis and Buchanan is very likely to be significantly lower than the 439,155 acre-feet/year that LCRA has proposed in its WMP.
    b. Incorrectly assuming that the Combined Firm Yield is higher than the actual yield may allow LCRA to issue contractual commitments for firm water and potentially interruptible water sales that far exceed the water available for diversion and use under its water rights.
3. The proposed WMP makes inadequate provision for recovery of Lakes Buchanan and Travis, which were approximately 39% full on May 24, 2013, with a combined storage of 780,656 acre-feet. In view of the drought that now exists and is predicted by the State Climatologist to continue for as many as 10 more years, it is important to do everything possible to conserve the water in the lakes.
4. In order to assure 100% protection of firm customers under the terms of the court adjudication, the lakes should be allowed to refill and recover without the threat of releases of interruptible water. It is essential for the lakes to recover to a sustainable level prior to future releases of non-firm water from lake storage.
5. The proposed WMP includes drought triggers and drought responses that are inadequate to protect the firm customers in Central Texas and that rely upon outdated data and assumptions on the hydrology and water availability of the river system.
6. The proposed WMP lacks incentives for water conservation throughout the river basin.
    a. Firm customers in Central Texas may conserve water so that it will remain in lake storage, but LCRA, through this proposed WMP, is allowed to release that water downstream to its interruptible customers. Therefore, the conservation efforts are nullified by the same entity that encouraged the conservation efforts.
    b. The current policies for delivery of water to interruptible customers downstream seem to encourage downstream irrigation districts to continue diverting and using significant amounts of water from storage, without regard to drought conditions or other available water supplies, in order to maintain their current ways of doing business. A "use it or lose it" water policy has no place in today's water management practices.
    c. The huge disparity in LCRA's water rates, which are set at $151 per acre-foot for firm water (including domestic, municipal, and industrial customers) and $6.50 per acre-foot for interruptible water (primarily agricultural customers) appears to increase the risk that interruptible water may not be handled with the same degree of care as water that is 23 times more expensive. The rates that LCRA charges for firm and interruptible water appear to have implications for water use, and those implications should be considered as part of

the water planning and water management activities proposed by LCRA in its WMP.

7. It is clear that the current WMP has fatal flaws that need to be corrected, as LCRA applied to and obtained Emergency Orders from the TCEQ to amend the terms of its existing WMP in 2012 and in 2013. In an application filed with the TCEQ on May 6, 2013, LCRA requested an extension of the Emergency Order issued by the TCEQ on February 19, 2013. However, the proposed WMP and draft TCEQ Order do not resolve the fatal flaws that continue to exist in the WMP. By using outdated hydrology to calculate an inflated firm yield, the quantity of water available to satisfy firm demands is at risk.
8. LCRA's proposed WMP fails to reflect and adhere to the legal requirements set forth in its surface water rights issued by the TCEQ, as established in the adjudication process, including the Certificates of Adjudication for Lakes Buchanan and Travis and the Water Management Plan Permit issued in 1989.
9. The proposed WMP does not properly evaluate the minimum combined storage in Lakes Buchanan and Travis that would be necessary or appropriate to protect firm water customers either during a repeat of the Drought of Record or under worse conditions.
    a. This evaluation was required in the WMP approved by the TCEQ in January 2010.
    b. LCRA cannot make a proper evaluation of the minimum combined storage without utilizing current hydrology and updated calculations.
10. The WMP should use multi-year planning and incorporation of inflows to effectively manage multi-year drought cycles. The proposed WMP utilizes a one-year planning basis and relies on high historical rainfall and inflow assumptions that are not realistic and may lead to over-commitment of interruptible water.
11. Current drought trigger points may result in very short-sighted and potentially risky water management decisions. Decisions to release water for interruptible customers should be made with caution, so that decisions like the one that allowed LCRA to release 433,251 acre-feet of water from the lakes in the summer of 2011 to interruptible agricultural customers downstream, in the face of one of the most extreme droughts in history, will not be repeated. In 2011, the total inflow to the lakes was approximately 127,000 acre-feet, and LCRA's website reports that the 2013 inflows to the Highland Lakes are on pace with the record low inflows of 2011.
12. The WMP should be drafted so that it avoids water management decisions that result in a manmade water crisis, such as the release of water in 2011 that expedited the impending declaration of a drought worse than the Drought of Record.
13. As part of LCRA's re-evaluation of the firm yield and the combined storage in the lakes, LCRA should clarify its water accounting numbers so that all of the water that LCRA may release from lake storage, including the total possible volume of releases for environmental flows, for instream uses, and for satisfaction of the Garwood Irrigation District's contractual rights, are properly and unequivocally counted in the total volume of firm water commitments that LCRA is required to satisfy under its WMP prior to allowing releases of stored water for non-firm customers.

B. Comments on the Draft TCEQ Order Approving the Amended WMP

1. CTWC is opposed to any provision that would allow LCRA to continue under the current or the proposed WMP without immediately reviewing, incorporating, and recalculating the fundamental components of this document. As currently written, the draft TCEQ Order requires LCRA to submit an amendment to the WMP that includes updates to the hydrology of the Colorado River Basin and includes updated actual and projected firm demands. The CTWC strongly supports this requirement. However, we are vehemently opposed to any provision that would allow the LCRA to delay this work until January 30, 2020.
2. In addition to the TCEQ mandates to update the hydrology and the actual and projected firm demands, LCRA must also update its firm yield calculations. The Combined Firm Yield, which forms the foundation for many crucial decisions in the WMP, should be based upon the best available science and data. CTWC is concerned that the firm yield of the lakes is much lower than the number that LCRA has proposed in this WMP. While the Emergency Orders of 2012 and 2013 appear to be delaying the arrival of the 600,000 acre-feet combined storage number that can trigger the LCRA Board's declaration of a drought worse than the Drought of Record, the fundamental flaws in the underlying assumptions of the current and proposed WMPs lead to problems that cannot be overcome. Since a recalculation of the firm yield is a necessity, LCRA should be required to begin that process as soon as TCEQ's updated Water Availability Model is ready.
3. CTWC is opposed to any language within the Order that implies or suggests that the amended WMP will operate to supersede or replace any of the legal principles and foundations of the adjudication process or the legal obligations imposed upon LCRA under the terms of its existing water rights. While the WMP may describe reservoir operations and plans for water management within the Highland Lakes and the lower Colorado River system, we are opposed to any attempts to codify the LCRA's interpretation of its water rights in this WMP in a manner that does not comply with existing law.

C. Additional Comments and Concerns

1. Water sales under firm and interruptible contracts in the entire lower Colorado River system should be conducted with all due care, with strict attention to previous firm commitments, the priority of firm customers, the protection of public health and safety, and the availability of other potential water sources for new customers. Before the LCRA commits to significant quantities of new contracts, it should be required to immediately update the hydrology, the combined firm yield of the lakes, and the actual and projected firm demands.
2. In the immediate future, as the TCEQ updates its Water Availability Model and the TCEQ and the LCRA perform these critical updates to the hydrology, the firm yield, the combined storage, and the actual and projected firm demands, LCRA should be required to operate in a manner that assures 100% protection of its firm customers. It is important to note that the 850,000 acre-foot combined storage number in the existing Emergency Order appears to be insufficient to protect firm customers, as

shown in LCRA's recent projections that the lakes will experience a drought worse than the Drought of Record in the next few months.

IV. Contact Information for CTWC

Please send all official communications and documents for CTWC relating to this proceeding to CTWC's legal counsel:

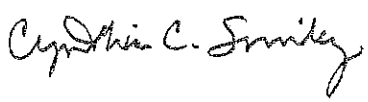
Cynthia C. Smiley
Smiley Law Firm, P.C.
6000 Shepherd Mountain Cove #2107
Austin, Texas 78730
Phone number (512) 394-7121
Fax number (512) 394-7145
Email: cindy@smileylawfirm.com

V. Conclusions and Recommendations

In closing, we appreciate the opportunity to provide these comments and participate in a hearing on the pending LCRA Application, as the management of the water in the Highland Lakes is critically important to the health and welfare of our members and the entire Highland Lakes region. As outlined above in our comments, the CTWC believes that the adoption of the proposed WMP would drive the Highland Lakes into a drought worse than the Drought of Record with disastrous consequences for all firm water customers and the future economic growth of Central Texas. The TCEQ should not allow the proposed WMP to move forward -- instead, the TCEQ should require the LCRA to manage the water in the Highland Lakes in a manner that will provide 100% protection to its firm water customers, while the TCEQ and the LCRA immediately undertake the updates, reviews, modeling and re-calculations to prepare a WMP that lacks the deficiencies identified in these comments.

We respectfully request the Commission's determination that the CTWC is an affected person and that its request for a contested case hearing should be granted. If you have any questions, please contact me at 512.394.7121.

Sincerely,



Cynthia C. Smiley
Smiley Law Firm, P.C.
On Behalf of the Central Texas Water Coalition, Inc.

ATTACHMENT A: Certificate of Formation for CTWC, Inc.
ATTACHMENT B: CTWC Board Resolution Dated May 23, 2013
ATTACHMENT C: INTERA Report Dated May 8, 2013

cc: Ms. Jo Karr Tedder, CTWC

Corporations Section
P.O.Box 13697
Austin, Texas 78711-3697

Hope Andrade
Secretary of State

Office of the Secretary of State

CERTIFICATE OF FILING
OF

CENTRAL TEXAS WATER COALITION, INC.
File Number: 801443582

The undersigned, as Secretary of State of Texas, hereby certifies that a Certificate of Formation for the above named Domestic Nonprofit Corporation has been received in this office and has been found to conform to the applicable provisions of law.

ACCORDINGLY, the undersigned, as Secretary of State, and by virtue of the authority vested in the secretary by law, hereby issues this certificate evidencing filing effective on the date shown below.

The issuance of this certificate does not authorize the use of a name in this state in violation of the rights of another under the federal Trademark Act of 1946, the Texas trademark law, the Assumed Business or Professional Name Act, or the common law.

Dated: 06/22/2011

Effective: 06/22/2011

Hope Andrade
Secretary of State

ATTACHMENT A

CENTRAL TEXAS WATER COALITION

RESOLUTION OF THE CENTRAL TEXAS WATER COALITION REGARDING THE APPLICATION BY THE LOWER COLORADO RIVER AUTHORITY TO AMEND ITS WATER MANAGEMENT PLAN; TCEQ WATER RIGHTS PERMIT NO. 5358; APPLICATION NO. 5838A

WHEREAS, the Central Texas Water Coalition, Inc. (CTWC) is a Texas nonprofit organization formed in 2011, with a Certificate of Filing issued by the Texas Secretary of State's Office on June 22, 2011;

WHEREAS, the CTWC's Certificate of Formation states that the CTWC was formed to address water issues of the Lower Colorado River Basin and to advocate for the preservation and conservation of the Highland Lakes' water supply and water levels for health, safety and recreation, and for recognition of the Highland Lakes as an irreplaceable economic engine for the State of Texas;

WHEREAS, the CTWC and its members are directly impacted by and deeply concerned about the Lower Colorado River Authority's (LCRA's) management of the water resources in the Highland Lakes and in the Colorado River Basin;

WHEREAS, the LCRA operates the reservoirs and manages the water in the Highland Lakes and the Colorado River basin under the terms of water rights issued by the Texas Commission on Environmental Quality (TCEQ);

WHEREAS, the LCRA's Water Management Plan is a TCEQ permit establishing LCRA's management of the water supplies in Lakes Buchanan and Travis;

WHEREAS, the CTWC and its members have reviewed the LCRA's recent Application for an amendment to its Water Management Plan (Application No. 5838A), along with the draft Order and other documents prepared by the TCEQ in response to LCRA's Application;

WHEREAS, the CTWC and its members are extremely concerned that they will suffer additional adverse effects if the TCEQ approves LCRA's requested amendments to its Water Management Plan, as currently drafted and proposed;

WHEREAS, the impacts of the current drought are very serious, and sometimes devastating, to many people in Central Texas, and the existing and proposed LCRA Water Management Plan is clearly not sufficient to satisfy LCRA's obligations toward its firm customers or to protect public health and welfare throughout the river basin;

WHEREAS, at its meeting on May 23, 2013, the CTWC Board voted to participate in the administrative and legal proceedings relating to LCRA's Application for an amendment of its Water Management Plan. More specifically, the CTWC Board voted to file written comments and request a

ATTACHMENT B

contested case hearing on the proposed TCEQ approval of LCRA's amended Water Management Plan, and to participate in the meetings and hearings relating to the LCRA Application;

NOW, THEREFORE, BE IT RESOLVED by the Board of the Central Texas Water Coalition that the CTWC is opposed to the draft TCEQ Order described in the TCEQ Notice of Application issued on April 15, 2013, and the CTWC Board has authorized its President (Jo Kerr Tedder) and her designees, as well as the Smiley Law Firm, to represent the CTWC in all of the proceedings relating to the draft TCEQ Order and LCRA's Water Management Plan.

DULY PASSED AND APPROVED ON MAY 23, 2013.

Jo Kerr Tedder

Jo Kerr Tedder

President, Central Texas Water Coalition

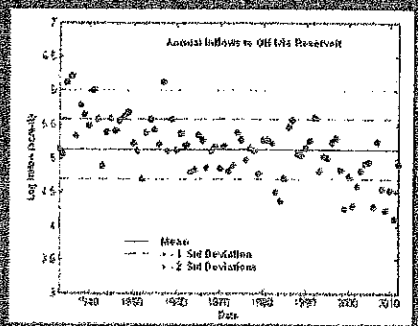
ATTEST:

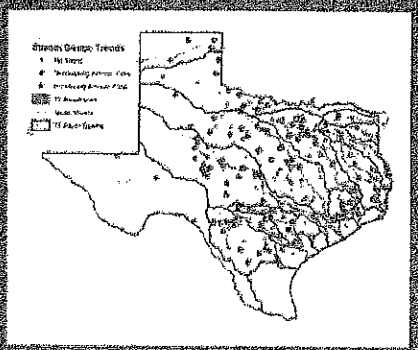
David Smiley

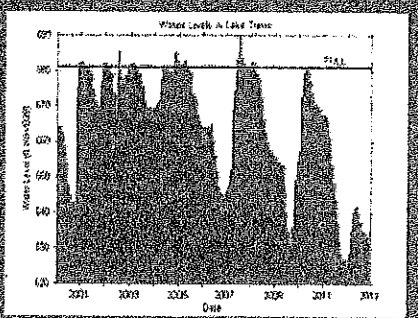
David Smiley

Secretary, Central Texas Water Coalition

Evidence for the Need to Change the Approach to Water Planning in the Lower Colorado Basin







Prepared For:

CENTRAL TEXAS WATER COALITION

Prepared By:

INTERA

Geosciences & Engineering

INTERA Incorporated
1812 Centre Creek Drive
Suite 300
Austin, TX 78754

May 8, 2013

Evidence for the Need to Change the Approach to Water Planning in the Lower Colorado Basin

Prepared for:

CENTRAL TEXAS WATER COALITION

Prepared by:

INTERA
Geosciences & Engineering

1812 Centre Creek Drive, Suite 300
Austin, TX 78754
512-425-2000

May 8, 2013

Barney Austin, PhD, PE
INTERA, Inc.
Texas Registered
Engineering Firm
F-4722

Abhishek Singh, PhD, EIT

Jordan Furnans, PhD, PE, PG
INTERA, Inc.
Texas Registered
Engineering Firm
F-4722

TABLE OF CONTENTS

TABLE OF CONTENTS i
EXECUTIVE SUMMARY 1
1.0 STREAMGAGE RECORDS SUGGEST A DRYING TREND 2
2.0 NATURALIZED FLOW DATA DEMONSTRATE A SHIFT IN HYDROLOGY 3
3.0 THE STOCHASTIC METHODS FOR SHORT-TERM FORECASTING NEED TO BE IMPROVED 5
4.0 A NEW DROUGHT OF RECORD IS IMMINENT AND THE FIRM YIELD OF THE HIGHLAND LAKES NEEDS TO BE REASSESSED 6
5.0 CONCLUSIONS AND RECOMMENDATIONS 7

EXECUTIVE SUMMARY

The State of Texas and the Lower Colorado River Authority (LCRA) base their water planning and management on historical flow records. Inflows to the Highland Lakes have been significantly lower in recent years, causing many to wonder if the use of historical hydrology is justified for decision-making. The Central Texas Water Coalition (CTWC) commissioned a rigorous study of historical Highland Lake inflows to determine if past hydrology is a good surrogate for future hydrology in the Lower Colorado River Basin.

Findings of the study demonstrate that the average annual naturalized inflow to the Highland Lakes in recent years is, statistically, significantly lower than the average annual naturalized inflow in historical records, indicating that there has been a downward shift in the natural flow regime. Furthermore, the firm yield of the Highland Lakes, which is the starting point for water availability studies and the Lower Colorado River Basin Water Management Plan (WMP), is likely lower than the number currently being used. This is corroborated by the fact that if dry conditions persist for just a few more months, the Lower Colorado Basin will be experiencing a new drought of record. These findings lead us to conclude that past hydrology is not a good proxy for future hydrology. As such, the recently submitted WMP, while a step in the right direction from the previous plan, is not appropriate for planning and allocation of flows in the basin and must be revised as soon as possible. The following sections describe the various analyses that lead to CTWC's assertions.

1.0 STREAMGAGE RECORDS SUGGEST A DRYING TREND

Recent low lake levels in Texas have caused many to speculate that we are experiencing a measurable trend in decreasing flows, not only into the Highland Lakes, but in many other parts of the state. Scientists often use the Mann-Kendall test to determine if there is a statistically significant trend in discrete hydrologic data. An analysis of active streamgages across the entire state with period of record greater than 50 years indicates that there is in fact a trend in decreasing flows across much of central, north and west Texas (see Figure 1). Furthermore, there may be a progression of these drier conditions from the northwest to the southeast of the state, as evidenced by lake levels across the region. For example in Lake Meredith, north of Amarillo, contents have been diminishing since 2000 and it no longer has any usable water. Other lakes closer to Central Texas have been shrinking since 2008. The areas in Figure 1 showing clusters of blue dots are expanding urban areas where impermeable surfaces can increase the amount of runoff and where wastewater discharge and water imported from other basins may result in more water for local streams and rivers.

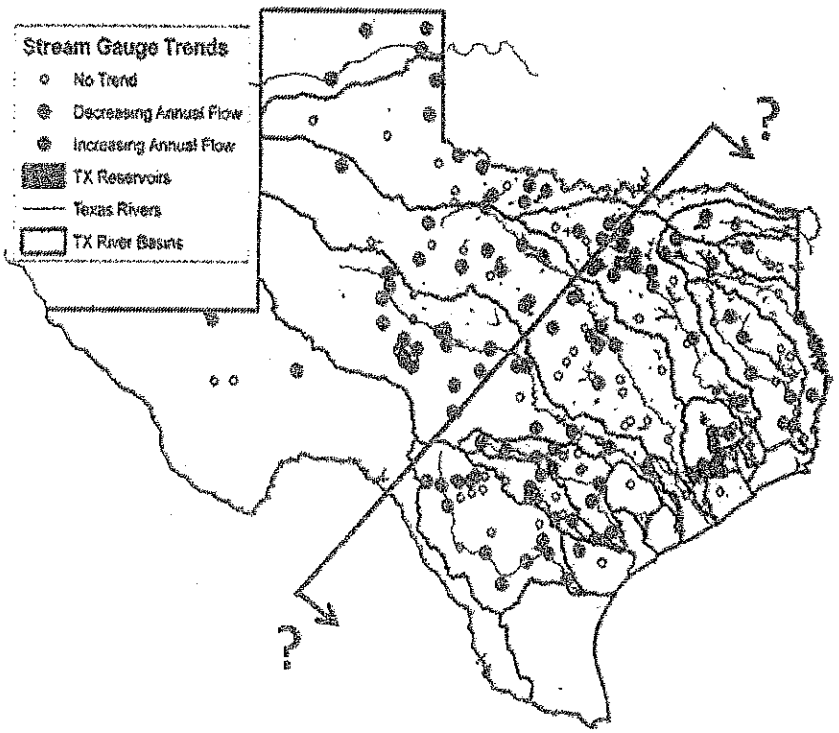


Figure 1. Trend in measured flow from active streamgages with period of record greater than 50 years

2.0 NATURALIZED FLOW DATA DEMONSTRATE A SHIFT IN HYDROLOGY

The fact that measured flows have been decreasing in some parts of the state is to be expected as reservoirs have been built and water diversions have steadily increased in the basin. For example, construction of Lake O.H. Ivie on the Colorado River above the Highland Lakes was completed in 1990, resulting in a reduction in the inflows to Lake Buchanan. To demonstrate that the hydrology has changed beyond what one would expect through increased use of water in the basin, naturalized flows (flows with anthropogenic impacts artificially removed) should be used and in fact these flows form the basis for water planning and water availability modeling in the state.

A time series of naturalized flows from 1940 through 1998 was developed for the TCEQ Water Availability Model (WAM). LCRA extended these naturalized flows through 2009 for the WMP and these data were obtained. Developing naturalized flows is a lengthy and tedious process and has been simplified here. For the purposes of this report, naturalized inflows to the Highland Lakes for the period 2010 through 2012 were estimated based on the largest ratio between measured and naturalized Highland Lake annual inflows from past records. This is a very conservative approach for the point we're making as it results in naturalized flows that are likely higher (wetter) than reality. The results (Figure 2) show that three of the past seven years (2006, 2008 and 2011) have been below the 5th percentile (two standard deviations below the mean). Furthermore, the naturalized inflows for 2011 were far below any other year in the hydrologic record and in fact the 5th percentile for low flows was not exceeded prior to 2006 – not even during the drought of record (1947 through 1956) or in 1963, which was the driest year on record until 2006.

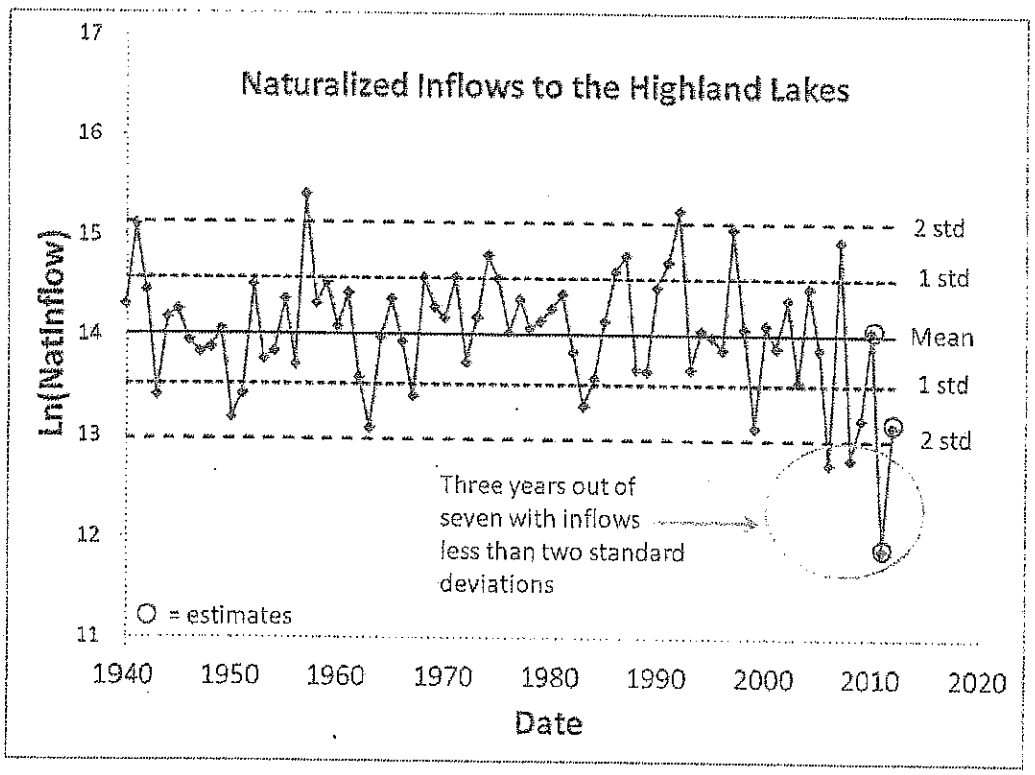


Figure 2 – Demonstration of the fact that naturalized inflows to the Highland Lakes have changed.

This analysis strongly suggests that we are in a hydrologic regime with naturalized flows for which the mean has shifted significantly lower than what we have seen historically (i.e., beyond natural variability). The statistics tell us that the hydrologic regime has changed, rather than the magnitude of that change. However, this past decade (2003 – 2012) has seen naturalized inflows that are on average more than 30 percent lower than the average for the period of record prior to that (1940 – 2002). The past five years (2008 – 2012) have seen average annual naturalized inflows more than 55 percent lower than the average for the period of record prior (1940 – 2007). Unfortunately there is nothing in the literature that suggests this dry weather will break anytime soon.

A persistence of these lower inflows would be crippling to our economy and place a real threat on water providers' ability to continue supplying water to their customers, even with strict water conservation measures in place. Preparation for that eventuality requires careful planning and a move away from a reliance on historical hydrologic data to a more realistic assessment of flows likely to occur over the next several years. We can no longer assume that the future will be like the past.

Possible reasons for this shift in hydrology include, but are not limited to:

- An increase in illegal diversions in the basin;
- An increase in withdrawals of water from the river alluvium that is not accounted for in the naturalization process;
- Changes in the vegetation of the watershed and riparian areas, such as the proliferation of Salt Cedar and Ashe Juniper;
- The construction of stock tanks, amenity ponds and flood control structures in the watershed; and
- Climate variability.

While a better understanding of the reason(s) that the Lower Colorado basin is experiencing a shift in hydrology is desirable, answering that question would require a lot of research and the point of this document is to highlight the fact that the hydrology *has* changed, not why it has changed. Therefore the approach used for long-range water supply planning must change as well.

3.0 THE STOCHASTIC METHODS FOR SHORT-TERM FORECASTING NEED TO BE IMPROVED

The LCRA has been applying stochastic methods to water supply planning and operations for over twenty years. A stochastic process is one whose predictive behavior is not completely known and is determined both by the process' predictable and random factors. Following the drought of 2006, LCRA developed short range forecast model that incorporates stochastically generated inflows. Based on email communications with Mr. Ron Anderson of the LCRA, the short range stochastic forecast model utilizes the following concept:

- Gaged records of the Highland Lakes for the period of 1940 to 2011 are analyzed and computed for the month to month persistence of streamflows for conditions of El Niño, La Niña, neutral, or unspecified (ENSO conditions);
- Monthly streamflows are grouped into lower quartile, inner quartile range, and upper quartile bins for dry, normal, and wet conditions respectively;
- The model calculates 'transitional probabilities', representing the probability of one month going from its current state (dry, normal, wet) to another (dry, normal, wet) for different ENSO conditions;
- Once the system state for a given month is predicted (based on the transitional probability) streamflows are picked randomly from the historic record corresponding to the predicted classification (dry, normal, wet) under the various ENSO conditions. Thus, future forecasts are entirely based on past records; and
- The streamflows are then used to predict lake levels for future conditions.

There are two drawbacks to this approach, which may be addressed as follows:

1) This methodology bins everything into three discrete categories (dry, normal, wet). It has been shown that such a 'block adjustment' approach does not capture the period to period persistence adequately, especially for persistent extreme conditions such as extended drought periods. There are statistical techniques available that could be used to improve the modeling of this persistence by taking into account the continuum of historical flow conditions.
2) The model assumes that past lake levels and flows are adequate representations of future states. In times worse than the drought of record or under changed hydrologic conditions, which have demonstrated to have occurred, the historical streamflow would not be able to capture the extreme low flows that would be expected under such conditions. This problem may be addressed (to a degree) using techniques (Kalman filters) that correct future forecasts based on estimates of errors in past predictions. Any systematic errors in lake levels (due to, for example, being in conditions drier than the drought of record) would then be reduced iteratively as the methodology corrects for bias seen in past months.

In short, the existing approach is not suitable for use during extreme drought conditions, or in a non-stationary environment, both of which are currently occurring based on the statistics of the naturalized flow time series.

4.0 A NEW DROUGHT OF RECORD IS IMMINENT AND THE FIRM YIELD OF THE HIGHLAND LAKES NEEDS TO BE REASSESSED

In a previous section we made the case that there is a high probability that we have experienced a shift in the naturalized flows entering the Highland Lakes. This is more than an anomaly or serious drought - we have a new normal and this new normal flow condition is significantly lower than it used to be. The question we need to answer is does this new condition signify that we have a new drought of record, thus requiring a reassessment of the firm yield of the Highland Lakes and an update to the WMP? The firm yield is the amount of water that is available out of a water supply source, such as a reservoir or system of reservoirs, every year through a repeat of the drought of record and is an important planning tool in Texas and elsewhere. In fact most water availability studies use the firm yield as a starting point for permitting and planning. A new drought of record would lead to the need to reassess the firm yield of the Highland Lakes and would also raise serious questions about the WMP. LCRA uses a customized methodology for determining "Drought Worse than Drought of Record" conditions. The drought of record for the Lower Colorado River is currently the period from May 1947 through to June 1956.

Water Availability Models (WAMs) were developed to address this question, and were based on LCRA's Firm Yield WAM developed during the creation of the WMP using two sets of modified naturalized flow data. The first modified dataset consisted of reduced flows for the period 1940-1998 such that the reduced mean flow for that period matched the mean flow for the period 1999-2012. Model results indicated that under the reduced-flow conditions, the combined storage of the Highland Lakes drops to zero several times during the 73 year simulation period, confirming a lower firm yield. The second modified dataset was identical to the naturalized flow dataset discussed above and shown in Figure 2, yet was extended to include simulated years 2013-2016 by twice repeating the naturalized flows from 2006 and 2008. This modified naturalized flow dataset therefore assumes that recent low flows will persist into the near future. The interesting conclusion from this WAM analysis is that with the continued dry weather, simulated lake contents will hit zero by middle to late summer (2013), again indicating that the firm yield will need to be revised downwards and that we have a new drought of record. We won't know the magnitude of the new drought of record or the extent to which it affects the firm yield until lake levels fully recover, or we have a sufficiently long period of record to quantify the new normal.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The stochastic model used for short term prediction of lake levels needs to be revisited and is not appropriate for forecasting during extremely dry or shifted hydrologic conditions. Recommendations for improvements to the model have been provided in this report.

Despite the fact that LCRA has extended the TCEQ-published naturalized flow series for the 2010 WMP, the use of naturalized flows for 1940 to 2009 is not a good basis for determining future water availability in the Lower Colorado Basin. The naturalized flow dataset needs to be officially extended through to the end of 2012 and serious consideration needs to be given to the evidence presented in this report that the hydrology of the basin has shifted significantly downwards. Reducing the full naturalized flow dataset by 30 percent for recalculation of the firm yield and reassessment of water availability is a possible and reasonable approach in the short term. However, we will not know how bad the current drought is or by how much the firm yield should be reduced until the drought has broken or we have a good understanding of the new hydrology of the basin. Until that time, policy-makers should take a conservative approach to water management to ensure that there remains sufficient water in the basin to meet the needs of firm customers under uncertain future conditions. In very short order, we need to revisit the data, models, techniques, triggers and rule curves for management of the Highland Lakes in order properly to deal with this changed hydrologic condition.

Marisa Weber

From: PUBCOMMENT
Sent: Tuesday, May 28, 2013 2:36 PM
To: PUBCOMMENT-OCC2
Subject: FW: Public comment on Permit Number WRPERM 5838
Attachments: CTWC's Comments and Request for Hearing eFile.docx

H

WR 823 15

From: PUBCOMMENT-OCC
Sent: Tuesday, May 28, 2013 7:09 AM
To: PUBCOMMENT
Subject: FW: Public comment on Permit Number WRPERM 5838

From: cindy@smileylawfirm.com [mailto:cindy@smileylawfirm.com]
Sent: Monday, May 27, 2013 6:04 PM
To: donotReply@tceq.state.tx.us
Subject: Public comment on Permit Number WRPERM 5838

REGULATED ENTY NAME 11405838000 WRPERM 5838 WATER MANAGEMENT PLAN

RN NUMBER: RN104252267

PERMIT NUMBER: WRPERM 5838

DOCKET NUMBER:

COUNTY: BASTROP, BURNET, COLORADO, FAYETTE, GILLESPIE, LAMPASAS, LLANO, MASON, MATAGORDA, SAN SABA, TRAVIS, WHARTON, WILLIAMSON

PRINCIPAL NAME: LOWER COLORADO RIVER AUTHORITY

CN NUMBER: CN600253637

FROM

NAME: Cindy Smiley

E-MAIL: cindy@smileylawfirm.com

COMPANY: Smiley Law Firm

ADDRESS: 6000 SHEPHERD MOUNTAIN CV #2107
AUSTIN TX 78730-4923

PHONE: 5123947121

MW

FAX: 5123947145

COMMENTS: Written comments and request for hearing from Central Texas Water Coalition. Attachments to follow.

SMILEY
LAW FIRM, P.C.

6000 Shepherd Mountain Cove
Suite 2107
Austin, Texas 78730

Telephone: 512.394.7121
Facsimile: 512.394.7141
cindy@smileylawfirm.com

May 27, 2013

VIA ELECTRONIC SUBMITTAL
Ms. Bridget C. Bohac, Chief Clerk
Office of the Chief Clerk (MC 105)
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Re: Submittal of Comments and Request for Contested Case Hearing from Central Texas Water Coalition, Inc. Regarding Application of Lower Colorado River Authority to Amend its Water Management Plan; Application No. 5838A; TCEQ Water Rights Permit No. 5838

Dear Ms. Bohac:

This letter transmits the comments and request for a contested case hearing from the Central Texas Water Coalition, Inc. ("CTWC"), a Texas nonprofit corporation, in response to the Texas Commission on Environmental Quality's ("TCEQ's") notice (issued on April 15, 2013) of the Lower Colorado River Authority's ("LCRA's") Application to amend its Water Management Plan ("WMP") and the draft TCEQ Order approving the amendments to the LCRA's WMP. This letter is timely submitted, as it is filed within the 30-day deadline (adjusted by holidays) from the date of the last newspaper publication of the TCEQ's Notice of this Application.

I. Background Information on CTWC

The CTWC has approximately 600 members, including individuals, businesses, home/property owners associations, business associations, marinas, water supply entities, ranchers, conservation organizations, property owners, and local governments.

As stated in the Certificate of Formation filed with the Texas Secretary of State, the CTWC was formed to address water issues of the Lower Colorado River Basin and to advocate for the preservation and conservation of the Highland Lakes' water supply and water levels for health, safety and recreation, and for recognition of the Highland Lakes as an irreplaceable economic engine for the State of Texas. The CTWC holds a Certificate of Filing dated June 22, 2011 from the Texas Secretary of State's Office and operates under bylaws that recite the

purposes of this entity, which focus on water supply and water management in the Highland Lakes. A copy of the Certificate of Filing is attached as ATTACHMENT A.

In addition, CTWC is a §501(c)(4) nonprofit corporation that was organized to address water needs and issues of the Lower Colorado River Basin and advocate for the preservation and conservation of the Highland lakes' water supply and water levels for health, safety, and recreation, as well as supporting property values, related businesses and associated tax base and for recognition of the Highland Lakes as an irreplaceable economic engine for the State of Texas. As an entity formed to facilitate research and advocacy on the preservation of the Highland Lakes as an irreplaceable natural resource and economic driver, the CTWC also assists in regional efforts to market the Highland Lakes as a tourist destination, focusing on the opportunities for fishing, camping, boating, cabins, lodges, inns, and dining that draw hundreds of thousands of visitors to the Highland Lakes each year.

II. CTWC is an "Affected Person" and CTWC's Hearing Request Meets the Criteria for Granting a Contested Case Hearing

Under the TCEQ rules governing eligibility for a hearing, 30 Texas Administrative Code ("TAC") §55.205 lists three requirements that an association must meet in order to have standing to request a contested case hearing:

(1) One or more members of the group or association would otherwise have standing to request a hearing in their own right;
(2) The interests the group or association seeks to protect are germane to the organization's purpose; and
(3) Neither the claim asserted nor the relief requested requires the participation of the individual members in the case.

Standing of Individual Members. Many of the members of the CTWC have standing to request a hearing in their own right, and have taken the liberty to do so. These members include, but are not limited to, the Bonanza Beach Property Owner's Association ("POA") and the Windermere Oaks Water Supply Corporation, as a few examples. The Bonanza Beach POA represents property owners within its community located on the east side of Lake Buchanan. The POA has a firm water contract from LCRA for irrigation of its community park, and it has a boat ramp that is now more than 200 yards away from the water. The entity's contact information is as follows:

Mr. Frank Closner, President
Bonanza Beach POA
101 CR 138
Burnet, TX 78611
Phone: (210) 872-1185

The Windermere Oaks Water Supply Corporation provides drinking water to its community with surface water from Lake Travis that it purchases from LCRA as a firm water

customer. If the surface water elevation of Lake Travis drops another 10 feet, its intake pumps will cease to pump water. The entity's contact information is as follows:

Mr. Pat Mulligan, President
Windermere Oaks WSC
424 Coventry Road
Spicewood, TX 78669
Phone: (512) 573-0311

Other CTWC members include the Barton Creek Lakeside POA and the Barton Creek Lakeside Irrigation Company, which holds a firm water contract with LCRA for the purchase of water from Lake Travis. In this community, many waterfront residents hold individual domestic use contracts with LCRA, but the property along the coves has been without lake water for one to two years. The Irrigation Company was formed to support domestic irrigation needs within the larger community and to provide a backstop for the community's drinking water and fire protection supplies. If Lake Travis drops to elevation 618' above mean sea level, the pumps will no longer have water. In addition to these water supply issues, the community's marina is unusable, the boat ramp has been dry for over two years, and the waterfront property values have declined significantly. This entity's contact information is as follows:

Mr. David Batchelor, President
Barton Creek Lakeside Irrigation Company
P.O. Box 58
Spicewood, TX 78669
Phone: (512) 750-1980

The CTWC membership also includes businesses, such as the Vanishing Texas River Cruise, a local business on the upper reaches of Lake Buchanan that operates a bird-watching and native wildlife tour for visitors to observe bald eagles, ducks, and other waterfowl and wildlife around the lake. As a result of the low lake levels, this business has experienced a dramatic decline. The Thunderbird Resort, also located on Lake Buchanan, reports that its lakefront property is now about 400 yards away from any water. Even more devastating has been the experience of businesses such as the Hi-Line Lake Resort on Lake Buchanan, which gained a reputation as an attractive waterfront location for guests, but which faced bankruptcy as its guests departed and its revenue declined below a subsistence level.

In addition to the CTWC members highlighted above, the marinas and boat slips on Lakes Buchanan and Travis have faced serious challenges to their continuing existence. According to the LCRA website, Lake Buchanan was about 29 feet below conservation pool and Lake Travis was about 53 feet below conservation pool on May 24, 2013. The Marina Association of Lake Travis, a CTWC member, reports that the lower lake levels have resulted in reduced revenues and increased expenses for these businesses, and some have paid hundreds of thousands of dollars to re-configure and re-locate these structures as the water recedes. The marinas on Lake Travis pay almost $600,000 each year in marina fees and permits to the LCRA. These fees, which are based on the surface water "footprint" (in square footage) that the marina occupies, are flat fees that are assessed by LCRA regardless of whether the marina is in contact

with any water. On Lake Buchanan, LCRA continues to assess fees for boat dock facilities that have been without water for a year or more. Without any control over the lake levels, these businesses face financial hardships that are exacerbated by LCRA's continued assessment of fees, without reduction for current conditions, even when a facility is sitting on a dry lake bed. To further illustrate the conditions that now exist, visitors to Lake Travis have recently observed cars and trucks parked in the grounded boat slips near a restaurant. Such images bring an alarming reality to the severity of the conditions in this once thriving area of the lake. The contact information for this business association is as follows:

Mr. Doug Powell, President
Marina Association of Lake Travis
105 Calypso
Lakeway, TX 78734
Phone: (512) 266-1535

CTWC's Interests are Germane to its Purpose. Clearly, the interests that are affected by the pending LCRA Application governing its management of water in the Highland Lakes and the lower Colorado River system are the very same interests that CTWC was formed to protect and which it has been actively seeking to protect for several years. In other words, the CTWC's involvement in this proceeding, in which it seeks to assure the proper management of water in the Highland Lakes, is entirely germane to CTWC's mission of advocating for the conservation and preservation of the Highland Lakes' water supply and water levels, as demonstrated in its Certificate of Formation, its bylaws, and in its past and ongoing efforts to assure that the water resources of Central Texas are conserved and managed in accordance with the best available science and laws. Further, the focus on the economic interests of its members with businesses that rely upon reasonable levels of water in the lakes, such as lodges, marinas and tourist services, are well-within the mission statement of the CTWC. The economic benefits of the Highland Lakes and the negative impacts of declining lake levels are documented and validated in recent economic impact studies for the Upper Highland Lakes:

(http://www.burnetcountytexas.org/users/0006/HighlandLakes_Final_Report_092012.pdf)

and for Lake Travis:

(http://www.co.travis.tx.us/commissioners_court/lake_travis_economic_impact_report.asp).

CTWC Represents its Members. There is no participation required of CTWC's individual members for the claim asserted or the relief requested in this case. Proper management of the water in the Highland Lakes is a universal concern for its members, who support the CTWC leadership in their efforts to address and resolve these vital issues. Further, the attached Resolution memorializes the decision by CTWC's Board of Directors for CTWC to fully participate in any and all proceedings that arise out of the LCRA Application to amend its WMP (TCEQ-Water Rights Permit No. 5838). The Board of Directors has chosen its President, Jo Karr Tedder, and whomever else she appoints, to act as the representative of CTWC. The Board of Directors has also chosen Smiley Law Firm, P.C. to act as legal representation for CTWC in these proceedings. The CTWC Board has taken specific action to file these comments

and request a hearing, as shown in the Board Resolution dated May 23, 2013 as ATTACHMENT B.

Upon review of the information presented above, we respectfully request the TCEQ's concurrence that the Central Texas Water Coalition, Inc. has successfully demonstrated its interests in this important proceeding on behalf of its members who are directly impacted by the LCRA's management of the water in the Highland Lakes in many different ways, including their increasingly limited ability to obtain water from Lakes Travis and Buchanan for drinking water, the increasingly limited operations of on-the-water businesses as the surface water area of Lakes Buchanan and Travis diminishes, the negative impacts on waterfront property values as lake levels decline, and the other impacts described in these comments. The CTWC seeks the TCEQ's determination that it is an affected person and its hearing request should be granted, so that it may become a party to the TCEQ proceedings on this LCRA Application.

III. Approval of the Proposed WMP Would Drive the Highland Lakes Into a Drought Worse than the Drought of Record and Bring Disastrous Consequences for Firm Water Customers and the Economic Strength of Central Texas

The CTWC provides the following list of comments on the proposed WMP and the draft TCEQ Order approving the WMP. Additional comments may be offered as this matter proceeds.

A. Comments on the LCRA Application to Amend its WMP

1. The proposed WMP fails to recognize and utilize the latest scientific data available on the hydrology and water availability of the lower Colorado River Basin.
    a. Average inflows to the lakes have significantly declined in recent years. The recent five-year average is approximately 450,000 acre-feet/year, while the LCRA appears to be assuming (and relying upon) an average historic inflow of over 1,200,000 acre-feet/year. This is a huge disconnect from reality, with serious consequences for water planning and management decisions.
    b. The Water Availability Modeling performed by the LCRA and submitted to the TCEQ included a hydrologic period of record from 1940-2009. The hydrologic period of record should be extended through 2012, and reasonable projections of future inflows should be included in all calculations and modeling on water availability.
    c. By omitting the hydrologic data from 2010, 2011 and 2012 in its calculations and modeling, the Applicant is proposing to move forward with critical water management decisions in the face of data showing that the hydrology of this river system experienced a downward shift in the natural flow regime that began in 1999. These concerns regarding the current drought and its implications have been validated in a technical report prepared by hydrologists at INTERA in Austin, Texas. A copy of the report, which includes

recommendations, is included as ATTACHMENT C to these comments.

2. The failure to recognize and utilize current hydrology and appropriate data leads to assumptions and conclusions with potentially devastating results.
    a. The calculation of the Combined Firm Yield for Lakes Travis and Buchanan is very likely to be significantly lower than the 439,155 acre-feet/year that LCRA has proposed in its WMP.
    b. Incorrectly assuming that the Combined Firm Yield is higher than the actual yield may allow LCRA to issue contractual commitments for firm water and potentially interruptible water sales that far exceed the water available for diversion and use under its water rights.
3. The proposed WMP makes inadequate provision for recovery of Lakes Buchanan and Travis, which were approximately 39% full on May 24, 2013, with a combined storage of 780,656 acre-feet. In view of the drought that now exists and is predicted by the State Climatologist to continue for as many as 10 more years, it is important to do everything possible to conserve the water in the lakes.
4. In order to assure 100% protection of firm customers under the terms of the court adjudication, the lakes should be allowed to refill and recover without the threat of releases of interruptible water. It is essential for the lakes to recover to a sustainable level prior to future releases of non-firm water from lake storage.
5. The proposed WMP includes drought triggers and drought responses that are inadequate to protect the firm customers in Central Texas and that rely upon outdated data and assumptions on the hydrology and water availability of the river system.
6. The proposed WMP lacks incentives for water conservation throughout the river basin.
    a. Firm customers in Central Texas may conserve water so that it will remain in lake storage, but LCRA, through this proposed WMP, is allowed to release that water downstream to its interruptible customers. Therefore, the conservation efforts are nullified by the same entity that encouraged the conservation efforts.
    b. The current policies for delivery of water to interruptible customers downstream seem to encourage downstream irrigation districts to continue diverting and using significant amounts of water from storage, without regard to drought conditions or other available water supplies, in order to maintain their current ways of doing business. A "use it or lose it" water policy has no place in today's water management practices.
    c. The huge disparity in LCRA's water rates, which are set at $151 per acre-foot for firm water (including domestic, municipal, and industrial customers) and $6.50 per acre-foot for interruptible water (primarily agricultural customers) appears to increase the risk that interruptible water may not be handled with the same degree of care as water that is 23 times more expensive. The rates that LCRA charges for firm and interruptible water appear to have implications for water use, and those implications should be considered as part of

the water planning and water management activities proposed by LCRA in its WMP.

7. It is clear that the current WMP has fatal flaws that need to be corrected, as LCRA applied to and obtained Emergency Orders from the TCEQ to amend the terms of its existing WMP in 2012 and in 2013. In an application filed with the TCEQ on May 6, 2013, LCRA requested an extension of the Emergency Order issued by the TCEQ on February 19, 2013. However, the proposed WMP and draft TCEQ Order do not resolve the fatal flaws that continue to exist in the WMP. By using outdated hydrology to calculate an inflated firm yield, the quantity of water available to satisfy firm demands is at risk.
8. LCRA's proposed WMP fails to reflect and adhere to the legal requirements set forth in its surface water rights issued by the TCEQ, as established in the adjudication process, including the Certificates of Adjudication for Lakes Buchanan and Travis and the Water Management Plan Permit issued in 1989.
9. The proposed WMP does not properly evaluate the minimum combined storage in Lakes Buchanan and Travis that would be necessary or appropriate to protect firm water customers either during a repeat of the Drought of Record or under worse conditions.
    a. This evaluation was required in the WMP approved by the TCEQ in January 2010.
    b. LCRA cannot make a proper evaluation of the minimum combined storage without utilizing current hydrology and updated calculations.
10. The WMP should use multi-year planning and incorporation of inflows to effectively manage multi-year drought cycles. The proposed WMP utilizes a one-year planning basis and relies on high historical rainfall and inflow assumptions that are not realistic and may lead to over-commitment of interruptible water.
11. Current drought trigger points may result in very short-sighted and potentially risky water management decisions. Decisions to release water for interruptible customers should be made with caution, so that decisions like the one that allowed LCRA to release 433,251 acre-feet of water from the lakes in the summer of 2011 to interruptible agricultural customers downstream, in the face of one of the most extreme droughts in history, will not be repeated. In 2011, the total inflow to the lakes was approximately 127,000 acre-feet, and LCRA's website reports that the 2013 inflows to the Highland Lakes are on pace with the record low inflows of 2011.
12. The WMP should be drafted so that it avoids water management decisions that result in a manmade water crisis, such as the release of water in 2011 that expedited the impending declaration of a drought worse than the Drought of Record.
13. As part of LCRA's re-evaluation of the firm yield and the combined storage in the lakes, LCRA should clarify its water accounting numbers so that all of the water that LCRA may release from lake storage, including the total possible volume of releases for environmental flows, for instream uses, and for satisfaction of the Garwood Irrigation District's contractual rights, are properly and unequivocally counted in the total volume of firm water commitments that LCRA is required to satisfy under its WMP prior to allowing releases of stored water for non-firm customers.

B. Comments on the Draft TCEQ Order Approving the Amended WMP

1. CTWC is opposed to any provision that would allow LCRA to continue under the current or the proposed WMP without immediately reviewing, incorporating, and recalculating the fundamental components of this document. As currently written, the draft TCEQ Order requires LCRA to submit an amendment to the WMP that includes updates to the hydrology of the Colorado River Basin and includes updated actual and projected firm demands. The CTWC strongly supports this requirement. However, we are vehemently opposed to any provision that would allow the LCRA to delay this work until January 30, 2020.
2. In addition to the TCEQ mandates to update the hydrology and the actual and projected firm demands, LCRA must also update its firm yield calculations. The Combined Firm Yield, which forms the foundation for many crucial decisions in the WMP, should be based upon the best available science and data. CTWC is concerned that the firm yield of the lakes is much lower than the number that LCRA has proposed in this WMP. While the Emergency Orders of 2012 and 2013 appear to be delaying the arrival of the 600,000 acre-feet combined storage number that can trigger the LCRA Board's declaration of a drought worse than the Drought of Record, the fundamental flaws in the underlying assumptions of the current and proposed WMPs lead to problems that cannot be overcome. Since a recalculation of the firm yield is a necessity, LCRA should be required to begin that process as soon as TCEQ's updated Water Availability Model is ready.
3. CTWC is opposed to any language within the Order that implies or suggests that the amended WMP will operate to supersede or replace any of the legal principles and foundations of the adjudication process or the legal obligations imposed upon LCRA under the terms of its existing water rights. While the WMP may describe reservoir operations and plans for water management within the Highland Lakes and the lower Colorado River system, we are opposed to any attempts to codify the LCRA's interpretation of its water rights in this WMP in a manner that does not comply with existing law.

C. Additional Comments and Concerns

1. Water sales under firm and interruptible contracts in the entire lower Colorado River system should be conducted with all due care, with strict attention to previous firm commitments, the priority of firm customers, the protection of public health and safety, and the availability of other potential water sources for new customers. Before the LCRA commits to significant quantities of new contracts, it should be required to immediately update the hydrology, the combined firm yield of the lakes, and the actual and projected firm demands.
2. In the immediate future, as the TCEQ updates its Water Availability Model and the TCEQ and the LCRA perform these critical updates to the hydrology, the firm yield, the combined storage, and the actual and projected firm demands, LCRA should be required to operate in a manner that assures 100% protection of its firm customers. It is important to note that the 850,000 acre-foot combined storage number in the existing Emergency Order appears to be insufficient to protect firm customers, as

shown in LCRA's recent projections that the lakes will experience a drought worse than the Drought of Record in the next few months.

IV. Contact Information for CTWC

Please send all official communications and documents for CTWC relating to this proceeding to CTWC's legal counsel:

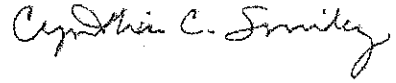
Cynthia C. Smiley
Smiley Law Firm, P.C.
6000 Shepherd Mountain Cove #2107
Austin, Texas 78730
Phone number (512) 394-7121
Fax number (512) 394-7145
Email: cindy@smileylawfirm.com

V. Conclusions and Recommendations

In closing, we appreciate the opportunity to provide these comments and participate in a hearing on the pending LCRA Application, as the management of the water in the Highland Lakes is critically important to the health and welfare of our members and the entire Highland Lakes region. As outlined above in our comments, the CTWC believes that the adoption of the proposed WMP would drive the Highland Lakes into a drought worse than the Drought of Record with disastrous consequences for all firm water customers and the future economic growth of Central Texas. The TCEQ should not allow the proposed WMP to move forward -- instead, the TCEQ should require the LCRA to manage the water in the Highland Lakes in a manner that will provide 100% protection to its firm water customers, while the TCEQ and the LCRA immediately undertake the updates, reviews, modeling and re-calculations to prepare a WMP that lacks the deficiencies identified in these comments.

We respectfully request the Commission's determination that the CTWC is an affected person and that its request for a contested case hearing should be granted. If you have any questions, please contact me at 512.394.7121.

Sincerely,



Cynthia C. Smiley
Smiley Law Firm, P.C.
On Behalf of the Central Texas Water Coalition, Inc.

ATTACHMENT A: Certificate of Formation for CTWC, Inc.
ATTACHMENT B: CTWC Board Resolution Dated May 23, 2013
ATTACHMENT C: INTERA Report Dated May 8, 2013

cc: Ms. Jo Karr Tedder, CTWC

Marisa Weber

From: PUBCOMMENT
Sent: Thursday, May 09, 2013 8:45 AM
To: PUBCOMMENT-OCC2
Subject: FW: Public comment on Permit Number WRPERM 5838

H

WR 82315

From: PUBCOMMENT-OCC
Sent: Thursday, May 09, 2013 7:30 AM
To: PUBCOMMENT
Subject: FW: Public comment on Permit Number WRPERM 5838

From: michaelsullivan@austin.rr.com [mailto:michaelsullivan@austin.rr.com]
Sent: Wednesday, May 08, 2013 9:43 PM
To: donotReply@tceq.state.tx.us
Subject: Public comment on Permit Number WRPERM 5838

REGULATED ENTY NAME 11405838000 WRPERM 5838 WATER MANAGEMENT PLAN

RN NUMBER: RN104252267

PERMIT NUMBER: WRPERM 5838

DOCKET NUMBER:

COUNTY: BASTROP, BURNET, COLORADO, FAYETTE, GILLESPIE, LAMPASAS, LLANO, MASON, MATAGORDA, SAN SABA, TRAVIS, WHARTON, WILLIAMSON

PRINCIPAL NAME: LOWER COLORADO RIVER AUTHORITY

CN NUMBER: CN600253637

FROM

NAME: MR Michael T Sullivan

E-MAIL: michaelsullivan@austin.rr.com

COMPANY:

ADDRESS: 123 ROCKET ST
LAKEWAY TX 78734-3817

PHONE: 5126089373

FAX:

COMMENTS: Regarding the contested case hearing on application to amend the LCRA Water Management Plan; Application No. 5838A; TCEQ Water Rights Permit No. 5838 Although there are some improvements in the proposed LCRA WMP, these improvements are not sufficient. There is no assurance that LCRA will provide a guaranteed water supply to the firm water customers in this current or future droughts. It uses incomplete hydrology history and violates the firm customer protections provided for a 1989 Adjudication Order. With population growth excelerating and inflows declining, we will face chronically low reservoir lake levels that further endanger drinking water supplies. Which I don't need to remind anybody about the possible economic impact no drinking water would bring. Chronically low levels do not benefit anybody; environmental, agricultural, municipal, industrial, or lake interests.