

**Dickinson Bayou
Watershed Steering Committee
DRAFT Meeting Summary – August 19, 2004**

ATTENDING: 8-19-04 MEETING:

- * Jean Wright – Houston Galveston Area Council – Clean Rivers Program
- * Carol Singletary – Dunbar Middle School Science Teacher, Resident
- * Michael A. Cunningham – Industry - Penreco
- * Winston Denton – Biologist, Texas Parks and Wildlife
- * Al Caldwell – Citizen and resident on the Bayou
- * Jerry Armstrong - Citizen and resident on the Bayou
- * Rex Ward – League City - “Keeper of Clear Creek”
- * Helen Drummond – Coastal Bend Bays & Estuaries Program
- * Ralph Stenzel – Mayor Pro-tem, Councilman, City of Santa Fe
- * Mr. & Mrs. Don Reynolds – Residence of the Bayou
- * Michelle Ruckstuhl – TX Commission on Environmental Quality – Houston Regional
- * James Pierce - Citizen
- * Linda Pierce - Citizen
- * Julie Masters – Director – “Keep Dickinson Beautiful”
- * Jim McBride – Water Board
- * Jan Culbertson – TX Parks & Wildlife
- * Scott Jones – Galveston Bay Estuary Program
- * John Jacob – Texas Sea Grant

* Indicates interest in serving as stakeholder committee member

Mary Dunbaugh – Councilwoman, City of Dickinson
Ronnie Schulz – Galveston County Health District
James Deats – Resident of Dickinson for 61 years
Brenda Justice – Texas Parks & Wildlife, Aquatic Specialist
Neal Young – Councilman, City of Santa Fe
David A. Paulissei – Galveston County Water Control & Improvement District # 1
David Kocurek – Director of Public Services, City of Alvin
Ted Gillis – Councilman, City of Santa Fe
Susi Ferguson – TX Commission on Environmental Quality
Courtney Miller – Galveston Bay Foundation
Harriet Engelke - Citizen
Janet Belonyw – Citizen and member of “Keep Dickinson Beautiful”
Sara Metzger – City of Pasadena
Sara Snell – “Master Naturalist”, “Keep Dickinson Beautiful”
Ivan Langford – City Administrator, Dickinson
Linda Broach – TX Commission on Environmental Quality (TCEQ) – Houston Regional
William Flynn - TX Commission on Environmental Quality – GIS Specialist

Roger Miranda - TX Commission on Environmental Quality – Project Manager
Earlene Lambeth - TX Commission on Environmental Quality – Coordinator
Jeff East – U.S. Geological Survey (USGS) – Houston
Bruce Moring - U.S. Geological Survey (USGS) – Austin
Gary Fogarty – TX Commission on Environmental Quality – Houston Regional Office

CALL TO ORDER/WELCOME/INTRODUCTIONS:

Earlene Lambeth (TCEQ) opened the meeting of the Dickinson Bayou Total Maximum Daily Load (TMDL) project with self-introductions. The meeting was held at the Dickinson City Hall, City Council Chambers Room. The meeting was well attended with a diverse representation from local businesses, various state agencies, and public and private stakeholders.

PROJECT OVERVIEW

After commencing the meeting, Ms. Lambeth turned the meeting over to the TCEQ Project Manager, Mr. Roger Miranda who gave a brief description of the stakeholder procedure for establishing a Dickinson Bayou Watershed Steering Committee in accordance with HB 2912. Roger encouraged the group to sign the sign-in sheet and also to indicate if they would like to be considered for the committee. He also handed out a draft copy of the proposed ground rules for the committee (see attached). If you are or if you know someone who would be interested in serving on this committee, please contact, Earlene Lambeth at (512) 239-3129 or E-mail elambeth@tceq.state.tx.us.

Mr. Miranda covered the water quality assessment process, the categories of the Section 303(d) list, and the TMDL development process. He said that a Total Maximum Daily Load (TMDL) establishes the maximum amount of a pollutant a water body can assimilate and still meet Water Quality Standards (aquatic life, contact recreation, public water supply, and fish consumption or oyster waters). The TMDL also allocates allowable pollutant loadings among contributors. More detailed information on the TMDL process and program can be found at: <http://www.tnrcc.state.tx.us/water/quality/tmdl/index.html>.

The Dickinson Bayou (Tidal Segment 1103 and Above Tidal Segment 1104) has been listed on the State of Texas 303(d) list since 1996 as impaired for low dissolved oxygen (DO). The work began on the TMDL project in the year 2000 with detailed data collection, water quality monitoring, public participation through the Clean Rivers' program and watershed modeling. The tidal portion of Dickinson Bayou (Segment 1103) is listed for bacteria and DO. The above tidal portion of Dickinson Bayou (Segment 1104) is listed for bacteria. Also noted were impairments to Galveston Bay which is listed for fish consumption (dioxin in fish tissue) and bacteria. Later in the meeting staff from the Galveston Bay Estuary Program clarified that the dioxin impairment for Galveston Bay appears to be limited to the upper reaches of the bay in an area located significantly farther north of Dickinson Bay.

Where are we on this process?

- The water body (Dickinson Bayou) has been listed on the State of Texas Clean Water Act Section 303(d) list
- The TCEQ initiated a TMDL (DO impairment verified in 2000 – 2002)

- In the process of establishing a draft TMDL
- Now forming a Dickinson Bayou Watershed Steering Committee (Max. 24)

What remains to be done?

- Calibration of a watershed model and development of an in-stream water quality model
- Develop a TMDL report
- Adoption and approval process of TMDL through TCEQ & EPA
- Develop an Implementation Plan (IP) with Steering Committee participation

Roger Miranda presented graphs of water quality data collected in Dickinson Bayou and used in the latest 303(d) list 2004.

Linda Broach with the TCEQ Houston Regional office gave the next presentation reporting on biological (fish) sampling performed in the Dickinson Bayou and Oyster Bayou in 1992 and 1993 during all the four seasons of the year. Forty-three different fish species were collected and Linda presented the results using graphs to compare similar sampling performed in the bayous. The study focused on two particular characteristics. Oyster Bayou significantly out-performed Dickinson Bayou in these samplings.

A concern expressed by the various stakeholders attending the meeting was that the testing was done in 1992/93 and the data is now 13 years old. The stakeholders said they would like to see data that is more current. Linda agreed that more recent data could show different results – showing either improvement or, more likely, more severe impairment.

Roger Miranda ensured the stakeholders that the study that is being done now is very pertinent to the results of studies performed in earlier years. Roger said that what the data is showing is that Dickinson is indeed impaired. The real question Roger would like everyone to ask is “why is it impaired?” The monitoring data is not showing high nutrient levels or high biochemical oxygen demand (BOD). The data shows occasional high swings in dissolved oxygen and persistent low DO at low flow conditions, but Roger continued to say that these observations are not a-typical of estuarine water-bodies. It is the impaired aquatic life use that is troubling. What are the causes? Roger believed that through the data that Linda had presented, Dickinson Bayou possibly could be suffering from decreased habitat as a result of urbanization. Reduced habitat is reflected in the data that is 13 years old and is therefore very relevant to the problems that Dickinson suffers from now. The bayou was dredged in the 50’s and bulk-heading and urbanization are on-going processes in the watershed.

Bruce Moring of the U.S. Geological Survey (USGS) presented information on a fish community study that was performed on the Dickinson and Armand Bayous in the years 2000 and 2001. The study compared the two water bodies and found marked differences – Dickinson was bulk-headed and dredged whereas Armand was shallower and had a wider channel. Five sites were chosen where fish and benthic invertebrates were collected, habitat assessment was performed, and the physical characteristics assessed. The amount of fish and species were taken into consideration such as black drum, gizzard shad, menhaden, and red drum. Fish were rated/classified as tolerant or intolerant to low DO. Rough fish such as gar and carp were found throughout but not a lot of sunfish or game fish (such as bass) were present – the tolerant species

dropped as they monitored downstream. Habitat features examined included meandering of the channel and the ratio of channel length to width.

Brochures and maps of Dickinson Bayou were developed and distributed through the TCEQ, Galveston Bay Estuary program.

Roger discussed the impairment to Dickinson Bayou, including likely cause(s) and possible solutions. Roger reiterated what Linda Broach had reported earlier – what causes could be limiting aquatic life in the bayou? Are they related to habitat and physical conditions or pollutant loadings? At this time, we do not know what is causing problem is.

Roger explained the watershed modeling process and how various types of observed data and information such as rainfall, soil types, land use, reported data from point source, etc. are used to simulate flow and loading of pollutants into Dickinson Bayou. It will also take into consideration all natural processes such as infiltration, runoff, erosion, physical and chemical transformations, etc. A model is being calibrated that will simulate all of these processes.

Roger also explained the need for the development of an in-stream hydrodynamic and water quality model for Dickinson Bayou. Roger said that, in developing the in-stream model for Dickinson Bayou, it is important to get the hydraulics and hydrodynamics right, especially for the tidal portion of the water body. This hydraulic interactions and mixing are important factors in this study and they are very difficult to model – upper layer and lower layers of the water body must be correctly represented. He said that the TCEQ had contracted with the USGS and Galveston County Health District to obtain the calibration data and that the information will now be used to actually make sure the model is representing the actual processes observed– in other words that we are simulating the water-body and the watershed processes correctly. He gave a brief view of the data received with the assistance of the TMDL GIS Specialist, Will Flynn. The data was compared before and after hurricane Allison and various other storm events.

Roger gave the attendees a timeline for the development of the TMDL for Dickinson Bayou and for the adoption and approval process for the TMDL (i.e., winter, 2006). Roger mentioned that EPA approval tends to be a lengthy process but optimistically, we hope for EPA approval before 2007. The most important role for the committee will then be to look at solutions to the water quality problems in Dickinson Bayou.

For more information on Dickinson Bayou project can be found at:
<http://www.tnrcc.state.tx.us/water/quality/tmdl/dickinson.pdf>

DRAFT DICKINSON BAYOU
WATERSHED STEERING COMMITTEE
GROUND RULES

These Ground Rules are being formed for the Dickinson Bayou Total Maximum Daily Load (TMDL) Watershed Steering Committee being formed in September of 2004.

The signatories to these Ground Rules agree as follows:

I. GOALS

The goal of the Dickinson Bayou Watershed Steering Committee (Committee) is to help develop and implement an effort to establish Total Maximum Daily Loads (TMDL) for the Dickinson Bayou Watershed for the pollutant(s) listed on the State of Texas Clean Water Act §303(d) List.

Dickinson Bayou is located in the San Jacinto-Brazos Coastal Basin. It originates near Alvin and flows east through Dickinson before terminating in Dickinson Bay. Dickinson Bay has two designated segments, representing the Tidal (Segment 1103) and Above Tidal (Segment 1104) portions.

The Texas Commission on Environmental Quality (TCEQ) is facilitating the formation of the Watershed Steering Committee. The Committee is the main vehicle for public participation in the TMDL process and will be instrumental in obtaining local support for actions aimed at restoring surface water quality in Dickinson Bayou.

The TCEQ will support a Total Maximum Daily Load (TMDLs) development by the Committee that meet all necessary legal and scientific requirements. The TCEQ is responsible for submitting TMDLs to the U.S. Environmental Protection Agency for final approval. The TCEQ reserves the right to take any action that may be necessary to comply with applicable law and regulation, or that the TCEQ decides is necessary for the successful development, implementation and approval of TMDLs. Notwithstanding any other provision of this document, nothing in this document constitutes or is intended to constitute a legal obligation enforceable against the TCEQ, or the members of this Committee.

II. TIME FRAME

The development of a TMDL for pollutants causing low dissolved oxygen in Dickinson Bayou will require, at least a 3-year period from the date this document is approved and signed by the committee members.

III. PARTICIPANTS

- a. Balanced Representation: Solicitation of members was conducted under a process developed by the TCEQ. This process involved: (1) consultation with members of the

Texas Clean Rivers Program, local and regional government, various civic groups, and other interested parties to determine the stakeholder and public interests related to the uses described previously under Section I (Goals) (2) meetings with the various stakeholder interest groups and individuals, and (3) self-nomination or requests by the various interest groups or individuals. Membership solicitation criteria included: representation of the full geographic area within the watershed; representation from the full range of stakeholder and public interests; emphasis on establishing a Committee that meets all the requirements of House Bill 2912, Section 1.10, amended §5.107 of the Texas Water Code.

- b. Stakeholder: The Committee is composed of stakeholders in Dickinson Bayou watershed. A stakeholder is defined as someone who may be affected in a significant way by the implementation of recommendations included in the TMDL process, either economically or in quality of life.
- c. Open Participation: Means that anyone may attend a Committee meeting and have the opportunity to offer an opinion on the subject of the meeting, or otherwise participate as a member of the advisory group.
- d. Members: The TCEQ follows the requirements established under HB 2912, Section 1.10, amended §5.107 of the Texas Water Code. This guidance states that any group that includes non-agency members that is created by the executive director or TCEQ agency staff for the purpose of seeking advice, recommendations, input or suggestions from interested persons within the agency's jurisdiction, the guidance must be followed. An advisory group may have no more than 24 members. (see appendix). If a member of the committee resigns, dies, becomes incapacitated, is removed by the rest of the Committee, or otherwise vacates his or her position, TCEQ may seek a replacement.
- e. Proxies: All members hereby agree to make a good faith effort to attend all Committee meetings, however, the members recognize that emergencies may arise necessitating the absence of a member. The absent member may designate in writing the name of a specific person who may participate on his/her behalf at any Committee meeting. The members agree that proxies shall not count toward member attendance.
- f. Additional Members: The members agree that new individuals may be added to the Committee if (1) a Committee member vacates a position or (2) if important stakeholder interests are identified that are not represented by the existing membership. In either event, the Committee will, when practical, accept additional members as long as the number does not exceed 24.
- g. Attendance at Meetings: A Committee member may be accompanied by such other individuals as the Committee member believes to be appropriate; however, only the Committee member will have the privilege of sitting at the table, speaking during the meetings, and participating in consensus determinations. Committee members are expected to attend all full meetings and participate fully in the Committee's deliberations.

- h. Absent Members: All members agree to make a good faith effort to attend all Committee meetings, however, the members recognize that emergencies may arise necessitating the absence of a member. The absent member may:
 - (1) Communicate to the TCEQ Project Manager or Facilitator on any issue or view that member wishes to convey to the other members. The person designated will present the absent member's position or view but will not argue for it or be an advocate on behalf of that member, or
 - (2) May designate a proxy as described in III.d.
- i. Work Groups: Generally, the Committee will operate as a whole. However, some tasks (such as research or drafting) may be better performed by smaller groups. The Committee has discretion to form work groups to carry out specific assignments from the Committee. Committee members may serve on work groups; in addition, the Committee may invite outside individuals to attend work group meetings or conference calls if it feels particular expertise or perspectives not held by Committee members are needed. The TCEQ will notify each Committee member of all work group meetings, and each committee member is welcome to attend any work group meeting. Work groups are not authorized to make decisions for the Committee as a whole.

IV. DECISION MAKING

- 1. Substantive and Major Procedural Matters: In developing the TMDLs, the Committee will operate by consensus to the extent possible, for both substantive matters (e.g., determining interim and long-term corrective actions and developing load allocations) and major procedural matters (e.g., adoption of the ground rules). Generally, "consensus" means that all members of the Committee agree they can at least abide by the proposed approach, even if a member might prefer another approach.
- 2. Minor Procedural Matters: For minor procedural matters (e.g., meeting times) the TCEQ may suggest options and the Committee will vote to determine an outcome.

V. PROCEDURES

- a. Open Meetings: Committee meetings will be open to the public and, if time allows, the Committee may invite members of the public to comment during designated public comment periods. In addition, public workshops may be held in conjunction with scheduled Committee meetings in order to solicit additional public input to Committee deliberations.
- b. Meeting Summaries: Draft summaries of Committee meetings will be prepared by the TCEQ and posted to the web at the following URL:
<http://www.trcc.state.tx.us/water/quality/tmdl/dickinson>

The draft summary will be posted after prepared at the above URL and e-mailed to the Committee for review. If a Committee member does not have access to e-mail, a draft

copy of the summary will be mailed if requested. If summary corrections are needed, communicate the requested changes to the facilitator either by mail, e-mail, or phone. The Committee will approve the meeting summaries at the next meeting of the steering committee.

- c. Agendas: Meeting agendas will be drafted by the TCEQ and will be based on the Committee's instructions from the previous meeting. The agenda will be reviewed at the beginning of each meeting and may be refined by the Committee.
- d. Background Materials: TCEQ (and, on occasion, other sources) may provide background materials to Committee members in advance of Committee meetings. All requests for, and distribution of, background materials to all Committee members will occur through the TCEQ to ensure equal sharing of information. Members may draft position papers or provide other material to be circulated by the TCEQ. The TCEQ will use their best efforts to distribute any written information any member of the Committee wishes the Committee as a whole to receive.
- e. Thoroughness of Deliberations: During the course of Committee deliberations, every relevant issue raised will be recorded and addressed. To expedite the process, agreed-upon lower priority issues may be recorded and dealt with at a later date. If issues raised are not those identified by the Committee for deliberation, they will be recorded as such.

VI. ROLES AND RESPONSIBILITIES

- a. Facilitator: A TCEQ facilitator will lead the meetings and work with all of the members to ensure that the process runs smoothly. The role of the facilitator includes finalizing meeting agendas, focusing discussions, assuring fair opportunity for members to participate in Committee proceedings, working to resolve any impasses that may arise, distributing background materials, working with the Committee members to prepare meeting summaries, assisting in the location and/or preparation of background materials, distributing documents the Committee or a work group develops, assisting work groups, conducting public outreach and assuring appropriate public participation, moderating public workshops, providing assistance to Committee members regarding Committee business between meetings, and other functions as the Committee requests.
- b. TCEQ Project Manager: The TCEQ Project Manager will prepare final TMDL documents for submittal to USEPA for federal approval. The TCEQ will maintain all records of the Committee proceedings. The Project Manager will also prepare draft agendas and submit to the facilitator for finalizing and distributing.
- c. Committee Members: Committee members will be expected to assist the TCEQ Project Manager to:
 - ▶ Identify the desired water quality conditions and measurable goals

- ▶ Make recommendations regarding water quality monitoring and modeling needed to identify and assess the sources of pollutant loadings in the Dickinson Bayou listed segment(s)
- ▶ Help determine the pollution reduction targets
- ▶ Lead the effort to implement the TMDLs at the local level
- ▶ Communicate implications of the TMDLs to other interested parties in the watershed.

Committee members are expected to attend all full Committee meetings. In addition, members may be asked to participate in public meetings that may be held to obtain additional public input on TMDL activities. All members agree to act in good faith in all aspects of the Committee's deliberations. Committee members are expected to present their own personal opinions based on their experience, perspective, and training, and to work constructively and collaboratively with other members toward reaching consensus.

VII. SAFEGUARDS

- a. Right to Withdraw: Any member may withdraw from the Committee at any time.
- b. Others' Positions: By participating, members agree that they are entering into a covenant of mutual respect and professional courtesy. When speaking at outside public forums, each member may express his or her point of view about the issues before the Committee; however, members agree not to report, by name, any other member's position or point of view. The members also agree that they will not publicly predict the outcome of the Committee's deliberations. Personal attacks and prejudiced statements will not be tolerated at any time during the process.
- c. Information:
 - (1) All members agree to openly exchange relevant information that is readily available to them. If a member believes he or she cannot or should not release relevant information, the member will provide the substance of the information in some form (such as aggregating data, deleting non-relevant confidential information, providing summaries, or furnishing information to the facilitator for limited or restricted use or to abstract) or a general description of it and the reason for not providing it directly.
 - (2) Members agree to share e-mail addresses and telephone numbers with others' serving on the Committee. Each Committee member must refrain from sharing this information outside of the Committee. This information is to be held confidential unless written consent from the member is obtained.
 - (3) Members will provide information as much in advance of the meeting at which it is to be discussed as is reasonably possible.
 - (4) Information and data provided to the Committee are a matter of public record.
 - (5) The Committee does not have authority to protect confidential business information (CBI). When information required for Committee deliberations can only be derived

from CBI (i.e., innovative technology, cost, or pricing information), the information may only be received by the Committee in aggregate form so as to protect specific CBI from release.

No member is expected to share advance information on its plans or strategy for filing or defending against litigation over TMDL issues. No member is expected to share any information that is subject to attorney/client privilege.

- (6) News Media: Representatives from the news media may attend Committee meetings and may also ask members to comment or answer questions about the Committee's business. Committee members agree that each member may offer his or her individual perspective; each member agrees not to attribute positions or views to other members by name, nor predict the outcome of the Committee's deliberations. To ensure consistency and accuracy in reporting on general Committee operations, members are encouraged to direct press inquiries concerning overall Committee plans and procedures to TCEQ.

VIII. PRODUCTS

- a. Meeting Summaries: The Facilitator, in consultation with the Committee, will prepare and distribute draft-meeting summaries following each meeting of the Committee. Committee meeting summaries will be reviewed by Committee members and upon approval at the next Committee meeting; they will become work products of the Committee.
- b. Final TMDL Documents: The Committee will provide input into the preparation of a draft and final TMDL report, which include: (1) problem identification, (2) endpoint identification, (3) source analysis, (4) linkage between sources and receiving water, (5) margin of safety, (6) loading allocation and (7) supporting (technical) documents. All Committee members will have the opportunity to review and comment on the draft and final documents. All Committee members will be asked to sign an agreement supporting the final TMDL reports.

IX. MEETING PLANS

- a. Number of Meetings: The Committee meetings should be approximately 10 and are expected to occur in the 3-year period beginning with the first meeting August 19, 2004. The Committee will determine the scheduling of additional meetings. The Committee will also determine the timing and number of workgroup meetings.
- b. Location of Meetings: To the extent possible, meetings will take place in central locations in the Dickinson Bayou watershed. However, meeting locations may vary depending on consensus opinions of the Committee and/or Work groups.

We, the undersigned, agree to follow the Ground Rules of the Dickinson Bayou Watershed Steering Committee. Notwithstanding any other provision of this document, nothing in this document constitutes or is intended to constitute a legal obligation enforceable against the TCEQ or the members of this Committee.

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APPENDIX
Dickinson Bayou Steering Committee and Work Group Members
(Updated Semiannually)
This Section will be filled out and completed as Steering Committee
Members are identified.

DICKINSON BAYOU TMDL Watershed Steering Committee and Work Group Members	
INTEREST	NAME ENTITY
State Agencies	Roger Miranda Texas Commission on Environmental Quality
Municipal Permittees:	
Industrial Permittees:	
Agriculture	
Non-governmental Organizations	
Private Citizens	
Others (government)	
Others (port, recreational, civic)	
Council of Government	