The Texas Commission on Environmental Quality (TCEQ or commission) proposes new §§298.1, 298.5, 298.10, 298.15, 298.20, 298.25, 298.200, 298.205, 298.210, 298.215, 298.220, 298.225, 298.230, 298.240, 298.250, 298.255, 298.260, 298.265, 298.270, 298.275, 298.280, 298.285, and 298.290.

## BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE PROPOSED RULES

In 2007, the 80th Legislature, passed House Bill 3 (HB 3), relating to the management of the water resources of the state, including the protection of instream flows and freshwater inflows; and, Senate Bill 3 (SB 3), relating to the development, management, and preservation of the water resources of the state. Both of these bills amended Texas Water Code (TWC), §11.1471, which requires the commission to adopt rules related to environmental flow standards and set-asides. The commission is proposing to create a new Chapter 298, Environmental Flow Standards for Surface Water, to implement the environmental flow provisions of HB 3, Article 1, and SB 3, Article 1, and propose environmental flow standards for the Trinity and San Jacinto Rivers, their associated tributaries, and Galveston Bay; and the Sabine and Neches Rivers, their associated tributaries, and Sabine Lake Bay.

Prior to HB 3/SB 3, the commission had authority to protect environmental interests as it permitted state surface water. The commission had authority to maintain: existing instream uses under TWC, §11.147(d); water quality under TWC, §11.147(d) and §11.150; fish and wildlife habitat under TWC, §11.147(e) and §11.152; and freshwater inflows to bay and estuary systems under TWC, §11.147(a) - (c). TWC, §11.147(b) - (e) and §11.152 required that these environmental considerations be included only to the extent practicable or reasonable and

required that environmental considerations be considered along with other factors of public welfare. HB 3/SB 3 did not make major changes to this commission authority.

The commission also retains its ability, granted prior to HB 3/SB 3, to place special conditions in water right permits to protect environmental interests. Before HB 3/SB 3, TWC, §11.134(b)(3)(D), required consideration of environmental interests for new appropriations of water, including amendments that granted an increase in the amount of water that could be diverted and TWC, §11.085, required consideration for interbasin transfers. Permits for water projects that call for the re-diversion of wastewater or return flows to a watercourse, so called "indirect reuse" projects, were also subject to special conditions to protect environmental uses under TWC, §11.042 and §11.046. Amendments that were not new appropriations were required to be authorized if, among other criteria, the amendment would not cause adverse impact to the environment of greater magnitude than under the original permit under TWC, §11.122(b). As a practical matter, if any adverse impact to the environment was noted in an application for an amendment, then special conditions were crafted to remove the adverse impact so that the amendment might be granted.

HB 3/SB 3 changed the process by which the state would decide the flow that needed to be preserved in the watercourse for the environment and the balancing of environmental interests along with other public interests. HB 3/SB 3 created a statewide Environmental Flows Advisory Group (Advisory Group). The Advisory Group was given the responsibility to appoint Basin and Bay Area Stakeholder Committees (the stakeholder committee) for each of the state's river basin, bay, and estuary systems. The stakeholder committees, in turn, appointed a Basin and

Bay Expert Science Team (the science team). The science teams were to develop a recommended environmental flow regime, or schedule of flow quantities adequate to support a sound ecological environment. The stakeholders were to take the science team's recommendations and consider those recommendations in conjunction with other factors, including the present and future needs for water for other uses. The stakeholders were also to report their recommendations to the commission. Both the science teams and the stakeholder committees were to reach their recommendations by a consensus basis to the maximum extent possible. The commission, in turn, was to take the recommendations from the science team, the stakeholder committees, the Advisory Group, and a statewide Science Advisory Committee, and consider that information along with other information and by rule adopt environmental flow standards for each basin and bay system. At the same time the commission is to establish an amount of unappropriated water, if available, to be set aside to satisfy the environmental flow standards to the maximum extent reasonable when considering human water needs. Once the environmental flow standards are adopted, the commission's objective or goal will be to protect the standards, along with the interests of senior water right holders, in its water rights permitting process for new appropriations and amendments that increase the amount of water to be taken, stored, or diverted. Under HB 3/SB 3, the commission may use the set-aside or use its existing authority to place special conditions in permits to protect the environmental flow standards.

The commission received the Trinity and San Jacinto Rivers and Galveston Bay science team's report on December 1, 2009, and the stakeholder committee report on May 28, 2010. The commission received the Sabine and Neches Rivers and Sabine Lake Bay science team's report

on November 30, 2009, and the stakeholder committee report on May 24, 2010. Copies of the Trinity and San Jacinto Rivers and Galveston Bay reports are available on the website: *http://www.tceq.state.tx.us/goto/eflows/galvestonbay*.

Copies of the Sabine and Neches Rivers and Sabine Lake Bay reports are available on the website: *http://www.tceq.state.tx.us/goto/eflows/sabinelake*.

The commission proposes rules in Subchapter A to implement HB 3/SB 3 for the whole state. As the commission receives stakeholder recommendations, it intends to adopt environmental flow standards and basin-specific rules in separate subchapters. The commission proposes Subchapter B to cover the Trinity and San Jacinto Rivers and Galveston Bay. The commission proposes Subchapter C to cover the Sabine and Neches Rivers and Sabine Lake Bay.

In a corresponding rulemaking published in this issue of the *Texas Register*, the commission also proposes to amend 30 TAC Chapter 35, Emergency and Temporary Orders and Permits; Temporary Suspension or Amendment of Permit Conditions.

SECTION BY SECTION DISCUSSION

Subchapter A: General Provisions §298.1, Definitions

The commission proposes new §298.1 to define common terms used in Chapter 298. Occasionally, the same term might be defined differently for a specific basin or bay and basin system. In those cases, the term will be redefined for the subchapter devoted to that specific bay

and basin system. Terms defined in Subchapter B and Subchapter C are applicable to the specific bay and basin systems referred to in those chapters, and those terms will control over the definitions in Subchapter A.

In §298.1(1), (7), and (8) the commission proposes definitions for the terms "base flow," "pulse or high flow pulse," and "subsistence flow" which represent components of a flow regime. The Science Advisory Committee used these instream flow regime components in their recommended framework for the development of environmental flow regime recommendations. The commission notes that both the science teams used these components in developing portions of their reports. The commission anticipates that future recommendations will use similar components; however, the commission, by including definitions for these components, does not mean to imply that all future recommendations must use these exact components as defined here.

In §298.1(2) the commission proposes a definition for the term "environmental flow regime." The commission proposes to define the term "environmental flow regime" by tracking the definition in TWC, §11.002(16), without all of the qualifying clauses. The commission intends its definition to have the same meaning as the statutory meaning.

In §298.1(3) the commission proposes a definition for the term "environmental flow standards." The commission proposed to define the term "environmental flow standards" by tracking the definition in TWC, §11.002(17). The commission intends its definition to have the same meaning as the statutory meaning. In §298.1(4) and (6) the commission proposes a definition for the terms "Lower Rio Grande" and "Middle Rio Grande." The commission proposes to define the terms "Lower Rio Grande" and "Middle Rio Grande" by tracking the definitions in 30 TAC §303.2, except that the definitions in this chapter refer only to the mainstem of the Rio Grande.

In §298.1(5) the commission proposes a definition for the term "measurement point." TWC, §11.1471(c) requires that environmental flow standards may vary geographically by specific location in a river basin or bay system. The commission proposes the use of the term "measurement point" to describe those locations where environmental flow standards are established.

In §298.1(9) the commission proposes a definition for the acronym "USGS."

In §298.1(10) the commission proposes a definition for the term "water right holder." The commission proposes to define the term "water right holder" with its common practical meaning, being the owner of a water right permit, which also is defined in this chapter.

In §298.1(11) the commission proposes a definition for the term "water right permit." The commission proposes a definition of "water right permit" that includes permits, certificates of adjudication, and certified filings for the area of the state where the water rights adjudication process is not final, generally the Pecos Sub-basin, as well as permits issued since the adjudication process.

#### §298.5, General

The commission proposes new §298.5 to provide that this chapter contains the commission's rules related to environmental flow standards. The commission is proposing the environmental flow standards in Subchapter B for the Trinity and San Jacinto Rivers, their tributaries and Galveston Bay and in Subchapter C for the Sabine, and Neches Rivers, their associated tributaries, and Sabine Lake Bay. The commission has carefully considered: the definitions of the geographical extent of the river basin and bay system adopted by the Advisory Group and the designation of river basins by the Texas Water Development Board; the schedule for the adoption of environmental flows standards established by the Advisory Group; the recommendations developed by the stakeholder committees for their respective areas and any strategies identified by the stakeholders to meet the flow standards; comments submitted by the Advisory Group; the specific characteristics of the river basin and bay system; economic factors considered appropriate by the commission; human and other competing water needs in the river basin; and all reasonably available scientific information, including scientific information provided by the Science Advisory Committee; and, other appropriate information. The commission specifically invites commenters to provide any relevant information, which may differ from these proposed standards, that in the commenter's opinion would assist the commission in deciding on final environmental flow standards. The proposed new section would implement TWC, §11.1471(a) - (c).

#### §298.10, Applicability

The commission proposes new §298.10. The intent of HB 3/SB 3 was that the environmental flow standards would only apply to new appropriations of water and amendments that granted a new appropriation of water after September 1, 2007. Subsection (a) of this proposed section states the intent of those bills. However, HB 3/SB 3 left open the question of what process and substantive amounts of water will be used in special conditions, if any, to protect environmental flows for interbasin transfers of existing appropriations; amendments, such as moving a diversion point upstream that does not appropriate new water; and indirect reuse permits under either TWC, §11.042 or §11.046, that might or might not be considered a new appropriation. Under subsection (b) of the proposed rule, the commission intends to clarify that in those cases where this chapter does not apply, the commission will use its existing authority granted under TWC, Chapter 11, as may be modified by its 30 TAC Chapter 295 and Chapter 297 rules. This proposed new section would implement SB 3 and HB 3, as §1.27 was not codified into the TWC.

## §298.15, Special Conditions to Protect Environmental Flow Standards and Set-Asides

The commission proposes a new §298.15 to incorporate special conditions to protect the environment and set-asides into the rule. One of the ways that the commission may take action to attempt to satisfy environmental flow standards is to set aside unappropriated water under TWC, §11.1471(a)(2). Once the commission has set aside unappropriated water for this purpose, under TWC, §11.023(a) and §11.1471(d), the water is not available for appropriation, except in an emergency under TWC, §5.506 and §11.148. In addition, once the commission has established a set-aside, it is also obligated under TWC, §11.1471(d) to include, in new appropriations, appropriate conditions to ensure protection of the environmental flow set-aside.

The commission understands that special conditions may also be imposed to protect environmental flows in other situations besides when the commission has set aside unappropriated flows. The commission views set-asides as a tool, in circumstances specified by the statute, for a high-level of protection, but not the only level of protection afforded by the water code for environmental flows. Just as it has before HB 3/SB 3, the commission may impose special conditions in water right permits to protect environmental interests. Under the typical special conditions imposed by the commission prior to HB 3/SB 3, a broad classification of waters was allowed to satisfy the special condition. Water appropriated to downstream water rights holders, water of another state under an interstate compact, water appropriated to another but not used, and return flows would all count towards satisfying any environmental flow special condition. The commission considers this type of special condition still available to the commission to provide protection to environmental flow standards adopted pursuant to HB 3/SB 3. The commission is not proposing to specify the exact terms and conditions of special conditions that it will impose to protect environmental flow standards. The commission sees implementation of HB 3/SB 3 as an evolutionary process. The commission wishes to maintain flexibility in permit special conditions as it gains experience implementing the environmental flow standards. This proposed new section would implement TWC, §§11.023, 11.1471(d), and 11.147(e-3).

#### §298.20, Priority Date for Set-Asides

The commission proposes new §298.20. This section establishes that an environmental flow standard or set-aside that meets certain criteria will be assigned a priority date that corresponds to the date the commission receives the environmental flow recommendation. Further, this

proposed new section establishes that the priority date will be included in certain water availability models (WAMs). In accordance with TWC, §11.1471(e), for any environmental flow set-aside, that set aside water must be included in the commission's WAM with a priority date based on the date that the commission received the recommendations from the applicable science team. The commission also reserves the right to protect environmental flow standards by placing those standards into its availability models. When the commission places those environmental flow standards into the models it will give the flow standards the same priority date that it would give a set-aside. This is in part to ensure that the standards will not affect existing water rights. This proposed new section would implement TWC, §11.1471(e).

#### §298.25, Process for Adjusting Environmental Flow Conditions in Certain Permits

The commission proposes new §289.25. Under the HB 3/SB 3 amendment to TWC, §11.147, for all new appropriations of water after September 1, 2007, the commission was required to include in the water right a provision that allows the commission to adjust environmental flow conditions, if the commission later determines that the adjustment is appropriate to achieve compliance with adopted environmental flow standards. This section proposes procedures for that adjustment.

Subsection (a) proposes that the adjustment process would start on the petition by the executive director. The adjustment would only apply to new appropriations and amendments that increased the appropriation issued after September 1, 2007, the effective date of HB 3/SB 3, Article 1. Subsection (b) proposes that the executive director's petition be similar to an original application for a water permit, but the title should indicate that it is for an adjustment to an

environmental flow special condition. Subsection (c) proposes that the notice for these petitions for adjustment of special conditions be by first class mail to all water right holders and navigation districts in the basin. The rule also proposes that notice be posted to the agency's Web site. Notice is proposed to be given at least 30 days prior to action on the petition. Subsection (d) proposes that the commission may act on the petition without holding a public hearing. The authority for this subsection comes from TWC, §11.147(e-1), which does not mention a public hearing for the decision to adjust these special conditions. The statute does specify that adjustments may be made after an "expedited public comment process." Subsections (e) and (f) propose to provide that motions for reconsideration of the commission's action may be filed within 30 days by any of the following: the commission, the executive director, the water right holder, or the affected parties. The proposal would require the motion for reconsideration to be in writing. Subsection (g) proposes to give the commission, after it grants a motion to reconsider, authority to refer the matter to the State Office of Administrative Hearings. Subsection (h) proposes to implement the provision of the statute that the adjustment may not exceed 12.5% of the annualized total of the amount required to be adjusted. The 12.5% calculation for environmental flow conditions expressed in cubic feet per second is proposed to be calculated by a simple arithmetic calculation of a 12.5% increase to the flow condition. For environmental flow conditions for high flow pulses that may have a peak flow component expressed in cubic feet per second, a duration expressed in hours or days, and a total volume expressed in acre-feet, the proposal is to use a 12.5% increase of the total volume of the condition annualized by totaling all the required pulses per year. Subsection (i) discusses the basis of environmental flow adjustment and is proposed to track the language of TWC, \$11.147(e-1)(2), and is not intended to expand or restrict the intent of this section.

Subsection (j) is proposed to implement the provision of the statute that calls for the adjustment to be based on appropriate consideration of the voluntary contributions to the Texas Water Trust, voluntary amendments to existing water rights to change the use or add a use for instream flows dedicated to environmental needs or bay and estuary inflows, and the appropriate credit for those contribution or amendments. Water rights vary in reliability or the amount of time that water is actually present in the watercourse. The proposed rule recognizes that a contribution of reliable water or amendment for instream uses and bay and estuary freshwater inflows should be entitled to higher consideration and credit than a similar contribution or amendment of less reliable water. In order to avoid an overly complicated rule, the commission proposes that more reliable water, proposed to be defined as water where the total volume is available at least 75% of the years, is entitled to full credit. The amount of water must be evenly distributed over the full year. For example, the water right holder seeking credit or consideration under the proposed rule would not be able to specify that their 10,000 acrefoot donation should be considered as being made only in June, July, and August, unless the original water right only allowed diversions in those months. The commission proposes that water that is available less than 75% of the years, is entitled to credit for 50% of the amount of water, again spread over the full year. For water rights amended to add a use for instream flows dedicated to environmental needs or bay and estuary inflows, the water right holder retains the ability to use the water right for its original purposes. The rule proposes to give the water right holder credit for 50% of the amount so amended, so long as that amount is not used for its original purposes. This proposed new section would implement TWC, §11.147(e-1) and (e-2).

#### Subchapter B: Trinity, San Jacinto Rivers, and Galveston Bay.

The commission proposes Subchapter B to contain all of the environmental flow standards and rules specific to the basin and bay system composed of the Trinity and San Jacinto Rivers, their associated tributaries, and Galveston Bay. The science team delivered its report to the commission on December 1, 2009. The stakeholder committee for this basin and bay system delivered its recommendations to the commission on May 28, 2010. The commission understands that it is now its duty to adopt environmental flow standards under TWC, §11.02362(c)(5). This proposed new subchapter would implement the schedule established by the Advisory Group under TWC, §11.02362, and environmental flow standards required of the commission in TWC, §11.1471.

## §298.200, Applicability and Purpose

The commission proposes new §298.200 to describe the purpose of Subchapter B and in what circumstances it applies.

## §298.205, Definitions

The commission proposes new §298.205. The proposed section has definitions of terms that will apply only to this subchapter. In §298.205(1), (2), (4), and (5) the commission proposes definitions for the seasons, "fall," "spring," "summer," and "winter" because the proposed environmental flow standards for this basin and bay system vary by season. The definitions are the same as the definitions of the seasons in the recommendations of the majority of the stakeholders and that portion of the science team that identified themselves as the "conditional group." In §298.205(3) the commission proposes a definition for "sound ecological

environment." This proposed definition is the same definition as presented by the majority of the stakeholders.

## §298.210, Findings

The commission proposes new §298.210 regarding findings related to sound ecological environments. The proposed finding regarding the ecological environment is in keeping with the stakeholder committee reports. Additional information on the commission's reasoning for the proposed schedule of flow quantities and environmental flow standards can be found in this preamble under the analyses for §298.220 and §298.225. This proposed new section would implement TWC, §11.1471.

## §298.215, Standards Priority Date

The commission proposes new §298.215 which establishes the priority date for any set-asides and any modeling of the environmental flow standards as the date the commission received the report from the science team for the system, which was December 1, 2009.

#### §298.220, Schedule of Flow Quantities

The commission proposes new §298.220 regarding the schedule of flow quantities. The commission proposes this section to explain the implementation of the environmental flow standards for the following section. The commission reserves the right to not use the exact wording of the section in water right permits issued after the adoption of these rules. However, this section does express how the commission intends to implement the proposed environmental flow standards in water right permit applications for new appropriations.

Subsistence flows are intended to be the minimum flows below which the commission will not allow diversions or storage of water. Therefore, the water right holder may not divert or store water if the flow at the applicable measurement point is below the subsistence flow standard. If the flow is above the subsistence flow standard but below the base flow standard then the water right holder may divert or store water down to the subsistence flow standard. Once the flow at the applicable measurement point is above the base flow standard for the season, then the water right holder may store or divert water according to its permit as long as the flow at the measurement point does not fall below the applicable base flow standard. The commission proposes that two pulse flows per season be allowed to pass if the flows are above the base flow standard for the season and if the peak flow trigger level is reached at the measurement point. Once the trigger conditions are met, the water right holder may not store or divert water until either the applicable pulse volume passes the measurement point or the applicable pulse duration has occurred. The commission does not propose that the water right holder be required to produce a pulse flow. Pulses occur because of high rainfall events. The commission does propose that during two of these high rainfall events per season, the high flow pulse be allowed to pass downstream. If in a particular season, only one of the high flow pulses identified in the commission's proposed rule is generated, then there would be no need to "catch up" or allow more than two high flow pulses to pass in the following season. The commission specifically requests comments on alternative ways to implement the environmental flow standards of §298.225.

§298.225, Environmental Flow Standards

The commission proposes new §298.225 to provide the environmental flow standards of TWC, §11.1471, for the basin and bay system composed of the Trinity and San Jacinto Rivers, associated tributaries, and the Galveston Bay system. The commission based its decision on consideration of sound science and other public interests and relevant factors. In the absence of a consensus recommendation from the stakeholders, which balanced science with other public interests, the commission proposes standards based on available information and recommendations from the stakeholders, and recommendations from the science teams. The measurement points are those recommended by the majority of the stakeholders and that portion of the science team identified as the conditional group. In addition, to ensure that the proposed standards take into account the geographic extent of the river basin and bay system, two additional locations are proposed. These additional locations were recommended as locations for adaptive management by the conditional group of the science team and were also recommended by the portion of the science team identifying themselves as the "regime group," as well as the remaining stakeholders. The proposed base and subsistence standards are those recommended by the conditional group of the science team, and the majority of the stakeholders. For the additional two locations, the base and subsistence standards are those recommended for adaptive management purposes by the conditional group of the science team. The proposed high flow pulse standards are based on adaptive management pulses recommended by the conditional group of the science team and are also recommended as low tier pulses by the regime group of the science team. The proposed bay and estuary freshwater inflow standards for Galveston Bay are based on the recommendations of the majority of the stakeholders.

The executive director performed an analysis to address the issue of balancing human and other competing needs for water in the basin and bay system. The executive director did not look at every possible future water use scenario, but limited the selection of scenarios to those that could reasonably be expected to be implemented before the environmental flow standards are reconsidered, in accordance with the schedule in §298.240. The executive director did not look at longer term water use scenarios, i.e. 50 years in the future, because there will be another opportunity to look at those long term scenarios through HB 3/SB 3's adaptive management provisions. Under those provisions, the standards will be re-examined based on improved science and the stakeholders will have another opportunity to re-evaluate the issue of balancing human and other competing needs for water in the basin and bay system.

The executive director reviewed the Regional Water Plans for Regions C and H, as those regions are delineated by the Texas Water Development Board for the Regional Water Planning process. Based on this review, the executive director selected one future use scenario for the balancing analysis from the Trinity River Basin and one from the San Jacinto River Basin. For all evaluations, the executive director used the commission's WAM for the specific river basin and modified it by adding the selected scenario. Each scenario is different, therefore the application of criteria and reporting of results varies based on the specifics of the scenario. The executive director performed analyses to estimate water availability under three conditions: 1) application of the proposed environmental flow standard, 2) application of the commission's current default methodology, and 3) no environmental flow requirements. Copies of the WAMs used in this analysis are available at: <a href="http://www.tceq.state.tx.us/goto/eflows/rulemaking">http://www.tceq.state.tx.us/goto/eflows/rulemaking</a>.

For the Trinity River Basin scenario, applying either the default methodology or no instream flow or freshwater inflow requirement produces an annual availability of 83%. Application of the proposed standards also produced an annual availability of 83%. For the San Jacinto River Basin, no measurement points are proposed in the rule near the location of the scenario. In this case, no instream flow standards were applied in the analysis. However, the scenario would be subject to the proposed bay and estuary freshwater inflow standards. The minimum volumetric bay and estuary standards proposed in the rule were included in the WAM. Applying the commission's default methodology resulted in less water than would be available without instream flow or freshwater inflow requirements. Applying the bay and estuary freshwater inflow standard proposed by this rule resulted in less water than would be available under either application of the default methodology or application of no environmental flow requirements. The reliability of available water varied depending on the environmental flow condition. Reliability with application of either the bay and estuary freshwater inflow standard or no environmental flow requirements was comparable, and both of these conditions resulted in more reliable water than application of the default methodology. The executive director also considered whether reduction of the proposed standards would result in a significant increase in the yield of these projects and found that it did not. Based on the results of the analysis, the executive director determined that there would be no significant impact from implementation of the proposed standards.

The commission is not proposing to set aside any unappropriated water to protect the proposed environmental flow standards. The commission does not believe that, for the Trinity and San Jacinto Rivers, unappropriated water is available to protect the subsistence and base flows. Any

unappropriated water that is available in these river basins is available only during relatively wet conditions. In theory, some water might be able to be set aside for high flow pulses. The commission is of the initial opinion that the environmental flow standards may be adequately protected by special conditions in water right permits or amendments for new appropriations of water in these basins. Special conditions are a more effective method to maximize the use of water by allowing water to be used for dual purposes. Special conditions to protect environmental flows may allow water permitted to downstream senior water rights, as well as return flows and permitted but unused water, to satisfy the special conditions. This proposed new section would implement TWC, §11.1471.

#### §298.230, Water Right Permit Conditions

The commission proposes new §298.230 relating to water right permit conditions. The proposed provision would require the commission to place special conditions in water right applications for new appropriations and amendments that would add additional appropriations to existing permits. The special conditions would be to protect the environmental flow standards established by the subchapter. Water right permit applications to divert or store 10,000 per acre-feet per year or less would not contain the special conditions relative to high flow pulses. This proposed new section would implement TWC, §11.134(b)(3)(D) and §11.1471.

## §298.240, Schedule for Revision of Standards

The commission proposes new §298.240 to provide the schedule for re-examination of the environmental flow standards. The commission proposes to take up a possible rulemaking to change the standards ten years from the effective date of the rules. The commission notes that it

is prohibited from providing that the rulemaking process occurs more frequently than once every ten years unless the stakeholders' workplan approved by the Advisory Group under TWC, §11.02362(p), calls for a more frequent schedule. The commission notes that, as of the time of proposal of these rules, it has not received an approved workplan from the stakeholder committee. The commission will consider changing this proposal on adoption of the rule if it has received an approved workplan by the date this rule is considered for adoption at a commission agenda. The commission is also of the opinion that should it receive an approved workplan after final adoption of this rule package, the commission is free to consider an amendment to this section and change the schedule more often than once every ten years. The proposed new section would implement TWC, §11.1471(f).

## Subchapter C: Sabine, Neches Rivers, and Sabine Lake Bay.

The commission proposes Subchapter C to contain all of the environmental flow standards and rules specific to the basin and bay system composed of the Sabine and Neches Rivers, their associated tributaries, and Sabine Lake Bay. The science team delivered its report to the commission on November 30, 2009. The stakeholder committee delivered its recommendations to the commission on May 24, 2010. The commission understands that it is now its duty to adopt environmental flow standards under TWC, §11.02362(c)(5). This proposed new subchapter would implement the schedule established by the Advisory Group under TWC, §11.02362, and environmental flow standards required of the commission in TWC, §11.1471.

#### §298.250, Applicability and Purpose

The commission proposes new §298.250 to describe the purpose of Subchapter C and in what circumstances it applies.

#### §298.255, Definitions

The commission proposes a new §298.255 regarding definitions. The proposed section has definitions of terms that will apply only to this subchapter. The seasons, "fall," "spring," "summer," and "winter," are proposed to be defined because the proposed environmental flow standards for this basin and bay system vary by season. The definitions are the same as the definitions of the seasons in the recommendations of the science team. In §298.255(1), (2), and (7), the commission also proposes definitions for "average condition," "dry condition," and "wet condition." A range of base flow conditions - average, dry, and wet - is proposed to be defined consistent with the recommendations of the science team. In §298.255(5) the commission proposes a definition for "sound ecological environment." The proposed definition is the same definition as presented by the stakeholders.

# §298.260, Findings

The commission proposes new §298.260 regarding findings related to sound ecological environments. The proposed finding regarding the ecological environment is in keeping with the stakeholder committee report. The proposed finding regarding maintenance of the ecological environment is based on the science team report. Additional information on the commission's reasoning for the proposed schedule of flow quantities and environmental flow standards can be found in this preamble under the analyses for §298.275 and §298.280. This proposed new section would implement TWC, §11.1471.

#### §298.265, Set Asides and Standards Priority Date

The commission proposes new §298.265 that would establish the priority date for any set-asides and any modeling of the environmental flow standards as the date the commission received the report from the science team, which was November 30, 2009.

#### §298.270, Calculation of Hydrologic Conditions

The commission proposes new §298.270 to explain the determination of hydrologic conditions for implementation and application of the standards by water right holders to whom the proposed standards apply.

## §298.275, Schedule of Flow Quantities

The commission proposes new §298.275 to explain the implementation of the environmental flow standards for §298.280 The commission does not intend to be bound to use the exact wording of the section in water right permits issued after the adoption of these rules. However, this section does express how the commission intends to implement the proposed environmental flow standards in water right permit applications for new appropriations. Subsistence flows are intended to be the minimum flows below which the commission will not allow diversions or storage of water. Therefore, the water right holder may not divert or store water if the flow at the applicable measurement point is below the subsistence flow standard. The applicable base flow standard varies depending on the hydrologic condition. If the flow is above the subsistence flow standard but below the dry base flow standard, then the water right holder may divert or store water down to the subsistence flow. If the flow at the applicable

measurement point is above the base flow standard for the season, then the water right holder may store or divert water according to its permit as long as the flow at the measurement point does not fall below the applicable base flow standard. The commission proposes that two smaller magnitude pulse flows per season be allowed to pass if the flows are above the applicable base flow standard for the season and if the peak flow trigger level is reached at the measurement point. Under dry hydrologic conditions, in the spring and summer, only one of these smaller magnitude pulse flows per season need to be allowed to pass if the peak flow trigger level is reached at the measurement point. No smaller magnitude pulses need to be passed during the fall and winter seasons under dry hydrologic conditions. In addition to the two smaller magnitude high flow pulses, under wet conditions, the commission proposes that one larger magnitude high flow pulse per season also be allowed to pass if the peak flow trigger level is reached at the measurement point. Once the trigger conditions are met, the water right holder may not store or divert water until either the applicable pulse volume passes the measurement point or the applicable pulse duration has occurred. The commission does not propose that the water right holder somehow produce a pulse flow. Pulses occur because of high rainfall events. The commission does propose that, as described above, during high rainfall events in a specific season, the applicable high flow pulse be allowed to pass downstream. If in a particular season, the high flow pulse is not generated by rainfall events, then there would be no need to "catch up" or allow more than the applicable high flow pulses to pass in the following season. The commission specifically requests comments on alternative ways to implement the environmental flow standards of §298.280.

#### §298.280, Environmental Flow Standards

The commission proposes new §298.280 to provide the environmental flow standards of TWC, §11.1471, for the basin and bay system composed of the Sabine and Neches Rivers, associated tributaries, and Sabine Lake Bay. The commission based its decision on consideration of sound science and other public interests and relevant factors. In the absence of a recommendation from the stakeholders, which would have balanced science with other public interests, the commission proposes standards based on available information and recommendations from the science team. The measurement locations are those recommended by the science team, with the exception of USGS gage 08038000, Attoyac Bayou near Chireno, Texas. At the present time, daily discharge information is not publically available. For this location, the commission believes that the lack of readily accessible daily data could create implementation issues for specific water right holders who could be subject to an environmental flow standard at this location. Therefore, the commission does not propose environmental flow standards at this location. The proposed base and subsistence standards, and the proposed high flow pulse standards are those recommended by the science team. The science team did not recommend bay and estuary standards for Sabine Lake Bay. The executive director performed an analysis to address the issue of balancing human and other competing needs for water in the basin and bay system. The executive director did not look at every possible future water use scenario, but limited the selection of scenarios to those that could reasonably be expected to be implemented before the environmental flow standards are reconsidered in accordance with the schedule in §298.290. The executive director did not look at longer term water use scenarios, i.e. 50 years in the future, because there will be another opportunity to look at those long term scenarios through HB 3/SB 3's adaptive management provisions. Under those provisions, the standards will be re-examined based on improved science and the stakeholders will have another

opportunity to re-evaluate the issue of balancing human and other competing needs for water in the basin and bay system.

The executive director reviewed the Regional Water Plans for Regions C, D, and I, as those regions are delineated by the Texas Water Development Board for the Regional Water Planning process. Based on this review, the executive director selected one future water use scenario for the balancing analysis from the Sabine River Basin and one from the Neches River Basin. For all evaluations, the executive director used the commission's WAM for the specific river basin and modified it by adding the selected scenario. Each scenario is different, therefore the application of criteria and reporting of results varies based on the specifics of the scenario. The executive director performed analyses to estimate water availability under three conditions: 1) application of the proposed environmental flow standard, 2) application of the commission's WAM for the Sabine River Basin accounts for Texas' obligations under the Sabine River Compact. Copies of the WAMs used in this analysis are available at:

http://www.tceq.state.tx.us/goto/eflows/rulemaking.

For the Sabine River Basin scenario, applying either the default methodology or no instream flow requirement produces an annual availability of 97%. Application of the standards proposed in this rule produces an annual availability of 95% or a 2% decrease as compared to the amount available under the other environmental flow conditions. For the Neches River Basin scenario, the maximum annual availability under each of the three conditions varied slightly. The 50th percentile annual diversion amounts exhibited greater variation, with application of the

proposed standards resulting in the lowest annual availability in this range, although this reduction is not significant.

The executive director also considered whether reduction of the proposed standards would result in a significant increase in the yield of these projects and found that it did not. Based on the results of the analysis, the executive director determined that there would be no significant impact from implementation of the proposed standards. The commission is not proposing to set aside any unappropriated water to protect the proposed environmental flow standards. The commission does not believe that, for the Sabine and Neches Rivers, unappropriated water is available to protect subsistence and base flows. Any unappropriated water that is available in these river basins is only available during relatively wet conditions. In theory, some water might be able to be set aside for high flow pulses. The commission is of the initial opinion that the environmental flow standards may be adequately protected by special conditions in new appropriations of water in these basins. The special conditions are a more effective method to maximize the use of water by allowing water to be used for dual purposes. Special conditions to protect environmental flows may allow water permitted to downstream senior water rights, as well as return flows and permitted but unused water, to satisfy the special conditions. This proposed new section would implement TWC, §11.1471.

## §298.285, Water Right Permit Conditions

The commission proposes new §298.285 to require the commission to place special conditions in water rights for new appropriations and amendments that would add additional appropriations to existing permits. The special conditions would be to protect the

environmental flow standards established by the subchapter. Water right permit applications to divert or store 10,000 acre-feet or less per year would not contain the special conditions relative to high flow pulses. This proposed new section would implement TWC, §11.134(b)(3)(D) and §11.1471.

#### §298.290, Schedule for Revision of Standards

The commission proposes new §298.290 to provide the schedule for re-examination of the environmental flow standards. The commission proposes to take up possible rulemaking to change the standards ten years from the date of adoption of the rules. The commission notes that it is prohibited from providing that the rulemaking process occurs more frequently than once every ten years, unless the stakeholders' workplan approved by the Advisory Group under TWC, §11.02362(p), calls for a more frequent schedule. The commission notes that, as of the time of proposal of these rules, it has not received an approved workplan from the stakeholder committee. The commission will consider changing this proposal on adoption of the rule, if it has received an approved workplan by the date this rule is considered for adoption at a commission agenda. The commission is also of the opinion that should it receive an approved workplan after final adoption of this rule package, the commission is free to consider an amendment to this section and change the schedule more often than once every ten years. This proposed new section would implement TWC, §11.1471(f).

## FISCAL NOTE: COSTS TO STATE AND LOCAL GOVERNMENT

Jeff Horvath, Analyst in the Strategic Planning and Assessment Section, determined that for the first five-year period the proposed rules are in effect, no significant fiscal implications are

anticipated for the agency or any other unit of state or local government as a result of administration or enforcement of the proposed rules.

The proposed rules would implement provisions of HB 3/SB 3 by adopting appropriate environmental flow standards for the river and bay systems of the Sabine and Neches Rivers, Sabine Lake Bay, and the Trinity and San Jacinto Rivers and Galveston Bay. The proposed rules would also establish procedures for implementing an adjustment of conditions included in a permit or amended water right in those river and bay systems.

The proposed rules do not include any new fees nor do they change existing ones. The new rules do propose specific standards that will be applied by TCEQ staff during technical review of applications for new appropriations of state water. These proposed standards are the result of stakeholder recommendations and will replace the methodology currently used to determine streamflow requirements. Once the environmental flow standards are adopted, the standards will be a part of the commission's water rights permitting process. This may affect new appropriations and amendments that increase the amount of water to be taken, stored, or diverted, which could result in an applicant having to secure an additional source of water. However, streamflow restrictions are currently applied to new appropriations of water under existing practice and environmental flow standards as proposed in the rule are expected to function similarly to current streamflow restrictions. Any effect of the proposed rules on an application for new appropriations would depend upon the type of application, the location of the application in its basin, and the overall water availability in that basin. In the Sabine and Neches River Basins, staff's preliminary analysis indicates that the impacts of the proposed

standards may be greater for applications for direct diversions than for applications that request a new appropriation of water from an existing reservoir. In the Trinity and San Jacinto River Basins, staff's preliminary analysis indicates similar types of impacts. In addition, bay and estuary inflow requirements would be considered in availability determinations for applications in the Trinity and San Jacinto River Basins and the amount of water granted in an application could be lower.

Overall, because the proposed standards are expected to function similarly to current streamflow restrictions for applications, the proposed standards are not expected to have significant fiscal implications for units of state or local government including river authorities, cities, or water districts.

## PUBLIC BENEFITS AND COSTS

Mr. Horvath also determined that for each year of the first five years the proposed new rules are in effect, the public benefit anticipated from the changes seen in the proposed rules will be to provide certainty for the state's water management and development as well as adequate protection of the state's streams, rivers, bays, and estuaries.

Individuals and businesses are not expected to experience significant fiscal implications as a result of the proposed rules. The proposed rules will provide appropriate environmental flow standards for the river and bay systems of the Sabine and Neches Rivers, Sabine Lake Bay, and the Trinity and San Jacinto Rivers and Galveston Bay.

The proposed rules may affect new appropriations and amendments that increase the amount of water to be taken, stored, or diverted, which could result in an applicant having to secure an additional source of water. However, because streamflow restrictions are currently applied to new appropriations of water under existing practice and the proposed standards are expected to function similarly to current streamflow restrictions for applications, the proposed standards are not expected to have significant fiscal implications for businesses and individuals.

## SMALL BUSINESS AND MICRO-BUSINESS ASSESSMENT

No adverse fiscal implications are anticipated for small or micro-businesses as a result of the administration or implementation of the proposed rules. The proposed rules will provide appropriate environmental flow standards for the river and bay systems of the Sabine and Neches Rivers and Sabine Lake Bay, and the Trinity and San Jacinto Rivers and Galveston Bay. The proposed rules may affect new appropriations and amendments that increase the amount of water to be taken, stored, or diverted, which could result in an applicant having to secure an additional source of water. However, because streamflow restrictions are currently applied to new appropriations of water under existing practice and the proposed environmental flow standards would function similarly to current streamflow restrictions, no adverse fiscal implications are anticipated for small or micro-businesses.

#### SMALL BUSINESS REGULATORY FLEXIBILITY ANALYSIS

The commission has reviewed this proposed rulemaking and determined that a small business regulatory flexibility analysis is not required because the proposed rules are not expected to adversely affect small or micro-businesses for the first five years that they are in effect, the rules

are necessary to protect public health and safety, and because the rules are required to implement state law.

## LOCAL EMPLOYMENT IMPACT STATEMENT

The commission has reviewed this proposed rulemaking and determined that a local employment impact statement is not required because the proposed rules do not adversely affect a local economy in a material way for the first five years that the proposed rules are in effect.

## DRAFT REGULATORY IMPACT ANALYSIS DETERMINATION

The commission evaluated these proposed rules and performed an analysis of whether these proposed rules require a regulatory impact analysis under Texas Government Code, §2001.0225. These amendments are not a "major environmental rule" under §2001.0225 because although the specific intent of the rulemaking is to protect the environment, these rules do not potentially adversely affect in a material way the economy or a sector of the economy. Additionally, the purpose of these rules is not to exceed a standard set by federal law, exceed an express requirement of state law, exceed a requirement of a delegation agreement or contract between the state and an agency of the federal government to implement a state and federal program, or to adopt rules solely under the general powers of the agency instead of specific state law. This rulemaking is specifically required by TWC, §11.1471. The purpose of these rules is to establish environmental flow standards, set-asides (if available), and procedures for implementing an adjustment of these standards, if required in a permit or amendment for the river and bay systems consisting of the Sabine and Neches Rivers and Sabine Lake Bay, and the Trinity and San Jacinto Rivers and Galveston Bay, as required by §11.1471(a). Therefore, no

regulatory impact analysis is required under Texas Government Code, §2001.0225, for this rulemaking.

Written comments on the draft regulatory impact analysis determination may be submitted to the contact person at the address listed under the SUBMITTAL OF COMMENTS section of this preamble.

## TAKINGS IMPACT ASSESSMENT

The commission evaluated these proposed rules and performed an analysis of whether they constitute a taking under Texas Government Code, Chapter 2007. The specific purpose of these rules is to establish environmental flow standards, set-asides (if available), and procedures for implementing an adjustment of these standards, if required in a permit or amendment for the river and bay systems consisting of the Sabine and Neches Rivers and Sabine Lake Bay, and the Trinity and San Jacinto Rivers and Galveston Bay, as expressly required by TWC, §11.1471(a). Promulgation and enforcement of these proposed rules would be neither a statutory nor a constitutional taking of private real property. Specifically, because under TWC, §11.147(e-1), these rules cannot be retroactively applied to water rights issued before September 1, 2007; the subject proposed regulations do not affect a landowner's rights in private real property. Thus, this rulemaking does not burden (constitutionally) nor restricts or limits the owner's right to existing property and reduces its value by 25% or more beyond that which would otherwise exist in the absence of the regulations.

## CONSISTENCY WITH THE COASTAL MANAGEMENT PROGRAM

The commission reviewed the proposed rulemaking and found that the proposal is subject to the Texas Coastal Management Program (CMP) in accordance with the Coastal Coordination Act, Texas Natural Resources Code, §§33.201 *et. seq.*, and, therefore, must be consistent with all applicable CMP goals and policies. The commission conducted a consistency determination for the proposed rules in accordance with Coastal Coordination Act Implementation Rules, 31 TAC §505.22, and found the proposed rulemaking is consistent with the applicable CMP goals and policies.

CMP goals applicable to the proposed rules include: 1) to protect, preserve, restore, and enhance the diversity, quality, quantity, functions, and values of coastal natural resource areas; and, 2) to ensure sound management of all coastal resources by allowing for compatible economic development and multiple human uses of the coastal zone. CMP policies applicable to the proposed rules include those contained in 31 TAC §501.33. The proposed rules implement HB 3/SB 3, which established the environmental flows process to provide certainty in water management and development and to provide adequate protection of the state's streams rivers, bays, and estuaries. Since one of the purposes of the proposed rules is to protect coastal natural resources, the rules are consistent with CMP goals and policies.

Promulgation and enforcement of these rules will not violate or exceed any standards identified in the applicable CMP goals and policies, because the proposed rules are consistent with these CMP goals and policies, because these rules do not create or have a direct or significant adverse effect on any coastal natural resource areas, and, because one of the purposes of the proposed rules is to protect coastal natural resources.

Written comments on the consistency of this rulemaking may be submitted to the contact person at the address listed under the SUBMITTAL OF COMMENTS section of this preamble.

## ANNOUNCEMENT OF HEARING

The commission will hold a public hearing on this proposal in Austin on December 16, 2010, at 10:00 a.m. in Building E, Room 201S, at the commission's central office located at 12100 Park 35 Circle. The hearing is structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon in order of registration. Open discussion will not be permitted during the hearing; however, commission staff members will be available to discuss the proposal 30 minutes prior to the hearing.

Persons who have special communication or other accommodation needs who are planning to attend the hearing should contact Charlotte Horn, Office of Legal Services at (512) 239-0779. Requests should be made as far in advance as possible.

#### SUBMITTAL OF COMMENTS

Written comments may be submitted to Natalia Henricksen, MC 205, Office of Legal Services, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087, or faxed to (512) 239-4808. Electronic comments may be submitted at:

*http://www5.tceq.state.tx.us/rules/ecomments/*. File size restrictions may apply to comments being submitted via the eComments system. All comments should reference Rule Project Number 2007-049-298-OW. The comment period closes December 20, 2010. Copies of the

proposed rulemaking can be obtained from the commission's Web site at

http://www.tceq.state.tx.us/nav/rules/propose\_adopt.html. For further information, please

contact Ron Ellis, Water Rights Permitting and Availability, (512) 239-1282.

# <u>SUBCHAPTER A: GENERAL PROVISIONS</u> §§298.1, 298.5, 298.10, 298.15, 298.20, 298.25

## STATUTORY AUTHORITY

The new sections are proposed under Texas Water Code (TWC), §§5.102, concerning General Powers; 5.103, concerning Rules; and 5.105 concerning General Policy, which authorize the commission to adopt rules as necessary to carry out its power and duties under the TWC. The new sections are also proposed under TWC, §§5.506, concerning Emergency Suspension of Permit Condition Relating to, and Emergency Authority to Make Available Water Set Aside For, Beneficial Inflows to Affected Bays and Estuaries and Instream Uses; 11.0235, concerning Policy Regarding Waters of the State; 11.147, concerning Effects of Permit on Bays and Estuaries and Instream Uses; 11.148, concerning Emergency Suspension of Permit Conditions and Emergency Authority to Make Available Water Set Aside for Environmental Flows; and 11.1471, concerning Environmental Flow Standards and Set-Asides.

The proposed new sections implement TWC, §§5.102, 5.103, 5.105, 5.506, 11.0235, 11.147, 11.148, and 11.1471.

## §298.1. Definitions.

The following words or phrases, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise, or unless a subchapter has a different definition that only applies to that subchapter:
(1) **Base flow**--the range of average flow conditions, in the absence of significant rainfall events, that may vary depending on current weather patterns.

(2) **Environmental flow regime**--a schedule of flow quantities that reflects seasonal and yearly fluctuations that typically would vary geographically, by specific location in <u>a watershed.</u>

(3) **Environmental flow standards**--those requirements contained in this chapter, adopted by the commission under Texas Water Code, §11.1471.

(4) **Lower Rio Grande**--the main stem of the Rio Grande from just above Falcon Reservoir to the mouth of the Rio Grande.

(5) **Measurement point**--a specific geographical location on a watercourse where environmental flow standards are established.

(6) **Middle Rio Grande**--the main stem of the Rio Grande from just above <u>Amistad Reservoir to just above Falcon Reservoir.</u>

(7) **Pulse or high flow pulse**--relatively short-duration, high flows within the stream channel that occur during or immediately following a storm event.

(8) **Subsistence flow**--the minimum streamflow needed during critical drought periods to maintain tolerable water quality conditions and to provide minimal aquatic habitat space for the survival of aquatic organisms.

(9) USGS--United States Geological Survey.

(10) **Water right holder**--a person or entity that owns a valid certificate of adjudication, certified filing, or water right permit.

(11) Water right permit--a valid certificate of adjudication, certified filing, or water right permit. The term does not include exempt water users, such as domestic and livestock water users.

#### <u>§298.5. General.</u>

This chapter contains the environmental flow standards and set-asides required by Texas Water Code (TWC), §11.1471. The commission adopts these environmental flow standards for each river basin and bay system in this state as the commission receives recommendations from basin and bay area stakeholders in accordance with TWC, §11.02362. The commission finds that the environmental flow standards adopted herein are adequate to support a sound ecological environment, to the maximum extent reasonable, considering other public interests and other relevant factors as described in TWC, §11.1471(b). The environmental flow standards adopted

herein are schedules of flow quantities, reflecting seasonal and yearly fluctuations that vary geographically by specific location in a river basin and bay system.

## §298.10. Applicability.

(a) This chapter only relates to a permit for a new appropriation of water or to an amendment to an existing water right that increases the amount of water authorized to be stored, taken, or diverted, and the chapter applies only to:

(1) Water appropriated under a permit for a new appropriation of water, the application for which was pending with the commission on September 1, 2007, or is filed with the commission on or after that date; or

(2) The increase in the amount of water authorized to be stored, taken, or diverted under an amendment to an existing water right that increases the amount of water authorized to be stored, taken, or diverted, and the application for which was pending with the commission on September 1, 2007, or was filed with the commission on or after that date.

(b) This chapter does not otherwise amend or restrict the commission's authority to impose special conditions on water right permits, including special conditions to protect environmental flows. The commission retains any and all authority to place special conditions on interbasin transfers; on amendments, such as an amendment to move a diversion point upstream; and on authorizations under Texas Water Code (TWC), §11.042 and §11.046, to

protect environmental flows or senior water rights. This chapter also does not expand the commission's authority to impose special conditions on water right permits beyond the authority granted to the commission in TWC, Chapter 11, or expressed by the commission in Chapter 297 of this title (relating to Water Rights, Substantive).

# <u>§298.15.</u> Special Conditions to Protect Environmental Flow Standards and Set <u>Asides.</u>

(a) The commission may not grant an appropriation for state water that has been set aside by the commission under this chapter to meet downstream instream flow needs or freshwater inflow needs. The commission may not issue a permit for a new appropriation or an amendment to an existing water right that increases the amount of water authorized to be stored, taken, or diverted if the issuance of the permit or amendment would impair an environmental flow set-aside established by this chapter.

(b) For purposes of determining any environmental flow conditions in any water right permit application to which this chapter applies that are necessary to maintain: freshwater inflows to an affected bay and estuary system; existing instream uses and water quality of a stream or river; or fish and wildlife habitats; the commission shall apply any applicable environmental flow standard, including any environmental flow set-aside, adopted in this chapter, instead of considering the factors specified in Texas Water Code, §11.147(b) - (e) and §§297.53 - 297.56 of this title (relating to Habitat Mitigation; Water Quality Effects; Estuarine Considerations; and Instream Uses, respectively).

(c) The commission will incorporate into every water right permit any condition, restriction, limitation, or provision, as provided in Chapter 297 of this title (relating to Water Rights, Substantive) that is reasonably necessary to protect environmental flow standards, to the maximum extent reasonable, considering other public interests and other relevant factors.

#### §298.20. Priority Date for Set-Asides.

An environmental flow standard or set-aside established under this chapter for a river basin and bay system other than the middle and lower Rio Grande shall be assigned a priority date corresponding to the date the commission receives environmental flow regime recommendations from the applicable basin and bay expert science team as set forth in these rules. This priority date shall be included in the appropriate water availability models maintained by the commission in connection with an application for a permit for a new appropriation or for an amendment to an existing water right that increases the amount of water authorized to be stored, taken, or diverted.

# <u>§298.25. Process for Adjusting Environmental Flow Conditions in Certain</u> <u>Permits.</u>

(a) On the petition of the executive director, the commission may amend a water right permit for a new appropriation or an amendment for an increase in the amount of water authorized to be stored, taken, or diverted issued after September 1, 2007, in order to adjust

<u>environmental flow special conditions, if the commission determines, through the process set</u> <u>forth herein, that such an adjustment is appropriate to achieve compliance with applicable</u> <u>environmental flow standards adopted in this chapter.</u>

(b) A petition to adjust an environmental flow special condition shall be prepared by the executive director in the manner of an original application for a permit and have a title that indicates that it is to adjust environmental flow special conditions. The petition shall be filed with the Chief Clerk in the same manner as a water right permit application.

(c) Notice of the petition, with an opportunity for public comment, shall be mailed by the executive director by first-class mail, postage prepaid, to each water right holder of record within the basin and to all navigation districts within the river basin concerned not less than 30 days before the date of action on the petition by the commission. The executive director will also cause a copy of the notice to be posted to the commission's Web site at least 30 days before the date of action on the petition. A temporary outage of service of the commission's Web site during the 30 day notice period does not prevent the commission's consideration of the petition. The inadvertent failure of the executive director to mail notice to a navigation district that is not an appropriator of water does not prevent the commission's consideration of the petition.

(d) The commission may act on the petition without holding a public hearing. The commission shall consider all written public comment received on the petition prior to the commission's decision on the petition.

(e) A motion for rehearing of the commission's action must be filed no later than 23 days after the chief clerk mails (or otherwise transmits) the decision on the petition and provides instructions for requesting that the commission reconsider the decision or hold a contested case hearing. The following may file a motion for rehearing under this chapter:

(1) the commission on its own motion;

(2) the executive director;

(3) the water right holder; and

(4) affected persons, when authorized by law.

(f) A motion for rehearing by an affected person must be in writing, and must be filed with the chief clerk within the time provided by subsection (e) of this section.

(g) If the motion for rehearing is granted, the commission may refer the matter to the State Office of Administrative Hearings.

(h) The environmental flow adjustment, in combination with any previous adjustments made under this section may not increase the amount of the environmental flow pass-through or release requirement for a water right permit by more than 12.5% of the annualized total of

<u>that requirement contained in the permit as issued or of that requirement contained in the</u> <u>amended water right and applicable only to the increase in the amount of water authorized to be</u> <u>stored, taken, or diverted under the amended water right permit. Any new permit conditions</u> <u>must be consistent with the environmental flow standards to the maximum extent practicable.</u>

(1) For environmental flow conditions expressed in cubic feet per second, the maximum adjustment is calculated by multiplying the annual amount of the original standard in cubic feet per second by 12.5% to generate the adjustment and calculate the new condition expressed in cubic feet per second. The adjustment, in combination with all previous adjustments, cannot increase the flow requirement above the sum of the original flow requirement plus the original 12.5% adjustment.

(2) For environmental flow conditions, such as a pulse, expressed with multiple characteristics, such as frequency, peak flow, volume, and duration, the maximum adjustment is calculated by multiplying the original pulse volume component by 12.5% to generate the maximum adjustment amount. The combination of all previous adjustments, and any new adjustment, cannot increase the pulse volume above the sum of the original pulse volume requirement plus the original 12.5% adjustment.

(i) The environmental flow adjustment must be based on appropriate consideration of the priority dates and diversion locations of any other water rights granted in the same river basin that are subject to adjustment under this section.

(j) The environmental flow adjustment must be based on appropriate consideration of any voluntary contributions to the Texas Water Trust, and of any voluntary amendments to existing water rights to change the use of a specified quantity of water to or add a use of a specified quantity of water for instream flows dedicated to environmental needs or bay and estuary inflows as authorized by Texas Water Code, §11.0237(a), that actually contribute toward meeting the applicable environmental flow standard. Any water right holder who makes a contribution or amends a water right as described herein is entitled to appropriate credit for the benefits of the contribution or amendment against the adjustment of the holder's existing water right permit conditions under this section.

(1) Water rights that are voluntarily contributed to the Texas Water Trust or voluntary amendments to change the use where the total volume of water is available in at least 75% of the years, are entitled to credit the contribution or amendment against the adjustment only by spreading out the amount contributed over the permit's time interval; and

(2) Water rights that are voluntarily contributed to the Texas Water Trust or voluntary amendments to change the use where the reliability of the water does not meet the criteria that the water is available in at least 75% of the years, or amendments to add a use of a specified quantity of water for instream flows dedicated to environmental needs or bay and estuary inflows are entitled to credit the contribution or amendment against the adjustment only by spreading out one half of the amount contributed over the permit's time interval.

## <u>SUBCHAPTER B: TRINITY, SAN JACINTO RIVERS, AND GALVESTON BAY</u> §§298.200, 298.205, 298.210, 298.215, 298.220, 298.225, 298.230, 298.240

#### **STATUTORY AUTHORITY**

The new sections are proposed under Texas Water Code (TWC), §§5.102, concerning General Powers; 5.103, concerning Rules; and 5.105 concerning General Policy, which authorize the commission to adopt rules as necessary to carry out its power and duties under the TWC. The new sections are also proposed under TWC, §§5.506, concerning Emergency Suspension of Permit Condition Relating to, and Emergency Authority to Make Available Water Set Aside For, Beneficial Inflows to Affected Bays and Estuaries and Instream Uses; 11.0235, concerning Policy Regarding Waters of the State; 11.147, concerning Effects of Permit on Bays and Estuaries and Instream Uses; 11.148, concerning Emergency Suspension of Permit Conditions and Emergency Authority to Make Available Water Set Aside for Environmental Flows; and 11.1471, concerning Environmental Flow Standards and Set-Asides.

The proposed new sections implement TWC, §§5.102, 5.103, 5.105, 5.506, 11.0235, 11.147, 11.148, and 11.1471.

#### §298.200. Applicability and Purpose.

This subchapter contains the environmental flow standards for the Trinity and San Jacinto rivers, their associated tributaries, and Galveston Bay. Provisions of this subchapter control over any provisions of Subchapter A of this chapter (relating to General Provisions) for

purposes of environmental flow standards and regulation in the Trinity and San Jacinto rivers, their associated tributaries, and Galveston Bay.

## §298.205. Definitions.

<u>The following words or phrases have the following meanings, in this subchapter, unless</u> <u>the context clearly indicates otherwise:</u>

(1) **Fall**--the period of time September through November, inclusive.

(2) **Spring**--the period of time March through May, inclusive.

(3) **Sound ecological environment**--a resilient, functioning ecosystem characterized by intact, natural processes, and a balanced, integrated, and adaptive community of organisms comparable to that of the natural habitat of a region.

(4) **Summer**--the period of time June through August, inclusive.

(5) **Winter**--the period of time December through February, inclusive.

<u>§298.210. Findings.</u>

(a) The Trinity and San Jacinto rivers, their associated tributaries, Galveston Bay, and the associated estuaries are healthy and sound ecological environments.

(b) The commission finds that these sound ecological environments can best be maintained by a set of flow standards that implement a schedule of flow quantities that contain subsistence flow, base flow, and one level of high flow pulses at defined measurement points. Minimum flow levels for these components will vary by season and by year since the amount of precipitation and, therefore, whether a system is in subsistence or base flow conditions, will vary from year to year and within a year from season to season, and the number of pulses protected will also vary with the amount of precipitation.

#### §298.215. Standards Priority Date.

The priority date for the environmental flow standards and set-asides established by this subchapter is December 1, 2009.

#### §298.220. Schedule of Flow Quantities.

(a) The environmental flow standards adopted by this subchapter constitute a schedule of flow quantities made up of subsistence flow, base flow, and one level of high flow pulses. Environmental flow standards are established at six separate measurement locations in §298.230 of this title (relating to Water Right Permit Conditions).

(b) Subsistence flow. For a water right holder to which an environmental flow standard applies, at a measurement point that applies to the water right, the water right holder may not store or divert water unless the flow at the measurement point is above the subsistence flow standard for that point. If the flow at the measurement point is above the subsistence flow standard but below the applicable base flow standard, then the water right holder may divert or store water according to its permit, subject to senior and superior water rights, as long as the flow at the measurement point does not fall below the applicable subsistence flow standard.

(c) Base flow. The applicable base flow standard varies depending on the seasons as described in §298.230 of this title. For a water right holder to which an environmental flow standard applies, at a measurement point that applies to the water right, the water right is subject to a base flow standard. For a water right holder to which an environmental flow standard applies, at a measurement point that applies to the water right, when the flow at that point is above the applicable base flow standard, and below the applicable peak flow trigger level, the water right holder may store or divert water according to its permit, subject to senior and superior water rights, as long as the flow at the measurement point does not fall below the applicable base flow standard.

(d) High flow pulses. High flow pulses are relatively short-duration; high flows within the watercourse that occur during or immediately following a storm event.

(1) Two pulses per season are to be passed (i.e., no storage or diversion by an applicable water right holder) if the flows are above the applicable base flow standard, and if the

<u>peak flow trigger level is met at the measurement point. The water right holder shall not divert</u> <u>or store water until either the volume amount has passed the measurement point or the</u> duration time has passed since the peak flow trigger rate occurred.

(2) If the peak flow trigger rate does not occur in a season, then the water right holder need not stop storing or diverting water to produce a peak. The water right holder is not required to store water to be released later to produce a peak.

(3) For purposes of this section, compliance with seasonal high flow pulse frequency requirements is determined by Fall, defined as October through November; Spring, defined as March through June; Summer, defined as July through September; and Winter, defined as December through February.

(4) Each season is independent of the preceding and subsequent seasons with respect to high flow pulse frequency.

#### §298.225. Environmental Flow Standards.

(a) A water right application in the Trinity or San Jacinto river basins, or associated coastal basins that drains to Galveston Bay, which increases the amount of water authorized to be stored, taken or diverted as described in §298.10 of this title (relating to Applicability), shall not reduce the long-term frequency at which the following volumes of freshwater inflows occur. Figure: 30 TAC §298.225(a)

Bay and Estuary Freshwater Inflow Standards for the Galveston Bay System

Basin Inflow Quantity		Annual Target Frequency	
	(acre-feet per year)		
	2,816,532	50%	
Trinity	2,245,644	60%	
	1,357,133	75%	
	1,460,424	50%	
San Jacinto	1,164,408	60%	
	703,699	75%	

(b) The following environmental flow standards are established for the following described measurement points:

(1) West Fork Trinity River near Grand Prairie, Texas, generally described as

USGS gage 08049500, and more specifically described as Latitude 32° 45' 45"; Longitude 96° 59' 40".

Figure: 30 TAC §298.225(b)(1)

USGS Gage 08049500, West Fork Trinity River near Grand Prairie

Month Subs	istence Base	Pulse
------------	--------------	-------

January	19 cfs	45 cfs	Trigger: 392 cfs Volume: 3,830 af Duration: 4 days
February	19 cfs	45 cfs	Trigger: 392 cfs Volume: 3,830 af Duration: 4 days
March	17 cfs	45 cfs	Trigger: 1,280 cfs Volume: 8,345 af Duration: 8 days
April	17 cfs	45 cfs	Trigger: 1,280 cfs Volume: 8,345 af Duration: 8 days
May	17 cfs	45 cfs	Trigger: 1,280 cfs Volume: 8,345 af Duration: 8 days
June	16 cfs	35 cfs	Trigger: 1,280 cfs Volume: 8,345 af Duration: 8 days
July	16 cfs	35 cfs	Trigger: 293 cfs Volume: 1,899 af Duration: 3 days
August	16 cfs	35 cfs	Trigger: 293 cfs Volume: 1,899 af Duration: 3 days
September	15 cfs	35 cfs	Trigger: 293 cfs Volume: 1,899 af Duration: 3 days
October	15 cfs	35 cfs	N/A
November	15 cfs	35 cfs	N/A
December	19 cfs	45 cfs	Trigger: 392 cfs Volume: 3,830 af Duration: 4 days

cfs = cubic feet per second af = acre-feet

N/A = not applicable

(2) Trinity River near Dallas, Texas, generally described as USGS gage 08057000, and more specifically described as Latitude 32° 46' 29"; Longitude 96° 49' 18".

## Figure: 30 TAC §298.225(b)(2)

## USGS Gage 08057000, Trinity River at Dallas

Month	Subsistence	Base	Pulse
			Trigger: 758 cfs
January	15 cfs	31 cfs	Volume: 3,968 af
-			Duration: 3 days
			Trigger: 758 cfs
February	15 cfs	31 cfs	Volume: 3,968 af
			Duration: 3 days
			Trigger: 4,120 cfs
March	15 cfs	37 cfs	Volume: 41,998 af
			Duration: 9 days
			Trigger: 4,120 cfs
April	15 cfs	37 cfs	Volume: 41,998 af
-			Duration: 9 days
			Trigger: 4,120 cfs
May	15 cfs	37 cfs	Volume: 41,998 af
Ū			Duration: 9 days
			Trigger: 4,120 cfs
June	15 cfs	32 cfs	Volume: 41,998 af
			Duration: 9 days
			Trigger: 660 cfs
Julv	15 cfs	32 cfs	Volume: 685 af
J			Duration: 3 days
-			Trigger: 660 cfs
August	15 cfs	32 cfs	Volume: 685 af
8	10 015		Duration: 3 days
			Trigger: 660 cfs
September	15 cfs	26 cfs	Volume: 685 af
Deptember	10 010		Duration: 3 days
October	15 cfs	26 cfs	N/A
November	15 cfs	26 cfs	N/A
	15 (15	~0 (13	11/11
		31 cfs	Trigger: 758 cfs
December	15 cfs		Volume: 3,968 af
			Duration: 3 days

cfs = cubic feet per secondaf = acre-feetN/A = not applicable

(3) Trinity River near Oakwood, Texas, generally described as USGS gage

08065000, and more specifically described as Latitude 31° 38' 54"; Longitude 95° 47' 21".

Figure: 30 TAC §298.225(b)(3)

USGS	Gage	08065000.	Trinity	River	near	Oakwood
CDGD	auge	00000000,	I I IIIIC J	101101	neur	ounnoou

Month	Subsistence	Base	Pulse
			Trigger: 3,200 cfs
January	98 cfs	265 cfs	Volume: 18,931 af
			Duration: 5 days
			Trigger: 3,200 cfs
February	98 cfs	265 cfs	Volume: 18,931 af
_			Duration: 5 days
			Trigger: 7,840 cfs
March	80 cfs	322 cfs	Volume: 141,705 af
			Duration: 11 days
			Trigger: 7,840 cfs
April	80 cfs	322 cfs	Volume: 141,705 af
-			Duration: 11 days
			Trigger: 7,840 cfs
May	80 cfs	322 cfs	Volume: 141,705 af
-			Duration: 11 days
			Trigger: 7,840 cfs
June	75 cfs	186 cfs	Volume: 141,705 af
			Duration: 11 days
			Trigger: 1,180 cfs
July	75 cfs	186 cfs	Volume: 4,866 af
Ũ			Duration: 2 days
			Trigger: 1,180 cfs
August	75 cfs	186 cfs	Volume: 4,866 af
Ŭ			Duration: 2 days

September	85 cfs	162 cfs	Trigger: 1,180 cfs Volume: 4,866 af Duration: 2 days
October	85 cfs	162 cfs	N/A
November	85 cfs	162 cfs	N/A
December	98 cfs	265 cfs	Trigger: 3,200 cfs Volume: 18,931 af Duration: 5 days

cfs = cubic feet per second

af = acre-feet

N/A = not applicable

## (4) Trinity River near Romayor, Texas, generally described as USGS gage

08066500, and more specifically described as Latitude 30° 25' 30"; Longitude 94° 51' 02".

Figure: 30 TAC §298.225(b)(4)

USGS Gage 08066500, Trinity River at Romayor

Month	Subsistence	Base	Pulse
January	295 cfs	744 cfs	Trigger: 10,100 cfs Volume: 152,814 af Duration: 13 days
February	295 cfs	744 cfs	Trigger: 10,100 cfs Volume: 152,814 af Duration: 13 days
March	290 cfs	923 cfs	Trigger: 10,900 cfs Volume: 184,186 af Duration: 15 days
April	290 cfs	923 cfs	Trigger: 10,900 cfs Volume: 184,186 af Duration: 15 days
May	290 cfs	923 cfs	Trigger: 10,900 cfs

		-	
			Volume: 184,186 af
			Duration: 15 days
			Trigger: 10,900 cfs
June	223 cfs	510 cfs	Volume: 184,186 af
			Duration: 15 days
			Trigger: 1,870 cfs
July	223 cfs	510 cfs	Volume: 18,417 af
, i i i i i i i i i i i i i i i i i i i			Duration: 7 days
			Trigger: 1,870 cfs
August	223 cfs	510 cfs	Volume: 18,417 af
U			Duration: 7 days
			Trigger: 1,870 cfs
September	240 cfs	515 cfs	Volume: 18,417 af
•			Duration: 7 days
			/-
October	240 cfs	515 cfs	N/A
November	240 cfs	515 cfs	N/A
 			Triggor: 10 100 of
Descuber	205 efe	744	Value 159 914 - 6
December	295 CIS	/44 CIS	volume: 152,814 af
			Duration: 13 days

cfs = cubic feet per second af = acre-feet N/A = not applicable

(5) East Fork San Jacinto River, Cleveland, Texas, generally described as USGS

gage 08070000, and more specifically described as Latitude 30° 20' 11"; Longitude 95° 06' 14".

## Figure: 30 TAC §298.225(b)(5)

USGS Gag	ve 08070000.	East Fork San	Jacinto	<b>River</b> near	Cleveland
ODGD Gug		Lust I of K bull	Jucinto	iviver mean	oleveland

Month	Subsistence	Base	Pulse
January	10 cfs	27 cfs	Trigger: 475 cfs Volume: 5,055 af Duration: 8 days
February	10 cfs	27 cfs	Trigger: 475 cfs

			Volume: 5,055 af
			Duration: 8 days
			Trigger: 687 cfs
March	10 cfs	28 cfs	Volume: 6,769 af
			Duration: 8 days
			Trigger: 687 cfs
April	10 cfs	28 cfs	Volume: 6,769 af
-			Duration: 8 days
			Trigger: 687 cfs
May	10 cfs	28 cfs	Volume: 6,769 af
5			Duration: 8 days
			Trigger: 687 cfs
June	9 cfs	16 cfs	Volume: 6,769 af
			Duration: 8 days
			Trigger: 94 cfs
July	9 cfs	16 cfs	Volume: 288 af
5			Duration: 2 days
			Trigger: 94 cfs
August	9 cfs	16 cfs	Volume: 288 af
U			Duration: 2 days
			Trigger: 94 cfs
September	9 cfs	16 cfs	Volume: 288 af
-			Duration: 2 days
			Trigger: 56 cfs
October	9 cfs	16 cfs	Volume: 188 af
			Duration: 2 days
			Trigger: 56 cfs
November	9 cfs	16 cfs	Volume: 188 af
			Duration: 2 days
			Trigger: 475 cfs
December	10 cfs	27 cfs	Volume: 5,055 af
			Duration: 8 days

cfs = cubic feet per second

af = acre-feet

(6) West Fork San Jacinto River near Conroe, Texas, generally described as USGS gage 08068000, and more specifically described as Latitude 30° 14' 40"; Longitude 95° 27' 25".

Figure: 30 TAC §298.225(b)(6)

Month	Subsistence	Base	Pulse
			Trigger: 420 cfs
January	10 cfs	38 cfs	Volume: 3,679 af
-			Duration: 7 days
			Trigger: 420 cfs
February	10 cfs	38 cfs	Volume: 3,679 af
_			Duration: 7 days
			Trigger: 1,100 cfs
March	12 cfs	47 cfs	Volume: 12,377 af
			Duration: 9 days
			Trigger: 1,100 cfs
April	12 cfs	47 cfs	Volume: 12,377 af
_			Duration: 9 days
			Trigger: 1,100 cfs
May	12 cfs	47 cfs	Volume: 12,377 af
, i i i i i i i i i i i i i i i i i i i			Duration: 9 days
			Trigger: 1,100 cfs
June	10 cfs	17 cfs	Volume: 12,377 af
			Duration: 9 days
			Trigger: 74 cfs
July	10 cfs	17 cfs	Volume: 380 af
Ū			Duration: 2 days
			Trigger: 74 cfs
August	10 cfs	17 cfs	Volume: 380 af
0			Duration: 2 days
			Trigger: 74 cfs
September	10 cfs	16 cfs	Volume: 380 af
-			Duration: 2 days
October	10 of s	16 of	N/A
October		10 CIS	1N/ A
November	10 cfs	16 cfs	N/A
			Trigger: 420 cfs
December	10 cfs	38 cfs	Volume: 3,679 af
			Duration: 7 days

## USGS Gage 08068000, West Fork San Jacinto River near Conroe

cfs = cubic feet per second

af = acre-feet

N/A = not applicable

#### §298.230. Water Right Permit Conditions.

(a) For water right permits with an authorization to store or divert more than 10,000 acre-feet per year in the Trinity and San Jacinto River basins, and to which the environmental flow standards apply, that are issued after the effective date of this subchapter, the water right permit or amendment shall contain flow restriction special conditions that are adequate to protect the environmental flow standards of this subchapter, to the maximum extent reasonable, considering other public interests and other relevant factors.

(b) For water right permits with an authorization to store or divert 10,000 acre-feet or less per year in the Trinity and San Jacinto river basins and to which the environmental flow standards apply, that are issued after the effective date of this subchapter, the water right permit or amendment shall contain flow restriction special conditions that are adequate to protect the environmental flow standards of this subchapter, to the maximum extent reasonable. considering other public interests and other relevant factors; however, no special conditions are necessary to preserve or pass high flow pulses.

#### §298.240. Schedule for Revision of Standards.

The environmental flow standards or environmental flow set-asides adopted herein for the Trinity and San Jacinto rivers, their associated tributaries, and Galveston Bay may be revised by the commission through the rulemaking process. The final revised rules shall be

effective no sooner than ten years from the effective date of this rule, unless the Trinity and San Jacinto basin and bay area stakeholder committee submits a work plan approved by the advisory group under Texas Water Code, §11.02362(p), that provides for a period review to occur more frequently. In that event, the commission may provide for the rulemaking process to be undertaken in conjunction with the periodic review if the commission determines that schedule to be appropriate. The rulemaking process shall include participation of stakeholders having interests in the Trinity and San Jacinto Rivers, their associated tributaries, and Galveston Bay.

# <u>SUBCHAPTER C: SABINE, NECHES RIVERS, AND SABINE LAKE BAY</u> <u>§§298.250, 298.255, 298.260, 298.265, 298.270, 298.275,</u> 298.280, 298.285, 298.290

#### **STATUTORY AUTHORITY**

The new sections are proposed under Texas Water Code (TWC), §§5.102, concerning General Powers; 5.103, concerning Rules; and 5.105 concerning General Policy, which authorize the commission to adopt rules as necessary to carry out its power and duties under the TWC. The new sections are also proposed under TWC, §§5.506, concerning Emergency Suspension of Permit Condition Relating to, and Emergency Authority to Make Available Water Set Aside For, Beneficial Inflows to Affected Bays and Estuaries and Instream Uses; 11.0235, concerning Policy Regarding Waters of the State; 11.147, concerning Effects of Permit on Bays and Estuaries and Instream Uses; 11.148, concerning Emergency Suspension of Permit Conditions and Emergency Authority to Make Availabile Water Set Aside for Environmental Flows; and 11.1471, concerning Environmental Flow Standards and Set-Asides.

The proposed new sections implement TWC, §§5.102, 5.103, 5.105, 5.506, 11.0235, 11.147, 11.148, and 11.1471.

#### <u>§298.250. Applicability and Purpose.</u>

<u>This subchapter contains the environmental flow standards for the Sabine and Neches</u> <u>Rivers, their associated tributaries, and Sabine Lake Bay. Provisions of this subchapter control</u>

over any provisions of Subchapter A of this chapter (relating to General Provisions) for purposes of environmental flow standards and regulation in the Sabine and Neches Rivers, their associated tributaries, and Sabine Lake Bay.

#### §298.255. Definitions.

The following words or phrases have the following meanings in this subchapter, unless the context clearly indicates otherwise:

(1) **Average condition**--the hydrologic condition that is neither a wet condition nor a dry condition.

(2) **Dry condition**--the hydrologic condition determined by the cumulative upstream storage that would be exceeded more than 75% of the time based on full exercise of all water rights over a period from 1940 to 1998, when the monthly upstream storage conditions are ranked from driest to wettest.

(3) **Fall**--the period of time October through December, inclusive.

(4) **Spring**--the period of time April through June, inclusive.

(5) **Sound ecological environment**--an ecological environment that: supports <u>a healthy diversity of fish and other aquatic life; sustains a full complement of important</u>

<u>species; provides for all major habitat types including rivers and streams, reservoirs, and</u> <u>estuaries; sustains key ecosystem processes; and maintains water quality adequate for aquatic</u> <u>life.</u>

#### (6) **Summer**--the period of time July through September, inclusive.

(7) **Wet condition**--the hydrologic condition determined by the cumulative upstream storage that would be exceeded less than 25% of the time based on full exercise of all water rights over a period from 1940 to 1998, when the monthly upstream storage conditions are ranked from driest to wettest.

(8) Winter--the period of time January through March, inclusive.

#### §298.260. Findings.

(a) The Sabine and Neches Rivers, their associated tributaries, Sabine Lake Bay, and the associated Sabine-Neches estuary are substantially sound ecological environments.

(b) The commission finds that this sound ecological environment can best be maintained by a set of flow standards that implement a schedule of flow quantities that includes subsistence flow, base flow, and two levels of high flow pulses at defined measurement points. Minimum flow levels for these components shall vary by season and by hydrological conditions since the amount of precipitation and, therefore, streamflow varies from year to year.

## §298.265. Set-Asides and Standards Priority Date.

<u>The priority date for the environmental flow standards and set-asides established by this</u> <u>subchapter is November 30, 2009.</u>

## §298.270. Calculation of Hydrologic Conditions.

(a) The determination of the hydrologic condition for a particular season shall be determined once per season. The conditions present on the last day of the month of the preceding season will determine the hydrologic condition for the following season. For each measurement point specified in this section, the cumulative storage in the major reservoirs located upstream of that measurement point will determine the hydrologic condition.

(b) Measurement points, associated reservoirs, and storage levels and conditions are:

#### Figure: 30 TAC §298.270(b)

Reservoirs and Storage Volumes for Calculating Hydrologic Conditions for Measurement Points in the Sabine and Neches River Basins

			END OF SEASON		
			COMBINED STORAGE VOLUME		
			(acre-feet)		
	MEASUREMENT				
BASIN	POINTS	RESERVOIRS	DRY	AVG	WET

NECHES	Neches River at Neches, Texas Angelina River near Alto, Texas	Lake Palestine	less than 181,000	181,000 - 400,400	greater than 400,400
NECHES	Neches River at Rockland, Texas Village Creek near Kountze, Texas Neches River at Evadale, Texas	Lake Palestine and Sam Rayburn Reservoir	less than 2,675,000	2,675,000 - 3,263,400	greater than 3,263,400
SABINE	Sabine River near Gladewater, Texas Big Sandy Creek near Big Sandy, Texas Sabine River near Beckville, Texas	Lake Fork and Lake Tawakoni	less than 1,157,600	1,157,600 - 1,513,800	greater than 1,513,800
SABINE	Sabine River near Bon Weir, Texas Big Cow Creek near Newton, Texas Sabine River near Ruliff, Texas	Lake Fork, Lake Tawakoni, and Toledo Bend Reservoir	less than 4,947,200	4,947,200 - 5,928,900	greater than 5,928,900

#### §298.275. Schedule of Flow Quantities.

(a) The environmental flow standards adopted by this subchapter constitute a schedule of flow quantities made up of subsistence flow, base flow, and high flow pulses. Environmental flow standards are established for eleven measurement points in §298.270 of this title (relating to Calculation of Hydrologic Conditions) and this section.

(b) Subsistence flow. For a water right holder to which an environmental flow standard applies, at a measurement point that applies to the water right, the water right holder may not store or divert water, unless the flow at the measurement point is above the subsistence flow

standard for that point. If the flow at the measurement point is above the subsistence flow standard but below the applicable base flow level, then the water right holder may divert or store water according to its permit, subject to senior and superior water rights, as long as the flow at the measurement point does not fall below the applicable subsistence flow standard.

(c) Base flow. The applicable base flow level varies depending on the hydrologic conditions described in §298.270 of this title. For a water right holder to which an environmental flow standard applies, at a measurement point that applies to the water right, the water right holder is subject to the base flow standard for the climatic condition prevailing at that time, i.e., the water right will be subject to either : a dry base flow; an average base flow; or a wet base flow standard. For a water right holder to which an environmental flow standard applies, at a measurement point that applies to the water right, when the flow at the measurement point is above the applicable base flow standard, but below any applicable high flow pulse levels, the water right holder may store or divert water according to its permit, subject to senior and superior water rights, as long as the flow at the measurement point does not fall below the applicable base flow standard.

(d) High flow pulses. High flow pulses are relatively short-duration; high flows within the watercourse that occur during or immediately following a storm event. They flush fine sediment deposits and waste products, restore normal water quality following prolonged low flows, and provide longitudinal connectivity for species movement along the river.

(1) Two smaller magnitude pulses per season are to be passed (i.e., no storage or diversion by an applicable water right holder), if the hydrologic condition is average or wet, and if the peak flow trigger level is met at the measurement point. The water right holder shall not divert or store water until either the volume amount has passed the measurement point, or the duration time has passed since the peak flow trigger rate occurred. Under dry hydrologic conditions during the spring and summer seasons, only one smaller-magnitude pulse shall be passed, if the peak flow trigger level is met at the measurement point. Under dry hydrologic conditions during the fall and winter, no high flow pulses need be passed.

(2) During wet conditions and in addition to the two smaller-magnitude pulses, a single larger-magnitude pulse must be passed; a water right holder shall not divert or store water until either the volume amount has passed the measurement point, or the duration time has passed since the peak flow trigger rate occurred.

(3) If the peak flow trigger rate does not occur in a season, then the water right holder need not stop storing or diverting to produce a peak. The water right holder is not required to release water lawfully stored to produce a peak.

(4) Each season is independent of the preceding and subsequent seasons with respect to high flow pulse frequency.

#### §298.280. Environmental Flow Standards.

The following environmental flow standards are established for the following described measurement points:

## (1) Big Sandy Creek near Big Sandy, Texas, generally described as United States

Geological Survey (USGS) gage 08019500, and more particularly described as Latitude 32° 36'

14"; Longitude 95° 05' 29".

#### Figure: 30 TAC §298.280(1)

Season	Condition	Subsistence	Base	Small Pulse	Large Pulse
Winter	Dry	20 cfs	66 cfs	N/A	N/A
Winter	Average	N/A	106 cfs	2 per season Trigger: 358 cfs Volume: 5,932 af Duration: 10 days	N/A
Winter	Wet	N/A	163 cfs	2 per season Trigger: 358 cfs Volume: 5,932 af Duration: 10 days	1 per season Trigger: 942 cfs Volume: 14,544 af Duration: 16 days
Spring	Dry	9 cfs	30 cfs	1 per season Trigger: 313 cfs Volume: 5,062 af Duration: 13 days	N/A
Spring	Average	N/A	51 cfs	2 per season Trigger: 313 cfs Volume: 5,062 af Duration: 13 days	N/A
Spring	Wet	N/A	111 cfs	2 per season Trigger: 313 cfs Volume: 5,062 af Duration: 13 days	1 per season Trigger: 950 cfs Volume: 12,852 af Duration: 19 days
Summer	Dry	8 cfs	14 cfs	1 per season Trigger: 50 cfs	N/A

USGS Gage 08019500, Big Sandy Creek near Big Sandy

				Volume: 671 af Duration: 6 days	
Summer	Average	N/A	18 cfs	2 per season Trigger: 50 cfs Volume: 671 af Duration: 6 days	N/A
Summer	Wet	N/A	26 cfs	2 per season Trigger: 50 cfs Volume: 671 af Duration: 6 days	1 per season Trigger: 132 cfs Volume: 2,054 af Duration: 11 days
Fall	Dry	8 cfs	20 cfs	N/A	N/A
Fall	Average	N/A	36 cfs	2 per season Trigger: 130 cfs Volume: 2,189 af Duration: 9 days	N/A
Fall	Wet	N/A	63 cfs	2 per season Trigger: 130 cfs Volume: 2,189 af Duration: 9 days	1 per season Trigger: 367 cfs Volume: 6,055 af Duration: 14 days

cfs = cubic feet per secondaf = acre-feetN/A = not applicable

## (2) Sabine River near Gladewater, Texas, generally described as USGS gage

## 08020000, and more particularly described as Latitude 32° 31' 37"; Longitude 94° 57' 36".

## Figure: 30 TAC §298.280(2)

Season	Condition	Subsistence	Base	Small Pulse	Large Pulse
Winter	Dry	45 cfs	277 cfs	N/A	N/A
Winter	Average	N/A	472 cfs	2 per season Trigger: 1,880 cfs	N/A

## USGS Gage 08020000, Sabine River near Gladewater

				Volume: 48,599 af Duration: 15 days	
Winter	Wet	N/A	836 cfs	2 per season Trigger: 1,880 cfs Volume: 48,599 af Duration: 15 days	1 per season Trigger: 5,570 cfs Volume: 194,743 af Duration: 24 days
Spring	Dry	22 cfs	119 cfs	1 per season Trigger: 1,580 cfs Volume: 51,150 af Duration: 16 days	N/A
Spring	Average	N/A	283 cfs	2 per season Trigger: 1,580 cfs Volume: 51,150 af Duration: 16 days	N/A
Spring	Wet	N/A	664 cfs	2 per season Trigger: 1,580 cfs Volume: 51,150 af Duration: 16 days	1 per season Trigger: 5,070 cfs Volume: 140,612 af Duration: 25 days
Summer	Dry	14 cfs	34 cfs	1 per season Trigger: 168 cfs Volume: 2,752 af Duration: 7 days	N/A
Summer	Average	N/A	46 cfs	2 per season Trigger: 168 cfs Volume: 2,752 af Duration: 7 days	N/A
Summer	Wet	N/A	78 cfs	2 per season Trigger: 168 cfs Volume: 2,752 af Duration: 7 days	1 per season Trigger: 730 cfs Volume: 13,480 af Duration: 17 days
Fall	Dry	17 cfs	49 cfs	N/A	N/A
Fall	Average	N/A	105 cfs	2 per season Trigger: 380 cfs Volume: 1,098 af Duration: 11 days	N/A
Fall	Wet	N/A	232 cfs	2 per season Trigger: 380 cfs Volume: 1,098 af Duration: 11 days	1 per season Trigger: 2,240 cfs Volume: 66,875 af Duration: 21 days

cfs = cubic feet per second

af = acre-feet

N/A = not applicable

## (3) Sabine River near Beckville, Texas, generally described as USGS gage

08022040, and more particularly described as Latitude 32° 19' 38"; Longitude 94° 21' 12".

## Figure: 30 TAC §298.280(3)

## USGS Gage 08022040, Sabine River near Beckville

Season	Condition	Subsistence	Base	Small Pulse	Large Pulse
Winter	Dry	66 cfs	438 cfs	N/A	N/A
Winter	Average	N/A	807 cfs	2 per season Trigger: 2,900 cfs Volume: 84,998 af Duration: 15 days	N/A
Winter	Wet	N/A	1,580 cfs	2 per season Trigger: 2,900 cfs Volume: 84,998 af Duration: 15 days	1 per season Trigger: 7,200 cfs Volume: 302,174 af Duration: 24 days
Spring	Dry	28 cfs	232 cfs	1 per season Trigger: 2,160 cfs Volume: 72,092 af Duration: 15 days	N/A
Spring	Average	N/A	526 cfs	2 per season Trigger: 2,160 cfs Volume: 72,092 af Duration: 15 days	N/A
Spring	Wet	N/A	1,260 cfs	2 per season Trigger: 2,160 cfs Volume: 72,092 af Duration: 15 days	1 per season Trigger: 7,030 cfs Volume: 220,513 af Duration: 27 days
Summer	Dry	22 cfs	51 cfs	1 per season Trigger: 285 cfs Volume: 5,436 af Duration: 6 days	N/A
Summer	Average	N/A	74 cfs	2 per season Trigger: 285 cfs Volume: 5,436 af Duration: 6 days	N/A

Summer	Wet	N/A	122 cfs	2 per season Trigger: 285 cfs Volume: 5,436 af Duration: 6 days	1 per season Trigger: 1,120 cfs Volume: 19,863 af Duration: 16 days
Fall	Dry	22 cfs	75 cfs	N/A	N/A
Fall	Average	N/A	141 cfs	2 per season Trigger: 628 cfs Volume: 7,245 af Duration: 9 days	N/A
Fall	Wet	N/A	356 cfs	2 per season Trigger: 628 cfs Volume: 7,245 af Duration: 9 days	1 per season Trigger: 3,250 cfs Volume: 100,717 af Duration: 21 days

cfs = cubic feet per secondaf = acre-feetN/A = not applicable

## (4) Sabine River near Bon Wier, Texas, generally described as USGS gage

08028500, and more particularly described as Latitude 30° 44' 49"; Longitude 93° 36' 30".

Figure: 30 TAC §298.280(4)

Season	Condition	Subsistence	Base	Small Pulse	Large Pulse
Winter	Dry	479 cfs	1,460 cfs	N/A	N/A
Winter	Average	N/A	5,870 cfs	2 per season Trigger: 13,800 cfs Volume: 421,966 af Duration: 14 days	N/A
Winter	Wet	N/A	15,400 cfs	2 per season Trigger: 13,800 cfs Volume: 421,966 af Duration: 14 days	1 per season Trigger: 20,600 cfs Volume: 690,800 af Duration: 17 days
Spring	Dry	279 cfs	857 cfs	1 per season Trigger: 6,700 cfs Volume: 151,163 af Duration: 12 days	N/A
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Spring	Average	N/A	1,590 cfs	2 per season Trigger: 6,700 cfs Volume: 151,163 af Duration: 12 days	N/A
Spring	Wet	N/A	6,680 cfs	2 per season Trigger: 6,700 cfs Volume: 151,163 af Duration: 12 days	1 per season Trigger: 16,500 cfs Volume: 483,992 af Duration: 21 days
Summer	Dry	241 cfs	478 cfs	1 per season Trigger: 5,880 cfs Volume: 132,571 af Duration: 13 days	N/A
Summer	Average	N/A	656 cfs	2 per season Trigger: 5,880 cfs Volume: 132,571 af Duration: 13 days	N/A
Summer	Wet	N/A	1,120 cfs	2 per season Trigger: 5,880 cfs Volume: 132,571 af Duration: 13 days	1 per season Trigger: 7,360 cfs Volume: 175,009 af Duration: 14 days
Fall	Dry	241 cfs	478 cfs	N/A	N/A
Fall	Average	N/A	615 cfs	2 per season Trigger: 2,590 cfs Volume: 40,957 af Duration: 7 days	N/A
Fall	Wet	N/A	1,110 cfs	2 per season Trigger: 2,590 cfs Volume: 40,957 af Duration: 7 days	1 per season Trigger: 8,960 cfs Volume: 249,617 af Duration: 17 days

cfs = cubic feet per secondaf = acre-feetN/A = not applicable

### (5) Big Cow Creek near Newton, Texas, generally described as USGS gage

08029500, and more particularly described as Latitude 30° 49' 08"; Longitude 93° 47' 08".

# Figure: 30 TAC §298.280(5)

Season	Condition	Subsistence	Base	Small Pulse	Large Pulse
Winter	Dry	28 cfs	56 cfs	N/A	N/A
Winter	Average	N/A	78 cfs	2 per season Trigger: 693 cfs Volume: 4,911 af Duration: 8 days	N/A
Winter	Wet	N/A	106 cfs	2 per season Trigger: 693 cfs Volume: 4,911 af Duration: 8 days	1 per season Trigger: 1,080 cfs Volume: 7,387 af Duration: 10 days
Spring	Dry	20 cfs	38 cfs	1 per season Trigger: 350 cfs Volume: 2,545 af Duration: 7 days	N/A
Spring	Average	N/A	52 cfs	2 per season Trigger: 350 cfs Volume: 2,545 af Duration: 7 days	N/A
Spring	Wet	N/A	74 cfs	2 per season Trigger: 350 cfs Volume: 2,545 af Duration: 7 days	1 per season Trigger: 862 cfs Volume: 6,075 af Duration: 10 days
Summer	Dry	20 cfs	28 cfs	1 per season Trigger: 109 cfs Volume: 873 af Duration: 5 days	N/A
Summer	Average	N/A	36 cfs	2 per season Trigger: 109 cfs Volume: 873 af Duration: 5 days	N/A
Summer	Wet	N/A	48 cfs	2 per season Trigger: 109 cfs Volume: 873 af Duration: 5 days	1 per season Trigger: 191 cfs Volume: 1,447 af Duration: 7 days
Fall	Dry	20 cfs	36 cfs	N/A	N/A

# USGS Gage 08029500, Big Cow Creek near Newton

Fall	Average	N/A	46 cfs	2 per season Trigger: 322 cfs Volume: 2,232 af Duration: 7 days	N/A
Fall	Wet	N/A	64 cfs	2 per season Trigger: 322 cfs Volume: 2,232 af Duration: 7 days	1 per season Trigger: 790 cfs Volume: 5,038 af Duration: 9 days

cfs = cubic feet per second

af = acre-feet

N/A = not applicable

### (6) Sabine River near Ruliff, Texas generally described as USGS gage 08030500,

### and more particularly described as Latitude 30° 18' 13"; Longitude 93° 44' 37".

### Figure: 30 TAC §298.280(6)

Season	Condition	Subsistence	Base	Small Pulse	Large Pulse
Winter	Dry	949 cfs	1,520 cfs	N/A	N/A
Winter	Average	N/A	2,565 cfs	2 per season Trigger: 1,600 cfs Volume: 10,202 af Duration: 3 days	N/A
Winter	Wet	N/A	5,063 cfs	2 per season Trigger: 1,600 cfs Volume: 10,202 af Duration: 3 days	1 per season Trigger: 9,880 cfs Volume: 261,464 af Duration: 22 days
Spring	Dry	436 cfs	1,208 cfs	1 per season Trigger: 3,250 cfs Volume: 42,883 af Duration: 8 days	N/A
Spring	Average	N/A	1,795 cfs	2 per season Trigger: 3,250 cfs Volume: 42,883 af	N/A

### USGS Gage 08030500, Sabine River near Ruliff

				Duration: 8 days	
Spring	Wet	N/A	3,035 cfs	2 per season Trigger: 3,250 cfs Volume: 42,883 af Duration: 8 days	1 per season Trigger: 9,880 cfs Volume: 253,851 af Duration: 21 days
Summer	Dry	396 cfs	670 cfs	1 per season Trigger: 3,380 cfs Volume: 54,321 af Duration: 11 days	N/A
Summer	Average	N/A	870 cfs	2 per season Trigger: 3,380 cfs Volume: 54,321 af Duration: 11 days	N/A
Summer	Wet	N/A	1,430 cfs	2 per season Trigger: 3,380 cfs Volume: 54,321 af Duration: 11 days	1 per season Trigger: 6,600 cfs Volume: 157,936 af Duration: 19 days
Fall	Dry	396 cfs	735 cfs	N/A	N/A
Fall	Average	N/A	970 cfs	2 per season Trigger: 2,020 cfs Volume: 17,662 af Duration: 5 days	N/A
Fall	Wet	N/A	1,400 cfs	2 per season Trigger: 2,020 cfs Volume: 17,662 af Duration: 5 days	1 per season Trigger: 6,030 cfs Volume: 110,471 af Duration: 15 days

cfs = cubic feet per second

af = acre-feet

N/A = not applicable

### (7) Neches River at Neches, Texas, generally described as USGS gage 08032000.

and more particularly described as Latitude 31° 53' 32"; Longitude 95° 25' 50".

Figure: 30 TAC §298.280(7)

USGS Gage 08032000, Neches River at Neches

Season	Condition	Subsistence	Base	Small Pulse	Large Pulse
Winter	Dry	51 cfs	178 cfs	N/A	N/A
Winter	Average	N/A	408 cfs	2 per season Trigger: 833 cfs Volume: 19,104 af Duration: 10 days	N/A
Winter	Wet	N/A	814 cfs	2 per season Trigger: 833 cfs Volume: 19,104 af Duration: 10 days	1 per season Trigger: 1,370 cfs Volume: 39,549 af Duration: 13 days
Spring	Dry	21 cfs	87 cfs	1 per season Trigger: 820 cfs Volume: 20,405 af Duration: 12 days	N/A
Spring	Average	N/A	194 cfs	2 per season Trigger: 820 cfs Volume: 20,405 af Duration: 12 days	N/A
Spring	Wet	N/A	524 cfs	2 per season Trigger: 820 cfs Volume: 20,405 af Duration: 12 days	1 per season Trigger: 1,370 cfs Volume: 31,846 af Duration: 15 days
Summer	Dry	12 cfs	42 cfs	1 per season Trigger: 113 cfs Volume: 1,339 af Duration: 4 days	N/A
Summer	Average	N/A	73 cfs	2 per season Trigger: 113 cfs Volume: 1,339 af Duration: 4 days	N/A
Summer	Wet	N/A	108 cfs	2 per season Trigger: 113 cfs Volume: 1,339 af Duration: 4 days	1 per season Trigger: 248 cfs Volume: 4,029 af Duration: 7 days
Fall	Dry	13 cfs	73 cfs	N/A	N/A
Fall	Average	N/A	104 cfs	2 per season Trigger: 345 cfs Volume: 5,391 af Duration: 8 days	N/A
Fall	Wet	N/A	172 cfs	2 per season Trigger: 345 cfs Volume: 5,391 af	1 per season Trigger: 782 cfs Volume: 19,996 af

		Duration: 8 days	Duration: 12 days
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cfs = cubic feet per secondaf = acre-feetN/A = not applicable

# (8) Neches River at Rockland, Texas, generally described as USGS gage

08033500, and more particularly described as Latitude 31º 01' 30"; Longitude 94º 23' 58".

Figure: 30 TAC §298.280(8)

Season	Condition	Subsistence	Base	Small Pulse	Large Pulse
Winter	Dry	67 cfs	548 cfs	N/A	N/A
Winter	Average	N/A	1,390 cfs	2 per season Trigger: 3,080 cfs Volume: 82,195 af Duration: 14 days	N/A
Winter	Wet	N/A	2,500 cfs	2 per season Trigger: 3,080 cfs Volume: 82,195 af Duration: 14 days	1 per season Trigger: 6,910 cfs Volume: 256,523 af Duration: 22 days
Spring	Dry	29 cfs	382 cfs	1 per season Trigger: 1,720 cfs Volume: 39,935 af Duration: 12 days	N/A
Spring	Average	N/A	1,020 cfs	2 per season Trigger: 1,720 cfs Volume: 39,935 af Duration: 12 days	N/A
Spring	Wet	N/A	2,160 cfs	2 per season Trigger: 1,720 cfs Volume: 39,935 af Duration: 12 days	1 per season Trigger: 5,600 cfs Volume: 167,866 af Duration: 23 days

# USGS Gage 08033500, Neches River at Rockland

Summer	Dry	21 cfs	61 cfs	1 per season Trigger: 195 cfs Volume: 1,548 af Duration: 5 days	N/A
Summer	Average	N/A	88 cfs	2 per season Trigger: 195 cfs Volume: 1,548 af Duration: 5 days	N/A
Summer	Wet	N/A	151 cfs	2 per season Trigger: 195 cfs Volume: 1,548 af Duration: 5 days	1 per season Trigger: 615 cfs Volume: 13,365 af Duration: 11 days
Fall	Dry	21 cfs	82 cfs	N/A	N/A
Fall	Average	N/A	168 cfs	2 per season Trigger: 515 cfs Volume: 649 af Duration: 8 days	N/A
Fall	Wet	N/A	381 cfs	2 per season Trigger: 515 cfs Volume: 649 af Duration: 8 days	1 per season Trigger: 2,240 cfs Volume: 72,600 af Duration: 17 days

cfs = cubic feet per secondaf = acre-feetN/A = not applicable

### (9) Angelina River, near Alto, Texas, generally described as USGS gage

08036500, and more particularly described as Latitude 31° 40' 10"; Longitude 94° 57' 24".

### Figure: 30 TAC §298.280(9)

Season	Condition	Subsistence	Base	Small Pulse	Large Pulse
Winter	Dry	55 cfs	252 cfs	N/A	N/A
Winter	Average	N/A	581 cfs	2 per season	N/A

### USGS Gage 08036500, Angelina River near Alto

				Trigger: 1,620 cfs Volume: 37,114 af Duration: 13 days	
Winter	Wet	N/A	971 cfs	2 per season Trigger: 1,620 cfs Volume: 37,114 af Duration: 13 days	1 per season Trigger: 3,530 cfs Volume: 89,332 af Duration: 18 days
Spring	Dry	18 cfs	82 cfs	1 per season Trigger: 1,100 cfs Volume: 24,117 af Duration: 14 days	N/A
Spring	Average	N/A	206 cfs	2 per season Trigger: 1,100 cfs Volume: 24,117 af Duration: 14 days	N/A
Spring	Wet	N/A	518 cfs	2 per season Trigger: 1,100 cfs Volume: 24,117 af Duration: 14 days	1 per season Trigger: 2,760 cfs Volume: 59,278 af Duration: 20 days
Summer	Dry	11 cfs	36 cfs	1 per season Trigger: 146 cfs Volume: 2,632 af Duration: 8 days	N/A
Summer	Average	N/A	48 cfs	2 per season Trigger: 146 cfs Volume: 2,632 af Duration: 8 days	N/A
Summer	Wet	N/A	69 cfs	2 per season Trigger: 146 cfs Volume: 2,632 af Duration: 8 days	1 per season Trigger: 397 cfs Volume: 7,129 af Duration: 13 days
Fall	Dry	16 cfs	47 cfs	N/A	N/A
Fall	Average	N/A	92 cfs	2 per season Trigger: 588 cfs Volume: 12,038 af Duration: 12 days	N/A
Fall	Wet	N/A	176 cfs	2 per season Trigger: 588 cfs Volume: 12,038 af Duration: 12 days	1 per season Trigger: 1,500 cfs Volume: 34,291 af Duration: 16 days

cfs = cubic feet per second

af = acre-feet

N/A = not applicable

# (10) Neches River at Evadale, Texas, generally described as USGS gage

### 08041000, and more particularly described as Latitude 30° 21' 20"; Longitude 94° 05' 35".

### Figure: 30 TAC §298.280(10)

Season	Condition	Subsistence	Base	Small Pulse	Large Pulse
Winter	Dry	228 cfs	1,750 cfs	N/A	N/A
Winter	Average	N/A	2,635 cfs	2 per season Trigger: 2,020 cfs Volume: 20, 920 af Duration: 6 days	N/A
Winter	Wet	N/A	4,988 cfs	2 per season Trigger: 2,020 cfs Volume: 20, 920 af Duration: 6 days	1 per season Trigger: 8,700 cfs Volume: 246,099 af Duration: 22 days
Spring	Dry	266 cfs	1,640 cfs	1 per season Trigger: 3,830 cfs Volume: 68,784 af Duration: 12 days	N/A
Spring	Average	N/A	3,210 cfs	2 per season Trigger: 3,830 cfs Volume: 68,784 af Duration: 12 days	N/A
Spring	Wet	N/A	3,960 cfs	2 per season Trigger: 3,830 cfs Volume: 68,784 af Duration: 12 days	1 per season Trigger: 8,700 cfs Volume: 246,099 af Duration: 22 days
Summer	Dry	228 cfs	527 cfs	1 per season Trigger: 1,540 cfs Volume: 21,605 af Duration: 9 days	N/A
Summer	Average	N/A	2,250 cfs	2 per season Trigger: 1,540 cfs Volume: 21,605 af Duration: 9 days	N/A

### USGS Gage 08041000, Neches River at Evadale

Summer	Wet	N/A	3,230 cfs	2 per season Trigger: 1,540 cfs Volume: 21,605 af Duration: 9 days	1 per season Trigger: 3,680 cfs Volume: 69,561 af Duration: 13 days
Fall	Dry	228 cfs	465 cfs	N/A	N/A
Fall	Average	N/A	1,570 cfs	2 per season Trigger: 1,570 cfs Volume: 17,815 af Duration: 7 days	N/A
Fall	Wet	N/A	2,730 cfs	2 per season Trigger: 1,570 cfs Volume: 17,815 af Duration: 7 days	1 per season Trigger: 4,160 cfs Volume: 71,531 af Duration: 13 days

cfs = cubic feet per secondaf = acre-feetN/A = not applicable

# (11) Village Creek near Kountze, Texas, generally described as USGS gage

08041500, and more particularly described as Latitude 30° 23' 52"; Longitude 94° 15' 48".

Figure: 30 TAC §298.280(11)

USGS	Gage	08041500.	Village	Creek	near	Kountze
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Season	Condition	Subsistence	Base	Small Pulse	Large Pulse
Winter	Dry	83 cfs	240 cfs	N/A	N/A
Winter	Average	N/A	424 cfs	2 per season Trigger: 2,010 cfs Volume: 36,927 af Duration: 13 days	N/A
Winter	Wet	N/A	672 cfs	2 per season Trigger: 2,010 cfs Volume: 36,927 af Duration: 13 days	1 per season Trigger: 2,070 cfs Volume: 38,134 af Duration: 13 days

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Spring	Dry	49 cfs	106 cfs	1 per season Trigger: 1,380 cfs Volume: 23,093 af Duration: 13 days	N/A
Spring	Average	N/A	189 cfs	2 per season Trigger: 1,380 cfs Volume: 23,093 af Duration: 13 days	N/A
Spring	Wet	N/A	335 cfs	2 per season Trigger: 1,380 cfs Volume: 23,093 af Duration: 13 days	1 per season Trigger: 2,070 cfs Volume: 31,650 af Duration: 15 days
Summer	Dry	41 cfs	70 cfs	1 per season Trigger: 341 cfs Volume: 6,159 af Duration: 8 days	N/A
Summer	Average	N/A	91 cfs	2 per season Trigger: 341 cfs Volume: 6,159 af Duration: 8 days	N/A
Summer	Wet	N/A	135 cfs	2 per season Trigger: 341 cfs Volume: 6,159 af Duration: 8 days	1 per season Trigger: 814 cfs Volume: 11,418 af Duration: 13 days
Fall	Dry	41 cfs	89 cfs	N/A	N/A
Fall	Average	N/A	138 cfs	2 per season Trigger: 712 cfs Volume: 11,426 af Duration: 9 days	N/A
Fall	Wet	N/A	236 cfs	2 per season Trigger: 712 cfs Volume: 11,426 af Duration: 9 days	1 per season Trigger: 2,070 cfs Volume: 31,143 af Duration: 13 days

cfs = cubic feet per secondaf = acre-feetN/A = not applicable

### §298.285. Water Right Permit Conditions.

(a) For water right permits with an authorization to store or divert more than 10,000 acre-feet per year in the Sabine and Neches river basins and to which the environmental flow standards apply, that are issued after the effective date of this subchapter, the water right permit or amendment shall contain flow restriction special conditions that are adequate to protect the environmental flow standards of this subchapter, to the maximum extent reasonable, considering other public interests and other relevant factors.

(b) For water rights permits with an authorization to store or divert 10,000 acre-feet or less per year in the Sabine and Neches river basins and to which the environmental flow standards apply, that are issued after the effective date of this subchapter, the water right permit or amendment shall contain flow restriction special conditions that are adequate to protect the environmental flow standards of this subchapter, to the maximum extent reasonable, considering other public interests and other relevant factors; however, no special conditions are necessary to preserve or pass high flow pulses.

#### §298.290. Schedule for Revision of Standards.

The environmental flow standards or environmental flow set-asides adopted herein for the Sabine and Neches Rivers, their associated tributaries, and Sabine Lake Bay may be altered by the commission through the rulemaking process. The final revised rules shall be effective no sooner than ten years from the effective date of this rule, unless the Sabine and Neches basin and bay area stakeholder committee submits a work plan approved by the advisory group under Texas Water Code, §11.02362(p), that provides for a period review to occur more frequently. In

that event, the commission may provide for the rulemaking process to be undertaken in conjunction with the periodic review if the commission determines that schedule to be appropriate. The rulemaking process shall include participation of stakeholders having interests in the Sabine and Neches Rivers, their associated tributaries, and Sabine Lake Bay.