Texas Commission on Environmental Quality Chapter 298 - Environmental Flow Standards for Surface Water Page 1

SUBCHAPTER C: SABINE AND NECHES RIVERS, AND SABINE LAKE BAY §\$298.250, 298.255, 298.260, 298.265, 298.275, 298.280, 298.285, 298.290 Effective August 30, 2012

§298.250. Applicability and Purpose.

This subchapter contains the environmental flow standards for the Sabine and Neches Rivers, their associated tributaries, and Sabine Lake Bay. In case of a direct conflict, 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 Sabine and Neches Rivers, their associated tributaries, and Sabine Lake Bay.

Adopted April 20, 2011

Effective May 15, 2011

§298.255. Definitions.

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

- (1) **Fall**--the period of time October through December, inclusive.
- (2) **Spring**--the period of time April through June, inclusive.
- (3) **Sound ecological environment**—an ecological environment that: supports a healthy diversity of fish and other aquatic life; sustains a full complement of important species; provides for all major habitat types including rivers and streams, reservoirs, and estuaries; sustains key ecosystem processes; and maintains water quality adequate for aquatic life.
 - (4) **Summer**--the period of time July through September, inclusive.
 - (5) **Winter**--the period of time January through March, inclusive.

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§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 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 .

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§298.265. Set-Asides and Standards Priority Date.

The priority date for the environmental flow standards and set-asides established by this subchapter is November 30, 2009. The priority date for the environmental flow standards will be used in the water availability determination 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 and has no other purpose.

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§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 one level of high flow pulses. Environmental flow standards are established for ten measurement points in §298.280 of this title (relating to Environmental Flow Standards) and this section.
- (b) Subsistence flow. The applicable subsistence flow standard varies depending on the seasons as described in §298.255 of this title (relating to Definitions). 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 applicable 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 level varies depending on the seasons as described in §298.255 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 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 the measurement point is above the applicable base flow standard, but below any applicable high flow pulse trigger 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 pulses per season are to be passed during the Spring and Fall seasons and one pulse per season is to be passed during the Winter and Summer seasons (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 applicable high flow pulse trigger level is met at the measurement point. The water right holder shall not divert or store water except during times that streamflow at the applicable measurement point exceeds the applicable high flow pulse trigger level and until either the applicable volume amount has passed the measurement point, or the duration time has passed since the high flow pulse trigger level occurred.
- (2) If the applicable high flow pulse flow trigger level does not occur in a season, then the water right holder need not stop storing or diverting to produce a high flow pulse. The water right holder is not required to release water lawfully stored to produce a high flow pulse.
- (3) Each season is independent of the preceding and subsequent seasons with respect to high flow pulse frequency.
- (e) A water right owner that has stored water in accordance with the terms and conditions of its water right, including any applicable environmental flow requirement in effect at the time the water was stored, may divert, release, or use this water, even if the applicable environmental flow requirement is not met at the time of the subsequent diversion, release, or use of that stored water.

Adopted April 20, 2011

Effective May 15, 2011

§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 $32^{\rm o}$ 36' 14"; Longitude $95^{\rm o}$ 05' 29".

United States Geological Survey Gage 08019500, Big Sandy Creek near Big Sandy

Season	Subsistence	Base	Pulse
Winter	20 cfs	73 cfs	1 per season Trigger: 358 cfs Volume: 5,932 af Duration: 10 days
Spring	9 cfs	33 cfs	2 per season Trigger: 313 cfs Volume: 5,062 af Duration: 13 days
Summer	8 cfs	15 cfs	1 per season Trigger: 50 cfs Volume: 671 af Duration: 6 days
Fall	8 cfs	22 cfs	2 per season Trigger: 130 cfs Volume: 2,189 af Duration: 9 days

cfs = cubic feet per second

af = acre-feet

(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)

United States Geological Survey Gage 08020000, Sabine River near Gladewater

Season	Subsistence	Base	Pulse
Winter	45 cfs	305 cfs	1 per season Trigger: 1,880 cfs

			Volume: 48,599 af Duration: 15 days
Spring	22 cfs	131 cfs	2 per season Trigger: 1,580 cfs Volume: 51,150 af Duration: 16 days
Summer	14 cfs	37 cfs	1 per season Trigger: 168 cfs Volume: 2,752 af Duration: 7 days
Fall	17 cfs	54 cfs	2 per season Trigger: 380 cfs Volume: 1,098 af Duration: 11 days

cfs = cubic feet per second af = acre-feet

(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".

United States Geological Survey Gage 08022040, Sabine River near Beckville

Season	Subsistence	Base	Pulse
Winter	66 cfs	482 cfs	1 per season Trigger: 2,900 cfs Volume: 84,998 af Duration: 15 days
Spring	28 cfs	255 cfs	2 per season Trigger: 2,160 cfs Volume: 72,092 af Duration: 15 days
Summer	22 cfs	56 cfs	1 per season Trigger: 285 cfs Volume: 5,436 af Duration: 6 days
Fall	22 cfs	83 cfs	2 per season Trigger: 628 cfs Volume: 7,245 af Duration: 9 days

ofs – subject foot per second

cfs = cubic feet per second af = acre-feet

(4) 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".

United States Geological Survey Gage 08029500, Big Cow Creek near Newton

Season	Subsistence	Base	Pulse
Winter	28 cfs	62 cfs	1 per season Trigger: 693 cfs Volume: 4,911 af Duration: 8 days
Spring	20 cfs	42 cfs	2 per season Trigger: 350 cfs Volume: 2,545 af Duration: 7 days
Summer	20 cfs	31 cfs	1 per season Trigger: 109 cfs Volume: 873 af Duration: 5 days
Fall	20 cfs	40 cfs	2 per season Trigger: 322 cfs Volume: 2,232 af Duration: 7 days

cfs = cubic feet per second af = acre-feet

(5) Sabine River near Ruliff, Texas generally described as USGS gage 08030500, and more particularly described as Latitude 30° 18' 13"; Longitude 93° 44' 37".

United States Geological Survey Gage 08030500, Sabine River near Ruliff

Season	Subsistence	Base	Pulse
Winter	949 cfs	1,672 cfs	1 per season Trigger: 1,600 cfs Volume: 10,202 af Duration: 3 days

Spring	436 cfs	1,329 cfs	2 per season Trigger: 3,250 cfs Volume: 42,883 af Duration: 8 days
Summer	396 cfs	737 cfs	1 per season Trigger: 3,380 cfs Volume: 54,321 af Duration: 11 days
Fall	396 cfs	809 cfs	2 per season Trigger: 2,020 cfs Volume: 17,662 af Duration: 5 days

cfs = cubic feet per second af = acre-feet

(6) Neches River at Neches, Texas, generally described as USGS gage 08032000, and more particularly described as Latitude 31° 53' 32"; Longitude 95° 25' 50".

United States Geological Survey Gage 08032000, Neches River at Neches

Season	Subsistence	Base	Pulse
Winter	51 cfs	196 cfs	1 per season Trigger: 833 cfs Volume: 19,104 af Duration: 10 days
Spring	21 cfs	96 cfs	2 per season Trigger: 820 cfs Volume: 20,405 af Duration: 12 days
Summer	12 cfs	46 cfs	1 per season Trigger: 113 cfs Volume: 1,339 af Duration: 4 days
Fall	13 cfs	80 cfs	2 per season Trigger: 345 cfs Volume: 5,391 af Duration: 8 days

cfs = cubic feet per second

af = acre-feet

(7) Neches River near Rockland, Texas, generally described as USGS gage 08033500, and more particularly described as Latitude 31° 01′ 30″; Longitude 94° 23′ 58″.

United States Geological Survey Gage 08033500, Neches River near Rockland

Season	Subsistence	Base	Pulse
Winter	67 cfs	603 cfs	1 per season Trigger: 3,080 cfs Volume: 82,195 af Duration: 14 days
Spring	29 cfs	420 cfs	2 per season Trigger: 1,720 cfs Volume: 39,935 af Duration: 12 days
Summer	21 cfs	67 cfs	1 per season Trigger: 195 cfs Volume: 1,548 af Duration: 5 days
Fall	21 cfs	90 cfs	2 per season Trigger: 515 cfs Volume: 8,172 af Duration: 8 days

cfs = cubic feet per second

af = acre-feet

(8) Angelina River, near Alto, Texas, generally described as USGS gage 08036500, and more particularly described as Latitude 31° 40′ 10″; Longitude 94° 57′ 24″.

United States Geological Survey Gage 08036500, Angelina River near Alto

Season	Subsistence	Base	Pulse
Winter	55 cfs	277 cfs	1 per season Trigger: 1,620 cfs Volume: 37,114 af Duration: 13 days
Spring	18 cfs	90 cfs	2 per season Trigger: 1,100 cfs Volume: 24,117 af

			Duration: 14 days
Summer	11 cfs	40 cfs	1 per season Trigger: 146 cfs Volume: 2,632 af Duration: 8 days
Fall	16 cfs	52 cfs	2 per season Trigger: 588 cfs Volume: 12,038 af Duration: 12 days

cfs = cubic feet per second

af = acre-feet

(9) Neches River at Evadale, Texas, generally described as USGS gage 08041000, and more particularly described as Latitude 30° 21' 20"; Longitude 94° 05' 35".

United States Geological Survey Gage 08041000, Neches River at Evadale

Season	Subsistence	Base	Pulse
Winter	228 cfs	1,925 cfs	1 per season Trigger: 2,020 cfs Volume: 20, 920 af Duration: 6 days
Spring	266 cfs	1,804 cfs	2 per season Trigger: 3,830 cfs Volume: 68,784 af Duration: 12 days
Summer	228 cfs	580 cfs	1 per season Trigger: 1,540 cfs Volume: 21,605 af Duration: 9 days
Fall	228 cfs	512 cfs	2 per season Trigger: 1,570 cfs Volume: 17,815 af Duration: 7 days

cfs = cubic feet per second

af = acre-feet

(10) Village Creek near Kountze, Texas, generally described as USGS gage 08041500, and more particularly described as Latitude 30° 23′ 52″; Longitude 94° 15′ 48″.

United States	Geological Su	rvey Gage 08041	1500, Village Creek	near Kountze
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Season	Subsistence	Base	Pulse
Winter	83 cfs	264 cfs	1 per season Trigger: 2,010 cfs Volume: 36,927 af Duration: 13 days
Spring	49 cfs	117 cfs	2 per season Trigger: 1,380 cfs Volume: 23,093 af Duration: 13 days
Summer	41 cfs	77 cfs	1 per season Trigger: 341 cfs Volume: 6,159 af Duration: 8 days
Fall	41 cfs	98 cfs	2 per season Trigger: 712 cfs Volume: 11,426 af Duration: 9 days

cfs = cubic feet per second

af = acre-feet

Adopted April 20, 2011

Effective May 15, 2011

§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.
- (b) For water right 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; however, no special conditions are necessary to preserve or pass high flow pulses.

§298.290. Schedule for Revision of Standards.

The adopted environmental flow standards or environmental flow set-asides for the Sabine and Neches Rivers, their associated tributaries, and Sabine Lake Bay may be revised by the commission through the rulemaking process. The Sabine and Neches basin and bay area stakeholder committee shall submit their review of the adopted environmental flow standards by September 1, 2013, and every five years thereafter. If the stakeholder committee recommends revisions to the adopted environmental flow standards, or, if the commission determines that revisions to the adopted environmental flow standards are appropriate at the time of the periodic review, the rulemaking process shall be undertaken in conjunction with the periodic review. Any final revised rules arising from a rulemaking undertaken in conjunction with any such periodic review shall be effective within one year after the deadline for the review of the adopted environmental flow standards. The rulemaking process shall include participation by a balanced representation of stakeholders having interests in the Sabine and Neches Rivers, their associated tributaries, and Sabine Lake Bay.

Adopted August 8, 2012

Effective August 30, 2012