§298.450. Applicability and Purpose.

This subchapter contains the environmental flow standards for the Brazos River and its associated bay and estuary system. The provisions of this subchapter will prevail over any provisions of Subchapter A of this chapter (relating to General Provisions) that are inconsistent with this subchapter relating to environmental flow standards and regulation in the Brazos River Basin and the Brazos-Colorado Coastal Basin.

Adopted February 12, 2014 Effective March 6, 2014

§298.455. Definitions.

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

(1) Average condition--for all measurement points, the hydrologic condition that would occur approximately 50% of the time.

(2) Climatic division--a geographic area defined by the National Weather Service.

(3) Dry condition--for all measurement points, the hydrologic condition that would occur approximately 25% of the time and that is intended to represent the driest periods.

(4) Lower Basin--the geographic area of the Brazos River Basin which includes all watersheds below Lake Whitney Dam, and the San Bernard River and coastal watersheds, and which is defined for the purpose of calculating hydrologic conditions as described in §298.470 of this section (relating to Calculation of Hydrologic Conditions).

(5) Middle Basin--the geographic area of the Brazos River Basin which includes all watersheds draining into the Brazos River and its tributaries downstream of Possum Kingdom Dam and upstream of Lake Whitney Dam, and which is defined for the purpose of calculating hydrologic conditions as described in §298.470 of this section (relating to Calculation of Hydrologic Conditions).
(6) PHDI—the Palmer Hydrological Drought Index, based on a scale from -6.0 to 6.0, and representing the severity of moisture conditions from extremely dry to extremely wet.

(7) PHDI Index—a regional PHDI, calculated for the Lower Basin, Middle Basin, and Upper Basin, based on ranked values for a period of record from 1895 through 2010, and which is defined for the purpose of calculating hydrologic conditions as described in §298.470 of this title (relating to Calculation of Hydrologic Conditions).

(8) Spring—the period of time March through June, inclusive.

(9) Sound ecological environment—characterized by fish, macroinvertebrate, and riparian vegetation species assemblages that remain relatively intact compared to historical records.

(10) Summer—the period of time July through October, inclusive.

(11) Upper Basin—the geographic area of the Brazos River Basin which includes all watersheds upstream of and draining into Possum Kingdom Lake, and which is defined for the purpose of calculating hydrologic conditions as described in §298.470 of this title (relating to Calculation of Hydrologic Conditions).

(12) Wet condition—for all measurement points, the hydrologic condition that would occur approximately 25% of the time and that is intended to represent the wettest conditions.

(13) Winter—for all measurement points, the period of time November through February, inclusive.

Adopted February 12, 2014 Effective March 6, 2014

§298.460. Findings.

(a) The Brazos River and its associated tributaries and bay and estuary system and the San Bernard River and its associated tributaries 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 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 dry, average, or wet 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 and hydrologic conditions.

Adopted February 12, 2014 Effective March 6, 2014

§298.465. Set-Asides and Standards Priority Date.

The priority date for the environmental flow standards and set-asides established by this subchapter is March 1, 2012. 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.

Adopted February 12, 2014 Effective March 6, 2014

§298.470. Calculation of Hydrologic Conditions.

(a) For new water right authorizations which increase the amount of water authorized to be stored, taken, or diverted as described in §298.10 of this title (relating to Applicability), the determination of the hydrologic condition for a particular season shall be determined once per season. The Palmer Hydrologic Drought Index (PHDI) value present on the last day of the month of the preceding season, as reported by the National Weather Service, and calculated for the geographic area as described in subsection (b) of this section, will determine the hydrologic condition for the following season. For each measurement point specified in this section, the PHDI Index will determine the hydrologic condition, as described in subsection (c) of this section.

(b) The percentage of each climatic division within each geographic area, as defined in §298.455 of this title (relating to Definitions), are:

Figure: 30 TAC §298.470(b)

<table>
<thead>
<tr>
<th>CLIMATIC DIVISION</th>
<th>PERCENTAGE LOCATED IN UPPER BASIN</th>
<th>PERCENTAGE LOCATED IN MIDDLE BASIN</th>
<th>PERCENTAGE LOCATED IN LOWER BASIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Plains</td>
<td>2.7%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Low Rolling Plains</td>
<td>64.7%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
(c) For all measurement points, based on the geographic area in which the measurement point is located, as defined in §298.455 of this title, the PHDI Index and the corresponding hydrologic conditions are:

Figure: 30 TAC §298.470(c)

PHDI Index for Calculating Hydrologic Conditions for all Measurement Points on the Brazos River and its associated tributaries and the San Bernard River and its associated tributaries

<table>
<thead>
<tr>
<th>GEOGRAPHIC AREA</th>
<th>DRY</th>
<th>AVERAGE</th>
<th>WET</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPPER BASIN</td>
<td>less than -1.78</td>
<td>-1.78 - 2.18</td>
<td>greater than 2.18</td>
</tr>
<tr>
<td>MIDDLE BASIN</td>
<td>less than -1.95</td>
<td>-1.95 - 2.39</td>
<td>greater than 2.39</td>
</tr>
<tr>
<td>LOWER BASIN</td>
<td>less than -1.73</td>
<td>-1.73 - 2.13</td>
<td>greater than 2.13</td>
</tr>
</tbody>
</table>

(d) The PHDI Index for the hydrologic conditions, as set out in subsection (b) of this section govern the operations of permits subject to this subchapter during the initial period, not longer than ten years, until the environmental flow standards in this subchapter are reevaluated. The PHDI Index was calculated to achieve compliance with the percentages of time for dry, average, and wet conditions of 25%, 50%, and 25%, respectively. The PHDI Index set out in subsection (c) of this section will be recalculated, no less frequently than once every ten years, in order to achieve, to the greatest extent possible, compliance with the percentages of time for dry, average, and wet conditions of
§298.475. Schedule of Flow Quantities.

(a) Schedule of flow quantities. 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 at 20 separate measurement locations in §298.480 of this title (relating to Environmental Flow Standards).

(b) Subsistence flow. The applicable subsistence flow standard varies depending on the seasons as described in §298.455 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 applicable measurement point is above the subsistence flow standard but below the applicable dry condition base flow standard, then the water right holder must allow the applicable subsistence flow, plus 50% of the difference between measured streamflow and the applicable subsistence flow, to pass its measurement point and any remaining flow may be diverted or stored, 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 §298.455 of this title and the hydrologic condition described in §298.470 of this title (relating to Calculation of Hydrologic Conditions). 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 hydrologic condition prevailing at that time. For all measurement points, the water right will be subject to one of the following: a dry, an average, 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 applicable 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 applicable measurement point does not fall below the applicable base flow standard for that hydrologic condition except during dry conditions as described in subsection (b) of this section.

(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) For all measurement points, one, two, three, or four pulses per season are to be passed (i.e., no storage or diversion by an applicable water right holder), if applicable, and as described in §298.480 of this title, if streamflows are above the applicable subsistence or base flow standard, and if the applicable high flow pulse trigger level is met at the applicable measurement point. The water right holder shall not divert or store water until either the applicable volume amount has passed the applicable measurement point or the duration time has passed since the high flow pulse trigger level occurred except during times that streamflow at the applicable measurement point exceeds the applicable high flow pulse trigger level. A water right holder can divert water in excess of an applicable pulse flow trigger requirement as long as its diversions do not prevent the occurrence of the pulse flow trigger level of an applicable larger pulse.

(2) If the applicable high flow pulse trigger level does not occur in a season, then the water right holder need not stop storing or diverting water 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.

(4) High flow pulses at the applicable measurement point are dependent on the hydrologic conditions set out in §298.470 of this title.

(5) For measurement points in the Brazos River Basin described in §298.480(7) - (8) of this title, if a pulse flow requirement for the large seasonal pulse is satisfied for a particular season, one of the smaller pulse requirements is also considered to be satisfied for that season.

(e) Stored water. 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 February 12, 2014

Effective March 6, 2014

§298.480. Environmental Flow Standards.

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

1. Double Mountain Fork Brazos River near Aspermont, Texas, generally described as United States Geological Survey (USGS) gage 08080500, and more
Texas Commission on Environmental Quality  
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specifically described as Latitude 33 degrees, 00 minutes, 29 seconds; Longitude 100 degrees, 10 minutes, 49 seconds.

Figure: 30 TAC §298.480(1)

United States Geological Survey Gage 08080500, Double Mountain Fork Brazos River near Aspermont

<table>
<thead>
<tr>
<th>Season</th>
<th>Subsistence</th>
<th>Hydrologic Condition</th>
<th>Base</th>
<th>Dry Condition Seasonal Pulse</th>
<th>Average Condition Seasonal Pulse</th>
<th>Wet Condition Seasonal Pulse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter</td>
<td>1 cfs</td>
<td>Dry</td>
<td>1 cfs</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>4 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>15 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>1 cfs</td>
<td>Dry</td>
<td>1 cfs</td>
<td>1 per season Trigger: 280 cfs Volume: 1,270 af Duration: 10 days</td>
<td>2 per season Trigger: 280 cfs Volume: 1,270 af Duration: 10 days</td>
<td>1 per season Trigger: 570 cfs Volume: 2,600 af Duration: 12 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>3 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>8 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer</td>
<td>1 cfs</td>
<td>Dry</td>
<td>1 cfs</td>
<td>1 per season Trigger: 230 cfs Volume: 990 af Duration: 9 days</td>
<td>2 per season Trigger: 230 cfs Volume: 990 af Duration: 9 days</td>
<td>1 per season Trigger: 480 cfs Volume: 2,160 af Duration: 12 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>2 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>7 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

(2) Salt Fork Brazos River near Aspermont, Texas, generally described as USGS gage 08082000, and more specifically described as Latitude 33 degrees, 20 minutes, 2 seconds; Longitude 100 degrees, 14 minutes, 16 seconds.

Figure: 30 TAC §298.480(2)

United States Geological Survey Gage 08082000, Salt Fork Brazos River near Aspermont
### Season Subsistence Hydrologic Condition Base Dry Condition Seasonal Pulse Average Condition Seasonal Pulse Wet Condition Seasonal Pulse

<table>
<thead>
<tr>
<th>Season</th>
<th>Subsistence</th>
<th>Hydrologic Condition</th>
<th>Base</th>
<th>Dry Condition Seasonal Pulse</th>
<th>Average Condition Seasonal Pulse</th>
<th>Wet Condition Seasonal Pulse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter</td>
<td>1 cfs</td>
<td>Dry</td>
<td>1 cfs</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>4 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>9 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>1 cfs</td>
<td>Dry</td>
<td>1 cfs</td>
<td>1 per season Trigger: 160 cfs Volume: 720 af Duration: 10 days</td>
<td>2 per season Trigger: 160 cfs Volume: 720 af Duration: 10 days</td>
<td>1 per season Trigger: 300 cfs Volume: 1,350 af Duration: 11 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>2 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>5 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer</td>
<td>1 cfs</td>
<td>Dry</td>
<td>1 cfs</td>
<td>1 per season Trigger: 140 cfs Volume: 560 af Duration: 8 days</td>
<td>2 per season Trigger: 140 cfs Volume: 560 af Duration: 8 days</td>
<td>1 per season Trigger: 260 cfs Volume: 1,090 af Duration: 10 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>1 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>3 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

(3) Brazos River at Seymour, Texas, generally described as USGS gage 08082500, and more specifically described as Latitude 33 degrees, 34 minutes, 51 seconds; Longitude 99 degrees, 16 minutes, 02 seconds.

Figure: 30 TAC §298.480(3)

United States Geological Survey Gage 08082500, Brazos River at Seymour
### Environmental Flow Standards for Surface Water

<table>
<thead>
<tr>
<th>Season</th>
<th>Subsistence</th>
<th>Hydrologic Condition</th>
<th>Base</th>
<th>Dry Condition Seasonal Pulse</th>
<th>Average Condition Seasonal Pulse</th>
<th>Wet Condition Seasonal Pulse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter</td>
<td>1 cfs</td>
<td>Dry</td>
<td>5 cfs</td>
<td>1 per season Trigger: 560 cfs Volume: 2,960 af Duration: 10 days</td>
<td>N/A</td>
<td>1 per season Trigger: 1,040 cfs Volume: 5,870 af Duration: 12 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>8 cfs</td>
<td>2 per season Trigger: 560 cfs Volume: 2,960 af Duration: 10 days</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>13 cfs</td>
<td>1 per season Trigger: 1,040 cfs Volume: 5,870 af Duration: 12 days</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>1 cfs</td>
<td>Dry</td>
<td>3 cfs</td>
<td>1 per season Trigger: 180 cfs Volume: 860 af Duration: 9 days</td>
<td>2 per season Trigger: 180 cfs Volume: 860 af Duration: 9 days</td>
<td>1 per season Trigger: 590 cfs Volume: 2,800 af Duration: 12 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>6 cfs</td>
<td></td>
<td>2 per season Trigger: 180 cfs Volume: 860 af Duration: 9 days</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>12 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer</td>
<td>1 cfs</td>
<td>Dry</td>
<td>1 cfs</td>
<td>1 per season Trigger: 26 cfs Volume: 160 af Duration: 9 days</td>
<td>2 per season Trigger: 26 cfs Volume: 160 af Duration: 9 days</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>8 cfs</td>
<td></td>
<td>2 per season Trigger: 26 cfs Volume: 160 af Duration: 9 days</td>
<td></td>
</tr>
</tbody>
</table>

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

(4) Clear Fork Brazos River at Nugent, Texas, generally described as USGS gage 08084000, and more specifically described as Latitude 32 degrees, 41 minutes, 24 seconds; Longitude 99 degrees, 40 minutes, 09 seconds.

Figure: 30 TAC §298.480(4)

United States Geological Survey Gage 08084000, Clear Fork Brazos River at Nugent
Texas Commission on Environmental Quality
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<table>
<thead>
<tr>
<th>Season</th>
<th>Subsistence</th>
<th>Hydrologic Condition</th>
<th>Base</th>
<th>Dry Condition Seasonal Pulse</th>
<th>Average Condition Seasonal Pulse</th>
<th>Wet Condition Seasonal Pulse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter</td>
<td>1 cfs</td>
<td>Dry</td>
<td>7 cfs</td>
<td>N/A</td>
<td>N/A</td>
<td>1 per season Trigger: 26 cfs Volume: 158 af Duration: 9 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>10 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>16 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>1 cfs</td>
<td>Dry</td>
<td>4 cfs</td>
<td>1 per season Trigger: 18 cfs Volume: 74 af Duration: 2 days</td>
<td>2 per season Trigger: 37 cfs Volume: 148 af Duration: 2 days</td>
<td>1 per season Trigger: 335 cfs Volume: 2,054 af Duration: 9 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>7 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>15 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer</td>
<td>1 cfs</td>
<td>Dry</td>
<td>1 cfs</td>
<td>1 per season Trigger: 18 cfs Volume: 74 af Duration: 2 days</td>
<td>2 per season Trigger: 37 cfs Volume: 148 af Duration: 2 days</td>
<td>1 per season Trigger: 170 cfs Volume: 779 af Duration: 5 Days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>5 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>11 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

(5) Clear Fork Brazos River at Lueders, Texas, generally described as USGS gage 08084200, and more specifically described as Latitude 32 degrees, 47 minutes, 33.9 seconds; Longitude 99 degrees, 36 minutes, 43.30 seconds.

Figure: 30 TAC §298.480(5)

United States Geological Survey Gage 08084200, Clear Fork Brazos River at Lueders

<table>
<thead>
<tr>
<th>Average</th>
<th>4 cfs</th>
<th>100 cfs Volume: 460 af Duration: 8 days</th>
<th>100 cfs Volume: 460 af Duration: 8 days</th>
<th>390 cfs Volume: 1,890 af Duration: 12 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wet</td>
<td>9 cfs</td>
<td>----------------------------------------</td>
<td>----------------------------------------</td>
<td>------------------------------------------</td>
</tr>
</tbody>
</table>
(6) Brazos River near South Bend, Texas, generally described as USGS gage 08088000, and more specifically described as Latitude 33 degrees, 01 minutes, 27 seconds; Longitude 98 degrees, 38 minutes, 37 seconds.

Figure: 30 TAC §298.480(6)

United States Geological Survey Gage 08088000, Brazos River near South Bend

<table>
<thead>
<tr>
<th>Season</th>
<th>Subsistence</th>
<th>Hydrologic Condition</th>
<th>Base</th>
<th>Dry Condition Seasonal Pulse</th>
<th>Average Condition Seasonal Pulse</th>
<th>Wet Condition Seasonal Pulse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter</td>
<td>1 cfs</td>
<td>Dry</td>
<td>36 cfs</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>73 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>120 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>1 cfs</td>
<td>Dry</td>
<td>29 cfs</td>
<td>1 per season Trigger: 1,260 cfs Volume: 7,280 af Duration: 10 days</td>
<td>2 per season Trigger: 1,260 cfs Volume: 7,280 af Duration: 10 days</td>
<td>1 per season Trigger: 2,480 cfs Volume: 15,700 af Duration: 13 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>60 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>100 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer</td>
<td>1 cfs</td>
<td>Dry</td>
<td>16 cfs</td>
<td>1 per season Trigger: 580 cfs Volume: 3,140 af Duration: 8 days</td>
<td>2 per season Trigger: 580 cfs Volume: 3,140 af Duration: 8 days</td>
<td>1 per season Trigger: 1,180 cfs Volume: 7,050 af Duration: 11 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>46 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>95 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

(7) Brazos River near Palo Pinto, Texas, generally described as USGS gage 08089000, and more specifically described as Latitude 32 degrees, 51 minutes, 45 seconds; Longitude 98 degrees, 18 minutes, 08 seconds.

Figure: 30 TAC §298.480(7)

United States Geological Survey Gage 08089000, Brazos River near Palo Pinto
<table>
<thead>
<tr>
<th>Season</th>
<th>Subsistence</th>
<th>Hydrologic Condition</th>
<th>Base</th>
<th>Dry Condition Seasonal Pulse</th>
<th>Average Condition Seasonal Pulse</th>
<th>Wet Condition Seasonal Pulse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter</td>
<td>17 cfs</td>
<td>Dry 40 cfs</td>
<td></td>
<td>2 per season Trigger: 850 cfs Volume: 3,690 af Duration: 5 days</td>
<td>4 per season Trigger: 850 cfs Volume: 3,690 af Duration: 5 days</td>
<td>4 per season Trigger: 850 cfs Volume: 3,690 af Duration: 5 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average 61 cfs</td>
<td></td>
<td>2 per season Trigger: 1,390 cfs Volume: 7,180 af Duration: 7 days</td>
<td>3 per season Trigger: 1,390 cfs Volume: 7,180 af Duration: 7 days</td>
<td>3 per season Trigger: 1,390 cfs Volume: 7,180 af Duration: 7 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet 100 cfs</td>
<td></td>
<td></td>
<td>2 per season Trigger: 1,390 cfs Volume: 7,180 af Duration: 7 days</td>
<td>3 per season Trigger: 1,390 cfs Volume: 7,180 af Duration: 7 days</td>
</tr>
<tr>
<td>Spring</td>
<td>17 cfs</td>
<td>Dry 39 cfs</td>
<td></td>
<td>2 per season Trigger: 1,400 cfs Volume: 6,600 af Duration: 6 days</td>
<td>4 per season Trigger: 1,400 cfs Volume: 6,600 af Duration: 6 days</td>
<td>4 per season Trigger: 1,400 cfs Volume: 6,600 af Duration: 6 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average 75 cfs</td>
<td></td>
<td>2 per season Trigger: 3,370 cfs Volume: 20,200 af Duration: 10 days</td>
<td>3 per season Trigger: 3,370 cfs Volume: 20,200 af Duration: 10 days</td>
<td>3 per season Trigger: 3,370 cfs Volume: 20,200 af Duration: 10 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet 120 cfs</td>
<td></td>
<td></td>
<td>2 per season Trigger: 3,370 cfs Volume: 20,200 af Duration: 10 days</td>
<td>3 per season Trigger: 3,370 cfs Volume: 20,200 af Duration: 10 days</td>
</tr>
<tr>
<td>Summer</td>
<td>17 cfs</td>
<td>Dry 40 cfs</td>
<td></td>
<td>2 per season Trigger: 1,230 cfs Volume: 5,920 af Duration: 6 days</td>
<td>4 per season Trigger: 1,230 cfs Volume: 5,920 af Duration: 6 days</td>
<td>4 per season Trigger: 1,230 cfs Volume: 5,920 af Duration: 6 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average 72 cfs</td>
<td></td>
<td>2 per season Trigger: 5,920 cfs Volume: 5,920 af Duration: 6 days</td>
<td>3 per season Trigger: 5,920 cfs Volume: 5,920 af Duration: 6 days</td>
<td>3 per season Trigger: 5,920 cfs Volume: 5,920 af Duration: 6 days</td>
</tr>
</tbody>
</table>
### Chapter 298 - Environmental Flow Standards for Surface Water

<table>
<thead>
<tr>
<th></th>
<th>Wet</th>
<th>120 cfs</th>
<th>2,260 cfs</th>
<th>2,260 cfs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Volume:</td>
<td>Volume:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>13,000 af</td>
<td>13,000 af</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Duration: 9 days</td>
<td>Duration: 9 days</td>
</tr>
</tbody>
</table>

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

(8) Brazos River near Glen Rose, Texas, generally described as USGS gage 080891000, and more specifically described as Latitude 32 degrees, 15 minutes, 32 seconds; Longitude 97 degrees, 42 minutes, 08 seconds.

Figure: 30 TAC §298.480(8)

United States Geological Survey Gage 080891000, Brazos River near Glen Rose

<table>
<thead>
<tr>
<th>Season</th>
<th>Subsistence</th>
<th>Hydrologic Condition</th>
<th>Base</th>
<th>Dry Condition Seasonal Pulse</th>
<th>Average Condition Seasonal Pulse</th>
<th>Wet Condition Seasonal Pulse</th>
</tr>
</thead>
</table>
| Winter | 16 cfs      | Dry                  | 42 cfs | 2 per season Trigger: 930 cfs  
Volume: 5,400 af  
Duration: 8 days | 4 per season Trigger: 930 cfs  
Volume: 5,400 af  
Duration: 8 days | 4 per season Trigger: 930 cfs  
Volume: 5,400 af  
Duration: 8 days |
|        |             | Average              | 77 cfs | 2 per season Trigger: 1,700 cfs  
Volume: 10,800 af  
Duration: 10 days | 3 per season Trigger: 1,700 cfs  
Volume: 10,800 af  
Duration: 10 days | 3 per season Trigger: 1,700 cfs  
Volume: 10,800 af  
Duration: 10 days |
|        |             | Wet                  | 160 cfs | 2 per season Trigger: 2,350 cfs  
Volume: 14,300 af  
Duration: 10 days | 4 per season Trigger: 2,350 cfs  
Volume: 14,300 af  
Duration: 10 days | 4 per season Trigger: 2,350 cfs  
Volume: 14,300 af  
Duration: 10 days |
| Spring | 16 cfs      | Dry                  | 47 cfs | 2 per season Trigger: 2,350 cfs  
Volume: 14,300 af  
Duration: 10 days | 3 per season Trigger: 2,350 cfs  
Volume: 14,300 af  
Duration: 10 days | 3 per season Trigger: 2,350 cfs  
Volume: 14,300 af  
Duration: 10 days |
|        |             | Average              | 92 cfs | 2 per season Trigger: 2,350 cfs  
Volume: 14,300 af  
Duration: 10 days | 3 per season Trigger: 2,350 cfs  
Volume: 14,300 af  
Duration: 10 days | 3 per season Trigger: 2,350 cfs  
Volume: 14,300 af  
Duration: 10 days |
(9) North Bosque River near Clifton, Texas, generally described as USGS gage 08095000, and more specifically described as Latitude 31 degrees, 47 minutes, 09 seconds; Longitude 97 degrees, 34 minutes, 04 seconds.

Figure: 30 TAC §298.480(9)

United States Geological Survey Gage 08095000, North Bosque River near Clifton

<table>
<thead>
<tr>
<th>Season</th>
<th>Subsistence</th>
<th>Hydrologic Condition</th>
<th>Base</th>
<th>Dry Condition Seasonal Pulse</th>
<th>Average Condition Seasonal Pulse</th>
<th>Wet Condition Seasonal Pulse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter</td>
<td>1 cfs</td>
<td>Dry</td>
<td>5 cfs</td>
<td>N/A</td>
<td>N/A</td>
<td>2 per season Trigger: 120 cfs Volume: 750 af Duration: 10 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>12 cfs</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>25 cfs</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>
### Seasonal Flow Standards

<table>
<thead>
<tr>
<th>Season</th>
<th>Subsistence</th>
<th>Hydrologic Condition</th>
<th>Base</th>
<th>Dry Condition Seasonal Pulse</th>
<th>Average Condition Seasonal Pulse</th>
<th>Wet Condition Seasonal Pulse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter</td>
<td>56 cfs</td>
<td>Dry</td>
<td>120 cfs</td>
<td>1 per season Trigger: 2,320 cfs Volume: 12,400 af Duration: 7 days</td>
<td>3 per season Trigger: 2,320 cfs Volume: 12,400 af Duration: 7 days</td>
<td>2 per season Trigger: 4,180 cfs Volume: 25,700 af Duration: 9 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>210 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>480 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>56 cfs</td>
<td>Dry</td>
<td>150 cfs</td>
<td>1 per season Trigger: 5,330 cfs Volume: 32,700 af Duration: 10 days</td>
<td>3 per season Trigger: 5,330 cfs Volume: 32,700 af Duration: 10 days</td>
<td>2 per season Trigger: 13,600 cfs Volume: 102,000 af Duration: 14 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>270 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>690 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer</td>
<td>56 cfs</td>
<td>Dry</td>
<td>140 cfs</td>
<td>1 per season Trigger: 1,980 cfs Volume:</td>
<td>3 per season Trigger: 1,980 cfs Volume:</td>
<td>2 per season Trigger: 4,160 cfs Volume:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>250 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

(10) Brazos River at Waco, Texas, generally described as USGS gage 08096500, and more specifically described as Latitude 31 degrees, 32 minutes, 09 seconds; Longitude 97 degrees, 04 minutes, 23 seconds.

Figure: 30 TAC §298.480(10)
### Table 1: Environmental Flow Standards for Surface Water

<table>
<thead>
<tr>
<th>Season</th>
<th>Subsistence</th>
<th>Hydrologic Condition</th>
<th>Base</th>
<th>Wet Condition Seasonal Pulse</th>
<th>Average Condition Seasonal Pulse</th>
<th>Wet Condition Seasonal Pulse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter</td>
<td>1 cfs</td>
<td>Dry</td>
<td>9 cfs</td>
<td>N/A</td>
<td>N/A</td>
<td>2 per season Trigger: 100 cfs Volume: 540 af Duration: 6 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>20 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>52 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>1 cfs</td>
<td>Dry</td>
<td>10 cfs</td>
<td>1 per season Trigger: 340 cfs Volume: 1,910 af Duration: 10 days</td>
<td>3 per season Trigger: 340 cfs Volume: 1,910 af Duration: 10 days</td>
<td>2 per season Trigger: 630 cfs Volume: 4,050 af Duration: 13 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>24 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>54 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer</td>
<td>1 cfs</td>
<td>Dry</td>
<td>4 cfs</td>
<td>1 per season Trigger: 58 cfs Volume: 220 af Duration: 4 days</td>
<td>3 per season Trigger: 58 cfs Volume: 220 af Duration: 4 days</td>
<td>2 per season Trigger: 140 cfs Volume: 600 af Duration: 6 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>12 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>27 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

(11) Leon River at Gatesville, Texas, generally described as USGS gage 08100500, and more specifically described as Latitude 31 degrees, 26 minutes, 05 seconds; Longitude 97 degrees, 45 minutes, 30 seconds.

Figure: 30 TAC §298.480(11)

United States Geological Survey Gage 08100500, Leon River at Gatesville

(12) Lampasas River near Kempner, Texas, generally described as USGS gage 08100500, and more specifically described as Latitude 31 degrees, 26 minutes, 05 seconds; Longitude 97 degrees, 45 minutes, 30 seconds.
gage 08103800, and more specifically described as Latitude 31 degrees, 04 minutes, 45 seconds; Longitude 98 degrees, 00 minutes, 59 seconds.

Figure: 30 TAC §298.480(12)

United States Geological Survey Gage 08103800, Lampasas River near Kempner

<table>
<thead>
<tr>
<th>Season</th>
<th>Subsistence</th>
<th>Hydrologic Condition</th>
<th>Base</th>
<th>Dry Condition Seasonal Pulse</th>
<th>Average Condition Seasonal Pulse</th>
<th>Wet Condition Seasonal Pulse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter</td>
<td>10 cfs</td>
<td>Dry</td>
<td>18 cfs</td>
<td>1 per season trigger: 78 cfs, volume: 430 af, duration: 8 days</td>
<td>3 per season trigger: 78 cfs, volume: 430 af, duration: 8 days</td>
<td>2 per season trigger: 190 cfs, volume: 1,150 af, duration: 11 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>27 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>39 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>10 cfs</td>
<td>Dry</td>
<td>21 cfs</td>
<td>1 per season trigger: 780 cfs, volume: 4,020 af, duration: 13 days</td>
<td>3 per season trigger: 780 cfs, volume: 4,020 af, duration: 13 days</td>
<td>2 per season trigger: 1,310 cfs, volume: 6,860 af, duration: 16 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>29 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>43 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer</td>
<td>10 cfs</td>
<td>Dry</td>
<td>16 cfs</td>
<td>1 per season trigger: 77 cfs, volume: 270 af, duration: 4 days</td>
<td>3 per season trigger: 77 cfs, volume: 270 af, duration: 4 days</td>
<td>2 per season trigger: 190 cfs, volume: 680 af, duration: 6 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>23 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>32 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

(13) Little River near Little River, Texas, generally described as USGS gage 08104500, and more specifically described as Latitude 30 degrees, 57 minutes, 59 seconds; Longitude 97 degrees, 20 minutes, 45 seconds.

Figure: 30 TAC §298.480(13)

United States Geological Survey Gage 08104500, Little River near Little River
<table>
<thead>
<tr>
<th>Season</th>
<th>Subsistence</th>
<th>Hydrologic Condition</th>
<th>Base</th>
<th>Dry Condition Seasonal Pulse</th>
<th>Average Condition Seasonal Pulse</th>
<th>Wet Condition Seasonal Pulse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter</td>
<td>55 cfs</td>
<td>Dry</td>
<td>82 cfs</td>
<td>1 per season Trigger: 520 cfs Volume: 2,350 af Duration: 5 days</td>
<td>3 per season Trigger: 520 cfs Volume: 2,350 af Duration: 5 days</td>
<td>2 per season Trigger: 1,600 cfs Volume: 11,800 af Duration: 11 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>110 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>190 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>55 cfs</td>
<td>Dry</td>
<td>95 cfs</td>
<td>1 per season Trigger: 1,420 cfs Volume: 9,760 af Duration: 10 days</td>
<td>3 per season Trigger: 1,420 cfs Volume: 9,760 af Duration: 10 days</td>
<td>2 per season Trigger: 3,290 cfs Volume: 32,200 af Duration: 17 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>150 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>340 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer</td>
<td>55 cfs</td>
<td>Dry</td>
<td>84 cfs</td>
<td>1 per season Trigger: 430 cfs Volume: 1,560 af Duration: 4 days</td>
<td>3 per season Trigger: 430 cfs Volume: 1,560 af Duration: 4 days</td>
<td>2 per season Trigger: 1,060 cfs Volume: 5,890 af Duration: 8 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>120 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>200 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

(14) Little River near Cameron, Texas, generally described as USGS gage 08106500, and more specifically described as Latitude 30 degrees, 50 minutes, 06 seconds; Longitude 96 degrees, 56 minutes, 47 seconds.

Figure: 30 TAC §298.480(14)

United States Geological Survey Gage 08106500, Little River near Cameron
### Environmental Flow Standards for Surface Water

<table>
<thead>
<tr>
<th>Season</th>
<th>Subsistence</th>
<th>Hydrologic Condition</th>
<th>Base</th>
<th>Dry Condition Seasonal Pulse</th>
<th>Average Condition Seasonal Pulse</th>
<th>Wet Condition Seasonal Pulse</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Winter</strong></td>
<td>300 cfs</td>
<td>Dry</td>
<td>540 cfs</td>
<td>1 per season Trigger: 3,230 cfs Volume: 21,100 af Duration: 7 days</td>
<td>3 per season Trigger: 3,320 cfs Volume: 21,100 af Duration: 7 days</td>
<td>2 per season Trigger: 5,570 cfs Volume: 41,900 af Duration: 10 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>860 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>1,760 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td>300 cfs</td>
<td>Dry</td>
<td>710 cfs</td>
<td>1 per season Trigger: 6,050 cfs Volume:</td>
<td>3 per season Trigger: 6,050 cfs Volume:</td>
<td>2 per season Trigger: 10,400 cfs Volume:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>1,260 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

(15) Brazos River at SH 21 near Bryan, Texas, generally described as USGS gage 08108700, and more specifically described as Latitude 30 degrees, 37 minutes, 36 seconds; Longitude 96 degrees, 32 minutes, 38 seconds.

**Figure: 30 TAC §298.480(15)**

United States Geological Survey Gage 08108700, Brazos River at SH 21 near Bryan
(16) Navasota River near Easterly, Texas, generally described as USGS gage 08110500, and more specifically described as Latitude 31 degrees, 10 minutes, 12 seconds; Longitude 96 degrees, 17 minutes, 51 seconds.

Figure: 30 TAC §298.480(16)

United States Geological Survey Gage 08110500, Navasota River near Easterly

<table>
<thead>
<tr>
<th>Season</th>
<th>Subsistence</th>
<th>Hydrologic Condition</th>
<th>Base</th>
<th>Dry Condition Seasonal Pulse</th>
<th>Average Condition Seasonal Pulse</th>
<th>Wet Condition Seasonal Pulse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter</td>
<td>1 cfs</td>
<td>Dry</td>
<td>9 cfs</td>
<td>1 per season Trigger: 260 cfs Volume: 1,610 af Duration: 9 days</td>
<td>3 per season Trigger: 260 cfs Volume: 1,610 af Duration: 9 days</td>
<td>2 per season Trigger: 800 cfs Volume: 5,440 af Duration: 12 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>14 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>23 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>1 cfs</td>
<td>Dry</td>
<td>10 cfs</td>
<td>1 per season Trigger: 720 cfs Volume: 4,590 af Duration: 11 days</td>
<td>3 per season Trigger: 720 cfs Volume: 4,590 af Duration: 11 days</td>
<td>2 per season Trigger: 1,340 cfs Volume: 8,990 af Duration: 13 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>19 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>29 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer</td>
<td>1 cfs</td>
<td>Dry</td>
<td>3 cfs</td>
<td>N/A</td>
<td>N/A</td>
<td>2 per season Trigger: 49 cfs Volume: 220 af Duration: 5 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>8 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>16 cfs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
cfs = cubic feet per second  
af = acre-feet  
N/A = not applicable

(17) Brazos River near Hempstead, Texas, generally described as USGS gage 08111500, and more specifically described as Latitude 30 degrees, 07 minutes, 44 seconds; Longitude 96 degrees, 11 minutes, 15 seconds.

Figure: 30 TAC §298.480(17)

United States Geological Survey Gage 08111500, Brazos River near Hempstead

<table>
<thead>
<tr>
<th>Season</th>
<th>Subsistence</th>
<th>Hydrologic Condition</th>
<th>Base</th>
<th>Dry Condition Seasonal Pulse</th>
<th>Average Condition Seasonal Pulse</th>
<th>Wet Condition Seasonal Pulse</th>
</tr>
</thead>
</table>
| Winter | 510 cfs     | Dry                  | 920 cfs | 1 per season Trigger: 5,720 cfs  
Volume: 49,800 af  
Duration: 10 days | 3 per season Trigger: 5,720 cfs  
Volume: 49,800 af  
Duration: 10 days | 2 per season Trigger: 11,200 cfs  
Volume: 125,000 af  
Duration: 15 days |
|        |             | Average              | 1,440 cfs |                              |                                 |                             |
|        |             | Wet                  | 2,890 cfs |                              |                                 |                             |
| Spring | 510 cfs     | Dry                  | 1,130 cfs | 1 per season Trigger: 8,530 cfs  
Volume: 85,000 af  
Duration: 13 days | 3 per season Trigger: 8,530 cfs  
Volume: 85,000 af  
Duration: 13 days | 2 per season Trigger: 16,800 cfs  
Volume: 219,000 af  
Duration: 19 days |
|        |             | Average              | 1,900 cfs |                              |                                 |                             |
|        |             | Wet                  | 3,440 cfs |                              |                                 |                             |
| Summer | 510 cfs     | Dry                  | 950 cfs | 1 per season Trigger: 2,620 cfs  
Volume: 17,000 af  
Duration: 7 days | 3 per season Trigger: 2,620 cfs  
Volume: 17,000 af  
Duration: 7 days | 2 per season Trigger: 5,090 cfs  
Volume: 40,900 af  
Duration: 9 days |
|        |             | Average              | 1,330 cfs |                              |                                 |                             |
|        |             | Wet                  | 2,050 cfs |                              |                                 |                             |

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

(18) Brazos River at Richmond, Texas, generally described as USGS gage 08114000, and more specifically described as Latitude 29 degrees, 34 minutes, 56 seconds; Longitude 95 degrees, 45 minutes, 27 seconds.
Figure: 30 TAC §298.480(18)

United States Geological Survey Gage 08114000, Brazos River at Richmond

<table>
<thead>
<tr>
<th>Season</th>
<th>Subsistence</th>
<th>Hydrologic Condition</th>
<th>Base</th>
<th>Dry Condition Seasonal Pulse</th>
<th>Average Condition Seasonal Pulse</th>
<th>Wet Condition Seasonal Pulse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter</td>
<td>550 cfs</td>
<td>Dry</td>
<td>990 cfs</td>
<td>1 per season Trigger: 6,410 cfs&lt;br&gt;Volume: 60,600 af&lt;br&gt;Duration: 11 days</td>
<td>3 per season Trigger: 6,410 cfs&lt;br&gt;Volume: 60,600 af&lt;br&gt;Duration: 11 days</td>
<td>2 per season Trigger: 12,400 cfs&lt;br&gt;Volume: 150,000 af&lt;br&gt;Duration: 16 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>1,650 cfs</td>
<td>3 per season Trigger: 8,930 cfs&lt;br&gt;Volume: 94,000 af&lt;br&gt;Duration: 13 days</td>
<td>3 per season Trigger: 8,930 cfs&lt;br&gt;Volume: 94,000 af&lt;br&gt;Duration: 13 days</td>
<td>2 per season Trigger: 16,300 cfs&lt;br&gt;Volume: 215,000 af&lt;br&gt;Duration: 19 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>3,310 cfs</td>
<td>2 per season Trigger: 5,430 cfs&lt;br&gt;Volume: 46,300 af&lt;br&gt;Duration: 10 days</td>
<td>2 per season Trigger: 5,430 cfs&lt;br&gt;Volume: 46,300 af&lt;br&gt;Duration: 10 days</td>
<td>2 per season Trigger: 10,860 cfs&lt;br&gt;Volume: 112,600 af&lt;br&gt;Duration: 16 days</td>
</tr>
<tr>
<td>Spring</td>
<td>550 cfs</td>
<td>Dry</td>
<td>1,190 cfs</td>
<td>1 per season Trigger: 2,460 cfs&lt;br&gt;Volume: 16,400 af&lt;br&gt;Duration: 6 days</td>
<td>2 per season Trigger: 2,460 cfs&lt;br&gt;Volume: 16,400 af&lt;br&gt;Duration: 6 days</td>
<td>2 per season Trigger: 5,430 cfs&lt;br&gt;Volume: 46,300 af&lt;br&gt;Duration: 10 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>2,140 cfs</td>
<td>2 per season Trigger: 5,430 cfs&lt;br&gt;Volume: 46,300 af&lt;br&gt;Duration: 10 days</td>
<td>2 per season Trigger: 5,430 cfs&lt;br&gt;Volume: 46,300 af&lt;br&gt;Duration: 10 days</td>
<td>2 per season Trigger: 10,860 cfs&lt;br&gt;Volume: 112,600 af&lt;br&gt;Duration: 16 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>3,980 cfs</td>
<td>2 per season Trigger: 5,430 cfs&lt;br&gt;Volume: 46,300 af&lt;br&gt;Duration: 10 days</td>
<td>2 per season Trigger: 5,430 cfs&lt;br&gt;Volume: 46,300 af&lt;br&gt;Duration: 10 days</td>
<td>2 per season Trigger: 10,860 cfs&lt;br&gt;Volume: 112,600 af&lt;br&gt;Duration: 16 days</td>
</tr>
<tr>
<td>Summer</td>
<td>550 cfs</td>
<td>Dry</td>
<td>930 cfs</td>
<td>1 per season Trigger: 2,460 cfs&lt;br&gt;Volume: 16,400 af&lt;br&gt;Duration: 6 days</td>
<td>2 per season Trigger: 2,460 cfs&lt;br&gt;Volume: 16,400 af&lt;br&gt;Duration: 6 days</td>
<td>2 per season Trigger: 5,430 cfs&lt;br&gt;Volume: 46,300 af&lt;br&gt;Duration: 10 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>1,330 cfs</td>
<td>2 per season Trigger: 5,430 cfs&lt;br&gt;Volume: 46,300 af&lt;br&gt;Duration: 10 days</td>
<td>2 per season Trigger: 5,430 cfs&lt;br&gt;Volume: 46,300 af&lt;br&gt;Duration: 10 days</td>
<td>2 per season Trigger: 10,860 cfs&lt;br&gt;Volume: 112,600 af&lt;br&gt;Duration: 16 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td>2,190 cfs</td>
<td>2 per season Trigger: 5,430 cfs&lt;br&gt;Volume: 46,300 af&lt;br&gt;Duration: 10 days</td>
<td>2 per season Trigger: 5,430 cfs&lt;br&gt;Volume: 46,300 af&lt;br&gt;Duration: 10 days</td>
<td>2 per season Trigger: 10,860 cfs&lt;br&gt;Volume: 112,600 af&lt;br&gt;Duration: 16 days</td>
</tr>
</tbody>
</table>

\( \text{cfs} = \text{cubic feet per second} \)
\( \text{af} = \text{acre-feet} \)
\( \text{N/A} = \text{not applicable} \)

(19) Brazos River near Rosharon, Texas, generally described as USGS gage 08116650, and more specifically described as Latitude 29 degrees, 20 minutes, 58 seconds; Longitude 95 degrees, 34 minutes, 56 seconds.

Figure: 30 TAC §298.480(19)

United States Geological Survey Gage 08116650, Brazos River near Rosharon
<table>
<thead>
<tr>
<th>Season</th>
<th>Subsistence</th>
<th>Hydrologic Condition</th>
<th>Dry Condition Seasonal Pulse</th>
<th>Average Condition Seasonal Pulse</th>
<th>Wet Condition Seasonal Pulse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter</td>
<td>11 cfs</td>
<td>Dry</td>
<td>1 per season Trigger: 510 cfs Volume: 3,710 af Duration: 8 days</td>
<td>3 per season Trigger: 510 cfs Volume: 3,710 af Duration: 8 days</td>
<td>2 per season Trigger: 1,060 cfs Volume: 9,370 af Duration: 12 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>11 cfs</td>
<td>Dry</td>
<td>1 per season Trigger: 350 cfs Volume:</td>
<td>3 per season Trigger: 350 cfs Volume:</td>
<td>2 per season Trigger: 680 cfs Volume:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

(20) San Bernard River near Boling, Texas, generally described as USGS gage 08117500, and more specifically described as Latitude 29 degrees, 18 minutes, 48 seconds; Longitude 95 degrees, 53 minutes, 37 seconds.

Figure: 30 TAC §298.480(20)
Texas Commission on Environmental Quality  
Chapter 298 - Environmental Flow Standards for Surface Water

<table>
<thead>
<tr>
<th>Season</th>
<th>Trigger</th>
<th>Volume</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wet</td>
<td>85 cfs</td>
<td>2,360 af</td>
<td>7 days</td>
</tr>
<tr>
<td>Summer</td>
<td>11 cfs</td>
<td>1,170 af</td>
<td>9 days</td>
</tr>
<tr>
<td>Average</td>
<td>64 cfs</td>
<td>2,360 af</td>
<td>7 days</td>
</tr>
<tr>
<td>Summer</td>
<td>30 cfs</td>
<td>2,360 af</td>
<td>9 days</td>
</tr>
<tr>
<td>Average</td>
<td>98 cfs</td>
<td>2,360 af</td>
<td>9 days</td>
</tr>
<tr>
<td>Wet</td>
<td>140 cfs</td>
<td>5,300 af</td>
<td>10 days</td>
</tr>
</tbody>
</table>

Adopted February 12, 2014 
Effective March 6, 2014 


(a) For water right permits with an authorization to store or divert water from the Brazos River and its associated tributaries, and from the Brazos-Colorado Coastal Basin, 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 divert water in the Brazos River Basin and the Brazos-Colorado Coastal Basin at a rate less than 20% of the pulse trigger level requirements of an applicable high flow pulse at a measurement point, as described in §298.480 of this title (relating to Environmental Flow Standards), 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 that applicable high flow pulse.

(c) For water right permit applications that request only to increase authorized storage by up to 15%, in the Palo Pinto Creek watershed, 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 any otherwise applicable high flow pulses.

Adopted February 12, 2014 
Effective March 6, 2014
§298.490. Schedule for Revision of Standards.

The environmental flow standards or environmental flow set-asides adopted in this subchapter for the Brazos River and its associated tributaries and its associated bay and estuary system and the Brazos-Colorado Coastal Basin 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 Brazos River and Associated Bay and Estuary System Stakeholder Committee submits a work plan approved by the Environmental Flows Advisory Group under Texas Water Code, §11.02362(p), that provides for a periodic review to occur more frequently. The rulemaking process shall include participation by a balanced representation of stakeholders having interests in the Brazos River and its associated tributaries and its associated bay and estuary system and the Brazos-Colorado Coastal Basin.

Adopted February 12, 2014

Effective March 6, 2014