

**SUBCHAPTER H: RIO GRANDE, RIO GRANDE ESTUARY, AND LOWER
LAGUNA MADRE**

**§§298.500, 298.505, 298.510, 298.515, 298.520, 298.525,
298.530, 298.535, 298.540
Effective March 6, 2014**

§298.500. Applicability and Purpose.

This subchapter contains the environmental flow standards for the Rio Grande and its associated tributaries. 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 Rio Grande basin.

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§298.505. 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 would occur approximately 50% of the time and that is intended to represent periods that are neither dry nor wet.

(2) Dry condition--the hydrologic condition that would occur approximately 15% of the time and that is intended to represent conditions that are dry but are above the subsistence condition.

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

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

(5) Sound ecological environment--an environment that sustains the full complement of the current suite of native species in perpetuity, or at least supports the introduction of extirpated species, sustains key habitat features required by these species, retains key features of the natural flow regime required by these species to complete their life cycles, and sustains key ecosystem processes and services, such as elemental cycling and the productivity of important plant and animal populations.

(6) Subsistence condition--the hydrologic condition that would occur approximately 10% of the time and that is intended to represent the driest periods.

(7) Wet condition--the hydrologic condition that would occur approximately 25% of the time and that is intended to represent the wettest conditions.

(8) Winter--the period of time November through February, inclusive.

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§298.510. Findings.

For the Rio Grande, and its associated tributaries located within Texas, the commission finds that the environmental flow standards in this subchapter are appropriate environmental flow standards that are adequate to support a sound ecological environment at the locations specified in this subchapter to the maximum extent reasonable considering other public interests and other relevant factors. The commission finds that the sound ecological environment can best be maintained by a set of flow standards consisting of a schedule of flow quantities that contain subsistence flow, base flows, 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 subsistence, dry, average, or wet hydrologic conditions, will vary from year to year and within a year from season to season, and the number of pulses will also vary with the amount of precipitation.

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§298.515. Set-Asides and Standards Priority Date.

The priority date for the environmental flow standards and set-asides established by this subchapter is July 25, 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.

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§298.520. Calculation of Hydrologic Conditions.

(a) For new water right authorizations in the Rio Grande Basin 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 conditions present on the last day of the month of the preceding season will determine the hydrologic condition for the following season for the applicable measurement point. For each measurement point,

cumulative streamflow for the previous 12 months will determine the hydrologic condition.

(b) For purposes of permit special conditions related to hydrologic conditions, for water right applications in the Rio Grande Basin, which increase the amount of water to be stored, taken, or diverted, the hydrologic condition shall be calculated using the full period of record for the United States Geological Survey (USGS) gage or the International Boundary and Water Commission (IBWC) gage, as applicable, at each measurement point such that subsistence conditions occur approximately 10% of the time, dry conditions occur approximately 15% of the time, average conditions occur approximately 50% of the time, and wet conditions occur approximately 25% of the time.

(c) For purposes of water availability determinations, for water right permit applications in the Rio Grande Basin, which increase the amount of water to be stored, taken, or diverted, hydrologic conditions used in the commission's water availability model shall be calculated such that subsistence conditions occur approximately 10% of the time, dry conditions occur approximately 15% of the time, average conditions occur approximately 50% of the time, and wet conditions occur approximately 25% of the time, based on the period of record and simulated flows of the water availability model.

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§298.525. Schedule of Flow Quantities.

(a) Schedule of flow quantities. The environmental flow standards proposed in this subchapter constitute a schedule of flow quantities made up of subsistence flow, base flows, and high flow pulses. Environmental flow standards are established for five measurement points in §298.530 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 §298.505 of this title (relating to Definitions) and hydrologic conditions, as described in §298.520 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 may not store or divert water under subsistence hydrologic conditions, unless the flow at the measurement point is above the applicable subsistence flow standard for that point. During subsistence hydrologic conditions, if the flow at the measurement point is above the subsistence flow standard but below the applicable dry condition 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 §298.505 of this title, and the hydrologic conditions, as described in §298.520 of this title. For a water right holder, to which an environmental flow standard applies, at a measurement point that applies to a water right, the water right holder is subject to a base flow standard for the hydrologic conditions prevailing at the time, i.e., the water right holder will be subject to one of the following: a subsistence, 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 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 applicable 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) One or two 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 §298.530 of this title, if the flows 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 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 applicable duration time has passed since the high flow pulse trigger level occurred. 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 flow 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 are independent of the hydrologic conditions set out in §298.520 of this title.

(5) If a pulse flow requirement for an annual pulse is satisfied for a particular season or year, one of the applicable smaller pulse requirements is also considered to be satisfied in 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.

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§298.530. Environmental Flow Standards.

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

(1) Rio Grande at Johnson Ranch near Castolon, Texas and Santa Elena, Chihuahua, Mexico generally described as International Boundary and Water Commission (IBWC) gage 08-3750.00, and more particularly described as Latitude 29 degrees, 02 minutes, 05 seconds; Longitude 103 degrees, 23 minutes, 25 seconds.

Figure: 30 TAC §298.530(1)

International Boundary and Water Commission Gage 08-3750.00, Rio Grande at Johnson Ranch

Season	Hydrologic Condition	Subsistence	Base	Annual Pulse (1 per year)
Winter	Subsistence	15 cfs	129 cfs	Trigger: 3,990 cfs Volume: 103,891 af Duration: 5 days
Winter	Dry	N/A	129 cfs	
Winter	Average	N/A	193 cfs	
Winter	Wet	N/A	299 cfs	
Spring	Subsistence	15 cfs	64 cfs	
Spring	Dry	N/A	64 cfs	
Spring	Average	N/A	98 cfs	
Spring	Wet	N/A	178 cfs	
Fall	Subsistence	15 cfs	87 cfs	
Fall	Dry	N/A	87 cfs	

Fall	Average	N/A	154 cfs	
Fall	Wet	N/A	244 cfs	

cfs = cubic feet per second
 af = acre-feet
 N/A = Not Applicable

(2) Rio Grande at Foster Ranch near Langtry, Texas and Rancho Santa Rosa, Coahuila, Mexico generally described as IBWC gage 08-3772.00, and more particularly described as Latitude 29 degrees, 46 minutes, 50 seconds; Longitude 101 degrees, 45 minutes, 30 seconds.

Figure: 30 TAC §298.530(2)

International Boundary and Water Commission Gage 08-3772.00, Rio Grande at Foster Ranch

Season	Hydrologic Condition	Subsistence	Base	Seasonal Pulse (1 per season)
Winter	Subsistence	126 cfs	205 cfs	N/A
Winter	Dry	N/A	205 cfs	
Winter	Average	N/A	259 cfs	
Winter	Wet	N/A	336 cfs	
Spring	Subsistence	114 cfs	171 cfs	Trigger: 2,335 cfs Volume: 38,146 af Duration: 9 days
Spring	Dry	N/A	171 cfs	
Spring	Average	N/A	228 cfs	
Spring	Wet	N/A	313 cfs	
Fall	Subsistence	110 cfs	201 cfs	Trigger: 4,427 cfs Volume: 98,150 af Duration: 16 days
Fall	Dry	N/A	201 cfs	
Fall	Average	N/A	279 cfs	
Fall	Wet	N/A	371 cfs	

(3) Pecos River near Girvin, Texas, generally described as USGS gage 08446500, and more particularly described as Latitude 31 degrees, 06 minutes, 47 seconds; Longitude 102 degrees, 25 minutes, 02 seconds.

Figure: 30 TAC §298.530(3)

United States Geological Survey Gage 08446500, Pecos River near Girvin

Season	Hydrologic Condition	Subsistence	Base	Seasonal Pulse (1 per season)
Winter	Subsistence	8.7 cfs	22 cfs	N/A
Winter	Dry	N/A	22 cfs	
Winter	Average	N/A	27 cfs	
Winter	Wet	N/A	32 cfs	
Spring	Subsistence	6.8 cfs	14 cfs	Trigger: 72 cfs Volume: 1,199 af Duration: 6 days
Spring	Dry	N/A	14 cfs	
Spring	Average	N/A	19 cfs	
Spring	Wet	N/A	25 cfs	
Fall	Subsistence	6.3 cfs	13 cfs	Trigger: 100 cfs Volume: 1,419 af Duration: 7 days
Fall	Dry	N/A	13 cfs	
Fall	Average	N/A	18 cfs	
Fall	Wet	N/A	27 cfs	

cfs = cubic feet per second

af = acre-feet

N/A = not applicable

(4) Devils River at Pafford Crossing near Comstock, Texas, generally described as IBWC gage 08-4494.00, and more particularly described as Latitude 29 degrees, 40 minutes, 35 seconds; Longitude 101 degrees, 00 minutes, 00 seconds.

Figure: 30 TAC §298.530(4)

International Boundary and Water Commission Gage 08-4494.00, Devils River at Pafford Crossing near Comstock

Season	Hydrologic Condition	Subsistence	Base	Seasonal Pulse (1 per season)	Annual Pulse (1 per year)
Winter	Subsistence	84 cfs	175 cfs	N/A	Trigger: 3,673 cfs Volume: 34,752 af Duration: 13 days
Winter	Dry	N/A	175 cfs		
Winter	Average	N/A	200 cfs		
Winter	Wet	N/A	243 cfs		
Spring	Subsistence	91 cfs	160 cfs	Trigger: 558 cfs Volume: 17,374 af Duration: 7 days	
Spring	Dry	N/A	160 cfs		
Spring	Average	N/A	207 cfs		
Spring	Wet	N/A	253 cfs		
Fall	Subsistence	87 cfs	166 cfs	Trigger: 1,872 cfs Volume: 27,781 af Duration: 9 days	
Fall	Dry	N/A	166 cfs		
Fall	Average	N/A	206 cfs		
Fall	Wet	N/A	238 cfs		

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

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§298.535. Water Right Permit Conditions.

For water right permits with an authorization to store or divert water in the Rio Grande Basin, 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.

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§298.540. Schedule for Revision of Standards.

The environmental flow standards adopted in this subchapter for the Rio Grande,

and its associated tributaries in Texas, 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 Rio Grande Basin, Rio Grande estuary, and Lower Laguna Madre Stakeholder Committee submits a work plan approved by the 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 Rio Grande, its associated tributaries, Rio Grande estuary and Lower Laguna Madre.

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