

Hays Trinity Groundwater Conservation District: Drought Contingency Plan



The Hays Trinity Groundwater Conservation District (HTGCD) is charged by Chapter 36 of the Water Code to "...provide for the conservation, preservation, protection, recharging, and prevention of waste of groundwater...". 36.0015(b)¹

In order to prepare and act during drought, the HTGCD has developed the following Drought Contingency Plan and promulgated that plan into *Rule 13 Drought Management*, and *Rule 15.2 Drought Curtailment*

Rule 13 (below) designates specific indicators, triggers, and curtailment measures that gauge drought severity and timely curtailment responses, and Rule 15.2 (below) is specifically for Jacobs Well Groundwater Management Zone specific rules.

HTGCD uses Pedernales and Blanco River streamflow as District-wide drought indicators because these rivers are recharge features of our aquifers. Aquifer recharge occurs relatively slowly, and streamflow indicates the current and future health of the Trinity Aquifer in the District -- and therefore determines what stage of drought we must observe.

Data shows healthy streamflow in the Pedernales River is above 31.6 cubic feet per second (cfs), and 28.5 cfs in the Blanco River. The District recommends conservative use of water when streamflow is healthy.

When streamflow drops below a drought trigger -- shown in the table below as "Alarm," "Critical," and "Emergency" -- a daily counter begins. If the counter for both drought indicators reaches 30 days, the District Board will declare the appropriate drought stage.

To move out of a drought stage, both drought indicators must flow 60 consecutive days above the current drought trigger in order to give aquifers time to recharge. The declaration of the District coming out of drought stage will go into effect on the next Board Meeting.

Streamflow is measured by the United States Geological Survey (USGS) gauges at the Blanco River in Wimberley and the Pedernales River in Johnson City. These gage readings are represented by the graphs above. The yellow triangles represent the median flow over an 80-year period and the blue line represents streamflow in cfs.

Jacob's Well Groundwater Management Zone Drought Management

In order to protect groundwater supplies in the 39 square mile Jacobs's Well Groundwater Management Zone, District Rule 15 designates cutback triggers based on Jacob's Well spring flow. When flows from Jacob's Well averages 6 cfs or less during any 10-day period, The District Board declares appropriate drought stage. Springflow is measured by the United States

¹ [Chapter 36 Water Code](#)

Geological Survey (USGS) gauge at Cypress Creek in Wimberley. Jacob's Well Groundwater Management Zone drought trigger specifics may be found below in Rule 15.2.

RULE 13. DROUGHT MANAGEMENT

Section 13.1 Drought Conditions & Provisions

(13.1.1) The District shall designate the various drought conditions and implement the applicable provisions of this rule upon determination that such implementation may be necessary for the conservation, preservation, protection and recharge of the groundwater within the District boundaries.

Section 13.2 Drought Triggers

(13.2.1) The District's drought triggers are based upon the discharge flow rates provided by the USGS for the Pedernales and Blanco Rivers. The District also references the Palmer Drought Index as its third drought trigger. To see the latest drought trigger indicators, District Drought Stage Chart, or Drought Stage History visit the District's website.

(13.2.2) The District shall monitor the discharge flow rates of the Pedernales and Blanco Rivers and the Palmer Drought Index Map to determine the drought stage level. Drought stages will move up and down the vertical drought chart as follows:

A. To move into a drought stage, both rivers must flow thirty consecutive days within that drought stage trigger.

B. To move out of a drought stage, both rivers must flow sixty consecutive days within the lesser drought stage trigger.

(13.2.3) The General Manager shall declare any drought stage level changes when they occur and provide a written Order for the Board to approve and sign at the next available Board meeting. Once drought stage has been initiated, all permit holders shall be notified of current drought status and its effective date. Permit holders are required to reduce groundwater production as indicated on their individual Drought Production Cutback Chart.

Section 13.3 Drought Stages

(13.3.1) District drought management consists of four drought stages:

1. No Drought /Voluntary Conservation;

2. Alarm;
3. Critical; or
4. Emergency.

Section 13.4 User Drought Contingency and Water Conservation Plans

(13.4.1) Operating permit holders shall file with the District an acceptable User Drought Contingency Plan and Water Conservation Plan, which shall be kept current so as to remain consistent with the District's:

- A. Management Plan;
- B. Drought Contingency Plan, including but not limited to drought stage target pumpage volume;
- C. Water Conservation Plan; and
- D. Rules.

(13.4.2) Permit holders who are found to be in non-compliance with District drought management rules, the User Drought Contingency Plan, the Water Conservation Plan or the Drought Production Cutback Chart, may be subject to penalties.

Adopted August 9, 2001. Amended March 25, 2004; Effective March 29, 2004 by Board Order 102. Amended February 24, 2005; Effective March 9, 2005 by Board Order. Amended June 14, 2007; Effective June 14, 2007 by Board Order 140. Amended and Effective April 3, 2013 by Board Order 159. Amended December 17, 2014; Effective January 1, 2015 by Board Order 174. Amended November 18, 2015; Effective December 1, 2015 by Board Order 178. Amended December 20, 2017; Effective January 1, 2018 by Board Order 187.

Section 15.2 Drought Curtailments (Jacobs Well Groundwater Management Zone only)

(15.2.1) Drought curtailments are mandatory for all permit holders within the JWGMZ. The District will post the then current drought curtailment percentage applicable to that month on the first business day each month that a drought curtailment applies. The amount of groundwater authorized to be withdrawn during that month may not exceed the baseline amount as adjusted by the applicable drought curtailment amount.

(15.2.2) Monthly Baseline Production Amount. Each permit shall include a Monthly Baseline Production Amount based on the average actual amount of groundwater produced and put to a beneficial use for each calendar month from January 2017 through December 2019. The Monthly Baseline Production Amount only applies during a curtailment period. A permittee may amend the Monthly Baseline Production Amount by filing an amendment application with the District. The Monthly Baseline Production Amount may be amended if the Board determines any of the following:

- 1) The total groundwater demand has increased through the addition of New Water Utility Service Connections;
- 2) The total groundwater demand has increased through expansion or growth; or
- 3) The permittee implemented water conservation measures during calendar years 2017 through 2019 that resulted in 10% or greater demand reduction.

(15.2.3) Monthly Baseline Production Amount for Permits Issued After 2016. Notwithstanding the Monthly Baseline Production Amount established pursuant to Rule 15.2.2, for permits issued after December 31, 2016, the Monthly Baseline Production Amount is the amount of groundwater production as authorized in the permit. After three calendar years of production, the District shall review the actual amount of groundwater produced and put to a beneficial use and consider modifying the Monthly Baseline Production Amount.

(15.2.4) Drought curtailment shall be based on a 10-Day running average of the USGS flow meter at Jacob's Well. During a curtailment period, groundwater production may not exceed the Monthly Baseline Production Amount adjusted by the following reduction percentages:

- 6 CFS or less 10 Percent
- 5 CFS or less 20 Percent
- 3 CFS or less 30 Percent

(15.2.5) Each permittee shall prepare a Drought Curtailment Implementation Plan detailing how the required production curtailments will be achieved. Drought Curtailment Implementation Plans must be presented to the District no later than one (1) calendar year following adoption of this rule. During that time period, the District may not take any enforcement action nor assess any Penalty Fees for failure to meet the requirements of the Drought Cutback Chart or exceeding the adjusted Monthly Baseline Production Amount during any drought curtailment period.

Adopted March 5, 2020. Effective March 5, 2020 by Board Order 197.