

Drought Management Plan as Amended (August 15,2023)

The goal of Plum Creek Conservation District’s drought management plan is, in part, to provide for a balance between the highest practicable level of groundwater production and the conservation, preservation, and protection of groundwater.

To some degree, the foundation of our management plan, rules, and compliance with chapter 36 requirements hinge on the achievement of the Desired Future Conditions. Because of this, so too will the Desired Future Conditions be a basis for PCCD’s drought management Plan. Desired future conditions are defined in Title 31, Part 10, §356.2 of the Texas Administrative Code as the desired, quantified condition of groundwater resources (such as water levels, water quality, spring flows, or volumes) for a specified aquifer within a management area at a specified time or times in the future.

Plum Creek Conservation District has adopted Desired Future Conditions for 4 aquifers in our district. These aquifers are the Trinity Group, Edwards (Saline), Carrizo and Wilcox. All of our DFC’s are based on water levels.(See table below). Since we do not have any known production coming from the Trinity and/ or Edwards (saline) wells at this time, they will not be included in PCCD’s drought management plan.

GMA	Aquifers	Adopted DFC	Adoption Date
10	Trinity Group	Trinity Aquifer, in the hydrologically confined zone downdip of the Trinity outcrop: Outside of Uvalde and Bexar Counties: Average regional well drawdown not exceeding 25 feet during average recharge conditions (including exempt and non-exempt use)	June 26, 2017
10	Saline Edwards	Saline Edwards Aquifer in the Northern GMA Subdivision: No more than 75 feet of regional average potentiometric surface drawdown due to pumping when compared to pre-development conditions	June 26, 2017

13	Carrizo-Wilcox, Etal	<p>75 percent of saturated thickness in the outcrop at the end of 2012 remains at the end of 2080</p> <p style="text-align: center;">And</p> <p>Average drawdown of 48 feet (+/- 5 feet) for all of GMA 13 calculated from the end of 2012 conditions through the year 2080</p>	11/19/2021
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There are several components of our drought management plan which are designed to provide for a checks and balances approach to management. Currently, not much is known how precipitation patterns and water production affect water levels. Water levels over several decades have remained somewhat constant in our district and there has been limited pumping compared to other districts in the region. Exactly how an aquifer will react to pumping and precipitation will only be known as it occurs, so it is crucial, on a yearly basis, to monitor our water levels and water use, and assess what adjustments will need to be made in order to comply with the DFCs.

COMPONENTS:

1. Statement of DFCs and a year-by-year breakdown of what the expected DFCs will be.
2. Monitoring Program: measure and report water levels, pumping, precipitation, and exempt use.
3. Establish the various stages of the drought management plan.
4. Establish the triggers for each of the stages
5. Establish the restrictions for each of the stages
6. Yearly Review & Assessment
7. Exemptions

Statement of DFC

- A) Statement of each of PCCD's DFC
- B) Chart what the expected DFCs will be on a yearly basis.
- C) Determine what the Base line DFC water level is.

Monitoring Program:

Water levels

- a) Establish a Grid network of cells.
- b) Establish a monitoring well in each cell
- c) Measure each monitoring well at least 3 times a year.

Pumping

- a. Report Tier 2 monthly water use.
- b. Report Tier 1 yearly water use.
- c. Report estimated yearly exempt water use.

Precipitation

- a. Report monthly and yearly precipitation amounts for Lockhart, Luling, San Marcos and PCCD monitoring stations.
- b. Report, if available, monthly and yearly precipitation amounts from other sources.

STAGES, TRIGGERS, & RESTRICTIONS

Wilcox Aquifer Drought Stage	Drought Triggers: Average Wilcox Water Levels	Drought Restrictions
Stage 1	375 ft. AMSL	5% Water Reduction
Stage 2	370 ft. AMSL	10% Water Reduction
Stage 3	365 ft. AMSL	20% Water Reduction
Stage 4	360 ft. AMSL	30% Water Reduction
Stage 5	355 ft. AMSL	35% Water Reduction

*PCCD does not enforce water restrictions imposed by municipalities but regulates PCCD groundwater production permits.

ANNUAL REVIEW & ASSESSMENT

1. Determine the average annual water level
2. Determine if monitoring wells are reliable and effective in providing water levels.
3. Determine the average water level decline/increase from the previous year.
4. Compare the average annual water level to the DFC
5. Compare the actual water level drawdowns to the expected DFC water level drawdowns.
6. Assess the impact from water use (permitted and exempt use) on the average annual water level.
7. If a drought stage is in effect, assess its impact on water levels and the DFC.
8. Prepare recommendations for any changes to the drought management plan based on the Board of Directors annual review
9. Establish drought Stages, Triggers, and Restrictions as we gain a more in depth understanding of the relationship between water use and water levels.
10. Establish the criteria for granting a drought management plan exemption.

EXEMPTION:

In certain circumstances where a permit holder believes he would suffer unreasonable hardship due to PCCD's drought restriction, he may apply for a drought management plan exemption. The criteria for these circumstances will be established by the Board in its annual review and assessment process. Exemption applications will be considered, evaluated, and either approved, denied or postponed for further review by the PCCD Board of Directors.