

Kinney County Groundwater Conservation District Critical Period Management Plan - Las Moras Springs (Proposed) (sometimes referred to as the “Save Our Springs Plan” or the “SOS Plan”)

Goals of Critical Period Management Plan and Corresponding Rules Revisions

- Develop and implement critical period triggers to declare a critical period when groundwater permit holders must restrict pumping in order to conserve, preserve and protect the aquifer and the sustainability, health and quality of Las Moras Springs and Las Moras Creek
- Avoid unreasonable impacts to existing groundwater and surface water resources and existing permit holders
- Provide transparency to the public, which has an interest in the health of the springs and creek
- Recognize the property rights of landowners to groundwater beneath their land and of landowners adjacent to the springs and creek
- Give notice and predictability to permit holders in order to help plan for potential droughts and/or reservoir pressure depletion

Triggers to Make a Declaration of Critical Period

- 1) Las Moras Springs Flow Rate – Given that the sustainability, health and quality of Las Moras Springs is an important goal of the Critical Period Management Plan, and that metered data about the springs’ flow rate is available from the US Geological Survey (USGS),¹ the flow rate of the springs should be an important trigger for determining critical period conditions requiring pumping curtailment.
- 2) Dooley Well – Given that the Dooley well has a strong correlation to Las Moras Springs and can be used as a predictor of the springs’ flow, the Dooley Well should be a second trigger for determining critical period conditions requiring pumping curtailment.

If either the **Las Moras Spring Flow rate** or **Dooley Well Water Level** fall below the values in the tables below for a given 30-day period, the corresponding critical stage

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<https://waterdata.usgs.gov/monitoring-location/08456310/#parameterCode=00060&period=P7D&showMedian=false>.

shall be triggered. 30-day periods that fall between two months will use the most recent month's value as the trigger.

It is recognized that Las Moras Springs' flow rate varies from month to month, by up to 40% throughout the year. In order to better match the critical stage trigger to the flow rate of a given month, the Critical Period Management Stage trigger will vary according to that month's average flow rate.

Las Moras Springs Triggers

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Avg Spring Flow (Normal Conditions)	22	19	18	18	20	20	20	20	21	25	25	24
Stage 1	20	17	16	16	18	18	18	19	23	23	22	20
Stage 2	18	15	14	14	16	16	16	17	20	20	19	18
Stage 3	14	12	11	11	13	13	13	13	16	16	15	14
Stage 4	11	9	9	9	10	10	10	10	12	12	12	11

*Avg Spring Flow is calculated from monthly USGS data from 1966 – 2019

**Stage 1 represents a 10% reduction from Avg Spring Flow

***Stage 2 represents a 20% reduction from Avg Spring Flow

****Stage 3 represents a 30% reduction from Avg Spring Flow

*****Stage 4 is a 40% reduction from Avg Spring Flow

Dooley Well Water Level Triggers

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Well Levels	Jan Avg	Feb Avg	Mar Avg	Apr Avg	May Avg	Jun Avg	Jul Avg	Aug Avg	Sep Avg	Oct Avg	Nov Avg	Dec Avg
Stage 1	10% Belo w	10% Belo w	10% Belo w	10% Belo w	10% Belo w	10% Belo w	10% Belo w	10% Belo w	10% Belo w	10% Belo w	10% Belo w	10% Belo w
Stage 2	20% Belo w	20% Belo w	20% Belo w	20% Belo w	20% Belo w	20% Belo w	20% Belo w	20% Belo w	20% Belo w	20% Belo w	20% Belo w	20% Belo w
Stage 3	30% Belo w	30% Belo w	30% Belo w	30% Belo w	30% Belo w	30% Belo w	30% Belo w	30% Belo w	30% Belo w	30% Belo w	30% Belo w	30% Belo w
Stage 4	40% Belo w	40% Belo w	40% Belo w	40% Belo w	40% Belo w	40% Belo w	40% Belo w	40% Belo w	40% Belo w	40% Belo w	40% Belo w	40% Belo w

*Dooley well water may also fluctuate by up to 40% throughout the year due to its correlation with Las Moras Springs, therefore, monthly averages are used in order to better match the trigger to that month's average water level under normal conditions.

**Dooley well level data to be filled in by historical data provided by KCGCD

Critical Period Declaration

The general manager shall issue a Declaration of Critical Period upon determining that a trigger has been reached. The Declaration of Critical Period and any change in drought stage status will be sent by email to all permit holders and any other interested persons who have requested such notification from the District. The District will also display the current Critical Period status on the home page of its website.

Permit holders shall be required to take a meter reading at each of their wells within 3 days of the declaration of a Critical Period. Critical Period curtailment for permit holders shall commence at the beginning of the first month after the declaration of Critical Period.

Crop Protection Plan

In the event that a crop has been planted prior to the Critical Period Declaration, crop planters will be allowed to file a notice of intent to finish a crop to the District (notifying the District as to the date in which the crop planting was completed, identifying the type of crop planted, and providing the expected date on which harvesting will end), and may continue to withdraw groundwater without curtailment until the crop is harvested or a forage crop goes dormant.

Public Water Supply Protection Plan

Any permit holder for public water supply that meets the following criteria will be exempt from any drought curtailment: 80% or more of the water supply is used for residential purposes only during the Critical Period, and a water conservation plan is maintained by the permit holder and the plan is implemented during the Critical Period.

End of Critical Period

Trigger to End Critical Period – In order to confirm the stabilization of springflows and aquifer levels, both the Las Moras Springs and Dooley Well must stay above their respective triggers for a 90-day period in order to move from one stage of the Critical Period to a lesser stage or out of Critical Period.

Curtailments

The below reductions from prior 3-year average pumping for each permit holder will be mandatory according to the Critical Period Stage triggered and zone in which the well resides. Zones have been developed according to field testing in order to assess the degree of sensitivity each zone's water level has to Las Moras Springs flow rate and Las Moras Creek.

Curtailment as Percentage of Reduction from Last 3 Years' Average Pumping			
Critical Period Stage	Zone 1 (Most Sensitive)	Zone 2 (Moderate Sensitivity)	Zone 3 (Less Sensitivity)
Stage 1	25%	15%	5%
Stage 2	35%	25%	15%
Stage 3	45%	35%	25%
Stage 4	55%	45%	35%

*Curtailment rates will be applied to the monthly pumping that took place over the last 3 years for that month. If a well does not have pumping data for the last 3 years, curtailment will be applied to the monthly average of the number of years in which the well has been pumping. For example, if a well has only been pumping for 2 years and is curtailed in February, the well's curtailment percentage for February will be based on the average of the pumped amount for that well over the two February periods in which it was pumping.

Monitoring

Permit holders must report their monthly pumping to the KCGCD by the 5th day of each month following the month being reported, including a photo of the well meter.

Enforcement

Permit holders are subject to audits and inspections by the District. Permit holders should self-report violations of Critical Period requirements.

5-Year Review

Acknowledging that the Critical Period Management Plan and its required curtailments may need to be adjusted up or down from time to time as the aquifer and Las Moras Springs are monitored, the District shall review the triggers and curtailments at least every 5 years.