



Ukiah Valley Basin Groundwater Sustainability Agency

DECEMBER TAC MEETING – DECEMBER 7,
2022



TAC Agenda Item 5

Compliance Process with Executive Order N-7-22

Executive Order N-7-22

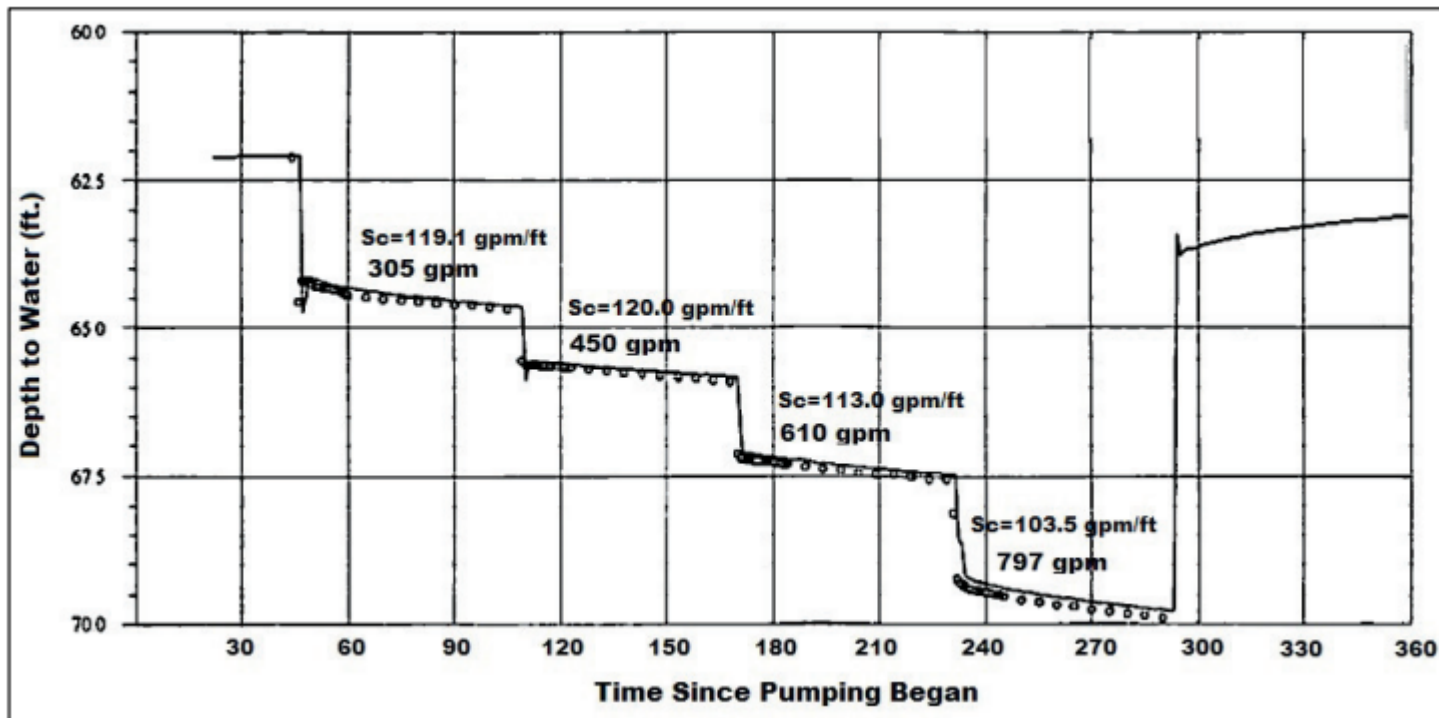
Pumping Tests

- What is the value of a pumping test?
 - Pumping tests are usually down in two parts: step-rate test and a constant rate test
 - Step-rate tests typically will discharge water from a well at three to four different pumping rates. The results from these different pumping rates help inform which pumping rate is most appropriate for the constant rate test and also help inform the pump contractor/licensed PE, PG, or CHG which pump and what rate would likely be the most appropriate for the well to pump at over time
 - Constant rate tests typically will discharge water for a minimum of 24-hours (pending local well ordinance requirements, site conditions, etc.). The results from this test provide an estimation of aquifer transmissivity, storativity, and extent of which drawdown may occur and what nearby wells may be affected
- Downside of pumping tests is they can be expensive, especially if there is any contamination that requires special permitting or disposal requirements. The typical cost to perform a pumping test in a well without contamination is between \$25,000 - \$50,000.

Executive Order N-7-22

Pumping Tests

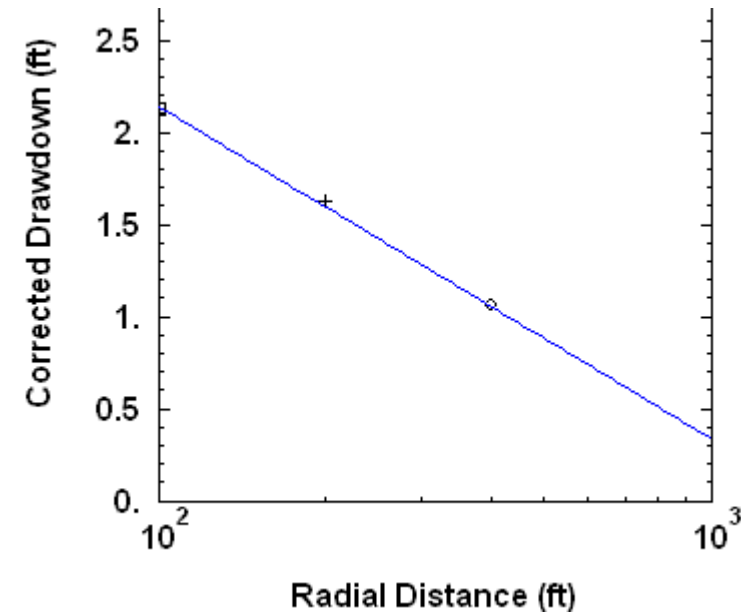
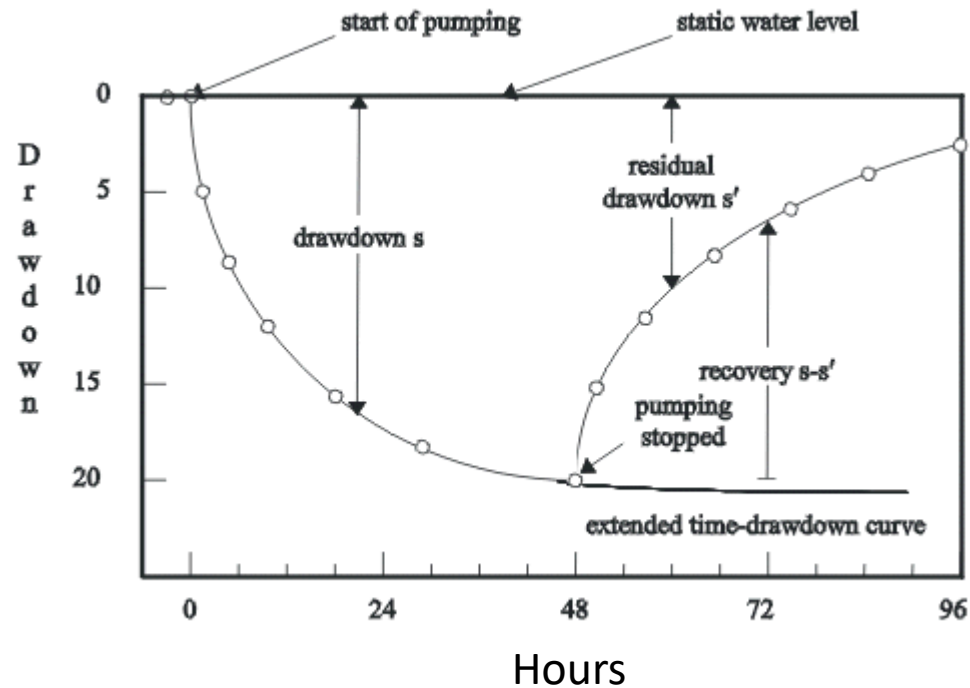
- Example of results that come from a step-rate pumping test



Executive Order N-7-22

Pumping Tests

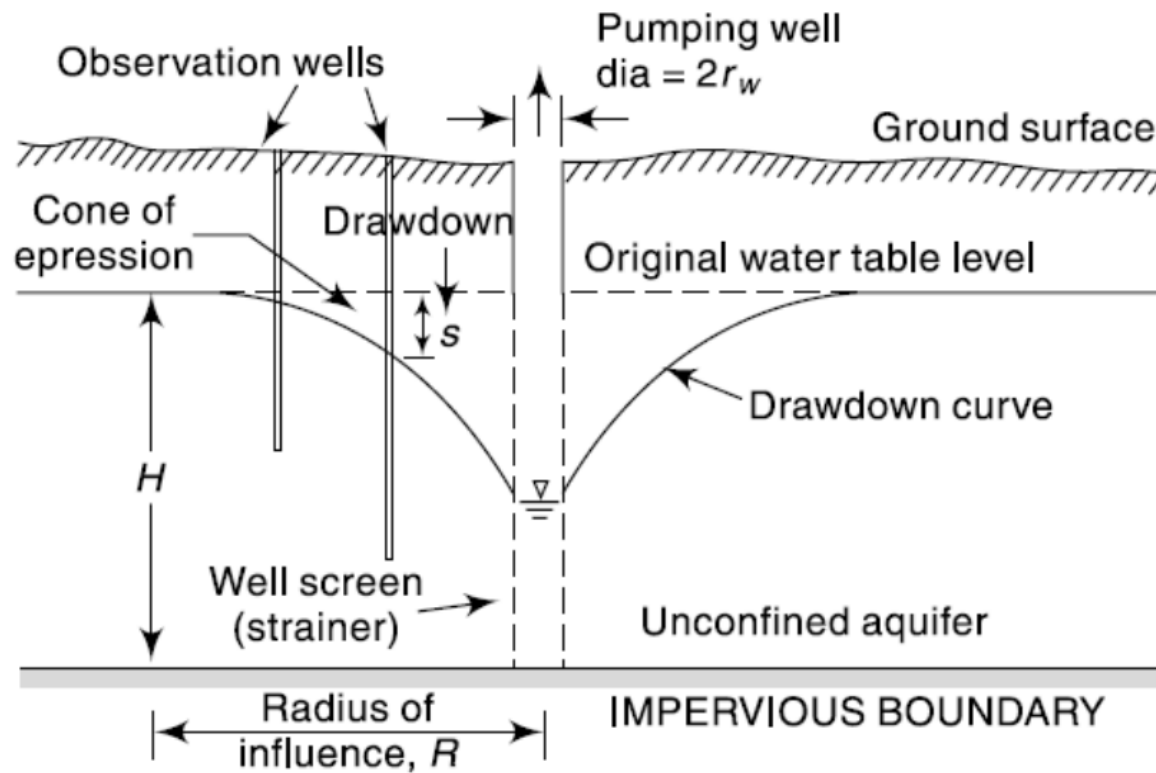
- Example of results that come from a constant rate pumping test



Executive Order N-7-22

Pumping Tests

- Example of results that come from a constant rate pumping test



Executive Order N-7-22 Workshop Feedback

Proposed process for
repair/modification of an existing well.
Question to answer:

- If the repair/modification will NOT result in an increase in pumping, is pumping test data required for the GSA to conduct its analysis for 9(a)?
- In the event of an emergency, should the County consider allowing the well owner to proceed with the repair/modification before a permit is filled and formal approval is given?

Executive Order N-7-22 Workshop Feedback

Proposed process for a new well. Questions to answer:

- If there's no known issue with well interference at an existing well at the current level of pumping and a new well is proposed to meet the following conditions outlined below, does the GSA need pumping test data for a new well to conduct its analysis for 9(a)?
 - New well will pump the same amount or less
 - New well is screened in the same interval as the existing well
 - New well is to be located on the same property as existing well that's not in close proximity to neighboring well(s)
- If a new well doesn't meet any of the above-mentioned conditions, are pumping tests required by the GSA to conduct its analysis for 9(a)?

Executive Order N-7-22 Workshop Feedback

Proposed process for a new well. Questions to answer:

- How can we decrease the review time so permits may be reviewed by the GSA ASAP?
- How can we modify the process to make the GSA's review more feasible for well owners to follow and support?

Executive Order N-7-22 Workshop Feedback

Proposed process for a State permitted surface water diversion wells.
Questions to answer:

- Should these wells be exempt from County/GSA review?

Executive Order N-7-22 Workshop Feedback

Proposed requirement for pumping test data. Questions to answer:

- Costs to conduct a pumping test and complete the analysis are a concern. Is it reasonable for the County to require pumping tests on existing and/or new wells where (1) no pumping test data exists and (2) the well repair/modification will result in increased pumping and a new well cannot be exempt?