

Coso groundwater study completed

Mike Bodine, Inyo Register, 2-9-11

The Inyo County Water Department is accepting comments on the Coso/Hay Ranch Groundwater Transfer Project evaluation. The project has completed its first year of operation and has been evaluated and recalibrated by a third-party consulting firm.

The Conditional Use Permit for the project allows Coso Operating Company to pump water from its Hay Ranch property for use at its geothermal power plant. The Hay Ranch sits atop the Rose Valley aquifer.

One of the key provisions of the CUP for this project was the adoption of the Hydrologic Mitigation and Monitoring Program to establish monitoring and mitigation to ensure that the project does not harm the environment or other water users in Rose Valley. There has been concern that Little Lake, down-stream from the project, could be adversely affected by the project.

The HMMP describes the use of the Rose Valley groundwater model to revise pumping rates and groundwater level triggers for the project, and requires that the recalibrated groundwater model used to establish new groundwater trigger levels for the network of monitoring wells listed in the HMMP. Also, the HMMP requires that the recalibrated model be used to redefine the pumping rate and duration of pumping for the project. The new trigger levels, pumping rate, and duration of pumping will be incorporated into an amendment to the HMMP.

The recalibrated model, modifications to trigger levels, and redefined pumping rates and pumping duration must be reviewed and approved by the Inyo County Water Department.

Consultant Daniel B. Stephens and Associates has completed the recalibration of the model and reevaluated the pumping rate, duration and water level triggers. The consultant made several modifications to the model, including re-examination of the water budget for Rose Valley, modifications to the model grid, recalibration of aquifer geometry and parameters, incorporation of pre-project transient effects into model simulations, and revisions to the boundary conditions of the model. The result is three groundwater-pumping scenarios that would not result in significant environmental impacts.

The recalibrated model indicates that pumping at 4,839 acre-feet per year could continue for 2.7 years past the end of the first year of pumping. According to the recalibrated model, the currently-permitted rate of pumping of 3,000 acre-feet per year could continue for 4.5 years before significant impacts to Little Lake would occur, or if the project were to continue to pump for the full 30-year period of the Conditional Use Permit, pumping would be limited to 790 acre-feet per year.

The final report produced by the consultant is available for public review at:
www.inyowater.org/coso/default.htm.

The water department will accept comments on the consultant's report from the public from now until March 2, after which, in accordance with the HMMP and the conditional use permit, the Water Department will approve new groundwater level triggers, pumping rate, and pumping duration for the next phase of the project.