

Groundwater Substitution

Issue No. 14 - DRAFT Groundwater Level Monitoring

Background

Issue

The goal for 2010 is to identify appropriate groundwater wells for a monitoring grid network that can be used to determine the impacts of transfer pumping on other groundwater pumpers. It must be determined if the transfer proposal and contract language adequately address establishing and monitoring an appropriate groundwater level monitoring well network.

Discussion

In 2009, DWR and Reclamation staff reviewing transfer proposals raised concerns about the inadequacy of groundwater level monitoring. Issues of inadequacy of monitoring wells include lack of well construction information, poor well spacing, and frequency of monitoring, among others. Groundwater level monitoring provides information to address claims of alleged injury from additional transfer pumping. Sellers do not necessarily have monitoring wells built or identified that can be used to determine the impacts of their transfer pumping on other groundwater pumpers.

Recommendation for 2010

- Sellers should identify an appropriate groundwater level monitoring network and measure static groundwater levels at least one month in advance of participation in 2010 water transfers. The network of monitored wells should be sufficient to allow for the evaluation of the local, regional, and downstream effects of groundwater substitution transfers.
- Sellers may enlist and authorize professionals familiar with groundwater monitoring networks to develop an appropriate monitoring network for their transfer, if required.
- Sellers should work with DWR and USBR to identify where additional existing wells may be located to complete a monitoring network.

Future Discussions for the Long-Term Program

- Adequate groundwater level monitoring may require that additional dedicated monitoring wells are built.
- Dedicated monitoring well infrastructure should be in place no later than one month prior to transfer pumping in order to record baseline conditions.

- Establish a long-term groundwater level monitoring program to determine ongoing groundwater level conditions and trends within and around the transfer proponent's project area.