

EXHIBIT 70

Christopher Garner

Outline of Expert Witness Testimony

Walker River Basin Decision Support Tool

Program Manager, Hydrologic Research

Mr. Garner, with the University of Nevada, led the development of the Walker River Basin Decision Support Tool (DST). The DST is a modeling system that captures the interactions between climate, evapotranspiration, surface water flows, groundwater-surface water exchange along the river, irrigation practices, and groundwater pumping. The modeling system consists of three components linked by a set of geospatial datasets and a controller module that facilitates the connectivity among the components. The three components are: the MODSIM component which simulates the surface water allocation, the MODFLOW component which simulates the groundwater system, and the HRU Water Balance component which performs a field-level water accounting of the agricultural activities.

Mr. Garner's responsibilities included, and therefore his testimony at the evidentiary hearing could include the following:

- Support for the design and implementation of the conceptual modeling approach.
- Managing the model development process, including interacting with other team members to integrate the DST modeling components (i.e. MODSIM, MODFLOW, HRU Water Balance, and the DST Controller).
- Support for the conceptualization and implementation of the MODSIM customization.
- Implementation of the MODSIM customized pre/post processing of input and output files.
- Design and implementation of the MODSIM model calibration and stream-aquifer interaction.
- DST MODSIM, HRU Water Balance and MODFLOW modules design and implementation.
- Preparation of available data and information processing for DST modules.