EXHIBIT 64

Douglas P. Boyle

<u>Outline of Expert Witness Testimony</u>

Walker River Basin Decision Support Tool

<u>Principal Investigator and Project Lead</u>

Dr. Boyle, with the University of Nevada, was the lead Principal Investigator and overall lead research scientist on the Walker River Basin Decision Support Tool (DST) project. 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. Dr. Boyle was responsible for developing the conceptual modeling approach behind the DST, forming the team of research scientists to develop the three components of the DST computer model from the conceptual models, coordinating the integration of the three components, calibration and testing of the DST, formulation of the DST scenario simulation of NFWF Application No. 80700, and the comparative analysis of results.

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

- General concepts behind the conceptual modeling approach used in the DST.

- General concepts behind the development and integration of the different DST modeling components (i.e., MODSIM, MODFLOW, HRU Water Balance, and the controller).

- Determination of the appropriate DST team member to address specific details, assumptions, limitations, and uncertainty related to the different DST modeling components (i.e., MODSIM, MODFLOW, HRU Water Balance, and the controller).

- Details related to the calibration and testing of the DST.

- Details related to the formulation, application of the DST, and comparative analysis of the results pertaining to the DST scenario simulation of NFWF Application No. 80700.