

Study Objectives for FY-96:

- **Select a reservoir temperature model that can be expanded to evaluate other WQ parameters. The TVA's 2-D BETTER model was selected.**
- **Configure model to Lake Powell. Completed.**
- **Assemble flow and temperature input data. Completed.**
- **Develop model geometry from survey data. Completed.**
- **Assemble climate data. Ongoing.**
- **Develop solar radiation model for Lake Powell and add to model. Ongoing.**
- **Review Edinger's Lake Powell modeling study and adopt appropriate inflow routing assumptions. Ongoing.**
- **Shakedown model. Ongoing.**
- **Calibrate model.**
- **Verify the model against another data set (not calibration data).**
- **Make preliminary runs to determine availability of warm water in summer season.**
- **Review downstream routing data and modeling needs for temperature.**

Study Objectives for FY-97 (preliminary):

- **Evaluate the improvements that can be made by delaying the discharge of warm water by 1 or 2 months.**
- **Evaluate summer warming in the river as a function of flow rate and discharge temperature.**
- **How much does SLW reduce winter temperatures in lake.**
- **How much does one year effect the next.**

Study Objectives for FY-98 (preliminary):

- **Add WQ parameters and data to model (potential addition to FY-97 objectives).**
- **Calibrate and verify.**
- **Evaluate WQ (DO, nutrients, and primary productivity) impact (lake and discharge) of discharge schedule (potential addition to FY-97 objectives).**