# Illinois River Update

September 20, 2017

## What is the status?

- We have received temperature profiles of Lake Tenkiller using the bathymetry that was applied in the CE-QUAL-W2 model by Scott Wells on August 24, 2017.
- The refined bathymetry has facilitated a much improved temperature calibration of the model.
    - The revised profile as well as the previous profiles are attached.

## What do we anticipate receiving and when?

- We anticipate receiving improved water quality calibrations which are anticipated to more closely match the water quality parameter profiles in the water column for the days monitored.
    - The contractors are doing the work out of pocket in an effort to address previous failings with the lake calibration.
    - The calibration parameters of interest include phosphorus and nitrate species, dissolved oxygen, and chlorophyll-a.
- We expect to receive the water quality calibrations sometime in the next two weeks.

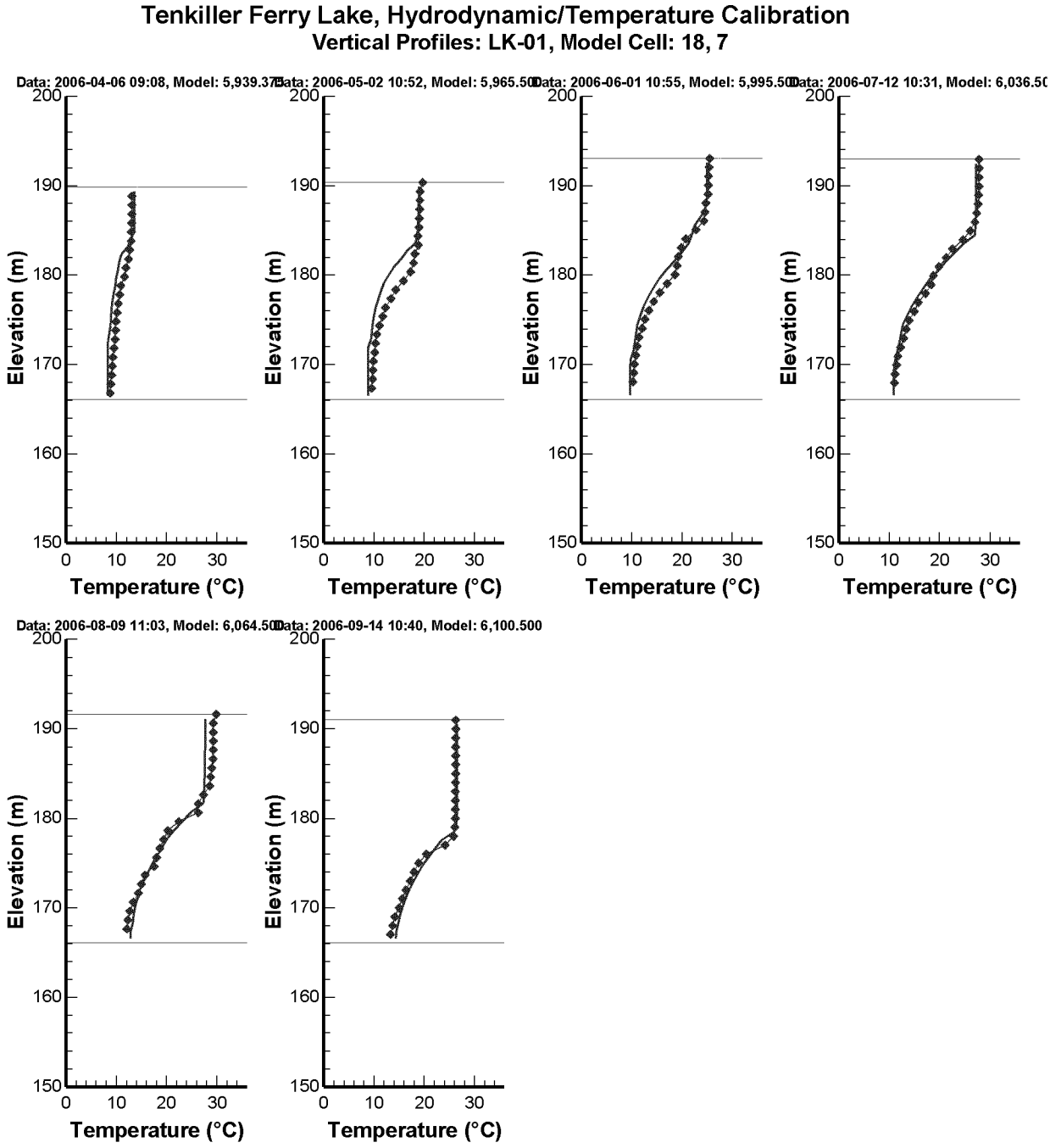
## Do we need to and if so, when would we convene a technical workgroup meeting?

- Regardless of the outcome of the lake revisions, a technical workgroup meeting is recommended to help facilitate one of two paths forward.
    - One path stems from a successful calibration. If calibrated correctly, we would use the EFDC model to assess load scenarios for lake Tenkiller.
    - An alternative path would be invoked if the model will not calibrate to the desired quantitative variance. If such a situation, we would use a simple model and apply a greater level of conservatism to evaluate load scenarios and their impact on the lake.

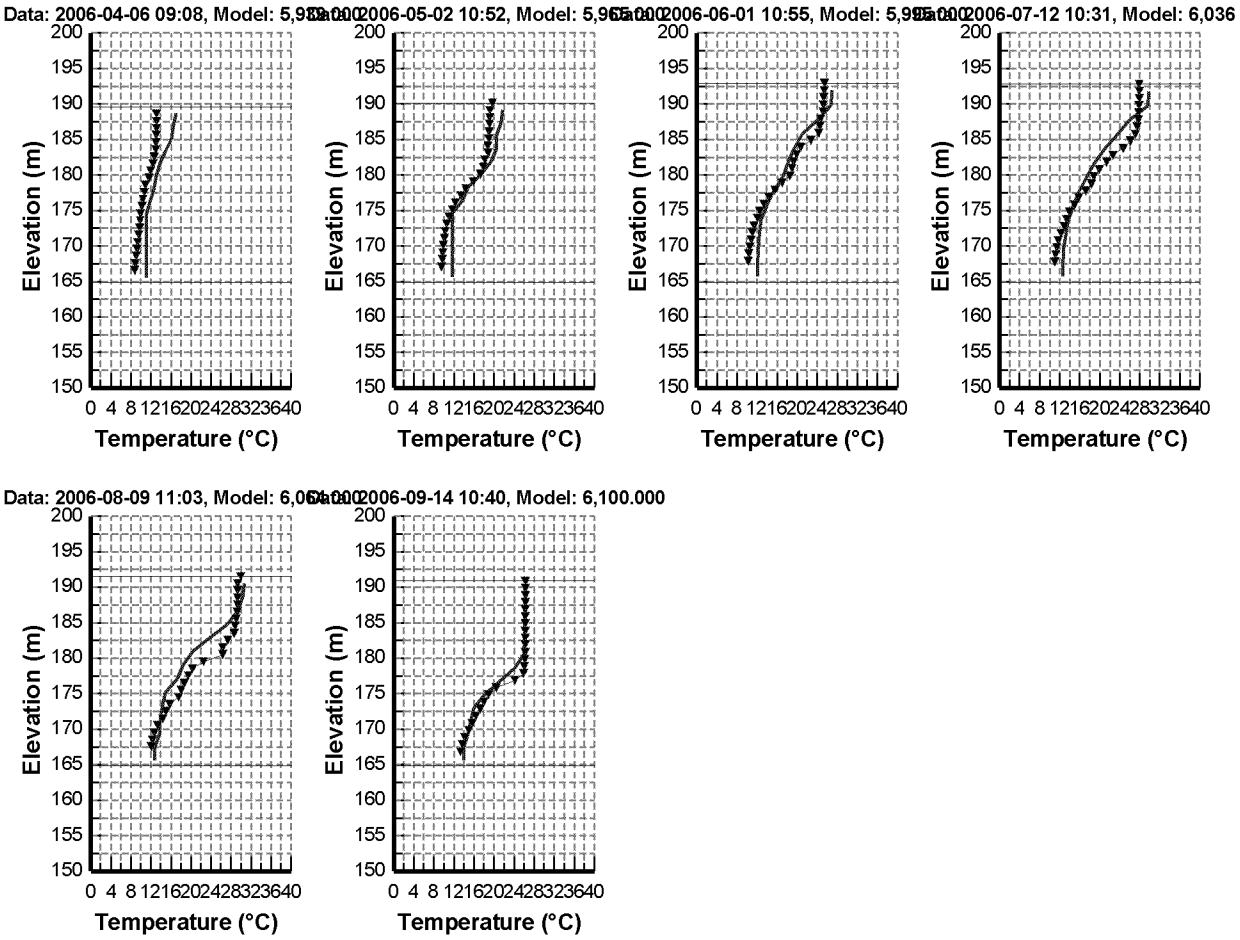
## Do we need to convene a Principals' Call?

- A principals' call would be beneficial once we have the technical workgroup meeting and have made decisions regarding the paths forward regarding the lake.

Revised LK-01 Model Cell: 18,7




Original LK-01 Model Cell: 26,7

# Tenkiller Hydro and Water Quality

## Vertical Profiles: LK-01, Model Cell: 26, 7