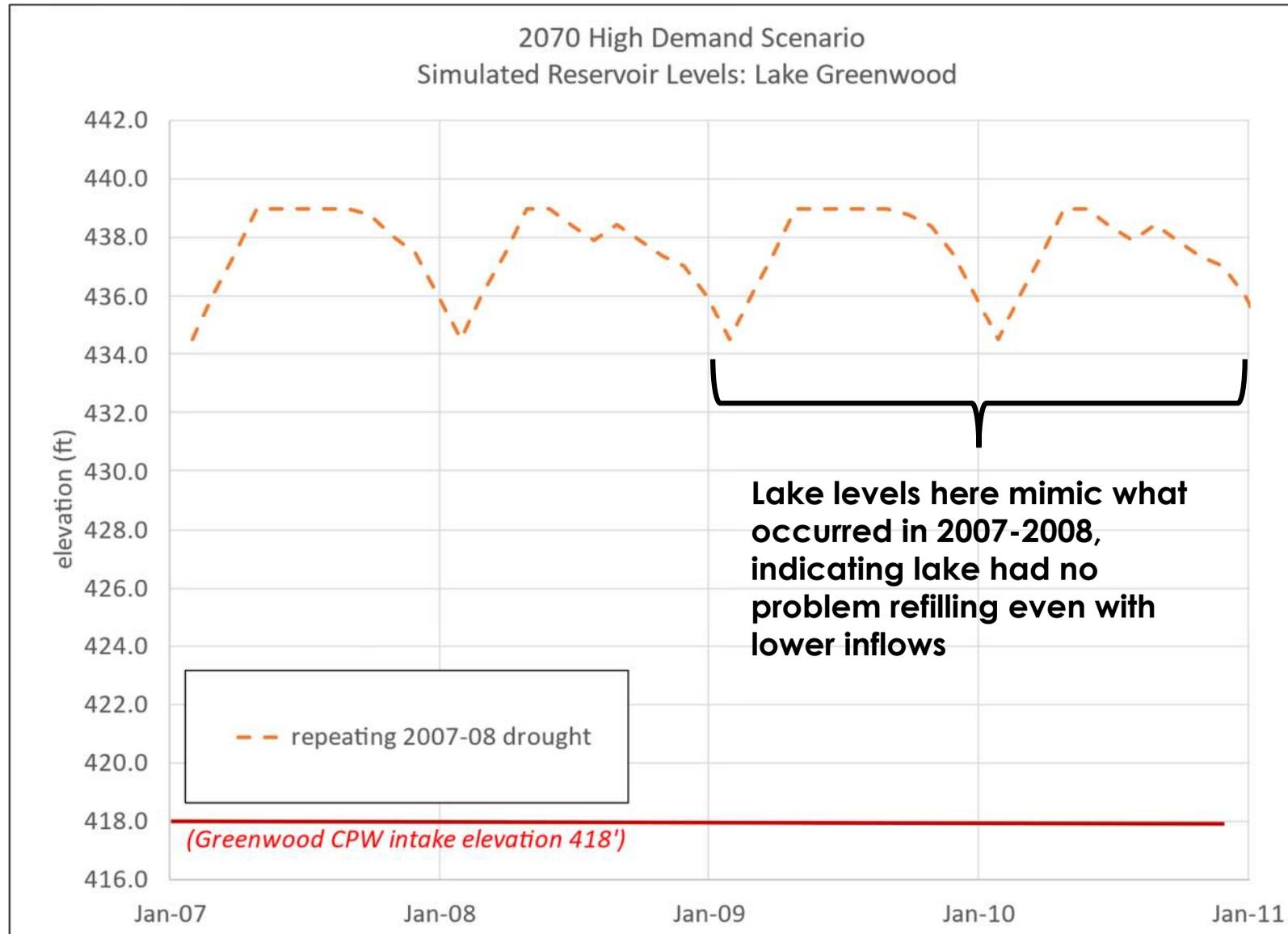


What is the impact to reservoirs if the drought of 2007-2008 were repeated?

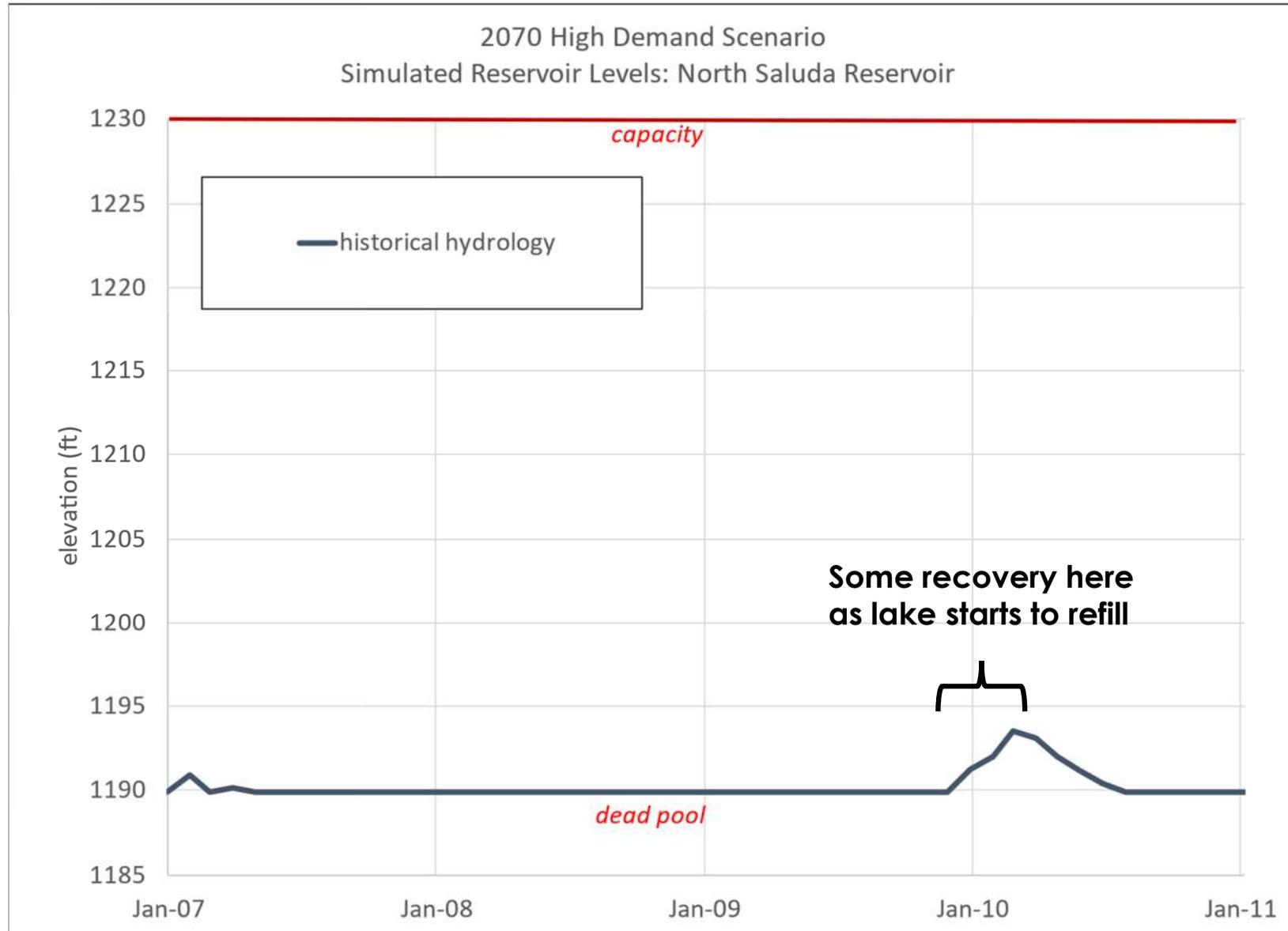


Lake Greenwood levels repeating the hydrology of 2007-2008

(i.e., 2009-2010 hydrology was replaced with 2007-2008 hydrology)

2070 High Demand Scenario

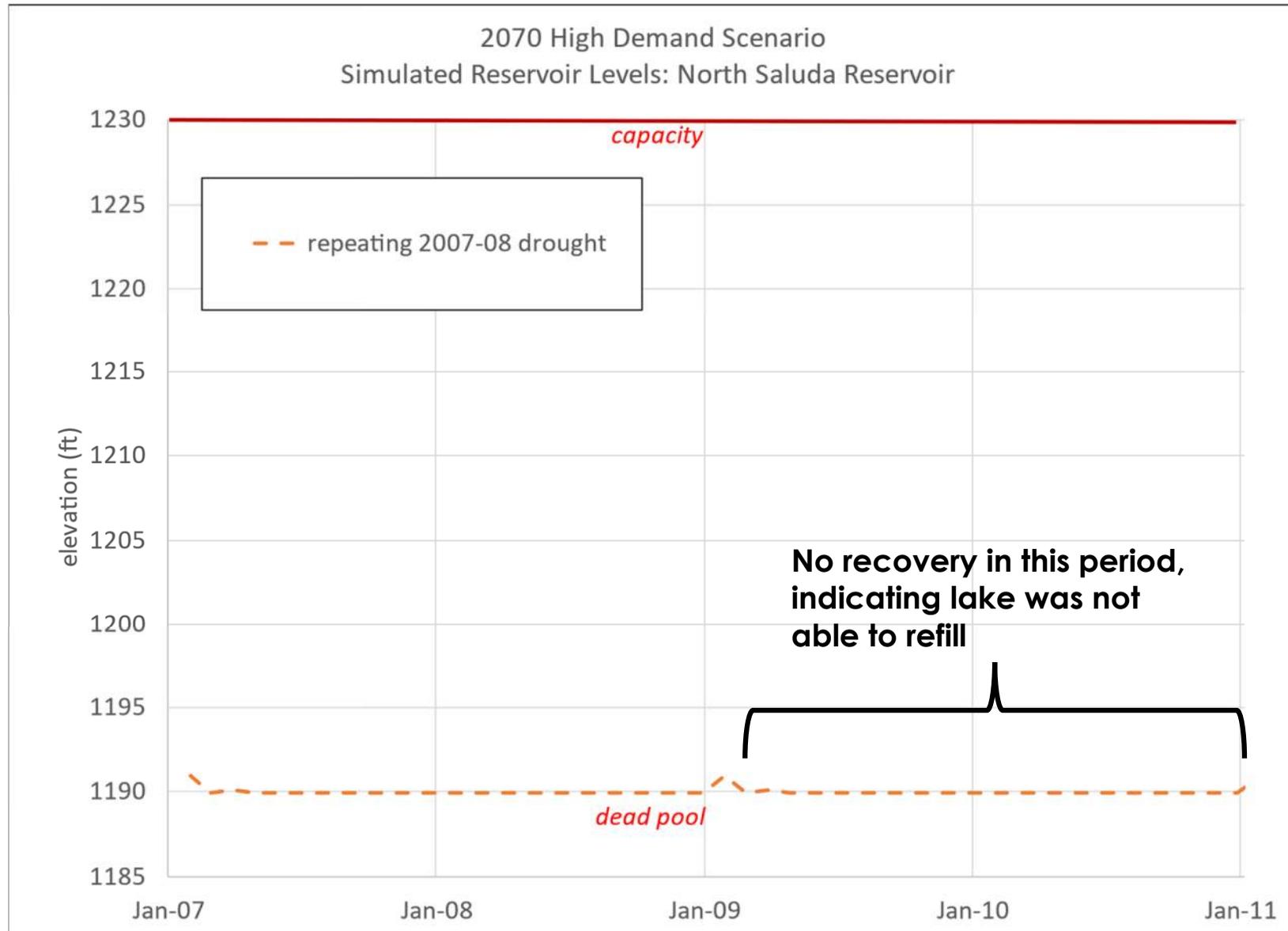
What is the impact to reservoirs if the drought of 2007-2008 were repeated?



North Saluda Lake levels using historical hydrology of 2007-2010

2070 High Demand Scenario (73 MGD for North Saluda and Table Rock)

What is the impact to reservoirs if the drought of 2007-2008 were repeated?



North Saluda Lake levels repeating the hydrology of 2007-2008

(i.e., 2009-2010 hydrology was replaced with 2007-2008 hydrology)

2070 High Demand Scenario (73 MGD for North Saluda and Table Rock)

Limitations of the “Repeating Drought” Analysis

- Under a repeating drought, groundwater levels might not recover as well, and the baseflow component of streamflow could be lower. **This is not accounted for in the model.**
- The analysis is sensitive to the time period selected.
 - Repeating the worst part of the 2007-2008 drought would show more impact; however, it reduces the plausibility of the analyses.

Next Steps

- Evaluate **flow-ecology metrics** using SWAM model daily timestep results for each planning scenario (March Meeting)
- Consider if there is reason to establish one or more **Reaches of Interest** or **Surface Water Condition** at any location.
- Decide if there are any other Scenarios that should be developed and evaluated.

Reaches of Interest

Specific stream reaches that may have no identified *Surface Water Shortage* but experience undesired impacts, environmental or otherwise, determined from current or future water-demand scenarios or proposed water management strategies.

Could be related to:

- Recreational flows
- Ecological / in-stream flows
- Designation as a Scenic River
- Other factors

Surface Water Condition

A limitation, defined by the RBC, on the amount of water that can be withdrawn from a surface water source and which can be applied to evaluate **Surface Water Supply** for planning purposes.

