

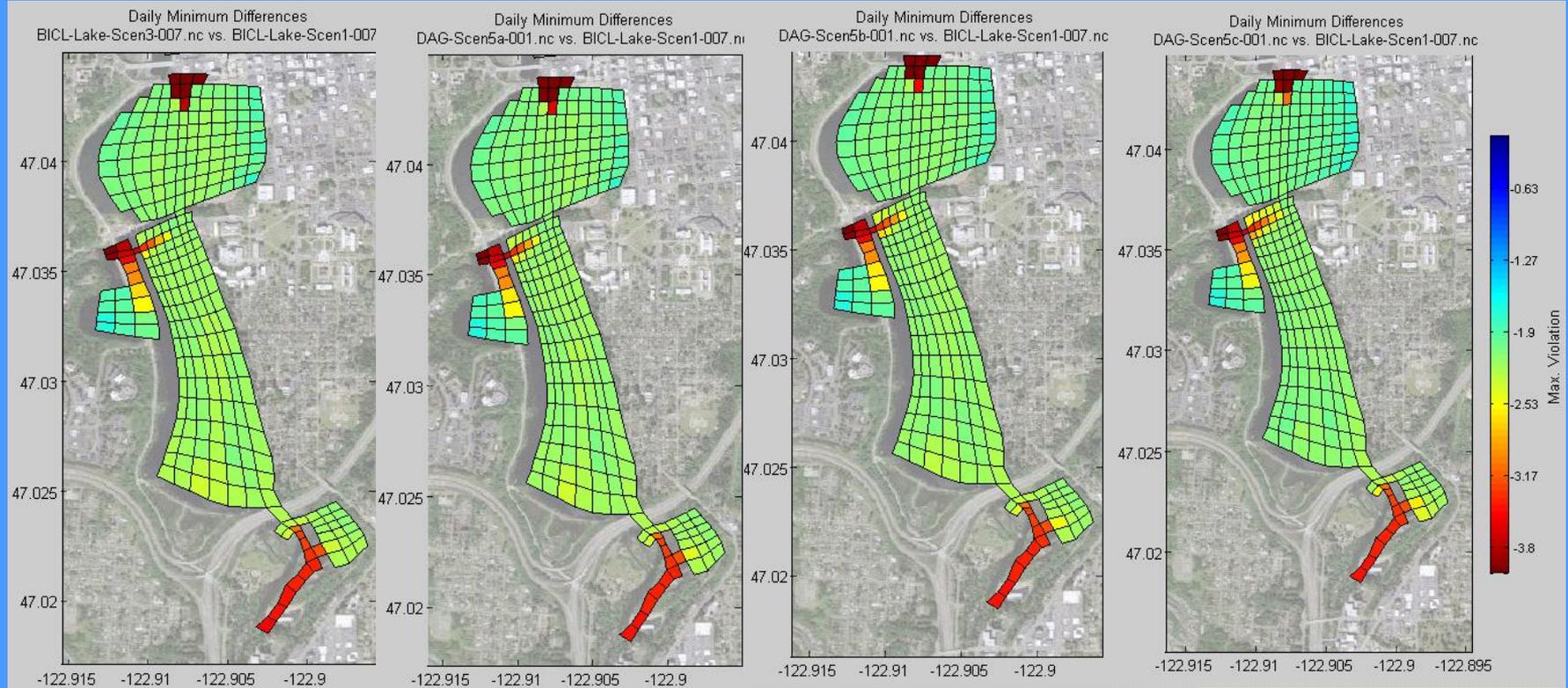
# Deschutes Advisory Group (DAG)\_Scenarios

1. Reduce non-point N\_loading to Budd Inlet
2. Advanced nitrogen removal at all WWTPs
3. Extend LOTT outfall
4. Reduce N\_load at open boundary
5. Reduce non-point P\_loading to Capitol Lake
6. Reduce temperature Input to Capitol Lake
7. Provide alum treatment to reduce P in Capitol Lake.

## 5. Reduce non-point P\_loading to Capitol Lake

- a. Non-point can only be reduced to natural conditions
- b. Reduce the difference between existing and natural conditions
- c. Scenarios: DAG\_Scenario5a, 5b and 5c

# 5. Reduce NP\_P loading to Capitol Lake : Max depletion



Existing vs natural

10% NP\_P reduction  
vs. Natural

20% NP\_P reduction  
vs. Existing

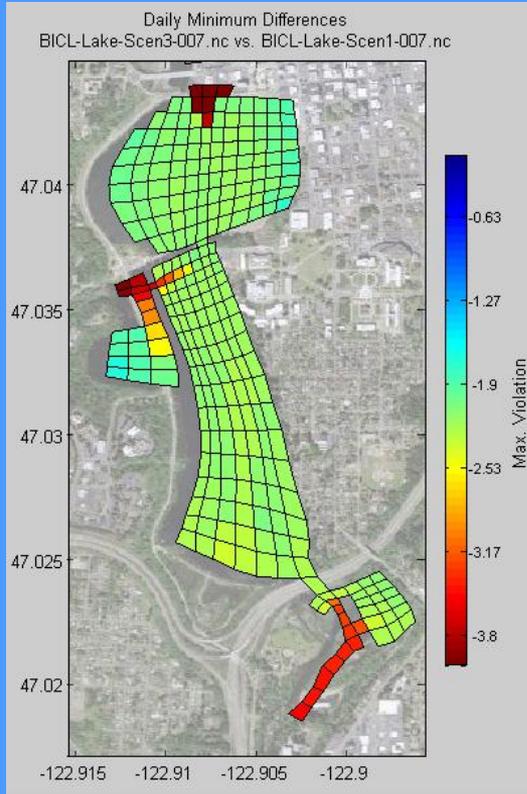
50% NP\_P reduction  
vs. Existing

## 6. Reduce temperature Input to Capitol Lake

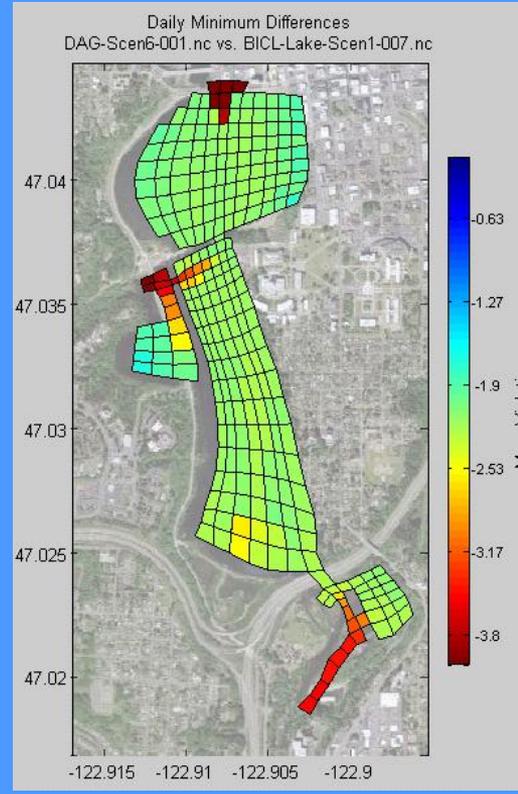
Temperature reduced in Deschutes River by 4° C for the months of July through September.

This is DAG\_Scenario6

# 6. Reduce temperature Input to Capitol Lake : max depletion



**Existing vs natural**

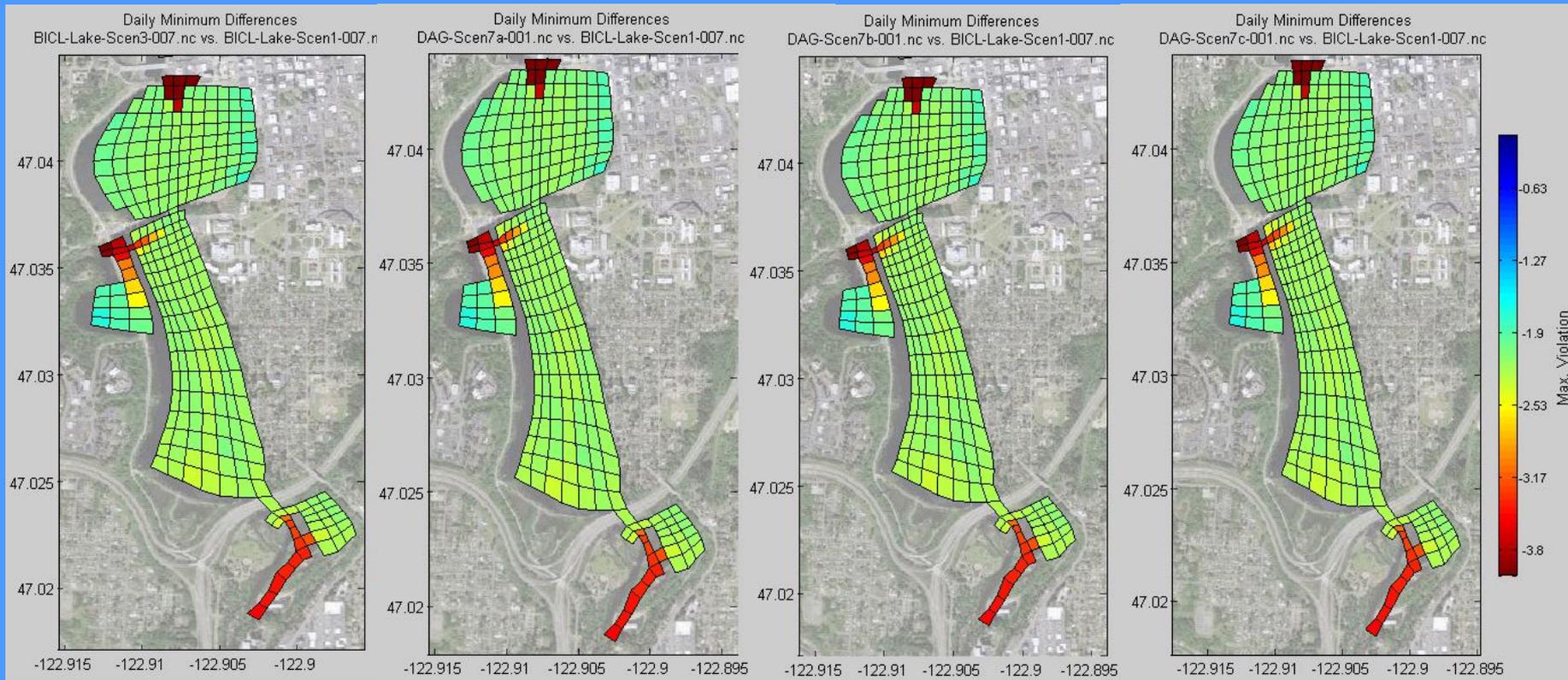


**Low temp input vs. Natural**

## 7. Alum treatment to reduce P in Capitol Lake.

- a. Alum treatment clears water column of both dissolved and particulate phosphorus as well as algae
- b. Alum treatment traps the sediment fluxes of Phosphorus
- c. The initial concentration of PO<sub>4</sub>, POP, algae assumed to be zero
- d. Sediment fluxes assumed to be reduced by 20%, 50%, and 75%
- e. The respective scenarios are:
  - DAG\_Scenario7a
  - DAG\_Scenario7b
  - DAG\_Scenario7c

# 7. Alum treatment of P in Capitol Lake : max depletion relative to existing



**Existing vs natural**

**20% reduced P-flux  
vs. existing**

**50 % reduced P-flux  
vs. existing**

**75% reduced P-flux  
vs. existing**