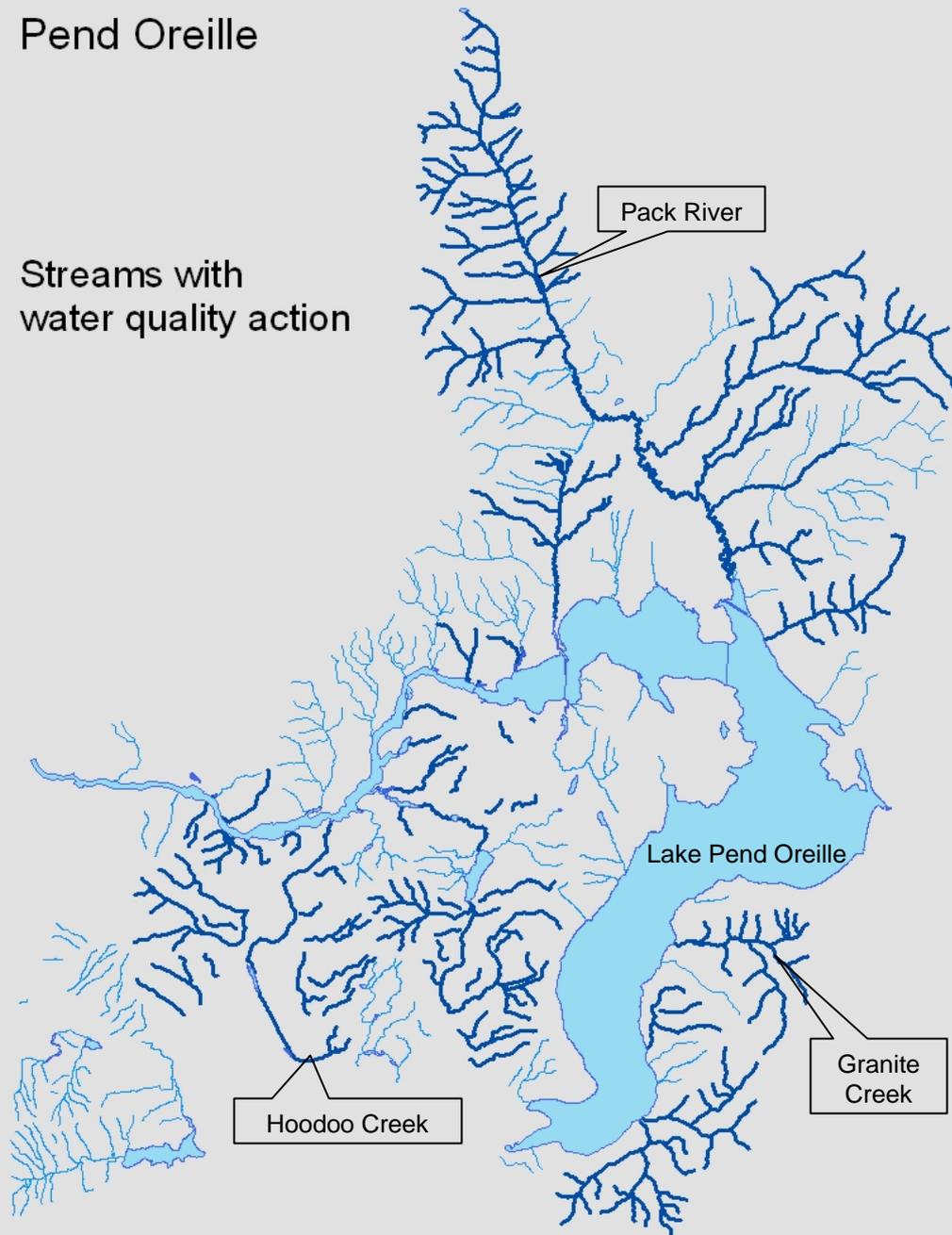


Pend Oreille Tributary Working Group Process



Pend Oreille

Streams with
water quality action



Pack River

Lake Pend Oreille

Hoodoo Creek

Granite
Creek

Tributary Work Group Participation

Pend Oreille River WAG

- 18 members
- 9-10 other stakeholder participants
- IDEQ, DOE, EPA, Kalispel Tribe all with regulatory authority

Tributary Work Group

- 6 WAG members participate
- 13 other stakeholder participants
- IDEQ has regulatory authority

Next Steps

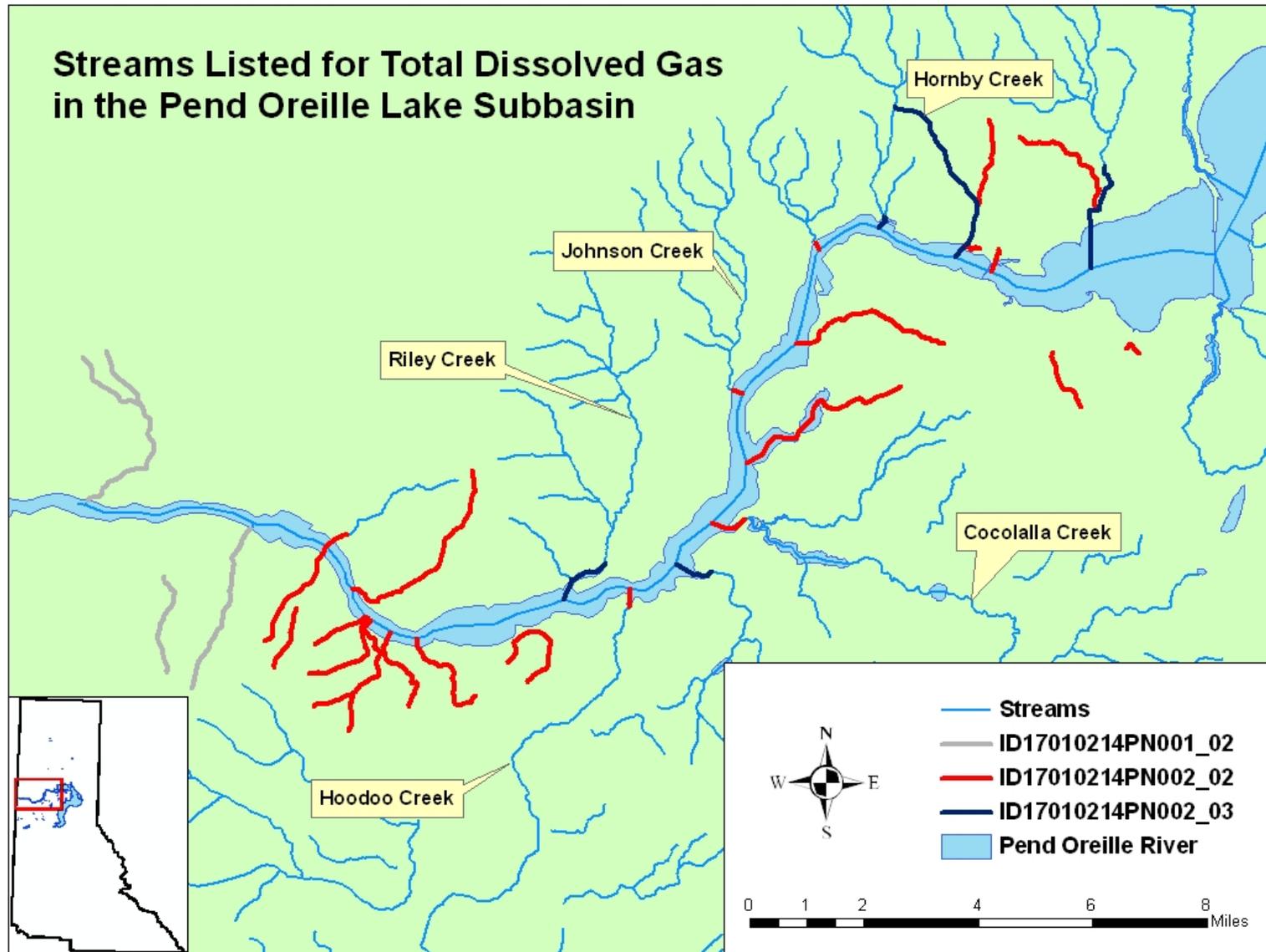
- Formalize Tributary Work Group in Operating Procedures of Pend Oreille River WAG:
 - Tributary Group has authority to review and recommend TMDLs to BAG for Idaho tributaries
- Next Meeting Tributary Work Group
 - May 23rd 1-4 pm Sandpoint Federal Building
 - Tributary Temperature TMDLs
 - Peter Leinenbach, EPA
 - Mark Shumar, IDEQ



Idaho 2002 Integrated Report

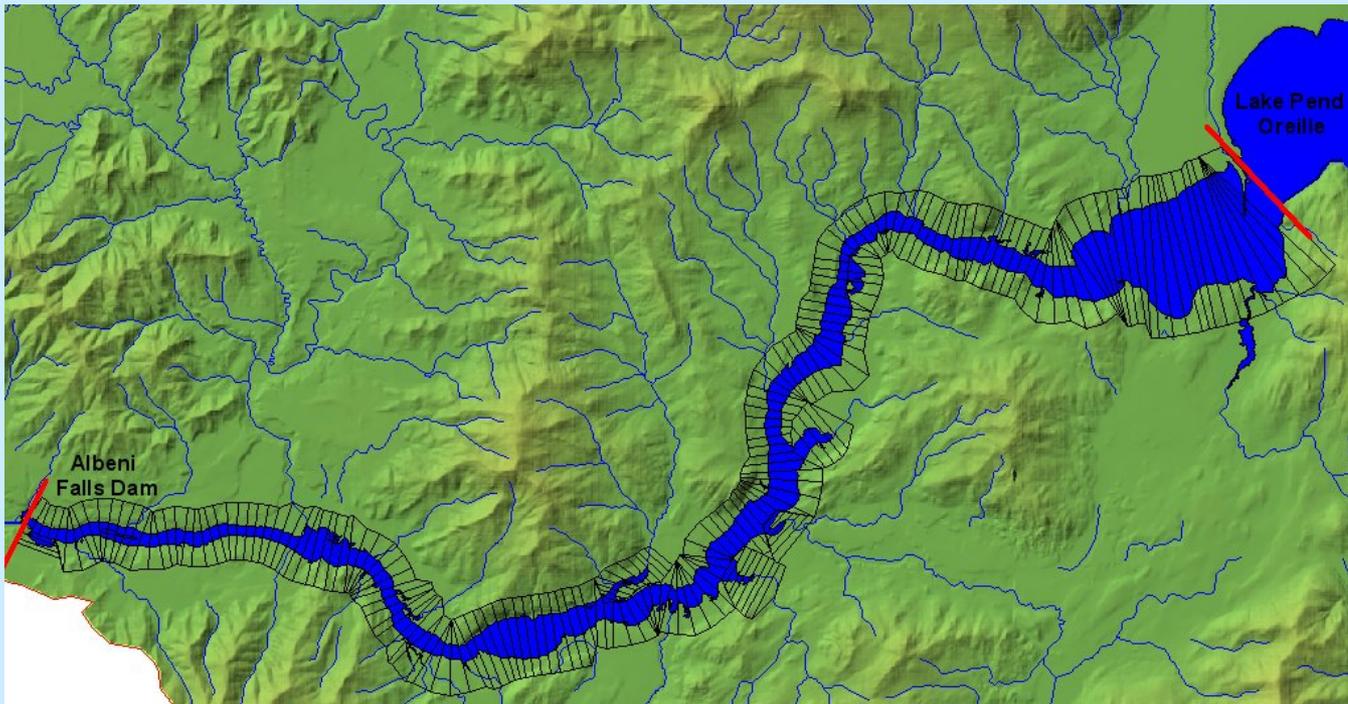
- 3 Assessment Units in the Pend Oreille River Identified as impaired by:
 - TDG
 - Temperature
 - Sediment
- IDEQ recommends removing sediment as a pollutant
 - Narrative standard, waters should be free from *excessive* sediment
 - A waterbody this size does not show evidence that sediment is impairing beneficial uses
 - There is not spawning habitat in the river
 - IDEQ will be preparing justification for removal of sediment as an impairment for presentation to the WAG

Tributaries with TDG as Impairment to be removed due to GIS error



Idaho Model Summary

- 234 model segments
- Each 250 meters long



Model Summary (for Idaho)

Model simulations were run for 5 difference scenarios:

- Existing Conditions to Natural Conditions (Scenarios 1 and 8)
 - Comparisons shows periods (time and space) of increased and decreased temperature
- Point Source Contributions (Scenarios 1 and 2)
 - River temperature were not sensitive to point source contributions
- Nonpoint Source Contributions (Scenarios 1 and 2.5)
 - River temperature were not sensitive to tributary temperature contributions (including Priest River)
- Albeni Falls Dam Contribution (Scenarios 1 and 4)
 - Results are similar to Scenario 8
- Vegetation Bank Shading (Scenario 8, varying SRF, Veg. density)
 - River temperature were not sensitive to vegetation density

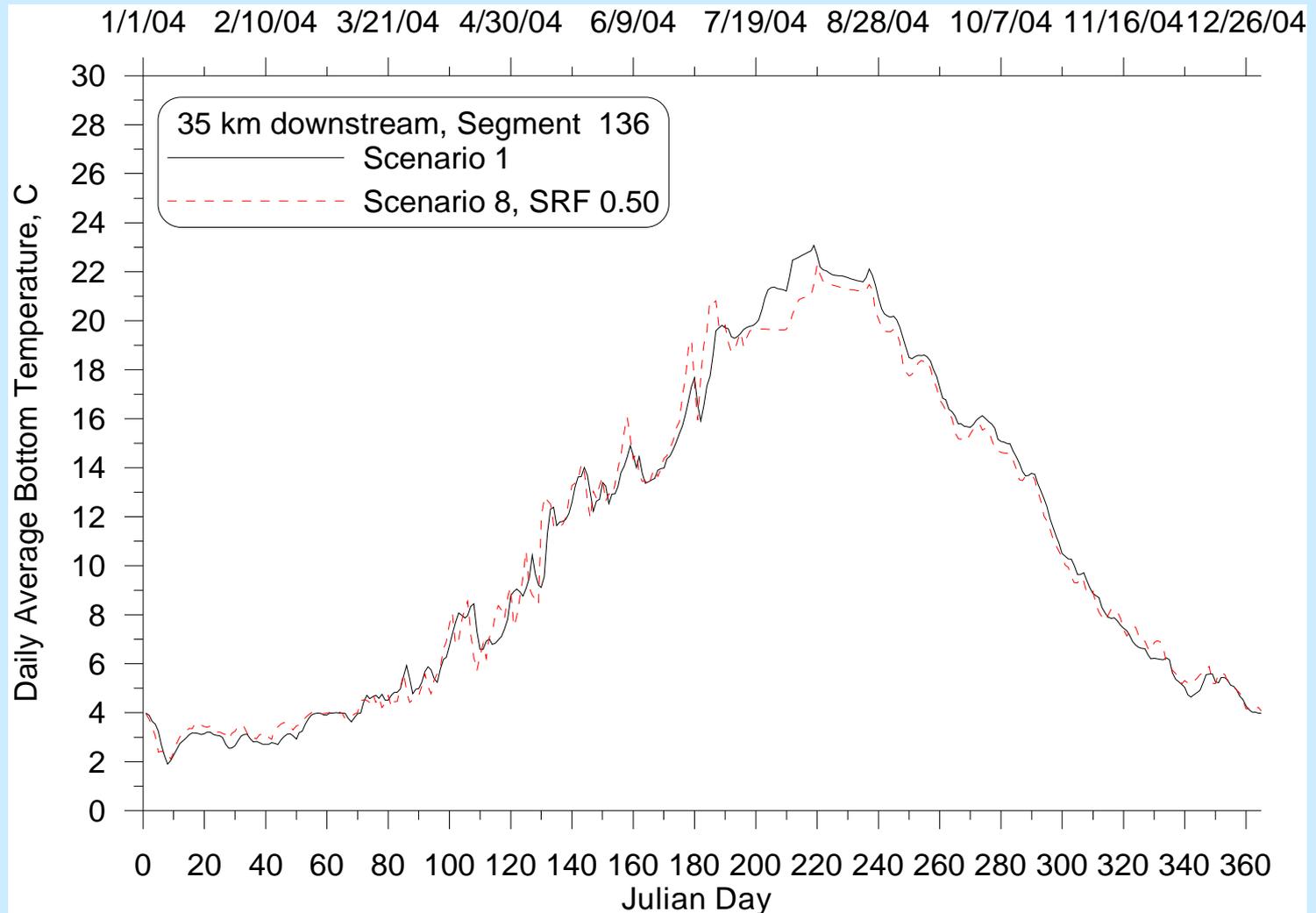
Initial Conclusions (in Idaho)

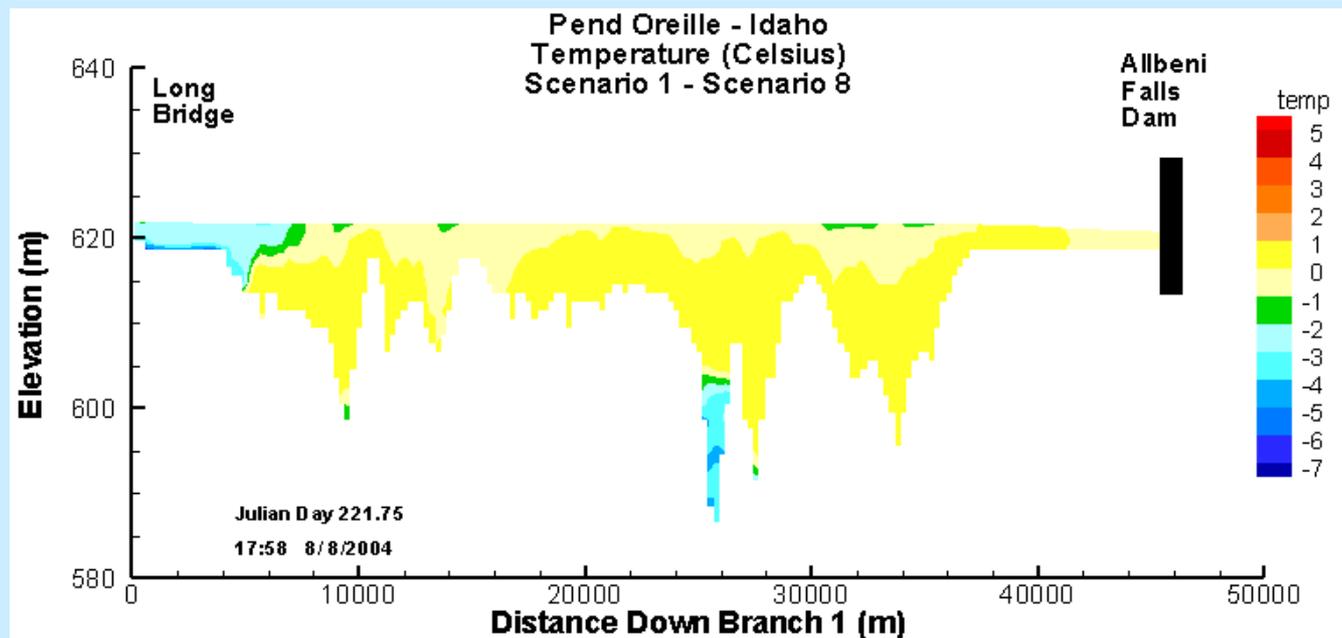
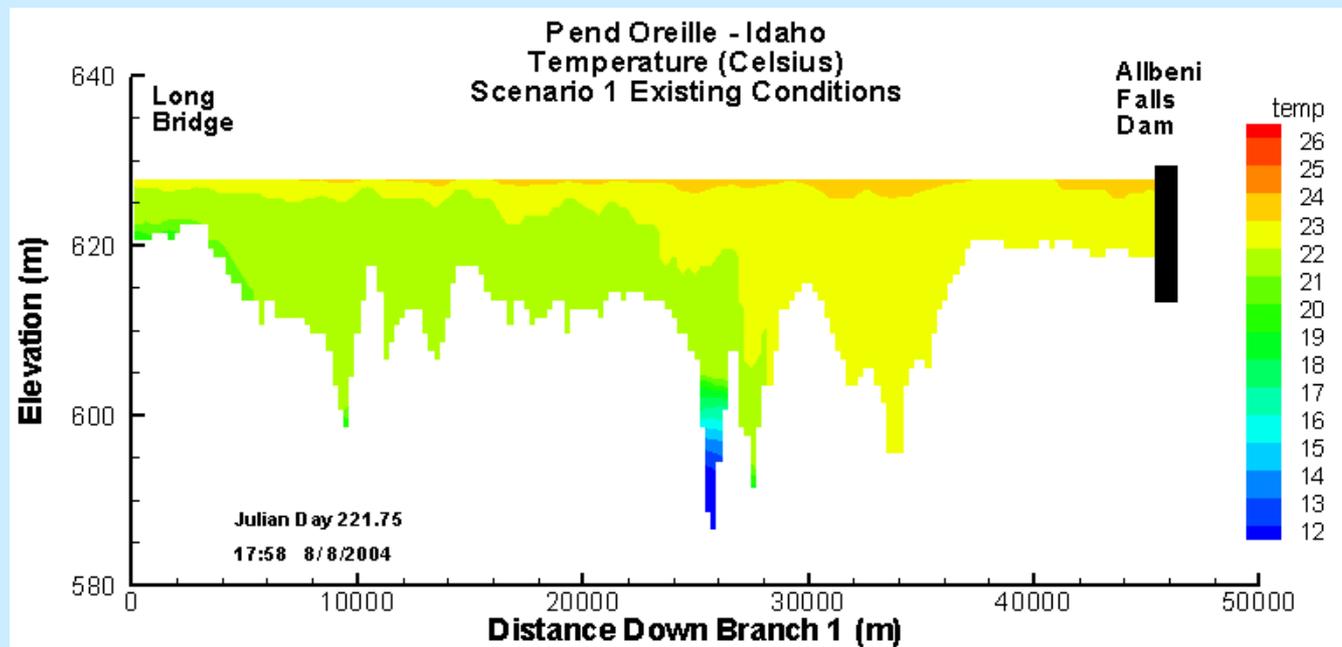
- Generally, the additional volume and depth of water in an impounded Pend Oreille River results in **cooler** water than would be in an un-impounded Pend Oreille River in Idaho
- Idaho Water Quality Standards are not being met at 2 of the 13 compliance points. The source of this impairment is Albeni Falls dam operation (“impacts from hydrostructure flow regulation/modification”)

Summary Comparisons of Modeling Results to Idaho Water Quality Standards

No.	Compliance Area	Evaluation Classification	Figure	Numeric Criterion	IDEQ Finding
1)	10 km surface	Average	Figure 2	19 °C	Meets Standards
2)	10 km bottom	Average	Figure 4	19 °C	Meets Standards
3)	10 km volume weighted	Average	Figure 5	19 °C	Meets Standards
4)	35 km surface	Average	Figure 6	19 °C	Meets Standards
5)	35 km bottom	Average	Figure 7	19 °C	Does Not Meet Standards
6)	35 km volume weighted	Average	Figure 8	19 °C	Meets Standards
7)	Albeni Falls Outflow	Continuous	Figure 9	22 °C	Meets Standards
8)	10 km surface	Maximum	Figures 10 and 11	22 °C	Meets Standards
9)	35 km surface	Maximum	Figures 12 and 13	22 °C	Meets Standards
10)	Longitudinal surface	Continuous	Figure 14	22 °C	Meets Standards
11)	Longitudinal volume weighted	Continuous	Figure 15	22 °C	Meets Standards
12)	Cross Section Aug 16	Continuous	Figures 16 and 18	22 °C	Meets Standards
13)	Cross Section Aug 8	Continuous	Figures 19 and 21	22 °C	Does Not Meet Standards

Daily average bottom temperature time series at 35 km downstream from Lake Pend Oreille for the Natural Conditions (8) and Existing Conditions (1) Scenarios, 2004 (Figure 7)





Next Steps

- Evaluate impact of the two non-compliance areas on cold water aquatic life beneficial uses in Idaho
- Look at relationship to downstream impairments

