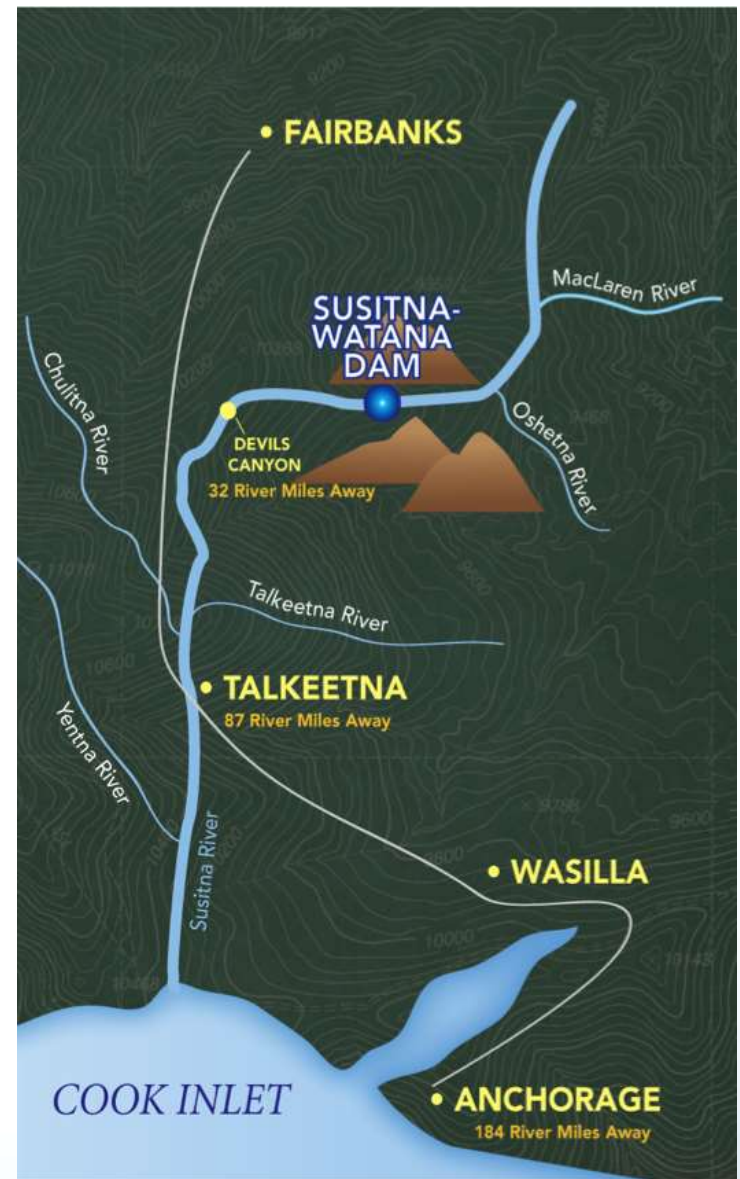


Technical Team Meeting – Riverine Modeling November 13-15, 2013

Day 1 **MODEL DESCRIPTIONS**

Prepared for: **Alaska Energy Authority**

 **SUSITNA-WATANA HYDRO** *Clean, reliable energy for the next 100 years.*

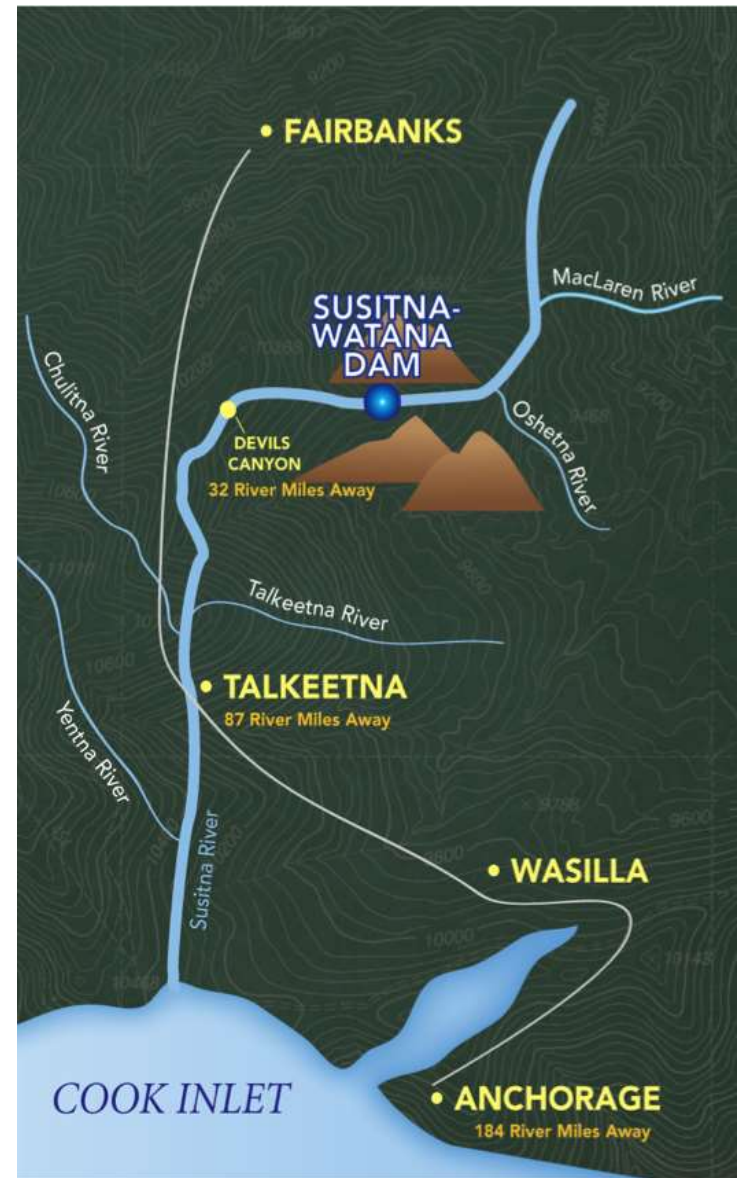


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Day 2

ADDRESSING BIOLOGICAL QUESTIONS

Prepared for: **Alaska Energy Authority**



See Metrics Matrix Table

- Centered on Anadromous Fish Habitat
- Middle River Segment (PRM -184 to 104)
- Life Stage specific (spawning, incubation, juvenile rearing, smolt outmigration, adult migration)
- Pose biological questions → list draft metrics to address → and sources of information (models, literature, etc.)
- Process can be repeated for other species, as well as other resource issues – Wildlife, Recreation (boating, fishing, etc.), Cultural, Aesthetics, etc.



Biologically Sensitive Periods

- Open Water Flow Conditions –
Spring/Summer/Fall (June – October)
- Ice Cover Conditions –
Winter (November-April)
- Transitional/shoulder periods
 - Freeze up (October-November)
 - Melt and ice-out (April-May)



Key Biological Questions Covered

- 1) How does the Project impact effective spawning/incubation/emergence habitat?
- 2) How does the Project impact effective juvenile rearing habitat during open water?
- 3) How does the Project impact juvenile rearing during ice cover?
- 4) How does the Project impact timing/intensity/duration of spring breakup?
- 5) How does the Project impact juvenile passage out of lateral habitats (sloughs, tributaries, side channels) during outmigration?
- 6) How does the Project affect adult upstream passage conditions into lateral spawning habitats and in the mainstem river passage within and through the Devils Canyon Reach?



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Day 3

TYING IT ALL TOGETHER

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