

Monitoring River Behavior for Effective Water Management



Sean Bedingfield, Utah State University

iUTAH Mentors:

Dr. David E. Rosenberg, Utah State University
Dr. R. Ryan Dupont, Utah State University

Why?

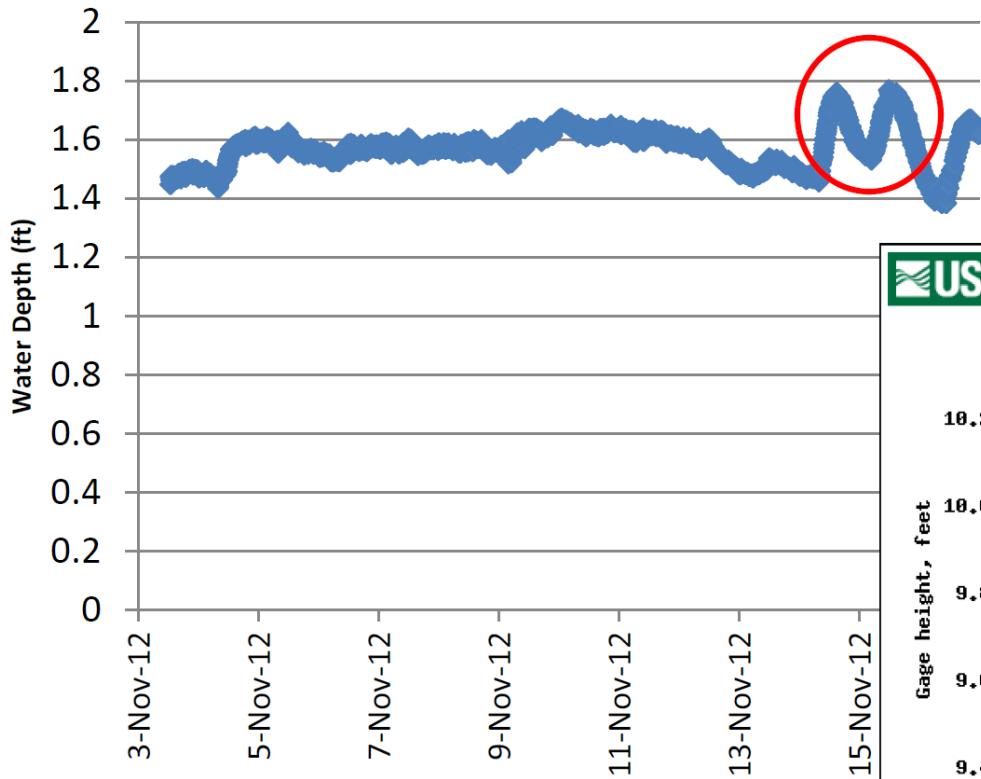
- Resource Evaluation:
 - Rising population
 - Unpredictable water supply
- Environmental impact:
 - Where water is used
 - When water is used

Goal

- Organize data involving **river bank level (stage)** and **flow** over time at sites on the Bear and Cub rivers into the following:
 - Depth over Time Database from August '12
 - Monitored Site Cross Sections
 - Stage-Flow Diagram

Depth Over Time Database:

Water Depths

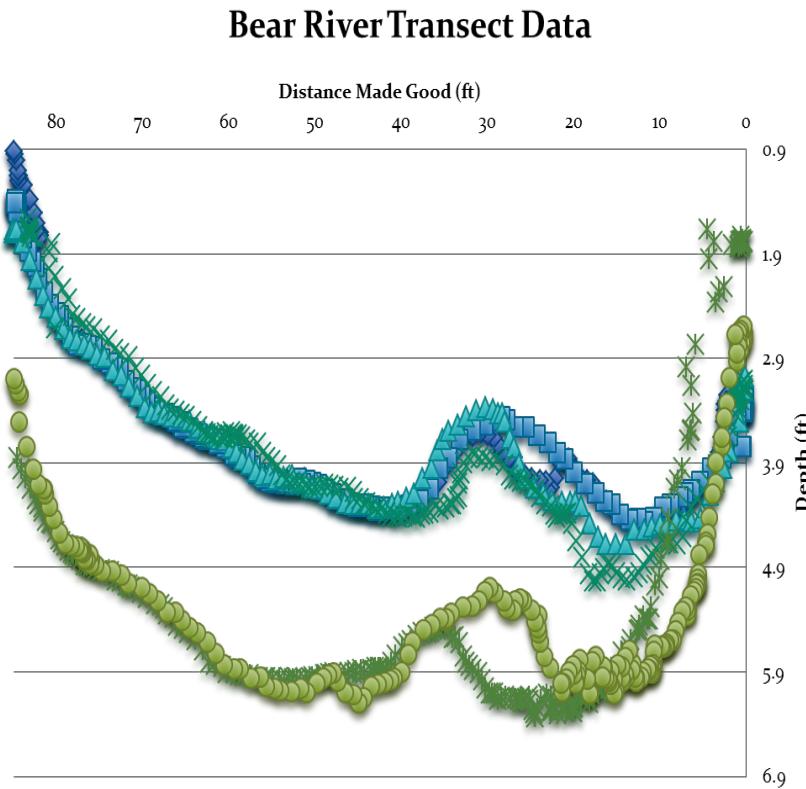


USGS 10092700 BEAR RIVER AT IDAHO-UTAH STATE LINE

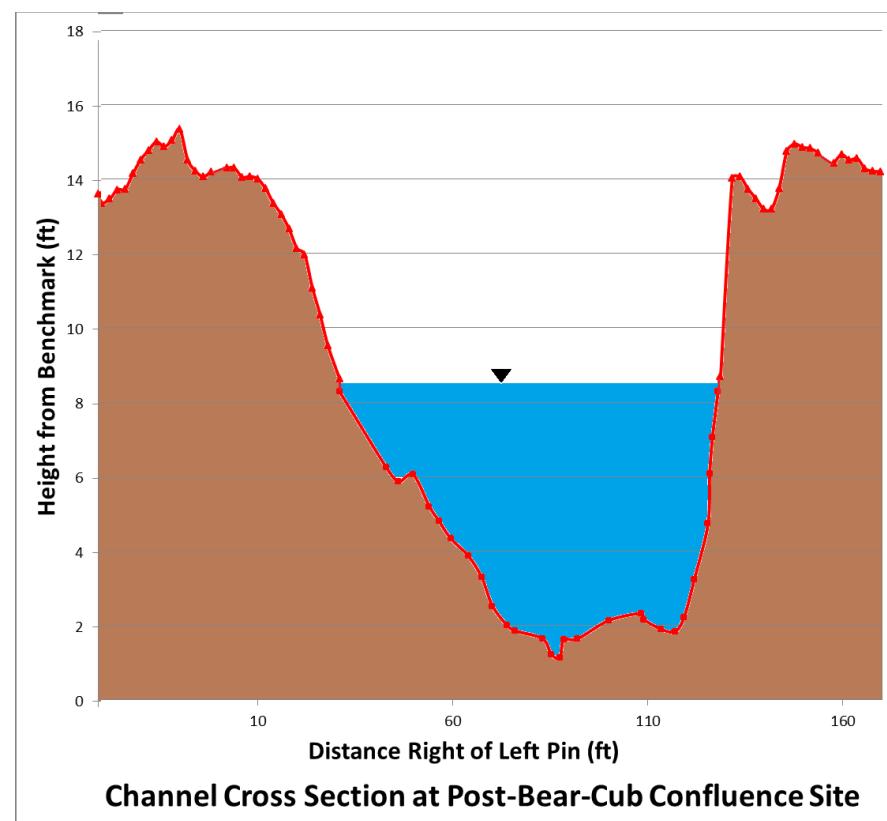


Monitored Site Cross Section:

Before

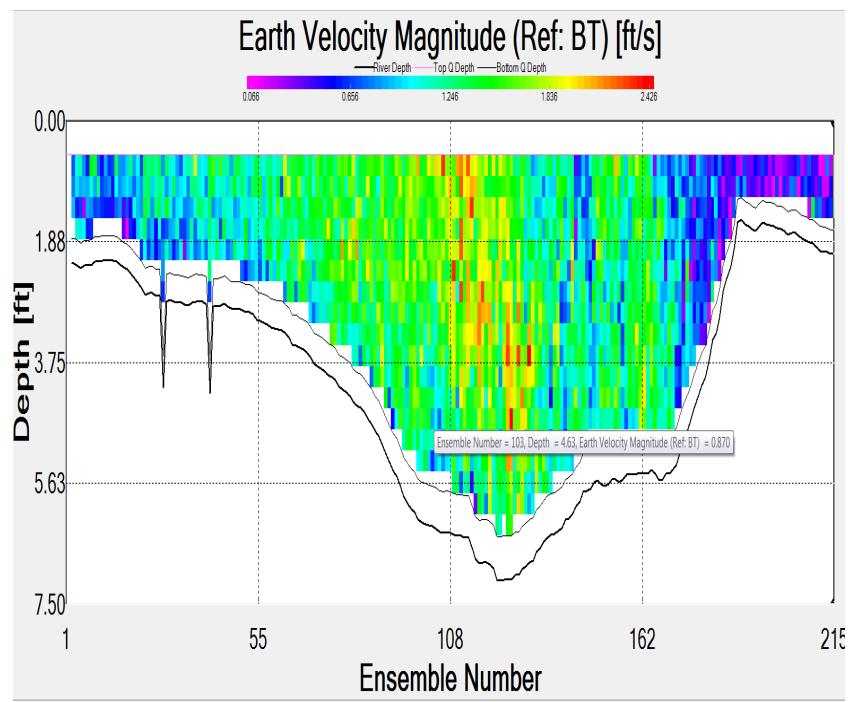


After

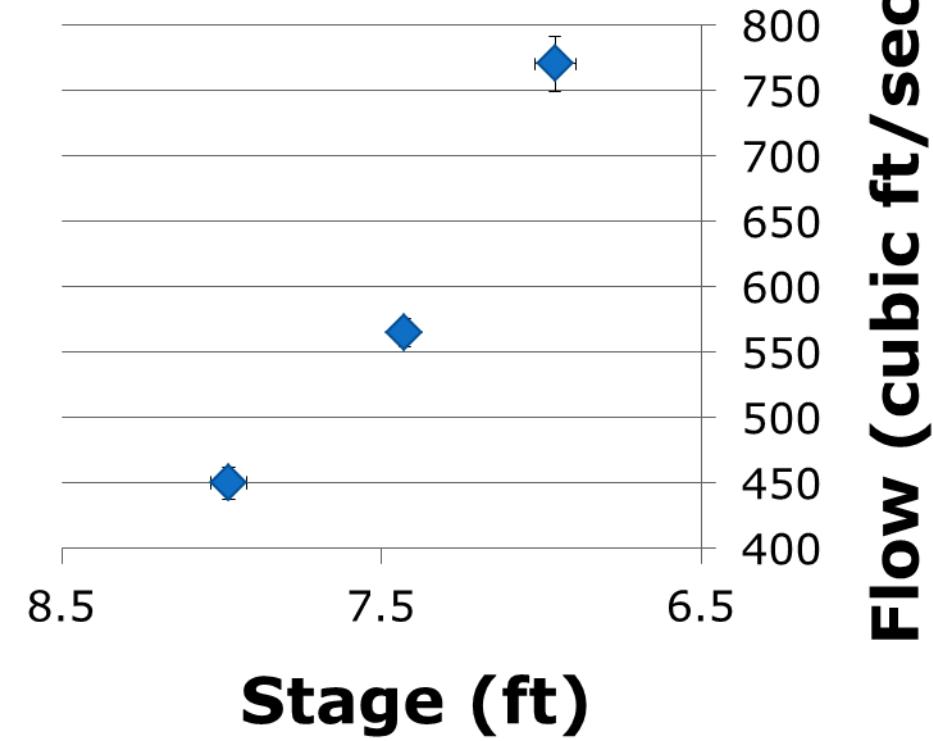


Channel Cross Section at Post-Bear-Cub Confluence Site

Stage-Flow Diagram:

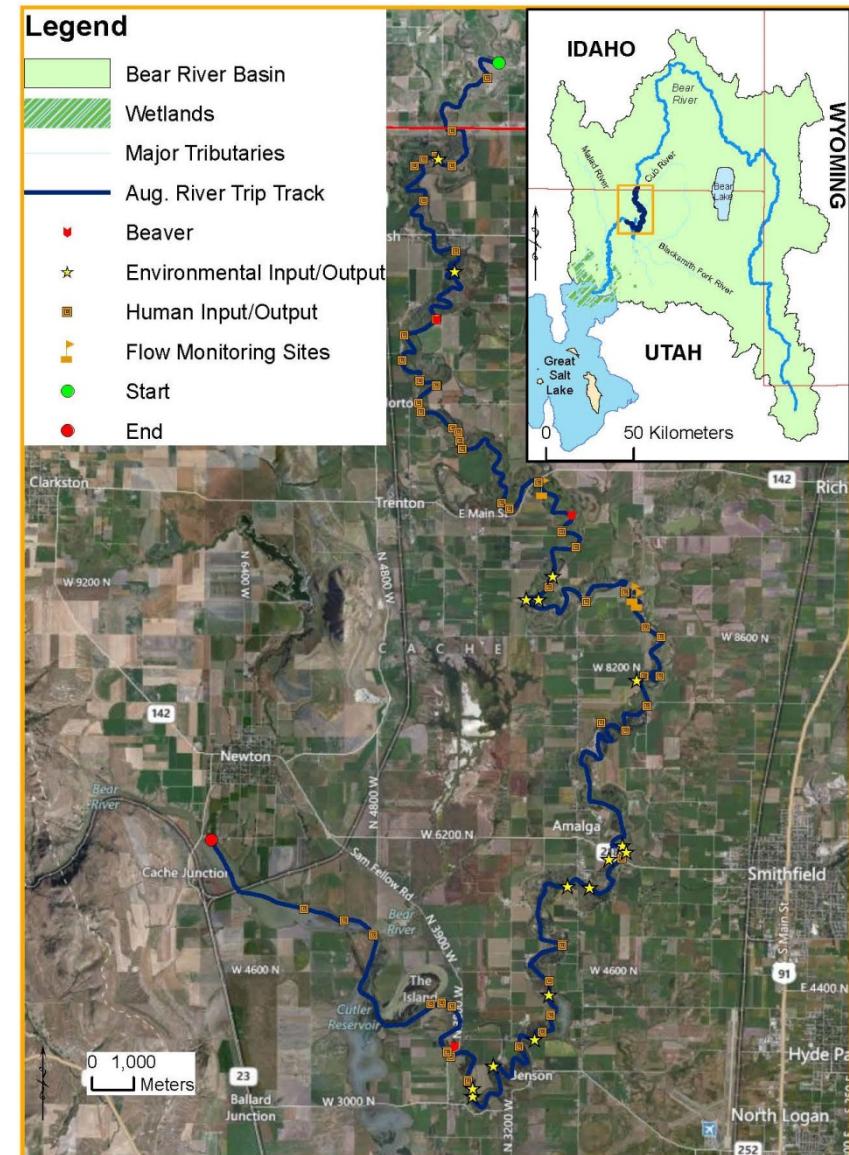


Bear River Site Stage-Flow Diagram



Future Work:

- Collect more data
- Use organized data for modeling
 - Environmental impact on shoreline
 - Resource evaluation
 - Amounts of pollutants at monitored sites





Thank You!

Questions?