Study Update
Tailrace Slough Use by Anadromous Salmonids
Goals and Objectives

• Identify what anadromous salmonids use the tailrace slough by:
  – Life Stage (Juvenile, migrating and spawning adults)
  – Timing
  – Type of use
Study Area

- The tailrace slough immediately downstream of the Project tailrace terminus to its confluence with the Cowlitz River
- Given that the configuration of the tailrace changes frequently, the area surveyed is within the bankfull channel at the time of the study
Study Area

- Cowlitz River
- Right Channel
- Tailrace Terminus
- Tailrace Slough
- Project Boundary
- Left Channel
- Main Channel
- Gage #1
- Gage #2
Methods

• 30 m of every 160 m is snorkeled seasonally for 1 year assessing:
  – Fish species presence
  – Life Stage and Approximate Length
  – Habitat Characteristics
    • Depths
    • Velocities
    • Substrate Composition
    • Habitat Types
Work Done to Date

- A Spring 2006 survey could not be done due to a period of extended high water and extreme turbidity
- The Summer, 2006 survey was conducted on July 27, 2006 and August 2, 2006
- The Fall survey is scheduled to take place the week of December 10, 2006
Results from the Summer 2006 Survey

• A total of six 30 m sites were surveyed
• 618 coho juveniles were observed in the “left side channel”
• 50 coho juveniles were observed in the “right side channel”
• 200 coho were observed in the channel prior to the split
• Other species documented include:
  – rainbow trout
  – whitefish
  – sucker
Habitat Conditions

- The left side channel has a higher gradient, varying substrate composition and much higher habitat diversity than the right channel.
- The right and main channels consist of a uniform glide with very little cover and substrate made up of nearly 100% sand.
- Analysis done prior to November 2006 floods.
Work to be Done

• A Fall survey is scheduled for the week of December 10, 2006
• A Winter survey will be done in either January or February, 2007
• A Spring survey will be done in either April or May, 2007
• Data will be analyzed and a final report produced by July 2007