

# Study Update

## Tailrace Slough Use by Anadromous Salmonids



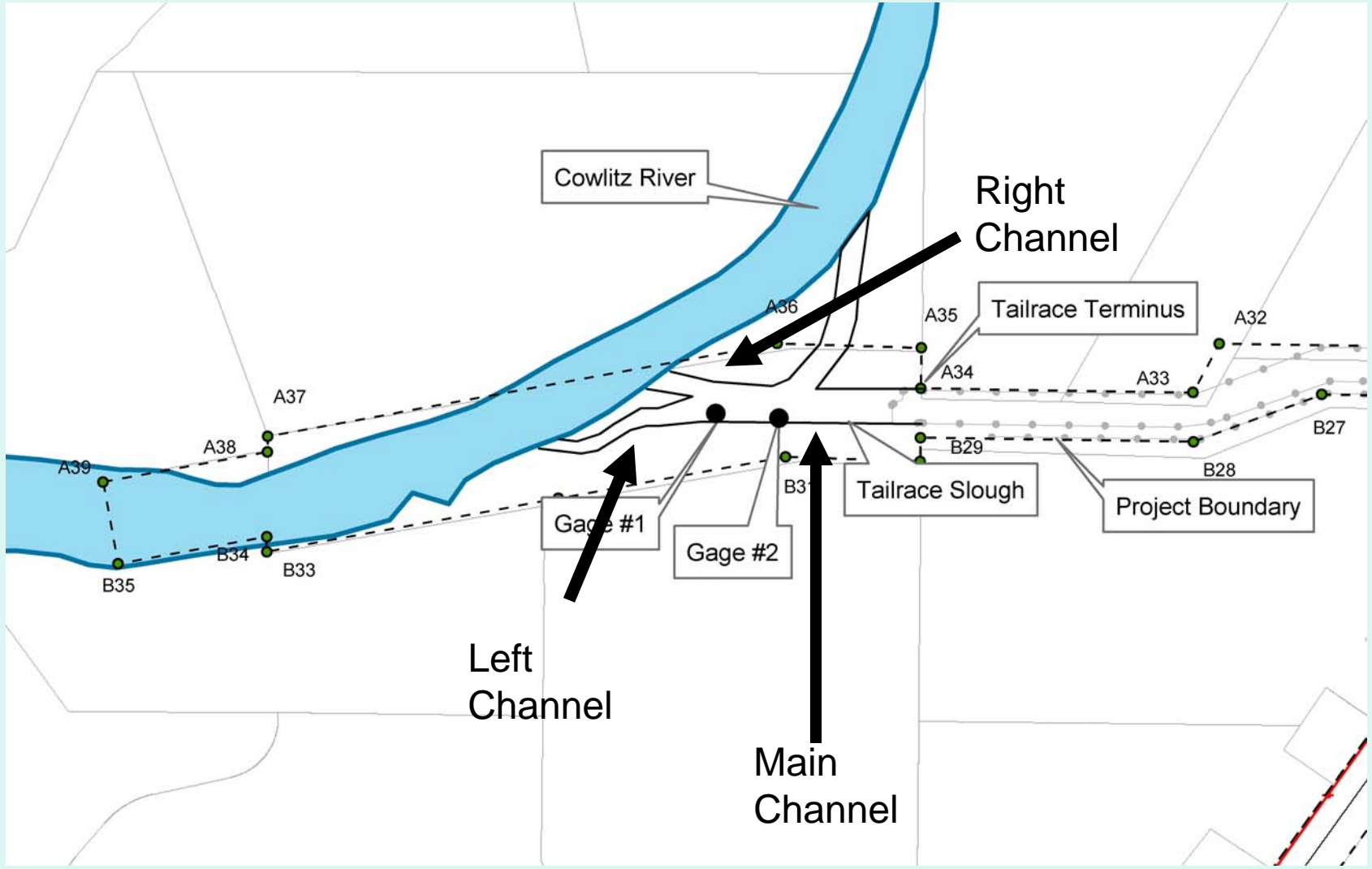
# Goals and Objectives

- 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



# 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