

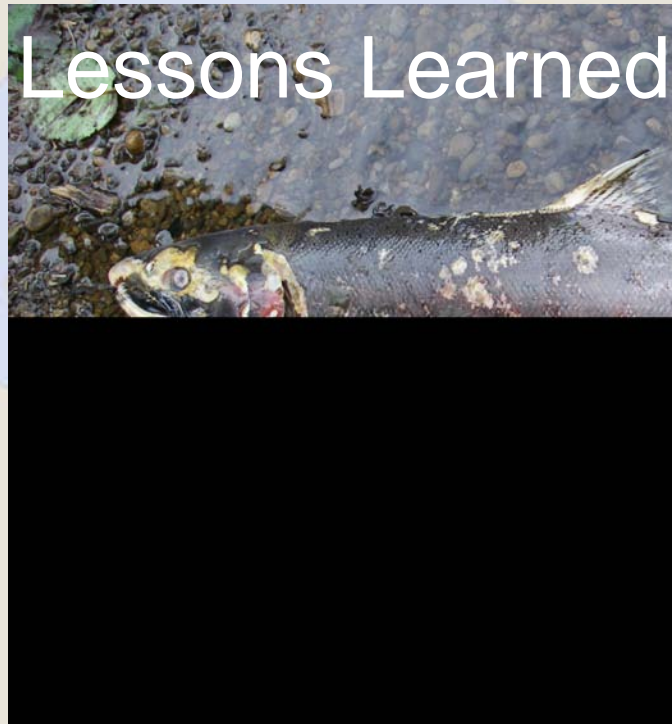
Implementing Salmon Recovery

Columbia River Estuary Study Taskforce

Amy Ammer



Lessons Learned



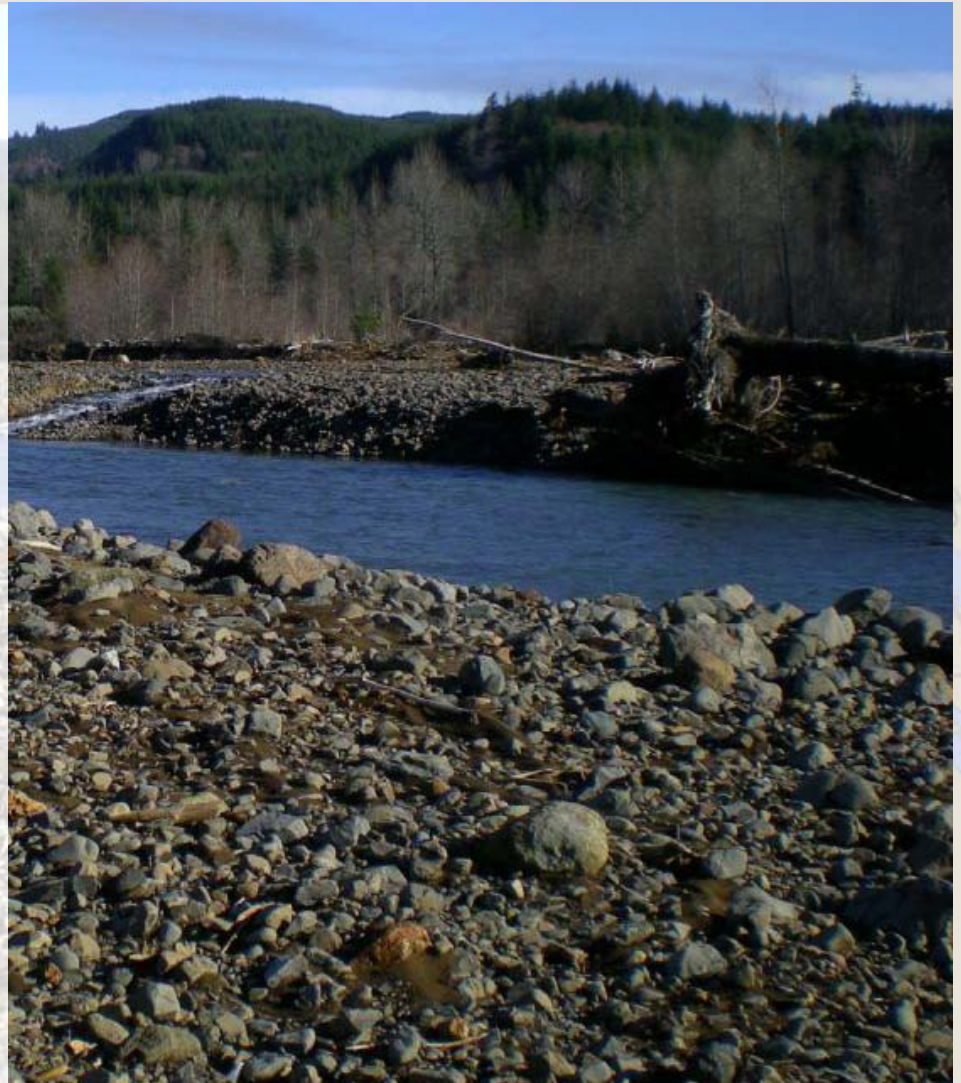
North Coast Watershed Association

Madeline Dalton



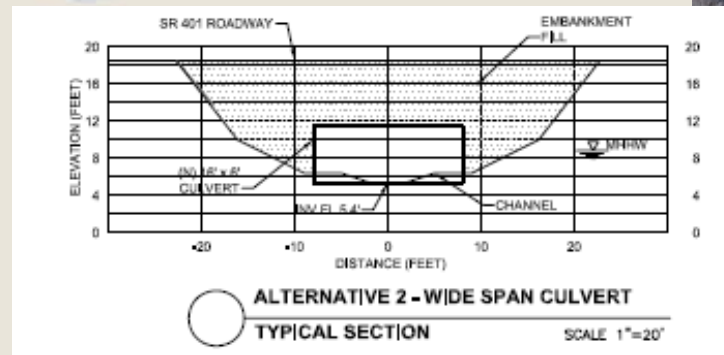
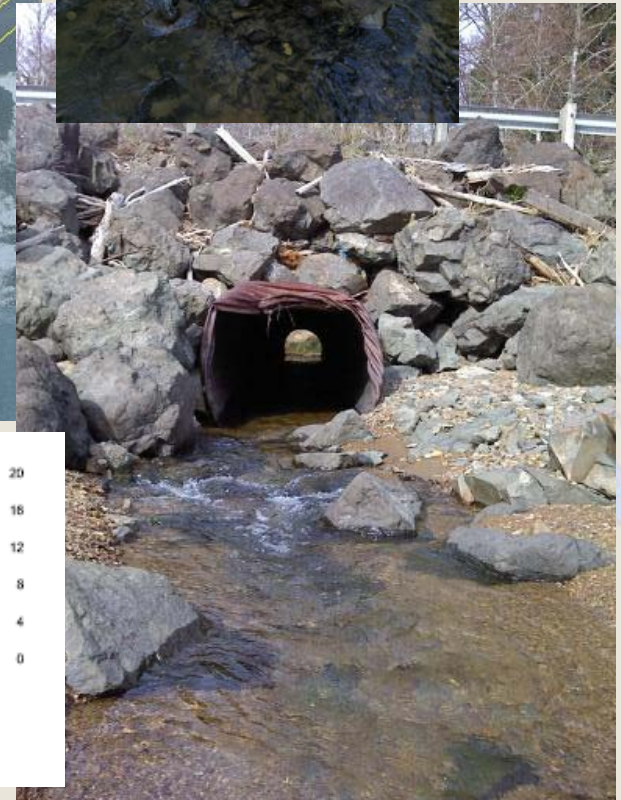
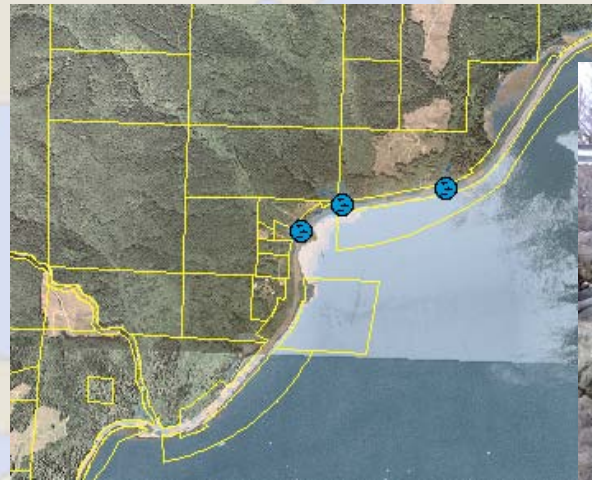
Presentation Outline

- Identification
- Development (including design)
- Funding
- Implementation



Project Identification

- Identify Project Types
- Prioritize Projects
- Locate Projects
- Develop Specific Project Strategy



Project Development

- Select best qualified design team
- Develop realistic expectations
- Maintain communication & disclose findings
- Review all design documents carefully
- Be clear about decision hierarchy in conflict settings



Funding

- Know the funder's goals/strategies
- Match the project to funders with similar goals and objectives.
- Be realistic
- Account for funding timelines & budget time for contract negotiations

Lower Columbia Salmon Recovery And Fish & Wildlife Subbasin Plan

Clark, Cowlitz, Lewis, Skamania
and Wahkiakum Counties



Lower Columbia Fish Recovery Board
March 5, 2010
PUBLIC REVIEW DRAFT

Project Implementation

- Build a robust budget
- Be conscientious in construction bidding
- Review terms and permit conditions with contractor
- Schedule pre-work meeting with engineer/contractor
- Hire lowest competent bidder
- Be on-site as much as possible
- Bring knowledgeable people into the process to serve as advisors

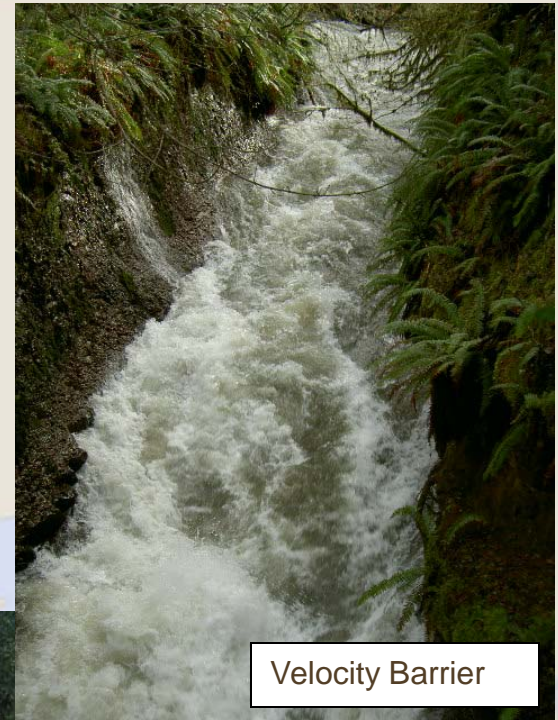


Examples

- Big Creek
 - Restoration project to remove fish passage barrier to upstream salmonid spawning and rearing habitat and improve in-stream habitat .
- Gorley Springs
 - Restoration of habitat-forming process on 1 river mile. Site is one of three remaining naturally spawning chum populations in the Lower Columbia.

Big Creek

- Identification
- Development
- Funding
- Implementation



Velocity Barrier

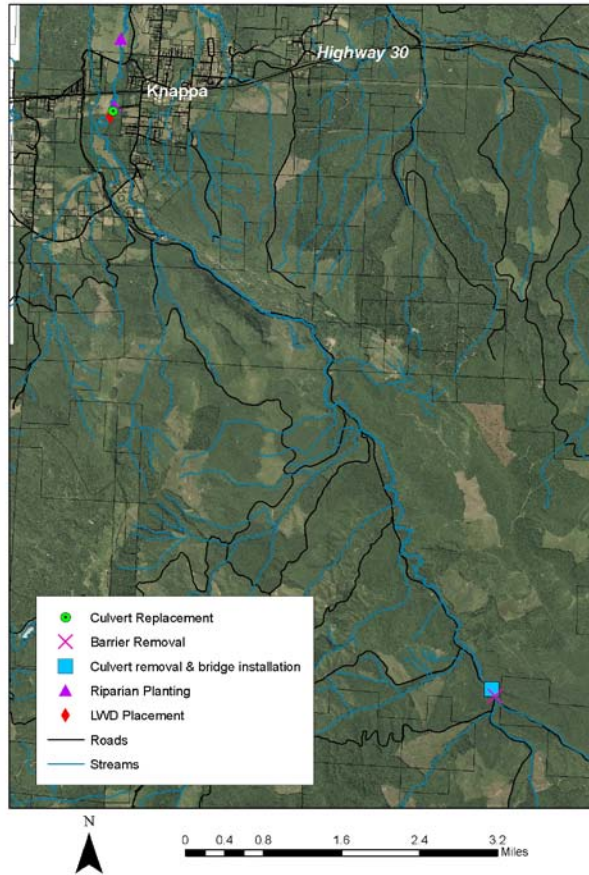


Restored Channel



Identification

Big Creek Restoration & Enhancement



Big Creek Habitat Assessment Project

Report by Boswell Consultants

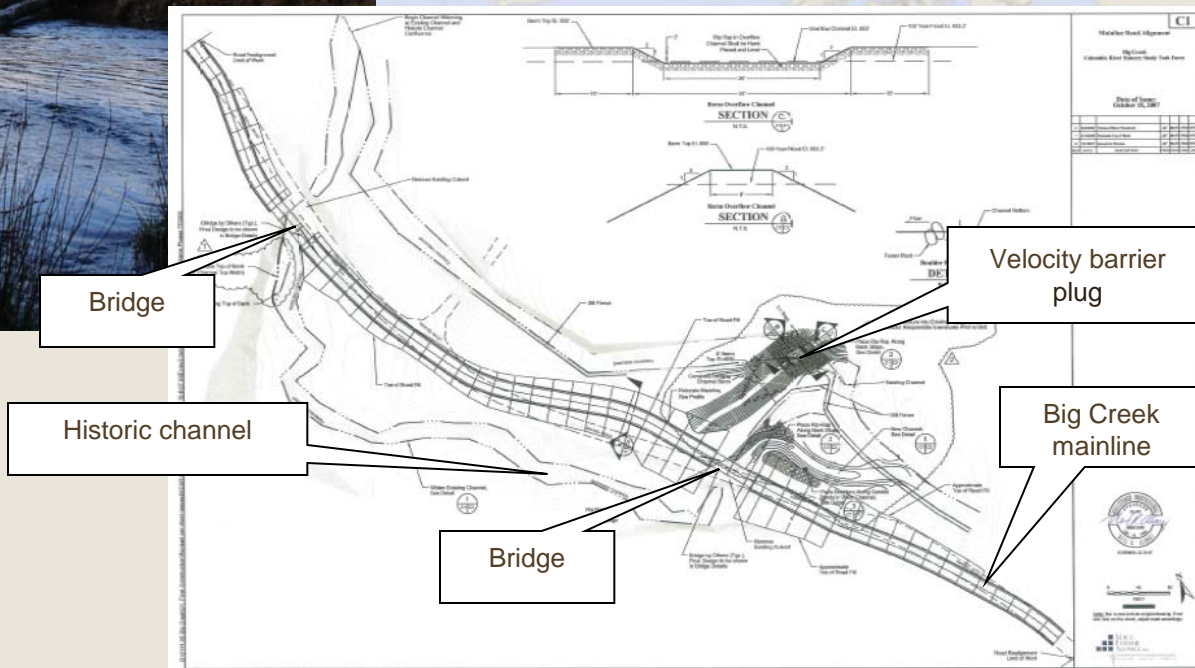
January 2007



The project was designed to generate:

- Current freshwater habitat conditions for coho salmon
- Priorities for Off-Channel habitat improvements and Riparian Enhancement
- Evaluations of current watershed activities

Development

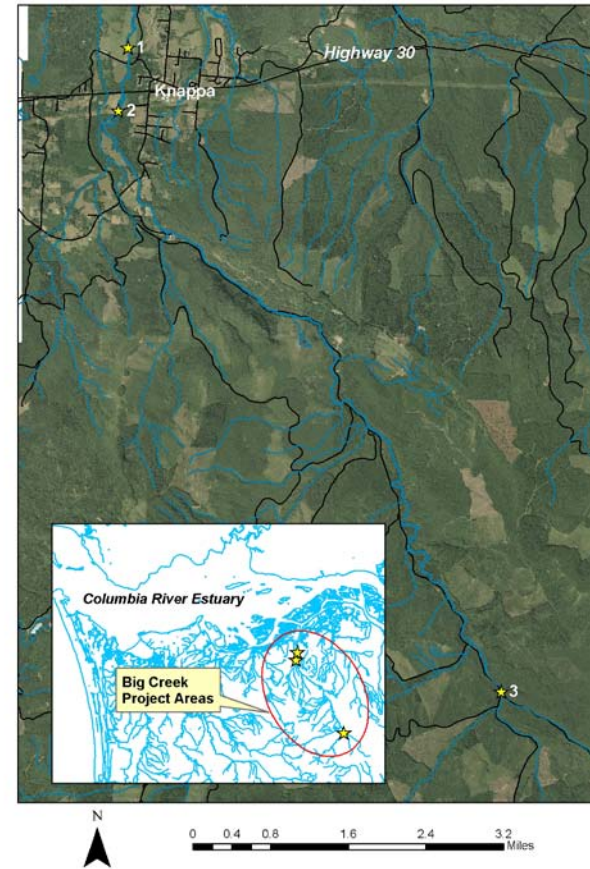


Funding

- LCREP/ NOAA
- OWEB
- US Fish and Wildlife Service
- Hampton Affiliates
- LCREP/ BPA

* *BPA funding was awarded after funding had originally been secured to cover project overages and ensure that the project could be completed*

Big Creek Restoration & Enhancement



Implementation



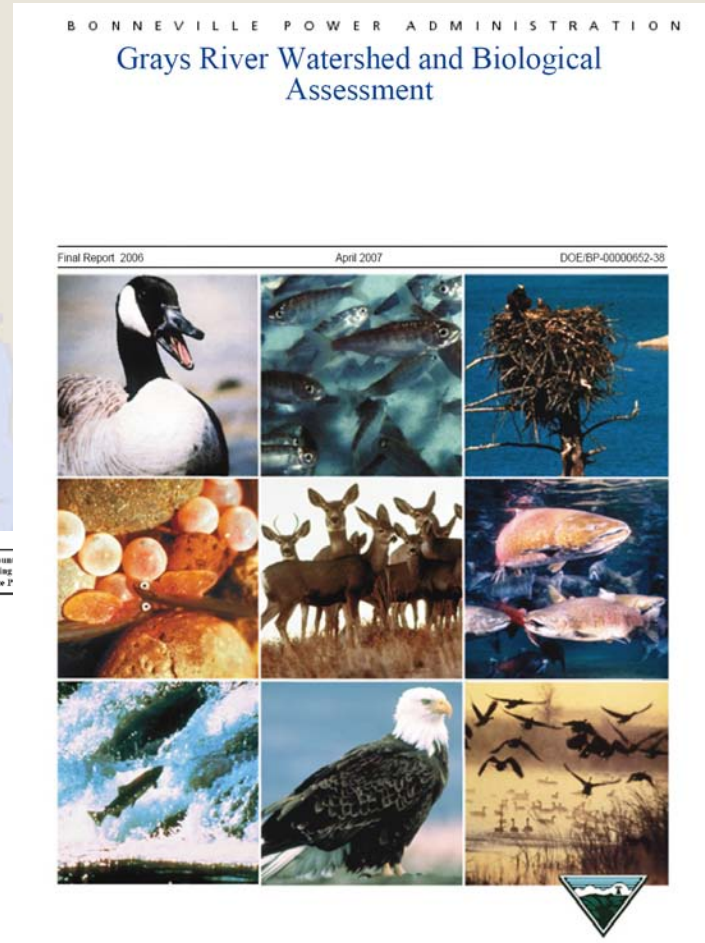
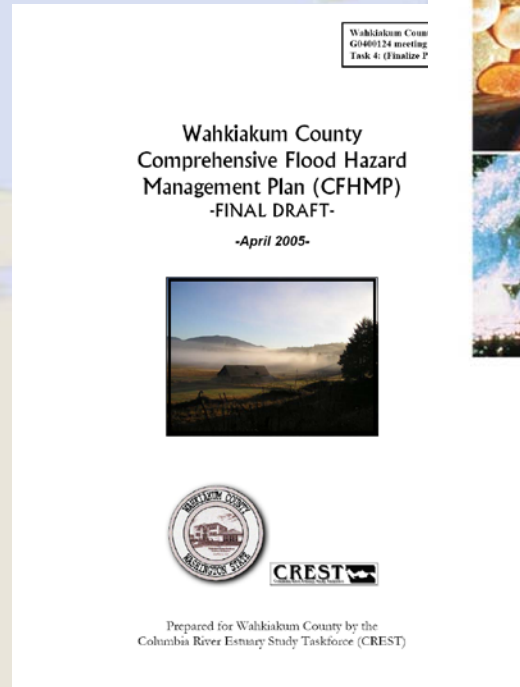
Gorley Springs

- Identification
- Development
- Funding
- Implementation

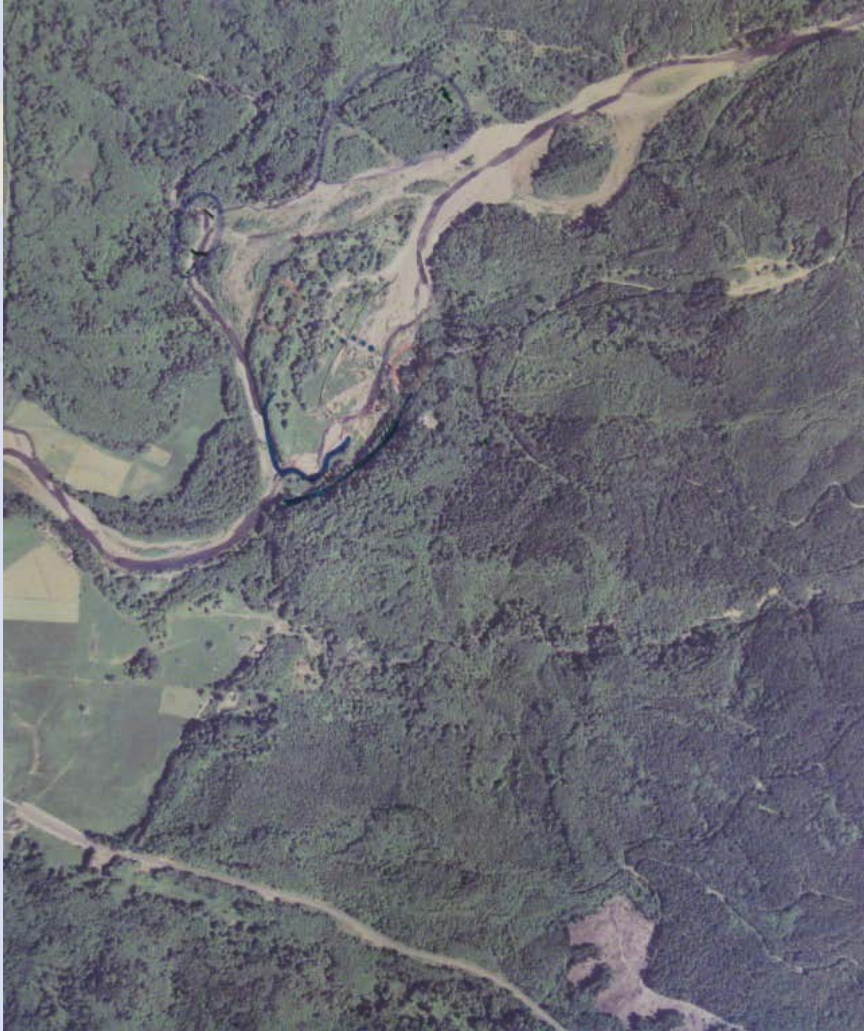


Identification

- CREST introduced to Gorley Family 2003
- Project submitted to BPA for project funding
- Awarded 1.2 million in 2007
- PNNL conducted monitoring for the site



Development



Catland 9:30am

- Sierra Pacific - railway priority
- WDFW - priority stream spanning (protect)
- 2008 Ministry of migrants (women)
- Sierra Pacific road erosion causing water 2008
- Corley family compound/home/road
- backwater flooding (family money)

Stakeholders Meeting at start of process

Development

- Community Concerns about LWD
- Receiving timely feedback from the TAC
- Design and identifying tricky construction elements

Key:

Red – Focal Questions

Black – Additional detail to focal questions

Blue – CREST background to questions and/or additional data

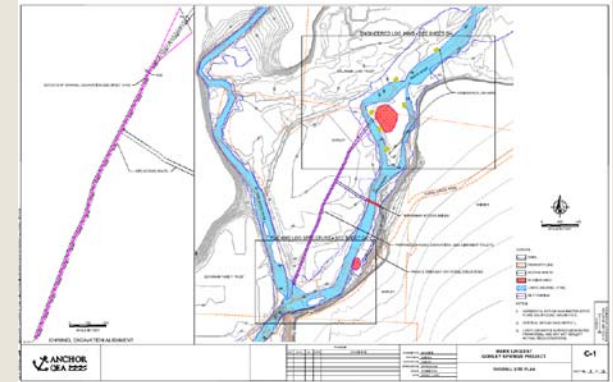
Engineered Log Jams questions and concerns

1. ~~Have the locations changed from Conceptual?~~

If not, with the large change in flows & LWD deposits, why are they still placed where they are? What is the purpose of each individual log jam?

2. ~~How much of the jams are in contact with the flows during low flow periods?~~

Question regarding effectiveness of log jams and whether the project could cause channel incision at lower flows when most of the down cutting occurs.



Mark Linquist/ Gorley Springs Project Newsletter March 2009

What else is happening on the Grays?

Research

Have you ever noticed small 'research' boats being launled through Grays River and Rosburg? Have you wondered what they are researching?

While you may not be aware of it, Grays River is part of an important study on the cumulative, or total, effects of multiple habitat restoration projects completed in the Lower Columbia Estuary. Understanding how habitat restoration projects benefit juvenile salmon survival, or do not benefit their survival, is important for several reasons. The most basic one is we want to know if these projects are effective.

The Grays River has been identified as an important watershed by many organizations. The Cumulative Effects study is one of several ongoing efforts in the region. You can find more information about what is happening in the Lower Columbia and the Grays on-line at the 2008 Columbia River Estuary Conference website: <http://crec.labworks.org/abstracts.htm>. A presentation on cumulative effects is listed under Session 4, bullet 4.



Naselle/Grays River students at the Gorley Site this winter

Education

For the past 2 years, an education program has been operating out of the Naselle High School each summer. Sponsored by the Wahkiakum Community Foundation and dubbed the Columbia Estuary Environmental Education Program, or CEEEP, the students have participated in a number of activities ranging from knotweed removal, cutting out English ivy in restoration sites and in community places, and participating in habitat assessments. The Grays River has served as their primary 'classroom.' With a steep gorge, wild floodplain at Gorleys, single channel in the main valley, invasive plants, and tides in the lower portion, the Grays River provides many lessons and skill sets to be learned.

This summer, CEEEP students are going to move into a new range of skills, assisting in project management at the Mark Linquist/Gorley Springs Restoration Project. They will be learning how to survey, oversee contractors, install erosion control devices, and making preliminary assessments about what will occur post-construction.

Complementing the summer program, CREST and the Naselle/Grays River School District have obtained a grant for \$23,000 to construct a greenhouse at the school. In the greenhouse, students will raise native plants. The students will work with interested property owners in the Grays River to assess potential planting locations, develop a planting plan, and then to plant the natives on the site.

Funding

- LWD
- Construction costs – actual and projected



| CREST | | | | |
|--|---------|---------|--------------------------|--------------------|
| Grays River Restoration Project #2003-013-00 | | | | |
| CCR 16893 (Contract # 263024) | | | | |
| 5/15/2009 - 5/14/2010 | | | | |
| | Qty 2 | Qty 1 | Unit Cost | COST |
| 1 PERSONNEL | | | | |
| CREST Project Manager | 334 hrs | ⊕ | \$30.00/hr | \$10,020.00 |
| CREST Escalator Director | 20 hrs | ⊕ | \$50.00/hr | \$1,000.00 |
| CREST Biologist | 80 hrs | ⊕ | \$24.00/hr | \$1,920.00 |
| | | | <i>Subtotal Salaries</i> | <i>\$12,940.00</i> |
| CREST Project Manager | | ⊕ | \$0.00 | |
| CREST Escalator Director | | ⊕ | \$0.00 | |
| CREST Biologist | | ⊕ | \$0.00 | |
| CREST Biologist Tech | | ⊕ | \$0.00 | |
| | | | <i>Subtotal Benefits</i> | <i>\$0.00</i> |
| 2 TRAVEL | | | | |
| POV Mileage | 24 mo | ⊕ | 150 miles | \$1,800.00 |
| Misc. | | ⊕ | 0.55/mi | \$13.20 |
| 3 PROFESSIONAL MEETINGS AND TRAINING | | | | |
| \$0.00 | | | | |
| 4 VEHICLES | | | | |
| \$0.00 | | | | |
| 5 SUPPLIES/EQUIPMENT | | | | |
| Exceptional Materials (Newsletters, mailings, etc) | 8000 | mailing | ⊕ | \$130/piece |
| \$1,040.00 | | | | |
| 6 RENT/UTILITIES | | | | |
| \$0.00 | | | | |
| 7 CAPITAL EQUIPMENT | | | | |
| \$100,720.00 | | | | |
| <i>Construction Materials</i> | | | | |
| Cable | 2000 | feet | ⊕ | \$7.20/ft |
| Large Woody Debris w/ Posts | 160 | pieces | ⊕ | \$100/piece |
| \$14,720.00 | | | | |
| \$116,000.00 | | | | |
| 8 SUBCONTRACTS | | | | |
| \$22,500.00 | | | | |
| <i>Engineering Firm Contract</i> | | | | |
| Professional Engineer | 150 | hrs | ⊕ | \$150/hr |
| \$22,500.00 | | | | |
| <i>Contractor (Mark Edwards F & C)</i> | | | | |
| Contract & Engineered Log Jams | | | ⊕ | \$100,000.00 |
| Install 6 Engineered Log Jams | 6 | ELJ | ⊕ | \$168,000.00 |
| \$168,000.00 | | | | |
| BUDGET SUBTOTAL | | | | |
| \$161,560.00 | | | | |
| \$0.00 | | | | |
| TOTAL PROJECT COSTS | | | | |
| \$161,560.00 | | | | |

Implementation



- Pre-work Meeting
- Be on-site!

Lessons Learned

- CREST's takeaway message
 - Frame the project
 - Work closely with everyone
 - Anticipate problems
- Regional takeaway messages
 - Long term funding/monitoring of sites
 - Unfunded monitoring mandates

