Cedar Creek Dam Removal

Project Partners:
- Town of Ione, WA
- WA Dept of Fish & Wildlife
- WA Dept of Ecology
- WA Dept of Natural Resources
- WA Dept of Transportation
- Pend Oreille County
- U.S. Fish and Wildlife Service
- U.S. Forest Service
- Fairchild Airforce Base Survival School
- Curlew Job Corps
- KNRD
- Vaagen Brothers Lumber Co.

Goals & Objectives:
- Restore channel processes
- Improve spawning and rearing conditions for bull trout and other native salmonids
- Restore riparian and floodplain cover and function
- Eliminate risks to public health and safety from potential dam failure
Design Criteria

- Provide grade control with pool-riffle incorporating large woody debris
- Riparian corridor restoration
- Stable channel form up to the 5-year flood recurrence interval
- Floodplain stability provided up to a 10-year flood recurrence

Construction

- Diversion/ Dewatering
- Removal of 20,000 CY of Impounded Sediment
- Dam Removal
- Channel Restoration
Flow Diversion

Dewatering
Dewatering / Sediment Removal

Sediment Removal
Sediment Removal

Firm Ground
Dam Removal

[Image of dam removal process]

Dam Removal

[Image of another phase of dam removal process]
Dam Removal

Restored Channel
Potential Passage Issue?

Log Undermined
Incision

Following High Flow
Longitudinal Profile

Large Wood Complexes
Large Wood Complexes

Potential Access Impacts
Potential Access Impacts

Limited Upstream Impacts
Conclusions

- Based on design criteria, the project was a success.
- If conditions had remained static following spring 2006 flows, project would have failed to meet design criteria.
- Develop design criteria for your projects!