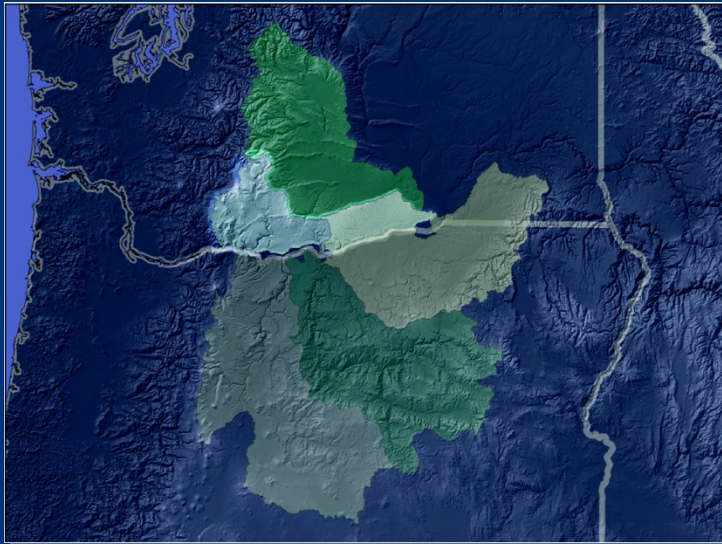


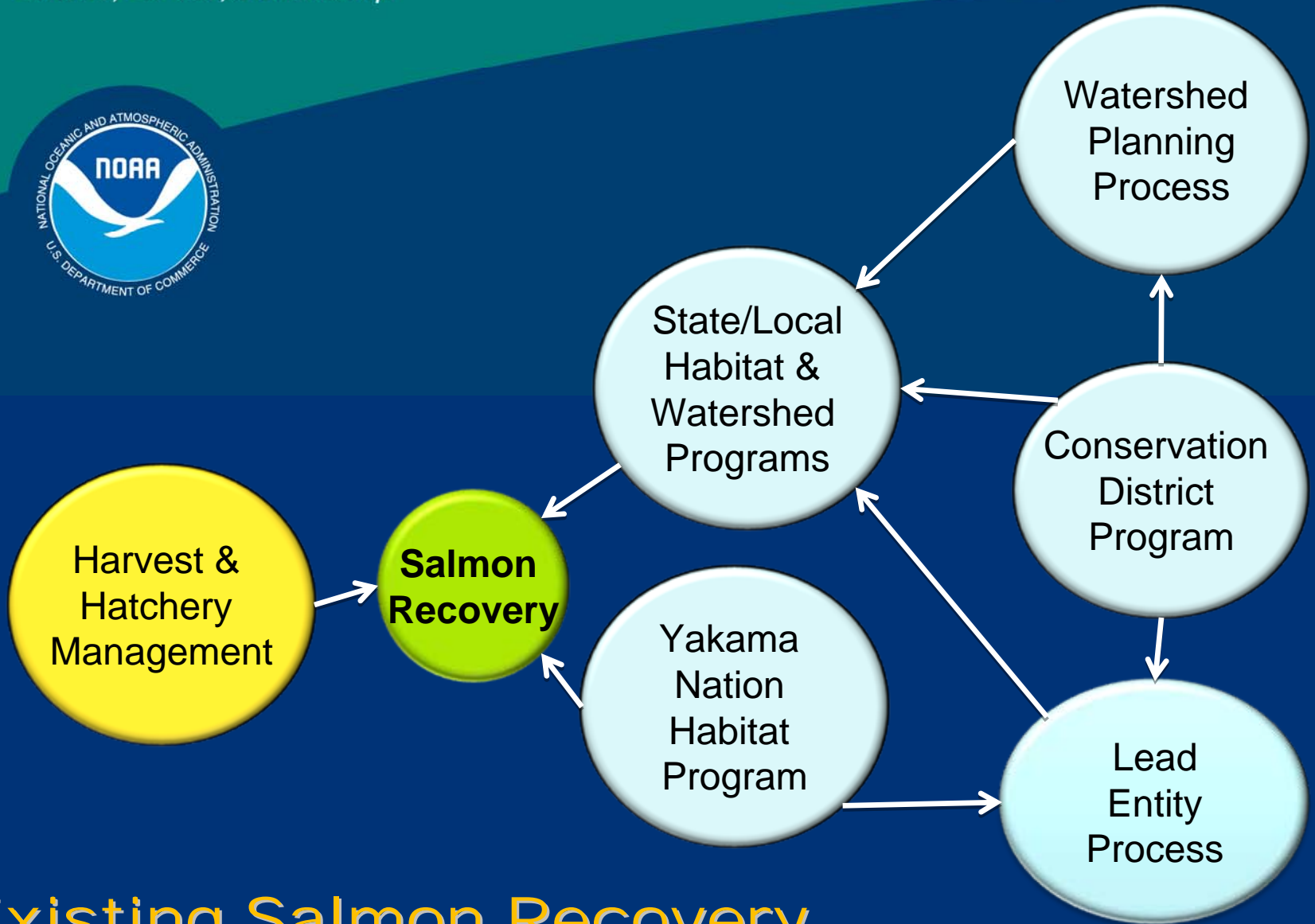


Washington Gorge Recovery Plan Implementation



Nora Berwick

Washington Gorge
Implementation Team Coordinator



Existing Salmon Recovery Implementation Processes



Washington Gorge Implementation Team

Coordinator

National Marine Fisheries Service

Co-Managers

- Yakima Nation
- Washington Dept Fish and Wildlife

Federal/State and Local Entities

- Ecology
- County
- Conservation Districts



Washington Gorge Recovery Plan Implementation

Ongoing Programs

	Klickitat	Rock Creek	White Salmon	Totals
Abundance & Productivity	9	1	2	12
Hatchery Effects	13	0	0	13
Habitat	25	8	6	39
Dam Removal & Species Recolonization			3	3
Total Projects	47	9	11	67



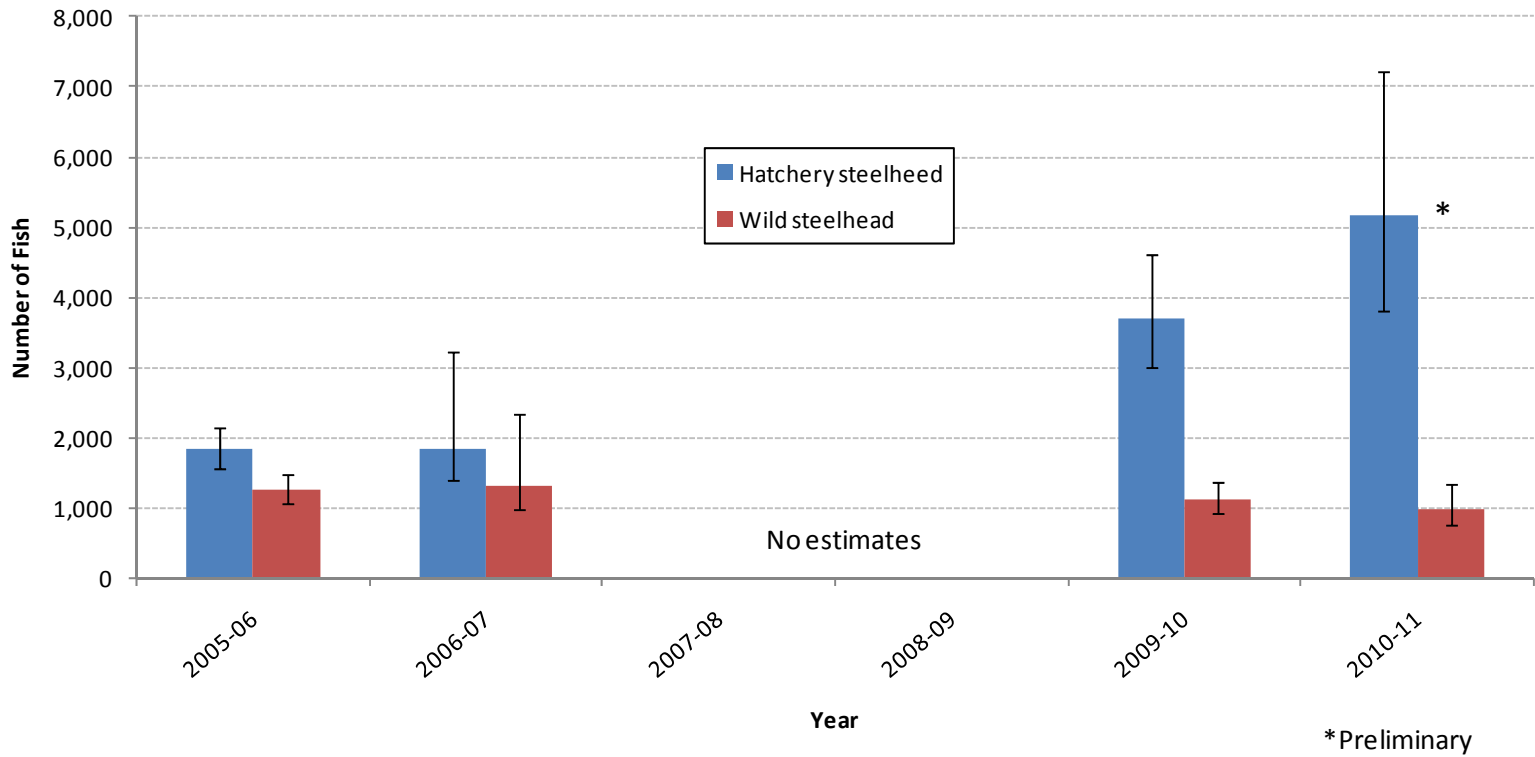
Abundance and Productivity

- **Lyle Falls**
- **Castile Falls**
- **Klickitat Smolt Traps**
- **Rock Creek Population Surveys**



Abundance and Productivity - Lyle Falls

Klickitat summer steelhead run size Mark-recapture estimates at Lyle Falls





White Creek Steelhead Monitoring

- **Instream PIT tag detector in lower White Creek**
- **Migration patterns and survival**
- **Pre- and post-habitat restoration monitoring**
 - Fish abundance, condition
 - Benthic invertebrates
 - Riparian vegetation





Hatchery Effects

- **Assessment of Effects**
 - Spatial and Temporal Distribution
 - Genetic Analysis
- **Hatchery Improvements**
 - YKFP & HSRG Measures
 - Wahkiacus Hatchery Construction
 - McCreedy Creek Acclimation



Habitat Assessment

- **Klickitat mainstem habitat assessment (YN)**
 - Middle Klickitat above Little Klickitat
 - Lower Klickitat and Swale Creek
 - Upper Klickitat above Castile Falls
- **Rock Creek habitat and fish distribution study (YN)**
- **White Salmon tributary habitat assessments (YN, USGS, Underwood Conservation District)**



Habitat Assessment

- **Little Klickitat habitat assessment (Klickitat County and CKCD)**
- **Rock Creek and Eastern Tributaries habitat assessment and follow up shade and sediment transport assessments (Klickitat County and CKCD)**
- **White Salmon assessment and restoration planning (PacifiCorp)**



Habitat Monitoring

- **Temperature Monitoring**
 - Conservation Districts, YN, Ecology
- **Stream flow monitoring**
 - Ecology, YN, USGS, Conservation Districts
- **SNOTEL sites (Klickitat County, CKCD, NRCS)**
- **Watershed health monitoring (Ecology)**
- **Multi-parameter water quality monitoring (Ecology)**



Water Quality Improvement Programs

- **Little Klickitat Temperature TMDL**
- **Rock Creek Straight to Implementation**
- **Swale Creek Straight to Implementation**



Habitat Restoration Project Areas

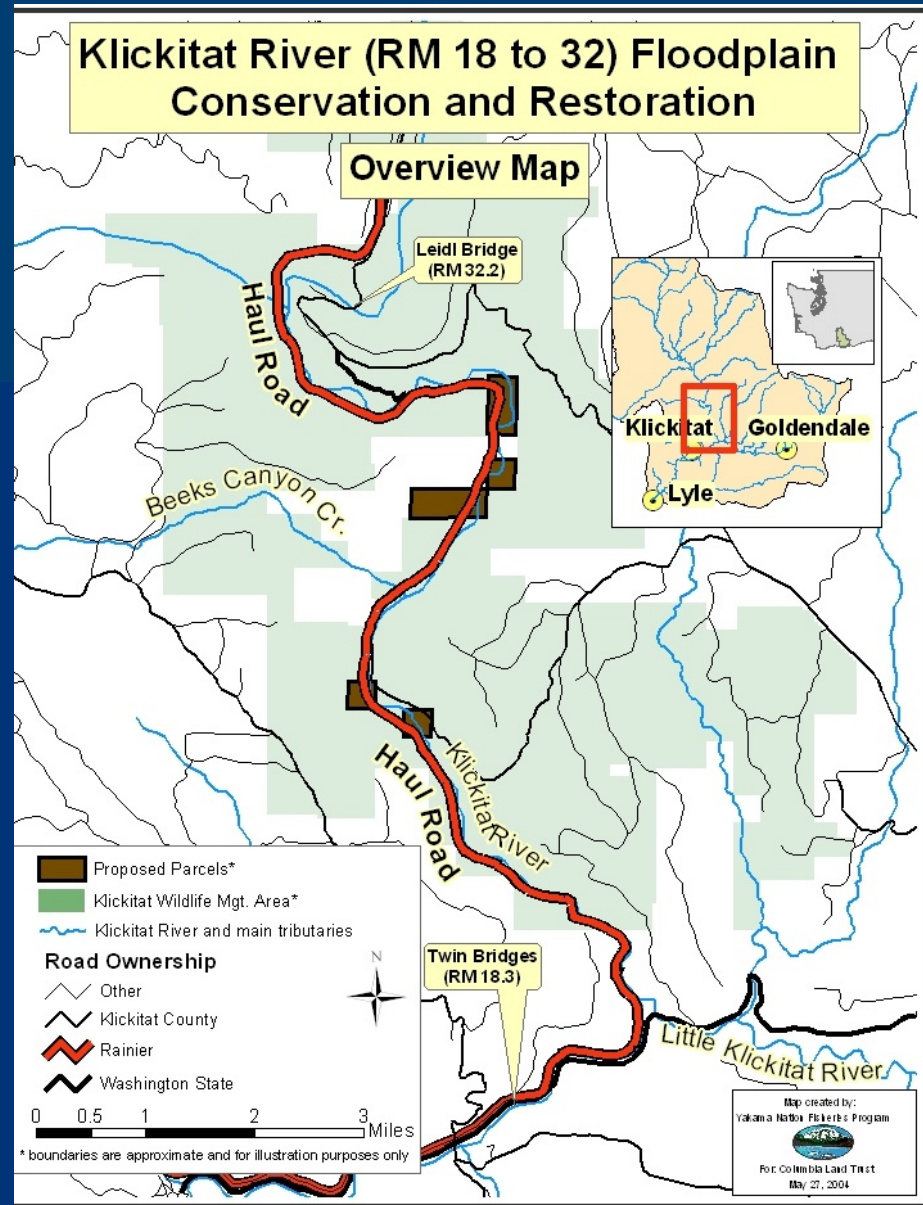
- **Klickitat**
- **Rock Creek**
- **White Salmon**

Haul Road



Upstream End:
Vicinity of “Truck Shop” near Leidl Br.

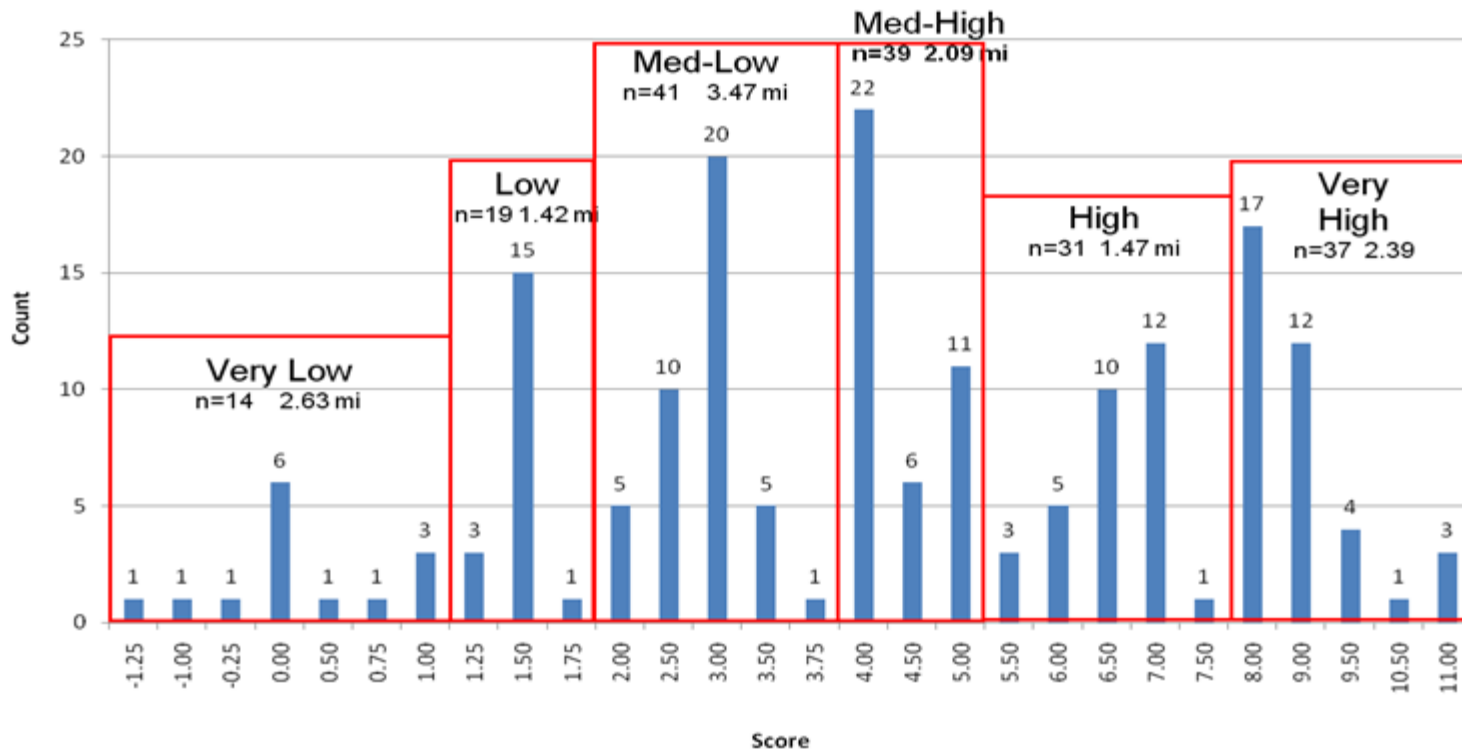
Downstream End:
“Twin Bridges” of SR 142





Haul Road Prioritization

Haul Road Segments - Ecological Priority Groups



Haul Road Examples





White Salmon

- **Not critical for Mid-C DPS viability, but would bolster MPG viability**
- **Condit Dam decommissioning in 2011**
- **Monitoring re-colonization after removal**





Funding

- **Total Cost - \$116,218,400**
- **Funding Secured – \$44,162,160**
- **Additional Funding Needed**
 - ICTRT Risk Assessment Factors
 - \$2,446,000
 - Full Implementation
 - \$72,056,240

Science, Service, Stewardship

