

An aerial photograph of a rural landscape. In the foreground, there's a small farmstead with several buildings and a dirt road. Beyond it, a large, green, irregularly shaped field dominates the center. A winding river or stream flows along the right side of this field. The background shows more fields, some with bare trees, and a distant town or village under a hazy sky. The image is framed by a green bar at the top and a blue bar at the bottom.

# Chehalis Basin Strategy ASRP Early Action Reach Update

February 6, 2020  
Chehalis Basin Board Meeting

# Early Action Reach (EAR) Projects

- 5 reach-scale pilot projects
  - Skookumchuck River
  - Newaukum River
  - Stillman Creek (South Fork Chehalis River)
  - Wynoochee River
  - Satsop River
- **Opportunities to learn from early implementation to:**
  - Adapt strategies based on feasibility
  - Inform future ASRP restoration in the basin



Wynoochee aerial drone footage, WDFW

# EAR Example Project Objectives

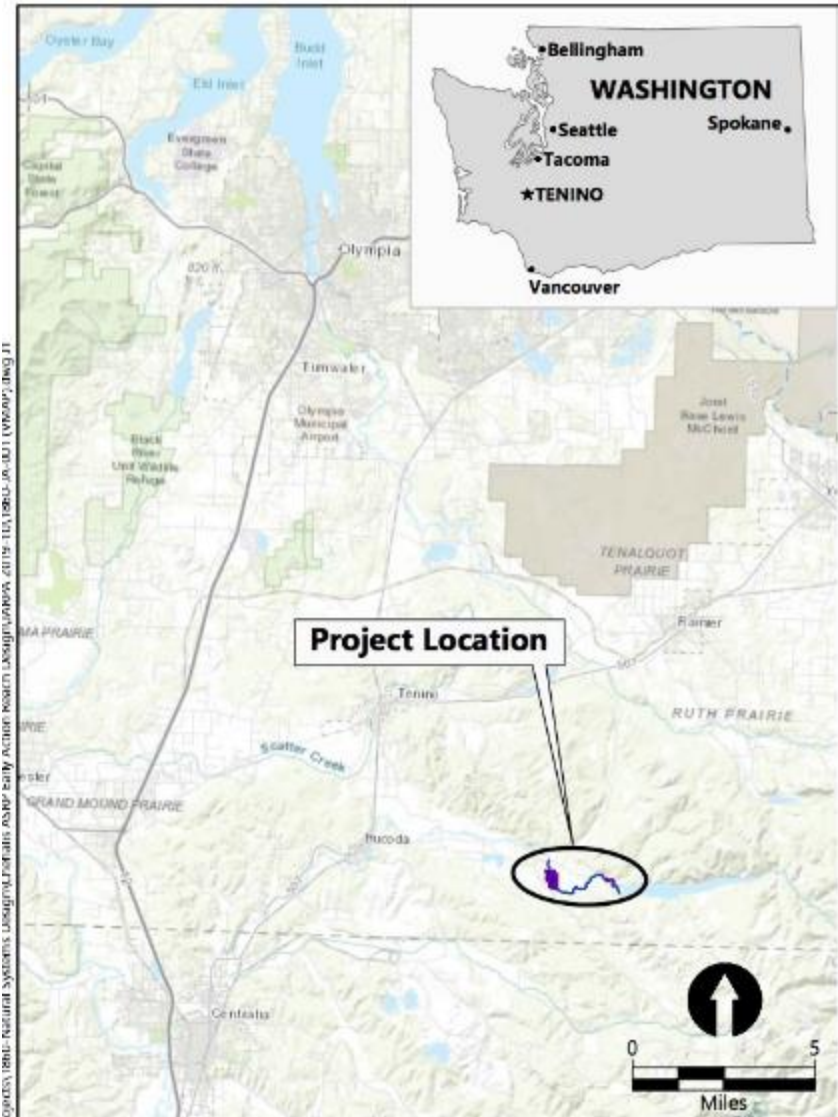
- Protect existing high-quality habitats
- Remove impediment to and promote natural processes
- Restore in-channel structure and key habitats for aquatic species, such as deep pools and side channels
- Restore riparian habitats and processes
- Promote resilience to climate change from riparian restoration and floodplain connectivity

# EAR – Anticipated Timelines

Early Action Reach Projects Construction Schedule Overview												
2020												
J	F	M	A	M	J	July	August	S	O	N	D	
						Skookumchuck						
2021												
J	F	M	A	M	J	July	August	S	O	N	D	
						Newaukum (Season 1)						
						Wynoochee (Season 1)						
2022												
J	F	M	A	M	J	July	August	S	O	N	D	
						Satsop (Season 1)						
						Stillman (Season 1)						
						Wynoochee (Season 2)						
						Newaukum (Season 2)						
2023												
J	F	M	A	M	J	July	August	S	O	N	D	
						Satsop (Season 2)						
						Stillman (Season 2)						
Notes: Satsop and Wynoochee are interchangeable. Schedule subject to change based on contractor and material availability.												



# EAR – Skookumchuck River Restoration



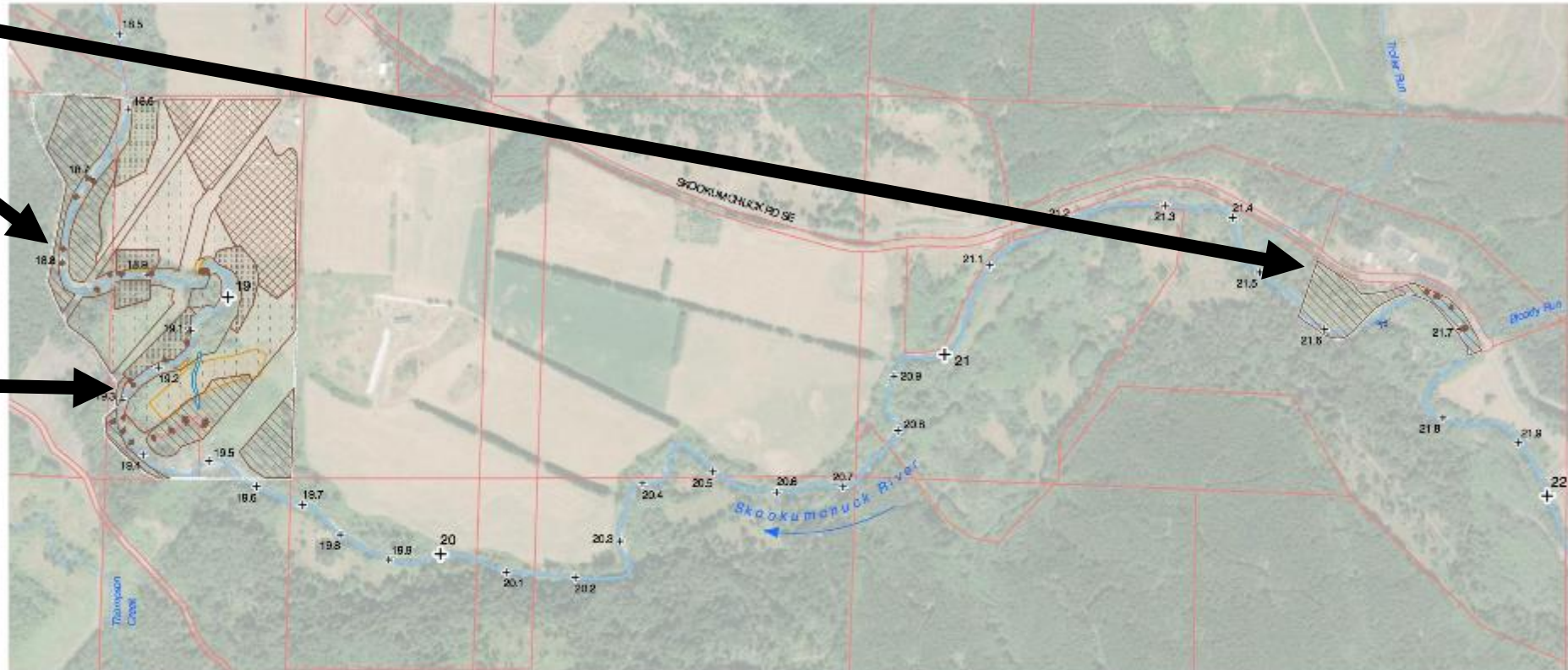
Engineered large wood structure



# EAR – Skookumchuck River Restoration

Extensive  
riparian  
plantings

Wood and  
side channel

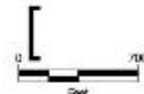


**LEGEND:**

- |                         |                            |
|-------------------------|----------------------------|
| <b>E</b> River Mile     | Proposed Revegetation Area |
| Skookumchuck River      | Riparian Forest            |
| Parcel Boundary         | Grass Underplantings       |
| Proposed LWD/BLI        | Oak Woodland               |
| Proposed Side Channel   | CHP Area                   |
| Proposed Regrading Area |                            |
| Proposed Berthing Area  |                            |

**NOTE:**

1. 2017 Aerial provided by Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.  
2. Model results provided by Natural Systems Design from their River Flow 2D model.





# EAR – Skookumchuck River Restoration





# EAR – Skookumchuck River Restoration





# EAR – Skookumchuck River Restoration

Design Element	Existing	Proposed
Engineered log jams	12 natural jams (primarily small wood)	24 additional ELJs (~200 key pieces)
Pools	39 (mostly shallow)	Additional 24
Pilot channel	N/A	600 linear feet
Enhance flow into side channels	N/A	~1,200 linear feet
Riparian forest plantings	N/A	~56 acres
Conifer underplantings	N/A	~24 acres
Oak woodland	N/A	~15 acres
<b>TOTAL PROJECT AREA</b>		<b>~95 acres</b>

# EAR – Skookumchuck Schedule

- January/early February 2020 – Complete final design documents
- March/April 2020 – Advertise for bids
- March 2020 – Receive permit approval from U.S. Army Corps
- May 2020 – Award bid and notice to proceed for selected contractor
- July/August – Construction
  - Invasive species management – Spring and Fall 2020, Spring 2021
  - Native plantings – Fall 2020 and 2021

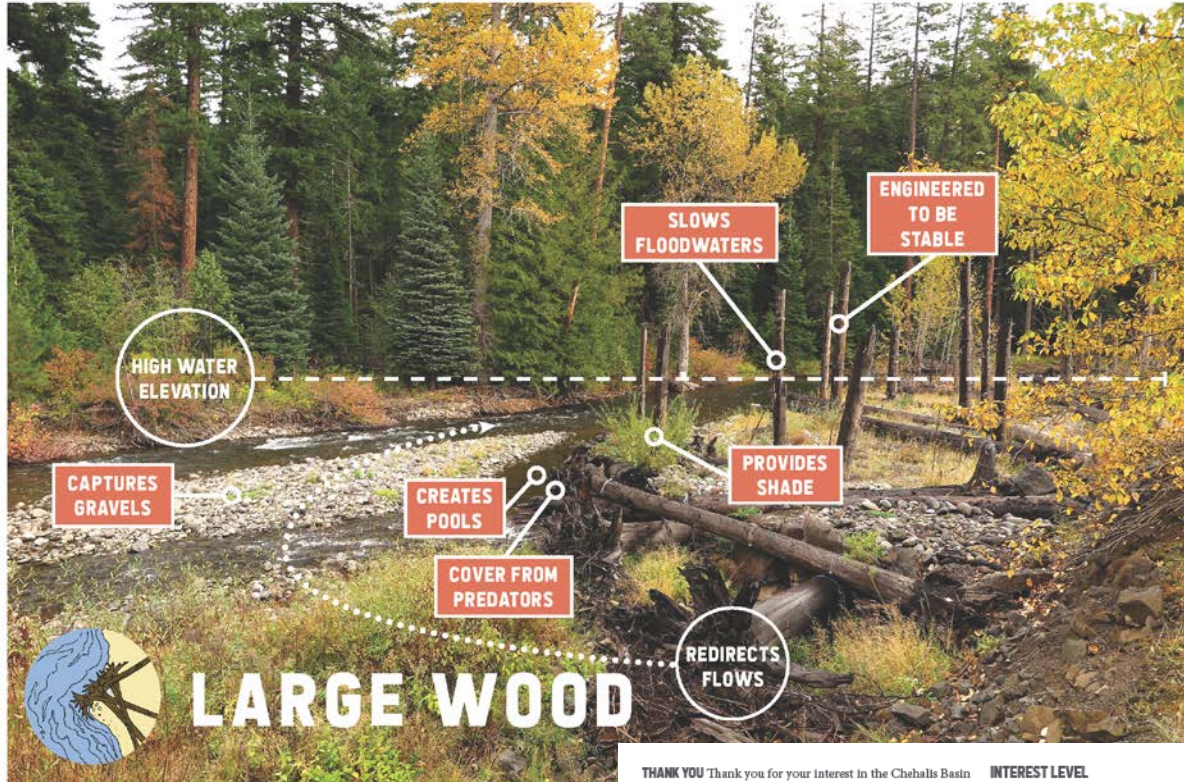
Note: This schedule is dependent on permit approvals and contractor and material availability.



# EAR – Building the Toolbox (a glimpse)

- Developing relationships with landowners including commercial forestry owners
- Understanding information landowners need for decision making
- Identifying opportunities for streamlining processes
- Gauging contractor and material availability
- Assessing the phasing of projects to help reduce uncertainty in the design process and reduce project costs

# Example Resources for Landowners



**THANK YOU** Thank you for your interest in the Chehalis Basin ASRP Pilot Project. Our goal is to work with landowners to meet their needs while helping to improve salmon habitat in the Chehalis.

To help us better understand your level of interest in participating in a pilot project, please print your name on the front and complete the interest level table to the right.

Below is additional space if you'd like to add any specific comments. If you indicate 'interested' or 'potentially interested,' we will be in touch soon to potentially develop specific habitat restoration plans on your property.

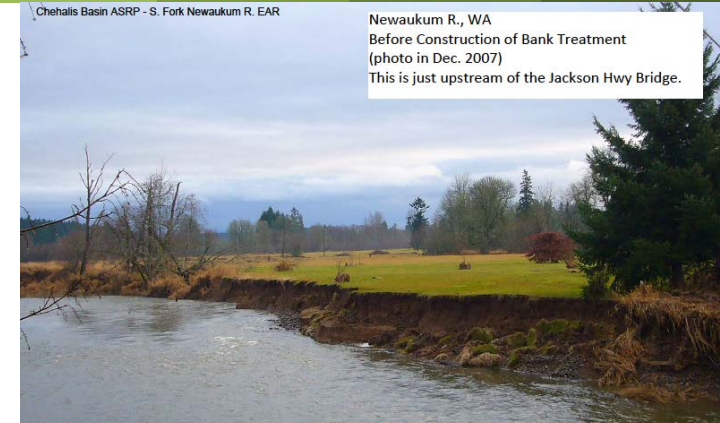
ADDITIONAL COMMENTS

INTEREST LEVEL

	Interested	Potentially interested	Not interested
LARGE WOOD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
REVEGETATION	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BANK TREATMENT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FLOODPLAIN RECONNECTION	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SPY CHANNEL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SIDE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Chehalis Basin ASRP - S. Fork Newaukum R. EAR

Newaukum R., WA  
Before Construction of Bank Treatment  
(photo in Dec. 2007)  
This is just upstream of the Jackson Hwy Bridge.



Chehalis Basin ASRP - S. Fork Newaukum R. EAR





# EAR – What we're learning so far

- Discussions with landowners take time
- Not all landowners are interested in acquisition but many support restoration
- Bring CDs and land trusts together in advance of landowner outreach to evaluate restoration and conservation opportunities
- Gauge landowner willingness before initiating design/engineering
- Early engagement with permit agencies and tribes is essential
- Build project teams based on expertise and project needs

**This work will continue to inform future restoration and protection actions in the basin.**

# Questions



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