# Project: Lower Satsop RM 0 to 2.0 Phase II Restoration: Construction Synopsis:

- **Sponsor:** GHCD
- **Location:** Grays Harbor County, Olympic Mountains Ecological Unit, Lower Satsop Mainstem GSU (a near term priority area)
- Landowner: Multiple Private landowners
- ASRP Priority Limitations for this location: Key habitat, Temperature, and Habitat Diversity
- **ASRP Priority Actions for this location:** Place Large Wood, Riparian Restoration, reconnect/restore floodplain
- Cost: \$3,000,000 ASRP + \$6,276,084 NCRF; \$9,276,084 total
- Narrative:
  - Reach Scale restoration of 2.0 miles along the Satsop River including engineered log jams (ELJs), riparian restoration, and invasives management.
  - Engineered log jam complexes will provide key habitat features for salmon, increase habitat diversity, increase side channel flow, increase channel stability along rapidly eroding banks, and capture sediment. These complexes will also protect riparian forests and allow them to reach maturity.
  - Riparian plantings and invasive management will increase cover to reduce temperature, increase channel stability, increase habitat diversity, and increase long term habitat diversity by providing large wood material inputs.
  - Intended long term outcome for the project is increased floodplain connectivity, reduced channel migration to allow for riparian forests to mature, a substantial increase in stable large wood throughout the reach, and multiple channels.

## Outcomes (Funded by this project):

- 2.0 miles of large river restoration
- 46 ELJs
- 374 acres of riparian enhancement
- 248 acres of riparian plantings
- Grading high vertical banks to a 3::1 slope

## Previous and Related Funding:

- Phase II Concept through Final design
  - Funded by ASRP in 2020 for \$320,000 + \$30,000 match
  - Chehalis Basin Flood Authority: \$96,902
    - Specifically funded components of project related to phase II of the right bank conservation project
  - Final Design is currently completed
- Lower Satsop Right Bank Conservation Project: \$1,665,482 (construction) \$340,369 (design)
  - Funded by CBS Flood

- Initiated as an emergency bank protection project; included launchable log-jacks
- Constructed in 2021 and 2022
- Lower Satsop Floodplain Restoration Project: \$1,621,325 (phase 1), \$1,679,000 (phase 2)
  - Project on WDFW property which removed revetments, shallowed ponds, and increased floodplain connectivity.
  - Phase 2 completed in 2023
- Lower Satsop Phase 1: \$865,178 (WCRRI)
  - Sponsored by WDFW and GHCD
  - Initial floodplain connectivity + bank erosion work, completed by 2022
- Lower Satsop Priority Planning: \$312,019 (CBS Flood)
  - Funded in 2018-2021
  - Produced Lower Satsop Investment Plan and design for Phase I

#### Milestones + Timeframe:

- Final design and permitting: 2023/ early 2024
- Phase 1 construction: summer 2024
- Phase 2 construction: summer 2025
- Riparian revegetation, enhancement, and monitoring: winter 2024- 2026

### Feedback:

- No engineering "red flags" were found in the design.
- WDFW biologist commented that project is anticipated to have positive outcomes in terms of habitat uplift.
- Future projects of this scale would benefit from receiving additional funding for establishing baseline habitat data through surveys and monitoring project impacts. The project report could have better connected habitat uplift goals regarding specific wildlife needs to project intervention actions.





