



Lower Satsop Restoration & Protection Program Update/Discussion – Phase I, Phase II

Protect, Preserve, Restore

- * Farmland
- * Essential Infrastructure
- * River/Floodplain Functions & Habitat

September 21, 2020



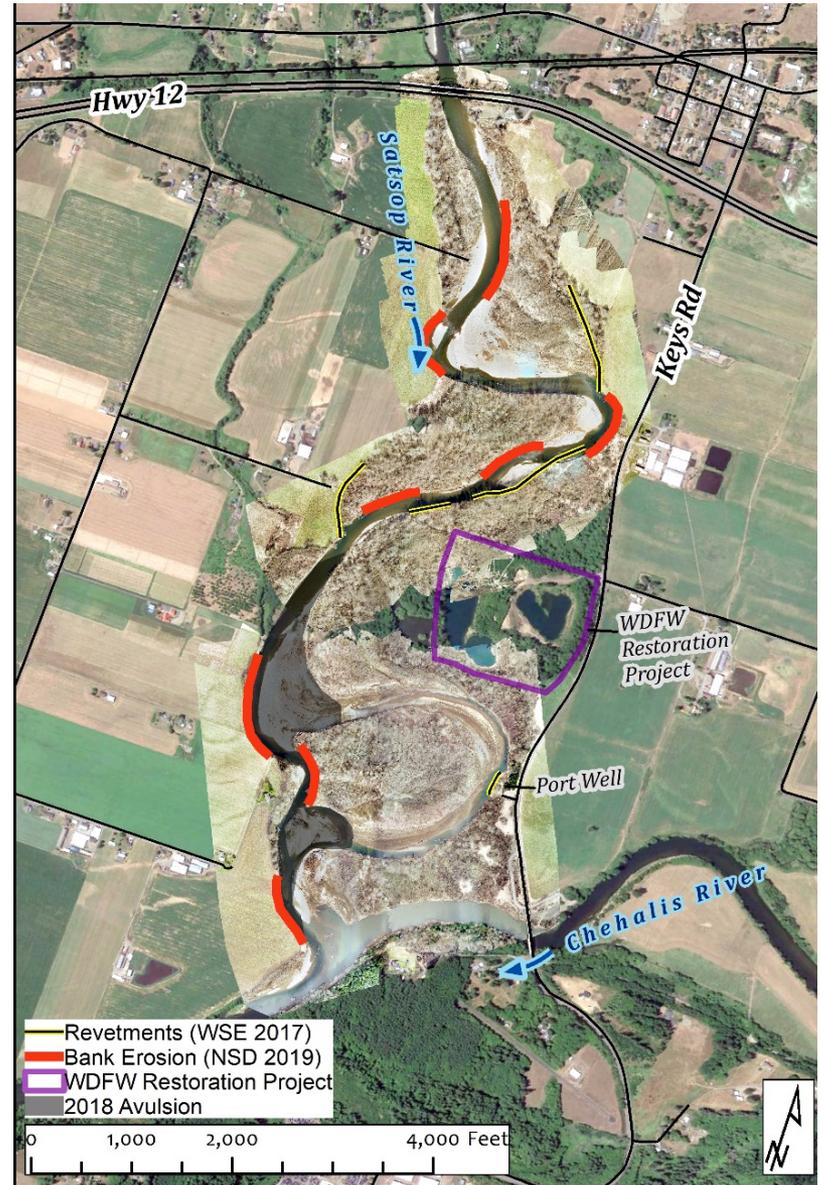
Grays Harbor
Conservation
District

your window to healthy lands



Background

- Bank Erosion
- Revetments
- Keys Road
- Port Well
- WDFW Restoration Project
- 2018 Avulsion
- Habitat Loss
- Loss of Floodplain Access
- Community Frustration
- Lack of Momentum



Background

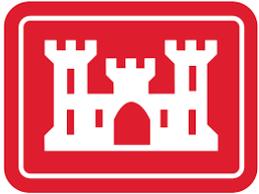


1953



2019

Background (Advisory Group)



Background

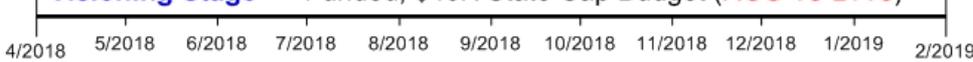
Lower Satsop Restoration & Protection Program



“Organizing Stage”



“Visioning Stage” -- Funded, \$40K State Cap Budget (RCO 18-2118)

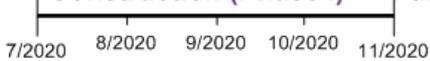


(Phase I)
Keys Road Corridor
Flood Protection
Project

“Planning/Design/Engineering/Permitting/Bid (Phase I)” -- Funded, \$175K State Cap Budget (RCO 18-2118)



“Construction (Phase I)” -- Funded, \$1,725,024 State Cap Budget (RCO 20-****)

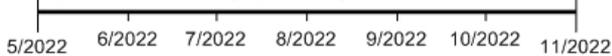


(Phase II)
Habitat
Connectivity
& Reach-Scale
Aquatic, Riparian
and Floodplain
Restoration
Project

“Planning/Design/Engineering/Permitting/Bid (Phase II)” -- Funded, \$320K State ASRP \$ (RCO 20-****)



“Construction (Phase II)” -- Funding Pending, \$1,561,405 State Flood Authority \$ (RCO 22-****)



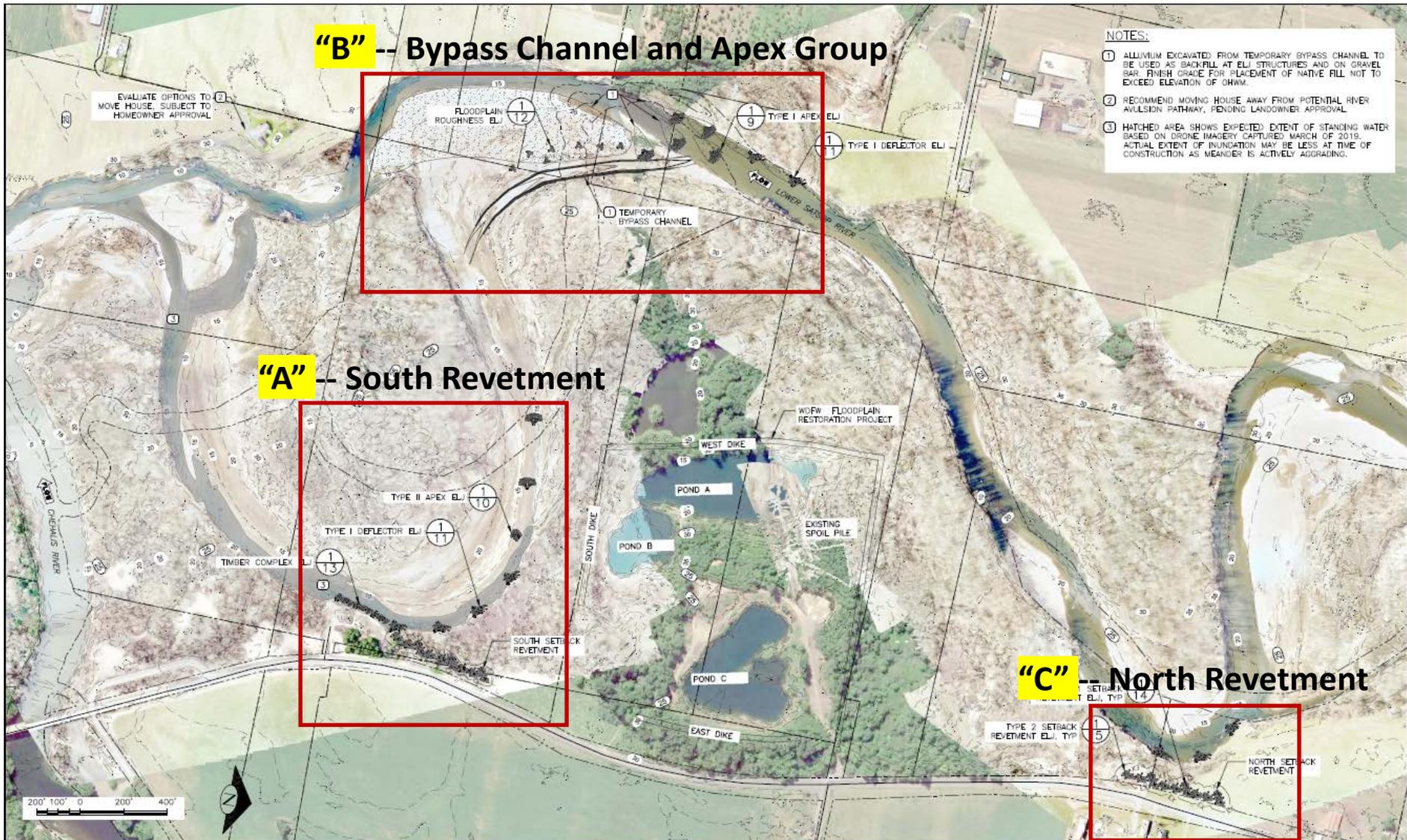
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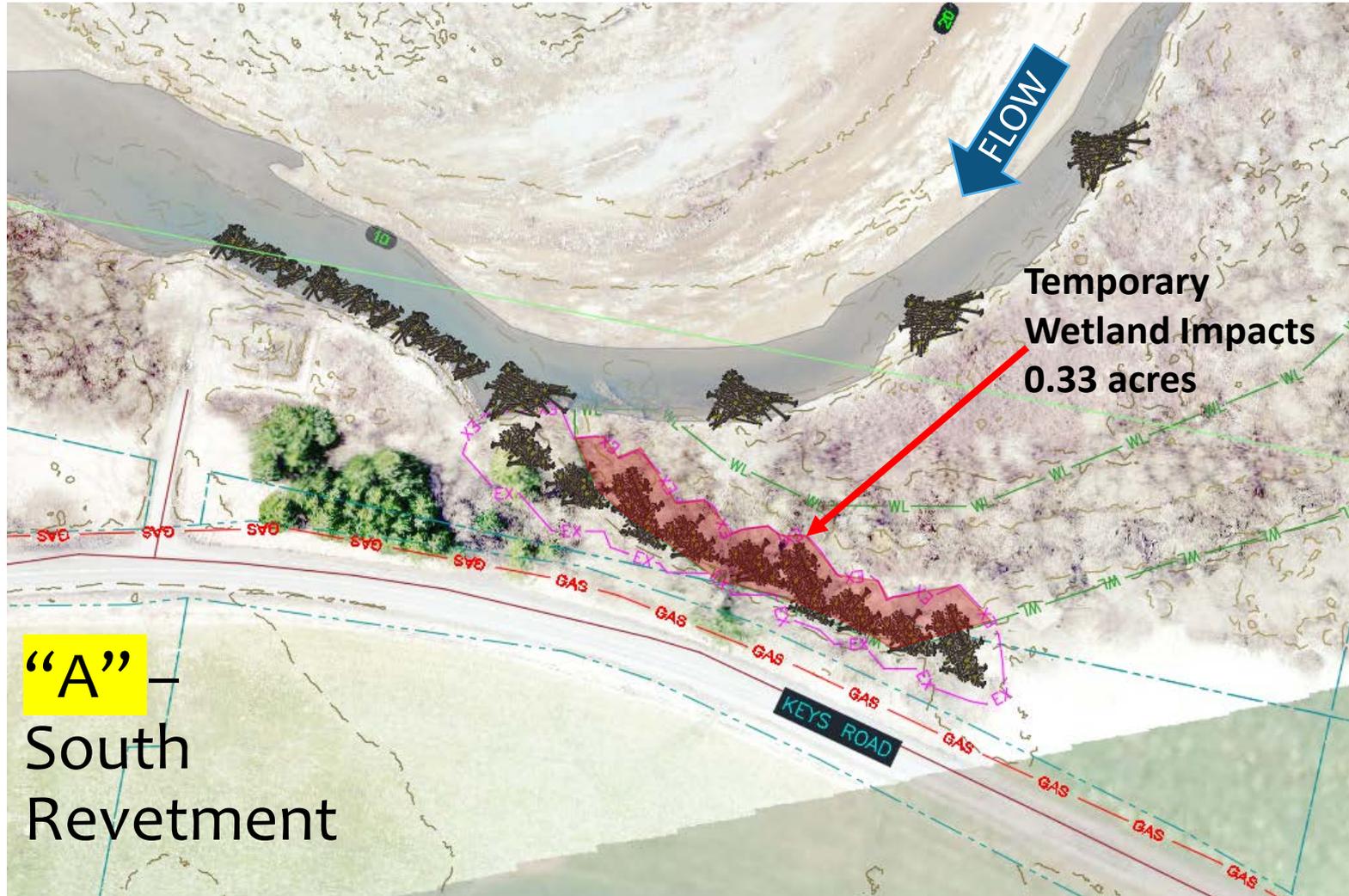
2019

✓ Many Community Meetings ✓ Many Individual Meetings/Presentations/Tours ✓ Many Multi-Agency Advisory Group Meetings

Phase I (2020), Keys Road Corridor Flood Protection



Phase I (2020), Keys Road Corridor Flood Protection



Phase I (2020), Keys Road Corridor Flood Protection

“A” --
South
Revetment



Timber Complex at the Port of Grays Harbor well

Phase I (2020), Keys Road Corridor Flood Protection

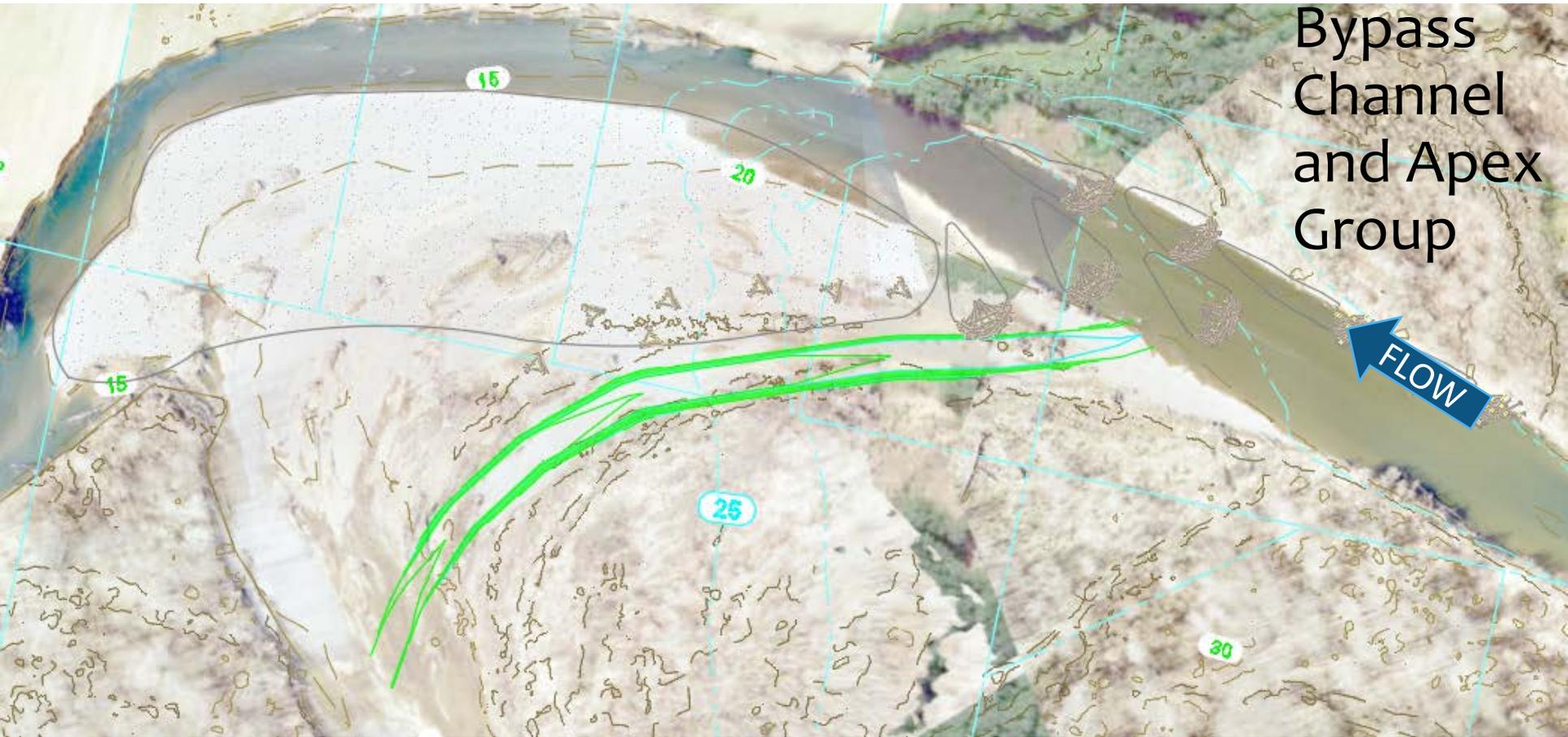
Aerial view of deflectors in side-channel

“A” --
South
Revetment



Phase I (2020), Keys Road Corridor Flood Protection

“B” --
Bypass
Channel and Apex
Group



Phase I (2020), Keys Road Corridor Flood Protection

Aerial view of apex jams

“B” --
Bypass
Channel and Apex
Group



Phase I (2020), Keys Road Corridor Flood Protection

Floodplain roughness structures, bypass channel, apex jams, and deflectors.



“B”--
Bypass
Channel
and Apex
Group

Phase I (2020), Keys Road Corridor Flood Protection



Phase I (2020), Keys Road Corridor Flood Protection

Deflector structures looking downstream

Deflector structures looking upstream



“C” -- North
Revetment

Phase I (2020), Keys Road Corridor Flood Protection

North setback revetment pit and pile driving crane

“C” -- North
Revetment



Phase I (2020), Keys Road Corridor Flood Protection

Lessons Learned

- | | |
|------------------|--|
| 1. Construction | <ul style="list-style-type: none">a. Brumfield -- No mechanical breakdowns affecting August fish windowb. Brumfield -- Not shy to seek clarification/resources to do best jobc. WDFW -- Exceptionally helpful as on-the-ground regulatord. Public interest -- Very high |
| 2. Permitting | <ul style="list-style-type: none">a. 16 weeks! JARPA submittal 3/27/20; Pre-construction mtg 7/14/20b. Multi-Agency Advisory Group -- “Having so many interested and involved agencies, jurisdictions, departments was excellent in that it allowed for lots of ideas and didn’t leave anyone surprised as ideas and plans came about.” |
| 3. Coordination | <ul style="list-style-type: none">a. Right of Way/Property Access -- Complete sooner |
| 4. Leadership | <ul style="list-style-type: none">a. GHC -- Assumes “coordinator/convener/momentum generator” role on 9/20/2017 (here) |
| 5. Communication | <ul style="list-style-type: none">a. Frequent and Substantiveb. In-person, Email, Website, Zoom, Webcams, Dronec. News articles? |

Phase II (2021/22), Habitat Connectivity & Reach-Scale Aquatic, Riparian, and Floodplain Restoration

- Build on investment in East Fork Satsop (Early-Action ASRP) by improving connectivity between critical habitats.

- Achieve reach-scale effect on sediment and flow dynamics.
 - ▶ 35 in-channel structures
 - ▶ 130 acres of riparian planting

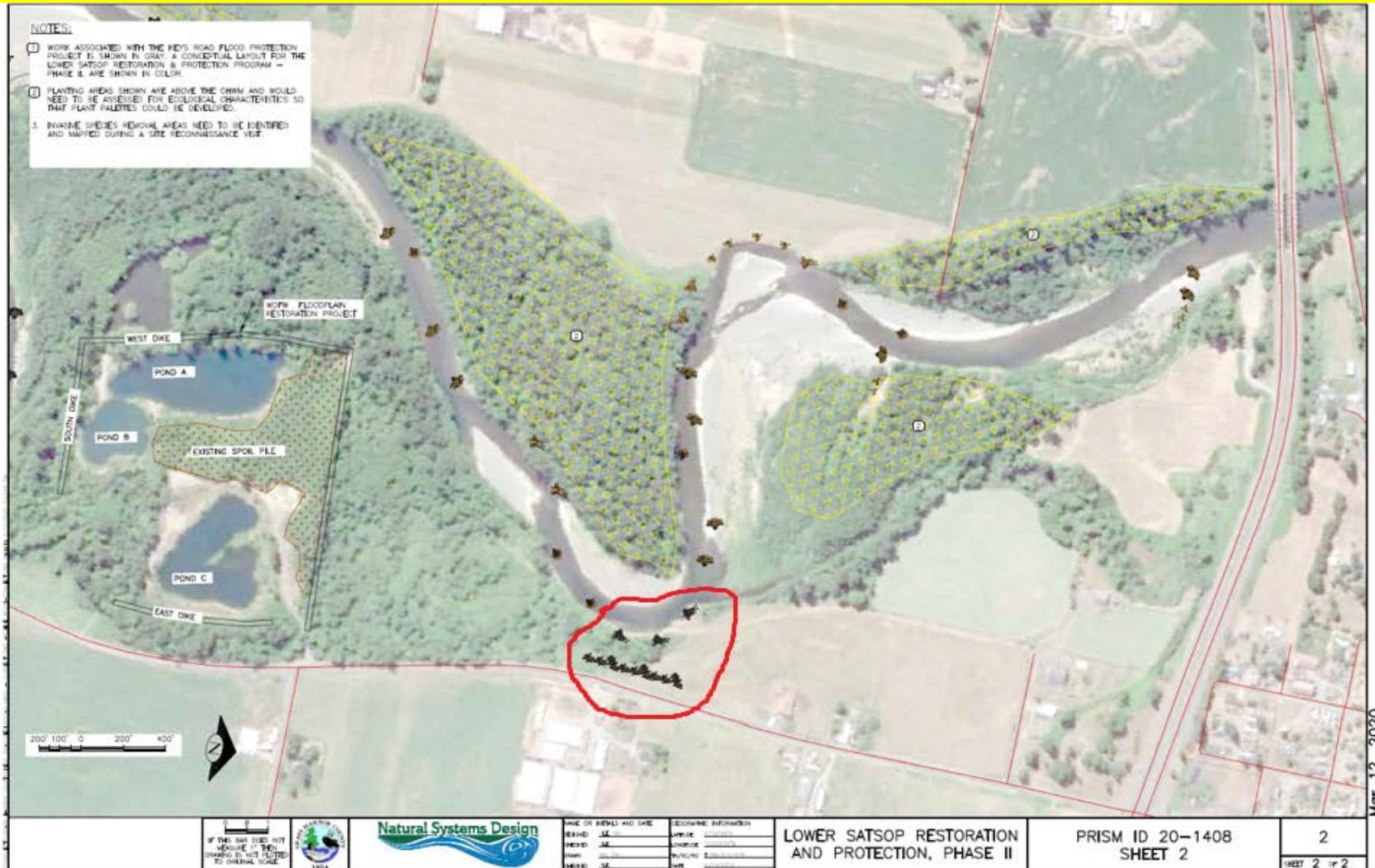
- Reduce invasive species (~10 acres invasive plant control).

Phase II (2021/22), Habitat Connectivity & Reach-Scale Aquatic, Riparian, and Floodplain Restoration



Red Outline = Phase I (2020)

Phase II (2021/22), Habitat Connectivity & Reach-Scale Aquatic, Riparian, and Floodplain Restoration



Red Outline = Phase I (2020)

Phase II (2021/22), Habitat Connectivity & Reach-Scale Aquatic, Riparian, and Floodplain Restoration

■ Design, Engineering, Permitting

- ▶ Funded -- \$320K
- ▶ Schedule -- 10/2020 to 5/2022

Next Steps

■ Construction

- ▶ Funding pending -- \$1.56M
- ▶ Schedule – 5/2022 to 11/2022

■ Key Considerations

- ▶ In-water work window August 1 -31
- ▶ Right of way, property access
- ▶ Geomorphic changes (adaptive management)** -- 10/2020 to 5/2022

**Note: Considering relocating webcam and conducting routine drone flights to monitor and document river changes driven by Phase I.

■ Coming Up

- ▶ Community meeting – 9/23/2020, 4:30 p.m. to 6:30 p.m., Willis' property
- ▶ Agency Advisory Group Meeting – 9/25/2020 to kick-off Phase II design, engineering, permitting

Questions/More Information

ezview.wa.gov/site/alias__1492/37609/Default.aspx

Project: Chehalis River Basin Flood Authority
UPR#: 1492

Search Documents Messages Project Members

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Key Links

Lower Satsop Restoration & Protection Program

(Keys Road Flooding, 1-07-2020, Part of Grays Harbor Photo)

-- PHASE I --

JARPA Approvals → Click [here](#).

Construction Bid Package (advertised 6-04-2020) → Click [here](#)

JARPA (submittal 3-27-2020, supplement1 4-23-2020, supplement2 5-26-2020) → Click [here](#).

Lower Satsop Advisory Group Meeting (3-31-2020) → Click [here](#).

Lower Satsop Community Meeting (4-06-2020) → Click [here](#).

2020 Legislative Funding Request → FUNDED! See [here](#) (pg. 77).

- Rep. Brian Blake & Rep. Jim Walsh (11-12-2019) → Click [here](#).
- Sen. Dean Takko & Sen. Van De Wege (12-26-2019) → Click [here](#).
- Letter of Support:
 - Washington State Dairy Federation (2-04-2020) → Click [here](#).
 - Grays Harbor Voluntary Stewardship Program (2-14-2020) → Click [here](#).
 - Grays Harbor/Pacific County Farm Bureau (2-20-2020) → Click [here](#).

Overview/FAQ (12-16-2019) → Click [here](#).

Map → Click [here](#) (12-13-2019, All Phases), [here](#) (12-27-2019, Phase I)

Presentation (12-16-2019) → Click [here](#).

-- PHASE II --

2020-21 ASRP Funding Request:

- Request For Proposals (issued 11-15-2019) → Click [here](#).
- Funding Proposal (submitted 2-05-2020) → Click [here](#).
- Funding Award for Phase II Design (received 5-15-2020) → Click [here](#).

Organization	Contact Information
Grays Harbor County	Rob Wilson 360/249-4222 RWilson@co.grays-harbor.wa.us
Natural Systems Design	Miranda Smith 206/480-1127 miranda@naturaldes.com
Chehalis River Basin Flood Authority	Scott Boettcher 360/480-6600 scottb@sbgh-partners.com

https://www.ezview.wa.gov/site/alias__1492/37609/lower_satsop_restoration_and_protection_program.aspx

