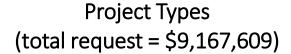
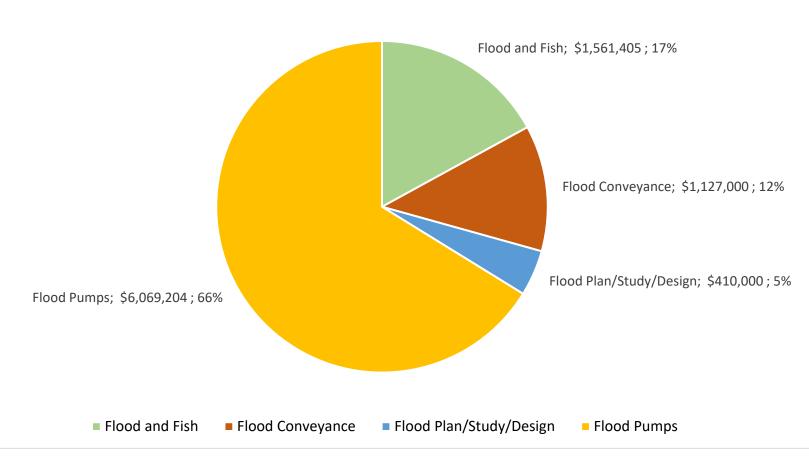


November 5, 2020 (Updated 12-02-2020)

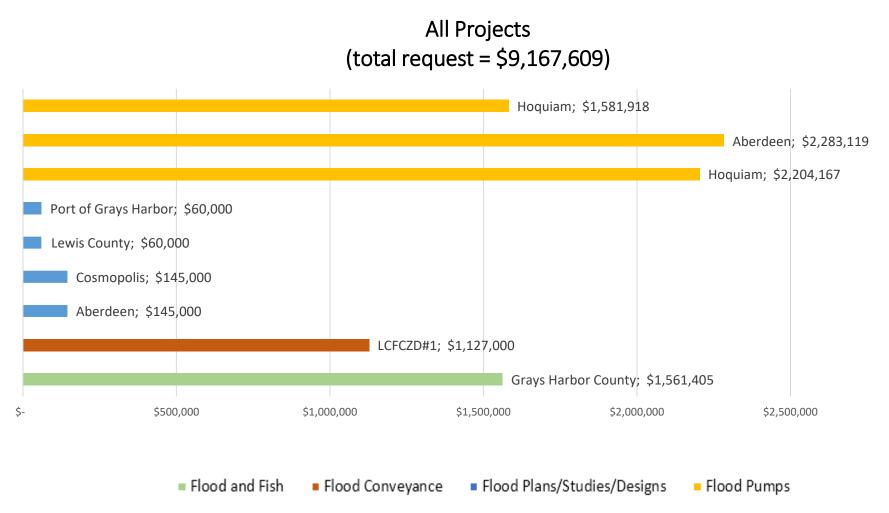
Scott Boettcher, Staff
Chehalis River Basin Flood Authority

### Projects Submitted

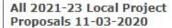




### Projects Submitted



# Projects Submitted



Flood

Plans/Studies/Designs

Flood Pumps

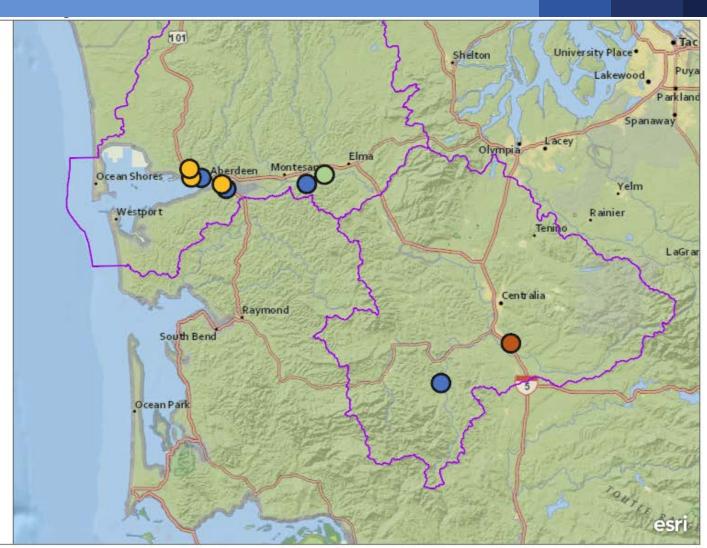
Flood Conveyance

Flood and Fish

View interactive map

https://arcg.is/0rDTjr





### Pump Projects

Total request = \$6,069,204





<b>Hoquiam 10th Street Pump Station</b>
\$2,204,167

Aberdeen -- Farragut Street Pump Station \$2,283,119

Hoquiam -- Queen Ave Pump Station \$1,581,918

Project: Replaces 1960s era pump station.

Benefit:

- ✓ Significant pump station for SE Hoquiam (\$38,101,152 assessed value).
- ✓ Implements 2000 City Surface Water Plan and 2016 Timberworks Plan.
- ✓ Immediate benefit without NSL West Seg.
- ✓ At end of useful, maintenance-efficient life.

Doable: Yes (design, permit, construct).

Initial Ranking: 4



Project: Replaces 1980 pump station.

#### Benefit:

- ✓ Significant pump station that protects 400 South Aberdeen properties (\$37M).
- ✓ Coordinated with Cosmopolis 2021-23 Mill Creek Multi-Objective Plan to optimize discharge to lower Mill Creek basin.
- ✓ At end of useful, maintenance-efficient life.

<u>Doable</u>: Yes (design, permit, construct).

**Initial Ranking: 5** 



Project: Replaces 1962 pump station.

#### Benefit:

- ✓ Significant pump station for SE Hoquiam (\$27,435,496 assessed value).
- ✓ Implements 2000 City Surface Water Plan and 2016 Timberworks Plan.
- ✓ Immediate benefit without NSL West Seg.
- ✓ At end of useful, maintenance-efficient life.

Doable: Yes (design, permit, construct).

**Initial Ranking: 6** 



- 1. "Stormwater utility revenues do not (and will not) have the capacity for pump capital improvements." (Kris Koski)
- 2. "Reducing flood risk and lowering flood insurance is single most important effort for community, economic development." (Brian Shay)

# Plan, Study, Design Projects

Total request = \$410,000

Aberdeen – Fry Creek
Restoration & Flood Reduction
Phase IIIa Plan
\$145,000

Cosmopolis – Mill Creek Multi -Objective Implementation Plan \$145,000 Lewis County – Lower Boistfort
Valley Infrastructure
Vulnerability Assessment
\$60,000

Port of Grays Harbor – Satsop Business Park Chehalis River Bank Stabilization Study \$60,000

<u>Project</u>: Plan to identify a preferred conceptual design for flood reduction within Sumner and Simpson Avenue corridor.

#### Benefit:

- ✓ Build on previous phases (I and II) and implement 2016 Timberworks Plan.
- ✓ Daylight Fry Creek (now underground, constricted, flood prone, and not fishfriendly).

<u>Doable</u>: Yes

<u>Initial</u> <u>Ranking</u>: 2



<u>Project</u>: Plan to prioritize 4,500 feet of culvert improvements.

#### Benefit:

- ✓ Begins Phase II of Mill Creek Multi -Objective Plan. (Phase I was Mill Creek Dam, fish passage project.)
- ✓ Partner project with WDFW (fish passage) and Aberdeen (pump station project) to protect 250 homes (800 residents).

Doable: Yes

Initial Ranking: 3



City of Cosmopolis 2021 – 2023 Mill Creek Multi-Objective Implementation Plan <u>Project</u>: Study to assess, prioritize infrastructure vulnerability.

#### Benefit:

- ✓ Reach-scale migration zone analysis (6-7 miles from South Fork Chehalis River at HWY 6 to Lost Valley Rd).
- ✓ Prioritized actions/plans to protect road, utilities, well, emergency access in this significant rural area.

Doable: Yes

<u>Initial</u> <u>Ranking</u>: 8



<u>Project</u>: Study to identify preferred protection approach for Port's jeopardized haul road.

#### Benefit:

- ✓ Road is essential maintenance access to industrial water well.
- ✓ Opportunity for fish-friendly, maintenance-friendly solution.

Doable: Yes

Initial Ranking: 9



### Flood Conveyance Project

Total request = \$1,127,000

Lewis County Flood Control District #1 -- Chehalis Industrial Park Flood Conveyance, Evacuation Project \$1,127,000

<u>Project</u>: Improve conveyance, evacuation of Chehalis Industrial Park flood waters to Dillenbaugh and Berwick creeks .

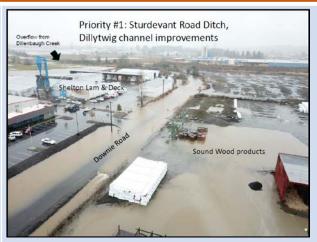
#### Benefit:

- ✓ Reduce flood impacts and down time costs to Industrial Park businesses.
  - 12/19-21/2019 flood event = \$1,150,000 impact/loss to Cascade Hardwoods, Sound Wood Products, Shelton Structures, Lewis County.
- ✓ Improve emergency response by reducing road and parking lot closures and flooding of local residences.

Doable: Yes\*\*

Initial Ranking: 7

\*\*Note: Working to modify project scope to (1) address immediate priority flood impact needs, and (2) assess larger drainage system with County, City, and other partners and set/sequence future investment priorities.





### Flood and Fish Project

Total request = \$1,561,405

Grays Harbor County -- Lower Satsop Restoration & Protection Program,
Phase II (Habitat Connectivity and Reach-Scale Aquatic, Riparian and Floodplain Restoration)
\$1,561,405

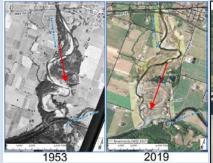
<u>Project</u>: Construct Phase II <u>Lower Satsop Restoration and</u> <u>Protection Program</u> to protect farmland, essential infrastructure and restore river/floodplain functions, habitat.

#### Benefit:

- ✓ Phase II (construction Summer 2022) -- flood relief through further river stabilization, erosion reduction, habitat restoration/enhancement.
  - o ~35 in-channel structures.
  - o ~130 acres riparian planting.
  - o ~10 acres invasive species control.
- ✓ Phase I (completed Summer 2020) -- flood relief through river stabilization, erosion reduction, and reestablishing river access to its floodplain (construction areas - A, B, C).
  - 42 in-channel structures.
  - Rock revetment removal.
  - Post-construction Drone footage (<u>here</u> and <u>here</u>)

Doable: Yes

Initial Ranking: 1







### Next Steps

- ✓ Continue to refine costs.
- ✓ Continue to <u>refine scopes of work</u> focused on do-ability/implementability.
- ✓ <u>Develop investment options</u> (low, medium, high) based on rankings, geography, project types, fund sources etc.
- ✓ Review projects against <u>Chehalis Basin priorities</u> (ASRP ecoregions, Local Actions Program measurable outcomes, CFAR, etc.).
- ✓ Seek Flood Authority approval 11-19-2020.
- ✓ Seek Chehalis Basin Board approval 12-05-2020.
- ✓ Continue to identify <u>local project needs beyond 2021-23</u>.

# Thank You / Questions

Scott Boettcher, Staff Chehalis River Basin Flood Authority 360/480-6600

scottb@sbgh-partners.com

