

## Floodproofing, Elevations, and Acquisitions

### Description

The Office of the Chehalis Basin (OCB) could provide technical and financial assistance to property owners in the Chehalis Basin to voluntarily floodproof, elevate, acquire, and/or relocate potentially flood-prone structures out of harm's way. OCB currently provides these services and funding through the Community Flood Assistance and Resilience (CFAR) program.

OCB could also acquire properties from willing sellers for the dual purpose of flood damage reduction and aquatic species restoration. OCB currently provides funding for voluntary acquisitions that meet both criteria through a new Dual-Purposed Voluntary Acquisition Program.

### Potential Principles

- **Principle 1:** Floodproofing and elevating structures is an essential part of the long-term strategy for flood damage reduction in the Chehalis Basin.
- **Principle 2:** Acquiring flood-prone properties from willing sellers can be an important way to support the Chehalis Basin Strategy goals of flood damage reduction and aquatic species restoration, while reducing economic losses and improving the safety and well-being of basin residents.
- **Principle 3:** Property owners whose homes or businesses are not protected from catastrophic flooding by infrastructure projects (e.g., FRE, levees/diversion/conveyance system, North Shore Levee, local Flood Authority projects, etc.) should have support to voluntarily floodproof, elevate, or relocate flood-prone structures out of harm's way.
- **Principle 4:** Participation will be voluntary; property owners will have the opportunity to choose whether to receive technical and financial assistance for floodproofing, elevations, or acquisitions.
- **Principle 5:** OCB will seek to provide flood assistance to the most vulnerable communities, including people with low incomes and people of color.

### Key Components

OCB could provide technical and financial assistance to property owners on a voluntary basis to reduce flood damage risks to structures or to acquire/relocate structures out of harm's way. This assistance could include the following components:

- **Technical Assistance:** OCB could continue to assist property owners on a voluntary basis to identify the potential for flood-damage exposure at their homes or businesses and develop property-specific flood damage mitigation recommendations. Recommendations

could include developing a flood response plan, wet or dry floodproofing, relocating utilities, home elevation, or acquiring or relocating structures.

- **Financial Assistance:** OCB could provide financial assistance to interested property owners for approved flood mitigation and dual-purpose acquisition projects based on available funding. This funding could support activities such as:
  - Design and construction of home elevation projects
  - Floodproofing and utility relocation assistance for homeowners
  - Floodproofing for commercial and/or agricultural structures
  - Acquisition and long-term stewardship of properties that provide benefits for flood-damage reduction and/or aquatic species
  - Demolition of structures and relocation expenses for voluntary acquisition properties

With the assistance of a CFAR workgroup and an acquisition workgroup, OCB is in the process of developing criteria for prioritizing financial assistance for home elevations and dual-purposed acquisitions, so that OCB can allocate funding in a fair and consistent way to meet the Strategy's goals.

## Cost

**Total estimated cost range:** \$192,000,000-\$314,000,000

If implemented over 30 years, this averages to an annual cost of \$6,400,000-10,500,000. However, the implementation period is likely to be much longer because this is a voluntary program and there is limited available contractor labor. Some property owners with flood-prone properties may never choose to participate.

Cost estimates are based on applying unit costs for flood mitigation actions according to the estimated inundation level from the modeled 100-year flood in 2080, as described in the Local Actions Non-Dam Alternative report for the "Safe Structures" program.<sup>1</sup> For valuable structures that would be inundated with less than 1 foot of water above the first floor, floodproofing assistance is assumed (unit cost of \$20,000 for homes or \$30,000 for commercial/agricultural properties). For valuable structures that would be inundated with 1-5 feet of water, elevations are assumed (unit cost of \$150,000). For valuable structures that would be inundated with more than 5 feet of water, acquisitions and/or relocations are assumed (unit cost of \$400,000 for a replacement home and relocation/rental assistance of 5% of relocation costs).

The "low" end of the range assumes that a basin-scale flood damage reduction infrastructure project (FRE or levee/diversion/conveyance system) is constructed, so there would be less need

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<sup>1</sup> *Chehalis Basin LAND: Local Actions Non-Dam Alternative*, prepared for the Office of Chehalis Basin, 2024, pp. 74-78.

for floodproofing, elevation, and acquisition assistance. The “high” end of the range assumes that no basin-scale flood damage reduction infrastructure project is constructed (no FRE and no new levee system), so more structures would need floodproofing, elevation, and acquisition assistance. This range corresponds to about 1,230-2,380 structures that would be floodproofed, elevated, or relocated under these estimates. The assumed participation rate is 75%, as not all property owners will voluntarily participate.

## **More Information**

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Refer to [Flood Assistance webpage](#) of the Chehalis Basin Strategy website for more details.