

Coordinated Investment for Puget Sound Floodplains

THE CHALLENGE

Floodplain restoration is one of the most challenging and essential elements in the plan to recover Puget Sound.

The Puget Sound Action Agenda sets a recovery goal of restoring 15% of degraded floodplains in the Sound. The current single-purpose approach to floodplain management spreads limited resources too thinly and pits one interest against another, resulting in conflict and insufficient cumulative progress. Given the urgency and constricting budgets, **we need a new approach to restoration** that:

- Better coordinates state and federal programs;
- Layers multiple and distinct funding sources; *and*
- Delivers **multiple benefits** for the environment and communities – improved habitat, reduced flooding, infrastructure repair and farmland protection.



Restoration in Port Susan Bay, Snohomish County, 2012. Benefits include salmon habitat restoration, flood risk reduction, farmland protection and jobs.

Photo © Marlin Greene/OneEarthImages

A NEW APPROACH

The goal of the **Coordinated Investment Initiative** is to accelerate the pace and scale of ecosystem restoration. We can do this through a collaborative, multiple benefits approach to floodplain investments that delivers substantive flood risk reduction alongside habitat restoration, water quality gains and other community improvements.

This effort aims to better align policies, regulations, planning, public funding and agency coordination. By improving coordination among agencies, we can bring multiple funding sources together to support priority projects, increase the scale of restoration activities, reduce counter-productive actions of separate agencies and ensure more efficient use of public funds. At its heart, **this is about accelerating Puget Sound recovery** through a better use of state dollars.

The Capital Budget request for a Coordinated Investment Initiative would provide \$30 million to leverage existing federal and state resources and scale up implementation of a set of integrated floodplain projects. Because of the benefits they will deliver, these projects enjoy support from local government, the conservation community, Tribes, watershed groups and state and federal agencies.

WHY NOW

Just as with traditional restoration, funding the Coordinated Investment project package will **improve habitat and put people to work**. But more importantly, these projects will bridge the gap between the existing single purpose programs, and implementation of a new vision for maximizing investments in Puget Sound communities.

If Washington is to maintain its commitment to Puget Sound, we must continually strive to use scarce dollars more efficiently, and to be smarter and more comprehensive in tackling the tough problems. **The Coordinated Investment Initiative will set the stage for a healthier Puget Sound that benefits us all.**



Canyon Creek Integrated Flood-Fish Project

Lower Stillaguamish Fish, Farm and Flood Management

Lower Snohomish River Restoration and Infrastructure Assessment

Snoqualmie River Fall City Corridor Project

Lower Cedar River Integrated Floodplain Restoration

Calistoga Reach Setback Levee and Side-Channel Construction

Neadham Road Setback Levee

Lower Dungeness Floodplain Recovery

Skokomish River Floodplain Restoration and Sediment Management



Coordinated Investment for Puget Sound Floodplains

Projects: Coordinated Investment for Puget Sound Floodplains

Calistoga Reach Setback Levee and Side-Channel Construction

Proponent(s): Pierce County and City of Orting

Legislative Districts: 2, 31

County: Pierce

Jobs Created: 232

Multiple Benefits: Flood risk reduction; salmon habitat restoration

Project Summary: The project will restore critical floodplain habitat and improve river function on 3.5 miles of the river near the City of Orting. Actions include:

- 1.5 miles of setback levee, removing over 5,700 feet of existing levee and installing large log jams to protect new levee and add habitat complexity
- Restoration of 55 acres that will connect to 44 acres of habitat for a total of 101 acres restored
- Enhancement of an additional 42 acres through construction of major 4000' side channel, installation of large log jams, and riparian planting to increase floodplain forest habitat and reconnection of 46 acres of side channel/backwater habitat

Requested Amount: \$5,745,918

Match: \$10,653,718 (DOE, SRFB, USDA, City of Orting, Pierce County Flood District - *proposed*)

Canyon Creek Integrated Flood-Fish

Proponent(s): Whatcom County Flood Control Zone District

Legislative District: 42

County: Whatcom

Jobs Created: 59

Multiple Benefits: Flood risk reduction; salmon habitat restoration

Project Summary: The project restores and reconnects 29 acres of floodplain habitat and provides access to 81% of area historically able to absorb flood waters. It provides flood risk reduction to an adjacent subdivision that has experienced significant flooding and erosion. Actions include:

- Removing the remaining 1,850 feet of levee (first phase in 2009 removed 520 feet)
- Constructing up to 23 engineered log jams to improve fish habitat, provide structure and keep normal flows from damaging the riprap that protects the subdivision

Requested Amount: \$2,100,000

Match: \$2,790,320 (Whatcom County Flood District, NOAA, PSAR)

Lower Cedar River Integrated Floodplain Restoration

Proponent(s): King County

Legislative Districts: 5, 11

County: King

Jobs Created: 57

Multiple Benefits: Flood risk reduction; salmon habitat restoration

Project Summary: The project restores 40 acres of floodplain and relocates mobile home park residents out of harms' way, thereby enabling future restoration of more than 18 acres of additional floodplain.

Funding for acquisition is already secured. Actions include:

- Removal of 1,200 feet of levee/revetment to allow flood waters to flow across 40-acres of floodplain and reduce potential damage to the Cedar River trail and SR-169
- Installation of bank protection features, and the creation and enhancement of off-channel or side-channel habitat

Requested Amount: \$4,130,000

Match: \$743,000 (King County Flood Control District, City of Seattle, PSAR and other grants)

Lower Dungeness Floodplain Recovery

Proponent(s): North Olympic Lead Entity for Salmon

Legislative District: 24

County: Clallam

Jobs Created: 132

Multiple Benefits: Flood risk reduction; salmon habitat restoration; water quality and quantity; public access; agricultural viability

Project Summary: The project is a multi-faceted, large-scale effort to restore and improve nearshore, estuary and floodplain conditions while improving agricultural irrigation infrastructure. Actions include:

- Approximately 28 additional acres acquired & 120 total acres restored once infrastructure is removed and dike setback project implemented
- Irrigation system upgrades to provide water security for farmers and ensure in-stream flows for fish
- Final design of the Dungeness Dike Setback
- Acquisition of two parcels needed for future floodplain and nearshore restoration
- Infrastructure removal & riparian planting

Requested Amount: \$7,881,182

Match: \$3,392,000 (Clallam County, WDFW, Jamestown S'Klallam Tribe, Clallam Conservation District)

Lower Stillaguamish Fish, Farm and Flood Management

Proponent(s): Stillaguamish Tribe

Legislative District: 10

County: Snohomish

Jobs Created: 88

Multiple Benefits: Salmon habitat restoration; water quality; agricultural viability

Project Summary: The project builds off efforts carried out in the Sustainable Lands Strategy (SLS). This is a large-scale, multi-faceted project that includes:

- Landslide abatement, including design, permitting and construction, of to address the largest source of sediment that is harming fish production and reducing flood water capacity in the South Fork Stillaguamish River
- Acquisition and/or restoration design of three parcels: Leque Island (150-300 acres), Matterand (83 acres), and Ellingsen (90-100 acres)
- Feasibility and design of improvements to floodwater drainage channel (Irvine Slough)
- Inventory, assessment and design of repairs to failing sections of Diking District 7
- The design and permitting of an anaerobic bio-digester to treat local cattle and chicken waste in order to reduce water pollution

Requested Amount: \$4,300,000

Match: \$1,500,000 (Tribal funds from USFWS, Conservation Futures - *proposed*)

Neadham Road Setback Levee

Proponent(s): Pierce County

Legislative District: 2

County: Pierce

Jobs Created: 10

Multiple Benefits: Salmon habitat restoration; flood risk reduction; flood damage reduction

Project Summary: This is part of a multi-phase project to move people out of harms' way and remove a levee and road in order to restore natural functions to approximately 280 acres that have been the site of repeated flood damages, creating economic burdens and putting citizens and responders at risk.

Actions include:

- Purchasing high risk, privately owned parcels (~60 acres)
- Demolishing and removing structures
- And eventually abandoning Neadham Road and failed levee segments (the County has already completed acquisition of 154 acres; another 66 acres in non-residential use)

Requested Amount: \$3,416,797

Match: \$2,879,664 (Pierce County - \$379,664 in match; \$2,500,000 in previous land acquisition costs)

Skokomish River Floodplain Restoration and Sediment Management

Proponent(s): Skokomish Tribe and Mason County Conservation District

Legislative District: 35

County: Mason

Jobs Created: 15

Multiple Benefits: Salmon habitat restoration; water quality/shellfish; flood risk reduction; agricultural viability

Project Summary: Project goals are to restore floodplain connectivity, reduce flood hazards (especially to farmland), increase agricultural and shellfish productivity, and improve critical habitat for threatened fish species in the Skokomish River valley. Work will be accomplished in two locations along the Skokomish River: the confluence of the North Fork and South Fork, and at Holman Flats in the South Fork. Actions include:

- Completion of design and land acquisition to enable future reconnection of 150 acres of floodplain through the removal of at least 3500' of river dike and placement of approximately 50 engineered log jams
- Completion of final design and installation of 22 engineered log jams along 1 mile of river in order to improve habitat complexity and reduce sediment inputs that exacerbate flooding and inhibit fish passage

Requested Amount: \$1,395,914

Match: \$246,338 (SRFB)

Lower Snohomish River Restoration and Infrastructure Assessment

Proponent(s): Snohomish County Surface Water Management

Legislative District: 39, 44

County: Snohomish

Jobs Created: 18

Multiple Benefits: Agricultural viability; salmon habitat; water quality; flood risk reduction

Project Summary: This project creates a GIS-based assessment of the lower Snohomish River basin that will:

- Locate, characterize and map all major floodplain flood protection and drainage systems and other floodplain infrastructure
- Complete a hydro-geomorphic river model
- Combine infrastructure information with modeling outputs
- Identify current and future vulnerabilities and risks
- Develop recommendations for a prioritized list of capital infrastructure and habitat projects, as well as a partnership work plan to move projects forward in a coordinated manner

Requested Amount: \$900,000

Match: \$435,000 (Snohomish County)

Snoqualmie River Fall City Corridor

Proponent(s): King County

Legislative District: 5

County: King

Jobs Created: 92

Multiple Benefits: Salmon habitat restoration; flood risk reduction; agricultural viability

Project Summary: The project goals include restoring floodplain habitat for native species including ESA-listed Chinook and steelhead trout, and reducing flood risks to public infrastructure and private farms.

This phase will restore up to 105 acres of degraded floodplain. Ultimately, the corridor project will improve habitat, protect farmland and reduce flooding by reconnecting the river to 250 acres of floodplain area in this reach. Actions include:

- Construction of the Carlson levee setback
- Design and construction of the Hafner revetment setback

Requested Amount: \$3,350,000

Match: \$2,118,000 (EPA; King County; Large CIP PSAR – *proposed*)

TOTAL COORDINATED INVESTMENT CAPITAL BUDGET REQUEST: \$33,219,811