



Floodplains by Design

· REDUCING RISK, RESTORING RIVERS ·

2017 - 2019 Projects Recommended for Funding

The Floodplains by Design coalition requests continued funding at the \$60 million level in the FY 2017-19 capital budget. This request will fund new projects that provide both flood risk reduction and ecosystem benefits in communities prone to flooding. Flooding is the number one natural hazard in Washington state, having caused more than \$2 billion in damages since 1980, and the risk is increasing substantially with climate change. Floodplains by Design is a cost-effective and broadly supported way to advance multiple community priorities and build a more prosperous and resilient future. ***This \$60 million request will leverage an additional \$75 million from other sources.***

Rank	Project Sponsor	Project	County	LD	Request	Running total
1	Mason Conservation District	Skykomish Watershed Ecosystem & Floodplain Restoration	Mason	35	\$7,000,000	\$7,000,000
<p>The Mason Conservation District will advance a suite of construction and design projects to reduce flood hazards on the most frequently flooded river in Washington state and restore habitat throughout the Skokomish Watershed. This project will address the massive sediment aggradation that has degraded the ecosystem and increased flood duration and severity. This will be accomplished by reconnecting 182 acres of floodplain including more than 40 acres of wetland, reducing erosion rates along 4 miles of river, increasing channel capacity, removing 5,400' of levee, constructing over 7,000' of set-back levee and installing large woody debris throughout 3.6 miles of channel.</p>						
2	Pierce County Surface Water Management	Floodplains for the Future: Puyallup, White & Carbon Rivers	Pierce	31	\$7,750,000	\$14,750,000
<p>Pierce County and partners will advance a suite of pre-construction and construction activities that are the next steps in implementing a comprehensive watershed scale approach to flood risk reduction, ecosystem restoration and agricultural viability in the Puyallup, White and Carbon Rivers. The Puyallup Watershed ranks among the highest in the state for frequency and magnitude of flood damage and it's habitats are degraded, and prime floodplain soils are being removed from agricultural production. This project will address these issues by: 1) acquisition, design, or construction of 11 on-the-ground projects to restore floodplains, 2) identifying agricultural viability actions, 3) integrate agricultural priorities into the Clear Creek project and selecting a conceptual design, 4) conserving 150-300 acres of farmland through easements, and 5) monitoring to track progress toward goals across interests. This work builds on FbD investments in riparian restoration.</p>						
3	Whatcom County Public Works Department	Lower Nooksack River: Floodplains for the Future Phase 1	Whatcom	42	\$5,835,000	\$20,585,000
<p>Whatcom County will lead this project to reduce flood hazard, restore ecosystems and improve agricultural viability in the lower Nooksack River. Proposed actions include: 1) levee design to improve protection to three Ferndale area treatment facilities, restore riverside vegetation and complete a pedestrian trail, 2) levee setback feasibility downstream of Ferndale to address sediment impacts, 3) Fishtrap Creek levee setback preliminary design to reduce upstream flood levels, enhance streamside vegetation, and improve agricultural drainage, 4) design and construction of the Lynden Levee and culvert to reduce flood risk and improve habitat, and 5) acquisition of property and development right from willing sellers for human health and safety and floodplain restoration between Deming and Everson.</p>						

4	Hood Canal Salmon Enhancement Group	Lower Big Quilcene River Design & Acquisition Project	Jefferson	24	\$2,355,526	\$22,940,526
<p>Hood Canal Salmon Enhancement Group will complete a final design for the lower 3 miles of the Big Quilcene river that will reduce flood risk, restore floodplain habitats, protect shellfish resources, and enhance water quality, recreational access, educational opportunities, and economic vitality in the local community. This project directly addresses costly and frequent flooding and degraded habitat and water quality through a community-based process that ensures a broad range of community needs and concerns are addressed. Project activities will also include acquiring key floodplain parcels from willing sellers needed for project implementation.</p>						
5	Yakima County Public Services Department	Rambler's Park Phase VI	Yakima	15	\$5,788,136	\$28,728,662
<p>The project is a continuation of prior Yakima County, Yakima City and Floodplains by Design efforts to reduce the flood damages and ecological degradation from historic infrastructure along a 2.6 mile reach of the Naches River that is considered to have the highest potential for ecosystem restoration. This project includes 1) removal of the downstream 600 feet of McCormick Levee, 2) acquiring 140 acres and excavating & reestablishing 6500 feet of abandoned side channels through the aggraded central Naches River floodplain deposits, 3) channel excavation and road armoring in a previous levee setback area, and 4) expansion of the Nelson Dam fish bypass. Combined, these actions will optimize the habitat, sediment passage, flood risk reduction, and boating opportunities.</p>						
6	Skagit River System Cooperative	Barnaby Reach Outreach and Design	Skagit	39	\$415,000	\$29,143,662
<p>The goal of this project is to improve floodplain function, restore fish and wildlife habitat, and reduce flood and erosion risks for the community in the Barnaby Reach of the Skagit River. The Skagit River is the largest river system in the Puget Sound and a project in the Barnaby Reach has the potential to significantly contribute to habitat recovery goals. Skagit River System Cooperative and area conservation landowners will work with key stakeholders to assess the feasibility of actions that restore hundreds of acres of floodplain and maintain or improve erosion protection and flood conditions for local residents. A preliminary design for the preferred project concept will be completed.</p>						
7	King County Water and Land Resources Division	Riverbend Reach Construction Phase 1	King	11	\$7,500,000	\$36,643,662
<p>This multi-objective project will reduce flooding and channel migration risks in the Riverbend Reach of the Cedar River, while improving habitat. The proposed actions will (1) remove up to 1400 linear feet of levee/revetment to allow channel expansion in the upper half of the project site (2) remove 147,000 cubic yards of floodplain fill behind levee/revetments (3) construct up to 2400 linear feet of setback protection to protect existing infrastructure. (4) construct 6400 linear feet of new side channel (5) plant 19 acres of floodplain and (6) add 213 pieces of large wood. These actions will reduce 100 year flood elevations within the right bank neighborhood by as much as two feet. A portion of the site will be open to the public to enjoy for passive recreational use.</p>						

8	Lower Columbia Estuary Partnership	Steigerwald Flood Risk Reduction & Habitat Restoration Project	Clark	18	\$4,579,547	\$41,223,209
<p>This project will reconfigure the Port of Camas-Washougal's (Port) levee system along the Lower Columbia and Gibbons Creek to reduce flood risk, and reconnect 912 acres of Columbia River floodplain. The project will increase recreation opportunities at the Steigerwald National Wildlife Refuge, which receives 90,000 visitors annually. Project actions will reduce the base flood elevation in the area by seven feet; reducing flood risk for the City of Washougal's wastewater treatment plant, the Port's Industrial Park (which provides 1,000 jobs), State Route 14 and private residences. Additionally, the project restores floodplain habitat by 14% in a portion of the Columbia River where floodplain restoration opportunities are limited, and increases the length of the Refuge's trail network by 1.0 miles.</p>						
9	Whatcom Land Trust	Lower Middle Fork Floodplain Restoration	Whatcom	42	\$500,000	\$41,723,209
<p>The primary purpose of this project is to eliminate ongoing flood risk for property owners in the Lower Middle Fork Nooksack River at Canyon Creek while protecting and restoring habitat. The subject properties are situated in a hazard zone that is particularly susceptible to severe flooding and sedimentation, and many residential structures have been flooded over the last few years. Landowners in the hazard zone are seeking assistance. The Whatcom Land Trust and County staff will work with willing sellers to remove structures from the flood zone and restore critical floodplain habitats in a key reach.</p>						
10	Stillaguamish Tribe of Indians	Lower Stillaguamish Fish, Farm, and Flood Management Project Phase II	Snohomish	10	\$5,000,000	\$46,723,209
<p>This cooperative effort will increase floodplain ecological function, protect and enhance farmland productivity, improve water quality and reduce impacts from flooding and sediment transport by implementing multiple habitat restoration and flood management projects within the Stillaguamish watershed. This proposal advances several projects funded by FY2013-15 FbD into construction phase. Project actions include: 1) design and permit separation of flood and stormwater drainage to improve water quality and reduce impacts to farmland, 2) acquire and preserve 160 acres of farmland, 3) construct 350 acres of estuary habitat restoration, 4) construct crib wall to reduce fine sediment input from a large deep seated landslide, 5) permit and construct a dairy distillery to reduce nutrients within the floodplain, 6) design, permit and construct failing sections of the DD7 dike system, and 7) complete 30% design to reconnect key remnant side channel habitat.</p>						
11	Kittitas County Public Works Department	Yakima River Corridor Plan Implementation	Kittitas	13	\$5,092,500	\$51,815,709
<p>This project advances integrated high-priority flood protection, habitat restoration, and agricultural land protection activities identified in the 2015 Yakima River Jeffries Levee to Canyon River Corridor Plan covering a four-mile reach near Ellensburg. Project activities include: 1) abandon 1,500 feet of at-risk road, and reconnect, and restore the associated 40-acre floodplain, 2) eliminate development rights on 29 parcels, 3) remove seven structures and two water rights, 4) acquire and protect 400 acres of floodplain, 5) design reclamation of former gravel mining pits and the badly damaged levee protecting them, and 6) construct 15,000 feet of side channel habitat and improve 77 acres riparian forest.</p>						

12	Walla Walla County Conservation District	McCaw Floodplain Restoration Phase B	Walla Walla	16	\$400,000	\$52,215,709
<p>Walla Walla County Conservation District will restore habitat and reduce flood risks on 4,175 feet of the Touchet River near Waitsburg, WA. Upstream channelization and armoring cause channel erosion and sedimentation that degrade fish habitat and exacerbate flooding and erosion. Project activities include designing and installing 131 individual logs and 34 log structures, and establishing 3000 riparian plants to divert flow, reconnect side channels, provide habitat, reduce erosion and increase the riparian function of a mile of the Touchet River. This project is the last of three projects that together will encompass over 2 miles along the Touchet River and about 80 acres of floodplain and riparian buffer area. The previous two projects re-connected 6200 feet of side channels.</p>						
13	King County Water and Land Resources Division	Lower Russell Road Levee Setback and Habitat Restoration	King	11	\$1,000,000	\$53,215,709
<p>This multi-objective project will achieve flood protection, habitat restoration, and recreational enhancements in an urban area of the Green River. The existing levee system does not meet current engineering design standards and is prone to scour and slope instability. This project represents one of very few opportunities to improve habitat within the urban portion of the river corridor. King County will replace and improve levees and revetments along the 1.4 mile project reach to provide 500-year flood protection, reconnect 30-40 acres of floodplain, create and restore 15 acres of channel and 25 acres of riparian habitat, construct more than 1.4 miles of trail, and enhance recreational opportunities. Since previous FbD funding was awarded, project actions have expanded to include additional property acquisition, relocating a park away from the river, and more aquatic and riparian habitat restoration and enhanced recreational opportunities.</p>						
14	Washington Water Trust	Dungeness Off-channel Reservoir and Floodplain Restoration	Clallam	24	\$4,480,000	\$57,695,709
<p>This multi-benefit project builds on the success of past collaborative efforts in the Dungeness River watershed to restore floodplain habitats and keep people safe. The current project will support healthy high and low flows in a changing climate for people, farms and fish while reducing flood damage. Specific project activities include: 1) permitting and designing a 1,500 acre-foot reservoir to store damaging high winter flows and support agriculture and instream habitats during low summer flows, 2) acquiring and restoring 37 acres of floodplain including removal of five homes and 17 structures, and 3) creation of a new County Park with public river access. Secondary benefits include improved water quality, enhanced public recreation, and opportunities for aquifer recharge.</p>						
15	Forterra NW	Wayne Sammamish Riverfront Project	King	1	\$500,000	\$58,195,709
<p>Forterra is facilitating the acquisition and permanent protection of 89 acres of urban property along the Sammamish River, approximately 2.5 miles upstream from Lake Washington. This land, the former Wayne Golf Course, is among the last remaining large areas of undeveloped riverfront open space in this highly developed part of the Puget Sound Region. With more than 4800 feet of riverbank and 2000 feet along a tributary, the acquisition of this property will protect it from development and allow for future opportunities for habitat restoration.</p>						

16	Snohomish County Public Works Department	Lower Skykomish & Snohomish River Reach-Scale Projects Pipeline	Snohomish	39	\$3,391,000	\$61,586,709
<p>This project will accelerate Snohomish River Basin ecosystem recovery, address flood hazards and the impacts of frequent and costly flooding, and ensure long-term agricultural vitality. The project will advance the work of the Snohomish Sustainable Lands Strategy, a group of diverse interests that has been working collaboratively together since 2010. Specific actions include: 1) design and permit 222 acres of floodplain reconnection and 2.6 miles of creek and 19 acres of off-channel area improvements, 2) design and construct 500 feet of bank stabilization and riparian restoration, 3) design, permit and construct measures to alleviate flooding on two roads, 4) broad outreach and 30 site assessments to identify and develop designs for three multi-benefit projects, 5) acquire acreage for conservation through easements and/or fee simple transactions; and 6) develop a agricultural resiliency plan and identify and implement site-specific actions to support farming.</p>						
Additional Projects in Need of Funding:						
17	City of Kent Public Works	Downey Farmstead Restoration Project	King	33	\$5,238,626	\$66,825,335
18	Skagit County Public Works	Colony Creek Comprehensive Floodplain Enhancement Project	Skagit	39	\$350,000	\$67,175,335
19a	Kittitas County Public Works	Reecer, Currier & Whiskey Creek Phase III	Kittitas	13	\$5,009,750	\$72,185,085
20	Yakima County Public Services	Gap to Gap 1135 Locally Preferred Alternative	Yakima	14	\$2,000,000	\$74,185,085
21	Methow Conservancy	Upper Methow (Stafford) Flood Risk and Floodplain Restoration	Okanogan	12	\$500,000	\$74,685,085
22	Skagit County Public Works	Hansen Creek Reach 5 Restoration	Skagit	39	\$3,028,500	\$77,713,585
23	City of Snoqualmie	Snoqualmie Riverfront Acquisition & Bank Stabilization	King	5	\$1,389,000	\$79,102,585
24	Kittitas County Public Works	Manastash Creek Corridor Plan Phase II	Kittitas	13	\$499,176	\$79,601,761
25	Nisqually Land Trust	Protecting and Enhancing Floodplain Habitats along the Nisqually River	Pierce & Thurston	2	\$2,770,061	\$82,371,822
26	Chelan County Natural Resource Department	Middle Entiat Cottonwood Flats Floodplain Reconnection Project	Chelan	12	\$723,714	\$83,095,536
27	Tri-State Steelheaders	Bridge to Bridge Phase II	Walla Walla	16	\$273,910	\$83,369,446
28	City of North Bend	South Fork Snoqualmie River Levee Setback	King	5	\$7,000,000	\$90,369,446
29	Cowlitz Indian Tribe	Cowlitz Bend Floodplain Reconnection	Cowlitz	20	\$9,805,014	\$100,174,460