

Puyallup/ White River Basin Restoration Projects

note: Ideas in this table generally appear to fall within the Corps of Engineers ecosystem restoration and / or flood damage reduction criteria. The viability of individual projects as to preferred alternative design, real estate requirements, and sponsorship requirements has not been assessed. At this point, each of these projects warrant further consideration during the feasibility phase.

Site No.	Project Name	Geographic Location	Jurisdictional Location	Description	Project Category
1	373rd St. Roadfill Removal	West fork Hylebos Creek at 373rd St.	City of Federal Way	Either simple road / berm removal to restore natural floodplain cross-section, or design and construct a crossing structure which accommodates the local channel dynamics and floodplain configuration.	barrier removal
2	Electron Dam Flume Screening Project	Located at forebay at bottom of diversion flume at Electron Dam	Pierce County Conservation District	Outmigration passage issue. Estimated 70-97% of outmigrating smolts are killed by the flume diversion. Install screens and maintenance system to prevent debris from clogging screens	barrier removal
3	Game Farm Wilderness Park Levee Removal	Left bank White River from RM 8.2 to 8.4	City of Auburn	Flood plain recommendation: Remove up to 1200 lin ft. of levee and revegetate riparian area.	barrier removal
4	Restore Stream Connections to small ponds in Spring Valley area.	Several small ponds in the Spring Valley area of Hylebos Creek.	City of Federal Way, Friends of the Hylebos Wetlands	Remove blockages caused by flooding effects, and replant with native vegetation, in order to reconnect the ponds to the creek.	barrier removal
5	Roegner Park Riverbank Restoration	White river from RM 6.8 to 7.0	City of Auburn	Reslope 2000 lin ft. of eroding bank along Park Trail. Remove foreign materials, install LWD along the toe of the bank and revegetate bank face with native plants. Install cluster plantings of coniferous trees on top of bank.	barrier removal
6	South 356th St. culvert replacement.	Hylebos Creek at 356th St.	City of Federal Way	Remove existing culvert and replace with larger, box type culvert.	barrier removal
7	South 373rd St. bridge replacement	Hylebos Creek at 373rd St.	City of Federal Way	Remove bridge and replace with large box culvert. Work with private property owners to restore off channel habitat and exclusion of cattle.	barrier removal
8	West Hylebos Restoration Project	West branch Hylebos creek downstream of west wetlands	City of Federal Way, Friends of the Hylebos wetlands	Project will involve channel and bank stabilization, placement of LWDs, and removal of several structures, replanting native conifers, and repairing a failed septic drainfield.	barrier removal
9	White River Pipeline Crossing	White River at RM 23.3	Tacoma Water	Remove the scour protection structure (dam) protecting Tacoma water pipeline. This is a known partial barrier to spawner migration. It is also a site of known stranding due to ramping the Lake Tapps hydro facility inlet diversion. It is a known poaching site.	barrier removal
10	4 Culverts - Foothills Trail	Foothills trail between South Prarie Creek and Carbon River at approx RM 1.7, 1.8, 2.3, and 2.5.	Pierce County Public Works	Install box culverts at four locations along Foothills trail. Three will replace existing restrictive culverts, and one will be new.	culvert removal / replacement
11	Asarco Shoreline Enhancement	Specific plans for a specific site likely exist but have not be reviewed.	City of Tacoma	As part of site remediation, it is expected that selected areas along site will be restored by cutting down banks to reduce slope; re-armored as needed; treated with habitat mix; add riparian plantings.	culvert removal / replacement
12	Birch St. Culvert Replacement	Hylebos Creek at Birch St.	City of Milton	The existing culvert has been crushed and cannot accommodate high flows and is a partial barrier to fish passage. Replace existing culvert, remove invasive weeds, and plant native vegetation.	culvert removal / replacement

13	Clarks Creek and Meeker Ditch Confluence Improvement	Confluence of Meeker Ditch and Clarks Creek	City of Puyallup	Construct off-channel rearing and wetland areas at the confluence of the two streams.	culvert removal / replacement
14	Deer Creek Flood Reduction and Fish Passage Improvement	Mouth of Deer Creek to East Pioneer	City of Puyallup	Reconstruct East Main and E. Pioneer culvert crossings to improve fish passage. Construct floodplains to accommodate backwater flooding.	culvert removal / replacement
15	Dock Streen to Grain Terminal Shoreline Rehabilitation	On City, Parks & rec or other properties from the mouth of Thea Foss Waterway to the grain silos, exclusive of the boat ramp.	City of Tacoma	Excavate pavement in parking area at boat launch; cut down bank armor; add habitat mix; add LWD; add riparian plantings on adjacent uplands. Add riparian plantings from boat launch to NW grain silos.	culvert removal / replacement
16	Gravel Restoration - Brooklake	Hylebos Creek	Friends of the Hylebos Wetlands	Add appropriate size gravel to streambed.	culvert removal / replacement
17	Greenwater SR 410 Bridge replacement	SR 410 bridge over Greenwater at R.M. 0.10.	King County	Replace the bridge with a full spanning one. The present one has a center pier that experiences scour and collects woody debris.	culvert removal / replacement
18	Invasive weed control / native planting of Hylebos Confluence	Confluence of east and west branches of Hylebos creek.	Friends of the Hylebos Wetlands	Remove the reed canary grass that is choking the creek and replant with native vegetation.	culvert removal / replacement
19	Middle / St. Paul peninsula	on DNR and Simpson property at tip of St. Paul / Middle Waterway Peninsula	City of Tacoma	Pull approx. 1,400 creosote treated piles; remove surface debris; construct shoal / breakwater at tip of peninsula; cover area with habitat mix (2" minus mixed sand and gravel); plant salt marsh nodes along shore at appropriate elevations.	culvert removal / replacement
20	Middle Waterway Corridor	On Simpson property at east side of entrance to middle waterway	City of Tacoma	Clean up surface debris; reduce bank slope; cover area with rounded river cobbles and habitat mix (2" minus mixed sand and gravel); add LWD to shoreline; add riparian plantings on adjacent uplands.	culvert removal / replacement
21	Middle Waterway Marsh / Mudflat / Channel	On Simpson property at east side of middle waterway	City of Tacoma	Excavate 6.9 acres of uplands adjacent to existing Middle waterway mudflat and Trustee mitigation site; include dendritic drainage pattern and grade to elevations that will support saltmarsh; add LWD; add riparian plantings on adjacent uplands.	culvert removal / replacement
22	Milgard Restoration Project	Lower Hylebos downstream of Hwy 99, between 4th and 8th Aves.	City of Fife	Acquire Milgard property alongside the mainstem of Hylebos Creek across from Jordan area. Create off-channel habitat	culvert removal / replacement
23	Pacific Park Buffer restoration	Right bank White River from RM 5.8 to 6.0	City of Pacific	Remove 800 lin ft. of concrete slab revetment and revegetate the riverbank and 100 ft. wide buffer with native trees and shrubs.	culvert removal / replacement
24	Puyallup Side Channel	On Simpson property at east side of Puyallup River	City of Tacoma	Excavate 2.8 acres of uplands adjacent to existing semi-isolated marsh (Simpson mitigation site); include dendritic drainage pattern and grade to elevations that will support brackish marsh; add LWD; add riparian plantings on adjacent uplands. Requires construction of inner dike.	culvert removal / replacement
25	Reconnect Justus Pond to Hylebos Creek.	Channel between Hylebos Creek and Justus Pond at Spring Valley School.	City of Federal Way, Friends of the Hylebos Wetlands	Reconnect Justus Pond to Hylebos Creek.	culvert removal / replacement
26	Redirect Creek from between I-5 and Pac Hwy S.	Hylebos Creek	DOT, City of Fife, Friends of the Hylebos Wetlands	Redirect stream away from the channel running between I-5 and Pac Hwy S. (near Fife curve) and construct new channel running south along side of I-5 to meet with the surprise lake drainage channel.	culvert removal / replacement
27	Scientific Study (study only)	Hylebos Creek	Friends of the Hylebos Wetlands	Study current base flows and channel to understand necessary base flow level to support sustainable runs of salmon (I.e. low summer and winter flows are limiting factor)	culvert removal / replacement

28	Sportsman's Club Wetland	Left bank at Puyallup RM 14 bounded by the Puyallup river to the north and east, SR 162 on the west, and 96th St. on the south.	Puyallup Tribe, Pierce County	Redesigning the culvert between the wetland complex and the river could allow fish passage, availing year-round backwater fish habitat. Flushing would improve water quality and habitat by flushing out the Himalayan blackberry presently choking the channel.	culvert removal / replacement
29	SR 167 / Fife Habitat restoration	Hylebos Creek	City of Fife, Friends of the Hylebos Wetlands	Purchase private property between Hylebos Creek and proposed SR 167 roadway as it runs from SR 99 to approx. 8th Ave. Remove homes and create off channel habitat. Plant with native vegetation.	culvert removal / replacement
30	Surprise Lake Drainage Channel Restoration	Hylebos Creek	City of Fife, Friends of the Hylebos Wetlands	Purchase agricultural lands and "restore" stream segment that is currently an agricultural drainage ditch and plant native vegetation buffers (this project may be part of the mitigation for the SR 167 const. Project)	culvert removal / replacement
31	Union Pacific Parcel	Right bank of Puyallup RM 2.8, bound by North Levee Road, the Union Pacific Railroad, and Frank Albert Road	City of Fife, Puyallup Tribe, Pierce County	1) Imposing one breach in the existing levee to create a backwater area. 2) Two breaches to create a secondary channel. The entire 137 acres could also be excavated to create wetlands, but this may be excessive in cost and impact. Construct setback levees	culvert removal / replacement
32	West Hylebos Creek Habitat Acquisition	Hylebos Creek	Friends of the Hylebos Wetlands	Acquire approx. 70 acres of stream corridor, wetlands and connected upland habitat, include channel and other habitat restoration as needed.	culvert removal / replacement
33	Boise Creek LWD enhancement	Boise Creek from RM 1.5 to 4.5	King County	Provide increased volume of LWD along approximately one mile of stream to increase cover, pool depths, and habitat diversity.	estuary-shoreline restoration
34	Channel Migration Mapping (study)	Lower portions of White, Puyallup, and Carbon Rivers, plus South Prairie creek and CMZs of other tributaries.	King County	Map CMZs to identify past and likely future zones of channel migration. Prepare, adopt and implement land-use regulations.	estuary-shoreline restoration
35	Dumas Bay shoreline restoration	Dumas Bay Park, Federal Way	City of Federal Way	Remove hard bulkhead and replace with soft armoring with possible beach nourishment	estuary-shoreline restoration
36	East Branch Hylebos Conifer Underplanting	East branch Hylebos tributary 0006 from RM 5.3 to 6.8	King County	Plant native trees and shrubs in the existing riparian area of the creek. Remove noxious weeds and invasive plants.	estuary-shoreline restoration
37	East Branch Hylebos LWD Enhancement	Tributary 0006, R.M. 5.3 to 6.8	King County	Import large woody debris to enhance aquatic habitat and provide channel stabilization.	estuary-shoreline restoration
38	Greenwater and White Confluence Restoration	Greenwater / White River confluence, RM 45.8, right bank.	King County	Acquire residential / commercial structure and parcel along left bank of Greenwater. Remove all infrastructure and concrete block floodwall. Restore river bank topography and revegetate with native plants and trees.	estuary-shoreline restoration
39	Greenwater Revetment Retrofit	Greenwater River	King County	Remove riprap, install biostabilization and large woody debris	estuary-shoreline restoration
40	LWD Collection and Downstream Re-distribution	Mud Mountain Dam	King County	Salvage woody debris from the Mud Mountain Dam reservoir, stock-pile and place in downstream reaches of the White River	estuary-shoreline restoration
41	Middle Waterway Estuarine Habitat Restoration	Head of Middle Waterway	City of Tacoma	Excavation and regrading of 1.85 acres of vacant land, located adjacent to and within the SW shore of the waterway, has created an intertidal marsh. This project complements the Middle Waterway Shoreline Restoration Project.	estuary-shoreline restoration

42	Red creek and White river confluence restoration	Right bank of Red Creek and White river confluence at R.M. 27.5.	King County	Relocate 4 residential structures and remove flood control revetments. Revegetate riparian and stabilize disturbed channel and riverbank areas as needed to reestablish natural conditions. 4 year project.	estuary-shoreline restoration
43	Riparian Buffer restoration	Right bank White river from RM 6.7 to 7.9	King County	Acquire conservation easement of 50 ft. min width. Remove foreign materials from 6000 lin ft. of river bank. Revegetate disturbed soils with native riparian plants and trees.	estuary-shoreline restoration
44	Tahoma Salt Marsh Restoration	Commencement Bay at Ruston Way Shoreline	City of Tacoma	Develop salt marsh wetland on the Ruston Way Shoreline. Excavate & regrade 1.95 acres, plant native marsh and riparian vegetation, excavate a tidal channel to connect wetland to beach.	estuary-shoreline restoration
45	Thea Foss Redevelopment	Thea Foss and Wheeler Osgood Waterways	City of Tacoma	along the western shoreline of the Thea Foss Waterway will reduce the coverage and shading of littoral areas by 0.4 acres, remove several	estuary-shoreline restoration
46	Trans Canada Levee Removal	Left bank White River from RM 8.4 to 8.8	King County	Remove already breached sections of the existing levee.	estuary-shoreline restoration
47	Upper Boise Creek Revegetation	Boise Creek from RM 1.5 to 4.5	King County	Revegetate the stream in all reaches having little or no riparian vegetation. Install fences with livestock watering access. Install educational signage with roped off boundaries in golf course area.	estuary-shoreline restoration
48	White River Estates Riparian buffer enhancement.	Right bank White River from RM 6.3 to 6.7	King County	Acquire 50 ft. wide conservation easement along 2000 lin ft. of channel. Underplant the existing cottonwood riverbank with conifers and native shrubs. Re-grade the slope in some areas.	estuary-shoreline restoration
49	Birch St. Native vegetation planting	upstream and downstream of the Birch St. culvert.	Pierce Stream Team, Friends of the Hylebos Creek, City of Milton	As part of the Birch Street Culvert project (see above description), Friends of the Hylebos Wetlands and the Pierce Stream Team will conduct invasive weed control and native plantings upstream and downstream from the culvert.	habitat restoration
50	Brooklake riparian restoration	The project site is a former blueberry farm alongside approximately 800 feet of the West Branch of Hylebos Creek.	King County	Restoration would involve two phases: 1) installing Engineered large Woody Debris (ELWd) systems in the stream channel to encourage formation of pools, spawning gravel deposition and salmon habitat; 2) removing blackberries and restoring a functioning riparian forest with native shrubs and trees. This project will involve volunteers in planting and ELWd installation.	habitat restoration
51	Carbon River Sub-basin barrier removals	various sites within Carbon river sub-basin	Pierce County Conservation District	Replace culverts and restore habitat	habitat restoration
52	Clear Creek Floodgate removal	Lower clear creek	Pierce County	Remove floodgate, buy out potentially floodprone property, and/ or build setback levee to protect homes.	habitat restoration

53	Clearwater Sub-basin barrier removals	various sites within Clearwater sub-basin	Pierce County Conservation District	Replace culverts and restore habitat	habitat restoration
54	Coal Creek Restoration	Mouth of Coal Creek where it enters the White River by the City of Auburn	Pierce County Conservation District	Install wiers to fix gradient, and replace culvert.	habitat restoration
55	Dickman Mill Shoreline Rehabilitation	On property of unknown ownership offshore of Dickman Mill	Located in Tacoma, but City not necessarily sponsor	Project to remove mill and many overwater structures is complete. Additional actions would remove remaining overwater structures, pull pilings, re-establish eelgrass beds in formerly shaded footprint. May require thin sand cap to provide substrate.	habitat restoration
56	Ehli Creek Culvert Project	intersection of private road and Ehli Creek	Pierce County Conservation District	Replace culvert and plant native vegetation to restore riparian zone	habitat restoration
57	Electron Diversion Screen	mid Puyallup mainstem - electron area	Pierce County	Provide inclined floor screen structure or flume, similar to W.R. facility.	habitat restoration
58	Floodplain Acquisition with Levee Breaching.	41 acres inland from left bank of White River at R.M. 5.0 to 6.3. (county line)	King County (PTI & MIT also interested)	Reconnect 41 acres of floodplain with to the active river channel by breaching a portion of the levee.	habitat restoration
59	Foothills Trail Vegetation Installation	4 acres of total land adjacent to South Prarie Creek at 6 locations. (R.M. 1, 1.5, 2.5, 3.5, 7, 7.5)	Pierce County Public Works	Plant 4 acres of total land adjacent to South Prarie Creek with native conifer trees.	habitat restoration
60	Grain Terminal to GSA Terminal Shoreline Rehabilitation	On property of unknown ownership from the grain silos NW about 1200 ft.	Located in Tacoma, but City not necessarily sponsor	Excavate uplands west of grain silo access road (2.5 acres); cut down bank to reduce slope; armor as needed; add habitat mix; create storm berm and backshore, remove offshore pilings; add LWD; add riparian plantings on adjacent uplands.	habitat restoration
61	Greenwater Sub-basin barrier removals	various sites within Greenwater sub-basin	Pierce County Conservation District	Replace culverts and restore habitat	habitat restoration
62	Hauff property / DOT mitigation restoration project	Lower Hylebos upstream of Hylebos waterway	Pierce County	Acquire Hauff property upstream of DOT mitigation project and Hylebos Waterway. Conduct stream channel and riparian restoration. Create off-channel rearing habitat.	habitat restoration
63	Lower Boise Creek Relocation and acquisition	Right bank of Boise Creek and White River near confluence at RM 0.10	King County	Acquire 3 parcels and one residential structure along the right bank of the confluence and relocate the lower 500 ft of the creek in a new channel, approx 2000 ft.	habitat restoration
64	Pierce 78 W.R. Hydroelectric Facility tailrace barrier	at powerhouse tailrace on Puyallup	Pierce County	Create a barrier to prevent fish from entering the tailrace. Project is required by FERC license - currently under appeal.	habitat restoration
65	Puyallup River Setback levee - Calistoga Bridge	Puyallup RM 19-21.8 RB (North of Calistoga bridge)	Pierce County	Construct approximately 6,000 lin-ft of setback levee, remove existing levee, and acquire land parcels.	habitat restoration

66	Puyallup River Setback levee - Ford / Matlock Extension	Ford / Matlock Extension, Puyallup RM 22-23.8 RB (south of Calistoga bridge)	Pierce County	Construct approximately 10,000 lin-ft of setback levee, remove existing levee, and acquire land parcels.	habitat restoration
67	Puyallup River Setback levee - N.128th St. LB	North of 128th St. Bridge, Puyallup RM 15.2-16.65 LB	Pierce County	Construct approximately 7,000 lin-ft of setback levee, remove existing levee, and acquire land parcels.	habitat restoration
68	Puyallup River Setback levee - N.128th St. RB	North of 128th St. Bridge, Puyallup RM 15.2-16.65 RB	Pierce County	Construct approximately 8,800 lin-ft of setback levee, remove existing levee, and acquire land parcels.	habitat restoration
69	Puyallup River Setback levee - S.128th St. LB	South of 128th St. Bridge, Puyallup RM 16.65-17.51 LB	Pierce County	Construct approximately 5,500 lin-ft of setback levee, remove existing levee, and acquire land parcels.	habitat restoration
70	Relocation of mobile home park and riparian buffer restoration	Right bank White River from RM 6.0 to 6.3	King County	Purchase and relocate 24 mobile homes along 3rd place SE in Pacific. Remove all infrastructure and 1200 lin ft. of concrete slab revetment. Revegetate with a 200 ft. min width buffer with	habitat restoration
71	Ruston Shoreline enhancement	On City Parks and recreation ownership and property of unknown ownership.	Located in Tacoma, but City not necessarily sponsor	Selected local areas along this reach could be amenable to the following types of actions: cut down banks to reduce slope; re-armor as needed; add habitat mix; create pocket beaches with storm berm and backshore; remove offshore pilings; add riparian habitat.	habitat restoration
72	Shera's Falls, Clover Creek	On Clover Creek at Ron Shera's property just above Steilacoom Lake	Pierce County Conservation District	Construct a rock wier below concrete wier	habitat restoration
73	Squally Beach Restoration Project	Hylebos Creek near Marine View Drive	City of Tacoma	Excavate 2000 cy from 0.66 acres along Hylebos Creek, and plant intertidal vegetation. Runoff from the north side of Marine View Drive would be intercepted and routed through the project site. Freshwater inputs and substrate enhancement will also be included.	habitat restoration
74	Swan Creek Stream Restoration	Swan Creek	City of Tacoma	Excavate approximately 2 acres of filled wetland property and the planting of native vegetation within and adjacent to newly created wetlands on on nearby hillslopes. Fish passage impediments will also be eliminated.	habitat restoration
75	West Milton Salmon Habitat Restoration	East Hylebos upstream of 5 th Avenue in Milton	King County	This project involves invasive weed removal and restoration planting along 450 feet of stream, reed canary grass control and native planting in an adjacent wetland, and installation of at least four engineered wood structures in the stream channel to create channel diversity and juvenile salmon habitat.	habitat restoration
76	White River Setback Levee	Sumner Tractor, south of Main St. Bridge, White RM 0.3-0.6 RB	Pierce County	Construct approximately 1,500 lin-ft of setback levee, remove existing levee, and acquire land parcels.	habitat restoration
77	Carbon River Setback levee - Allward Rd.	Carbon RM 5.8-8.3 LB	Pierce County Conservation District	Construct approximately 15,000 lin-ft of setback levee, remove existing levee system and acquire land parcels.	levee removal / setback
78	Flett Creek Channel Restoration	Flett Creek above both Bridgeport and Lakewood Dr.	Pierce County Conservation District	Mechanically pull Reed canary grass and restore channel. Plant riparian corridor to shade channel and reduce sediment from nearby development.	levee removal / setback

79	Greenwater River Channel Restoration Project	Greenwater river area above and below RM 7.0	Pierce County Conservation District	Restore natural channel corridor, cover, side channel habitat, and percent gravel. Increase percentage of pools from 3% to 50% of the available habitat. Increase LWD from 7 to over 90 pieces.	levee removal / setback
80	Huckleberry Sub-basin barrier removals	various sites within Huckleberry sub-basin	Pierce County Conservation District	Replace culverts and restore habitat	levee removal / setback
81	Hylebos Sub-basin barrier removals	various sites within Hylebos sub-basin	Pierce County Conservation District	Replace culverts and restore habitat	levee removal / setback
82	Mowich Sub-basin barrier removals	various sites within Mowich sub-basin	Pierce County Conservation District	Replace culverts and restore habitat	levee removal / setback
83	Old Soldier's Home Setback	Left bank of Puyallup at RM 22 just downstream of the city of Orting, bound by the Puyallup river to the east, Calistoga Ave. to the west, and Albert Bell Rd. to the south.	Puyallup Tribe, Pierce County (also being pursued by Corps)	Pulling back the levee to allow the river to meander and reduce scour during flood event. This would eventually increase fish habitat. Levee construction might not require same specifications as present structure.	levee removal / setback
84	Pierce-142 LWD enhancement	many	Pierce County Conservation District	Place large woody debris	levee removal / setback
85	Pierce-143 Nutrient enhancement	many	Pierce County Conservation District	place salmon carcasses or manufactured product.	levee removal / setback
86	Puyallup River Setback levee (in progress)	Puyallup River	Pierce County Water Programs	Construct a 550 lin ft. setback revetment along the Puyallup River south of Orting. The project will implement fish habitat structures such as willow plantings, LWDS, and Kapowsin Creek channel restoration	levee removal / setback
87	Puyallup watershed unknown barrier removals	various sites within watershed	Pierce County Conservation District	Replace culverts and restore habitat	levee removal / setback
88	Puyallup-Lower Sub-basin barrier removals	various sites within Lower Puyallup river sub-basin	Pierce County Conservation District	Replace culverts and restore habitat	levee removal / setback
89	Puyallup-upper Sub-basin barrier removals	various sites within upper Puyallup river sub-basin	Pierce County Conservation District	Replace culverts and restore habitat	levee removal / setback
90	South Prarie Sub-basin barrier removals	various sites within South Prarie sub-basin	Pierce County Conservation District	Replace culverts and restore habitat	levee removal / setback
91	Wapato Sub-basin barrier removals	various sites within Wapato river sub-basin	Pierce County Conservation District	Replace culverts and restore habitat	levee removal / setback
92	West fork White Sub-basin barrier removals	various sites west fork White River sub-basin	Pierce County Conservation District	Replace culverts and restore habitat	levee removal / setback

93	White-lower Sub-basin barrier removals	various sites within lower White river sub-basin	Pierce County Conservation District	Replace culverts and restore habitat	levee removal / setback
94	White-upper Sub-basin barrier removals	various sites within upper White sub-basin	Pierce County Conservation District	Replace culverts and restore habitat	levee removal / setback
95	28 Mile Creek Side Channel Restoration Project / Barrier Removal	At approx. USFS Rd 70 and 28 Mile Creek intersection.	Pierce County Conservation District	reconnect side channel to 28 Mile Creek and remove barrier culvert. Additional restoration needed at USFS wiers downstream from barrier culvert.	miscellaneous
96	Foothills Trail Culvert Replacement	Tributary to the South Prarie Creek at R.M. 7.	Pierce County Public Works / Conservation District	Remove a 130 ft long concrete culvert that is considered a blockage, and replace with a box culvert or bridge.	miscellaneous
97	Mud Mountain Dam Flow Modifications Investigation	Mud Mountain Dam	King County	<i>Conduct Preliminatry Assessment:</i> Operate flow control from Mud Mountain Dam, to the extent possible, to more closely represent components of natural variability--magnitude, frequency, duration, timing and rate of change	miscellaneous
98	Puyallup River Basin REET Land Acquisition	Puyallup, Carbon, and White Rivers	Pierce County Water Programs	This action involves the voluntary participation of property owners wishing to sell their floodplain property due to threat of flooding. This capital expenditure has been on-going each year since 1990. Funding averages \$500,00/yr and 710 acres have been acquired to date.	miscellaneous
99	Puyallup River Setback Levee - Riverside Drive	Puyallup RM 12.43-12.8 RB	Pierce County Conservation District	levee breachings or arch culverts at either end of this site would allow water (and fish) to enter the channel. There are residences on a bench above the old channel, which may require revetment along the 1100 ft. toe of the slope.	miscellaneous
100	Salmon Recovery land acquisition grant	Puyallup and Carbon Rivers	Pierce County Water Programs	This action involves the voluntary participation of property owners wishing to sell their floodplain property due to threat of flooding. Funding for this project is \$1,600,000, and 56 acres have been acquired to date.	miscellaneous
101	116th Street Wetland	left bank at Puyallup RM 16, bounded by Puyallup river, 116th St., and SR 162.	Puyallup Tribe, Pierce County	Levee breachings or arch culverts at either end of this site would allow water (and fish) to enter the channel. There are residences on a bench above the old channel, which may require revetment along the 1100 ft. toe of the slope.	off-channel habitat
102	96th Street Wetland	Right bank of Puyallup river immediately upstream of the Sportsman's site. Bounded by the river to the west, and straddles the intersection of Riverside Dr. and McCutcheon Rd.	Puyallup Tribe, Pierce County	Excavating the bottom of the wetland outlet 5 feet would provide more frequent inflow from the Puyallup River and allow fish passage. Clearing or grubbing the blackberries, followed by revegetation, would improve the habitat for fish and wildlife.	off-channel habitat
103	Clear Creek Off-channel habitat	Private parcels of willing sellers along Puyallup	Pierce County, Port of Tacoma	Purchase land and conduct restoration actions by excavating off channel habitat and re-establishing riparian vegetation	off-channel habitat
104	Jordan Property Acquisition project	Lower Hylebos downstream of Hwy 99, between 4th and 8th Aves.	Pierce County, City of Fife	Create off-channel habitat on recently aquired 13-acre parcel alongside the mainstem of Hylebos Creek downstream of Hwy 99, between 4th and 8th Aves.	off-channel habitat
105	Lower Carbon River Setback	Left bank of the Carbon river, at R.M. 0.8 just downstream from the city of Orting, bounded to the east by the river, and to the west by SR 162	Puyallup Tribe, Pierce County	This project would expand the most productive mainstem spawning habitat in the entire Puyallup watershed. Pulling back 2900 feet of levee would provide 75-160 acres of river channel habitat. Some excavation would be required to reduce downstream siltation.	off-channel habitat

106	Mowitch Restoration Project	Hylebos Creek	City of Tacoma	Three backwater pools near MLW will be sculpted from the present upland buffer area. A secondary stream mouth will be added in the area where there was an historic log ramp. The pools will include horizontal logs as habitat features. The area between the pools will also be regraded.	off-channel habitat
107	Outer Hylebos	DNR bedlands located between the mouth of the Hylebos Waterway and Browns Point	Port of Tacoma	Place fill to convert subtidal habitat to intertidal and shallow subtidal habitat over an area of approx. 40 acres by placement of clean dredged material. Habitats could vary from sandflat/mudflat to eelgrass.	off-channel habitat
108	Removal and replacement of lower Puyallup levee	North bank Puyallup River. River mile 2.5 through 8	Pierce County, City of Fife, City of Puyallup	Removal and replacement of levee on north side of River. The increased sediment loading is in the part of the lower Puyallup that is under the jurisdiction of the Corps has caused the flood plain to increase substantially.	off-channel habitat
109	Ruston Way Beach Replenishment	DNR tidelands and bedlands along Ruston Way Shoreline	Port of Tacoma	Place dredged material from Port development project along shoreline to construct intertidal and shallow subtidal beaches. Action could vary in size based on availability of dredged material.	off-channel habitat
110	Sumner Setback	Left bank of R.M. 10.8 on mainstem Puyallup river, bounded by the river to the north, 134th Ave. to the west, and 74th St. on the south.	Puyallup Tribe, Pierce County	Up to 1800 feet of levee could be set back as far as the toe of the existing slope. Excavation of up to 320,000 yds ³ to lower the site by 5 ft.	off-channel habitat
111	Westside Delta Enhancement	Washington DNR bedlands located on the west side of the neo delta of the Puyallup River	Port of Tacoma	Place fill to convert subtidal habitat to intertidal and shallow subtidal habitat by placement of clean dredged material. Action could vary in size based on availability of dredged material.	off-channel habitat
112	South Fork Road Setback	Left bank of Puyallup at RM 17.6, immediately upstream of the SR 162 bridge, bounded by the Puyallup river and the toe of the steep rise behind it, encompassing South Fork Rd.	Puyallup Tribe, Pierce County	Removing the levee for 2600 ft. would expose 32.5 acres of low floodplain to channel meandering. This would involve excavation of 260,000 yds ³ and reconstruction of 2400 ft. of levee. The new levee would be for flood control, not containment.	off-channel habitat
113	128th Street Wetland	Right bank of Puyallup at R.M. 16.8, immediately upstream of the 128th St. bridge, between the river and McCutcheon Rd.	Puyallup Tribe, Pierce County	Excavating channels to both ends of this wetland could improve flushing and provide side channel habitat. Both ends of the wetland could be connected with less than 150 ft. of 5 ft. deep excavation. No levee construction is necessary, since the wetland is inside the existing levee.	relocation
114	Coffee Creek Culvert Replacement	At the culvert site on Coffee Creek		Culvert will be replaced with bottomless arch culvert	relocation
115	Culvert Replacement on West Hylebos at Hwy 99.	West branch Hylebos creek at Hwy 99.	WS Dept of Transport	Replace existing culvert with one more suitable for fish passage.	relocation
116	Estuary Marsh Corridor Acquisition and restoration	A 0.8 mile span between Middle waterway and Puyallup river at R.M. 0.6.	Washington Dept of Natural Resources	Construct a side channel marsh connecting corridor between the Puyallup river and the middle waterway.	relocation

117	Freeman Road Oxbow Wetland	Right bank of Puyallup RM 6.0 bound by Freeman Rd. to the west, North Levee Road on the south, 86th Ave. on the east, and 52nd St. on the North.	Puyallup Tribe, Pierce County, City of Puyallup	Constructing a ring levee around the perimeter of the wetland and connecting it to the river with a culvert or bridged channel. A larger levee and excavation could provide more wetland than presently. The wetland would be tidally influenced.	relocation
118	Golf course oxbow	Left bank of R.M. 9.8 on mainstem Puyallup river across from the White/Puyallup confluence. There is a low oxbow bounded by the river to the north and a golf course to the south.	Puyallup Tribe, Pierce County	The oxbow is currently isolated from the river by a levee, which could be breached to allow flooding and backwater habitat. Opening the oxbow at both ends would provide side channel habitat. Excavation at either end would be less than 100 ft.	relocation
119	Puyallup River Setback Levee RM 13-14.5	Downstream from 96th St. bridge. Puyallup RM 14.5-13.0 LB.	WDFW	Remove constricting levees or revetments where feasible, and especially where historical floodplain features exist behind the existing channel structures.	relocation
120	White / Puyallup Confluence	Right bank of the main stem of Puyallup River at R.M. 9.9, immediately downstream of confluence with White River	Puyallup Tribe, Pierce County, City of Puyallup	A bottomless culvert through the levee would provide passage during high flows. The topography around the site should protect the surrounding areas from flooding.	relocation