



SALMON RECOVERY GRANTS

DECEMBER 2006

Asotin County \$115,408

Asotin County Conservation District \$28,860

Replacing the Hefflefinger Passage Barrier

The Asotin County Conservation District will use this grant to replace a barrier to fish migration on Hefflefinger Creek, a tributary to George Creek on private property. The stream is traditional spawning and rearing habitat for steelhead and trout, but no fish have been found upstream of the barrier. Replacing the barrier will open 0.69 mile of habitat. The landowner also will enroll 0.5 mile of stream in the Conservation Reserve Enhancement Program at the site providing 23.2 acres of riparian habitat restoration. The conservation district will contribute \$5,093 in donated materials and a state grant. (06-2231R-FY07)

Asotin County Conservation District \$86,548

Replacing the Shumaker Creek Passage Barrier

The Asotin County Conservation District will use this grant to replace two barriers to fish migration on Shumaker Creek, a tributary to the Grande Ronde. Steelhead and trout have been seen in the stream. Replacing the barriers will open 3 miles of step pool habitat. The conservation district will contribute \$15,825 from a federal grant and donated equipment and labor. (06-2232R-FY07)

Chelan County \$749,803

Chelan County \$402,642

Reconnecting the Nason Creek Oxbow

Chelan County will use this grant to complete the design, permitting and installation of two culverts under State Route 207 on the Nason Creek, opening 34.5 acres of oxbow habitat. This will provide off-channel rearing and foraging habitat for spring Chinook salmon and steelhead, which are endangered, and bull trout. Chelan County will contribute \$72,000. (06-2188R-FY07)

Chelan County \$68,327

Restoring Irwin Riparian Areas

Chelan County will use this grant to buy and install plants on the Irwin property, restoring 1.63 acres of riparian habitat. The floodplain at the Irwin property is used for hay production, and the streambanks support a sparse community of trees and shrubs. Working with the landowner, the county will plant a 50-foot-wide buffer of native trees and shrubs on the floodplain extending back from the top of the streambanks for the entire length of the property. Below the floodplain plantings, the streambanks will be planted with native willows and poplars. Work will include irrigation and maintenance



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during the first year of the project. Chelan County will contribute \$12,100 in donated labor. (06-2189R-FY07)

Chelan County **\$130,291**

Replacing the Lower Skinney Creek Culvert

Chelan County will use this grant to replace a culvert that blocks salmon species migrations to spawning and rearing habitat. The culvert presents a high drop and is too small for the volume of water running through it, creating water that is too fast for fish to successfully navigate. The culvert will be replaced with a bridge. Successful completion of the lower Skinney Creek project in conjunction with replacing the upper Skinney Creek culvert in 2006 will open more than 4 miles of critical habitat. Chelan County will contribute \$31,000 in donated labor. (06-2268R-FY07)

Chelan County **\$148,543**

Replacing the Alder Creek Culvert #1

Chelan County will use this grant to replace a culvert with a steel bridge on Alder Creek to provide year-round fish passage. In addition, crews will plant the creek banks to restore and enhance habitat. Chelan County will contribute \$31,000 in donated labor. (06-2249R-FY07)

Clallam County **\$982,000**

Jamestown S'Klallam Tribe **\$184,000**

Restoring Dungeness River Estuary

The Jamestown S'Klallam Tribe will use this grant to allow the tide to penetrate 50 acres in the Dungeness River and Bay estuary, opening access to important nearshore habitat for salmon species. Saltwater dikes were built to create agricultural land in the late 1800s. The land is bisected by the Dungeness River channel (now dry; but visible) and 40 acres of privately owned salt marsh. The tribe will modify the saltwater levees to allow the tides to enter the land and extend the reach of saltwater. Work will include designing and excavating the land to create channels for the tide to enter the area and to create a salt marsh. The tribe also will complete two assessments – a cultural resources survey and an assessment of the risk of the bluff eroding if the dike is removed or changed. The tribe will contribute \$83,000 in a federal grant. (06-2133R-FY07)

Anne Shaffer **\$201,195**

Assessing Fish Use of the Strait Juan De Fuca Nearshore

Anne Shaffer will use this grant to define fish use in the central Strait nearshore, including identifying species, populations, timing and life history strategies of juvenile salmon species. She also will look at how fish use the highest priority areas for



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restoration and she will prioritize projects. The recent federal designation of critical habitat for salmon at risk of extinction ends at the mouth of the Elwha River because there was no information for the Strait's nearshore. This project will provide information on the presence of fish to address this data gap. Shaffer will contribute \$80,000 in donated labor. (06-2279N-FY07)

Clallam Conservation District **\$399,805**
Conserving Clallam-Cline Water

The Clallam Conservation District will use this grant to replace nearly 17 miles of open canals and ditches with pipelines to save water for salmon and bull trout. The Cline Irrigation District, Clallam Ditch Company and the Dungeness Irrigation Group have formed a partnership to improve the efficiencies of their irrigation systems and reduce the amount of water pulled from the Dungeness River to benefit Puget Sound Chinook, Hood Canal summer chum and bull trout. Under the sponsorship of the Clallam Conservation District, the partnership will replace the open canals and ditches with nearly 13 miles of closed pipes, saving an estimated 6 cubic feet per second of water. In addition, the pipeline will eliminate spills and associated contamination of Dungeness Bay. The conservation district will contribute \$100,000 from a state grant. (06-2272R-FY07)

Quileute Tribe **\$197,000**
Restoring Large Woody Debris in Hyas Creek

The Quileute Tribe will use this grant to place large woody debris in Hyas Creek, one of only two tributaries of the south fork of the Calawah River that has spawning and rearing habitat for coho and steelhead. Without large woody debris in the creek, the water flows too high and too fast to create a diversity of habitat and to retain spawning gravel. Rootwads, branches and logs will be cabled together in "jams" and secured between rocks to slow the river so gravel can settle on the river bottom. The tribe will contribute \$57,000 in a federal grant and donations of labor and materials. (06-2286R-FY07)

Clark County **\$895,157**

Lower Columbia Fish Enhancement Group **\$310,157**
Restoring the Lower Washougal River Phase 2

The Lower Columbia Fish Enhancement Group will use this grant to create a large logjam and add five clusters of boulders in the Lower Washougal River. Work also will include replanting the perimeter of the off-channel ponds and wetlands. These actions will increase the types of habitats in the ponds, creating spawning and rearing areas for chum, coho, Chinook and steelhead, which are threatened with extinction, as well as for cutthroat, which are a candidate for the federal government's endangered species list. Project partners include Camas and the Georgia-Pacific and Burlington Northern



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Railway. The enhancement group will contribute \$315,000 from a state grant and donated labor. (06-2182R-FY07)

Clark County **\$300,000**

Protecting the East Fork of the Lewis Reach and Dean Creek

Clark County will use this grant to buy 52 acres of shoreline, riparian and floodplain habitat on the east fork of the Lewis River and lower Dean Creek. The site includes 0.3 mile of shoreline on the east fork of the Lewis River and 0.2 mile on Dean Creek. The land is adjacent to and will become part of the lower East Fork Lewis Habitat and Greenway system, which includes 2,100 acres of protected habitat and open space. The site is an important area for protecting chum, Chinook, steelhead and coho. Clark County will contribute \$725,700 in conservation futures¹ and a state grant. (06-2173A-FY07)

Columbia Land Trust **\$285,000**

Protecting the East Fork of the Lewis River Reach 17

The Columbia Land Trust will use this grant to protect from residential development 169 acres of high-quality shoreline and riparian and upland habitat on the east fork of the Lewis River, 1.5 miles west of the Clark and Skamania county line and Gifford Pinchot National Forest. The land has been subdivided into 33, 5-acre lots and includes 1 mile of shoreline in Reach 17. The reach is important for protection of summer steelhead. The landowner will sell the lots if this project cannot be completed. The land trust will contribute \$599,460 in donated land and conservation futures.² (06-2165A-FY07)

Columbia County **\$201,261**

Columbia Conservation District **\$57,761**
Improving McKinley Habitat

The Columbia Conservation District will use this grant to install rock vanes and large woody debris, such as rootwads and logs, in the Touchet River to increase habitat, slow the river and stabilize the streambank. The Touchet River is home to mid-Columbia steelhead, which are threatened with extinction, bull trout and spring Chinook salmon. The streambank at the reach is eroding, which has reduced the riparian buffer by more than 100 feet, damaging spawning areas. Installation of a rock vane and woody debris will slow the river, creating a variety of areas for fish to rest, hide from predators, feed and grow. It also will help reduce erosion. The conservation district will contribute \$10,194 in donations of cash and materials. (06-2227R-FY07)

¹ Conservation futures are a portion of property taxes used by local governments to buy land or development rights to protect natural areas, forests, wetlands and farms.

² Same as above.



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Columbia Conservation District **\$77,000**

Helping a Farmer Convert to Direct Seeding

The Columbia Conservation District will use this grant to help a farmer convert from conventional soil-disturbing farming practices to directly applying seed on 500 acres. Work will include developing a management plan to minimize soil disturbance and address plant residue and sod bank issues. The farm drains into the Tucannon River and Willow Creek, which drains to the Tucannon River. The impacted stream reaches are used by Snake River steelhead and fall and spring Chinook salmon, all of which are threatened with extinction, and bull trout. The conservation district will contribute \$77,000 (06-2230R-FY07)

Columbia Conservation District **\$66,500**

Piping a Ditch in the East End Irrigation District

The Columbia Conservation District will use this grant to convert an open ditch to a pipe. Low water in the Touchet River is an imminent threat to salmon recovery. By converting the ditch to a pipe, less water is lost through leaks and evaporation. The piped ditch will be a closed system with irrigation water being used when needed, eliminating the continuous flow that now exists. The conservation district will contribute \$15,000 from a federal grant. (06-2229R-FY07)

Cowlitz County **\$372,301**

Cowlitz-Wahkiakum Conservation District **\$278,501**

Creating a Coweeman River Community Watershed Plan

The Cowlitz-Wahkiakum Conservation District received two grants to develop a conservation plan and implement those practices for a landowner as a pilot project and for the second grant to plan, site and design salmon recovery projects in the same watershed for multiple landowners. The district will work with a landowner in the Coweeman watershed to complete a restoration project that will address several of the key habitat elements, such as fencing, riparian plantings and placement of large woody debris in the stream. For the larger project, the district has engaged nine landowners who are interested in projects along more than 4 miles of stream reaches. Work will include developing site-specific but watershed-sensitive conservation plans, habitat restoration designs and implementation strategies. The plans are expected to improve the stream channel, retain gravel, reduce the stream temperature and improve water quality for salmon and steelhead. The district will contribute \$50,001 in a state grant and donations of labor, materials and equipment. (06-2175R-FY07 and 06-2325N-FY07)



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Lower Columbia Fish Enhancement Group **\$93,800**

Designing Lower Kalama River Off-Channel Habitat

The Lower Columbia Fish Enhancement Group will use this grant to develop designs for restoration projects that would create off-channel habitat on 52 acres owned by Julius Ledgitt. Work would include gathering topographical, surface water and groundwater elevation data and then crafting a conceptual plan. Data collected from potential project sites will be used to calculate detailed construction budgets and conceptual designs for proposals seeking funding in 2008. This project is intended to benefit chum, coho and Chinook salmon as well as steelhead and cutthroat trout. The fish enhancement group will contribute \$21,800 in cash and donations of equipment and labor. (06-2181N-FY07)

Grays Harbor County **\$819,860**

Mason County **\$547,850**

Conserving Decker Creek Habitat

Mason County will use this grant to protect 498 acres of Decker Creek, permanently protecting a salmon-producing, riparian-wetland complex in the watershed of the east fork of the Satsop River. Coho, summer and fall Chinook, chum, steelhead and cutthroat use the site for spawning and rearing. It contains a diversity of riparian and wetland habitats that produce a complex mosaic of native plant communities that create a highly productive habitat for salmon species. The site includes extensive riparian habitat, including about 2 miles of Decker Creek. The site is threatened with logging. The U.S. Fish and Wildlife Service and National Oceanic and Atmospheric Administration's Marine Fisheries Service support this project, stating the highest level of protection is warranted for this unique salmon-producing complex. Mason County will contribute \$695,925 from a state grant and donated labor. (06-2151A-FY07)

Quinault Nation **\$242,775**

Controlling Prairie Creek Knotweed

The Quinault Nation will use this grant to survey the Prairie Creek sub-watershed for Japanese knotweed and then eradicate the knotweed with herbicide treatments for 3 years. Crews will inspect and treat the roads and uplands in the watershed to prevent reinfestation of the stream. The invasive plant has degraded the stream functions. High water spreads the seed throughout the lower Quinault system. The eradication of Japanese knotweed will give native plants a chance to recolonize riparian areas and restore forests and the ecological functions they provide, and prevent additional infestations. Steelhead, Chinook and coho are affected. The Quinault Nation will contribute \$45,000 from a federal grant and donated labor. (06-2254R-FY07)



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Quinault Nation **\$29,235**

Relocating Camp 7 Road and a Culvert

The Quinault Nation will use this grant to relocate Camp 7 Road to restore fish passage to a pond and about 0.75 mile of habitat, restore sediment transport and hydraulic processes at the road crossing, and restore habitat in the historic stream channel to as natural condition as possible. The Camp 7 project is on an unnamed tributary of the Quinault River, southwest of Amanda Park, and is home to coho salmon, winter steelhead, char and cutthroat trout. The stream at the road crossing is diverted to an undersized culvert but upstream is about 4 feet above the road. The culvert blocks access to a wetland pond and 0.75 mile of habitat. Work will include relocating the road, designing and installing a bridge and several culverts, opening the stream channel and establishing a connection between the stream and wetland pond. The Quinault Nation will contribute \$112,580 in a federal grant, equipment and materials. (06-2284R-FY07)

Island County **\$179,200**

Island County **\$179,200**

Assessing and Protecting Strawberry Point

Island County will use this grant to coordinate data analysis so it can prioritize shorelands for protection and develop implementation plans. The implementation plans would include updating stewardship plans, increasing participation in conservation programs, acquisition actions and identification of landowners willing to enter into conservation easement agreements with the county. This work is targeted at protecting the healthy Strawberry Point watershed for salmon. Strawberry Point is an important area for juvenile salmon, forage fish, sand lance, surf smelt and eelgrass. Island County will contribute \$32,700 in labor and donations of equipment and labor. (06-2217N-FY07)

Jefferson County **\$478,151**

Hood Canal Salmon Enhancement Group **\$200,000**

Restoring the Quilcene Estuarine Wetlands

The Hood Canal Salmon Enhancement Group will use this grant to restore 38 acres of coastal wetland habitats to properly functioning conditions. Quilcene Bay and its coastal wetlands provide significant habitats for a wide diversity of wildlife. Much of the bay's estuarine wetlands have been lost by the impacts of agricultural diking, road building and flood control projects. Work will include permanently removing livestock from the 38 acres, removing a 0.5-mile-long saltwater levee and reestablishing a properly functioning tidal channel network and plant communities on adjacent wetlands. The



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restored wetlands (38 acres) and an adjacent 12 acres of wetlands will be conserved in perpetuity using a conservation easement. The salmon group will contribute \$526,570 from federal and local grants. (06-2225R-FY07)

Jefferson County

\$139,051

Purchasing the Dosewallips Floodplain Phase 2

Jefferson County will use this grant to purchase 33 acres to protect a key migration zone for Puget Sound Chinook salmon. The Dosewallips River contains some of the most important and highest quality salmon habitat in eastern Jefferson County. The purchase will permanently protect critical stream habitat, floodplain, sandbars, side channels and floodplain connections that support spawning populations of Puget Sound Chinook salmon and Hood Canal summer chum, both of which are threatened with extinction. The habitat also is used by steelhead, coho, pink salmon and cutthroat trout. The purchase will prevent future habitat degradation along more than 0.5 mile of shoreline. Work also will include restoration activities. Jefferson County will contribute \$24,539 in donated land. (06-2288A-FY07)

Skokomish Tribe

\$39,100

Acquiring Quilcene Floodplain

The Skokomish Tribe will use this grant to purchase 5 acres, conserving riparian, floodplain and channel habitats in the lower Big Quilcene River watershed. The land will be owned and maintained in perpetuity by the Skokomish Tribe for salmon recovery. The tribe will contribute \$6,900 from a local grant. (06-2301A-FY07)

Hood Canal Salmon Enhancement Group

\$100,000

Acquiring Land Along the Little Quilcene River

The Hood Canal Salmon Enhancement Group will use this grant to buy 8 acres, including 0.4 mile of shoreline, on the Little Quilcene River. The land is adjacent to property owned by Jefferson County, which would unify the north side of the Little Quilcene River and estuary from the Center Road bridge to Quilcene Bay, aiding further breaching of the north Little Quilcene River dike. Puget Sound and Hood Canal are comprised of large, complex estuarine systems that support thousands of wildlife species. Although the marine areas still support the largest remaining estuarine wetlands on the West Coast, 73 percent of salt marsh habitat has been lost since the 1800s. The Little Quilcene River along with the Big Quilcene River estuary represent some of the most significant estuarine-salt marsh areas in this marine complex. The estuary supports Chinook, pink, chum, steelhead, coho, sturgeon and cutthroat. Dikes have disturbed tidal function on a significant portion of this estuary and limited the amount of habitat available to salmon. The salmon group will contribute \$25,000. (06-2226A-FY07)



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King County

\$1,462,000

King County

\$365,000

Removing the Chinook Bend Levee

King County will use this grant to remove a levee on the Snoqualmie River, restoring floodplain habitat in the Chinook Bend Natural Area. Removal of the levee will allow the river to access its floodplain at much lower flows than presently allowed. The project is expected to restore rearing habitat for nearly the entire population of the Snoqualmie run of Snohomish fall Chinook salmon. Design and permitting of the levee project will take place in 2007-2008 with construction in summer 2008. King County will contribute \$335,128 in cash and federal and local grants. (06-2250R-FY07)

King County

\$100,000

Designing Snoqualmie River Off-channel Habitat Near Camp Gilead

King County will use this grant to design of a project to remove a levee along the Snoqualmie River. The levee impounds a small tributary, a wetland and a historic backwater channel of the Snoqualmie, creating a single, open water wetland. The levee has effectively severed the floodplain wetland from the Snoqualmie River. Removing a 115-foot segment of the levee will open 4 acres of off-channel habitat. Work also might include removing bank armoring. The wetland will provide rearing and refuge habitat for juvenile salmon species. The project is near a high concentration of spawners on the Snoqualmie River and is on the migratory path of a vast majority of the Snoqualmie run of Snohomish fall Chinook. King County will contribute \$52,890. (06-2251N-FY07)

Seattle

\$436,000

Acquiring the Cedar River Rainbow Bend

Seattle will use this grant to acquire 20 acres of floodplain along the lower Cedar River in a reach with some of the most natural riverine and riparian habitat downstream of the protected Cedar River watershed. The site encompasses the downstream half of a meander bend referred to as Rainbow Bend. This purchase will be part of a large scale effort between Seattle and King County to protect and restore the entire bend (about 40 acres) and will create the largest floodplain restoration opportunity on the river. In addition to the acquisition, Seattle has set aside about \$1 million for restoration of the entire 40 acres. The restoration goal is to reconnect the river with its floodplain and restore the structure and function of the riparian habitat. The lower Cedar River supports some of the most significant salmon runs in the region including wild Chinook, which are threatened with extinction. King County will contribute \$4.8 million in cash, conservation futures³ and federal and local grants. (06-2258A-FY07)

³Conservation futures are a portion of property taxes used by local governments to buy land or development rights to protect natural areas, forests, wetlands and farms.



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Tukwila **\$311,000**

Acquiring Duwamish Gardens Habitat

Tukwila will use this grant to purchase 2.16 acres adjacent to the right bank of the Duwamish River, a high priority transition zone between freshwater and saltwater that will, in the future, be restored for salmon habitat. Off-channel and shallow water habitats in this stretch of the Duwamish will provide opportunities for juvenile fish to move out of the main channel to places where they can feed and grow. The property is among the largest remaining pieces of under-developed sites for habitat restoration remaining in the Duwamish corridor. Located in the midst of several other restoration sites, the property will provide an important habitat and open space link. The property, until recently, operated as a family farm known as Duwamish Gardens and is for sale. Tukwila will contribute more than \$1 million in cash, conservation futures⁴ and state and local grants. (06-2199A-FY07)

Cascade Land Conservancy **\$100,000**

Beaconsfield on the Sound Phase 2

The Cascade Land Conservancy will use this grant to design and plan for restoration and acquisition of a bluff at Beaconsfield on the Sound, one of the last privately held undeveloped feeder bluffs in central Puget Sound. The 300-foot-high bluff historically released more than 4,500 cubic yards a year of sediment, which provided the beach with ideal material for fish spawning areas. More than 800 feet of the bluff now is armored, preventing nearly all of the sediment input. An analysis of landowner willingness supported removal of 656 feet of bulkhead, leaving 175 feet of bulkhead to protect a house. Work will include technical design, property appraisals, permit applications and landowner outreach and negotiations. The area is home to Green Duwamish Chinook. The conservancy will contribute \$64,500 from a local grant. (06-2198P-FY07)

Kent **\$150,000**

Restoring Riverview Park

Kent will use this grant to complete plans and permitting for restoring Riverview Park to provide summer rearing habitat and winter refuge for salmon. The restoration work will include creating an off-channel area from the main stem of the lower Green River just downstream from the mouth of Mill Creek and placing large woody debris, spawning gravel and riparian plantings. The project is a top priority because it provides needed salmon habitat and refuge in a key reach of the Green River and the mouth of Lower Mill Creek. Kent will contribute \$1.3 million in cash and cash donations. (06-2190R-FY07)

⁴ Conservation futures are a portion of property taxes used by local governments to buy land or development rights to protect natural areas, forests, wetlands and farms.



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Kitsap County \$522,000

Mid-Puget Sound Fish Enhancement Group \$74,250
Designing the Harper Estuary Culvert Removal Project

The Mid-Puget Sound Fish Enhancement Group will use this grant to do a feasibility study and design for a project to replace an undersized culvert in Harper estuary. Harper estuary is a pocket estuary of salt marsh, mudflats, a main channel and a disconnected freshwater wetland. The estuary provides little habitat for salmon because of a periodic barrier caused by the undersized culvert. The feasibility study and design will incorporate an analysis of both upstream and downstream habitat and geomorphic conditions and will coordinate with tribes to identify culturally sensitive areas. The enhancement group will contribute \$13,250 in donated labor. (06-2281N-FY07)

Mid-Puget Sound Fish Enhancement Group \$79,400
Planning Beaver Creek Pond and Culvert Removal

The Mid-Puget Sound Fish Enhancement Group will use this grant to assess and design the removal of an artificial sediment detention pond along Beaver Creek and assess the possibility of removing an undersized culvert. This is the fourth phase of an ongoing restoration project for the lower reaches of Beaver Creek, a salmon-bearing stream that drains into Clam Bay near Manchester. The enhancement group will investigate the barrier formed by the 48-inch culvert under the access road, immediately upstream of the sediment pond, as well as the bypass into a roadside ditch. The enhancement group will contribute \$28,000 in donated labor. (06-2274N-FY07)

Bainbridge Island \$235,000
Restoring Pritchard Park East Bluff

Bainbridge Island will use this grant to restore a nearshore bluff function at Pritchard Park in Eagle Harbor. The site is updrift of a fish spawning beach and other habitat at Pritchard Park. Work will include removing the failing bulkhead along the bluff, helping relocate a driveway away from the top of the unstable bluff and restoring riparian vegetation. The bluff experienced a major slide this past winter and the road is likely to be lost in two years. The project will be in view of the busiest ferry route in the state and will provide an opportunity to educate the public about salmon recovery and the need to restore nearshore habitat. Bainbridge Island will contribute \$100,000. (06-2294R-FY07)

Mid-Puget Sound Fish Enhancement Group \$56,000
Designing the Indianola Waterfront Preserve Bridge

The Mid-Puget Sound Fish Enhancement Group will use this grant to design a bridge to replace an undersized culvert in the Miller Bay estuary. Kitsap County has acquired land around Miller Bay to protect the uplands, streams and the Miller Bay estuary. Part of that land is the Indianola Waterfront Preserve, which includes significant estuarine



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habitat on the Port Madison Indian Reservation. The enhancement group will work with the Suquamish Fisheries Department, Kitsap County and the Indian Bay Homeowners Association to design a bridge to replace the culvert under Chief Sealth Drive, and restore the natural ecological function of the estuary. In addition to the bridge, the design will address removal of fill from the upper estuary. The enhancement group will contribute \$10,000. (06-2289N-FY07)

Bainbridge Island **\$77,350**

Planning and Beginning Strawberry Plant Restoration

Bainbridge Island will use this grant to design restoration work for the Strawberry Plant property and begin that work. The property, once the center of a thriving strawberry industry and now unused, eventually will become a park. Eagle Harbor has suffered significant habitat impacts, including the filling of two marsh/lagoon habitats in the outer harbor. The Strawberry Plant property is one of the most significant opportunities to restore lost habitat in Eagle Harbor and will benefit salmon and other wildlife. Work will include designing the project to restore the stream mouth, intertidal, fringe marsh and riparian habitat, and to begin work by removing 100 piles, a float, 250 feet of shoreline armoring and 23,000 square feet of concrete. Work also will include grading and amending soil and replanting the shoreline. Bainbridge Island will contribute \$126,650. (06-2300N-FY07)

Kittitas County **1,015,770**

Kittitas Conservation Trust **\$300,000**

Protecting Upper Yakima River Habitat-Hundley

The Kittitas Conservation Trust will use this grant to protect 100 acres of floodplain in the Easton reach of the Yakima River, which includes prime salmon spawning and rearing habitat. The land, known as the Hundley property, is comprised of 500 acres that contain 3 miles of shoreline, 40 acres of connected ponds and wetlands and two small tributary streams. It is adjacent to 212 acres of property owned by the state Department of Fish and Wildlife and several hundred acres of conserved land associated with Suncadia Resort near Roslyn. Subdivision and rapid development put the land at risk of fragmentation. Habitat acquisition in the Easton reach is a key strategy for habitat and species protection. Partners include co-managers Washington Department of Fish and Wildlife and the Yakama Nation, Kittitas County commissioners, four local conservation groups, Bonneville Power Administration, Washington State Parks and Recreation Commission and Suncadia resort. The conservation trust will contribute \$100,000 in cash donations. (06-2143A-FY07)



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Kittitas Conservation Trust \$243,820

Improving Cle Elum River Habitat

The Kittitas Conservation Trust will use this grant to design and build logjams in the lower Cle Elum River, providing critical freshwater habitat for spring Chinook, mid-Columbia steelhead, bull trout and coho. Construction of the Cle Elum dam in 1933 and the ensuing regulation of flows in the lower Cle Elum River have reduced the extent and complexity of salmon rearing habitat. The dam has isolated the lower Cle Elum River from its upper watershed and the natural habitat forming processes associated with floods, sediment transport, and recruitment of large woody debris. Several meanders also have been cut off, limiting off-channel habitat for rearing. The logjams built by the Trust will reactivate up to 5.79 miles of side channels and meanders and will restore natural habitat forming processes. The Kittitas Conservation Trust will contribute \$138,000 in donations of labor and materials. (06-2141R-FY07)

Kittitas County Conservation District \$155,050

Improving Fish Passage in Currier Creek

The Kittitas County Conservation District will use this grant to pass the Ellensburg Water Company main canal under Currier Creek and add a fish screen to the diversion. Work will include removing a 120-year-old fish barrier created by the canal-creek intersection, restoring the creek channel and planting plants along the creek. The creek is home to steelhead, which are threatened with extinction, as well as rainbow trout and coho and Chinook salmon. The diversion will make the level of the creek more consistent by being made independent of canal operations. It also will prevent fish from being trapped in the canal and will protect the creek from canal sediment. This project is being coordinated with the Yakama Nation and Kittitas Conservation Trust to allow fish to travel from the Yakima River through Reecer and Currier Creeks to open more than 2 miles of habitat in this critical reach of the Upper Yakima River. The Currier and Reecer Creek watersheds drain 47 square miles and meet the Yakima River near a perennial side channel with habitat for juvenile fish. The conservation district will contribute \$419,174 in cash, a state grant and donated materials. (06-2160R-FY07)

Kittitas County Conservation District \$316,900

Removing a Cherry Creek Barrier

The Kittitas County Conservation District will use this grant to upgrade fish screens on four surface water diversions and remove two fish barriers on Cherry Creek, opening 1.98 miles of rearing habitat. Work will include converting sprinkler systems to improve efficiency of water use and reduce soil erosion, converting a ditch to a closed pipeline, providing watering facilities away from the stream and improving streamside habitat. Cherry Creek is home to spring Chinook, steelhead trout and rainbow trout. Upstream are 50 miles of streams in three tributaries. These creeks, like all the tributaries in the Kittitas Valley, are modified extensively and contain passage barriers and unscreened diversions. This project is the first step in the larger process of restoring access and



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improving habitat. The conservation district will contribute \$145,000 from federal and state grants and donated materials. (06-2156R-FY07)

Klickitat County **\$131,704**

Underwood Conservation District **\$131,704**
Preventing Invasive Species Phase 1

The Underwood Conservation District will use this grant to survey the Klickitat River, focusing on popular access points, to determine the presence of the New Zealand mudsnail, an invasive species that can affect salmon habitat. The mudsnail has invaded several locations throughout North America, including the Columbia River and Deschutes River. The mudsnail can colonize a wide variety of salmon habitats, altering the food eaten by salmon species. The conservation district will develop and implement an outreach program focusing on building awareness, identification and prevention of spreading the mudsnail. The district also will develop preliminary designs for boat and equipment cleaning stations and will identify potential locations for them. The conservation district will contribute \$23,250 from federal and state grants and donations of equipment, materials and labor. (06-2253N-FY07)

Mason County **\$914,849**

Cascade Land Conservancy **\$190,050**
Purchasing Richert Ranch

The Cascade Land Conservancy will use this grant to purchase 150 acres of critical salmon habitat near the confluence of the north and south forks of the Skokomish River and Richert Springs. The land is regarded as the most important and urgent salmon restoration project in the Hood Canal basin. It is important for Chinook and summer chum salmon, which are threatened with extinction, as well as bull trout, coho, fall chum and steelhead. After the failure of an agricultural dike, the north fork began flowing through a cattle pasture creating significant sediment, water quality, temperature and fish passage concerns. Once the land is purchased, restoration will occur. The Cascade Land Conservancy will contribute \$115,500 from a federal grant. (06-2283A-FY07)

Skokomish Tribe **\$190,000**
Placing Large Wood Debris on the South Fork of the Skokomish River

The Skokomish Tribe will use this grant to design and install log jams to enhance the density and distribution of natural large woody debris in the upper south fork of the Skokomish River and its tributary confluences. The river drains about 129 square miles.



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Large woody debris slows a river and creates different types of habitat for fish, such as places to hide, rest and grow. Reaches targeted for wood placement include an area between the canyon and LeBar Creek that was cleared in the 1950s for a dam that never was built and at the mouths of Church, Pine and Cedar tributaries. The Skokomish Tribe will contribute \$170,000 from a federal grant and donated materials. (06-2302R-FY07)

Hood Canal Salmon Enhancement Group **\$81,799**
Restoring the Hamma Hamma River Estuary

The Hood Canal Salmon Enhancement Group will use this grant to breach the north dike on the Hamma Hamma River to allow salmon species to pass into and from 45 acres of estuarine salt marsh. The salmon group also will remove a culvert, which will improve access to an additional 2.5 acres of salt marsh on the south side. The Hama Hama River was diked in the early 1900s cutting off normal flow to the north fork and channelizing the south fork, essentially cutting off the estuary function to Hood Canal. The channelization makes Chinook, coho, fall chum, pink, steelhead, cutthroat trout and summer chum easy prey for seals when returning to their spawning beds. The escape route for out migrating juveniles is no less perilous as scores of shore birds feed on them as they try to reach Hood Canal. The salmon group will contribute \$32,686 from federal and private grants. (06-2221R-FY07)

Mason County **\$225,000**
Replacing Rabbit Creek Culvert

Mason County will use this grant to replace a culvert on Rabbit Creek where it crosses the Beeville Loop Road in the western part of the county. The culvert's small size speeds up the velocity of the water flowing through, limiting the ability of salmon to pass through. Crews will replace the culvert with a wider, open bottom, aluminum culvert and will fill a downstream plunge pool to return the streambed to its natural height. This was the highest priority culvert replacement in the watershed, as identified by a Mason Conservation District survey. Replacing the culvert will open 11.25 miles of habitat, including 2.5 miles of Rabbit Creek and 2.7 miles of major tributaries. The project will remove the lowest culvert barrier in the lower reaches of the Rabbit Creek watershed. Rabbit Creek has a substantial, undisturbed riparian corridor and extensive connected wetlands and is home to chum, coho and cutthroat. Mason County will contribute \$57,000 in equipment and donated labor. (06-2150R-FY07)

Washington Trout **\$80,000**
Mapping Watertypes in Water Resource Inventory Area 14

Washington Trout will use this grant to map rivers and streams and develop a prioritized list of salmon recovery projects. Effective salmon recovery requires the restoration and protection of fish habitats. Mason County stream buffer widths are set by watertype. Watertype maps under-represent the extent of fish and fish habitat, don't correctly



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represent the location of streams and miss streams. Consequently, many streams that warrant protection are not receiving appropriate buffers. Washington Trout will determine water type classifications in about 60 watersheds, map previously unmapped and incorrectly mapped waterways and generate species-specific distribution data. Washington Trout also will develop a list of five projects to be done in the future. Washington Trout will contribute \$14,200 in donated equipment and materials.
(06-2242N-FY07)

South Puget Sound Salmon Enhancement Group **\$101,000**
Restoring Pirates Cove

The South Puget Sound Salmon Enhancement Group will use this grant to restore Pirates Cove in Puget Sound's Pickering Passage. Work will include removing roads to reconnect the estuary. The site was modified in the late 1950s for recreation use. Then, the north end of the spit was closed to form a lagoon. A spillway near the center of the spit was dredged and a log weir and access road were installed to control water elevations. Severe erosion began almost immediately and today the area is flattened and slowly filling in the estuary used by salmon species. The restoration will recreate the estuary's physical connection with the freshwater stream and protect the vegetation from wave damage to create additional habitat. The enhancement group will contribute \$18,000 from a grant and doanted labor. (06-2220R-FY07)

Mason County **\$47,000**
Replacing the McLane Cove Culvert

Mason County will use this grant to replace a fish barrier culvert on a small tributary stream in McLane Cove located on Case Inlet in eastern Mason County. The culvert would be replaced with a large, 10-foot-wide by 12-foot-high concrete box culvert. This new design will provide fish access for decades with little or no maintenance. Replacing this crossing will provide open about 3,500 feet of upstream habitat. The stream is home to coho, chum and coastal cutthroat. Mason County will contribute \$305,000.
(06-2260-FY07)

Okanogan County **\$1,045,850**

Methow Salmon Recovery Foundation **\$441,999**
Piping Chewuch Canals Phase 3

The Methow Salmon Recovery Foundation will use this grant to convert an open earthen canal into a piped, pressurized system, reducing the amount of water that evaporates and leaving more for fish in the Methow River. The Chewuch canal diverts water from the Chewuch River 8 miles above its confluence with the Methow River for delivery to users in both the Chewuch and Methow drainages. Work will include piping 1.3 miles of canal between Lake Creek and Bear Creek near Winthrop. It will be



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joined to previously piped sections to provide continuous piping along the lowest portion of the Chewuch canal. This is part of a larger program to convert the entire lower portion of the canal below Pearrygin Lake to a piped system. The foundation will contribute \$141,000 in cash and donated labor. (06-2216R-FY07)

Methow Conservancy **\$425,500**

Protecting Methow Valley Riparian Areas Phase 4

The Methow Conservancy will use this grant to purchase conservation easements on three properties, protect 107 riparian acres and 0.93 mile of shoreline. These easements contain high-quality riparian habitat and the land likely would be developed for housing without this protection. The area is home to spring Chinook and steelhead. The Methow Conservancy will contribute \$425,500 from a grant. (06-2152A-FY07)

Methow Salmon Recovery Foundation **\$50,000**

Restoring Fender Mill Floodplain Phase 1

The Methow Salmon Recovery Foundation will use this grant to restore salmon habitat in the Methow River using natural stream processes. Work will include removing barriers, such as dikes and roads that have resulted in isolation of historically active channels. Two to three new side channels for rearing habitat and refuges from high flows will be created directly downstream from the Weeman Bridge. The foundation will contribute \$50,000 in donated labor. (06-2239R-FY07)

Yakama Nation **\$128,351**

Restoring Hancock Springs

The Yakama Nation will use this grant to restore Hancock Springs, opening about 1 mile of critical rearing and spawning habitat in the upper Methow River basin. Eight miles north of Winthrop, Hancock Creek has the highest density of spawning spring Chinook and steelhead, both of which are endangered, in the basin and nearby tributaries have ample populations of bull trout. The tribe will plant native vegetation, reform degraded banks, build structures in the creek to stabilize the banks and reduce brook trout populations, which are an invasive species that compete with endangered fish for limited food and space. The Yakama Nation will contribute \$158,666 from a federal grant and donations of labor and materials. (06-2292R-FY07)

Pacific County **\$72,000**

Shorebank Enterprise Pacific **72,000**

Designing Clearwater Creek Fish Passage

Shorebank Enterprise Pacific will use this grant to develop a design for replacing two undersized culverts with a bridge over Clearwater Creek, opening 3 miles of habitat. Clearwater Creek's watershed contains about 3 miles of high quality, fish-bearing



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streams and is almost completely undeveloped and forested. Two undersized culverts restrict salmon species from migrating into the entire watershed and restrict tidal inundation of the marsh. The removal of the barrier will not only provide habitat to fish spawning in Clearwater Creek, but also rearing habitat for migrating fish from the Naselle River and Willapa Bay. Shorebank Enterprise Pacific will contribute \$13,000 in donations of cash and labor. (06-2298N-FY07)

Pend Oreille County \$329,472

Department of Fish and Wildlife \$82,275

Fixing Whiteman Creek Fish Passage

The Department of Fish and Wildlife will use this grant to replace twin, impassable culverts with a bottomless arch on Forest Service Road 1936 on Whiteman Creek. Replacing the culverts will open 2 miles of habitat for bull trout, westslope cutthroat trout and other fish. Whiteman Creek is a tributary to the west branch of LeClerc Creek, which drains to LeClerc Creek and the Pend Oreille River in northeast Washington. Historically, bull trout from Lake Pend Oreille migrated down the Pend Oreille River and spawned and reared in tributaries such as LeClerc Creek. LeClerc Creek is one of only two watersheds that drain to the lower Pend Oreille River where recent successful spawning of bull trout has occurred. The department will contribute \$14,575 in donations of cash and labor. (06-2305R-FY07)

Department of Fish and Wildlife \$85,650

Fixing Mineral Creek Fish Passage

The Department of Fish and Wildlife will use this grant to replace an impassable culvert with a bottomless arch on Forest Service Road 1936 on Mineral Creek. Replacing this culvert will open about 2 miles of spawning and rearing habitat for bull trout, westslope cutthroat trout and other fish. Mineral Creek is a tributary to the west branch of LeClerc Creek, which drains to LeClerc Creek and the Pend Oreille River in northeast Washington. Historically, bull trout from Lake Pend Oreille migrated down the Pend Oreille River and spawned and reared in tributaries such as LeClerc Creek. LeClerc Creek is one of only two watersheds in the lower Pend Oreille where recent successful spawning of bull trout has occurred. The department will contribute \$19,000 in donations of cash and labor. (06-2304R-FY07)

Department of Fish and Wildlife \$161,547

Restoring the Hungry Deer Watershed

The Department of Fish and Wildlife will use this grant to improve habitat for salmon species in the Hungry Deer watershed. Work will include removing 6.3 miles of unstable, abandoned roads that are delivering sediment to streams; stabilizing the area



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disturbed during construction by seeding, mulching and fertilizing; treating weeds; and replacing large wood complexes at 21 locations. The work will protect and enhance spawning and rearing habitat and reconnect habitats by removing the failing road system. The department will contribute \$34,056 in labor, equipment and donations of cash, equipment and labor. (06-2306R-FY07)

Pierce County

\$995,972

South Puget Sound Salmon Enhancement Group Improving Habitat in the Greenwater River

\$485,000

The South Puget Sound Salmon Enhancement Group will use this grant to place up to five logjams upstream of the U.S. Forest Service Road 7010 bridge in the Greenwater River, which forms the border between Pierce and King Counties. The logjams will help widen and slow the river to improve habitat for salmon species such as steelhead and Chinook. The logjams will recreate habitat conditions that existed before the area was logged and the river was cleared of fallen wood. In addition, crews will remove up to 0.5 mile of U.S. Forest Service Road 70 to assist with improving the river's floodplain function. The enhancement group will contribute \$85,600 in donated labor, materials and other grants. (06-2223R-FY07)

South Puget Sound Salmon Enhancement Group Prioritizing Projects in Water Resource Inventory Area 15

\$85,000

The South Puget Sound Salmon Enhancement Group will use this grant to identify and prioritize shoreline projects. Using existing reports, the enhancement group and its partners will develop and work through a strategic list of projects to target high priority areas, select projects and obtain preliminary designs for up to eight projects. The shoreline habitats of Puget Sound have been identified as an important factor in the survival of all Puget Sound salmon species. This project will provide a list of feasible, developed, site-specific projects aimed at restoring nearshore processes. The enhancement group is partnering with the Squaxin Island Tribe, Pierce County and others. The enhancement group will contribute \$15,000 in donated equipment and labor. (06-2271N-FY07)

Nisqually River Land Trust Protecting Elledge Shoreline

\$349,860

The Nisqually River Land Trust will use this grant to purchase a conservation easement on 29 acres, known as the Elledge property, along the Nisqually River, immediately downstream of the McKenna bridge on State Route 507. The acquisition will protect about 0.4 mile of Nisqually River shoreline, and about 0.25 mile of a small tributary stream that runs through the property. The conservation easement will severely restrict



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future development of the property and requires that the shoreline areas be made available for restoration activities. When combined with other property purchased by the land trust, this purchase will result in the protection of more than 2 miles of Nisqually River shoreline habitat. The Elledge property will be for sale soon and the owners are willing to have a protective easement on the property before selling the land. The land trust will contribute \$61,740 in cash and donated labor and materials. (06-2278A-FY07)

South Puget Sound Salmon Enhancement Group **\$76,112**
Assessing Restoration of the Mashel River

The South Puget Sound Salmon Enhancement Group will use this grant to develop restoration projects for the Mashel River. The river is an important spawning and rearing area for Chinook, steelhead, pinks and coho. Past land uses have created erosion problems and a lack of woody debris, which creates habitat for fish by slowing the river. Work will include developing a comprehensive set of restoration projects for the river at the confluence with the Little Mashel River and at Smallwood Park, adjacent to Mill Pond. The restoration projects will include habitat enhancement, riparian treatments, riprap removal near Mill Pond and erosion fixes. The enhancement group will contribute \$14,000. (06-2206N-FY07)

San Juan County **\$212,000**

Washington Trout **\$119,393**
Expanding the Cutthroat Trout Habitat Inventory

Washington Trout will use this grant to complete a survey of potential habitats in San Juan County for cutthroat trout, determine the minimum pool depths and maximum pool temperatures that cutthroat can tolerate, identify threats to preserving stream conditions and make recommendations to landowners and county government for in-stream flow rules, habitat restoration and protection priorities and actions needed. Coastal cutthroat trout have declined significantly and are in danger of extinction because they consist of small, isolated populations. To date, research has focused on mainland headwaters and not short, steep coastal watersheds typical of the San Juan Islands. Washington Trout will contribute \$30,876 in donated equipment and labor. (06-2282N-FY07)

Northwest Marine Tech Inc. **\$62,000**
Tracking Juvenile Chinook Salmon

Northwest Marine Tech Inc. will use this grant to tag salmon to estimate how much time they spend in the San Juan Islands. San Juan County lies at the crossroads between waters flowing southward through the Straits of Georgia and the Straits of Juan de Fuca and those flowing northward from Puget Sound. This project is a first attempt to decipher whether juvenile Chinook salmon spend much time in nearshore habitats or



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whether they just pass through. Work will include tagging wild fish as they arrive in selected areas of the San Juan archipelago and recapturing them during selected times. By identifying site specific behavior, an inventory of priority habitats targeted for future work can be prepared. Northwest Marine Tech Inc. will contribute \$31,860 in donated equipment, labor and materials. (06-2293N-FY07)

San Juan County **\$30,607**

Analyzing How to Protect the San Juan Archipelago

San Juan County will use this grant to develop a list of site-specific recommendations to increase protection of the San Juan archipelago. Work will include a community-based analysis of regulatory, voluntary, incentive and education protection programs and the gaps, and creation of a vision for protection actions. The county and its partners also will deliver a set of site-specific actions responding to identified gaps along with commitment from key parties to implement the recommendations. Lastly, it will bring existing scientific information into one usable system. San Juan County will contribute \$471,393 from state, private and other grants. (06-2291N-FY07)

Skagit County **\$1,010,393**

The Nature Conservancy **\$165,875**

Protecting the Upper South Fork of the Skagit River

The Nature Conservancy will use this grant to acquire about 40 acres of wetlands and riparian habitat in the upper reaches of the Skagit River estuary on the river's south fork. Work will include restoring forest vegetation and enhancing salmon species' access to the area. The property includes one of the largest and last remaining tracts of intact riverine tidal forest or riparian habitat left in the Skagit delta between Burlington and Conway. It provides critical food and rearing and refuge habitat in the most modified section of the Skagit River. Parts of the land have been used as pasture and for motorcycle racing. Acquisition will protect the area from further degradation and will allow restoration of habitats. The Nature Conservancy will contribute \$29,273 in donations of cash and land. (06-2209C-FY07)

Skagit River System Cooperative **\$50,315**

Studying Gilligan Island Restoration Feasibility

The Skagit River System Cooperative will use this grant to develop and evaluate alternatives to restore habitat that has been isolated and degraded by a large dike on the left bank of the Skagit River, just downstream from Gilligan Creek. Removing or modifying the dike will restore natural bank conditions, create off-channel habitat and improve connections between river and floodplain habitats. The U.S. Forest Service supports removing or modifying the dike on its land but is concerned about potential



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flooding or erosion of downstream property owners. For this reason, the study will identify private parcels that might be affected and will develop alternatives that address those risks. The cooperative will contribute \$8,880 in donated labor. (06-2210N-FY07)

Skagit Watershed Council **\$50,000**

Studying Cottonwood Island Restoration Alternatives

The Skagit Watershed Council will use this grant to develop an assessment of habitat restoration alternatives for the Cottonwood Island area where the north and south forks of the Skagit River split. The core of this assessment will be the development of a model of this complex area to understand the sustainability, feasibility and hydrologic and hydraulic impacts of habitat restoration work. Using the model results, the study team will develop at least one restoration alternative. Cottonwood Island is identified as a high priority for restoration and a high priority area for benefiting Skagit Chinook salmon. The Skagit Watershed Council will contribute \$30,000. (06-2211N-FY07)

Skagit Conservation District **\$305,000**

Controlling Cascade Roads Erosion

Skagit Conservation District will use this grant to reduce the risk of road failures and erosion affecting the Cascade River and Sibley and Marble Creeks. The district is partnering with the U.S. Forest Service to replace culverts, ditch and stabilize fill areas on nearly 10 miles of road. The area is home to Chinook salmon, Dolly Varden, coho, chum, pink, sea run and resident populations of cutthroat and rainbow (steelhead). The Skagit Conservation District will contribute \$61,000 in donated materials. (06-2212R-FY07)

Skagit Conservation District **\$253,810**

Controlling Erosion on Finney Creek Roads

The Skagit Conservation District will use this grant to reduce the risk of road failures and erosion affecting Finney Creek and the Skagit River. The conservation district is partnering with U.S. Forest Service to replace culverts, stabilize fill and decommission roads. The work is expected to improve water quality and reduce the risk of landslides and sediment delivery. The creek and river are home to Chinook, coho, steelhead and Dolly Varden. The conservation district will contribute \$45,000 in donated materials. (06-2213R-FY07)

Snohomish County Conservation District **\$185,393**

Controlling Erosion at Deer Creek Headwaters

The Snohomish Conservation District will use this grant to reduce road failures and erosion in the Deer Creek sub-basin of the watershed. The conservation district is partnering with the U.S. Forest Service on an erosion control project aimed at controlling road drainage to reduce the risk of road failures, erosion and sediment production, and their harmful effects on fish habitat and water quality. Work will include various treatments, including adding or replacing culverts, stabilizing and removing fill,



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and installing drainage structures. Bull trout, steelhead, coho, Chinook, pink, chum and sea run cutthroat trout use Deer Creek. Snohomish County will contribute \$35,000 in donated labor and material. (06-2266R-FY07)

Skamania County **\$332,569**

Lower Columbia Fish Enhancement Group **\$87,487**
Restoring Duncan Creek

The Lower Columbia Fish Enhancement Group will use this grant to reconnect Duncan Creek's reach and floodplain to provide spawning and rearing habitat for chum and coho salmon, steelhead and cutthroat trout. Duncan Creek flows into the Columbia River about 7 miles below Bonneville Dam near Skamania. Duncan Creek flows in a shallow, braided channel through the lake bed and the chum spawning tributary connection also braids when it enters the lake bed. Work will include improving the creek's spawning channels, assessing habitat conditions and developing conceptual designs for restoration projects in the reach from State Route 14 to the mouth of Duncan Creek. The fish enhancement group will contribute \$47,500 from a federal grant and donated labor. (06-2178R-FY07)

Lower Columbia Fish Enhancement Group **\$245,082**
Restoring Reach 8 of the Washougal River

The Lower Columbia Fish Enhancement Group will use this grant to install a large logjam and five clusters of boulders in the Washougal River to slow the river and create habitat important for fish survival. This area is important for coho and Chinook salmon and steelhead, all of which are threatened with extinction. The work will restore access to more than 0.75 mile of tributary habitat on the north side of the river currently blocked by sediment and vegetation and lack of a defined channel and create 3 acres of off-channel rearing habitat. Work will include groundwater investigation to help design the project and plantings. The fish enhancement group will contribute \$151,500 in donated labor. (06-2183R-FY07)

Snohomish County **\$369,435**

Snohomish County **\$95,000**
Restoring the Skykomish River Braided Reach

Snohomish County will use this grant to restore salmon habitat on the Skykomish River. Work will include adding a logjam to create refuge, holding pools and different types of habitat needed by salmon. Other structures will be added to increase habitat diversity



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and encourage side channel formation. Crews will plant vegetation along the riverbanks as well. Snohomish County will contribute \$60,000. (06-2202R-FY07)

Arlington **\$274,435**

Acquiring the Graafstra Floodplain

Arlington will use this grant to buy a conservation easement for 57 acres of the retired Country Charm Dairy floodplain, protecting 1.9 miles of riparian and stream bank habitat. The near term threat of extinction of the South Fork Stillaguamish Chinook requires that habitat be addressed in this high priority area. Currently the property is zoned for housing. Arlington will contribute \$48,430. (06-2267A-FY07)

Thurston County **\$281,000**

South Puget Sound Salmon Enhancement Group **\$69,000**

Restoring Frye Cove Park Beach

The South Puget Sound Salmon Enhancement Group will use this grant to restore the beach at Frye Cove Park. Work will include removing about 1,000 cubic yards of rock armoring along 400 feet of shoreline on Eld Inlet. Crews also will place large woody debris to create complexity and habitat areas at the beach and provide a safe pathway for the public. Many tons of rip-rap had been placed along the shoreline to stop erosion of the upper beach and those rocks have migrated onto the beach. The rocks are hindering the natural process of the beach and limiting forage fish and salmon species use of the area. In total, about 40,000 square feet of beach will be improved and an education sign discussing the project and why shorelines are important for fish will be installed. The enhancement group will contribute \$12,200 from a grant. (06-2218R-FY07)

Washington Trout **\$43,200**

Mapping Water Types in Water Resource Inventory Area 13

Washington Trout will use this grant to map waterways in Thurston County. Effective salmon recovery requires restoration and protection of habitats. In Thurston County, stream buffers are set by water type. Existing water type maps under-represent the extent of fish and fish habitat, and many streams are mapped incorrectly or not at all. Washington Trout will determine correct water type classifications for about 35 watersheds on Johnson Point and will map previously unmapped and incorrectly mapped waterways. It also will prioritize five projects. This assessment will generate species-specific distribution data to help identify restoration projects. The data will be available to the public online. Project partners include Thurston County and the Thurston Conservation District. Washington Trout will contribute \$7,700 in donated materials. (06-2238N-FY07)



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South Puget Sound Salmon Enhancement Group **\$168,800**

Restoring Little Fish Trap Estuary

The South Puget Sound Salmon Enhancement Group will use this grant to restore a small pocket estuary and spit adjacent to a salmon-bearing stream. The original spit was modified in the early 1940s. This project will use on-site material to re-configure the spit shape and tidal channel to increase the size of the estuary by at least 0.6 acre. Chinook and chum salmon rely heavily on estuaries for refuge. When landowners filled in the historical stream and tidal channel, sediment was diverted into the estuary instead of the beach, damaging habitat. The enhancement group will contribute \$30,000 from a grant. (06-2219R-FY07)

Wahkiakum County **\$802,005**

Cowlitz-Wahkiakum Conservation District **\$259,214**

Creating a Skamokawa Creek Community Watershed Plan

The Cowlitz-Wahkiakum Conservation District received two grants to develop a pilot habitat restoration project on at least one privately owned property on the left fork of Skamokawa Creek as a demonstration area for the community, and to develop conservation plans and design projects on a spawning reach with multiply landowners. The work is expected to protect the habitat in the stream, reduce erosion, restore riparian condition and restore degraded water quality. For the larger project, the district has engaged 11 landowners who have expressed interest in projects along more than 4 miles of stream reaches. For them, the district will develop site-specific but watershed-sensitive conservation plans, habitat restoration designs and implementation strategies. The district will contribute \$45,786 from a state grant and donations of labor and equipment. (06-2176R-FY07 and 06-2324N-FY07)

Wahkiakum County **\$382,480**

Improving Duck Creek Fish Passage

Wahkiakum County will use this grant to build a new bridge to replace twin culverts, recently displaced by the early November storm. The twin culverts had a drop at the outlet ends, limiting fish migration to Duck Creek habitat. The project will increase rearing and spawning habitat in Duck Creek by up to 98 percent, and fully open access to 2.8 miles of spawning and rearing habitat. In addition, a new bridge will help restore normal river processes, including sediment and woody debris transport, to reaches downstream. Work will include removing invasive Japanese knotweed and planting the area. Wahkiakum County will contribute \$163,920. (06-2172R-FY07)



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Lower Columbia Fish Enhancement Group **\$160,311**

Improving Habitat in the Grays River

The Lower Columbia Fish Enhancement Group will use this grant to place large, woody debris at two locations in the Grays River to improve fish habitat. The large woody debris will restore habitat complexity. The Grays River is home to coho, Chinook, chum and steelhead. This reach of the river is characterized by lack of pools where fish can rest, feed and grow and being too wide and shallow. The fish enhancement group will contribute \$36,000 in donated labor. (06-2185R-FY07)

Walla Walla County **\$1,141,152**

Walla Walla County Conservation District **\$77,100**

Improving a Walla Walla Fish Screen

The Walla Walla County Conservation District will use this grant to provide equipment that allows irrigators to maintain fish screens. The Washington Department of Fish and Wildlife Cooperative Compliance Review Program, in partnership with the conservation district, has reduced fish deaths by placing more than 300 screens on irrigation pumps. While 95 percent have worked well, a few have been problematic. In these few cases, the screens have plugged. This is especially true of the screens in early spring when they are sitting on the bottom in swift, deep, silt-laden waters, or in late summer when algae accumulates. These conditions require the irrigator to clean the screen several times a day, which can be dangerous during periods of swift, high water. This grant will fund appropriate devices to assist irrigators in the safe removal and reinstallation of screens. The conservation district will contribute \$13,900 from a state grant and donations of cash and labor. (06-2237R-FY07)

Inland Empire Action Coalition **\$198,077**

Purchasing the Bolles Conservation Easement

The Inland Empire Action Coalition will use this grant to purchase a permanent conservation easement on 78 acres along the Touchet River upstream of Bolles Junction, near Waitsburg. The conservation easement will prohibit development, agriculture uses, grazing and logging. This reach was identified as a major spawning area for steelhead, which are threatened with extinction. The land was recently restored with riparian buffers and the easement will ensure those buffers stay in place and human encroachment will not restrict the floodplain. The coalition will contribute \$35,000 from donations of labor and land. (06-2244C-FY07)



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Inland Empire Action Coalition **\$153,105**

Purchasing the Coppei Forks Conservation Easement

The Inland Empire Action Coalition will use this grant to purchase a permanent conservation easement on Coppei Creek, within a prime spawning reach for steelhead, which are threatened with extinction. Coppei Creek, located south of Waitsburg, is under development pressure. While some other important spawning reaches in the watershed have been severely impacted by human encroachment, there is great potential for Coppei Creek to properly function and maintain long-term watershed health by restoring the creekbanks and protecting the area with conservation easements. The easement will prohibit development, grazing, agriculture use and logging. This project adds to a continued effort to restore Coppei Creek and is part of a nearly 9-mile reach of contiguous riparian buffers. The coalition will contribute \$28,000 in donated land.

(06-2245C-FY07)

Tri-State Steelheaders Inc. **\$13,867**

Purchasing the Kooskooskie Conservation Easement

Tri-State Steelheaders Inc. will use this grant to purchase a conservation easement, permanently protecting 3.8 acres and 0.25 mile of riparian habitat in the upper Mill Creek watershed. The area is used by steelhead, which are threatened with extinction, as well as spring Chinook and bull trout. Development is increasing countywide, including in the scenic Mill Creek watershed at the foothills of the Blue Mountains. The landowner has been approached to sell the property for development. Located on a hill that is continuous with the streambank, disturbance to the site could damage critical salmon habitat. The Tri-State Steelheaders will contribute \$25,298 from a federal grant.

(06-2240A-FY07)

Gardena Farms Irrigation District #13 **\$229,500**

Assessing Alternatives to the Gardena Farms Fish Passage

The Gardena Farms Irrigation District will use this grant assess a Walla Walla River reach to determine what causes the build-up of sediment and develop an alternative for the diversion dam. The diversion dam has flashboards that are placed and removed by hand, which is not possible during higher flows, resulting in sediment build-up. The sediment blocks the irrigation diversion gates and fish ladder entrances and exits. Sediments above the dam are forcing the river to erode the north bank. Existing data would be used, along with new data, to determine river hydraulics, bedload transport, habitat and fish use in designing an alternative to the dam. The irrigation district will contribute \$40,500. (06-2243N-FY07)

Department of Fish and Wildlife **\$96,000**

Assessing the Mill Creek Barrier

The Department of Fish and Wildlife will use this grant to identify physical barriers and water velocity barriers on a Mill Creek flood control channel. Many of the channel's weirs have aprons that create passage problems at low flows and portions of the



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concrete channel create barriers at certain high flows. Work will include identifying the barriers within a 5.8-mile section by measuring physical characteristics of the channel and modeling velocities within the channel. The department also will produce conceptual ideas for projects to improve migration of steelhead, which are threatened with extinction, as well as bull trout and spring Chinook. Passage is a critical issue in this section of Mill Creek because the creek upstream of the flood control channel has excellent spawning and rearing habitat. The department will contribute \$17,000 in donations of cash and labor. (06-2203N-FY07)

Walla Walla County Conservation District \$17,000
Restoring Doan Creek Phase 1

The Walla Walla County Conservation District will use this grant to develop a design for continued restoration of Doan Creek, a small tributary to lower Mill Creek. Historically Doan Creek was used as spawning and rearing habitat by salmon species including mid-Columbia steelhead, which are threatened with extinction. The creek has not been accessible for many decades after its channel was straightened and moved to the edge of the floodplain so the entire valley could be more easily cultivated for alfalfa. In 2004, the Walla Walla County Conservation District partnered with the Whitman Mission National Monument, Washington Department of Fish and Wildlife and the Tri-State Steelheaders to restore natural channel characteristics and functions to 0.3 mile of creek. This grant would design restoration actions for another 0.3 mile. The conservation district will contribute \$3,000 in donated equipment and labor. (06-2233N-FY07)

Blue Mountain Land Trust \$356,503
Restoring and Conserving the Strohmaier Property

The Blue Mountain Land Trust will use this grant to restore 75 acres for salmon habitat and conserve it, protecting it from development. A landowner on the Touchet River wishes to return her family farm to wildlife habitat and to retain forever its natural function. Twenty-five years ago, an earlier landowner moved 0.5 mile of the meandering Touchet River into a straight channel. Vegetation in the floodplain was removed to create 75 acres of pasture. The trust will restore the channel and vegetation. It also will place large, woody debris such as rootwads and logs, in the river to create fish habitat. A permanent conservation easement on the land will ensure that it remains in wildlife habitat by preventing future cultivation, grazing and development. The Blue Mountain Land Trust will contribute \$100,000 in donated property interest. (06-2241C-FY07)



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Whatcom County \$682,000

Nooksack Tribe \$617,500

Restoring the South Fork of the Nooksack River

The Nooksack Tribe will use this grant to design and build four logjams in a 0.2-mile reach of the lower south fork of the Nooksack River near the mouth of Todd Creek. The work is aimed at increasing habitat diversity for Chinook salmon. The work will increase the frequency and depth of holding pools and increase the areas of the river that are shaded and have cool temperatures. The tribe will contribute \$120,000 from a federal grant. (06-2247R-FY07)

Whatcom County \$64,500

Analyzing Alternatives for Acme Restoration

Whatcom County will use this grant to evaluate alternatives and designs to restore complex pool habitat at a historical logjam site, maintain floodplain connectivity, and improve floodplain tributary habitat stability and complexity in the south fork of the Nooksack River. Products will facilitate permitting and securing implementation funding. The goal is to produce designs for complex wood structures to improve main-stem and tributary habitat diversity and complexity and thermal conditions in an area of cool groundwater discharge. The Nooksack River is home to Chinook salmon and bull trout. Whatcom County will contribute \$21,678. (06-2256C-FY07)

Yakima County \$500,126

Yakima County \$141,175

Acquiring Naches River Floodplain

Yakima County will use this grant to buy 73 acres of Naches River floodplain and river channel. The acquisition will allow Yakima, Yakima County and the Washington Department of Transportation to begin restoring the area by pulling back dikes, retiring diversions, improving fish passage and improving habitat and floodplain function. Yakima County will contribute \$25,000 from a local grant. (06-2193A-FY07)

North Yakima Conservation District \$112,701

Improving Habitat Cowiche Creek - Schneider Project

The North Yakima Conservation District will use this grant to improve habitat in Cowiche Creek, which is a tributary to the Naches River and home to steelhead, bull trout and coho. Work will include placing rootwads and log vanes in the creek to stabilize severely sloughing streambanks, reduce sedimentation and increase habitat diversity. Crews also will plant native plants along both streambanks to create shade, provide hiding



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places for fish and create a source of woody debris that helps create fish habitat. Fencing will be installed to keep livestock from using the stream and to protect the streamside plants. The conservation district will contribute \$60,299 from a local grant. (06-2200R-FY07)

Yakama Nation

\$246,250

Enhancing the Upper Klickitat River Phase 2

The Yakama Nation will use this grant to enhance spawning, rearing and holding habitat for steelhead and spring Chinook salmon along 2.3 miles of the Klickitat River, from McCreedy Creek to the Diamond Fork reach. Work will include constructing 35 large woody debris jams, reconnecting and creating nearly 0.4 mile of side channel habitat and stabilizing almost 0.5 mile of bank. This work will increase the types and complexity of habitat in the river. Summer steelhead are threatened with extinction and spring Chinook are listed by the Washington Department of Fish and Wildlife as depressed. The Yakama Nation will contribute \$461,953 from a federal grant, another grant and donated materials. (06-2277R-FY07)