



KING COUNTY

1200 King County Courthouse
516 Third Avenue
Seattle, WA 98104

Signature Report

July 12, 2016

FCD Resolution

Proposed No. FCD2016-11.2

Sponsors

1 A RESOLUTION relating to the operations and finances of the
2 King County Flood Control Zone District; authorizing the
3 expenditure of District funds for projects and activities in Water
4 Resource Inventory Areas 7 (Snoqualmie Watershed portion) 8, 9
5 and 10 (King County portion).

6 WHEREAS, the King County Flood Control Zone District's ("District")
7 comprehensive plan prioritizes expanded partnerships and collaborations with watershed
8 forums; and

9 WHEREAS, the District's comprehensive plan emphasizes the consideration of
10 fish and wildlife habitat when managing flood-risk; and

11 WHEREAS, the District seeks to protect public safety and promote the recovery
12 of native salmon species; and

13 WHEREAS, the District adopts an annual work program, budget, operating
14 budget for King County, capital budget and six-year capital improvement program
15 pursuant to chapter 86.15 RCW; and

16 WHEREAS, the District desires to continue funding watershed resource inventory
17 area ("WRIA") activities and projects that are identified using a process for awarding
18 WRIA grants in which the WRIA forums made grant recommendations to the District

19 and the King County water and land resources division administers the grant processes;
20 and

21 WHEREAS, in establishing the District's 2016 budget, the District provided
22 \$4,303,013 in funding for projects and activities in WRIA's 7 (Snoqualmie Watershed
23 portion), 8, 9 and 10 (King County portion); now, therefore

24 BE IT RESOLVED BY THE BOARD OF SUPERVISORS OF THE KING
25 COUNTY FLOOD CONTROL ZONE DISTRICT:

26 SECTION 1. A. The Board authorizes the funding of water quality and water
27 resources and habitat restoration projects and activities as follows:

- 28 1. WRIA 7 (Snoqualmie Watershed portion) - \$855,141;
- 29 2. WRIA 8 - \$1,556,772;
- 30 3. WRIA 9 - \$1,642,105; and
- 31 4. WRIA 10 (King County portion) - \$225,668.

32

33 B. The amounts listed in Section A. are in accordance with the projects, grant
34 recipients and individual grant amounts described in Attachment A to this resolution.
35

FCD Resolution was introduced on and passed as amended by the King County Flood Control District on 7/11/2016, by the following vote:


Yes: 9 - Mr. von Reichbauer, Mr. Gossett, Ms. Lambert, Mr. Dunn,
Mr. McDermott, Mr. Dembowski, Mr. Upthegrove, Ms. Kohl-Welles
and Ms. Balducci
No: 0
Excused: 0

KING COUNTY FLOOD CONTROL ZONE
DISTRICT
KING COUNTY, WASHINGTON



Reagan Dunn, Chair

ATTEST:



Anne Noris, Clerk of the District

Attachments: A. 2016 Cooperative Watershed Management Grant Recommendations June 27, 2016

Attachment A
2016 Cooperative Watershed Management Grant Recommendations June 27, 2016

| WRIA | Project Name | Project Sponsor | Project Description | Match Funds | CWM Request |
|-----------------------------------|--|------------------------|---|-------------|-------------|
| SNOQUALMIE FORUM IN WRIA 7 | | | | | |
| 7 | 2017 Snoqualmie Restoration and Project Assistance Program | King County WLRD | King County will provide project development assistance and regional coordination to implement the Snohomish River Salmon Conservation Plan in the King County portion of WRIA 7. Direct project assistance will include design review, site visits, grant writing and project coordination. | \$13,690 | \$115,000 |
| 7 | Habitat Conditions Report | King County WLRD | King County will perform habitat condition surveys in the Snoqualmie River from the falls to the King-Snohomish County Line as well as the lower five to six miles of the Raging and Tolt Rivers. The goal of this effort is to understand the current condition of the habitat and assess whether habitat conditions have improved over the last 15 years. | | \$68,056 |
| 7 | Cherry Creek Phase I Riparian Restoration | Sound Salmon Solutions | This riparian restoration project will complement the Cherry Creek Phase I construction project by starting the seeding and planting of native plants to reduce erosion, reduce overland flow nutrient inputs, and provide much needed shade to reduce the high water temperatures in the creek. | | \$27,330 |
| 7 | Aronica Farm Riparian Restoration Phase II | Stewardship Partners | Stewardship Partners will continue working at Aronica Farm and restore an additional 2,000 linear feet of left bank riparian habitat along the mainstem Snoqualmie River. A total area of 70,000 square feet (1.6 acres) will be restored and another 2,000 linear feet of livestock exclusion fence will be installed. | \$22,000 | \$74,476 |
| 7 | Snoqualmie River Juvenile Salmon Outmigration Monitoring | Tulalip Tribes | Continue monitoring juvenile salmon outmigration in the Snoqualmie River Basin. These funds will go to the operation of the screw trap located at river mile 12.2 near Duvall. The project provides ongoing status, trends and abundance monitoring needed to support run forecasting, and gage salmon recovery in the Snohomish Basin. | \$45,326 | \$72,113 |
| 7 | Beckler Confluence Large Wood Design | Wild Fish Conservancy | Develop permit level designs for an Engineered Log Jam/Large Wood project within the confluence reach of the Lower Beckler River and South Fork Skykomish River. The goal of the constructed project will be to reconnect the lower Beckler River to its historic alluvial fan, improving site conditions and salmon habitat. | \$59,947 | \$59,947 |
| 7 | Patterson Creek Floodplain Restoration | King County WLRD | Design and permitting to expand and restore salmon spawning and rearing habitat by restoring floodplain topography, lowland riparian forest and shrubland; placing instream LWD and restoring branching channels to 2,347 lineal feet of Patterson Creek. | \$25,000 | \$125,000 |

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| 7 | South Fork Skykomish Riparian Health | King County Noxious Weeds | Continue treating and monitoring knotweed infestations on the South Fork Skykomish River. The project will improve riparian ecosystem functioning (including salmon habitat) and the facilitate regeneration of riparian forest. | \$2,936 | \$39,931 |
| 7 | South Fork Snoqualmie River Levee Setback Project | City of North Bend | Set back the Nintendo levee, removing up to 2,500 feet of the existing levee along the left bank at river mile 2.5 of the South Fork of the Snoqualmie River. This will reconnect approximately 25 acres of the floodplain including the area where Ribary Creek flows. CWM funding will cover preliminary design and floodplain invasive removal. | \$13,920,000 | \$125,000 |
| 7 | Camp Terry Environmental Education | Mountains to Sound Greenway Trust | Develop and implement a comprehensive outdoor environmental education curriculum focused on the natural resources near at hand. This collaborative proposal is a natural extension of prior restoration efforts in the area, and will establish high-quality, inquiry-based environmental education. The property is located along the Raging River and approximately 350 youth visit the camp each week during the summer. | \$7,900 | \$20,000 |
| 7 | Kimball Creek Restoration | City of Snoqualmie | Kimball Creek, a Snoqualmie River tributary, has suffered habitat and water quality degradation through land use and alteration. This project will remove six to ten acres of knotweed and other invasive vegetation on approximately 38.5 acres of City-owned property, and 4.7 acres of rail line owned by the Northwest Railway Museum. Impacted areas will be revegetated with nearly 6,000 native tree and shrub species. | \$19,994 | \$78,023 |
| 7 | Snoqualmie Valley Watershed Education and Stewardship | NatureVision | Provide custom education programs, including field trips and small scale restoration projects, to classes from schools in the Riverview and Snoqualmie Valley School Districts. Classes of 3rd-12th grade students will become "Blue Teams" by completing an education program and restoration action project to improve salmon habitat and water quality. | \$3,756 | \$16,650 |
| 7 | Citizen Action Training School | Sound Salmon Solutions | The Citizen Action Training School (CATS) is a science-based education and engagement program that will train 20+ active citizens on local salmon recovery, water quality, and other local environmental issues. Each participant of the CATS program will culminate their experience by planning, organizing, and implementing an on-the-ground stewardship project that will directly contribute to the health of the Snoqualmie watershed, and the greater Puget Sound | \$13,610 | \$15,695 |

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|-----------------------------------|---|---------------------------------------|--|---------------------|------------------|
| | | | watershed. | | |
| 7 | Middle Fork Snoqualmie Stewardship | King County Parks | Complete restoration at two parks along the Middle Fork Snoqualmie River (Three Forks Natural Area and Middle Fork Snoqualmie Natural Area). This project would restore a minimum of 2.5 acres and 400 feet of shoreline by removing invasives and planting 3,000 native trees and shrubs with over 600 hours of volunteer time. | \$12,850 | \$17,920 |
| Snoqualmie Forum Subtotals | | | | \$14,147,009 | \$855,141 |
| WRIA 8 | | | | | |
| 8 | Lower Taylor Creek Restoration Final Design | Seattle Public Utilities | Complete final designs for a project to restore stream, floodplain, riparian, delta, and lakeshore processes for a tributary to south Lake Washington. | \$300,000 | \$300,000 |
| 8 | Wayne Sammamish Community Project | Forterra | Funds will contribute to the permanent protection and transfer to public ownership of the 89-acre Wayne Golf Course property in the City of Bothell. | \$300,000 | \$600,000 |
| 8 | Cedar River Stewardship-in-Action | Seattle Public Utilities | The partnership between Seattle Public Utilities, Forterra, and King County Noxious Weed Control Program will treat and control Invasive plants and restore native plant communities along the Cedar River from Landsburg Dam to the City of Renton. | \$54,261 | \$174,627 |
| 8 | Issaquah Tributary Restoration at Hope Creek | Mountains to Sound Greenway Trust | Remove invasive plants and install native vegetation adjacent to other protected and restored areas, complementing previous restoration efforts. | \$17,500 | \$46,250 |
| 8 | 2017 Lake Washington Juvenile Salmon Monitoring | Washington Dept. of Fish and Wildlife | Trap and tag juvenile Chinook salmon in WRIA 8 to to evaluate the success of implementing the <i>WRIA 8 Chinook Salmon Conservation Plan</i> . | | \$242,460 |
| 8 | 2017 Adult Chinook (Fish-In) Monitoring | King County | Monitor spawning Chinook salmon in WRIA 8 to evaluate the success of implementing the <i>WRIA 8 Chinook Salmon Conservation Plan</i> . | \$18,903 | \$57,540 |
| 8 | Predator Abundance and Predation Impacts on Juvenile Chinook and Sockeye Salmon | Washington Dept. of Fish and Wildlife | Estimate the abundance of salmon predators, quantify the magnitude of the problem, and provide information about factors that affect predation and can be addressed through management action. | \$146,544 | \$42,572 |
| 8 | Effects of Different Types of Artificial Nighttime Lighting on Juvenile Chinook Salmon in Lake Washington | U.S. Fish and Wildlife Service | Building on emerging research demonstrating juvenile Chinook are attracted to lights, which may increase their vulnerability to predators, this work will test light sources to provide new information to resource managers on how to reduce the effects of nighttime lighting on Chinook while maintaining safety. | \$11,583 | \$14,795 |

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| 8 | Beach Naturalist Program | Seattle Aquarium | Train naturalists to motivate behavioral change by raising the public's understanding of the value of the intertidal ecosystem, the nearshore, and Puget Sound for salmon. | \$70,914 | \$13,200 |
| 8 | Cedar River Salmon Journey | Seattle Aquarium | Educate citizens about Cedar River salmon, watershed health, and the actions citizens can take to help salmon recovery efforts. | \$80,631 | \$38,500 |
| 8 | Citizen Action Training School | Mid-Sound Fisheries Enhancement Group | Engage and empower citizens in habitat protection and restoration by offering an 8-week training course on watershed health in exchange for participants conducting a volunteer project of at least 50 hours. | \$27,010 | \$16,828 |
| 8 | Salmon Education and Outreach | Friends of the Issaquah Salmon Hatchery | Enhance existing educational programs and outreach at the Issaquah Hatchery (the most visited hatchery in the state) and expand outreach efforts to new venues. | \$201,510 | \$10,000 |
| WRIA 8 Subtotals | | | | \$1,228,856 | \$1,556,772 |
| WRIA 9 | | | | | |
| 9 | Tukwila "Green the Green" Shoreline Revegetation Project | City of Tukwila | Remove invasive species and revegetate with native plants along approximately 1,200 linear feet of shoreline. The plant installation will focus on providing shade with the "critical", "high", or "medium" need areas as shown in the <i>Riparian Aspects Map</i> . | \$10,000 | \$53,459 |
| 9 | Whitney Bridge Revegetation | King County Water and Land Resources | Revegetate riparian zone of the Green River at Whitney Bridge Park (river mile 41.5) in a "critical" location per the Riparian Aspects Map to provide much-needed shade to the most important reach in the watershed for Chinook salmon spawning. A total of 4.0 acres, including 1,000 linear feet of riparian zone, will be revegetated. | | \$75,000 |
| 9 | Lower Green River Cooperative Riparian Habitat Improvement Project | Forterra | This effort will expand on previous, successful efforts to reduce the impact of noxious weeds and reducing stream temperatures in the lower Green River by restoring native trees to streamside public and private lands. | \$35,863 | \$121,541 |
| 9 | Porter Levee Setback Construction | King County Water and Land Resources | The project will remove a portion of the Porter Levee along the Middle Green River, protect the Green Valley Road, and enhance the floodplain with habitat features. Funding from this grant will go toward revegetating the areas disturbed by construction and other open areas. | \$5,200,000 | \$88,942 |
| 9 | Van Doren's Park Preliminary Design | King County Water and Land Resources | This will fund design and permitting of the Van Doren's Landing Habitat Restoration Project, including technical studies, alternatives analysis, project design and permit materials. The project will reconnect nine to twelve acres of floodplain and restore about 1,600 linear feet of riparian forest along the lower Green River between river | | \$300,000 |

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| | | | mile 19.3 and 18.6. | | |
| 9 | Duwamish and Nearshore Property Acquisition Feasibility | King County Water and Land Resources | This grant will help determine landowner willingness to set and site feasibility of properties along the Duwamish River and WRIA 9 nearshore for habitat protection and/or restoration. WRIA 9 needs to identify the next large project along the Duwamish to expand rearing habitat for juvenile salmonids. The nearshore parcels, if subsequently purchased with other funding, would protect important feeder bluffs. | | \$160,000 |
| 9 | Big Spring Creek Restoration, Phase 3 | King County Water and Land Resources | This grant will fund the construction of Phase 3 of this project. Phases 1 and 2 resulted in the construction of a 4,000-lineal foot stream channel from where the stream crosses 244th Ave. SE downstream to the confluence with Newaukum creek. Phase 3 will plant those areas of the project that were not planted with Corps funding under the Ecosystem Restoration Project (ERP) program. | \$6,200,000 | \$80,000 |
| 9 | Lowman Beach Seawall Removal Feasibility | City of Seattle | Conduct a feasibility study for removal of the falling seawall at Lowman Beach Park and regrading of the shoreline. The purpose is to create a natural sloping beach with large wood and native vegetation to provide marine nearshore habitat for migratory juvenile Chinook salmon. | | \$250,000 |
| 9 | Teufel Property Soil Contamination Investigation | King County Water and Land Resources | Investigate the depth of pesticide soil contamination at the former Teufel nursery property. The results will be used to help develop remedial cost estimates and final restoration design plans for a salmon habitat restoration project. | | \$49,163 |
| 9 | WRIA 9 Capital Projects Implementation | King County Water and Land Resources | Funding will support implementation of projects and programs in the Green/Duwamish and Central Puget Sound watershed, including development of project funding strategies, technical support and solicitation of new projects. This function supports the resources and tools needed for capital improvement implementation. | | \$132,000 |
| 9 | WRIA 9 Habitat Plan Technical and Outreach Support | King County Water and Land Resources | This grant would fund staff from the King County Science Section and/or consultants to support updating the WRIA 9 Salmon Habitat Plan; this help is critical for supporting plan implementation and a science-based update. Outreach support will be necessary to inform the public and hold public meetings to gather input during the Salmon Habitat Plan update. | | \$161,000 |

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| 9 | Changing Behaviors: Improving Watershed Health and Salmon Habitat through Education and Outreach | Environmental Science Center | Increase public awareness of watershed health and salmon habitat protection with curriculum, field studies, educational outreach, and community events. This project will encourage people in WRIA 9 to make positive behavior changes to improve water quality of Puget Sound and protect salmon habitat. | \$88,480 | \$30,000 |
| 9 | Duwamish River Streamflow Discharge and Water Quality Monitoring | U.S. Geological Survey | This will help fund two gages in the tidally-influenced zone of the Duwamish River to collect sediment and chemical load data combined with streamflow discharge, turbidity, water temperature and salinity. This information will be used to help plan future projects. | | \$10,000 |
| 9 | Green River Smolt Monitoring and Otolith Analysis | Washington Department of Fish and Wildlife | This funding will contribute towards operation of the Green River screw trap. The focus of this project is to estimate the number of naturally-produced Puget Sound Chinook salmon originating from the river system and is part of a long-term monitoring effort. | | \$85,000 |
| 9 | Duwamish Chinook Rearing Analysis and Report | University of Washington | Juvenile salmon and other fish at restored and un-restored sites within the Duwamish estuary were sampled in Spring-Summer 2016. Funding is requested for analyzing the sampling data and preparing a report on the results. | | \$25,000 |
| 9 | Beach Naturalist Program | Seattle Aquarium | The Beach Naturalist Program is a public education and outreach program that engages local citizen volunteers to teach the public about the importance of the nearshore environment. | \$63,114 | \$21,000 |
| WRIA 9 Subtotals | | | | \$11,597,457 | \$1,642,105 |
| WRIA 10 | | | | | |
| 10 | White River Juvenile Salmon Production Assessment Project | Puyallup Tribe of Indians | This project will monitor the outmigration of juvenile salmon on the White River to establish abundance estimates, run timing and biological characteristics for ESA listed salmon species, Chinook and Steelhead. The trap will be installed, maintained and fished with three temporary employees and additional staff from the Puyallup Tribe of Indians Fisheries Department. This is a continuation of a project funded by CWM in FY 2014 and 2015. | | \$150,668 |
| 10 | Middle Boise Creek Restoration - VanWieringen Final Design | King County Water and Land Resources Division | Fund a portion of the cost of a final design that would facilitate a 2018 Middle Boise Creek riparian restoration project to improve salmon habitat. | \$88,080 | \$71,195 |
| WRIA 10 Subtotals | | | | \$88,080 | \$221,863 |
| TOTALS | | | | \$27,061,402 | \$4,275,881 |