
King County Flood Control District Scope of Services Semi-Annual Report

October 2010



King County

Department of Natural Resources and Parks
Water and Land Resources Division
King Street Center, KSC-NR-0600
201 South Jackson Street, Suite 600
Seattle, WA 98104

<http://www.kingcounty.gov/environment/wlr.aspx>

Alternate Formats Available
206-296-7380 TTY Relay: 711

Table of Contents

| | |
|--|----|
| I. Introduction..... | 1 |
| II. Purpose..... | 1 |
| III. Scope of Services..... | 2 |
| a. Capital Improvement Program Implementation | 2 |
| b. Flood Preparedness, Regional Flood Warning Center and Post Flood Recovery Program..... | 4 |
| c. Flood Hazard Studies, Mapping, and Technical Services Program..... | 4 |
| d. Flood Hazard Planning and Grants, Repetitive Loss Mitigation, and Public Outreach..... | 5 |
| e. King County Flood Control District Coordination | 9 |
| f. Resource Management, Annual Maintenance, and Facility Assessment Program..... | 9 |
| g. Program Management and Supervision; Finance, Budget and General Administration..... | 10 |
| List of Attachments..... | 11 |
| Attachment A: King County Flood Control District 2010 Revised CIP and Flood Damage Repair Projects (Adopted April 2010) | |
| Attachment B: King County Flood Control District Summary of Capital and Operating Expenditures | |

**King County Flood Control District
Scope of Services Semi-Annual Report
April – October 2010**

I. Introduction

This report provides information for the second and third quarters of 2010 on King County's work to implement the King County Flood Control District (District) work program. As discussed in further detail below, project and programs successes during the second and third quarter included:

- Support for the District's effort to secure \$44 million in federal funds to repair the United States Corps of Engineers (Corps) Howard Hanson Dam. Funds will be used for improved drainage tunnels and other repairs that will reduce flood risks.
- Completion of nine construction projects on multiple river systems: five on the Cedar River, two on the Upper Snoqualmie River, one on the Green River and one on the South Fork Skykomish River.
- Preparations for the upcoming 2010-2011 flood season, which marks the 50th anniversary of King County Flood Warning Services.
- Receipt of an Achievement Award from the National Association of Counties for the use of technology in the King County Flood Warning Program. The program warns residents and agencies of impending floodwaters and helps increase safety and preparedness for residents through the use of several technology-based programs used countywide.
- Over \$3.7 million in property acquisitions, including Snoqualmie Mobile Home Park and Tukwila Lilly Point easement required for Army Corps PL 84-99 repair project.
- Grant-funded acquisition of the Snoqualmie Mobile Home Park that was substantially damaged in the January 2009 federally-declared disaster, as well as relocation of residents to safe and secure housing outside of the floodplain.
- A new website has been developed for the Sub-Regional Opportunity Fund, providing 40 jurisdictions with program information as well as advance reimbursement requests and progress reports.

II. Purpose

The purpose of this report is to provide the District's Board of Supervisors with a status report on the implementation of each element of the District's annual work program. Any guidance or suggestions from the Board of Supervisors to ensure that this and future reports are responsive to both the terms of the ILA and the information needs of the Board of Supervisors is appreciated.

III. Scope of Services

The District's work program is comprised of two major components:

1. A capital improvement program to rehabilitate flood protection facilities and other projects to protect structures at high risk of flooding; and
2. Operational and programmatic activities, such as identifying flood risks, communicating those risks to the public, preparing for and responding to flood events, maintaining over 500 facilities in King County's flood protection system, and coordinating the District Advisory Committee and Basin Technical Committees (BTCs).

a. Capital Improvement Program Implementation

Projects proposed in the District's capital program (see Attachment A: King County Flood Control District 2010 CIP and Flood Damage Repair Projects, adopted April 2010) reduce risks to public health, safety, and critical public infrastructure from flooding, erosion, and rapid channel migration. A detailed description of flood hazard management conditions and objectives for each major river system is available in the adopted 2006 King County Flood Hazard Management Plan, which serves as the District's Comprehensive Plan. The District's capital program fulfills one or more of the following flood hazard management objectives:

- repair, rehabilitate, and improve flood facility protection throughout major commercial, industrial and residential areas;
- reduce hazards by removing flood, erosion, and landslide prone residential structures;
- improve flood water conveyance and capacity; and
- provide safe access to homes and businesses by protecting key transportation routes.

The District's 2010 revised capital program includes 73 capital projects. Over 87 percent of the District's 2010 budget of \$75.8 million is allocated to the capital component of the work plan, including over \$7 million in federal and state grant funds to implement flood damage repairs and acquire or elevate at-risk residential structures.

The 2010 capital program includes the following activities:

- repairs to flood facilities damaged in the January 2009 flood event;
- levee rehabilitation and reconstruction;
- acquisitions to reduce flood risk;
- elevations to minimize flood risk; and
- technical studies and design work to guide flood risk reduction projects.

Construction completed in 2010 include the following projects.

- **McKnight Repair, South Fork Skykomish River:** Repaired approximately 70 linear feet of erosion at the crown of the levee that protects a residential area. Damage was recorded from the January 2009 federally-declared disaster.
- **Mason Thorson Extension Repair, Upper Snoqualmie River:** Repaired

-
- approximately 25 feet of damage from the January 2009 federally-declared disaster.
- **Allen Repair, Upper Snoqualmie River:** Repaired approximately 30 feet of damage from the January 2009 federally-declared disaster.
 - **Cedar Rapids Repair, Cedar River:** Repaired flood-damaged Cedar Rapids levee setback facility by installing 13 engineered log structures in the floodplain to minimize the risk of river migration.
 - **Byers Curve Repair, Cedar River:** Repaired approximately 70 feet of damage from the January 2009 federally-declared disaster.
 - **Herzman Repair, Cedar River:** Repaired 270 feet of revetment damaged in the January 2009 federally-declared disaster. Design is underway for the larger Herzman Levee setback immediately downstream of repair site.
 - **Cedar River Trail Site 2B, Cedar River:** Repaired 85 feet of revetment damaged in the January 2009 federally-declared disaster. Revetment protects the Cedar River Trail, SR-169, and a regionally significant fiber-optic cable.
 - **Belmondo Revetment, Cedar River:** Installed flow deflection structure and reconstruct emergency repair site. Facility protects the Cedar River Trail, SR-169, and a regionally significant fiber-optic cable.
 - **Stoneway Lower, Green River:** Repaired a cracked road under which a pipe carries landfill runoff to a wastewater treatment facility. Construction will be substantially completed in October 2010 and will prevent additional slumping and protect the pipe from damage.

In addition to construction projects, capital program highlights during the second and third quarters include:

- **Riverside Mobile Home Park Acquisition and Relocation, Upper Snoqualmie River:** With grant funding from the Federal Emergency Management Agency (FEMA) and the State of Washington, King County acquired the park and relocated the residents to safe housing outside the floodplain. Asbestos abatement is complete for the sixteen mobile homes, two travel trailers, and two single-family homes on the site, and demolition of the structures is scheduled for December 2010 – January 2011, pending successful completion of the contracting process.
- **Acquisition of at-risk structures, multiple river systems:** In addition to the Riverside Mobile Home Park, \$3.8 million was expended to acquire flood damaged structures and property interests necessary for the construction of high-priority levee rehabilitation projects. This also includes \$1 million for an easement along the Tukwila 205 levee to complete the real estate certification for a flood damage repair completed in 2008 through the Army Corps PL 84-99 program.
- **Mitigation for Army Corps PL 84-99 Levee Vegetation Management, Snoqualmie and Green Rivers:** Trees were removed from levees at multiple locations in 2008 and 2009 so that levees could be made eligible for federal cost-sharing under the Corps' PL 84-99 program. Mitigation work was completed at several locations on the Green and Snoqualmie Rivers. One project site, Camp Gilead in Carnation, was featured in a *Seattle Times* cover story, "King County turns to horses to move logs through delicate site," for its use of horse logging – a cost-

effective and environmentally sound alternative to heavy equipment.
http://seattletimes.nwsourc.com/html/localnews/2012971347_horselogging23m.html

- **Sub-Regional Opportunity Fund:** The 2010 Revised Budget adopted by the Board of Supervisors is approximately \$9.2 million, including carryover from 2008-2009. To date, eight of the 40 jurisdictions in King County have requested reimbursements totaling approximately \$2 million. Staff have solicited new project proposals for the 2011 work program. The 2011 Opportunity Fund is estimated to be approximately \$3.596 million. For 2011, 22 of the 40 jurisdictions have opted to accrue funds for a later date; most are fairly small amounts and the combined total of these accruals is approximately \$500,000. A new website has been developed for the Opportunity Fund, providing jurisdictions with program information as well as advance reimbursement requests and progress reports.
www.kingcounty.gov/environment/waterandland/flooding/flood-control-zone-KCFCD/opportunity-fund.aspx

b. Flood Preparedness, Regional Flood Warning Center and Post Flood Recovery Program

The District's operational work program includes a comprehensive approach to preparing and educating citizens for flood events, coordinating emergency response and regional flood warning center operations during flood events, and ensuring consistency across basins for post-flood recovery actions.

During the second and third quarters, flood warning activities were focused on preparation for the upcoming flood season. The King County Flood Alert System, providing automated flood phase information via text, cellphone, or email, now has over 3,200 subscribers, and staff are refining the data management software application to enhance the collection, analysis and distribution of flood warning data.

Flood preparation activities in the Green River valley continue to receive high priority, with significant coordination effort between King County, the Corps, and the Green River valley cities regarding flood preparations, communications, and levee patrols.

Additional flood preparedness information, including the Flood Alert System sign-up and the Flood Photo Viewer, is available at www.kingcounty.gov/flood.

c. Flood Hazard Studies, Mapping, and Technical Services Program

The purpose of this work program element is to generate technical information, such as studies and maps, to develop and implement strategies to reduce flood risks.

King County staff completed the Sammamish River Flood Study and submitted it to FEMA for review during the second quarter of 2010. Technical analyses for the grant-funded Coastal Hazard Analysis is being finalized, and completion is dependent on technical guidance from FEMA. Staff provided technical comments, in coordination with staff from other jurisdictions, on draft FEMA maps for the Green and White Rivers. These Digital Flood Insurance Rate Maps,

or “D-FIRMs,” will be revised by FEMA. The timing of the release of the final maps to the public has not yet been determined by FEMA.

d. Flood Hazard Planning and Grants, Repetitive Loss Mitigation, and Public Outreach

This year marks the 50th anniversary of King County’s Flood Warning Services. Following major flooding in King County in 1959, the King County Flood Warning Program was established in 1960 to gather, analyze and distribute information so citizens could make critical decisions during flood events. Recognition of the anniversary will be the focal point for this year’s flood awareness activities.

The National Association of Counties recognized the King County Flood Warning program with an Achievement Award for its use of technology in warning residents and agencies of impending floodwaters and helping to increase safety and preparedness. Residents use online applications to get river gage data; automated flood alerts; look up property in the Green River Inundation area; access the King County Flood Photo Viewer; and get sandbag distribution locations.



Following the Howard Hanson Dam/Green River Valley Flood Awareness campaign undertaken last year, King County staff have focused efforts on targeting more vulnerable populations –specifically non-English speaking or limited-English proficiency residents. Two major publications (“Flood Warning Information for Major Rivers in King County” and “Before, During and After a Flood: Flood Response Information to Help You Reduce Risk to Your Family and Property”) will also be translated into Spanish for on-the-ground distribution this coming flood season. In addition to print materials, flood safety and preparedness videos are being produced in multiple languages spoken throughout King County. Videos will be shown on King County television (KCTV), posted on YouTube and the King County website, and will be distributed to community networks through the American Red Cross and Public Health – Seattle & King County. Simple flood warning and safety images are also being developed for use in targeting this audience.

Leveraging External Resources through Grants and Partnerships

The District has eleven grant-funded projects underway, two pending applications, and two grants that will be submitted in October 2010. In the period April – September 2010, the following grant activities were performed.

- Hazard Mitigation Grant Program (1682) Home Elevations – Three elevations completed and one elevation nearing completion.
- Hazard Mitigation Grant Program (1734) Home Elevations – Four elevations completed; three elevations under construction; and two elevations in the permitting process.

-
- Hazard Mitigation Grant Program (1734) Acquisitions and Retrofitting – Three purchase offers accepted; and one wet floodproofing project nearing completion.
 - Flood Mitigation Assistance (FY 2009) – One elevation project initiated.
 - Hazard Mitigation Grant Program (1817/1825) Home Acquisitions – Three substantially-damaged residential structures acquired and asbestos abatement (necessary prior to demolition) is underway.
 - Hazard Mitigation Grant Program (1817/1825) Riverside Mobile Home Park Acquisition – Acquired mobile home park in the City of Snoqualmie consisting of sixteen mobile homes, two travel trailers, two single-family wood frame houses, and a cement block storage building. All tenants were relocated, and asbestos abatement is underway so demolition can be initiated.

In addition to moving forward on awarded grants, King County staff also began preparing new grant applications for the federal fiscal year 2011 grant application period. The District will submit two new grant applications for consideration under FEMA's Severe Repetitive Loss Grant Program. This program seeks to mitigate those properties that place the greatest financial burden on the National Flood Insurance Fund. Local funds are leveraged at 9 to 1 through this program. Applications will seek funding for:

- Home Elevations – elevate six residential structures in the North Bend and Snoqualmie areas; and
- Home Acquisitions – acquire two residential structures in the Snoqualmie Kimball Creek area.

In 2009, King County submitted a planning grant under the FEMA Pre-Disaster Mitigation Program, requesting \$200,000 in federal funds to support the update to the 2009 Flood Hazard Management Plan, which serves as the comprehensive plan for the District under RCW 86.12 and must be updated every five years to receive Community Rating System (CRS) credits. This grant proposal was not funded, and staff are developing alternative approaches to complete the plan update without this external funding. Finally, staff submitted a grant proposal to the Environmental Protection Agency to conduct research related to the impacts of native vegetation on levee stability. This grant application was not funded, but the scope of work will be useful for on-going discussions with federal agencies, and it may also form the basis for a grant submittal to the National Science Foundation.

Levee Vegetation Management and Partnering with the U.S. Army Corps of Engineers

As noted in the April 2010 Annual Report, the Corps has proposed a federal policy change that would create an extensive levee vegetation variance request process that would likely make variances more difficult to obtain. The proposal has been the subject of letters from the Advisory Committee, Board of Supervisors, King County Executive, Puget Sound Partnership, and over 30 individual local governments and stakeholders in Washington State, as well as over 30 stakeholders in California. The Corps intends to adopt a final policy on October 30, 2010, and it is uncertain to what extent the final policy will reflect comments from our region. On August 5,

2010, the regional directors of the Corps, National Marine Fisheries Service (NMFS), and the United States Fish and Wildlife Service (USFWS) sent a joint letter to Corps Headquarters identifying “deficiencies” with the proposal and suggesting an alternative regional framework to collaboratively conduct research to develop “implementable local solutions.”

National Flood Insurance Program Biological Opinion

In September 2008, NMFS issued a final Biological Opinion regarding implementation of FEMA’s National Flood Insurance Program (NFIP). At issue was the effect of the NFIP on Puget Sound salmon and orca whales, which are listed under the Endangered Species Act (ESA). The Biological Opinion was issued following a formal consultation between NMFS and FEMA pursuant to Section 7 of the ESA and consistent with judicial order (National Wildlife Federation v. FEMA, 2004). In the Opinion, NMFS recognizes that King County’s regulations already go beyond the minimum requirements of the NFIP in ways that are likely to reduce habitat degradation for listed species.

At the request of FEMA, King County staff participated in a work group of local governments and natural resource agencies to review a model floodplain development ordinance, as well as supporting tools such as recommended assessment methodologies for habitat located within riparian areas, channel migration zones and floodplains. NMFS provided comments on the draft documents in April 2010 and FEMA made additional changes to address the concerns. However the final version of the model ordinance has not been finalized, and NMFS granted FEMA’s request for a one-year extension for compliance with the Biological Opinion.

FEMA sent a letter to all Tier One communities in July 2010 offering three options for compliance with the Biological Opinion. Tier One communities were identified as those communities that contribute to the abundance, diversity, geographic distribution and productivity of the listed species. Tier One communities, which include King County, were given until September 23, 2010 to demonstrate full compliance with the Biological Opinion. The three options offered Tier One communities were:

1. Adopt the model ordinance and supporting tools.
2. Complete a checklist demonstrating that local regulations comply with the Biological Opinion.
3. Demonstrate compliance on each individual permit.

In September 2010, King County sent FEMA the completed checklist and supporting documentation demonstrating consistency with the Biological Opinion. FEMA is now reviewing King County’s checklist and supporting documentation and will make a determination on whether all requirements have been met.

King County Flood Control District Hazard Mitigation Plan

Congress approved the federal Disaster Mitigation Act (DMA), commonly known as the 2000 Stafford Act amendments, on October 10, 2000 (Public Law 106-390). This act requires state

and local governments to develop hazard mitigation plans as a condition for federal grant assistance. The DMA improves upon hazard planning by emphasizing the importance of community planning for disasters before they occur, thus moving away from a focus on post-disaster recovery toward pre-disaster mitigation and risk reduction. Implementing regulations for DMA are included in Title 44 of the Code of Federal Regulations (44 CFR).

King County staff prepared a comprehensive hazard mitigation plan consistent with the DMA to address flood hazard areas and dam failure countywide. Earthquake, liquefaction, landslide, severe weather, lahar (volcanic mud flow), and wildfire were limited to the impact of those hazards on flood and channel migration infrastructure and property interests owned and maintained for flood risk reduction purposes by the District and King County. The plan was developed as a single jurisdictional plan, but language included in the plan would allow other jurisdictions within the District to adopt it by expanding the assessment of risk for earthquake, liquefaction, landslide, severe weather, lahar, and wildfire within their jurisdictions, identifying additional mitigation actions to address those hazards, conducting public involvement within their jurisdictions and adopting the plan.

Pre-adoption approval of the plan was granted by the Washington State Emergency Management Division on May 4, 2010, and by FEMA Region X on June 4, 2010. The District Board of Supervisors adopted the plan through Resolution #FCD2010-34.1 on July 12, 2010. Final FEMA approval was granted on August 17, 2010. With FEMA's approval of this plan, the District is eligible to apply for grant funding under the federal Hazard Mitigation Grant Program, expanding the District's ability to leverage federal and state funds for high-priority flood risk reduction actions.

Community Rating System (CRS) Outreach Strategy

King County and six cities (Auburn, Bellevue, Issaquah, Kent, North Bend and Snoqualmie) participate in the CRS program under FEMA's National Flood Insurance Program (NFIP). Several other cities within the District are considering participating. The CRS is a voluntary incentive program that rewards communities that go beyond the NFIP minimum standards for floodplain management in four types of activities: public information, mapping and regulations, flood damage reduction, and flood preparedness. Property owners within participating jurisdictions receive discounts on their flood insurance premiums based on their community's CRS rating. Currently King County is the highest-rated county in the nation, with a Class 2 rating that provides a 40 percent discount; Auburn, Bellevue, Issaquah and Snoqualmie are Class 5 communities that receive a 25 percent discount, and Kent and North Bend are Class 6 communities that receive a 20 percent discount.

As a regional service provider, activities conducted by the District provide CRS credits for CRS-participating communities within the District. On September 28, 2010 King County hosted the Outreach Projects Strategy (OPS) meeting. The purpose of this meeting is twofold. First, it is an opportunity to coordinate with all jurisdictions within the District on outreach activities to increase efficiencies, share resources and develop consistent messaging. Second, is to prepare a written OPS document for all participating CRS communities. King County hosts this meeting once or twice a year and invites all 39 incorporated cities and special purpose districts, such as fire and rescue districts, to participate.

The OPS team for the September 28 meeting was composed of non-government private property owners, staff from King County as well as Eastside Fire and Rescue, and the Cities of Auburn, Bothell, Burien, Issaquah, Kent, North Bend, Renton, Redmond, Sammamish, Shoreline, and Snoqualmie. Representatives from Seattle Public Utilities Department, the King County Office of Emergency Management and the Cities of Bellevue, Carnation, Duvall, Covington, Enumclaw, Kirkland, and Tukwila have participated in previous OPS meeting. A written OPS document is drafted and distributed to all communities following the meeting.

e. King County Flood Control District Coordination

This work program element includes coordination with King County cities through the Basin Technical Committees (BTCs) comprised of jurisdictions' technical staff and the 15-member Advisory Committee of elected officials. Activities during April and May included multiple meetings in each basin to develop recommendations for the 2011 budget and the 2011-2016 capital project list. In light of two significant sources of uncertainty (levy suppression and Board direction on funding for coastal hazard projects), the Advisory Committee recommended a placeholder budget for 2011 only, and requested that the Board seek Advisory Committee input in the first quarter of 2011 after these two issues have been resolved. The Advisory Committee's Annual Report was transmitted to the Board by the King County Executive on August 31 2010; the report is available online.

www.kingcounty.gov/environment/waterandland/flooding/flood-control-zone-District/governance/advisory-committee.aspx

f. Resource Management, Annual Maintenance, and Facility Assessment Program

This element of the District's work program includes coordination of facility and property maintenance of approximately 500 flood protection facilities covering 119 linear miles and approximately 430 acres of land acquired for flood mitigation purposes, as well as pump stations and related flood protection infrastructure.

Staff also removed levee vegetation along the Tukwila 205 levee to maintain PL 84-99 funding eligibility, as well as the levee's certification and accreditation status. This effort cost approximately \$85,000, not including \$160,000 to reimburse the City of Tukwila. In September 2010, the Seattle District of the Corps provided an annual update on the status of King County's levees under the PL 84-99 cost-sharing program. The Corps has requested a vegetation maintenance plan for eligible facilities (i.e., those levees where vegetation has been removed to comply with the Seattle District's Regional Variance). King County's engineers use a risk-based approach to evaluate levee vegetation based on several site-specific parameters such as tree characteristics, tree health, soil conditions, slope, geomorphic factors, wind exposure, and the overall condition of the levee.

King County received a letter from the Corps on September 7, 2010 requesting a vegetation maintenance plan for all King County levees. While the Corps' letter commends the County for its vegetation maintenance activities along the Green River to remain in compliance with the Corps' PL84-99 national vegetation maintenance standards and thus maintaining eligibility for levee rehabilitation assistance to flood-damaged levees, it requests that the County submit and implement a plan for further vegetation removal to levees that currently do not meet the Corps' vegetation maintenance standards. In response to this letter, the County will reference

ongoing, collaborative efforts underway between federal, state and local agencies to develop a regional framework for vegetation maintenance solutions. In light of these regional efforts, the County will request that any further vegetation maintenance compliance activities be guided by the outcome of the regional framework and will seek to extend the date to December 2011 for compliance with the Corps' vegetation maintenance standards.

A second area of emphasis during this period is the maintenance of temporary levees along the Green River. Flood protection supersacks have been the target of some vandalism and arson, and several work crews have been dispatched to repair the damage to over 500 supersacks in advance of flood season. The repair effort has received significant press coverage, including KOMO's report: "Fixes coming to hundreds of vandalized Green River sandbags."

www.komonews.com/news/local/103507149.html

Finally, maintenance staff are coordinating with the City of Pacific to ensure that the City closes any gaps in the temporary flood protection structures surrounding Pacific City Park in advance of flood season.

g. Program Management and Supervision; Finance, Budget and General Administration

This element of the operational work program includes supervisory, budgeting, and administrative services for the District. Major activities during the second and third quarters included 2011 operating and capital budget preparation for the Board and the Executive, as well as grant billing and financial management, working with homeowners to provide accurate records of reimbursable home elevation costs, and preparation for the conversion to King County's new accounting system. This conversion was scheduled for 2011, but has now been rescheduled to January 2012. Finally, staff also prepared several alternative capital program scenarios to demonstrate the impacts of different levels of levy suppression.

A financial summary for operating and capital expenditures from April through September is included as Attachment B: King County Flood Control District Summary of Capital and Operating Expenditures.

**King County Flood Control District Scope of Services Semi-Annual Report
List of Attachments**

Attachment A: King County Flood Control District 2010 Revised CIP and Flood Damage
Repair Projects (Adopted April 2010)

Attachment B: King County Flood Control District Summary of Capital and Operating
Expenditures

Attachment A: 2010 6-Year CIP Revised

Adopted April 12, 2011

| Council District | Flood Risk | Impl Pot | Project | Name | 2009 Carryover | 2010 | Proposed Change | Revised 2010 | 2010 + Carryover | 2011 | 2012 | 2013 | 2014 | 2015 | 6-Year Total |
|--|------------|----------|---------|---|--------------------|--------------------|----------------------|--------------------|-----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|
| FL0000 - SF Skykomish / Miller Rivers | | | | | | | | | | | | | | | |
| 3 | 66% | 64% | FL0001 | Miller River Home Buyout | (\$1,015) | \$75,000 | (\$60,000) | \$15,000 | \$13,985.00 | \$800,000 | \$0 | \$0 | \$0 | \$0 | \$813,985 |
| 3 | 71% | 8% | FL0002 | Miller River Road Protection | \$103,953 | \$0 | \$0 | \$0 | \$103,953.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$103,953 |
| 3 | 76% | 46% | FL0003 | Timber Lane Village Erosion Buyouts | (\$1,597) | \$0 | \$1,597 | \$1,597 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 3 | 76% | 46% | FL0004 | Timber Lane Village Home Buyouts | \$99,239 | \$0 | \$0 | \$0 | \$99,239.00 | \$0 | \$1,036,058 | \$1,102,792 | \$1,173,919 | \$1,249,735 | \$4,661,743 |
| 3 | 74% | 46% | FL0005 | S.F. Skykomish River Repetitive Loss Mitigation | \$0 | \$0 | \$457,290 | \$457,290 | \$457,290.00 | \$0 | \$0 | \$0 | \$0 | \$324,271 | \$781,561 |
| 3 | 37% | 41% | FL0007 | McKnight Repair | \$57,479 | \$0 | \$0 | \$0 | \$57,479.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$57,479 |
| 3 | 55% | 36% | FL0008 | NE 196th and 635th NE Repair | \$50,000 | \$0 | (\$50,000) | (\$50,000) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 3 | 68% | 49% | FL0009 | Miller River Curve Repair | \$78,766 | \$0 | (\$78,766) | (\$78,766) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 3 | 63% | 36% | FL0010 | SF Skykomish/Maloney Confluence Improvements | \$0 | \$0 | \$0 | \$0 | \$0 | \$50,000 | \$0 | \$0 | \$0 | \$0 | \$50,000 |
| FL0000 Total | | | | | \$386,825 | \$75,000 | \$270,121 | \$345,121 | \$731,946.00 | \$850,000 | \$1,036,058 | \$1,102,792 | \$1,173,919 | \$1,574,006 | \$6,468,721 |
| FL1000 - Upper Snoqualmie River | | | | | | | | | | | | | | | |
| 3 | 84% | 8% | FL1001 | Middle Fork Snoqualmie River Flood Damage Repair | (\$1,412) | \$0 | \$1,412 | \$1,412 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 3 | 84% | 85% | FL1002 | North Bend Area Residential Flood Mitigation | \$413,507 | \$500,000 | \$929,231 | \$1,429,231 | \$1,842,738.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,842,738 |
| 3 | 79% | N/A | FL1003 | South Fork Levee System Improvements | \$927,976 | \$1,686,104 | (\$1,608,989) | \$77,115 | \$1,005,091.00 | \$1,766,862 | \$2,469,249 | \$1,609,000 | \$0 | \$0 | \$6,850,202 |
| 3 | 82% | N/A | FL1004 | South Fork Snoqualmie Flood Damage Repairs | \$430,893 | \$0 | (\$430,893) | (\$430,893) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 3 | 37% | N/A | FL1005 | Upper Snoqualmie River Flood Damage Repairs | \$224,384 | \$0 | (\$192,605) | (\$192,605) | \$31,779.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$31,779 |
| 3 | 68% | 13% | FL1017 | Kimball Creek and Snoqualmie Basin | \$0 | \$230,098 | \$0 | \$230,098 | \$230,098.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$230,098 |
| 3 | 79% | 79% | FL1018 | City of Snoqualmie Natural Area Acquisitions | \$236,928 | \$0 | \$0 | \$0 | \$236,928.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$236,928 |
| 3 | 76% | 33% | FL1019 | Middle Fork Levee System Capacity Improvements | \$135,581 | \$1,865,632 | (\$1,000,000) | \$865,632 | \$1,001,213.00 | \$960,444 | \$980,828 | \$669,584 | \$0 | \$0 | \$3,612,069 |
| 3 | 76% | 26% | FL1022 | SR202 Bridge Lengthening on SF Snoqualmie River | \$374,086 | \$1,737,690 | \$1,391,825 | \$3,129,515 | \$3,503,601.00 | \$1,105,615 | \$1,178,058 | \$1,255,324 | \$1,337,735 | \$954,572 | \$9,805,973 |
| 3 | 89% | 54% | FL1023 | Upper Snoqualmie Residential Flood Mitigation | \$36,375 | \$0 | \$0 | \$0 | \$36,375.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$36,375 |
| 3 | 71% | 79% | FL1024 | Mason Thorson Ext Repair | \$80,000 | \$0 | (\$80,000) | (\$80,000) | \$47,380.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$47,380 |
| 3 | 71% | 79% | FL1027 | Mason Thorson Ellis Repair | \$47,380 | \$0 | \$0 | \$0 | \$47,380.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$47,380 |
| 3 | 71% | 79% | FL1029 | Vallcuga Repair | \$57,056 | \$0 | \$0 | \$0 | \$57,056.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$57,056 |
| 3 | 71% | 79% | FL1030 | Allen Repair | \$0 | \$250,000 | (\$250,000) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 3 | 71% | 41% | FL1032 | Circle River Ranch Repair | \$0 | \$2,962,754 | (\$1,240,019) | \$5,029,505 | \$7,992,259.00 | \$3,832,921 | \$4,628,135 | \$3,533,908 | \$1,337,735 | \$2,380,212 | \$23,705,170 |
| FL1000 Total | | | | | \$2,962,754 | \$6,269,524 | (\$1,240,019) | \$5,029,505 | \$7,992,259.00 | \$3,832,921 | \$4,628,135 | \$3,533,908 | \$1,337,735 | \$2,380,212 | \$23,705,170 |
| FL2000 - Lower Snoqualmie River | | | | | | | | | | | | | | | |
| 3 | 84% | 87% | FL2001 | Aldair & Fall City Reach Flood Mitigation | \$718,902 | \$1,583,014 | \$0 | \$1,583,014 | \$2,301,916.00 | \$86,335 | \$0 | \$0 | \$0 | \$0 | \$2,388,251 |
| 3 | 82% | N/A | FL2002 | Lower Snoqualmie River Flood Damage Repairs | \$386,893 | \$700,000 | (\$500,000) | \$200,000 | \$586,893.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$586,893 |
| 3 | 68% | N/A | FL2003 | Neal Road Relocation | \$40,782 | \$0 | (\$40,782) | (\$40,782) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 3 | 68% | 59% | FL2012 | McElhoer/Person Levee | \$0 | \$310,386 | \$0 | \$310,386 | \$310,386.00 | \$541,890 | \$567,770 | \$0 | \$0 | \$0 | \$1,420,046 |
| 3 | 84% | 49% | FL2013 | Toit Pipeline Protection | \$0 | \$153,597 | \$0 | \$153,597 | \$153,597.00 | \$1,404,727 | \$1,473,665 | \$0 | \$0 | \$0 | \$3,031,989 |
| 3 | 74% | 21% | FL2014 | Lower Snoqualmie River Repetitive Loss Mitigation | \$143,451 | \$449,750 | \$946,095 | \$1,395,845 | \$1,539,296.00 | \$0 | \$0 | \$0 | \$0 | \$390,856 | \$1,930,152 |
| 3 | 79% | 79% | FL2015 | McElhoer-Pearson Repair | \$0 | \$50,000 | \$0 | \$50,000 | \$50,000.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$50,000 |
| 3 | N/A | N/A | FL2018 | Farm/Flood Task Force Implementation | \$0 | \$96,883 | \$0 | \$96,883 | \$96,883.00 | \$100,759 | \$104,789 | \$108,981 | \$113,340 | \$117,874 | \$642,626 |
| 3 | 76% | 41% | FL2019 | Schlesel-Phiffer Repair | \$0 | \$600,000 | (\$600,000) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 3 | 89% | 54% | FL2020 | Lower Snoqualmie Resl Flood Mitigation | \$0 | \$300,000 | \$300,000 | \$600,000 | \$600,000.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$600,000 |
| FL2000 Total | | | | | \$1,290,028 | \$4,243,630 | \$105,313 | \$4,348,943 | \$5,638,971.00 | \$2,133,711 | \$2,146,224 | \$108,981 | \$113,340 | \$508,730 | \$10,649,957 |
| FL3000 - Toit River | | | | | | | | | | | | | | | |
| 3 | 74% | 8% | FL3001 | Toit River Flood Damage Repairs | \$163,987 | \$0 | \$0 | \$0 | \$163,987.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$163,987 |
| 3 | 74% | 0% | FL3002 | Toit River Supplemental Study | \$269,308 | \$0 | \$0 | \$0 | \$269,308.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$269,308 |
| 3 | 74% | 21% | FL3003 | Toit River Road Shoulder Protection | \$6,121 | \$0 | (\$6,121) | (\$6,121) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 3 | 74% | 69% | FL3004 | Lower Toit River Acquisition | \$0 | \$500,000 | (\$500,000) | \$0 | \$0 | \$0 | \$517,850 | \$500,000 | \$0 | \$0 | \$1,017,850 |
| 3 | 82% | 59% | FL3005 | San Souci Neighborhood Buyout | \$998,646 | \$259,593 | \$0 | \$259,593 | \$1,258,239.00 | \$1,365,967 | \$0 | \$0 | \$0 | \$0 | \$2,624,206 |
| 3 | 61% | 54% | FL3006 | Toit River Natural Area Floodplain Reconnection/Act | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$3,274,749 | \$3,760,768 | \$7,035,517 |
| 3 | 61% | 41% | FL3007 | Toit River SR 203 to Trail Bridge Floodplain Reconn | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,133,771 | \$1,197,901 | \$2,331,672 |
| 3 | 74% | 21% | FL3008 | Toit River Repetitive Loss Mitigation | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$187,011 | \$187,011 | \$187,011 |
| 3 | 79% | 74% | FL3009 | Toit River Mile 1.1 Levee Setback | \$1,007,004 | \$0 | \$400,000 | \$400,000 | \$1,407,004.00 | \$0 | \$1,231,266 | \$1,727,839 | \$1,830,635 | \$1,940,086 | \$8,136,830 |
| 3 | 39% | 95% | FL3010 | Toit River Mouth to SR 203 Floodplain Reconnector | (\$1,413) | \$0 | \$10,000 | \$10,000 | \$8,587.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$8,587 |
| 3 | 66% | 44% | FL3012 | Frew Emergency Repair | (\$1,928) | \$0 | \$4,000 | \$4,000 | \$2,072.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$2,072 |
| 3 | 66% | 44% | FL3014 | Toit River Levee Rght Repair | \$125,000 | \$0 | (\$125,000) | (\$125,000) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| FL3000 Total | | | | | \$2,566,725 | \$759,593 | (\$217,121) | \$542,472 | \$3,109,197.00 | \$1,365,967 | \$1,749,116 | \$2,227,839 | \$6,426,166 | \$6,898,755 | \$21,777,040 |
| FL4000 - Raging River | | | | | | | | | | | | | | | |

| Council District | Flood Risk | Impl Potl | Project | Name | 2009 Carryover | 2010 | Proposed Change | Revised 2010 | 2010 + Carryover | 2011 | 2012 | 2013 | 2014 | 2015 | 6-Year Total |
|---------------------------------|------------|-----------|---------|--|----------------|-------------|-----------------|--------------|------------------|-------------|-------------|-------------|-------------|-------------|--------------|
| FL4000 - Sammamish River | | | | | | | | | | | | | | | |
| 3,9 | 74% | N/A | FL4001 | Alpine Manor Mobile Home Park Neighborhood Buy | \$958,290 | \$500,000 | \$0 | \$500,000 | \$1,458,290.00 | \$1,083,244 | \$1,143,342 | \$1,206,989 | \$1,274,403 | \$1,345,818 | \$7,512,086 |
| 3,9 | 76% | N/A | FL4002 | Raging River Flood Damage Repairs | \$26,726 | \$0 | (\$25,000) | (\$25,000) | \$1,726.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,726 |
| 3,9 | 68% | 77% | FL4016 | Abandoned Bridge Abutment and Waring Revetmen | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$147,342 | \$147,342 |
| 3,9 | 47% | 49% | FL4017 | Preston Fall-City Lowest Repair | \$199,594 | \$0 | (\$199,594) | (\$199,594) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 3,9 | 42% | 44% | FL4018 | Bridge to Bridge L Repair | \$84,726 | \$0 | (\$84,726) | (\$84,726) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 3,9 | 47% | 49% | FL4019 | Bridge to Bridge R Repair | (\$39,403) | \$0 | \$39,403 | \$39,403 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 3,9 | 37% | 44% | FL4020 | Bridge to Mouth R 2009 Repair | \$15,000 | \$0 | (\$15,000) | (\$15,000) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 3,9 | 66% | 41% | FL4021 | Preston-Fall City Upper Repair | \$2,002 | \$400,000 | \$0 | \$400,000 | \$402,002.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$402,002 |
| 3,9 | 66% | 41% | FL4022 | Preston Fall City Lower Repair | (\$14,386) | \$250,000 | (\$235,614) | \$14,386 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| FL4000 Total | | | | | \$1,232,549 | \$1,150,000 | (\$520,531) | \$629,469 | \$1,862,018.00 | \$1,083,244 | \$1,143,342 | \$1,206,989 | \$1,274,403 | \$1,493,160 | \$8,063,156 |
| FL5000 - Sammamish River | | | | | | | | | | | | | | | |
| 3 | 58% | N/A | FL5001 | Willowmoor Floodplain Restoration | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$85,000 | \$85,000 |
| FL6000 - Issaquah Creek | | | | | | | | | | | | | | | |
| 9 | 82% | N/A | FL6001 | Issaquah Creek Streambank Stabilization | \$88,865 | \$0 | \$0 | \$0 | \$88,865.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 9 | 74% | 56% | FL6002 | Issaquah Creek Repetitive Loss Mitigation | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$214,088 | \$228,689 | \$244,285 | \$687,062 |
| FL7000 - Cedar River | | | | | | | | | | | | | | | |
| 9 | 76% | 8% | FL7001 | Cedar Grove Mobile Home Park Acquisition | \$509,596 | \$0 | \$0 | \$0 | \$509,596.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$509,596 |
| 9 | 63% | 8% | FL7002 | Cedar Rapids Levee Setback | \$392,570 | \$0 | (\$382,570) | (\$382,570) | \$10,000.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$10,000 |
| 9 | 97% | 8% | FL7003 | Cedar River Flood Damage Repairs | \$813,548 | \$0 | \$0 | \$0 | \$813,548.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$813,548 |
| 9 | 74% | N/A | FL7004 | Cedar River Repetitive Loss Mitigation | \$605,012 | \$1,055,244 | (\$781,193) | \$274,051 | \$879,063.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$879,063 |
| 9 | 79% | N/A | FL7005 | Elliott Bridge Levee Setback and Acquisition | \$49,023 | \$478,987 | \$0 | \$478,987 | \$528,010.00 | \$500,440 | \$0 | \$0 | \$0 | \$0 | \$1,028,450 |
| 9 | 76% | N/A | FL7006 | Rainbow Bend Levee Setback and Floodplain Recor | \$416,280 | \$794,111 | \$0 | \$794,111 | \$1,210,391.00 | \$832,059 | \$0 | \$0 | \$0 | \$0 | \$2,042,450 |
| 9 | 79% | 69% | FL7014 | Dorre Don Meanders- Phase 1 | \$0 | \$242,209 | \$0 | \$242,209 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$242,209 |
| 9 | 76% | 51% | FL7015 | Herzman Levee Setback & Floodplain Reconnection | \$129,604 | \$156,901 | \$0 | \$156,901 | \$286,505.00 | \$469,504 | \$491,835 | \$0 | \$0 | \$0 | \$1,247,844 |
| 9 | 76% | 44% | FL7016 | Jan Road-Rutledge Johnson Levee Setbacks | \$77,513 | \$190,383 | \$0 | \$190,383 | \$267,896.00 | \$394,321 | \$412,776 | \$0 | \$0 | \$0 | \$1,074,993 |
| 9 | 84% | 46% | FL7017 | Maplewood Levee Setback Phase 1 Alt Evaluation | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$136,226 | \$0 | \$0 | \$136,226 |
| 5 | 89% | 28% | FL7018 | Cedar River Gravel Removal | \$0 | \$352,791 | \$0 | \$352,791 | \$352,791.00 | \$369,684 | \$1,549,920 | \$1,624,932 | \$2,272,011 | \$0 | \$6,169,338 |
| 9 | 79% | 51% | FL7020 | Lower Jones Road Setback | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$208,070 | \$764,732 | \$972,802 |
| 9 | 82% | 46% | FL7021 | Riverbend Mobile Home Park Acquisition and Levee | (\$76) | \$0 | \$76 | \$76 | \$0 | \$0 | \$0 | \$0 | \$248,177 | \$259,411 | \$507,588 |
| 9 | 84% | 46% | FL7022 | Maplewood Acquisition and Levee Setback Phase 2 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$960,659 | \$960,659 |
| 5 | 66% | 18% | FL7023 | Renton- Cedar River Bridge Flood Reduction Projeci | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$694,090 | \$694,090 |
| 9 | 71% | 18% | FL7024 | Bellevue - Lower Coal Creek Phase 1 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$2,036,890 | \$2,138,414 | \$4,175,304 |
| 9 | 79% | 77% | FL7026 | Belmondo Emergency Repair | \$1,649 | \$0 | \$0 | \$0 | \$1,649.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,649 |
| 9 | 63% | N/A | FL7027 | Cedar Rapids Repair | (\$402,867) | \$0 | \$1,382,570 | \$1,382,570 | \$979,703.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$979,703 |
| 9 | 100% | 69% | FL7028 | Cedar River Trail 1 Repair | (\$46,453) | \$0 | \$46,453 | \$46,453 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 9 | 100% | 69% | FL7029 | Cedar River Trail 3 Repair | (\$9,827) | \$0 | \$9,827 | \$9,827 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 9 | 55% | 38% | FL7030 | Orchard Grove Repair | \$60,410 | \$0 | (\$60,410) | (\$60,410) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 9 | 63% | 64% | FL7031 | Petorak-Wadhams Repair | (\$44,752) | \$0 | \$44,752 | \$44,752 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 9 | 61% | 46% | FL7032 | Rhode Levee Repair | \$86,190 | \$0 | (\$86,190) | (\$86,190) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 9 | 76% | 44% | FL7033 | Jan Road Repair | \$48,748 | \$0 | (\$48,748) | (\$48,748) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 9 | 66% | 64% | FL7034 | Byers Curve Repair | \$30,000 | \$0 | \$0 | \$0 | \$30,000.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$30,000 |
| 9 | 47% | 44% | FL7035 | Rainbow Bend Repair | (\$1,105) | \$0 | \$1,105 | \$1,105 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 9 | 45% | 51% | FL7036 | Lower Dorre Don Repair | (\$5,486) | \$0 | \$5,486 | \$5,486 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 9 | 68% | 46% | FL7037 | Rhode Levee Setback and Home Buyouts | \$0 | \$442,998 | (\$200,000) | \$242,998 | \$242,998.00 | \$463,816 | \$485,718 | \$508,771 | \$533,039 | \$0 | \$2,234,342 |
| 9 | 61% | 54% | FL7038 | Herzman Repair | \$0 | \$450,000 | \$0 | \$450,000 | \$450,000.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$450,000 |
| 9 | 79% | 49% | FL7039 | Dorre Done Phase 2 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,244,067 | \$1,289,826 | \$2,533,893 |
| 9 | 73% | 47% | FL7040 | Cedar Pre-Construction Strategic Acquisition | \$0 | \$500,000 | \$0 | \$500,000 | \$500,000.00 | \$1,114,015 | \$1,721,239 | \$1,835,664 | \$1,957,772 | \$2,088,086 | \$9,216,776 |
| 9 | 92% | 67% | FL7043 | Cedar River Trail 2B FEMA | \$0 | \$200,000 | \$200,000 | \$200,000 | \$200,000.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$200,000 |
| 9 | 79% | 77% | FL7044 | Belmondo Rvtmnt Repair FEMA PW1653 | \$0 | \$950,000 | \$950,000 | \$950,000 | \$950,000.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$950,000 |
| FL7000 Total | | | | | \$2,709,577 | \$4,663,624 | \$1,081,158 | \$5,744,782 | \$8,454,359.00 | \$4,143,839 | \$4,661,488 | \$4,105,593 | \$8,500,026 | \$8,195,218 | \$38,060,523 |

| Council District | Flood Risk | Impl Potl | Project | Name | 2009 Carryover | 2010 | Proposed Change | Revised 2010 | 2010 + Carryover | 2011 | 2012 | 2013 | 2014 | 2015 | 6-Year Total |
|----------------------------------|------------|-----------|---------|---|----------------|-------------|-----------------|---------------|------------------|-------------|-------------|--------------|--------------|-------------|--------------|
| FL8000 - Green River | | | | | | | | | | | | | | | |
| 5, 7, 8 | 100% | 3% | FL8003 | Green River 2006 Flood Damage Repairs | (\$28,062) | \$0 | \$28,062 | \$28,062 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 5, 7 | 95% | N/A | FL8005 | Nursing Home Levee (Replaced w Horseshoe Benc | \$1,004,894 | \$0 | (\$1,004,894) | (\$1,004,894) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 5, 7 | 95% | 15% | FL8011 | Kent Shops-Narita | \$697,043 | \$500,000 | (\$1,097,043) | (\$597,043) | \$100,000.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 5 | 89% | 3% | FL8012 | Myer's Golf Levee | (\$4,832) | \$0 | \$4,832 | \$4,832 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$100,000 |
| 5 | 92% | 62% | FL8016 | Briscoe Levee #1-#3, #5-#8 | \$1,125,180 | \$1,760,246 | (\$2,885,426) | (\$1,125,180) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 5 | 89% | 49% | FL8017 | Desimone Levee #1 | \$136,127 | \$256,427 | (\$392,554) | (\$136,127) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 5 | 89% | 49% | FL8018 | Desimone Levee #2 | \$190,728 | \$319,901 | (\$510,629) | (\$190,728) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 5 | 95% | 49% | FL8019 | Desimone Levee #3 | \$114,521 | \$193,266 | (\$307,787) | (\$114,521) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 5 | 92% | 49% | FL8020 | Desimone Levee #4 | \$628,053 | \$1,049,835 | (\$1,677,888) | (\$628,053) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 7 | 68% | 62% | FL8021 | Riverside Estates/Reddington | \$762,898 | \$1,025,610 | (\$1,788,508) | (\$762,898) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 5 | 97% | 31% | FL8022 | Segale Levee #2 & #3 | \$858,776 | \$1,435,510 | (\$2,294,286) | (\$858,776) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 5 | 87% | 69% | FL8023 | 42nd Ave South Repair | \$9,939 | \$0 | (\$9,939) | (\$9,939) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 5 | 82% | 28% | FL8025 | Gaco Western | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$548,575 |
| 5 | 95% | 31% | FL8026 | Segale Levee #4 | \$160,767 | \$574,204 | (\$734,971) | (\$160,767) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 5 | 68% | 46% | FL8027 | Stoneway Lower Repair | \$56,429 | \$0 | \$450,000 | \$450,000 | \$506,429.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 5 | 74% | 54% | FL8029 | Horseshoe Bend Repair | \$60,000 | \$0 | \$0 | \$0 | \$60,000.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 5 | 76% | 49% | FL8030 | Ratolo Repair | \$25,000 | \$0 | \$0 | \$0 | \$25,000.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 5 | 55% | 54% | FL8031 | Gateway Lower/Codiga Repair | \$0 | \$150,000 | \$0 | \$150,000 | \$150,000.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 7 | 84% | 56% | FL8034 | Reddington Extension | \$0 | \$1,157,421 | (\$1,157,421) | \$0 | \$0 | \$0 | \$140,000 | \$2,800,000 | \$0 | \$0 | \$0 |
| 5 | 76% | 56% | FL8036 | Russell Rd Lower | \$0 | \$107,692 | (\$107,692) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 5 | 76% | 56% | FL8037 | Russell Rd Upper | \$0 | \$1,184,615 | (\$1,020,615) | \$164,000 | \$164,000.00 | \$2,775,500 | \$0 | \$2,800,000 | \$0 | \$0 | \$2,940,000 |
| 5 | 95% | 59% | FL8039 | Boeing Setback Levee | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 5 | 68% | 51% | FL8040 | Russell Rd Lowest | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$161,538 | \$2,692,308 | \$0 | \$2,939,500 |
| 5 | 95% | 41% | FL8041 | Horseshoe Bend Acquisition & Reconnection | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$105,000 | \$2,870,000 | \$0 | \$2,853,846 |
| 7 | 89% | 59% | FL8042 | Lones Addition & Ext | \$0 | \$0 | \$0 | \$1,004,894 | \$1,004,894.00 | \$0 | \$577,208 | \$616,573 | \$658,623 | \$703,542 | \$3,560,840 |
| 5, 7, 8 | N/A | N/A | FL8043 | Dykstra Lowspot Repair | \$7,463 | \$0 | \$0 | \$0 | \$7,463.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$2,870,000 |
| 5 | 89% | 49% | FL8045 | Green Flood Emergency Preparation | \$5,307,126 | \$0 | \$0 | \$0 | \$5,307,126.00 | \$0 | \$1,000,000 | \$0 | \$0 | \$0 | \$0 |
| 7 | 68% | 62% | FL8017 | Briscoe Reach Design | \$0 | \$0 | \$2,984,000 | \$2,984,000 | \$2,984,000.00 | \$100,000 | \$0 | \$0 | \$0 | \$0 | \$6,307,126 |
| 5, 7 | 80% | 51% | FL8021 | Reddington Reach Design | \$0 | \$0 | \$1,550,000 | \$1,550,000 | \$1,550,000.00 | \$50,000 | \$0 | \$0 | \$0 | \$0 | \$3,084,000 |
| 5 | N/A | N/A | FL8058 | Green Pre-Construction Acquisition | \$0 | \$0 | \$5,400,000 | \$5,400,000 | \$5,400,000.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,600,000 |
| 5 | 92% | 62% | FL8059 | Tukwila 205 - Lily Point Reimbursement | \$0 | \$0 | \$1,383,000 | \$1,383,000 | \$1,383,000.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$5,400,000 |
| 5 | 91% | 49% | FL8060 | Briscoe Levee Setback | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$4,228,868 | \$4,228,868 | \$4,228,868 | \$0 | \$1,383,000 |
| 5 | 96% | 31% | FL8061 | Desimone Levee Setback | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,164,731 | \$1,164,731 | \$1,164,731 | \$0 | \$16,915,473 |
| 7 | 68% | 62% | FL8062 | Segale Levee Setback | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,283,534 | \$1,283,534 | \$1,283,534 | \$0 | \$4,658,924 |
| 7 | N/A | N/A | FL8063 | Reddington Levee Setback | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,350,191 | \$1,350,191 | \$1,350,191 | \$1,350,191 | \$0 | \$5,134,137 |
| 7 | N/A | N/A | FL8038 | PL84-99 Mitigation Site | \$0 | \$0 | \$2,500,000 | \$2,500,000 | \$2,500,000.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$5,400,764 |
| FL8000 Total | | | | | \$11,112,050 | \$9,714,727 | \$315,135 | \$10,029,862 | \$21,141,912.00 | \$4,275,691 | \$9,744,532 | \$11,780,435 | \$17,048,255 | \$7,929,250 | \$71,920,077 |
| FL9000 - White River | | | | | | | | | | | | | | | |
| 7 | 58% | N/A | FL9001 | County line to A-Street Flood Conveyance Improver | \$2,290,823 | \$20,616 | \$0 | \$20,616 | \$2,311,439.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$2,311,439 |
| 7 | 37% | N/A | FL9003 | White River Flood Damage Repair at Stuck River Dr | \$1,438 | \$0 | \$0 | \$0 | \$1,438.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 9 | 66% | N/A | FL9004 | White-Greenwater Acquisition | \$1,721 | \$0 | \$800,000 | \$800,000 | \$801,721.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,438 |
| 9 | 71% | N/A | FL9002 | Red Creek Acquisitions | \$939 | \$0 | \$0 | \$0 | \$939.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$801,721 |
| 9 | 66% | 54% | FL9007 | Pacific Right Bank Acquisition and Setback Berm | \$494,600 | \$1,716,266 | \$0 | \$1,716,266 | \$2,210,866.00 | \$1,760,046 | \$1,860,351 | \$0 | \$0 | \$1,321,865 | \$1,322,804 |
| 7 | N/A | N/A | FL9012 | City of Pacific Gravel and Debris Removal | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,124,865 | \$0 | \$0 | \$5,831,263 |
| 7 | 82% | 46% | FL9013 | White River Corps 205 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$272,452 | \$708,375 | \$0 | \$1,124,865 |
| FL9000 Total | | | | | \$2,789,521 | \$1,736,882 | \$800,000 | \$2,536,882 | \$5,326,403.00 | \$1,760,046 | \$1,860,351 | \$1,397,317 | \$708,375 | \$1,321,865 | \$980,827 |
| FLC000 - Seattle Projects | | | | | | | | | | | | | | | |
| 4 | 100% | N/A | FL8002 | Alaskan Way Seawall Replacement Feasibility and I | \$1,329,480 | \$500,000 | \$0 | \$500,000 | \$1,829,480.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,829,480 |
| 8 | 79% | 64% | FL8024 | South Park - Duwamish Backwater Inundation at 4th | \$272,727 | \$3,250,000 | (\$3,522,727) | (\$272,727) | \$0 | \$2,750,000 | \$1,500,000 | \$0 | \$0 | \$0 | \$4,250,000 |
| FLC000 Total | | | | | \$1,602,207 | \$3,750,000 | (\$3,522,727) | \$227,273 | \$1,829,480.00 | \$2,750,000 | \$1,500,000 | \$0 | \$0 | \$0 | \$6,079,480 |
| FLM000 | | | FLM000 | Flood CIP Monitoring/Maintenance | (\$25,717) | \$236,124 | \$200,000 | \$436,124 | \$410,407.00 | \$256,781 | \$308,962 | \$356,024 | \$336,228 | \$299,321 | \$1,967,723 |
| FLS000 | | | FLS000 | Subregional Opportunity Fund | \$4,599,628 | \$4,639,033 | \$0 | \$4,639,033 | \$9,238,661.00 | \$3,592,503 | \$3,657,520 | \$3,734,660 | \$3,813,427 | \$3,893,890 | \$27,930,661 |

| Council District | Flood Risk | Impl Potl | Project | Name | 2009 Carryover | 2010 | Proposed Change | Revised 2010 | 2010 + Carryover | 2011 | 2012 | 2013 | 2014 | 2015 | 6-Year Total |
|--|------------|-----------|---------------|------------------------------------|---------------------|---------------------|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|
| FLX000 - Countywide Miscellaneous | | | | | | | | | | | | | | | |
| | | FLX100 | | Flood District Capital Contingency | (\$74,219) | \$0 | \$74,219 | \$74,219 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| | | FLX200 | | Flood Emergency Contingency | \$0 | \$250,000 | \$0 | \$250,000 | \$250,000.00 | \$250,000 | \$250,000 | \$250,000 | \$250,000 | \$250,000 | \$1,500,000 |
| | | FLX012 | | Stockpile Chargeback Projects | \$26 | \$0 | \$10,000 | \$10,000 | \$10,026.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$10,026 |
| | | | | FLX000 Total | (\$74,193) | \$250,000 | \$84,219 | \$334,219 | \$260,026.00 | \$250,000 | \$250,000 | \$250,000 | \$250,000 | \$250,000 | \$1,510,026 |
| FLGRCT | | | FLGRCT | Green River Budget Contra | \$0 | (\$8,400,000) | \$8,400,000 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| D15712 | | | D15712 | Fund Default Project | (\$22,214) | \$0 | \$22,214 | \$22,214 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| | | | | Total | \$31,218,605 | \$29,088,137 | \$5,777,762 | \$34,865,899 | \$66,084,504 | \$26,294,703 | \$32,685,728 | \$30,018,626 | \$41,210,563 | \$35,073,692 | \$231,367,818 |

Attachment B: King County Flood Control District Summary of Capital and Operating Expenses

Operating Expenditures April - September 2010

| <u>Description</u> | <u>Apr</u> | <u>May</u> | <u>Jun</u> | <u>Jul</u> | <u>Aug</u> | <u>Sep</u> | <u>Total</u> |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------|
| ANNUAL MAINTENANCE, FACILITY ASSESSMENTS | \$ 133,708 | \$ 146,502 | \$ 132,861 | \$ 58,628 | \$ 92,052 | \$ 145,796 | \$ 709,548 |
| FLD HAZARD PLANNING, GRANTS, OUTREACH | \$ 24,369 | \$ 10,485 | \$ 52,458 | \$ 24,024 | \$ 12,192 | \$ 22,512 | \$ 146,041 |
| FLD HAZARD STUDIES, MAPS, TECHNICAL SERVICES | \$ 41,086 | \$ 19,759 | \$ 59,468 | \$ 22,978 | \$ 10,228 | \$ 9,968 | \$ 163,487 |
| FLOOD PREPARATION, FLOOD WARNING CENTER, POST FLOOD ACTIVITIES | \$ 2,009 | \$ 1,321 | \$ 2,940 | \$ 2,937 | \$ 1,363 | \$ 3,007 | \$ 13,577 |
| PROGRAM MANAGEMENT, SUPERVISION, FINANCE, BUDGET | \$ 200,247 | \$ 206,086 | \$ 131,856 | \$ 195,009 | \$ 194,181 | \$ 134,006 | \$ 1,061,384 |
| PROGRAM IMPLEMENTATION | \$ 67,446 | \$ 73,312 | \$ 66,180 | \$ 58,258 | \$ 55,884 | \$ 65,481 | \$ 386,561 |
| USACE HOWARD HANSON DAM (PROJECT FLD105) | \$ 14,260 | \$ 31,450 | \$ 384 | \$ 518 | \$ - | \$ - | \$ 46,612 |
| TRANSFERS AND CHARGES TO CAPITAL AND OTHER PROJECTS, LOAN OUT RECOVERY | \$ 16,512 | \$ 54,895 | \$ (20,589) | \$ 51,483 | \$ 61,466 | \$ 4,453 | \$ 168,221 |
| Total Expenditures | \$ 499,638 | \$ 543,809 | \$ 425,558 | \$ 413,836 | \$ 427,366 | \$ 385,224 | \$ 2,695,430 |

Attachment B: King County Flood Control District Summary of Capital and Operating Expenses

Capital Expenditures April-September 2010

| <u>River / Program</u> | <u>Apr</u> | <u>May</u> | <u>Jun</u> | <u>Jul</u> | <u>Aug</u> | <u>Sep</u> | <u>Total</u> |
|------------------------------|-------------|------------|------------|-------------|------------|------------|--------------|
| SKYKOMISH/MILLER RIVERS | \$9,585 | \$500 | \$12,254 | \$254 | \$2,582 | \$1,078 | \$26,253 |
| UPPER SNOQUALMIE RIVER | \$1,391,409 | \$390,042 | \$185,450 | \$187,681 | \$169,030 | \$130,013 | \$2,453,625 |
| LOWER SNOQUALMIE RIVER | \$6,291 | \$41,880 | \$65,077 | \$33,152 | \$13,267 | \$54,256 | \$213,923 |
| TOLT RIVER | \$23,329 | \$21,075 | \$342,728 | \$21,319 | \$9,531 | \$492,508 | \$910,491 |
| RAGING RIVER | \$6,149 | \$23,213 | \$15,688 | \$1,317 | \$1,514 | | \$47,882 |
| CEDAR RIVER | \$156,367 | \$322,108 | \$89,936 | \$370,082 | \$251,945 | \$626,026 | \$1,816,463 |
| GREEN RIVER | \$177,676 | \$135,032 | \$189,991 | \$1,097,673 | \$170,108 | \$456,119 | \$2,226,599 |
| WHITE RIVER | \$659,425 | \$549,641 | \$39,767 | \$35,592 | \$20,872 | \$50,334 | \$1,355,631 |
| MONITORING/MAINTENANCE | \$5,181 | \$25,652 | \$54,737 | \$47,035 | \$48,381 | \$5,901 | \$186,886 |
| SUBREGIONAL OPPORTUNITY FUND | | \$29,880 | \$992,767 | \$220,022 | \$132,043 | \$32,293 | \$1,407,005 |
| SEATTLE PROJECTS | \$7,995 | | \$85,065 | | \$9,720 | \$47,736 | \$150,516 |
| COUNTYWIDE MISCELLANEOUS | | | \$4,665 | \$8,097 | | | \$12,762 |

Total Capital Expenditures **\$2,443,407** **\$1,539,021** **\$2,078,126** **\$2,022,223** **\$828,995** **\$1,896,263** **\$10,808,036**