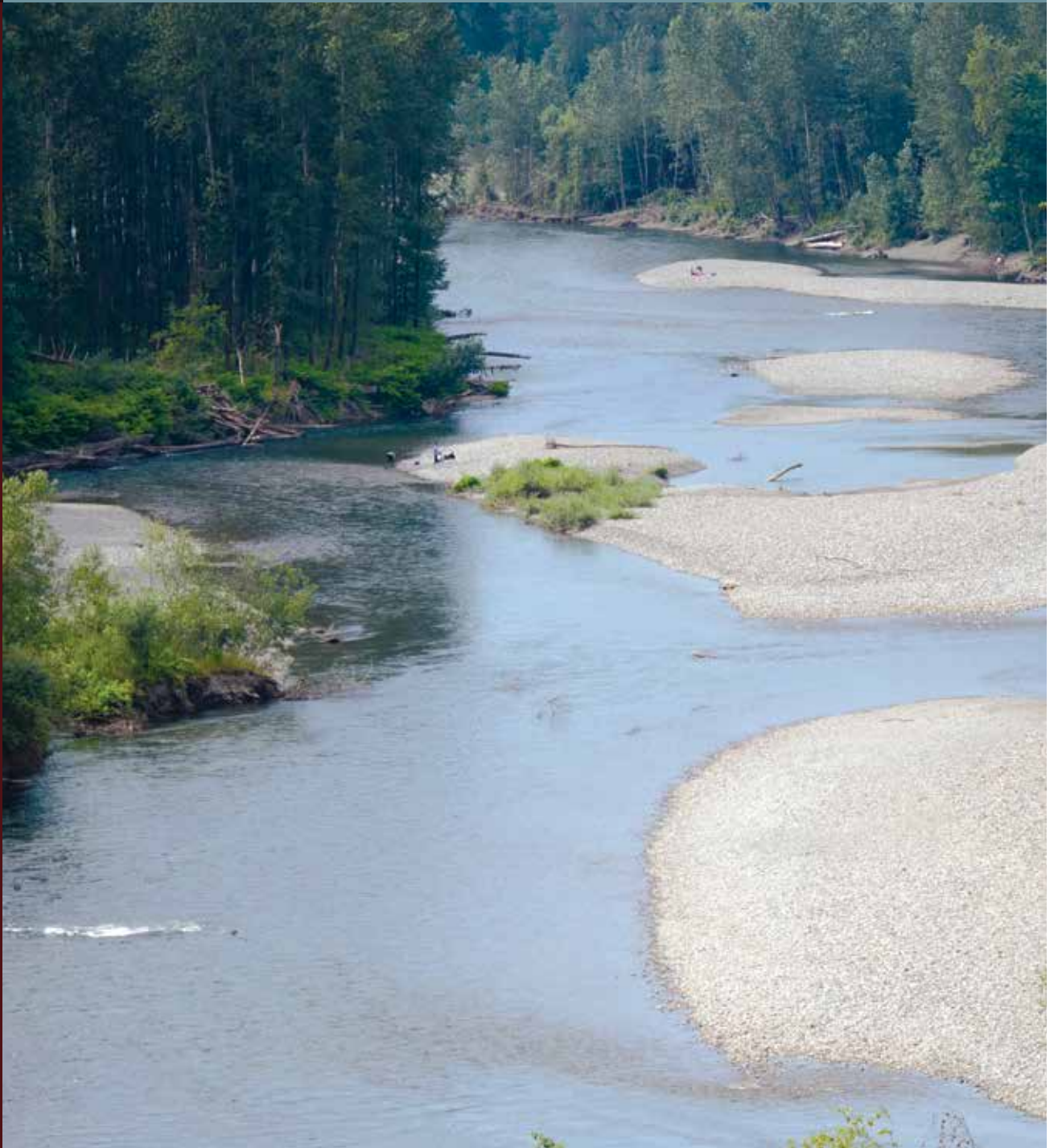


# King County Flood Control District Scope of Services 2014 Annual Report and 2015 First Quarter Performance Report

*April 2015*



KING COUNTY  
FLOOD CONTROL  
DISTRICT



**King County**

Department of Natural Resources and Parks  
Water and Land Resources Division

**River and Floodplain Management Section**



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# I. Introduction and Highlights

The King County Flood Control District (Flood District) work program is implemented by the Water and Land Resources Division of the King County Department of Natural Resources and Parks. This annual report summarizes the accomplishments of the Flood District's two major work program components:

1. A capital improvement program to rehabilitate flood protection facilities and other projects to protect structures at high risk of flooding.
2. Operational and programmatic activities, such as identifying and communicating flood and channel migration risk to the public; preparing for and responding to flood events; maintaining more than 500 facilities in King County's flood protection system; and coordination of the Flood District's Advisory Committee and Basin Technical Committees.

## Highlights

- **Major construction projects**

– The extension of the \$17 million Reddington Levee Setback project (Green River) was completed in November 2014, preceded by a major replanting event (Clean Sweep) coordinated by King County and the City of Auburn in May; the Briscoe-Desimone Levee Improvement Project (Green River), managed by the City of Kent, began construction

in May 2014; the Countyline Levee Setback Project (White River) made progress in the area of land acquisitions, funding partnerships and permitting; and the Willowmoor Floodplain Restoration Project (Sammamish River) is putting forward three design alternatives as the result of an 18-month Stakeholder Advisory Committee process.

- **Flood damage repairs** – Work is underway on the following flood damage repairs: the Desimone and Dykstra levees (Green River) and the Sinnema Quaale and Winkelman revetments (Lower Snoqualmie River).
- **River corridor planning** – Five river corridor plans are underway: the Green River System-Wide Improvement Framework; the Tolt River Corridor Plan; the South Fork Snoqualmie Corridor Plan; the Middle Fork Snoqualmie Corridor Plan and the Cedar



*Clean Sweep planting event at Reddington, Green River*



River Corridor Plan. The plans will identify clear outcomes to reduce flood risks and include alternatives adopted by the Board of Supervisors to successfully achieve a long-term investment strategy.

- **Agricultural flood mitigation** – The Farm Pad program provided technical assistance towards the construction of four farm pads in the Snoqualmie River valley.
- **Floodplain acquisitions, demolitions and relocations** – Seventeen parcels were acquired; eight demolitions completed; and 27 relocations were completed (see Table 1. 2008-2014 Capital Improvement Projects and Mitigation Accomplishments by Basin for grand totals).
- **Elevation of At-Risk Structures** – Five at-risk homes were elevated in the Snoqualmie basin during the reporting period; another 16 home elevations are underway. Federal Emergency Management Agency (FEMA) grants are currently pending for another two homes.



*Royal Arch landslide, Cedar River (May 2014)*

- **Landslide hazard mapping** – Technical analyses (phase one) were completed in the investigation of landslide hazards that could intersect major river corridors and their floodplains and additional work (phase two) will be completed in 2016.
- **Flood insurance savings** – King County maintains its Class 2 rating under FEMA's Community Rating System (CRS) (see p. 20) which allows unincorporated King County residents to continue to receive a flood insurance discount of up to 40 percent. The results of FEMA's 2014 recertification process will be confirmed in 2015. In addition, participating jurisdictions are able to earn points towards their own CRS programs based on King County's flood program and King County has convened a Users Group of participating cities to better leverage knowledge and experience.
- **Awards** – The King County Department of Natural Resources and Parks and the King County Flood Control District received the Washington State Salmon Recovery Funding Board's Bravo Award for work on the Lower Tolt River Floodplain Restoration Project for restoring watershed processes that benefit salmon recovery.



- **Flood District grants to stakeholders** – The 2014 Sub-Regional Opportunity Fund distributed \$4.2 million in reimbursements to 19 jurisdictions, and 2015 fund will allocate an additional \$5.4 million. The 2014 Collaborative Watershed Management Grants funded \$4.02 million in grants and the 2015 budget adopted by the Board of Supervisors includes \$4.23 million. The Flood Reduction Fund, totaling \$5.55 million in grant funding, targets small and medium flood reduction projects throughout King County. The remaining balance for all three programs is \$33 million.

**TABLE 1: 2008-2014 Capital Improvement Projects and Mitigation Accomplishments by Basin**

River Basin	• Acquisitions* • Acres • Expenditures	Homes Elevated**	Agricultural Structures Elevated	Farm Pads Built	Structures Demolished or Relocated	Construction Projects Completed
Snoqualmie-Skykomish	• 94 parcels • 228.24 acres • \$20,685,085	55	3	30	71 demolished	33
Cedar-Sammamish	• 35 parcels • 77.5 acres • \$19,298,140	0	0	0	82 demolished 27 relocated	26
Green-Duwamish	• 13 parcels • 44.4 acres • \$9,220,065	0	0	0	1 demolished 11 relocated	17
White	• 5 parcels • 47.92 acres • \$6,848,800	0	0	0	14 demolished 6 relocated	1
<b>Total</b>	• <b>177 parcels</b> • <b>398.07 acres</b> • <b>\$56,052,090</b>	<b>55</b>	<b>3</b>	<b>30</b>	<b>168 demolished</b> <b>44 relocated</b>	<b>77</b>

\* Includes King County Flood Control District funding, grant expenditures, and combined funding with the Rural and Regional Services Section of the King County Department of Natural Resources and Parks.

\*\* Home elevations as of 1993.



## II. Capital Improvement Program

The Flood District's 2014 capital program included 89 capital projects.

<sup>[1]</sup> More than 90 percent of the Flood District's 2014 budget of \$135 million is allocated to the capital component of the work plan, backed by state and federal revenue of \$7.3 million to implement flood damage repairs and acquire or elevate at-risk residential structures.

The Flood District's capital projects meet one or more of the following flood hazard management objectives:



*Fenster Levee, Green River*

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

### Repair Projects

- **Dykstra and Desimone Levee Repairs, Green River** – The U.S. Army Corps of Engineers (Corps) approved the funding and repair of the Dykstra and Desimone levees damaged by flooding in March 2014. The Dykstra Levee, in Auburn, repair design is 65 percent complete with a cost estimate of \$3-4 million. The Desimone Levee is expected to cost approximately \$10 million. Because of the overlap with the work being completed by the City of Kent, King County staff is working with both parties to adjust design plans so the floodwall project and the levee repair project complement each other in meeting flood protection and vegetation goals in this location. Both the Dykstra and Desimone flood damage repair projects will be constructed by the Corps in 2015.
- **Black River Pump Station Repairs, Green River** – During the report period, the pump station's fuel system was upgraded; safety improvements were made; the roof was replaced; a capital needs assessment study was completed; and permits have been submitted to remove sediment from the forebay.

<sup>1</sup> This number includes every active project, regardless of the level of activity.

## Construction Projects

- **Reddington Levee Extension, Green River** –

In 2014, the Reddington levee was extended north of the River Mobile Estates to 43rd Street Northeast, from approximately River Mile 28.6 to River Mile 28.2. Construction of this final segment of the Reddington Levee was completed in the summer of 2014 and provides significant flood protection to parts of the City of Auburn. This work completed the entire Reddington levee setback project and extension, totaling 6,600 feet, with a cost of \$17 million.



*Chris Andersen, City of Auburn and Lisa Brandt, King County – Clean Sweep event coordinators for the Reddington planting event*

- **Alaskan Way Seawall Project** – During 2014

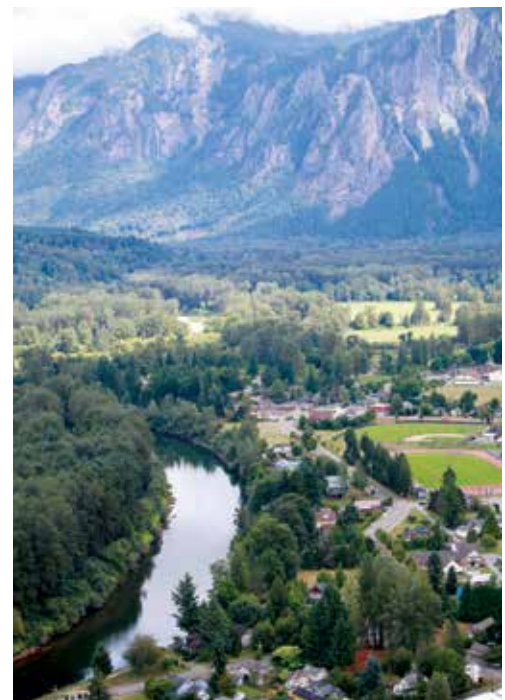
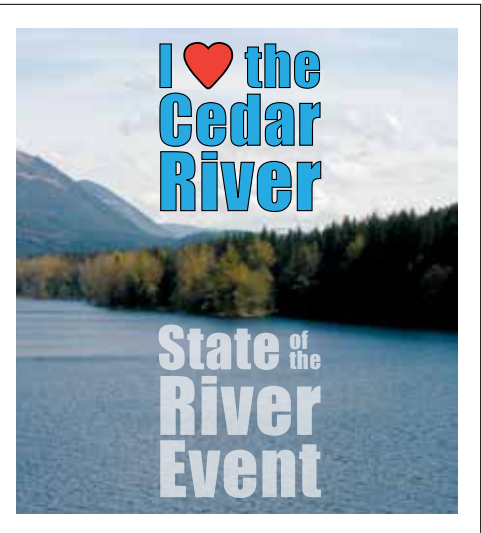
the Flood District reimbursed the City of Seattle for \$17 million in engineering design expenditures related to the replacement of the Alaskan Way Seawall. This is the single largest capital expenditure in the history of the Flood District, and completes the Flood District's \$32 million funding contribution to this project. Construction south of Colman Dock was completed in 2014; construction north to Pike Street is scheduled for 2015 and 2016. This project protects commercial areas of downtown Seattle, including regional transportation corridors such as the ferry terminal, SR-99, and regional rail lines.

## Project Planning

- **Green River System-Wide Improvement Framework (SWIF)** – The Green River SWIF Letter of Intent was approved by the U.S. Army Corps of Engineers (Corps) in February 2013 and related work was scheduled for completion in February 2015. Recognizing the complexities involved in developing a desired integrated river and floodplain management plan for the lower Green River, the Corps approved an extension of the project until summer 2015. Work completed in 2014 included a current conditions report; adoption of provisional levels of protection at different locations along the Lower Green River shoreline; and identification of Resource Areas to achieve multi-objective goals. With the extension, the following will be completed: a vegetation management plan; a plan to determine the desired level of protection, up to a 500-year level of protection, and the capital projects needed to achieve the desired protection (including conceptual designs, planning-level costs and implementation plans); and interim flood-risk reduction actions until the capital projects are complete. The SWIF planning effort includes a two-tiered advisory process and is funded by the Flood District and a \$300,000 State of Washington grant.
- **Cedar River Corridor Plan** – In 2014, Herrera Environmental Consultants, Inc. was hired to work collaboratively with River and Floodplain Management Section (RFMS) employees to perform technical analyses, facilitate public outreach, develop programmatic and project recommendations, and prepare the Corridor Plan report. The U.S. National Park Service is providing technical assistance with the recreational components of the corridor planning. The consultant is evaluating existing conditions related to flood risks, habitat limiting factors, and the overlap with human uses in the basin, and will develop a range of possible solutions for these issues. The project was presented at the annual "I Love

the Cedar River” meeting held November 18 in Maple Valley, inviting the community to become informed and involved. Small neighborhood meetings are also being held to foster more localized conversations. An Advisory Committee has been formed and began meeting in February 2015. The Cedar River Corridor Plan is expected to be completed in 2016.

- **South Fork Snoqualmie River Corridor Plan** – Work to document the existing conditions of the South Fork Snoqualmie River was completed and presented at a stakeholder workshop and public meeting held in October 2014 and a planning framework was adopted by the Board of Supervisors in December. Another stakeholder workshop and public meeting are being planned for the spring of 2015 to present preferred flood-risk reduction alternatives with a final plan expected to be completed by the end of 2015.
- **Middle Fork Snoqualmie River Corridor Plan** – Existing conditions reports have been completed and planning work commenced to develop a recommended suite of flood-risk reduction actions that improve ecological functions in a cost-effective manner along this river corridor. The project has been delayed and is anticipated to be re-started later in 2015 with a framework for the planning phase proposed for approval by the Board of Supervisors in 2017.
- **Tolt River Corridor Plan** – Technical analyses for several existing conditions reports were completed in 2014, with final reports anticipated in the first quarter of 2015. A stakeholder workshop and public meeting were held in January 2015, and a planning framework was adopted by the Board of Supervisors in March 2015. Floodplain management action alternative development and evaluation was initiated in 2014 and will continue through 2015 to complete the plan in the fourth quarter of 2015.
- **Lower Snoqualmie Valley Needs Assessment** – In 2014, work began to assess the number of farms requiring future assistance with farm pads, home elevations, and elevated agricultural structures. Data will be used to help mitigate flood impacts on farmlands in the Lower Snoqualmie Valley Agricultural Production District. Data collection includes online and on-the-ground surveys. A report on farm and flood mitigation needs is expected to be completed in the second quarter of 2015 and will be submitted to the King County Council.
- **Timberlane Village Home Buyouts** – A hazard and risk assessment was completed in 2014 to characterize flood, erosion, and channel migration risks in this neighborhood in order to inform home buyout priorities. One community meeting was held in 2014 to share this information, and a follow-up meeting with the neighborhood homeowners association is scheduled for 2015.



*Snoqualmie River Valley*



## Projects in Design

- **Willowmoor Floodplain Restoration, Sammamish River** – Eight Stakeholder Advisory Committee meetings were held, including five in 2014, with a final meeting planned for spring 2015. Informed by study results and stakeholder feedback, a suite of design objectives and corresponding criteria were developed, followed by several draft alternatives to reconfigure the Sammamish River Transition Zone. In early 2015, the refined versions of the draft alternatives were presented to regulatory agencies, the Muckleshoot Indian Tribe, adjacent municipalities and at a public meeting held in March 2015. Based in part on feedback from



*Willowmoor project site, Sammamish River Transition Zone in Marymoor Park*

- these entities and the stakeholder committee, a preferred alternative will be proposed to the Board of Supervisors in late spring 2015. This project, if approved by the Board of Supervisors, will address several longstanding flood control, lake level and habitat issues on the Sammamish River near its outlet from Lake Sammamish. During the reporting period, the project team completed several technical studies (hydrologic, hydraulic, habitat – aquatic and terrestrial – and water quality).
- **Lower Russell Road Levee Setback Project** – This project is located in the City of Kent along the right (east) bank of the Green River between South 212th Street and Veterans Drive/South 228th Street. It will replace an old levee and revetment that does not meet current engineering design standards. The new levee will be set back from the Green River where feasible and better protect residential and commercial development behind the levee, while also improving fish and wildlife habitat along the Green River. The project will integrate existing road, trail and park amenities and enhance existing recreational opportunities. Accomplishments in 2014 included developing a project management plan; holding a design charrette with key external stakeholders to review project constraints and opportunities and get input; developing and procuring a consultant team, an alternatives analysis and pre-design work; and a public meeting in November. Selection of a preferred levee alignment and alternative is expected in spring 2015. Additional funding through a State of Washington Floodplains by Design Grant is being pursued.
  - **South Fork Snoqualmie I-90 Project** – This project is intended to reduce flood risks to Interstate 90 near North Bend, as well as to neighboring residential properties. The project was initiated in 2014 with preliminary work on concept development. A project concept will be selected in 2015, and alternatives analyses and project design will begin later in the year. Depending on the concept and selected alternative, construction is anticipated in 2017.
  - **Sinnema Quaale Revetment, Lower Snoqualmie** – Preliminary design was completed in 2014 on this project to reconstruct approximately 800 linear feet of riverbank to stabilize an embankment that supports the Snoqualmie Valley Trail, two regional fiber optic lines, and SR 203. The project is currently on schedule for construction in summer 2015.

- **Winkelman Revetment, Lower Snoqualmie** – This project to reconstruct approximately 1,000 linear feet of the Winkelman (formerly RM 13.5) revetment where ongoing lateral channel migration threatens to undermine the City of Seattle’s Tolt River water supply pipeline is in the design alternative analysis phase. An alternative design is expected to be selected in 2015 and the project is on schedule for construction in 2016.
- **Countyline Levee Setback, White River** – During the reporting period, significant progress on land acquisitions, funding partnerships and permitting was made. In May 2014, the Flood District authorized resolutions to proceed with condemnation of the four remaining private properties necessary for the project implementation. The 75-day mediation period (June-July 2014) resulted in a settlement of one property with another settlement achieved in November. Ongoing negotiations with the two other property owners will be completed through legal proceedings scheduled in 2015. All resource agency permits have been received and funding agreements with the Natural Resource Damage Assessment Parties (\$4.775 million) and Pierce County (\$500,000) are ready for execution in 2015. This project will reduce flooding in residential neighborhoods in the City of Pacific, improve sediment storage, and enhance habitat, and is scheduled to be constructed in 2016.

## **Project Partnerships**

### **City of Renton**

- **Cedar River Gravel Removal Project** - The Flood District has partnered with the City of Renton to remove approximately 125,000 cubic yards of accumulated sediment from the lower 1.2 miles of the Cedar River. The goal is to maintain 100-year flood protection for public safety, infrastructure and capital improvements through this heavily urbanized section of river, including the Boeing 737 Production Facility and the Renton Municipal Airport. In 2014, a consultant team managed by Renton completed several technical studies (hydrologic, hydraulic, geomorphic, bank stability, sediment characterization, environmental, habitat and constructability). Based on the study results, a 30 percent design and corresponding cost estimate were completed. Final design, negotiation of mitigation requirements, consultation with regulatory agencies, and submittal of permit documentation is underway. Due to the complex permitting and regulatory process, the city does not expect sediment removal to begin until summer 2016.

### **City of Kent**

The following levee improvement projects were managed by the City of Kent, with funding and support from the Flood District, as part of its Green River Levee Improvement Program to provide flood protection to countless businesses, homes and infrastructure in the Kent valley.

- **Briscoe-Desimone Floodwall Project** – This project involves installing steel sheet pile walls at four locations along the back of the Briscoe-Desimone Levee, combined with a levee layback to help reduce flood risks to the cities of Kent, Tukwila and Renton. In some locations, the project includes re-planting the embankment and constructing shallow water benches. In 2014, project design for Reach 1 was completed and construction of Reaches 2 and 3 was completed. In 2015, construction of Reach 1 is expected to begin and design of Reach 4 is expected to be completed. Project funding is \$18 million from the Flood District and a \$7 million grant from the Washington State Department of Ecology.



- **Russell Road Upper Secondary Levee Project** – This \$5.9 million dollar project includes installation of a secondary levee in some locations behind the existing Russell Road Upper Levee and construction of a setback levee at West James Street and Russell Road. In 2014, construction of the secondary levee was completed along the north portion of the project. By the third quarter of 2015, the floodwall and setback levee along the south reach of the project are expected to be complete.

## City of Bellevue

- **Lower Coal Creek Parkway Project** – This joint project between the Flood District and the City of Bellevue is aimed at reducing flood risks in the Newport Shores neighborhood, a portion of Bellevue that has experienced flooding issues over the last thirty years. A study of the preferred solutions to reduce flood risk throughout the neighborhood recommended installing five box culverts to improve flood conveyance while maintaining fish passage and to improve neighborhood drainage by redirecting the local storm drainage network from Coal Creek directly to Lake Washington. Currently, during periods of high water in Coal Creek, the creek backs-up into the road drainage system, flooding streets and threatening structures as well as overtopping the creek banks and running through the neighborhood. The Flood District has appropriated more than \$8.5 million for this project and construction is scheduled to begin in 2017.

## Lake Forest Park

- **McAleer-Lyon Creek Channel Improvement Project** – Reimbursement was made to the City of Lake Forest Park for this project which will re-establish a more natural floodplain widening for Lyon Creek and upgrade undersized culverts in the project area. This expenditure is a portion of the 25 percent local share for Lake Forest Park's \$3 million FEMA grant.

## Mitigation Projects

- **U.S. Army Corps of Engineers Public Law 84-99 Mitigation** – The Flood District has a number of Green River flood protection facilities that are enrolled in the Corps' PL84-99 program. To remain eligible for the program, the Flood District authorized the removal of a significant number of trees and shrubs from the enrolled levees in 2008 and 2010. Consequently, state permitting agencies required that the Flood District mitigate for these environmental damages by planting trees and installing large pieces of wood positioned along the banks of the Green River. Three sites along the lower Green River were selected for these mitigation projects.
  - **Foster Site** – In 2014, plans were 90 percent complete and permits were prepared for project construction of the Foster Site in Tukwila in 2015.
  - **Fenster Site** – The Fenster site in Auburn is experiencing significant channel migration, requiring the removal of logs placed as part of a prior restoration project. Additional modeling and project design in 2014 and 60 percent plans are expected to be complete in 2015 at which time the permitting process will begin. Construction is anticipated for 2016.

- **Teufel Site** – The Teufel Site in Kent required testing for soil and groundwater contamination from agricultural chemicals before a determination could be made for an appropriate location for the mitigation project. Soil testing was completed in January 2015 and project design is expected to be completed by the end of the year with construction in 2016.

In total, these mitigation projects are expected to cost approximately \$7 million.

### **Capital Grants**

- **Sub-Regional Opportunity Fund** – In 2014, \$4.2 million in reimbursements were paid to 19 King County jurisdictions to support flood risk reduction activities. The 2015 fund is \$5.4 million with a funding floor of \$10,000.
- **Collaborative Watershed Management Grants** – In 2014, the Flood District funded \$4.02 million in grants for Watershed Resource Inventory Area (WRIA) collaborative watershed management for the Snoqualmie portion of WRIA 7, WRIAs 8 and 9, and the King County portion of WRIA 10. The 2015 budget adopted by the Board of Supervisors includes \$4.23 million to continue this program.
- **Flood Reduction Fund** – This grant fund totaling \$5.55 million targets small and medium flood reduction projects throughout King County including projects where the control of stormwater will have a direct benefit in reducing flooding. No requests for reimbursement from grant recipients were made prior to completion of this report.



# III. Operational and Programmatic Activities

## A. Regional Flood Warning Center, Flood Preparedness and Outreach

The Flood District's operational work program includes characterizing hazards and vulnerabilities; preparing and educating citizens for flood events; coordinating emergency responses; running the regional flood warning center during flood events; and ensuring consistency across basins for post-flood recovery actions and maintenance.

- **2014-2015 Flood Events and Response** – The Flood Warning Center opened on nine separate occasions from November 2014-January 2015 with the majority of flood events causing minimal damages or disruption to people that live, work or travel through flood prone areas. However, the flood event of January 5, 2015 did result in the Snoqualmie River and Tolt River reaching Phase 4 with the highest flows recorded since 2009. The flood caused widespread damages to public and private property. A school and residential neighborhood were evacuated due to flooding; many roads were closed and damaged. Field crews continue to inspect and document damages to river facilities as of the end of the first quarter of 2015.



*Flooding over roadways in the Snoqualmie Valley*

- **Flood Preparedness Meetings** – In October 2014, Flood Warning Program staff hosted an annual meeting for staff from multiple jurisdictions throughout King County to coordinate and prepare for flood season. Presentations were given on the King County Flood Warning Program and the U.S. Army Corps of Engineers' (Corps) operation of major dams and flood management projects and programs in each of the major river basins. Flood Warning Program staff also participated in a King County Winter Weather Seminar and pre-flood season coordination meetings with the Corps.
- **King County Flood Warning App** – King County continues to be the only jurisdiction in the nation with a stand-alone flood warning app. A Microsoft Windows mobile version of the app was launched in October allowing the public to easily track real-time and forecasted flooding conditions on King County rivers. The Android and iOS versions of

the app were updated to take advantage of the latest operating systems features. The app was featured in the National Hydrologic Warning Council newsletter, “The NHWC Transmission.” The app has been downloaded more than 2,600 times since it was launched and has had more than 100,000 unique web page views during the report period.

- **King County Flood Alerts** – Currently more than 6,000 subscribers receive free automated Flood Alerts by text message, email or phone call and the number of subscribers continues to grow. During the report period, more than 30,000 Flood Alert messages were sent – which includes the Flood Warning Center phone number to connect subscribers to 24-hour, live support during flood events.
- **Map Information Service** – During the report period, more than 100 hours of assistance was provided in the following areas in response to more than 150 community inquiries:
  - Identifying if a parcel or property is located within a FEMA mapped Special Flood Hazard Area (SFHA), or flood-prone area identified by King County;
  - Obtaining flood insurance rating information such as Flood Insurance Rate Map zones, panel number, suffix, panel date and index date; and
  - Obtaining FEMA elevation certificates (King County has elevation certificates for many properties within the SFHA).
- **Flood Preparedness Outreach** – The Flood District contributed \$7,500 at the Supporter Level to the regional preparedness campaign, “Take Winter By Storm.” Flood related outreach included two media events, “Flood Preparedness” and “Know Your Flood Hazard” the latter of which included information about the Flood District’s work on landslide hazards. Flood preparedness outreach print materials included the “5 Ways to Get Flood Warning Information for King County” and “2014-2015 Flood Update: Flood Warning Information for Major Rivers in King County.” This season, the brochure was tailored to individual King County Council Districts to feature the work being done at the local level to reduce flood risks in each community. Seven versions were produced and mailed to 18,396 addresses in the King County floodplain to provide flood warning, preparedness and response information and updates. A general version was produced for on-the-ground distribution and translation into 21 languages, all of which are posted at [www.kingcounty.gov/flood](http://www.kingcounty.gov/flood).



*Flood alert subscriptions  
top 6,000*



*Annual flood mailing to residents*

- **City of Pacific Park Flood Protection** – In 2014, the Flood District authorized King County to modify and make repairs to the flood protection barriers that surround the Park and adjoining residential neighborhoods. The work also includes closing the barriers in the fall for flood protection to the nearby residents and city roadways and reopening them in the spring so the Park can be accessed following the end of flood season. In 2014, barriers were inspected and repairs were made along with the closing of the Park driveways in October to provide contiguous flood protection. In March 2015 work began to open the barriers. The River and Floodplain Management Section coordinates the work done by King County Road Services Division crews in close collaboration with the City of Pacific.

## **B. Flood Hazard Studies, Mapping and Technical Services Program**

- **Snoqualmie Hydrologic and Hydraulic (H&H) Studies** – Work was initiated in late 2014 on a series of studies to evaluate potential changes in flood hydrology and any impacts associated with them. The first phase of the work is an evaluation of the benefits and impacts of two projects constructed at Snoqualmie Falls – the Snoqualmie 205 channel widening project and the Puget Sound Energy hydroelectric plant upgrades. Phase 1 is anticipated to be completed in mid-2015.
- **Flood Insurance Maps** - Since 2010, issuance of new FEMA flood insurance maps has been on hold. FEMA is now conducting pilot projects to test new flood hazard mapping procedures at 26 sites around the nation. Until these pilots are complete and the results analyzed, flood hazard maps submitted by King County will continue to be on hold. Studies on hold include: Coastal Vashon-Maury Island and incorporated King County; Cedar River; Lower Snoqualmie River (including Patterson Creek); Lower and Middle Green River; Lower and Upper White River; and the Sammamish River.
- **Landslide Mapping** - The Flood District Board of Supervisors revised the 2014 budget to support technical analyses for the investigation of landslide hazards that could intersect major river corridors and their floodplains. The preliminary landslide investigation was completed in October and the results are available at [www.kingcounty.gov/floodservices](http://www.kingcounty.gov/floodservices). Further analyses are in progress to gather more detailed information about the types of landslides in river valleys. The detailed information will be used to update the results of the preliminary investigation completed during 2014. This work will be completed in 2016.
- **Cedar River Flood Level Viewer Pilot Project** - In early 2014, this interactive mapping tool was completed, following a similar approach developed by the National Weather Service. The tool displays flood levels based on existing flood study data to better characterize flood hazards and inform capital project priorities along the Cedar River. The goal of the pilot project is to increase public awareness of flood hazards on the Cedar River. The mapping tool was made available to the public in October 2014.
- **Channel Migration Zone Mapping** - Applying the County's adopted Channel Migration Zone (CMZ) mapping methodology, a draft mapping and technical report to identify channel migration zones along the Cedar River was completed in September 2014. A public meeting was held in February 2015 at the Lake Wilderness Lodge in Maple Valley and the comment period ended in March. Public comments will be reviewed and considered in making final revisions to the mapping and report. Technical materials for the CMZ study of the South Fork Skykomish River were also compiled during 2014. Draft mapping and a report are expected to be completed in 2015. An update to the existing Tolt River CMZ study and map was initiated in early 2015. Technical analyses will be conducted into mid-year and a draft update to the Tolt River CMZ study and map is expected in late 2015. The technical information from these



studies is being used to inform river corridor planning and development of capital projects in these river basins.

### **C. Flood Hazard Planning and Grants, and Repetitive Loss Mitigation**

- **Leveraging External Resources through Grants and Partnerships**

- During the report period, the Flood District had three active FEMA grant-funded projects underway; one active Washington State Department of Ecology grant for a levee project; and one FEMA

- Pre-Disaster Mitigation planning grant application that has been “identified for further review” by FEMA.



- **Community Rating System (CRS) Recertification** – King County is a Class 2 Community in FEMA’s CRS Program, the first county in the nation to achieve this rating, and remains one of only two counties in the country with this rating. This preserves the flood insurance discount (up to 40 percent) available to residents of unincorporated King County and saves policyholders approximately \$850,000 annually (2012 FEMA data). Every three years, the County is audited by the CRS Program and receives a review of its full floodplain management program. This verification visit occurred in October 2014. Technical reviews are expected to be completed in 2015, resulting in a confirmation of classification. King County staff have established and are facilitating an ongoing CRS Users Group as a forum for shared learning and networking, with the hopes of improving coordination across jurisdictions and identifying where our efforts can have a shared benefit. The cities of Auburn, Bellevue, Carnation, Issaquah, Kent, North Bend, Renton, and Snoqualmie are participating CRS communities and the City of Redmond is in the process of entering the program.
- **River Corridor Planning** – RFMS has embarked on river corridor plans in five key riverine areas of the county where it is clear that capital investments are necessary to address flood risk. These plans integrate multiple objectives in a transparent process that identifies the desired future condition of each river corridor, evaluates alternative solutions, identifies problems, and mitigates impacts on a cumulative scale to establish a 20-year investment strategy. Corridor plans are currently underway for the Green, Tolt, South and Middle Forks of the Snoqualmie, and Cedar rivers.

### **D. King County Flood Control District Implementation**

This work program element includes coordination with King County cities through the Basin Technical Committees (BTC) which are comprised of jurisdictions’ technical staff and the 15-member Advisory Committee of elected officials. In 2014, RFMS supported the Flood District’s Executive Director in convening the Advisory Committee and developing a recommended work program and budget for 2015. This includes updates on river corridor planning efforts and upcoming construction projects. The Advisory Committee also discussed Seattle’s Elliott Bay Seawall Project, which is funded in part by the Flood District (see p. 10.). Advisory Committee materials are now available on the Flood District website



([www.kingcountyfloodcontrol.org](http://www.kingcountyfloodcontrol.org)). The Advisory Committee is scheduled to meet in May, June, and July to develop the 2016 budget recommendations.

## **E. Resource Management, Annual Maintenance, and Facility Assessment Program**

- **Inspection and Monitoring of Maintenance Sites** – During the reporting period, 14 reports were completed for monitoring work done in 2013 and 11 reports were completed for monitoring done in 2014. During this period, 174 work authorizations were issued for levee maintenance and property management work based on site inspections done by maintenance staff. The work included mowing levees, noxious and invasive weed control, hazard tree alterations, logjam alterations, project planting and general site maintenance. Maintenance work will continue on flood buyout properties and inspections will begin in preparation for the summer through fall weed-management season.
- **Green River Eligibility for Corps Funding Assistance** – New maintenance work on the Green River levees needed to maintain eligibility for federal assistance on levee repairs began in the first quarter of 2015 and included animal burrow investigations and preparation for the removal of tree stumps, repair of minor erosion problems, adjustment to fences, debris removal and upgrades to stormwater outfall control structures.
- **Structure Removals** – During the reporting period, 12 homes and one commercial facility acquired by King County were demolished or relocated and contract preparations were made for four additional homes to be removed during the in the second quarter of 2015.

## **F. Program Management and Supervision; and Finance, Budget and General Administration**

### **Contract Management**

In March 2015, RFMS contract specialists participated in the Regional Contracting Forum at the Washington State Convention Center, which was attended by over 1,500 consultants and contractors, and later RFMS hosted 60 attendees to provide a preview of upcoming King County projects.

New contracts and work orders executed in 2014 included:

- Forty-seven construction and engineering work orders and \$2,141,610 committed via these work orders;
- One small works roster construction contract for \$125,805;
- One construction contract for \$1,000,000;
- Four architectural and engineering contracts totaling \$2,475,242; and
- Two professional services contracts totaling \$1,000,000.

All contracts and work orders maintained by RFMS in 2014:

- Twenty-five contracts and 62 work orders listing a total of 125 consultants and contractors; and
- A total of \$6,191,409 paid under all contracts and work orders.

Pending contracts in 2015 include:

- Two Multidisciplinary Engineering and Environmental Services work orders contracts for \$2,000,000 each;
- One Demolition, Abatement and Well Decommissioning work order construction contract for \$1 million;
- One construction contract estimated at \$3,700,000; and
- Two Hydrologic/Hydraulic and Geomorphologic Services work order contracts for \$500,000 each.
- One professional services contract estimated at \$400,000.



*White River*

## Conclusion

In 2014, corridor planning was a major focus of many of the river basin teams. The goal is to consider entire river corridors when planning how best to reduce flood risks while taking into consideration how to meet multiple objectives with each capital investment. That means considering flooding, habitat, agriculture, economy, infrastructure, community and recreational use.

Most corridor plans will be completed in 2015 and begin implementation in 2016. Identifying early actions that can be taken (such as the South Fork Snoqualmie project to reduce flood risks to Interstate 90 near North Bend) will continue into 2015 to allow projects that are clearly identified as beneficial to move forward.

# Appendix A

## *2014 Final Budget*

## 2014 Budget

### Flood Control District Administration

Flood District Administration	\$576,906
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### Operating Budget

Description	
Annual Maintenance	\$2,417,254
Flood Hazards Plan, Grants, Outreach	\$405,008
Flood Hazard Studies, Maps, Technical Services	\$663,857
Flood Preparation, Flood Warning Center	\$706,032
Program Management, Supervision, Finance, Budget	\$818,780
Program Implementation	\$3,050,288
Overhead / Central Costs	\$1,676,196
<b>Total</b>	<b>\$9,737,415</b>

### Capital Budget

Project	Description	
<b>Snoqualmie River Basin</b>		
1112057 WLFL0 MALONEY CR CONF IMPVMNTS		\$80,238
1112059 WLFL0 MILLER R RD PROTECTION		\$14,302
1044459 WLFL0 MILLER RIVER HOME BUYOUT		\$60,831
1044461 WLFL0 SF SKYKMSH REP LOSS MIT		\$4,060
1044460 WLFL0 TIMBER LN EROSN BUYOUTS		\$338,468
1121044 WLFL1 CIRCLE RVR RANCH RISK RED		\$150,000
1112055 WLFL1 MEADOWBROOK 2011 REPAIR		\$799
1044469 WLFL1 MF SNO CORRIDOR PLAN		\$229,942
1121588 WLFL1 MF SNO CORRIDOR IMP		\$1,531,678
1044465 WLFL1 N BEND RESID FLD MITGTN		\$336,333
1112032 WLFL1 RECORD OFFCE 2011 REPAIR		\$600
1044466 WLFL1 SF SNO CORRIDOR PLAN		\$1,792,466
1121587 WLFL1 SF SNO CORRIDOR IMP		\$2,000,000
1122632 WLFL1 SF SNO CORR EARLY ACTION		\$500,000
1044517 WLFL1 UPR SNO RES FLD MITIGTN		\$2,692,639
1044576 WLFL2 L SNO/ALDAIR CORRIDOR PLN		\$1,601,475
1044581 WLFL2 FARM FLOOD TSK FORCE IMP		\$101,694
1044580 WLFL2 L SNO REP LOSS MITGTION		\$523,847
1044582 WLFL2 LWR SNO RESDL FLD MITGTN		\$543,481
1112020 WLFL2 MCELHOE/PERSON LEVEE		\$471
1122633 WLFL2 SE 19TH WAY REVETMENT		\$250,000
1112046 WLFL2 SINNEMA QUALLE 2011 REPR		\$894,632
1044579 WLFL2 WINKELMAN REVETMENT		\$417,390
1044645 WLFL3 SAN SOUCI NBRHOOD BUYOUT		\$1,728,311
1112058 WLFL3 TOLT R MILE 1.1 ACQ		\$1,188,280
1115032 WLFL3 TOLT R NATURAL AREA ACQ		\$438,185
1044644 WLFL3 TOLT SUPPLEMENTAL STUDY		\$290,939
1044647 WLFL4 ALPINE MANOR MOB PRK ACQ		\$1,130,674
<b>TOTAL SNOQUALMIE BASIN</b>		<b>\$18,841,735</b>

### Cedar River Basin

1112037 WLFL5 WILLOWMOOR FLDPLAIN REST	\$613,142
1116846 WLFL6 LOWER COAL CRK PH I	\$936,890
1116847 WLFL6 MCALEER/LYON CHAN IMPRVM	\$350,000
1112024 WLFL7 BELMONDO FEMA 1653	\$18,682

**Cedar River Basin** *(continued)*

1116060 WLFL7 CEDAR LEVEE SETBACK FEAS	\$685,270
1044651 WLFL7 CEDAR R REP LOSS MITGATN	\$613,633
1044729 WLFL7 CEDAR RVR GRAVEL REMOVAL	\$2,887,942
1044728 WLFL7 DORRE DON MEANDERS PH 1	\$25,580
1112041 WLFL7 ELLIOTT BR LEVEE	\$370,807
1112029 WLFL7 RAINBOW BEND LEVEE STBCK	\$701,527
1119888 WLFL7 RIVERBEND MHP ACQ	\$550,000

<b>TOTAL CEDAR RIVER BASIN</b>	<b>\$11,497,589</b>
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**Green River Basin**

1116360 WLFL8 BLACK R PUMP STATION	\$2,794,360
1112025 WLFL8 BOEING LEVEE ADD-KENT	\$92,756
1123376 WLFL8 BOEING LEVEE HT INCREASE	\$104,100
1116362 WLFL8 BOEING LEVEE USACE ERP	\$1,700,000
1116515 WLFL8 BRISCOE LEVEE SETBACK	\$17,630,526
1112051 WLFL8 BRISCOE REACH DESIGN	\$55,000
1044882 WLFL8 GREEN R PL84-99 MITIGATN	\$806,168
1112040 WLFL8 HAWLEY RD LEVEE-KENT	\$236,836
1112033 WLFL8 HORSESHOE BND ACQ-RCNCT	\$2,514,336
1120033 WLFL8 HOLIDAY KENNEL ACQ & BERM	\$500,000
1112056 WLFL8 LWR RUSSELL LEVEE SETBACK	\$3,000,000
1112035 WLFL8 REDDINGTON REACH SETBACK	\$3,543,982
1044881 WLFL8 RUSSELL RD UPPER	\$3,754,097
1117948 WLFL8 SANDBAG REMOVAL	\$132,548
1116363 WLFL8 USACE SWIF	\$1,297,576

<b>TOTAL GREEN RIVER BASIN</b>	<b>\$38,162,285</b>
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**White River Basin**

1112049 WLFL9 COUNTYLINE TO A STREET	\$4,534,161
1112038 WLFL9 RIGHT BANK LEVEE SETBACK	\$2,994,112
1122630 WLFL9 WHITE - GREENWATER ACQ	\$375,000

<b>TOTAL WHITE RIVER BASIN</b>	<b>\$7,903,273</b>
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**Seattle Projects**

1045041 WLFLS AK WY SEAWALL PRE-CONSTRUCTN	\$20,771,008
1112036 WLFLS SOUTH PARK DWMSH BACKWTR	\$409,426

<b>TOTAL SEATTLE PROJECTS</b>	<b>\$21,180,434</b>
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**Countywide Costs**

1044281 WLFLX CENTRAL CHARGES	\$275,446
1044279 WLFLX FLOOD EMERGENCY CONTGNCY	\$339,746
1112022 WLFLM EFFECTIVENESS MONITORING	\$1,114,839
1045042 WLFLX SUBREGNL OPPRTNTY FUND	\$13,338,389
1122628 WLFLG GRANT FUND	\$2,666,329
1117333 WLFLX WATERSHED MGMT GRANTS	\$9,685,568

<b>TOTAL COUNTYWIDE COSTS</b>	<b>\$27,420,317</b>
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**TOTAL CAPITAL BUDGET**

<b>\$125,005,633</b>
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**Flood Control District Total**

<b>\$135,319,954</b>
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## Appendix B

### *2014 Expenditures*



## 2014 Expenditures

### Flood Control District Administration

Flood District Administration<sup>1</sup>

\$381,692

### Operating Budget

Description	Budget
Annual Maintenance	\$1,870,613
Flood Hazards Plan, Grants, Outreach	\$554,111
Flood Hazard Studies, Maps, Technical Services	\$594,447
Flood Preparation, Flood Warning Center	\$307,337
Program Management, Supervision, Finance, Budget	\$1,139,774
Program Implementation	\$1,702,060
Overhead / Central Costs	\$857,065
<b>Total</b>	<b>\$7,025,406</b>

### Capital Budget

Project	Description	Budget
<b>Snoqualmie River Basin</b>		
1112057	WLFL0 MALONEY CR CONF IMPVMNTS	\$257
1112059	WLFL0 MILLER R RD PROTECTION	\$173
1044459	WLFL0 MILLER RIVER HOME BUYOUT	(\$33,224)
1044460	WLFL0 TIMBER LN EROSN BUYOUTS	\$45,189
1121044	WLFL1 CIRCLE R RANCH RISK RED	\$37,769
1112055	WLFL1 MEADOWBROOK 2011 REPAIR	\$409
1044469	WLFL1 MF LEVEE SYSTEM IMPRVMNT	\$67,025
1044465	WLFL1 N BEND RESID FLD MITGTN	\$78,023
1112032	WLFL1 RECORD OFFCE 2011 REPAIR	\$216
1044466	WLFL1 SF LEVEE SYSTEM IMPROVE	\$367,143
1122632	WLFL1 SF SNO CORR EARLY ACTION	\$180,744
1044517	WLFL1 UPR SNO RES FLD MITGTN	\$1,140,611
1044576	WLFL2 ALDAIR BUYOUT	\$287,526
1044581	WLFL2 FARM FLOOD TSK FORCE IMP	\$100,862
1044580	WLFL2 L SNO REP LOSS MITGTION	\$44,950
1044582	WLFL2 LWR SNO RESDL FLD MITGTN	\$204,437
1122633	WLFL2 SE 19TH WAY REVETMENT	\$8,934
1112046	WLFL2 SINERRA QUALLE 2011 REPR	\$538,111
1044579	WLFL2 SNOQUALMIE 13.5 REVETMN	\$434,438
1112034	WLFL3 LOWER TOLT R ACQUISITION	\$578
1044645	WLFL3 SAN SOUCI NBRHOOD BUYOUT	\$479,209
1044644	WLFL3 TOLT CORRIDOR PLAN	\$222,134
1112058	WLFL3 TOLT R MILE 1.1 SETBACK	\$4,334
1115032	WLFL3 TOLT R NATURAL AREA ACQ	\$20
1044647	WLFL4 ALPINE MANOR MOB PRK ACQ	\$6,749
<b>TOTAL SNOQUALMIE BASIN</b>		<b>\$4,216,619</b>

### Cedar River Basin

1112037	WLFL5 WILLOWMOOR FLDPLAIN REST	\$626,004
1115747	WLFL6 ISSAQUAH CR REP LOSS MIT	\$17,896
1116846	WLFL6 LOWER COAL CRK PH I	\$303,984
1116847	WLFL6 MCALEER/LYON CHAN IMPRVM	\$104,951
1112024	WLFL7 BELMONDO FEMA 1653 PH I	\$41,119

**Cedar River Basin** *(continued)*

1044734	WLFL7 CDR PRE-CONST STRTGC ACQ	\$176,110
1116060	WLFL7 CEDAR LEVEE SETBACK FEAS	\$381,020
1044651	WLFL7 CEDAR R REP LOSS MITGATN	\$97
1044729	WLFL7 CEDAR RVR GRAVEL REMOVAL	\$669,640
1112041	WLFL7 ELLIOTT BR LEVEE SETBACK	\$109,171
1112029	WLFL7 RAINBOW BEND LEVEE STBCK	\$224,221
<b>TOTAL CEDAR RIVER BASIN</b>		<b>\$2,654,211</b>

**Green River Basin**

1116360	WLFL8 BLACK R PUMP STATION	\$1,350,522
1112025	WLFL8 BOEING LEVEE ADD-KENT	\$66,366
1123376	WLFL8 BOEING LEVEE HT INCREASE	\$1,639
1116362	WLFL8 BOEING LEVEE USACE ERP	\$6,751
1116515	WLFL8 BRISCOE LEVEE SETBACK	\$11,137,975
1112051	WLFL8 BRISCOE REACH DESIGN	\$434
1044882	WLFL8 GREEN R PL84-99 MITIGATN	\$268,488
1112040	WLFL8 HAWLEY RD LEVEE-KENT	\$227,639
1112033	WLFL8 HORSESHOE BND ACQ-RCNCT	\$5,714
1112056	WLFL8 LWR RUSSELL/HOLIDAY	\$732,662
1112035	WLFL8 REDDINGTON REACH SETBACK	\$1,528,973
1044881	WLFL8 RUSSELL RD UPPER	\$1,175,780
1117948	WLFL8 SANDBAG REMOVAL	\$132,548
1116363	WLFL8 USACE SWIF	\$1,262,701
<b>TOTAL GREEN RIVER BASIN</b>		<b>\$17,898,193</b>

**White River Basin**

1112049	WLFL9 COUNTYLINE TO A STREET	\$1,793,439
1112038	WLFL9 RIGHT BANK LEVEE SETBACK	\$899,165
<b>TOTAL WHITE RIVER BASIN</b>		<b>\$2,692,603</b>

**Seattle Projects**

1045041	WLFLS AK WY SEAWALL CONSTRUCTN	\$20,756,994
1112036	WLFLS SOUTH PARK DWMSH BACKWTR	\$36
<b>TOTAL SEATTLE PROJECTS</b>		<b>\$20,757,031</b>

**Countywide Costs**

1112022	WLFLM EFFECTIVENESS MONITORING	\$298,652
1045042	WLFL0 SUBREGNL OPPRTNTY FUND	\$4,219,588
1044281	WLFLX CENTRAL CHARGES	\$37,993
1044279	WLFLX FLOOD EMERGENCY CONTGNCY	\$22
1117333	WLFLX WATERSHED MGMT GRANTS	\$2,974,671
1122628	WLFLG FLOOD REDUCTION GRANTS	\$7,006
0000000	INTEREST EXPENSE PAYMENTS	\$31,834
<b>TOTAL TOTAL COUNTYWIDE COSTS</b>		<b>\$7,569,766</b>

<b>Flood Control District Total<sup>2</sup></b>	<b>\$55,788,423</b>
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<b>\$63,195,521</b>
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<sup>1</sup> The final Flood District Administrative expenditures may vary slightly from this report as the District's financial statement was still being prepared at time of publication.

<sup>2</sup> The Flood District Total expenditure includes expenditures in the capital and operating funds backed by King County revenue such as grants and the InterCounty River Improvement Fund (ICRIF). For this reason the total is higher than the expenditures shown in the King County Comprehensive Annual Financial Report (CAFR) for the Flood District fund 190010010.



# Appendix C

## *2015 Budget*

## 2015 Budget

### Flood Control District Administration

Flood District Administration \$644,213

### Operating Budget

Description	
Annual Maintenance	\$2,132,048
Flood Hazards Plan, Grants, Outreach	\$424,852
Flood Hazard Studies, Maps, Technical Services	\$1,140,872
Flood Preparation, Flood Warning Center	\$463,000
Program Management, Supervision, Finance, Budget	\$791,390
Program Implementation	\$1,629,559
Overhead / Central Costs	\$2,641,170
<b>Total</b>	<b>\$9,222,891</b>

### Capital Budget <sup>1</sup>

Project	Description	
<b>Snoqualmie River Basin</b>		
1112059	WLFL0 MILLER R RD PROTECTION	\$3,967
1044460	WLFL0 TIMBER LN EROSN BUYOUTS	\$232,468
1044469	WLFL1 MF SNO CORRIDOR PLAN	\$271,559
1044465	WLFL1 N BEND RESID FLD MITGTN	(\$169,666)
1122632	WLFL1 SF SNO CORR EARLY ACTION	\$4,274,020
1121587	WLFL1 SF SNO CORRIDOR IMP	\$102,163
1044466	WLFL1 SF SNO CORRIDOR PLAN	(\$1,444,388)
1044517	WLFL1 UPR SNO RES FLD MITGTN	\$3,127,492
1044581	WLFL2 FARM FLOOD TSK FORCE IMP	\$118,765
1044576	WLFL2 L SNO/ALDAIR CORRDROR PLN	(\$426,675)
1044582	WLFL2 LWR SNO RESDL FLD MITGTN	\$591,819
1122633	WLFL2 SE 19TH WAY REVETMENT	\$450,000
1112046	WLFL2 SINNEMA QUAAL 2011 REPR	\$2,642,728
1044579	WLFL2 WINKELMAN REVTMNT REPAIR	\$269,653
1044645	WLFL3 SAN SOUCI NBRHOOD BUYOUT	\$53,088
1112058	WLFL3 TOLT R MILE 1.1 SETBACK	(\$314,660)
1115032	WLFL3 TOLT R NATURAL AREA ACQ	\$62,495
1044647	WLFL4 ALPINE MANOR NEIGHBORHOOD BUYOUTS	(\$608,184)
<b>TOTAL SNOQUALMIE BASIN</b>		<b>\$9,236,644</b>
<b>Cedar River Basin</b>		
1112037	WLFL5 WILLOWMOOR FLDPLAIN REST	\$351,858
	WLFL5 SAMMAMISH R BANK REPAIRS	\$400,000
1116846	WLFL6 LOWER COAL CRK PH I	\$3,138,414
1116847	WLFL6 MCALEER/LYON CHAN IMPRVM	\$350,000
1044734	WLFL7 CDR PRE-CONST STRTGC ACQ	(\$856,754)
1116060	WLFL7 CEDAR LEVEE SETBACK FEAS	\$699,487
1044651	WLFL7 CEDAR R REP LOSS MITGATN	\$817
1044729	WLFL7 CEDAR RVR GRAVEL REMOVAL	\$5,545,108
1119888	WLFL7 RIVERBEND MHP ACQ	\$1,494,400
<b>TOTAL CEDAR RIVER BASIN</b>		<b>\$11,123,330</b>

**Green River Basin**

1116360 WLFL8 BLACK R PUMP STATION	\$2,699,204
1123376 WLFL8 BOEING LEVEE HT INCREASE	\$1,725,662
1116515 WLFL8 BRISCOE LEVEE SETBACK	\$440,674
WLFL8 DESIM/DYKSTRA REPAIR USACE	\$4,500,000
1044882 WLFL8 GREEN R PL84-99 MITIGATN	\$1,242,029
1123254 WLFL8 SWIF IMPLEMENTATION	\$4,000,000
1112056 WLFL8 LWR RUSSELL LEVEE SETBACK	\$911,193
1116362 WLFL8 BOEING LEVEE USACE ERP	\$50,000
WLFL8 PORTER LEVEE ERES	\$300,000
1044881 WLFL8 RUSSELL RD UPPER KENT	\$2,200,000
1116363 WLFL8 USACE SWIF	\$573,824
<b>TOTAL GREEN RIVER BASIN</b>	<b>\$18,642,586</b>

**White River Basin**

1112049 WLFL9 COUNTYLINE TO A STREET	\$5,186,449
1112038 WLFL9 RIGHT BANK LEVEE SETBACK	(\$415,791)
<b>TOTAL WHITE RIVER BASIN</b>	<b>\$4,770,658</b>

**Seattle Projects**

1112036 WLFLS SOUTH PARK DWMSH BACKWTR	\$1,190,575
<b>TOTAL SEATTLE PROJECTS</b>	<b>\$1,190,575</b>

**Countywide Costs**

WLFLX CORRIDOR PLN DESIGN/CONST PLACEHOLDEI	\$71,305
1122628 WLFLG GRANT FUND	\$2,883,634
1112022 WLFLM EFFECTIVENESS MONITORING	(\$127,348)
1045042 WLFLO SUBREGNL OPPRTNTY FUND	\$5,499,189
1044281 WLFLX CENTRAL CHARGES	\$174,077
1044279 WLFLX FLOOD EMERGENCY CONTGNCY	\$160,253
1117333 WLFLX WATERSHED MGMT GRANTS	\$4,227,272
<b>TOTAL COUNTYWIDE COSTS</b>	<b>\$12,888,382</b>

<b>TOTAL CAPITAL BUDGET</b>	<b>\$57,852,175</b>
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<b>Flood Control District Total</b>	<b>\$67,719,279</b>
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**Notes:**

1) The numbers shown here represent the budget as adopted in Resolution FCD2014-14.3. It is the new appropriation for 2015 and does not include carryover budget from 2014. It is anticipated the FCD Board of Supervisors will adopt the carryover additions to the budget in the second quarter of 2015.

