

**King County Flood Control District**  
**2014 Work Program**  
**October 17, 2013**

The King County Flood Control District (District) work program is comprised of three categories: district oversight and policy development, operations, and capital improvements. The Flood Control District contracts with King County for operations and capital improvements.

- District Oversight and Policy Development
  - Policy direction to guide Advisory Committee and King County interlocal agreement for services
  - Financial planning, budgeting, levy rate, bonding (if any)
  - *2006 King County Flood Hazard Management Plan* Comprehensive Policy Update
  - Asset management
  - Capital improvement priorities
  - Capital improvement project cost estimating, procurement, change orders, reporting
  - Expert/Peer review of basin plans, levee design
  - Public awareness priorities
  - Technical study scoping of emerging issues
    - Sediment removal
    - Woody-debris
    - Sandbags
    - Agricultural needs
  - Post flood event review and evaluation
  - Legal services, financial management, and Washington State audit
  - Federal and state legislative agenda
  
- Operations Work Program
  - Flood Preparedness, Regional Flood Warning Center, and Post Flood Recovery
  - Flood Hazard Assessments, Mapping, and Technical Studies
  - Planning, Grants, Mitigation, and Public Outreach
  - KCFCD Implementation
  - Resource Management, Annual Maintenance, and Facility Monitoring
  - Management, Finance, Budget and General Administration
  
- Capital Improvement Program (CIP)
  - Capital Improvement Projects
  - Acquisitions and Elevations

## **ILA Category 1:**

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

**Program Summary:** Coordinate facility and property maintenance for the District, which includes 500 flood protection facilities covering 119 linear miles and approximately 430 acres of land acquired for flood mitigation purposes. Facility inspections and assessments may lead to proposed repairs in the capital program. Inspections and assessments also help to increase the potential for federal funding assistance for future flood damages.

**Changes from 2013:** Overall, the budget for this category is lower than 2013. Sediment removal in the Sammamish Transition Zone was a 2013 expense that is not continued into 2014. However, vegetation management of the Transition Zone will continue consistent with current agreements and subject to permitting requirements. Black River Pump Station diesel fuel costs are reduced from 2013 as the fuel was allowed to be depleted before the tanks were replaced and then refilled during 2013. In 2014, maintenance costs for native plant supplies increased as the 2014 work program includes planting a number of sites where homes have been demolished and removed. By replanting the site, long-term costs associated with controlling noxious weeds and invasives are reduced. Consistent with the 2013 budget, the maintenance program continues to assume \$500,000 for compliance with Army Corps levee maintenance requirements pending completion of the System-Wide Improvement Framework (SWIF) and possible changes to the maintenance of levees along the lower Green River.

Specific programmatic elements include:

#### **Annual Maintenance Program:**

- Manage work authorizations and coordinate with DOT Roads Services Division or contractor on completion of maintenance activities:
  - Facility mowing
  - Access gate maintenance
  - Access road maintenance
  - Noxious and non-native plant removal
  - Irrigation and watering
  - Interpretive sign installation and maintenance
- Coordinate design of facility and acquisition property revegetation projects.
- Coordinate design and implementation of volunteer planting and other land stewardship projects.
- Provide land and resource management including management of lands for appropriate levels of public access.
- Inspect, assess and, if necessary, remove hazardous trees.
- Collect and remove garbage from fee-simple owned property.

#### **Flood Protection Facility Assessment and Monitoring Program**

- Develop methods for facility inventory/assessment program.
- Conduct annual, spring and fall, facility assessments.
- Conduct, or assist with, post-flood damage assessments.
- Produce annual report on facility conditions.

### Facility Maintenance and Repair Program

- Conduct or assist with facility assessments, consistent with the facility assessment and monitoring program.
- Coordinate with Army Corps of Engineers on PL 84-99 levee inspections including vegetation management, permitting, and mitigation (as necessary).
- Support or lead staff on the Green River Pump Station Operation and Maintenance Program.

### Sediment Management, Large Woody Debris, In-stream Management Program

- Coordinate sediment management program/project actions to reduce flood risks.
- Coordinate large woody debris program/project actions to reduce flood risks.
- Monitor other in-stream hazards and coordinate associated flood risk reduction actions.

### ILA Category 2:

#### Flood Hazard Planning and Grants, Repetitive Loss Mitigation, and Public Outreach

**Program Summary:** Manage repetitive loss area mitigation coordination, public outreach, flood hazard management planning, and grant preparation. Repetitive loss mitigation is generally achieved by buying or elevating at-risk homes. While buyouts and elevations are funded via the capital program, the planning, prioritization, and FEMA grant submittals are funded via the operating program. Most operating costs for grant development are reimbursable if the FEMA grant is awarded. Public outreach for specific capital projects is funded through the capital program; basin-wide outreach regarding on-going and planned capital projects is considered an operating expense.

**Changes from 2013:** This program previously included all costs for one communications specialist and associated printing/postage costs for annual flood awareness mailing and Take Winter By Storm contributions. These costs are now included under ILA Category 4 Flood Preparedness. Additionally, ½ of the staff time for communications specialists is now charged to the capital program to support specific capital projects. Floodplain planning and grant application development continue to be supported by a term-limited position through 2014.

Specific programmatic elements include:

#### Repetitive Loss Area Mitigation Planning Program

- Track repetitive loss area and repetitive loss property information.
- Provide ongoing program database updates, including tracking property owner communications, interest, and staff recommendations for mitigation options.
- Manage and administer King County's Home Buyout and Elevation Program.

#### Public Outreach and Communications Program

- Provide increased citizen preparedness for floods.
- Provide community outreach support for capital projects.
- Conduct annual basin-wide meetings and outreach regarding the full range of floodplain management activities, whether on-going or planned.
- Support media relation activities.

- Coordinate citizen involvement, and prepare and facilitate public meetings.
- Coordinate updates to webpage and other outreach and educational materials.
- Coordinate outreach to landowners with facility easements regarding maintenance work.

#### Community Rating System (CRS) Coordination

- Manage the CRS program consistent with the newly adopted federal CRS manual.
- Complete annual CRS recertification documentation.
- Coordinate/manage updates and process to the planning and regulatory processes for future flood plan updates, King County’s Regional Hazard Mitigation Plan, King County Comprehensive Plan, Shoreline Master Plan, and Critical Areas Ordinance. Includes coordination with other jurisdictions.

#### Grants Program

- Develop grant applications for FEMA hazard mitigation assistance grants as well as post-flood funding. Develop other grant applications to support capital project implementation.
- Administer biennial Washington State Department of Ecology Flood Control Assistance Account Program (FCAAP) grant process and track successful grants to ensure timely reporting.
- Coordinate and assist with preparation of applications for all state and federal flood hazard mitigation grant processes.
- Provide grant application technical assistance to cities and other stakeholders, as needed.

**Special Program Direction:** The District and County shall develop protocols for the grant writing program, that will establish 1) priorities for types of grants to pursue and 2) procedures for notification to and approval by the District, prior to making application for a grant. In addition, the grant writing program shall be evaluated as to effectiveness in obtaining grants and appropriate level of staffing needed for this function.

#### ILA Category 3:

#### Flood Hazard Studies, Mapping, and Technical Services Program

**Program Summary:** Generate technical information used to characterize, quantify, and delineate flood risks, as well as to develop and implement strategies and actions to reduce those risks. Flood hazard technical information types include hydrologic and hydraulic studies, floodplain and channel migration zone maps, geologic studies, geographic information system (GIS) land use data, dam operations studies, risk assessments and flood hazard management corridor working maps. These technical assessments are used to inform the capital project feasibility, prioritization, and design process funded by the capital program.

**Changes from 2013:** The 2014 budget for mapping is reduced from 2013 following the completion of floodplain mapping studies for all major rivers in King County as well as the coastal shoreline. The 2014 budget includes hydraulic analyses of the Snoqualmie River system, flood hazard mitigation studies of the Cedar River, countywide channel surveys, and a placeholder for additional Green River mapping and analysis.

Specific programmatic elements include:

- Conduct independently or with consultant contracts, as needed, the following technical study and mapping projects:
  - Floodplain delineation and mapping
  - Channel migration zone delineation and mapping
  - Channel monitoring
  - Gravel removal studies and analysis
  - Risk assessments
  - Hydraulic modeling
- Coordinate with FEMA and other local, state and federal agencies on mapping studies and products.
- Maintain accessible flood study and flood hazard data in a floodplain mapping library.

**ILA Category 4:**

**Flood Preparedness, Regional Flood Warning Center and Post Flood Recovery Program**

**Program Summary:** Implement 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. Build on existing flood awareness efforts by developing innovative tools using emerging technologies to increase flood preparedness and public engagement in flood risk reduction efforts. Post-flood damage assessments may result in capital projects to repair damaged facilities. Flood and post-flood activities are tracked with a unique project number so that expenditures may be submitted for any federal assistance that becomes available following a federal disaster declaration.

**Changes from 2013:** This program now includes a portion of communications staff and printing costs that were previously included in ILA Category 2. These communications resources support flood awareness and preparedness and coordination with the Take Winter by Storm regional outreach effort. No other significant changes from 2013.

**Special Program Direction:** The general communications protocol between the District and County shall be reviewed and revisions shall be subject to approval by the Executive Committee.

**Special Program Direction:** Staffing for the communication work program shall be limited to one FTE.

**Special Program Direction:** Protocols regarding notification of the District, prior to the beginning of work on innovative outreach projects, shall developed and transmitted to the District for its review and approval.

Specific programmatic elements include:

Flood Preparedness

- Coordinate flood hazard education program, communication tools (brochures, web content, customer service bulletins, etc.) to increase the awareness of flood risks and prepare citizens for flood events. This includes participation in the regional Take Winter by Storm campaign.
- Track and disseminate flood hazard technical information to other King County departments (Department of Transportation [DOT], Department of Permitting and Environmental Review [DPER], etc.) and other local, state, and federal agencies.
- Coordinate annual flood awareness month and associated public information program strategy (meetings, websites, other) designed to increase the public's awareness of locally available resources and information.

#### Regional Flood Warning Center

- Staff the Regional Flood Warning Center monitoring and emergency first responder flood patrols during flood events.
- Coordinate with the following agencies in support of the Regional Flood Warning Center operations:
  - Local governments
  - City of Seattle and U. S. Army Corps of Engineers (Corps) on dam operations
  - National Weather Service on weather forecasts and flood predictions
  - King County Office of Emergency Management for coordinated emergency response activities
  - United States Geological Survey (USGS) on river gauging contract and gage upgrades
  - King County DOT on road closures and emergency flood damage and repair response activities
- Coordinate flood emergency response activities.

#### Post-Flood Recovery Operations Program

- Complete preliminary damage assessments, and develop and track FEMA public assistance Project Worksheet completion, expenditures and general documentation.
- Coordinate with the Federal Emergency Management Agency (FEMA) and Corps on flood damage repairs and federal funding opportunities; determine eligibility.
- Identify projects and complete grant applications for post-disaster FEMA Hazard Mitigation Grant Program opportunities.

#### ILA Category 5:

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

**Program Summary:** Provide supervisory, budgeting, contract administration, and administrative services for the District.

**Changes from 2013:** No significant changes from 2013.

Specific programmatic elements include:

#### Management and Supervision Tasks

- Manage the technical and business operations of the District work program and staff.
- Develop annual operating and capital budgets, work programs and staff allocations.

- Provide supervision, technical assistance and quality control/assurance to staff.
- Carry out responsibilities for hiring, management performance, developing training expectations and recommending effective discipline and termination.
- Ensure programs and projects are completed to carry out the goals and objectives of the River and Floodplain Management Program.
- Work collaboratively with other government and regulatory agencies, departments within King County, and the public to address environmental policies and issues related to floodplain management principles, goals and objectives.

#### Finance and Budget Operations

- Develop annual capital and operating budget.
- Track and report annual capital and operating budget, revenue and expenditures.
- Process approved reimbursement requests for Subregional Opportunity Fund and WRIA Cooperative Watershed Management grants
- Provide grant and cost-share reporting, billing and documentation.
- Provide contract and procurement management, support and strategy. (Note: contract administration for specific capital projects is charged to the capital project rather than the operating budget)
- Support capital project managers/engineers with detailed project expenditures, revenues, scheduling, contract management and other finance needs in support of CIP implementation.
- Contract record-keeping consistent with county, state, and federal policies and requirements.

**Special Program Direction:** The provisions relating to billing invoice detail within the interlocal between the District and County shall be reviewed and revisions shall be subject to approval by the Executive Committee.

#### General Administration

- Records maintenance
- Copying, filing, correspondence, and scheduling.
- Meeting preparation, coordination and support.
- Photo-documentation management.
- General program administrative support.

#### Compliance

- Provide access to records including but not limited to contracts, invoices, timesheets.
- Respond to annual FCD audits, grant-related audits, and quarterly procurement audits.
- File semi-annual and Annual Report with the Board of Supervisors and Executive Director in printed and electronic form for posting to the District website.
- Notify Executive Director in writing when project scope, budget or schedule changes from the adopted capital improvement plan.
- Notify Executive Director of grant requests and awards.
- Work with Executive Committee and Executive Director in setting the agenda for Advisory Committee meetings.

#### **ILA Category 6:**

## **King County Flood Control District Program Implementation**

**Program Summary:** Implement flood hazard management programs and coordinate capital improvement projects for the District. Teams of staff are organized by river basin, supported by countywide technical services and countywide planning services, and will be responsible for identifying, implementing, and tracking flood risk reduction program and project actions within a given basin. Staff also coordinate four basin technical committees with partner jurisdictions and maintain relationships with communities and other agencies.

**Changes from 2013:** No significant changes from 2013

Specific programmatic elements include:

### **Basin Team and Basin Technical Committee Program**

- Staff and coordinate regular Basin Technical Committees.
- Implement work program to guide private property owner and community outreach necessary to complete capital improvement projects.
- Develop ongoing relationships with cities, agencies, and stakeholders within the basin, and ensure consistency across basins.
- Coordinate on acquisition priorities with Acquisition Unit.
- Coordinate and support logjam investigation and response/action.
- Respond to, investigate and provide technical assistance for enforcement on complaints and general inquiries. Conduct citizen and/or landowner contact, communication and outreach.
- Annual large wood public meeting
- Coordinate with the DOT Roads Services Division on construction crew scheduling.
- Provide quarterly project reporting to management.
- Address and seek resolution on basin-specific floodplain management issues.

### **KCFCD Advisory Committee Coordination**

Under the direction of the Executive Director, the County shall:

- Provide staff support to the KCFCD Advisory Committee and the Board of Supervisors.
- Track basin technical committee meetings, issues, and cross-basin policy issues.
- Coordinate public process across KCFCD to ensure consistent outreach across basins.
- Report KCFCD activities, accomplishments, revenues and expenditures through an annual report.
- Respond to Advisory Committee and Board of Supervisors requests for information regarding rate structure options, and other issues.

**Special Program Direction:** The contract for Advisory Committee facilitation shall be subject to review and approval by the Executive Committee.

### **Flood Control District Committee Support**

- Provide presentations and updates as requested by the Executive Director at meetings of the Executive Committee and Board of Supervisors.

### Floodplain Management Planning

- Support Board discussions of policy issues, building on materials previously developed for the Citizens Committee.
- Support Board engagement in capital project planning efforts, including the development of goals and evaluating alternative flood risk reduction actions. Participate in basin planning and coordination efforts such as the Lower Snoqualmie Flood-Fish-Farm work group

### Agriculture Needs Assistance

- Provide technical and modeling assistance and permitting support for farm pad proposals.
- Management of compensatory storage bank.
- Provide assistance to identify and pursue mitigation opportunities for barn and other farm structure elevations.
- Implement recommendations of the Farm/Flood Task Force.
- Coordinate outreach to farmers and the King County Agriculture Commission to gather input on the unique needs of agriculture lands within flood hazard areas.

### **ILA Category 7:**

#### **Central Costs / Overhead and Reimbursement from Capital**

This category includes use-based and FTE-based overhead costs from the Water and Land Resources Division, the Department of Natural Resources and Parks, and King County. Examples include use-based charges for the Prosecuting Attorney's Office, risk management, and the financial management system, as well as FTE-based charges building rent and utilities. When staff loan out from the operating fund to the capital fund, the capital fund reimburses the operating fund for FTE-related overhead charges.

For 2014, the total overhead budget is \$2,432,442, an increase of \$86,380 or 3% from 2013.

### **Capital Improvement Program Implementation**

**Program Summary:** The vast majority of the proposed District work program and budget is dedicated to the implementation of major maintenance and capital projects. This work includes managing and implementing major maintenance, repair and new flood protection facility design, permitting and construction; home buyouts and acquisitions; home and barn elevations; and farm pad cost-share assistance. The capital projects include those projects to be completed by jurisdictions through the Subregional Opportunity Fund program with funding allocated proportional to assessed value of each jurisdiction.

Construction of flood protection infrastructure has paved the way for considerable residential, commercial and industrial economic development in flood hazard areas. The flood protection infrastructure has reduced the frequency of flooding and severity of erosion, and contained flood flows within levees that has allowed for significant economic growth by promoting development of historical floodplains, as exemplified by the industrial and commercial development lining the lower Green River. However, these areas will always face the potential risk that the flood protection facilities could be overwhelmed, resulting in serious flood damage, significant impacts to the regional economy, or personal injury and death. While the costs of flood protection facility

construction and maintenance are borne by the public, the value to the economy is a regional benefit.

The CIP will complete high priority and regionally significant flood hazard management capital improvement projects to significantly protect public safety and reduce flood risks to the regional economy, transportation corridors, and public and private infrastructure and property. These capital improvement projects include retrofits and repairs to levees and revetments; levee setbacks to improve slope stability and increase flood conveyance and capacity; and targeted acquisition of repetitive loss properties and other at-risk developments. The Flood Hazard Management Program (FHMP) Plan recommends approximately 135 capital projects for the ten-year period (2008-2017), of which approximately 95 are construction projects and 40 are acquisition only.

The CIP will provide project design, construction and management on the following project implementation elements:

- Scope and Concept
  - Identify problem, alternatives, recommended solution and project goals
- Feasibility
  - Identify and conduct studies, analysis, cost estimates, resource needs, landowner issues
- Acquisition
  - Obtain the necessary property rights to perform the work
- Design and Permitting
  - Address all elements of the project (e.g. geomorphic, constructability)
  - Complete all federal, state and local permitting requirements (e.g. Corps, Environmental Species Act (ESA))
    - Survey
      - Conduct pre- and post-construction (“as-built”) survey
    - AutoCAD
      - Develop design plan set
    - Hydraulic Modeling
      - Conduct pre- and post-project modeling
      - Complete Letter of Map Revision (LOMR) for constructed projects, when/if warranted
    - Ecological
      - Conduct pre- and post-construction monitoring
      - Complete pre-project feasibility studies/analysis
      - Provide project design support
      - Complete biological assessments/evaluations
        - Individual
        - Programmatic
      - Complete Section 7 Endangered Species Act consultation
      - Coordinate or support permitting and permit agency outreach
    - State Environmental Policy Act (SEPA)
      - Complete individual project SEPA
      - Complete programmatic SEPA

- Geotechnical Engineering Support/Geologist/Geotechnical
  - Provide sediment management monitoring, analysis and modeling
  - Conduct pre- and post-construction monitoring
  - Conduct pre-project feasibility studies/analysis
  - Provide project design support
- Engineering (may include Project Management function as well)
  - Lead design engineer for projects
  - Manage construction of projects
  - Obtain resources for projects; make task assignments
  - Track and report project scope, schedule, and budget
  - Develop plan set for construction, or bid documentation support
  - Provide overall project quality assurance and quality control oversight
- Project Management
  - Obtain resources for projects; make task assignments
  - Track and report project scope, schedule, and budget
  - Provide overall project quality assurance and quality control oversight
  - Monitoring and Adaptive Management
    - Pre-project baseline information
    - Construction Monitoring
    - Conduct pre- and post-construction monitoring
    - Provide monitoring reports to DDES and other agencies as required

**Special Program Direction:** Since the District was formed in 2007 many of the assumptions about the necessary staffing capacity and organizational structure to deliver flood risk reduction services have changed. The District and King County will collaboratively evaluate options to ensure that the organizational capacity and structure are well suited to provide the most efficient and effective implementation of the District’s work program.