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1200 King County Courthouse
516 Third Avenue
Seattle, WA 98104

KING COUNTY

Signature Report

FCD Resolution

Proposed No. FCD2020-22.3 **Sponsors**

A RESOLUTION relating to the operations and finances of the District, adopting the 2021 budget and authorizing improvements.

WHEREAS, pursuant to RCW 86.15.140, the King County Flood Control Zone District (District) held a public hearing on the proposed 2021 budget of the District on November 4, 2020, and

WHEREAS, the board of supervisors (Board) desires to adopt the King County Flood Control Zone District's (District) 2021 budget, and

WHEREAS, by Ordinance 15728, the King County council adopted the District's initial comprehensive plan of development for flood and stormwater control, which is titled "2006 King County Flood Hazard Management Plan," and by Resolution FCD2011-05.1, the District Board amended the initial plan to include a project in the city of Seattle (collectively, the District Comprehensive Plan), and

WHEREAS, pursuant to RCW 86.15.110, the Board must approve by resolution all flood control and storm water control improvements, prior to the extension, enlargement, acquisition or construction of such improvements, and

WHEREAS, RCW 85.15.110, further provides that such approval resolution must state whether the improvements are to be extended, enlarged, acquired or constructed; state that the comprehensive plan has been adopted; state that the improvements generally

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contribute to the objectives of the comprehensive plan; state that the improvements will benefit the county as a whole; state the estimated costs of the improvements; and identify the data supporting the estimated costs,

WHEREAS, the Board desires to approve improvements in the District's 2021 budget that are not in the District Comprehensive Plan, or that have been modified by the District's 2021 budget, in accordance with RCW 85.15.110;

WHEREAS, the District reaffirms its commitment to ensuring the transparency in its practices and the effective and efficient implementation of capital projects by contracting with King County, as its primary service provider, and other jurisdictions when appropriate, and

WHEREAS, the District desires to protect, and where possible, enhance aquatic and riparian habitat in a manner that conserves tribal and treaty-reserved natural resources under treaty reserved rights and is consistent with adopted salmon habitat recovery plans in King County, and

WHEREAS, the District acknowledges and affirms its commitment to the interconnectedness of flood risk reduction, environmental stewardship, equity and social justice, and environmental justice;

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF SUPERVISORS OF THE KING COUNTY FLOOD CONTROL ZONE DISTRICT:

SECTION 1. The Board hereby adopts the 2021 Budget for the District, as set forth in Attachments A ("Work Program"), B ("2021 Annual Budget"), C ("2021 Annual Operating Budget"), D ("2021 Annual Capital Budget"), E ("2021 - 2026 Six-Year CIP"), F ("2021 Annual District Oversight Budget"), G ("2021 Subregional Opportunity Fund

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Allocations") and H ("2021-2026 Six-Year CIP Project Allocations"); provided that King County, or other jurisdictions contracted to implement projects, work shall submit predesign reports for capital projects to the District executive director, and shall seek approval from the executive director of project charters. Furthermore, King County, and other service providers as appropriate, shall provide to the District executive director thirty percent design project reports for authorization to proceed with sixty percent design, sixty percent design project reports for authorization to proceed to ninety percent design and ninety percent design project reports for authorization to proceed to one hundred percent design.

SECTION 2. The Board approves the extension, enlargement, acquisition or construction, as applicable, of the improvements that are included in the District Comprehensive Plan, that are included in the District Comprehensive Plan but have been modified by Attachments C, D and H to this resolution, or that are not included in the District Comprehensive Plan but are identified in Attachments C, D and H to this resolution (collectively, the "Improvements"). The District Comprehensive Plan includes the streams or water courses upon which the Improvements will be enlarged, extended, acquired or constructed. The Board determines that the Improvements generally contribute to the objectives of the District Comprehensive Plan and will be of benefit to the county as a whole.

SECTION 3. The estimated costs of the Improvements are stated in Attachments C, D and H to this resolution and the supporting data for the estimated costs are on file with the director of the King County water and land resources division.

SECTION 4. For Improvements that will be constructed, preliminary engineering

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studies and plans either have been prepared or will be prepared, and have been filed or will be filed, with the director of the King County water and land resources division.

SECTION 5. The Board authorizes the District executive committee to modify project budgets and schedules identified in Attachment H.

SECTION 6. The Board reiterates its commitment to educating residents of King County about the dangers of dam failure and directs the District executive director to continue to work with the King County Office of Emergency Management on a dam education and outreach program.

SECTION 7. The Board directs the executive director to develop and recommend a bonding policy for the implementation of capital projects. The policy shall be developed by August 31, 2021.

SECTION 8. The Board directs the executive director to undertake a study examining how to increase efficiency and efficacy in flood control capital project planning and delivery. The study shall include, an analysis of capital project planning best practices; recommendations and options to increase efficiency and efficacy in capital project delivery. The policy shall be developed by August 31, 2021.

SECTION 9. The Board directs the executive director to convene a working group to develop recommendations updating its acquisition policy to accommodate an integrated floodplain management approach while also addressing equity and social justice issues and environmental justice concerns. The recommendations shall be transmitted by August 31, 2021.

SECTION 10. The Board directs the executive director to develop and recommend an equity and social justice policy that recognizes an integrated floodplain

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management approach while also addressing equity and social justice issues and environmental justice concerns. The policy shall be developed by December 31, 2021.

SECTION 11. The Board directs the executive director to develop and recommend a recreation policy that recognizes an integrated floodplain management approach while also addressing equity and social justice issues and environmental justice concerns. The policy shall be developed by December 31, 2021.

SECTION 12. The Board directs the executive director to work collaboratively with King County water and land resources division to develop an integrated approach to identifying, planning, prioritizing and designing flood risk reduction Capital Improvement Projects. This approach will consider risk reduction strategies and projects in a reach and basin context and seek opportunities to collaborate with other partners to achieve cobenefits and leverage public and community investments.

SECTION 13. The Board directs the executive director to work collaboratively with King County water and land resources division to develop a process to reevaluate and reprioritize within Capital Investment Strategies as necessary to prioritize multibenefit projects; encourage an integrated floodplain management approach and focus on equity and social justice and environmental justice. This reevaluation of Capital Investment Strategies will begin with the Cedar River Capital Investment Strategy. New Capital Investment Strategies, including the Sammamish River Capital Investment Strategy planning process that is currently underway will utilize an integrated flood management approach, prioritize multibenefit projects and focus on equity and social justice.

SECTION 14. The District will convene a committee of governments and

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stakeholders to advise the District as it considers implementation of flood risk reduction projects in the Green River Valley. The District shall consult closely with the committee as the District develops the Lower Green River Corridor Flood Hazard Management Plan for the Middle and Lower Green River incorporating multiple benefits and values through an integrated floodplain management approach. The committee shall also assist the District with development of a programmatic environmental impact statement to support the flood hazard management plan and on a Capital Investment Strategy for the Middle and Lower Green River.

SECTION 15. The Board directs King County water and land resources division to develop a report outlining potential options for comprehensive flood risk reduction facilities and strategies on Issaquah Creek by April 30, 2021.

SECTION 16. The Board directs the executive director to work collaboratively with the King County Green Jobs Strategy of the department of natural resources and parks to submit a plan developing workforce pathways creating career opportunities and living wage jobs for Black, Indigenous, and youth of color on District capital projects.

SECTION 17. The Board directs King County water and land resources division to use compost from the county's stream of organic recycled material on all capital projects where applicable and to provide a report evaluating the expanded use of organic composted material on capital projects. This report shall be transmitted by April 30, 2021.

SECTION 18. The Board directs the District executive director to provide members of the District Advisory Committee regular reports on capital project delivery by District service providers, capital project milestones and completion, and data relating

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to the county "Strike Team" and "Countywide Capital Project Team" accomplishments.

SECTION 19. The Board directs King County water and land resources division to provide a monthly report to the District executive director of the status of acquisitions of property necessary to implement capital projects identified in Attachment H.

SECTION 20. The Board directs King County water and land resources division to provide a report on maintenance and operations of the weir on Lake Sawyer by July 30, 2021. This report shall include research into the legal status of the weir and the legal responsibilities of the owners, an analysis of inspection reports of the weir and the current condition of the weir, and options for continued operations and ownership of the weir.

SECTION 21. The Board directs King County water and land resources division to provide a monthly report to the District executive director on the status of inspections of all facilities monitored and maintained by King County as a service provider to the District.

SECTION 22. The Board directs King County water and land resources division to provide a monthly report to the executive director on the status of recruitment and hiring of all vacant positions funded by the District. If any of the five capital project staff positions created in the FCD Resolution 2019-13 remain unfilled by April 1, 2021, the District may consider reallocating the Operating Budget to achieve project delivery goals through alternative contracting methods.

SECTION 23. The Board directs King County water and land resources division to provide a quarterly report to the District executive director on the status of progress on items in the Work Program as set forth in Attachment A.

SECTION 24. Section 3.6 of the interlocal agreement between the District and

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King County provides that King County shall notify the District executive director in writing if the county needs to modify or reprioritize capital projects. King County's notifications to the District executive director should include information regarding variations within project budgets of more than twenty percent in the "acquisition,"

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"design," "construction," "contingency" and "total" expenditure categories, shown on Attachment D.

FCD Resolution was introduced on and passed as amended by the King County Flood Control District on 11/4/2020, by the following vote:

Yes: 9 - Ms. Balducci, Mr. Dembowski, Mr. Dunn, Ms. Kohl-Welles, Ms. Lambert, Mr. McDermott, Mr. Upthegrove, Mr. von Reichbauer and Mr. Zahilay

KING COUNTY FLOOD CONTROL ZONE DISTRICT
KING COUNTY, WASHINGTON

DocuSigned by:
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Dave Upthegrove, Chair

ATTEST:

DocuSigned by:
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Melani Pedroza, Clerk of the Board

Attachments: A. King County Flood Control District 2021 Workplan FINAL, B. 2021 Annual Budget FINAL, C. 2021 Annual Operating Budget FINAL, D. 2021 Annual Capital Budget FINAL, E. 2021-2026 Six Year CIP FINAL, F. 2021 Annual District Oversight Budget FINAL, G. 2021 Subregional Opportunity Fund Allocations FINAL, H. 2021-2026 Six Year CIP Project Allocations FINAL

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Attachment A
2021 Budget Work Program
10/28/2020

King County Flood Control District 2021 Work Program

The 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 as service provider
  - Financial planning, budgeting, levy rate, bonding (if any)
  - Administration of contracts
  - Asset management
  - Capital improvement priorities
  - Capital improvement implementation evaluation
  - Public awareness priorities
  - Post flood event review and evaluation
  - Federal and state legislative agenda
  - Legal services, financial management, and Washington State audit

- Operations Work Program
  - Annual Maintenance
  - Flood Hazards Plan, Grants, Outreach
  - Flood Hazard Studies, Maps, Technical Services
  - Flood Preparation, Flood Warning Center, Post Flood Recovery
  - Program Management, Supervision, Finance, Budget
  - Program Implementation,
  - District Planning, Outreach, Policy and Technical Services

- Capital Improvement Program (CIP)
  - Capital Improvement Projects Acquisitions and Elevations
  - Programmatic capital funding (Subregional Opportunity Fund, Cooperative Watershed Management Grants, Flood Reduction Grants)

2021 Priorities:

<u>Management & Budget</u>
- Seek federal assistance with US Army Corps issues
- Align capital expenditure schedules
- Provide budget issue requests to Advisory Committee
- Examine how to increase efficiency and efficacy in flood control capital project planning and delivery

<u>Policy Development</u>
- Develop policy framework for monitoring and maintaining flood protection facilities
- Develop Equity and Social Justice Policy
- Convene workgroup to develop recommendations to Acquisition Policy
- Develop Recreation Policy

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- Flood Hazard Management Plan Update
- Develop Green Jobs Policy

Capital Projects
- Align budgeted versus actual expenditures for service providers
- Reports from WLRD on capital project progress

Real Estate
- Update facility inventory and real estate records
- Address property title issues

Reports
- Monthly hiring report
- Monthly inventory maintenance/inspection report
- Quarterly work program milestone reports
- Lake Sawyer Weir analysis and report
- Issaquah Creek flood risk reduction facilities options
- Regular reports to Advisory Committee on capital project delivery, capital project milestones and completion, and data relating to county "Strike Team" and "Countywide Project Team" accomplishments

Planning and Studies
- Sammamish CIS
- Lower Green River Planning Process
- Flood Hazard Management Plan Update Process
- Levee Breach Study to evaluate and identify gaps in evacuation and shelter in place plans in areas impacted by a levee breech
- Issaquah Creek studies
- Evaluation of climate change scenarios in partnership with the University of Washington
- Small stream flood studies

Grants
- Monitor Opportunity Fund Project Implementation
- Monitor WRIA/CWM Grant progress and identify leveraging opportunities
- Develop prioritization framework for WRIA/CWM Grant Program

Communications
- Maintain District website
- Update and redesign Be Flood Ready brochure
- Continue education and outreach related to dam safety
- Review and approve communications plans by service providers for planning processes, advisory committees, large wood, flood awareness, and special initiatives
- Conduct media outreach and response on identified priorities
- Participate in public meetings on priorities including robust public process for small stream studies

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King County ILA Service Provider Work Plan

Resource Management, Annual Maintenance, and Facility Monitoring

Program Summary: Coordinate facility and property maintenance for the District, which includes 500 flood protection facilities covering 119 linear miles and approximately 800 acres of land managed 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.

Annual Maintenance Program:

- Manage work authorizations and coordinate with Department of Transportation (DOT) Road Services Division, Washington Conservation Corps, work crews from the Road Division, Earth Corps, the Department of Juvenile and Adult Detention's Community Work Program, or contractors 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 re-vegetation 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 the U.S. Army Corps of Engineers (Corps) 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.

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Flood Hazard Plan, 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 the Federal Emergency Management Agency (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.

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 consistent with District acquisition policies.

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.
- Coordinate with the District to implement communications protocols.

Community Rating System (CRS) and federal Disaster Mitigation Act Coordination

- Manage the CRS program consistent with the newly adopted federal CRS manual, including coordination with other CRS jurisdictions in King County through the CRS Users Group.
- 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. This includes coordination with other jurisdictions.

Grants Program

If resources are available, the following types of grant activities may be included:

- 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 the 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.

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Provide grant application technical assistance to cities and other stakeholders, as needed. Grant prioritization within WLRD shall be based on the following considerations, in order of significance:

- The impacts to public safety.
- The portion of the project directly related to flood reduction.
- The risks of potential damage to infrastructure, including but not limited to businesses, homes, farms, and roads.
- Efficiency of staffing hours.

In addition to grant alerts to the District, WLRD shall transmit a grant overview report to the District by June 30 of each year including information with a description of grants for which WLRD has applied and how the above priorities were taken into consideration.

Flood Hazard Studies, Maps, and Technical Studies

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.

- 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
    - Landslide hazard mapping in areas that may intersect major river floodplains.
- 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.

Flood Preparation, 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. 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.

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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 base-level 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 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 Sates Geological Survey (USGS) on river gauging contract and gauge 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 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.

Program Management, Supervision; Finance, Budget and General Administration

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

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

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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, Water Resource Inventory Area (WRIA) Cooperative Watershed Management grants, and Flood Reduction 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 budget 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.

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 District audits, King County Council audits, state 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 change from the adopted capital improvement plan.
- Notify Executive Director of grant requests 30 days prior to grant due date or submittal
- Notify Executive Director of grant award within 10 days of grant approval.
- Work with Executive Committee and Executive Director to support the District's work with Advisory Committee.

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

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maintain relationships with communities and other agencies.

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 consistent with District acquisition policies.
- 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.
- Conduct annual public meetings about large wood.
- Coordinate with the DOT Road Services Division on construction crew scheduling.
- Provide quarterly project reporting to management.
- Address and seek resolution on basin-specific floodplain management issues.

King County Flood Control District Advisory Committee Coordination

- Provide staff support to the Flood Control District Advisory Committee and the Board of Supervisors, as requested by the Executive Director.
- Track basin technical committee meetings, issues, and cross-basin policy issues.
- Coordinate public process across the District to ensure consistent outreach across basins.
- Report District 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.

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.
- Manage 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 as directed by District Executive Committee.
- Coordinate outreach to farmers and the King County Agriculture Commission to gather input on the unique needs of agriculture lands within flood hazard areas.

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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, grants recommended through the WRIA cooperative watershed management program, and the flood reduction grant program**.**

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 CIP will provide project design, construction and management on the following project implementation elements, consistent with WLR Division's Project Management Manual:

- 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, Endangered Species Act (ESA))
    - Survey
        - Conduct pre- and post-construction ("as-built") survey
    - AutoCAD

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- 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 ESA consultation
  - Coordinate or support permitting and permit agency outreach
- State Environmental Policy Act (SEPA)
  - Complete individual project SEPA review
  - Complete programmatic SEPA review
- 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 o
    Pre-project baseline information o
    Construction Monitoring
    - Conduct pre- and post-construction monitoring
    - Provide monitoring reports to DPER and other agencies as required.

Central Costs/Overhead and Reimbursement from Capital

- This category includes use-based and FTE-based overhead costs from the Water and Land Resources Division of 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 for 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.

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King County Flood Control District

2021 Annual Budget

Attachment B

10/28/2020

Program	2019 Actuals	2020 Approved	2020 Revised	2021 Requested
Flood District Administration	773,881	913,238	913,238	2,338,637
Maintenance and Operation	9,905,721	13,464,210	13,739,210	13,171,717
Construction and Improvements	38,751,549	94,984,555	202,547,438	124,690,145
Bond Retirement and Interest	$0	$0	$0	$0
Total	49,431,150	109,362,003	217,199,886	140,200,499
Projected Capital Reserves - Cash Fund Balance [1]	93,504,495	56,841,663	96,977,354	95,389,624
Projected Capital Reserves - Budgetary Fund Balance [2]	(19,311,281)	(53,649,615)	(59,600,979)	(135,494,646)

[1] The cash fund balance assumes an expenditure rate of 18% of the capital budget in 2021, informed by prior year actuals.

[2] The budgetary fund balance assumes 100% expenditure of all budgeted amounts and is used to understand budgetary commitment.

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King County Flood Control District

2021 Annual Operating Budget

Attachment C

10/28/2020

	2019 Actuals	2020 Approved	2020 Revised	2021 Requested
Annual Maintenance	$2,165,551	3,305,056	3,305,056	$2,370,715
Flood Hazards Plan, Grants, Outreach	$644,694	675,380	950,380	$512,619
Flood Hazard Studies, Maps, Technical Services	$894,387	3,383,416	3,383,416	$2,261,254
Flood Preparation, Flood Warning Center	$465,259	991,042	991,042	$1,032,536
Program Management, Supervision, Finance, Budget	$1,785,374	1,727,017	1,727,017	$1,913,982
Program Implementation	$736,369	246,986	246,986	$1,826,273
Overhead / Central Costs	$3,214,087	3,135,313	3,135,313	$3,254,337
Total	**$9,905,721**	**$13,464,210**	**$13,739,210**	**$13,171,717**

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King County Flood Control District

2021 Annual Capital Budget

Attachment D

10/28/2020

Basin	Acquisition	Design	Construction	Contingency	Total
Snoqualmie River Basin	($553,640)	$14,767,521	$2,556,720	$0	$16,770,601
Cedar River Basin	$450,000	$8,679,844	$10,679,937	$0	$19,809,781
Green River Basin	$0	$58,917,055	($951,533)	$0	$57,965,522
White River Basin	$867,200	$39,519	$36,000	$0	$942,719
Effectiveness Monitoring	$0	$364,338	$850,122	$0	$1,214,460
Countywide Miscellaneous	$0	$0	$0	$250,000	$250,000
Opportunity Fund	$0	$5,974,680	$0	$0	$5,974,680
Grant Fund	$12,762,382	$6,000,000	$3,000,000	$0	$21,762,382
Total	**$13,525,942**	**$94,742,957**	**$16,171,246**	**$250,000**	**$124,690,145**

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King County Flood Control District

2021 - 2026 Six-Year CIP

Attachment E

10/28/2020

Name	2019 Actuals	2020 Approved	2020 Revised	2021 Requested	2022	2023	2024	2025	2026	2021 - 2026 Total
Snoqualmie River Basin	$7,267,581	$8,933,012	24,669,506	16,770,601	17,960,991	21,566,356	29,492,387	13,489,177	28,608,974	127,888,486
Cedar River Basin	$7,007,329	$7,833,030	27,406,257	19,809,781	17,800,064	14,263,762	6,791,719	5,132,358	3,200,000	66,997,684
Green River Basin	$12,663,843	$55,025,510	$92,466,382	57,965,522	59,359,758	35,821,386	54,139,839	24,806,000	20,962,257	253,054,762
White River Basin	$945,873	$1,171,209	3,002,929	942,719	1,896,200	8,034,900	7,658,704	326,900	1,000,000	19,859,423
Effectiveness Monitoring	$651,769	$330,232	1,188,300	1,214,460	1,142,650	1,207,500	1,039,750	911,600	894,650	6,410,610
Countywide Miscellaneous	$289,764	$100,000	1,788,575	250,000	350,000	350,000	350,000	350,000	350,000	2,000,000
Subregional Opportunity Fun	$3,569,863	$6,091,017	22,626,278	5,974,680	5,981,476	5,993,630	6,006,788	6,021,445	6,037,760	36,015,779
Grants Programs	$6,355,527	$15,500,545	29,399,211	21,762,382	22,084,082	22,410,539	22,741,821	23,078,000	23,419,148	135,495,972
Total	$38,751,549	94,984,555	202,547,438	124,690,145	126,575,221	109,648,073	128,221,008	74,115,480	84,472,789	647,722,716

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King County Flood Control District

2021 Annual District Oversight Budget

Attachment F

10/28/2020

	2020 Adopted	2020 Revised	2021 Proposed
Management & Support	$299,020	$299,020	1,341,621
Rent and Equipment	$12,668	$12,668	42,086
Legal Services	$103,875	$103,875	250,000
Accounting	$106,779	$106,779	130,000
State Auditor	$21,385	$21,385	70,000
Other Professional Services	$258,268	$258,268	401,131
Expenses	$19,002	$19,002	19,572
Insurance	$92,241	$92,241	84,227
Total	**$913,238**	**$913,238**	**$2,338,637**

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King County Flood Control District

2021 Subregional Opportunity Fund Allocations

Attachment G

10/28/2020

Jurisdiction	Opportunity Fund Allocation	Project Name	Project Description
Algona	$10,000	DEFERRING	
Auburn	$95,602	DEFERRING	
Beaux Arts	$10,000	2021 Stormwater Annual Clean and Camera	Annual clean and camera of existing stormwater system
Bellevue	$636,151	Upper Kelsey Creek Phase 2 Culvert/Bridge Replacement at Lake Hills Blvd.	Replace a bridge and culvert to alleviate flooding on Lake Hills Blvd. during large storm events.
Black Diamond	$10,000	DEFERRING	
Bothell	$64,049	DEFERRING	
Burien	$73,520	DEFERRING	
Carnation	$10,000	DEFERRING	
Clyde Hill	$28,939	DEFERRING	
Covington	$27,186	DEFERRING	
Des Moines	$41,321	DEFERRING	
Duvall	$13,888	DEFERRING	
Enumclaw	$15,385	Battersby Avenue Culvert Replacement	Amendment adding budget to project that will replace culverts to reduce flooding frequency of road and downtown area.
Federal Way	$112,485	DEFERRING	
Hunts Point	$11,868	2021 Annual Stormwater Clean and Camera	Remove sediment and debris; early detection of potential storm system problems.
Issaquah	$111,655	DEFERRING	
Kenmore	$50,481	DEFERRING	
Kent	$204,609	Lake Fenwick Aerator Upgrade	Amendment to add budget to project that will improve water quality of lake.
King County	$483,843	1. Natural Drainage Flood Program; 2. Integrated Floodplain Management; 3. Alluvial Fan Mapping	1. Amendment adding budget that will be used to implement stormwater control improvements that address flooding problems. 2. Support the update to the King County Flood Hazard Management Plan, outlining multi-objective policy and programmatic approaches to floodplain management in King County, including capital investments that will contribute to flood risk reduction, and inform the next KC Comprehensive Plan Update in 2023. Facilitate stronger collaboration and integration with other county, Flood Control District, Tribe, city and partner projects and programs to reduce flood risks, restore habitat, center equity, and support community priorities. 3. Support implementation of recommendations in the "Alluvial Fan Report" recently transmitted to the County Council to map alluvial fans and associated hazards. This information will be used to develop assess risks to critical infrastructure like roads, homes, and agriculture, and to develop projects, programs, and regulatory reforms to reduce risks while protecting habitat.
Kirkland	$297,745	Kirkland Surface Water Master Plan	Develop Surface Water Utility Master Plan to guide the next six years of utility operation.
Lake Forest Park	$32,961	DEFERRING	
Maple Valley	$40,978	SE 254TH Place & Witte Road Culvert Replacement	Replace an existing 24-inch corrugated metal culvert that conveys South Fork Jenkins Creek under SE 254th Place with an adequately sized box culvert to pass 100-year design flows and allow fish passage.
Medina	$45,067	DEFERRING	
Mercer Island	$145,048	DEFERRING	
Milton	$10,000	DEFERRING	
Newcastle	$35,160	DEFERRING	
Normandy Park	$17,247	DEFERRING	
North Bend	$15,804	DEFERRING	
Pacific	$10,000	DEFERRING	
Redmond	$229,191	Gun Club Creek Culvert Replacement at Willows Road	The culvert where "Gun Club Creek" flows under Willows Road will be replaced with a 10' wide x 4' high, 105' long concrete box culvert, meeting current standards for capacity and fish passage. The existing culvert is old and undersized.
Renton	$181,411	Monroe Ave NE Storm System Improvement	To prevent historic flooding along Monroe Ave NE, south of NE 4th St, the project will design an infiltration facility to replace an existing temporary stormwater overflow.
Sammamish	$191,730	George David Creek Fish Passage	The project will remove three fish passage barriers along George Davis Creek and construct 200 linear feet of new stream channel to provide access to one river-mile of salmon spawning habitat.
SeaTac	$41,000	S. 221st St. Drainage Improvements	This project aims to construct a stormwater conveyance system to resolve localized flooding and erosion issues in the Grandview Neiahborhood.
Seattle	$2,403,067	1. Fauntleroy Creek Culvert Replacement at 45th Ave. 2. Fauntleroy Creek Culvert Replacement at California Ave SW.	1. The 45th Ave SW culvert is undersized and in poor structural condition. A new, significantly larger culvert that meets increased future flow and allows for fish passage is being designed. 2. The California Ave SW culvert is undersized and in poor structural condition. A new, significantly larger culvert that meets increased future flow and allows for fish passage is being designed.
Shoreline	$111,551	Pump Station 26 Replacement	Amendment to add budget to project that will replace pump station to prevent neighborhood flooding.
Skykomish	$10,000	DEFERRING	
Snoqualmie	$30,537	DEFERRING	
Tukwila	$59,705	Riverton Creek Plapgate Removal	Amendment to add budget to rehabilitate habitat within Riverton Creek and improve its connection to Duwamish River.
Woodinville	$41,357	DEFERRING	
Yarrow Point	$14,140	2021 Stormwater Annual Clean and Camera	2021 Annual Stormwater clean and camera activities for NE 40th St. and 95th Ave NE.
Jurisdiction Totals	**$5,974,681**		

Deferrals	$1,042,307
Projects	$4,932,374

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King County Flood Control District

2021 - 2026 Six-Year CIP Project Allocations

Attachment H

10/28/2020

Capital Investment Strategy Project
Grant/External Revenue Awarded
Cost Share Contribution to Others
Added in 2020
Proposed New Add in 2021

No.	Title	Basin	Type of project	2019 Inception to Date Expenditure	2020 Inception to Date Budget	2020 Available Budget	2021 Requested	2022 Forecasted	2023 Forecasted	2024 Forecasted	2025 Forecasted	2026 Forecasted	6-Year CIP Total	CIS Year 7-10	CIS 10+ Year	Project Life Total	Comments
1	WLFL0 SF SKYKMSH REP LOSS MIT	SF Skykomish	FCD Acqu/Elev	$703,571	$4,323,571	$3,620,000	$1,780,000	$800,000	$800,000	$800,000	$800,000	$800,000	$5,780,000	$5,780,000		$15,883,571	Baring. This project will elevate or buyout individual structures in the South Fork Skykomish Basin to eliminate the risk of flooding or erosion damage during future flood events.
2	WLFL0 SKYKOMISH LB DOWN 2016 REPAIR	SF Skykomish	FCD Const	$85,402	$150,000	$64,599	$0	$0	$0	$0	$0	$0	$0			$150,000	Skykomish. Approximately 50-foot-long section of missing armor rock immediately downstream of the bridge. Further flooding may compromise or severely damage facility.
3	WLFL0 TIMBER LN EROSN BUYOUTS	SF Skykomish	FCD Acqu/Elev	$1,969,442	$2,402,442	$433,000	$2,367,000	$800,000	$800,000	$800,000	$800,000	$800,000	$6,367,000			$8,769,442	Skykomish. This project will continue to acquire and remove homes along a stretch of the Skykomish River that are endangered by erosive forces as well as inundation in some places.
4	WLFL0 TIMBERLANE 2016 REPAIR	SF Skykomish	FCD Const	$12,970	$16,040	$3,070	$0	$0	$0	$0	$0	$0	$0			$16,040	Skykomish. Project will lay back the privately-built rockery to reconstruct rock wall into stable revetment geometry. Will likely be implemented by the Strike Team.
5	WLFL0 TIMBERLANE 2019 REPAIR	SF Skykomish	FCD Const	$160,050	$600,000	$439,950	$0	$0	$0	$0	$0	$0	$0			$600,000	Skykomish. Revetment is approximately 300 LF along left bank of South Fork Skykomish River. Unstable section of vertical stacked rock is approximately 150 LF (needs verification). Failure has occurred previously in this section of revetment.
6	WLFL1 428TH AVE SE BR FEASIBILITY	Upper Snoq	FCD Const	$309,686	$309,756	$70	$0	$0	$0	$0	$0	$0	$0			$309,756	North Bend. Reduce neighborhood isolation from flooding. Develop a set of alternatives for improvements to 428th Avenue SE, SE 92nd Street, and Reinig Road to reduce the frequency of community isolation caused by floodwaters overtopping these roadways.
7	WLFL1 BENDIGO UPR SETBACK NORTH BEND	Upper Snoq	Agreement	$124	$50,000	$49,876	$0	$0	$0	$0	$0	$4,200,000	$4,200,000			$4,250,000	North Bend. Cost-share of $8.4M levee setback project. The levee overtops at a 20-year or greater flood, inundating undeveloped property, railway lines and roadways. Project would reconnect 25 acres of floodplain and construct a new levee that meets current engineering guidelines. City has submitted grant application for the remaining $4.2 million.
8	WLFL1 CIRCLE RVR RANCH RISK RED	Upper Snoq	FCD Const	$302,511	$673,689	$371,178	$261,122	$219,300	$187,195	$2,995,230	$6,000	$0	$3,668,847			$4,342,536	North Bend. This project will determine a preferred action to reduce long term risks from channel migration in the Circle River Ranch Neighborhood on the South Fork Snoqualmie River. Being conducted concurrent with South Fork Snoqualmie Corridor Plan.
9	WLFL1 CITY SNOQ HOME ELEVATIONS	Lower Snoq	Agreement		$1,468,000	$1,468,000	$0	$0	$0	$0	$0	$0	$0			$1,468,000	City of Snoqualmie. Elevate several flood-prone homes in the areas around Walnut St and Northern St.
10	WLFL1 MF FLOOD CONVEYANCE N BEND	Upper Snoq	Agreement	$0	$0	$0	$150,000	$750,000	$750,000	$0	$0	$0	$1,650,000			$1,650,000	North Bend. Overflow channels originating from the Middle Fork Snoqualmie River flow through neighborhoods and cross roads creating risk to homes and infrastructure. Potential solutions include channel modifications, enhancements, and culvert improvements.
11	WLFL1 MF RESIDENTIAL FLD MTGTN	Upper Snoq	FCD Acqu/Elev		$120,000	$120,000	$2,400,000	$1,830,000	$1,830,000	$1,830,000	$2,265,000	$2,265,000	$12,420,000			$12,540,000	North Bend. Work with willing sellers to acquire eighteen homes at risk from channel migration along the Middle Fork (Project E in the draft Capital Investment Strategy)
12	WLFL1 MF SNO CORRIDOR PLAN	Upper Snoq	FCD Const	$1,658,993	$1,852,497	$193,504	$0	$0	$0	$0	$0	$0	$0			$1,852,497	North Bend. Middle Fork Snoqualmie Corridor Planning, scheduled for completion in 2018.
13	WLFL1 MF SNO PL84-99	Upper Snoq	FCD Const		$75,000	$75,000	($75,000)	$0	$0	$0	$0	$0	($75,000)			$0	North Bend. Upgrade the Middle Fork Snoqualmie levees to meet the US Army Corps of Engineers PL84-99 certification standards.
14	WLFL1 NORMAN CREEK DS CULV	Upper Snoq	Agreement	$722,080	$724,000	$1,920	$0	$0	$0	$0	$0	$0	$0			$724,000	North Bend. Replace two existing rusted out 48" corrugated metal pipes on Norman Creek under 428th Ave SE with a new precast concrete box culvert. The new culvert will reduce the time it takes to drain the flood waters off of private property by increasing the capacity of the crossing. Currently when the North Fork Snoqualmie River overflows water backs up against 428th and impedes use of the roadway as the Norman Creek crossing is the normal outflow for this flood water once the North Fork has overtopped the adjacent levees.
15	WLFL1 NORMAN CREEK US 2024 CULV	Upper Snoq	Agreement		$0	$0	$0	$0	$350,000	$750,000	$0	$0	$1,100,000			$1,100,000	North Bend. Improve SE 92nd Street, east of 428th Street, and alleviate roadway flooding by installing a new box culvert.
16	WLFL1 NORTH FORK BRIDGE FEASIBILITY	Upper Snoq	Agreement	$10,265	$200,000	$189,735	$160,265	$0	$0	$0	$0	$0	$160,265			$360,265	North Bend. Initiate feasibility study to mitigate the risk of scour damage to the North Fork Bridge by retrofitting the existing structure with deep foundations or alternative risk mitigation strategies.
17	WLFL1 RECORD OFFICE 2016 REPAIR	Upper Snoq	Agreement	$168,985	$987,835	$818,850	$2,391,493	$0	$0	$0	$0	$0	$2,391,493			$3,379,328	Snoqualmie. Repair downstream 200 lineal feet of facility which is missing face rock and toe rock. A significant scour hole has formed around a City of Snoqualmie stormwater outfall pipe at the downstream end of facility. Potential erosion impact to Park Ave SE in City of Snoqualmie, an area included in the City's planned "Riverwalk" park and trail project. Project implemented by City of Snoqualmie as part of Riverwalk project, construction is scheduled for 2020.
18	WLFL1 REIF RD LEVEE IMPROVEMENTS	Upper Snoq	FCD Const		$0	$0	$0	$0	$265,438	$318,421	$385,937	$457,218	$1,427,014			$1,427,014	North Bend. Conduct a feasibility study to determine ways of preventing the overtopping of the Reif Rd Levee. Potential solutions include: repair and/or raise levee in place / setback levee / gravel removal / home elevations.
19	WLFL1 REINIG RD ELEVATION	Upper Snoq	Agreement		$0	$0	$0	$0	$0	$0	$50,000	$100,000	$150,000			$150,000	Snoqualmie. Elevate low section of Reinig Rd to alleviate flooding that blocks roadway.
20	WLFL1 REINIG RD RVTMNT 2016 REPAIR	Upper Snoq	FCD Const	$914,143	$1,314,143	$400,000	$3,943,514	$0	$0	$0	$0	$0	$3,943,514			$5,257,657	North Bend. Repair three primary damage sites just upstream and directly across from the South Fork Snoqualmie confluence totaling ~285 lineal feet. Construction is anticipated in 2021.

No.	Title	Basin	Type of project	2019 Inception to Date Expenditure	2020 Inception to Date Budget	2020 Available Budget	2021 Requested	2022 Forecasted	2023 Forecasted	2024 Forecasted	2025 Forecasted	2026 Forecasted	6-Year CIP Total	CIS Year 7-10	CIS 10+ Year	Project Life Total	Comments
21	WLFL1 REINIG FISH ACCESS PLACEHOLDER	Upper Snoq	FCD Const	$0	$0	$0	$0	$1,000,000	$0	$0	$0	$0	$1,000,000			$1,000,000	North Bend. Address flooding from Ribary Creek at Bendigo Blvd in North Bend as the Snoqualmie levees prevent drainage to the river during high flows.
22	WLFL1 RIBARY CREEK N BEND	Upper Snoq	Agreement	$0	$186,492	$186,492	$450,000	$2,338,618	$3,223,883	$0	$0	$0	$6,012,501			$6,198,993	North Bend. Address flooding from Ribary Creek at Bendigo Blvd in North Bend as the Snoqualmie levees prevent drainage to the river during high flows.
23	WLFL1 SF CIS LONG TERM	Upper Snoq	FCD Const		$0	$0	$0	$0	$0	$0	$0	$0	$0		$57,100,000	$57,100,000	North Bend. Implement projects identified in the Capital Investment Strategy, approved as policy direction by the Executive Committee.
24	WLFL1 SF CIS MED TERM	Upper Snoq	FCD Const		$0	$0	$0	$0	$0	$0	$0	$0	$0	$43,000,000		$43,000,000	North Bend. Implement projects identified in the Capital Investment Strategy, approved as policy direction by the Executive Committee.
25	WLFL1 SF SNO LEVEE REMEDIATION	Upper Snoq	FCD Const	$198,682	$388,000	$189,318	($183,318)	$0	$0	$0	$0	$0	($183,318)			$204,682	North Bend. Six levee deficiencies have been identified in this leveed segment. The project will design and reconstruct the impaired segment of levee in place.
26	WLFL1 SHAKE MILL LB 2016 REPAIR	Upper Snoq	FCD Const	$2,739,161	$3,550,000	$810,839	($410,839)	$0	$0	$0	$0	$0	($410,839)			$3,139,161	North Bend. Total breach of levee - erosion and lateral channel migration is ongoing. No immediately adjacent private property or infrastructure. Continued erosion could threaten 428th Ave embankment or bridge.
27	WLFL1 SHAKE MILL RB 2016 REPAIR	Upper Snoq	FCD Const	$47,340	$351,090	$303,750	$248,910	$0	$0	$0	$0	$0	$248,910			$600,000	North Bend. Between 428th St Bridge and Tate Creek, several locations on levee where toe-rock dislodged and corresponding minor bank erosion along 50-60 feet of river bank. Actual gaps range between 6-10 feet. Missing toe rock compromises levee integrity, increasing its vulnerability to further scour and potential failure. Failure of this facility could result in damage to a heavily used county road (428th Ave SE). Scheduled for 2018 construction.
28	WLFL1 SI VIEW RM4 2017 REPAIR	Upper Snoq	FCD Const	$288,037	$396,754	$108,717	$0	$0	$0	$0	$0	$0	$0			$396,754	North Bend. Repair approximately 25 lineal feet of the facility with missing toe rock and shallow scour scallop into bank that is approximately 1-2 feet deep. Si View Levee is a relatively short flood containment levee that protects 50+ homes in the Si View Park Neighborhood of North Bend from flooding. Project scheduled for 2018 construction.
29	WLFL1 SR202 SF BRIDGE LENGTHEN	Upper Snoq	FCD Const		$0	$0	$0	$0	$0	$0	$0	$100,000	$100,000			$100,000	North Bend. Placeholder funding to partner with WSDOT to expand bridge SR202 opening over South Fork Snoqualmie River and Ribary Creek to improve conveyance and reduce upstream flood impacts. Supported by North Bend. Requires state or federal funding. Relative contribution of this project is being evaluated in the SF Snoqualmie Corridor Plan.
30	WLFL1 TATE CR SCOUR FEASIBILITY	Upper Snoq	Agreement		$0	$0	$0	$0	$150,000	$0	$0	$0	$150,000			$150,000	North Bend. Prepare a Concept Development Report (CDR) to analyze and select best span/alignment replacement bridge and road-raising option as the current bridge does not provide enough hydraulic opening due to the transport of sediments and water overtops the approaches during floods.
31	WLFL1 UPR SNO RES FLD MITIGTN	Upper Snoq	FCD Acqu/Elev	$11,552,715	$14,123,587	$2,570,872	$295,755	$2,364,628	$2,435,567	$2,508,634	$2,583,893	$2,583,893	$12,772,370			$26,895,957	Snoqualmie. This project will continue to acquire or elevate flood-prone structures in the Upper Snoqualmie basin to reduce the risk of flood, erosion, and channel migration damage. Partnership with City of Snoqualmie to elevate homes and cost-share acquisition of homes where City is planning to construct the Riverwalk project.
32	WLFL1 USACE PL 84-99 UPPER SNO	Upper Snoq	FCD Const	$40,136	$333,377	$293,241	($48,241)	$0	$0	$0	$0	$0	($48,241)			$285,136	North Bend. Ensure eleven South Fork Snoqualmie River levees meet the standards of the US Army Corps of Engineers PL 84-99 program in order to receive future assistance from the Corps in the event of flood damage to the levees..
33	WLFL2 264TH AVE NE AT SR 202 FLD IMPRVMNT	Lower Snoq	Agreement		$0	$0	$0	$0	$0	$0	$540,000	$0	$540,000			$540,000	Redmond. Alleviate flooding on this sole access road by replacing the existing culverts and raising the roadway to elminate over-topping during flood events.
34	WLFL2 334TH AVE SE & SE 43RD PL FLD IMPRVMNT	Lower Snoq	Agreement		$0	$0	$0	$0	$0	$0	$500,000	$0	$500,000			$500,000	Fall City. Improve drainage to alleviate neighborhood flooding by constructing a drainage system to flow to the Snoqualmie River.
35	WLFL2 DUTCHMAN RD REPAIR	Lower Snoq	FCD Const	$5,823	$105,823	$100,000	$192,770	$1,450,000	$0	$0	$0	$0	$1,642,770			$1,748,593	Duvall. Repair approximately 200 feet of revetment. Dutchman Road in this location provides the sole access to residences and business on the west side of the Snoqualmie Valley downstream of Duvall. Continued erosion of the revetment could result in erosion of the road (West Snoqualmie Valley Road NE) which would severely limit access to the downstream property owners during or following a flood event.
36	WLFL2 DUVALL SLOUGH 2017 IMPRV	Lower Snoq	Agreement	$277,937	$400,000	$122,063	($122,063)	$0	$0	$0	$0	$0	($122,063)			$277,937	Duvall. These two bridges are subject to having the roadway approach fill wash out during a flood. Excavate approaches and rebuild approaches to prevent loosing approaches during flooding. A similar repair was done on Woodinville-Duvall Bridge No. 1136D.
37	WLFL2 FALL CITY FLOODPLAIN RESTORATION	Lower Snoq	Agreement	$0	$0	$0	$300,000	$0	$0	$0	$0	$0	$300,000			$300,000	Fall City. Project will reconnect floodplain, removing the aging Hafner and Barfuse facilities and replacing with modern flood and erosion protection features. FCD cost-share funding is intended for design of flood risk reduction features.
38	WLFL2 FISH HATCHERY RD BR #61B REPAIR	Lower Snoq	Agreement	$0	$80,000	$80,000	$434,000	$186,000	$0	$0	$0	$0	$620,000			$700,000	Duvall. Strengthen the bridge structure to stabilize it after the most recent flood event, rebuild the east approach roadway to address the current issue and to protect it against major flood events in the future, and restore the eroded creek bed and riverbank profile to buffer the bridge against scour.
39	WLFL2 JOY 2020 REPAIR	Lower Snoq	FCD Const	$0	$100,000	$100,000	$500,000	$500,000	$2,620,000	$0	$0	$0	$3,620,000			$3,720,000	Duvall. Design and repair approximately 800 linear feet of bank erosion along the Joy Revetment on the left bank of the Snoqualmie River across from the City of Duvall. Bank erosion is undermining an existing road.

No.	Title	Basin	Type of project	2019 Inception to Date Expenditure	2020 Inception to Date Budget	2020 Available Budget	2021 Requested	2022 Forecasted	2023 Forecasted	2024 Forecasted	2025 Forecasted	2026 Forecasted	6-Year CIP Total	CIS Year 7-10	CIS 10+ Year	Project Life Total	Comments
40	WLFL2 L SNO 2019 BANK REPAIR	Lower Snoq	Agreement	$1,111,942	$2,200,000	$1,088,058	$0	$0	$0	$0	$0	$0	$0			$2,200,000	Fall City. The river is scouring the road away and David Powell Road is collapsing into the river. This project will repair an existing failing revetment and extend MSE wall to prevent undercutting of the riverbank and roadway.
41	WLFL2 L SNO REP LOSS MITGTION	Lower Snoq	FCD Acqu/Elev	$1,279,413	$1,695,671	$416,258	($416,258)	$0	$0	$0	$0	$0	($416,258)			$1,279,413	Carnation. Funding as possible local match for FEMA grants to elevate or acquire at-risk structures.
42	WLFL2 L SNO SCOUR REPAIR 2017	Lower Snoq	Agreement	$142,411	$150,000	$7,589	($7,589)	$0	$0	$0	$0	$0	($7,589)			$142,411	Fall City. The foundation of the main-span pier is exposed and is vulnerable to destabilization during a flood. Add scour mitigation measures to protect footing. Bridge crosses the Snoqualmie River at Duvall and is the city's primary route.
43	WLFL2 L SNO/ALDAIR CORRDOR PLN	Lower Snoq	FCD Const	$7,019,214	$7,365,814	$346,600	($276,600)	$50,000	$420,000	$20,000	$20,000	$20,000	$253,400			$7,619,214	Fall City. Cost-shared contribution to multiple levee setbacks and high priority flood risk reduction acquisitions in the Fall City reach of the Lower Snoqualmie. Projects reduce flood and erosion risk to revetments, roads, and landowners. FCD expenditure leverages habitat restoration funding from other sources.
44	WLFL2 LWR SNO RESDL FLD MITGTN	Lower Snoq	FCD Acqu/Elev	$2,230,892	$3,316,472	$1,085,580	$0	$500,000	$500,000	$500,000	$500,000	$500,000	$2,500,000			$5,816,472	Carnation. This project provides technical and cost-sharing assistance to residential and agricultural landowners in the Lower Snoqualmie floodplain to help them better withstand the impacts of flooding. Specific project actions include farm pads, elevations of homes, and elevation or flood proofing of agricultural structures.
45	WLFL2 MUD CREEK SEDIMENT FACILITY	Lower Snoq	FCD Const		$432,000	$432,000	$0	$0	$0	$0	$0	$0	$0			$432,000	Snoqualmie. Design and permit a sediment facility to minimize sediment deposition, flooding, and channel avulsions at this site.
46	WLFL2 SE 19TH WAY REVETMENT	Lower Snoq	FCD Const	$1,835,637	$1,916,294	$80,657	$0	$0	$0	$0	$0	$0	$0			$1,916,294	Fall City. Rebuild revetment to protect road access to high value agricultural operations and lands. Construction is complete.
47	WLFL2 SNOQUALMIE VALLEY FEAS	Lower Snoq	Agreement	$0	$0	$0	$250,000	$250,000	$0	$0	$0	$0	$500,000			$500,000	Duvall. Regional flooding in the Snoqualmie Valley cuts off access to eastern cities. Determine which major roadway(s) that cross the Snoqualmie Valley would be the most cost effective to improve in the valley with chronic flood issues impacting over 25,000 daily drivers.
48	WLFL2 STOSSEL LONG TERM REPAIR	Lower Snoq	FCD Const	$0	$100,000	$100,000	$350,000	$450,000	$2,500,000	$120,000	$0	$0	$3,420,000			$3,520,000	Carnation. Placeholder costs for long-term facility improvement project to prevent erosion undermining 310th Ave NE.
49	WLFL2 STOSSEL RB 2018 REPAIR	Lower Snoq	FCD Const	$970,781	$1,107,886	$137,105	$0	$0	$0	$0	$0	$0	$0			$1,107,886	Carnation. This completed project repaired approximately 250 feet of damage identified in late March 2018 to a section of the Stossel Bridge Right Bank Revetment on the Snoqualmie River, downstream of the City of Carnation.
50	WLFL2 TOLT PIPELINE PROTECTION	Lower Snoq	FCD Const	$10,644,758	$10,778,068	$133,310	$0	$0	$0	$0	$0	$0	$0			$10,778,068	Carnation. This project will repair approximately 800 linear feet of the Winkelman (formerly RM 13.5) revetment. Erosion along the right bank of the Snoqualmie River channel threatens to undermine the Seattle Public Utilities water supply line at this location south of Duvall. Construction is complete.
51	WLFL3 FREW LEVEE 2016 REPAIR	Tolt	FCD Const	$168,880	$360,360	$191,480	$0	$0	$0	$0	$0	$0	$0			$360,360	Carnation. Face rock displaced along approximately 50 feet of levee face. Some core material appears to have been lost, resulting in an over steepened bank relative to upstream and downstream undamaged levee sections. Top of damaged face approximately 6 feet from edge of gravel trail. Continued erosion will cut off popular riverside trail. Potential impact to highway if facility breaches during a major flood. Construction is complete.
52	WLFL3 GIRL SCOUT LEVEE 2016 REPAIR	Tolt	FCD Const	$166,079	$311,000	$144,921	($144,921)	$0	$0	$0	$0	$0	($144,921)			$166,079	Carnation. Repair approximately 20 feet of face and toe rock dislodged from Girl Scout Camp levee revetment below side channel confluence with mainstem. Missing face and toe rock compromises levee integrity, increasing its vulnerability to further scour and potential failure. Scheduled for 2018 construction.
53	WLFL3 HOLBERG 2019 REPAIR	Tolt	FCD Const	$0	$50,000	$50,000	$0	$450,000	$0	$0	$0	$0	$450,000			$500,000	Carnation. Facility failure has consequences for property owners immediately landward of facility. Potential for high flows and erosive damage to residences and property.
54	WLFL3 HOLBERG FEASIBILITY	Tolt	FCD Const	$211,557	$401,061	$189,504	$11,088	$0	$0	$0	$0	$0	$11,088			$412,149	Carnation. Feasibility study to determine the nature and extent of levee improvements necessary to remove four homes in unincorporated King County from the regulatory Channel Migration Zone as mapped in the March 2017 Draft Tolt River Channel Migration study
55	WLFL3 LOWER FREW LEVEE SETBACK	Tolt	FCD Const	$215,777	$578,664	$362,887	$437,113	$850,000	$700,000	$14,650,000	$100,000	$0	$16,737,113			$17,315,777	Carnation. Capital Investment Strategy. Design, based on level of service analysis, the highest priority levee setback for flood risk reduction. Phase 2 construction estimated in CIS at $14.5M-$16.7M
56	WLFL3 LOWER TOLT RIVER ACQUISITION	Tolt	FCD Acqu/Elev	$529,475	$1,379,475	$850,000	$0	$30,000	$200,000	$200,000	$645,000	$550,000	$1,625,000			$3,004,475	Carnation. Acquire high-priority flood risk reduction properties in the lower two miles of the Tolt River consistent with the adopted Capital Investment Strategy.
57	WLFL3 REMLINGER LEVEE 2017 REPAIR	Tolt	FCD Const	$143,033	$311,000	$167,967	$0	$0	$0	$0	$0	$0	$0			$311,000	Carnation. Damage is approximately 60 lineal feet of the facility with missing toe rock and undermined face rock near the Snoqualmie Valley Trail. The damage is at the downstream end of Remlinger facility and a breach or continued erosion would increase flooding impacts on portions of the Remlinger property. Construction complete.
58	WLFL3 RIO VISTA PROPERTY ACQ	Tolt	FCD Acqu/Elev	$203	$1,432,203	$1,432,000	$1,638,000	$1,750,000	$1,750,000	$1,750,000	$1,750,000	$0	$8,638,000			$10,070,203	Carnation. Capital Investment Strategy: Acquire 2 at-risk homes from willing sellers; acquire remaining 14 homes as funds become available.
59	WLFL3 SAN SOUCI NBRHOOD BUYOUT	Tolt	FCD Acqu/Elev	$4,588,674	$5,169,674	$581,000	$30,000	$0	$400,000	$0	$0	$0	$430,000			$5,599,674	Carnation. This project will buyout remaining properties and remove all homes and privately-constructed rubble levee at upstream end of the community access road, ultimately completing project initiated 20 years ago by others. Approximately 20 homes removed from high hazard areas within and just upstream and downstream of San Souci neighborhood.

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60	WLFL3 SEDIMENT MGMT FEAS	Tolt	FCD Const	$113,706	$441,358	$327,652	($177,652)	$0	$0	$0	$0	$0	($177,652)			$263,706	Carnation. Capital Investment Strategy: Conduct sediment management feasibility study and develop a plan. Update and include upper watershed sediment production estimates.
61	WLFL3 SR 203 BR IMPRVMNTS FEAS	Tolt	FCD Const	$22,658	$395,900	$373,242	$0	$0	$0	$0	$0	$0	$0			$395,900	Carnation. Capital Investment Strategy: Initiate study (with potential future design and construct) to add bridge span(s), raise the highway and relocate King County Parks parking area.
62	WLFL3 TOLT CIS LONG TERM	Tolt	FCD Const		$0	$0	$0	$0	$0	$0	$0	$0	$0		$28,800,000	$28,800,000	Carnation. Implement projects identified in the Capital Investment Strategy, approved as policy direction by the Executive Committee.
63	WLFL3 TOLT CIS MED TERM	Tolt	FCD Const		$0	$0	$0	$0	$0	$0	$0	$0	$0	$56,250,000		$56,250,000	Carnation. Implement projects identified in the Capital Investment Strategy, approved as policy direction by the Executive Committee.
64	WLFL3 TOLT CORRIDOR PLAN	Tolt	FCD Const	$1,139,227	$1,153,657	$14,430	$0	$0	$0	$0	$0	$0	$0			$1,153,657	Carnation. The corridor plan for the lower 6 miles of the Tolt River will develop a prioritized implementation strategy for near-term and long-term floodplain management actions. This project is scheduled for adoption in 2017.
65	WLFL3 TOLT R LEVEE L.O.S. ANALYSIS	Tolt	FCD Const	$344,315	$756,624	$412,309	$185,191	$30,400	$0	$0	$0	$0	$215,591			$972,215	Carnation. Capital Investment Strategy: Conduct a detailed hydraulic analysis to optimize the elevation of new levees to maximize flood risk reduction benefits
66	WLFL3 TOLT R MILE 1.1 ACQ	Tolt	FCD Acqu/Elev	$4,214,727	$4,255,325	$40,598	($40,348)	$0	$0	$0	$0	$0	($40,348)			$4,214,977	Carnation. Acquisition funding for high risk properties in levee setback project area. Project priorities will be determined by the Board through adoption of the Tolt Corridor Plan.
67	WLFL3 TOLT R NATURAL AREA ACQ	Tolt	FCD Acqu/Elev	$2,555,550	$4,185,550	$1,630,000	$0	$50,000	$700,000	$0	$0	$0	$750,000			$4,935,550	Carnation. Capital investment strategy: acquire at-risk homes from willing sellers.
68	WLFL3 TOLT R RD ELEVATION FEASIBILITY	Tolt	FCD Const	$50,160	$250,000	$199,840	$0	$0	$0	$0	$0	$0	$0			$250,000	Carnation. Reduce neighborhood isolation from flooding. Evaluate feasibility of elevating sections of Tolt River Road.
69	WLFL3 TOLT R RD NE IMPROVEMENTS	Tolt	FCD Const	$0	$0	$0	$0	$53,045	$109,273	$225,102	$1,043,347	$1,432,863	$2,863,630			$2,863,630	Carnation. Capital Investment Strategy: Initiate design for elevation of one road location to reduce or eliminate isolation. Implement additional road elevations as funds become available.
70	WLFL3 TOLT R RD SAN SOUCI ELEVATION	Tolt	FCD Const	$12,722	$185,000	$172,278	$200,000	$700,000	$700,000	$825,000	$0	$0	$2,425,000			$2,610,000	Carnation. Capital Investment Strategy: Construct Tolt Road NE road elevation in one location. Remove illegal revetment and roads in San Souci neighborhood.
71	WLFL3 UPPER FREW LEVEE SETBACK	Tolt	FCD Const	$0	$50,000	$50,000	$0	$159,000	$175,000	$1,200,000	$1,500,000	$14,800,000	$17,834,000			$17,884,000	Carnation. Capital Investment Strategy: Initiate the levee setback design in order to apply for grant funding. Levee setback to increase sediment storage and floodwater conveyance; protect adjacent development; reduce damage to trail bridge.
72	WLFL4 ALPINE MANOR NEIGHBORHOOD BUYOUTS	Raging	FCD Acqu/Elev	$1,753,810	$1,853,460	$99,650	($69,650)	$400,000	$0	$0	$0	$0	$330,350			$2,183,810	Fall City. Acquisition of single-family homes and future acquisition of mobile home park at risk of channel migration along the Raging River in the Alpine Manor neighborhood.
73	WLFL4 RAGING MOUTH TO BR 2017 REPAIR	Raging	FCD Const	$266,859	$500,000	$233,141	($233,141)	$0	$0	$0	$0	$0	($233,141)			$266,859	Fall City. Repair 150 lineal feet of discontinuous damage and missing toe rock. The levee protects the landward area from flooding and serves as the road embankment for Dike Rd, an access road to the Fall City boat launch. The damaged levee section is immediately adjacent to the Twin Rivers golf course barn, which would experience greater flooding if the levee were breached. Scheduled for 2018 construction.
74	WLFL4 RAGING SCOUR REPAIR 2017	Raging	Agreement	$25,062	$80,000	$54,938	$0	$0	$0	$0	$0	$0	$0			$80,000	Fall City. This bridge has a history of scour damage. One of the arch foundations is exposed. Repair scour mitigation measures to protect the footing. It serves only one house but is a designated King County Landmark.
75	**Snoqualmie-South Fork Skykomish Subtotal**			$63,925,577	$88,444,612	$24,519,038	$16,770,601	$17,960,991	$21,566,356	$29,492,387	$13,489,177	$28,608,974	$127,888,486	$105,030,000	$85,900,000	$407,263,098	
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78	WLFL5 ALLEN LK OUTLET IMPRVMNT	Sammamish	Agreement	$0	$400,000	$400,000	$445,000	$1,365,000	$585,000	$0	$0	$0	$2,395,000			$2,795,000	Sammamish. To address chronic flooding on this sole access roadway with approximately 200 properties, look at upstream and downstream retention/detention options; study road-raining options; prepare Concept Development Report, analyze and select best options.
79	WLFL5 BAYLESS 2020 REPAIR	Sammamish	FCD Const		$50,000	$50,000	$0	$0	$0	$0	$0	$0	$0			$50,000	Issaquah. The Bayless Revetment protects a sole access bridge to a residential community (about 70 homes) in the City of Issaquah. The facility was flanked and/or overtopped during the flood resulting in flooding of the low lying Sycamore neighborhood in the City of Issaquah behind the revetment. Continued erosion may result in damage to the bridge and ongoing flooding to the neighborhood.
80	WLFL5 GEORGE DAVIS CRK CITY OF SAMMAMISH	Sammamish	Agreement		$400,000	$400,000	$0	$0	$0	$0	$0	$0	$0			$400,000	Sammamish. This project will restore access to one river mile of high quality kokanee salmon habitat and reduce the risk of flooding by reducing sediment deposition.
81	WLFL5 IRWIN R 2020 REPAIR	Sammamish	FCD Const		$25,000	$25,000	$275,000	$0	$0	$0	$0	$0	$275,000			$300,000	Issaquah. Further damage to the facility could cut off the sole access to one resident (via a private road and bridge over the creek).
82	WLFL5 JEROME 2020 REPAIR	Sammamish	FCD Const		$50,000	$50,000	$200,000	$0	$0	$0	$0	$0	$200,000			$250,000	Issaquah. The Jerome Revetment protects three private residences in the City of Issaquah. Erosion of the revetment could result in loss of property and damage to private utilities. Loss of bank in front of middle property. 70 linear feet (LF) of erosion.
83	WLFL5 MOMB 2020 REPAIR	Sammamish	FCD Const		$50,000	$50,000	$60,000	$300,000	$350,000	$0	$0	$0	$710,000			$760,000	Issaquah. Damage to the SE 156th St. road next flood season could cut off the sole access to a community of about 30 homes. More erosion at the downstream end of the facility may further destabilize the steep slope of the landslide and threaten downstream homeowners.

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84	WLFL5 WILLOWMOOR FLDPLAIN REST	Sammamish	FCD Const	$3,223,377	$3,520,977	$297,600	$1,000,000	$0	$0	$0	$0	$0	$1,000,000			$4,520,977	Redmond. Willowmoor Floodplain Restoration Project seeks to reduce the frequency and duration of high lake levels in Lake Sammamish while maintaining downstream Sammamish River flood control performance and enhancing habitat. The project will reconfigure the Sammamish transition zone to ensure ongoing flow conveyance, downstream flood control, potential extreme lake level reduction, habitat conditions improvement, and reduction of maintenance impacts and costs. Project is currently on hold pending completion of a 3rd party review scheduled to be completed in December 2020. The 2021 funding shown here is a placeholder only pending the outcome of the review.
85	WLFL6 BEAR CRK FLOOD EROSION REDMOND	Lk Wash Tribs	Agreement		$550,000	$550,000	$550,000	$0	$0	$0	$0	$0	$550,000			$1,100,000	Redmond. Protect Avondale Rd from an embankment that has been scoured by floodwaters from Bear Creek.
86	WLFL6 FACTORIA BLVD DRAINAGE	Lk Wash Tribs	Agreement		$1,071,000	$1,071,000	$3,721,000	$2,022,000	$0	$0	$0	$0	$5,743,000			$6,814,000	Bellevue. Reduce flooding during high-intensity storm events along Factoria Boulevard, a major transportation corridor within the City of Bellevue. These events have increased in frequency and are anticipated to be even more frequent in the future as a result of climate change.
87	WLFL6 ISSAQUAH TRIB FEAS	Lk Wash Tribs	Agreement	$233,156	$350,000	$116,844	$0	$0	$0	$0	$0	$0	$0			$350,000	Issaquah. Prepare a feasibility analysis report which will include, but is not limited to, surveying, geotechnical analysis, traffic analysis, and hydraulic analysis to idenify potential solutions to bridge deficiencies, including a constructed hydraulic opening with piles that collect debris and pose risks to the stability of the bridge.
88	WLFL6 LOWER COAL CRK PH I	Lk Wash Tribs	Agreement	$7,754,240	$11,061,592	$3,307,352	$300,000	$200,000	$285,000	$1,310,000	$1,432,358	$0	$3,527,358			$14,588,950	Bellevue. Increase conveyance capacity at the five box culvert crossings. Disconnect local storm drainage outfall from Coal Creek and redirect them to Lake Washington. Implemented by City of Bellevue. Expenditure forecast to be updated based on current project schedule.
89	WLFL6 148TH AVE SE LARSEN LK BELLEVUE	Lk Wash Tribs	Agreement	$0	$0	$0	$400,000	$0	$0	$0	$0	$0	$400,000			$400,000	Bellevue. Conduct a site assessment and initiate preliminary design to progress toward construction of best drainage treatments and resilient design to reduce or eliminate roadway flooding on 148th Ave SE. Improve high water flow capacity for Larsen Lake/Lake Hills Greenbelt to Kelsey Creek where it floods 148th Avenue SE during moderate to severe storm and longer duration rainfall periods.
90	WLFL6 MAY VALLEY DRAINAGE IMPRVMNT	Lk Wash Tribs	Agreement	$220,545	$530,000	$309,455	$0	$0	$0	$0	$0	$0	$0			$530,000	Newcastle. As recommended in the May Creek Basin Plan, two sediment traps will be constructed on May Creek tributaries (Cabbage and Country Creeks) to limit sediment loading. FCD funding is for initial feasibility analysis, landowner outreach, and acquisition of property from willing sellers for a future sediment facility. 2020 funding is for permitting and project design.
91	WLFL7 BELMONDO 2020 REPAIR	Cedar	FCD Const		$50,000	$50,000	$100,000	$550,000	$0	$0	$0	$0	$650,000			$700,000	Renton. Critical facilities (Utilities, CRT, SR 169). Regional impact extents. Potential human injury from sudden change in conditions. Generally exposed bank - damage likely to occur next major high-flow event.
92	WLFL7 BRODELL 2020 REPAIR	Cedar	FCD Const		$50,000	$50,000	$450,000	$800,000	$0	$0	$0	$0	$1,250,000			$1,300,000	Renton. Residential land use and critical facilities (Utilities, CRT, SR 169). Regional impact extents. Potential human injury from sudden change in conditions. Damage may occur next flood season/likelihood increasing.
93	WLFL7 BYERS 2020 REPAIR	Cedar	FCD Const		$25,000	$25,000	$0	$0	$0	$0	$0	$0	$0			$25,000	Renton. Emergency action to prevent flooding of Byers Road, which is the sole access/egress for numerous residences along the Cedar River.
94	WLFL7 BYERS NEIGHBORHOOD IMPROVEMENTS	Cedar	FCD Const	$0	$0	$0	$220,000	$300,000	$50,000		$0	$0	$570,000			$570,000	Renton. Capital Investment Strategy: Take several actions to reduce flood risk including construction of an emergency egress route, acquisition of flood-prone homes, and possible elevation of neighborhood roads. The Cedar CIS will be reviewed by the District in 2021 in light of changed conditions from the 2020 flood disaster.
95	WLFL7 CDR PRE-CONST STRTGC ACQ	Cedar	FCD Acqu/Elev	$3,986,708	$4,661,708	$675,000	$2,068,824	$1,600,000	$1,600,000	$1,600,000	$1,600,000	$1,600,000	$10,068,824			$14,730,532	Renton. This project will acquire strategic real estate upon which several large Flood Control District capital projects are dependent (Project J in the Capital Investment Strategy).
96	WLFL7 CEDAR CIS LONG TERM	Cedar	FCD Acqu/Elev		$0	$0	$0	$0	$0	$0	$0	$0	$0		$35,400,000	$35,400,000	Renton.Implement projects identified in the Capital Investment Strategy, approved as policy direction by the Executive Committee.
97	WLFL7 CEDAR CIS MED TERM	Cedar	FCD Acqu/Elev		$0	$0	$0	$0	$0	$0	$0	$0	$0	$22,000,000		$22,000,000	Renton.Implement projects identified in the Capital Investment Strategy, approved as policy direction by the Executive Committee.
98	WLFL7 CEDAR LEVEE SETBACK FEAS (Cedar Corridor	Cedar	FCD Const	$1,852,687	$1,987,587	$134,900	$0	$0	$0	$0	$0	$0	$0			$1,987,587	Renton. This six-year flood risk reduction capital investment strategy will cover the Cedar River valley from Landsburg Road SE (River Mile 22) to Lake Washington. Project complete. Closeout in 2020.
99	WLFL7 CEDAR R DWNSTREAM 2024 IMPV	Cedar	Agreement		$0	$0	$0	$0	$0	$100,000	$0	$0	$100,000			$100,000	Renton. Improve Cedar Grove Road near Byers Road SE and alleviate roadway flooding by raising the road through the application of a thick layer of overlay.
100	WLFL7 CEDAR RAPIDS ELJ6 2020 REPAIR	Cedar	FCD Const		$50,000	$50,000	$136,000	$0	$0	$0	$0	$0	$136,000			$186,000	Erosion and scour have resulted in loss of upper ballast, dislodging of key logs, shearing of piles, and damage to hardware connections, to an Engineered Log Jam (ELJ #6), within the Cedar Rapids reach.
101	WLFL7 CEDAR RES FLOOD MITIGATION	Cedar	FCD Acqu/Elev		$674,000	$674,000	$2,400,000	$1,600,000	$1,600,000	$1,600,000	$1,600,000	$1,600,000	$10,400,000			$11,074,000	Renton. Implement projects identified in the Capital Investment Strategy, approved as policy direction by the Executive Committee. Project K on the CIS: Risk analysis has identified 53 homes as high risk from flooding and channel migration, but which are not mitigated by projects. Elevate or purchase approximately 2 homes per year.

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102	WLFL7 CEDAR RVR GRAVEL REMOVAL	Cedar	Agreement	$9,831,778	$12,566,549	$2,734,771	$268,551	$200,000	$203,000	$500,000	$500,000	$0	$1,671,551			$14,238,100	Renton. The project ensures the minimum required 100-year flood conveyance capacity along the lower 1.25 miles of the Cedar River. Project is a required maintenance action by the Army Corps of Engineers Section 205 Flood Control Project. Maintenance dredging took place in 2016. Project funding shown herein represent post construction mitigation monitoring and reporting as well as the planning and design of the next dredging project. Additional funding will be needed beyond 2026 to cover permitting, mitigation plan development, construction, mitigation and post-construction monitoring work associated with the next cycle of dredging.
103	WLFL7 CITY OF RENTON LEVEE CERTIFICATION	Cedar	Agreement	$0	$5,000,000	$5,000,000	$0	$0	$0	$0	$0	$0	$0			$5,000,000	Renton. Levee improvements necessary to satisfy levee certification engineering recommendations.
104	WLFL7 CRT SITE 2 2020 REPAIR	Cedar	FCD Const		$1,178,000	$1,178,000	$55,000	$0	$0	$0	$0	$0	$55,000			$1,233,000	Renton. This emergency action will armor up to 300 feet river bank and construct a buried revetment to stabilize the bank and prevent further erosion to the most damaged portion. This emergency action and the subsequent extension are upstream of the CRT 2 revetment in an area referred to as "Zone B."
105	WLFL7 CRT SITE 5 2020 REPAIR	Cedar	FCD Const		$100,000	$100,000	$250,000	$500,000	$750,000	$0	$0	$0	$1,500,000			$1,600,000	Renton. Erosion and scour have resulted in loss of toe and bank rock, oversteepened and undercut banks (some portions cantilevered). Scour has undermined numerous large trees, likely to fall into the channel likely resulting in further damage of the bank. Damage is observed along approximately 350 feet of facility, near the upstream end.
106	WLFL7 CRT SITE A BANK	Cedar	FCD Const	$23,690	$208,302	$184,612	$0	$0	$0	$0	$0	$0	$0			$208,302	Renton. Capital Investment Strategy: Repair eroded section of left bank with bioengineered revetment to stabilize toe of bank and to prevent large scale bank failure.
107	WLFL7 CRT2 ZONE D 2020 REPAIR	Cedar	FCD Const		$50,000	$50,000	$143,000	$0	$0	$0	$0	$0	$143,000			$193,000	Renton. Critical facilities (Utilities, CRT, SR 169). Regional impact extents. Potential human injury from sudden change in conditions. Damage may occur next flood season/likelihood increasing. This damage is to the CRT 2 revetment downstream of the emergency repair site listed separately; area is referred to as "Zone D".
108	WLFL7 DORRE DON AVULSION ANALYSIS	Cedar	FCD Const		$50,000	$50,000	$50,000	$0	$0	$0	$0	$0	$50,000			$100,000	Renton. The main channel has avulsed into the previous left floodplain, leading to erosion of the channel bank, adjacent to 231st Pl SE.
109	WLFL7 DORRE DON NBHOOD IMPRVMNT	Cedar	FCD Const	$0	$0	$0	$2,400,000	$0	$0	$0	$0	$0	$2,400,000			$2,400,000	Renton. Capital Investment Strategy: This project will acquire flood-prone homes per the Cedar CIS, as well as evaluate if changes to the levee and road elevation will result in meaningful flood risk reduction and to determine what level of protection can be provided. The study would also evaluate other structural improvements such as raising Lower Dorre Don Way SE upstream and downstream of the trail crossing and farther downstream near RM 16.3. The Cedar CIS will be reviewed by the District in 2021 in light of changed conditions from the 2020 flood disaster.
110	WLFL7 FBD CORRIDOR IMPLEMENTATION	Cedar	FCD Acqu/Elev	$5,836,796	$5,836,796	$0	$0	$0	$0	$0	$0	$0	$0			$5,836,796	Renton. Washington State Floodplains by Design grant from the Department of Ecology. The project will buyout residents in high risk areas, increase the capacity for flood storage, and provide corresponding environmental improvements. The project has cost-share funding from the City of Seattle. Also funds design elements of the Herzman project and Riverbend.
111	WLFL7 HERZMAN LEVEE SETBACK	Cedar	FCD Const	$1,297,391	$2,154,391	$857,000	$0	$150,000	$4,200,000	$50,000	$0	$0	$4,400,000			$6,554,391	Renton. Capital Investment Strategy: Setback levee; excavate side-channel to reduce pressure on revetment; reconstruct, reinforce and/or extend revetment; acquire up to 5 properties.
112	WLFL7 ISSAQUAH MAY VALLEY IMPV	Cedar	Agreement	$88,319	$100,000	$11,681	$0	$0	$0	$0	$0	$0	$0			$100,000	Issaquah. This project will construct improvements to the intersection which could be either a roundabout or additional travel lanes with a travel signal at the intersection of Issaquah Hobart Road SE and SE May Valley Road.
113	WLFL7 JAN ROAD NEIGHBORHOOD	Cedar	FCD Const	$667,183	$2,106,868	$1,439,685	$672,562	$7,127,975	$50,000	$0	$0	$0	$7,850,537			$9,957,405	Renton. Capital Investment Strategy: Suite of solutions to be determined as part of feasibility study. Includes raise road, partial removal of Jan Road levee, construction of side channel, and mitigation of at-risk properties. Construction phased for mitigation in 2021 and other improvements in 2023.
114	WLFL7 LOWER CEDAR FEASIBILITY STUDY	Cedar	Agreement	$1,390	$400,000	$398,610	$120,000	$0	$0	$0	$0	$0	$120,000			$520,000	Renton. Capital Investment Strategy: Conduct feasibility study of Lower Cedar reach in City of Renton to 1) quantity economic damage potential 2) determine infrastructure modifications to improve flood resiliency and sediment storage potential, and 30 conduct cost-benefit analysis.
115	WLFL7 LOWER JONES ROAD NEIGHBORHOOD	Cedar	FCD Const	$202,956	$1,898,466	$1,695,510	$681,352	$235,089	$4,540,762	$1,631,719	$0	$0	$7,088,922			$8,987,388	Renton. Capital Investment Strategy: Raise in place or setback Jones Road; excavate and stabilize right bank to increase conveyance capacity; reinforce one revetment; remove portion of another revetment; acquire 8 at risk properties Construction delayed to 2024 to accommodate Jan Rd construction in 2021 or 2022.
116	WLFL7 MADSEN CR CULVERT 2017	Cedar	Agreement	$426,520	$3,326,000	$2,899,480	$0	$0	$0	$0	$0	$0	$0			$3,326,000	Renton. To address a culvert failure affecting approximately 10 properties, prepare Concept Development Report to analyze and select best culvert replacement and road-raising option; and analyze upstream and downstream retention/detention impacts.
117	WLFL7 MADSEN CR RENTON	Cedar	Agreement	$62	$635,000	$634,938	$0	$0	$0	$0	$0	$0	$0			$635,000	Renton. Design and implement phase I improvements to Madsen Creek to achieve 100-year level flood protection for properties south of SR 169 and 25-year level flood protection for properties north of SR 169.

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118	WLFL7 MAPLEWOOD FEASIBILITY STUDY	Cedar	FCD Const	$297,086	$490,246	$193,160	$0	$0	$0	$0	$0	$0	$0			$490,246	Renton. Capital Investment Strategy: Conduct site specific landslide risk assessment study; conduct a feasibility study to evaluate opportunities to modify the Erickson Levee. Pending results of landslide hazard analysis, FCD will consider options for a project.
119	WLFL7 RIVERBEND MHP ACQ	Cedar	FCD Acqu/Elev	$4,378,048	$5,231,042	$852,994	$0	$0	$0	$0	$0	$0	$0			$5,231,042	Renton. This project represents the Flood District contribution to a larger project that relocates mobile home park tenants and initiates preliminary engineering design for potential levee setback / realignment to reduce flood heights, velocities and channel migration risk in this reach. Disappropriate remainder after FCD portion of scope is complete.
120	WLFL7 SR 169 FLOOD REDUCTION	Cedar	FCD Const	$295,338	$785,003	$489,665	$2,593,492	$50,000	$0	$0	$0	$0	$2,643,492			$3,428,495	Renton. Conduct feasibility study in coordination with WSDOT to evaluate flood risk reduction opportunities, such as elevating SR 169, upgrading the local drainage infrastructure, and / or installation of back flow prevention gates. Funding added in 2019 pending FCD decision to move forward with preliminary design.
121	WLFL7 TABOR-CROWALL 2020 REPAIR	Cedar	FCD Const		$100,000	$100,000	$250,000	$800,000	$50,000	$0	$0	$0	$1,100,000			$1,200,000	Renton. Critical facilities (Utilities, CRT, SR 169). Regional impact extents. Potential human injury from sudden change in conditions. Generally exposed bank along 200 feet - damage likely to occur next major high-flow event.
122	**Cedar-Sammamish Subtotal**			$40,617,269	$67,773,527	$27,156,257	$19,809,781	$17,800,064	$14,263,762	$6,791,719	$5,132,358	$3,200,000	$66,997,684	$22,000,000	$35,400,000	$192,171,211	
123																	
124																	
125	WLFL8 BRISCOE LEVEE SETBACK	Green	Agreement	$21,193,077	$23,330,271	$2,137,194	$0	$0	$0	$0	$0	$0	$0			$23,330,271	Kent. Floodwall construction at four locations completed by the City of Kent. Final expenditures for the remainder of 2017 will include reimbursement for property acquisition and riparian plantings. The revised 2017 financial plan includes revenue of $4.1 million for the sale of the Rivers Edge Business Park. Per FCD 2016-20 Section 6, this revenue makes expenditure authority available for the Lower Russell Levee Setback project. The Briscoe project will be closed out once the District's ILA with Kent expires in 2018.
126	WLFL8 BRPS CONTROL BLDG RPLCMT	Green	FCD Const	$16,841	$2,007,382	$1,990,541	($1,344,864)	$200,000	$400,000	$3,257,382	$10,000,000	$980,100	$13,492,618			$15,500,000	Renton. This project will design and build the second phase of renovations to the Black River pump station. Major components include replacement of the control building, replacement of the trash rake system, and replacement of the screen spray system.
127	WLFL8 BRPS FISH PASS IMPRVMNTS	Green	FCD Const		$350,000	$350,000	$550,000	$600,000	$1,500,000	$1,350,000	$8,000,000	$8,350,000	$20,350,000			$20,700,000	Renton. This project will design and build the fourth phase of renovations to the Black River pump station, revising and replacing the obsolete fish passage systems.
128	WLFL8 BRPS HIGH-USE ENGINES	Green	FCD Const	$1,518,227	$5,433,776	$3,915,549	$4,256,549	$35,196	$0	$0	$0	$0	$4,291,745			$9,725,521	Renton. This project will design and build the first phase of renovations to the Black River pump station, replacing the three smaller pump engines which run much more frequently than the other, larger pump engines.
129	WLFL8 BRPS LARGE ENGINE REPLACEMENT	Green	FCD Const	$0	$0	$0	$0	$0	$250,000	$500,000	$1,000,000	$6,250,000	$8,000,000			$8,000,000	Renton. This project will design and replace the large engines and overhaul the large pumps at the Black River pump station.
130	WLFL8 BRPS SEISMIC UPGRADES	Green	FCD Const	$0	$0	$0	$500,000	$2,000,000	$7,000,000	$10,397,322	$795,000	$382,157	$21,074,479			$21,074,479	Renton. This project will strengthen and improve the structure and subsurface soils at the Black River Pump Station.
131	WLFL8 BRPS SUPPORT SYS UPGRADES	Green	FCD Const		$1,149	$1,149	$448,851	$2,000,000	$2,550,000	$0	$0	$0	$4,998,851			$5,000,000	Renton. This project will design and build the third phase of renovations to the Black River pump station, replacing support systems such as engine control panels, cooling systems, oilers and hoists.
132	WLFL8 COVINGTON CR BLACK DIAMOND	Green	Agreement		$291,500	$291,500	$2,002,000	$0	$0	$0	$0	$0	$2,002,000			$2,293,500	Black Diamond. Remove the three 6-foot diameter culverts where Lake Sawyer flows into Covington Creek and replace with a bridge to eliminate obstructions for water flow and allow passage for migrating salmon.
133	WLFL8 DESIMONE MAJOR REPAIR USACE	Green	Agreement		$80,000	$80,000	$770,000	$10,000	$0	$0	$0	$0	$780,000			$860,000	Kent. This project will assess the damaged section of Desimone Levee between the two new floodwall segments, and recommend possible options for repair. Only the conditions assessment is proposed for funding.
134	WLFL8 FORT DENT 2020 REPAIR	Green	FCD Const		$50,000	$50,000	$200,000	$350,000	$0	$0	$0	$0	$550,000			$600,000	Damage increases vulnerability of the heavily used regional Green River trail and regional soccer complex (Starfire) and Tukwila Park. Erosion increases vulnerability to trail and soccer fields.
135	WLFL8 GALLI-DYKSTRA 2020 REPAIR	Green	FCD Const	$90,891	$407,314	$316,423	$360,095	$0	$0	$0	$0	$0	$360,095			$767,409	Auburn. Complete Phase 1 repair per a request from the City of Auburn. Elevate 3500 feet levee reach to meet FEMA levee certification requirements.
136	WLFL8 GALLI-DYKSTRA FEASIBILITY	Green	FCD Const	$4,970	$0	($4,970)	$9,940	$0	$0	$0	$0	$0	$9,940			$9,940	Auburn. Conduct a feasibility study to raise the levee providing 100-year flood protection plus 3 feet of freeboard. Canceled and incorporated into Galli-Dykstra 2020 Repair.
137	WLFL8 GREEN PRE-CONST ACQ	Green	FCD Acqu/Elev	$2,577,724	$10,368,856	$7,791,132	$2,208,868	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$27,208,868			$37,577,724	Tukwila. This project will acquire strategic real estate upon which future large Flood Control District capital projects are dependent, thereby reducing risks to construction schedules for those projects.
138	WLFL8 GREEN R IMPROVEMENT 2024	Green	Agreement		$0	$0	$0	$0	$0	$100,000	$0	$0	$100,000			$100,000	Auburn. Improve SE Green Valley Road near SE Auburn Black Diamond Road and alleviate roadway flooding by raising the road through the application of a thick layer of overlay.
139	WLFL8 GREEN R PL84-99 MITIGATN	Green	FCD Const	$5,258,368	$5,660,541	$402,173	($387,173)	$0	$0	$0	$0	$0	($387,173)			$5,273,368	Auburn. This project will result in actions to mitigate environmental damage from tree cutting during 2008-9 (as required by permitting agencies) to maintain eligibility for US Army Corps of Engineers PL84-99 program. The current mitigation effort is the Teufel project scheduled for 2018 construction.
140	WLFL8 GREEN SCOUR REPAIR 2017	Green	Agreement	$47,524	$150,000	$102,476	$0	$0	$0	$0	$0	$0	$0			$150,000	Auburn. This project will address scour damage to the bridge, which is on the primary through route of the Green River Valley Rd. The bridge is also a King County landmark.

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141	WLFL8 HSB BREDA SETBACK KENT	Green	Agreement	$930,509	$7,190,330	$6,259,821	($5,259,821)	$5,200,000	$7,900,000	$400,000	$0	$0	$8,240,179			$15,430,509	Kent. New project to implement interim SWIF adopted by Board of Supervisors. This project will reconstruct the Horseshoe Bend Levee at the Breda reach (RM 24.46-24.72) to a more stable configuration in order to reduce flood risk to the surrounding areas. The project will also raise levee crest elevations to contain the 500-year (0.2% annual chance) flood. This segment of the levee has the lowest factor of safety rating of the Horseshoe Bend levee.
142	WLFL8 HSB MCCOY REALIGNMENT USACE	Green	Agreement	$4,244	$516,138	$511,894	$0	$0	$2,188,106	$700,000	$0	$0	$2,888,106			$3,404,244	Kent. This USACE repair project replaces the SWIF capital project originally planned by the FCD. The repair project is anticipated to stabilize the failure of the levee slope, construct a ring levee around an isolated utility, and shift the alignment of the federal levee back to the City of Kent's secondary containment levee.
143	WLFL8 HSB NURSING HOME SETBACK	Green	FCD Const	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0			$0	Kent. New project to implement interim SWIF adopted by Board of Supervisors. The Nursing Home levee is over-steepened and does not meet current engineering standards. The economic consequence of levee failure or overtopping to the lower Green River valley is extensive and could cause tens of millions of dollars in damage. This capital project area contains a 'Minimally Acceptable' deficiency by the US Army Corps of Engineers at RM 25. 5 (over steepened slopes from 1. 25 to 1. 7H:1V for 225 feet). The Horseshoe Bend Levee Certification Report calculated a Factor of Safety (FOS) value for rapid drawdown of 1. 01 at RM 25. 57 (Section F). This is barely above the minimum FOS (1. 0) from the US Army Corps of Engineers manual.
144	WLFL8 INTERIM SWIF IMPLEMENTATION	Green	FCD Const	$83,675	$85,000	$1,325	$0	$0	$0	$0	$0	$0	$0			$85,000	Kent. Coordination and planning activities to implement recommendations of interim SWIF. Maintenance work associated with the interim SWIF is included in the operating budget.
145	WLFL8 LONES LEVEE SETBACK	Green	Agreement		$1,850,000	$1,850,000	$0	$0	$0	$0	$0	$0	$0			$1,850,000	Auburn. Contribute the partial cost of a repair ($500,000) to a $5 million levee setback project. By relocating the levee, flood risks as well as future repair costs for the Flood Control District are reduced.
146	WLFL8 LOWER RUSSELL ACQ KENT	Green	Agreement	$1,123,668	$1,123,668	$0	$0	$0	$0	$0	$0	$0	$0			$1,123,668	Kent. Acquisitions by the City of Kent for the Lower Russell levee setback project.
147	WLFL8 LWR GRN R CORRIDOR PLAN/EIS	Green	FCD Const	$329,299	$1,743,249	$1,413,950	$0	$1,211,050	$0	$0	$0	$0	$1,211,050			$2,954,299	Kent. Lower Green River Corridor Planning and Environmental Impact Statement.
148	WLFL8 LWR RUSSELL LEVEE SETBACK	Green	FCD Const	$16,516,475	$29,441,378	$12,924,903	$21,518,860	$2,292,913	$0	$0	$0	$0	$23,811,773			$53,253,151	Kent. Remove and replace the existing flood containment system of levee and revetments along the right (east) bank of the Green River between river mile 17.85 (S 212th St) and river mile 19.25 (S 231st Way) in the City of Kent to provide long-term flood protection and improve riparian and aquatic habitat. Increased expenditure authority to match interim SWIF adopted by Board of Supervisors.
149	WLFL8 MILWAUKEE LEVEE #2-KENT	Green	Agreement	$418,401	$19,400,000	$18,981,599	$0	$0	$0	$0	$0	$0	$0			$19,400,000	Kent. Prepare an analysis and study of design and construction alternatives to provide flood protection, scour protection, enable levee certification and secure necessary land rights.
150	WLFL8 NEWAUKUM CR FLOOD CONVEYANCE RESTO	Green	FCD Const		$65,000	$65,000	$0	$0	$0	$0	$0	$0	$0			$65,000	Enumclaw. An undersized culvert causes flooding that could block a sole access road.
151	WLFL8 OLD JEFFS FARM REVETMENT	Green	FCD Const	$301,921	$377,327	$75,406	$524,394	$406,000	$2,880,780	$0	$0	$0	$3,811,174			$4,188,501	Auburn. This project will conduct a feasibility analysis of channel migration hazards from river mile 21.1 to 21.7. Alternative selection is pending; alternative 1 is assumed as a placeholder.
152	WLFL8 RUSSELL RD UPPER KENT	Green	Agreement	$6,065,056	$6,082,173	$17,117	$0	$0	$0	$0	$0	$0	$0			$6,082,173	Kent. Project is to improve the levee by providing a minimum of 3 feet of freeboard above the predicted 500-year flood event and improve slope stability. These segments of the Russell Road Upper Levee have over-steepened slopes and therefore lack adequate structural stability to provide adequate safety.
153	WLFL8 S 106TH ST DRAINAGE IMPVMNT	Green	Agreement		$451,000	$451,000	$0	$0	$0	$0	$0	$0	$0			$451,000	Burien. Replace an existing damaged and undersized pipe that runs under eleven properties to prevent stormwater flooding.
154	WLFL8 SIGNATURE PT REVETMENT KENT	Green	Agreement	$345,419	$1,745,000	$1,399,581	$28,200,419	$26,800,000	$0	$0	$0	$0	$55,000,419			$56,745,419	Kent. Project provides increased level of protection to 1.5 miles of Lower Green River Corridor. Alternative selected by Executive Committee.
155	WLFL8 TITUS PIT RVTMNT 2018 REPAIR	Green	Agreement	$167,738	$250,000	$82,262	$0	$0	$0	$0	$0	$0	$0			$250,000	Kent. Repair of the recent damage to the Titus Pit RB revetment is needed to prevent a potential revetment failure and Green River road collapse. The revetment protects an adjacent King County arterial road and utilities (such as water, natural gas, telecommunication and power) under the road.
156	WLFL8 TUK-205 GUNTER FLOODWALL	Green	FCD Const		$2,000,000	$2,000,000	$9,423,000	$2,265,000	$1,159,500	$32,075,135	$0	$0	$44,922,635			$46,922,635	Tukwila. New project to implement interim SWIF adopted by Board of Supervisors. This project will construct a facility to bring this levee segment in compliance with certification requirements for structural stability and raise the levee to roughly the 500 year event.
157	WLFL8 TUK-205 RATOLO FLOODWALL	Green	FCD Const		$0	$0	$0	$0	$1,500,000	$300,000	$0	$0	$1,800,000			$1,800,000	Tukwila. New project to implement interim SWIF adopted by Board of Supervisors. This project will construct a 0.15 mile floodwall and sloped embankment to protect adjacent businesses from flooding. The floodwall alignment (including embankment slope, factors of safety, and necessary real estate) will be finalized during the project design phase.
158	WLFL8 TUK-205 USACE GACO-SEGALE	Green	FCD Const	$858,822	$15,732,418	$14,873,596	($6,015,596)	$3,959,599	$3,493,000	$60,000	$11,000	$0	$1,508,003			$17,240,421	Tukwila. US Army Corps led project to replace 3500 ft. of Tukwila 205 levee in-place replacement to bring up to 500-year level of protection per the adopted interim SWIF. The USACE will share remaining 2/3 of the cost; this allocation is the local share of 1/3 of total cost. Requires cooperation agreement.
159	WLFL8 TUKWILA RVTMT 2019 REPAIR	Green	FCD Const	$230,061	$500,000	$269,939	$0	$0	$0	$0	$0	$0	$0			$500,000	Tukwila. Erosion and slumping of Tukwila Trail revetment caused by the recent Green River flood resulted in approximately 200 feet of damage to the revetment.

No.	Title	Basin	Type of project	2019 Inception to Date Expenditure	2020 Inception to Date Budget	2020 Available Budget	2021 Requested	2022 Forecasted	2023 Forecasted	2024 Forecasted	2025 Forecasted	2026 Forecasted	6-Year CIP Total	CIS Year 7-10	CIS 10+ Year	Project Life Total	Comments
160	WLFLS PUGET WAY CULVERT	Seattle	Agreement	$1,095,048	$1,800,000	$704,952	$0	$0	$0	$0	$0	$0	$0			$1,800,000	Seattle. This project will replace an aging and undersized creek culvert under Puget Way SW in Seattle.
161	WLFLS S PARK DRAINAGE IMPROVEMENTS	Seattle	Agreement	$1,637,071	$10,075,000	$8,437,929	$0	$7,030,000	$0	$0	$0	$0	$7,030,000			$17,105,000	Seattle. The South Park Drainage Conveyance Improvements Project will install a formal conveyance system in the streets, to get flows to the pump station. The conveyance improvements will work in conjunction with the Pump Station.
162	WLFLS SOUTH PARK PUMPSTATION	Seattle	Agreement	$1,787,029	$6,505,000	$4,717,971	$0	$0	$0	$0	$0	$0	$0			$6,505,000	Seattle. Cost-share construction of pump station to reduce flooding in industrial area. Allocation of funds by year may be revised based on updated project schedule. Implemented by the City of Seattle. Expenditure forecast to be updated based on current project schedule.
163	**Green-Duwamish Subtotal**			$62,602,059	$155,063,470	$92,461,412	$57,965,522	$59,359,758	$35,821,386	$54,139,839	$24,806,000	$20,962,257	$253,054,762	$0	$0	$408,118,232	
164																	
165																	
166	WLFL9 212TH AVE SE @ SR 164 FLD IMPRVMNT	Green	Agreement		$0	$0	$0	$0	$0	$0	$190,000	$0	$190,000			$190,000	Enumclaw. Improve the drainage system to alleviate neighborhood flooding. May require improvements outside of the road right-of-way.
167	WLFL9 212TH AVE SE MITIGATION	White	Agreement		$29,000	$29,000	$36,000	$0	$0	$0	$0	$0	$36,000			$65,000	Enumclaw. TBD
168	WLFL9 ANDERSON PARK ACQUISITION	White	FCD Acqu/Elev	$0	$100,000	$100,000	$0	$0	$0	$0	$0	$0	$0			$100,000	Enumclaw. Park is split by the White River; acquire undevelopable and inaccessible southern portion of park in Pierce County from the City of Enumclaw.
169	WLFL9 BUTTE AVE FLOOD MITIGATION	White	Agreement	$226,633	$226,633	$0	$0	$0	$0	$0	$0	$0	$0			$226,633	Pacific. This project will reduce flood risks to residences and businesses in the Cities of Pacific and Algona by addressing backwatering and drainage problems in Government Canal from high river flows. The project will design and permit a stormwater pump station which will significantly reduce flood risks to approximately five hundred homes and businesses. The completed project will also reduce long-term road closures that have occurred in the past due to flooding.
170	WLFL9 CHARLIE JONES DS CULVERT	White	Agreement	$0	$0	$0	$0	$150,000	$1,500,000	$0	$0	$0	$1,650,000			$1,650,000	Auburn. This project will analyze culvert replacement and road-raising options and implement the preferred option.
171	WLFL9 CHARLIE JONES US CULVERT	White	Agreement	$148,566	$590,000	$441,434	$157,666	$152,300	$0	$0	$0	$0	$309,966			$899,966	Auburn. This project will analyze culvert replacement and road-raising options and implement the preferred option.
172	WLFL9 COUNTYLINE TO A STREET	White	FCD Const	$23,888,129	$24,004,419	$116,290	($78,290)	$0	$0	$0	$0	$0	($78,290)			$23,926,129	Pacific. Reduces flood elevations that impact residential neighborhoods in the City of Pacific (200 homes, with $52 million of assessed and $13 million content value), improves sediment storage and enhances habitat.
173	WLFL9 RIGHT BANK LEVEE SETBACK	White	FCD Const	$12,836,478	$14,540,389	$1,703,911	$867,200	$1,593,900	$6,534,900	$7,658,704	$136,900	$0	$16,791,604			$31,331,993	Pacific. Construct a new levee setback in the City of Pacific, extending from BNSF railroad bridge embankment to endpoint at Butte Ave. by White River Estates neighborhood.
174	WLFL9 SLIPPERY CREEK ACQ	White	FCD Acqu/Elev	$115,563	$180,000	$64,437	$0	$0	$0	$0	$0	$0	$0			$180,000	Greenwater. In mid-2018 budget reallocation, funding was authorized to acquire a vacant property located outside flood hazard area on the north side of Highway 410. Subsequent site visits identified multiple unpermitted structures and a well; additional funding necessary to complete demolition and asbestos abatement at a remote and inaccessible location.
175	WLFL9 STUCK R DR FLOOD PROTECTION	White	FCD Const	$0	$0	$0	$0	$0	$0	$0	$0	$1,000,000	$1,000,000			$1,000,000	Auburn. TBD
176	WLFL9 STUCK R DR 2019 REPAIR	White	FCD Const	$98,517	$646,374	$547,857	($39,857)	$0	$0	$0	$0	$0	($39,857)			$606,517	Auburn. Loss of facing rock along 130' of the lower half of the embankment. Some of the gravel fill under the rock has eroded as well, leaving a near-vertical face supporting the rock remaining on the upper slope. The rock that slid down is currently providing scour protection at the toe.
177	**White Subtotal**			$37,313,885	$40,316,815	$3,002,929	$942,719	$1,896,200	$8,034,900	$7,658,704	$326,900	$1,000,000	$19,859,423	$0	$0	$60,176,238	
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180	WLFLG COASTAL EROSION/FLOODING GRANTS	Countywide	Grant	$0	$0	$0	$3,000,000	$3,044,347	$3,089,350	$3,135,018	$3,181,361	$3,228,389	$18,678,465			$18,678,465	Focuses on mapped coastal flood hazard areas to increase resiliency to sea level rise in coastal flood hazard areas by restoring shorelines and retrofitting or relocating infrastructure out of flood-prone areas to reduce risk.
181	WLFLG CULVERT & FISH PASSAGE GRANTS	Countywide	Grant	$0	$0	$0	$3,000,000	$3,044,347	$3,089,350	$3,135,018	$3,181,361	$3,228,389	$18,678,465			$18,678,465	Reduces flooding and improves fish passage and water quality by replacing and/or removing culverts or other blockages to fish passage. This program will focus on accelerating replacement or removal of culverts that address both significant flood risks to critical infrastructure, and restore fish passage.
182	WLFLG FLOOD REDUCTION GRANTS	Countywide	Grant	$11,789,184	$23,732,458	$11,943,274	$3,000,000	$3,044,347	$3,089,350	$3,135,018	$3,181,361	$3,228,389	$18,678,465			$42,410,923	Competitive grant program for flood reduction projects. Increases as a proportion of total FCD tax revenue.
183	WLFLG URBAN STREAMS GRANTS	Countywide	Grant	$0	$0	$0	$3,000,000	$3,044,347	$3,089,350	$3,135,018	$3,181,361	$3,228,389	$18,678,465			$18,678,465	Invests in urban flooding projects that reduce risks to people, property, and public infrastructure.
184	WLFLG WRIA GRANTS	Countywide	Grant	$24,468,355	$41,924,292	$17,455,937	$9,762,382	$9,906,694	$10,053,139	$10,201,749	$10,352,556	$10,505,592	$60,782,112			$102,706,404	Cooperative Watershed Management Grant Program; priorities recommended by watershed groups. Increase based on assumed inflation rate.
185	WLFLM EFFECTIVENESS MONITORING	Countywide	FCD Const	$3,052,862	$4,241,162	$1,188,300	$1,214,460	$1,142,650	$1,207,500	$1,039,750	$911,600	$894,650	$6,410,610			$10,651,772	Evaluation of capital projects to determine effectiveness and identify project design improvements.
186	WLFLO SUBREGNL OPPRTNTY FUND	Countywide	Grant	$38,775,925	$61,402,203	$22,626,278	$5,974,680	$5,981,476	$5,993,630	$6,006,788	$6,021,445	$6,037,760	$36,015,779			$97,417,982	Allocation to all King County jurisdictions for flooding, water quality, or watershed management projects. Increases as a proportion of total FCD tax revenue.
187	WLFLX CENTRAL CHARGES	Countywide	FCD Const	$819,564	$1,111,493	$291,929	$0	$100,000	$100,000	$100,000	$100,000	$100,000	$500,000			$1,611,493	Central charges related to the FCD's capital fund.
188	WLFLX CONST MATERIALS STOCKPILE	Countywide	FCD Const	$3,354	$500,000	$496,646	$0	$0	$0	$0	$0	$0	$0			$500,000	Stockpile role for future flood damage repairs.
189	WLFLX FLOOD EMERGENCY CONTGNCY	Countywide	FCD Const	$419,042	$1,419,042	$1,000,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$1,500,000			$2,919,042	Contingency for emergency response actions during a flood event.
190	**Countywide Subtotal**			$79,328,285	$134,330,650	$55,002,364	$29,201,522	$29,558,208	$29,961,669	$30,138,359	$30,361,045	$30,701,558	$179,922,361	$0	$0	$314,253,011	
191																	
192	**Grand Total**			**$283,787,075**	**$485,929,074**	**$202,142,000**	**$124,690,145**	**$126,575,221**	**$109,648,073**	**$128,221,008**	**$74,115,480**	**$84,472,789**	**$647,722,716**	**$127,030,000**	**$121,300,000**	**$1,381,981,790**	