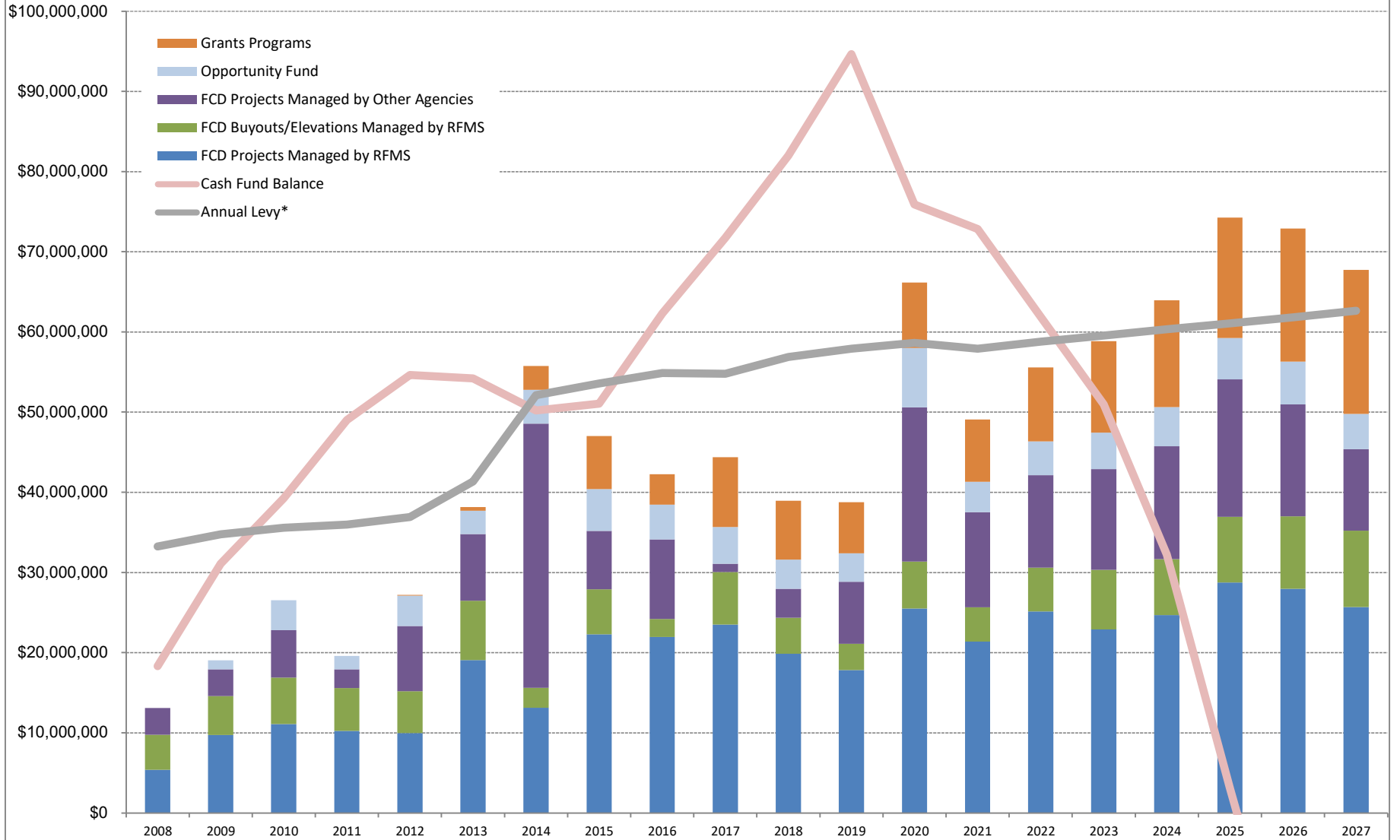


DRAFT: Actual and Forecasted Flood District Expenditures by Type

August 3, 2021



*Annual levy assumes an increase for new construction only in 2021-2026; no 1% increase. See the financial plan for negative cash balances in 2026-2027.

WORKING DRAFT - FCD 2022 Budget, 07/15/2021 Version

NOTE: The increase in total compensation in 2022 (salary + benefits) is 2.5%, or approximately \$256,000 for WLR staff, per the adopted King County budget for 2021-2022.

FCD Work Category	Adopted 2021 FCD Budget	PROPOSED 2022 FCD Budget	Difference	Program Description	Changes from Adopted 2021 FCD Budget
1 Annual Maintenance	2,370,715	2,533,518	162,804	Maintenance activities to properly operate and maintain the District's investments, including levees, revetments, properties, and pump stations, as well as large wood hazard investigations in support of the King County Sheriff. 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. This includes implementation of routine flood facility inspection and maintenance for approximately 500 levees and and revetments along 119 miles of river so that minor maintenance needs do not become larger scale repair problems. The program also includes property inspections and maintenance for the approximately 800 acres of publicly owned floodplain property (managed as 200 separate sites), a responsibility that grows each year as property is acquired to reduce flood risks and/or support capital project construction. Maintenance actions to identify and resolve problems that might pose a risk to the community such as attractive nuisances (a hazardous object or condition that poses a risk), illegal dumping, noxious weeds, and public health risks. This category includes maintenance, facility assessment and monitoring, facility maintenance and repair, management of sediment and large wood, and monitoring of flood protection assets. The largest expenditures in this category are (1) operation and maintenance of the Green River Pump Stations (2) maintenance crew time and (3) inspections of levees, revetments, and property on a 2-year cycle.	Minor adjustments from 2021 budget due to adjustments to BRPS utility and maintenance parts and supplies costs, as well as adjusted labor costs for 2022.
2 Flood Hazards Plan, Grants, Outreach	512,619	575,653	63,034	Programmatic elements of floodplain management include many approaches to understand and communicate risk so that all floodplain residents and users can prepare and protect themselves from flooding and related riverine hazards. Other programmatic elements include organizational performance measurement. This category includes funding for the Flood Hazard Management Plan Update, and coordinating compliance with FEMA's Community Rating System. Flood Hazard Management Plan Update costs will be covered by \$275,000 carryover previously authorized by the FCD and \$250,000 authorized by King County in the current biennium. Also included is the planning, outreach and grant submittals associated with repetitive loss mitigation projects, while the actual buyouts and elevations are funded via the capital program. All of this work is only conducted with prior authorization from the Flood Control District. Public outreach associated with specific capital projects is funded through the capital program.	No significant change. Increase is largely to due to salary costs for existing staff, and minor adjustments to assumptions about how staff time is allocated between Category 2 and Category 4.
3 Flood Hazard Studies, Maps, Tech Svcs	2,261,256	5,065,964	2,804,708	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 (CMZ) 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. The base budget includes funding for LIDAR and post-flood channel evaluations that will not occur unless there are high flow events.	As part of the District's effort to "right-size" annual budgets and reduce carryover, the 2022 budget includes budget continuations for multi-year technical studies. This is a new practice of requesting budgets in the year the expenditure will occur, instead of carrying over unused budget authority. Budget continuations total \$2.8M and include \$1.65M for the levee breach study, \$1M for the Issaquah Creek Flood Study, \$110k for the South Fork Skykomish Flood Study, and \$130k for climate change analysis by the University of Washington for the Cedar and White Rivers. The budget also includes funding to continue the channel and sediment monitoring program (\$586k). Budget adjustments proposed for 2022 are an increase of \$850k to reflect updated costs for the levee breach study, \$75k for additional survey work on the previously authorized small streams flood study. New items proposed in 2022 are \$75k for the Snoqualmie valley gaging study and \$100,000 to revise FEMA flood maps to reflect capital projects that modify flood elevations.
4 Flood Prep, Flood Warning Center	1,032,536	1,048,487	15,951	Implement a comprehensive approach to preparing and educating the community 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. Base budget includes annual flood preparedness campaign, sandbag supplies for distribution centers in each basin, the King County Flood Alert system, King County Sheriff's Office staff for flood emergency response and cost-share with U.S. Geological Survey for operations and maintenance of real-time river gauges around King County.	Includes \$60,000 for a consultant to reframe the annual flood awareness campaign with an emphasis on ensuring we are effectively communicating flood risk, flood preparedness and flood recovery messages and tools to marginalized communities and those most impacted by flooding across King County.. Also reflects minor adjustments to assumptions about how staff time is allocated between Category 2 and Category 4.
5 Program Mgmt, Supervision, Fin, Budget	1,913,982	1,971,187	57,205	Provide supervisory, financial management, contract administration, capital program oversight, and administrative services for the River and Floodplain Management Section to implement the District's work program. Financial management tasks include forecasting, budget development, accounting, and financial and performance audits from the State of Washington, Flood Control District, King County Council, state and federal grantors, as well as quarterly internal audits by King County Procurement. This category also include contract development and administration for work order contracts, individual work orders are budgeted and accounted for under other work categories or under a specific capital project.	No significant change, increase is largely to due to salary costs for existing staff.
6 Program Implementation	1,826,273	1,921,599	95,326	Implement flood hazard management programs and coordinate capital improvement projects for the District. This work category includes river basin team as well as the countywide capital strike team, responsible for identifying, implementing, and tracking flood risk reduction program and project actions within a given basin. This work category includes coordination with other flood risk reduction partners through the Basin Technical Committees, and similar multi-stakeholder efforts to manage risk and coordinate efforts in each river basin. This category also includes coordination meetings at the Section, team, and individual supervisory level, coordination with the District, as well as trainings for River and Floodplain Management Section staff. Time spent on capital projects is reimbursed from the capital project fund.	No significant change, increase is largely to due to salary costs for existing staff.

7 Overhead / Central Costs	3,254,337	3,197,399	(56,938)	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. Per the Inter-Local Agreement between the District and King County, "administrative overhead costs shall be determined in accordance with the Overhead Cost Allocation Policy adopted as part of the County's Comprehensive Financial Management Policies, as currently in effect and as amended, and with the overhead costs in the adopted County budget."	Adjustments to align overhead costs with Council-adopted overhead rates for 2021-2022 biennium.
Grand Total	13,171,717	16,313,808	3,142,091		

King County Flood Control District

2022 - 2027 Six-Year CIP Project Allocations

Attachment H

8/3/2021

Capital Investment Strategy Project

Grant/External Revenue Awarded

Cost Share Contribution to Others

Added in 2021

Proposed New Add in 2022

No.	Title	Basin	Type of project	2020 Inception to Date Expenditure	2021 Inception to Date Budget	2021 Available Budget	2022 Requested	2023 Forecasted	2024 Forecasted	2025 Forecasted	2026 Forecasted	2027 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	\$2,879,041	\$4,129,041	\$1,250,000	\$800,000	\$800,000	\$800,000	\$800,000	\$800,000	\$800,000	\$4,800,000			\$8,929,041	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. Assumes one home per year.
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	\$1,972,095	\$2,472,095	\$500,000	\$340,000	\$800,000	\$800,000	\$800,000	\$800,000	\$800,000	\$4,340,000			\$6,812,095	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. Assumes one home per year.
4	WLFL0 TIMBERLANE 2016 REPAIR	SF Skykomish	FCD Const	\$13,131	\$16,040	\$2,909	\$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.
5	WLFL0 TIMBERLANE 2019 REPAIR	SF Skykomish	FCD Const	\$304,972	\$700,924	\$395,952	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$700,924	Skykomish. Revetment is approximately 300 LF along left bank of South Fork Skykomish River. Unstable section of vertical stacked rock is approximately 150 LF. Failure has occurred previously in this section of revetment.
6	WLFL1 428TH AVE SE BR FEASIBILITY	Upper Snoq	FCD Const	\$309,756	\$309,756	\$0	\$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 Reing 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	\$766,017	\$993,617	\$227,600	\$196,305	\$193,500	\$145,695	\$3,023,030	\$0	\$0	\$3,558,530			\$4,552,147	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 MASON THORSON ELLS 2022 REPAIR	Lower Snoq	FCD Const			\$0	\$105,000	\$0	\$0	\$0	\$0	\$0	\$105,000			\$105,000	North Bend. New project. Provide 20% local match to repair erosion to the downstream end of the Mason Thorson Ells levee under the US Army Corps of Engineers (USACE) PL 84-99 Levee Rehabilitation and Inspection Program (RIP). The downstream 60-feet of the levee was damaged during the February 2020 flood event and the proposed project will repair the damage and reduce future erosion risk to the facility.
11	WLFL1 MF FLOOD CONVEYANCE N BEND	Upper Snoq	Agreement		\$150,000	\$150,000	\$150,000	\$1,500,000	\$0	\$0	\$0	\$0	\$1,650,000			\$1,800,000	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.
12	WLFL1 MF RESIDENTIAL FLD MTG TN	Upper Snoq	FCD Acqu/Elev	\$4,462	\$404,462	\$400,000	\$2,887,769	\$2,887,769	\$1,830,000	\$2,265,000	\$2,265,000	\$0	\$12,135,538			\$12,540,000	North Bend. Work with willing sellers to acquire eighteen homes at risk from channel migration along the Middle Fork (Project C in the Capital Investment Strategy)
13	WLFL1 MF SNO CORRIDOR PLAN	Upper Snoq	FCD Const	\$1,705,594	\$1,852,497	\$146,903	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$1,852,497	North Bend. Middle Fork Snoqualmie Corridor Planning, completed in 2020.
14	WLFL1 MF SNO PL84-99	Upper Snoq	FCD Const		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$0	North Bend. Upgrade the Middle Fork Snoqualmie levees to meet the US Army Corps of Engineers PL84-99 certification standards.
15	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.
16	WLFL1 NORMAN CREEK US 2024 CULV	Upper Snoq	Agreement		\$0	\$0	\$0	\$350,000	\$750,000	\$0	\$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.
17	WLFL1 NORTH FORK BRIDGE FEASIBILITY	Upper Snoq	Agreement	\$32,554	\$464,583	\$432,030	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$464,583	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.
18	WLFL1 RECORD OFFICE 2016 REPAIR	Upper Snoq	Agreement	\$331,407	\$3,883,278	\$3,551,871	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$3,883,278	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 2021.
19	WLFL1 REIF RD LEVEE IMPROVEMENTS	Upper Snoq	FCD Const		\$0	\$0	\$0	\$265,438	\$318,421	\$385,937	\$457,218	\$0	\$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.

No.	Title	Basin	Type of project	2020 Inception to Date Expenditure	2021 Inception to Date Budget	2021 Available Budget	2022 Requested	2023 Forecasted	2024 Forecasted	2025 Forecasted	2026 Forecasted	2027 Forecasted	6-Year CIP Total	CIS Year 7-10	CIS 10+ Year	Project Life Total	Comments
20	WLFL1 REINIG RD ELEVATION	Upper Snoq	Agreement	\$394	\$394	\$0	\$0	\$0	\$50,000	\$100,000	\$0	\$0	\$150,000			\$150,394	Snoqualmie. Elevate low section of Reinig Rd to alleviate flooding that blocks roadway.
21	WLFL1 REINIG RD RVTMNT 2016 REPAIR	Upper Snoq	FCD Const	\$1,259,015	\$5,730,915	\$4,471,900	\$655,000	\$20,000	\$0	\$0	\$0	\$0	\$675,000			\$6,405,915	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.
22	WLFL1 RIBARY CREEK N BEND	Upper Snoq	Agreement	\$9,885	\$636,492	\$626,607	\$316,168	\$1,170,761	\$4,998,233	\$0	\$0	\$0	\$6,485,161			\$7,121,653	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		\$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	\$47,200,000		\$47,200,000	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	\$209,704	\$209,704	\$0	\$5,022	\$0	\$0	\$0	\$0	\$0	\$5,022			\$214,726	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	\$2,918,260	\$3,139,161	\$220,901	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$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	\$612,229	\$667,229	\$55,000	\$5,000	\$0	\$0	\$0	\$0	\$0	\$5,000			\$672,229	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).
28	WLFL1 SI VIEW RM4 2017 REPAIR	Upper Snoq	FCD Const	\$296,181	\$396,754	\$100,573	\$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.
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	\$150,000	\$0	\$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	\$12,196,349	\$13,306,349	\$1,110,000	\$3,714,000	\$1,957,361	\$2,016,081	\$2,076,564	\$2,138,861	\$2,203,026	\$14,105,893			\$27,412,242	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	\$90,071	\$285,136	\$195,065	\$378,458	\$0	\$0	\$0	\$0	\$0	\$378,458			\$663,594	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 IMPRVMT	Lower Snoq	Agreement		\$0	\$0	\$0	\$0	\$0	\$540,000	\$0	\$0	\$540,000			\$540,000	Redmond. Alleviate flooding on this sole access road by replacing the existing culverts and raising the roadway to eliminate over-topping during flood events.
34	WLFL2 334TH AVE SE & SE 43RD PL FLD IMPRVMT	Lower Snoq	Agreement		\$0	\$0	\$0	\$0	\$0	\$500,000	\$0	\$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	\$62,471	\$474,401	\$411,930	\$484,752	\$1,479,035	\$6,404,174	\$19,000	\$0	\$0	\$8,386,961			\$8,861,362	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	\$277,937	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$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		\$300,000	\$300,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$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 FARM FLOOD TSK FORCE IMP	Lower Snoq	FCD Acqu/Elev	\$838,251	\$979,803	\$141,552	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$979,803	Carnation. This project provides technical and cost-sharing assistance to agricultural landowners in the Lower Snoqualmie floodplain to help them better withstand the impacts of flooding. Specific project actions include farm pads and elevation or flood proofing of agricultural structures.
39	WLFL2 FISH HATCHERY RD BR #61B REPAIR	Lower Snoq	Agreement	\$43,801	\$514,000	\$470,199	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$514,000	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.
40	WLFL2 JOY 2020 REPAIR	Lower Snoq	FCD Const	\$35,882	\$600,000	\$564,118	\$500,000	\$2,620,000	\$0	\$0	\$0	\$0	\$3,120,000			\$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	2020 Inception to Date Expenditure	2021 Inception to Date Budget	2021 Available Budget	2022 Requested	2023 Forecasted	2024 Forecasted	2025 Forecasted	2026 Forecasted	2027 Forecasted	6-Year CIP Total	CIS Year 7-10	CIS 10+ Year	Project Life Total	Comments
41	WLFL2 L SNO 2019 BANK REPAIR	Lower Snoq	Agreement	\$1,074,203	\$2,200,000	\$1,125,797	\$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 repaired an existing failing revetment and extend MSE wall to prevent undercutting of the riverbank and roadway. Completed in September 2020.
42	WLFL2 L SNO REP LOSS MITGTON	Lower Snoq	FCD Acqu/Elev	\$1,279,468	\$1,279,468	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$1,279,468	Carnation. Funding as possible local match for FEMA grants to elevate or acquire at-risk structures.
43	WLFL2 L SNO SCOUR REPAIR 2017	Lower Snoq	Agreement	\$142,411	\$142,411	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$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.
44	WLFL2 L SNO/ALDAIR CORRDROR PLN	Lower Snoq	FCD Const	\$7,027,058	\$7,089,214	\$62,156	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$7,089,214	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.
45	WLFL2 LWR SNO RESDL FLD MITGTN	Lower Snoq	FCD Acqu/Elev	\$2,256,127	\$3,316,472	\$1,060,345	\$59,655	\$1,000,000	\$500,000	\$500,000	\$500,000	\$500,000	\$3,059,655			\$6,376,127	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.
46	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.
47	WLFL2 SE 19TH WAY REVETMENT	Lower Snoq	FCD Const	\$1,838,512	\$1,916,294	\$77,782	\$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.
48	WLFL2 SNOQUALMIE VALLEY FEAS	Lower Snoq	Agreement		\$250,000	\$250,000	\$151,000	\$99,000	\$0	\$0	\$0	\$0	\$250,000			\$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.
49	WLFL2 STOSSEL LONG TERM REPAIR	Lower Snoq	FCD Const	\$16,598	\$450,000	\$433,402	\$86,598	\$2,968,000	\$12,000	\$0	\$0	\$0	\$3,066,598			\$3,516,598	Carnation. Placeholder costs for long-term facility improvement project to prevent erosion undermining 310th Ave NE.
50	WLFL2 STOSSEL RB 2018 REPAIR	Lower Snoq	FCD Const	\$1,023,994	\$1,107,886	\$83,892	\$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.
51	WLFL2 TOLT PIPELINE PROTECTION	Lower Snoq	FCD Const	\$10,694,001	\$10,778,068	\$84,067	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$10,778,068	Carnation. This project repaired 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.
52	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.
53	WLFL3 GIRL SCOUT LEVEE 2016 REPAIR	Tolt	FCD Const	\$166,079	\$166,079	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$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.
54	WLFL3 HOLBERG 2019 REPAIR	Tolt	FCD Const		\$50,000	\$50,000	\$200,000	\$250,000	\$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.
55	WLFL3 HOLBERG FEASIBILITY	Tolt	FCD Const	\$285,819	\$412,149	\$126,330	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$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 Tolt River Channel Migration study
56	WLFL3 LOWER FREW LEVEE SETBACK	Tolt	FCD Const	\$221,096	\$1,015,777	\$794,681	\$105,319	\$750,000	\$750,000	\$14,644,681	\$50,000	\$0	\$16,300,000			\$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
57	WLFL3 LOWER TOLT RIVER ACQUISITION	Tolt	FCD Acqu/Elev	\$532,475	\$1,379,475	\$847,000	\$150,000	\$200,000	\$200,000	\$645,000	\$550,000	\$550,000	\$2,295,000			\$3,674,475	Carnation. Acquire high-priority flood risk reduction properties in the lower two miles of the Tolt River consistent with the adopted Capital Investment Strategy.
58	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.
59	WLFL3 RIO VISTA PROPERTY ACQ	Tolt	FCD Acqu/Elev	\$656,331	\$3,070,203	\$2,413,872	\$397,128	\$1,750,000	\$1,750,000	\$1,750,000	\$0	\$0	\$5,647,128			\$8,717,331	Carnation. Capital Investment Strategy: Acquire 2 at-risk homes per year from willing sellers; acquire remaining 14 homes as funds become available.
60	WLFL3 SAN SOUCI NBRHOOD BUYOUT	Tolt	FCD Acqu/Elev	\$5,046,463	\$5,199,674	\$153,211	\$0	\$346,789	\$0	\$0	\$0	\$0	\$346,789			\$5,546,463	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.
60	WLFL3 TOLT R RD ELEV SAN SOUCI	Tolt	FCD Const		\$25,000	\$25,000	\$700,000	\$700,000	\$800,000	\$25,000	\$0	\$0	\$2,225,000			\$2,250,000	Carnation. Capital Investment Strategy: Construct Tolt Road NE road elevation in one location. Remove illegal revetment and roads in San Souci neighborhood.
61	WLFL3 SEDIMENT MGMT FEAS	Tolt	FCD Const	\$174,823	\$263,706	\$88,883	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$263,706	Carnation. Capital Investment Strategy: Conduct sediment management feasibility study and develop a plan. Update and include upper watershed sediment production estimates.

No.	Title	Basin	Type of project	2020 Inception to Date Expenditure	2021 Inception to Date Budget	2021 Available Budget	2022 Requested	2023 Forecasted	2024 Forecasted	2025 Forecasted	2026 Forecasted	2027 Forecasted	6-Year CIP Total	CIS Year 7-10	CIS 10+ Year	Project Life Total	Comments
62	WLFL3 SR 203 BR IMPRVMENTS FEAS	Tolt	FCD Const	\$30,706	\$395,900	\$365,194	\$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.
63	WLFL3 TOLT CIS LONG TERM	Tolt	FCD Const			\$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.
64	WLFL3 TOLT CIS MED TERM	Tolt	FCD Const			\$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.
65	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.
66	WLFL3 TOLT R LEVEE L.O.S. ANALYSIS	Tolt	FCD Const	\$575,785	\$941,815	\$366,030	\$54,357	\$0	\$0	\$0	\$0	\$0	\$54,357			\$996,172	Carnation. Capital Investment Strategy: Conduct a detailed hydraulic analysis to optimize the elevation of new levees to maximize flood risk reduction benefits
67	WLFL3 TOLT R MILE 1.1 ACQ	Tolt	FCD Acq/Elev	\$4,214,977	\$4,214,977	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$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.
68	WLFL3 TOLT R NATURAL AREA ACQ	Tolt	FCD Acq/Elev	\$2,614,518	\$4,814,518	\$2,200,000	\$107,740	\$700,000	\$0	\$0	\$0	\$0	\$807,740			\$5,622,258	Carnation. Capital investment strategy: acquire at-risk homes from willing sellers.
69	WLFL3 TOLT R RD ELEVATION FEASIBILITY	Tolt	FCD Const	\$67,917	\$250,000	\$182,083	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$250,000	Carnation. Reduce neighborhood isolation from flooding. Evaluate feasibility of elevating sections of Tolt River Road.
70	WLFL3 TOLT R RD NE IMPROVEMENTS	Tolt	FCD Const		\$0	\$0	\$0	\$91,301	\$250,000	\$150,000	\$2,342,329	\$30,000	\$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.
71	WLFL3 UPPER FREW LEVEE SETBACK	Tolt	FCD Const		\$50,000	\$50,000	\$159,000	\$175,000	\$1,200,000	\$1,500,000	\$14,800,000	\$0	\$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 Acq/Elev	\$1,753,880	\$1,783,810	\$29,930	\$400,000	\$0	\$0	\$0	\$0	\$0	\$400,000			\$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	\$266,859	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$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.
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			\$71,413,367	\$100,453,340	\$29,039,975	\$13,108,271	\$23,223,953	\$23,574,604	\$29,724,212	\$24,703,408	\$9,183,026	\$123,517,474	\$103,450,000	\$85,900,000	\$413,320,813	
76							\$0										
77							\$0										
78	WLFL5 ALLEN LK OUTLET IMPRVMT	Sammamish	Agreement	\$19,226	\$845,000	\$825,774	\$0	\$36,256	\$1,500,000	\$400,000	\$10,000	\$0	\$1,946,256			\$2,791,256	Sammamish. To address chronic flooding on this sole access roadway with approximately 200 properties, look at upstream and downstream retention/detention options; study road-raising 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	\$16,197	\$300,000	\$283,803	\$0	\$15,000	\$0	\$0	\$0	\$0	\$15,000			\$315,000	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	Agreement	\$5,083	\$355,083	\$350,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$355,083	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	\$2,391	\$110,000	\$107,609	\$142,391	\$577,500	\$15,000	\$0	\$0	\$0	\$734,891			\$844,891	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.
84	WLFL5 SAMMAMISH CIS	Sammamish	FCD Const	\$195,121	\$445,120	\$250,000	\$1,307,400	\$1,030,409	\$27,093	\$0	\$0	\$0	\$2,364,902			\$2,810,022	Redmond: Identify and prioritize near-, mid-, and long-term capital projects for Flood Control District funding along the Sammamish River.
85	WLFL5 WILLOWMOOR FLDPLAIN REST	Sammamish	FCD Const	\$3,371,525	\$4,520,977	\$1,149,452	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$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.
86	WLFL6 148TH AVE SE LARSEN LK BELLEVUE	Lk Wash Tribs	Agreement		\$400,000	\$400,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$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.

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87	WFL6 BEAR CRK FLOOD EROSION REDMOND	Lk Wash Tribs	Agreement	\$128	\$1,100,000	\$1,099,872	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$1,100,000	Redmond. Protect Avondale Rd from an embankment that has been scoured by floodwaters from Bear Creek.
88	WFL6 FACTORIA BLVD DRAINAGE	Lk Wash Tribs	Agreement		\$4,792,000	\$4,792,000	\$2,022,000	\$0	\$0	\$0	\$0	\$0	\$2,022,000			\$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.
89	WFL6 ISSAQUAH TRIB FEAS	Lk Wash Tribs	Agreement	\$322,547	\$350,000	\$27,453	\$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 identify potential solutions to bridge deficiencies, including a constructed hydraulic opening with piles that collect debris and pose risks to the stability of the bridge.
90	WFL6 LOWER COAL CRK PH I	Lk Wash Tribs	Agreement	\$11,113,877	\$11,361,592	\$247,715	\$200,000	\$285,000	\$1,310,000	\$1,432,358	\$0	\$0	\$3,227,358			\$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.
91	WFL6 MAY VALLEY DRAINAGE IMPRVMT	Lk Wash Tribs	Agreement	\$224,826	\$530,000	\$305,174	\$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.
92	WFL7 BELMONDO 2020 REPAIR	Cedar	FCD Const	\$9,048	\$150,000	\$140,952	\$149,048	\$410,000	\$15,000	\$0	\$0	\$0	\$574,048			\$724,048	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.
93	WFL7 BRODELL 2020 REPAIR	Cedar	FCD Const	\$9,403	\$9,403	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$9,403	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.
94	WFL7 BYERS 2020 REPAIR	Cedar	FCD Const	\$15,194	\$25,000	\$9,806	\$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.
95	WFL7 BYERS NEIGHBORHOOD IMPROVEMENTS	Cedar	FCD Const		\$220,000	\$220,000	\$0	\$300,000	\$50,000	\$0	\$0	\$0	\$350,000			\$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.
96	WFL7 CDR PRE-CONST STRTGC ACQ	Cedar	FCD Acqu/Elev	\$4,269,411	\$6,730,532	\$2,461,121	\$1,600,000	\$1,600,000	\$1,600,000	\$1,600,000	\$1,600,000	\$1,600,000	\$9,600,000			\$16,330,532	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). Assumes 3 homes per year.
97	WFL7 CEDAR CIS LONG TERM	Cedar	FCD Acqu/Elev			\$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.
98	WFL7 CEDAR CIS MED TERM	Cedar	FCD Acqu/Elev			\$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.
99	WFL7 CEDAR LEVEE SETBACK FEAS (Cedar Corridor)	Cedar	FCD Const	\$1,853,360	\$1,987,587	\$134,227	\$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.
100	WFL7 CEDAR R DWNSTREAM 2024 IMPV	Cedar	Agreement		\$0	\$0	\$0	\$0	\$100,000	\$0	\$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.
101	WFL7 CEDAR RAPIDS ELJ6 2020 REPAIR	Cedar	FCD Const	\$13,518	\$186,000	\$172,482	\$5,518	\$0	\$0	\$0	\$0	\$0	\$5,518			\$191,518	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.
102	WFL7 CEDAR RES FLOOD MITIGATION	Cedar	FCD Acqu/Elev	\$1,332	\$3,074,000	\$3,072,668	\$0	\$1,600,000	\$1,600,000	\$1,600,000	\$1,600,000	\$1,600,000	\$8,000,000			\$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.
103	WFL7 CEDAR RVR GRAVEL REMOVAL	Cedar	Agreement	\$10,259,941	\$12,835,100	\$2,575,159	\$0	\$0	\$403,000	\$500,000	\$500,000	\$0	\$1,403,000			\$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.
104	WFL7 CITY OF RENTON LEVEE CERTIFICATION	Cedar	Agreement	\$469,072	\$5,000,000	\$4,530,928	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$5,000,000	Renton. Levee improvements necessary to satisfy levee certification engineering recommendations.
105	WFL7 CRT SITE 2 2020 REPAIR	Cedar	Agreement	\$447,793	\$1,233,000	\$785,207	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$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."
106	WFL7 CRT SITE 5 2020 REPAIR	Cedar	FCD Const	\$2,905	\$350,000	\$347,095	\$87,905	\$1,070,000	\$5,000	\$0	\$0	\$0	\$1,162,905			\$1,512,905	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.
107	WFL7 CRT SITE A BANK	Cedar	FCD Const	\$145,013	\$208,302	\$63,289	\$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.

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108	WLFL7 CRT2 ZONE D 2020 REPAIR	Cedar	Agreement	\$449	\$193,000	\$192,551	\$5,142,656	\$0	\$0	\$0	\$0	\$0	\$5,142,656			\$5,335,656	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 repair addresses damage to the CRT 2 revetment downstream of the 2020 emergency repair site, retrofitting the 2020 emergency repair with wood bank deflectors for long-term protection, and extending CRT 2 upstream to replace the damaged Riverbend Lower revetment, which will be removed as part of the Riverbend phase 2 project.
109	WLFL7 DORRE DON AVULSION ANALYSIS	Cedar	FCD Const	\$23,120	\$100,000	\$76,880	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$100,000	Renton. The main channel has avulsed into the previous left floodplain, leading to erosion of the channel bank, adjacent to 231st PI SE.
110	WLFL7 DORRE DON NBHOOD IMPRVMT	Cedar	FCD Const		\$800,000	\$800,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$800,000	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.
111	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.
112	WLFL7 HERZMAN LEVEE SETBACK	Cedar	FCD Const	\$1,610,209	\$2,285,209	\$675,000	\$297,670	\$5,088,710	\$32,782	\$0	\$0	\$0	\$5,419,162			\$7,704,371	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.
113	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.
114	WLFL7 JAN ROAD LEVEE SETBACK	Cedar	FCD Const	\$1,541,264	\$3,649,904	\$2,108,640	\$9,573,987	\$26,204	\$0	\$0	\$0	\$0	\$9,600,191			\$13,250,095	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.
115	WLFL7 LOWER CEDAR FEASIBILITY STUDY	Cedar	Agreement	\$9,503	\$520,000	\$510,497	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$520,000	Renton. Capital Investment Strategy: Conduct feasibility study of Lower Cedar reach in City of Renton to 1) quantify economic damage potential 2) determine infrastructure modifications to improve flood resiliency and sediment storage potential, and 3) conduct cost-benefit analysis.
116	WLFL7 LOWER JONES ROAD NEIGHBORHOOD	Cedar	FCD Const	\$214,203	\$1,244,203	\$1,030,000	\$1,410,000	\$160,704	\$4,540,762	\$1,631,719	\$0	\$0	\$7,743,185			\$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 accommodate Jan Rd construction in 2022.
117	WLFL7 MADSEN CR CULVERT 2017	Cedar	Agreement	\$3,399,480	\$3,326,000	(\$73,480)	\$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.
118	WLFL7 MADSEN CR RENTON	Cedar	Agreement	\$144,638	\$635,000	\$490,362	\$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.
119	WLFL7 MAPLEWOOD FEASIBILITY STUDY	Cedar	FCD Const	\$463,979	\$490,246	\$26,267	\$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.
120	WLFL7 RIVERBEND MHP ACQ	Cedar	FCD Acqu/Elev	\$4,427,587	\$5,231,042	\$803,455	\$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.
121	WLFL7 SR 169 FLOOD REDUCTION	Cedar	FCD Const	\$677,965	\$4,885,254	\$4,207,289	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$4,885,254	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.
122	WLFL7 TABOR-CROWALL-BRODELL 2020 REPAIR	Cedar	FCD Const	\$14,499	\$617,014	\$602,515	\$635,325	\$156,483	\$4,287,000	\$36,000	\$0	\$0	\$5,114,808			\$5,731,822	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.
123	Cedar-Sammamish Subtotal			\$51,218,923	\$87,482,364	\$36,263,443	\$22,573,900	\$12,356,266	\$15,485,637	\$7,200,077	\$3,710,000	\$3,200,000	\$64,525,880	\$22,000,000	\$35,400,000	\$209,408,244	
124																	
125																	
126	WLFL8 BRISCOE LEVEE SETBACK	Green	Agreement	\$21,348,995	\$23,330,271	\$1,981,276	\$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.

No.	Title	Basin	Type of project	2020 Inception to Date Expenditure	2021 Inception to Date Budget	2021 Available Budget	2022 Requested	2023 Forecasted	2024 Forecasted	2025 Forecasted	2026 Forecasted	2027 Forecasted	6-Year CIP Total	CIS Year 7-10	CIS 10+ Year	Project Life Total	Comments
127	WLFL8 BRPS CONTROL BLDG RPLCMT	Green	FCD Const	\$842,416	\$1,002,416	\$160,000	\$490,862	\$506,479	\$3,477,822	\$971,315	\$3,898,218	\$4,015,165	\$13,359,861			\$14,362,277	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.
128	WLFL8 BRPS FISH PASS IMPRVMENTS	Green	FCD Const	\$39,144	\$939,144	\$900,000	\$1,420,719	\$3,238,220	\$9,942,392	\$10,127,229	\$61,345	\$0	\$24,789,905			\$25,729,049	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.
129	WLFL8 BRPS HIGH-USE ENGINES	Green	FCD Const	\$3,782,906	\$6,690,325	\$2,907,419	\$3,837,828	\$22,510	\$0	\$0	\$0	\$0	\$3,860,338			\$10,550,663	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.
130	WLFL8 BRPS LARGE ENGINE REPLACEMENT	Green	FCD Const		\$0	\$0	\$0	\$0	\$0	\$401,193	\$413,229	\$6,652,427	\$7,466,849			\$7,466,849	Renton. This project will design and replace the large engines and overhaul the large pumps at the Black River pump station.
131	WLFL8 BRPS SEISMIC UPGRADES	Green	FCD Const		\$1,379,170	\$1,379,170	\$2,397,634	\$6,978,155	\$11,592,741	\$9,252,839	\$184,481	\$0	\$30,405,850			\$31,785,020	Renton. This project will strengthen and improve the structure and subsurface soils at the Black River Pump Station.
132	WLFL8 BRPS SUPPORT SYS UPGRADES	Green	FCD Const		\$636,540	\$636,540	\$928,728	\$225,102	\$1,616,440	\$1,664,933	\$174,483	\$0	\$4,609,686			\$5,246,226	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.
133	WLFL8 COVINGTON CR BLACK DIAMOND	Green	Agreement		\$2,293,500	\$2,293,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$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.
134	WLFL8 DESIMONE MAJOR REPAIR USACE	Green	Agreement	\$116,332	\$850,000	\$733,668	\$6,000,000	\$6,600,000	\$20,000,000	\$6,005,000	\$15,000	\$0	\$38,620,000			\$39,470,000	Tukwila. Construct a floodwall to design elevation for 18,800 cfs plus 3 feet of freeboard, repairing slope failures, laying the levee embankment slope back and shifting the levee alignment (and trail) landward where possible. The floodwall will connect previously constructed floodwalls at Desimone reaches 1 and 2.
135	WLFL8 DYKSTRA 2022 REPAIR	Green	FCD Const				\$50,000	\$100,000	\$250,000	\$0	\$0	\$0	\$400,000			\$400,000	Auburn: New flood damage repair project. Address scour and bank erosion and missing toe rock upstream of 2015 Corps of Engineers repair.
135	WLFL8 FORT DENT 2020 REPAIR	Green	FCD Const	\$13,498	\$250,000	\$236,502	\$328,710	\$311,109	\$2,611,000	\$6,556	\$0	\$0	\$3,257,375			\$3,507,375	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.
136	WLFL8 FORT DENT US 2021 REPAIR	Green	FCD Const		\$398,825	\$398,825	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$398,825	Tukwila. This project will repair a damaged section of the levee that was caused by a falling tree and susceptible to further scour and erosion.
137	WLFL8 GALLI-DYKSTRA 2020 REPAIR	Green	FCD Const	\$356,094	\$1,167,211	\$811,117	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$1,167,211	Auburn. Complete Phase 1 repair per a request from the City of Auburn. Elevate 3500 feet levee reach to meet FEMA levee certification requirements.
138	WLFL8 GALLI-DYKSTRA FEASIBILITY	Green	FCD Const		\$9,940	\$9,940	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$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.
139	WLFL8 GREEN PRE-CONST ACQ	Green	FCD Acqu/Elev	\$4,079,197	\$12,577,724	\$8,498,527	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$30,000,000			\$42,577,724	Auburn, Kent, Renton, 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.
140	WLFL8 GREEN R IMPROVEMENT 2024	Green	Agreement		\$0	\$0	\$0	\$0	\$100,000	\$0	\$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.
141	WLFL8 GREEN R PL84-99 MITIGATN	Green	FCD Const	\$5,271,305	\$5,273,368	\$2,063	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$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.
142	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.
143	WLFL8 HSB BREDA SETBACK KENT	Green	Agreement	\$930,509	\$1,930,509	\$1,000,000	\$5,200,000	\$7,900,000	\$400,000	\$0	\$0	\$0	\$13,500,000			\$15,430,509	Kent. 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.
144	WLFL8 HSB MCCOY REALIGNMENT USACE	Green	Agreement	\$4,244	\$516,138	\$511,894	\$0	\$2,188,106	\$700,000	\$0	\$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.
145	WLFL8 INTERIM SWIF IMPLEMENTATION	Green	FCD Const	\$83,675	\$83,675	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$83,675	Auburn, Kent, Renton, Tukwila. Coordination and planning activities to implement recommendations of interim SWIF. Maintenance work associated with the interim SWIF is included in the operating budget.
146	WLFL8 KENT AIRPORT RVTMNT 2022 REPAIR	Green	FCD Const		\$0	\$0	\$100,000	\$350,000	\$0	\$0	\$0	\$0	\$450,000			\$450,000	Kent: New flood damage repair project. Stabilize over steepened bank and rock revetment that has been undercut by rotational bank failure.
146	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.
147	WLFL8 LOWER RUSSELL ACQ KENT	Green	Agreement	\$1,023,656	\$1,123,668	\$100,012	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$1,123,668	Kent. Acquisitions by the City of Kent for the Lower Russell levee setback project.
148	WLFL8 LWR GRN R CORRIDOR PLAN/EIS	Green	FCD Const	\$553,519	\$1,743,249	\$1,189,730	(\$1,024,730)	\$0	\$0	\$0	\$0	\$0	(\$1,024,730)			\$718,519	Auburn, Kent, Renton, Tukwila. Lower Green River Corridor Planning and Environmental Impact Statement.
149	WLFL8 LWR RUSSELL LEVEE SETBACK	Green	FCD Const	\$30,835,317	\$48,960,238	\$18,124,921	\$7,945,687	\$130,730	\$0	\$0	\$0	\$0	\$8,076,417			\$57,036,655	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.

No.	Title	Basin	Type of project	2020 Inception to Date Expenditure	2021 Inception to Date Budget	2021 Available Budget	2022 Requested	2023 Forecasted	2024 Forecasted	2025 Forecasted	2026 Forecasted	2027 Forecasted	6-Year CIP Total	CIS Year 7-10	CIS 10+ Year	Project Life Total	Comments
150	WLFL8 MILWAUKEE LEVEE #2-KENT	Green	Agreement	\$1,898,921	\$19,400,000	\$17,501,079	\$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.
151	WLFL8 NEWAUKUM CR FLOOD CONVEYANCE REST	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.
152	WLFL8 O'CONNELL REVETMENT 2021 REPAIR	Green	FCD Const		\$100,000	\$100,000	\$50,000	\$350,000	\$0	\$0	\$0	\$0	\$400,000			\$500,000	Kent. Stabilize the O'Connell revetment slope, and move or replace the road shoulder and guardrail.
153	WLFL8 OLD JEFFS FARM REVETMENT	Green	FCD Const	\$304,577	\$901,721	\$597,144	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$901,721	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.
154	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.
155	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.
156	WLFL8 SIGNATURE PT REVETMENT KENT	Green	Agreement	\$1,482,083	\$29,945,419	\$28,463,336	\$26,800,000	\$0	\$0	\$0	\$0	\$0	\$26,800,000			\$56,745,419	Kent. Project provides increased level of protection to 1.5 miles of Lower Green River Corridor. Alternative selected by Executive Committee.
157	WLFL8 TITUS PIT RVTMNT 2018 REPAIR	Green	Agreement	\$167,738	\$167,738	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$167,738	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.
158	WLFL8 TUK-205 GUNTER FLOODWALL	Green	FCD Const	\$198,446	\$11,423,000	\$11,224,554	\$3,075,336	\$1,230,114	\$34,993,637	\$0	\$0	\$0	\$39,299,087			\$50,722,087	Tukwila. 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.
159	WLFL8 TUK-205 RATOLO FLOODWALL	Green	FCD Const		\$0	\$0	\$0	\$1,500,000	\$300,000	\$0	\$0	\$0	\$1,800,000			\$1,800,000	Tukwila. 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.
160	WLFL8 TUK-205 USACE GACO-SEGALE	Green	Agreement	\$945,745	\$9,716,822	\$8,771,077	\$3,959,599	\$3,493,000	\$60,000	\$11,000	\$0	\$0	\$7,523,599			\$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.
161	WLFL8 TUKWILA RVTMT 2019 REPAIR	Green	FCD Const	\$411,134	\$500,000	\$88,866	\$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.
162	WLFLS PUGET WAY CULVERT	Seattle	Agreement	\$1,541,952	\$1,800,000	\$258,048	\$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.
163	WLFLS S PARK DRAINAGE IMPROVEMENTS	Seattle	Agreement	\$6,032,914	\$10,075,000	\$4,042,086	\$7,030,000	\$0	\$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.
164	WLFLS SOUTH PARK PUMPSTATION	Seattle	Agreement	\$1,787,318	\$6,505,000	\$4,717,682	\$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.
165	Green-Duwamish Subtotal			\$90,164,213	\$210,288,784	\$120,124,569	\$73,590,373	\$40,123,525	\$91,044,032	\$33,440,065	\$9,746,756	\$15,667,592	\$263,612,343	\$0	\$0	\$473,901,127	
166							\$0										
167							\$0										
168	WLFL9 212TH AVE SE @ SR 164 FLD IMPRVMT	Green	Agreement		\$0	\$0	\$0	\$0	\$0	\$190,000	\$0	\$0	\$190,000			\$190,000	Enumclaw. Improve the drainage system to alleviate neighborhood flooding. May require improvements outside of the road right-of-way.
169	WLFL9 212TH AVE SE MITIGATION	White	Agreement		\$65,000	\$65,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$65,000	Enumclaw. TBD
170	WLFL9 ANDERSON PARK ACQUISITION	White	FCD Acqu/Elev		\$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.
171	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.
172	WLFL9 CHARLIE JONES DS CULVERT	White	Agreement		\$0	\$0	\$45,000	\$555,000	\$1,000,000	\$50,000	\$0	\$0	\$1,650,000			\$1,650,000	Auburn. This project will analyze culvert replacement and road-raising options and implement the preferred option.
173	WLFL9 CHARLIE JONES US CULVERT	White	Agreement	\$271,852	\$747,666	\$475,814	\$188,186	\$47,000	\$10,000	\$0	\$0	\$0	\$245,186			\$992,852	Auburn. This project will analyze culvert replacement and road-raising options and implement the preferred option.
174	WLFL9 COUNTYLINE TO A STREET	White	FCD Const	\$23,890,826	\$23,926,129	\$35,303	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$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.
175	WLFL9 RIGHT BANK LEVEE SETBACK	White	FCD Const	\$14,157,783	\$15,407,589	\$1,249,806	\$583,755	\$1,848,752	\$7,047,482	\$6,811,257	\$135,941	\$0	\$16,427,187			\$31,834,776	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.
176	WLFL9 SLIPPERY CREEK ACQ	White	FCD Acqu/Elev	\$116,261	\$180,000	\$63,739	\$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.

No.	Title	Basin	Type of project	2020 Inception to Date Expenditure	2021 Inception to Date Budget	2021 Available Budget	2022 Requested	2023 Forecasted	2024 Forecasted	2025 Forecasted	2026 Forecasted	2027 Forecasted	6-Year CIP Total	CIS Year 7-10	CIS 10+ Year	Project Life Total	Comments
177	WLFL9 STUCK R DR 2019 REPAIR	White	FCD Const	\$580,294	\$815,294	\$235,000	\$5,000	\$0	\$0	\$0	\$0	\$0	\$5,000			\$820,294	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.
178	WLFL9 STUCK R DR FLOOD PROTECTION	White	FCD Const	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000,000			\$1,000,000	Auburn. TBD
179	White Subtotal			\$39,243,649	\$41,468,311	\$2,224,662	\$821,941	\$2,450,752	\$8,057,482	\$7,051,257	\$135,941	\$1,000,000	\$19,517,373	\$0	\$0	\$60,985,684	
180																	
181																	
182	WLFLG COASTAL EROSION/FLOODING GRANTS	Countywide	Grant		\$3,000,000	\$3,000,000	\$3,075,449	\$3,152,795	\$3,232,086	\$3,313,372	\$3,396,702	\$3,482,128	\$19,652,532			\$22,652,532	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.
183	WLFLG CULVERT & FISH PASSAGE GRANTS	Countywide	Grant		\$3,000,000	\$3,000,000	\$3,075,449	\$3,152,795	\$3,232,086	\$3,313,372	\$3,396,702	\$3,482,128	\$19,652,532			\$22,652,532	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.
184	WLFLG FLOOD REDUCTION GRANTS	Countywide	Grant	\$13,907,874	\$26,732,458	\$12,824,584	\$3,075,449	\$3,152,795	\$3,232,086	\$3,313,372	\$3,396,702	\$3,482,128	\$19,652,532			\$46,384,990	Competitive grant program for flood reduction projects. Increases as a proportion of total FCD tax revenue.
185	WLFLG URBAN STREAMS GRANTS	Countywide	Grant		\$3,000,000	\$3,000,000	\$3,075,449	\$3,152,795	\$3,232,086	\$3,313,372	\$3,396,702	\$3,482,128	\$19,652,532			\$22,652,532	Invests in urban flooding projects that reduce risks to people, property, and public infrastructure.
186	WLFLG WRIA GRANTS	Countywide	Grant	\$30,406,157	\$51,686,674	\$21,280,517	\$10,007,902	\$10,259,596	\$10,517,620	\$10,782,133	\$11,053,299	\$11,331,285	\$63,951,835			\$115,638,509	Cooperative Watershed Management Grant Program; priorities recommended by watershed groups. Increase based on assumed inflation rate.
187	WLFLM EFFECTIVENESS MONITORING	Countywide	FCD Const	\$3,762,973	\$5,455,622	\$1,692,649	\$850,701	\$1,191,950	\$1,064,100	\$815,500	\$628,200	\$608,500	\$5,158,951			\$10,614,573	Evaluation of capital projects to determine effectiveness and identify project design improvements.
188	WLFLQ SUBREGNL OPPRTNTY FUND	Countywide	Grant	\$46,215,045	\$67,376,883	\$21,161,837	\$6,092,142	\$6,170,764	\$6,247,632	\$6,324,334	\$6,408,362	\$0	\$31,243,234			\$98,620,117	Allocation to all King County jurisdictions for flooding, water quality, or watershed management projects. Increases as a proportion of total FCD tax revenue.
189	WLFLX CENTRAL CHARGES	Countywide	FCD Const	\$864,056	\$1,111,493	\$247,437	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$600,000			\$1,711,493	Central charges related to the FCD's capital fund.
190	WLFLX CONST MATERIALS STOCKPILE	Countywide	FCD Const	\$149,992	\$500,000	\$350,008	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$500,000	Stockpile material for future flood damage repairs.
191	WLFLX FLOOD EMERGENCY CONTGNCY	Countywide	FCD Const	\$419,042	\$1,669,042	\$1,250,000	\$0	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000			\$2,919,042	Contingency for emergency response actions during a flood event.
192	Countywide Subtotal			\$95,725,139	\$163,532,172	\$67,807,032	\$29,352,541	\$30,583,490	\$31,107,696	\$31,525,455	\$32,026,669	\$26,218,297	\$180,814,148	\$0	\$0	\$344,346,320	
193																	
194	Grand Total			\$347,765,290	\$603,224,971	\$255,459,681	\$139,447,026	\$108,737,986	\$169,269,451	\$108,941,066	\$70,322,774	\$55,268,915	\$651,987,218	\$125,450,000	\$121,300,000	\$1,501,962,188	