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
					-											Baring. This project will elevate or buyout individual structures in the South Fork Skykomish Basin to eliminate the risk of flooding or erosion damage
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	during future flood events. Skykomish. Approximately 50-foot-long section of missing armor rock
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	immediately downstream of the bridge. Further flooding may compromise or severely damage facility.
																Skykomish. This project will continue to acquire and remove homes along a stretch of the Skykomish River that are endangered by erosive forces as
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	well as inundation in some places. Skykomish. Project will lay back the privately-built rockery to reconstruct
4 WLFL0 TIMBERLANE 2016 REPAIR	SF Skykomish	FCD Const	\$12,970	\$16,040	\$3,070	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$16.040	rock wall into stable revetment geometry. Will likely be implemented by the Strike Team.
			¥ ·=,e · ·	¥ 12,212	70,010	7.	**	***	7.			, ,			4 . 2 , 2	Skykomish. Revetment is approximately 300 LF along left bank of South Fork Skykomish River. Unstable section of vertical stacked rock is
5 WLFL0 TIMBERLANE 2019 REPAIR	SF Skykomish	FCD Const	\$160.050	\$600.000	\$439.950	\$0	\$0	\$0	\$0	\$0	\$0	\$0			9600 000	approximately 150 LF (needs verification). Failure has occurred previously in this section of revetment.
5 WELLO TIMBERCANE 2019 NEL AIR	Of OKYKOIIISI	I I OD GOISE	\$100,030	φουσ,σου	ψ439,930	ΨΟ	ΨΟ	φυ	ΨΟ	φυ	φυ	ΨΟ			\$000,000	North Bend. Reduce neighborhood isolation from flooding. Develop a set of alternatives for improvements to 428th Avenue SE, SE 92nd Street, and
C MU ELA ACCITILANTE CE DE FEACIEULTY		FOD 0	#200 coc	\$200.7FC	¢70	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$200.7F0	Reinig Road to reduce the frequency of community isolation caused by
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	h floodwaters overtopping these roadways. 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
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. 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
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	South Fork Snoqualmie Corridor Plan. City of Snoqualmie. Elevate several flood-prone homes in the areas around
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	Walnut St and Northern St. 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
10 WLFL1 MF FLOOD CONVEYANCE N BEND	Upper Snog	Agreement	\$0	\$0	\$0	\$150,000	\$750.000	\$750.000	\$0	\$0	\$0	\$1.650.000			\$1.650.000	modifications, enhancements, and culvert improvements.
WELLING FLOOD CONVEYANCE IN BEIND	Оррег Эпоц	Agreement	φυ	φυ	φυ	\$150,000	\$750,000	\$750,000	φυ	φυ	φυ	\$1,030,000			\$1,050,000	North Bend. Work with willing sellers to acquire eighteen homes at risk from
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	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.
																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
14 WLFL1 NORMAN CREEK DS CULV	Upper Snog	Agreement	\$722.080	\$724.000	\$1.920	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$724.000	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		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.
				7.	7-	7-	**	7000,000	4,22,22		**	¥ 1,122,222			+ ·,· · · · ·	North Bend. Initiate feasibility study to mitigate the risk of scour damage to the North Fork Bridge by retrofitting the existing structure with deep
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	foundations or alternative risk mitigation strategies.
																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,
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	construction is scheduled for 2020.
																North Bend. Conduct a feasibility study to determine ways of preventing the overtopping of the Reif Rd Levee. Potential solutions include: repair and/or
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	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.
																North Bend. Repair three primary damage sites just upstream and directly across from the South Fork Snoqualmie confluence totaling ~285 lineal feet.
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	Construction is anticipated in 2021.

			2019 Inception to	2020 Inception to Date	2020 Available	2021						6-Year CIP	CIS	CIS	Project Life	
No. Title	Basin	Type of project	Date Expenditure		Budget		2022 Forecasted	2023 Forecasted	2024 Forecasted	2025 Forecasted	2026 Forecasted		Year 7-10	10+ Year	Total	Comments
																ess flooding from Ribary Creek at Bendigo Blvd in North qualmie levees prevent drainage to the river during high
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 flows.	ess flooding from Ribary Creek at Bendigo Blvd in North
															Bend as the Snoo	qualmie levees prevent drainage to the river during high
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 flows. North Bend. Impl	ement projects identified in the Capital Investment
23 WLFL1 SF CIS LONG TERM	Upper Snoq	FCD Const		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$57,100,000		ed 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 Strategy, approve	ed as policy direction by the Executive Committee.
															l l	evee deficiencies have been identified in this leveed oject will design and reconstruct the impaired segment of
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 levee in place.	
															ongoing No imp	I breach of levee - erosion and lateral channel migration is lediately adjacent private property or infrastructure.
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 Continued erosio	n could threaten 428th Ave embankment or bridge.
						, , , , , , , , , , , , , , , , , , ,		·		·		(, , ,			North Bend. Betv	een 428th St Bridge and Tate Creek, several locations on
																ock dislodged and corresponding minor bank erosion of river bank. Actual gaps range between 6-10 feet.
																compromises levee integrity, increasing its vulnerability to potential failure. Failure of this facility could result in
OZ WILET A CHANCE MILL DD COAC DEDAID	0	500.0	\$47.040	2054.000	#000 7 50	0040.040	40			***		2040.040			damage to a hea	vily used county road (428th Ave SE). Scheduled for 2018
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 construction.	in annual and the CF live of fact of the facility with an incirc
															toe rock and sha	air approximately 25 lineal feet of the facility with missing low scour scallop into bank that is approximately 1-2 feet
																vee is a relatively short flood containment levee that les in the Si View Park Neighborhood of North Bend from
28 WLFL1 SI VIEW RM4 2017 REPAIR	Upper Snog	FCD Const	\$288.037	\$396,754	\$108,717	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$396.754 flooding. Project	scheduled for 2018 construction.
20 112 21 31 112 1111 1211 122 1111	Оррог отгод	1 02 00	\$200,00 1	φοσο, το τ	ψ100,111	ΨŪ	Ψ0	40	Ψ.	Ψ0	4 0	Ų.				eholder funding to partner with WSDOT to expand bridge
															SR202 opening of	ver South Fork Snoqualmie River and Ribary Creek to
															North Bend Reg	nce and reduce upstream flood impacts. Supported by uires state or federal funding. Relative contribution of this
29 WLFL1 SR202 SF BRIDGE LENGTHEN	Upper Snoq	FCD Const		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100,000	\$100,000			\$100,000 project is being e	valuated in the SF Snoqualmie Corridor Plan.
																are a Concept Development Report (CDR) to analyze and
															the current bridge	alignment replacement bridge and road-raising option as does not provide enough hydraulic opening due to the
30 WLFL1 TATE CR SCOUR FEASIBILITY	Upper Snoq	Agreement		\$0	\$0	\$0	\$0	\$150,000	\$0	\$0	\$0	\$150,000			\$150.000 transport of sedir	nents and water overtops the approaches during floods.
	-,,	Ĭ		, ,	, .	, ,	, -	,,	,	•	, ,	,,			Snoqualmie. This	project will continue to acquire or elevate flood-prone
																Jpper Snoqualmie basin to reduce the risk of flood, anel migration damage. Partnership with City of
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 to ele	evate homes and cost-share acquisition of homes where
WEIET OF KONG REGIES WITHOUT	Оррег опоч	1 OD Acquirelev	ψ11,002,710	ψ14,120,307	Ψ2,510,012	Ψ233,133	Ψ2,004,020	ψ2,400,001	Ψ2,000,004	Ψ2,000,000	Ψ2,300,030	Ψ12,112,510			North Bend. Ensu	re eleven South Fork Snoqualmie River levees meet the
																JS Army Corps of Engineers PL 84-99 program in order to sistance from the Corps in the event of flood damage to
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 the levees	
																te flooding on this sole access road by replacing the and raising the roadway to elminate over-topping during
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 flood events.	drainage to alleviate neighborhood flooding by
34 WLFL2 334TH AVE SE & SE 43RD PL FLD IMPRVMNT	Lower Snoq	Agreement		\$0	\$0	\$0	\$0	\$0	\$0	\$500,000	\$0	\$500,000				ainage system to flow to the Snoqualmie River.
																proximately 200 feet of revetment. Dutchman Road in this
																the sole access to residences and business on the west lalmie Valley downstream of Duvall. Continued erosion of
																uld result in erosion of the road (West Snoqualmie Valley would severely limit access to the downstream property
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			l '	following a flood event.
The second secon		. 32 301101	\$0,020	Ţ.55,020	Ţ.00,000	Ψ.32,110	Ţ.,.JO,OO	*************************************		ΨΟ	Ψ0	ψ., σ. 12,110			Duvall. These two	bridges are subject to having the roadway approach fill
																ı flood. Excavate approaches and rebuild approaches to pproaches during flooding. A similar repair was done on
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 Woodinville-Duva	
															Barfuse facilities	and replacing with modern flood and erosion protection
37 WLFL2 FALL CITY FLOODPLAIN RESTORATION	Lower Snoq	Agreement	\$0	\$0	\$0	\$300,000	\$0	\$0	\$0	\$0	\$0	\$300,000			features. FCD co \$300,000 reduction feature	st-share funding is intended for design of flood risk
		J	73	, , , , , , , , , , , , , , , , , , ,	+0	,,	Ψ0	-		70	V	, , , , , ,				
WLFL2 FISH HATCHERY RD BR #61B REPAIR															flood event, rebu	n the bridge structure to stabilize it after the most recent ld the east approach roadway to address the current issue
38	Lower Snoq	Agreement	\$0	\$80.000	\$80,000	\$434,000	\$186,000	\$0	\$0	\$0	\$0	\$620,000			and to protect it a	gainst major flood events in the future, and restore the and riverbank profile to buffer the bridge against scour.
55	LOWEL SHOW	Agreement	φυ	φου,υυυ	φου,υυυ	ψ+υ4,000	ψ100,000	Φ0	φ0	φU	φυ	φυΖυ,υυυ				
																Id repair approximately 800 linear feet of bank erosion vetment on the left bank of the Snoqualmie River across
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				uvall. Bank erosion is undermining an existing road.

				2020												
No. Title	Basin	Type of project	2019 Inception to Date Expenditure	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
																Fall City. The river is scouring the road away and David Powell Road is
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	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.
			, , , ,	,,,,,,,	, , , , , , , , , , , , , , , , , , , ,	(, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	•	, ,		•	,	(, , , , , , ,			, , -, -	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
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	primary route. 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,
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	and landowners. FCD expenditure leverages habitat restoration funding from other sources.
WEI EE E GNOWLED WIT GOTTLED THE	Lower Gried	1 OB Const	ψ1,010,214	ψ1,000,014	ψο-10,000	(\$210,000)	Ψου,σου	ψ120,000	Ψ20,000	Ψ20,000	Ψ20,000	\$200,400			Ψ1,010,214	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
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	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.
	·		₾4.005.007		\$80.657	\$0	\$0	\$0	\$0	\$0	\$0					Fall City. Rebuild revetment to protect road access to high value agricultural
46 WLFL2 SE 19TH WAY REVETMENT	Lower Snoq	FCD Const	\$1,835,637	\$1,916,294	\$80,057	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$1,916,294	operations and lands. Construction is complete. 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
47 WLFL2 SNOQUALMIE VALLEY FEAS	Lower Snoq	Agreement	\$0	\$0	\$0	\$250,000	\$250,000	\$0	\$0	\$0	\$0	\$500,000			\$500,000	with chronic flood issues impacting over 25,000 daily drivers. Carnation. Placeholder costs for long-term facility improvement project to
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	prevent erosion undermining 310th Ave NE. Carnation. This completed project repaired approximately 250 feet of
																damage identified in late March 2018 to a section of the Stossel Bridge
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	Right Bank Revetment on the Snoqualmie River, downstream of the City of Carnation.
																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
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. 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
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. 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
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	for 2018 construction. Carnation. Facility failure has consequences for property owners
53 WLFL3 HOLBERG 2019 REPAIR	Tolt	FCD Const	\$0	\$50.000	\$50,000	\$0	\$450,000	\$0	\$0	\$0	\$0	\$450.000			¢500,000	immediately landward of facility. Potential for high flows and erosive damage to residences and property.
55 WLFL3 HOLDERG 2019 REPAIR	TOIL	FCD Collst	φυ	\$50,000	\$50,000	Φ0	\$450,000	\$0	\$0	Φ0_	\$0	\$450,000			\$500,000	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
54 WLFL3 HOLBERG FEASIBILITY	Tolt	FCD Const	\$211,557	\$401,061	\$189,504	\$11,088	\$0	\$0	\$0	\$0	\$0	\$11,088			\$412,149	March 2017 Draft Tolt Piver Chappel Migration study
			* =::,;••:	*********	7.00,00	¥,,000		**	**	**	**	7.1,000			¥ ,	Carnation. Capital Investment Strategy. Design, based on level of service analysis, the highest priority levee setback for flood risk reduction. Phase 2
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	construction estimated in CIS at \$14.5M-\$16.7M
																Carnation. Acquire high-priority flood risk reduction properties in the lower two miles of the Tolt River consistent with the adopted Capital Investment
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. 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
		500.0														the Remlinger property. Construction complete.
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. Capital Investment Strategy: Acquire 2 at-risk homes from
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	willing college; acquire remaining 14 homes as funds become available
																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
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			\$5 500 674	by others. Approximatlely 20 homes removed from high hazard areas within and just upstream and downstream of San Souci neighborhood.
OU VALLED OVIN OCCOL MONHOOD BOLLOOF	TOIL	Ti OD Acda/Elea	ψ+,500,074	ψυ, 108,014	φυσ 1,000	φου,υυυ	Φ0	μ φ400,000	μ φ0	\$0	1 20	μ φ430,000		1	μυ,υσσ,υ74	

			2019 Inception to	2020 Inception to Date	2020 Available	2021						6-Year CIP	CIS	CIS	Project Life
No. Title	Basin	Type of project	Date Expenditure	Budget	Budget	Requested	2022 Forecasted	2023 Forecasted	2024 Forecasted 2	2025 Forecasted	2026 Forecasted	Total	Year 7-10	10+ Year	Total Comments
60 WLFL3 SEDIMENT MGMT FEAS	Tolt	FCD Const	\$113,706	\$441,358	\$327,652	(\$177,652)	\$0	\$0	\$0	\$0	\$0	(\$177,652)			Carnation. Capital Investment Strategy: Conduct sediment management feasibility study and develop a plan. Update and include upper watershed \$263,706 sediment production estimates.
		505.0	***	4005.000	40=0.040	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,									Carnation. Capital Investment Strategy: Initiate study (with potential future design and construct) to add bridge span(s), raise the highway and relocate
	Tolt	FCD Const	\$22,658	\$395,900	\$373,242	\$0	\$0	\$0	\$0	\$0	\$0			#00 000 000	\$395,900 King County Parks parking area. Carnation. Implement projects identified in the Capital Investment Strategy,
	Tolt			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$28,800,000	\$28,800,000 approved as policy direction by the Executive Committee. Carnation. Implement projects identified in the Capital Investment Strategy,
63 WLFL3 TOLT CIS MED TERM	Tolt	FCD Const		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$56,250,000		\$56,250,000 approved as policy direction by the Executive Committee. 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
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 2017.
															Carnation. Capital Investment Strategy: Conduct a detailed hydraulic analysis to optimize the elevation of new levees to maximize flood risk
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 reduction benefits Carnation. Acquisition funding for high risk properties in levee setback
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)			project area. Project priorities will be determined by the Board through \$4,214,977 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			Carnation. Capital investment strategy: acquire at-risk homes from willing \$4.935.550 sellers.
			. , ,			, .				•	7.				Carnation. Reduce neighborhood isolation from flooding. Evaluate feasibility
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 of elevating sections of Tolt River Road. Carnation. Capital Investment Strategy: Initiate design for elevation of one
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			road location to reduce or eliminate isolation. Implement additional road \$2,863,630 elevations as funds become available.
69 WLFL3 TOLT R RD NE IMPROVEMENTS	I OIL	FCD Const	\$0	\$0	\$0	\$0	\$53,045	\$109,273	\$225,102	\$1,043,347	\$1,432,863	\$2,863,630			\$2,803,030 elevations as funds become available. Carnation. Capital Investment Strategy: Construct Tolt Road NE road
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			elevation in one location. Remove illegal revetment and roads in San Souci \$2,610,000 neighborhood.
10 1121 20 1021 111 20 51 111 20 51 111 20 51		1 02 00.100	V.2,.22	ψ.ισσ,σσσ	ψ <u>2,2.</u> .σ	Ψ200,000	ψ. σσ,σσσ	ψ. σσ,σσσ	φο20,000		Ψ	Ψ2, 120,000			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
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 damage to trail bridge. Fall City. Acquisition of single-family homes and future acquisition of mobile
		505 4 (5)	44 === 040	44.050.400	***	(200.050)	****			•		*****			home park at risk of channel migration along the Raging River in the Alpine
72 WLFL4 ALPINE MANOR NEIGHBORHOOD BUYOUTS F	Kaging	FCD Acqu/Elev	\$1,753,810	\$1,853,460	\$99,650	(\$69,650)	\$400,000	\$0	\$0	\$0	\$0	\$330,350			\$2,183,810 Manor neighborhood. 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
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 levee were breached. Scheduled for 2018 construction.
															Fall City. This bridge has a history of scour damage. One of the arch foundations is exposed. Repair scour mitigation measures to protect the
	Raging	Agreement	\$25,062	\$80,000	\$54,938	\$0	\$0	\$0	\$0	\$0	\$0	\$0			footing. It serves only one house but is a designated King County \$80,000 Landmark.
75 Snoqualmie-South Fork Skykomish Subtotal 76			\$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
77															
															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
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 Development Report, analyze and select best options.
															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
70 NW 51 5 DANK 500 0000 DEDAID	0	505.0		#50.000	#50.000	***									revetment. Continued erosion may result in damage to the bridge and
79 WLFL5 BAYLESS 2020 REPAIR S	Sammamish	FCD Const		\$50,000	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$50,000 ongoing flooding to the neighborhood. Sammamish. This project will restore access to one river mile of high
80 WLFL5 GEORGE DAVIS CRK CITY OF SAMMAMISH	Sammamish	Agreement		\$400,000	\$400,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0			quality kokanee salmon habitat and reduce the risk of flooding by reducing \$400,000 sediment deposition.
				, ,	. ,	•	\$0	\$0	\$0	\$0	\$0				Issaquah. Further damage to the facility could cut off the sole access to one
01 WLFLO IRWIIN R ZUZU REPAIR	Sammamish	FCD Const		\$25,000	\$25,000	\$275,000	\$0	\$0	\$0	\$ U	\$0	\$275,000			\$300,000 resident (via a private road and bridge over the creek). 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
82 WLFL5 JEROME 2020 REPAIR	Sammamish	FCD Const		\$50,000	\$50,000	\$200,000	\$0	\$0	\$0	\$0	\$0	\$200,000			\$250,000 linear feet (LF) of erosion.
															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
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 landslide and threaten downstream homeowners.

				2020											
No. Title	Basi	n Type of project	2019 Inception to Date Expenditure	Inception to Date	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
	Just				·								Tear 7-10	101104	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.
84 WLFL5 WILLOWMOOR FLDPLAIN REST	Samman		\$3,223,377		\$297,600	\$1,000,000	\$0	\$0	\$0	\$0	\$0				\$4,520,977 Redmond. Protect Avondale Rd from an embankment that has been
85 WLFL6 BEAR CRK FLOOD EROSION REDM 86 WLFL6 FACTORIA BLVD DRAINAGE		Tribs Agreement Tribs Agreement		\$550,000 \$1,071,000	\$550,000 \$1,071,000	\$550,000 \$3,721,000	\$2,022,000	\$0	\$0 \$0	\$0 \$0	\$0				\$1,100,000 scoured by floodwaters from Bear Creek. 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. Issaquah. Prepare a feasibility analysis report which will include, but is not
87 WLFL6 ISSAQUAH TRIB FEAS	Lk Wash	Tribs Agreement	\$233,156	\$350,000	\$116,844	\$0	\$0	\$0	\$0	\$0	\$0	\$0			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 \$350,000 the stability of the bridge.
88 WLFL6 LOWER COAL CRK PH I	Lk Wash		\$7,754,240		\$3,307,352	\$300,000	\$200,000	\$285,000	\$1,310,000	\$1,432,358	\$0				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 BELLEVI	UE Lk Wash	Tribs Agreement	\$0	\$0	\$0	\$400,000	\$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. 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
90 WLFL6 MAY VALLEY DRAINAGE IMPRVMN		Tribs Agreement	\$220,545	\$530,000	\$309,455	\$0	\$0	\$0	\$0	\$0	\$0	\$0			for a future sediment facility. 2020 funding is for permitting and project design. 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.
91 WLFL7 BELMONDO 2020 REPAIR 92 WLFL7 BRODELL 2020 REPAIR	Cedar Cedar	FCD Const		\$50,000 \$50,000	\$50,000 \$50,000	\$100,000 \$450,000	\$550,000 \$800,000	\$0	\$0 \$0	\$0 \$0	\$0 \$0				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.
02 144 EL 7 DVEDO 2020 DEDAID	0-4	FOD 0t		\$25.000	\$25,000	фо.	\$0	00	0	* 0	\$0	00			Renton. Emergency action to prevent flooding of Byers Road, which is the sole access/egress for numerous residences along the Cedar River.
93 WLFL7 BYERS 2020 REPAIR 94 WLFL7 BYERS NEIGHBORHOOD IMPROVE	Cedar MENTS Cedar	FCD Const	\$0	\$25,000 \$0	\$25,000 \$0	\$0 \$220,000	\$300,000	\$0 \$50,000	\$0	\$0 \$0	\$0	\$0 \$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 \$570,000 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			Renton. This project will acquire strategic real estate upon which several large Flood Control District capital projects are dependent (Project J in the \$14,730,532 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	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		Renton.Implement projects identified in the Capital Investment Strategy, \$22,000,000 approved as policy direction by the Executive Committee. Renton. This six-year flood risk reduction capital investment strategy will cover the Cedar River valley from Landsburg Road SE (River Mile 22) to
98 WLFL7 CEDAR LEVEE SETBACK FEAS (Ced	dar Corridor Cedar	FCD Const	\$1,852,687	\$1,987,587	\$134,900	\$0	\$0	\$0	\$0	\$0	\$0	\$0			Lake Washington. Project complete. Closeout in 2020. \$1,987,587 Renton. Improve Cedar Grove Road near Byers Road SE and alleviate
99 WLFL7 CEDAR R DWNSTREAM 2024 IMPV	Cedar	Agreement		\$0	\$0	\$0	\$0	\$0	\$100,000	\$0	\$0	\$100,000			roadway flooding by raising the road through the application of a thick layer \$100,000 of overlay. Erosion and scour have resulted in loss of upper ballast, dislodging of key
100 WLFL7 CEDAR RAPIDS ELJ6 2020 REPAIR	Cedar	FCD Const		\$50,000	\$50,000	\$136,000	\$0	\$0	\$0	\$0	\$0	\$136,000			logs, shearing of piles, and damage to hardware connections, to an \$186,000 Engineered Log Jam (ELJ #6), within the Cedar Rapids reach. Renton. Implement projects identified in the Capital Investment Strategy,
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			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.

				2020 Inception to Date	2020 Available	2021						6-Year CIP	CIS	CIS	Project Life	
No. Title	Basin	Type of project [Date Expenditure	Budget	Budget	Requested	2022 Forecasted	2023 Forecasted	2024 Forecasted	2025 Forecasted	2026 Forecasted	Total	Year 7-10	10+ Year	Total	Comments 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.
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	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.
						·										Renton. Capital Investment Strategy: Repair eroded section of left bank with bioengineered revetment to stabilize toe of bank and to prevent large
106 WLFL7 CRT SITE A BANK	Cedar	FCD Const	\$23,690	\$208,302	\$184,612	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$208,302	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				Renton. The main channel has avulsed into the previous left floodplain, leading to erosion of the channel bank, adjacent to 231st PI SE.
109 WLFL7 DORRE DON NBHOOD IMPRVMNT	Cedar	FCD Const	\$0	\$00,000	\$0	\$2,400,000	\$0	\$0		\$0		\$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	\$2,700,000	\$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
THE WEI ET I BE CONNECTIVITIES ENTERTATION	Cedai	T OD Acqu/Liev	ψ5,030,790	ψ5,050,790	ΨΟ	ΨΟ	ΨΟ	ΨΟ	Ψ0	ΨΟ	ΨΟ	ΨΟ			ψ3,030,790	Renton. Capital Investment Strategy: Setback levee; excavate side- channel to reduce pressure on revetment; reconstruct, reinforce and/or
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	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. Renton. Capital Investment Strategy: Suite of solutions to be determined
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	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
			,	, , ,	, , ,			,								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 conduct storage potential and 20 conduct cost hopefit analysis.
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: 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
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	risk properties Construction delayed to 2024 to accommodate Jan Rd construction in 2021 or 2022. 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
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	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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			2019 Inception to		2020 Available	2021						6-Year CIP	CIS	CIS	Project Life
No. Title	Basin	Type of project	Date Expenditure	Budget	Budget	Requested	2022 Forecasted	2023 Forecasted	2024 Forecasted	2025 Forecasted	2026 Forecasted	Total	Year 7-10	10+ Year	Total Comments Renton. Capital Investment Strategy: Conduct site specific landslide risk
															assessment study; conduct a feasibility study to evaluate opportunities to
118 WLFL7 MAPLEWOOD FEASIBILITY STUDY	Cedar	FCD Const	\$297,086	\$490,246	\$193,160	\$0	\$0	\$0	\$0	\$0	\$0	\$0			modify the Erickson Levee. Pending results of landslide hazard analysis, \$490,246 FCD will consider options for a project.
															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
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 remainder after FCD portion of scope is complete.
															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
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			gates. Funding added in 2019 pending FCD decision to move forward with \$3,428,495 preliminary design.
															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
121 WLFL7 TABOR-CROWALL 2020 REPAIR 122 Cedar-Sammamish Subtotal	Cedar	FCD Const	\$40,617,269	\$100,000 \$67,773,527	\$100,000 \$27,156,257	\$250,000 \$19,809,781	\$800,000 \$17,800,064	\$50,000 \$14,263,762	\$0 \$6,791,719	\$0 \$5,132,358	\$0 \$3,200,000		\$22,000,000	\$35,400,000	\$1,200,000 event. \$192.171.211
123			\$10,011,200	φο.,ο,ο <u>ε</u> .	\$27,100,207	ψ.ιο,οσο,σ.	\$11,000,001	ψ.1,200,102	40,701,710	ψο, 102,000	ψ0,200,000	\$30,007,00	\$22,000,000	400, 100,000	widely (in the control of the contro
124									+					-	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
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 2018.
															Renton. This project will design and build the second phase of renovations to the Black River pump station. Major components include replacement of
126 WLFL8 BRPS CONTROL BLDG RPLCMT	Croon	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			the control building, replacement of the trash rake system, and replacement
120 WLFLO BRPS CONTROL BLDG RPLCWI	Green	FCD Corist	\$10,041	\$2,007,362	\$1,990,541	(\$1,344,004)	\$200,000	\$400,000	\$3,257,362	\$10,000,000	\$980,100	\$13,492,616			\$15,500,000 of the screen spray system. Renton. This project will design and build the fourth phase of renovations to
127 WLFL8 BRPS FISH PASS IMPRVMNTS	Croon	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			the Black River pump station, revising and replacing the obsolete fish
121 WLFLO BRFS FISH FASS IMPRVIMINTS	Green	FCD Collst		\$350,000	\$350,000	\$550,000	\$600,000	\$1,500,000	\$1,350,000	\$6,000,000	\$6,350,000	\$20,350,000			\$20,700,000 passage systems.
															Renton. This project will design and build the first phase of renovations to the Black River pump station, replacing the three smaller pump engines
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 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			Renton. This project will design and replace the large engines and overhaul \$8,000,000 the large pumps at the Black River pump station.
			·	7.0	7.0	7.	**								Renton. This project will strengthen and improve the structure and
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 subsurface soils at the Black River Pump Station.
															Renton. This project will design and build the third phase of renovations to the Black River pump station, replacing support systems such as engine
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 control panels, cooling systems, oilers and hoists.
					. ,										Black Diamond. Remove the three 6-foot diameter culverts where Lake
															Sawyer flows into Covington Creek and replace with a bridge to eliminate
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 obstructions for water flow and allow passage for migrating salmon.
															Kent. This project will assess the damaged section of Desimone Levee between the two new floodwall segments, and recommend possible options
133 WLFL8 DESIMONE MAJOR REPAIR USACE	Green	Agreement		\$80,000	\$80,000	\$770,000	\$10,000	\$0	\$0	\$0	\$0	\$780,000			\$860,000 see the two new noodwan segments, and recommend possible options for repair. Only the conditions assessment is proposed for funding.
WEI ED BEGINGIVE WARDON NEI AIN GOAGE	Green	Agreement		ψ00,000	ψου,σου	ψ110,000	ψ10,000	Ψ	ΨΟ	ΨΟ	ΨΟ	Ψ700,000			Damage increases vulnerability of the heavily used regional Green River
134 WLFL8 FORT DENT 2020 REPAIR	Green	FCD Const		\$50,000	\$50,000	\$200,000	\$350,000	\$0	\$0	\$0	\$0	\$550,000			trail and regional soccer complex (Starfire) and Tukwila Park. Erosion \$600,000 increases vulnerability to trail and soccer fields.
				,,,,,,	777,077	¥=00,000	7000,000	-		**	,,,,	,,,,,,,,,			Auburn. Complete Phase 1 repair per a request from the City of Auburn.
135 WLFL8 GALLI-DYKSTRA 2020 REPAIR	Green	FCD Const	\$90,891	\$407,314	\$316,423	\$360,095	\$0	\$0	\$0	\$0	\$0	\$360,095			Elevate 3500 feet levee reach to meet FEMA levee certification \$767,409 requirements.
			, ,	, , ,	, , .	, ,	, ,		, ,	•	,	, , , , , , ,			Auburn. Conduct a feasibility study to raise the levee providing 100-year
136 WLFL8 GALLI-DYKSTRA FEASIBILITY	Green	FCD Const	\$4,970	\$0	(\$4,970)	\$9,940	\$0	\$0	\$0	\$0	\$0	\$9,940			flood protection plus 3 feet of freeboard. Canceled and incorporated into \$9,940 Galli-Dykstra 2020 Repair.
															Tukwila. This project will acquire strategic real estate upon which future
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			large Flood Control District capital projects are dependent, thereby reducing \$37,577,724 risks to construction schedules for those projects.
															Auburn. Improve SE Green Valley Road near SE Auburn Black Diamond Road and alleviate roadway flooding by raising the road through the
138 WLFL8 GREEN R IMPROVEMENT 2024	Green	Agreement		\$0	\$0	\$0	\$0	\$0	\$100,000	\$0	\$0	\$100,000			\$100,000 application of a thick layer of overlay.
															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
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)			current mitigation effort is the Teufel project scheduled for 2018 \$5,273,368 construction.
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	3.0011	. 22 301100	\$5,230,000	\$5,555,041	ψ.52,170	(4001,110)	Ψ	Ψ0		ΨΟ	40	(\$337,170)			Auburn. This project will address scour damage to the bridge, which is on
140 WLFL8 GREEN SCOUR REPAIR 2017	Green	Agreement	\$47,524	\$150,000	\$102,476	\$0	\$0	\$0	\$0	\$0	\$0	\$0			the primary through route of the Green River Valley Rd. The bridge is also \$150,000 a King County landmark.
	12.50.	1	¥,o	+ .00,000	Ţ.0 <u>2</u> ,0	ΨΟ	ΨΟ	Ι ΨΟ	. **	Ψ0	ι ψυ	, 40			, ,

				2020											
No. Title	Basin	Type of project	2019 Inception to Date Expenditure	Inception to Date	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
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	2025 Forecasted	\$0		Teal 7-10	TOT Teal	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 \$15,430,509
142 WLFL8 HSB MCCOY REALIGNMENT USACE	Green	Agreement	\$4.244	\$516.138	\$5,239,621	(\$5,255,621)	\$3,200,000	,,,,,,,,,	\$700,000	\$0	\$0	, , , , ,			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 \$3,404,244
143 WLFL8 HSB NURSING HOME SETBACK	Green	FCD Const	\$4,244	\$516,136	\$511,694	\$0	\$0	\$2,100,100	\$700,000	\$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.
143 WEI EUTISB NORSING HOWE SETBACK	Green	1 OB Const	φυ	Ψ0	ΨΟ	ΨΟ	φυ	φυ	ΨΟ	ΨΟ	φυ	ΨΟ			Kent. Coordination and planning activities to implement recommendations of interim SWIF. Maintenance work associated with the interim SWIF is
144 WLFL8 INTERIM SWIF IMPLEMENTATION	Green	FCD Const	\$83,675	\$85,000	\$1,325	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$85,000 included in the operating budget. Auburn. Contribute the partial cost of a repair (\$500,000) to a \$5 million
145 WLFL8 LONES LEVEE SETBACK	Green	Agreement		\$1,850,000	\$1,850,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0			levee setback project. By relocating the levee, flood risks as well as future \$1,850,000 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			Kent. Acquisitions by the City of Kent for the Lower Russell levee setback \$1,123,668 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			Kent. Lower Green River Corridor Planning and Environmental Impact \$2,954,299 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			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 \$53,253,151
			\$418,401	\$19,400,000	\$18,981,599	\$0	\$0	\$0	\$0	\$0	\$0	\$23,011,773			Kent. Prepare an analysis and study of design and construction alternatives to provide flood protection, scour protection, enable levee certification and \$19,400,000 secure necessary land rights.
149 WLFL8 MILWAUKEE LEVEE #2-KENT 150 WLFL8 NEWAUKUM CR FLOOD CONVEYANCE RES'	Green	Agreement FCD Const	\$410,401	\$19,400,000	\$10,961,599	\$0 \$0	\$0	\$0	\$0	\$0 \$0	\$0				\$19,400,000 secure necessary rand rights. 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				Auburn. This project will conduct a feasibility analysis of channel migration hazards from river mile 21.1 to 21.7. Alternative selection is pending; \$4,188,501 alternative 1 is assumed as a placeholder. 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-
152 WLFL8 RUSSELL RD UPPER KENT	Green	Agreement	\$6,065,056	\$6,082,173	\$17,117	\$0	\$0	\$0	\$0	\$0	\$0	\$0			stability. These segments of the Russell Road Opper Levee Trave over- steepened slopes and therefore lack adequate structural stability to provide \$6,082.173 adequate safety.
153 WLFL8 S 106TH ST DRAINAGE IMPVMNT	Green	Agreement	ψ0,000,000	\$451,000	\$451,000	\$0	\$0	\$0		\$0	\$0				Burien. Replace an existing damaged and undersized pipe that runs under \$451,000 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				Kent. Project provides increased level of protection to 1.5 miles of Lower Sco,745,419 Green River Corridor. Alternative selected by Executive Committee.
155 WLFL8 TITUS PIT RVTMNT 2018 REPAIR	Green	Agreement	\$167,738	\$250,000	\$82,262	\$0	\$20,000,000	\$0	\$0	\$0	\$0				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	Ų.(d.),, do	\$2,000,000	\$2,000,000	\$9,423,000	\$2,265,000	\$1,159,500	\$32,075,135	\$0	\$0				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 \$46,922,635 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			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	. , ,			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 \$17,240,421 agreement.
159 WLFL8 TUKWILA RVTMT 2019 REPAIR	Green	FCD Const	\$230,061	\$500,000	\$269,939	\$0	\$0	\$0	\$0	\$0	\$0	\$0			Tukwila. Erosion and slumping of Tukwila Trail revetment caused by the recent Green River flood resulted in approximately 200 feet of damage to \$500,000 the revetment.

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				2019 Inception to	2020 Inception to Date	2020 Available	2021						6-Year CIP	CIS	CIS	Project Life	
No.	Title	Basin	Type of project	Date Expenditure	Budget	Budget	Requested	2022 Forecasted	2023 Forecasted	2024 Forecasted	2025 Forecasted	2026 Forecasted	Total	Year 7-10	10+ Year	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.
										·							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
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	Pump Station.
																	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.
	WLFLS SOUTH PARK PUMPSTATION Green-Duwamish Subtotal	Seattle	Agreement	\$1,787,029 \$62.602.059	\$6,505,000 \$155,063,470	\$4,717,971 \$92,461,412	\$0 \$57.965.522	\$0 \$59,359,758	\$0 \$35.821.386	\$0 \$54,139,839	\$24.806.000	\$0 \$20.962.257	\$0 \$253.054.762	\$0	\$0	\$6,505,000 \$408.118.232	1 1 1
164				¥3=,53=,535	, ,	+ ,,	+01,000,000	,	700,000,,000	+ ,,	+ = 1,000,000	+,,		**		¥ ****, * ***,===	
165																	Enumclaw. Improve the drainage system to alleviate neighborhood flooding.
166	WLFL9 212TH AVE SE @ SR 164 FLD IMPRVMNT	Green	Agreement		\$0	\$0	\$0	\$0	\$0	\$0	\$190,000	\$0	\$190,000			\$190,000	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
																	Enumclaw. Park is split by the White River; acquire undevelopable and inaccessible southern portion of park in Pierce County from the City of
168	WLFL9 ANDERSON PARK ACQUISITION	White	FCD Acqu/Elev	\$0	\$100,000	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$100,000	Enumclaw.
																	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.
169	WLFL9 BUTTE AVE FLOOD MITIGATION	White	Agreement	\$226,633	\$226,633	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$226,633	Auburn. This project will analyze culvert replacement and road-raising
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	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			990 0082	Auburn. This project will analyze culvert replacement and road-raising options and implement the preferred option.
171	WEFLS CHARLIE JONES US COLVERT	vviiite	Agreement	φ146,300	φ390,000	φ441,434	\$157,000	\$152,300	φυ	φυ	φ0	φ0	\$309,900			\$699,900	
																	Pacific. Reduces flood elevations that impact residential neighborhoods in the City of Pacific (200 homes, with \$52 million of assessed and \$13 million
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	content value) improves sediment storage and enhances habitat
		· · · · · · ·		\$20,000,120	ψ <u>2</u> 1,00 1, 1 10	\$110,200	(4:0,200)	Ψ.	Ψ0	Ψ0	Ų.	40	(\$10,200)			\$20,020,120	Pacific. Construct a new levee setback in the City of Pacific, extending from
172	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			\$21 221 002	BNSF railroad bridge embankment to endpoint at Butte Ave. by White River Estates neighborhood.
173	WELLS KIGHT BANK LEVEL SETBACK	vviite	1 CD Collst	\$12,030,470	ψ14,540,509	\$1,705,911	ψου1,200	\$1,595,900	ψ0,334,900	\$7,030,704	\$130,900	\$0	\$10,791,004			ψ51,551,995	
																	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.
	WLFL9 SLIPPERY CREEK ACQ WLFL9 STUCK R DR FLOOD PROTECTION	White White	FCD Acqu/Elev FCD Const	\$115,563 \$0	\$180,000 \$0	\$64,437 \$0	\$0 \$0		\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$1,000,000	\$0 \$1,000,000			\$180,000 \$1,000,000	Auburn. TBD
170	WEI EU GTOOK K BILL EOOB T NOTEO HON	VVIIILO	1 OB Const	Ψΰ	ΨΟ	40	ΨΟ	Ψ0	Ψ	Ψ	Ψ	ψ1,000,000	ψ1,000,000			ψ1,000,000	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.
	WLFL9 STUCK R DR 2019 REPAIR	White	FCD Const	\$98,517 \$37,313,885	\$646,374 \$40,316,815	\$547,857 \$3,002,929	(\$39,857) \$942,719	\$0 \$1,896,200	\$0 \$8,034,900	\$0 \$7,658,704	\$0 \$326,900	\$0 \$1,000,000	(\$39,857) \$19,859,423	\$0	\$0	\$606,517 \$60,176,238	unat silu down is currently providing scour protection at the toe.
178	White Subtotal			φ37,313,005	\$40,316,615	\$3,002,929	\$942,719	\$1,696,200	\$6,034,900	\$7,050,704	\$326,900	\$1,000,000	\$19,059,425	φυ	\$0	\$60,176,236	
179																	
																	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
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	risk. 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
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	both significant flood risks to critical infrastructure, and restore fish passage.
				044 705 171					. , ,	. , ,	. , ,					640.415.571	Competitive grant program for flood reduction projects. Increases as a
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	proportion of total FCD tax revenue. Invests in urban flooding projects that reduce risks to people, property, and
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	public infrastructure.
			Ι Τ	\exists		T						1 T	T		_		Cooperative Watershed Management Grant Program; priorities recommended by watershed groups. Increase based on assumed inflation
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	
405	WILE I W EEEECTIVENESS MONITORING	Countraid	FCD Const	¢2 0E0 000	¢4 044 400	¢4 490 000	¢4 044 400	£4.440.050	64 007 500	¢4 020 750	#044.000	\$904.0F0	¢6 440 040			¢40.654.770	Evaluation of capital projects to determine effectiveness and identify project
185	WLFLM EFFECTIVENESS MONITORING	Countywide	1 CD COURT	\$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		1	\$10,051,772	design improvements. Allocation to all King County jurisdictions for flooding, water quality, or
																	watershed management projects. Increases as a proportion of total FCD
	WLFLO SUBREGNL OPPRTNTY FUND WLFLX CENTRAL CHARGES	Countywide Countywide	Grant FCD Const	\$38,775,925 \$819.564	\$61,402,203 \$1,111,493	\$22,626,278 \$291,929	\$5,974,680 \$0	\$5,981,476 \$100,000	\$5,993,630 \$100,000	\$6,006,788 \$100,000	\$6,021,445 \$100,000		\$36,015,779 \$500,000				tax revenue. 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.
	WLFLX FLOOD EMERGENCY CONTGNCY	Countywide	FCD Const	\$419,042	\$1,419,042	\$1,000,000	\$250,000		\$250,000	\$250,000	\$250,000		\$1,500,000	- 00			Contingency for emergency response actions during a flood event.
190 191	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	
	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	