

## King County Flood Control District

## 2020 Reallocation Summary

May 15, 2020

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|---|
| Category A - New 2020 Construction                                    |
| Category B - New Project, Initiate in 2020 for 2021-2022 Construction |
| Category C - New Project, Risk Assessment                             |
| Category E2 - Add to existing project scope                           |
| Category E4 - New / Initiate CJP Project                              |
| Category E5 - New Project - Corps Emergency Assistance Plan           |

| No. | Title                                | Basin        | 2020 Reallocation Request | 2020 Revised Budget | Reallocation Notes   |
|-----|--------------------------------------|--------------|---------------------------|---------------------|--|
| 1   | WLF0 SF SKYKMSH REP LOSS MIT         | SF Skykomish | \$3,184,903               | \$3,170,000         | Acquisition from willing sellers who contacted King County. Residential structures are in mapped channel migration zone and floodway. Of this amount, \$1.9 million is for the Riverside Ranch acquisition request approved by the FCD 1/27/2020. The remaining \$1.284 million is for three additional willing sellers with pending requests. This does not include the interested landowner listed in Appendix A of the 2019-2020 Flood Season Report.   |
| 4   | WLF0 TIMBER LN EROSN BUYOUTS         | SF Skykomish | \$358,200                 | \$433,000           | Acquisition from willing seller who contacted King County. 2020 budget was limited to appraisal costs to minimize potential for carryover; now seeking budget authority for willing seller.  |
| 7   | WLF1 428TH AVE SE BR FEASIBILITY     | Upper Snoq   | \$728                     | \$70                | Project Closeout.  |
| 21  | WLF1 REING RD RVTMNT 2016 REPAIR     | Upper Snoq   | (\$3,943,514)             | \$400,000           | No net change in total project cost. Construction shifted from 2020 to 2021 due to permitting issue.   |
| 22  | WLF1 RIBARY CREEK                    | Upper Snoq   | (\$150,000)               | \$36,492            | Work deferred to respond to February 2020 Major Presidential Flood Disaster.   |
| 31  | WLF1 UPR SNO RES FLD MITIGTN         | Upper Snoq   | (\$350,000)               | \$2,570,872         | Shift budget authority to Line 35, consolidate 8 home elevations managed by City of Snoqualmie in one budget line.   |
| 35  | WLF2 CITY SNOQ HOME ELEVATIONS       | Lower Snoq   | \$350,000                 | \$1,468,000         | Shift budget authority from Line 31, consolidate 8 home elevations managed by City of Snoqualmie in one budget line. Note that this budget line is mis-coded to the Lower Snoqualmie; this will be corrected in the 2021 budget materials.   |
| 36  | WLF2 DUTCHMAN RD REVETMENT           | Lower Snoq   | \$57,230                  | \$100,000           | 2020 Flood Response - Initiate capital construction project to reduce risk to West Snoqualmie Valley Rd, a sole access road for homes and businesses downstream of Duvall. Bank eroded over a length of 200 feet in close proximity to West Snoqualmie River Road NE. Erosion threatens West Snoqualmie River Road NE which 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 severely limit access to the downstream property owners during or following a flood event. Provide sufficient funding to conduct site evaluation and risk assessment for large damage site.   |
| 40  | WLF2 JOY REVETMENT                   | Lower Snoq   | \$100,000                 | \$100,000           | 2020 Flood Response - initiate new capital project to reduce risk to sole access road serving residential and commercial structures. Three separate damage locations were identified along this 860 LF-long King County owned and maintained river revetment. Each damage location is characterized as having significant slumping of the riverbank that has created near vertical bank conditions. The length of the damage locations range from 26 LF to 64 LF. Rock bank armoring and toe protection are notably absent at all five of these locations. Adjacent property is private road serving as sole access to residential and commercial structures. Agricultural land is not FPP. Provide sufficient funding to conduct site evaluation and risk assessment for large damage site. |
| 48  | WLF2 SINNEMA QUAALE 2011 REPR        | Lower Snoq   | (\$60,968)                | \$0                 | Project Closeout.  |
| 50  | WLF2 STOSSEL REVETMENT               | Lower Snoq   | \$50,000                  | \$100,000           | 2020 Flood Response - Initiate capital construction project to reduce risk to sole access roadway for two commercial structures. Bank eroded over a length of 80 feet, width of 10 feet and depth of 12 feet just upstream of 2018 repair; no rock is visible in this damaged section. Damage extends to log structure in 2018 repair. Adjacent land use in King County road serving as sole access to 2 commercial structures. Rapid erosion of embankment could result in changes of inundation patterns, potentially endangering residents. Agricultural land is not FPP. Provide sufficient funding to conduct site evaluation and risk assessment for site with greater than 100 feet of damage.  |
| 56  | WLF3 HOLBERG FEASIBILITY             | Tolt         | \$52,870                  | \$189,504           | Additional expenditure authority to complete analysis following landowner engagement and delayed field work due to access issues.  |
| 58  | WLF3 LOWER TOLT RIVER ACQUISITION    | Tolt         | \$825,000                 | \$850,000           | Additional expenditure authority for acquisition from willing seller based on 3/20/2020 appraisal. 2020 budget was limited to appraisal costs to minimize potential for carryover; now seeking budget authority for willing seller.  |
| 60  | WLF3 RIO VISTA PROPERTY ACQ          | Tolt         | \$650,000                 | \$700,000           | Additional expenditure authority for acquisition from willing seller in floodway and channel migration zone. FCD work program approval 2/10/2020. 2020 budget was limited to appraisal costs to minimize potential for carryover; now seeking budget authority for willing seller.   |
| 61  | WLF3 SAN SOUCI NBRHOOD BUYOUT        | Tolt         | \$216,321                 | \$581,000           | Additional expenditure authority for acquisition from willing seller in floodway and channel migration zone. FCD work program approval 2/5/2020.   |
| 69  | WLF3 TOLT R LEVEE L.O.S. ANALYSIS    | Tolt         | \$64,489                  | \$412,309           | Increase expenditure authority due to greater level of effort than originally budgeted to conduct the hydrologic and geomorphic analysis that will support future conditions modeling.   |
| 71  | WLF3 TOLT R NATURAL AREA ACQ         | Tolt         | \$230,236                 | \$1,630,000         | Updating expenditure authority to cover planned demolition and targeted acquisition based on updated cost estimates as the property has been in a foreclosure process for the past 2 years. This does not include the interested landowner listed in Appendix A of the 2019-2020 Flood Season Report.  |
| 72  | WLF3 TOLT R RD ELEVATION FEASIBILITY | Tolt         | (\$190,000)               | \$9,840             | Work deferred to respond to February 2020 Major Presidential Flood Disaster.   |
| 82  | WLF5 BAYLESS 2020 REPAIR             | Samamish     | \$50,000                  | \$50,000            | 2020 Flood Response - Risk Assessment. The Bayless Revetment protects a sole access bridge to a residential community (about 70 homes) in the City of Issaquah. Approximately 125 feet of bank erosion of the right bank revetment facility. 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 at upstream end may result in damage to the bridge and ongoing flooding to the neighborhood. Provide sufficient funding to conduct site evaluation and risk assessment for medium damage site.   |
| 84  | WLF5 IRWIN R 2020 REPAIR             | Samamish     | \$25,000                  | \$25,000            | 2020 Flood Response - initiate repair for 2021-2022 construction. Irwin R revetment damage - 5 feet of scour at downstream end of revetment facility with rock missing near a private driveway bridge (sole access) and near a major arterial, Issaquah Hobart Rd. Further damage to the facility could cut off the sole access to one resident (via a private road and bridge over the creek). Provide sufficient funding to conduct site evaluation and risk assessment for small damage site.   |
| 85  | WLF5 JEROME 2020 REPAIR              | Samamish     | \$50,000                  | \$50,000            | 2020 Flood Response - initiate repair for 2021-2022 construction. 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. Provide sufficient funding to conduct site evaluation and risk assessment for site medium damage site.  |

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| 86  | WLFL5 MOMB 2020 REPAIR                            | Sammamish | \$50,000                  | \$50,000            | 2020 Flood Response - Risk Assessment. 30 feet of erosion and 25 feet of slumped bank at the upstream end of the revetment facility. Undercutting may have cut into SE 156 St (a sole access road) bed prism. There is also a landslide immediately downstream of the facility on the same left bank that may pose a risk of channel migration to residential properties on the Right Bank. 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. Provide sufficient funding to conduct site evaluation and risk assessment for medium damage site.  |
| 87  | WLFL5 SAMMAMISH R BANK REPAIRS                    | Sammamish | (\$4,723)                 | \$0                 | Closeout   |
| 88  | WLFL5 WILLOWMOOR FLDPLAIN REST                    | Sammamish | (\$100,000)               | \$197,600           | Work deferred to respond to February 2020 Major Presidential Flood Disaster.   |
| 94  | WLFL7 BELMONDO 2020 REPAIR                        | Cedar     | \$50,000                  | \$50,000            | 2020 Flood Response - initiate repair for 2021-2022 construction. Erosion and scour have resulted in loss of toe and bank rock, oversteepened and undercut banks, and localized bank erosion (scallop). Damage is observed along approximately 50 feet of facility, near the upstream end. 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. Provide sufficient funding to conduct site evaluation and risk assessment for medium damage site.   |
| 95  | WLFL7 BRODELL 2020 REPAIR                         | Cedar     | \$50,000                  | \$50,000            | 2020 Flood Response - initiate repair for 2021-2022 construction. Oversteepened downstream from houses, and generally overall. Facility is a mixture of riprap, concrete pieces, and in places concrete slabs laid against the bank. Approximately 10-foot tension crack observed near furthest downstream home where a slab has slid down into the river. Additional minor damage upstream of facility. Downstream portion of facility observed to be oversteepened, with undercut banks (approximately 200 feet in length). 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. Provide sufficient funding to conduct site evaluation and risk assessment for medium damage site. |
| 102 | WLFL7 CEDAR R TRAIL SITE 2                        | Cedar     | \$878,000                 | \$1,178,000         | 2020 Flood Response - construct buried revetment upstream of emergency repair completed in February 2020. Construction in 2020 as part of the Riverbend project. Potential mitigation costs are not included at this time and will be included in the 2021 budget following further discussions with regulatory agencies.  |
| 103 | WLFL7 CEDAR RAPIDS ELJ6 2020 REPAIR               | Cedar     | \$50,000                  | \$50,000            | 2020 Flood Response - Risk Assessment. 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) constructed as part of a previous District project within the Cedar Rapids reach. Undeveloped land in floodplain; recreational risk. Potential human injury from sudden change in conditions. Structure severely damaged and vulnerable - damage likely to occur next major high-flow event. Provide sufficient funding to conduct site evaluation and risk assessment for medium damage site.   |
| 104 | WLFL7 CEDAR RES FLOOD MITIGATION                  | Cedar     | \$674,000                 | \$674,000           | Acquisition at-risk home in floodway and channel migration zone from willing seller. Home flooded 2-3 feet above finished floor elevation, isolated by flooding and access cut off. FEMA repetitive loss parcel with history of flood damage insurance claims. This parcel is included in Appendix A of the 2019-2020 Flood Season Report.   |
| 105 | WLFL7 CEDAR RIVER TRAIL SITE A BANK               | Cedar     | (\$150,000)               | \$184,612           | Work deferred to respond to February 2020 Major Presidential Flood Disaster.   |
| 108 | WLFL7 CEDAR RIVER TRAIL SITE 5 2020 REPAIR        | Cedar     | \$100,000                 | \$100,000           | 2020 Flood Response - Risk Assessment. 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. Damaged sections are observed within an approximately 350 feet of facility, near the upstream end. 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. Provide sufficient funding to conduct site evaluation and risk assessment for medium damage site.  |
| 110 | WLFL7 CEDAR RIVER TRAIL SITE 2 ZONE D 2020 REPAIR | Cedar     | \$50,000                  | \$50,000            | 2020 Flood Response - initiate repair for 2021-2022 construction. This is the existing CRT2 revetment, immediately downstream of the emergency repair completed in February. This segment is referred to as Zone D. Erosion and scour have resulted in loss of toe rock and general oversteepening of bank, along approximately 100 feet of upstream end of facility. 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. Provide sufficient funding to conduct site evaluation and risk assessment for site with 25-75 feet of damage.  |
| 111 | WLFL7 DORRE DON AVULSION ANALYSIS                 | Cedar     | \$50,000                  | \$50,000            | 2020 Flood Response - Risk Assessment. The main channel has avulsed into the previous left floodplain, leading to erosion of the channel bank, adjacent to 231st PI SE. Residential land use and critical facilities (SE 184th St). Moderate impact extents (structures, roads). Potential human injury from sudden change in conditions. Generally exposed bank - damage likely to occur next major high-flow event. Provide sufficient funding to conduct site evaluation and risk assessment. Provide sufficient funding to conduct site evaluation and risk assessment for medium damage site.   |
| 112 | WLFL7 FBD CORRIDOR IMPLEMENTATION                 | Cedar     | \$525,012                 | \$0                 | The additional appropriation is requested to cover expenditures from a change in project accounting by KC Finance and not an actual increase in expenditures for the FCD. The accounting change concerns the transfer to Seattle of their portion of the Department of Ecology grant, resulting in both higher expenditures and an equivalent amount of higher revenue than initially budgeted. There is no net impact to the FCD from this accounting adjustment.   |
| 113 | WLFL7 HERZMAN LEVEE SETBACK                       | Cedar     | \$600,578                 | \$857,000           | 2020 Flood Response - expand scope of existing Herzman project to include repairs; construction shifts to 2022. New damage to Camp Freeman revetment in project area. Erosion and scour have resulted in loss of toe and bank rock, oversteepened and undercut banks, and localized bank erosion likely due to tree recruitment. Damage is observed along approximately 390 feet of facility. Critical facilities (SE Jones Rd). Regional impact extents. Potential human injury from sudden change in conditions. Generally exposed bank - damage likely to occur next major high-flow event. With this additional scope construction of the Herzman project shifts from 2021 to 2022.  |

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| 118 | WLFL7 MADSEN CR CULVERT 2017      | Cedar      | \$756,000                 | \$2,899,480         | Additional budget for outfall control structure required for project approvals, consistent with FCD 60% design approval April 15 2020. 2020 construction by Roads Services Division.   |
| 120 | WLFL7 MAPLEWOOD FEASIBILITY STUDY | Cedar      | (\$75,000)                | \$118,160           | Work deferred to respond to February 2020 Major Presidential Flood Disaster.   |
| 122 | WLFL7 TABOR-CROWALL REVETMENT     | Cedar      | \$100,000                 | \$100,000           | 2020 Flood Response - New capital construction project to protect SR 169 and critical public infrastructure in Renton. Entire facility is oversteepened. Varying amounts of rock protection on toe and face combined with areas of exposed soil. Critical facilities (Utilities, CRT, SR 169). Regional impact extends. Potential human injury from sudden change in conditions. Generally exposed bank along 200 feet - damage likely to occur next major high-flow event. Provide sufficient funding to conduct site evaluation and risk assessment for large damage site.   |
| 124 | WLFL7 SR 169 FEASIBILITY STUDY    | Cedar      | (\$200,000)               | \$289,665           | Work deferred to respond to February 2020 Major Presidential Flood Disaster.   |
| 129 | WLFL8 BRPS CONTROL BLDG RPLCMT    | Green      | (\$300,000)               | \$1,990,541         | Work deferred to respond to February 2020 Major Presidential Flood Disaster.   |
| 130 | WLFL8 BRPS FISH PASS IMPRVMTS     | Green      | \$350,000                 | \$350,000           | Additional budget authority to expedite design and permitting of fish passage improvements consistent with capital strategy. Initiate fish passage outreach and early action fish passage items such as the fish counter.  |
| 134 | WLFL8 DESIMONE MAJOR REPAIR       | Green      | \$80,000                  | \$80,000            | Conduct levee conditions analysis following observation of levee seepage and boils during the February 2020 flood. Analysis will be provided to the Corps of Engineers as they evaluate options to address the problems observed during the flood. Study authorized under emergency contingency budget on 4/6/2020.  |
| 135 | WLFL8 FORT DENT 2020 REPAIR       | Green      | \$50,000                  | \$50,000            | 2020 Flood Response - New repair to protect regional trail and recreational complex. 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. Pavement erosion along levee/revetment at fence and cracking of trails along a 78-foot segment. Cracking for approximately 28 feet, 5 feet wide and 10-12 deep. Second location had approximately 38 feet of erosion prior to flood event. Total eroded area is now approximately 127 feet in length, 16 feet wide and 11 feet deep. Provide sufficient funding to conduct site evaluation and risk assessment for medium damage site. |
| 146 | WLFL8 LOWER RUSSELL ACQ KENT      | Green      | \$100,012                 | \$0                 | Additional budget authority for the final remaining costs of FCD agreement with City of Kent.  |
| 148 | WLFL8 LWR RUSSELL LEVEE SETBACK   | Green      | (\$14,468,661)            | \$12,924,903        | No net change in total project cost. Phase 1 construction to be completed in summer 2020; Phase 2 advertised in April. Shifting portion of 2020 construction expenditures from 2020 to 2021.   |
| 151 | WLFL8 OLD JEFF'S FARM REVETMENT   | Green      | (\$500,000)               | \$75,406            | Work deferred to respond to February 2020 Major Presidential Flood Disaster.   |
| 169 | WLFL9 BUTTE AVE FLOOD MITIGATION  | White      | (\$243,367)               | \$0                 | Butte avenue pump station project added to Pacific Right Bank project line (Line 171)  |
| 171 | WLFL9 RIGHT BANK LEVEE SETBACK    | White      | \$401,397                 | \$1,703,911         | Additional expenditure authority for Butte avenue pump station scope (Line 169), remaining \$158k for updated cost forecast for DEIS technical studies.  |
| 184 | WLFLM EFFECTIVENESS MONITORING    | Countywide | \$981,708                 | \$1,188,300         | Approximately 1/2 of the increase corrects a budgeting error in the 2020 budget. Additional expenditure authority to shift baseline monitoring costs from individual projects to the central effectiveness monitoring project; individual project forecasts will be updated accordingly in the 2021 budget.  |
| 188 | WLFLX FLOOD EMERGENCY CONTNGNCY   | Countywide | \$368,125                 | \$1,000,000         | Increase expenditure authority to \$1 million to create greater capacity to respond to flood emergencies.  |
| 191 | <b>Grand Total</b>                |            | <b>(\$8,206,424)</b>      | <b>\$39,137,665</b> |  |