

King County Regional Flood Control Zone District Advisory Committee

Preliminary Draft: Levy Rate Scenarios for Capital Projects

Notes:

1. Questions for Advisory Committee meeting on 6/22:
 - (a) Do you want to include projects that address coastal erosion and inundation hazards?
 - (b) Do you support including new project submittals as part of this list?
 - (c) What levy rate do you support?
 - (d) Do you want to fund subregional projects? If so, at what level?
2. Project costs are planning estimates only. Constant dollar (2006) costs are used to control for the effect of inflation on project sequencing. Operating costs for programmatic elements of work program are not included.
3. All new capital projects submitted to the BTCs as 'Regional' are included in this list and shaded. New capital projects total \$55 million. New project submittals range in cost from \$100,000 (Carnation - Tolt Supplemental Study) to \$21,900,000 (Bellevue- Coal Creek Phase 1 and 2).
4. Projects submitted as 'subregional' are included at the end of this list. No call for proposals was issued for this category, and no scoring has been conducted by the BTCs. We have received \$57.8 million in proposals to date, and expect that this amount would increase substantially if an RFP were issued.
5. Changes from the 6/8/07 List: (a) The two Bellevue projects submitted as 'Regional' are included. Coal Creek project sequenced in two phases of \$12.5 million and \$9.4 million based on discussions with Bellevue staff (b) Dorre Don Meanders phased to reduce costs to \$7.5 million in the 10-yr window, remaining acquisition costs of \$7 million assumed in Phase 2. (c) Technical Support for Tolt River Mouth to SR 203 Floodplain Reconnection Project moved to operating costs for 2008. Capital project portion remains on the CIP list. (d) Green River Flood Damage costs adjusted to reflect projects already included in the Flood Plan Specific projects are noted on the list below (e) Snoqualmie Tribe proposal to study flooding impacts of Snoqualmie Falls Dam on the City of Snoqualmie moved to programmatic operating budget.
6. All projects will be designed and constructed consistent with current engineering standards and practices. Completion of proposed projects on the Lower Green River does not presume certification per 44 CFR 65.10.

Ref #	Project Name	Project Description	Basin	Score (Out of 38 Possible)	Project Cost (2006 Dollars)	Levy Rate (¢/\$1000 AV)
1	Segale Levee #1 (Includes Flood Damage Repair)	Rehabilitate levees to reduce the risk of flooding in the Lower Green River. Includes Nov 2006 Flood Damage Repairs.	Green	37	\$1,913,000	5
2	City of Snoqualmie Property Acquisition and Residential Flood Mitigation	Purchase repetitive loss properties along the left bank of the Snoqualmie River.	Snoqualmie	34	\$4,600,000	5
3	Alaskan Way Seawall Replacement	The seawall will be designed and replaced to ensure the transportation, utility and private infrastructure is protected and preserved. Additionally the seawall replacement will ensure that shoreline remains stable during seismic and storm events, and the fill contained by the seawall will not damage the ecology of Puget Sound.	Green	33	\$2,000,000	5
4	Briscoe Levee #4 (includes Flood Damage Repair)	Rehabilitate levees to reduce the risk of flooding in the Lower Green River. Includes Nov 2006 Flood Damage Repairs.	Green	33	\$1,135,000	5
5	Cedar River Flood Damage Repairs	Complete five Cedar River flood protection facility repair projects.	Cedar-Samm	32	\$1,200,000	5
6	Segale Levee #2 & #3 (Includes Flood Damage Repairs)	Rehabilitate levees to reduce the risk of flooding in the Lower Green River. Includes Nov 2006 Flood Damage Repairs.	Green	32	\$4,782,000	5
7	Tolt Pipeline Protection	Install one or more engineered log jams to roughen the river channel near the toe of the eroding bank, thereby helping to reduce local water velocities and the resulting toe erosion process. (Lower Snoqualmie River, Unincorporated)	Snoqualmie	32	\$2,367,000	5
8	Middle Fork Snoqualmie River Flood Damage Repairs	Complete two Middle Fork Snoqualmie flood protection facility repair projects.	Snoqualmie	32	\$600,000	5
9	Narita Levee (including Flood Damage Repairs)	Rehabilitate levees to reduce the risk of flooding in the Lower Green River. Includes Nov 2006 Flood Damage Repairs.	Green	31	\$1,913,000	5
10	Segale Levee #4 (includes Flood Damage Repairs)	Rehabilitate levees to reduce the risk of flooding in the Lower Green River. Includes Nov 2006 Flood Damage Repairs.	Green	31	\$1,913,000	5
11	Boeing Setback Levee (includes Flood Damage Repairs)	Stabilize the remaining riverbank slopes, by creating a midslope bench and reconstructing the lower embankment slopes, and rebuilding the levee toe. Includes Nov 2006 Flood Damage Repairs.	Green	31	\$9,085,000	5
12	Nursing Home Levee (includes Flood Damage Repairs)	Rehabilitate levees to reduce the risk of flooding in the Lower Green River. Includes Nov 2006 Flood Damage Repairs.	Green	31	\$2,438,000	5
13	Desimone Levee #3 (includes Flood Damage Repairs)	Rehabilitate levees to reduce the risk of flooding in the Lower Green River. Includes Nov 2006 Flood Damage Repairs.	Green	31	\$650,000	5
14	San Souci Neighborhood Buyout	Purchase homes in high flood and erosion hazard area.	Snoqualmie	31	\$2,003,000	5
15	Lower Snoqualmie River Flood Damage Repairs	Complete 23 Lower Snoqualmie River flood protection facility repair projects.	Snoqualmie	31	\$6,750,000	5
16	South Fork Snoqualmie Flood Damage Repairs	Complete 16 South Fork Snoqualmie River flood protection facility repair projects.	Snoqualmie	31	\$5,727,000	5
17	Dorre Don Meanders Phase 1	Acquire flood-prone properties in lower Dorre Don area and modify levees and restore floodplain where feasible to reconnect areas of the floodplain with the river for conveyance.	Cedar-Samm	30	\$7,500,000	5
18	Kent Shops Levee (includes Flood Damage Repairs)	Rehabilitate levees to reduce the risk of flooding in the Lower Green River. Includes Nov 2006 Flood Damage Repairs.	Green	30	\$3,596,000	5
19	Briscoe Levee #1-#3, #5-#8 (includes Flood Damage Repairs)	Rehabilitate levees to reduce the risk of flooding in the Lower Green River. Includes Nov 2006 Flood Damage Repairs.	Green	30	\$14,970,000	5
20	Desimone Levee #4 (includes Flood Damage Repairs)	Rehabilitate levees to reduce the risk of flooding in the Lower Green River. Includes Nov 2006 Flood Damage Repairs	Green	30	\$3,491,000	5
21	City of Snoqualmie Natural Area Acquisitions	This project is to acquire property along the Snoqualmie River to reduce flood risk to residential area, and protect floodplain processes and function.	Snoqualmie	30	\$188,000	5

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22	South Fork Levee System Improvements	Rebuild and strengthen selected portions of the existing levee system in a manner that maintains current preferential protection of the more heavily developed parts of the City of North Bend. (South Fork Snoqualmie River, Unincorporated)	Snoqualmie	30	\$5,039,000	5
23	Cedar Grove Mobile Home Park Acquisition	Purchase homes and property in this neighborhood of homes which is subject to extreme flooding. Project is partially grant funded. Funding will cover grant match and project management costs.	Cedar-Samm	29	\$4,349,000	5
24	Cedar River Gravel Removal	Support periodic gravel removal from the lower Cedar River to maintain 100 year flood protection.	Cedar-Samm	29	\$4,827,000	5
25	Desimone Levee #1 (includes Flood Damage Repairs)	Rehabilitate levees to reduce the risk of flooding in the Lower Green River. Includes Nov 2006 Flood Damage Repairs.	Green	29	\$860,000	5
26	Desimone Levee #2 (includes Flood Damage Repairs)	Rehabilitate levees to reduce the risk of flooding in the Lower Green River. Includes Nov 2006 Flood Damage Repairs.	Green	29	\$1,071,000	5
27	Myer's Golf Levee (including Flood Damage)	Rehabilitate levees to reduce the risk of flooding in the Lower Green River. Includes Nov 2006 Flood Damage Repairs.	Green	29	\$4,967,000	5
28	Timber Lane Village Home Erosion Buyouts	Purchase homes and property in this neighborhood of homes which is subject to extreme erosion.	SF Skykomish	29	\$3,367,000	5
29	Middle Fork Levee System Capacity Improvements	Reduce flood risks associated with constrictions caused by segments of the incomplete levee system on the Middle Fork Snoqualmie River.	Snoqualmie	29	\$2,831,000	5
30	SR202 Bridge Lengthening on South Fork Snoqualmie River	<i>The south side of the bridge could be extended with the south abutment changed to a pier and a new abutment installed further south. This would allow for more channel width and cross-sectional flow area for the river.</i>	Snoqualmie	29	\$3,000,000	5
31	Raging River Flood Damage Repairs	Complete twelve Raging River flood protection facility repair projects.	Snoqualmie	29	\$1,800,000	5
32	Alpine Manor Mobile Home Park Neighborhood Buyout	The proposed project would include the acquisition and removal of most of the 35 homes in the neighborhood, due to significant threats to public safety from flooding and channel migration, and the cost of improvements to the existing revetment (Raging River, Unincorporated)	Snoqualmie	28	\$5,596,000	5
Median:				31	\$116,528,000	Cumulative Total, 5¢
33	Issaquah Creek Repetitive Loss Mitigation	Elevate or otherwise mitigate flood risks to two repetitive loss properties.	Cedar-Samm	28	\$132,000	8
34	S.F. Skykomish River Repetitive Loss Mitigation	Purchase or otherwise mitigate flood risks to seven repetitive loss properties.	SF Skykomish	28	\$1,059,000	8
35	Cedar River Repetitive Loss Mitigation	Purchase or otherwise mitigate flood risks to nine repetitive loss properties	Cedar-Samm	28	\$2,811,000	8
36	Issaquah FCZD Proj 2 - Issaquah Creek Area Elevations and Floodproofing	<i>Provide assistance to repetitive loss single family structures within the Issaquah Creek floodplain to elevate and/or floodproof structures to current floodplain standards. This will help mitigate current repetitive losses to allow them to be taken off of repetitive loss lists. Elevations will raise first floors to 1-2 feet above the base flood elevation.</i>	Cedar-Samm	28	\$400,000	8
37	Tolt River Repetitive Loss Mitigation	Elevate or otherwise mitigate flood risks to repetitive two repetitive loss properties	Snoqualmie	28	\$132,000	8
38	Tolt River Flood Damage Repairs	Complete two Tolt River flood protection facility repair projects.	Snoqualmie	28	\$375,000	8
39	Tolt River Supplemental Study	<i>General Investigation Study for Tolt and Tolt/Snoqualmie Confluence, in conjunction with the Army Corps of Engineers and King County. This study will be done in conjunction with feasibility and design work for the following projects: Lower Tolt Acquisition, Tolt River SR 203 to Trail Bridge Floodplain Reconnection, Tolt River Mile 1.1 Levee Setback, and Tolt River Mouth to SR 203 Levee Setback</i>	Snoqualmie	28	\$100,000	8
40	Lower Tolt River Acquisition	The purpose of this project is to permanently protect a natural buffer between the City of Carnation and the Tolt River through acquisition of 6.7 acres of habitat in the floodway.	Snoqualmie	28	\$884,000	8
41	Tolt River Road Shoulder Protection	Install a 200-foot windrow of buried rock riprap along the shoulder of the Tolt River Road to protect it from erosion upstream of the existing revetment. This road is the sole access route to over 80 homes (Tolt River, Unincorporated)	Snoqualmie	28	\$385,000	8
42	Aldair Buyout	Remove existing homes from low-lying ground immediately behind the Aldair levee, which is experiencing seepage and possible underground erosion and is at high risk of a sudden catastrophic breach. (Lower Snoqualmie River, Unincorporated)	Snoqualmie	28	\$2,299,000	8
43	Lower Snoqualmie River Repetitive Loss Mitigation	Purchase and remove structure, or otherwise mitigate flood risks to ten repetitive loss properties. (Lower Snoqualmie River, and Tolt Rivers Unincorporated)	Snoqualmie	28	\$660,000	8
44	North Bend Area Residential Flood Mitigation	Reduce flood risks to homes in the North Bend area. Initially focus on five unmitigated repetitive loss properties and surrounding areas.	Snoqualmie	28	\$4,827,000	8
45	Maplewood Acquisition and Levee Setback	Explore possible flood buyouts in this neighborhood and opportunities to restore floodplain. Explore options for bioengineering and softening bank hardening.	Cedar-Samm	27	\$9,016,000	8
46	Timber Lane Village Home Flood Buyouts	Purchase homes and property in this neighborhood of homes which is subject to extreme flooding.	SF Skykomish	27	\$800,000	8
47	Miller River Road Protection	Supplement and extend the existing log crib that helps to direct flow toward the Miller River bridge. (Miller River, Unincorporated)	SF Skykomish	27	\$96,000	8
48	Clough Creek Outfall to South Fork Snoqualmie River	<i>The outfall pipe is to be replaced with a larger sized culvert and backflow preventer. This work should be included as part of the South Fork Levee System Improvements project for the Upper Snoqualmie River.</i>	Snoqualmie	27	\$250,000	8
49	Red Creek Acquisitions	Remove homes subject to flooding and erosion hazards.	White	27	\$735,000	8
50	Bellevue - Lower Coal Creek Phase 1	<i>Increase the storage capacity of the regional pond while maintaining fish passage to effectively reduce flow rates to protect private property and maintain stream channel capacity. Increase conveyance capacity of five box culverts and construct Army Corp of Engineer's approved levees where feasible. The first element targets flood flow reduction through increased flood storage at the I-405 regional detention pond and increased flood flow conveyance at the 5 culvert crossings through the Newport Shores reach downstream of the regional detention pond.</i>	Cedar-Samm	27	\$12,500,000	8
51	Issaquah FCZD Proj 3 - Gilman Square Floodproofing	<i>Provide assistance to up to six commercial buildings within the Gilman Repetitive Loss Area to elevate and/or flood proof structures to current floodplain standards. This will help mitigate current repetitive losses at up to four structures, to allow them to be taken off of the City's repetitive loss list (the total number of repetitive loss properties in Issaquah is 19). Elevations will raise first floors to 1-2 feet above the base flood elevation, or floodproofing methods will be used based on current criteria, based on floodplain mapping recently developed for the Issaquah Flood Insurance Study update.</i>	Cedar-Samm	26	\$250,000	8
52	Orchard Grove	Pursue flood buyouts in the Orchard Grove and restore floodplain where possible. Buyouts should include the 'BN Nose' property upstream of revetment.	Cedar-Samm	26	\$3,837,000	8

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53	Riverbend Mobile Home Park Acquisition and Levee Setback	Purchase property underlying 19 mobile homes nearest river, recontour existing oversteepened revetment to reduce erosion, flood damage and improve flood conveyance, thereby reducing risk to downstream areas.	Cedar-Samm	26	\$6,525,000	8	
54	Issaquah Creek Streambank Stabilization	Explore soft bank stabilization options at 3 sites along Issaquah Creek where roads and other infrastructure are at risk from erosion; 252nd St. extends ~500 LF	Cedar-Samm	26	\$519,000	8	
55	Riverside Estates/Reddington (includes Flood Damage Repairs)	Increase floodplain capacity by reconnecting an off-channel habitat to mainstem Lower Green. Setback Reddington Levee to increase conveyance and storage capacity, and replace existing malfunctioning flood closure system. Includes Nov 2006 Flood Damage Repairs.	Green	26	\$2,387,000	8	
56	Gaco Western	Rehabilitate levees to reduce the risk of flooding in the Lower Green River.	Green	26	\$1,913,000	8	
57	McElhoe/Person Levee	The project will remove or set back about 1,300 feet of the levee, to increase flood storage and conveyance, reconnect floodplain area, and increase side channel formation. The setback project would reduce the need for maintenance and flood repair along existing McElhoe/Person levee. (Lower Snoqualmie River, Unincorporated)	Snoqualmie	26	\$1,149,000	8	
58	Abandoned Bridge Abutment and Waring Revetment Channel Constriction	Remove channel constriction at old bridge site.	Snoqualmie	26	\$100,000	8	
59	Tolt River Natural Area Floodplain Reconnection/Acquisition	This project would assess the feasibility of removing a levee that is currently disconnecting a side channel from being active. In order to remove the levee two homeowners must be bought out as they are directly in the old side channel. The project would reduce the need for maintenance of existing Edenholm levee (portion to be removed) resulting in an elimination of the risk to two homes. (Tolt River, Unincorporated)	Snoqualmie	26	\$4,853,000	8	
60	<i>Kimball Creek and Snoqualmie Basin</i>	<i>Propose re-channeling of the Kimball Creek channel in the reach between SE 384th and Meadowbrook Way.</i>	<i>Snoqualmie</i>	<i>26</i>	<i>\$500,000</i>	<i>8</i>	
61	Lower Jones Road Setback	Purchase the homes and property and set back road and associated revetment to improve conveyance and capacity.	Cedar-Samm	25	\$4,408,000	8	
62	<i>Renton- Cedar River Bridge Flood Reduction Project</i>	<i>As part of the bridge replacement in the future, a share of the cost to reconstruct the bridges to an elevation above the new floodplain elevation would be funded from the District. Due to the fact that these bridges are now within the floodway, the need to replace them, to prevent their damage or loss during a flood, may have to be done earlier than the normal bridge replacement schedule. The funding would only be for a proportionate share of the total bridge replacement cost (assumed to be \$500,000 per bridge for FCZD budgeting purposes)</i>	<i>Cedar-Samm</i>	<i>25</i>	<i>\$2,500,000</i>	<i>8</i>	
63	Elliott Bridge Levee Setback and Acquisition	Complete hazard mitigation projects (buyouts, levee setback, etc) for a repetitive loss area reach currently constrained by armored banks that do not offer adequate flood risk reduction	Cedar-Samm	25	\$1,821,000	8	
64	Miller River Home Buyout	Remove homes from hazard area. (Miller River, Unincorporated)	SF Skykomish	25	\$683,000	8	
65	Lower Lions Club	Acquire flood-prone homes, including two repetitive loss properties. Adjacent to completed flood buyout and private land managed for educational and conservation purposes.	Cedar-Samm	25	\$1,050,000	8	
				Median, All Projects	28	\$69,956,000	Increase from 5¢
						\$186,484,000	Cumulative Total, 8¢
66	<i>South Park - Duwamish Backwater Inundation at 4th and Trenton Storm Drain</i>	<i>The primary objective of the 4th Ave S and S Trenton St Storm Drain Project is to reduce flooding from Duwamish River backwater inundation in the 7th Ave S drainage basin in the South Park neighborhood. Flooding and water/sediment quality are a concern to both the community and SPU. The intent of this project is to relieve flooding while at the same time minimizing impacts to water and sediment quality in the Duwamish Waterway.</i>	<i>Green</i>	<i>25</i>	<i>\$4,500,000</i>	<i>10</i>	
67	Neal Road Relocation	The project would eliminate the public safety hazard associated with potential road failure and improve emergency access to flood-prone farms. The project would also minimize disturbance of river channel environment, as well as need for future inspection, maintenance and repair. (Lower Snoqualmie River, Unincorporated)	Snoqualmie	25	\$1,450,000	10	
68	White-Greenwater Acquisition	Remove homes subject to flooding and erosion hazards.	White	25	\$785,000	10	
69	Rainbow Bend Levee Setback and Floodplain Reconnection	Setback levee to achieve improved conveyance and floodplain capacity.	Cedar-Samm	24	\$1,733,000	10	
70	Cedar Rapids Levee Setback	Set back levee to improve flood conveyance and capacity. Complete project design, permits, and construction. Funding will cover the grant match and project management costs.	Cedar-Samm	24	\$137,000	10	
71	Town of Skykomish Home Buyouts	Purchase homes and property in this neighborhood of homes which is subject to flood born debris.	SF Skykomish	24	\$1,952,000	10	
72	Jan Road-Rutledge Johnson Levee Setbacks	Remove portions of both levees that solely protect open space land. Segments of existing levees constrict conveyance and direct erosive flood flows into the Cedar River Trail and SR-169.	Cedar-Samm	24	\$955,000	10	
73	Russell Road #3	Rehabilitate levees to reduce the risk of flooding in the Lower Green River.	Green	24	\$472,000	10	
74	Herzman Levee Setback & Floodplain Reconnection	Setback levee to reduce erosive forces on the Cedar River Trail and SR-169.	Cedar-Samm	24	\$1,023,000	10	
75	<i>Maloney Creek Confluence Improvements</i>	<i>Skykomish Levee enclosure and Channel improvements.</i>	<i>SF Skykomish</i>	<i>24</i>	<i>\$1,000,000</i>	<i>10</i>	
76	Russell Road #2	Set back levee using current design and construction techniques.	Green	24	\$9,085,000	10	
77	Gunter Levee Setback	Acquires off-channel floodplain, ehabilitates existing Gunter Levee and Frager Road Levees with setback relocation	Green	24	\$5,409,000	10	
78	Tolt River SR 203 to Trail Bridge Floodplain Reconnection	Set back levee to improve conveyance by allowing sediment deposition over a broader floodplain, thereby reducing the vertical rate of aggradation in the river channel.	Snoqualmie	23	\$4,585,000	10	
79	Tolt River Mile 1.1 Levee Setback	The existing left bank levee was constructed well riverward of the southernmost abutment of the Snoqualmie Trial Bridge, unnecessarily confining the channel beneath this span. The proposed project would increase conveyance beneath the Trail Bridge by removing 2000 feet of the existing levee and reconstructing a new levee adjacent to the southern bridge abutment. This construction would require the acquisition of 16 flood prone parcels on the left bank and approximately 1.5 acres of Remlinger Farm. The new levee would be constructed at more stable slope than the existing flood protection facility and would include the installation of large woody debris and establishment of native vegetation in the project area. (Tolt River, Unincorporated, City of Carnation)	Snoqualmie	23	\$5,677,000	10	
80	Willowmoor Floodplain Restoration	Improve conveyance at the outlet of Lake Sammamish for flood risk reduction purposes.	Cedar-Samm	22	\$2,944,000	10	

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81	Middle Green River Acquisition	Purchase one at-risk homes and associated property in the middle Green River valley.	Green	22	\$1,204,000	10		
82	County line to A-Street Flood Conveyance Improvement	Reduce flood-related risk to residential area by purchasing flood-prone property and providing conveyance through an existing levee into adjacent floodplain, thereby reducing flood heights and velocities. This sit is the only remaining significantly sized overbank area available to enhance flood storage and improve conveyance in the lower White River within the Cities of Pacific and Auburn.	White	22	\$1,193,000	10		
83	Rhode Levee Setback and Home Buyouts	Purchase homes along path of fastest, deepest flood flow, and set back the levee.	Cedar-Samm	21	\$3,518,000	10		
84	Russell Road #1	Set road back from river and reconstruct lower bank using current design and construction methods.	Green	21	\$9,085,000	10		
85	Stout Property Restoration	This project includes biostabilization along the Pleasant Hill School and Lynn revetments on the mainstem Snoqualmie River to reduce erosion and long-term maintenance costs. (Lower Snoqualmie River, Unincorporated)	Snoqualmie	21	\$128,000	10		
86	Lower Raging River Restoration	This project seeks to setback existing Raging River levee system to increase its level of flood protection to the Fall City community. (Raging River, Unincorporated)	Snoqualmie	21	\$3,729,000	10		
87	Patterson Creek Acquisition	The primary purpose of this project is to acquire property that is being impacted by alluvial fan development where a headwater stream of Patterson Creek enters the floodplain.	Snoqualmie	21	\$598,000	10		
					Median, All Projects	28	\$61,162,000	Increase from 8¢
						\$247,646,000	Cumulative Total, 10¢	
88	3rd Place and Pacific City Park Revetment Retrofit	Rehabilitate failing concrete slab revetment by replacing with bioengineered flood protection facility	White	21	\$6,447,000	11		
89	Green River 2006 Flood Damage Repairs Phase 2	Complete 5 Green River flood protection facility repair projects (Dykstra, Frager Road, Kent Airport, S 104th, Galli Section)	Green	20	\$7,740,000	11		
90	SE 19th Way Road Buyout	Purchase farm which is at risk of being isolated by bank erosion.	Snoqualmie	20	\$1,772,000	11		
91	Deer Creek Channel Relocation	The project would relocate Deer Creek away from a farm road and two farm buildings, provide a more natural stream alignment and increase the stream reaches capacity to store sediment. (Lower Snoqualmie River, Unincorporated)	Snoqualmie	20	\$190,000	11		
92	Fort Dent Levee	Rehabilitate the steep, eroding, and slumping levee to a stable angle of repose with a midslope bench/buttress, and improve flood storage and conveyance capacity along Fort Dent Park. Restore the failing toe buttress structure and rehabilitate the channel edge with large woody debris placement	Green	20	\$2,779,000	11		
93	Snoqualmie River Byers Floodplain and Riparian Restoration	Install a 600 foot long "drift fence" to capture the large amount of woody debris that is accumulating in the back/tree line of the property to reduce erosion along agricultural property. (Lower Snoqualmie River, Unincorporated)	Snoqualmie	20	\$153,000	11		
94	Bellevue -Richards/Sunset Creek	<i>Eliminate repetitive flooding by acquiring several commercial and vacant properties in the area where the three creeks merge. Use property ownership as a means to design a stable channel adjacent to the King County sewer line.</i>	Cedar-Samm	20	\$7,800,000	11		
					Median, All Projects	27	\$26,881,000	Increase from 10¢
						\$274,527,000	Cumulative Total, 11¢	
95	Getchman Levee Setback and Floodplain Reconnection	Setback the levee to improve conveyance and capacity. Most of the acquisitions needed for this project have already been completed.	Cedar-Samm	19	\$2,670,000	12		
96	Renton- Riviera Apartments Setback Levee	<i>Construct a setback levee that is FEMA certified to protect buildings and could include fish habitat improvements, if Levee certification can be still be achieved. Alternatively the building can be elevated or bought out. If the site is redeveloped in the future, the possibility exists to get the redevelopment project to construct building at an elevation that prevents them from flooding (1-ft above 100-yr base flood elevation – Renton Standard).</i>	Cedar-Samm	19	\$2,500,000	12		
97	WPA Levee Setback and Acquisition	Acquire homes in floodway and floodplain. Setback or remove revetment. Restore and revegetate floodplain.	Cedar-Samm	19	\$1,821,000	12		
98	Lower Mill Creek to Lower Mullen Slough	Increase floodplain capacity in a manner that increases access to lower valley tributaries. Rehabilitates steep, eroding levees and revetments , w/setbacks along Hawley and Frager Roads, restores channel edge, floodplain habitat.	Green	19	\$5,002,000	12		
99	Renton- Carco Theater	<i>Construct a setback levee to protect the building from damages and modify storm systems that surcharge during flood events to prevent surcharging back into the building.</i>	Cedar-Samm	18	\$500,000	12		
100	Gilliam Creek	Replaces a malfunctioning 90" iron flapgate at the confluence of Gilliam Creek. Area currently experiences local interior flooding due to flapgate failure, requiring floodwaters to be pumped out of street manholes into the river during high water events.	Green	18	\$871,000	12		
101	Snoqualmie River Bank Stabilization Agriculture Lands	Biostabilization and revegetation of existing levees or revetments to reduce cost of flood risk reduction and protect agricultural lands. (Lower Snoqualmie River, Unincorporated)	Snoqualmie	18	\$128,000	12		
102	Sandy Cove Park Restoration	Bank erosion has resulted in a high vertical wall of loose material within the city park, posing a safety hazard to park users. The project would place a large bioengineered log structure along 200' of bank along the mainstem of the upper Snoqualmie to reduce the risk of erosion damage to a public park.(Upper Snoqualmie River, City of Snoqualmie)	Snoqualmie	18	\$647,000	12		
103	Renton-Old City Hall flood protection project	<i>Reconsturct or modify existing wall to increase height and include required freeboard so the wall can be FEMA certified as a floodwall. Modify onsite storm system to prevent surcharging during high flows and flooding behind the wall. Alternatively, a levee could be reconstructed by removing gabions, if sufficient space is available to meet levee design standards and FEMA levee Certification requirements. This alternative would result in fish habitat improvements if planting and LWD could be incorporated into the project and still meet FEMA levee Certification requirements.</i>	Cedar-Samm	17	\$750,000	12		
104	Snoqualmie River Fall City Reach Reconnection and Acquisition	The project would reconnect adjacent floodplain for flood conveyance and storage without impacting Neal Road or nearby residents. (Lower Snoqualmie River, Unincorporated)	Snoqualmie	17	\$4,909,000	12		
105	White River Flood Damage Repair at Pacific Park Levee	Install biostabilization along 75 L.F. of riverbank and enhance existing buffer with erosion resistant plantings	White	17	\$75,000	12		

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Ref #	Project Name	Project Description	Basin	Score (Out of 38 Possible)	Project Cost (2006 Dollars)	Levy Rate (¢/\$1000 AV)
106	Sammamish River Bank Stabilization	Setback banks and improve structural integrity through installation of riparian vegetation and additional instream features.	Cedar-Samm	17	\$3,299,000	12
107	<i>Issaquah FCZD Proj 6 - Squak Valley Park Levee Removal</i>	<i>Construct the Squak Valley Park stream and riparian restoration project that includes partial or full levee removal. Project will include fish habitat enhancement, consistent with WRIA8 Salmon Conservation Plan proposal (on 3-year high priority list), and floodplain reconnection with remainder of city park property. (Note: this project replaces a Corps of Engineers Section 206 Ecosystem Restoration Project that was previously proposed for this location. That project was cancelled due to lack of federal funding). This project is currently under design, with construction scheduled for 2009.</i>	Cedar-Samm	16	\$800,000	12
108	Upper Jones Road Acquisition and Revetment Setback	Floodplain buyouts of homes behind the upstream end of the Scott-Indian levee. The homes are not known to experience regular flooding, but are susceptible to undermining by channel migration or erosion. Setback facility.	Cedar-Samm	16	\$3,837,000	12
109	Horsehead Bend	Rehabilitate and stabilize an eroding riverbank.	Green	16	\$1,448,000	12
110	Lower Snoqualmie Floodplain Capacity and Shoreline Stabilization	This project will reconnect the river with its floodplain and increase floodplain capacity while stabilizing the shoreline through use of native plantings	Snoqualmie	16	\$97,000	12
			Median, All Projects	26	\$29,354,000 \$303,881,000	Increase from 11¢ Cumulative Total, 12¢
111	Littlefield-Cummins-Belmondo	Acquire homes located in the floodplain and the potential severe channel migration hazard area (based on preliminary findings of CMZ mapping in progress).	Cedar-Samm	16	\$5,181,000	14
112	Brassfield Revetment Setback and Acquisition	Complete hazard mitigation projects (buyouts, levee setback, etc) in a reach currently constrained by levees on both banks.	Cedar-Samm	15	\$1,821,000	14
113	Hamakami Levee	Relocate deteriorating levees to edge of agricultural terrace, improves flood storage and conveyance. Levee setback also protects agriculture production area.	Green	15	\$1,290,000	14
114	Lone's Levee Setback	Relocate deteriorating levees to edge of agricultural terrace, improves flood storage and conveyance. Levee setback also protects agriculture production area.	Green	15	\$1,571,000	14
115	Neely and Porter Levee Setback	Relocate deteriorating levees to the edge of the floodway within the adjoining agricultural areas at the Neely site, and to the Green Valley Road at the Porter site.	Green	15	\$2,376,000	14
116	HerbCo Farm	The project will remove blackberry and knotweed and replant with native vegetation along 1000 feet of the Snoqualmie River and provide vegetation maintenance of the Herman and Joy revetments. (Lower Snoqualmie River, Unincorporated)	Snoqualmie	15	\$25,000	14
117	<i>Tolt River Mouth to SR 203 Floodplain Reconnection Project</i>	<i>See the project description in the Flood Hazard Management Plan</i>	<i>Snoqualmie</i>	<i>15</i>	<i>\$1,000,000</i>	<i>14</i>
118	Northeast Auburn Creek	Improve floodplain capacity by restoring tributary access	Green	14	\$897,000	14
119	Duwamish Revetment	Bank stabilization and setback of existing revetment.	Green	14	\$6,282,000	14
120	Upper Snoqualmie River Flood Damage Repairs	Complete one Upper Snoqualmie Mainstem River flood protection facility repair project.	Snoqualmie	14	\$225,000	14
121	Jubilee Farm	This project will remove invasive species and plant a 50 to 70 foot buffer along one mile of the Snoqualmie River. The proposal would provide vegetation maintenance of Harry Peterson, Angerer Upper, and Angerer Lower revetments (to be planted) (Lower Snoqualmie River, Unincorporated)	Snoqualmie	14	\$84,000	14
122	White River Flood Damage Repair at Stuck River Drive	Replace eroded revetment with stable log and rock toe, and 300 L.F. of biostabilized riverbank	White	14	\$300,000	14
123	Turley Levee Setback	Relocate deteriorating levees to edge of agricultural terrace, improves flood storage and conveyance. Levee setback also protects agriculture production area.	Green	13	\$1,179,000	14
124	Horath-Kaech Levee Setback	Relocate deteriorating levees to edge of agricultural terrace, improves flood storage and conveyance. Levee setback also protects agriculture production area.	Green	13	\$1,651,000	14
125	TransCanada Levee Modification	Conduct conveyance improvement feasibility study. Implement levee modification project.	White	13	\$1,421,000	14
126	<i>Issaquah FCZD Proj 1 - Sycamore Vacant Parcel Acquisition</i>	<i>Purchase flood-prone undeveloped residential parcels.</i>	<i>Cedar-Samm</i>	<i>12</i>	<i>\$675,000</i>	<i>14</i>
127	78th Avenue South	Acquire degraded floodplain properties. Relocate the roadway/revetment system landward and improve flood storage and conveyance capacity. Restore the river edge habitat with installations of large woody debris. Stabilize the riverbank by flattening steep slopes and excavating a midslope bench/buttress	Green	12	\$6,075,000	14
128	Pacific City Park Revetment Repair	Repair concrete revetment. A small length of the concrete revetment at the upstream end of the park is broken and undermined along the ordinary high water line. This portion of the revetment is on the outside of the meander and there is the potential for further erosion, which will cause an increased amount of damage in the city park if not repaired.	White	11	\$183,000	14
129	Rosso Nursery	Acquire degraded floodplain properties. Relocate revetment system landward and improve flood storage and conveyance. Restore river edge habitat with large woody debris placement, stabilize the bank with construction of a midslope bench/buttress, restore floodplain and wetland habitat, and stabilize the site with native riparian vegetation.	Green	10	\$1,905,000	14
130	Pautzke and Fenster Levee Setback	Relocate the deteriorating levees to set back locations and re-establish old side-channel connections. Stabilize the riverbank against channel migration by reinforcing the aquatic edge of the channel with large woody debris installations. Regrade the steep levee slopes to flatter angles and construct midslope benches/buttresses.	Green	8	\$3,399,000	14
131	Snoqualmie River Footbridge Off Channel Reconnection	Reconnection of floodplain for flood storage to reduce risk of damage to existing revetments on opposite river bank and to the properties those revetments protect without impacting the park facilities. (Lower Snoqualmie River, Unincorporated)	Snoqualmie	8	\$576,000	14
132	Gonneson Revetment Removal / Acquisition	The project will restore the Snoqualmie River to allow it to migrate laterally along this meander bend by removing existing bank armor. This proposal would require the acquisition of 12 acres of property in order to allow the project to occur. It would also eliminate any need for maintenance of existing Gonneson revetment (to be removed). (Lower Snoqualmie River, Unincorporated)	Snoqualmie	8	\$839,000	14

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133	I-405 Levee	Increase floodplain capacity by reconnecting an off-channel habitat to mainstem Lower Green. Breaches or sets back an existing levee, replaces flood management function in setback location. Reconnects abandoned river channel, rehabilitates channel edge and riparian, wetlands habitat	Green	4	\$1,629,000	14		
134	Chinook Bend Reach Restoration	The project is to consider removing the levees on the Chinook Bend Natural Area. Removal of the levee would allow better access to the floodplain and encourage channel migration across the bend. In addition, removal of the levee would eliminate any need for maintenance of existing Carnation Farms Upper levee (to be removed). (Lower Snoqualmie River, Unincorporated)	Snoqualmie	3	\$200,000	14		
135	Camp Gilead Off-Channel Reconnection	The project will remove approximately 400 feet of King County levee on the Snoqualmie River and eliminate any need for maintenance to this part of existing Camp Gilead levee (to be removed). Fish access to four acres of off-channel habitat and approximately 1.3 miles of stream would be restored. (Lower Snoqualmie River, Unincorporated)	Snoqualmie	3	\$316,000	14		
136	Stillwater Restoration	The project would restore natural processes to this segment of the river by removing levee and revetments across from Chinook Bend. Riparian plantings would occur at the same time. The project would reduce need for maintenance of existing Meehan/Game Farm levee (portion to be removed). (Lower Snoqualmie River, Unincorporated)	Snoqualmie	3	\$1,035,000	14		
137	Dorre Don Meanders Phase 2	Acquire flood-prone properties in lower Dorre Don area and modify levees and restore floodplain where feasible to reconnect areas of the floodplain with the river for conveyance.	Cedar-Samm	30	\$7,000,000	14		
138	Bellevue - Lower Coal Creek Phase 2	<i>Increase the storage capacity of the regional pond while maintaining fish passage to effectively reduce flow rates to protect private property and maintain stream channel capacity. Increase conveyance capacity of five box culverts and construct Army Corp of Engineer's approved levees where feasible. The second element of the Coal Creek project is the levee construction through the Newport Shores reach.</i>	Cedar-Samm	27	\$9,400,000	14		
139	Cherry Creek Mouth Restoration	Revegetation of existing levees or revetments to reduce cost of flood risk reduction. This project would restore the old channel alignment, circa 1960, before it was straightened and channelized. This would create approximately 2000 feet of new channel. The project would also eliminate any need for maintenance of existing channelized outlet (to be abandoned). (Lower Snoqualmie River, Unincorporated)	Snoqualmie	3	\$897,000	14		
					Median, All Projects	25	\$59,432,000	Increase from 12¢
							\$363,313,000	Cumulative Total, 14¢

Unranked New "Subregional" Projects Received as of June 18, 2007

No formal Request for Proposals has been conducted at this time. 'Subregional' category has not been defined and submitted projects have not been reviewed or scored by the Basin Technical Committees.

Project Name	Submitted By:	Request:	Levy Rate (¢/\$1000 AV)
Des Moines Project #1 - Des Moines Creek	Des Moines	500,000	+ 2
Des Moines Project #2 - Massey Creek	Des Moines	365,000	+ 2
95th St Trunk	Redmond	1,122,000	+ 2
5050 W. Lake Sammamish Pkwy Culvert Replacement	Redmond	534,000	+ 2
Evans Creek Relocation	Redmond	1,975,000	+ 2
Friendly Village	Redmond	110,000	+ 2
NE 105th St @ 170th Ave NE	Redmond	33,000	+ 2
North Overlake Conveyance and Detention	Redmond	3,080,000	+ 2
Oakridge Swale	Redmond	835,500	+ 2
Upper Braeburn Creek	Redmond	396,000	+ 2
West Education hill Stream Relocation and Erosion Repair	Redmond	300,000	+ 2
Willows Business Park at 152nd Ave NE	Redmond	132,000	+ 2
Willows Creek at Puget Sound Energy Substation	Redmond	913,000	+ 2
Madison Valley Long Term Solution	Seattle	23,700,000	+ 2
Madison Valley "sag"	Seattle	None submitted	+ 2
MLK Way/Norfolk Street Storm Improvements	Seattle	11,600,000	+ 2
N 125th and Aurora N storm drain	Seattle	9,400,000	+ 2
Thornton Creek confluence	Seattle	1,700,000	+ 2
Thornton Creek South Branch	Seattle	700,000	+ 2
May Creek	UAC	200,000	+ 2
			57,595,500