Seattle Public Utilities Water Fund Draft Proposed 2017-2022 Capital Improvement Program

Changes since 4/7/16 OB version

Project Name (Red = New Projects since 2016-2021 CIP)	Sum of Previous Years' Actuals (2015 and earlier)	2016 Spending Projections (as of 3/24/2016)	2017	2018	2019	2020	2021	2022	Sum of Remaining Costs (2023 and beyond)	Total Project Cost **
Existing Supply Cost Pool										
1 Tolt Ring Gate Upgrade	\$143,011	\$543,244	\$1,637,532	\$19,696	\$0	\$0	\$0	\$0	\$0	\$2,343,483
2 Morse Lake Pump Plant	\$30,394,563		\$272,051	\$0	\$0	\$0	\$0	\$0	\$0	\$42,320,898
3 Hatchery Spring Water Redundancy	\$0		\$880,000	\$80,000	\$30,000	\$0	\$0	\$0	\$0	\$1,045,000
4 Sockeye Broodstock Weir	\$0		\$500,000	\$5,250,000	\$100,000	\$0	\$0	\$0	\$0	
5 Hatchery Spring Water Pump Improvement	\$0		\$243,655	\$0	\$0	\$0	\$0	\$0	\$0	\$243,655
6 Hatchery Adult Pond Improvement	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
7 Landsburg Fish Ladder Retrofit	\$0		\$205,000	\$0	\$0	\$0	\$0	\$0	\$0	\$247,500
Hatchery Moisture Mitigation	\$0		\$550,000	-		-	-		\$1	\$600,001
Budget Placeholder - Hatchery Works	\$0		\$0	\$0	\$250,000	\$500,000	\$500,000	\$250,000	\$2	
8 New Landsburg Tunnel Flowmeter	\$0		\$250,000	\$0	\$0	\$0	\$0	\$0	\$0	
9 Watershed Road Improvements	\$2,620,574		\$568,058	\$573,052	\$600,750	\$612,765	\$614,885	\$172,303		
10 Watershed Road Decommissioning	\$1,915,543		\$308,375	\$266,809	\$269,894	\$276,727	\$336,429	\$661,000		
11 Riparian Conifer Underplanting	\$744,423	\$12,950	\$13,000	\$13,260	\$13 <i>,</i> 525	\$13,796	\$14,072	\$14,353		
12 LWD Replacement in Streams	\$956,169	\$55,000	\$55,000	\$55,000	\$55,000	\$55,000	\$57,000	\$57,000		
13 Riparian Restoration Thinning	\$522,248		\$14,280	\$14,566	\$14,857	\$15,154	\$15,457	\$15,766		
14 Bank Revegetation	\$425,378		\$8,000	\$8,200	\$8,400	\$8,500	\$8,500	\$8,500		
15 Passage for Peak Flows	\$489,465		\$35,000	\$36,000	\$37,000	\$37,885	\$38,600	\$39,000		
16 Bank Stabilization	\$250,569		\$40,000	\$40,000	\$40,000	\$40,000	\$60,000	\$60,000		
17 Stream Crossing for Fish Passage	\$423,280		\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000		
18 Upland Restoration Planting	\$786,987		\$11,220	\$11,444	\$11,673	\$11,907	\$12,145	\$12,388		
19 Upland Ecological Thinning	\$1,692,701	\$88,000	\$71,000	\$71,000	\$71,000	\$70,000	\$70,000	\$70,000		
20 Freshwater Conservation (Ballard Locks)	\$458,666	\$100,000	\$140,000	\$145,000	\$150,000	\$155,000	\$160,000	\$165,000	\$0	\$1,473,666
21 Downstream Habitat-Instream Flows	\$6,085,815		\$50,000	\$575,000	\$425,000	\$0	\$0	\$0	\$0	\$7,385,815
22 Downstream Habitat-Landsburg Mitigation	\$1,516,246	\$600,000	\$600,000	\$600,000	\$700,000	\$532,000	\$0	\$0	\$0	
23 Chinook Studies	\$1,532,624	\$101,500	\$142,000	\$147,000	\$152,000	\$157,000	\$160,000	\$165,000		
24 Cedar Bridges	\$0	\$2,000	\$1,000	\$1,000	\$1,000	\$100,000	\$15,000	\$0		
25 Taylor Creek 9 Road Bridge Replacement	\$0		\$0	\$260,000	\$0	\$0	\$0	\$0	\$0	\$260,000
26 Taylor Cr Railroad Trestle Removal & Stream Restoration	\$0	\$0	\$0	\$640,000	\$0	\$0	\$0	\$0	\$0	\$640,000
27 Tolt Bridges	\$0	\$0	\$1,000	\$1,000	\$1,000	\$0	\$0	\$0	\$0	\$3,000
28 MIT Road Improvements	\$121,527	\$68,937	\$64,481	\$75 <i>,</i> 486	\$81,668	\$64,808	\$90,093	\$65,000	\$0	\$632,000
29 Cedar Falls Building Imprvmts	\$46,873	\$0	\$75,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000		
30 Cedar Falls Facilities Development	\$1,437,246	\$708,189	\$7,509,159	\$5,252,665	\$65,525	\$0	\$0	\$0	\$0	\$14,972,784
31 Cedar Falls Phase 2	\$0		\$0	\$0	\$200,000	\$500,000	\$2,000,000	\$6,000,000	\$3,000,000	\$11,700,000
32 Tolt Building Imprvmts	\$262,517	\$240,000	\$50,000	\$50,000	\$50,000	\$50,000	\$0	\$0		
33 Tolt/Duvall Facilities Dev.	\$0		\$0	\$0	\$100,000	\$250,000	\$500,000	\$1,000,000	\$8,000,000	\$9,850,000
34 Lake Youngs Building Imprvmts	\$91,367		\$75,000	\$75,000	\$75,000	\$75,000	\$50,000	\$50,000		
35 Lake Youngs Facilities Dev.	\$0	\$0	\$0	\$0	\$0	\$0	\$250,000	\$500,000	\$8,500,000	\$9,250,000
Existing Supply Total	\$52,917,794		\$14,419,811	\$14,361,178	\$3,603,292	\$3,625,542	\$5,052,181	\$9,405,310	\$19,500,003	

Attachment 3a

5/25/2016 for 6/2/16 OB

Seattle Public Utilities Water Fund Draft Proposed 2017-2022 Capital Improvement Program

Changes since 4/7/16 OB version

Project Name v (Red = New Projects since 2016-2021 CIP)	Sum of Previous Years' Actuals (2015 and earlier)	2016 Spending Projections (as of 3/24/2016)	2017	2018	2019	2020	2021	2022	Sum of Remaining Costs (2023 and beyond)	Total Project Cost **
Existing Transmission Cost Pool										
36 Maple Leaf Reservoir Seismic	\$6,521,662	\$413,947	\$6,474	\$0	\$0	\$0	\$0	\$0	\$0	\$6,942,083
37 Reservoir Covering-Lake Forest Park	\$0	\$0	\$25 <i>,</i> 000	\$50,000	\$590,000	\$1,200,000	\$9,750,000	\$620,000	\$0	\$12,235,000
38 Tolt Slide Improvements, incl Tunnel	\$0	\$350,000	\$100,000	\$19,912,000	\$19,934,000	\$3,856,000	\$350,000	\$0	\$0	\$44,502,000
39 Tolt Slide Toe Stabilization	\$335,794	\$35,000	\$1,000	\$1,000	\$1,000	\$0	\$0	\$0	\$0	\$373,794
40 Transmission Pipelines Rehab	\$0	\$250,000	\$250,000	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000		
Existing Transmission Total	\$6,857,456	\$1,048,947	\$382,474	\$21,463,000	\$22,025,000	\$6,556,000	\$11,600,000	\$2,120,000	\$0	\$64,052,877
Individual Purveyors										
41 Purveyor Meters		\$204,000	\$208,000	\$213,000	\$218,000	\$223,000	\$100,000	\$100,000		
Individual Purveyors Total		\$204,000	\$208,000	\$213,000	\$218,000	\$223,000	\$100,000	\$100,000		
SW Subregional Costs										
42 Beverly Park Tank Improvements	\$28,531	\$158,000	\$215,000	\$1,675,000	<mark>\$2,952,000</mark>	\$0	\$0	\$0	\$0	\$5,028,531
Subregion Total	\$28,531	\$158,000	\$215,000	\$1,675,000	\$2,952,000	\$0	\$0	\$0	\$0	\$5,028,531
Various*										
43 Dam Safety		\$570,000	\$1,125,000	\$975,000	\$1,025,000	\$875,000	\$1,175,000	\$1,175,000		
44 Treatment Facility/WQ Improvements		\$250,000	\$234,464	\$250,000	\$250,000	\$480,000	\$150,000	\$150,000		
15 System Dewatering Program		\$143,600	\$25,000	\$27,000	\$30,000	\$33,000	\$35,000	\$36,000		
46 Cathodic Protection (CP)		\$1,385,166	\$1,889,000	\$633,000	\$2,112,000	\$616,000	\$2,320,000	\$624,000		
47 Replace Air Valve Chambers		\$124,766	\$124,766	\$127,000	\$130,000	\$132,651	\$130,000	\$130,000		
48 Water SCADA Improvements Phase 2		\$313,000	\$480,000	\$480,000	\$480,000	\$480,000	\$400,000	\$480,000		
19 Integrated Security Syst - WF		\$839,860	\$600,000	\$650,000	\$700,000	\$750,000	\$750,000	\$750,000		
50 Integrated Security System		\$360,000	\$168,750	\$187,500	\$360,000	\$187,500	\$187,500	\$187,500		
51 SR 520 Corridor Project-WF		\$100,000	\$50,000	\$250,000	\$500,000	\$500,000	\$0	\$0		
Various Total		\$4,086,392	\$4,696,980	\$3,579,500	\$5,587,000	\$4,054,151	\$5,147,500	\$3,532,500		
New Supply Cost Pool										
52 Regional Conservation Indoor		\$448,767	\$464,360	\$476,647	\$586,871	\$605,024	\$719,125	\$733,507		
53 Regional Conservation Outdoor		\$144,106	\$158,859	\$162,236	\$175,681	\$179,195	\$182,778	\$186,434		
54 Regional Conservation Commercial		\$765,335	\$782,440	\$799,889	\$807,687	\$825,840	\$844,357	\$963,244		
New Supply Total		\$1,358,208	\$1,405,659	\$1,438,772	\$1,570,239	\$1,610,059	\$1,746,260	\$1,883,185		
Grand Total		\$22,700,079	\$21,327,924	\$42,730,450	\$35,955,531	\$16,068,752	\$23,645,941	\$17,040,995	\$19,500,003	\$184,456,458

Notes:

*Projects indicated as 'Various' involve work on multiple facilities. Costs for these projects will be included in regional or subregional cost pools to the extent that work is done on a regional or subregional facility.

**All amounts are in inflated dollars. Total project costs are shown for those projects where costs will be allocated when project goes online.

*** Assume annual closing for the sake of rate calculation.

Attachment 3a

5/25/2016 for 6/2/16 OB

Seattle Public Utilities Water Fun Seattle Public Utilities Water Fund Draft Proposed 2017-2022 Capital Improvement Program

Changes since 4/7/16 OB version			Den	nand used in ca	alcula	tions same as	3, 2014		5/25/2	016 for 6/2/16			
Project Name Row (Red = New Projects since 2016-2021 CIP)	Accounting balance in Work- In-Progress as Closing year of of 12/31/16 assets		Assumed accounting life	Percentage assumed to regional/ subregional rates	Ef	Effect on 2017 rates		ect on 2018 rates	Effect on 2019 rates	Effect on 2020 rates	Eff	fect on 2021 rates	Effect on 202 rates
Existing Supply Cost Pool													
1 Tolt Ring Gate Upgrade	\$143,665	2018	15	100%	\$	-	\$	0.003	\$ 0.005	\$ 0.005	5 \$	0.005	\$ 0.00
2 Morse Lake Pump Plant	\$22,024,889	2017	50	100%	\$	0.039	\$	0.050	\$ 0.050		_	0.048	\$ 0.04
3 Hatchery Spring Water Redundancy	\$0	2019	30	100%	\$	-	\$	-	\$ 0.001	-	_	0.002	
4 Sockeye Broodstock Weir	\$0	2019	20	100%	\$	-	\$	-	\$ 0.007	\$ 0.012	2 \$	0.012	\$ 0.02
5 Hatchery Spring Water Pump Improvement	\$0	2017	10	100%	\$	-	\$	0.001	\$ 0.001	\$ 0.001	\$	0.001	\$ 0.00
6 Hatchery Adult Pond Improvement	\$0	TBD	30	100%	\$	-	\$	-	\$ -	\$ -	\$	-	\$ -
7 Landsburg Fish Ladder Retrofit	\$0	2017	30	100%	\$	-	\$	-	\$ -	\$ -	\$	-	\$ -
a Hatchery Moisture Mitigation	\$0	2017	30	100%	\$	-	\$	-	\$ -	\$ -	\$	-	\$ -
b Budget Placeholder - Hatchery Works	\$0	various***	30	100%	\$	-	\$	-	\$ -	\$ -	\$	-	\$ -
8 New Landsburg Tunnel Flowmeter	\$0	2017	30	100%	\$	-	\$	0.001	\$ 0.001	\$ 0.001	\$	0.001	\$ 0.00
9 Watershed Road Improvements	\$167,334	various***	20	100%	\$	0.001	\$	0.002	\$ 0.003	\$ 0.005	5\$	0.006	\$ 0.00
10 Watershed Road Decommissioning	\$12,431	various***	20	100%	\$	0.001	\$	0.001	\$ 0.002	\$ 0.002	2 \$	0.003	\$ 0.00
11 Riparian Conifer Underplanting	\$33,688	various***	10	100%	\$	-	\$	-	\$-	\$-	\$	-	\$-
12 LWD Replacement in Streams	\$0	various***	10	100%	\$	-	\$	-	\$-	\$ 0.001	\$	0.001	\$ 0.00
13 Riparian Restoration Thinning	\$0	various***	10	100%	\$	-	\$	-	\$-	\$-	\$	-	\$-
14 Bank Revegetation	\$0	various***	10	100%	\$	-	\$	-	\$-	\$-	\$	-	\$-
15 Passage for Peak Flows	\$33,688	various***	10	100%	\$	-	\$	-	\$-	\$-	\$	-	\$ 0.00
16 Bank Stabilization	\$32,153	various***	10	100%	\$	-	\$	-	\$-	\$-	\$	0.001	\$ 0.00
17 Stream Crossing for Fish Passage	\$0	various***	10	100%	\$	-	\$	-	\$-	\$ 0.001	\$	0.001	\$ 0.00
18 Upland Restoration Planting	\$0	various***	10	100%	\$	-	\$	-	\$-	\$-	\$	-	\$-
19 Upland Ecological Thinning	\$0	various***	10	100%	\$	-	\$	-	\$ 0.001	\$ 0.001	\$	0.001	\$ 0.00
20 Freshwater Conservation (Ballard Locks)	\$0	various***	10	100%	\$	-	\$	0.001	\$ 0.001	\$ 0.002	2 \$	0.002	\$ 0.00
21 Downstream Habitat-Instream Flows	\$0	various***	10	50%	\$	-	\$	0.001	\$ 0.001	\$ 0.001	\$	0.001	\$ 0.00
22 Downstream Habitat-Landsburg Mitigation	\$0	various***	10	50%	\$	0.001	\$	0.002	\$ 0.003	\$ 0.003	\$	0.003	\$ 0.00
23 Chinook Studies	\$0	various***	10	100%	\$	-	\$	0.001	\$ 0.001	\$ 0.002	2 \$	0.002	\$ 0.00
24 Cedar Bridges	\$0	various***	75	100%	\$	-	\$	-	\$-	\$-	\$	-	\$-
25 Taylor Creek 9 Road Bridge Replacement	\$0	2018	75	100%	\$	-	\$	-	\$-	\$-	\$	-	\$-
26 Taylor Cr Railroad Trestle Removal & Stream Restorati	\$0	2018	75	100%	\$	-	\$	0.001	\$ 0.001	\$ 0.001	\$	0.001	\$ 0.00
27 Tolt Bridges	\$0	various***	75	100%	\$	-	\$	-	\$-	\$-	\$	-	\$-
28 MIT Road Improvements	\$20,240	various***	20	100%	\$	-	\$	-	\$-	\$ 0.001	\$	0.001	\$ 0.00
29 Cedar Falls Building Imprvmts	\$0	various***	30	100%	\$	-	\$	-	\$-	\$-	\$	-	\$ 0.00
30 Cedar Falls Facilities Development	\$1,259,201	various***	30	100%	\$	0.013	\$	0.022	\$ 0.021	\$ 0.021	\$	0.020	\$ 0.02
31 Cedar Falls Phase 2	\$0	2024	30	100%	\$	-	\$	-	\$-	\$ -	\$	-	\$ -
32 Tolt Building Imprvmts	\$199,621	various***	30	100%	\$	-	\$	-	\$-	\$-	\$	-	\$-
33 Tolt/Duvall Facilities Dev.	\$0	2025	30	100%	\$	-	\$	-	\$-	\$-	\$	-	\$-
34 Lake Youngs Building Imprvmts	\$0	various***	30	100%	\$	-	\$	-	\$-	\$ -	\$	0.001	\$ 0.00
35 Lake Youngs Facilities Dev.	\$0	2025	30	100%	\$	-	\$	-	\$ -	\$ -	\$	-	\$ -
Existing Supply Total	\$23,926,910				\$	0.055	\$	0.086	\$ 0.099	\$ 0.111	\$	0.113	\$ 0.11

Attachment 3a

5/25/2016 for 6/2/16 OB

Seattle Public Utilities Water Fun Seattle Public Utilities Water Fund Draft Proposed 2017-2022 Capital Improvement Program

Changes since 4/7/16 OB version	Demand used in calculations same as presented on April 3, 2014 5/25/2016 for 6/2/1													or 6/2/16 OE		
Project Name (Red = New Projects since 2016-2021 CIP)	Accounting balance in Work- In-Progress as of 12/31/16	Closing year of assets	Assumed accounting life	Percentage assumed to regional/ subregional rates	Ef	ffect on 2017 rates	Eff	fect on 2018 rates	Eff	ect on 2019 rates	Eff	ect on 2020 rates	Eff	ect on 2021 rates	Effe	ect on 2022 rates
Existing Transmission Cost Pool																
Maple Leaf Reservoir Seismic	\$4,336,300	2017	67	100%	\$	0.005	\$	0.007	\$	0.007	\$	0.006	\$	0.006	\$	0.006
Reservoir Covering-Lake Forest Park	\$0	2022	20	100%	\$	-	\$	-	\$	-	\$	-	\$	-	\$	0.014
Tolt Slide Improvements, incl Tunnel	\$0	2021	50	100%	\$	-	\$	-	\$	-	\$	-	\$	0.051	\$	0.066
Tolt Slide Toe Stabilization	\$0	2019	20	100%	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Transmission Pipelines Rehab	\$0	various***	25	100%	\$	-	\$	0.003	\$	0.006	\$	0.008	\$	0.011	\$	0.013
Existing Transmission Total	\$4,336,300				\$	0.005	\$	0.010	\$	0.013	\$	0.014	\$	0.068	\$	0.099
Individual Purveyors																
Purveyor Meters		various***	١	N/A, not rate based		N/A		N/A		N/A		N/A		N/A		N/A
Individual Purveyors Total																
SW Subregional Costs																
Beverly Park Tank Improvements	\$28,882	2019	30	8%	\$	-	\$	-	\$	0.006	\$	0.009	\$	0.009	\$	0.009
Subregion Total	\$28,882				\$	-	\$	-	\$	0.006	\$	0.009	\$	0.009	\$	0.009
Various*																
Dam Safety		various***	50	100%	\$	0.002	\$	0.003	\$	0.005	\$	0.006	\$	0.007	\$	0.009
Treatment Facility/WQ Improvements	\$41,845	various***	10	50%	\$	-	\$	0.001	\$	0.001	\$	0.002	\$	0.002	\$	0.00
System Dewatering Program		various***	20	50%	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Cathodic Protection (CP)		various***	20	80%	\$	0.003	\$	0.004	\$	0.007	\$	0.008	\$	0.012	\$	0.012
Replace Air Valve Chambers		various***	20	50%	\$	-	\$	-	\$	-	\$	-	\$	0.001	\$	0.002
Water SCADA Improvements Phase 2	\$6,292	various***	10	50%	\$	0.001	\$	0.001	\$	0.002	\$	0.003	\$	0.003	\$	0.004
Integrated Security Syst - WF		various***	10	50%	\$	0.001	\$	0.002	\$	0.003	\$	0.004	\$	0.005	\$	0.00
Integrated Security System		various***	10	50%	\$	-	\$	0.001	\$	0.001	\$	0.001	\$	0.001	\$	0.002
SR 520 Corridor Project-WF		various***	50	WSDOT Reimbursed		N/A		N/A		N/A		N/A		N/A		N/A
Various Total	\$48,137				\$	0.007	\$	0.012	\$	0.019	\$	0.024	\$	0.031	\$	0.035
New Supply Cost Pool																
Regional Conservation Indoor		various***	10	Not rate based		N/A		N/A		N/A		N/A		N/A		N/A
Regional Conservation Outdoor		various***	10	Not rate based		N/A		N/A		N/A		N/A		N/A		N/A
Regional Conservation Commercial		various***	10	Not rate based		N/A		N/A		N/A		N/A		N/A		N/A
New Supply Total																
Grand Total	\$28,340,229															

Notes:

*Projects indicated as 'Various' involve work on multiple facilities. Costs for these projects will be included in regional or subregional cost pools to the extent that work is done on a regional or subregional facility.

**All amounts are in inflated dollars. Total project costs are shown for those projects where costs will be allocated when project goes online.

*** Assume annual closing for the sake of rate calculation.

Attachment 3a

5/25/2016 for 6/2/16 OP