

Seattle Public Utilities Water Fund Draft Proposed 2016-2021 Capital Improvement Program

Attachment 4a

3/23/2015, for 4/2/2015 OB

Row	Project Name (Red = New Projects since 2015 CIP)	Sum of Previous Years Actuals (2014 and earlier)	2015 Spending Projections (as of 3/19/2015)	2016	2017	2018	2019	2020	2021	Sum of Remaining Costs (2022 and beyond)	Total Project Cost **
	Existing Supply Cost Pool										
1	Tolt Ring Gate Upgrade	\$0	\$0	\$500,000	\$100,000	\$0	\$0	\$0	\$0	\$0	\$600,000
2	Morse Lake Pump Plant	\$18,736,244	\$17,255,292	\$3,969,834	\$0	\$0	\$0	\$0	\$0	\$0	\$39,961,370
3	Hatchery Spring Water Redundancy	\$0	\$20,000	\$100,000	\$400,000	\$100,000	\$80,000	\$0	\$0	\$0	\$700,000
4	Sockeye Broodstock Weir	\$0	\$15,000	\$200,000	\$3,000,000	\$75,000	\$18,000	\$0	\$0	\$0	\$3,308,000
5	Hatchery Spring Water Pump Improvement	\$0	\$0	\$71,992	\$243,655	\$0	\$0	\$0	\$0	\$0	\$315,647
6	Hatchery Adult Pond Improvement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500,000	\$300,000	\$800,000
7	Watershed Road Improvements	\$1,968,848	\$555,001	\$550,800	\$568,058	\$573,052	\$600,750	\$612,765	\$614,885	--	--
8	Watershed Road Decommissioning	\$1,761,203	\$251,000	\$260,000	\$708,104	\$666,809	\$250,000	\$250,000	\$242,000	--	--
9	Riparian Conifer Underplanting	\$729,334	\$12,435	\$12,000	\$13,000	\$13,260	\$13,525	\$13,796	\$14,072	--	--
10	LWD Replacement in Streams	\$931,897	\$90,021	\$55,000	\$55,000	\$55,000	\$55,000	\$55,000	\$57,000	--	--
11	Riparian Restoration Thinning	\$522,248	\$14,000	\$14,000	\$14,280	\$14,566	\$14,857	\$15,154	\$15,457	--	--
12	Bank Revegetation	\$420,387	\$12,527	\$8,000	\$8,000	\$8,200	\$8,400	\$8,500	\$8,500	--	--
13	Passage for Peak Flows	\$467,764	\$30,021	\$35,000	\$35,000	\$36,000	\$37,000	\$37,000	\$37,740	--	--
14	Bank Stabilization	\$205,735	\$40,918	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$60,000	--	--
15	Upland Restoration Planting	\$772,001	\$17,981	\$11,000	\$11,220	\$11,444	\$11,673	\$11,907	\$12,145	--	--
16	Upland Ecological Thinning	\$1,644,897	\$82,501	\$82,000	\$84,000	\$86,000	\$87,000	\$89,000	\$90,780	--	--
17	Freshwater Conservation (Ballard Locks)	\$358,666	\$231,000	\$236,000	\$240,000	\$245,000	\$250,000	\$255,000	\$260,000	\$0	\$2,075,666
18	Downstream Habitat-Instream Flows	\$6,051,459	\$13,580	\$10,000	\$10,000	\$0	\$0	\$0	\$0	\$0	\$6,085,039
19	Downstream Habitat-Landsburg Mitigation	\$1,494,796	\$450,000	\$595,000	\$332,010	\$383,000	\$0	\$0	\$0	\$0	\$3,254,806
20	Chinook Studies	\$1,407,354	\$26,254	\$237,000	\$242,000	\$247,000	\$252,000	\$257,000	\$262,000	--	--
21	Cedar Bridges	\$0	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$100,000	\$15,000	--	--
22	CRW Contamination Remediation	\$0	\$0	\$100,000	\$100,000	\$0	\$0	\$0	\$0	\$0	\$200,000
23	Tolt Bridge Chuck Judd Cr	\$0	\$0	\$200,000	\$200,000	\$0	\$0	\$0	\$0	\$0	\$400,000
24	Tolt Bridge Siwash Creek	\$0	\$61,000	\$250,000	\$250,000	\$0	\$0	\$0	\$0	\$0	\$561,000
25	MIT Road Improvements	\$0	\$90,000	\$81,600	\$83,232	\$84,897	\$86,595	\$88,326	\$90,093	\$0	\$604,743
26	Cedar Falls Building Imprvmts	\$46,873	\$0	\$100,000	\$75,000	\$50,000	\$50,000	\$50,000	\$50,000	--	--
27	Cedar Falls Facilities Development	\$683,288	\$1,154,666	\$1,220,000	\$6,538,000	\$4,430,000	\$150,000	\$0	\$0	\$0	\$14,175,954
28	Tolt Building Imprvmts	\$153,059	\$6,500	\$100,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	--	--
29	Lake Youngs Building Imprvmts	\$91,367	\$0	\$100,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	--	--
30	Materials Supply Inventory Reg'l	\$741,675	\$100,667	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$892,342
	Existing Supply Total	\$39,189,095	\$20,531,365	\$9,190,226	\$13,476,559	\$7,245,228	\$2,130,800	\$2,008,448	\$2,454,672	\$300,000	\$73,934,568

Seattle Public Utilities Water Fund Draft Proposed 2016-2021 Capital Improvement Program

Attachment 4a

3/23/2015, for 4/2/2015 OB

Row	Project Name (Red = New Projects since 2015 CIP)	Sum of Previous Years Actuals (2014 and earlier)	2015 Spending Projections (as of 3/19/2015)	2016	2017	2018	2019	2020	2021	Sum of Remaining Costs (2022 and beyond)	Total Project Cost **
	Existing Transmission Cost Pool										
31	Maple Leaf Reservoir Seismic	\$1,053,186	\$3,327,871	\$4,244,000	\$0	\$0	\$0	\$0	\$0	\$0	\$8,625,057
32	Reservoir Covering-Lake Forest Park	\$0	\$0	\$0	\$0	\$0	\$590,000	\$1,200,000	\$9,750,000	\$620,000	\$12,160,000
33	Tolt Slide Improvements	\$0	\$50,000	\$350,000	\$350,000	\$350,000	\$350,000	\$350,000	\$350,000	\$0	\$2,150,000
34	Tolt Slide Toe Stabilization	\$198,847	\$279,079	\$15,000	\$0	\$0	\$0	\$0	\$0	\$0	\$492,926
35	Tolt Slide Tunnel	\$0	\$0	\$0	\$2,000,000	\$18,500,000	\$18,500,000	\$2,400,000	\$0	\$0	\$41,400,000
36	Transmission Pipelines Rehab	\$0	\$82,450	\$250,000	\$250,000	\$1,062,000	\$1,084,000	\$1,106,000	\$1,150,000	--	--
	Existing Transmission Total	\$1,252,033	\$3,739,400	\$4,859,000	\$2,600,000	\$19,912,000	\$20,524,000	\$5,056,000	\$11,250,000	\$620,000	\$64,827,983
	Individual Purveyors										
37	Purveyor Meters	--	\$157,578	\$204,000	\$208,000	\$213,000	\$218,000	\$223,000	\$100,000	--	--
	Individual Purveyors Total		\$157,578	\$204,000	\$208,000	\$213,000	\$218,000	\$223,000	\$100,000		
	Subregional Costs										
	<i>None</i>										
	Subregion Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Various*										
38	Dam Safety	--	\$387,000	\$750,000	\$775,000	\$500,000	\$650,000	\$650,000	\$750,000	--	--
39	Treatment Facility/WQ Improvements	--	\$204,550	\$250,000	\$234,464	\$250,000	\$250,000	\$480,000	\$150,000	--	--
40	System Dewatering Program	--	\$124,000	\$24,000	\$25,000	\$27,000	\$30,000	\$33,000	\$35,000	--	--
41	Cathodic Protection (CP)	--	\$1,077,631	\$867,249	\$380,000	\$810,000	\$390,000	\$810,000	\$900,000	--	--
42	Replace Air Valve Chambers	--	\$121,293	\$124,766	\$124,766	\$127,000	\$130,000	\$132,651	\$130,000	--	--
43	SCADA WF Imprv Phase 2	--	\$310,000	\$480,000	\$480,000	\$480,000	\$480,000	\$480,000	\$480,000	--	--
44	Integrated Security Syst - WF	--	\$428,000	\$520,000	\$600,000	\$650,000	\$700,000	\$750,000	\$750,000	--	--
45	Integrated Security System	--	\$311,250	\$210,750	\$135,000	\$28,500	\$28,500	\$28,500	\$28,500	--	--
46	SR 520 Corridor Project-WF	--	\$0	\$50,000	\$50,000	\$300,000	\$500,000	\$500,000	\$0	--	--
	Various Total		\$2,963,723	\$3,276,765	\$2,804,230	\$3,172,500	\$3,158,500	\$3,864,151	\$3,223,500		
	New Supply Cost Pool										
47	Regional Conservation Indoor	--	\$638,516	\$651,333	\$664,360	\$676,647	\$686,871	\$705,024	\$719,125	--	--
48	Regional Conservation Outdoor	--	\$151,288	\$165,548	\$168,859	\$172,236	\$175,681	\$179,195	\$182,778	--	--
49	Regional Conservation Commercial	--	\$821,156	\$855,333	\$872,440	\$889,889	\$907,687	\$925,840	\$944,357	--	--
	New Supply Total		\$1,610,961	\$1,672,214	\$1,705,659	\$1,738,772	\$1,770,239	\$1,810,059	\$1,846,260		
	Grand Total		\$29,003,026	\$19,202,205	\$20,794,448	\$32,281,500	\$27,801,539	\$12,961,658	\$18,874,432	\$920,000	\$138,762,550

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.

Seattle Public Utilities Water Fun Seattle Public Utilities Water Fund Draft Proposed 2016-2021 Capital Improvement Program

Attachment 4a

Demand used in calculations same as presented on April 3, 2014

3/23/2015, for 4/2/2015 OB

Row	Project Name (Red = New Projects since 2015 CIP)	Accounting balance in Work-In-Progress as of 12/31/15	Closing year of assets	Assumed accounting life	Percentage assumed to regional/subregional rates	Effect on 2016 rates	Effect on 2017 rates	Effect on 2018 rates	Effect on 2019 rates	Effect on 2020 rates	Effect on 2021 rates
	Existing Supply Cost Pool										
1	Tolt Ring Gate Upgrade	\$0	2017	30	100%	\$ -	\$ 0.001	\$ 0.001	\$ 0.001	\$ 0.001	\$ 0.001
2	Morse Lake Pump Plant	\$9,736,901	2016	50	100%	\$ 0.035	\$ 0.046	\$ 0.045	\$ 0.045	\$ 0.044	\$ 0.043
3	Hatchery Spring Water Redundancy	\$0	2019	30	100%	\$ -	\$ -	\$ -	\$ 0.001	\$ 0.001	\$ 0.001
4	Sockeye Broodstock Weir	\$0	2019	10	100%	\$ -	\$ -	\$ -	\$ 0.004	\$ 0.010	\$ 0.009
5	Hatchery Spring Water Pump Improvement	\$0	2017	10	100%	\$ -	\$ -	\$ -	\$ 0.004	\$ 0.010	\$ 0.009
6	Hatchery Adult Pond Improvement	\$0	2023	30	100%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7	Watershed Road Improvements	\$62,349	various***	20	100%	\$ 0.001	\$ 0.002	\$ 0.003	\$ 0.004	\$ 0.006	\$ 0.007
8	Watershed Road Decommissioning	\$703	various***	20	100%	\$ 0.001	\$ 0.002	\$ 0.003	\$ 0.004	\$ 0.004	\$ 0.004
9	Riparian Conifer Underplanting	\$148,615	various***	10	100%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10	LWD Replacement in Streams	\$476,552	various***	10	100%	\$ -	\$ -	\$ -	\$ 0.001	\$ 0.001	\$ 0.001
11	Riparian Restoration Thinning	\$101,948	various***	10	100%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12	Bank Revegetation	\$101,477	various***	10	100%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	Passage for Peak Flows	\$28,399	various***	10	100%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0.001
14	Bank Stabilization	\$7,715	various***	10	100%	\$ -	\$ -	\$ -	\$ -	\$ 0.001	\$ 0.001
15	Upland Restoration Planting	\$286,281	various***	10	100%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
16	Upland Ecological Thinning	\$594,585	various***	10	100%	\$ -	\$ -	\$ 0.001	\$ 0.001	\$ 0.001	\$ 0.001
17	Freshwater Conservation (Ballard Locks)	\$21,392	2021	10	100%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0.002
18	Downstream Habitat-Instream Flows	\$289	2017	10	100%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	Downstream Habitat-Landsburg Mitigation	\$2,125,484	2018	10	100%	\$ -	\$ -	\$ 0.004	\$ 0.011	\$ 0.011	\$ 0.010
20	Chinook Studies	\$890,417	various***	10	100%	\$ 0.001	\$ 0.001	\$ 0.002	\$ 0.003	\$ 0.003	\$ 0.004
21	Cedar Bridges	\$0	various***	75	100%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
22	CRW Contamination Remediation	\$0	2017	20	100%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
23	Tolt Bridge Chuck Judd Cr	\$0	2017	75	100%	\$ -	\$ -	\$ 0.001	\$ 0.001	\$ 0.001	\$ 0.001
24	Tolt Bridge Siwash Creek	\$0	2017	75	100%	\$ -	\$ 0.001	\$ 0.001	\$ 0.001	\$ 0.001	\$ 0.001
25	MIT Road Improvements	\$0	2017	20	100%	\$ -	\$ -	\$ -	\$ -	\$ 0.001	\$ 0.001
26	Cedar Falls Building Imprvmts	\$0	various***	30	100%	\$ -	\$ -	\$ -	\$ -	\$ 0.001	\$ 0.001
27	Cedar Falls Facilities Development	\$469,993	2019	30	100%	\$ -	\$ -	\$ -	\$ 0.016	\$ 0.024	\$ 0.023
28	Tolt Building Imprvmts	\$84,972	various***	30	100%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0.001
29	Lake Youngs Building Imprvmts	\$0	various***	30	100%	\$ -	\$ -	\$ -	\$ 0.001	\$ 0.001	\$ 0.001
30	Materials Supply Inventory Reg'l	\$366,848	2016	10	100%	\$ 0.001	\$ 0.001	\$ 0.001	\$ 0.001	\$ 0.001	\$ 0.001
	Existing Supply Total	\$15,504,918				\$ 0.039	\$ 0.054	\$ 0.062	\$ 0.099	\$ 0.123	\$ 0.124

Seattle Public Utilities Water Fun Seattle Public Utilities Water Fund Draft Proposed 2016-2021 Capital Improvement Program

Attachment 4a

Demand used in calculations same as presented on April 3, 2014

3/23/2015, for 4/2/2015 OB

Row	Project Name (Red = New Projects since 2015 CIP)	Accounting balance in Work-In-Progress as of 12/31/15	Closing year of assets	Assumed accounting life	Percentage assumed to regional/subregional rates	Effect on 2016 rates	Effect on 2017 rates	Effect on 2018 rates	Effect on 2019 rates	Effect on 2020 rates	Effect on 2021 rates
	Existing Transmission Cost Pool										
31	Maple Leaf Reservoir Seismic	\$1,074,530	2016	67	100%	\$ 0.010	\$ 0.012	\$ 0.012	\$ 0.012	\$ 0.012	\$ 0.011
32	Reservoir Covering-Lake Forest Park	\$0	2022	20	100%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
33	Tolt Slide Improvements	\$0	2020	50	100%	\$ -	\$ -	\$ -	\$ -	\$ 0.002	\$ 0.003
34	Tolt Slide Toe Stabilization	\$205,748	2016	20	100%	\$ 0.001	\$ 0.001	\$ 0.001	\$ 0.001	\$ 0.001	\$ 0.001
35	Tolt Slide Tunnel	\$0	2020	75	100%	\$ -	\$ -	\$ -	\$ -	\$ 0.047	\$ 0.057
36	Transmission Pipelines Rehab	\$0	various***	25	100%	\$ -	\$ 0.001	\$ 0.003	\$ 0.005	\$ 0.007	\$ 0.009
	Existing Transmission Total	\$1,280,279				\$ 0.011	\$ 0.014	\$ 0.016	\$ 0.018	\$ 0.069	\$ 0.081
	Individual Purveyors										
37	Purveyor Meters	--	various***		N/A, not rate based	N/A	N/A	N/A	N/A	N/A	N/A
	Individual Purveyors Total										
	Subregional Costs										
	<i>None</i>										
	Subregion Total	\$0				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Various*										
38	Dam Safety	--	various***	50	100%	\$ 0.001	\$ 0.002	\$ 0.003	\$ 0.004	\$ 0.005	\$ 0.006
39	Treatment Facility/WQ Improvements	\$41,355	various***	10	50%	\$ -	\$ 0.001	\$ 0.001	\$ 0.001	\$ 0.002	\$ 0.002
40	System Dewatering Program	--	various***	20	50%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
41	Cathodic Protection (CP)	--	various***	20	80%	\$ 0.001	\$ 0.002	\$ 0.003	\$ 0.004	\$ 0.005	\$ 0.006
42	Replace Air Valve Chambers	--	various***	20	50%	\$ -	\$ -	\$ -	\$ -	\$ 0.001	\$ 0.001
43	SCADA WF Imprv Phase 2	\$5,996	various***	10	50%	\$ 0.001	\$ 0.001	\$ 0.002	\$ 0.003	\$ 0.003	\$ 0.004
44	Integrated Security Syst - WF	--	various***	10	50%	\$ 0.001	\$ 0.002	\$ 0.002	\$ 0.003	\$ 0.004	\$ 0.005
45	Integrated Security System	--	various***	10	50%	\$ -	\$ -	\$ 0.001	\$ 0.001	\$ 0.001	\$ 0.001
46	SR 520 Corridor Project-WF	--	various***	50	Reimbursed by WSDOT	N/A	N/A	N/A	N/A	N/A	N/A
	Various Total	\$47,352				\$ 0.004	\$ 0.008	\$ 0.012	\$ 0.016	\$ 0.021	\$ 0.025
	New Supply Cost Pool										
47	Regional Conservation Indoor	--	various***	10	Not rate based	N/A	N/A	N/A	N/A	N/A	N/A
48	Regional Conservation Outdoor	--	various***	10	Not rate based	N/A	N/A	N/A	N/A	N/A	N/A
49	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	\$16,832,549									

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.