

Significant changes in the 2009 WTD Capital Program:

- **Brightwater Treatment & Conveyance:**

The latest 2008 trend estimate is the basis for the current Brightwater cashflow. Project costs have increased from the prior year trend (2007) primarily due to the higher actual cost of contracts awarded for the Influent Pump Station (\$20 million), Treatment Plant Solids Contract (\$12.8 million) and Treatment Plant Liquids subcontract packages (\$12 million). Partially offsetting these increases were lower costs for the Outfall design-build contract of \$4.4 million and reductions to overall program contingency of \$19 million. The net increase from the prior trend is estimated to be \$33 million. The majority of construction contracts are now awarded, thereby reducing risk associated with inflation and the bidding environment.

Status	2008	2009	2010	2011	2012
2008 Adopted	348,886,132	468,816,639	151,401,286	144,727,498	0
2009 Adopted	363,300,940	403,647,899	268,637,663	95,017,095	24,641,741

Non Brightwater Project Changes:

- **423515-007 CSO Control and Improvement – University:**

The planning and design process to achieve capacity improvements to the University CSO was scheduled to begin in 2009. Further analysis of this system indicates that the improvements can be delayed up to 2 years. This delay will permit further data collection on the Densmore Drain, where we lack reliable flow data. This new data will help us determine the remaining CSO flow to be controlled at University. By implementing other minor improvements else where in the system (the Duwamish drainage is proposed) we can keep the overall CSO program on track for system control by 2030. Staff proposed a two year delay in University CSO, which results in \$2.98M being moved out to 2011; and \$3.29M moved to 2012. The 2009 project cost estimate is \$80.1 million compared to \$79.4 million in 2008.

Status	2008	2009	2010	2011	2012
2008 Adopted	0	2,985,707	3,292,689	2,237,272	12,295,029
2009 Adopted	0	0	0	2,986,379	3,293,201

- **423368 Sediment Management Plan:**

We proposed moving \$22.3M from the 2009-2010 of the Sediment Management Program, to the 2011. This budget was established to pay for costs anticipated as part of the Superfund allocation process. This process spreads the cost of Superfund cleanup activities among the 4 partners in the Lower Duwamish Work Group (Seattle, King County, the Port, and Boeing). At present, we do not believe the allocation process will begin in 2010. The remaining budget in 2010 should be adequate to cover the other staff and consultant labor for planned sediment management activities scheduled for work in 2010. Only the payments under the allocation formula (yet to be determined) are postponed. The 2009 project cost estimate is \$45.7 million compared to \$44.2 million in 2008.

Status	2008	2009	2010	2011	2012
2008 Adopted	3,191,147	9,618,115	20,414,290	2,240,916	325,340
2009 Adopted	4,374,737	2,703,148	4,964,287	24,586,285	956,835

- **423521, Bellevue Pump Station:**

This project will modify the existing pump station in Bellevue and replace all the major mechanical and electrical equipment including the control system; and build a new 5,700 foot force main. The pump station construction contract has been delayed until August 2008 due to a bid protest necessitating rebidding of the contract. This delay moves \$8.9 million for construction from 2008-09 to 2010-2011. The potential for an overflow is only increased by 3% with this delay.

The 2009 project cost estimate is \$34.4 million; an increase of \$2.9 million compared to the 2008 cost estimate. The cost increase reflects an updated construction cost estimate.

Status	2008	2009	2010	2011	2012
2008 Adopted	10,599,939	5,856,130	18,212	0	0
2009 Adopted	1,286,665	3,803,361	5,702,613	3,227,539	0

- **423618, RWSP Local Systems I/I Implementation:**

Inflow/Infiltration (I/I) reduction is intended to reduce peak flow demands within the regional conveyance system by repairing leaky side sewers and laterals in local systems. If successful, the I/I reduction projects will reduce or eliminate the need for more costly capital improvements to the regional conveyance system. The I/ I implementation project has been changed from 3 or 4 pilot system modifications to 2 or 3 pilot system modifications, reducing the overall budget by \$ 6.8 million from \$26.6 million in 2008 to \$19.8 million in 2009. One of the areas identified in the planning process is indicating a low infiltration rate, supporting the reduction in pilot project areas.

Status	2008	2009	2010	2011	2012
2008 Adopted	1,771,132	3,409,414	10,605,122	10,419,610	298,686
2009 Adopted	1,542,655	1,167,996	2,654,297	6,257,794	6,698,174

- **423615, Black Diamond Storage Facility:**

This project will fund the design and construction of a wastewater storage facility in Black Diamond (BD) upstream of the existing BD pump station. Construction of the Black Diamond Storage Facility will be delayed from 2010 to 2012 shifting spending from 2009-10 to 2011-13. This delay should not have an immediate impact to local service due to the uncertainty of the planned development in the Black Diamond area.

The project estimate increased \$8.1 million from \$4.6 million in 2008 to \$12.7 million in 2009. The cost estimate increase is based on a preliminary Black Diamond Wastewater Infrastructure Feasibility Study and a more detailed project cost estimate for the facility developed by engineering consultant Tetra Tech.

Status	2008	2009	2010	2011	2012
2008 Adopted	1,050,230	2,752,940	833,652	0	0
2009 Adopted	829,701	763,999	340,000	1,075,001	3,465,858

- 2009-007 Sunset/Heathfield Pump Station Replacement and Forcemain Upgrade:**
 This project is intended to increase the peak pumping capacity of the two pump station system to utilize the maximum available capacity in the regional gravity sewer systems directly upstream and downstream of the pump stations and force main discharge point. This project schedule has been delayed a year as part of the effort to balance the financial plan. Total project costs will be impacted by inflation and potentially changes in building codes and more stringent permitting requirements. This delay shifts \$1.2 million in project spending out of 2010 to 2011. Delay of this upgrade may result in decreases in the year current peak flow level of service because of limitations of the existing pumps. There is an increased risk of overflowing to Lake Sammamish. Increased maintenance costs are anticipated to ensure continued operation of the stations' large influent pumps.

The 2009 project cost estimate for this project is \$70.9 million.

Status	2008	2009	2010	2011	2012
2008 Adopted	0	887,000	2,292,000	2,889,587	2,210,405
2009 Adopted	0	940,868	1,020,854	4,065,547	2,745,013

- 423602 Ballard Siphon Repair:**

This project will replace the Ballard Siphon constructed of wood stave barrels to meet capacity requirements through 2106. Ninety percent of this tunnel is beneath the Washington Ship Canal. Design work is 90% complete and the design team is incorporating review comments needed to proceed to advertisement of the construction contract. Staff is completing the permitting and easement processes.

The 2009 project cost estimate compared to 2008 increased by \$18.3 million from \$22.2 million to \$40.5 million. Cost increases are a result of: 1) A change in the tunneling construction technique and the shaft depth added to reduce the project risk. 2) Increases in labor, material, land and easements acquisition costs. 3) Inclusion of contingencies to account for market volatility. 4) Correction of an error during the consultant's estimating process that resulted in \$5M of overhead, bonding and profit costs not being incorporated in the estimated costs.

Revisions to the schedule resulted from the additional time to secure permits, land and easement acquisitions; and changes in design to address geotechnical data and risk factors. The overall result is an increase of about 2.5 years in project duration.

Status	2008	2009	2010	2011	2012
2008 Adopted	13,360,645	4,243,600			
2009 Adopted	3,795,000	4,403,250	10,089,158	3,795,000	4,403,250

- **423593 North Creek Pipeline:**

The new North Creek Interceptor will provide additional capacity where flows are projected to exceed pipe capacity in the near future. The additional capacity will accommodate the growth planned in the Snohomish County Comprehensive Plan, protect the environment, and provide reliable sewer service to Southwest Snohomish County well into the future.

The project will replace the existing North Creek Interceptor serving parts of south Snohomish County and north King County (City of Bothell) with 16,400 feet of 21-48 inch gravity sewer. The Alderwood Water and Wastewater District will take the lead on implementation of this gravity pipeline facility, to be constructed under two contracts, the north segment which is in Snohomish County and the south segment which is in the City of Bothell. The sewer pipes will be installed using open cut construction, with several sections of micro-tunneling used where the pipe crosses areas with high potential for traffic or environmental impacts under state highways, creeks and wetlands.

The 2009 project cost estimate compared to 2008 increased by \$6.8 million from \$38.1 million to \$44.9 million. The \$6.8 million cost estimate increase is the result of updates to the construction contract estimate, construction contingency and sales tax.

Status	2008	2009	2010	2011	2012
2008 Adopted	18,952,477	11,084,618			
2009 Adopted	10,248,245	25,196,587	4,825,318	1,612,581	10,248,245

- **423407 Kirkland Pump Station Modifications:**

The project scope includes increasing the peak capacity of the station to 9.3 mgd, replacing aging equipment with new, higher capacity equipment, modifying the wet well, replacing 2100 feet of asbestos-cement force main pipe with new, larger diameter pipe, and constructing 350 feet of new influent piping to increase capacity and storage.

The 2009 project cost estimate compared to 2008 increased by \$6.4 million from \$9.5 million to \$15.9 million. The \$6.4 million cost estimate increase is the result of updates to the current construction estimate that was based on a 1999 planning level project construction estimate. Additional budget was needed to comply with requirements from Sound Transit and the city of Kirkland and to cover design modifications to accommodate recent flow projection updates.

Status	2008	2009	2010	2011	2012
2008 Adopted	669,268	1,793,767	3,291,416	1,665,898	
2009 Adopted	905,753	1,897,771	3,193,924	5,301,283	2,359,243