

Monthly Project Report

January 2010

West Tunnel (right): Inside looking toward curve to the left.





IPS Ductbank (left): Workers installing the ductbank from Puget Sound Energy substation to the IPS vault.



Department of Natural Resources and Parks Wastewater Treatment Division

Contents

Brightwater Project Summary	.1
Project Description	. 1
Project Highlights	. 1
Project Issues and Exceptions	. 2
Looking Ahead	. 2
Schedule	. 3
System Wide Mitigation	. 3
Mitigation Spending	. 4
Expenditure Summary	. 5
Staff Labor and Miscellaneous Service Expenditures	. 8
Inflation Trends	
Conveyance System1	3
Project Description	13
Current Activities	13
Project Issues	15
Looking Ahead	
Schedule Adjustments/Issues	
Contract Status	
Expenditures Summary	
Cost/Budget Adjustments	
Detailed Expenditures	
Treatment Plant	<u>23</u>
Project Description	23
Current Activities	23
Project Issues	23
Looking Ahead	24
Schedule	
Schedule Adjustments/Issues	
Contract Status	
Expenditures Summary	
Cost/Budget Adjustments	
Detailed Expenditures	
Appendix A. Acronyms and Abbreviations	31
Appendix B. Table Definitions	35
Expenditure Tables	
Contract Status Table	36

List of Tables

Table 1: Mitigation Spending for Brightwater Project	4
Table 2: Annual and Lifetime Expenditures for the Brightwater Project	
Table 3: Expenditures: Staff Labor and Miscellaneous Services and Materials	8
Table 4: Annual Construction Cost Index Changes 1999-2006	12
Table 6: Summary of Brightwater Conveyance Contract Status	
Table 7: Annual and Lifetime Conveyance Expenditures	19
Table 8: Detailed Annual and Lifetime Conveyance Expenditures	22
Table 9: Summary of Brightwater Treatment Plant Contract Status	26
Table 10: Annual and Lifetime Treatment Plant Expenditures	27
Table 11: Detailed Annual and Lifetime Treatment Plant Expenditures	30

List of Figures

Figure 1: Phase Schedule for the Brightwater Project	3
Figure 2: Brightwater Annual Expenditures: Current Planned vs. Actual	6
Figure 3: Brightwater Lifetime Expenditures: Current Planned vs. Actual	7
Figure 4: Brightwater Staff Labor Expenditures: Planned vs. Actual	9
Figure 5: CCI Annualized Changes over Prior Year	
Figure 6: Material and Labor Annualized Changes over Prior Year	
Figure 7: Reclaimed Water Pipeline System	15
Figure 8: Summary of Brightwater Conveyance Schedule	
Figure 9: Annual Conveyance Expenditures: Current Planned vs. Actual	
Figure 10: Lifetime Conveyance Expenditures: Current Planned vs. Actual	
Figure 11: Summary of Brightwater Treatment Plant Schedule	
Figure 12: Annual Treatment Plant Expenditures: Current Planned vs. Actual	
Figure 13: Lifetime Treatment Plant Expenditures: Current Planned vs. Actual	

Brightwater Project Performance Measures for January 2010

Measure	Target	Actual (2010)	Comments
Environmental Compliance			
Number of consecutive days without a notice of violation	365ª	31	
Safety - WTD Brightwater Staff			
Number of lost time accidents King County – WTD Brightwater Staff	0	0	
Safety - Construction Safety Compliance			
Number of consecutive days without a notice or citation for construction safety non-compliance DLI-WISHA, OSHA, MSHA, and Fire Depts.	365	31	
Safety - Contractors & Consultants			
Number of <u>lost time</u> accidents - January Hoffman = 0 Kiewit, TP = 0 KST = 0 VPFK = 0 JCT = 0 Kiewit, Conveyance = 0 Jacobs Civil = 0	0	0 YTD	OSHA <u>recordable</u> accidents reported for January 2010 by all contractors: Hoffman = 0 for January & 0 YTD. Kiewit, TP = 0 for January & 0 YTD. KST JV = 0 for January & 0 YTD. VPFK JV = 0 for January & 0 YTD. JCT JV = 0 for January & 0 YTD. Kiewit, Convey. = 1 for January & 1 YTD. Jacobs Civil = 0 for January & 0 YTD.
Financial			
Annual accomplishment rate	95%	-0.4%	Calculated as actual spent year to date as a percentage of total planned for the year.
Customers			
Complaints responded to within 24 hours of receipt during the current month.	100%	100%	There were 8 complaints about construction activities at Brightwater sites. All were responded to within 24 hours.
Job Growth – Apprentice Utilization			Project(s) Start Date(s) through 01/31/10
Treatment Plant			
Hours worked by apprentices/total labor hours (January 2010 – 20.26%)	15%	16.16%	
Hours worked by women and minority apprentices/total apprenticeship hours	33%	28.92%	Percentages of apprenticeship utilization are from the start dates of the projects.
Conveyance System			1
Hours worked by apprentices/total labor hours (January 2010 – 8.99%)	15%	12.75%	
Hours worked by women and minority apprentices/total apprenticeship hours	33%	44.36%]

Brightwater Project Summary

Project Description

King County is building a new wastewater system, called Brightwater, which is scheduled for completion in 2011. The Brightwater system will include a treatment plant to provide secondary treatment of wastewater, tunnels and a pump station to carry wastewater, treated effluent and reclaimed water, and a marine outfall discharging to Puget Sound. The project also includes extensive odor control facilities, habitat enhancement, and open space for the public. The Regional Wastewater Services Plan (RWSP) outlines the need for the Brightwater system to provide necessary capacity to meet wastewater demand and comply with federal and state regulations in the years ahead.

Project Highlights

Conveyance System

East Tunnel

• Grouting subcontractor MixOnSite continued to work on backfilling the tunnel. Approximately 33% of the BT-1 tunnel has been backfilled. The Contractor Kenney/Shea/Traylor (KST) continued to place concrete in the East Thrust Restraint Zone and controlled-density fill (CDF) in the Treatment Plant Portal (TPP) shaft.

Central Tunnel

- The BT-2 TBM remained stationary at Ring 1526 throughout January while the rim bar was under repair. The total tunnel length completed remains at just over 66%. The dewatering system at the Maywood Hills Elementary School was running all month. Groundwater levels were stable and the volume of pumped groundwater continued to decrease. The 10 drains inside the tunnel continued to yield an average of 70-80 gallons per minute. The Contractor, Vinci/Parsons RCI/Frontier-Kemper JV, completed the installation of the infill pieces that fill the worn groove around the outside of the rim bar. A total of 106 working interventions were conducted during January at an average pressure of 1.25 bar. Crews are working three 8-hour shifts, 6 days per week.
- The BT-3 TBM is still awaiting rim bar repairs. Boulders were encountered on January 12th, while excavating for Ring 1993, damaged rippers and pick housings and impacted the operation to move the TBM the 330 feet forward to 53rd Ave. NE and NE 195th. The remainder of the month was spent repairing the damaged machine, replacing the rippers with discs, and attempting to remove 2 boulders which were lodged in the excavation chamber outlet. By the end of the month, the BT-3 TBM was still 26 rings (130 feet) short of the safe haven. A total of 10 rings were completed this month, bringing the total number of rings to date to 1992. Approximately 49% of the total length of the tunnel has been completed to date. A total of 44 cutterhead interventions were carried out this month at 5.8 bar of pressure using TRIMIX. Crews are working three 8-hour shifts, 6 days per week.

West Tunnel

• The Contractor made good progress during the reporting period, mining 1,385 ft. on the BT-4 tunnel; 20,671 ft. (98% of the total length) of this tunnel is complete. Thirteen barge loads (approximately 1,700 tons/each) of tunnel muck were transported in January. A total of 185 barges have been transported to the disposal facility to date. On January 29 the County directed the contractor to temporarily suspend the mining of BT-4 at a point 150 feet west of the Ballinger Way Shaft to evaluate whether it is feasible, practical and advisable to amend the Contract and direct JCT to complete additional tunneling work into the BT-3 alignment. The Contractor will continue to prepare for the hole-through of the BT-4 TBM at the Ballinger Way Shaft site in early 2010.

Marine Outfall

• Triton completed the as-built drawings and O&M manuals for the outfall. In January work continued on the development of the RFP for the outfall survey and diffuser port uncapping. Both activities will occur just prior to startup of the treatment plant.

Influent Pump Station

• During January, the Contractor (Kiewit Pacific, Inc.) continued forming and placing reinforcing steel for the TBM removal chamber in the Influent Structure (IS). In the Influent Pump Station (IPS), the Contractor completed the installation of the walls and columns between elevations 85 and 109, and the falsework for the deck and beams in the west lobe at elevation 109.

Treatment Plant

Solids/Odor Control Facilities

• Kiewit Pacific Company (KPC) continued with forming, rebar installation, and concrete work for the Digestion Complex and Odor Control Buildings. They placed the Digester 1 parapet walls. Concrete, piping and electrical work continued on the three Odor Control Buildings. Structural steel and metal deck installation is nearly completion in the Solids Building. Piping equipment and electrical installation also continues in the Solids and Digestion buildings, and the galleries. Roofing continues on the Energy Building, and coating work continues in all areas.

Liquid Facilities

• Various subcontractors continued installation of equipment, cable tray, ductwork, piping, and coatings in all areas of the plant. Work on architectural finishes such as roofing, glazing, and door installation is ongoing.

Project Issues and Exceptions

Completion of the BT-2 and BT-3 tunnels has been significantly delayed due to the need to conduct repairs to the machines at their current locations. To mitigate the impact of these delays on the treatment plant start up, the IPS IS was redesigned. This allows the build-out of the IS shaft and IPS/treatment plant system testing independent of BT-2 tunnel completion. With the implementation of this scenario, the current schedule update of Brightwater Raw Sewage commissioning is anticipated in mid-August 2011

Additionally, Brightwater construction management staff is developing alternatives for treatment plant commissioning with the objective of minimizing the schedule and cost impacts of the Central Tunnel delay. A Cost Model has been developed to facilitate prediction of operating costs based on varying flow conditions expected to occur during 2011 and 2012 prior to Central Tunnel completion. Results from the operating cost model will be used to evaluate operating costs associated with each alternative. A formal report on these alternatives in response to possible completion outcomes is under development as required in King County Council Budget Ordinance 16717, Proviso 2, Section 105.

Looking Ahead

Conveyance System

• The BT-4 contractor is evaluating the feasibility of continuing tunnel construction into the BT-3 alignment and continuing to work on the hole-through of the BT-4 (West) TBM into the Ballinger Way Shaft.. Backfill grouting and work in the TPP shaft will continue in BT-1 (East). The Central Contractor will continue to implement its TBM repair plans on both BT-2 and BT-3. The IPS Contractor will continue forming and placing the concrete for all of the decks and beams at IPS elevation 109. He will also place and grout the Flow Splitter in the IPS Wet Well and will begin painting the walls in the Lower Pump Room of the IPS. In the IS, work will continue on forming and placing concrete for the TBM removal chamber. The Contractor will also install the 40-inch and 48-inch pipes in the Utilidor and place the concrete for the

1 1

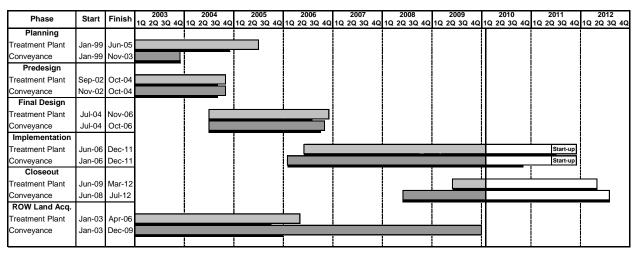
Generator Building walls.

Treatment Plant

- The Solids/Odor Control Facilities contractor, KPC, will continue to place concrete for the remainder of the Digester building 300 level slab, and will complete Digester 1 concrete work. They will continue mechanical work in the Digester and Solids galleries. Installation of structural steel and miscellaneous mechanical and electrical equipment will continue in the Solids Building. Backfilling continues around completed portions of structures on the site. Concrete work will be completed on the 490 Solids/Headworks Odor Control Building and the 590 Aeration/Membrane Odor Control Building. Mechanical and electrical work continues on the Energy Building structures and Odor Control Buildings.
- The liquids contractor, HCC has completed tank leakage testing but continues to work on injection of cracks. Equipment installations will continue. Elcon and Valley Electric will continue placing cable in cable trays. Concrete masonry unit (CMU) walls are being erected at the EECC building. Glu-lam roof beams have been placed as well.

Schedule

Figure 1 shows progress on the Brightwater project, by phase, for the treatment and conveyance components of the project. The projected hydraulic completion of the Brightwater system is May 18, 2011. The initial start up of wastewater treatment is projected for August 15, 2011.





System Wide Mitigation

- Construction continues on the Environmental Education/Community Center (EECC) as scheduled. The CMU walls are complete and the roof beams are now being placed.
- The Brightwater landscaping installation contractor has been planting the foreground landforms and will continue through the winter.

Mitigation Spending

The Table 1 format has been revised to simplify presentation. The prior format included a column for Construction and one for Allied Costs with the results stated in 2005 dollars. These columns have been combined into one column entitled Lifetime Committed Nominal Dollars and all results stated in nominal dollars (including inflation). Since the majority of costs are established through agreements and construction contracts, and actual costs are measured in nominal dollars, this revision allows for a more accurate comparison.

			Т		
Mitigation Element	Jurisdiction	Lifetime Committed Nominal Dollars		Cost To Date	Status
Habitat		•			
Plant Site North Mitigation Area	Snohomish County	\$ 8,639,212	\$	8,639,212	Construction Complete.
Plant Site South Mitigation Area - Howell Creek	Snohomish County	\$ 607,226	\$	69,277	100% design / 10% ESD/CM
Watershed Education (Fieldhouse Pavillion)	Snohomish County	\$ 107,600	\$	106,574	Closed for now, possible re-open
Snohomish County Agreement	Snohomish County	\$ 10,800,000	\$	10,800,000	100% Paid
Subtotal		\$ 20,154,038	\$	19,615,063	
Public Access					
Richmond Beach Community Mitigation	City of Shoreline	\$ 750,000	\$	750,000	100% Paid
Plant Site Boardwalks, Overlooks and Educational Signage	Snohomish County	\$ 991,458	\$	113,114	100% design / 10% ESD/CM
Boardwalks, Overlooks and Educational Signage					
at North Creek Portal	City of Bothell	\$ 151,049		17,056	100% design / 10% ESD/CM
Education/Community Facility	Snohomish County	\$ 9,737,511			100% design /10% ESD/CM
EECC Furniture/Management/Bid Alt	Snohomish County	\$ 546,036	-	54,400	100% design / 10% ESD/CM
Subtotal		\$ 12,176,054	\$	3,391,142	
Natural Stormwater Treatment					
Plant Site Enhanced Natural Stormwater Treatmer		\$ 3,476,935			100% design / 10% ESD/CM
Enhanced Natural Stormwater Management	City of Kenmore	\$ 407,789			60% design / 0% ESD/CM
Enhanced Natural Stormwater Management	City of Shoreline	\$ 37,762			60% design / 0% ESD/CM
Natural Stormwater Treatment at North Creek Port		\$ 415,385			100% design / 10% ESD/CM
Subtotal		\$ 4,337,871	\$	471,222	
Traffic/Pedestrian Mitigation and Safety			-		
Traffic Mitigation	City of Bothell	\$ 1,775,000	\$	1,775,000	100% Paid
Plant Site Boulevard Entry	Snohomish County	\$ 30,173		3,153	100% design / 0% ESD/CM
City of Kenmore Agreement	City of Kenmore	\$ 500,000	\$	-	Awaiting Final Building Pemit
Snohomish County Agreement	Snohomish County	\$ 25,850,000	\$	25,850,000	100% Paid
	Bothell Business				
Entry Improvements	Park	\$ 131,600		131,600	100% design / 100% ESD/CM
195th Street Intersection Improvements	City of Woodinville	\$ 500,000			100% Paid
Barge/rail Transport of Spoils	City of Shoreline	\$ 1,966,734			100% Paid
Subtotal		\$ 30,753,507	\$	30,226,487	
Noise/Light/Glare					
Noise Mitigation	City of Bothell	\$ 188,300			Construction / 100% Complete
Noise Mitigation	City of Kenmore	\$ 204,000		204,000	Construction / 100% Complete
Noise Monitoring/Remediation	City of Shoreline	\$ 120,839			Construction / Landscape remains - 0% complete
Subtotal		\$ 513,139	\$	473,975	
Visual Screening	Ou change of the Output	A	¢.	1 010 000	1000/ design / 00/ EOD/OM
Plant Site Enhanced Landscaping	Snohomish County	\$ 11,242,730			100% design / 0% ESD/CM
Plant Site Architectural Finishes Subtotal	Snohomish County	\$ 2,949,280 \$ 14,192,010		306,563 2,224,830	100% design / 0% ESD/CM
Community Mitigation		\$ 14,192,010	φ	2,224,030	
Job Retention	Snohomish County	\$ 1,890,000	\$	1,749,300	
Community Mitigation; Infrastructure	City of Bothell	\$ 3,000,000		3,000,000	100% Paid
Staff Review	Multiple	\$ 130,000			
Additional Contingent Mitigation	Snohomish County				Not Required \$2.95M
Subtotal		\$ 5,020,000	\$	4,790,302	·
Restoration and Monitoring at Outfall					
Derelict Fishing Gear Mitigation	WA State DNR	\$ 25,000			100% Paid
Intertidal Monitoring,	WA State DNR/UofW				
Eelgrass Replacement	WA Fish and Wildlife	\$ 700,000	\$	280,796	Paid WDFW for loss of Crab (\$20K)
	Muckleshoot,		1		
Tribal Fisheries Research and Enhancement	Suquamish, and		-		500(D-14
	Tulalip Tribes	\$ 1,365,000		767,752	56% Paid
Subtotal	ļ	\$ 2,170,894	\$	1,104,443	
Groundwater	City of Dath : "	¢ 475.000	¢		
Monitoring	City of Bothell Cross Valley Water	\$ 175,000	\$	-	
Cross Valley Agreement	District	\$ 4,700,000	\$	4,008,269	
	Lake Forest Park	φ 4,700,000	φ	4,000,209	Incl. \$300 monthly service charges through
Groundwater Supply Protection	Water District	\$ 4,122,640	\$	3,177,427	12/09.
Subtotal		\$ 8,997,640		7,185,696	
Active Recreation			. *	,,	
Little Bear Creek Trail Overpass	City of Woodinville	\$ 1,400,000	\$	1,400,000	100% Paid
Snohomish County Agreement	Snohomish County	\$ 30,400,000			100% Paid
Subtotal	2. Ionomion County	\$ 31,800,000			unu
Land Costs			ψ	5.,000,000	
Land Mitigation	Snohomish County	\$ 12,123,438	\$	12,123,438	Purchase Complete
City of Kenmore Agreement	City of Kenmore	\$ 5,707,994			Purchase Complete
City of Shoreline Agreement	City of Shoreline	\$ 706,774			Purchase Complete
Subtotal	Sity of Onloronine	\$ 18,538,206			
Total Committed Mitigation (Nominal \$)		\$ 148,653,359			81% Complete
		- 1-0,000,009	ųΨ		

Table 1: Mitigation Spending for Brightwater Project

Expenditure Summary

Table 2 shows a summary of annual and lifetime expenditures for the Brightwater project. This information is also depicted graphically in Figures 2 and 3 on the following page. This table reflects the inclusion of the *Brightwater Cost Update* Trend dated January 2009, and the annual cash flows submitted for the 2010 rate process.

	Baseline	Baseline	Baseline	2010 Annual Ex	xpenditures	nditures Lifetime Expendi					
ITEM	Cost	Cost *	Cost *	YTD		Percent	LTD	Planned **	Percent		
	(2004\$)	(w/ 3% infl)	(w/ 5% infl)	Actual	Planned	Spent	Actual	(w/infl)	Spent		
IMPLEMENTATION/CONSTRUCTION	953,041,177	1,088,874,247	1,188,207,565	13,223,985	195,115,534	6.78%	878,034,429	1,248,115,415	70.3%		
NON-IMPLEMENTATION/CONSTRUCTION											
Engineering Services	132,596,680	140,282,159	145,812,021	33,287	6,415,864	0.5%	145,135,637	154,838,688	93.7%		
Planning and Management Services	79,109,585	83,906,293	87,360,836	947,045	17,549,306	5.4%	77,246,366	103,902,851	74.3%		
Permitting and Other Agency Support	44,480,000	46,759,566	48,331,196	1,094	511,106	0.2%	6,598,567	8,688,767	75.9%		
Right-of-Way	122,241,484	124,534,031	126,069,582	2,965	2,114,914	0.1%	208,732,558	212,657,480	98.2%		
Misc. Services and Materials	9,026,685	9,518,955	9,880,163	104,163	628,168	16.6%	8,977,652	9,713,907	92.4%		
Staff Labor	52,558,015	56,367,539	59,136,826	252,010	6,243,776	4.0%	51,318,463	61,065,718	84.0%		
Total Non-Implementation /Const. Cost	440,012,449	461,368,543	476,590,623	1,340,563	33,463,134	4.0%	498,009,243	550,867,411	90.4%		
Accruals and Adjustments *** Project Reserve	100,046,392	120,712,553	136,413,486	-15,465,073 0	0 0	0.0% 0.0%	0 0	0 4,000,000	0.0%		
Project Total	1,493,100,019	1,670,955,344	1,801,211,674	-900,525	228,578,669	-0.4%	1,376,043,673	1,802,982,825	76.3%		
Credits and Revenues	-10,000,000	-10,786,544	-11,335,009	0	0	0.0%	-3,112,052	-3,226,903	96.4%		
Project Total + Credits and Revenues	1,483,100,019	1,660,168,800	1,789,876,666	-900,525	228,578,669	-0.4%	1,372,931,621	1,799,755,922	76.3%		

Table 2: Annual and Lifetime Expenditures for the Brightwater Project

* These columns represent the sum of each year's project costs inflated to that year's dollars. Inflation is estimated at three percent and five percent per year.

** This column represents Lifetime total costs including inflation reflected in awarded contracts and inflation on remaining forecast contracts at three percent per year through the completion of the project. The majority of construction contracts have been awarded. Mitigation payments have been moved from the Permitting category to Right-of-Way.

*** In December 2009 costs were accrued to reflect the dollars spent during 2009 but not paid. The accounting convention is to reverse those amounts, which were actually paid in early 2010.

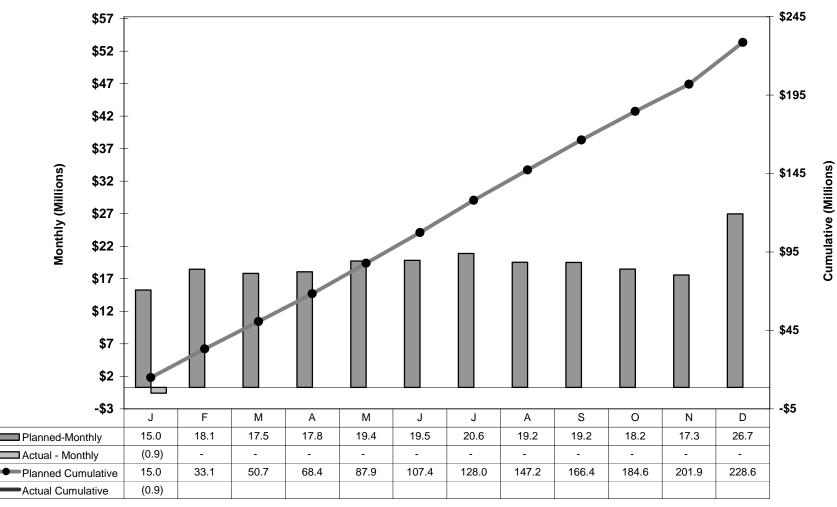
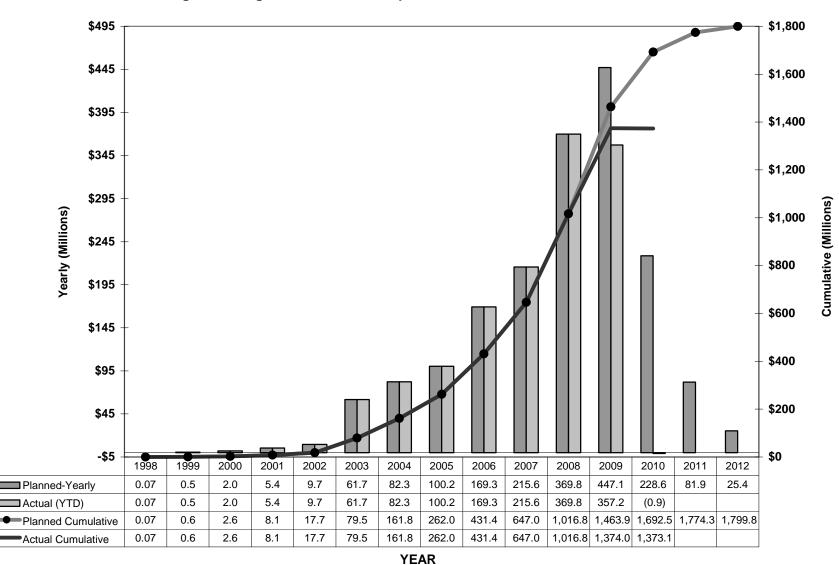


Figure 2: Brightwater Annual Expenditures: Current Planned vs. Actual

2010

Note: In December 2009 costs were accrued to reflect the dollars spent during 2009 but not paid. The accounting convention is to reverse those amounts, which are actually paid in early 2010. Thus, for accounting purposes, the expenditures show a negative amount in January 2010. Planned costs are the current forecast (January 2009 Trend) of total project costs including prior year actual (1998-2009) and future years forecast costs.





Planned costs are the current forecast (January 2009 Trend) of total project costs including prior year actual (1998-2009) and future years forecast costs. Actual Cumulative for year 2010 includes only YTD costs through the current month.

Staff Labor and Miscellaneous Service Expenditures

Table 3 shows annual and lifetime expenditures for staff labor and miscellaneous services and materials for the Brightwater project. The staff labor expenditures are depicted graphically in Figure 4 on the following page. The cost centers have been changed to reflect the revised WTD organization structure, effective January 1, 2008.

	Baseline	Baseline	Baseline		Annual Expendi					
ITEM	Cost	Cost *	Cost *	Monthly IBIS	YTD	itures	Percent	LTD	Planned **	Percent
I I EM	(2004\$)	(w/ 3% infl)	(w/ 5% infl)	Jan-10	Actual	Planned	Spent	Actual	(w/infl)	Spent
	(20040)	(11/0/0/11/1)	(11/ 0/0 1111)	oun ro	Actual	Thanned	opent	Aotuui	(11/11/1	opent
Misc. Services & Materials										
Office and Transportation Costs	2,000,000	2,167,603	2,290,961	8,198	8,198	133,526	6.1%	2,080,861	2,149,738	96.8%
Equipment	183,873	202,994	217,068	0	0	36,087	0.0%	56,413	144,185	39.1%
Supplies and Safety	673,832	731,196	773,418	40,367	40,367	104,781	38.5%	764,737	906,026	84.4%
Professional Development/Travel	299,827	325,322	344,087	0	0	39,002	0.0%	274,019	357,749	76.6%
Printing, Courier and Media Services	2,000,000	2,076,088	2,130,979	509	509	48,584	1.0%	1,865,513	1,973,304	94.5%
Miscellaneous Services	3,761,406	3,895,256	3,993,772	35,264	35,264	155,296	22.7%	2,957,675	3,247,104	91.1%
Other	107,747	120,495	129,877	19,824	19,824	110,893	17.9%	978,433	935,801	104.6%
Subtotal Misc. Services & Materials	9,026,685	9,518,955	9,880,163	104,163	104,163	628,168	16.6%	8,977,652	9,713,907	92.4%
Staff Labor										
Non-WTD Support										
Central Services	1,585,589	1,623,946	1,649,848	0	0	847,051	0.0%	4,837,476	6,297,851	76.8%
Legal Services	1,041,989	1,109,985	1,159,432	0	0	215,756	0.0%	2,362,448	2,646,668	89.3%
Surface Water Management	344,639	350,160	354,156	0	0	0	0.0%	561,785	539,678	
WLRD	2,882,537	2,978,134	3,047,526	7,310	7,310	110,653	6.6%	3,064,064	3,248,043	94.3%
DNRP	614,629	636,711	652,696	0	0	33,112	0.0%	596,181	669,426	89.1%
Other	1,243,561	1,278,391	1,303,758	0	0	224,298	0.0%	1,427,553	1,788,332	79.8%
Subtotal Non-WTD Labor	7,712,944	7,977,326	8,167,416	7,310	7,310	1,430,871	0.5%	12,849,507	15,190,000	84.6%
Wastewater Treatment Division										
4100 WTD Manager	150,076	161,117	169,110	2,582	2,582	29,000	8.9%	205,028	222,991	91.9%
4200 Finance & Administrative Services	767,224	878,846	962,363	5,206	5,206	119,793	4.3%	859,496	1,029,262	011070
4400 East Operations	301,599	312,801	320,647	294	294	15,000	2.0%	499,619	517,662	96.5%
4500 West Operations	212,359	221,288	227,594	927	927	10,000	9.3%	175,190	196,262	89.3%
4600 Planning & Compliance	191,510	205,311	215,301	0	0	15,000	0.0%	117,559	159,201	73.8%
4700 Environmental & Community Svcs	101,010	200,011	210,001	0	0	10,000	0.070	117,000	100,201	10.070
4751 Community Svcs Planning	5,222,822	5,691,298	6,036,104	13,734	13,734	159,714	8.6%	2,934,176	3,250,537	90.3%
4752/4701 Environmental Planning & Mgmt	2,163,083	2,224,664	2,267,698	497	497	25,580	1.9%	1,762,297	1,809,203	97.4%
4761/62 Permitting, Right of Way & Monitoring	3,403,928	3,621,992	3,779,261	20,671	20,671	213,221	9.7%	3,104,350	3,347,218	92.7%
4770 Industrial Waste	1,733	1,733	1,733	20,071	20,071	213,221	0.0%	1,733	1,733	100.0%
4800 Project Planning & Delivery	1,755	1,700	1,700	0	0	0	0.078	1,755	1,755	100.078
4803 Project Planning & Delivery Mgmt	8,749,557	9,299,597	9,698,113	584	584	14,257	4.1%	6,667,521	6,708,672	99.4%
4805 Technical Resources Mgmt	44,412	47,173	49,171	0	0	5,000	0.0%	61,400	79,144	77.6%
4806 Modeling & GIS Support	568,903	590,445	605,738	1,971	1,971	15,000	13.1%	491,573	528,413	93.0%
4808/09/16 Planning, Asset Mgmt & Mgmt	62,610	62,610	62,610	379	379	13,000	0.0%	73,552	69,002	106.6%
4830 Constuction	1,259,946	1,420,980			11,516	251,523	4.6%	665,245		56.9%
			1,538,282	11,516		251,523	4.6% 0.0%	279,321	1,168,666	56.9% 103.2%
4840 Facilities Inspection	1,858,818	2,105,371	2,287,134	476	476	0			270,779	
4850 Project Engineering	3,475,388	3,785,297	4,008,973	2,172	2,172	-	0.0%	1,546,433	1,543,937	100.2%
4880 Project Management	11,986,544	12,920,343	13,597,078	870	870	15,954	5.5%	8,845,504	8,890,039	99.5%
4990 Project Controls	4,424,558	4,839,346	5,142,500	33,062	33,062	547,286	6.0%	4,095,811	4,835,697	84.7%
4900 Brightwater										
4921 Brightwater Mgmt	0	0	0	149,759	149,759	3,376,577	4.4%	6,083,148	11,247,301	54.1%
Subtotal WTD Labor	44,845,071	48,390,213	50,969,410	244,700	244,700	4,812,905	5.1%	38,468,956	45,875,718	83.9%
Staff Labor Total	52,558,015	56,367,539	59,136,826	252,010	252,010	6,243,776	4.0%	51,318,463	61,065,718	84.0%

Table 3: Expenditures: Staff Labor and Miscellaneous Services and Materials

* These columns represent the sum of each year's project costs inflated to that year's dollars. Inflation is estimated at three percent and five percent per year.

** This column represents Lifetime total costs including actual costs through 2009 plus inflation on remaining forecast costs at three percent per year through project completion.

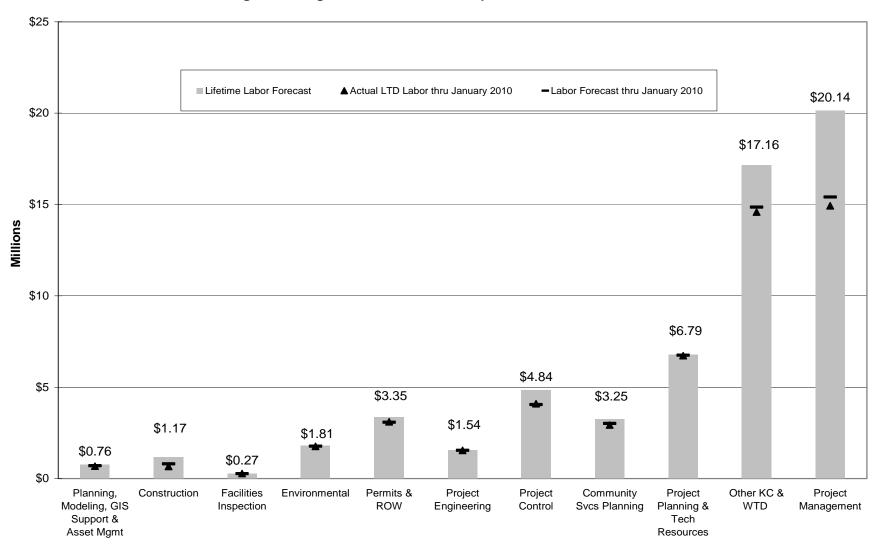


Figure 4: Brightwater Staff Labor Expenditures: Planned vs. Actual

Labor Category

Labor categories reflect January 2008 reorganization within WTD. New Brightwater cost center shown in Project Management reflects the transfer of some personnel primarily from Project Engineering and Project Planning.

Inflation Trends

Figures 5 and 6 reflect the national Construction Cost Index (CCI) and the materials and common labor cost trends as published in *Engineering News Record*. Percentage changes represent the change from the same period in the prior year. The Brightwater baseline cost assumed an annualized inflation rate for total project costs of three percent per year for 2005–2011.

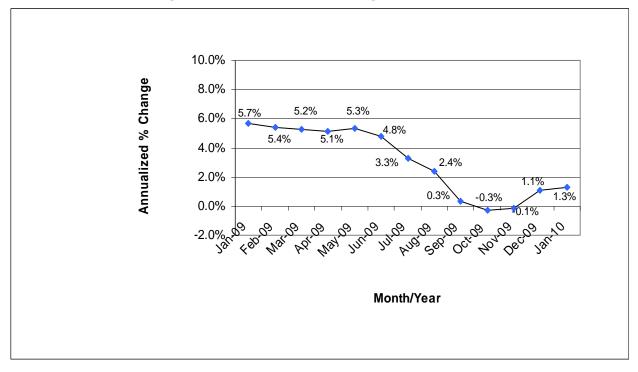
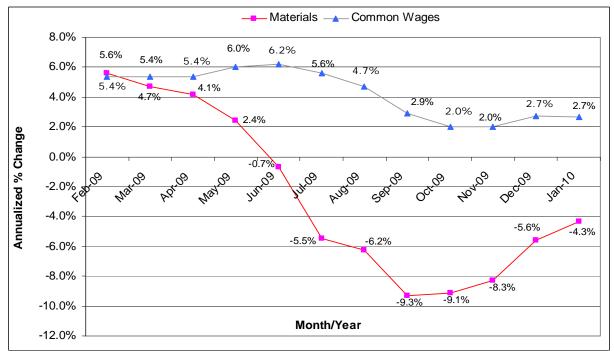


Figure 5: CCI Annualized Changes over Prior Year

Figure 6: Material and Labor Annualized Changes over Prior Year



Engineering News Record, internet database updated with current indices from January 2010. January 2010 Brightwater Monthly Report F

Table 4: Annual Construction Cost Index Changes 2001-2008

/	2001	2002	2003	2004	2005	2006	2007	2008
CCI	1.7%	2.7%	3.3%	7.8%	4.6%	3.2%	2.6%	5.7%

Note: The above table has been adjusted to reflect changes between calendar year-ends rather than changes between annual averages. This coincides with the method used to calculate changes in Figures 5 and 6.

The annual inflation series from the Bureau of Labor Statistics pertinent to construction are shown below for the period 2002-2008. Although price increases have slowed for many series during 2008, there are still a number which are above the WTD long term average of 3 percent per year particularly fuel related, concrete, steel pipe, and copper. These have affected the price of the final Brightwater construction over the initial baseline costs presented to the Council in 2004.

Percentage Changes in Producer Price Indexes (PPIs) for Construction Materials and Components, 2002-2008

	12 months through	gh December					
	2002	2003	2004	2005	2006	2007	2008
Table 1: Changes in Consumer, Producer & Constructio	n Prices						
Consumer price index (CPI-U)	2.4	1.9	3.3	3.4	2.5	4.1	0.1
Producer price index (PPI) for finished goods	1.2	4.0	4.2	5.4	1.1	6.2	-0.9
Materials and components for construction	0.8	3.0	10.1	6.1	4.3	2.0	7.3
Table 2: Changes in PPIs Weighted by Construction Typ							
Highway and street construction	1.0	2.6	10.8	14.1	6.2	10.1	-0.8
Other heavy construction	1.0	2.6	13.4	8.8	5.5	6.9	1.4
Table 3: Changes in PPIs for Specific Construction Input	ts						
Concrete products	-0.3	1.5	7.6	10.1	8.1	3.8	4.2
Hot-rolled bars, plates, & structural shapes	2.1	11.3	53.8	-1.0	7.5	8.1	4.3
Steel pipe and tube	9.1	3.3	66.0	1.2	5.5	-1.3	28.6
Copper and brass mill shapes	-1.6	11.6	29.6	31.0	44.4	-3.0	-24.3
Aluminum mill shapes	-0.9	-0.5	9.9	5.0	12.7	-1.7	-5.9
Construction machinery	1.9	1.3	6.0	4.9	3.6	2.3	5.3
Table 4: Changes in PPIs for Basic Inputs Important to C							
Crude petroleum (domestic production)	60.6	14.3	30.5	49.6	0.1	51.7	-57.9
Industrial natural gas	12.2	20.3	20.1	31.5	-13.2	-2.8	4.3
Plastic resins and materials	9.2	6.4	28.6	10.8	-7.8	9.7	-5.6
Construction sand/gravel/crushed stone	2.5	2.4	4.3	7.7	9.3	8.4	6.6
Cement	1.3	-1.1	7.9	12.2	10.5	4.4	-0.6
Iron ore	-1.3	1.6	6.7	15.5	7.5	1.3	12.1
Iron and steel scrap	27.8	64.9	50.8	-10.8	2.9	29.4	-40.7
Copper ores	3.6	37.4	65.1	39.3	53.1	-1.7	n.a.
Copper base scrap	11.2	30.7	34.5	51.9	50.0	3.1	-52.7
••••••							

Updated 2/23/09 Source: Bureau of Labor Statistics (BLS): www.bls.gov/cpi for CPI, www.bls.gov/ppi for PPIs

Compiled by Ken Simonson (simonsonk@agc.org), Chief Economist, Associated General Contractors of America, www.agc.org

Conveyance System

Project Description

The Brightwater conveyance system is comprised of four major tunnels and related facilities needed to convey wastewater to the Brightwater treatment plant and discharge treated effluent to Puget Sound. These facilities include large diameter tunnels from the Brightwater Treatment Plant in Woodinville to Point Wells, a marine outfall in Puget Sound, diversion structures to collect or divert flow from existing sewers into the new system, a reclaimed water pipeline, and odor control facilities.

Current Activities

Conveyance Design

Ancillary Facilities

• Design work continues on the Odor Control Facilities at North Kenmore and Ballinger to support advertising for bids prior to the completion of the conveyance tunneling system.

Conveyance Construction

East Tunnel

• Throughout January, grouting subcontractor MixOnSite continued to work on backfilling the tunnel. With more than 23,000 cubic yards of the total 70,000 cubic yards of grout installed to date, approximately 33% of the BT-1 tunnel has been backfilled. By the end of the month, approximately 7,500 feet of the tunnel had been backfilled up to the springline of the 48- and 66-inch pipes. KST continued to place concrete in the East Thrust Restraint Zone. The Contractor placed controlled-density fill (CDF) in the Treatment Plant Portal (TPP) shaft to the crown of the 84-inch pipe, installed and welded the 48- and 66-inch pipes in the shaft, and began to backfill the 48- and 66-inch pipes with CDF.

Central Tunnel

- The BT-2 TBM remained stationary at Ring 1526 throughout January while the rim bar was under repair. The total tunnel length completed remains at just over 66%. The dewatering system at the Maywood Hills Elementary School was running all month. Groundwater levels were stable and the volume of pumped groundwater continued to decrease. The 10 drains inside the tunnel continued to yield an average of 70-80 gallons per minute. The drains were monitored continuously and flushed on a regular basis to maintain their efficiency. A workforce of 100 is working out of the central portal site. Both TBMs have crews working three 8-hour shifts, 6 days per week. BT-2 TBM cutterhead repairs continued to achieve good progress throughout the month under approximately 1.3 bar of compressed air. The low-pressure working environment enabled the Contractor to address the repairs without significant crew time lost to the decompression cycle. The Contractor completed the installation of the infill pieces that fill the worn groove around the outside of the rim bar. A total of 106 working interventions were conducted during January at an average pressure of 1.25 bar. Short inspection dives were also carried out by the Contractor's management and supervision throughout the month. Nine dives were cancelled due to a tower crane breakdown on January 9th and the unavailability of the overseeing dive physician on the 6th and 22nd.
- The BT-3 TBM is still awaiting rim bar repairs. Slurry material and handling experts from the UK were onsite from January 6-8 to observe the implementation of the polymer slurry. As a follow-up, joint meetings with the Contractor took place to discuss slurry handling improvements and modifications, and agree on a way forward. Boulders were encountered on January 12th, while excavating for Ring 1993, damaging rippers and pick housings and delaying mining. The remainder of the month was spent replacing the rippers with discs and attempting to remove 2 boulders which were lodged in the excavation chamber outlet. Further visits are planned for the slurry specialists when mining resumes. By the end of the month, the BT-3 TBM was still 26 rings (130 feet) short of January 2010 Brightwater Monthly Report Page 13

the safe haven. A total of 10 rings were completed this month, bringing the total number of rings to date to 1992. Approximately 49% of the total length of the tunnel has been completed to date. A total of 44 cutterhead interventions were carried out this month at 5.8 bar of pressure using TRIMIX. The safe haven at 53rd Ave. NE was completed after plans for construction of a sixth dewatering well was abandoned due to drill rig interference from overhead power lines. The Contractor believes 5 wells will be sufficient for dewatering needs.

West Tunnel

- The Contractor made good progress during the reporting period, mining 1,385 ft. on the BT-4 tunnel; 20,671 ft. (98% of the total length) of this tunnel is complete. Thirteen barge loads (approximately 1,700 tons/each) of tunnel muck were transported in January. A total of 185 barges have been transported to the disposal facility to date.
- The Contractor is preparing for the hole-through of the BT-4 TBM at the Ballinger Way Shaft site, currently anticipated in early 2010. The Contractor elected to implement ground freezing around the last 50 feet of BT-4 to facilitate its hole-through into the shaft. The ground-freezing operation installed by Subcontractor Soilfreeze was in operation throughout the month. On January 29 King County temporarily suspended the mining of BT-4 at a point 150 feet west of the Ballinger Way Shaft to evaluate whether it is feasible, practical and advisable to amend the Contract to direct JCT to complete additional tunneling work.

Influent Pump Station

• During January, the Contractor continued forming and placing reinforcing steel for the TBM removal chamber in the IS. In the IPS, the Contractor completed the installation of the walls and columns between elevations 85 and 109 and the falsework for the deck and beams in the west lobe at elevation 109. The substructure of the Generator Building and the duct bank for the primary power feed to the IPS were also completed.

North Creek Facilities

• The J. W. Fowler construction contract for the North Creek Facilities work is closed.

Marine Outfall Contract

- Triton Marine Construction and their designer Dayton & Knight completed revisions of the as-builts and O&M manuals.
- Triton continued to collect the forms and paperwork necessary to closeout the project.
- Work continued on the development of the RFP for the final outfall survey and diffuser port uncapping which will occur prior to treatment plant startup.

Reclaimed Water

• The second section of the reclaimed water pipe running from the existing North Creek Pump Station down thru the Sammamish Valley met substantial completion on October 15, 2009. There are still several subcontractor affidavits that the contractor, Scarsella, must submit before final acceptance is issued and the job closed out.

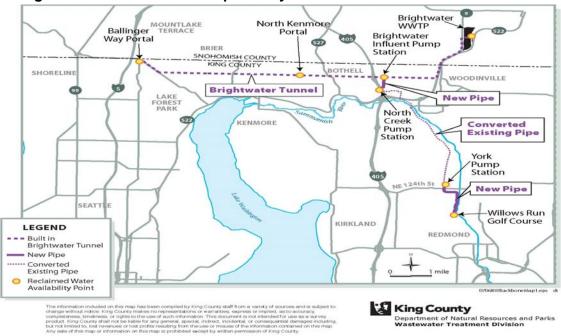


Figure 7: Reclaimed Water Pipeline System

Permitting

- During the month of January conveyance sites were in compliance with permits.
- All permits are up to date for conveyance tunnel construction

Easements/Land Acquisition

• The Paramount Petroleum property acquisition/easements settlement was concluded at a total cost of \$3 million dollars.

Project Issues

- Tunneling work on the BT-2 and BT-3 tunnels has been halted to complete repairs to the two TBMs. The Contractor plans to complete the repair work on BT-2 and restart mining on February 15, 2010. The BT-3 Contractor plans to resume mining on May 4, 2010.
- The Ballinger Way contract work is now complete, except for the surface work and installation of the shaft cover slab. The Central and West contractors have coordinated and agreed to the site conditions for the removal of the BT-4 TBM.

Looking Ahead

Conveyance Design

Ancillary Facilities

• Design of the Odor Control facilities at North Kenmore and Ballinger will continue to support advertising for bids prior to the completion of the conveyance tunneling system.

Conveyance Construction

East Tunnel

• In February, MixOnSite will continue placing backfill grout in BT-1. MixOnSite will set-up its grout/foam train using the 84-inch pipe to access the tunnel from the treatment plant portal. They will also begin a second shift for production and clean-up, which will free up the first shift for additional production. KST will continue to backfill the shaft and initial shaft piping with Type S crushed rock where needed, and will continue to place concrete in the East Thrust Restraint Zone. The 48- and 66-inch pipes will be encased in CDF as they extend into the TPP. The encasement will form a solid "block" which will serve as a work deck for KST/MixOnSite to access the 48- and 66-inch pipes, begin to remove the stulling inside the 48- and 66-inch pipes where allowed, and monitor the heights of the backfill grout lifts within the 66-inch pipe. Once this initial pipe placement and backfill in the shaft is finished, the remainder of the pipe work in the shaft will be on hold until backfill grouting in the tunnel is complete.

Central Tunnel

- Planned progress for February for BT-2 includes completion of the stone crusher modifications and other work to the TBM cutterhead; decommissioning of the 6 surface dewatering wells and 10 tunnel drains at the Maywood Hills School, continued installation of the BT-2 Safe Haven 2, progress planning for the BT-2 Safe Haven 3, and recommencement of mining BT-2 at mid-month.
- Planned progress for February for BT-3 includes mining forward to the safe haven at Ring 2018 and beginning rim bar repairs at low pressures; conducting pump tests on the surface dewatering wells at the 53rd Ave NE safe haven, and planning and commencing the installation of BT-3's Safe Haven 2.

West Tunnel

• The Contractor will resume mining the BT-4 tunnel once options for continuing on into the BT-3 alignment are evaluated. They will also work to facilitate the hole-through of the BT-4 TBM into the Ballinger Way Shaft.

Influent Pump Station

• In February, the Contractor will continue forming and placing the concrete for all of the decks and beams at IPS elevation 109. They will also place and grout the Flow Splitter in the IPS Wet Well, and will begin painting the walls in the Lower Pump Room of the IPS. In the IS, work will continue on forming and placing concrete for the TBM removal chamber. The Contractor will also install the 40-inch and 48-inch pipes in the Utilidor and place the concrete for the Generator Building walls.

Marine Outfall

• Work on the RFP for outfall survey and diffuser uncapping prior to startup will continue throughout 2010.

Reclaimed Water

• Brightwater Reclaimed water system configuration briefings for the York pump station facilities are planned for late February with the South Plant process control managers and the East off site supervisor. Additional briefings will be scheduled as other components of the RW system are completed.

Schedule

Figure 8 provides a summary of scheduled activities for the Brightwater conveyance system.

Figure 8: Summary of Brightwater Conveyance

	ctivity Start Finish Variance: Contractual		Variance: Current Contractual to Forcast	2010										2012
			Contractoar to Porcast	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Brightwater							1	1	1					
Program						1			1					
Emerson Software Configuration Complete	30-Dec-09 A	30-Dec-09			6			1						
Full I&C System Integration Complete	13-May-11	13-May-11	-60					1	•	•				
Brightwater System 90 Day Start-Up Test	19-May-11	14-Aug-11	-164			1								
Begin Treating Wastewater	15-Aug-11	15-Aug-11	-164			1	1			1	•	1	1	1
Conveyance								1	•					
East Tunnel						1			1					
East Piping Installation	14-Jan-09 A	30-Jun-10	-163	_	<u> </u>	1	-							
East Substantial Completion	30-Jun-10	30-Jun-10	-163			1	7	1	<u> </u>					
	30-3011-10	30-301-10	-103		! ¶				+	+		+	<u> </u>	
Central Tunnel			1000											
Ballinger Portal Construction	29-Jun-07 A	26-Feb-10	-438		1	1	101	1	1		1			
BT2 Tunneling and TBM Retrieval	23-Apr-08 A	29-Sep-10	-439			3	12		1					
BT3 Tunneling and TBM Retrieval	03-Jun-08 A	15-May-11	-544	_	:	3	8 - 3		3	1				
BT2 Lining and Piping	10-Sep-10	02-May-11	-341				!						ļ	ļ
BT2 Tunneling and TBM Retrieval Complete	29-Sep-10	29-Sep-10	-439			1		-	1			1		
BT3 Lining and Piping	03-May-11	26-Oct-11	-463	-		-					1			
North Kenmore Portal Construction	08-Sep-11	08-Feb-12	-522			1		1	1		E -	1		
Central Post Construction	09-Feb-12	29-Feb-12	-471			1			1				-	1
Central Substantial Completion	29-Feb-12	29-Feb-12	-465		la nom				<u></u>	ļ		Ļ	•	
West Tunnel														
BT4 Tunneling and TBM Retrieval	24-Sep-08 A	14-Apr-10	-94											
BT4 Lining and Pt. Wells Post Construction	15-Apr-10	27-May-11	31									8		
Complete Flow Metering Structure	21-Dec-10	21-Dec-10	11				1	1. 1	È.					
West Substantial Completion	27-May-11	27-May-11	31					1	1	h 🍫			L	
Influent Pump Station					1		1	1	1		1	1	1	1
IPS Construction	14-Jan-09 A	12-Jul-11	0	-	-	2	2	ł	4			li -	1	
IS Mitigation Construction Measures	03-Aug-09 A	03-May-10	15		-						1	1		
IS Construction	03-May-10	23-May-11	0				18		1					
IPS Ready for Internal Operational Testing	13-Apr-11	13-Apr-11	0 0									8		
IPS Internal Operational Testing	14-Apr-11	18-May-11	n		÷		- †		÷	-	·	÷	<u> </u>	<u>.</u>
IPS Water Recirculation to Treatment Plant Testing	19-May-11	14-Aug-11	0								1			
IPS Ready to Pump Wastewater to Treatment Plant	14-Aug-11	14-Aug-11	0			1	8	1	1			1	1	1
IPS Post Testing Construction	15-Aug-11	15-Dec-11	ů	1			C. Marke	ł	1			12		
IPS Substantial Completion	15-Dec-11	15-Dec-11	0			1		1	1				1	
Ballinger/N. Kenmore Odor Control	13-060-11	13-080-11	, end							+		•		
Ballinger/N. Kenmore Odor Control Design	25 hun 0.4 k	02 Dec 40	0	-				1						
	25-Jun-04 A	03-Dec-10	0	_	-	1	12	1	1	1				
Ballinger/N. Kenmore Permits Ballinger/N. Kenmore Bid and Award	05-Sep-05 A 06-Dec-10	20-May-10 04-Oct-11	0		:	3			1	<u> </u>	1	4		
Ballinger/N. Kenmore Big and Award Ballinger/N. Kenmore Construction	06-Dec-10 04-Oct-11	18-Apr-12	0					-	1	1	E.		1	
Ballinger/N. Kenmore Construction Ballinger/N. Kenmore Substantial Completion	18-Apr-12	18-Apr-12 18-Apr-12	0										1	
Reclaimed Water	18-Apt-12	Te-Apr-12	U			1			1					¥
								1	1		1			
Design and Construction				1			5				5			
Reclaimed Water DOE Permits	26-Oct-09 A	25-Apr-12	0				15	-			13		1 2	
	15-Feb-10	31-Mar-10	0						ļ	Ļ		ļ		
Reclaimed Water Initial East FM Cleaning	09-Feb-12	21-Mar-12	0			1		1	1	1				
Reclaimed Water Initial East FM Cleaning Reclaimed Water Final East FM Cleaning Reclaimed Water Startup and Testing	29-Feb-12	07-May-12	0		i .	- U	i.	i						_

Schedule Adjustments/Issues

The projected initiation of wastewater treatment is August 15, 2011 based upon the proposed revised sequence of IS construction to bypass the BT-2 tunneling delay.

Contract Status

Table 6 summarizes the current contract status for the Brightwater conveyance system.

Original Contract Amount	Planned Phased Amendments	Baseline Cost = (original + planned Am.)	Other Am. or Change Orders	Other Am. or Change Order % of Baseline	No. of Am. or CO's to Date	Current Contract Amount	Amount Paid	Through Payment No.	% Complete
\$11,474,386	\$10,386,010	\$21,860,396	\$368,876	2%	6	\$22,229,272	\$17,747,050	81-3	80%
. , ,	. , ,					. , ,	. , ,		
\$24,013,721	\$5,107,164	\$29,120,885	\$0	0%	1	\$29,120,885	\$26,664,807	65	92%
\$13,327,255	\$32,789,992	\$46,117,248	\$2,295,318	5%	5	\$48,412,565	\$33,158,359	57	68%
\$475,916	\$337,636	\$813,552	\$72,737	9%	5	\$886,289	\$739,431	39	83%
\$933,568	\$1,159,916	\$2,093,484	\$0	0%	4	\$2,093,484	\$1,499,349	41	72%
\$250,000	\$0	\$250,000	\$0	0%	3	\$250,000	\$150,273	73	60%
\$130,848,750	\$1,000,000	\$131,848,750	\$5,180,461	3.9%	22	\$137,029,211	\$126,936,592	56	93%
\$211,076,058	\$0	\$211,076,058	\$21,197,118	10.0%	15	\$232,273,176	\$162,464,776	57	70%
\$102,453,000	\$0	\$102,453,000	\$6,282,029	6%	10	\$108,735,029	\$90,406,734	32	83%
\$91,860,000	\$0	\$91,860,000	\$5,154,854	6%	18	\$97,014,854	\$24,919,832	31	26%
\$1,156,330	\$0	\$1,156 <u>,</u> 330	\$56,159	5%	3	\$1,212,489	\$1,212,489	10	100%
\$10,180,000	\$0	\$10,180,000	\$315,381	3%	5	\$10,495,381	\$10,495,381	17	100%
\$27,599,800	\$1,500,000	\$29,099,800	\$693,893	2.4%	12	\$29,793,693	\$29,618,959	17	99%
	Contract Amount \$11,474,386 \$24,013,721 \$13,327,255 \$475,916 \$933,568 \$250,000 \$130,848,750 \$211,076,058 \$102,453,000 \$91,860,000 \$91,860,000 \$11,156,330 \$10,180,000	Original Contract Amount Planned Phased Amendments \$11,474,386 \$10,386,010 \$24,013,721 \$5,107,164 \$13,327,255 \$32,789,992 \$475,916 \$337,636 \$933,568 \$1,159,916 \$250,000 \$0 \$130,848,750 \$1,000,000 \$211,076,058 \$0 \$102,453,000 \$0 \$91,860,000 \$0 \$1,156,330 \$0 \$10,180,000 \$0	Original Contract Amount Planned Phased Amendments Baseline Cost = (original + planned Am.) \$11,474,386 \$10,386,010 \$21,860,396 \$24,013,721 \$5,107,164 \$29,120,885 \$13,327,255 \$32,789,992 \$46,117,248 \$475,916 \$337,636 \$813,552 \$933,568 \$1,159,916 \$2,093,484 \$250,000 \$0 \$250,000 \$130,848,750 \$1,000,000 \$131,848,750 \$211,076,058 \$0 \$211,076,058 \$102,453,000 \$0 \$102,453,000 \$91,860,000 \$0 \$1,156,330 \$10,180,000 \$0 \$10,180,000	Original Contract Amount Planned Phased Amendments Baseline Cost e (original + planned Am.) Other Am. or Change Orders \$11,474,386 \$10,386,010 \$21,860,396 \$368,876 \$24,013,721 \$5,107,164 \$29,120,885 \$00 \$13,327,255 \$32,789,992 \$46,117,248 \$2,295,318 \$475,916 \$337,636 \$813,552 \$72,737 \$933,568 \$1,159,916 \$2,093,484 \$00 \$250,000 \$0 \$250,000 \$0 \$130,848,750 \$1,000,000 \$131,848,750 \$5,180,461 \$211,076,058 \$0 \$211,076,058 \$21,197,118 \$102,453,000 \$0 \$102,453,000 \$6,282,029 \$91,860,000 \$0 \$1,156,330 \$55,154,854 \$1,156,330 \$0 \$1,156,330 \$56,159 \$10,180,000 \$0 \$10,180,000 \$315,381	Original Contract Amount Planned Phased Amendments Baseline Cost = (original + planned Am.) Other Am. or Change Orders Other Am. or Change Order % of Baseline \$11,474,386 \$10,386,010 \$21,860,396 \$368,876 2% \$24,013,721 \$5,107,164 \$29,120,885 \$00 0% \$13,327,255 \$32,789,992 \$46,117,248 \$2,295,318 5% \$475,916 \$337,636 \$813,552 \$72,737 9% \$933,568 \$1,159,916 \$2,093,484 \$00 0% \$250,000 \$0 \$250,000 \$00 0% \$130,848,750 \$1,000,000 \$131,848,750 \$5,180,461 3.9% \$211,076,058 \$0 \$211,076,058 \$21,197,118 10.0% \$102,453,000 \$102,453,000 \$6,282,029 6% \$91,860,000 \$0 \$91,860,000 \$5,154,854 6% \$1,156,330 \$0 \$1,156,330 \$56,159 5% \$10,180,000 \$10,180,000 \$315,381 3%	Original Contract AmountPlanned Phased AmendmentsBaseline (original + planned Am.)Other Am. or Change OrdersOther Am. or Change Order % of BaselineNo. of Am. or CO's to Date $\$11,474,386$ \$10,386,010\$21,860,396\$368,8762%6 $\$24,013,721$ \$5,107,164\$29,120,885\$00%1 $\$13,327,255$ \$32,789,992\$46,117,248\$2,295,3185%5 $\$475,916$ \$337,636\$813,552\$72,7379%5 $\$933,568$ \$1,159,916\$2,093,484\$00%4\$250,000\$0\$250,000\$00%3\$130,848,750\$1,000,000\$131,848,750\$5,180,4613.9%22\$211,076,058\$0\$221,076,058\$21,197,11810.0%15\$102,453,000\$0\$102,453,000\$6,282,0296%10\$91,860,000\$0\$1,156,330\$56,1595%3\$10,180,000\$0\$10,180,000\$315,3813%5	Contract Amount Phased Amendments = (original + planed Am Change Orders Change Order % of Baseline or CO's to Date Contract Amount \$11,474,386 \$10,386,010 \$21,860,396 \$368,876 2% 6 \$22,229,272 \$24,013,721 \$5,107,164 \$29,120,885 \$00 0% 1 \$29,120,885 \$13,327,255 \$32,789,992 \$46,117,248 \$2,295,318 5% 5 \$48,412,565 \$475,916 \$337,636 \$813,552 \$72,737 9% 5 \$886,289 \$933,568 \$1,159,916 \$2,093,484 \$0 0% 4 \$2,093,484 \$250,000 \$1,159,916 \$2,209,3484 \$0 0% 3 \$2,093,484 \$250,000 \$1,159,916 \$2,093,484 \$0 0% 3 \$2,093,484 \$250,000 \$1,159,916 \$2,093,484 \$0 0% 3 \$2,093,484 \$250,000 \$1,31,848,750 \$5,180,461 3.9% 22 \$13,7,029,211 \$211,076,058 \$211,076,05	Original Contract Amount Planned Phased Amendments Baseline Cost e (original + planned Am.) Other Am. or Change Orders No. of Am. of Baseline Current or Co's to Date Current Contract Amount Amount Paid \$\$11,474,386 \$10,386,010 \$21,860,396 \$368,876 2% 6 \$22,229,272 \$17,747,050 \$\$24,013,721 \$5,107,164 \$29,120,885 \$0 0% 1 \$29,120,885 \$26,664,807 \$\$13,327,255 \$32,789,992 \$46,117,248 \$2,295,318 5% 5 \$48,412,565 \$33,158,359 \$\$475,916 \$\$337,636 \$\$813,552 \$72,737 9% 5 \$886,289 \$739,431 \$\$933,568 \$\$1,159,916 \$2,093,484 \$0 0% 4 \$2,093,484 \$1,499,349 \$\$250,000 \$0 \$25,180,461 3.9% 22 \$137,029,211 \$126,936,592 \$\$11,076,058 \$1,000,000 \$131,848,750 \$5,180,461 3.9% 22 \$137,029,211 \$126,936,592 \$\$211,076,058 \$211,076,058 \$21,197,118 10.0%	Original Contract Amount Planed Phased Amendments Baseline Cost e (original + planed Am.) Other Am. or Change Orders Other Am. or Change Orders No. of Am. or CO's to Date Current Contract Amount Through Amount Amount Paid \$11.474.386 \$10,386,010 \$21,860,396 \$368,876 2% 6 \$22,229,272 \$17,747,050 81-3 \$24,013.721 \$5,107,164 \$29,120,885 \$0 0% 1 \$29,120,885 \$26,664,807 65 \$13,327,255 \$32,789,992 \$46,117,248 \$2,295,318 5% 5 \$48,412,565 \$33,158,359 57 \$475,916 \$3337,636 \$813,552 \$72,737 9% 5 \$886,289 \$739,431 39 \$933,568 \$1,159,916 \$2,093,484 \$0 0% 4 \$2,093,484 \$1,499,349 41 \$250,000 \$0 \$250,000 \$0 0% 3 \$250,000 \$150,273 73 \$130,848,750 \$1,1076,058 \$211,076,058 \$211,076,058 \$211,076,058 \$211,076,058 \$21,197,118 10

 Table 6: Summary of Brightwater Conveyance Contract Status

Planned Phased Amendments are planned amendments that were part of the initial project plan, and contribute to the contract baseline cost (baseline equals Original Contract Amount plus Planned Phased Amendments). The *Other Am. Or Change Order* % column is the percentage of unplanned amendments compared to the contract baseline. Amendments to contract P43020P Jacobs: 1. Clarification of tasks outlined in the original scope of work to reflect responsibilities of the consultant as a result of the development of the Construction Management Plan, which includes budget for cost estimating for ancillary facilities, OCIP coordination, constructability reviews for ancillary facilities, partnering workshops, and additional project control support, 2. Added inspection and resident engineering services for IPS and ancillary contracts – consultants responsibilities were not defined at time of development of original contact, 3. Increased budget for design & implementation of a new document management system, 4. The RW Beck Project Mgt. Oversight contract was transferred to KC Council Auditor's office on July 1, 2008.

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Expenditures Summary

Table 7 shows annual and lifetime expenditures for the Brightwater Conveyance project (excluding miscellaneous/staff costs which are shown combined with Treatment Plant costs on Table 3). Monthly and Annual costs are depicted graphically in Figures 9 and 10 on the following pages. This table reflects the inclusion of the *Brightwater Cost Update* Trend dated January 2009, and the related annual cash flows submitted for the 2010 rate process and approved by the Council in June 2009

	Baseline	Baseline	Baseline	2010 Annual Ex	cpenditures		Lifetime I	Expenditures	
ITEM	Cost	Cost *	Cost *	YTD	-	Percent	LTD	Planned **	Percent
	(2004\$)	(w/ 3% infl)	(w/ 5% infl)	Actual	Planned	Spent	Actual	(w/infl)	Spent
IMPLEMENTATION/CONSTRUCTION	617,243,534	704,756,695	768,745,113	6,751,383	94,698,265	7.13%	499,439,103	698,161,489	71.5%
NON-IMPLEMENTATION/CONSTRUCTION									
Engineering Services	81,685,247	87,262,878	91,288,908	-5,365	2,143,937	-0.3%	75,916,683	78,405,000	96.8%
Planning and Management Services	56,600,007	60,464,767	63,254,418	939,916	12,710,296	7.4%	53,139,054	73,632,789	72.2%
Permitting and Other Agency Support	21,110,000	22,090,795	22,757,972	1,094	40,376	2.7%	1,106,618	1,221,447	90.6%
Right-of-Way	20,803,727	21,243,876	21,537,309	2,965	1,659,896	0.2%	27,804,153	30,797,761	90.3%
Total Non-Implementation /Const. Cost	180,198,981	191,062,316	198,838,607	938,610	16,554,504	5.7%	157,966,509	184,056,996	85.8%
Accruals and Adjustments *** Project Reserve	74,165,992	89,486,148	101,125,501	-7,709,732 0	0	0.0%	0 0	0 2,000,000	0.0%
Project Total	871,608,507	985,305,159	1,068,709,221	-19,740	111,252,769	0.0%	657,405,612	884,218,486	74.3%
Credits and Revenues	0	0	0	0	0	0.0%	-3,865	-4,666	82.8%
Project Total + Credits and Revenues	871,608,507	985,305,159	1,068,709,221	-19,740	111,252,769	0.0%	657,401,748	884,213,820	74.3%

Table 7: Annual and Lifetime Conveyance Expenditures

* These columns represent the sum of each year's project costs inflated to that year's dollars. Inflation is estimated at three percent and five percent per year.

**This column represents Lifetime total cost including inflation reflected in awarded contracts and inflation on remaining forecast contracts at three percent per year through the completion of the project. The majority of construction contracts have been awarded. Mitigation payments have been moved from the Permitting category to Right-of-Way.

*** In December 2009 costs were accrued to reflect the dollars spent during 2009 but not paid. The accounting convention is to reverse those amounts, which were actually paid in early 2010.

Cost/Budget Adjustments

• Planned costs reflect the January 2009 Brightwater Cost Trend Update. YTD and LTD Actual Right-of-Way includes payment of Lake Forest Park Water District mitigation not included in January 2009 Trend, but budgeted in other categories.

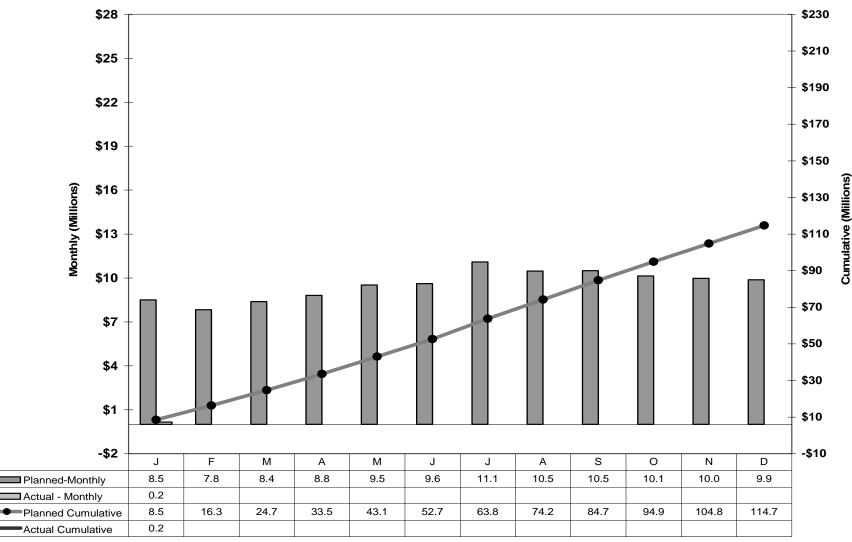
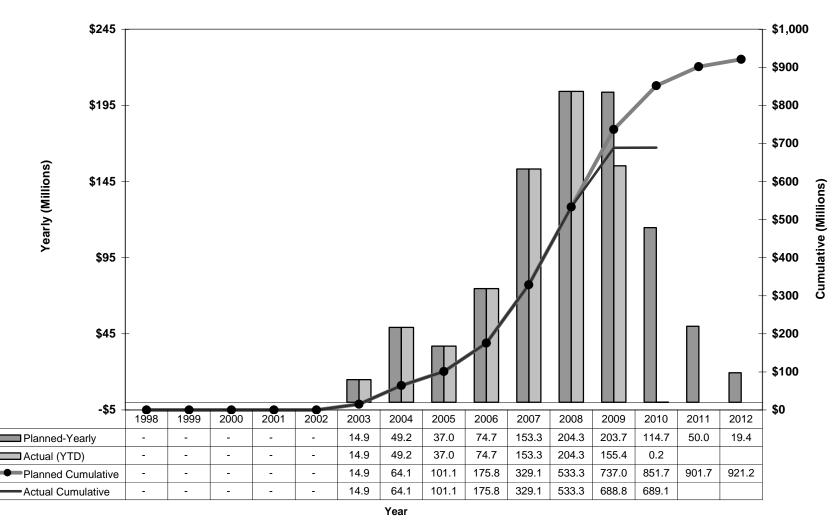


Figure 9: Annual Conveyance Expenditures: Current Planned vs. Actual

2010

Note: In December 2009 costs were accrued to reflect the dollars spent during 2009 but not paid. The accounting convention is to reverse those amounts, which are actually paid in early 2010. Thus, for accounting purposes, the expenditures show a negative amount in January 2010. Planned costs are the current forecast (January 2009 Trend) of total project costs including prior year actual (1998-2009) and future years forecast costs. Costs include Miscellaneous and Staff Labor.





Costs include Miscellaneous and Staff Labor. Planned costs are the current forecast of total project costs including prior year actual (1998-2009) and future years forecast costs. Actual Cumulative for year 2010 includes only YTD costs through the current month.

Detailed Expenditures

	Baseline	Baseline	Baseline		Annual Expendi		-			
ITEM	Cost	Cost *	Cost *	Monthly IBIS	YTD		Percent	LTD	Planned **	Percent
	(2004\$)	(w/ 3% infl)	(w/ 5% infl)	Jan-10	Actual	Planned	Spent	Actual	(w/infl)	Spent
IMPLEMENTATION/CONSTRUCTION	(20014)	(11, 0, 0, 11, 11)	(11, 0, 10 111)		, lotuu	. iaiiioa	oponi	, lottaal	(,)	opoint
Implementation/Construction Contracts										
Construction Contracts	511,495,630	580,442,505		5,955,197	5,955,197	90,982,631	6.5%	435,832,294	580,897,957	75.0%
Construction Mitigation	4,163,169	4,754,609		0	0	397,836	0.0%	2,051,261	2,802,861	73.2%
Judgements/Claims	0	0	0	223,189	223,189	200,000	111.6%	1,331,716	865,963	153.8%
OCIP - Owner Controlled Insurance		Incl in Contract	Incl in Contract	0	0	116,002	0.0%	16,865,612	17,054,576	98.9%
Contingency	51,115,982	61,948,399		0	0	14,878,822	0.0%	0	63,999,299	0.0%
Sales Tax	50,398,733	57,541,162		563,131	563,131	-12,644,040	0.0%	39,245,582	26,076,306	150.5%
Subtotal KC Construction Contracts	617,173,514	704,686,675	768,675,093	6,741,518	6,741,518	93,931,252	7.2%	495,326,464	691,696,962	71.6%
Owner Furnished Equipment and Materials										
Procurement Contracts	66,419	66,419	66,419	0	0	74,463	0.0%	880,461	1,059,492	83.1%
Subtotal Owner Furnished Equipment	66,419	66,419		0	0	74,463	0.0%	880,461	1,059,492	83.1%
	, -	, -								
Outside Agency Implementation/Construction										
Utility Relocations, etc.	0	0	0	9,323	9,323	692,550	1.3%	2,980,611	5,172,706	57.6%
Subtotal Outside Agency Costs	0	0	0	9,323	9,323	692,550	1.3%	2,980,611	5,172,706	57.6%
Other Capital Charges										
Subtotal Other Capital Charges	3,601	3,601	3,601	541	541	0	0.0%	251,567	232,328	108.3%
Implementation/Construction Total	617,243,534	704,756,695	768,745,113	6,751,383	6,751,383	94,698,265	7.1%	499,439,103	698,161,489	71.5%
NON-IMPLEMENTATION/CONSTRUCTION										
Engineering Services										
Subtotal Engineering Services	81,685,247	87,262,878	91,288,908	-5,365	-5,365	2,143,937	-0.3%	75,916,683	78,405,000	96.8%
Planning and Management Services										
Subtotal Planning and Management Services	56,600,007	60,464,767	63,254,418	939,916	939,916	12,710,296	7.4%	53,139,054	73,632,789	72.2%
g			,,		,	,,		,,	, ,	/ •
Permitting and Other Agency Support										
Permits and Licenses	3,000,000	3,157,224	3,264,257	0	0	40,376	0.0%	527,763	617,419	85.5%
Local Agency Project Costs	18,010,000	18,824,298		1,094	1,094	0	0.0%	578.855	504,028	114.8%
1% for Art Payment	100,000	109,273		0	0	0	0.0%	0/0,000	100,000	0.0%
Subtotal Permitting and Other Agency Support	21,110,000	22,090,795		1,094	1,094	40,376	2.7%	1,106,618	1,221,447	90.6%
	21,110,000	22,000,700	22,101,012	1,004	1,004	40,070	2.7 /0	1,100,010	1,221,447	00.070
Right-of-Way (not incl. in allied cost calcs.)										
Land Purchases/Easements	16,770,394			2,665	2,665	0	0.0%	13,258,817	12,674,303	104.6%
Land Purchases/Easements-Mitigation	4,033,333		4,235,000	0	0	0	0.0%	6,414,768	6,414,768	100.0%
Local Agency Mitigation (Moved from Local Agency Pr				300	300	1,659,896	0.0%	8,130,569	11,708,691	69.4%
Subtotal Right-of-Way	20,803,727	21,243,876	21,537,309	2,965	2,965	1,659,896	0.2%	27,804,153	30,797,761	90.3%
Total Non-Implementation /Const. Cost	180,198,981	191,062,316	198,838,607	938,610	938,610	16,554,504	5.7%	157,966,509	184,056,996	85.8%
	100,130,901	131,002,310	130,000,007	-		10,004,004		137,300,309	104,000,000	00.076
Accrual Adjustment				-7,709,732	-7,709,732	0	0.0%	0	0	
Project Reserve	74,165,992	89,486,148	101,125,501	0	0	0	0.0%	0	2,000,000	0.0%
PROJECT TOTAL	871,608,507	985,305,159	1,068,709,221	-19,740	-19,740	111,252,769	0.0%	657,405,612	884,218,486	74.3%
	671,000,507	900,000,159								
Credits and Revenues	0	0	0	0	0	0	0.0%	-3,865	-4,666	82.8%
Project Total + Credits and Revenues	871,608,507	985,305,159	1,068,709,221	-19,740	-19,740	111,252,769	0.0%	657,401,748	884,213,820	74.3%
-										

Table 8: Detailed Annual and Lifetime Conveyance Expenditures

* These columns represent the sum of each year's project costs inflated to that year's dollars. Inflation is estimated at three percent and five percent per year.

**This column represents Lifetime total cost including inflation reflected in awarded contracts and inflation on remaining forecast contracts at three percent per year through the completion of the project.

Treatment Plant

Project Description

The Brightwater Treatment Plant is a new wastewater treatment facility to be located just east of State Route 9 and north of State Route 522 and Woodinville. The Brightwater plant will provide 36 million gallons per day (mgd) of treatment capacity (average wet weather flow) beginning in 2011 and 54 mgd of capacity by 2040. The Brightwater Treatment Plant includes membrane bioreactor (MBR) secondary treatment systems, Class B biosolids and reclaimed water production, odor control systems, and disinfection.

Current Activities

- The Electronic O&M manuals (EOM) for the Brightwater system continue to be developed. The manuals are now at 60% completion.
- Following Functional Acceptance Testing of the Emerson Instrumentation and Control equipment which occurred during May, 2009, Emerson continues to work on punch list items with final inspection and acceptance due February 2010.
- Start-up and component test plans continue to be submitted by Kiewit and Hoffman for review by County staff.

Treatment Plant Construction

- The landscaping subcontractor continued placing plants, erosion control and mulch on the landforms south of 228th St. Valley is installing HSQ control panels for the Liquids Contract. Electrical, mechanical, and HVAC work continues in all areas of the plant.
- Kiewit continues forming and concrete placement for remaining slabs in the Digester, Solids, and the three Odor Control Buildings, and installing site cast panels for the Solids building. They are preparing for concrete placement on the Digester 1 parapet walls. Kiewit's subcontractors continued with concrete, electrical and piping installation on all three Odor Control Buildings, and are continuing mechanical and electrical work in the 262 and 284 level of the Solids and Digestion Buildings and the Energy Building. Kiewit's painting subcontractor continued coating of piping and structural steel in all areas. Roofing work continued on the Energy Building. Doors and architectural systems continue to be installed in all buildings.

Local Permits

- All permits have been issued for the Treatment Plant.
- Construction remained in compliance with permit conditions.

State and Federal Permits

• During the month of January, construction at the Treatment Plant was in compliance with State and Federal permits.

Project Issues

• There were no new issues in January.

Looking Ahead

Solids Contract

- Kiewit will continue placing rebar, concrete (including setting the last of the site cast panels), structural steel and miscellaneous metals for the Solids Building and will continue work on the Energy Building mechanical and electrical equipment. Mechanical and electrical work will continue on the 490, 590 and 790 Odor Control Buildings. They will continue installing piping, HVAC, equipment and electrical cable trays in the Galleries, Digestion and Solids Building. Roofing work will begin on the solids building. Electrical cable installation will begin between the Energy building and the Liquids medium voltage switchgear.
- Kiewit will continue mechanical and electrical work on the Chemical Storage Building, including piping, conduit and panels. Concrete placements on the Digestion Building roof level slab will be completed.

Liquids Contract

- Application of the coating system in the membrane tanks will continue provided acceptable application conditions can be achieved.
- Installation of yard piping will also continue including natural gas piping and fire sprinkler service in the East Road. Backfill around the digesters will be completed.
- Landscaping work will continue in the areas south of Echo Mound near the West Wetscape. Construction of the pond boardwalks will continue.
- The CMU walls for the community center wing of the EECC will be completed.
- Hoffman's subcontractors will continue working on installation of glazing, louvers, flashing, and roofing to get buildings "dried in".
- Elcon and Valley will continue pulling cable in all areas.
- Bids will be opened for the site signage subcontract package. This will complete the contract buyout process.

Schedule

Figure 11 provides a summary of scheduled activities for the Brightwater Treatment Plant.

tract / Activity	Start	Finish Variance: Current		2010				1	2011			
			Contractual to Forcast	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	0
Brightwater												
Program												
Emerson Software Configuration Complete	30-Dec-09 A	30-Dec-09		-	0							
Full I&C System Integration Complete	13-May-11	13-May-11	-60	l	Ì	1				0		
Brightwater System 90 Day Start-Up Test	19-May-11	14-Aug-11	-164	1		1						
Begin Treating Wastewater	15-Aug-11	15-Aug-11	-164	1		1	1				0	
Treatment Plant												
Liquids Package												
Liquids Construction	18-Jun-07 A	21-Feb-11	0									
EECC Construction	11-Sep-09 A	15-Nov-10	-109									
Liquids Ready for IPS Water Recirculation Testing	15-Nov-10	15-Nov-10	-8		1	1		2				
Liquids Substantial Completion	21-Feb-11	21-Feb-11	0						1	-		
Solids Package												
Solids Construction	02-Jan-08 A	23-Feb-11	0									
Solids Ready for Water Recirc Testing	19-Nov-10	19-Nov-10	0	1				1				
Solids Substantial Completion	23-Feb-11	23-Feb-11	0						\$			
♦ Contract Milestone ♦ Forecast Milestone ■ ■ Baseline (Contract)	Bright	twater P	rogram Sumn	nary	Sc	hedu	lle		f I	Brig	htw	atr
Critical	January 2010							King County TREATMENT SYS				

Figure 11: Summary of Brightwater Treatment Plant

Schedule Adjustments/Issues

The projected initiation of wastewater treatment is August 15, 2011.

Contract Status

Table 9 summarizes the current contract status for the Brightwater Treatment Plant.

				-						
	Original	Planned	Baseline Cost			No. of Am.	Current		Through	
_	Contract	Phased	= (original +	Change	Change Order	or CO's to	Contract		Payment	%
Contract	Amount	Amendments	planned Am.)	Orders	% of Baseline	Date	Amount	Amount Paid	No.	Complete
E13035E CH2M Hill -										
Design	\$9,719,364	\$51,086,355	\$60,805,719	\$17,396,653	29%	42	\$78,210,743	\$69,788,877	PH4-35	89%
P53007P CDM										
Construction Mgt.										
Services	\$1,497,206	\$12,730,519.58	\$14,227,726	\$298,711	2%	6	\$14,526,437	\$10,217,909	33	70%
P0001P06 - BW Testing										
and Inspection	\$100,000	\$900,000	\$1,000,000	\$0	0%	6	\$1,000,000	\$995,663	34	100%
P00048P08 - BW										
Testing and Inspection	\$1,500,000	\$0	\$1,500,000	\$0	0%	0	\$1,500,000	\$829,559	10	55%
C38138C GCCM Contract										
Preconstruction	\$1,424,428	\$0	\$1,424,428	\$666,028	47%	3	\$2,090,456	\$1,943,703	33	93%
C38138C-515 North										
Mitigation Area *	\$7,740,356	\$0	\$7,740,356	\$114,822	1%	15	\$7,855,178	\$6,781,936	18	86%
C38138C-525 Site										
Preparation *	\$23,797,389	\$0	\$23,797,389	\$2,063,751	9%	12	\$25,861,140	\$21,984,418	18	85%
C38138C-535										
Earthworks/BOC/										
Liquids *	\$41,783,191	\$247,184,021	\$288,967,212	-\$18,671,546	-6%	29	\$270,295,666	\$192,945,833	33	71%
C00168C07 Solids/										
Odor Control Facilities	\$166,459,000	\$0	\$166,459,000	\$2,327,375	1%	16	\$168,786,375	\$103,399,408	24	61%
C00168C07-01										
DRB - Richard A. Lewis	\$125,000	\$0	\$125,000	\$0	0%	0	\$125,000	\$13,004	7	10%
C00168C07-02										
DRB - Quandrant II, Inc.	\$125,000	\$0	\$125,000	\$0	0%	0	\$125,000	\$4,806	3	4%
C00168C07-03										
DRB - R. Brown										
Consulting Group, LLC	\$125,000	\$0	\$125,000	\$0	0%	0	\$125,000	\$6,913	7	6%
Legal - Foster Pepper	\$1,150,000		\$3.300.000	\$0		6	\$3.300.000	\$2,930,867	63	89%
Legal - Stoel Rives	\$3,500,000		\$3,500,000	\$0	0%	0	\$3,500,000	\$479,929	30	14%
Legal - Preston Gates	\$1,150,000					10	\$4,387,056	\$4,387,056	85	100%
PO 299593 SnoPUD										
Engineering & Design										
Services	\$150,000	\$396,200	\$546,200	\$0	0%	5	\$546,200	\$530,204	21	97%
PO 373403 SnoPUD	,,		, ,	* *			,			
Procurement &										
Construction	\$7,389,000	\$0	\$7,389,000	\$0	0%	0	\$7,389,000	\$5,095,274	10	69%
PO 387375 Emerson	<i></i>	\$ 3	<i></i>	\$ 0		-	÷:,===,000	+-,,-,-,		
Process Management	\$6,114,678	\$0	\$6,114,678	\$0	0%	0	\$6,114,678	\$5,075,183	6	83%
PO 309175 Zenon	\$23,714,638		\$23,714,638	-\$2,991,349		3	\$20,723,290	\$7,959,935	12	38%
PO 309175 Zenon	⊅∠3,714,638	\$0	\$23,714,638	-∌∠,991,349	-13%	3	\$20,723,290	\$7,959,935	12	38%

Table 9: Summary of Brightwater Treatment Plant Contract Status

Planned Phased Amendments are planned amendments that were part of the initial project plan, and contribute to the contract baseline cost (baseline equals Original Contract Amount plus Planned Phased Amendments). The *Other Am. Or Change Order* % column is the percentage of unplanned amendments compared to the contract baseline. Unplanned amendments to Contract P93012P adjusted the contract from a simple planned programmatic EIS to a complex project level EIS to advance the project schedule, reduce risk and overall siting costs. Several amendments and change orders were needed to other contracts to respond to the 60 percent construction cost estimate which was over the project budget amount. Amendments were needed for the CH2M Hill Contract E13035E and EarthTech Contract P56016P to participate in value engineering exercises used to investigate over 300 cost savings ideas, and to provide redesign services of over 150 of the selected ideas which resulted in approximately \$50 million in savings. A change order was needed in Hoffman's GCCM preconstruction contract to also participate in the VE exercises and to provide cost estimating for the cost savings ideas.

* Sales Tax was included in the original contract amounts for NMA, Site Prep and Earthwork/BOC/Liquids. Amendment 5, effective 9/18/07, removed the unspent balance of sales tax from Earthwork/BOC/Liquids phase of the project for all work performed after July 1, 2007. Amount paid includes sales taxes of \$2,367,113 though June 30, 2007.

Expenditures Summary

Table 10 shows the annual and lifetime expenditures for the Brightwater Treatment Plant (excluding miscellaneous/staff costs which are shown combined with Conveyance costs on Table 3). Monthly and Annual costs are depicted graphically in Figures 12 and 13 on the following pages. This table reflects the inclusion of the *Brightwater Cost Update* Trend dated January 2009, and the related annual cash flows submitted for the 2010 rate process and approved by the Council in June 2009

	Baseline	Baseline	Baseline	2010 Annual Ex	xpenditures		Lifetime	Expenditures	
ITEM	Cost	Cost *	Cost *	YTD		Percent	LTD	Planned **	Percent
	(2004\$)	(w/ 3% infl)	(w/ 5% infl)	Actual	Planned	Spent	Actual	(w/infl)	Spent
IMPLEMENTATION/CONSTRUCTION	335,797,643	384,117,552	419,462,452	6,472,603	100,417,269	6.4%	378,595,326	549,953,926	68.8%
NON-IMPLEMENTATION/CONSTRUCTION									
Engineering Services	50,911,433	53,019,281	54,523,113	38,652	4,271,927	0.9%	69,218,954	76,433,688	90.6%
Planning and Management Services	22,509,579	23,441,526	24,106,418	7,129	4,839,011	0.1%	24,107,311	30,270,062	79.6%
Permitting and Other Agency Support	23,370,000	24,668,771	25,573,223	0	470,730	0.0%	5,491,948	7,467,320	73.5%
Right-of-Way	101,437,757	103,290,154	104,532,273	0	455,018	0.0%	180,928,405	181,859,718	99.5%
Total Non-Implementation /Const. Cost	198,228,768	204,419,733	208,735,027	45,780	10,036,686	0.5%	279,746,618	296,030,789	94.5%
Accruals and Adjustments ***				-7,755,341	0	0.0%	0	0	
Project Reserve	25,880,400	31,226,405	35,287,985	0	0	0.0%	0	2,000,000	0.0%
Project Total	559,906,811	619,763,690	663,485,464	-1,236,958	110,453,955	-1.1%	658,341,945	847,984,714	77.6%
Credits and Revenues	-10,000,000	-10,786,544	-11,335,009	0	0	0.0%	-3,108,187	-3,222,237	96.5%
Project Total + Credits and Revenues	549,906,811	608,977,146	652,150,456	-1,236,958	110,453,955	-1.1%	655,233,757	844,762,477	77.6%

Table 10: Annual and Lifetime Treatment Plant Expenditures

* These columns represent the sum of each year's project costs inflated to that year's dollars. Inflation is estimated at three percent and five percent per year.

** This column represents Lifetime total cost including inflation reflected in awarded contracts and inflation on remaining forecast contracts at three percent per year through the completion of the project. The majority of construction contracts have been awarded. Mitigation payments have been moved from the Permitting category to Right-of-Way.

*** In December 2009 costs were accrued to reflect the dollars spent during 2009 but not paid. The accounting convention is to reverse those amounts, which were actually paid in early 2010.

Cost/Budget Adjustments

• Planned costs reflect the January 2009 Brightwater Cost Trend Update. Mitigation payments were transferred from the Permitting category to Right-of-Way.

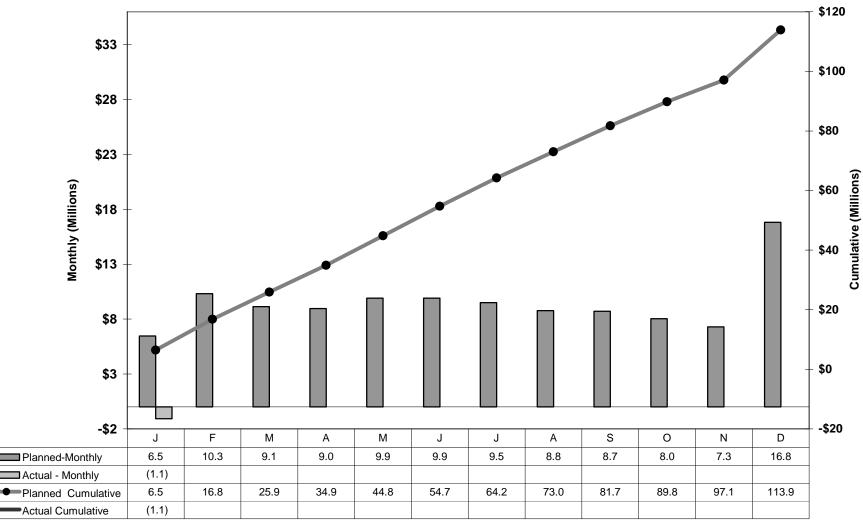


Figure 12: Annual Treatment Plant Expenditures: Current Planned vs. Actual

2009

Note: In December 2009 costs were accrued to reflect the dollars spent during 2009 but not paid. The accounting convention is to reverse those amounts, which are actually paid in early 2010. Thus, for accounting purposes, the expenditures show a very small amount in January 2010. Planned costs are the current forecast (January 2009 Trend) of total project costs including prior year actual (1998-2009) and future years forecast costs. Costs include Miscellaneous and Staff Labor.

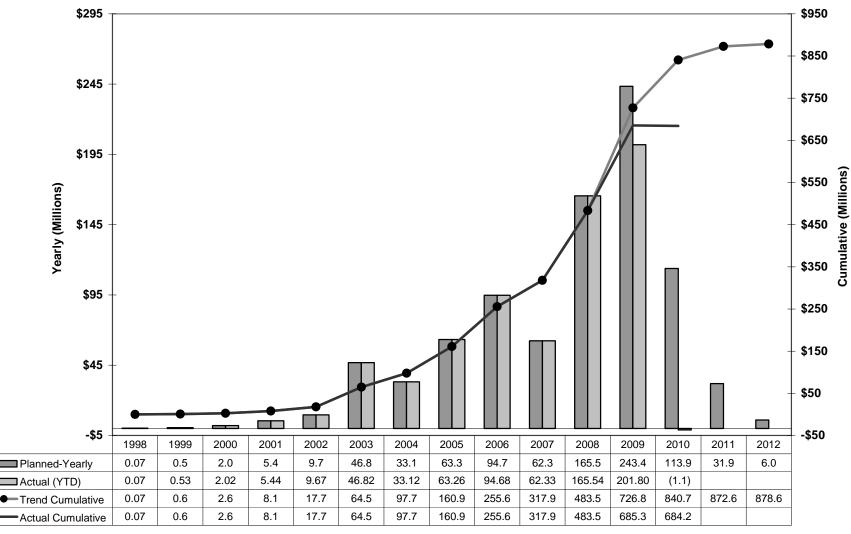


Figure 13: Lifetime Treatment Plant Expenditures: Current Planned vs. Actual

Year

Costs include Miscellaneous and Staff Labor. Planned costs are the current forecast of total project costs including prior year actual (1998-2009) and future years forecast costs. Actual Cumulative for year 2010 includes only YTD costs through the current month.

Detailed Expenditures

	Baseline	Baseline	Baseline	2010	Annual Expendi	tures		Lifetime	Expenditures	
ITEM	Cost	Cost *	Cost *	Monthly IBIS	YTD		Percent	LTD	Planned **	Percent
	(2004\$)	(w/ 3% infl)	(w/ 5% infl)	Jan-10	Actual	Planned	Spent	Actual	(w/infl)	Spent
IMPLEMENTATION/CONSTRUCTION										
Implementation/Construction Contracts										
Construction Contracts	259,500,014	296,472,713	323,421,114	6,057,726	5,505,371	78,454,057	7.0%	314,526,666	418,411,492	75.2%
Construction Mitigation	28,388,610	31,071,321	32,957,559	84,670	637,024	9,446,298	6.7%	10,541,461	26,463,569	39.8%
Judgments/Claims	0	0	0	0	0	50,000	0.0%	0	150,000	
OCIP - Owner Controlled Insurance	Incl in Contract	Incl in Contract	0	0	0	63,097	0.0%	9,185,256	9,288,038	98.9%
Contingency	26,054,532	31,553,814	35,747,231	0	0	7,288,302	0.0%	9,515	26,584,577	0.0%
Sales Tax	21,765,086	24,930,302	27,247,146	457,441	457,441	1,097,492	41.7%	25,934,935	29,611,298	87.6%
Subtotal KC Construction Contracts	335,708,241	384,028,150	419,373,050	6,599,836	6,599,836	96,399,246	6.8%	360,197,833	510,508,973	70.6%
Owner Furnished Equipment and Materials										
Procurement Contracts	39,575	39,575	39,575	-127,234	-127,234	3,278,970	-3.9%	11,467,023	28,894,065	39.7%
Subtotal Owner Furnished Equipment	39,575	39,575	39,575	-127,234	-127,234	3,278,970	-3.9%	11,467,023	28,894,065	39.7%
	,	,		,	,	-,,				
Outside Agency Implementation/Construction										
Utility Relocations, etc.	0	0	0	0	0	0	0.0%	5,815,166	8,038,833	72.3%
Subtotal Outside Agency Costs	0	0	0	0	0	0	0.0%	5,815,166	8,038,833	72.3%
Other Capital Charges										
Subtotal Other Capital Charges	49,827	49,827	49,827	0	0	739,053	0.0%	1,115,305	2,512,054	44.4%
Total Implementation/Construction	335,797,643	384,117,552	419,462,452	6,472,603	6,472,603	100,417,269	6.4%	378,595,326	549,953,926	68.8%
NON-IMPLEMENTATION/CONSTRUCTION										
Engineering Services										
Subtotal Engineering Services	50,911,433	53,019,281	54,523,113	38,652	38,652	4,271,927	0.9%	69,218,954	76,433,688	90.6%
Planning and Management Services										
Subtotal Planning and Management Services	22,509,579	23,441,526	24,106,418	7,129	7,129	4,839,011	0.1%	24,107,311	30,270,062	79.6%
Permitting and Other Agency Support										
Permits and Licenses	3,000,000	3,087,863	3,146,439	0	0	15,730	0.0%	880,364	939,631	93.7%
Local Agency Project Costs	16,070,000	16,774,121	17,254,983	0	0	355,000	0.0%	1,348,940	2,227,690	60.6%
1% for Art Payment	4,300,000	4,806,787	5,171,801	0	0	100,000	0.0%	3,262,644	4,300,000	75.9%
Subtotal Permitting and Other Agency Support	23,370,000	24,668,771	25,573,223	0	0	470,730	0.0%	5,491,948	7,467,320	73.5%
Right-of-Way (not incl. in allied cost calcs.)										
Land Purchases/Easements	93,371,090	94,981,488	96,062,273	0	0	0	0.0%	93,605,121	93,484,170	100.1%
Land Purchases/Easements-Mitigation	8,066,667	8,308,667	8,470,000	0	0	0	0.0%	12,112,482	12,123,438	99.9%
Local Agency Mitigation (Moved from Local Agency Pr	oject Costs above)		0	0	455,018	0.0%	75,210,801	76,252,110	98.6%
Subtotal Right-of-Way	101,437,757	103,290,154	104,532,273	0	0	455,018	0.0%	180,928,405	181,859,718	99.5%
Total Non-Implementation /Const. Cost	198,228,768	204,419,733	208,735,027	45,780	45,780	10,036,686	0.5%	279,746,618	296,030,789	94.5%
		. , .	. ,-			0		0	0	
Accrual Adjustment Project Reserve		31,226,405	35,287,985	-7,755,341 0	-7,755,341 0	0	0.0% 0.0%	0	2,000,000	0.0%
Filiped Reserve	20,000,400	51,220,405	55,201,305	0	0		0.0 %	0	∠,000,000	0.0%
Project Total	559,906,811	619,763,690	663,485,464	-1,236,958	-1,236,958	110,453,955	-1.1%	658,341,945	847,984,714	77.6%
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Credits and Revenues	-10,000,000	-10,786,544	-11,335,009	0	0	0	0.0%	-3,108,187	-3,222,237	96.5%
Project Total + Credits and Revenues	549,906,811	608,977,146	652,150,456	-1,236,958	-1,236,958	110,453,955	-1.1%	655,233,757	844,762,477	77.6%

Table 11: Detailed Annual and Lifetime Treatment Plant Expenditures

* These columns represent the sum of each year's project costs inflated to that year's dollars. Inflation is estimated at three percent and five percent per year.

** This column represents Lifetime total cost including inflation reflected in awarded contracts and inflation on remaining forecast contracts at three percent per year through the completion of the project.

*** Due to review and corrective adjustments, costs were transferred between Construction Contracts and Construction Mitigation.

Appendix A. Acronyms and Abbreviations

B&C	Brown and Caldwell (IPS design consultants)				
BINI	Brightwater Influent Network Improvements Project				
BNSF	Burlington Northern Santa Fe Railway Company				
BOC	Brightwater Operations Center				
Carollo	Carollo Engineers – Reclaimed Water Consulting Engineers				
CCI	construction cost index				
CDM	Camp Dresser McKee (geotechnical consultant for conveyance, and the treatment plant construction management consultant)				
СЕРС	chemically enhanced primary clarification				
CH2M Hill	treatment plant design consultant				
COE	United States Army Corps of Engineers				
CUP	conditional use permit				
CWA	Clean Water Act				
CZM	Coastal Zone Management				
DOE	Washington State Department of Ecology also referred to as Ecology				
DOH	Washington State Department of Health				
DOT	Washington State Department of Transportation				
EECC	Environment Education and Community Center				
EIS	environmental impact statement				
FM	Force Main				
GBR	geotechnical baseline report				
GCC	general contract cost				
GCCM	general contractor construction management				
GDR	geotechnical data report				
GMA	Growth Management Act				
НСС	Hoffman Construction Company (treatment plant GCCM)				
HDPE	High density polyethylene – a type of transmission pipe material				
HPA	hydraulic project approval				
HSI	Hoffman Structures, Inc.				

IBC	International Building Code
I/C	instrumentation and control
IPS	influent pump station
IS	Influent Structure
KST	Kenny/Shea/Traylor Joint Venture (East Tunnel contractor)
LPWTF	Local Public Works Trust Fund
MACC	maximum allowable construction cost
MARSEC	Marine Security
MBR	membrane bioreactor
ME	Membrane Effluent
MOA	memorandum of agreement
MWH/JA	Montgomery Watson Harza/Jacobs (conveyance design consultant)
MWPAAC	Metropolitan Water Pollution Abatement Advisory Committee
NCF	North Creek Facilities
NCFM	North Creek Force Main
NCPS	North Creek Pump Station
NMA	North Mitigation Area
NOC	Notice of Construction
NPDES	National Pollution Discharge Elimination System
NTP	notice to proceed
OCIP	owner controlled insurance program
OMC	oversight management consultant
PAUE	public agency and utility exception
PCSS	King County's Procurement and Contract Services Section
PLA	project labor agreement
PSE	Puget Sound Energy
QA/QC	quality assurance/quality control
RAS	Return Activated Sludge
RBAFO	request for best and final offer
RFP	request for proposal
D	

RFQ/P	Request of Quotation & Proposal
ROW	right-of-way
RW	reclaimed water
RWSP	Regional Wastewater Services Plan
SDC	services during construction
SEPA	State Environmental Policy Act
SI	System Integration
SnoPUD	Snohomish County Public Utilities District
SOQ	Statement of Qualifications
SRF	State Revolving Fund
TBM	tunnel boring machine
Vinci	Vinci/Parsons RCI/Frontier-Kemper Joint Venture – (Central Tunnel contractor)
WTD	Wastewater Treatment Division
WDFW	Washington State Department of Fish and Wildlife

Appendix B. Table Definitions

Expenditure Tables

The column headings defined below apply to all the tables in this report that present information on expenditures.

Column Heading	Definition
Baseline Cost (2004\$)	This column shows the total project cost for the Brightwater project without inflation. It is stated in 2004 dollars as determined in the October 2004 Brightwater predesign estimates.
Baseline Cost (w/infl)	This column shows the sum of each year's project costs inflated to that year's dollars. In other words, each year's costs in 2004 dollars are inflated at a rate that increments by three percent each year. The inflated costs for each year are then added together to yield the figures in this column.
2008 Annual Expenditures	
YTD Actual	Year-to-date Actual. This column shows what has been spent to date in the current year (2008), i.e., the year-to-date expenditures.
Planned	This column shows the planned expenditure for the current year (2008).
Percent Spent	This column shows the percent of the planned annual expenditure for the current year (2008) that has been spent as of the current reporting period (YTD Actual/Current Planned).
Lifetime Expenditures	
LTD Actual	Life-to-date Actual. This column shows what has been spent to date since the project began, i.e., the life-to-date expenditures.
Planned	This column shows the planned expenditure for the project's lifetime.
Percent Spent	This column shows the percent of the planned lifetime expenditure that has been spent to date as of the current reporting period (LTD Actual/Current Planned).

Contract Status Table

Column Heading	Definition
Contract	This column gives the contract number, the contract vendor, and the contract type.
Original Contract Amount	This column shows the cost of the original contract.
Amendments or Change Orders	This column shows the cumulative cost increase over the original contract amount due to amendments or change orders.
Am. or Change Order %	Amendment or Change Order Percent. This column shows by what percent the total contract amount has increased due to amendments or change orders
No. of Am. Or COs to Date	Number of Amendments or Change Orders to Date. This column shows how many amendments or change orders have been made to the original contract.
Current Contract Amount	This column shows the current amount of the contract after adding the cost of amendments or change orders.
Amount Paid	This column shows how much has been paid to date on the contract.
Thru PP No.	Through Process Payment Number. This column shows the progress payment number through which the amount paid has been made. A lower number indicates that very few payments have been made.
% Complete	Percent Complete. This column shows the percent of the contract current contract amount that has been spent to date.