

FINAL

Office of River Protection
Consent Decree 08-5085-FVS

Monthly Summary Report

April 2015

Office of River Protection**Consent Decree 08-5085-FVS
Monthly Summary Report****April 2015 (Monthly Summary Report/Project Earned Value Management System reflects
February 2015 information)**

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CD Milestone Statistics/Status

Milestone	Title	Due Date	Completion Date	Status
Fiscal Year 2014				
D-00B-01	Complete Retrieval of Tank Waste from 10 SSTs in WMA-C	09/30/2014		Past Due
D-00B-02	Advise Ecology of the Nine SSTs Waste will be Retrieved by 2022	09/30/2014	08/24/2011	Completed
Fiscal Year 2015				
D-00A-07	LAW Facility Construction Substantially Complete	12/31/2014		Past Due
D-00A-19	Complete elevation 98 feet Concrete Floor Slab Placements in PT Facility	12/31/2014		Past Due

Ecology = Washington State Department of Ecology.

LAW = low-activity waste.

PT = pretreatment.

SST = single-shell tank.

WMA-C = C Farm waste management area.

Consent Decree Reports/Reviews

D-00C-01 series, Submit to State of Washington and State of Oregon Semi-Annual Report, Due: Semiannually – January 31 and July 31 of each year, Status: Ongoing. The January 2015 Semiannual Report was issued on January 29, 2015, via U.S. Department of Energy (DOE), Office of River Protection (ORP) letter 15-ECD-0006.

D-00C-02 series, Submit to State of Washington and State of Oregon Monthly Summary Reports, Due: End of each month, Status: Ongoing.

D-006-00-A, Meet Approximately Every Three Years after Entry of Decree to review requirements of the Consent Decree, Held: December 10, 2013, Status: Completed.

D-006-00-A1, Provide State of Oregon notice of meetings in D-006-00-A, etc. no less than 30 days before they are scheduled, Sent: November 8, 2013, Status: Completed.

Single-Shell Tank Retrieval Program

Milestone	Title	Due Date	Status
D-00B-01	Complete Retrieval of Tank Wastes from 10 Remaining SSTs in WMA-C	September 30, 2014	Past Due
D-00B-01A through D-00B-01J	Submit Tank Retrieval Complete Certification	One year following each retrieved tank retrieval completion report ^a	Ongoing
D-00B-02	Advise Ecology of the Nine SSTs from which Waste Will Be Retrieved by 2022	September 30, 2014	Completed
D-00B-03	Initiate Startup of Retrieval in At Least 5 of 9 SSTs in D-00B-02	December 31, 2017	Ongoing
D-00B-04	Complete Retrieval of Tank Wastes from the nine SSTs in D-00B-02	September 30, 2022	Ongoing
D-00B-04A through D-00B-04I	Submit Tank Retrieval Complete Certification	TBD	TBD

- a. Pursuant to Section IV-B-5 of the Consent Decree, the U.S. Department of Energy (DOE) must submit to the Washington State Department of Ecology (Ecology) a written certification that DOE has completed retrieval of a tank in accordance with the requirements of Appendix C, Part 1, of the Consent Decree.
Completed for Single-Shell Tank (SST) C-104 on March 21, 2013, via DOE Office of River Protection (ORP) letter 13-TF-0018. Completed for SST C-108 on May 1, 2013, via ORP letter 13-TF-0025. Completed for SST C-109 on June 4, 2013, via ORP letter 13-TF-0037. Completed for SST C-110 on January 29, 2014, via ORP letter 14-TF-0007. Completed for SST C-107 on September 30, 2014, via ORP letter 14-TF-0114. Completed for SST C-112 on September 30, 2014, via ORP letter 14-TF-0115.

TBD = to be determined.
WMA-C = C Farm waste management area.

Significant Past Accomplishments:

- Completed installation a new Enhanced Reach Sluicer System in Riser 2 for C-102, restarted retrieval operations.
- Continued field activities for the replacement of the plugged slurry distributor at AN-106.
- Hose-in-hose transfer line replacement between POR209 and POR104 transfer structures is ongoing. Connection of the new hose-in-hose transfer lines at POR209 and POR104 are complete. Leak check of these connections will be done concurrently with the leak check of the new slurry distributor when installation is complete.
- Continued fabrication of new replacement sluicers for C-111.
- Continued with activities to replace the failed C-111 slurry pump.

Significant Planned Activities in the Next 6 Months:

- Complete retrieval of C-102 using modified sluicing (first technology), initiate second technology using high pressure water for retrieval. Complete retrieval using second technology.
- Finish a C-105 systems engineering evaluation of the current retrieval method; will potentially need a revised tank waste retrieval work plan.

- Continue retrieval of C-105 using Mobile Arm Retrieval System – Vacuum.
- Begin startup of hard heel retrieval in C-111 using high-pressure water, with caustic/water dissolution available.

Issues:

*DOE has notified the State of Washington and State of Oregon that a serious risk has arisen that DOE may be unable to meet this Consent Decree milestone.

Tank Waste Retrieval Work Plan Status

Tank	TWRWP	Expected Revisions	First Retrieval Technology	Second Technology	Third Technology
C-101	RPP-22520, Rev. 8	Complete	Modified Sluicing with ERSS	High-Pressure Water deployed with the ERSS	-
C-102	RPP-22393, Rev. 7	Complete	Modified Sluicing with ERSS	High-Pressure Water deployed with the ERSS	-
C-104	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Retrieval Process complete per 13-TF-0018	-
C-105	RPP-22520, Rev. 8	Complete	MARS-V	MARS-V-High Pressure Water Spray	-
C-107	RPP-22393, Rev. 7	Complete	MARS-S	MARS-S-High Pressure Water Spray	Water Dissolution
C-108	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Retrieval Process complete per 13-TF-0025	-
C-109	RPP-21895, Rev. 5	Complete	Modified Sluicing	Chemical Retrieval Process complete per 13-TF-0037	-
C-110	RPP-33116, Rev. 3	Complete	Modified Sluicing	Mechanical Waste Conditioning with an In-Tank Vehicle	High Pressure Water
C-111	RPP-37739, Rev. 2	Complete	Modified Sluicing	High pressure water using the ERSS	Chemical Dissolution Process with ERSS
C-112	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Retrieval Process	-

ERSS = Extended Reach Sluicing System.

MARS = Mobile Arm Retrieval System.

S = sluicing.

TWRWP = Tank Waste Retrieval Work Plan.

V = vacuum.

Significant Accomplishments:

None.

Significant Planned Activities in the Next 6 Months:

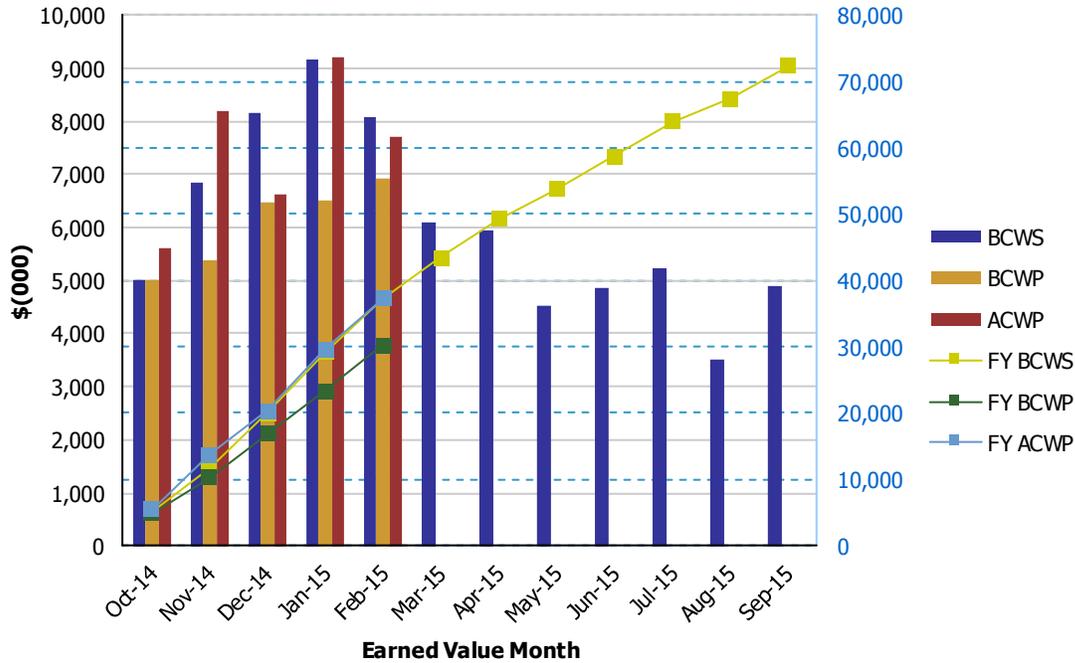
Develop AX Farm tank waste retrieval work plans.

Issues:

None.

**Tank Farms ORP-0014
Retrieve and Close SST's 5.02**

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2014	\$5,024	\$5,011	\$5,609	1.00	0.89	\$5,024	\$5,011	\$5,609	1.00	0.89
Nov 2014	\$6,852	\$5,392	\$8,174	0.79	0.66	\$11,876	\$10,403	\$13,783	0.88	0.75
Dec 2014	\$8,171	\$6,453	\$6,612	0.79	0.98	\$20,047	\$16,856	\$20,395	0.84	0.83
Jan 2015	\$9,167	\$6,524	\$9,195	0.71	0.71	\$29,215	\$23,380	\$29,589	0.80	0.79
Feb 2015	\$8,075	\$6,924	\$7,719	0.86	0.90	\$37,290	\$30,304	\$37,309	0.81	0.81
Mar 2015	\$6,095					\$43,385				
Apr 2015	\$5,926					\$49,311				
May 2015	\$4,509					\$53,819				
Jun 2015	\$4,852					\$58,671				
Jul 2015	\$5,238					\$63,909				
Aug 2015	\$3,527					\$67,436				
Sep 2015	\$4,886					\$72,322				
CTD	\$542,789	\$525,721	\$546,652	0.97	0.96					

Retrieval and Close Single-Shell Tanks

The current month unfavorable cost variance of (\$795K) is due to:

- C-102 Retrieval operations were suspended during the installation of a second ERSS in riser 2; the earned value in C-102 is based on gallons retrieved during a monthly time period, and when maintenance and operational upgrade was performed to bring on high-pressure water the contractor earned no “value” during this time period.

- Several stop work orders were issued related to water softener beads being found on masks after they had been cleaned; these stop work order-impacted project costs related to field activities within C Farm.

The current month unfavorable schedule variance of (\$1,151K) is due to:

- C Farm encountered several self-contained breathing apparatus related stop work orders that were issued due to water softener beads being found on masks after they had been cleaned; these stop work orders delayed the progress of planned field activities.
- A/AX design for supporting facilities (personnel/bathroom/change trailers) did not progress as planned due to other higher priorities.

Waste Treatment and Immobilization Plant Project

Number	Title	Due Date	Status
D-00A-06	Complete Methods Validations	12/31/2017	Ongoing*
D-00A-17	Hot Start of Waste Treatment Plant	12/31/2019	Ongoing*
D-00A-01	Achieve Initial Plant Operations for WTP	12/31/2022	Ongoing*

WTP = Waste Treatment and Immobilization Plant.

The Waste Treatment and Immobilization Plant (WTP) Project currently employs approximately 2,782 full-time equivalent contractor (Bechtel National, Inc. [BNI]) and subcontractor personnel. This includes 588 craft, 425 nonmanual, and 173 subcontractor full-time equivalent personnel working at the WTP construction site (all facilities).

In October 2012, the Pretreatment (PT) and High-Level Waste (HLW) Facilities 2-Year Interim Work Plan was incorporated into the project over-target baseline, and the percent-complete values for PT and HLW facilities were frozen at the September 2012 rate. ORP has approved the fiscal year (FY) 2015 and FY 2016 2-Year Interim Work Plan, and authorized BNI to resume production engineering activities necessary to finalize the design of the HLW Facility. The WTP Project continues to focus on resolving PT Facility technical issues, performing hazard analyses, and completing safety evaluations for process systems. The HLW safety design strategy has been approved by ORP and limited construction is ongoing.

The WTP Project continues to focus on completion of the Low-Activity Waste (LAW) Facility, analytical laboratory (LAB), and Balance of Facilities (BOF) (collectively LBL). As of February 2015, LBL facilities were 65 percent complete, design and engineering was 78 percent complete, procurement was 74 percent complete, construction was 82 percent complete, and startup and commissioning was 13 percent complete.

In February 2015, the cumulative to-date WTP Project schedule variance was a negative \$2.2 million, and the cumulative to-date WTP Project cost variance was a positive \$29.3 million. The major contribution to the cumulative to-date cost and schedule variance is based on the progress of the LBL replan and PT/HLW 2-Year Interim Work Plan.

The following is the project status through the end of February 2015.

Significant Past Accomplishments:

- Approved trend to move the scope of the Emergency Turbine Generator from BOF into HLW scope
- All physical refractory work was completed in both melters (LAW)
- Completed and received approval of the PT Facility 3 year work plan to DOE
- Initiated coatings of the BOF Switchgear Building #91 transformers (2,040 sf) (BOF).

Significant Planned Actions in the Next 6 Months:

- Complete modification at Full-Scale Vessel Testing Facility to support Phase 2 testing for the pulse jet mixer (PJM) controls (PT)
- Submit the Radioactive Liquid Waste Disposal (RLD) Safety Basis Change Package for DOE review (HLW)
- Complete the LAW Facility design and operability review
- Receive caustic scrubber (LAW)
- Finalize Standard High Solids Vessels Design vessel testing planning, test specification/plan, and define simulate and supplemental mixing engineering study (PT)
- Begin LAB system walkdowns in support of direct feed LAW modifications (LAB)
- Install nonradioactive liquid waste disposal system motor control panel (BOF).

Issues:

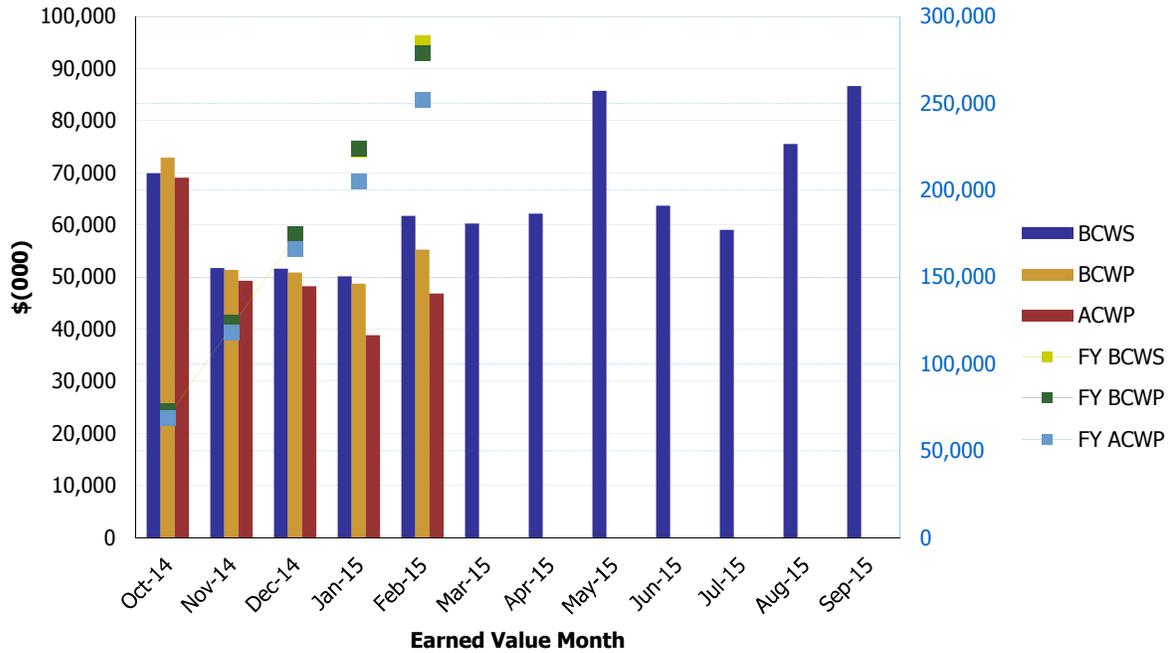
*DOE has notified the State of Washington and State of Oregon that a serious risk has arisen that DOE may be unable to meet this Consent Decree milestone. Technical issues related to WTP include, among others, PJMs, corrosion/erosion in piping and vessels, hydrogen accumulation, criticality, and ventilation.

Data Set: FY 2015 Earned Value Data

Data as of: February 2015

**River Protection Project
Waste Treatment Plant (WTP) Project**

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2014	\$69,893	\$72,879	\$69,039	1.04	1.06	\$69,893	\$72,879	\$69,039	1.04	1.06
Nov 2014	\$51,713	\$51,323	\$49,300	0.99	1.04	\$121,606	\$124,202	\$118,339	1.02	1.05
Dec 2014	\$51,573	\$50,885	\$48,245	0.99	1.05	\$173,179	\$175,087	\$166,583	1.01	1.05
Jan 2015	\$50,143	\$48,696	\$38,818	0.97	1.25	\$223,323	\$223,783	\$205,401	1.00	1.09
Feb 2015	\$61,729	\$55,235	\$46,859	0.89	1.18	\$285,052	\$279,018	\$252,260	0.98	1.11
Mar 2015	\$60,237									
Apr 2015	\$62,136									
May 2015	\$85,703									
Jun 2015	\$63,710									
Jul 2015	\$59,034									
Aug 2015	\$75,542									
Sep 2015	\$86,623									

PTD	\$8,656,531	\$8,654,356	\$8,625,045	1.00	1.00
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Pretreatment Facility

Number	Title	Due Date	Status
D-00A-19	Complete Elevation 98' Concrete Floor Slab in PT Facility	12/31/2014	Past Due
D-00A-13	Complete Installation of Pretreatment Feed Separation Vessels	12/31/2015	Ongoing*
D-00A-14	PT Facility Construction Substantially Complete	12/31/2017	Ongoing*
D-00A-15	Start PT Facility Cold Commissioning	12/31/2018	Ongoing*
D-00A-16	PT Facility Hot Commissioning Complete	12/31/2019	Ongoing*

PT = pretreatment.

The PT Facility will separate radioactive tank waste into HLW and LAW fractions, and transfer each waste type to the respective vitrification facility for immobilization. As of September 2012, the PT Facility was 56 percent complete overall, with engineering design 85 percent complete, procurement 56 percent complete, construction 43 percent complete, and startup and commissioning 3 percent complete. Construction, procurement, and production engineering activities remain on hold, resulting in no change to the percent-complete status since September 2012. BNI and DOE continue to focus on resolving technical issues, performing hazard analyses, and completing safety evaluations for process systems in accordance with the revised PT Facility 3 year work plan.

BNI has submitted resolution plans for eight technical issues: T1, Hydrogen in Vessels; T2, Criticality; T3, Hydrogen in Piping and Ancillary Vessels (HPAV); T4, Mixing; T5, Erosion Corrosion; T6, PT Facility Optimization; T7, Vessel Analysis; and T8, Ventilation. Phase 1 of the Full-Scale Vessel Testing is continuing for the PJM controls utilizing the RLD-8T vessel. Technical review teams continue to evaluate open PT Facility technical issues. An evaluation is ongoing relative to a standardized design for high-solids vessels within the PT Facility.

Significant Past Accomplishments:

- Completed and received approval of the PT Facility 3 year work plan to DOE
- Issued plutonium chemistry study
- Completed Standard High Solids Vessels Design Phase 1 Testing
- Completed five G2 model runs in support to early decision on conceptual design per PT Facility optimization plan.

Significant Planned Actions in the Next 6 Months:

- Commission Phase 2 test specification/plan and platform modifications
- Finalize Standard High Solids Vessels Design vessel testing planning, test specification/plan, and define simulate and supplemental mixing engineering study
- Issue criticality safety evaluation report on informal study for the evaluation of qualitative risk assessment input parameters to be included in the PT Facility safety basis

- Issue criticality safety evaluation report strategy and development plan
- Implement PT Facility systems engineering approach
- Issue fluid dynamics study
- Start informational testing in 8-ft test vessel for down selection of features pertaining to standardized high-solids vessel design
- Complete preliminary analysis of Standard High Solids Vessels Design
- Commission Phase 2 platform modifications
- Issue corrosion simulant basis document for localized corrosion.

Issues:

*DOE has notified the State of Washington and State of Oregon that a serious risk has arisen that DOE may be unable to meet this Consent Decree milestone. Technical issues related to WTP include, among others, PJMs, corrosion/erosion in piping and vessels, hydrogen accumulation, criticality, and ventilation.

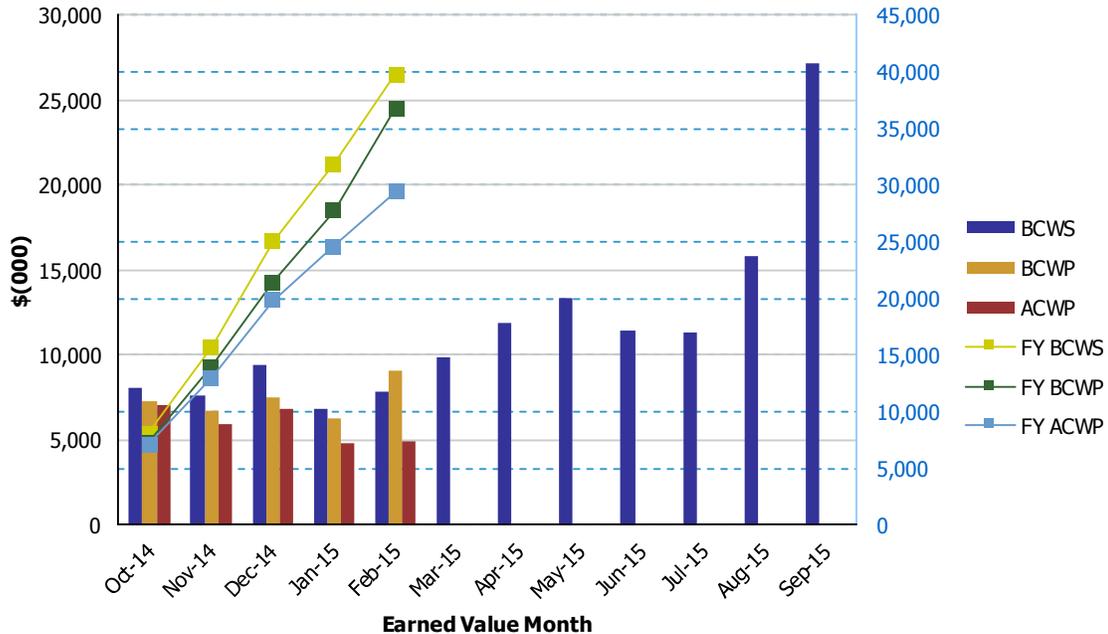
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: February 2015

**River Protection Project
Pretreatment Facility (WBS 1.01)**

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2014	\$8,100	\$7,285	\$7,050	0.90	1.03	\$8,100	\$7,285	\$7,050	0.90	1.03
Nov 2014	\$7,582	\$6,657	\$5,917	0.88	1.13	\$15,682	\$13,942	\$12,967	0.89	1.08
Dec 2014	\$9,361	\$7,472	\$6,841	0.80	1.09	\$25,043	\$21,414	\$19,808	0.86	1.08
Jan 2015	\$6,819	\$6,293	\$4,765	0.92	1.32	\$31,862	\$27,707	\$24,574	0.87	1.13
Feb 2015	\$7,877	\$9,034	\$4,869	1.15	1.86	\$39,740	\$36,742	\$29,442	0.92	1.25
Mar 2015	\$9,855									
Apr 2015	\$11,871									
May 2015	\$13,298									
Jun 2015	\$11,457									
Jul 2015	\$11,322									
Aug 2015	\$15,755									
Sep 2015	\$27,165									

PTD	\$1,646,411	\$1,643,360	\$1,636,069	1.00	1.00
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Mon - SV	Mon - CV
\$1,157	\$4,165
(\$3,051)	\$7,291

FY - SV	FY - CV
(\$2,998)	\$7,299

High-Level Waste Facility

Number	Title	Due Date	Status
D-00A-21	Complete Construction of Structural Steel to 37' in HLW Facility	12/31/2012	Complete
D-00A-02	HLW Facility Construction Substantially Complete	12/31/2016	Ongoing*
D-00A-03	Start HLW Facility Cold Commissioning	6/30/2018	Ongoing*
D-00A-04	HLW Facility Hot Commissioning Complete	12/31/2019	Ongoing*

HLW = high-level waste.

The HLW Facility will receive the separated HLW concentrate from the PT Facility. This concentrate will be blended with glass formers, converted into molten glass in one of the two HLW melters, and then poured into cylindrical stainless steel canisters. After cooling, the canisters will be sealed and decontaminated before shipping to interim storage.

As of September 2012, the HLW Facility was 62 percent complete overall, with engineering design 89 percent complete, procurement 81 percent complete, construction 43 percent complete, and startup and commissioning 4 percent complete. Construction, procurement, and production engineering activities have been significantly slowed down, resulting in minimal change to the percent completion status since September. Construction is continuing concrete placements and installation of support steel and crane rails in the canister handling cave.

Engineering release of upcoming wall and slab placements is ongoing providing for a continuous construction workflow. DOE and BNI are continuing to evaluate high-efficiency particulate air (HEPA) filter test data from Mississippi State University (MSU; Phase 1, Iteration 1), in addition to data from previous testing, to develop the path forward to proceed to Iteration 2 testing.

BNI is focused on design maturity of key systems through the development of System Design Descriptions (SDD) in accordance with the Systems Engineering Management Plan. Design is progressing for RLD vessels 7 and 8. The request for proposal for RLD-8 detailed vendor design has been issued. Work also continues on hazards analysis and engineering studies to develop paths forward for resolution of issues regarding the HVAC (heating, ventilation, and air-conditioning) systems, melters, and solid waste handling systems.

Significant Past Accomplishments:

- Issued six SDDs this month for a total of 11
- Continued development of path forward of MSU Phase 1, Iteration 2 HEPA filter test plan
- Approved trend to move the scope of the Emergency Turbine Generator from BOF into HLW scope
- Issued request for proposal for vendor design of RLD-8 vessel
- Issued request for proposal for fireproofing for HLW Annex structural steel

- Released six slabs (4001, 4002, 4003, 4004, 4012, 4032) to construction +58 ft
- Placed two slabs (4006, 4022) and two walls (3112, 3113)
- Installed 19 tons of structural steel.

Significant Planned Actions in the Next 6 Months:

- Issue the RLD Control Selection Report
- Submit the RLD Safety Basis Change Package for DOE review
- Initiate improved Nuclear Safety/Engineering analysis process
- Complete vendor fabrication of Autosampling System (ASX) units 29/42
- Perform vendor documentation reviews in preparation for the installation of ASX framing
- Evaluate ASX installation plan for impact to the Washington State Department of Ecology permit
- Continue installation of crane rails and supports in the canister handling cave
- Issue remaining outstanding SDDs
- Finalize and begin execution of MSU Phase 1, Iteration 2 HEPA filter test plan
- Initiate operational research modeling of waste, melter, and melter cave support handling systems.

Issues:

*DOE has notified the State of Washington and State of Oregon that a serious risk has arisen that DOE may be unable to meet this Consent Decree milestone. Technical issues related to the WTP include, among others, PJMs, corrosion/erosion in piping and vessels, hydrogen accumulation, criticality, and ventilation.

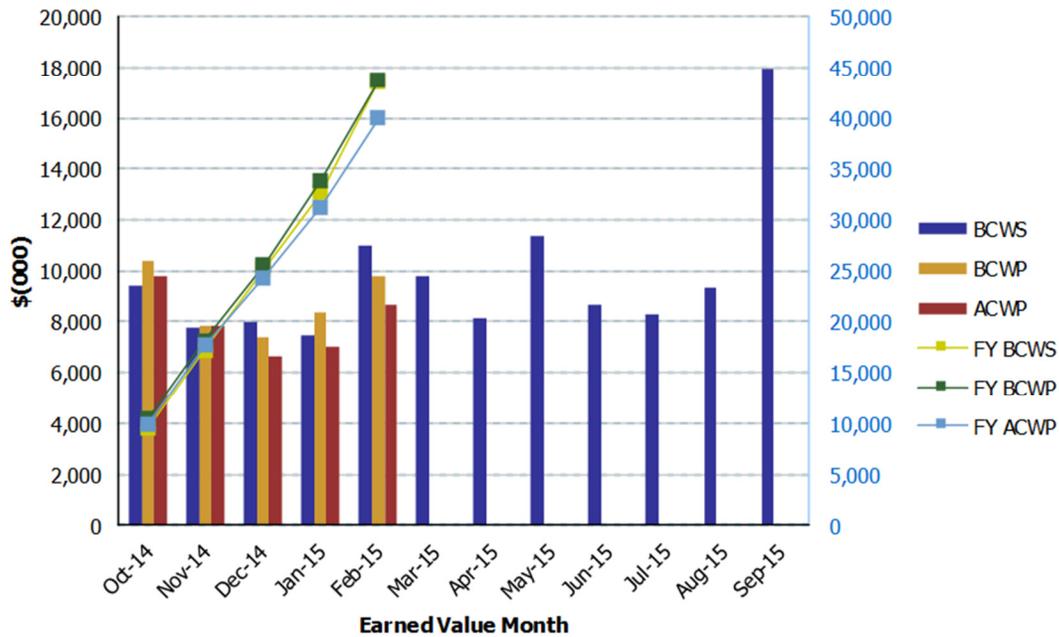
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: February 2015

**River Protection Project
High-Level Waste Facility (WBS 1.03)**

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2014	\$9,449	\$10,367	\$9,783	1.10	1.06	\$9,449	\$10,367	\$9,783	1.10	1.06
Nov 2014	\$7,743	\$7,833	\$7,880	1.01	0.99	\$17,192	\$18,200	\$17,663	1.06	1.03
Dec 2014	\$7,973	\$7,359	\$6,631	0.92	1.11	\$25,165	\$25,559	\$24,294	1.02	1.05
Jan 2015	\$7,490	\$8,342	\$6,994	1.11	1.19	\$32,655	\$33,901	\$31,288	1.04	1.08
Feb 2015	\$10,995	\$9,796	\$8,662	0.89	1.13	\$43,650	\$43,698	\$39,949	1.00	1.09
Mar 2015	\$9,792									
Apr 2015	\$8,151									
May 2015	\$11,369									
Jun 2015	\$8,688									
Jul 2015	\$8,290									
Aug 2015	\$9,315									
Sep 2015	\$17,990									

PTD	\$1,097,763	\$1,098,069	\$1,094,011	1.00	1.00
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Mon - SV	Mon - CV
(\$1,199)	\$1,135
\$305	\$4,058

FY - SV	FY - CV
\$47	\$3,748

Low-Activity Waste Facility

Number	Title	Due Date	Status
D-00A-07	LAW Facility Construction Substantially Complete	12/31/2014	Past Due
D-00A-08	Start LAW Facility Cold Commissioning	12/31/2018	Ongoing*
D-00A-09	LAW Facility Hot Commissioning Complete	12/31/2019	Ongoing*

LAW = low-activity waste.

The LAW Facility will process LAW that will be mixed with glass formers, vitrified into glass at a design capacity of 30 metric tons per day, and placed in stainless steel containers anticipated to be disposed of on the Hanford Site in the Integrated Disposal Facility. As of February 2015, the LAW Facility was 69 percent complete overall, with engineering design 81 percent complete, procurement 76 percent complete, construction 78 percent complete, and startup and commissioning 9 percent complete.

Significant Past Accomplishments:

- All physical refractory work was completed in both melters
- Released Uninterruptable Power Source material requisition for award
- Released active gas analyzer material requisition for award
- Installed over 190 linear feet of process piping and hydro-tested 10 linear feet of piping
- Installed over 160 linear feet of conduit and pulled approximately 3,500 linear feet of cable.

Significant Planned Actions in the Next 6 Months:

- Complete subcontractor work scope in the annex
- Complete the LAW Facility design and operability review
- Receive caustic scrubber
- Complete repair wet electrostatic precipitator vessel
- Assemble and install wet electrostatic precipitator internals.

Issues:

*DOE has notified the State of Washington and State of Oregon that a serious risk has arisen that DOE may be unable to meet this Consent Decree milestone.

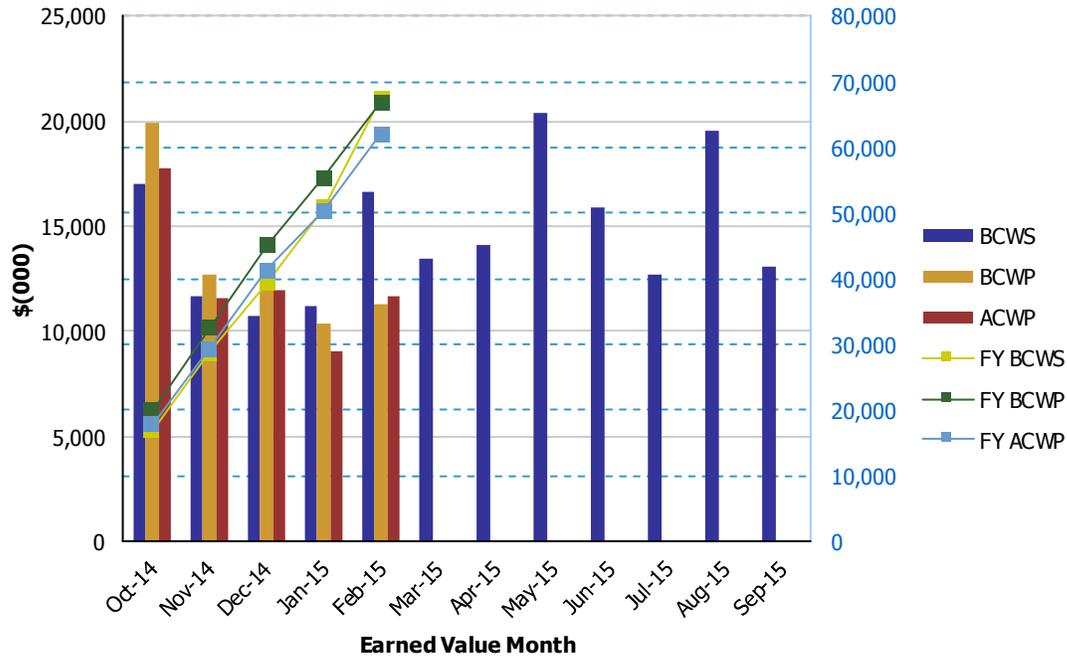
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: February 2015

River Protection Project
Low-Activity Waste Facility (WBS 1.02)

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2014	\$16,994	\$19,896	\$17,781	1.17	1.12	\$16,994	\$19,896	\$17,781	1.17	1.12
Nov 2014	\$11,700	\$12,666	\$11,597	1.08	1.09	\$28,694	\$32,562	\$29,378	1.13	1.11
Dec 2014	\$10,760	\$12,499	\$11,927	1.16	1.05	\$39,454	\$45,061	\$41,305	1.14	1.09
Jan 2015	\$11,248	\$10,387	\$9,033	0.92	1.15	\$50,702	\$55,448	\$50,338	1.09	1.10
Feb 2015	\$16,654	\$11,341	\$11,676	0.68	0.97	\$67,356	\$66,789	\$62,014	0.99	1.08
Mar 2015	\$13,444									
Apr 2015	\$14,118									
May 2015	\$20,343									
Jun 2015	\$15,877									
Jul 2015	\$12,705									
Aug 2015	\$19,548									
Sep 2015	\$13,062									

PTD	\$1,041,550	\$1,043,790	\$1,040,182	1.00	1.00
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Balance of Facilities

Number	Title	Due Date	Status
D-00A-12	Steam Plant Construction Complete	12/31/2012	Complete

The BOF will provide services and utilities to support operation of the main production facilities: PT, HLW, LAW, and LAB. As of February 2015, BOF was 58 percent complete overall, with engineering design 78 percent complete, procurement 67 percent complete, construction 83 percent complete, and startup and commissioning 14 percent complete.

BNI has initiated design activities to incorporate a permanent capability to directly feed LAW. Engineering activities are in progress to develop the preliminary design for BOF systems in support of direct feed LAW. Construction efforts are focused on the Standby Diesel Generator Facility and the nonradioactive liquid drain (54) facilities.

Significant Past Accomplishments:

- Continued coatings applications for Steam Plant piping
- Initiated coatings of the BOF Switchgear Building #91 transformers
- Installed over 110 linear feet of conduit and pulled approximately 60 linear feet of cable.

Significant Planned Actions in the Next 6 Months:

- Complete heat trace insulation in the Cooling Tower Facility
- Complete heat trace insulation in the water treatment building
- Receive and install nonradioactive liquid waste disposal system motor control panel
- Complete component testing of the low-voltage, medium-voltage, and fire detection systems for switchgear Buildings 87 and 91.

Issues:

No major issues at this time.

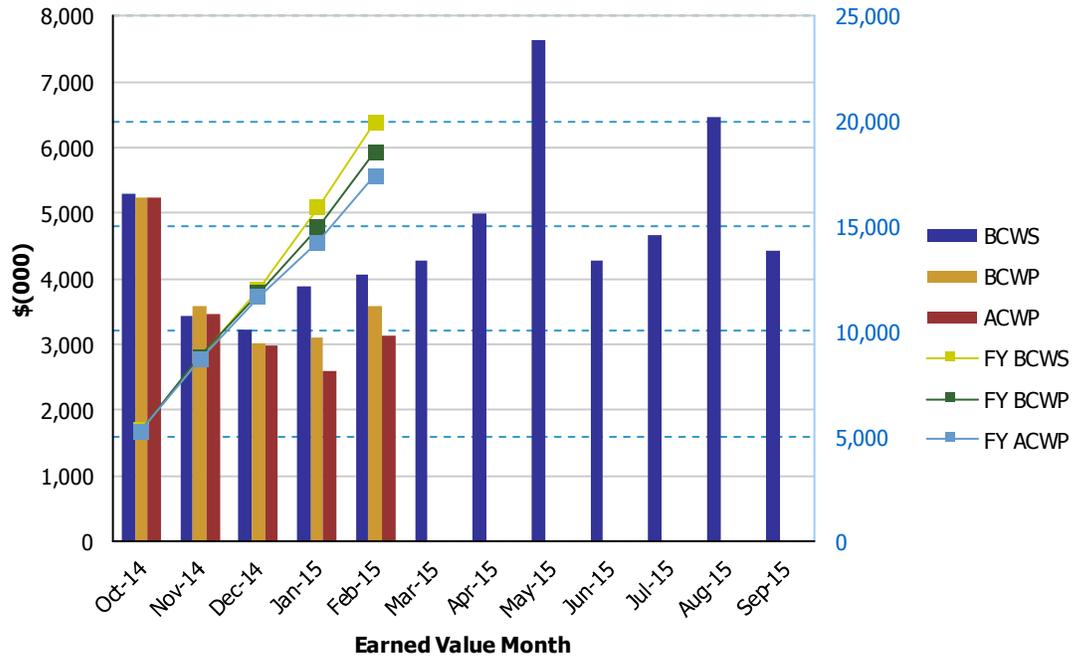
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: February 2015

**River Protection Project
Balance of Facilities (WBS 1.05)**

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2014	\$5,300	\$5,238	\$5,223	0.99	1.00	\$5,300	\$5,238	\$5,223	0.99	1.00
Nov 2014	\$3,429	\$3,578	\$3,454	1.04	1.04	\$8,729	\$8,816	\$8,677	1.01	1.02
Dec 2014	\$3,240	\$3,023	\$2,976	0.93	1.02	\$11,969	\$11,839	\$11,653	0.99	1.02
Jan 2015	\$3,885	\$3,098	\$2,584	0.80	1.20	\$15,854	\$14,937	\$14,237	0.94	1.05
Feb 2015	\$4,074	\$3,578	\$3,151	0.88	1.14	\$19,928	\$18,515	\$17,388	0.93	1.06
Mar 2015	\$4,270									
Apr 2015	\$4,982									
May 2015	\$7,617									
Jun 2015	\$4,265									
Jul 2015	\$4,679									
Aug 2015	\$6,476									
Sep 2015	\$4,425									

PTD	\$366,595	\$365,614	\$364,518	1.00	1.00
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Analytical Laboratory

Number	Title	Due Date	Status
D-00A-05	LAB Construction Substantially Complete	12/31/2012	Complete

LAB = Analytical Laboratory.

The LAB will support WTP operations by analyzing feed, vitrified waste, and effluent streams. As of February 2015, the LAB was 75 percent complete overall, with engineering design 83 percent complete, procurement 87 percent complete, construction 94 percent complete, and startup and commissioning 20 percent complete.

During this reporting period engineering efforts were focused on closure of nonconformance reports and construction deficiency reports. The remaining LAB construction workscope is minimal and construction efforts in the LAB will be suspended. The remaining construction workscope will be completed in parallel with system modifications and construction activities required to support direct feed of LAW.

Significant Past Accomplishments:

- Continued cable pulls and terminations (1,000 linear feet in February)
- Continued installation of conduit (250 linear feet in February)
- Subcontractor installed/adjusted 58 lateral restraints and 18 hangers in accordance with Uniform Building Code flooding requirements.

Significant Planned Actions in the Next 6 Months:

- Place LAB construction punchlist activities on hold
- Initiate component level testing of select LAB systems
- Begin LAB system walkdowns in support of direct feed LAW modifications
- Begin analytical methods development.

Issues:

No major issues at this time.

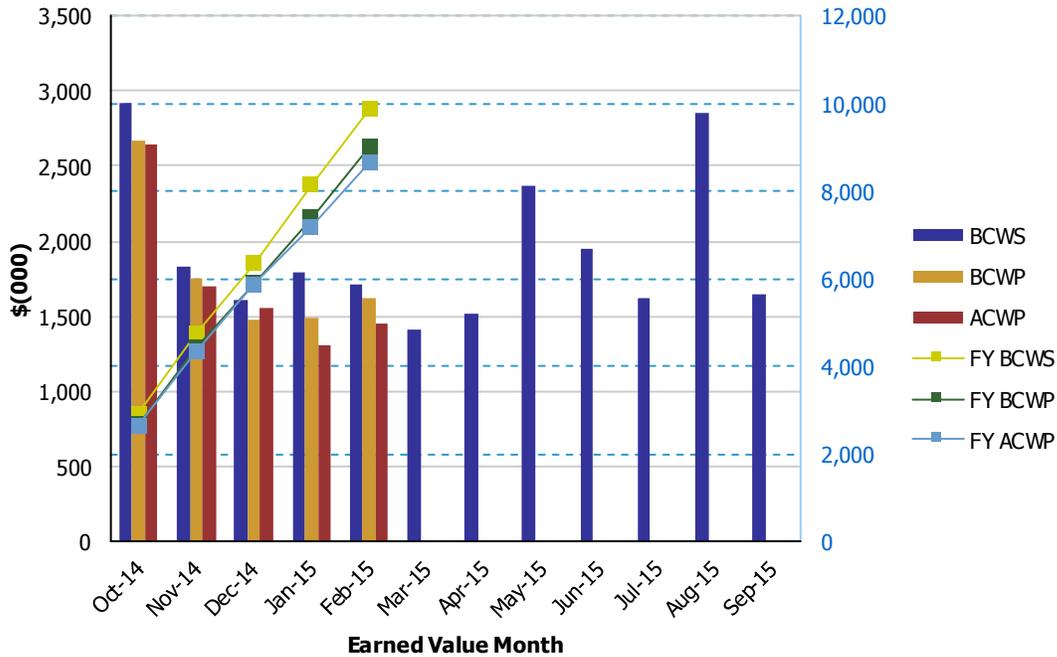
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: February 2015

**River Protection Project
Analytical Laboratory (WBS 1.06)**

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2014	\$2,920	\$2,670	\$2,645	0.91	1.01	\$2,920	\$2,670	\$2,645	0.91	1.01
Nov 2014	\$1,827	\$1,748	\$1,695	0.96	1.03	\$4,747	\$4,418	\$4,340	0.93	1.02
Dec 2014	\$1,614	\$1,482	\$1,552	0.92	0.95	\$6,361	\$5,900	\$5,892	0.93	1.00
Jan 2015	\$1,788	\$1,490	\$1,304	0.83	1.14	\$8,149	\$7,390	\$7,196	0.91	1.03
Feb 2015	\$1,716	\$1,618	\$1,447	0.94	1.12	\$9,865	\$9,008	\$8,643	0.91	1.04
Mar 2015	\$1,413									
Apr 2015	\$1,522									
May 2015	\$2,373									
Jun 2015	\$1,955									
Jul 2015	\$1,628									
Aug 2015	\$2,858									
Sep 2015	\$1,652									

PTD	\$292,380	\$291,938	\$291,770	1.00	1.00
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**Waste Treatment Plant Project - (LBL/Project Services) Percent Complete Status
Through February 2015**

(Dollars - Millions)	Overall Facility Percent Complete Unallocated Dollars			Design/Engineering Unallocated Dollars			Procurement Unallocated Dollars			Construction Unallocated Dollars			Startup & Plant Operations Unallocated Dollars			Project Management & Shared Services Unallocated Dollars		
	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete
Facilities																		
Low-Activity Waste	1,522.3	1,043.8	69%	415.6	334.7	81%	318.8	243.7	76%	570.5	443.0	78%	213.5	18.4	9%	4.0	4.0	100%
Balance of Facilities	627.5	365.6	58%	122.6	95.2	78%	78.4	52.3	67%	228.2	190.1	83%	197.9	27.6	14%	0.5	0.5	100%
Analytical Lab	389.1	291.9	75%	89.3	73.7	83%	63.4	55.1	87%	156.0	146.4	94%	80.0	16.2	20%	0.4	0.4	100%
Direct Feed LAW	21.9	2.0	9%	18.9	1.6	9%	0.52	0.07	13%	0.1	0.0	1%	0.0	0.0	0%	2.3	0.32	14%
LBL Facility Services	91.6	18.9	21%	0.0	0.0	0%	20.0	4.0	20%	0.0	0.0	0%	31.1	5.8	19%	40.5	9.05	22%
Total LBL	2,652.3	1,722.3	65%	646.3	505.3	78%	481.1	355.3	74%	954.8	779.4	82%	522.5	68.1	13%	47.7	14.2	30%
Project Services	404.7	91.5	23%	49.6	10.3	21%	37.3	7.7	21%	123.8	30.5	25%	2.9	1.2	41%	191.0	41.8	22%
Total Project Services	404.7	91.5	23%	49.6	10.3	21%	37.3	7.7	21%	123.8	30.5	25%	2.9	1.2	41%	191.0	41.8	22%
Total LBL & Project Services																		
	3,057.0	1,813.7	59%	695.9	515.6	74%	518.4	362.9	70%	1,078.6	809.9	75%	525.4	69.3	13%	238.6	56.0	23%
PT/HLW/SS Percent Complete Status Frozen as of September 2012 (due to project rebaselining efforts)																		
High-Level Waste	1,478.6	922.1	62%	364.4	325.2	89%	433.9	349.4	81%	561.1	243.2	43%	119.2	4.4	4%	n/a	n/a	n/a
Pretreatment	2,517.3	1,410.5	56%	761.7	645.8	85%	679.9	380.4	56%	890.0	378.6	43%	185.8	5.6	3%	n/a	n/a	n/a
Shared Services	4,726.9	3,632.6	77%	1,047.0	977.9	93%	451.7	395.0	87%	1,436.5	1,143.0	80%	453.5	133.2	29%	1,338.1	983.5	73%
Total HLW/PT/SS	8,722.8	5,965.2	68%	2,173.1	1,948.9	90%	1,565.5	1,124.8	72%	2,887.6	1,764.8	61%	758.5	143.2	19%	1,338.1	983.5	73%
Undistributed Budget	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total WTP	11,779.8	7,778.9	66%	2,869.0	2,464.5	86%	2,083.9	1,487.7	71%	3,966.2	2,574.7	65%	1,283.9	212.5	17%	1,576.7	1,039.5	66%

Source: Preliminary WTP Contract Performance Report - Format 1, Data for February 2015

Note: In September 2012, the LBL Replan was incorporated into the project OTB baseline resulting in increases/decreases to the LBL facility budgets, which correspondingly increased/decreased the facility/function to-date percent complete values. In October 2012, the PT/HLW/SS Interim Work Plan was incorporated into the project OTB baseline resulting in decreases to the PT/HLW/SS facility budgets, this was due to a work scope shift from the Distributed budget to UB. Percent Complete Values shown for PT, HLW and SS have been frozen with the September 2012 values due to the Interim Work Plan and budgets being moved into UB. UB value for the project for PT/HLW/SS is \$2,014M. The percent complete values for the Total WTP are the current total LBL BCWP added to the frozen HLW/PT/SS BCWP values. In March 2014, Project Controls and Project Management work scope was moved out of Shared Services control accounts into the facilities with new control accounts being set up in the facilities. These will now be seen under Project Management/Shared Services by facility. The Shared Services PMB value has not been changed to reflect this change due to the freeze on HLW/PT and SS and the budgets remaining in UB. October 2014 data reflects the incorporation of Direct Feed LAW and the split of Shared Services into LBL Facility Services and Project Services.