

**FINAL**

Office of River Protection  
Consent Decree 08-5085-FVS

Monthly Summary Report

March 2015

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

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## CD Milestone Statistics/Status

Milestone	Title	Due Date	Completion Date	Status
<b>Fiscal Year 2014</b>				
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
<b>Fiscal Year 2015</b>				
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

DOE = U.S. Department of Energy.

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 <sup>a</sup>	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 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:

- Continued with activities to install a new Enhanced Reach Sluicer System in Riser 2.
- Continued field activities for the replacement of the plugged slurry distributor at AN-106.
- Hose-in-hose transfer line (HIHTL) replacement between POR209 and POR104 transfer structures is ongoing. Expired HIHTLs have been disconnected. Initiating the connection of the new HIHTLs.
- Continued fabrication of new replacement sluicers for C-111.
- Tested the existing C-111 slurry pump and it failed operational testing. Activities to replace this pump are being initiated.

### 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**

<b>Tank</b>	<b>TWRWP</b>	<b>Expected Revisions</b>	<b>First Retrieval Technology</b>	<b>Second Technology</b>	<b>Third Technology</b>
C-101	RPP-22520, Rev. 8	Complete	Modified Sluicing with ERSS	High-Pressure Water deployed with the ERSS	-
C-102	RPP-22393, Rev. 7	In Process	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:**

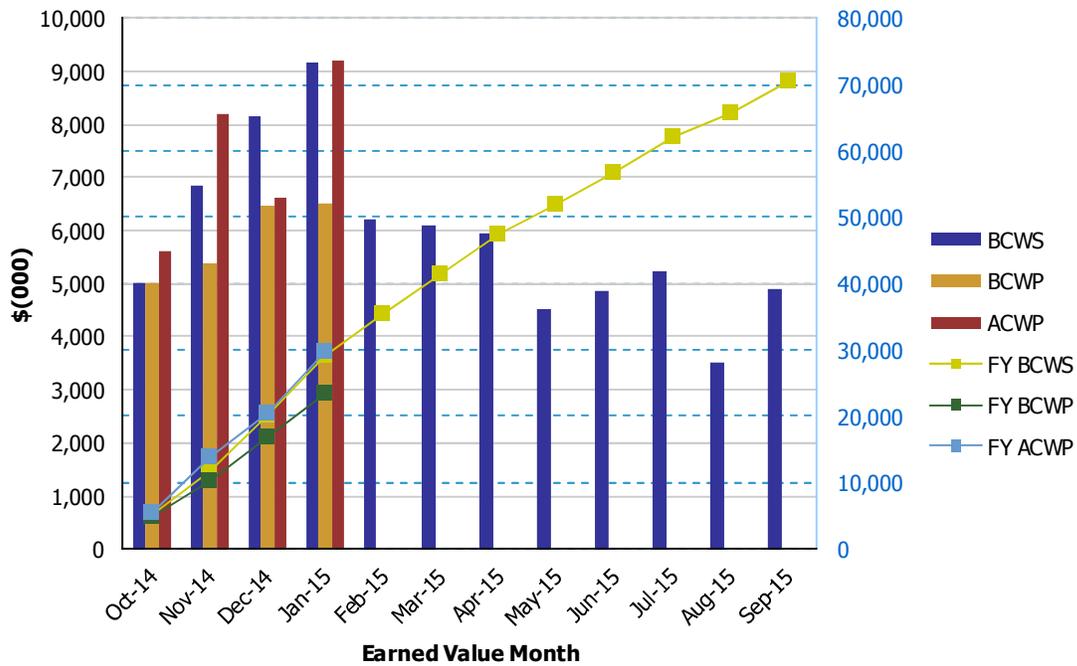
None.

**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	\$6,205					\$35,419				
Mar 2015	\$6,095					\$41,514				
Apr 2015	\$5,926					\$47,440				
May 2015	\$4,509					\$51,949				
Jun 2015	\$4,852					\$56,800				
Jul 2015	\$5,238					\$62,039				
Aug 2015	\$3,527					\$65,565				
Sep 2015	\$4,886					\$70,451				
CTD	\$534,714	\$518,797	\$538,933	0.97	0.96					

***Retrieval and Close Single-Shell Tanks***

The current month unfavorable cost variance of (\$2,671K) is due to:

- Single-shell tank retrieval operations training and qualifications for hiring additional industrial hygiene technicians and health physics technicians in support of AY-102 and A/AX construction
- C-102 retrieval and limitations of self-contained breathing apparatus (SCBA) from the mask cleaning vendor
- C-105 retrieval and awaiting the removal and replacement of the plugged slurry distributor in AN-106
- Installation of POR-126 and POR-127 exhausters at A/AX Tank Farm
- A/AX support facility bathrooms, change trailers, and new SCBA bottle stations.

The current month unfavorable schedule variance of (\$2,644K) is due to:

- Additional new requirements set forth from SRNL-RP-2014-00791, “Hanford Tank Vapor Assessment Report”
- C-111 retrieval subcontract delays in the extended reach sluicer system replacement procurement due to issues encountered during testing and swapping to nitrile hoses
- C-112 retrieval data report sampling impacted by limited work crew availability under the enhanced vapor control protection
- Upgraded SCBA storage capability to keep SCBA regulators above 40°F, and cleaning capability at the mask cleaning vendor.

## 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 2,244 full-time equivalent contractor (Bechtel National, Inc. [BNI]) and subcontractor personnel. This includes 597 craft, 425 nonmanual, and 163 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 January 2015, LBL facilities were 65 percent complete, design and engineering was 79 percent complete, procurement was 74 percent complete, construction was 81 percent complete, and startup and commissioning was 12 percent complete.

In January 2015, the cumulative to-date WTP Project schedule variance was a positive \$4.3 million, and the cumulative to-date WTP Project cost variance was a positive \$20.9 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 January 2015.

### Significant Past Accomplishments:

- Risk workshops were conducted to develop and define risk and opportunities associated with the resolution of technical issues (PT)
- Completed melter airlock, C5V fan redundancy options, C5V exhaust duct increased capacity and secondary waste export studies (HLW)
- Completed NQA-1 qualification of Mississippi State University test facility (HLW)
- Completed radioactive liquid waste disposal (RLD) vessel control selection (HLW)
- Completed the lower-level Versaflo placement in Melter #1 (LAW)
- Completed the Plenum Kaolite placements in Melter #2 (LAW)

- Completed the Kolite placements in the discharge chambers for both Melter #1 and Melter #2 (LAW).

**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)
- DOE approval of PT Facility Resumption Plan to support DOE authorization to proceed with production engineering (PT)
- Complete the LAW Facility design and operability review (LAW)
- Complete construction of the LAB (LAB)
- Initiate component level testing of select LAB systems (LAB)
- Install nonradioactive liquid waste disposal system motor control panel (BOF).

**Issues:**

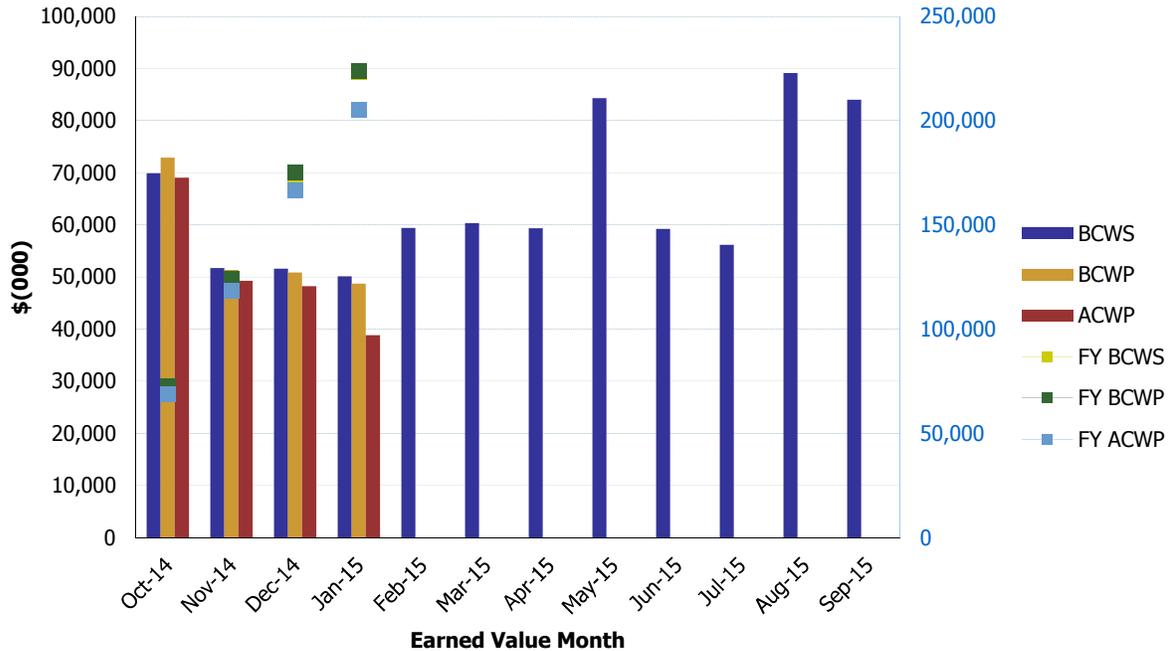
\*DOE has notified the State of Washington and State of Oregon that a serious risk has arisen that DOE may be unable to meet this Consent Decree milestone. Technical issues related to WTP include, among others, PJMs, corrosion/erosion in piping and vessels, hydrogen accumulation, criticality, and ventilation.

Data Set: FY 2015 Earned Value Data

Data as of: January 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	\$166,584	1.01	1.05
Jan 2015	\$50,143	\$48,696	\$38,818	0.97	1.25	\$223,322	\$223,783	\$205,402	1.00	1.09
Feb 2015	\$59,412									
Mar 2015	\$60,303									
Apr 2015	\$59,356									
May 2015	\$84,311									
Jun 2015	\$59,231									
Jul 2015	\$56,164									
Aug 2015	\$89,139									
Sep 2015	\$84,025									

PTD	\$8,594,802	\$8,599,122	\$8,578,186	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 PT/HLW 2-Year Interim 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:

- Risk workshops were conducted to develop and define risk and opportunities associated with the resolution of technical issues.

### 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, defining simulate and supplemental mixing engineering study
- Issue report on informal study for the evaluation of qualitative risk assessment input parameters to be included in the PT Facility safety basis
- Implement PT Facility systems engineering approach
- 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

- 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.

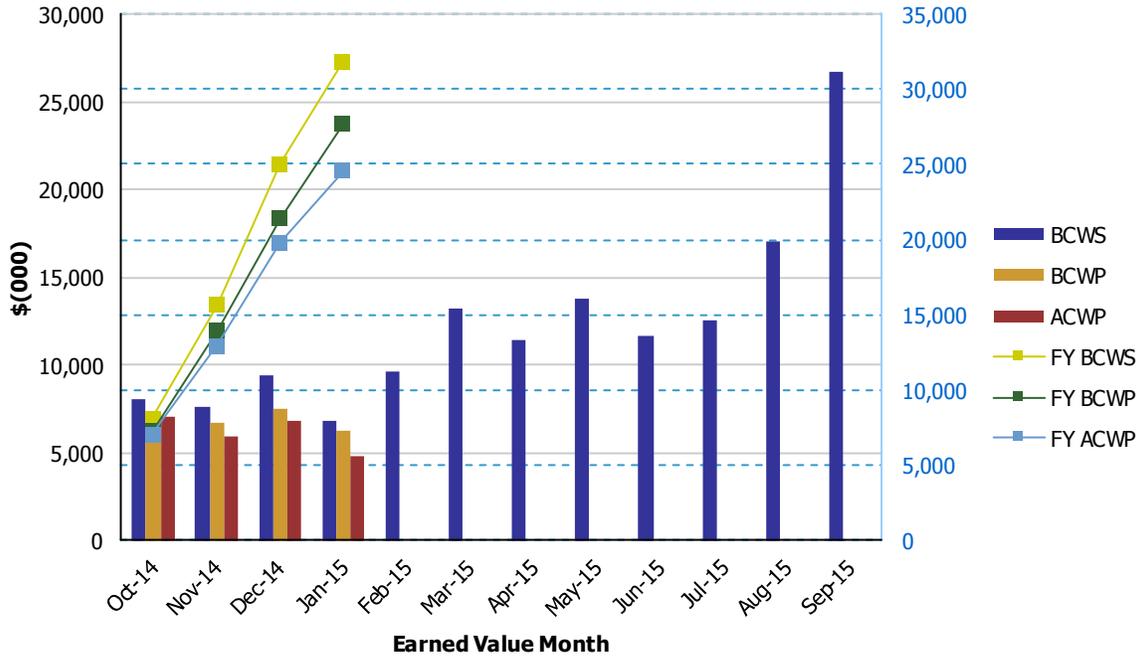
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: January 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	\$9,649									
Mar 2015	\$13,219									
Apr 2015	\$11,483									
May 2015	\$13,738									
Jun 2015	\$11,633									
Jul 2015	\$12,497									
Aug 2015	\$17,059									
Sep 2015	\$26,656									

PTD	\$1,638,534	\$1,634,326	\$1,631,200	1.00	1.00
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Mon - SV	Mon - CV
(\$527)	\$1,527
(\$4,208)	\$3,125

FY - SV	FY - CV
(\$4,155)	\$3,134

## 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 shipment 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. BNI is working to the 2-year plan for FY 2015 and FY 2016. Construction is continuing concrete placements at elevation +58 ft, installation of support steel, and crane rails in the canister handling cave. Preliminary results from the initial testing of modified high-efficiency particulate air (HEPA) filters at Mississippi State University (Phase 1, Iteration 1) indicates that some of the filters are challenged to meet the efficiency requirements. DOE and BNI are evaluating options, including review of the conservative bounding operating conditions, safety controls, modifications to HEPA design etc. to develop the path forward to proceed to future testing.

BNI is focused on issuing System Design Descriptions (SDD) in accordance with the Systems Engineering Management Plan to strengthen the design development of key HLW systems. Significant progress has been made in the development of the SDDs. A number of SDDs have been issued, and many are at various stages of development. BNI is continuing with the RLD system redesign and safety basis change package to issue the purchase order for detailed design of the vessels by vendor. Additionally, work is also continuing on hazards analysis and engineering studies to develop path forward for resolution of issues regarding the HVAC (heating, ventilation, and air-conditioning) systems, melters, and solid waste handling systems.

### Significant Past Accomplishments:

- Incorporated HLW Safety Design Strategy-Preliminary Documented Safety Analysis Gap analysis actions in FY 2015/2016 work plan.
- Submitted HLW Melter Feed Systems Hazard Analysis Report for review.

- Completed the initial melter airlock, C5V fan redundancy options, and C5V exhaust duct increased capacity and secondary waste export studies. Additional studies are being performed to develop conceptual design options.
- Released four walls (9406, 9407, and 3114) and slabs (4030) at +58 ft elevation, to construction.
- Completed NQA-1 qualification of Mississippi State University test facility.
- Issued HLW Facility design description.
- Completed RLD vessel control selection.
- Five SDD have been issued.
- Continuing activities to transfer the scope of the emergency turbine generator from BOF into HLW scope.

**Significant Planned Actions in the Next 6 Months:**

- Submit the RLD safety basis change package for DOE review
- Issue request for proposal for vendor design of RLD-8 vessel
- Issue request for proposal for fireproofing for HLW annex structural steel
- Continue efforts to release slabs 4001, 4002, 4003, 4004, 4012, and 4032
- Continue installation of crane rails and supports in the canister handling cave
- Issue remaining SDDs
- Finalize path forward and begin execution of Mississippi State University Phase 1, Iteration 2 HEPA filter test.

**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.

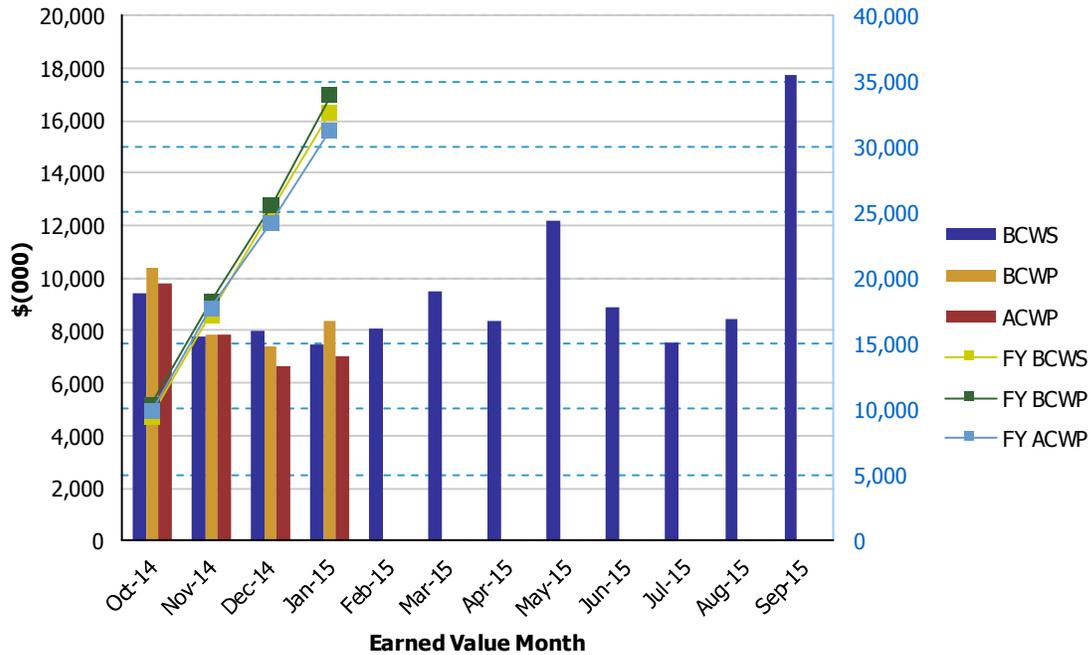
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: January 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	\$8,093									
Mar 2015	\$9,495									
Apr 2015	\$8,339									
May 2015	\$12,214									
Jun 2015	\$8,890									
Jul 2015	\$7,537									
Aug 2015	\$8,442									
Sep 2015	\$17,700									

PTD	\$1,086,768	\$1,088,272	\$1,085,349	1.00	1.00
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Mon - SV	Mon - CV
\$852	\$1,348
\$1,504	\$2,923

FY - SV	FY - CV
\$1,246	\$2,613

## 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 the 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 January 2015, the LAW Facility was 68 percent complete overall, with engineering design 80 percent complete, procurement 76 percent complete, construction 77 percent complete, and startup and commissioning 8 percent complete.

### Significant Past Accomplishments:

- Completed the lower-level Versaflo placement in Melter #1
- Completed the Plenum Kaolite placements in Melter #2
- Completed the Kolite placements in the discharge chambers for both Melter #1 and Melter #2
- Installed over 130 linear feet of process piping and hydro-tested 280 linear feet of piping
- Installed over 180 linear feet of conduit and pulled approximately 9,060 linear feet of cable.

### Significant Planned Actions in the Next 6 Months:

- Complete subcontractor work scope in the annex
- Award the purchase order for the active gas analyzers
- Complete the LAW Facility design and operability review
- Complete castable refractory installation in the melters
- 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.

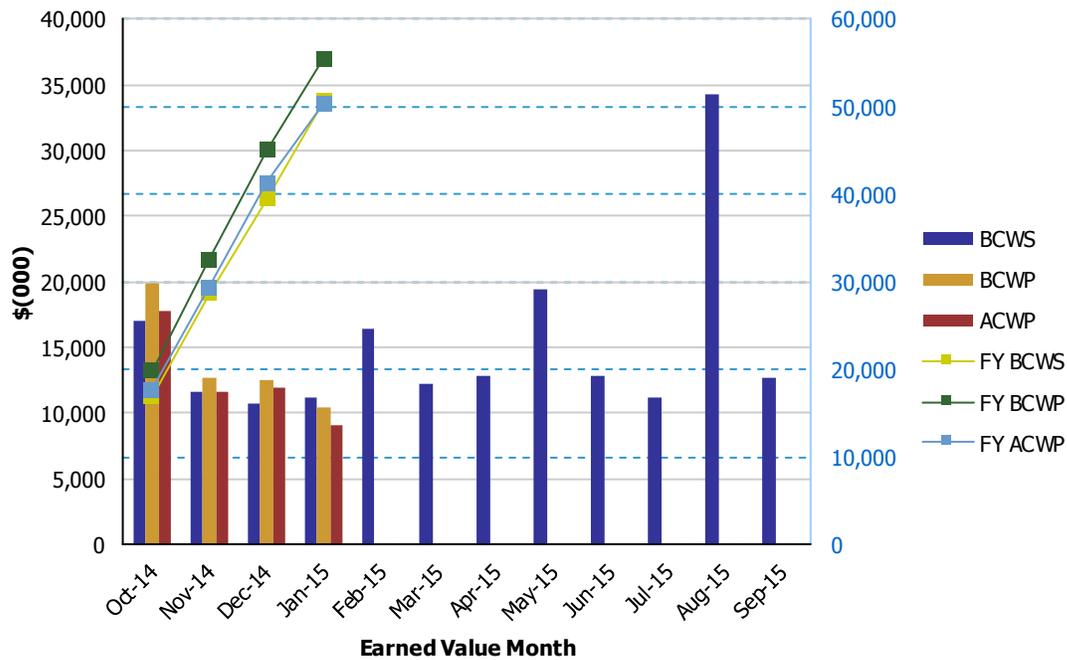
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: January 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	\$16,433									
Mar 2015	\$12,312									
Apr 2015	\$12,818									
May 2015	\$19,369									
Jun 2015	\$12,814									
Jul 2015	\$11,166									
Aug 2015	\$34,271									
Sep 2015	\$12,646									

PTD	\$1,024,897	\$1,032,449	\$1,028,506	1.01	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 January 2015, BOF was 58 percent complete overall, with engineering design 77 percent complete, procurement 67 percent complete, construction 83 percent complete, and startup and commissioning 13 percent complete.

BNI has initiated design activities to incorporate a permanent capability to directly feed LAW. Commercial grade dedication activities in support of the emergency turbine generator procurement are the primary focus for the quality and procurement organizations. Construction efforts are focused on the Standby Diesel Generator Facility and the nonradioactive liquid drain (54) facilities.

### Significant Past Accomplishments:

- Began installing lateral restraints and hangers in the chiller compressor Building 82
- Completed 90 linear feet of conduit and pulled 70 linear feet of cable
- Completed 2,700 square feet of coatings for the steam plant piping.

### 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.

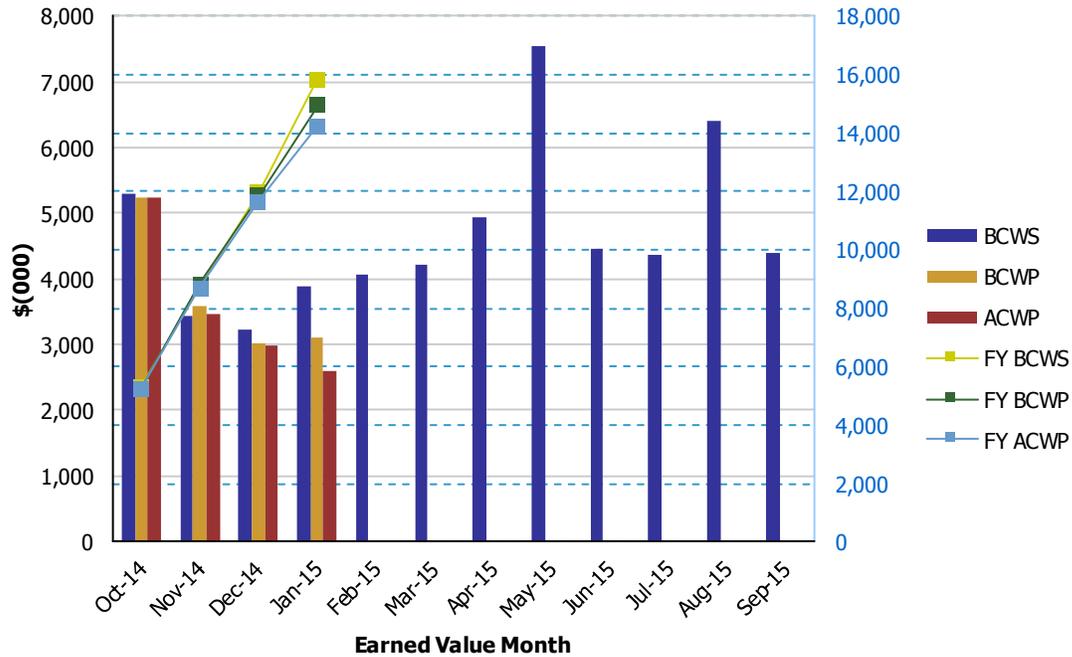
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: January 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	\$4,067									
Mar 2015	\$4,226									
Apr 2015	\$4,945									
May 2015	\$7,550									
Jun 2015	\$4,467									
Jul 2015	\$4,359									
Aug 2015	\$6,413									
Sep 2015	\$4,405									

PTD	\$362,521	\$362,036	\$361,367	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 January 2015, the LAB was 75 percent complete overall, with engineering design 81 percent complete, procurement 87 percent complete, construction 93 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. Construction efforts have been focused on installation of remaining electrical commodities and penetration seals.

The remaining LAB construction workscope is minimal and construction efforts in the LAB will soon 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 (15 linear feet)
- Continued installation of conduit (250 linear feet)
- Completed cementitious fireproofing in the trusses and prepared to start lateral brace applications
- Completed three general area conduit and threaded rod membrane seals.

### 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.

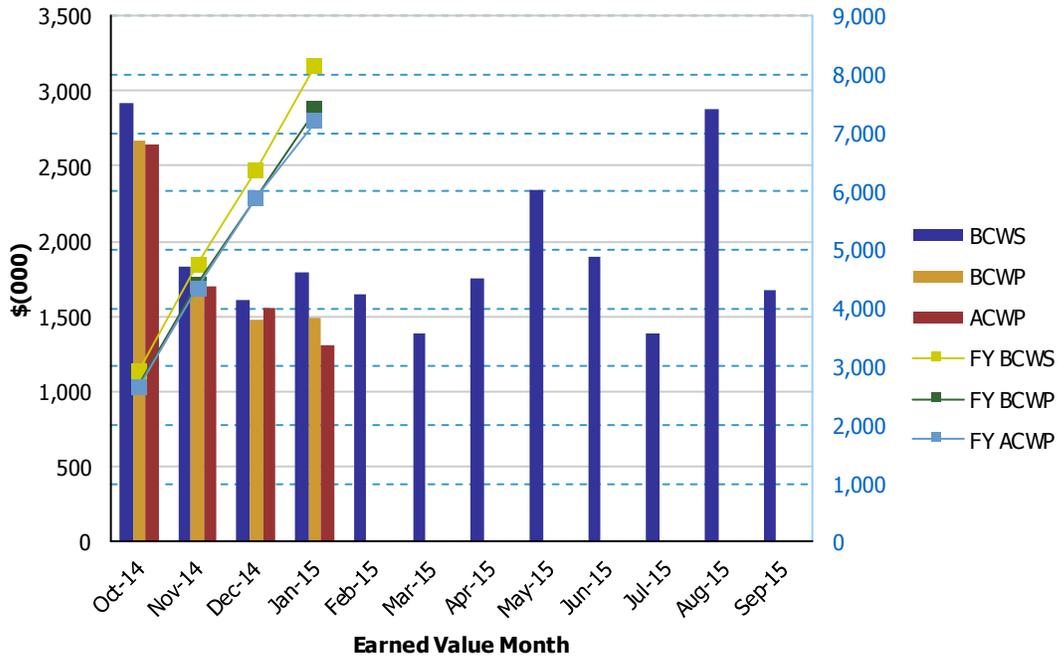
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: January 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	\$1,647									
Mar 2015	\$1,392									
Apr 2015	\$1,758									
May 2015	\$2,341									
Jun 2015	\$1,902									
Jul 2015	\$1,388									
Aug 2015	\$2,879									
Sep 2015	\$1,676									

PTD	\$290,664	\$290,320	\$290,323	1.00	1.00
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**Waste Treatment Plant Project - (LBL/Project Services) Percent Complete Status  
Through January 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
<b>Facilities</b>																		
Low-Activity Waste	1,518.4	1,032.4	68%	413.1	330.0	80%	318.1	242.6	76%	571.0	438.6	77%	212.3	17.2	8%	4.0	4.0	100%
Balance of Facilities	626.9	362.0	58%	122.7	94.0	77%	78.1	52.1	67%	228.8	189.0	83%	196.8	26.5	13%	0.5	0.5	100%
Analytical Lab	389.2	290.3	75%	89.7	73.1	81%	63.3	55.1	87%	156.4	145.7	93%	79.4	16.0	20%	0.4	0.4	100%
Direct Feed LAW	10.1	1.2	12%	8.5	1.0	12%	0.46	0.05	11%	0.0	0.0	4%	0.0	0.0	0%	1.1	0.21	18%
LBL Facility Services	92.6	15.3	16%	0.0	0.0	0%	20.3	3.3	16%	0.0	0.0	0%	31.0	4.7	15%	41.4	7.28	18%
<b>Total LBL</b>	<b>2,637.3</b>	<b>1,701.3</b>	<b>65%</b>	<b>633.9</b>	<b>498.1</b>	<b>79%</b>	<b>480.3</b>	<b>353.2</b>	<b>74%</b>	<b>956.1</b>	<b>773.3</b>	<b>81%</b>	<b>519.6</b>	<b>64.4</b>	<b>12%</b>	<b>47.4</b>	<b>12.4</b>	<b>26%</b>
Project Services	405.9	76.0	19%	48.9	8.3	17%	38.0	6.3	17%	124.1	25.9	21%	3.0	1.1	38%	192.0	34.3	18%
<b>Total Project Services</b>	<b>405.9</b>	<b>76.0</b>	<b>19%</b>	<b>48.9</b>	<b>8.3</b>	<b>17%</b>	<b>38.0</b>	<b>6.3</b>	<b>17%</b>	<b>124.1</b>	<b>25.9</b>	<b>21%</b>	<b>3.0</b>	<b>1.1</b>	<b>38%</b>	<b>192.0</b>	<b>34.3</b>	<b>18%</b>
<b>Total LBL &amp; Project Services</b>	<b>3,043.2</b>	<b>1,777.3</b>	<b>58%</b>	<b>682.8</b>	<b>506.4</b>	<b>74%</b>	<b>518.2</b>	<b>359.5</b>	<b>69%</b>	<b>1,080.2</b>	<b>799.3</b>	<b>74%</b>	<b>522.6</b>	<b>65.5</b>	<b>13%</b>	<b>239.5</b>	<b>46.7</b>	<b>19%</b>
<b>PT/HLW/SS Percent Complete Status Frozen as of September 2012 (due to project rebaselining efforts)</b>																		
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%
<b>Total HLW/PT/SS</b>	<b>8,722.8</b>	<b>5,965.2</b>	<b>68%</b>	<b>2,173.1</b>	<b>1,948.9</b>	<b>90%</b>	<b>1,565.5</b>	<b>1,124.8</b>	<b>72%</b>	<b>2,887.6</b>	<b>1,764.8</b>	<b>61%</b>	<b>758.5</b>	<b>143.2</b>	<b>19%</b>	<b>1,338.1</b>	<b>983.5</b>	<b>73%</b>
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
<b>Total WTP</b>	<b>11,766.0</b>	<b>7,742.5</b>	<b>66%</b>	<b>2,855.9</b>	<b>2,455.3</b>	<b>86%</b>	<b>2,083.7</b>	<b>1,484.3</b>	<b>71%</b>	<b>3,967.8</b>	<b>2,564.1</b>	<b>65%</b>	<b>1,281.1</b>	<b>208.7</b>	<b>16%</b>	<b>1,577.6</b>	<b>1,030.2</b>	<b>65%</b>

Source: Preliminary WTP Contract Performance Report - Format 1, Data for January 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.