

FINAL

Office of River Protection
Consent Decree 08-5085-FVS

Monthly Summary Report

June 2015

Office of River Protection

**Consent Decree 08-5085-FVS
Monthly Summary Report**

June 2015 (Monthly Summary Report/Project Earned Value Management System reflects April 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:

- First and second retrieval technologies at C-102 are completed to the limits of technology.
- Restarted C-105 MARS-Vacuum retrieval system using high-pressure water.
- Continued fabrication of last replacement sluicer for C-111.
- Completed removal of failed slurry pump at C-111, preparations for installation of the new pump have begun.

Significant Planned Activities in the Next Six Months:

- 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 (MARS-V)
- 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 Six Months:

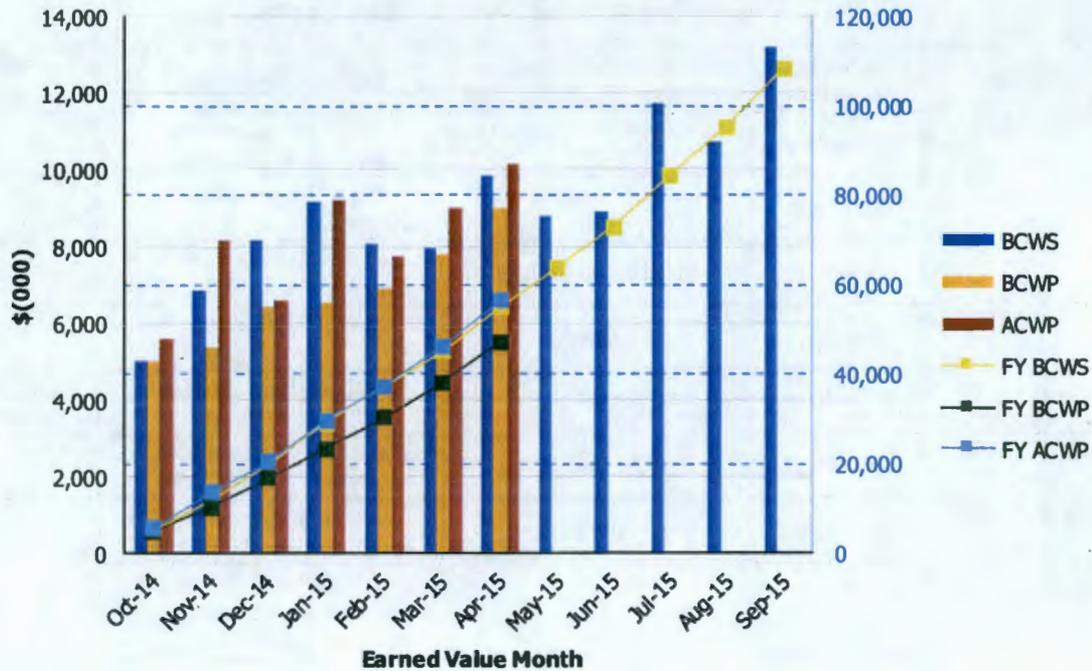
Develop AX Farm tank waste retrieval work plans.

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	\$7,971	\$7,801	\$9,009	0.98	0.87	\$45,261	\$38,105	\$46,318	0.84	0.82
Apr 2015	\$9,818	\$9,019	\$10,148	0.92	0.89	\$55,079	\$47,124	\$56,466	0.86	0.83
May 2015	\$8,781					\$63,860				
Jun 2015	\$8,899					\$72,759				
Jul 2015	\$11,715					\$84,474				
Aug 2015	\$10,714					\$95,188				
Sep 2015	\$13,179					\$108,367				
CTD	\$560,578	\$542,541	\$565,809	0.97	0.96					

Retrieval and Close Single-Shell Tanks

The current month unfavorable cost variance (CV) of **(\$1,129k)** is due to:

- Limited amount of waste retrieved from C-102 due to the material makeup/characterization (sand like consistency) of the remaining volume. In addition,

retrieval operations were halted in mid-April due to a leak within sluicer box #1. The project spent additional time and effort attempting to locate the leak source.

The current month unfavorable schedule variance (SV) of (\$799k) is due to:

- Limited amount of waste retrieved from C-102 due to the material makeup/characterization (sand like consistency) of the remaining volume.

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 2,695 full-time equivalent contractor (Bechtel National, Inc. [BNI]) and subcontractor personnel. This includes 603 craft, 410 non-manual, and 155 subcontractor full-time equivalent personnel working at the WTP construction site (all facilities).

In October 2012, the percent-complete values for Pretreatment (PT) and High-Level Waste (HLW) facilities were frozen at the September 2012 rate. Construction, procurement, and production engineering activities were placed on hold for PT and significantly slowed down for HLW. In August 2014, DOE approved continuation of production engineering activities for HLW. Subsequently, DOE has approved the fiscal year (FY) 2015 and FY 2016 2-Year Interim Work Plan. In April 2015, a 3-year Interim Work Plan for the PT facility was implemented emphasizing prioritization of technical issue resolution activities. The WTP Project is focused on resolving PT Facility technical issues and finalizing HLW facility design.

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 April 2015, LBL facilities were 68 percent complete, design and engineering was 80 percent complete, procurement was 77 percent complete, construction was 83 percent complete, and startup and commissioning was 16 percent complete.

In April 2015, the cumulative to-date WTP Project schedule variance was a negative \$2.8 million, and the cumulative to-date WTP Project cost variance was a positive \$42.8 million. The cumulative to-date cost and schedule variance is based on the progress of the LBL Internal Forecast.

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

Significant Past Accomplishments:

- Issued corrosion simulant basis document for localized corrosion (PT)
- Issued Commercial Grade Dedication plan for the ETG procurement (HLW)
- Completed placement of wall 4101 (HLW)
- Installed 32 tons of structural steel (HLW)
- Completed Installation of the Low Voltage Electrical System (LVE) Equipment, Elevation +48 (LAW)

- Completed Installation of LAW Container Finishing Handling System (LFH) Cranes and Hoists, Elevation +03 (LAW)
- Received and placed nonradioactive liquid waste disposal (NLD) system motor control powerhouse (BOF)

Significant Planned Actions in the Next Six Months:

- Complete modification at Full-Scale Vessel Testing Facility to continue testing for the pulse-jet mixer (PJM) control system (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 walk downs in support of direct feed LAW modifications (LAB)

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.

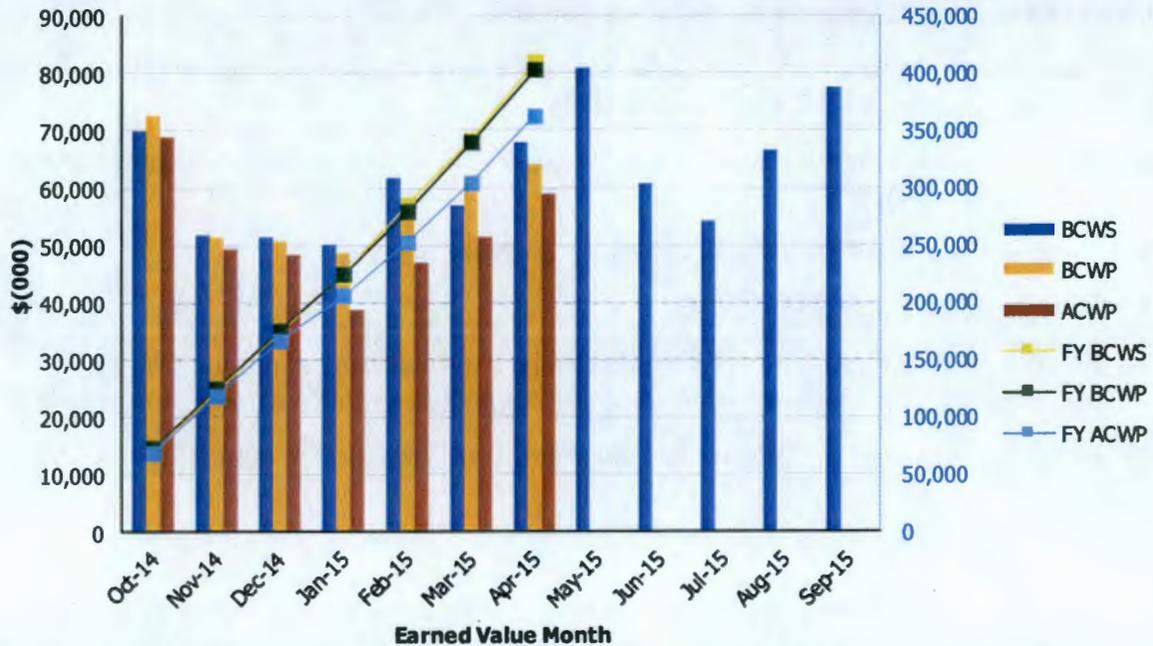
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: April 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	\$56,799	\$59,925	\$51,563	1.06	1.16	\$341,850	\$338,942	\$303,823	0.99	1.12
Apr 2015	\$67,809	\$64,010	\$58,892	0.94	1.09	\$409,659	\$402,952	\$362,716	0.98	1.11
May 2015	\$80,975									
Jun 2015	\$60,580									
Jul 2015	\$54,095									
Aug 2015	\$66,690									
Sep 2015	\$77,370									
PTD	\$8,781,139	\$8,778,291	\$8,735,501	1.00	1.00					

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 Standard High Solids Vessels Design test spec. / plan Rev. 0
- Issued PT – Ultrafiltration Process System HLP / PWD criticality hazard assessment report (Heavy Pu)
- Completed simulant solids characterization analysis
- Completed PA 2, 3, 4 conceptual piping
- Issued corrosion simulant basis document for localized corrosion

Significant Planned Actions in the Next Six 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 (CSER) 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
- Issue technical basis to support hold points 1 and 2
- Issue supplemental mixing study

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.

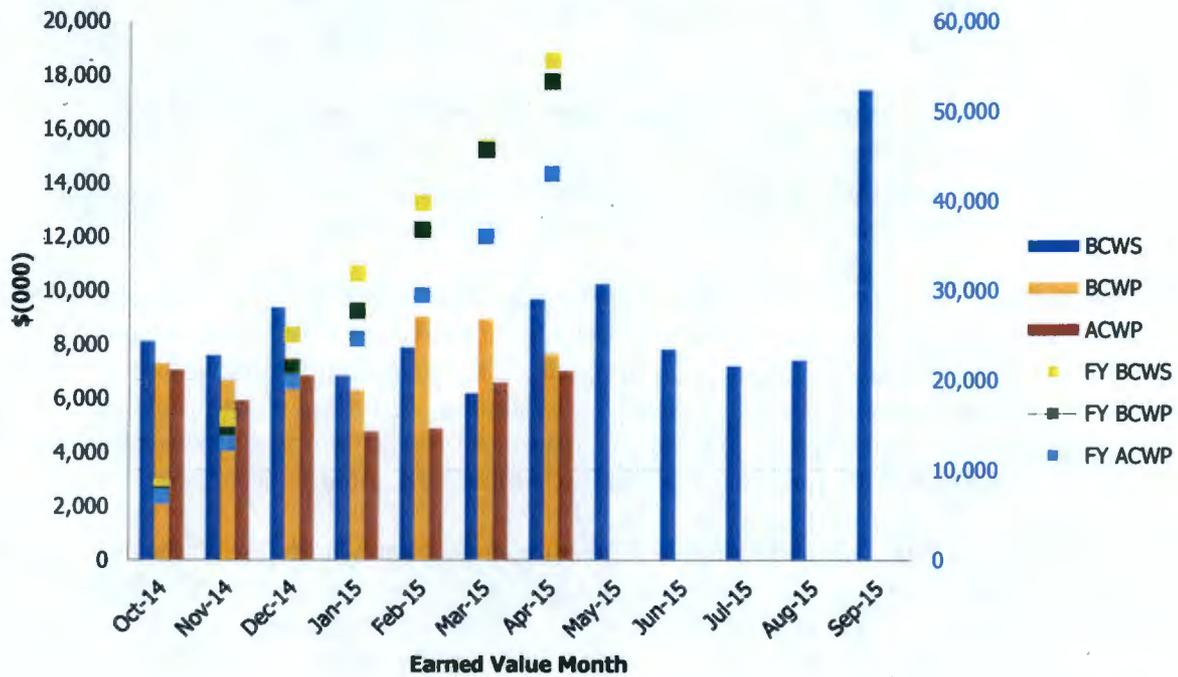
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: April 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	\$6,180	\$8,917	\$6,567	1.44	1.36	\$45,920	\$45,659	\$36,009	0.99	1.27
Apr 2015	\$9,661	\$7,631	\$7,008	0.79	1.09	\$55,581	\$53,290	\$43,017	0.96	1.24
May 2015	\$10,243									
Jun 2015	\$7,803									
Jul 2015	\$7,189									
Aug 2015	\$7,403									
Sep 2015	\$17,448									
PTD	\$1,662,252	\$1,659,908	\$1,649,644	1.00	1.01					

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, installation of support steel, and crane rails in the canister decontamination cave.

To support construction, BNI Engineering continues to execute detailed evaluations to release wall and slab placements and installation of HVAC, fire protection, process piping, and electrical commodities. Engineering also continues to review vendor documentation to support receipt and future installation of auto-sampler system (ASX) units. DOE and BNI are finalizing ventilation and off-gas system filter test plans for Phase 1, 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. 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. Procurement activities for the Emergency Turbine Generator (ETG) are progressing.

Significant Past Accomplishments:

- Issued two SDD's this month for a total of 14
- Continued development of path forward of MSU Phase 1, Iteration 2 HEPA filter test plan
- RLD Safety Basis Change Package is prepared and undergoing BNI final review
- Issued Commercial Grade Dedication plan for the ETG procurement
- Initiated improved Nuclear Safety/Engineering analysis process

- Performing vendor documentation reviews in preparation for the installation of ASX framing
- Initiated operational research modeling of waste, melter, and melter cave support handling systems
- Completed one concrete placement (walls 4101)
- Installed 32 tons of structural steel
- Began installation of crane rails and supports in the canister decontamination cave

Significant Planned Actions in the Next Six Months:

- Submit the RLD Safety Basis Change Package for DOE review
- Complete 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
- Complete installation of crane rails and supports in the canister decontamination cave
- Issue remaining outstanding SDDs
- Finalize and begin execution of MSU Phase 1, Iteration 2 HEPA filter test plan

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.

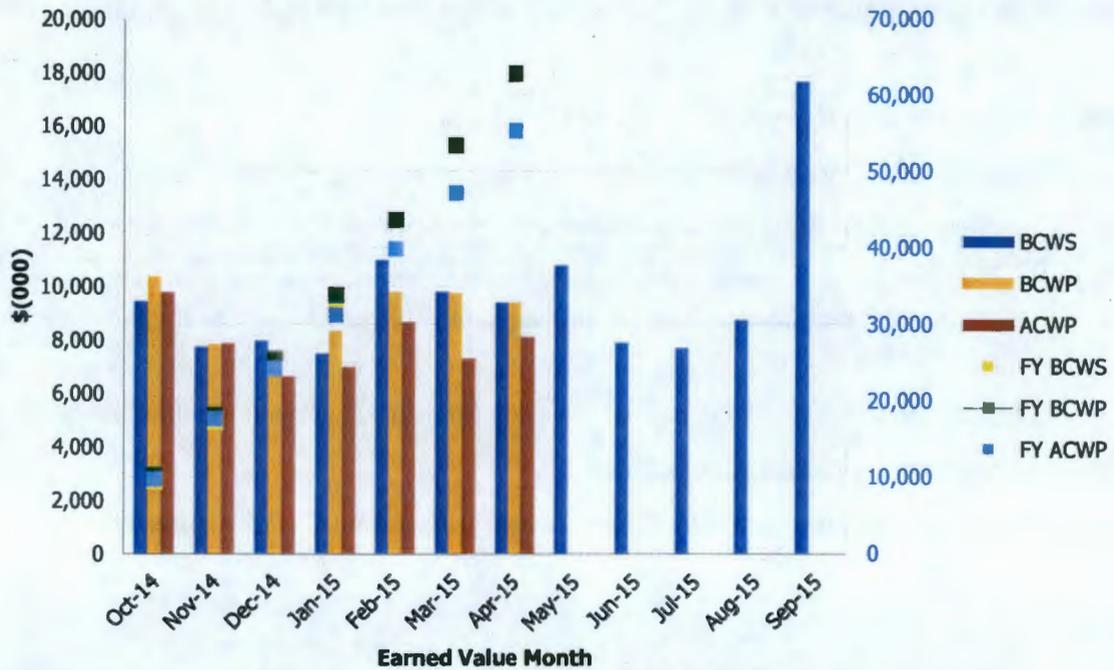
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: April 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	\$9,760	\$7,295	1.00	1.34	\$53,442	\$53,458	\$47,244	1.00	1.13
Apr 2015	\$9,391	\$9,411	\$8,115	1.00	1.16	\$62,834	\$62,868	\$55,359	1.00	1.14
May 2015	\$10,774									
Jun 2015	\$7,892									
Jul 2015	\$7,687									
Aug 2015	\$8,732									
Sep 2015	\$17,653									
PTD	\$1,116,947	\$1,117,240	\$1,109,420	1.00	1.01					

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 April 2015, the LAW Facility was 71 percent complete overall, with engineering design 82 percent complete, procurement 78 percent complete, construction 80 percent complete, and startup and commissioning 11 percent complete.

Significant Past Accomplishments:

- Installed over 150 linear feet of process piping and hydro-tested 650 linear feet of piping
- Installed over 1,280 linear feet of conduit and pulled approximately 14,560 linear feet of cable
- Completed Installation of the Low Voltage Electrical System (LVE) Equipment, Elevation +48
- Completed Installation of LAW Container Finishing Handling System (LFH) Cranes and Hoists, Elevation +03
- Completed repairs to Melter Feed Process (LFP) vessel LFP-00002
- Completed repairs to Concentrate Receipt Process (LCP) vessel LCP-0001

Significant Planned Actions in the Next Six Months:

- Complete subcontractor work scope in the annex
- Complete the LAW Facility design and operability review
- Complete Nuclear Safety Engineering Hazards Analysis
- Receive caustic scrubber
- 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: April 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	\$13,681	\$14,539	\$13,778	1.06	1.06	\$81,037	\$81,329	\$75,792	1.00	1.07
Apr 2015	\$16,031	\$14,925	\$15,002	0.93	0.99	\$97,068	\$96,254	\$90,794	0.99	1.06
May 2015	\$19,634									
Jun 2015	\$15,814									
Jul 2015	\$12,492									
Aug 2015	\$19,433									
Sep 2015	\$12,689									

PTD	\$1,071,262	\$1,073,254	\$1,068,962	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 April 2015, BOF was 62 percent complete overall, with engineering design 80 percent complete, procurement 77 percent complete, construction 84 percent complete, and startup and commissioning 16 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, Steam Plant piping, and the nonradioactive liquid drain (54) facility.

Significant Past Accomplishments:

- Completed coatings applications for Steam Plant piping
- Installed 1,060 linear feet of pipe insulation primarily in the Steam Plant
- Received and placed nonradioactive liquid waste disposal (NLD) system motor control powerhouse

Significant Planned Actions in the Next Six Months:

- Complete heat trace insulation in the Cooling Tower Facility
- Complete heat trace insulation in the Water Treatment Building
- Turnover all major systems of the NLD facility, WTP Switchgear, and BOF Switchgear buildings for component level testing

Issues:

No major issues at this time.

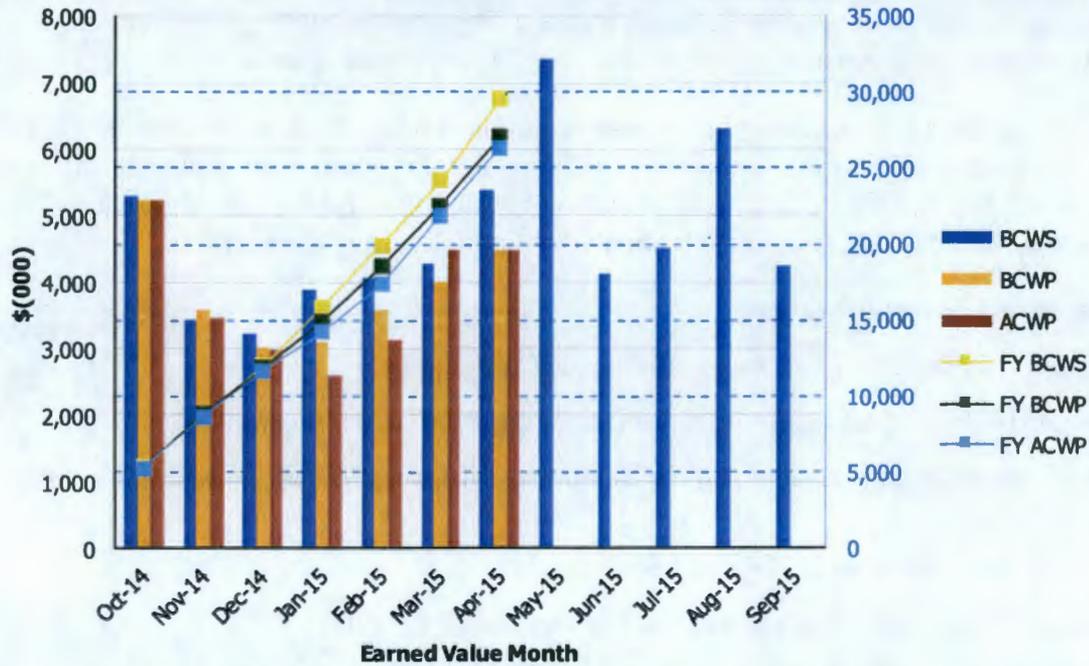
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: April 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	\$4,016	\$4,491	0.94	0.89	\$24,198	\$22,531	\$21,879	0.93	1.03
Apr 2015	\$5,384	\$4,497	\$4,491	0.84	1.00	\$29,582	\$27,029	\$26,370	0.91	1.02
May 2015	\$7,347									
Jun 2015	\$4,114									
Jul 2015	\$4,529									
Aug 2015	\$6,319									
Sep 2015	\$4,246									
PTD	\$376,249	\$374,127	\$373,500	0.99	1.00					

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 April 2015, the LAB was 77 percent complete overall, with engineering design 83 percent complete, procurement 87 percent complete, construction 95 percent complete, and startup and commissioning 23 percent complete.

During this reporting period engineering efforts are focused on LAB system reviews to evaluate potential modifications or isolations in support of directly feeding LAW. Closure of nonconformance reports and construction deficiency reports continued. Construction efforts within the LAB construction will soon be suspended. The remaining construction work scope will be completed in parallel with system modifications and construction activities required to support the direct feeding of LAW.

Significant Past Accomplishments:

- Continued misc. cable pulls and terminations (95% complete)
- Continued installation of misc. conduit (99% complete)

Significant Planned Actions in the Next Six Months:

- Place LAB construction punch list activities on hold
- Initiate component level testing of select LAB systems
- Begin LAB system walk downs in support of direct feed LAW modifications

Issues:

No major issues at this time.

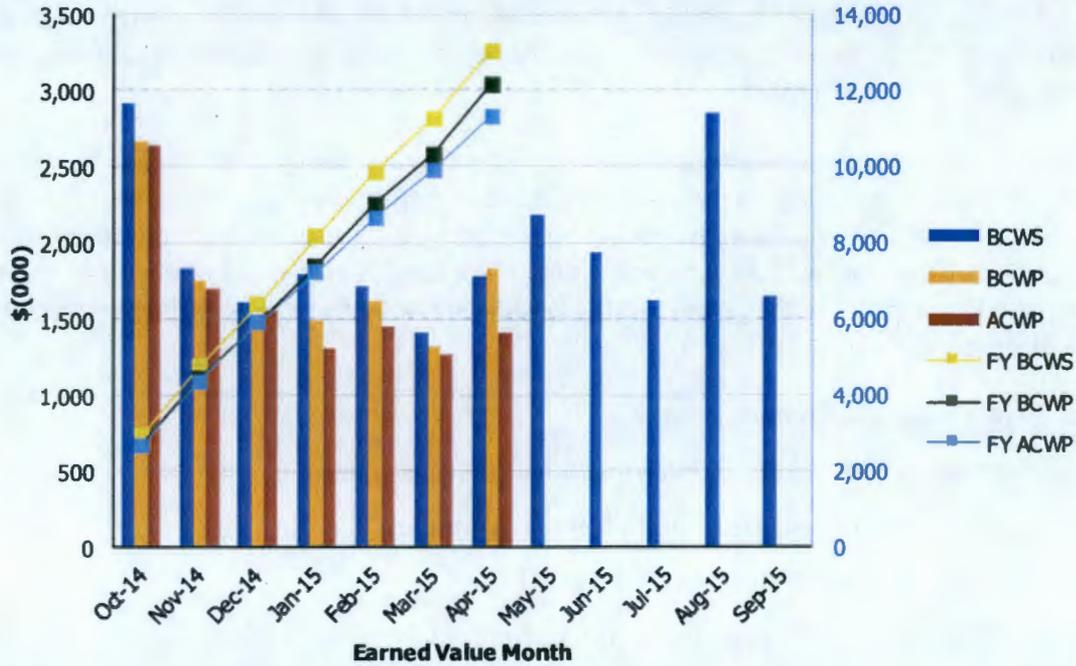
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: April 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	\$1,322	\$1,266	0.94	1.04	\$11,278	\$10,330	\$9,909	0.92	1.04
Apr 2015	\$1,781	\$1,833	\$1,407	1.03	1.30	\$13,059	\$12,163	\$11,316	0.93	1.07
May 2015	\$2,186									
Jun 2015	\$1,940									
Jul 2015	\$1,625									
Aug 2015	\$2,854									
Sep 2015	\$1,651									
PTD	\$295,574	\$295,094	\$294,443	1.00	1.00					

**Waste Treatment Plant Project - (LBL/Project Services) Percent Complete Status
Through April 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	1,511.9	1,073.3	71%	420.4	345.8	82%	318.8	247.7	78%	571.7	455.0	80%	197.0	20.7	11%	4.0	4.0	100%
Balance of Facilities	605.2	374.1	62%	123.2	98.0	80%	69.1	52.9	77%	228.4	192.8	84%	184.0	30.1	16%	0.5	0.5	100%
Analytical Lab	383.3	295.1	77%	90.2	75.1	83%	63.4	55.1	87%	156.1	147.5	95%	73.2	16.6	23%	0.5	0.5	100%
Direct Feed LAW	24.6	4.5	18%	21.5	3.8	17%	0.52	0.10	19%	0.1	0.1	40%	0.0	0.0	0%	2.5	0.69	28%
LBL Facility Services	90.2	25.6	28%	0.0	0.0	0%	20.0	5.6	28%	0.0	0.0	0%	29.4	8.0	27%	40.8	12.04	30%
Total LBL	2,615.2	1,772.6	68%	655.2	522.5	80%	471.8	361.4	77%	956.4	795.3	83%	483.6	75.6	16%	48.2	17.7	37%
Project Services	408.0	125.2	31%	49.6	14.8	30%	36.7	10.7	29%	124.1	39.9	32%	3.0	1.4	47%	194.7	58.4	30%
Total Project Services	408.0	125.2	31%	49.6	14.8	30%	36.7	10.7	29%	124.1	39.9	32%	3.0	1.4	47%	194.7	58.4	30%
Total LBL & Project Services																		
	3,023.1	1,897.7	63%	704.8	537.3	76%	508.5	372.0	73%	1,080.4	835.3	77%	486.5	77.0	16%	242.9	76.1	31%
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	11,745.9	7,862.9	67%	2,877.9	2,486.2	86%	2,074.0	1,496.8	72%	3,968.0	2,600.1	66%	1,245.0	220.2	18%	1,581.0	1,059.6	67%

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