

# Hanford Mission Integration Solutions



## Monthly Contract Performance Report June 2021

R. E. Wilkinson  
President & General Manager

U.S. Department of Energy  
Contract No. 89303320DEM000031



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# Monthly Contract & Project Performance Report June 2021

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Contractor for the U.S. Department of Energy  
under Contract 89303320DEM000031



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Release Approval

Date

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## 1.0 EXECUTIVE SUMMARY

Hanford Mission Integration Solutions (HMIS) continued to provide direct support to the U.S. Department of Energy (DOE) and its contractors with cost-effective infrastructure and Site services that are integral and necessary to accomplish the environmental cleanup mission through open and proactive communication, collaboration, and cooperation between Hanford Site customers (DOE Offices and Other Hanford Contractors [OHC]). Unless otherwise noted, all data provided is through June 20, 2021.

HMIS played a critical role in revising sitewide Coronavirus disease 2019 (COVID-19) safety protocols this month, not only designing a new Hanford app to facilitate vaccine attestation, but also drafting a training package, frequently asked questions and sitewide and internal communications. We also led planning and implementation of Hanford Live, which saw a more than 150% increase in viewers compared to 2019. Additionally, we published our first Code of Business Ethics and Conduct Guide online and mailed to employees, providing team members an easy-to-read reference to understand legal and regulatory requirements.

HMIS held a collaborative two-day workshop, analyzing our readiness to provide seamless 24/7 service delivery to support the Direct-Feed Low-Activity Waste (DFLAW) program. We put our readiness to action during another unprecedented event with record-high temperatures by meeting peak electricity demands and keeping information technology infrastructure cool enough for operations.

Critical infrastructure and service upgrades were completed with support from HMIS. These included replacement of the longest-running waste transfer pump at Tank Farms, as well as closure of the Plutonium Finishing Plant Material Balance Area.

Environmental protection across the Site was advanced in June when we demonstrated our updated Environmental Management System SharePoint to other Hanford contractors; installed a kiosk with critical information to fulfill DOE commitments with Washington State Department of Ecology; and installed artificial burrow systems to support preservation of Burrowing Owls, a species of concern in Washington.

Site contractors, in partnership with contractor Uni-tec, made further advancements in the development and testing of groundbreaking arc flash gear protective equipment specifically designed for Hanford. Vital upgrades to the Hanford Site Management System (SMS) notification system were completed, ensuring mass text messages will not be declined by carriers and will be delivered to Hanford site employees.

In keeping with our commitments to community and workforce development, we administered our first scholarship program, awarding \$29,000 in scholarships to 23 employee dependents and 4 co-op interns.

## 2.0 KEY ACCOMPLISHMENTS

- HMIS prepared the monthly local media entries for both the Tri-City Herald and the Journal of Business. The entries show the month's active comment periods, public meetings, and

Hanford Advisory Board meetings. The information was posted to social media and Hanford.gov events calendars.

- Issued our first Code of Business Ethics and Conduct, also known as the Ethics Guide in June. Our Ethics Guide connects our shared values to HMIS policies, procedures, and guidelines we have in place to guide our actions every day. The Guide was placed in the HMIS formal procedure system and added to the Ethics and Compliance Internal Website. All active employees received a copy at home, and it was also added to all employee's required reading assignment. The Ethics Guide was also publicized through the weekly Mission Insights, Daily Operations Report and Safety Start program. Employees are encouraged to actively reference the guide via hard copy or on-line as it translates legal and regulatory requirements into behaviors expected of all employees in an easy to understand format.
- Environmental Leadership Awards Program: Review and analyze the Environmental Leadership Awards Program (ELAP) nominees. Ratings and rankings were done by the Environmental group June 28.
- During June 2021, two invoices were submitted to DOE Richland Operations Office (DOE-RL) totaling \$27.65M for the work scope directly funded by DOE-RL, and 435 invoices were submitted to the Other Hanford Contractors totaling \$9.2M.
- The Forms Interface Management System (FIMS) Validation was complete with DOE HQ –
  - Day 1 Generated all four scorecards and performed the validation on the DOE Owned Scorecard.
  - Day 2 Performed the Site visit completed DOE Owned Scorecard, the Disposition Scorecard.
  - Day 3 Completed the Land and Lease scorecards.
- HMIS Interface Management and the HMIS technical service area managers for Electrical Utilities, Water Utilities, and Facility Maintenance met with Central Plateau Remediation Company (CPCCo) Interface Management via Teams on June 2, 2021. Discussion topics included the plan and schedule for updating interface documents [i.e., Administrative Interface Agreement (AIAs), Interface Document Control (ICDs), and Service Delivery Document (SDDs)], the revised work schedule currently under consideration by HMIS Biological Controls, and an overview of the CPCCo management tool, ACEMAN, which represents six pillars of project excellence (Accident free, Control dose, Event free, Meet commitments, Attend training, No rework).



*ACEMAN Tool*

- HMIS Performance Oversight distributed the draft revision of the Quality Assurance Program Description (QAPD), HMIS-PLN-QA-599, for internal review. The revision is a collaborative effort coordinated by the Performance Oversight group for this company level procedure that requires input from each VP organization. The QAPD describes the HMIS quality program and the basis of the graded approach applied by HMIS, the final revised QAPD will be submitted to DOE for review and approval no later than September 30, 2021.
- HMIS Safeguards & Security (SAS) staff provided the following Material Control and Accountability (MC&A) support to the Hanford site:
  - Supported CPCCo in the closure of the Plutonium Finishing Plant (PFP) Material Balance Area (MBA). The PFP MBA has been in place since the facility started up over 70 years ago. Closure of the MBA relieves CPCCo personnel from performing a number of activities at PFP, such as maintaining an MBA custodian, performing nuclear material surveillance and MC&A related procedures and training.
- Information Management Systems (IMS) created a COVID Vaccination Confirmation form to allow employees to confirm their vaccination status in accordance with Washington State Governor Inslee’s directive. The form was developed and integrated with IDMS for record creation.
- In June, the HMIS Workforce Solutions team successfully administered its first scholarship program since the inception of the contract, awarding a total of \$29,000 in scholarships for the 2021-2022 academic year. In total, 30 HMIS dependent scholarship applications were received and processed, and 23 applicants were selected as honorees. The applications were reviewed by HMIS Workforce Solutions for completeness and eligibility and evaluated and scored by The Columbia Basin College (CBC) Foundation using four criteria. Each dependent scholarship honoree was awarded a \$1,000 scholarship.

### 3.0 MAJOR ISSUES

**Program Services and Support:** Refer to Section A of this report for Program Services and Support specific major issues.

**Reliability Projects:** Refer to Section B of this report for project-specific major issues.

## 4.0 HMIS SAFETY PERFORMANCE

HMIS continues to focus on integrating and implementing safety programs in all program and project areas. In June, we experienced two Recordable Injuries, one of which resulted in Days Away, and there were nine first aids. These two recordable injuries resulted in HMIS June monthly rates being above DOE's targets. However, HMIS continues to exceed DOE's Fiscal year targets for both Total Recordable Case (TRC) rate and Days Away, Restricted, or Transferred (DART) case rate. DOE's fiscal and calendar year TRC target rate is set at 1.1 and the DART target rate is 0.6. To date, HMIS' rates are 0.88 and 0.59, respectively.

HMIS communicates frequently with our team through weekly Safety Starts and periodic safety bulletins. In June, the topics included Mental Health in America, 2021 HMIS Safety Improvement Plan, Bicycle Safety and the HMIS 2021 Ethics Guide. HMIS is also continuing to communicate to the work teams the importance of maintaining hydration to avoid heat stress related injuries.

HMIS continually reviews our first aid cases and analyzes the leading indicator to ensure our focus on injury prevention is targeted to events and activities that lead to first aid injuries. This information is shared at President's Zero Accident Council and further disseminated through the HMIS Employee Zero Accident Council Structure to ensure employees are informed and aware of the types of injuries and incidents occurring across the company. In addition, injury and vehicle accident statistics are tracked for each work group allowing individual work groups to focus on issues related to their specific events for Lessons Learned opportunities.

During June, HMIS implemented the new COVID-19 safety protocols for fully vaccinated personnel. The changes in safety protocols also incorporated direction from Executive Order 13991, Protecting the Federal Workforce and Requiring Mask-Wearing, which tightened protocols in some areas. This involved revising procedures and management directives, developing a standard training package for our supervisors and managers, development of frequently asked questions, development of site-wide and contractor-specific communications and a new Hanford App to support vaccination attestation of personnel.

Mission Assurance - Total Recordable Case Rate - HMIS	Period: 2021-06	FYTD TRC Rate (Green)
Primary Contact: FOSTER, ANDY	Printed: 12-Jul-2021 06:40	Monthly TRC Rate (Red)

### Definition

Monitor the Total Recordable Case (TRC) rate for HMIS employees and subcontractors (Note: Does not include independent subcontractors). The TRC is measured in accordance with OSHA guidelines for calculating and reporting. The rate is calculated by multiplying the number of Recordable cases by 200,000 and dividing by the total number of work hours.

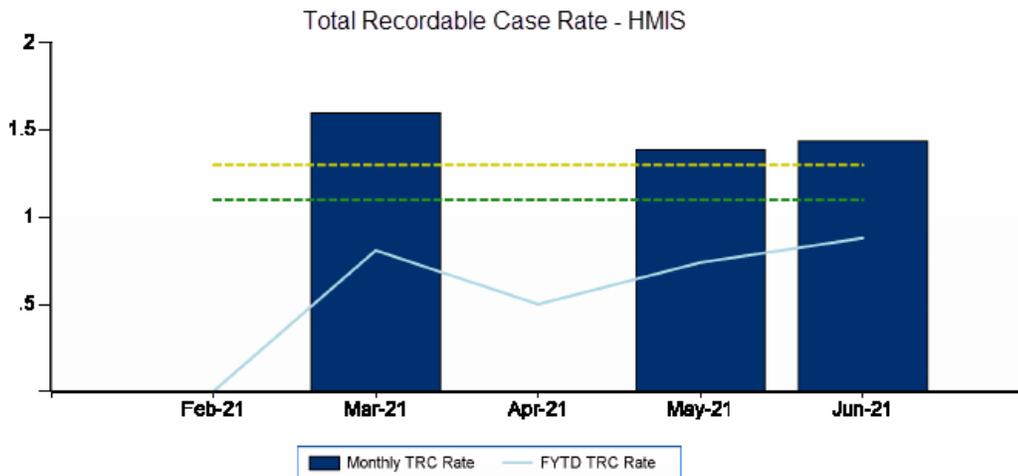
### Goals

The HMIS goal is to "do work safely" and achieve target zero by reducing injuries, accidents and incidents. The DOE-EM goal is to maintain a TRC rate below 1.1.

Monthly TRC Rate (Effective: 02/01/2021): Green <= 1.1, Yellow < 1.3, Red >= 1.3

FYTD TRC Rate (Effective: 02/01/2021): Green <= 1.1, Yellow < 1.3, Red >= 1.3

CYTD TRC Rate (Effective: 02/01/2021): Green <= 1.1, Yellow < 1.3, Red >= 1.3



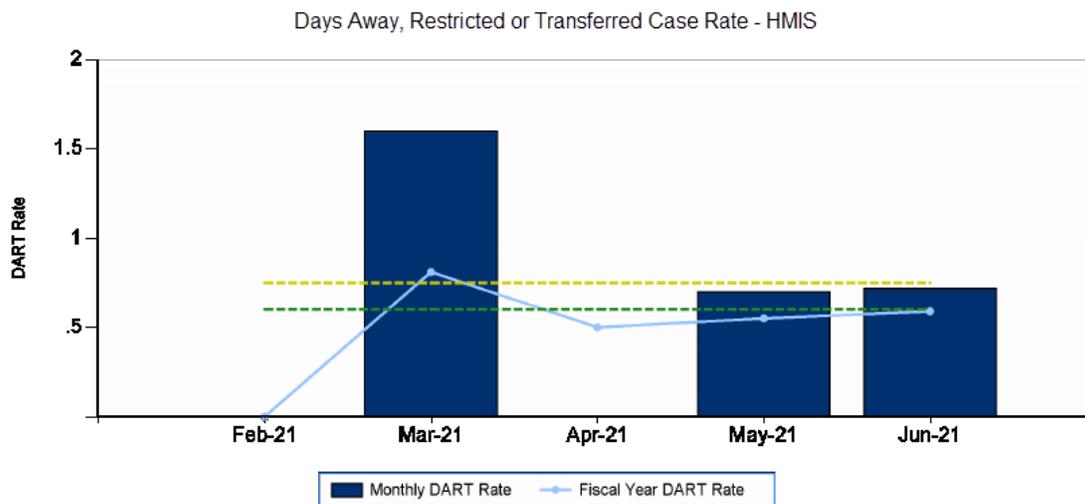
Field	2021-02	2021-03	2021-04	2021-05	2021-06
Monthly TRC Rate	0	1.6	0	1.39	1.44
FYTD TRC Rate	0	.81	.5	.74	.88
CYTD TRC Rate	0	.81	.5	.74	.88
Monthly Recordable Cases	0	2	0	2	2

**Figure 1. Total Recordable Case Rate (TRC)**

Monitor the TRC rate for HMIS employees and subcontractors (Note: Does not include independent subcontractors). The TRC is measured in accordance with Occupational Safety and Health Administration (OSHA) guidelines for calculating and reporting. The rate is calculated by multiplying the number of Recordable cases by 200,000 and dividing by the total number of work hours.

Mission Assurance - Days Away, Restricted or Transferred Case Rate - HMIS	Period: 2021-06	Fiscal Year DART Rate (Green)
Primary Contact: FOSTER, ANDY	Printed: 12-Jul-2021 06:42	Monthly DART Rate (Yellow)

<b>Definition</b>
Monitor the days away, restricted or transferred (DART) case rate for HMIS employees and subcontractors. The DART rate is measured in accordance with OSHA guidelines for calculating and reporting. The rate is calculated by multiplying the number of DART cases by 200,000 and dividing by the total number of work hours.
<b>Goals</b>
The HMIS goal is to "do work safely" and achieve target zero by reducing injuries, accidents and incidents. The DOE-EM performance baseline goal is to maintain a DART rate below 0.6.
Monthly DART Rate (Effective: 02/01/2021): Green <= 0.6, Yellow <= 0.75, Red > 0.75
Fiscal Year DART Rate (Effective: 02/01/2021): Green <= 0.6, Yellow <= 0.75, Red > 0.75
Calendar Year DART Rate (Effective: 02/01/2021): Green <= 0.6, Yellow <= 0.75, Red > 0.75



Field	2021-02	2021-03	2021-04	2021-05	2021-06
Monthly DART Rate	0	1.6	0	.7	.72
Fiscal Year DART Rate	0	.81	.5	.55	.59
Calendar Year DART Rate	0	.81	.5	.55	.59
Monthly DART Cases	0	2	0	1	1

**Figure 2. Days Away, Restricted, Transferred (DART)**

Monitor the DART Case rate for HMIS employees and subcontractors (Note: Does not include independent subcontractors). The DART is measured in accordance with OSHA guidelines for calculating and reporting. The rate is calculated by multiplying the number of DART cases by 200,000 and dividing by the total number of work hours.

## 5.0 EARNED VALUE MANAGEMENT

**Table 1. HMIS Schedule and Cost Performance**

CLIN Data for June	CURRENT PERIOD (CP)					CUMULATIVE TO DATE (CTD)					AT COMPLETION		
	BUDGETED COST		ACTUAL COST	VARIANCE		BUDGETED COST		ACTUAL COST	VARIANCE		BAC	EAC	VARIANCE
	BCWS	BCWP	ACWP	SCHEDULE	COST	BCWS	BCWP	ACWP	SCHEDULE	COST			
0001 - Contract Transition	\$0	\$0	\$0	\$0	\$0	\$6,405	\$6,405	\$5,684	\$0	\$721	\$6,405	\$5,684	\$721
0003 - Legacy Benefit Plans & Legacy Workers' Com	\$3,225	\$3,225	\$2,505	\$0	\$721	\$17,655	\$17,655	\$11,005	\$0	\$6,650	\$439,933	\$428,442	\$11,491
0004 - Infrastructure & Site Services	\$24,928	\$26,213	\$26,887	\$1,286	(\$674)	\$138,183	\$134,287	\$130,972	(\$3,896)	\$3,315	\$2,552,318	\$2,563,960	(\$11,642)
0005 - DOE Small Business Procure Pre-Award Supp	\$18	\$18	(\$33)	\$0	\$51	\$80	\$80	\$8	\$0	\$72	\$2,373	\$2,255	\$118
0007 - Infrastructure Reliability Projects	\$1,726	\$2,350	\$2,371	\$625	(\$21)	\$7,034	\$7,365	\$7,912	\$331	(\$547)	\$361,051	\$355,868	\$5,184
0008 - DOE Small Biz Pro Post-Award Supp & Other	\$440	\$440	\$377	\$0	\$63	\$2,394	\$2,394	\$1,848	\$0	\$546	\$210,505	\$203,764	\$6,741
Undistributed Budget (UB)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$216,352	\$216,352	\$0
Management Reserve (MR)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Grand Total</b>	<b>\$30,336</b>	<b>\$32,246</b>	<b>\$32,107</b>	<b>\$1,910</b>	<b>\$140</b>	<b>\$171,750</b>	<b>\$168,185</b>	<b>\$157,429</b>	<b>(\$3,565)</b>	<b>\$10,756</b>	<b>\$3,788,936</b>	<b>\$3,776,324</b>	<b>\$12,612</b>

Note: \$ in Thousands

### Performance Summary

The HMIS contract went operational on January 25, 2021.

### Cost Variance (CV) Analysis:

The Current Month (CM) favorable CV of (+\$140K) is primarily due to:

**(+\$721K) 4001.03.01 - Legacy Benefit Plans** - The favorable CM CV is primarily due to an incorrect P-Card entry that credited the account with the reversal being processed in June, along with the contract startup and transitioning of plans for the from prior entity for the Legacy benefits.

**(+\$267K) 4001.04.01 - Utilities & Infrastructure** – The favorable CM CV is primarily due subcontractor monthly costs not in alignment with billing cycle, and the lack of resource availability to execute the planned scope of work.

**(-\$1,045K) 4001.04.03 - Safeguards & Security** – The unfavorable CM CV is primarily in Labor and Subcontracts. Labor overruns are driven by the exclusion of overtime from the budget but are also impacted by COVID charging (COV charges and COVID Janitorial support), and labor rate resource mix. The Subcontracts overrun is primarily due higher than planned costs to support the current work scope for Physical Security Systems.

**(-\$287K) 4001.04.05 - Training & Workforce Readiness** – The unfavorable CM CV is primarily due to labor attrition supporting LMS and is not planned to be backfill until the July/August time frame. The HAMMER variance is attributed to the AV/IT upgrade subcontract as a milestone payment rather than the originally planned LOE. This variance will continue until final milestone payment is complete, which is anticipated in September.

**(-\$211K) 4001.04.06 - Information Technology & Mgmt** – The unfavorable CM CV is due to timecard corrections from the CIO account to multiple new charge codes for BMS being completed in the current month. Overhead increase from subcontractor NorthWind effective in the current period, retroactive to beginning of NW contract.

**(-\$233K) 4001.04.07 - Business Services** – The unfavorable CM CV is due to the Personal Property & Material Mgmt. Program and Hanford Workforce Engagement Center experiencing higher staffing levels than planned. These unfavorable variances are partially offset by General Supplies Inventory (GSI) buys and sells resulting in a positive variance when material sales are greater than the current buys.

**(-\$449K) 4001.04.08 - Real Property Asset Mgmt** – The unfavorable CM CV is due to Subcontractor costs not coming in as planned for the MMP Software Upgrade; invoicing delays with the Terragraphics subcontract, and higher labor supporting Fire System Maintenance than planned.

### **Schedule Variance (SV) Analysis:**

The CM favorable SV of (+\$1,910K) is primarily due to:

**(+\$1,030) 4001.07.03 - IRP - Electrical System** - The CM SV is primarily driven by: Schedule recovery associated L-801 Upgrade SCADA, RTU #1 Install milestone payment which was originally planned in fiscal month May. In addition, schedule recovery associated with L-789 Priority T&D Systems Wood PP Test & Replace catching-up and completing corridor construction.

**(+\$1,058) 4001.07.06 - IRP - Network & Telecom System** - The CM SV is primarily driven by L-937 Gable East Footprint Reduction (Phase 1) implementing a BCR in the current period which replanned the solar array work scope into Q1 of FY22. The replan resulted from realized risks related to extended supply chain lead times.

### **Variance at Completion (VAC):**

The favorable VAC of (+\$12,612K) is primarily due to:

**(+\$11,491K) 4001.03.01 - Legacy Benefit Plans** - The favorable VAC is primarily due to the transitioning of plans from prior entity and claims being less than planned.

**(+\$1,568K) 4001.04.01 - Utilities & Infrastructure** – The favorable VAC is primarily due subcontractor monthly costs not in alignment with billing cycle, and the lack of resource availability to execute the planned scope of work.

**(-\$8,451K) 4001.04.03 - Safeguards & Security** – The unfavorable VAC is primarily in Labor and Subcontracts. Labor overruns are driven by the exclusion of overtime from the budget but are also impacted by COVID charging (COV charges and COVID Janitorial support), and labor rate resource mix. The Subcontracts overrun is primarily due higher than planned costs to support the current work scope for Physical Security Systems.

**(+\$1,676K) 4001.04.04 - Emergencies & First Responders** – The favorable VAC is primarily due time phasing of material and equipment costs for consumables supporting level of effort scope, reduced IT costs to transition of scope to North Wind, and non-cash credits received for fire and emergency services provided to Energy Northwest. Other variances include offsetting labor and subcontract deltas. Labor overruns are due to the exclusion of non-standard shifts in the budget for platoon firefighter resources, and the subcontract underrun is primarily due the material difference for increased platoon staffing.

**(-\$1,448K) 4001.04.05 – Training & Workforce Readiness** – The unfavorable VAC is due to scope that is forecasted but not bid as part of the proposal for HAMMER Facility & Infrastructure projects as well as the Success Factors Learning Management System (LMS).

**(-\$2,592K) 4001.04.08 - Real Property Asset Mgmt.** – The unfavorable VAC is due to the MMP Software Upgrades is costing more than planned due to the complexity of the software integration. Also, Work Management is overrunning due to the implementation of a new subcontractor and cost associated with the start-up.

**(+\$798K) 4001.04.09 - Environmental Stewardship & Mgmt** - The favorable VAC is primarily in labor efficiencies supporting Post Cleanup Surveillance & Maintenance and Comprehensive Land Use Plans during FY21.

**(+\$1,074K) 4001.04.10 - Environmental Integration** - The favorable VAC is primarily in labor due to staff supporting Work For Others (WFOs), Reliability Projects (RPs) and staff absences.

**(-\$1,280K) 4001.04.11 – Safety & QA** - The unfavorable VAC is primarily in labor as the proposal assumed staffing efficiencies. Instead RL directed HMIS to maintain existing staffing levels that are higher than the planned levels.

**(+\$1,273K) 4001.04.12 - General Performance Requirements** – The favorable VAC is primarily due to: Hanford Portfolio Analysis/PS/Independent Assessment establishment is above FY21 performance due to the program not being as robust as planned, staff supporting HMIS proper systems, less materials, and North Wind support than anticipated.

**(+\$7,344K) 4001.08.97 – DDWS Out Year Summary Level Planning Package** - The favorable VAC is primarily due to RL directed work scope that was originally bid and budgeted under CLIN 8 DOE Small Business Procurement Post Award Support and Other Directed Work Scope (DDWS) but has since been directed to be performed under CLIN 4 Infrastructure and Site Services. HMIS is waiting on a contract modification to revise the baseline.

## 6.0 FUNDS ANALYSIS

**Table 2. HMIS Fiscal Year 2021 Funds vs. Fiscal Year Spend Plan**

FY 2021 IIP Funding Status Status through June FY 2021 (\$000)												
CLIN	Fund Source	IIP FYTD	FYTD ACWP	Spending Variance	* Funds Received	Remaining Available Funds	** RL Expected Funding	Total EAC	HMIS Uncosted Balance	Encumb Carryover	Hold Backs	Unencum Balance
CLIN 4	SWS and RL-0201 Fee	89,378.7	84,656.1	4,722.6	125,192.8	40,536.7	160,723.0	154,732.6	5,990.4	2,543.9	3,446.5	(0.0)
CLIN 4	RL-0020 (SES, IM, Fee)	36,134.9	33,935.6	2,199.3	51,227.0	17,291.4	71,212.3	62,397.5	8,814.8	745.4	8,289.2	(219.8)
CLIN 4	RL-0020 (RP)	465.4	152.4	313.0	1,923.5	1,771.1	2,034.0	302.2	1,731.8	1,748.4		(16.6)
CLIN 4	RL-0201 (RP)	12,225.6	9,567.8	2,657.8	32,982.0	23,414.2	42,572.7	22,285.2	20,287.5	7,888.7	18,504.3	(6,105.5)
CLIN 4	RL-0201, RL-0013, ORP-14 (BMS)			-		-	14,100.0		14,100.0	14,100.0		-
CLIN 4	RL-0201 (HAMMER)	5,052.1	3,658.5	1,393.6	6,500.0	2,841.5	8,664.7	7,792.9	871.8	871.8		0.0
CLIN 4	RL-0201 (COVID, GSI, CSI)	1,302.3	790.1	512.2	3,030.0	2,239.9	3,243.2	1,856.3	1,386.9	1,386.9		(0.0)
CLIN 4	RL201, RL13, RL20, ORP-14, 60, PD - Other DOE Services	2,287.9	1,294.0	993.9	6,762.2	5,468.2	3,876.4	2,588.1	1,288.3	250.0	945.1	93.2
CLIN 5	RL-0201 (Small Business, Fee)	40.1	12.2	27.9	95.5	83.3	128.4	37.1	91.3	1.5	89.8	-
CLIN 6	RL-0201 (Fee)	2,393.1	2,222.0	171.1	3,100.0	878.0	4,443.9	3,555.1	888.8	888.8		(0.0)
CLIN 7	RL-0020 (RP)	389.6	393.8	(4.2)	482.5	88.7	491.3	348.1	143.2			143.2
CLIN 7	RL-0201 (RP, Fee)	7,210.9	7,518.2	(307.3)	14,569.8	7,051.6	24,135.6	10,365.7	13,769.9	7,148.0	516.4	6,105.5
				-		-			-			-
	<b>TOTAL</b>	<b>156,880.6</b>	<b>144,200.7</b>	<b>12,679.9</b>	<b>245,865.3</b>	<b>101,664.6</b>	<b>335,625.5</b>	<b>266,260.8</b>	<b>69,364.7</b>	<b>37,573.4</b>	<b>31,791.3</b>	<b>0.0</b>

\* Funds received through Contract Mod P00077 dated July 12, 2021

\*\* RL Expected Funding thru CBAG Rev 2 - Pending approval of Integrated Investment Portfolio. Includes changes for CBAG Rev 3: Reductions of (\$16.1M) (RL20 \$4.2M, RL-0201 RP \$9.2M, ODS \$1.6M, SWS \$1.1M) and increase for BMS for \$14.1M and ODS for \$250K. Other reductions/changes in SWS were utilized to partially fund ODS \$858.3K, Fee in CLIN 6 \$615.9K, and changes in CLIN 5 (RL-0201).

The Remaining Available Funds will fund SWS through August 19, 2021 and RL-0020 through September 1, 2021

**Performance Summary:** The current Integrated Investment Portfolio (IIP) was submitted to DOE-RL April 20, 2021 and based upon Contract/Baseline Alignment Guidance (CBAG) Rev 2. Since then there are potential reductions in process including: Reductions of (\$16.1M) (RL20 \$4.2M, RL-0201 RP \$9.2M, ODS \$1.6M, Site wide Services (SWS) \$1.1M) and increase for Business Management System (BMS) for \$14.1M and ODS for \$250K. Other reductions/changes in SWS were utilized to partially fund ODS \$858.3K, Fee in CLIN 6 \$615.9K, and changes in CLIN 5 (RL-0201).

**Spending Variance Analysis:** The FYTD variance in SWS is primarily due to open requisitions not filled, variability of newly subcontracted scope under HMIS, unable to obtain resources for outages, COVID-19 quarantines, less overtime, and lower costs from NorthWind than expected. RL-0020 underruns are primarily in labor due to COVID-19 quarantines, attrition, and staff supporting other scope. In addition, timing of materials, equipment, and subcontracts moved to later in the fiscal year. RL-0201 (HAMMER) is due to delay in procurements and projects that will carry over into FY22. RL-0201 (Reliability Project - CLIN 4) underrun is primarily due to Project L-937, Gable East Footprint Reduction - delays in procurement and field work, L-897, Central Plateau Water Treatment Facility - membrane procurement contract delayed, and deferral of road projects (L-534, L-603, L-883). The overrun in RL-0201 (Reliability Project - CLIN 7) is primarily due to Project L839, 12-inch Potable Water Loop-Line - construction started earlier than planned, Project L-934, MSC Office Space Gap Reduction - change in execution and structure of milestone payments and Project L-905, FARS & RFARS Replacement & Upgrade - construction contract change orders. This is offset with an underrun for Project L-895, Fire Protection Infrastructure for PRW - due to a delay in award of the A/E subcontract.

**Variance at Completion/Uncosted Balance:** The \$69.4M Variance at Completion is primarily due to \$15.2M in RL-0201 for L-612, 230kV Transmission System Reconditioning and Sustainability Repairs that is being held back pending DOE-RL direction and is funding specifically held for Project L-612. In addition, scope for BMS was funded at \$14.1M for a multi-year project with minimal cost this fiscal year. There is a requirement to maintain continuity of operations into FY22 for a Continuing Resolution (CR) which would be approximately \$14M of funding held back at a bottom line. RL-0020 has an uncosted balance of \$10.7M that will be held for FY22 and supports a CR and carryover scope. Reliability Projects (RL-0201) are under by \$19M (excluding L-612 funding). SWS underrun of \$6M will support a two-week CR and carryover scope into FY22. Fee is being accrued at 80% and \$3.1M will be uncosted and held until a final fee determination is made in FY22.

Encumbered Carry scope is \$37.6M and will complete in FY22 including Reliability Project \$16.8M, BMS \$14.1M, HAMMER \$.9M, General Supplies Inventory and COVID \$1.4M, SWS Project H-006 \$.6M, Severance \$.5M, and Fee \$3.1M

**Table 3. Usage-Based Services/Direct Cost Adder Summary (Dollars in Thousands)**

Account Description	Fiscal Year To Date June FY21					FY21 HMIS Fiscal Year End			
	(Budget) Budgeted Cost of Work Scheduled (BCWS)	(Actuals) Actual Cost of Work Performed (ACWP)	Cost Variance	Liquidation	Liquidation (Over) / Under	Budget At Completion (BAC)	Outlook	Forecasted Liquidation	Forecasted Liquidation (Over) / Under
<b>Direct Cost Adder (DCA)</b>									
Software Services (4001.09.06.01.01)	3,246.8	1,113.6	2,133.2	(1,568.6)	(455.0)	5,525.9	1,931.1	(2,575.1)	(643.9)
Records Mgmt (4001.09.06.07.01)	733.5	755.4	(21.9)	(582.7)	172.7	1,248.3	1,241.4	(992.0)	249.4
Janitorial Services (4001.09.08.02.02)	739.6	800.1	(60.5)	(890.1)	(90.0)	1,258.8	1,310.1	(1,442.6)	(132.5)
Maintenance (4001.09.08.02.01)	2,985.1	4,305.5	(1,320.4)	(3,207.4)	1,098.1	5,080.4	7,012.9	(6,069.5)	943.4
Motor Carrier (4001.09.02.01.01)	2,195.1	2,132.1	63.0	(2,229.3)	(97.2)	3,735.8	3,909.1	(4,055.4)	(146.3)
<b>Total Direct Cost Adder - Total</b>	<b>9,900.1</b>	<b>9,106.6</b>	<b>793.5</b>	<b>(8,478.0)</b>	<b>628.6</b>	<b>16,849.2</b>	<b>15,404.6</b>	<b>(15,134.6)</b>	<b>270.0</b>
<b>Usage Based Service</b>									
Dosimetry (4001.09.10.08.01)	1,926.6	1,924.7	1.9	(2,068.6)	(144.0)	3,278.9	3,290.1	(3,518.6)	(228.5)
Training (4001.09.05.01.01)	5,199.5	7,319.4	(2,119.9)	(7,593.8)	(274.4)	8,849.1	12,323.0	(12,462.3)	(139.3)
Hanford Rad Instrumentation Prog (4001.09.10.08.02)	1,576.3	1,265.8	310.5	(1,392.8)	(127.0)	2,682.7	2,177.0	(2,532.8)	(355.8)
Information Technology Services (4001.09.06.03)	11,956.9	16,237.5	(4,280.6)	(14,276.7)	1,960.8	20,344.6	23,250.5	(23,250.5)	(0.0)
Work Management (4001.09.08.02.04/05)	154.1	311.3	(157.2)	(358.2)	(46.9)	262.3	540.9	(540.9)	0.0
Occupancy Lease (4001.09.08.02.03.04)	1,618.2	2,380.8	(762.6)	(1,655.0)	725.8	2,754.0	3,498.4	(3,234.6)	263.8
Occupancy Gov't (4001.09.08.02.03.05)	1,693.1	1,864.4	(171.3)	(1,813.9)	50.5	2,885.1	3,465.5	(3,666.7)	(201.2)
Crane & Rigging (4001.09.02.03.01)	4,161.8	4,733.3	(571.5)	(4,339.9)	393.3	7,083.1	8,332.3	(8,266.9)	65.4
Fleet Fuel Delivered (4001.09.02.02.03.04)	244.6	210.5	34.1	(256.3)	(45.8)	416.3	320.8	(418.3)	(97.5)
Fleet Fuel Consumed (4001.09.02.02.03.05)	1,345.3	910.4	434.9	(860.5)	49.9	2,289.6	1,714.5	(1,540.6)	173.9
Fleet Services (4001.09.02.02.01)	7,215.7	3,370.3	3,845.4	(3,336.5)	33.8	12,280.6	6,167.4	(6,459.1)	(291.7)
Fleet Materials (4001.09.02.02.02)	2,446.0	1,125.5	1,320.5	(628.2)	497.3	4,162.9	1,854.4	(1,512.4)	342.0
Fleet GSA Vehicle Maint (4001.09.02.02.04)	978.4	433.3	545.1	(599.4)	(166.1)	1,665.2	868.2	(968.0)	(99.8)
Courier Services (4001.09.07.05.01.01)	127.0	92.9	34.1	(92.2)	0.7	216.2	154.0	(154.0)	0.0
<b>Usage Based Service - Total</b>	<b>40,643.4</b>	<b>42,180.0</b>	<b>(1,536.5)</b>	<b>(39,272.1)</b>	<b>2,907.9</b>	<b>69,170.6</b>	<b>67,957.0</b>	<b>(68,525.7)</b>	<b>(568.7)</b>
<b>Variable Services Total</b>	<b>50,543.5</b>	<b>51,286.5</b>	<b>(743.0)</b>	<b>(47,750.0)</b>	<b>3,536.5</b>	<b>86,019.8</b>	<b>83,361.6</b>	<b>(83,660.3)</b>	<b>(298.7)</b>

Usage Based Service/Direct Cost Adder – The FYTD negative cost variance of (\$0.7M) is primarily driven per a cost overrun to date of the Information Technology Services UBS pool. The FYTD Information Technology cost overrun reflects the large dollar (approx. \$6M) one-time license procurement cost which posted in fiscal May. The budget of the account was somewhat level spread and did not reflect this large one-time cost spike, thus the resultant overrun and negative variance.

The \$3.5M under liquidation FYTD is also primarily a result of this IT Microsoft license procurement. The IT UBS rates recover the full fiscal year service cost over the entire performance period; thus, the one-time large procurement cost increase of May greatly impacts the FYTD liquidation performance. The IT account is currently expected to balance by fiscal year end.

7.0 PERTINENT BUSINESS INFORMATION

Table 4. Small Business Statistics – June

Socio Economic Category	Goals from SBSP	FY21 Actual to Date (% and Award Amount)	Cumulative	On track to meet or exceed goals
Small Business (SB)	55%	87.88% (\$71,601,729.86)	87.88%	✓
Small Disadvantaged Business (SDB)	8%	47.79% (\$38,939,465.43)	47.79%	✓
Small Woman Owned Business (SWOB)	8%	13.189% (\$10,736,130.79)	13.18%	✓
HUBZone (HUB)	4%	10.31% (\$8,403,042.34)	10.31%	✓
Service Disabled Veteran Owned (SDVO)	4%	10.43 % (\$8,495,735.38)	10.43%	✓
Veteran Owned Small Business (VOSB)	5%	13.66% (\$11,125,807.11)	13.66%	✓

Overall award total through reporting period (June 2021) for FY21: \$81,477,720.42

NOTES:

FY21 Actual Data and Cumulative columns are the same since both reporting periods align.

HMIS percentage goals are calculated based on the Total Awards divided by the Overall Awards Total. Each reporting value is calculated separately utilizing the same process and measured against the overall subcontracting goals as outlined in the HMIS Small Business Subcontracting plan.

HMIS reports all purchase card, purchase orders and subcontract awards based on award values and established size standards associated with the subcontractor, i.e. small business, and large business. As a part of the reporting structure, HMIS additionally reports all socio-economic conditions (Small Disadvantage Business, Small Woman Owned Business, Hub Zone, Small Disabled Veteran Owned and Veteran Owned Small Business). HMIS credits all subcontract awards to a Government Contractor, Educational Institute, Nonprofits, Off-Contract, Government entities and Foreign under a Formally Excluded heading, which ultimately reports under the large business.

## 8.0 BASELINE CHANGE REQUESTS

In June, HMIS approved and implemented seven BCRs into the Contractor Performance Baseline (CPB). The change requests are identified in the following table:

**Table 5. June 2021 Baseline Change Requests**

Change Request #	Title	CLIN	Summary of Change
<b>BCR-HMS-21-029</b>	Align Execution to Proposed Escalation Factor	2, 3, 4, 5, 6, 7	This BCR adjusted the escalation rates from 2.7% to 2.3% to align with CBAG Rev. 0 guidance.
<b>BCR-HMS-21-030</b>	Align SolarWinds to Proper Funding String	4	This BCR moved budget between level 6 WBSs to account for the updated DOE funding string direction.
<b>BCR-HMS-21-032</b>	Implement Station 93 Boiler Operations	4	This BCR replanned the Hanford Fire Department operations account to segregate Hanford Fire Station 93 boiler maintenance in FY 2021.
<b>BCR-HMS-21-033</b>	Implement RFS and DDWS Scope Through Contract Modification P00069	4, 8	This BCR distributed FY 2021 budget for RFSs and DDTOs through contract modification P00069.
<b>BCR-HMS-21-034</b>	Administrative Baseline Changes for June 2021 Reporting	4	This BCR implemented administrative WBS and coding changes.
<b>BCR-HMS-21-037</b>	Reliability Projects Alignment with Revised Execution Strategy for Various Projects	4, 7	This BCR replanned Reliability Projects to align with latest execution strategies, proposal submittals, and/or subcontractor construction submittals.
<b>BCR-HMS-21-038</b>	Update Program Log for Contract Modifications P00071	4, 8	This BCR implements the program log entries to transfer the Negotiated Contract Cost (NCC) to UB through contract modification P00071.

## 8.1 Undistributed Budget Activity

In June, the largest contributor to the change in Undistributed Budget (UB) was BCR-HMS-21-037. This BCR incorporated HMIS Reliability Project execution strategy updates which returned any indirect cost back to CLIN 4 UB.

**Table 6. June 2021 Undistributed Budget  
(Dollars in Thousands)**

Change Request #	Title	CLIN	UB
<b>BCR-HMS-21-033</b>	Implement RFS and DDWS Scope Through Contract Modification P00069	4	(\$19)
<b>BCR-HMS-21-037</b>	Reliability Projects Alignment with Revised Execution Strategy for Various Projects	4	\$27

## 8.2 Management Reserve Activity

There was no change in Management Reserve (MR) in June.

## 9.0 RISK MANAGEMENT

**Program Services and Support:** Refer to Section A of this report for Program Services and Support specific risk assessments.

**Reliability Projects:** Refer to Section B of this report for project-specific risk assessments.

## 10.0 PROGRAM CONDITION STATUS

**Table 7. Hanford Site Infrastructure System Health and Status Summary**  
**HANFORD SITE INFRASTRUCTURE SYSTEM HEALTH AND STATUS SUMMARY**  
**DATA CURRENT THROUGH June 20, 2021**

INFRASTRUCTURE SYSTEM	SYSTEM DESCRIPTION	SYSTEM HEALTH RATINGS			
		OVERALL STATUS	AVAILABILITY	MAINTENANCE	CONFIGURATION
WATER/SEWER UTILITIES	HMIS-ENG-66397, Rev 0 Updated Quarterly <b>Export Water (INFRA-EW)</b> Data: Jan - Mar 2021 Last Published: Apr 2021 This system provides export water to the 200 East & West Areas of the Hanford Site. Columbia River water is pumped to the 100-B and 100-D Areas and placed in settling basins. This system interfaces with both the raw and sanitary water systems.	81% (-4%)	77% (-5%)	91% (-3%)	86% (+1%)
	HMIS-ENG-66396, Rev 0 Updated Quarterly <b>Raw Water (INFRA-RW)</b> Data: Jan - Mar 2021 Last Published: Apr 2021 This system delivers raw water from the 200 Area reservoirs to the 200 Areas of the Hanford Site.	71% (-1%)	55% (NC)	92% (-8%)	97% (+1%)
	HMIS-ENG-66395, Rev 0 Updated Quarterly <b>Sanitary Water (INFRA-SW)</b> Data: Jan - Mar 2021 Last Published: Apr 2021 This system treats export water for human use and consumption in the 200 Areas of the Hanford Site.	92% (NC)	92% (NC)	91% (-2%)	92% (+1%)
	HMIS-ENG-66394, Rev 0 Updated Quarterly <b>Sanitary Sewer (INFRA-SNS)</b> Data: Jan - Mar 2021 Last Published: Apr 2021 This system receives and processes waste water generated from occupied facilities in the 200 Areas of the Hanford Site.	87% (+1%)	79% (NC)	96% (+3%)	100% (NC)
	HMIS-ENG-66418, Rev 0 Updated Quarterly	99% (+1%)	100% (NC)	100% (+2%)	93% (+3%)

## HANFORD SITE INFRASTRUCTURE SYSTEM HEALTH AND STATUS SUMMARY

DATA CURRENT THROUGH June 20, 2021

INFRASTRUCTURE SYSTEM		SYSTEM DESCRIPTION	SYSTEM HEALTH RATINGS			
			OVERALL STATUS	AVAILABILITY	MAINTENANCE	CONFIGURATION
SAS	<b>Safeguards and Security (INFRA-SAS)</b> Data: Jan - Mar 2021      Last Published: Apr 2021	This system provides access control & intrusion detection capabilities at the Hanford Site excluding the 200 Area Interim Storage Area. The boundary for each facility security system is defined by the power source.				
	<b>Transmission (INFRA-Transmission)</b> HMIS-ENG-66447, Rev 0      Updated Quarterly Data: Jan - Mar 2021      Last Published: Apr 2021	This system provides electricity to the entire Hanford Site by powering three 230 kV substations and one 115kV substation that powers the 400 Area. Major components of the system include the power lines, structures, and foundations. The deactivated A7 substation is this system as it functions only to transmit power.	See Note 5 (-0.9%)	100% (NC)	96% (NC)	100% (NC)
ELECTRICAL UTILITIES	<b>Distribution (INFRA-Distribution) (INFRA-T&amp;D)</b> HMIS-ENG-66446, Rev 0      Updated Quarterly Data: Jan - Mar 2021      Last Published: Apr 2021	This system provides power to the entire Hanford Site from the substations using overhead and some underground distribution lines. Major components of the system include service transformers, conductor, poles, line fault indicators, pole-top reclosers, capacitor banks and pole-top switches.	93.2% (-1.4%)	100% (+0.1%)	76.2% (-10%)	90% (+3.3%)
	<b>Supervisory, Control, and Data Acquisition (INFRA-EU_SCADA)</b> HMIS-ENG-66401, Rev 0      Updated Quarterly Data: Jan - Mar 2021      Last Published: Apr 2021	This system provides real-time knowledge of the electrical power flowing through the INFRA-TRANSMISSION, INFRA-SUB_A6, INFRA-SUB_A8, INFRA-SUB_A9, and INFRA-DISTRIBUTION systems. This system has some real-time knowledge of the INFRA-SUB_451B system. It performs remote operation of some switches.	88.10% (-1.59%) See Note 6	99.995% (+0.006%)	95.6% (-4.4%)	98.3% (NC)
	<b>Electrical Utilities: Meter Data Management System (INFRA-MDMS)</b> HMIS-ENG-66448, Rev 0      Updated Quarterly Data: Jan - Mar 2021      Last Published: Apr 2021	This system provides data collection, energy management, & access by stakeholders through a web-based Energy Management Module, and energy billing to support the unique Hanford electrical billing process for BPA billing, costing, forecast, and rate.	87.8% (-4.8%) See Note 6	98.4% (-0.1%)	96.0% (+0.6%)	99.3% (-.07%)
	HMIS-ENG-66398, Rev 0      Updated Quarterly		98.4%		95%	97%

## HANFORD SITE INFRASTRUCTURE SYSTEM HEALTH AND STATUS SUMMARY

DATA CURRENT THROUGH June 20, 2021

INFRASTRUCTURE SYSTEM	SYSTEM DESCRIPTION	SYSTEM HEALTH RATINGS				
		OVERALL STATUS	AVAILABILITY	MAINTENANCE	CONFIGURATION	
<b>Substation A6 (INFRA-SUB_A6)</b>  Data: Jan – Mar 2021      Last Published: Apr 2021  HMIS-ENG-66398, Rev 0      Updated Quarterly  <b>Substation A8 (INFRA-SUB_A8)</b>  Data: Jan – Mar 2021      Last Published: Apr 2021  HMIS-ENG-66398, Rev 0      Updated Quarterly  <b>Substation A9 (INFRA-SUB_A9)</b>  Data: Jan – Mar 2021      Last Published: Apr 2021  HMIS-ENG-66398, Rev 0      Updated Quarterly  <b>Substation 451B (INFRA-SUB_451B)</b>  Data: Jan – Mar 2021      Last Published: Apr 2021	This 230 kV substation monitors, protects, and controls the electrical power to the Waste Treatment Plant (WTP) Complex. The substation transforms transmission power to distribution power, which is supplied underground to the WTP 13.8 kV Switchgear Building.	(-1.2%)	100% (NC) See Note 7	(-5%)	(NC)	
	This 230 kV substation monitors, protects, and controls the electrical power to the 200 East and 200 West Areas. The substation transforms transmission power to distribution power. This substation also provides backup power to Substation A9, which supplies the 100 Areas.	96.6% (-1.4%)	100% (NC) See Note 7	94% (-6%)	89.0% (-1%)	
	This 230 kV substation monitors, protects, and controls the electrical power to the 100 Areas. The substation transforms transmission power to distribution power.	98.4% (+3.2%)	100% (NC) See Note 7	92% (+16%)	100% (NC)	
	This 115 kV substation monitors, protects, and controls the electrical power to the 400 Area and Laser Interferometer Gravitational Observatory. The substation transforms transmission power to distribution power.	70.7% (-0.3%) See Note 8	100% (NC)	90% (+2%)	81% (-4%)	
	<b>Core Telecommunication Infrastructure (INFRA-TELECOM)</b>  Data: Jan – Mar 2021      Last Published: Apr 2021  HMIS-ENG-66426, Rev 0      Updated Quarterly	The function of this system is to provide voice and data services to the Hanford Site. System includes the telecommunication equipment at all the core Information Management Facilities.	94% (+1%)	95% (+1%)	100% (NC)	85% (+4%)
		HMIS-ENG-66427, Rev 0      Updated Quarterly	89%	90%	92%	84%

## HANFORD SITE INFRASTRUCTURE SYSTEM HEALTH AND STATUS SUMMARY

DATA CURRENT THROUGH June 20, 2021

INFRASTRUCTURE SYSTEM	SYSTEM DESCRIPTION	SYSTEM HEALTH RATINGS				
		OVERALL STATUS	AVAILABILITY	MAINTENANCE	CONFIGURATION	
<p><b>Outside Plant Telecom Infrastructure (INFRA-OSP)</b></p> <p>Data: Jan – Mar 2021      Last Published: Apr 2021</p>	<p>This system manages all fiber, copper, and wireless outside plant infrastructure. INFRA-OSP includes the fiber summary map and spectrum management map. This system interfaces with other core telecommunication systems.</p>	(-5%)	(-5%)	(NC)	(-10%)	
<p>HMIS-ENG-65998, Rev 1      Updated Quarterly</p> <p><b>Campus Network Infrastructure (INFRA-CAMPUS)</b></p> <p>Data: Jan – Mar 2021      Last Published: Apr 2021</p>	<p>This system manages all components associated with the end building network connectivity and includes but is not limited to building network switches, indoor wireless access points, telecommunication rooms, backboards, and networks logic diagrams. This system interfaces with other core telecommunication systems.</p>	95% (NC)	96% (+1%)	100% (NC)	89% (-2%)	
<p>HMIS-ENG-66400, Rev 0      Updated Quarterly</p> <p><b>Special Circuits (INFRA-SC)</b></p> <p>Data: Jan – Mar 2021      Last Published: Apr 2021</p>	<p>This system manages all the special circuits providing telecommunications connectivity across the Hanford Site. This system interfaces with the core telecommunication system.</p>	100% (NC)	100% (NC)	100% (NC)	100% (+1%)	
<p>HMIS-ENG-66002, Rev 1      Updated Quarterly</p> <p><b>Hanford Site Emergency Alerting System</b></p> <p>Data: Jan – Mar 2021      Last Published: Apr 2021</p>	<p>This system manages all drawings, diagrams and maps associated with the Hanford Site Emergency Alerting System (HSEAS). System includes sirens, message reader boards (MRB), tone alert radios (TAR), and AM radio stations.</p>	80% (+3%)	72% (NC)	86% (+13%)	96% (+2%)	
HMIS FIRE SYSTEMS	<p>HMIS-ENG-66442, Rev 0      Updated Quarterly</p> <p><b>Breathing Air System (INFRA-FIRE_AIR)</b></p> <p>Data: Jan – Mar 2021      Last Published: Apr 2021</p>	<p>This system provides Grade D, or better, breathing air for Self-Contained Breathing Apparatus (SCBA) bottles, tanks for bottle carts, and emergency vehicles. The system also provides breathing air for SCBA unit testing and repair shops located at HAMMER and Building 609G.</p>	82% (-14%)	70% (-27%)	100% (+10%)	100% (NC)
	<p>HMIS-ENG-66435, Rev 0      Updated Quarterly</p>					

# EXECUTIVE SUMMARY

ROADS	<p><b>Radio Fire Alarm Reporter (INFRA-RFAR)</b></p> <p>Data: Jan – Mar 2021      Last Published: Apr 2021</p>	<p>This system transmits and receives alarm and trouble event signals primarily from facility fire alarm control panels to the Hanford Fire Department Dispatch Center located in the 200 Area Fire Station. RFAR is Factory Mutual-approved and meets NFPA 72.</p>	92% (NC)	94% (-1%)	95% (+3%)	83% (NC)
	<p>HMIS-ENG-66004, Rev 1      Updated Quarterly</p> <p><b>Fire Alarms (INFRA-FA)</b></p> <p>Data: Jan – Mar 2021      Last Published: Apr 2021</p>	<p>This system alerts building occupants of smoke and/or fire within the building and associated structures, while automatically summoning emergency services because of the activated alarm(s). [HMIS facilities only].</p>	86% (+1%)	95% (+1%)	72% (+2%)	75% (+2%)
	<p>HMIS-ENG-61894, Rev 1      Updated Quarterly</p> <p><b>Fire Suppression (INFRA-FIRE_SUPP)</b></p> <p>Data: Jan – Mar 2021      Last Published: Apr 2021</p>	<p>This system provides automatic controls for fires in buildings using; water, carbon dioxide, dry chemical, clean agents (Halon replacements), and high-expansion foams for the protection of certain portions of buildings or occupancy types. [HMIS facilities only].</p>	82% (-2%)	100% (NC)	65% (-8%)	48% (NC)
	<p>HMIS-ENG-66422, Rev 0      Updated Quarterly</p> <p><b>Hanford Site Roads (INFRA-ROADS)</b></p> <p>Data: Feb – Mar 2021      Last Published: Apr 2021</p>	<p>This system provides safe and compliant road networks to support continued operations and closure of the Hanford Site. Major components of the system include primary, secondary, and tertiary roads.</p>	87% (-5%)	86% (NC) See Note 10	78% (-22%)	100% (NC)

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Notes:

1. HMIS-PRO-ENG-61164, *Infrastructure System Health and Status Reports*, describes the process for report and ratings development.
2. In general, the Overall Status is calculated using Availability, Maintenance, and Configuration ratings. For some specific systems, aging or other Design Authority considerations has been factored in and a specific Note is identified.
3. Chart is based on the most recent published data for each system.
4. When data is available from a prior reporting period, the delta increase or decrease in the score is shown in parentheses below the current score.
5. Report includes separate ratings for status of North and South Loops. Overall status for this system exceeds goal value shown in report.
6. Consideration of system aging resulted in reduction of Overall System Status. See report for details on how this affects the Overall System Status score.
7. Report also calculates and presents availability of Bulk Electric System (BES) Transfer Trip Communications System, which is not presented in this summary table.
8. Overall System Status score scaled by 0.75 to reflect age of system and current period issues with transformer B5810C. See report for details.
9. NC = No Change.
10. This score for Roads is defined by the Design Authority as **Condition** in the report, as appropriate to this system.

Rating Legend	Rating Description
> 90%	Meets Goal
≥ 70% < 90%	Minimally Acceptable (Below Goal)
<70%	Not Acceptable

Revision Summary:

FY21-01: Updates to reflect latest updates to reports for INFRA-EW, INFRA-RW, INFRA-SW, INFRA-SNS, INFRA-Transmission, INFRA-Distribution, INFRA-EU\_SCADA, INFRA-MDMS, INFRA-SUB\_A6, INFRA-SUB\_A8, INFRA-SUB\_A9, INFRA-SUB\_451B, INFRA-TELECOM, and INFRA-OSP.

FY21-02: Updates to reflect latest updates to reports for INFRA-EW, INFRA-RW, INFRA-SW, INFRA-SNS, INFRA-Transmission, INFRA-Distribution, INFRA-EU\_SCADA, INFRA-MDMS, INFRA-SUB\_A6, INFRA-SUB\_A8, INFRA-SUB\_A9, and INFRA-SUB\_451B.

--Start of HMIS Operations (Jan 25, 2021)--

FY21-03: Updates to reflect latest updates to reports for INFRA-SC, INFRA-CAMPUS, INFRA-HSEAS, INFRA-RFAR, INFRA-FA, and INFRA-SUPP.

FY21-04: All reports updated to meet HMIS contract requirements for quarterly reporting of system health and status.

The Overall Status Scores for each system were either in the Yellow or Green score range (i.e., Overall System Status >70%). Included below is discussion of the three individual Red scores across all 20 reports:

## INFRA-RW (Raw Water)

**Availability.** The raw water system availability score is shown to be 55% in the most recent report (HMIS-ENG-66396, Rev 0). The system configuration remained the same during the January to April 2021 time period due to downtime for construction activities associated with Project L-895 and downtime for known maintenance for the 200 East Area fire pump. The Metron control cabinet supporting the 200 East Area fire pump is down, but walk downs for the job have been performed, work packages planned, and the new cabinet is on site with an expected installation to be next quarter (April to June 2021). Project L-895 Construction continued the pump house renovations at 282W and will continue into at least the next quarter. The availability items discussed here did not affect service for the raw water system due to the level of redundancy that has been engineered into INFRA-RW system and there was no interruption to raw water service during the reporting period.

## INFRA-FIRE\_SUPP (HMIS Fire Suppression Systems)

**Maintenance.** The fire suppression systems maintenance score is shown to be 65% in the most recent report (HMIS-ENG-61894, Rev 1). The score for the quarter was negatively impacted due to a low performance level of backlog corrective maintenance associated with fire suppression systems in HMIS facilities. It is expected that an increased level of backlog preventative maintenance will be accomplished during the next quarter.

**Configuration.** The fire suppression systems configuration score is shown to be 48% in the most recent report (HMIS-ENG-61894, Rev 1). This is due to the discovery of more open engineering changes on the system drawings than were previously known and resource limitations/priorities during the period covered in the current report. Additional resources have been added to this effort and it is expected that progress will be made on resolving the open engineering changes and bringing new and revised documentation into the technical baseline. These actions are anticipated to improve the configuration score in the next quarterly report; however, it may take two to three quarters to move the score solidly into the Yellow score range on the way to Green.

## 11.0 GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

HMIS Contracts is currently reviewing the J.11 table in relationship to C.3 of the contract and J.10.2. Needs identified to date are identified in the following table.

**Table 8. Government Furnished Services and Information**

<b>Contract Section</b>	<b>Identification</b>	<b>GFS/I</b>	<b>Due</b>	<b>Status</b>
<b>Nothing to report</b>				

## 12.0 PERFORMANCE EVALUATION AND MEASUREMENT PLAN (PEMP)

Fiscal Year 2021 PEMP		Feb	Mar	Apr	May	Jun
Service Level Agreements						
CLIN 0004						
<b>1.0 Effective Site Cleanup - Achievement of cleanup contractors' key milestones and regulatory commitments</b>						
1.1.1	Demonstrate that the following performance measure targets were met.					
	a Biological Controls – Pest Removal ≥85% 3-business-day completion					
	b Biological Controls – Tumbleweed Removal ≥80% 15-business-day completion					
	c Biological Controls - Vegetation Pre-Emergent; Selective; and Non-Selective; ≥85% on-time campaign fulfillment					
	d Maintain Potable Water Pressure at ICD Level					
	e Maintain Raw Water Pressure at ICD Level					
	f Electrical, Water & Sewer Preventative maintenance at 90% or better each month					
	g Electrical power availability					
	h Facilities Maintenance ≥90% on-time completion					
	i Fire Protection System Maintenance ≥90% on time completion					
	j Fire Systems - Priority 1 Emergency Impairments ≤ 3					
	k Fire Systems - Priority 2 Emergency Restrictions ≤ 18					
	l Fire Systems - Priority 3 Emergency Restrictions ≤ 80					
	m Fire Systems - Priority 2 Emergency Impairments ≤ 180 days during the month					
	n Fire Systems - Priority 3 Emergency Impairments ≤ 365 days during the month					
	o IT-Cyber Security – System Patching: ≥97% 7-business-day turnaround time (desktops) and ≥97% 14-business-day turnaround time (databases/servers)					
	p Cyber Security – Operational Technology (OT) Cyber Scores, reduction in cyber score, ≥2					
q IT-Cyber Security – CISA Directive Reporting						
r IT-Cyber Security Reporting - Incident within 30 minutes						
1.1.2	Demonstrate effective management of electric, water & sewer, and road utilities to maximize reliability and redundancy					
	Water: Complete flow test and condition assessment of the 200E water distribution system to include a briefing with recommendations on both to DOE					
	Water: Reduce corrective maintenance (including backlog) to an average completion of 250 days or less (this does not apply to responding to emergent situations or loss of service that have the potential to prevent effective cleanup operations);					
	Water: Submit quarterly System Health Report (SHR), by Engineering, complete with status of corrective actions for the availability, configuration, and maintenance dashboard one calendar month after each quarter.					
	Sewer: Reduce corrective maintenance (including backlog) to an average completion of 365 days or less (this does not apply to responding to emergent situations or loss of service that have the potential to prevent effective cleanup operations);					
	Sewer: Submit quarterly System Health Report (SHR), by Engineering, complete with status of corrective actions for the availability, configuration, and maintenance dashboard one calendar month after each quarter.					
	Electrical: Reduce corrective maintenance (including backlog) to an average completion of 300 days or less (this does not apply to responding to emergent situations or loss of service that have the potential to prevent effective cleanup operations)					
	Electrical: Submit quarterly System Health Report (SHR), by Engineering, complete with status of corrective actions for the availability, configuration, and maintenance dashboard one calendar month after each quarter.					
	Sewer: Submit biannual System Health Report (SHR), by Engineering, complete with status of corrective actions for the availability, reliability, and maintenance dashboard 1 calendar month after the biannual period.					
	2 Rejuvenate, reconfigure, and right size for 24/7 operations to support Direct Feed Low Activity Waste (DFLAW) and Waste Treatment Plant					
	3 Demonstrate comprehensive Critical Infrastructure Planning (water sewer, electrical, & roads) that demonstrates adequate and reliable utilities are supplied to critical facilities and operations, including those related to DFLAW, to adequately support 24/7 operations.					
4 Complete roads planning for Route 4S/2S/11A/Barricade upgrades						

# EXECUTIVE SUMMARY



Fiscal Year 2021 PEMP		Feb	Mar	Apr	May	Jun
Service Level Agreements						
<b>CLIN 0004</b>						
<b>2.0 Efficient Site Cleanup - Align resources and capabilities to support the site cleanup mission</b>						
2.1.2	1	Demonstrate effective Hanford Site integration to support an overall Hanford Enterprise including, but not limited to, working with other Hanford Contractors in identifying longstanding or emerging issues that affect efficient Site operations and provide recommendations for improvement.				
	2	Through the capacity-limiting constituents and Contractor Interface Board processes, provide DOE with an unfiltered, forward looking view of emerging operational, budget, regulatory, or contractual issues.				
	3	Conduct Operational Excellence Events: 40% of the Contractor's FY21 Operational Excellence events will be focused on cross-cutting inter-contractor Site integration opportunities.				
	4	Special Project: Working with OHCs through integration, prepare and submit a business case to the Contractor Interface Board for the implementation of a compliant (DRD-002 Section 13Attributes) Site Wide Computer Maintenance Management strategy/system. Through an annual Site Integration Self-Assessment Report, evaluate how well the Contractor performed the above measures against the stated objectives. The Contractor's approach, objectives, tools and processes, and results shall be considered as part of the report.				
	5	Develop and implement a new Employee Job Task Analysis (EJTA) system. Implementation is demonstrated by completion of two major milestones and associated sub-milestones.				
	6	3709A Fire Station Hot Water Boiler, assume operations and maintenance of the boiler from Johnson Controls				
	7	Submit for RL approval a site-wide Hanford Unmanned Aerial System (UAS) deployment process and Counter UAS program. Deployment is demonstrated by execution of an RL-approved Counter UAS program, followed by at least two completed approval evaluations or, if none are offered by OHCs, two reasonable test cases based on historical needs. Examples are roof inspections or land subsidence surveillance for underground structures demonstrating operational criteria (if approved).				
<b>CLIN 0005</b>						
<b>2.0 Efficient Site Cleanup - Align resources and capabilities to support the site cleanup mission</b>						
2.1.3	This CLIN covers the costs and fee associated with the work scope defined in Section C of the contract entitled, DOE					
<b>CLIN 0006</b>						
<b>1.0 Effective Site Cleanup - Achievement of cleanup contractors' key milestones and regulatory commitments</b>						
1.1.1	Demonstrate that the following performance measure targets were met.					
	a	Crane and Crew Support: ≥85% 2-business-day turnaround time and ≥85% 1-business-day turnaround time (emergency requests)				
	b	Fleet Services – Heavy Equipment Cranes; ≥90% in service - Cranes				
	c	Fleet Services – Heavy Equipment Excavators ≥90% in service - Excavators				
	c	Fleet Services – Heavy Equipment General Purpose; ≥90% in service				
	e	Fleet Services – Light Equipment Hanford Patrol; ≥90% in-service				
	f	Fleet Services – Light Equipment Hanford Fire; ≥90% in-service				
	g	Fleet Services – Light Equipment Special Purpose; ≥90% in-service				
	h	RSS - Dosimetry External Services: ≥95% 10-business-day turnaround time (routine exchanges) and ≥95% 30-business-day turnaround time (annual exchanges)				
i	RSS - Instrumentation Calibration ≥90% 10-day turnaround time					
<b>2.0 Efficient Site Cleanup - Align resources and capabilities to support the site cleanup mission</b>						
2.1.1	Maximize efficient MSA use of resources to meet the other Hanford contractors' changing project needs.					

## Performance Notes:

Red in April and May. An administrative error in the procedure that had P4's and P5's reversed. We corrected the error in the procedure and proceeded to evaluate the backlog of discrepancies to identify which ones needed to be corrected. Throughout the month of June seven P2 SRs were reported and four were corrected. There are currently 44 backlog P2 SRs open in FSMs responsibility to repair. During the month of June, annual preventive maintenance and extended

system testing occurred in several Nuclear facilities. Additionally, several backlogged PM's from 2-3 months prior were executed in June. As a result, several discrepancies normally found during the evolution of these PM's were discovered at this time. The increase of P2 SRs is a direct result of the accelerated pace of maintenance and testing performed during the month. Reference C.4.1.1.1.i Fire Protection System Maintenance (ITM Backlog) which documents the 88 backlogged PM's completed during the month.

Missed SLA in both April and May by one, Throughout the month of June twenty-three P3 SRs were reported and three were corrected. During the month of June, an unusually high number of P3 SRs were discovered. This is directly attributed to the deferred maintenance in FY2020 when the sites were in "mission critical posture;" and non-nuclear facilities had IT&M activities deferred, as documented in Letter MSA-2003537 and DOE Correspondence No. 2004578. IT&M activities, particularly the annual FACU and device testing activities, are where P3 system restrictions are typically discovered. Not performing these annual PM's during FY2020 allowed for 2-years' worth of discrepancies to accumulate since the last time the PM's were performed in FY2019. Several of the P3's would have been identified during normally scheduled 2020 annual PM's and corrected by now, or possibly could have been avoided had the normally scheduled maintenance been executed last year. An accelerated effort to execute these discrepancies is underway, particularly on overtime to catch up on backlogged work, however other higher priority work has taken precedence (emergency impairments and non-compliant backlogged IT&M), and some scheduling impacts have been realized from the recent excessive heat wave creating work rest regiments on many of these systems.

## 13.0 DOE ACTIONS/DECISIONS

**Program Services and Support:** Refer to Section A of this report for Program Services and Support specific DOE actions/decisions.

**Reliability Projects:** Refer to Section B of this report for project-specific DOE actions/decisions.

**Section A**



**Program Services and Support**

## 1.0 PROGRAM SERVICES AND SUPPORT SUMMARY

Key accomplishments and progress towards completion of goals and objectives, for the month of June included:

### President's Office:

- Chief of Staff/Communications/External Affairs/Special Projects
  - HMIS provided logistics support for a tour with EM-3 Nicole Nelson-Jean and EM's Chief Engineer and Chief of Staff for Field Operations Robert Crosby. Support included communicating with all parties involved with the tour, assisting with organizing the agenda and schedules, and arranging transportation and badging services.
  - HMIS took lead in planning and implementing Hanford Live, an online conversation about Hanford cleanup led by managers from DOE, the Environmental Protection Agency and Washington State Department of Ecology, and a local perspective from the Hanford Advisory Board (HAB). In order to provide a seamless and high-quality product, HMIS incorporated two dry runs, including a "dress rehearsal" with presenters and technical components in place. In overseeing the timeline, HMIS ensured that all staffing, advertising, and overall presentation was in place for this event. We documented nearly 170 total viewers for the event, an increase of more than 150% in viewers from 2019 (no event was held in 2020).
  - HMIS staff managed all aspects of a virtual public meeting on the Integrated Disposal Facility Leachate Tanks Class 3 Permit Modification. Support included drafting and circulating a public notice to advertise the event, postings on Hanford.gov and social media, collaborating with DOE, contractors and Tri-Party Agreement (TPA) agencies, and meeting logistics and facilitation.
  - HMIS participated in two full days of HAB meetings and two committee calls. Additionally, HMIS prepared and conducted the monthly TPA public involvement officer meeting. HMIS strategized with DOE HAB leadership, provided remarks, and answered questions. HMIS took notes, photos and drafted top manager summaries.
  - HMIS supported a DOE top manager round robin discussion with regional tribal members. Support included a planning meeting, dry run, updating of agenda, ground rules and presentations, then sharing documents during the virtual meeting.
  - HMIS worked to share information sitewide about COVID-19 safety protocol changes through all employee messages, frequently asked questions and a manager's brief shared with all contractors. Our team also monitored inboxes and feedback to address concerns and draft additional frequently asked questions.
  - HMIS prepared the monthly local media entries for both the Tri-City Herald and the Journal of Business. The entries show the month's active comment periods, public meetings, and Hanford Advisory Board meetings. The information was posted to social media and Hanford.gov events calendars.

- HMIS drafted and/or edited and sent 14 general delivery messages in June, focused on traffic impacts, COVID-19, and cybersecurity.
- Ethics
  - Issued our first Code of Business Ethics and Conduct, also known as the Ethics Guide in June. Our Ethics Guide connects our shared values to HMIS policies, procedures and guidelines we have in place to guide our actions every day. The Guide was placed in the HMIS formal procedure system and added to the Ethics and Compliance Internal Website. All active employees received a copy at home and it was also added to all employee's required reading assignment. The Ethics Guide was also publicized through the weekly Mission Insights, Daily Operations Report and Safety Start program. Employees are encouraged to actively reference the guide via hard copy or on-line as it translates legal and regulatory requirements into behaviors expected of all employees in an easy to understand format.
- Employee Concerns
  - Nothing to report.

### **Business Integration and Operations:**

- Site Mission Integration
  - HLANCostPlan, a custom application that contains Work Breakdown Structure (WBS) dictionaries, amongst other scope and estimating elements, has been implemented into production on May 17, 2021. On June 10, 2021, HMIS provided DOE-RL a demonstration for post-contract baseline WBS dictionary repository consideration. HMIS to provided DOE-RL a test environment to run through case studies on its use on July 8, 2021.
  - Transmittal of 5 or more significant opportunities white paper transmitted to DOE. Developed a plan for conducting an independent assessment of FY23 Red/Blue against phased approach and HIPL including review of narratives. Drafted FY22 KPGs and provided to Activity Managers and Deputies for their initial review on July 16, 2021, comments due by July 30, 2021.
  - HLCCB dashboard survey results continue to be gathered, and data marts being worked with the Site Baseline Systems group to interact with PowerBI. Meeting held with DOE-RL Project Controls Officers on July 15, 2021 to gather initial requirements. Efforts will proceed with DOE-RL by documenting additional requirements and interface meetings. Additional interface meetings with DOE-ORP will be initiated in July.
  - As a result of each OHC differing in their structuring of Cobra and the large magnitude of data that resides within, SMI continued to develop the data crosswalk in SQL script to be used as a basis for the mapping of earned value data for Power BI and a more efficient

mechanism of pushing the data into the data warehouse. Crosswalk needs to be updated based on new OHC system structures.

- Procurement
  - Environmental Leadership Awards Program: Review and analyze the ELAP nominees. Ratings and rankings was done by the Environmental group June 28.
  - In process with P-Card Administration update. Report generated to determine frequently used suppliers for PCard purchases, with reviewing North American Industry Classification System (NAICS) codes related to P-Cards. Actively working to update the supplier profile within the PCard database to ensure current information and NAICS codes are included.
  - Held meeting with Procurement and Electrical Utilities Interface to discuss potential improvements and ways to support EU acquisition requests. Discussions included the possibility to setup a blanket purchase order for commonly used electrical components.
  - Compliance completed reviews of Insurance Certificates and Subcontract Amendment NAICSs codes to ensure update to date information is reflected in Asset Suite, as well as, the Subcontract file. Still in process of obtaining Insurance Certificates from those vendors that have been contracted. In addition , Compliance assisted the P-Card Administration with their NAICS code review related to P-Cards.
- Finance & Accounting
  - Nothing to report.
- Business & Prime Contract Administration
  - Nothing to report.
- Business Process Compliance & Invoicing
  - During June 2021, two invoices were submitted to DOE-RL totaling \$27.65M for the work scope directly funded by DOE-RL, and 435 invoices were submitted to the Other Hanford Contractors totaling \$9.2M.
  - Business Process Compliance (BPC) continued the development of multiple business analytics regarding Code of Account (COA) Usage, training on overtime, timecard non-concurrences, and the pre-loading of time sheets. During June the analytic for COA Usage was completed and released into production. BPC is also working through the final stages of the testing of the floor check module with implementation planned prior to the end of September.
  - BPC provided approximately 38 telemetry related trip reports to managers with government vehicles for evaluation. BPC also incorporated several updates to the telemetry data based on feedback from Functional Service Areas.

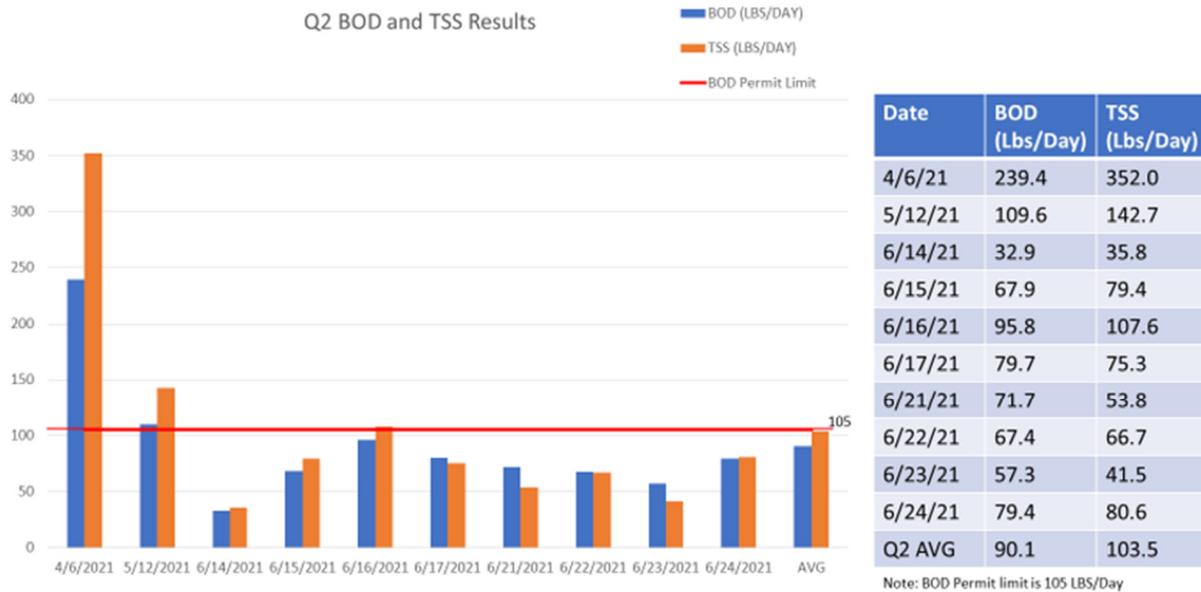
**Infrastructure & Site Services:**

- Completed 11.6 INFOR EAM upgrade test cases as a part of the Safety and quality assurance (SQA) documentation.
- Completed 3 ERMA related work packages.
  - 182D Clean up Asbestos containing material
  - Repair Potable Water Leaks in 200 East Area
- Initiated and approved CCR funding to extend the Letter Contract for TerraGraphics Activity Level Work Planning and Schedule Contract from 7/24/21 to 9/30/21.
- Meeting with Stratum Support to discuss schedule and support of Job Control System (JCS) to EAM transition. Requested schedule updates to Service Requests.
- Review of TerraGraphics metrics, weekly TerraGraphics reports for the month, Cost account charge number (CACN) corrections.
- Support Software Engineers/Project Manager for the Software Quality Assurance of EAM.
- Initiated a weekly ERMA status call meeting Water Utilities.
- Provided estimates for CPCCo maintenance of TSCR HVAC PM and Corrective Maintenance to develop ICWO SOW support FY 22.
- Meeting with TerraGraphics and Fire Systems Maintenance Operations to discuss the Planning Template and walk down support requests to be consistent with all other Departments.
- Fire Systems Maintenance executed several maintenance items, allowing for the closure of 19 fire system discrepancies in the month of June. Many of these were system restrictions which have the potential to impact the ability for fire suppression systems to operate appropriately in the event of a fire.
- FSM responded to and corrected 3 emergency impairments, which are conditions that critically impact fire suppression systems. Facilities included 623B, 222S, and MO354.
- FSM worked through a substantial portion of IT&M backlog in June, completing 88 overdue PM activities. Overdue PM's continue to be a high priority for scheduling in order to avoid non-compliances with National Fire Protection Association (NFPA) code frequencies.
- Electrical Utilities
  - Supported the finalized cutover and other project closeout activities assisting the L-789 project.



*Finalized Cutover and Closeout Activities*

- Performed a Construction Acceptance Test (CAT) and documentation at the A6 Substation supporting the L-801 project.
- Transducers were calibrated and passed.
- EU team was nominated for an HMIS Environmental stewardship award for repurposing a generator for HAMMER.
- Lead and Copper information: HMIS completed the 2021 triennial Lead & Copper sampling campaign on June 9 & 10 in the 100K, 200W, and 400 Area water systems. All sample results were in compliance with state and federal requirements and have been posted at each facility, as well as emailed to facility managers. Compliance Management is working on final paperwork that will be submitted to DOE-RL and WDOH.
- Summary of high BOD sample from 2nd quarter 2021 (April 6).
  - Investigation activities included a “foot survey” walk down of 448 Hanford facilities, evaluation of chemical use, and laboratory analysis of the disinfectant Lemon HG. These activities were discussed during the ISD meeting in June 2021.
  - Results from the BOD/TSS sampling events during the periods of June 14-17 and June 21-24 have been received. See graph.



**Figure A-1. Second Quarter BOD and TSS Results**

- MO386 ERMA repairs

**ERMA #1**

- When: 06/03/2021 at 21:00
- Details: 2-inch potable water line. ERMA work package number 836122. Positive pressure was maintained on the line until repairs were initiated or conditions worsened. The leak was estimated to be less than 1 gpm. There were no environmental impacts associated with this leak. A failed coupler was found to be the cause of the leak.



*ERMA #1*

**ERMA #2**

- When: 06/06/2021 at 21:06
- Details: 2-inch potable water line. ERMA work package number 836635. Prior to repairs being completed on ERMA #1, a ground valve adjacent to MO386 was broken. It was estimated that the leak was at 100 gpm. The line was isolated until repairs could be made. The decision was made to remove the ground valve to the building to prevent any future breaks.

*ERMA #2***ERMA #3**

- When: 06/19/2021 at 08:45
- Details: During the pressure test for the previous repairs, 3 addl. leaks were identified. Work was stopped and the area was put into a safe configuration until further evaluation and planning could be completed. CPCCo (customer) determined that no further actions were needed, and the line should be abandoned in place.
- Personnel are evaluating if a hydrant is required or if the line can be cut and capped.

*ERMA #3*

- On 06/04/2021, Hanford Patrol discovered that the 2607-EM Lift Station in the 200 East Area was releasing sewage to the ground. It is estimated that approximately 1,000 gallons of sewage was released due to a malfunctioning toilet (original

reporting indicated it was from a urinal) in the 2720EA Building. The toilet was stuck in the flush position. The toilet was immediately stopped by shutting the valve to the closed position. W&SU personnel maintained observation on the affected area until the standing sewage was removed, and the area disinfected on 06/04/2021 with a 0.06 % hypochlorite solution.

- The FIMS Validation was complete with DOE HQ –
- Day 1 Generated all four scorecards and performed the validation on the DOE Owned Scorecard.
- Day 2 Performed the Site visit completed DOE Owned Scorecard, the Disposition Scorecard.
- Day 3 Completed the Land and Lease scorecards.
- Completed interviews for CAS Inspectors supporting the change from DOE O 430.1b to 1c.
- Submitted CD0105 Maintenance 5-Year Plan for DOE review.
- Continued updating procedures to complete the Blue Sheeting process.
- Worked with RES Team to level load PMs through the warmer months allowing better resource utilization. Also looking for enhancements to allow process improvement in response.
- Completed field data collection for the Caretaker assessment.



*Impacted area surrounding 2607-EM LS*

- Expansion of Central Training Support to WTP: The Operation Support Central Training organization is working with the Waste Treatment Plant (WTP) to provide training and support for the roll-out of the Vision software program, which is used to develop training product, such as qualification cards and exams. This collaboration will ensure that the WTP's training products are consistent with products across the Hanford Site.
- WARNS Single Point of Contact Number: Operation Support Services implemented a single point of contact phone number for WARNS notifications as a means to streamline the notification process. Feedback from users has been positive, as users only need to call 372-0399 day or night. At the end of each workday, the phone is forwarded to the WARNS on-call POC.
- HMIS Painting & Signage Services kicked off this season's road striping campaign, painting white fog lines on the recently resurfaced Route 1. Road paint is in high demand this year due to an industry-wide latex shortage, which will result in a shorter than normal striping campaign.



*Road striping*

- 3709A, HFD Station 93, lost a seal on one of the pumps associated with the chilled water cooling system. As a result, a significant leak occurred which was promptly mitigated by the RES organization. The pump was subsequently replaced once a replacement was located and emergency ordered.



*Pump Leak*

*Pump Replacement*

### Interface & Integration Services:

- Interface Management:
  - Kinetic CE (Service Catalog) Migration: The Service Catalog team continued to configure Kinetic CE on HLAN and import data from the Kinetic Cloud during the month of June 2021. Activities completed include exporting the entire Kinetic data bundle from the hosted environment on the Kinetic servers, including approximately 200 Service Catalog forms. The Service Catalog team imported and tested multiple additional functions that make up the product suite.
  - HMIS and CPCCo Interface Meeting: HMIS Interface Management and the HMIS technical service area managers for Electrical Utilities, Water Utilities, and Facility Maintenance met with CPCCo Interface Management via Teams on June 2, 2021. Discussion topics included the plan and schedule for updating interface documents (i.e., AIAs, ICDs, and SDDs), the revised work schedule currently under consideration by HMIS Biological Controls, and an overview of the CPCCo management tool, ACEMAN, which represents six pillars of project excellence.



*ACEMAN Tool*

- HMIS 24/7 Operations Strategy Workshop: HMIS Interface and Integrations Services, Interface Management, and the Operating Excellence Team conducted a two-day workshop June 16-17, 2021 with representatives from Electrical Utilities, Water and Sewer Utilities, and Facility Maintenance. Special guest speaker, WTP Plant Manager, Kent Smith, Bechtel National Inc. (BNI) provided an update on the DFLAW project. Site contractors need to move to a more robust operational presence to ensure seamless 24/7 support to DFLAW. The goal of the workshop was to conduct an analysis of HMIS operations, response, and recovery to ensure HMIS is appropriately positioned to provide optimal 24/7 service delivery in support of DFLAW and associated continuous operations.
- Fleet Services
  - HMIS Environmental Field Support determined the continued use of the rental generator to power the Gable Mountain radio repeater would create a Washington State environmental non-compliance. Several different options were discussed with HMIS Environmental, IMS and Fleet Services. The best option was determined to be a new DOE owned generator, but current delivery times would not meet a schedule to avoid the non-compliance. Fleet Services then researched other options and was able to facilitate the immediate reassignment of a new WRPS generator to HMIS IMS. After the reassignment, Fleet Services, Maintenance Services and Work Control completed the installation at the Gable Mountain site which eliminated the potential non-compliance. The unit continues to function as designed without issue.

- HAMMER



*3M Speedglas G5-01 Welding Helmet*

- Two trial runs were held for the 1000 protection factor 3M Speedglas G5-01 welding helmet. The trials were a collaboration between contractors in the field as well as HAMMER personnel, Industrial Hygiene, Safety, and the Labor Training Directors. Using real-life welding operations for this trial run provided the workers the ability to adjust the Auto-Darkening Filter and all other aspects of the helmet. Their evaluations will help determine if contractors will add the 3M G5-01 Heavy Duty Welding Helmet to the approved list for use onsite.



*Arc Flash Gear*

- For several years site contractors have been working with the contractor, Uni-tec, to design, build, and test arc flash gear for the Powered Air Purification Unit (PAPR) in preparation for entries into contaminated facilities during Deactivation and Decommissioning. The arc flash gear will protect the PAPR in the event of an arc flash event and allow the worker to exit the contaminated area while still utilizing respiratory protection. This is a first of its kind arc flash protective gear designed specifically for Hanford. HAMMER recently received the arc flash gear. Staff have displayed some of the gear on a mannequin and incorporated informational slides into the arc flash section

of the NFPA 70 electrical safety training to bring awareness to the Hanford electrical workforce.

- Warehouse & Property Management:
  - Consummated lease agreement with the Port of Benton to lease an additional 23,021 square feet of warehouse space and an additional 32,830 square feet of secured/paved storage yard. Space is located at 2355 Stevens Drive, and is designated for the HMIS Surplus Property Disposition Program.
- Transportation Services:



*Gravel Transport*

- HMIS Teamsters Matrixed to WRPS delivering a pump to AW Farm.



*Pump Transport*

- HMIS Teamsters Matrixed to WRPS preparing a pump for shipment to Environmental Restoration Disposal Facility.

- Crane and Rigging:



*Crane & Rigging Evaporator Transport*



*Crane & Rigging Evaporator Transport*

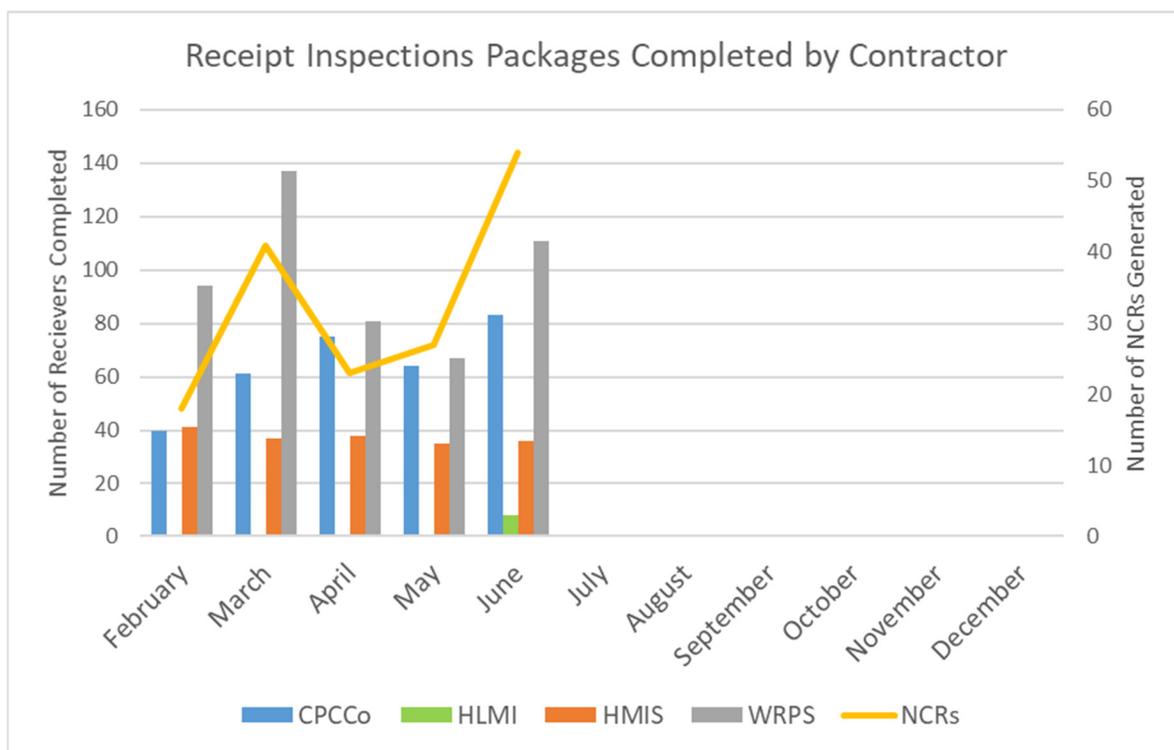
- HMIS Crane & Rigging recently assisted WRPS with the replacement of the 242-A Evaporator feed pump located in AW-Farm. This was the longest running waste transfer pump at Tank Farms and current 242-A Transfer Line replacement project provided the crucial window for the Feed Pump replacement. This will provide a new reliable pump for future 242-A campaigns and significantly reduce mission upset risk in coming years.

### **Mission Assurance:**

- HMIS Performance Oversight distributed the draft revision of the QAPD, HMIS-PLN-QA-599, for internal review. The revision is a collaborative effort coordinated by the Performance Oversight group for this company level procedure that requires input from

each VP organization. The QAPD describes the HMIS quality program and the basis of the graded approach applied by HMIS, the final revised QAPD will be submitted to DOE for review and approval no later than September 30, 2021.

- HMIS Performance Oversight supported CPCCo to successfully implement DevonWay iCAS and go live with the software effective June 28, 2021..
- The HMIS Acquisition Verification Services (AVS) group performed receipt inspection of quality level 1, 2, and 3 items on behalf of the prime contractors. AVS completed the receipt of 238 receivers, comprising of 358-line items, and generated 54 non-conformance reports (NCRs).



**Figure A-2. Receipt Inspections Packages Completed by Contractor**

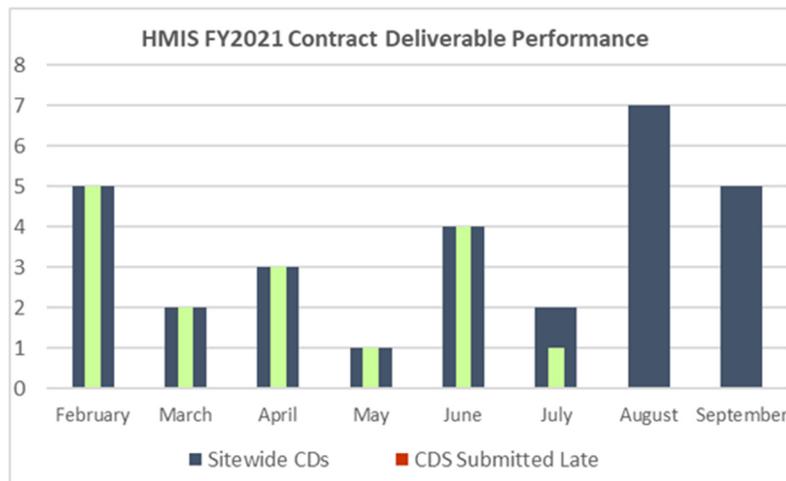
- HMIS Quality Assurance Engineers provided oversight of subcontractor activities and reliability project activities by reviewing 283 documents including statements of work, design, construction and procurement project documents, and participated in 11 field oversight/witness activities.
- HMIS operates the Centralized Consolidation/Recycling Center (CCRC) and receives Universal Waste (UW) and other types of recyclable commodities from all site contractors. The tables below represent the volume of waste received by and shipped from the CCRC for the month of June.

Table A-1. CCRC Shipments

Items Shipped to the CCRC During June FY2021							
Material Received		Received From					
		HMIS	CPCCo	WRPS	PNNL	WTP	DOE-RL
Mercury Containing Equipment	Gross Pounds						
Non-PCB Ballasts	Gross Pounds						
UW Lamps (All Types)	Gross Pounds		184			563	747
UW Batteries (All Types)	Gross Pounds	294	144	300		44	782
Lead Acid Batteries	Gross Pounds			1895		1400	3295
Aerosol Cans	Cans Received						
Aerosol Cans	Cans Punctured						

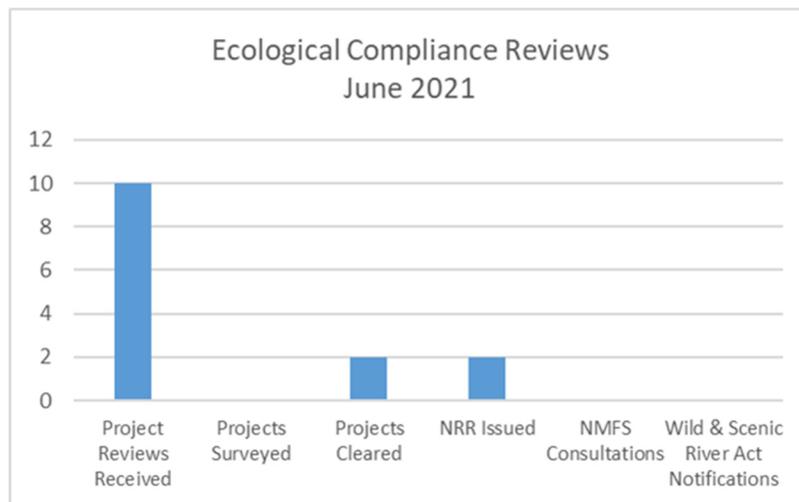
Off-Site Shipments from the CCRC During June FY2021				
		Veolia	ORRCo	Totals
Mercury Containing Equipment	Gross Pounds	31		31
Non-PCB Ballasts	Gross Pounds	1993		1993
UW Lamps (All Types)	Gross Pounds	1542		1542
UW Batteries (All Types)	Gross Pounds	1311		1311
Lead Acid Batteries	Gross Pounds	10,968		10,968
Used Oil	Gross Pounds			
Spent Antifreeze	Gross Pounds			
Off-Spec Gasoline	Gross Pounds			
Off-Spec Diesel Fuel	Gross Pounds			

- Environmental completed four Contract Deliverables in June. The Contract Deliverables were (1) CD0318, “Annual Radionuclide Air Emissions Report,” (2) CD0308, “Hanford Site PCB Annual Report,” (3) CD0309, “Annual Hanford Site PCB Document Log,” and (4) CD0321, Annual Air Operating Permit (AOP) Compliance Certification Report. One Contract Deliverable due in July was also submitted in June. CD0327, “Quarter 4, RCRA Permit Class I Modification Notification Report,” is due July 1 and was submitted on June 25.



**Figure A-3. Environmental CD Performance**

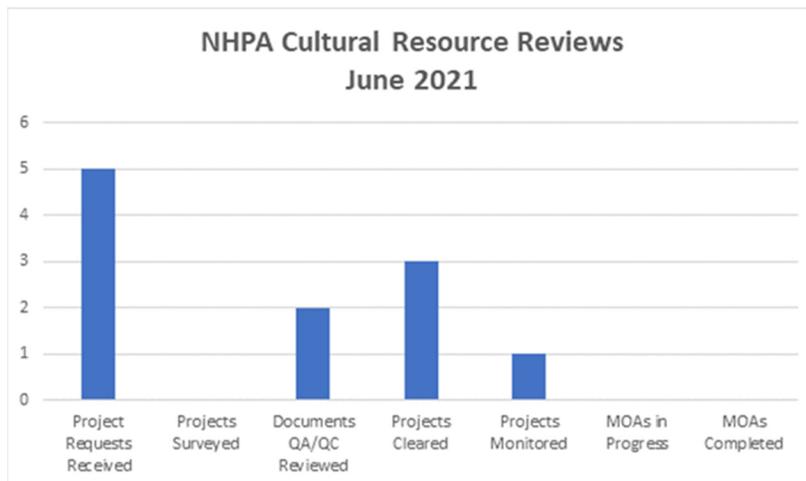
- Ecological Monitoring and Compliance (EMC) staff received ten new requests for Ecological Compliance Reviews during the month of June. EMC staff issued Ecological Clearance Notifications to Proceed for two projects and issued ‘No Review Required’ (NRR) emails for two projects during the month of June.



**Figure A-4. Ecological Compliance Reviews**

- Cultural and Historic Resource Protection (CHRP) program received five new requests for National Historic Preservation Act (NHPA) Section 106 Project Review during the month of June. CHRP staff did not conduct any surveys as part of the Section 106 process. On behalf of DOE-RL, CHRP staff reviewed two cultural resources documents for professional standards, quality, and compliance with NHPA Section 106 requirements. CHRP issued Cultural Clearance Notifications to proceed for three projects after completing all Section 106 requirements. Cultural resources monitoring occurred for

one project this month. Currently, DOE-RL is not consulting on any MOAs with the Washington State Historic Preservation Office and area Tribes.



**Figure A-5. NHPA Cultural Resource Reviews**

- HMIS has the responsibility to integrate, facilitate, and document regulatory agency inspections of DOE facilities on the Hanford Site for all Hanford Site contractors. Those responsibilities include providing support to DOE and Hanford Site contractors during regulatory agency inspections occurring on site and tracking those inspections in the Regulatory Agency Inspection Database (RAID). Below is a summary of the regulatory agency inspections that were supported by HMIS for June 2021.

**Table A-2. Sitewide Inspection Status**

Sitewide Inspection Support for June 2021						
Company	EPA	ECY	WDOH	DOE	Date	Subject/(Raid #)
HMIS		1		1	6/9/2021	• Ecology Underground Storage Tanks Inspection (2021-027)
					6/14/2021	• RCRA Permit Inspection of the 200 West Area (2021-028)
PNNL		1			6/23/2021	• Ecology RCRA Inspection of the 325 Laboratory (2021-032)
WRPS		1	2		6/9/2021	• Ecology Underground Storage Tank Inspection at 242-A (2021-027)
					6/21/2021	• WDOH Air Inspection of the 241-SY Exhausters (2021-030)
					6/30/2021	• WDOH Air Inspection of the 241-AN Emission Units (2021-034)
CPCCo		3			6/9/2021	• Ecology Underground Storage Tank Inspection of 400 Area (2021-027)
					6/15/2021	• Ecology RCRA Inspection of the WESF (2021-029)
					6/22/2021	• Ecology Observation of the Integrated Disposal Facility (2021-031)

HLMI		1			6/29/2021	• Ecology RCRA Inspection of the 222-S Laboratory (2021-033)
TOTALS		7	2	1		

- HMIS continued to seek projects that increase energy efficiency and qualify for utility incentives from the Bonneville Power Administration (BPA).
- HMIS manages the Site Evaluation and Excavation Permitting processes for the entire Hanford Site. All Hanford Contractors follow these processes and must submit requests for their specific land use actions and excavation activities. The following table shows the new requests that were submitted in June 2021.

**Table A-1. Hanford Site Evaluations and Excavation Permit Requests**

June 2021						
Contractor Request	HMIS	CPCCo	WRPS	PNNL	WTP	Totals
Site Elevations	1	0	0	0	0	1
Excavation Permits	2	1	0	1	0	4

**June Site Evaluation:**

- **600-2021-0016:** Access and Obtain Live Elk for Research from the Hanford Site. (HMIS)

**June Excavation Permits:**

- **DAN21-0089:** Work Package – PNNL is remodeling lab spaces on the west side of the 331 building to repurpose them for other research activities.
  - **DAN21-0092:** Work Package – CPCCo to support 203-A and 210-A Mechanical Isolation, 200E Area.
  - **DAN21-0096:** L-720 Outdoor Lighting Reconfiguration and Replacement – HMIS project where DGR is setting up a job site trailer parked at the 200 West laydown area.
  - **DAN21-0098:** Z-332, Hammer Walk Paths – This HMIS project will be adding walking paths at HAMMER. Excavation to include, but not limited to: excavation for installation of sidewalks/walk paths, backfill, and clean up and grade and pave areas affected by the soil disturbing activities.
- HMIS staff has teamed with Washington Department of Fish and Wildlife (WDFW) to trap and collect tissue samples from Townsend’s ground squirrels (*Urocitellus townsendii*) located at a winery in the Sunnyside area. The tissue was sent to the wildlife genetics lab for analysis. HMIS hopes to learn the genetic make-up of reference healthy population and Hanford’s depleting population to determine if potential genetic islands are causing the Hanford population decline and if the Sunnyside colony could serve as a donor population for the Hanford Site. Townsend’s ground squirrels are an important species that provide ecological functions such as serving as prey to many predators,

shaping soil fertility and plant production through burrowing and feeding, and furnishing burrow habitats for other species. The species has been showing signs of precipitous decline in Washington State in recent years. The WDFW lists the Townsend's ground squirrel as a "State Candidate" species. Surveys on the Hanford Site in 2021 corroborate the severe decline of Townsend's ground squirrels across the state with only one of twenty-three sites showing any active burrows.



*Collecting Tissue Samples from Townsend's Ground Squirrels*

- HMIS banded Burrowing Owls on June 15 and 16, 2021 from Artificial Burrow Systems (ABS) installed to support the declining owl population on Hanford. ABS with known nests were accessed to capture and band newly hatched Burrowing Owls. Burrowing Owls are listed as a Candidate Species in Washington State, meaning they are of conservation concern in the state. Bands were obtained from U.S. Fish and Wildlife Service (USFWS) and the data gathered from the banded birds will help both Hanford biologists, USFWS, Washington Department of Fish and Wildlife (WDFW) and other projects better understand Burrowing Owl distribution and breeding, contributing to regional owl conservation. Twenty-one local hatch year and 1 adult Burrowing Owl were banded.



*A young Burrowing Owl that has been banded.*

- HMIS provided a cleared document package about the environmental aspects review process to the Environmental Management System coordinators at Fermi National Accelerator Laboratory (FNAL). FNAL plans to use the documents for improving their environmental aspects review process. The package included the HMIS environmental aspects review process instructions, example scoring document, lifecycle perspective presentation, and environmental objective implementation form.
- HMIS composed a whitepaper evaluating the current uses of the Preservation Designated Area (PDA) located in the 300. This area is 102 acres and was part of the TRIDEC transfer of land. A 2019 Memorandum of Agreement between DOE, Pacific Northwest Site Office and DOE-RL established responsibilities with the intent to preserve cultural and biological resources. A Pacific Northwest National Laboratory survey, reflecting the revised area of the PDA at 116 acres has been completed, but not yet finalized. HMIS is awaiting decisions from DOE-RL on the requirement of badging in this area. The evaluation identified the current state of the area including access and uses and was provided to DOE.
- HMIS submitted the HMIS objective evidence (i.e., HMIS Daily Operations Report, Water/Sewer/Electrical Utilities and Fire Department procedures that incorporates trespassing awareness) for fulfilling our actions in accordance with procedure HMIS-PRO-ENV-62353, *Hanford Site Access and Awareness* to DOE Environmental Compliance Division as requested. This objective evidence will be provided to the Washington State Department of Ecology to fulfill the Ambient Air Boundary Memorandum of Agreement requirements. HMIS Environmental is also working with the HMIS Training organization to ensure a Hanford General Employee Training (HGET) completion report query is added to the [Success Factors Learning Management System Training Reports website](#), which will make it easy to obtain the required HGET completion reports in accordance with procedure HMIS-PRO-ENV-62353.
- HMIS installed a kiosk at the Rattlesnake barricade that included a map of the restricted access boundaries, contact information, and a Hanford Patrol assistance phone. Objective evidence of its completion was submitted to the DOE Environmental Compliance Division. This objective evidence will be provided to the Washington State Department of Ecology to fulfill DOE commitment as outlined in the Ambient Air Boundary Memorandum of Agreement requirements.



*Hanford Patrol Assistance Kiosk at Rattlesnake Barricade*

- On June 8, 2021, HMIS transmitted on behalf of DOE-RL the Cultural Resource Review for the L-819 Project Installation of a High Capacity Fiber Optic Cable Between North Richland and the 200 East Area of the Hanford Site, Benton County, Washington (HCRC#2021-600-002) to the Washington State Department of Archaeology and Historic Preservation and Area Tribes for 30 day review. This cultural review was performed for the L-819 Project, which includes the installation and ongoing maintenance of a new high capacity fiber optic cable between the 1220 Building in Richland and the 2220E Building in the 200 East Area of the Hanford Site. The cultural resource review identified nine new cultural resources and several previously identified cultural resources, including multiple Traditional Cultural Properties (TCPs), within the Area of Potential Effect. To prevent an adverse effect to TCPs as well as the potentially National Register of Historic Places eligible historic Camp Hanford, several work controls including cultural resource monitoring and avoidance of Camp Hanford are recommended. Additionally, DOE will continue consultation with Area Tribes to identify ways to protect impacts to First Foods that may be located within the project area.
- HMIS supported Project L-789: *Operation and Maintenance of Transmission and Distribution System Utility Poles and Access Roads in the 200 West Area* by performing a post-construction project walk down for the completed portion of the project. A portion of the project had removed utility poles and the associated access road was no longer needed for Hanford Site activities. This walk down identified the access road as requiring revegetation and followed up on restrictions within the Ecological Compliance Letter (MSA-2001936) for ongoing project activities. HMIS provided a site-specific revegetation plan as required by the *Biological Resources Management Plan* (DOE/RL-96-32 Rev. 2) and was written following guidance in the *Hanford Site Revegetation Manual* (DOE/RL-2011-116 Rev. 2). The site-specific revegetation plan has the goal of planting native species to restore the area impacted by the road, reducing habitat fragmentation and helping reduce the Hanford footprint on the ecological environment. Revegetation for this project will take place in Fiscal Year 2022 and Fiscal Year 2023.

HMIS provided support to DOE-RL in one Land Disposal Restrictions (LDR) Full Report Comment Resolution meeting. The Washington State Department of Ecology (Ecology), Environmental Protection Agency Region 10, DOE-ORP, and other Hanford Site Contractors also participated in this meeting. A letter from DOE-RL to Ecology was approved to extend the comment resolution period for the 2019 LDR Full Report from June 15, 2021 to July 31, 2021.

- HMIS provided support on Projects L-897, Central Plateau Water Treatment Facility (CPWTF) and L-839, 12-inch Water Line Loop. HMIS provided an update that a formal message from Ecology was sent to List Serve announcing the 30-day comment period for the State Waste Discharge Permit for the Treated Effluent Discharge Facility (TEDF) renewal would begin at the end of June. This renewal is needed prior to the first discharge to TEDF from CPWTF. HMIS also provided coordination between Central Plateau Cleanup Company and HMIS to discuss Waste Information Data System (WIDS) sites 200-W-252 on Project L-897 and WIDS Site 2607-EA for Project L-839.
- HMIS provided regulatory support to Centralized Consolidation/Recycling Center (CCRC) personnel as a follow-up to an inspection. In March 2021, Ecology inspected the CCRC and the satellite accumulation areas (SAAs) within the facility. One of the documents Ecology requested was a spill log. While spill logs are a requirement for SAAs managed by medium quantity generators (MQGs), the CCRC SAAs are managed under the large quantity generator (LQG) requirements and not subject to MQG requirements. HMIS reviewed the applicable regulations and provided CCRC personnel with the LQG requirements that are comparable to a spill log, i.e., the submittal of a written report to Ecology within 15 days of an incident, including a spill that triggers the implementation of the contingency plan. Since the CCRC did not have any such incidences, no 15-day reports were required to be submitted with the document request package.
- HMIS completed the customer requirements document which identifies the top-level requirements needed for the requirements management program, and charter, HMIS-CHT-EPRC-62380, Revision 0, *Hanford Sitewide Requirements Management Forum* that was published with an effective date of June 15, 2021. This charter defines the roles, responsibilities, and rules of practice for the Hanford Sitewide Requirements Management Forum.
- HMIS generated and provided to the DOE-Office of Chief Counsel (OCC) and Environmental Compliance Division, a consolidated Excel file containing all the active DOE-RL TPA milestones and DOE-ORP TPA Milestones and Consent Decree requirements as a quick reference tool. DOE-OCC was particularly interested in seeing the 110-day notification due dates for all the active TPA milestones, as the 110-day notification date provides DOE TPA milestone modification rights and protects their dispute resolution rights under the TPA as long as the notification requirement to the lead regulatory agency has been met. HMIS added the 110-day notification due dates into the file and will continue to provide the updated file to DOE at the beginning of each month.

- HMIS Integrated Biological Control (IBC) is tasked to control industrial weeds (primarily tumbleweeds) and pests on the Hanford Site to maintain a safe and healthy work site. One of the primary objectives of controlling weeds and pests is to prevent radiological contamination due to biological vectors. IBC also protects the ecology of the Hanford Site by controlling noxious weeds across the site. The activities for IBC during June 2021:

**Table A-3. Integrated Biological Controls**

June 2021	Sum	Sitewide	HMIS	CPCCo	WRPS
<b>Contamination Incidents &amp; Radiological Surveillance</b>					
Animal Contamination	0	-	0	0	0
Vegetation Contamination	5	-	0	1	4
Speck/Soil Contamination	0	-	0	0	0
<b>Tumbleweed Disposal</b>					
Non-Regulated YD <sup>3</sup>	75	75			
Regulated YD <sup>3</sup>	0	0			
Tumbleweeds Burned (YD <sup>3</sup> )	3,600	3,600			
<b>Vector and Pest Controls</b>					
Pest Control Work Requests	146	146			
Animals Capture	272	272			
Animals Contaminated	0	0			
<b>Herbicide Application</b>					
Industrial Weed (Acres)	395		154	217	24
Noxious Weed (Acres)	6	3			

- HMIS drafted new TPA Change Control Form (CCF) M-85-21-02 for DOE-RL, which proposed to modify the due date of TPA interim Milestone M-085-90. This milestone requires DOE-RL to submit a Remedial Investigation/Feasibility Study Work Plan for the 200-CR-1 Operable Unit (OU) to the U.S. Environmental Protection Agency (EPA) by September 30, 2021. This CCF proposed a 5-year extension, from September 30, 2021 to September 30, 2026 instead of the previous 10 years and 9 month extension proposed in CCF M-85-21-01 that was submitted to EPA on May 24, 2021. This new CCF was drafted based on comments received from EPA on CCF M-85-21-01, due to the close proximity of the 222-S Laboratory in the 200-CR-1 OU. HMIS obtained DOE-RL approval of CCF M-85-21-02, formally submitted it to EPA on June 4, 2021, replacing the previously issued CCF M-85-21-01. HMIS received approved CCF M-85-21-02 from

EPA on June 7, 2021, processed the CCF, and incorporated these changes into the TPA officially.

- HMIS received from the Washington State Department of Ecology, approved TPA CCF M-16-21-04, which extends the due date of interim milestone M-016-257, to complete Confirmation Sampling/No Further Action for all waste sites as identified in TPA CCF M-16-20-01 in Fiscal Year 2021, by 9 months from September 30, 2021 to June 30, 2022. HMIS processed the approved CCF, incorporated these changes into the TPA officially, posted the latest TPA and Appendix D updates on the [Hanford.gov TPA website](#), and made applicable Hanford stakeholder notifications.
- HMIS received from DOE-RL, approved Tri-Party Agreement (TPA) Change Control Form C-20-03, which incorporates 514 River Corridor waste site updates into TPA Appendix C, Listing by Operable Unit. HMIS processed the approved CCF, incorporated these changes into the TPA officially, posted the latest TPA and Appendix C updates on the [Hanford.gov TPA website](#), and made applicable Hanford stakeholder notifications.
- HMIS facilitated the DOE-RL Tri-Party Agreement (TPA) Quarterly Milestone Review meeting on June 17, 2021 to provide support to the Tri-Party agencies. These meetings are held between DOE-RL, U.S. Environmental Protection Agency, and Washington State Department of Ecology at the Executive Manager level to review monthly and cumulative budget, actual monthly and cumulative costs, performance measurement information including explanations of cost/schedule variances, progress in achievement of milestones, and notification of problems and program/project delays associated with meeting TPA milestones. HMIS recorded the meeting and will produce the meeting transcript, meeting minutes, meeting actions, and submit the final meeting minutes to the Hanford Administrative Record.
- HMIS coordinated and led the annual Resource Conservation and Recovery Act (RCRA) Permit inspection of the 200 West Area. The inspection team included representatives from DOE, HMIS, Central Plateau Cleanup Company, and Washington River Protection Solutions. In accordance with Hanford Facility RCRA Permit, Condition II.O.1.d, HMIS notified the Washington State Department of Ecology (Ecology) by electronic mail at least seven (7) days prior to the annual inspection to allow participation at their discretion. Ecology did not attend the inspection. There were observations made that will require evaluation and possible corrective actions. There were no RCRA related issues identified. HMIS has provided summary and photo information of the observations to responsible HMIS and Hanford contractor personnel. Responses to the observations will be provided to DOE once the corrective actions have been completed. The Regulatory Agency Inspection Database will also be updated as the corrective actions are completed.
- HMIS obtained approval of Tri-Party Agreement (TPA) Interagency Management Integration Team (IAMIT) Determination number 2021-001, *Temporary Suspension of Tri-Party Agreement Milestones from the Agreement in Principle (AIP) for the Negotiation of Hanford Federal Facility Agreement and Consent Order Revisions in Response to Federal Fiscal Year 2018-2020 Appropriation in Conjunction with the*

*Representative Analogous Site Coordinating Agency Liaisons (RASCAL) Recommendations (IAMIT Determination number 2020-006) for Expediting Remedial Cleanup on the Hanford Central Plateau* (referred to as the Budget/RASCAL negotiations). IAMIT Determination 2021-001 provides DOE-RL a 45-day temporary suspension of 13 TPA interim milestones through August 6, 2021. Since the AIP for the Budget/RASCAL negotiations expired on May 17, 2021, this temporary suspension provides DOE-RL milestone protection rights under the TPA and allows the parties to establish a path forward to continue negotiations. HMIS incorporated the status change for the 13 TPA milestones into the Central Milestone Module database, which are now shown “In Abeyance” (TPA term for suspended) for 45 days, added the IAMIT Determination into the Administrative Record, made the applicable Project Manager notifications, and will track these milestones in the interim.

- HMIS received an approval letter from the Washington State Department of Health (WDOH) for a waiver from Washington Administrative Code requirements. HMIS requested approval to use Controlled Density Fill (CDF) in place of sand and gravel to backfill septic tanks at the Hanford Site. WDOH approved the waiver to use CDF, when needed, to fill tanks that will not be used in the future.
- DOE Infrastructure and Services Division informed HMIS Environmental on June 3, 2021 that DOE and HMIS had decided not to proceed with construction activities under the enforcement discretion offered by the Washington State Department of Ecology. Following this decision, the RL Manager requested a fact finding report by close of business on June 10, 2021. HMIS supported this fact finding by developing a timeline of key events related to obtaining an air permit for the Water Systems Upgrade projects and participated in a series of meetings to document the application timeline of events and lessons learned from the events of the Water Systems Upgrade project permitting process.
- HMIS received notification of a 1,000 gallon sewage release from Lift Station 2607-EM, 200 East Area on June 4, 2021. The 2607-EM Lift Station is part of the 6608 Biolsolids Treatment Facility State Waste Discharge Permit ST0045514 and required notification to the Washington State Department of Ecology (Ecology) and the Washington State Department of Health (WDOH). Notification was made to Ecology and WDOH on June 4, 2021. This release requires a five-day report per ST0045514, Section S3.F.c. A five-day report was drafted, reviewed, and issued to Ecology and WDOH on June 9, 2021.



*Lift Station Sewage Release*

- HMIS met with Central Plateau Cleanup Company personnel to discuss a path forward for required mitigation of the 165-KW maternal bat colony. The 165-KW is being used by a colony of Yuma myotis bats that were initially discovered during April 2021 field survey prior to the demolition of the 165-KW structure. Maternity colonies of myotis species, including the Yuma myotis are a priority habitat under Washington State Department of Fish and Wildlife (WDFW) Priority habitats and species listing. The species specific conservation measure for Yuma myotis in the Washington Department of Fish and Wildlife (WDFW) Bat Conservation Plan states “Protection of nursery colonies and hibernacula from human disturbance is a priority”. The Hanford Site Biological Resources Management Plan (BRMP) is DOE’s primary implementation plan for managing natural resources under the Hanford Comprehensive Land-Use Plan (CLUP). Ecological clearance reviews for demolition of the complex stated that mitigation requirements would be implemented prior to demolition of 165-KW. The discussions during the walkdown and subsequent meetings included the potential to use a portion of the tunnel for in place mitigation and recommendations to delay demolition of the 165-KW building until bats have vacated the facility in October. A follow-up walkdown was conducted in the building and confirmed the presence of ~200 bats in, a single location of the building validating its use as a maternity colony. HMIS deployed temperature data loggers at 3 locations in the building and these temperature datasets will be used to compare current roosting temperatures in the 165-KW to the temperatures present in the tunnel for use in evaluation of possible engineering controls and changes required for the tunnel to meet similar roost requirements and be preserved as mitigation.

- HMIS participated in a meeting with DOE and Yakima Nation to discuss Hanford Site ecological resources monitoring and compliance activities. HMIS provided an overview of ecological resource management at Hanford and the related management plans and monitoring reports that document resource protection efforts.
- HMIS completed field work associated with long-term post-wildfire monitoring. Fourteen vegetation plots were monitored to investigate and document long-term changes in plant composition following fire. The plots were monitored to determine vegetation characteristics including native and invasive species cover, diversity, and abundance, and shrub recruitment. These plots had been monitored in 1996, burned in the 24 Command Fire in 2000, then had been monitored again between 2002 and 2009. These plots were revisited in 2021 to collect data on long-term vegetation changes post-fire. Results from this report will be used to inform post-fire restoration and determine how Hanford habitats have recovered following large fires within the past two decades. The results from this monitoring activity will be compiled in the Post-Fire Monitoring Report which will be published this fiscal year.
- HMIS has been supporting U.S. Fish and Wildlife Service efforts to restore critical Umtanum Desert Buckwheat habitat affected by wildland fires in the McGee Ranch area of the Hanford Site. HMIS Fire Operations walked down the Umtanum area to identify areas where road improvements will need to occur to support access, firebreaks, and firefighting activities. This detail is necessary for the Cultural and Ecological reviews. The list of proposed herbicides recommended by HMIS subject matter experts to treat weeds surrounding the plant population has been sent to University of Washington RareCare to be included in their research and testing.
- HMIS developed a National Environmental Policy Act (NEPA) strategy for Project L-612, “North Loop Transmission Line Rebuild,” to accommodate proposed changes in project scope by the Bonneville Power Administration (BPA), which would eliminate a radial tap to the A9 substation that provides power to the 100 Area. The strategy was presented to the DOE NEPA Compliance Officer and concurrence was obtained. The Project L-612 Environmental Assessment (DOE/EA-2033) and Finding of No Significant Impact (FONSI) were approved by the DOE Headquarters Assistant Secretary for Environmental Management on May 7, 2018. However, due to the high cost of the project, modifications became necessary to reduce the scope in a manner that would meet BPA’s regional and DOE’s Hanford Site needs for reliable electrical power transmission and distribution. The NEPA analysis determined that project modifications proposed by BPA are bounded by the alternatives analyzed in DOE/EA-2033 and the Area of Potential Effects would not change. In order to provide reliable power to DOE’s facilities in the 100 Area, the C8-L8 electrical distribution powerline would be rebuilt as part of Project L-898, “100 Area Mission Critical Distribution Feeder Replacement.” NEPA coverage to rebuild the C8-L8 electrical distribution powerline can be provided as an Activity-Specific Categorical Exclusion under DOE’s NEPA Implementing Procedures (10 CFR 1021, Subpart D, Appendix B) because the powerline has independent utility and is not required for Project L-612.

- HMIS staff performed a walkdown for *Project W-135: The Development of a Dry Storage System for Storage for the Cesium and Strontium Capsules Currently Stored in the Waste Encapsulation and Storage Facility (WESF) in the 200 East Area (MSA-2003398)*. The Ecological Compliance Review recommended a post-construction walkdown to determine any compensatory mitigation or rectification requirements. HMIS staff joined CPCCo staff in walking the project site down on July 1, 2021. HMIS staff determined no rectification would be required and is mapping and analyzing the impacts to determine if compensatory mitigation will be required. Compensatory mitigation acts as a mechanism to balance the DOE cleanup mission with environmental stewardship by offsetting negative environmental impacts with restoration activities. By following requirements in the Ecological Compliance Review, project staff avoided and minimized most project impacts to the environment. HMIS will continue to support CPCCo in planning and implementing the compensatory mitigation for Project W-135, if required.
- HMIS completed and submitted to DOE the Project L-888 Southern Area Fire Station Notice of Construction Application. HMIS also completed the final revision of the Health Impact Assessment (HIA) Protocol based on DOE comments and transmitted the document to the Department of Ecology for review and comment. The HIA is required because toxic air pollutant concentrations from the project are expected to exceed Washington State health thresholds. Ecology will utilize the HIA to further assess project emissions and support the issuance of the Project L-888 Approval Order.
- HMIS provided technical support to Washington River Protection Solutions (WRPS) through development of the AP Tank Farm's Notice of Construction (NOC) Application best available control technology and best available control technology for toxics (BACT/tBACT) report. Staff presented the calculation methodologies for the BACT/tBACT to WRPS on June 15, 2021. The draft BACT/tBACT will be sent to Ecology in July for review and approval for incorporation into the existing AP Tank Farm NOC Application.
- HMIS presented a Data Quality Objective (DQO) on Toxic Sampling PowerPoint presentation describing toxic emissions data analysis process to NV5 (DQO administrators). The data package containing a subset of toxic emissions raw data files, time series plots, and emission rates was provided to NV5 and Pacific Northwest National Laboratory statisticians in support of DQO.
- On June 9, 2021 HMIS provided a Hanford Collection orientation for new Central Plateau Cleanup Company staff (or in new positions) working for DOE's Manhattan Project National Historical Park program. The training was tailored to the unique considerations and requirements for managing the B Reactor National Historic Landmark, which displays approximately 30% of DOE's Hanford Collection artifacts. Information included regulatory requirements for display, handling, and housekeeping of federal collections under 36 CFR 79. This was part of a joint coordination with HMIS Cultural and Historic Resources Program and the WSU-TC Hanford History Project.

- HMIS performed two historical artifact evaluations, one for CPCCo and one for HMIS. CPCCo contacted HMIS about an old Surveying micro altimeter model M-1 (T.2021.003). The second evaluation was for an old air monitoring pump/tank assembly (T.2021.004) within an arc of the Hanford Atmospheric Dispersion Test Facility (HADTF), which is a historic property contributing to the Hanford Site historic built environment.



*Figure 1. Micro altimeter (T.2021.003) identified by CPCCo*



*Figure 2. HADTF air monitoring pump/tank assembly (T.2021.004) identified by Environmental*

- On June 7-8, 2021, HMIS performed cultural resources awareness training and cultural resources monitoring for the construction of the access and pad for groundwater well 100-K-233/C9921 in the 100-KR-4 Operable Unit of the Hanford Site. The training and monitoring are two of the stipulations outlined in the Memorandum of Agreement developed between DOE-RL, the Washington State Department of Archaeology and Historic Preservation, the Confederated Tribes and Bands of the Yakama Nation, the

Confederated Tribes of the Umatilla Indian Reservation, the Nez Perce Tribe, and the Wanapum for the *Cultural Resources Review for Installation, Operation, Maintenance, and Decommissioning of Groundwater Well 100-K-233/C9921, Associated Pad, and Access; and drilling of a replacement well for well 100-K-114A/B2801 in the 100-K Area of the Hanford Site, Benton County, Washington (HCRC# 2017-100-008)*. A divergence from the engineered system to define the work area boundaries (stipulation II.A.) took place briefly on June 7, 2021 but this was corrected by the cultural resources monitor by clarification with the project point of contact and discussion with the field work supervisor. The divergence was conveyed to the DOE-RL cultural resources manager and will be included in the final monitoring report following completion of all project activities.

- HMIS continues development of the Phase I Environmental Site Assessment (ESA) for the Riverlands area access request project. An outline of the ESA is being reviewed and an updated schedule is being drafted. After conducting historical research and reviewing available documentation, Land Management prepared a technical evaluation of the radiological conditions in the Riverlands area and submitted to DOE for review. A response from DOE was received on the radiological conditions of Riverlands and overall, HMIS is good to proceed with the current radiological clearance for, root digging, fishing, and potential construction of mat lodge/pithouse if the said construction does not involve digging. HMIS radiological services are working with DOE to respond to one final question. HMIS has prepared and submitted a site evaluation request to consider increased activity by the Wanapum in the Riverlands area at Hanford it has been routed for approvals.
- HMIS held a meeting with site contractors, DOE, and the Washington State Department of Health (WDOH) on June 9, 2021 to discuss whether and how to revise existing fugitive radiological air emission licenses to address emissions from routine Radiation Control activities, including operation of radiological counting facilities and performing field surveys. WDOH had developed a statement that could be added into the licenses to clarify that they provide coverage for emissions from routine Radiation Control activities and that additional tracking of these emissions was not required. HMIS had prepared a list of current fugitive radiological air emission licenses on the Hanford Site and during the meeting site contractors reviewed each with WDOH to identify which would be suitable for revision to include the text that WDOH developed. Meeting attendees determined that each contractor should follow up with WDOH to discuss and confirm which contractor-specific fugitive licenses will be revised to incorporate this text. This issue arose when personnel at the Waste Treatment Plant began planning to install a radiological counting trailer.
- HMIS submitted the cultural monitoring report for Installation, Operation, Maintenance, Repairs, and Decommissioning of Three Wells in the 100-HR-3 Groundwater Operable Unit in the 100-H Area of the Hanford Site, Benton County, Washington (HCRC#2020-100-009-M). Full time cultural resources monitoring was conducted as a work control identified in the cultural resources report, to maintain the ‘No Adverse Effect’

determination. The monitoring and subsequent monitoring report were stipulated by DOE-RL for two of the three well locations and new access road. During project activities at these locations all stipulated work controls were observed, no additional cultural resources were identified, and the ‘No Adverse Effect’ finding was maintained.

- The HMIS Post-Cleanup Surveillance and Maintenance field team completed the FY 2021 fieldwork for the Waste Information Data System site institutional controls (IC’s) assessment and inspections for the River Corridor (including the 300 and 1100 Areas) on June 3, 2021. Field walk downs were conducted in 20 to 30-meter intervals throughout each site. A shorter interval (e.g., 10 to 15 meters) was employed if the terrain differs significantly throughout a waste site. To improve efficiency, the team used an iPad to locate the waste sites and directly input notes onto a screenshot of the waste site. In addition, the most recent imagery collected on March 23, 2021 is being used to conduct spatial analyses of waste sites *prior* to field visits to supplement field verification to identify any major changes in the landscape (e.g., general ground cover gravel, asphalt, vegetation land-use changes, and excavation). The field assessment data will be documented in the FY 2021 Sitewide Institutional Control Assessment.
- In anticipation of the issuance of upcoming Records of Decisions, HMIS is reviewing the current version of the Institutional Controls (IC) Plan and identifying updates for the next version. Updates for revision include revising sections to be current with the Resource Conservation and Recovery Act Permit updates, update the information for new Explanation of Significance Differences, and any revisions to Decision Documents (e.g., Remedial Design and Action Work Plans). HMIS also reviewed the DOE Policy (P) 454.1, *Use of Institutional Controls*, and the *Institutional Controls Implementation Handbook for Use with Use of Institutional Controls* [DOE-HDBK-1240-2021] to identify potential updates to the IC Plan.
- The HMIS UAS team has been working on project coordination for development of an UAS program for the Hanford Site. The team has completed the draft HMIS Small Unmanned Aircraft System (sUAS) Safety Management System Program Plan and will revise the plan once pilot flights occur. The Environmental, Cultural Best Management Practices and National Environmental Policy Act (NEPA) for the UAS program are complete. The flight management system software continues to be developed and is on schedule to be available for the first pilot flight. The Request for Proposal for UAS Services has closed, proposals were reviewed by the HMIS UAS team and will awarded once final management approval is given. The Counter UAS (C-UAS) Plan was resubmitted to DOE-RL April 29, 2021 and is working with management on a path forward to resolve the issues identified. The HMIS Cyber team has completed a cyber-risk assessment for the UAS program that was submitted to DOE-RL on May 26, 2021. The UAS team delivered an update to the Aviation Implementation Document on February 3, 2021 that is still awaiting DOE approval. All DOE-RL approvals have been requested to be completed no later than June 30, 2021. The HMIS UAS team is drafting the UAS business case analysis and anticipates the draft will be ready for initial reviews

by July 15, 2021 with final delivery due by August 31, 2021 as listed in the HMIS Performance Evaluation and Measurement Plan.

- HMIS presented a demonstration of the updated HMIS Environmental Management System (EMS) SharePoint site to other Hanford Contractors. HMIS Environmental highlighted the structure and design choices that streamlined the amount and organization of documentation provided. The online tool is also used to integrate environmental information from various EMSs across the Hanford site into one location with quick access, direct hyperlinks, and adjustable permission capabilities.
- HMIS received a signed memo from the Department of Energy Laboratory Accreditation Program (DOELAP) on the DOELAP Accreditation in Good Standing Review of our External Dosimetry Program.
- HMIS developed new COVID-19 Posters to implement the Hanford site revised COVID-19 protocols that became effective June 11, 2021. As part of the implementation of these new requirements new posters were posted inside the entrance areas of each HMIS facility by the morning of June 14, 2021.
- HMIS received positive feedback on our Chemical Inventory Tracking System (CITS) during the ISMS Phase I & II verification at the Waste Treatment Plant. The outbrief stated “ The chemical Inventory Tracking System (CITS) database is a best-in-class Chemical Management System managed by personnel who are enthusiastic about its capabilities and its ability to maintain the functions and principles of ISMS”.
- Industrial Hygiene (IH) have completed 57 of 72 (79%) asbestos facility assessments. The due date to have all assessments completed is August 2<sup>nd</sup>, 2021.
- HMIS IH has scheduled routine meetings with WRPS to develop an exposure assessment for tank farm vapors when working at heights. The final exposure assessment will be documented and hazards/controls will be placed in the hazard analysis with the exposure assessment being back-up data. IH is working with HMIS Environmental to perform QUIC Modeling with WRPS IH assistance.
- HMIS completed the 10 CFR 835, Occupational Radiation Protection Subpart K, Design and Control triennial assessment. The assessment resulted in zero findings and nine opportunities for improvement.

#### **Safeguards, Security & Emergency Response:**

- HMIS EM&P staff completed pre-loading the latitude and longitude for facility locations into RadResponder. These latitude and longitude coordinates are already identified and pre-loaded into APGEMS and NARAC, which are used in the Unified Dose Assessment Center (UDAC) during an event (emergency or training). Adding the facility coordinates into RadResponder allows the UDAC to provide a more accurate assessment of an event.
- EM&P staff implemented training requirements for Continuity of Operations Program Emergency Response Group (CERG) members. This formalizes training requirements per DOE Order 150.1A, Continuity of Operations and ensures a trained and qualified CERG.

- HMIS EMP staff provided the following support to OHCs and DOE-RL/ORP:
  - Emergency Operations Center position-specific training to five students
  - Hanford Incident Command System/Building Emergency Director/Facility Emergency Response Organization Training to 22 students.
  - Supported ten Hazardous Facility Emergency Response drills (CPCCo – 3, HMIS – 1, PNNL – 1, WTP – 3, WRPS – 2)
  - The following Emergency Management Program documents were published:
    - Emergency Action Level (EAL) Implementing Procedures:
      - Appendix 1-2.E T Plant Complex
      - Appendix 1-2.T REDOX
      - Appendix 1-2.CC Hanford Tank Waste Treatment and Immobilization Plant (WTP)
    - Facility Hazards Surveys:
      - ERDF-IDF
      - WARP (West Area Remediation Project)
      - 324 Building
- HMIS SAS staff provided the following MC&A support to the Hanford site:
  - Supported CPCCo in the closure of the PFP MBA. The PFP MBA has been in place since the facility started up over 70 years ago. Closure of the MBA relieves CPCCo personnel from performing a number of activities at PFP, such as maintaining an MBA custodian, performing nuclear material surveillance and MC&A related procedures and training.
  - Supported CPCCo in the resolution of an item found with a broken Tamper-Indicating Device (TID). A new TID was installed by procedure and an inventory verification was completed by the facility with HMIS support. There was no indication of disturbance of the subject materials.
- HMIS SAS staff supported PNNL in the successful performance of Operational Acceptance testing of a newly installed security system in the 325 Building.
- HMIS Information Security staff Continued Phase 3 of the classified holding reduction project review of classified holdings at the Records Holding Area. During June 14 boxes of records (approximately 42,000 pages) were reviewed and processed for classification/declassification. To date 306 boxes have been reviewed. Due to delays caused by the partial stop-work, the project will continue through FY 2021.
- HMIS SAS staff remotely attended the following:
  - Security Awareness Special Interest Group monthly teleconference.
  - DOE complex-wide Classified Matter Protection and Control (CMPC) benchmarking teleconference.
- HMIS HFD personnel completed final preparations for the 2021 wildland fire season. Prescribed burning operations to reduce fuel loading around firebreaks and vulnerable facilities eliminated approximately 5500 cubic yards of tumbleweeds.

- HMIS HFD personnel from the Hanford Fire Marshal Office continued to provide documentation review and support for multiple projects, L-849/850, 200E/W water tank replacements, L-888, L-894, L-897, L-907, and L-928.

### Information Management Services:

- IMS Program Management
  - IMS completed transition of 80+ desktop workstations to Microsoft Azure Windows Virtual Desktops, which is cloud-based option being tested for remote workers.
  - IMS successfully upgraded the virtual desktop infrastructure (VDI) for Microsoft Teams optimization efforts to resolve reoccurring issues prompting users to login multiple times throughout the day; and significantly improves a user's audio/video experience while using VDI or thin client desktop.
  - IMS successfully upgraded Redline WiFLEX firmware to mitigate over 700 vulnerabilities in its firmware code.
  - IMS Cybersecurity assisted Electrical Utilities (EU) in performing scans of the newly installed L-801 EU- SCADA system for individual node assessment and hardening of system resources; bringing the project one step closer to being on-boarded into the Hanford Industrial Control System Network (HICSN).
  - IMS completed upgrading the Hanford SMS notification system to follow latest regulations for mass text messages, avoiding important Hanford notifications delivered through SMS being declined by carriers and not delivered to Hanford site employees.
  - IMS successfully completed the Windows Cortex XDR client upgrade from version 7.2.x to 7.3.1. It has been successfully deployed to all workstation, servers, and the Virtual Desktop Infrastructure environments.
  - IMS, in support of vacating 2261 Stevens building, has successfully disconnected all desktop towers, thin clients, phones and remaining equipment and completed all planned equipment and furniture moves to the Federal Building PACE.
- IMS Chief Information Office
  - The new EJTA web application was presented to the IT Leadership Forum to prepare for the new system and highlight improvements and enhancements being introduced. The existing system has been in place for over 20 years, and the new EJTA system streamlines processes and meets today's security standards.
  - HMIS made a commitment to DOE to bring all Grade D software documentation into compliance with its implementing procedure, HMIS-PRO-IS-309, by June 30. Through a collaborative effort, 75 of the 83 applications were brought into compliance by the due date. The remaining have been logged as corrective actions.

- IMS created and delivered a new web map to support the development of the Facility Information and Number Database (FIND), which will work with ArcGIS Indoors to provide a robust space planning solution and retirement of the current CareTaker system.
- IMS created a COVID Vaccination Confirmation form to allow employees to confirm their vaccination status in accordance with Washington State Governor Inslee's directive. The form was developed and integrated with IDMS for record creation.
- IMS retired the Autodesk Map - Mapping Application Extension (MAPMAX) moving the Site closer to a geospatial COTS solution for all location-based information and reducing the custom-built solution footprint.
- IMS implemented initial data layers in Datamart and Power BI layers supporting HLMI invoicing to DOE.
- IMS implemented a major production release of Solid Waste Information & Tracking System (SWITS). This production release included adding Dangerous Waste Management Unit (DWMU) tracking to SWITS, adding a new Nuclear Regulatory Commission (NRC) formula to SWITS, and other enhancements that will benefit SWITS users and the site waste reporting capabilities to the Washington State Department of Ecology.

### **Workforce Solutions:**

- In June, the HMIS Workforce Solutions team successfully administered its first scholarship program since the inception of the contract, awarding a total of \$29,000 in scholarships for the 2021-2022 academic year. In total, 30 HMIS dependent scholarship applications were received and processed, and 23 applicants were selected as honorees. The applications were reviewed by HMIS Workforce Solutions for completeness and eligibility and evaluated and scored by The CBC Foundation using four criteria. Each dependent scholarship honoree was awarded a \$1,000 scholarship.
- In addition to the dependent scholarship program, HMIS honored 4 Co-Op Interns with a \$1,500 scholarship award as well. All scholarship funds are distributed and administered by the CBC Foundation.
- HMIS is proud to support the educational efforts and endeavors of HMIS employee dependents and co-op employees. The company's scholarship program, in partnership with the CBC Foundation, is one of several efforts the company has employed to build on community relationships while investing in Hanford's next generation of workers.
- Hanford Workforce Engagement Center (HWEC)
  - Since March of 2020, COVID has created consistent hurdles for the Hanford site. The HWEC, even with COVID restrictions/social distancing, has continued assisting current workers, former workers, and family members of those workers. The HWEC has adapted its services and access to meet the needs of most parties needing assistance. The

Center is utilizing phone conferencing more often yet continue to be available in person for individuals with time sensitive issues or concerns. COVID restrictions to this day are minimizing in-person services, but using current COVID guidelines for safe interaction, HWEC stats show continued interface.

**Table A-3. Hanford Workforce Engagement Center  
Monthly Events – June 2021**

Monthly Event	No.
Phone calls	113
Walk-ins	14
E-mails	65
Scheduled Appointments	1
Outreach	5
<b>Monthly Total</b>	<b>198</b>
<b>Total Since HWEC Opening</b>	<b>10,499</b>

- Other HWEC Activities: During the month of June, 2021, HWEC representatives also attended the monthly Building Trades Contractor meeting and Beryllium Awareness Group (BAG), assisted HMIS Sitewide Standards with reviewing and provided comment on the new web based Employee Job Task Analysis (EJTA) process and are currently working with other Department of Energy prime contractors on a consistent approach to Medical Surveillance travel.

#### LEGACY BENEFITS – FERNALD WELFARE BENEFITS PLAN

- **iBenefits Deliverable – Preliminary Post Retirement Financial Statement:** On June 9, 2021, Preliminary Post Retirement (PRB) Financial Statement for FY2021 was completed and submitted through iBenefits for the Fernald Welfare Benefits Plan. This deliverable reports the actuarial estimates of the long-term health care and life insurance liabilities as of September 30, 2020 and determine net periodic benefit cost for fiscal year ending September 30, 2021.

#### LEGACY BENEFITS – MOUND WELFARE BENEFITS TRUST

- **iBenefits Deliverable – Preliminary Post Retirement Financial Statement:** On June 10, 2021, Preliminary Post Retirement (PRB) Financial Statement for FY2021 was completed and submitted through iBenefits for the Mound Welfare Benefits Plan. This

deliverable reports the actuarial estimates of long-term liabilities as of September 30, 2020 and determine net periodic benefit cost for fiscal year ending September 30, 2021.

### LEGACY BENEFITS – ROCKY FLATS WELFARE BENEFITS TRUST

- **iBenefits Deliverable – Preliminary Post Retirement Financial Statement:** On June 10, 2021, Preliminary Post Retirement (PRB) Financial Statement for FY2021 was completed and submitted through iBenefits. This deliverable reports the actuarial estimates of liabilities as of September 30, 2020 and determine net periodic benefit cost for fiscal year ending September 30, 2021. In addition, the Retiree Reimbursement Arrangement (RRA) claims assumptions were changed based on updated experience of RRA utilization. This assumption change reduces the liability of an estimate of \$12 million as of October 1, 2020.

### **Engineering, Technology & Projects:**

- Engineering
  - Kicked off subcontracted task order for formal design review support for Project L-907, Fleet Services Complex.
  - HMIS-ENG-66629, Fire Protection Configuration Management Improvement Plan (formerly MSA-ENG-62475), was updated and issued to assist with improving system health scores.
- Technology & Enterprise Architecture
  - Developed an IT Infrastructure & Operations Automation Plan.
  - Developed an Application Security Program Plan.
- Projects
  - See Section B

## **2.0 MAJOR ISSUES**

Nothing to report.

## **3.0 PROGRAM RISK ASSESSMENT**

The HMIS program risk assessments are outlined in the following subsections.

### **3.1 HMIS I&SS Mission Key Risks**

- **BCRs:** No BCRs were processed in June that impact the project's MR or SM profile.
- **Risk Analysis:** No risk analysis conducted in June.
- **Current Risk Posture:**

**Table A-4. I&SS Risk Posture**

Period	Realized	Key	Opened	Closed	Unassigned	Total Risks
May	0	5	0	0	0	33
June	0	6	0	0	0	33

**Table A-5. I&SS Key Risks**

Unmitigated Risk Impacts	Assessment		Comments															
	Month	Trend																
<b>EU- Mission Risks</b>																		
<b>Explanation of major changes to the program monthly spotlight chart:</b> Risk WSU-0019, <i>If the 12" potable water line feeding the southern end of the waste treatment plant (WTP) complex fails, then potable water supply supporting Waste Treatment Plant operations will be impacted</i> , was added to the high risk threat level section.																		
<b>Realized Risks</b> (Risks that are currently impacting project cost/schedule)																		
No Realized Risks in June.																		
<b>Critical Risks</b> (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)																		
No Critical Risks in June.																		
<b>High Risk Threat Value</b> (Recoverable slip to enforceable or incentivized milestone)																		
EU-0003-T: Substation Transformer Failure  Legacy Risk #: 1200 & PWEU-0003-T	If any of the four substation transformers fails, OHC operations may be impacted, and additional costs may be incurred. <b>Risk Handling Strategy:</b> Mitigate  <b>Probability:</b> Unlikely (10%) <b>Worst Case Impacts:</b> \$6,000K, 0 Days		<b>Risk Trigger:</b> Degradation of transformers lead to transformer failure.  <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Repair 451B transformer.</td> <td>08/2022</td> <td>0</td> </tr> <tr> <td>Plan and perform preventative and corrective maintenance</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Replace transformers when warranted.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Conduct system prioritization evaluation</td> <td>TBD</td> <td>0</td> </tr> </tbody> </table> <b>Mitigation Action Assessment:</b> No major changes in the month of June. A9 substation continues to be monitored with no indications of potential failure. 451B Transformer LTC leak has been stopped, re-drafting statement of work for repair effort. Repairs forecasted to start in July. In June, 451B contract is being finalized. Repair work is scheduled for the end of August 2021. Outage is tentative with BPA.	Mitigation Action(s)	FC Date	%	Repair 451B transformer.	08/2022	0	Plan and perform preventative and corrective maintenance	Ongoing	N/A	Replace transformers when warranted.	Ongoing	N/A	Conduct system prioritization evaluation	TBD	0
Mitigation Action(s)	FC Date	%																
Repair 451B transformer.	08/2022	0																
Plan and perform preventative and corrective maintenance	Ongoing	N/A																
Replace transformers when warranted.	Ongoing	N/A																
Conduct system prioritization evaluation	TBD	0																

Unmitigated Risk Impacts	Assessment		Comments						
	Month	Trend							
<b>WSU- Mission Risks</b>									
<b>Explanation of major changes to the program monthly spotlight chart:</b> No major changes in June.									
<b>Realized Risks</b> (Risks that are currently impacting project cost/schedule)									
No Realized Risks in June.									
<b>Critical Risks</b> (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)									
WSU-0006-T: 283W Water Treatment Facility Water Production limitation  Legacy Risk #: 1526 & PWWSU-0006-T	If the 283W Water Treatment Facility cannot produce enough potable water for the Hanford Site because of the 1,500gpm permit limitations, then potable water production demands will not be met, causing impacts to cleanup schedules or shutdown of certain Hanford site operations. <b>Risk Handling Strategy:</b> Avoid  <b>Probability:</b> Likely (80%)		<b>Risk Trigger:</b> 283W WTF cannot produce enough potable water for the Hanford Site.  <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Completion of L-897 200 Area Water Treatment Plant (DFLAW Essential)</td> <td>FY2022</td> <td>30</td> </tr> </tbody> </table> <b>Mitigation Action Assessment:</b> Project L-897, Central Plateau Water Treatment Plant (DFLAW Essential), is scheduled for completion FY2022. This will reduce the likelihood of not being able to produce enough potable water for the Hanford Site. If DFLAW commissioning	Mitigation Action(s)	FC Date	%	Completion of L-897 200 Area Water Treatment Plant (DFLAW Essential)	FY2022	30
Mitigation Action(s)	FC Date	%							
Completion of L-897 200 Area Water Treatment Plant (DFLAW Essential)	FY2022	30							

# SECTION A

	Unmitigated Risk Impacts	Assessment		Comments									
		Month	Trend										
<b>WSU- Mission Risks</b>													
	<b>Worst Case Impacts:</b> \$0K, 0 Days			<p>activities commence prior to the commissioning of the new CPWTF, then operational controls of the distribution of sanitary water from the existing 283W clearwells will be put into place, including:</p> <ul style="list-style-type: none"> <li>Limiting flow out of the clearwell to 1,200gpm</li> <li>Utilizing available storage reservoirs at 283E, 283EA and 283WA to supplement sanitary water peak demands</li> <li>Administratively control or limit non-essential potable water demands such as irrigation water supply</li> </ul> <p>These activities are discussed in HNF-64684, 200W Sanitary Water System Capacity Evaluation.</p> <p>In June, construction subcontractor continued submittals and procurements. Terms and conditions negotiations for the HMIS membrane filters and treatment system procurement continued. Ecology continued review of the Notice of Construction (NOC) application. Ecology issued a 30-day public comment period starting on June 28<sup>th</sup> for the TEDF Discharge Permit.</p>									
<p>WSU-0019-T: WTP 12" Potable Water Line Failure.</p> <p>Legacy Risk #: 3083 &amp; PWWSU-0019-T</p>	<p>If the 12" potable water line feeding the southern end of the waste treatment plant (WTP) complex fails, then potable water supply supporting Waste Treatment Plant operations will be impacted.</p> <p><b>Risk Handling Strategy:</b> Avoid</p> <p><b>Probability:</b> Unlikely (15%)</p> <p><b>Worst Case Impacts:</b> \$3,500K, 5 Days</p>	●	↔	<p><b>Risk Trigger:</b> Failure of 12" potable water line feeding the southern end of WTP.</p> <table border="1" style="width: 100%;"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Project L-839, 12in Potable Water Loop-line, avoids this risk.</td> <td>Ongoing</td> <td>NA</td> </tr> </tbody> </table> <p><b>Mitigation Action Assessment:</b> No major changes in the month of June.</p> <p>Project L-839 will install a redundant potable water line for a reliable supply of potable water to the WTP. Interim Mitigation Steps: Water Utilities is prepared to perform Expedited Repair Maintenance Activity (ERMA) that would be initiated on line breaks, allowing for repairs to be made within 3-5 days and reducing the length of impact that would otherwise be realized.</p> <p>In June, potholing and hand excavation of existing utilities across pipe route continued. Trenching and installation of 12" pipe and 4" fiber optic conduit along route were initiated.</p>	Mitigation Action(s)	FC Date	%	Project L-839, 12in Potable Water Loop-line, avoids this risk.	Ongoing	NA			
Mitigation Action(s)	FC Date	%											
Project L-839, 12in Potable Water Loop-line, avoids this risk.	Ongoing	NA											
<p>WSU-0020-T: TEDF Failure impacts discharge of waste water</p> <p>Legacy Risk #: 3175 &amp; PWWSU-0020-T</p>	<p>If HMIS Water Utilities (WU) is unable to discharge wastewater from the 283W Water Treatment Facility (WTF) or new Central Plateau Water Treatment Facility (CPWTF) due to an extended failure of the TEDF discharge line or lift station, then the ability to produce potable water for the Hanford Site will be impacted, causing potential site wide water outages, impacting cleanup operations and fire suppression requirements for the Hanford Site.</p> <p><b>Risk Handling Strategy:</b> Accept</p> <p><b>Probability:</b> Somewhat Likely (50%)</p> <p><b>Worst Case Impacts:</b> \$15,000K, 0 Days</p>	●	↔	<p><b>Risk Trigger:</b> WU is unable to discharge wastewater due to an extended failure of TEDF.</p> <table border="1" style="width: 100%;"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Ongoing communication with WRPS during their performance of emergency repairs to the lift station</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Use 3,000 gallon water trucks to haul wastewater to TEDF</td> <td>As Needed</td> <td>NA</td> </tr> </tbody> </table> <p><b>Mitigation Action Assessment:</b> No major changes in the month of June.</p> <p>Rely on WRPS to perform emergency repairs of the lift station in the event of failure. Ongoing discussions with DOE-RL to implement an emergency provision that includes using 3,000 gallon water trucks to haul wastewater to TEDF.</p> <p>The current analysis recognizes there are up to five days of waste water holding capabilities before needing to use water trucks or find an alternative means of wastewater diversion.</p>	Mitigation Action(s)	FC Date	%	Ongoing communication with WRPS during their performance of emergency repairs to the lift station	Ongoing	NA	Use 3,000 gallon water trucks to haul wastewater to TEDF	As Needed	NA
Mitigation Action(s)	FC Date	%											
Ongoing communication with WRPS during their performance of emergency repairs to the lift station	Ongoing	NA											
Use 3,000 gallon water trucks to haul wastewater to TEDF	As Needed	NA											
<p>WSU-0021-T: Water Line Failure under TSCR Pad</p> <p>Legacy Risk #: 3176 &amp; PWWSU-0021-T</p>	<p>If the 12" raw water line running under the proposed Tank Side Cesium Removal (TSCR) pad fails due to increased heavy traffic, then looped raw water supply to the 200E tank farms (TF) and fire suppression systems will be impacted for extended periods of time, causing operations to enter into Limited Condition of Operations (LCOs).</p> <p><b>Risk Handling Strategy:</b> Avoid</p>	●	↑	<p><b>Risk Trigger:</b> The raw water line located under the proposed TSCR pad fails due to increased heavy traffic.</p> <table border="1" style="width: 100%;"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Install a new raw water line routed around the proposed location of TSCR and associated waste transfer lines or paths of heavy equipment travel. (L-928)</td> <td>FY2023</td> <td>0</td> </tr> <tr> <td>Perform ERMA corrective maintenance waterline repairs while management exploits scheduling/personnel efficiencies where able.</td> <td>Ongoing</td> <td>NA</td> </tr> </tbody> </table>	Mitigation Action(s)	FC Date	%	Install a new raw water line routed around the proposed location of TSCR and associated waste transfer lines or paths of heavy equipment travel. (L-928)	FY2023	0	Perform ERMA corrective maintenance waterline repairs while management exploits scheduling/personnel efficiencies where able.	Ongoing	NA
Mitigation Action(s)	FC Date	%											
Install a new raw water line routed around the proposed location of TSCR and associated waste transfer lines or paths of heavy equipment travel. (L-928)	FY2023	0											
Perform ERMA corrective maintenance waterline repairs while management exploits scheduling/personnel efficiencies where able.	Ongoing	NA											

# SECTION A



Unmitigated Risk Impacts	Assessment		Comments						
	Month	Trend							
<b>WSU- Mission Risks</b>									
<p><b>Probability:</b> Likely (75%) <b>Worst Case Impacts:</b> \$750K, 0 Days</p>			<p><b>Mitigation Action Assessment:</b> No major changes in the month of <b>June</b>. Project L-928, Re-Route 12" Raw Water Line Near 241AP Farm (TSCR) (DFLAW Priority), has a completed draft SOW and initiated review. Planning is forecasted to be complete 07/2021. This will avoid a potential raw water line break. TSCR pad operational date is forecasted for September 2021 increasing the likelihood of a water line failure.  In June, a risk pre-mortem for L-928 was performed on 5/27/2021 and probabilities and consequences were assigned on 6/7/2021. Risk register is forecasted for review and approval July 2021. Design SOW and Hydraulic Model report approvals were initiated. Additional comments from HFD on Hydraulic Model report during approval process were received and comment resolution was initiated.</p>						
<b>High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)</b>									
<p>WSU-0016-T: PFP Contamination Reaches 283W Water Treatment Facility</p> <p>Legacy Risk #: 1955 &amp; PWWSU- 0016-T</p>	<p>If Plutonium Finishing Plant (PFP) radiological contamination reaches the 283W Water Treatment Facility, water purveyance abilities to 200W Area will be impacted resulting in sanitary and raw water supply shutdowns to 200W and 200E Area buildings.</p> <p><b>Risk Handling Strategy:</b> Accept</p> <p><b>Probability:</b> Unlikely (20%) <b>Worst Case Impacts:</b> 0 days, \$15.0M</p>		<p><b>Risk Trigger:</b> During PFP demolition, PFP radiological contamination reaches the 283W WTF prompting water supply shutdown to 200W and 200E areas.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>No mitigation actions planned at this time.</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> <p><b>Mitigation Action Assessment:</b> No major changes in the month of <b>June</b>. No mitigation actions are currently identified. Risk will continue to be monitored throughout the remainder of the PFP mission. CHPRC is performing D&amp;D activity for PFP project with a forecasted completion of FY2021. The PFP Closure Project team resumed demolition activities. The last remaining steam line associated with 234-5Z was size reduced and loaded out, officially completing the demolition of the PFP main processing facility. <b>Disposal of Plutonium Reclamation Facility (PRF) rubble pile is underway, once complete the risk can be evaluated for closure.</b></p>	Mitigation Action(s)	FC Date	%	No mitigation actions planned at this time.	N/A	N/A
Mitigation Action(s)	FC Date	%							
No mitigation actions planned at this time.	N/A	N/A							

Unmitigated Risk Impacts	Assessment		Comments															
	Month	Trend																
<b>MMP- Mission Risks</b>																		
<b>Explanation of major changes to the program monthly spotlight chart:</b> No major changes in <b>June</b> .																		
<b>Realized Risks (Risks that are currently impacting project cost/schedule)</b>																		
No Realized Risks in <b>June</b> .																		
<b>Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)</b>																		
<p>MMP-0001-T: Roof and HVAC Operating in Degraded State</p> <p>Legacy Risk #: 2073 &amp; RES- 0002-T</p>	<p>If sitewide roof and HVAC units continue to operate in a state of degradation because they are currently operating past their 20-year design life, then further deterioration will continue at an increasing rate resulting in impacts to mission critical support functions and poor occupant working conditions.</p> <p><b>Risk Handling Strategy:</b> Avoid</p> <p><b>Probability:</b> Somewhat Likely (70%) <b>Worst Case Impacts:</b> \$15,000K, 0 days</p>		<p><b>Risk Trigger:</b> HVAC units fail before being replaced.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Replace end of design life roof. Project L-796</td> <td>FY2021</td> <td>0</td> </tr> <tr> <td>Replace end of design life roof. Project L-914</td> <td>FY2022</td> <td>0</td> </tr> <tr> <td>Replace end of design life HVAC units. Project L-915</td> <td>FY2022</td> <td>0</td> </tr> <tr> <td>Perform routine inspections and maintenance, including minor repairs as needed and as able.</td> <td>Ongoing</td> <td>NA</td> </tr> </tbody> </table> <p><b>Mitigation Action Assessment:</b> No major changes in the month of <b>June</b>. Projects L-796, L-914, and L-915 are scheduled to replaced roofs and HVAC units. The completion of the projects will reduce the likelihood of roof leaks and HVAC failures. In June, construction subcontractor completed work on MO285 on 06/10/2021 and mobilized to MO414 and was 40% complete by 06/20/2021.</p>	Mitigation Action(s)	FC Date	%	Replace end of design life roof. Project L-796	FY2021	0	Replace end of design life roof. Project L-914	FY2022	0	Replace end of design life HVAC units. Project L-915	FY2022	0	Perform routine inspections and maintenance, including minor repairs as needed and as able.	Ongoing	NA
Mitigation Action(s)	FC Date	%																
Replace end of design life roof. Project L-796	FY2021	0																
Replace end of design life roof. Project L-914	FY2022	0																
Replace end of design life HVAC units. Project L-915	FY2022	0																
Perform routine inspections and maintenance, including minor repairs as needed and as able.	Ongoing	NA																
<b>High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)</b>																		
No High Risks in <b>June</b> .																		

3.2 HMIS I&IS Mission Key Risks

- **BCRs:** No BCRs were processed in June that impact the project’s MR or SM profile.
- **Risk Analysis:** No risk analysis conducted in June.
- **Current Risk Posture:**

Table A-6. I&IS Risk Posture

Period	Realized	Key	Opened	Closed	Unassigned	Total Risks
May	0	3	0	0	0	13
June	0	3	0	0	0	13

Table A-7. I&IS Key Risks

Unmitigated Risk Impacts	Assessment		Comments															
	Month	Trend																
<b>I&amp;IS- Mission Risks</b>																		
<b>Explanation of major changes to the program monthly stoplight chart:</b> No major changes to the Stoplight Charts in June.																		
<b>Realized Risks</b> (Risks that are currently impacting project cost/schedule)																		
No Realized Risks in June.																		
<b>Critical Risks</b> (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)																		
FLT-0007-O: New Fleet Facility risk avoidance  Legacy Risk #: 1747 and SSIM-0013--O	If HMIS is budgeted and approved to build a new Fleet facility, then risks associated with maintaining and operating the current 2711E Fleet Equipment Maintenance Shop can be closed resulting in greatly reduced risk exposure and higher level of work efficiency  <b>Risk Handling Strategy:</b> Exploit  <b>Probability:</b> Likely (75%) <b>Worst Case Impacts:</b> \$0, 0 days		<b>Risk Trigger:</b> A new fleet shop complex is designed and constructed. Operations at the new fleet shop complex will mitigate four existing risks. <table border="1" style="width: 100%; margin-top: 10px;"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Complete a Fleet Services Facility Master Plan to determine the long term goal of the fleet program</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Identify a facility design that accommodates all electrical and safety needs for long-term fleet service’s needs (L-907).</td> <td>FY2022</td> <td>0</td> </tr> <tr> <td>Complete project L-908, Auto/Truck Shop and Storage, based on L-907 design.</td> <td>FY2024</td> <td>0</td> </tr> <tr> <td>Complete project L-909, Heavy Equipment Shop and Storage based on L-907 design.</td> <td>FY2025</td> <td>0</td> </tr> </tbody> </table> <p><b>Mitigation Action Assessment:</b> No major changes in the month of June. BCR VMISA-20-027 was approved on 24 February 2020 for \$24.1K towards conceptual design on L-907 within the PMB. Project L-907 will design the fleet shop complex and current projects L-908 &amp; L-909 will see the construction of the fleet shop complex, exploiting this opportunity. Design contract awarded 1/25/2021. Fleet operations has developed a higher-efficiency layout. Implementation of this layout results in additional work for A/E, so some schedule slippage is being realized. 30% design package is due 9/13/2021. 30% design package due date revised to align with A/E deliverable schedule.</p>	Mitigation Action(s)	FC Date	%	Complete a Fleet Services Facility Master Plan to determine the long term goal of the fleet program	Complete	100	Identify a facility design that accommodates all electrical and safety needs for long-term fleet service’s needs (L-907).	FY2022	0	Complete project L-908, Auto/Truck Shop and Storage, based on L-907 design.	FY2024	0	Complete project L-909, Heavy Equipment Shop and Storage based on L-907 design.	FY2025	0
Mitigation Action(s)	FC Date	%																
Complete a Fleet Services Facility Master Plan to determine the long term goal of the fleet program	Complete	100																
Identify a facility design that accommodates all electrical and safety needs for long-term fleet service’s needs (L-907).	FY2022	0																
Complete project L-908, Auto/Truck Shop and Storage, based on L-907 design.	FY2024	0																
Complete project L-909, Heavy Equipment Shop and Storage based on L-907 design.	FY2025	0																

Unmitigated Risk Impacts	Assessment		Comments
	Month	Trend	

**I&IS- Mission Risks**

**High Risk Threat Value** (Recoverable slip to enforceable or incentivized milestone)

<p>FLT-0006-T: Leak detection failure at fuel station leads to environmental impacts.</p> <p>Legacy Risk #: 1783 &amp; SSIM-0008-T</p>	<p>If leak detection equipment is no longer serviceable due to system degradation, then petroleum, oil, and lubricant (POL) leaks into the soil could occur without HMIS knowledge potentially impacting ground soil and surrounding environment.</p> <p><b>Risk Handling Strategy:</b> Avoid</p> <p><b>Probability:</b> Somewhat Likely (33%) <b>Worst Case Impacts:</b> \$70,000, 0 days</p>			<p><b>Risk Trigger:</b> Leak detection equipment fails from age, resulting in leaks of oil and lubricant (POL) into the soil.</p> <table border="1" data-bbox="813 527 1565 596"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Replace fuel station with project L-923, Replace 200E Area Fuel Station.</td> <td>FY2026</td> <td>0</td> </tr> </tbody> </table> <p><b>Mitigation Action Assessment:</b> No major changes in the month of <b>June</b>. Mitigation action in place to avoid the leak detection equipment failure risk by completing reliability project L-923, Replace 200E Area Fuel Station. L-923 is on the FY20 RPIP for FY26.</p>	Mitigation Action(s)	FC Date	%	Replace fuel station with project L-923, Replace 200E Area Fuel Station.	FY2026	0						
Mitigation Action(s)	FC Date	%														
Replace fuel station with project L-923, Replace 200E Area Fuel Station.	FY2026	0														
<p>RDS-0002-T: 2S and 11A Risk of Failure</p> <p>Legacy Risk #: 1832 &amp; PWRDS-0002-T</p>	<p>If routes 2S and 11A remain at risk of failure, then there is a potential loss of construction truck ingress/egress and alternate site evacuation route.</p> <p><b>Risk Handling Strategy:</b> Mitigate</p> <p><b>Probability:</b> Likely (90%) <b>Worst Case Impacts:</b> \$13,473K, 0 Days</p>			<p><b>Risk Trigger:</b> Age and past weather conditions have led to continued degradation of roads. Continued degradation and future demand future traffic needs not being met would lead to risk being realized.</p> <table border="1" data-bbox="813 869 1565 1052"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Conduct 2S/4S road study.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Complete Roads Master Plan that provides a basis of when these particular routes are planned to be addressed beyond maintenance activities.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Increase/accelerate maintenance on roads. (Crack seal, pothole repairs, shoulder repairs, etc.)</td> <td>Ongoing</td> <td>NA</td> </tr> </tbody> </table> <p><b>Mitigation Action Assessment:</b> No major changes in the month of <b>June</b>. Road study recommended that the roads should be in 2-lane configuration. Scope statement submitted for Reliability Project – L-941. Road projects will be reprioritized by DOE and identified by Reliability Project Task Order. Roads Master Plan update is now a contract deliverable (CD-0013) was submitted on 5-26-2021.</p>	Mitigation Action(s)	FC Date	%	Conduct 2S/4S road study.	Complete	100	Complete Roads Master Plan that provides a basis of when these particular routes are planned to be addressed beyond maintenance activities.	Complete	100	Increase/accelerate maintenance on roads. (Crack seal, pothole repairs, shoulder repairs, etc.)	Ongoing	NA
Mitigation Action(s)	FC Date	%														
Conduct 2S/4S road study.	Complete	100														
Complete Roads Master Plan that provides a basis of when these particular routes are planned to be addressed beyond maintenance activities.	Complete	100														
Increase/accelerate maintenance on roads. (Crack seal, pothole repairs, shoulder repairs, etc.)	Ongoing	NA														

**Unassigned Risks** (Pending ownership of identified risks/opportunities)

No Unassigned Risks in <b>June</b> .
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3.3 HMIS MA Mission Key Risks

- **BCRs:** No BCRs were processed in June that impact the project’s MR or SM profile.
- **Risk Analysis:** No risk analysis conducted in June.
- **Current Risk Posture:**

Table A-8. MA Risk Posture

Period	Realized	Key	Opened	Closed	Unassigned	Total Risks
May	0	1	0	0	1	18
June	0	1	0	0	1	18

Table A-9. MA Key Risks

Unmitigated Risk Impacts	Assessment		Comments									
	Month	Trend										
<b>MISSION ASSURANCE- Mission Risks</b>												
<b>Explanation of major changes to the program monthly spotlight chart:</b> No major changes to the Spotlight Charts in June.												
<b>Realized Risks (Risks that are currently impacting project cost/schedule)</b>												
No Realized Risks in June.												
<b>Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)</b>												
No Critical Risks in June.												
<b>High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)</b>												
MA-0019-T: Building 6266 HVAC failure.  Legacy Risk #: 1856 & ESHQ- 0019-T	If the 6266 Building HVAC system experiences a complete failure, then HMIS is at risk of operational degradation in providing radiological instrument calibration and dosimetry services to the Hanford site.  <b>Risk Handling Strategy:</b> Mitigate  <b>Probability:</b> Likely (75%) <b>Worst Case Impacts:</b> \$1,461K, 0 Days		<b>Risk Trigger:</b> The 6266 building is currently running on backup compressor because the primary has failed. Every quarter, an outage of 2-3 days occurs and if lack of resources or parts is encountered and an outage lasted longer than 3 days it would be critical and force a move.  <table border="1" style="width: 100%;"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Process dosimeters at 805 Goethals and PNNL as needed.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Complete construction phase of Project L-797, Key Facilities HVAC Replacements.</td> <td>FY21</td> <td>0</td> </tr> </tbody> </table> <b>Mitigation Action Assessment:</b> No major changes in the month of June. Alternatives analysis conducted; awaiting prospective bids from contractors before project is awarded to replace the HVAC system. Bids are scheduled to be completed by the end of summer 2021 and the project is scheduled for 2021. Some dosimeters could be processed at 805 Goethals and PNNL to provide equipment calibration services, but those alternatives are highly inefficient.	Mitigation Action(s)	FC Date	%	Process dosimeters at 805 Goethals and PNNL as needed.	Ongoing	NA	Complete construction phase of Project L-797, Key Facilities HVAC Replacements.	FY21	0
Mitigation Action(s)	FC Date	%										
Process dosimeters at 805 Goethals and PNNL as needed.	Ongoing	NA										
Complete construction phase of Project L-797, Key Facilities HVAC Replacements.	FY21	0										
<b>Unassigned Risks (Pending ownership of identified risks/opportunities)</b>												
MA-0005-T: Unreadable Records from Radiological Exposure  Legacy Risk #: 1465 & ESHQ- 0005-T	If Radiological Exposure records become unreadable, then HMIS would be unable to provide these records in support of EEOICP/FOIA and Privacy Act requests. The maintenance of these records is also a regulatory requirement and the inability to sustain them is a direct breach of a federal requirement. Radiological record retention is a requirement of 10 CFR 830 & 835.  <b>HMIS Comment:</b> No major changes in June. Current handling of the records has been reduced to an as needed basis to reduce degradation. Digitization and indexing are not currently included in the HMIS scope and is being performed by ITG directly through DOE. HMIS is not contractually impacted by the penalties under the EEOICPA.											

3.4 HMIS SES Mission Key Risks

- **BCRs:** No BCRs were processed in June that impact the project’s MR or SM profile.
- **Risk Analysis:** No risk analysis conducted in June.
- **Current Risk Posture:**

Table A-10. SES Risk Posture

Period	Realized	Key	Opened	Closed	Unassigned	Total Risks
May	0	4	0	0	1	8
June	0	6	0	1	1	17

Table A-11. SES Key Risks

Unmitigated Risk Impacts	Assessment		Comments												
	Month	Trend													
<b>SES - Mission Risks</b>															
<p><b>Explanation of major changes to the program monthly spotlight chart:</b>                      SSERF-0001-T, <i>If a wildland fire starts and grows into a significant fire, Hanford Fire Department (HFD) may need to work significant overtime and expend consumables, resulting in budget overrun</i>, was added to report due to increased probability as a result of heightened seasonal fire danger.                      SSERF-0002-T, <i>If a wildland fire starts and Hanford Fire Department (HFD) is unable to stop the fire from spreading to an area with contaminated vegetation, then contamination may become airborne creating a health concern and environmental damages</i>, was added to report due to increased probability as a result of heightened seasonal fire danger.                      And unassigned risk SSERF-0013-T, <i>If a wildland fire starts and Hanford Fire Department (HFD) is unable to stop the fire from spreading then site operations will be impacted (results in site closure or restriction of site operations)</i>, was added to report due to increased probability as a result of heightened seasonal fire danger.                      Risk SSERF-0003-T, <i>If aging Ladder Truck 932 (DOE 3893) is unable to respond to a structural fire, due to being out of service for repairs or maintenance, then emergency responders will have to utilize their mutual-aid relationship, causing increased response times and reducing the ability to terminate emergency situations</i>, was closed as the risk falls under risk SSERF-0012-T, <i>If one or more aging Hanford Fire Department (HFD) response Apparatus cannot respond due to being out of service for long-term repairs or maintenance because the Hanford Fire Apparatus Replacement Plan is not properly funded, then emergency responders will have to utilize existing mutual-aid relationships, causing increased response times and reducing the ability to quickly terminate emergency situations</i>.</p>															
<b>Realized Risks (Risks that are currently impacting project cost/schedule)</b>															
No Realized Risks in June.															
<b>Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)</b>															
SSERF-0001-T: Significant wildland fire resulting in increased OT and budget overrun. Legacy Risk #: 746 & ES-0001-T	If a wildland fire starts and grows into a significant fire, Hanford Fire Department (HFD) may need to work significant overtime and expend consumables, resulting in budget overrun. <b>Risk Handling Strategy:</b> Avoid  <b>Probability:</b> Somewhat likely (50%) <b>Worst Case Impacts:</b> \$500K, 0 Days		<b>Risk Trigger:</b> Wildland fire resulting in increased overtime and budget overrun.  <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Harden firebreaks.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Add another 3-man team to perform prescribed burns.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Procure fire protection apparatus on schedule.</td> <td>Ongoing</td> <td>NA</td> </tr> </tbody> </table> <b>Mitigation Action Assessment:</b> Fire season officially runs May through September each year, though can fluctuate a few weeks earlier or later from year to year. Through mutual aid calls, Hanford fire will assist in fire calls in the surrounding communities adjacent to the Hanford site to proactively manage wildland fires before they get to the Hanford site. On-site firebreaks have been hardened and a dedicated team performs prescribed burns.	Mitigation Action(s)	FC Date	%	Harden firebreaks.	Complete	100	Add another 3-man team to perform prescribed burns.	Complete	100	Procure fire protection apparatus on schedule.	Ongoing	NA
Mitigation Action(s)	FC Date	%													
Harden firebreaks.	Complete	100													
Add another 3-man team to perform prescribed burns.	Complete	100													
Procure fire protection apparatus on schedule.	Ongoing	NA													

# SECTION A

	Unmitigated Risk Impacts	Assessment		Comments												
		Month	Trend													
<b>SES - Mission Risks</b>																
<p>SSERF-0002-T: Airborne contamination may be spread if a wildland fire spreads to contaminated vegetation.</p> <p>Legacy Risk #: 1368 &amp; ES-0002-T</p>	<p>If a wildland fire starts and Hanford Fire Department (HFD) is unable to stop the fire from spreading to an area with contaminated vegetation, then contamination may become airborne creating a health concern and environmental damages.</p> <p><b>Risk Handling Strategy:</b> Accept</p> <p><b>Probability:</b> Unlikely (20%)</p> <p><b>Worst Case Impacts:</b> \$0, 0 Days</p>	●	↔	<p><b>Risk Trigger:</b> Airborne contamination is spread when a wildland fire spreads to contaminated vegetation.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Harden firebreaks.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Add another 3-man team to perform prescribed burns.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Procure fire protection apparatus on schedule.</td> <td>Ongoing</td> <td>NA</td> </tr> </tbody> </table> <p><b>Mitigation Action Assessment:</b> Fire season officially runs May through September each year, though can fluctuate a few weeks earlier or later from year to year. Through mutual aid calls, Hanford fire will assist in fire calls in the surrounding communities adjacent to the Hanford site to proactively manage wildland fires before they get to the Hanford site. On-site firebreaks have been hardened and a dedicated team performs prescribed burns.</p>	Mitigation Action(s)	FC Date	%	Harden firebreaks.	Complete	100	Add another 3-man team to perform prescribed burns.	Complete	100	Procure fire protection apparatus on schedule.	Ongoing	NA
Mitigation Action(s)	FC Date	%														
Harden firebreaks.	Complete	100														
Add another 3-man team to perform prescribed burns.	Complete	100														
Procure fire protection apparatus on schedule.	Ongoing	NA														
<p>SES-0012-T: Fire, Medical, Security, and Emergency communication could fail if emergency radios and supporting site infrastructure fail.</p> <p>Legacy Risk #: 1959 &amp; ES-0012-T</p>	<p>If Emergency Radios and supporting site infrastructures fail because they're outdated and no longer supported for repair by the manufacturer, then Fire, Medical, Security, and Emergency communication will be impacted, delaying their response to the Hanford site.</p> <p><b>Risk Handling Strategy:</b> Avoid</p> <p><b>Probability:</b> Somewhat likely (40%)</p> <p><b>Worst Case Impacts:</b> \$0, 0 Days</p>	●	↔	<p><b>Risk Trigger:</b> Hardware/software that is no longer supported fails and cannot be repaired by the manufacturer.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Replace hand-held radios for Fire, Patrol, and Emergency Management (Project L919-7040).</td> <td>07/2021</td> <td>0</td> </tr> <tr> <td>Replace repeaters and site infrastructure that supports the Hanford site emergency radio system (Project L919-7140).</td> <td>08/2021</td> <td>0</td> </tr> </tbody> </table> <p><b>Mitigation Action Assessment:</b> No major changes in the month of June. Project L-919 will avoid this risk. Questions from contracts regarding the proposal prompted a request for a revised proposal answering those questions. Award was expected in the June 2020 reporting period. The questions raised during the review ultimately led to the decision to not award the contract under the current requisition. The vendor, Wildflower, will not be used for the procurement unless pricing for labor and services can be verified. The SOW was split in two phases: one for design/configuration services &amp; one for installation of radios and radio system core (construction contract). The services procurement contract was awarded 9/30/2020. Construction contract SOW was approved and posted. The award date of the construction contract has been delayed for several months for many reasons, including construction contract determination, approvals for job walk and HMIS template transition. Upon detailed review of the SOW, it was determined that design was not to the point that would support a Firm Fixed Price bid and the RFP was canceled. RFP will be re-issued following further development of the design and Bill of Materials. Delays awarding the installation contract and the materials procurement continue to push back activity L919-7140 to install repeaters and site infrastructure. The Project expects to recover all variance upon completion of award of the new contracts, which is expected in Fiscal Month August.</p>	Mitigation Action(s)	FC Date	%	Replace hand-held radios for Fire, Patrol, and Emergency Management (Project L919-7040).	07/2021	0	Replace repeaters and site infrastructure that supports the Hanford site emergency radio system (Project L919-7140).	08/2021	0			
Mitigation Action(s)	FC Date	%														
Replace hand-held radios for Fire, Patrol, and Emergency Management (Project L919-7040).	07/2021	0														
Replace repeaters and site infrastructure that supports the Hanford site emergency radio system (Project L919-7140).	08/2021	0														
<p>SESHFES-0011-T: HFD responses into PFP's RBA may result in contaminated equipment and apparatus.</p> <p>Legacy Risk #: 1972 &amp; ES-0014-T</p>	<p>If there is a Hanford Fire Department (HFD) emergency response to the PFP radiological buffer area for a fire, hazmat or medical event there may be a significant potential for HFD material as well as apparatus to be contaminated, thereby losing that equipment and/or apparatus for use elsewhere on the Hanford site.</p> <p><b>Risk Handling Strategy:</b> Accept</p> <p><b>Probability:</b> Unlikely (25%)</p> <p><b>Worst Case Impacts:</b> \$3,000K, 0 Days</p>	●	↑	<p><b>Risk Trigger:</b> Emergency response to PFP radiological buffer area for a fire, hazmat, or medical event.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Develop strategies to minimize the opportunity to contaminate Emergency Services apparatus and equipment.</td> <td>Complete</td> <td>100</td> </tr> </tbody> </table> <p><b>Mitigation Action Assessment:</b> No major changes in the month of June. Response strategies have been developed to minimize contamination of Emergency Services apparatus and equipment. As PFP progress continues, the probability of contamination will slowly reduce. This risk will continue to be monitored as PFP progresses through its mission.</p>	Mitigation Action(s)	FC Date	%	Develop strategies to minimize the opportunity to contaminate Emergency Services apparatus and equipment.	Complete	100						
Mitigation Action(s)	FC Date	%														
Develop strategies to minimize the opportunity to contaminate Emergency Services apparatus and equipment.	Complete	100														

# SECTION A



	Unmitigated Risk Impacts	Assessment		Comments												
		Month	Trend													
<b>SES - Mission Risks</b>																
<p>SES-0025-T: Response into a radio dead-zone.</p> <p>Legacy Risk #: ES-0025-T</p>	<p>If Emergency Response Personnel cannot communicate with each other or a controlling agency because radio communication is unavailable, then response into or operating in an unknown environment will potentially impact the health and safety of those responders.</p> <p><b>Risk Handling Strategy:</b> Avoid</p> <p><b>Probability:</b> Likely (75%) <b>Worst Case Impacts:</b> \$0, 0 Days</p>	●	↔	<p><b>Risk Trigger:</b> Emergency response to dead-zone or signal shadow on site where responders lose radio communication.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Install signal repeaters at identified dead-zones and signal shadows on site.</td> <td>TBD</td> <td>0</td> </tr> </tbody> </table> <p><b>Mitigation Action Assessment:</b> No major changes in the month of <b>June</b>. Avoid. Install signal repeaters at identified dead-zones and signal shadows within WTP. Signal repeaters would need to be established as permanent equipment that is reliable in all-weather environments and available 24/7. Signal repeaters must be compatible with existing and anticipated equipment. A work order to install the repeaters is in process, but there is no forecast completion date at this time.</p>	Mitigation Action(s)	FC Date	%	Install signal repeaters at identified dead-zones and signal shadows on site.	TBD	0						
Mitigation Action(s)	FC Date	%														
Install signal repeaters at identified dead-zones and signal shadows on site.	TBD	0														
<b>High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)</b>																
<p>SESHFES-0006-T: Catastrophic failure of utilities or structure leaves a Hanford fire station uninhabitable.</p> <p>Legacy Risk #: 1727 &amp; ES-0006-T</p>	<p>If a Hanford fire station (100/200/300 areas) becomes uninhabitable for fire and medical responders due to a catastrophic failure of utilities or structure, then responders and apparatus will need to be relocated increasing response times to incidents.</p> <p><b>Risk Handling Strategy:</b> Mitigate</p> <p><b>Probability:</b> Unlikely (20%) <b>Worst Case Impacts:</b> \$20,000K, 0 Days</p>	●	↔	<p><b>Risk Trigger:</b> Catastrophic failure of utilities or structure of one or more of the three Hanford fire stations.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Electrical systems have been updated once; backup generators installed to support facilities.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Supplemental window air conditioners are used.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Complete project L-888 400 Area Fire Station</td> <td>05/2023</td> <td>10</td> </tr> </tbody> </table> <p><b>Mitigation Action Assessment:</b> No major changes in the month of <b>June</b>. Several supplemental window air conditioners were installed at the 300 area fire station in July. Power fluctuations in the 300 area fire station required corrective maintenance on internal electrical equipment in August 2020. Environmental considerations are being monitored at all three facilities. All three facilities are manned 24/7 with little modifications past their original design and construction, including 1960's commonly used building materials. Electrical systems have been updated once; backup generators installed to support facilities. Supplemental window air conditioners are used, and one roof was repaired fall 2019. Project L-888, 400 Area Fire Station will partially mitigate this risk. L-888 Construction RFP was put on hold; cannot obtain pricing until DOE-RL issues the L-888 Task Order (RPTO-009) to HMIS. The construction services requisition is placed back to pending. More project specific information can be found within the L-888 spotlight.</p>	Mitigation Action(s)	FC Date	%	Electrical systems have been updated once; backup generators installed to support facilities.	Complete	100	Supplemental window air conditioners are used.	Ongoing	NA	Complete project L-888 400 Area Fire Station	05/2023	10
Mitigation Action(s)	FC Date	%														
Electrical systems have been updated once; backup generators installed to support facilities.	Complete	100														
Supplemental window air conditioners are used.	Ongoing	NA														
Complete project L-888 400 Area Fire Station	05/2023	10														
<b>Unassigned Risks (Pending ownership of identified risks/opportunities)</b>																
<p>SSERF-0013-T: Wildland fires overwhelm HFD capabilities and impact sitewide operations.</p> <p>Legacy Risk #: 1440 &amp; ES-0020-T</p>	<p>If a wildland fire starts and Hanford Fire Department (HFD) is unable to stop the fire from spreading, then site operations will be impacted (results in site closure or restriction of site operations).</p> <p>HMIS Comment: Even with mutual aid agreements in place, the possibility exists of a wildland fire impacting site operations. A sufficiently large fire on the Hanford site could overwhelm HFD capabilities. The determination to continue site operations would be outside of MSA's ability to manage as DOE makes the determination. Based on these factors, this is a proposed transfer risk.</p>															

3.5 HMIS IMS Mission Key Risks

- **BCRs:** No BCRs were processed in June that impact the project’s MR or SM profile.
- **Risk Analysis:** No risk analysis conducted in June.
- **Current Risk Posture:**

Table A-12. IMS Risk Posture

Period	Realized	Key	Opened	Closed	Unassigned	Total Risks
May	0	9	0	0	0	12
June	0	9	0	0	0	17

Table A-13. IMS Key Risks

Unmitigated Risk Impacts	Assessment		Comments																																	
	Month	Trend																																		
<b>IMS- Mission Risks</b>																																				
<b>Explanation of major changes to the program monthly stoplight chart:</b> No major changes to the Stoplight Charts in <b>June</b> .																																				
<b>Realized Risks (Risks that are currently impacting project cost/schedule)</b>																																				
No Realized Risks in <b>June</b> .																																				
<b>Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)</b>																																				
IMS-0003-T: Unaware of Network Intrusion  Legacy Risk #: 1206 & InfoM-0003-T	If HMIS is unaware of an ongoing intrusion into the network, due to an inability to detect the intruder, then a significant information compromise will occur.  <b>Risk Handling Strategy:</b> Mitigate  <b>Probability:</b> Somewhat Likely (50%) <b>Worst Case Impacts:</b> \$2.0M, 0 Days		<b>Risk Trigger:</b> During day to day operations, an intrusion to the network is experienced.  <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Increase staff by 2 FTEs for incident response and analysis.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Integrate network operations center with engineering and cyber security to form security operations center.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Improve internal controls, auditing, monitoring, and alerting capabilities.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Incident detection and log correlation tools have been improved; activity ongoing.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Review incident handling guidelines and implement appropriate recommendations.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Develop incident scenarios and perform exercises regularly.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Provide additional training on security tools to existing staff.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Improved incident response and analysis capability.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Use outside resources to expedite improvements.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Implement XSOAR Automation Software</td> <td>04/2021</td> <td>98%</td> </tr> </tbody> </table> <b>Mitigation Action Assessment:</b> No major changes in the month of <b>June</b> . Internal process improvements continue to be conducted to improve monitoring and alerting. In house training is ongoing to improve incident response and user awareness. Administrative controls are employed to prevent introduction of malware into the network. In <b>June</b> , the Production Readiness Review Board (PRRB) documentation was completed. XSOAR is forecasted to be in production by 06/30/2021.	Mitigation Action(s)	FC Date	%	Increase staff by 2 FTEs for incident response and analysis.	Complete	100	Integrate network operations center with engineering and cyber security to form security operations center.	Complete	100	Improve internal controls, auditing, monitoring, and alerting capabilities.	Ongoing	NA	Incident detection and log correlation tools have been improved; activity ongoing.	Ongoing	NA	Review incident handling guidelines and implement appropriate recommendations.	Ongoing	NA	Develop incident scenarios and perform exercises regularly.	Ongoing	NA	Provide additional training on security tools to existing staff.	Ongoing	NA	Improved incident response and analysis capability.	Ongoing	NA	Use outside resources to expedite improvements.	Ongoing	NA	Implement XSOAR Automation Software	04/2021	98%
Mitigation Action(s)	FC Date	%																																		
Increase staff by 2 FTEs for incident response and analysis.	Complete	100																																		
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Use outside resources to expedite improvements.	Ongoing	NA																																		
Implement XSOAR Automation Software	04/2021	98%																																		

# SECTION A

<p>IMS-0011-T: Industrial Control System Breach.</p> <p>Legacy Risk #: 1753 &amp; InfoM-0011-T</p>	<p>If the Industrial Control System (ICS) is breached due to an external attack or through a user's inadvertent or intentional download of malicious software, then significant and potentially catastrophic (depending on the criticality of the ICS, such TFLAN) system failure or damage may occur, including (1) loss of availability of the ICS / loss of production processes; (2) data leakage / loss of sensitive information; (3) physical damage to facilities or critical infrastructure; (4) interference with safety systems; (5) deterioration of ICS process controls; and (6) loss of life.</p> <p><b>Risk Handling Strategy:</b> Mitigate</p> <p><b>Probability:</b> Likely (75%) <b>Worst Case Impacts:</b> \$2.0M, 0 Days</p>			<p><b>Risk Trigger:</b> During day to day operations, an intrusion to the ICS network is experienced.</p> <table border="1" data-bbox="824 310 1572 646"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Conduct needs assessments for critical ICS.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Conduct needs assessments for critical ICS.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Secure access to wired and wireless networks within the ICS environment.</td> <td>CY2021</td> <td>30</td> </tr> <tr> <td>Implement ICS security procedures and governance.</td> <td>CY2021</td> <td>15</td> </tr> <tr> <td>Perform STE on first candidate system.</td> <td>11/2021</td> <td>25</td> </tr> <tr> <td>Implement comprehensive ICS change management.</td> <td>06/2022</td> <td>10</td> </tr> <tr> <td>Disable use of portable media where possible.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Implement procedures for approval of all portable devices prior to connection to the ICS network and components.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Disallow Internet and remote accesses to the ICS environment.</td> <td>Ongoing</td> <td>NA</td> </tr> </tbody> </table> <p><b>Mitigation Action Assessment:</b> No major changes in the month of <b>June</b>. In efforts to prevent a breach of the Industrial Control System (ICS), the project has implemented ongoing mitigation actions. These actions are being executed in conjunction with a heightened overall awareness of cyber security practices.</p>	Mitigation Action(s)	FC Date	%	Conduct needs assessments for critical ICS.	Complete	100	Conduct needs assessments for critical ICS.	Complete	100	Secure access to wired and wireless networks within the ICS environment.	CY2021	30	Implement ICS security procedures and governance.	CY2021	15	Perform STE on first candidate system.	11/2021	25	Implement comprehensive ICS change management.	06/2022	10	Disable use of portable media where possible.	Ongoing	NA	Implement procedures for approval of all portable devices prior to connection to the ICS network and components.	Ongoing	NA	Disallow Internet and remote accesses to the ICS environment.	Ongoing	NA
Mitigation Action(s)	FC Date	%																																
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Disallow Internet and remote accesses to the ICS environment.	Ongoing	NA																																
<b>High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)</b>																																		
<p>IMS-0001-T: Malicious Software Network Breach</p> <p>Legacy Risk #: 1118 &amp; InfoM-0001-T</p>	<p>If the network is breached through a user inadvertently or intentionally downloading malicious software, then a significant outage or information compromise may occur.</p> <p><b>Risk Handling Strategy:</b> Mitigate</p> <p><b>Probability:</b> Unlikely (25%) <b>Worst Case Impacts:</b> \$2.0M, 0 Days</p>			<p><b>Risk Trigger:</b> During day to day operations, an intrusion resulting in malicious software downloading to the network is experienced resulting in cost impacts.</p> <table border="1" data-bbox="824 953 1572 1268"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Replaced Palo Alto Traps with Palo Alto Cortex XDR.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Implement user behavior based anomaly detection. (Palo Alto Cortex XDR)</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Project H-001, BMS Upgrade Project</td> <td>FY2024</td> <td>5</td> </tr> <tr> <td>Implement application <b>allow listing</b>, allowing execution of only approved applications.</td> <td>DOE Approval Needed</td> <td>0</td> </tr> <tr> <td>Improve internal controls, auditing, monitoring, and alerting capabilities.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Provide additional security training for users.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Restrict use of removable storage devices.</td> <td>Ongoing</td> <td>NA</td> </tr> </tbody> </table> <p><b>Mitigation Action Assessment:</b> No major changes in the month of <b>June</b>. Existing administrative processes are employed to manage system changes. In house training and lessons learned are provided to improve secure coding practice. Contracts, MOUs, and ISAs are maintained. Project H-001, BMS Upgrade Project, partially mitigates this risk by reducing the number of systems potentially breached.</p>	Mitigation Action(s)	FC Date	%	Replaced Palo Alto Traps with Palo Alto Cortex XDR.	Complete	100	Implement user behavior based anomaly detection. (Palo Alto Cortex XDR)	Complete	100	Project H-001, BMS Upgrade Project	FY2024	5	Implement application <b>allow listing</b> , allowing execution of only approved applications.	DOE Approval Needed	0	Improve internal controls, auditing, monitoring, and alerting capabilities.	Ongoing	NA	Provide additional security training for users.	Ongoing	NA	Restrict use of removable storage devices.	Ongoing	NA						
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Restrict use of removable storage devices.	Ongoing	NA																																

# SECTION A

<p>IMS-0002-T: Application Software Vulnerability Network Breach</p> <p>Legacy Risk #: 1121 &amp; InfoM-0002-T</p>	<p>If the network is breached due to the exploitation of vulnerabilities in installed application software, then a significant outage or information compromise may occur.</p> <p><b>Risk Handling Strategy:</b> Mitigate</p> <p><b>Probability:</b> Unlikely (25%) <b>Worst Case Impacts:</b> \$2.0M, 0 Days</p>			<p><b>Risk Trigger:</b> During day to day operations, an intrusion due to network vulnerabilities is experienced resulting in cost impacts.</p> <table border="1" data-bbox="824 310 1572 716"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Increase staff by 2 FTEs for incident response and analysis.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Integrate network operations center with engineering and cyber security to form security operations center.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Improve internal controls, auditing, monitoring, and alerting capabilities.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Incident detection and log correlation tools have been improved; activity ongoing.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Review incident handling guidelines and implement appropriate recommendations.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Develop incident scenarios and perform exercises regularly.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Provide additional training on security tools to existing staff, ongoing.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Use outside resources to expedite improvements.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Perform vulnerability management scanning and mitigation.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Implement XSOAR Automation Software</td> <td>04/2021</td> <td>98%</td> </tr> </tbody> </table> <p><b>Mitigation Action Assessment:</b> No major changes in the month of June. Existing administrative processes are employed to manage system changes. In house training and lessons learned are provided to improve secure coding practice. Contracts, MOUs, and ISAs are maintained. In June, the Production Readiness Review Board (PRRB) documentation was completed. XSOAR is forecasted to be in production by 06/30/2021.</p>	Mitigation Action(s)	FC Date	%	Increase staff by 2 FTEs for incident response and analysis.	Complete	100	Integrate network operations center with engineering and cyber security to form security operations center.	Complete	100	Improve internal controls, auditing, monitoring, and alerting capabilities.	Ongoing	NA	Incident detection and log correlation tools have been improved; activity ongoing.	Ongoing	NA	Review incident handling guidelines and implement appropriate recommendations.	Ongoing	NA	Develop incident scenarios and perform exercises regularly.	Ongoing	NA	Provide additional training on security tools to existing staff, ongoing.	Ongoing	NA	Use outside resources to expedite improvements.	Ongoing	NA	Perform vulnerability management scanning and mitigation.	Ongoing	NA	Implement XSOAR Automation Software	04/2021	98%
Mitigation Action(s)	FC Date	%																																			
Increase staff by 2 FTEs for incident response and analysis.	Complete	100																																			
Integrate network operations center with engineering and cyber security to form security operations center.	Complete	100																																			
Improve internal controls, auditing, monitoring, and alerting capabilities.	Ongoing	NA																																			
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Perform vulnerability management scanning and mitigation.	Ongoing	NA																																			
Implement XSOAR Automation Software	04/2021	98%																																			
<p>IMS-0005-T: Unintended PII in Software Applications.</p> <p>Legacy Risk #: 1442 &amp; InfoM-0005-T</p>	<p>If unintended access to Personally Identifiable Information (PII) is discovered in software applications or files because information was not originally marked as PII, then corrections must be implemented, resulting in cost impacts.</p> <p><b>Risk Handling Strategy:</b> Mitigate</p> <p><b>Probability:</b> Very Likely (95%) <b>Worst Case Impacts:</b> \$150.0K, 0 Days</p>			<p><b>Risk Trigger:</b> During day to day operations, PII is discoverable on software or files to those without permission.</p> <table border="1" data-bbox="824 1010 1572 1478"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Procure tool and perform searches to proactively detect PII in systems and files. [ROM cost/duration - \$50K/3-6 months] and implement corrections as appropriate at an estimated \$25K per instance. (O365 G5 licenses with DLP will scan anything stored with OneDrive or Outlook.)</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Finalize DLP alerts and response procedures.</td> <td>12/2021</td> <td>18</td> </tr> <tr> <td>Provide additional training to employees for proper handling of PII. OOU training development between Cyber Security and Safeguards and Security.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>When unintended access to PII is found, evaluate, and implement best method of correction.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Compliance office will have two search analysts searching the front end of Integrated Document Management System (IDMS) for unidentified PII. Institute a vault process for controlling PII and other OOU.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Develop operational controls and alerts for file control access.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Encrypt data at rest. Would require alternatives/business case analysis to determine license fees, communications, switches for throughput, bandwidth, and infrastructure requirements, etc. [Cost/duration - \$TBD/24 months] Not a NIST requirement.</td> <td>TBD</td> <td>0</td> </tr> </tbody> </table> <p><b>Mitigation Action Assessment:</b> No major changes in the month of June. Perform mitigation in accordance with DOE Privacy Program – CRD O 206.1. In June, O365 is being implemented site-wide which will allow the DLP rules, tips and/or prompt users for action to be implemented. The O365 implementation is forecasted for completion 07/2021. The finalization of the DLP alerts and response procedures is forecasted for 12/2021.</p>	Mitigation Action(s)	FC Date	%	Procure tool and perform searches to proactively detect PII in systems and files. [ROM cost/duration - \$50K/3-6 months] and implement corrections as appropriate at an estimated \$25K per instance. (O365 G5 licenses with DLP will scan anything stored with OneDrive or Outlook.)	Complete	100	Finalize DLP alerts and response procedures.	12/2021	18	Provide additional training to employees for proper handling of PII. OOU training development between Cyber Security and Safeguards and Security.	Ongoing	NA	When unintended access to PII is found, evaluate, and implement best method of correction.	Ongoing	NA	Compliance office will have two search analysts searching the front end of Integrated Document Management System (IDMS) for unidentified PII. Institute a vault process for controlling PII and other OOU.	Ongoing	NA	Develop operational controls and alerts for file control access.	Ongoing	NA	Encrypt data at rest. Would require alternatives/business case analysis to determine license fees, communications, switches for throughput, bandwidth, and infrastructure requirements, etc. [Cost/duration - \$TBD/24 months] Not a NIST requirement.	TBD	0									
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# SECTION A

<p>ITCS-0007-T: Insufficient Fiber Cable Inventory</p> <p>Legacy Risk #: 1981 &amp; InfoM-0017-T &amp; IMS-0017-T</p>	<p>If on-hand fiber optic cable inventory remains insufficient to maintain, enhance, or expand existing network infrastructure, then MSA could find itself unable to recover from infrastructure damage or provide desired network redundancy resulting in impacts to sitewide operations and future reliability projects.</p> <p><b>Risk Handling Strategy:</b> Mitigate</p> <p><b>Probability:</b> Very Likely (95%) <b>Worst Case Impacts:</b> \$4.0M, 0 Days</p>			<p><b>Risk Trigger:</b> Due to additional network demand, and the lack of readily available cable inventory the project experiences a cost impact.</p> <table border="1" data-bbox="824 306 1572 583"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Perform study to determine feasibility of alternative and/or complimentary risk handling activities. Potential RHPs include, but are not limited to: Wavelength-division multiplexing, Wireless-based support strategy (temp. Wi-flex in areas to supply basic services), Consolidating/reducing legacy systems to reduce strain on current fiber optic capacity, Redistribute/optimize current equipment, Connect fiber from A8 substation to Midway substation (provides redundancy from site to Richland)</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Out-year project L-819 (FY23 – estimated \$5M) exists to address additional connectivity from the Central Plateau area to the Federal Building.</td> <td>FY2023</td> <td>0</td> </tr> </tbody> </table> <p><b>Mitigation Action Assessment:</b> No major changes in the month of June.</p> <p>Out-year project L-819 is currently planned in efforts to address additional connectivity from the Central Plateau area to the Federal Building in Richland. If any of these proposed actions are proven to be feasible, the formal risk handling plan will be updated to align.</p> <p>The study to determine the feasibility of alternative and/or complimentary risk handling actions was completed. The study concluded that a graded approach with three different optimization techniques to increase the availability of fiber at Hanford. The optimizations and approach include implementing bi-directional (Bi-Di) connections; optimizing the current fiber use through Coarse Wavelength Division Multiplexing (CWDM) and Dense Wavelength Division Multiplexing (DWDM); and installing new fiber and re-routing old fiber to free up existing fiber.</p>	Mitigation Action(s)	FC Date	%	Perform study to determine feasibility of alternative and/or complimentary risk handling activities. Potential RHPs include, but are not limited to: Wavelength-division multiplexing, Wireless-based support strategy (temp. Wi-flex in areas to supply basic services), Consolidating/reducing legacy systems to reduce strain on current fiber optic capacity, Redistribute/optimize current equipment, Connect fiber from A8 substation to Midway substation (provides redundancy from site to Richland)	Complete	100	Out-year project L-819 (FY23 – estimated \$5M) exists to address additional connectivity from the Central Plateau area to the Federal Building.	FY2023	0			
Mitigation Action(s)	FC Date	%														
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Out-year project L-819 (FY23 – estimated \$5M) exists to address additional connectivity from the Central Plateau area to the Federal Building.	FY2023	0														
<p>ITCSS-0003-T: Emergency siren activation failure.</p> <p>Legacy Risk #: 1684 &amp; InfoM-0009-T &amp; IMS-0009-T</p>	<p>If the signal to Emergency Siren(s) were intercepted, due to the signal being unencrypted or if Emergency Siren(s) activation failed, then false alarms could be sounded resulting in miscommunication or a legitimate emergency response could potentially be delayed. Either scenario would reduce Hanford personnel confidence in the emergency notification system and cause a Stop Work.</p> <p><b>Risk Handling Strategy:</b> Avoid</p> <p><b>Probability:</b> Unlikely (10%) <b>Worst Case Impacts:</b> \$0.0, 0 Days</p>			<p><b>Risk Trigger:</b> Emergency Sirens fail during a test or emergency situation.</p> <table border="1" data-bbox="824 1003 1572 1094"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Procure and deploy new activation software (CentrAlert).</td> <td>FY23</td> <td>15</td> </tr> <tr> <td>Revise procedures as necessary.</td> <td>FY2023</td> <td>0</td> </tr> </tbody> </table> <p><b>Mitigation Action Assessment:</b> No major changes in the month of June.</p> <p>Hanford Site Emergency Alerting System (HSEAS) is being implemented in multiple phases. The encryption of the signal is forecasted for implementation in FY23.</p>	Mitigation Action(s)	FC Date	%	Procure and deploy new activation software (CentrAlert).	FY23	15	Revise procedures as necessary.	FY2023	0			
Mitigation Action(s)	FC Date	%														
Procure and deploy new activation software (CentrAlert).	FY23	15														
Revise procedures as necessary.	FY2023	0														
<p>ITCS-0008-T: IM cannot perform Alternative Analysis of Gable Mountain.</p> <p>Legacy Risk #: 2072 &amp; InfoM-0018-T &amp; IMS-0018-T</p>	<p>If Information Management is unable to perform an alternatives analysis for Gable Mountain communications equipment removal because of HMIS's current funding priorities, then HMIS will be unable to holistically scope what would be required to vacate the area resulting in delays or inability to leverage future HMIS projects (reliability or other) in support of the Department of Energy's footprint reduction obligation on Gable Mountain.</p> <p><b>Risk Handling Strategy:</b> Avoid</p> <p><b>Probability:</b> Likely (90%) <b>Worst Case Impacts:</b> \$0.0, 0 Days</p>			<p><b>Risk Trigger:</b> No alternatives to Gable Mountain are acquired or found.</p> <table border="1" data-bbox="824 1472 1572 1675"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Consolidate equipment and facilities as able, including retiring/moving 623, 630 and 623b HSEAS, WiMax and two-way radio systems. (L-917)</td> <td>FY2024</td> <td>0</td> </tr> <tr> <td>Relocate commercial radio services and DOE systems to alternate locations as possible. (L-917)</td> <td>FY2024</td> <td>0</td> </tr> <tr> <td>Perform alternatives analysis &amp; conceptual design for complete, long-term withdrawal from Gable Mountain. (L-917)</td> <td>FY2024</td> <td>0</td> </tr> </tbody> </table> <p><b>Mitigation Action Assessment:</b> No major changes in the month of June.</p> <p>The completion of Project L-917 would avoid this risk. The project is currently in the planning phase and has not been funded.</p>	Mitigation Action(s)	FC Date	%	Consolidate equipment and facilities as able, including retiring/moving 623, 630 and 623b HSEAS, WiMax and two-way radio systems. (L-917)	FY2024	0	Relocate commercial radio services and DOE systems to alternate locations as possible. (L-917)	FY2024	0	Perform alternatives analysis & conceptual design for complete, long-term withdrawal from Gable Mountain. (L-917)	FY2024	0
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Perform alternatives analysis & conceptual design for complete, long-term withdrawal from Gable Mountain. (L-917)	FY2024	0														

# SECTION A

<p>IMS-0022-T: Control of Personally Identifiable Information (PII) is lost.</p> <p>Legacy Risk #: 1443 &amp; InfoM-0022-T</p>	<p>If control of Personally Identifiable Information (PII) is lost, due to intentional exploitation of vulnerabilities in existing software applications or legacy files by Site personnel, then corrections must be implemented and notifications sent, resulting in additional costs and damage to HMIS's relationships with the OHCs and DOE.</p> <p><b>Risk Handling Strategy:</b> Mitigate</p> <p><b>Probability:</b> Unlikely (20%) <b>Worst Case Impacts:</b> \$27.5M, 0 Days</p>			<p><b>Risk Trigger:</b> Access to PII is discoverable through the exploitation of vulnerabilities in existing software applications or legacy files to those without permission.</p> <table border="1" data-bbox="824 310 1572 722"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Procure tool and perform searches to proactively detect PII in systems and files. [ROM cost/duration - \$50K/3-6 months] and implement corrections as appropriate at an estimated \$25K per instance. (O365 G5 licenses with DLP will scan anything stored with OneDrive or Outlook.)</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Provide additional training to employees for proper handling of PII. OOU training is being developed between Cyber Security and Safeguards and Security.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>When unintended access to PII is found, evaluate, and implement best method of correction.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Compliance office will have two search analysts searching the front end of Integrated Document Management System (IDMS) for unidentified PII. Institute a vault process for controlling PII and other OOU.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Encrypt data at risk rest. Would require alternatives/business case analysis to determine license fees, communications, switches for throughput, bandwidth, and infrastructure requirements, etc. [Cost/duration - \$TBD/24 months] Not a NIST requirement.</td> <td>TBD</td> <td>0</td> </tr> </tbody> </table> <p><b>Mitigation Action Assessment:</b> No major changes in the month of <b>June</b>. Data at rest encryption is a dormant action because there is no requirement at present. Operational controls and alerts for file control access are an ongoing development.</p>	Mitigation Action(s)	FC Date	%	Procure tool and perform searches to proactively detect PII in systems and files. [ROM cost/duration - \$50K/3-6 months] and implement corrections as appropriate at an estimated \$25K per instance. (O365 G5 licenses with DLP will scan anything stored with OneDrive or Outlook.)	Complete	100	Provide additional training to employees for proper handling of PII. OOU training is being developed between Cyber Security and Safeguards and Security.	Ongoing	NA	When unintended access to PII is found, evaluate, and implement best method of correction.	Ongoing	NA	Compliance office will have two search analysts searching the front end of Integrated Document Management System (IDMS) for unidentified PII. Institute a vault process for controlling PII and other OOU.	Ongoing	NA	Encrypt data at risk rest. Would require alternatives/business case analysis to determine license fees, communications, switches for throughput, bandwidth, and infrastructure requirements, etc. [Cost/duration - \$TBD/24 months] Not a NIST requirement.	TBD	0
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3.6 HMIS ET&P Mission Key Risks

- **BCRs:** No BCRs were processed in June that impact the project’s MR or SM profile.
- **Risk Analysis:** No risk analysis conducted in June.
- **Current Risk Posture:**

Table A-14. ET&P Risk Posture

Period	Realized	Key	Opened	Closed	Unassigned	Total Risks
May	0	0	0	0	2	2
June	0	0	1	0	2	3

Table A-15. ET&P Key Risks

Unmitigated Risk Impacts	Assessment		Comments
	Month	Trend	
<b>ET&amp;PM- Mission Risks</b>			
<b>Explanation of major changes to the program monthly stoplight chart:</b> No major changes to the Stoplight Charts in June.			
<b>Realized Risks</b> (Risks that are currently impacting project cost/schedule)			
No Realized Risks in June.			
<b>Critical Risks</b> (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)			
No Critical Risks in June.			
<b>High Risk Threat Value</b> (Recoverable slip to enforceable or incentivized milestone)			
No High Risks in June.			
<b>Unassigned Risks</b> (Pending ownership of identified risks/opportunities)			
ETP-0009-T: NEPA screen determines reliability project must have an EA.  Legacy Risk #: 1949 & SSIM-0009-T	If a reliability project or projects require an Environment Assessment (EA) because the National Environmental Policy Act (NEPA) screen determines a Categorical Exclusion (CX) does not apply, then additional labor and financial resources will be required for HMIS and DOE oversight of the project(s) impacting project schedule and cost.		
ETP-0010-T: NEPA screen determines a reliability project requires an EIS.  Legacy Risk #: 1950 & SSIM-0010-T	If a reliability project or projects require an Environmental Impact Statement (EIS) because the National Environmental Policy Act (NEPA) screen determines a Categorical Exclusion (CX) does not apply, then additional labor and financial resources will be required for HMIS and DOE oversight of the project(s) impacting project schedule and cost.		

## 4.0 DOE ACTIONS/DECISIONS

**Table A-16. DOE Actions/Decisions**

Description	HMIS Delivery Date	Expected DOE-RL Due Date
N/A		

**Section B**



**Monthly Project Performance Report  
(CD0162)**

### 1.0 RELIABILITY PROJECTS EXECUTIVE SUMMARY

Covered above in 1.0 EXECUTIVE SUMMARY.

### 2.0 SAFETY PERFORMANCE

Nothing to report in the month of June.

### 3.0 KEY ACCOMPLISHMENTS

Significant accomplishments and progress towards completion of goals and objectives, for the month of June, included:

- L-720, Outdoor Lighting Reconfiguration and Replacement: Conducted Construction Kickoff meeting and mobilized to the field.
- L-796, Key Facilities Roof Replacement: Construction subcontractor completed work on the first building, MO285, then mobilized to second building, MO414, 50% complete at end of reporting period.
- L-819, High Capacity Fiber Optic Cable: Completed development of 40% design documents.
- L-826, 181 B Vertical Turbine Pumps: Completed approval of 30% design.
- L-839, 12-inch Potable Water Loop-Line to WTP: Continued installation of piping. Initiated installation of fiber optic cable conduit.
- L-850, 200W Potable Water Tank, Issued design media for tank size and piping changes.
- L-861, Single-Circuit Distribution Pole Replacement: Completed 60% design review, comments returned to the A/E.
- L-894, Raw Water Cross Connect Isolation 200E/W, Construction subcontractor performed testing of heaters and low temperature/loss of power alarm with use of a portable generator. Contract for A/E services awarded.
- L-895, Fire Protection Infrastructure for Plateau Raw Water: Contract for A/E services awarded.
- L-897, Central Plateau Water Treatment Facility: Ecology issued notice of 30-day public comment period to start on June 28th for the TEDF Discharge Permit.
- L-898, 100 Area Mission Critical Distribution Feeders Replacement: Received 30% design, initiated review.
- L-907, Fleet Complex Site Development: Received and approved pre-conceptual layouts and developed a higher efficiency alternative for consideration.

- L-934, Office Space Gap Reduction – 200E: Completed installation of trailers stairs and ramps, ecology blocks and bollards, gravel around trailers, hot mix asphalt including parking lot approaches, handicap parking, street crossings.



*L-796 TPO Installation Finished on MO-414 (6/24/21)*



*L-789 Stringing Fiber Optic Cable (6/17/21)*



*L-839 12-Inch Waterline Install East of Baltimore (6/8/21)*



*L-839 12-inch Waterline Pipe Installation (5/25/21)*

4.0 EARNED VALUE MANAGEMENT

Table B-1. Reliability Project Performance

	CURRENT PERIOD (CP)					FISCAL YEAR TO DATE (FYTD)					CUMULATIVE TO DATE (CTD)					AT COMPLETION		
	BCWS	BCWP	ACWP	SCHEDULE	COST	BCWS	BCWP	ACWP	SCHEDULE	COST	BCWS	BCWP	ACWP	SCHEDULE	COST	BAC	EAC	VARIANCE
<b>WBS for June</b>																		
4001.07.01.01.01 - L-839, 12in Potable Water Loop-line	\$567	\$816	\$814	\$249	\$2	\$699	\$1,327	\$1,367	\$628	(\$40)	\$699	\$1,327	\$1,367	\$628	(\$40)	\$2,126	\$2,125	\$0
4001.07.01.01.02 - L-850, Replace 200W 1.1M-gal PW Tank	\$59	\$60	\$62	\$1	(\$2)	\$763	\$784	\$906	\$21	(\$122)	\$763	\$784	\$906	\$21	(\$122)	\$5,138	\$5,356	(\$218)
4001.07.01.01.03 - L-897, Central Plateau Water Treatment Facility	\$226	\$177	\$191	(\$49)	(\$13)	\$2,160	\$1,459	\$1,440	(\$701)	\$19	\$2,160	\$1,459	\$1,440	(\$701)	\$19	\$9,544	\$9,956	(\$412)
4001.07.01.01.04 - L-781, 181D Vertical Turbine Pumps	\$46	\$39	\$50	(\$7)	(\$11)	\$688	\$680	\$627	(\$9)	\$53	\$688	\$680	\$627	(\$9)	\$53	\$754	\$693	\$61
4001.07.01.01.05 - L-826, 181B Vertical Turbine Pumps	\$41	\$55	\$57	\$14	(\$3)	\$389	\$352	\$295	(\$37)	\$56	\$389	\$352	\$295	(\$37)	\$56	\$417	\$337	\$80
4001.07.01.01.06 - L-849, Replace 200E 1.1M-gal PW Tank	\$20	\$20	\$27	\$0	(\$7)	\$316	\$264	\$222	(\$53)	\$42	\$316	\$264	\$222	(\$53)	\$42	\$545	\$485	\$60
4001.07.01.01.07 - L-894, Raw Water Cross Connect Isolation 200E/W	\$9	\$6	\$17	(\$3)	(\$11)	\$54	\$33	\$60	(\$21)	(\$27)	\$54	\$33	\$60	(\$21)	(\$27)	\$179	\$277	(\$98)
4001.07.01.01.08 - L-895, Fire Protection Infrastructure for PRW	\$279	\$91	\$133	(\$188)	(\$42)	\$1,367	\$719	\$966	(\$648)	(\$247)	\$1,367	\$719	\$966	(\$648)	(\$247)	\$2,699	\$2,597	\$103
4001.07.01.01.09 - L-838, Water Feeds to 622R, 6608 & 200W Lagoons	\$6	\$6	\$1	\$0	\$4	\$8	\$7	\$2	(\$1)	\$5	\$8	\$7	\$2	(\$1)	\$5	\$147	\$137	\$10
4001.07.02.01.01 - L-853, 200E Sewer Flow Equalization Facility	\$4	\$9	\$14	\$4	(\$6)	\$70	\$51	\$56	(\$19)	(\$5)	\$70	\$51	\$56	(\$19)	(\$5)	\$70	\$68	\$2
4001.07.02.01.02 - L-854, 200E Sewer Consolidations	\$0	\$6	\$9	\$6	(\$3)	\$63	\$28	\$21	(\$35)	\$8	\$63	\$28	\$21	(\$35)	\$8	\$63	\$29	\$34
4001.07.03.01.01 - L-905, FARS & RFARS Replacement & Upgrade	\$0	\$437	\$313	\$437	\$124	\$547	\$437	\$449	(\$109)	(\$12)	\$547	\$437	\$449	(\$109)	(\$12)	\$2,185	\$2,184	\$0
4001.07.03.01.02 - L-791, RFL Transfer Trip Upgrades	\$0	\$0	\$12	\$0	(\$12)	\$0	\$0	\$20	\$0	(\$20)	\$0	\$0	\$20	\$0	(\$20)	\$0	\$20	(\$20)
4001.07.03.01.03 - L-707, Advanced Electrical Metering	\$9	\$8	\$8	(\$1)	\$0	\$61	\$48	\$38	(\$13)	\$10	\$61	\$48	\$38	(\$13)	\$10	\$94	\$94	\$0
4001.07.03.01.04 - L-905, FARS & RFARS Replacement & Upgrade	\$21	\$34	\$57	\$12	(\$23)	\$204	\$202	\$252	(\$2)	(\$50)	\$204	\$202	\$252	(\$2)	(\$50)	\$286	\$357	(\$71)
4001.07.03.01.05 - L-911, Route 4S Lighting in 300 Area	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$0)	\$0	\$0	\$0	\$0	(\$0)	\$62	\$60	\$2
4001.07.03.01.06 - L-898, 100 Area Mission Crit Dist Feeders Repl	\$76	\$92	\$108	\$16	(\$16)	\$326	\$324	\$346	(\$2)	(\$22)	\$326	\$324	\$346	(\$2)	(\$22)	\$546	\$546	\$0
4001.07.03.02.01 - L-612, 230kV Trans Sys Recon & Sustainability	\$50	\$58	\$27	\$8	\$32	\$162	\$150	\$91	(\$12)	\$59	\$162	\$150	\$91	(\$12)	\$59	\$245	\$182	\$63
4001.07.03.02.02 - L-861, Single-Circuit Distribution Pole Replace	(\$9)	\$38	(\$33)	\$47	\$71	\$271	\$271	\$234	(\$0)	\$38	\$271	\$271	\$234	(\$0)	\$38	\$577	\$528	\$49
4001.07.03.02.03 - L-789, Priorit T&D Sys Wood PP Test & Replace	\$913	\$1,671	\$1,665	\$758	\$6	\$4,264	\$3,545	\$3,783	(\$719)	(\$238)	\$4,264	\$3,545	\$3,783	(\$719)	(\$238)	\$4,459	\$4,651	(\$192)
4001.07.03.02.04 - L-720, Outdoor Lighting Reconfiguration & Repl	\$269	\$20	\$24	(\$249)	(\$4)	\$1,016	\$579	\$513	(\$437)	\$66	\$1,016	\$579	\$513	(\$437)	\$66	\$2,254	\$1,695	\$558
4001.07.04.02.01 - L-534, Overlay Interior 200 East Roads	\$0	\$0	(\$7)	\$0	\$7	\$23	\$23	\$41	\$0	(\$18)	\$23	\$23	\$41	\$0	(\$18)	\$23	\$41	(\$18)
4001.07.04.02.02 - L-603, Chip Seal Route 3N (Route 11A to Route 3)	\$0	\$0	(\$5)	\$0	\$5	\$22	\$22	\$35	\$0	(\$14)	\$22	\$22	\$35	\$0	(\$14)	\$22	\$35	(\$14)
4001.07.04.02.03 - L-883, Chip Seal Rt 10, SR-240 to WYE Barricade	\$0	\$0	(\$29)	\$0	\$29	\$24	\$24	\$13	\$0	\$11	\$24	\$24	\$13	\$0	\$11	\$24	\$13	\$11
4001.07.05.01.01 - L-888, 400 Area Fire Station	\$4	\$4	\$10	\$0	(\$6)	\$24	\$21	\$74	(\$2)	(\$52)	\$24	\$21	\$74	(\$2)	(\$52)	\$39	\$91	(\$52)
4001.07.05.01.02 - L-907, Fleet Complex Site Development	\$6	\$3	\$34	(\$3)	(\$32)	\$448	\$435	\$331	(\$13)	\$105	\$448	\$435	\$331	(\$13)	\$105	\$1,848	\$1,591	\$257
4001.07.05.01.03 - L-934, MSC Office Space Gap Reduction - 200E	\$812	\$791	\$787	(\$21)	\$4	\$2,202	\$2,181	\$2,201	(\$21)	(\$20)	\$2,202	\$2,181	\$2,201	(\$21)	(\$20)	\$2,409	\$2,429	(\$20)
4001.07.05.01.04 - L-933, Install Mobile Office Trailers - 200E	\$0	\$0	\$1	\$0	(\$1)	\$17	\$17	\$43	\$0	(\$26)	\$17	\$17	\$43	\$0	(\$26)	\$17	\$43	(\$26)
4001.07.05.02.01 - L-796, Key Facilities Roof Replacements	\$346	\$343	\$296	(\$3)	\$47	\$775	\$602	\$598	(\$174)	\$4	\$775	\$602	\$598	(\$174)	\$4	\$1,578	\$1,606	(\$28)
4001.07.05.02.02 - L-797, Key Facilities HVAC Replacements	\$0	\$0	\$0	\$0	(\$0)	\$0	\$0	\$0	\$0	(\$0)	\$0	\$0	\$0	\$0	(\$0)	\$0	\$0	(\$0)
4001.07.06.01.01 - L-921, Telecom Hut at Met Tower	\$10	\$11	\$51	\$1	(\$40)	\$722	\$604	\$657	(\$118)	(\$143)	\$722	\$604	\$657	(\$118)	(\$143)	\$722	\$791	(\$68)
4001.07.06.01.02 - L-919, Emergency Radio Upgrade	\$82	\$29	\$59	(\$53)	(\$30)	\$328	\$123	\$272	(\$204)	(\$149)	\$328	\$123	\$272	(\$204)	(\$149)	\$3,374	\$3,405	(\$31)
4001.07.06.01.05 - L-819, High Capacity Fiber Optic (300 Area)	\$31	\$102	\$14	\$71	\$88	\$158	\$149	\$22	(\$9)	\$127	\$158	\$149	\$22	(\$9)	\$127	\$1,279	\$1,095	\$185
4001.07.06.02.04 - L-937, Gable East Footprint Reduction (Phase 1)	(\$471)	\$568	\$512	\$1,039	\$56	\$1,442	\$1,000	\$774	(\$443)	\$225	\$1,442	\$1,000	\$774	(\$443)	\$225	\$2,088	\$1,706	\$382
4001.07.07.01.01.01 - IRP - Out-Year Summary Level Planning Package	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$339,992	\$339,992	\$0
<b>Grand Total</b>	<b>\$3,402</b>	<b>\$5,493</b>	<b>\$5,278</b>	<b>2,091</b>	<b>215</b>	<b>\$19,611</b>	<b>\$16,460</b>	<b>\$16,749</b>	<b>(\$151)</b>	<b>(289)</b>	<b>\$19,611</b>	<b>\$16,460</b>	<b>\$16,749</b>	<b>(\$1,151)</b>	<b>(289)</b>	<b>\$385,804</b>	<b>\$385,216</b>	<b>\$588</b>

Note: \$ in Thousands

Performance Summary:

**Current Month (CM) Cost Variance (CV) Analysis:** The favorable CM CV of (+215K) is primarily due to:

Cost impacts to IRP – Electrical System Projects (4001.07.03)

- The favorable CM CV is driven by an accrual reversal of (\$100K) on our engineering support during installation contract. This contract is now under a different CACN to reflect the proposed Firm-Fixed Price milestone payment schedule of values as submitted in RPTO-007. This project is still working through pending cost transfers that will be completed in the next fiscal month. (+\$124.0K)

Cost impacts to IRP - Network & Telecom System (4001.07.06)

- The favorable CM CV is driven by completing conceptual design with less resources because the work was less complex than planned. (+\$88.3K)

**Current Month (CM) Schedule Variance (SV) Analysis:** The favorable CM SV of (+\$2,091K) is primarily due to:

Schedule impacts to IRP - Electrical System (4001.07.03)

- L-789 Priority T&D Systems Wood PP Test & Replace, the favorable CM SV is driven by catching-up and completing corridor construction. (+\$758.4K)
- L-801 Upgrade SCADA, the favorable CM SV is driven by the completion of RTU #1 Install milestone payment which was originally planned in fiscal month May. (+\$437.3K)

Schedule Impacts to IRP – Network & Telecom System projects (4001.07.06)

- L-937 Gable East Footprint Reduction (Phase 1), The favorable CM SV is driven by the project team replanning the solar array work scope into the fall and winter. Previously yet unidentified risk of initiating a project without a planning phase was realized. Design identified product lines that would require extended supply chain delivery. (+\$1,039.2M)

**Variance at Completion (VAC) Analysis:** The favorable VAC of (+\$588K) is within reporting variance.

5.0 PROJECT RISK ASSESSMENT

5.1 HMIS L-612 Project Key Risks

- **BCRs:** BCR-HMS-21-037, Reliability Projects Alignment with Revised Execution Strategy for Various Projects was processed in June to re-plan request for proposal (RFP) sequence for Condition Assessment due to lack of bidder response for first RFP offering in response to realized risks L612-0014-T.
- **Risk Analysis:** No risks analysis conducted in June.
- **Current Risk Posture:**

Table B-2. L-612 Risk Posture

Period	Realized	Key	Opened	Closed	Unassigned	Total Risks
May	0	0	0	0	0	15
June	1	0	0	0	0	15

Table B-3. L-612 Key Risks

Unmitigated Risk Impacts	Assessment		Comments									
	Month	Trend										
<b>L612 –230Kv Transmission System Reconditioning and Sustainability Repairs - Project Risks</b>												
<b>Explanation of major changes to the program monthly stoplight chart:</b>												
Risk L612-0014-T, <i>If the bid comes in higher than expected, there are no bidders or there is only a single bidder because the industry market is not well understood, then a rebid or a sole-source justification will be necessary impacting project schedule and/or cost,</i> was realized due to lack of bidder responses for first RFP offering.												
<b>Realized Risks</b> (Risks that are currently impacting project cost/schedule)												
L612-0014-T: RFP Bidders  Legacy Risk #: N/A	If the bid comes in higher than expected, there are no bidders or there is only a single bidder because the industry market is not well understood, then a rebid or a sole-source justification will be necessary impacting project schedule and/or cost. <b>Risk Handling Strategy:</b> Mitigate  <b>Probability:</b> Somewhat Likely (50%) <b>Worst Case Impacts:</b> \$750.0K, 192 days	●  ↓	<b>Risk Event:</b> RFP bid comes in high.  <table border="1"> <thead> <tr> <th>Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Re-evaluate bid options.</td> <td>08/2021</td> <td>0</td> </tr> <tr> <td>Reissue RFP.</td> <td>TBD</td> <td></td> </tr> </tbody> </table> <b>Recovery Action Assessment:</b> In June, no bidders responded to conditions assessment RFP. June BCR HMS-21-037 replanned condition assessment RFP activity sequence.	Recovery Action(s)	FC Date	%	Re-evaluate bid options.	08/2021	0	Reissue RFP.	TBD	
Recovery Action(s)	FC Date	%										
Re-evaluate bid options.	08/2021	0										
Reissue RFP.	TBD											

5.2 HMIS L-789 Project Key Risks

- **BCRs:** No BCRs were processed in **June** that impact the project’s MR or SM profile.
- **Risk Analysis:** No risks analysis conducted in **June**.
- **Current Risk Posture:**

Table B-4. L-789 Risk Posture

Period	Realized	Key	Opened	Closed	Unassigned	Total Risks
May	0	2	0	0	0	12
June	0	2	0	0	0	12

Table B-5. L-789 Key Risks

Unmitigated Risk Impacts	Assessment		Comments															
	Month	Trend																
<b>L789 - Priority T&amp;D Sys Wood PP Test &amp; Replace - Project Risks</b>																		
<b>Explanation of major changes to the program monthly stoplight chart:</b> No major changes to the Stoplight Chart in <b>June</b> . Realized risk L-789-0014-T: Linemen Mutual Aid was an artifact of poor weather and is no longer being realized. Risk will continue to be monitored.																		
<b>Realized Risks (Risks that are currently impacting project cost/schedule)</b>																		
No Realized Risks in <b>June</b> .																		
<b>Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)</b>																		
L789-0014-T: Linemen Mutual Aid.  Legacy Risk #: NA	If sub-contractor linemen are called to support mutual aid agreements by utilities in the in the event of power outages due to severe weather, including wildfires, then project schedule and cost will be impacted. <b>Risk Handling Strategy:</b> Mitigate  <b>Probability:</b> Somewhat Likely (50%) <b>Worst Case Impacts:</b> \$0, 96 days	● ↔	<b>Risk Trigger:</b> An incident requiring support of linemen through the mutual aid agreement.  <table border="1" style="width: 100%;"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Construction contract to remain open until all transmission/distribution projects complete</td> <td>Ongoing</td> <td>NA</td> </tr> </tbody> </table> <b>Mitigation Action Assessment:</b> No major changes in the month of <b>June</b> .	Mitigation Action(s)	FC Date	%	Construction contract to remain open until all transmission/distribution projects complete	Ongoing	NA									
Mitigation Action(s)	FC Date	%																
Construction contract to remain open until all transmission/distribution projects complete	Ongoing	NA																
<b>High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)</b>																		
L789-0006-T: EU resource constraints prevent new equipment electrical tie-ins.  Legacy Risk #: 1962	If an EU outage is delayed because of operational constraints, then some scheduled work may need to be reprioritized impacting project schedule. <b>Risk Handling Strategy:</b> Accept  <b>Probability:</b> Likely (75%) <b>Worst Case Impacts:</b> \$0, 32 days	● ↔	<b>Risk Trigger:</b> Operational delays resulting in delays.  <table border="1" style="width: 100%;"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Identify engineering needs to lead engineer during at the IPT meeting.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Establish engineering review needs during conceptual design phase.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Coordinate engineering support availability into project schedule.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Communicate scheduling changes impacting engineering review to lead engineer.</td> <td>Ongoing</td> <td>NA</td> </tr> </tbody> </table> <b>Mitigation Action Assessment:</b> No major changes in the month of <b>June</b> .	Mitigation Action(s)	FC Date	%	Identify engineering needs to lead engineer during at the IPT meeting.	Ongoing	NA	Establish engineering review needs during conceptual design phase.	Ongoing	NA	Coordinate engineering support availability into project schedule.	Ongoing	NA	Communicate scheduling changes impacting engineering review to lead engineer.	Ongoing	NA
Mitigation Action(s)	FC Date	%																
Identify engineering needs to lead engineer during at the IPT meeting.	Ongoing	NA																
Establish engineering review needs during conceptual design phase.	Ongoing	NA																
Coordinate engineering support availability into project schedule.	Ongoing	NA																
Communicate scheduling changes impacting engineering review to lead engineer.	Ongoing	NA																

Unmitigated Risk Impacts	Assessment		Comments
	Month	Trend	
<b>L789 - Priority T&amp;D Sys Wood PP Test &amp; Replace - Project Risks</b>			
<b>Unassigned Risks (Pending ownership of identified risks/opportunities)</b>			
No unassigned risks identified in <b>June</b> .			

**5.3 HMIS L-839 Project Key Risks**

- **BCRs:** No BCRs were processed in **June** that impact the project’s MR or SM profile.
- **Risk Analysis:** No risks analysis conducted in **June**.
- **Current Risk Posture:**

**Table B-6. L-839 Risk Posture**

Period	Realized	Key	Opened	Closed	Unassigned	Total Risks
<b>May</b>	0	2	0	0	0	6
<b>June</b>	0	2	0	0	3	12

**Table B-7. L-839 Key Risks**

Unmitigated Risk Impacts	Assessment		Comments												
	Month	Trend													
<b>L-839, 12in Potable Water Loop-line</b>															
<b>Explanation of major changes to the program monthly stoplight chart:</b> No major changes to the Stoplight Chart in <b>June</b> .															
<b>Realized Risks (Risks that are currently impacting project cost/schedule)</b>															
No realized risks in <b>June</b> .															
<b>Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)</b>															
No critical risks identified in <b>June</b> .															
<b>High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)</b>															
L839-0018-T: Construction material/equipment received late.  Legacy Risk #: N/A	If building materials (steel, ductile iron, PVC, etc.) are received late because of errors, delivered behind schedule or damaged in transit then schedule will be impacted.  <b>Risk Handling Strategy:</b> Accept  <b>Probability:</b> Likely (80%) <b>Worst Case Impacts:</b> \$0, 64 days	● ↔	<b>Risk Trigger:</b> Project procurement.  <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Identify items requiring extended procurement times during design phase.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Order construction materials as soon as quantities needed are verified.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Coordinate storage of construction materials HMIS laydown yard or alternate location.</td> <td>Ongoing</td> <td>NA</td> </tr> </tbody> </table> <b>Mitigation Action Assessment:</b> No major changes in the month of <b>June</b> . Received the bulk of the 12" pipe to be installed on the project and began stringing it out along the pipe route. Initiated trenching for and installation of 12" pipe, as well as, 4" fiber optic conduit.	Mitigation Action(s)	FC Date	%	Identify items requiring extended procurement times during design phase.	Complete	100	Order construction materials as soon as quantities needed are verified.	Ongoing	NA	Coordinate storage of construction materials HMIS laydown yard or alternate location.	Ongoing	NA
Mitigation Action(s)	FC Date	%													
Identify items requiring extended procurement times during design phase.	Complete	100													
Order construction materials as soon as quantities needed are verified.	Ongoing	NA													
Coordinate storage of construction materials HMIS laydown yard or alternate location.	Ongoing	NA													

Unmitigated Risk Impacts	Assessment		Comments															
	Month	Trend																
<b>L-839, 12in Potable Water Loop-line</b>																		
<p>L839-0019-T: Construction material price increase.</p> <p>Legacy Risk #: N/A</p>	<p>If the price of construction materials (e.g. steel, ductile iron, PVC) increase significantly (e.g. +25%) then project cost will be impacted.</p> <p><b>Risk Handling Strategy:</b> Accept</p> <p><b>Probability:</b> Likely (75%)</p> <p><b>Worst Case Impacts:</b> \$0, 32 days</p>		<p><b>Risk Trigger:</b> Project procurement.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Identify building materials at risk for price fluctuations during design.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Contact procurements regarding at risk building materials.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Monitor price fluctuations as price spikes will impact project costs.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Emphasize price spikes to construction sub-contractor.</td> <td>Ongoing</td> <td>NA</td> </tr> </tbody> </table> <p><b>Mitigation Action Assessment:</b> No major changes in the month of <b>June</b>. Received the bulk of the 12" pipe to be installed on the project and began stringing it out along the pipe route.</p>	Mitigation Action(s)	FC Date	%	Identify building materials at risk for price fluctuations during design.	Complete	100	Contact procurements regarding at risk building materials.	Complete	100	Monitor price fluctuations as price spikes will impact project costs.	Ongoing	NA	Emphasize price spikes to construction sub-contractor.	Ongoing	NA
Mitigation Action(s)	FC Date	%																
Identify building materials at risk for price fluctuations during design.	Complete	100																
Contact procurements regarding at risk building materials.	Complete	100																
Monitor price fluctuations as price spikes will impact project costs.	Ongoing	NA																
Emphasize price spikes to construction sub-contractor.	Ongoing	NA																
<b>Unassigned Risks (Pending ownership of identified risks/opportunities)</b>																		
<p>L839-0006-T: Delayed review/approval cycles impact schedule.</p> <p>Legacy Risk #: 3182</p>	<p>If permit and site evaluation review/approval cycles external to HMIS are delayed, project schedule may be impacted.</p> <p>HMIS Comment: Project has initiated trenching for and installation of 12" pipe, as well as, 4" fiber optic conduit. Primarily working East to West.</p>																	
<p>L839-0012-T: Hazardous waste or unknown container is discovered.</p> <p>Legacy Risk #: 3188</p>	<p>If hazardous waste or an unknown container is discovered, then project schedule and cost will be impacted.</p> <p>HMIS Comment: Project has initiated trenching for and installation of 12" pipe, as well as, 4" fiber optic conduit. Primarily working East to West.</p>																	
<p>L839-0014-T: Cultural or historical artifacts are discovered.</p> <p>Legacy Risk #: 3190</p>	<p>If cultural or historical artifacts are found during construction, then project schedule will be impacted.</p> <p>HMIS Comment: Project has initiated trenching for and installation of 12" pipe, as well as, 4" fiber optic conduit. Primarily working East to West.</p>																	

5.4 HMIS L-850 Project Key Risks

- **BCRs:** No BCRs were processed in **June** that impact the project’s MR or SM profile.
- **Risk Analysis:** No risks analysis conducted in **June**.
- **Current Risk Posture:**

Table B-8. L-850 Risk Posture

Period	Realized	Key	Opened	Closed	Unassigned	Total Risks
May	0	5	0	1	3	23
June	0	3	0	0	4	23

Table B-9. L-850 Key Risks

	Unmitigated Risk Impacts	Assessment		Comments								
		Month	Trend									
<b>L850 - Replace 200W 1.1M-gal PW Tank - Project Risks</b>												
<b>Explanation of major changes to the program monthly stoplight chart:</b>												
Risk L850-0005-T, Discovery of Hazardous Waste or Unknown Container, was moved from a key risk to an unassigned risk.												
Risk L850-0004-T, If underground interferences are discovered during construction or are missed during ground-scans, then project schedule and cost will be impacted, was changed to a proposed state and removed as a key risk because project is not in construction phase.												
Risk L850-0019-T, If a revision to the Solid Waste Operations Complex (SWOC) Master Documented Safety Analysis (MDSA) or approval of a new safety basis document is not approved by DOE by the end of the project then a project delay will occur impacting schedule, was changed to a proposed state and removed as a key risk because project is not in construction phase.												
<b>Realized Risks</b> (Risks that are currently impacting project cost/schedule)												
No realized risks in <b>June</b> .												
<b>Critical Risks</b> (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)												
No critical risks in <b>June</b> .												
<b>High Risk Threat Value</b> (Recoverable slip to enforceable or incentivized milestone)												
L850-0001-T: Design Errors or Omissions Resulting in Redesign and Rework  Legacy Risk #: 3087 & L850-0001-T	If Design errors or omissions result in redesign and rework, then project cost and schedule will be impacted. <b>Risk Handling Strategy:</b> Accept  <b>Probability:</b> Unlikely (18%) <b>Worst Case Impacts:</b> \$50.0K, 96 days			<b>Risk Trigger:</b> Design reviews reveal comments/issues were not incorporated into them causing rework and potential delays.								
				<table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Coordinate engineering support availability into project schedule.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Communicate scheduling changes impacting engineering review to lead engineer.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Create adequate review and comment periods in the schedule for reviewing the A/E's 30%, 60%, 90% &amp; 100% products.</td> <td>Ongoing</td> <td>NA</td> </tr> </tbody> </table>	Mitigation Action(s)	FC Date	%	Coordinate engineering support availability into project schedule.	Ongoing	NA	Communicate scheduling changes impacting engineering review to lead engineer.	Ongoing
Mitigation Action(s)	FC Date	%										
Coordinate engineering support availability into project schedule.	Ongoing	NA										
Communicate scheduling changes impacting engineering review to lead engineer.	Ongoing	NA										
Create adequate review and comment periods in the schedule for reviewing the A/E's 30%, 60%, 90% & 100% products.	Ongoing	NA										
<b>Mitigation Action Assessment:</b> No major changes in the month of <b>June</b> . In <b>June</b> , HMIS released revised DCN-002 documents (Tank Size Change & Piping to CPWTF). HMIS completed approval of Construction SOW Rev 1 per DCN-002. Construction subcontractor continued premobilization submittals and fabrication. Vendor resubmitted revision to tank design package and HMIS initiated review.												

# SECTION B

<p>L850-0018-T: Bid Comes in High</p> <p>Legacy Risk #: 3104 &amp; L850-0018-T</p>	<p>If the bid comes in higher than expected, there are no bidders or there is only a single bidder because the industry market is not well understood, then a rebid or a sole-source justification will be necessary impacting project schedule.</p> <p><b>Risk Handling Strategy:</b> Accept</p> <p><b>Probability:</b> Unlikely (25%) <b>Worst Case Impacts:</b> \$500.0K, 32 days</p>			<p><b>Risk Trigger:</b> Bids are received higher than expected.</p> <table border="1" data-bbox="815 289 1565 411"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Contact procurement during planning to determine the bidding climate.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Perform cost-price reviews.</td> <td>Ongoing</td> <td>NA</td> </tr> </tbody> </table> <p><b>Mitigation Action Assessment:</b> No major changes in the month of <b>June</b>. In June, HMIS and A/E started review of the resubmitted tank design. SOW Rev1 bid is forecasted to be submitted to DGR 07/01/2021.</p>	Mitigation Action(s)	FC Date	%	Contact procurement during planning to determine the bidding climate.	Ongoing	NA	Perform cost-price reviews.	Ongoing	NA			
Mitigation Action(s)	FC Date	%														
Contact procurement during planning to determine the bidding climate.	Ongoing	NA														
Perform cost-price reviews.	Ongoing	NA														
<p>L850-0020-T: Attrition or Staffing Turnover</p> <p>Legacy Risk #: 3212 &amp; L850-0020-T</p>	<p>If attrition or staffing reductions result in staffing turnover during the project, then efficiency will be impacted, resulting in schedule delays.</p> <p><b>Risk Handling Strategy:</b> Accept</p> <p><b>Probability:</b> Somewhat Likely (50%) <b>Worst Case Impacts:</b> \$0.0K, 48 days</p>			<p><b>Risk Trigger:</b> Staff or key personnel quits or retires.</p> <table border="1" data-bbox="815 606 1565 764"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Identify key personnel during planning.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Establish back up and alternates for key project positions to reduce impacts.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Maintain good documentation in the event a non-coordinated work turnover occurs.</td> <td>Ongoing</td> <td>NA</td> </tr> </tbody> </table> <p><b>Mitigation Action Assessment:</b> No major changes in the month of <b>June</b>. With little exception, key personnel positions have alternates and project documentation has reduced the impact of staff attrition.</p>	Mitigation Action(s)	FC Date	%	Identify key personnel during planning.	Complete	100	Establish back up and alternates for key project positions to reduce impacts.	Ongoing	NA	Maintain good documentation in the event a non-coordinated work turnover occurs.	Ongoing	NA
Mitigation Action(s)	FC Date	%														
Identify key personnel during planning.	Complete	100														
Establish back up and alternates for key project positions to reduce impacts.	Ongoing	NA														
Maintain good documentation in the event a non-coordinated work turnover occurs.	Ongoing	NA														
<p><b>Unassigned Risks (Pending ownership of identified risks/opportunities)</b></p>																
<p>L850-0013-T: PFP Contamination</p> <p>Legacy Risk #: 3099</p>	<p>If Plutonium Finishing Plant (PFP) contamination spreads to the Project Site, then construction activities could be delayed, impacting project cost and schedule.</p> <p>HMIS Comment: No major changes in the month of <b>June</b>.</p>															
<p>L850-0023-T: Department of Ecology disagrees with HMIS submitting two separate NOC applications for separate and non-overlapping air pollutants.</p> <p>Legacy Risk #: L850-0023-T</p>	<p>If the Department of Ecology does not agree with the project's strategy to submit separate NOC applications for separate and non-overlapping air pollutants, and if Ecology's interpretation of the WAC and "start of construction" differs from the project's interpretations and assumptions, then construction activities will be delayed impacting project schedule and cost.</p> <p>HMIS Comment: Department of Ecology has requested a single combined NOC application be submitted for project L-897 as opposed to two single NOC applications as planned. The separate NOC applications were to account for two separate and non-overlapping air pollutants. The NOC applications were to be submitted when the air pollutants would occur within the project schedule. The air pollutant data for the generator won't be known until the generator is shipped and arrives on site. Conservative generator values will need to be used lacking finite details. Per communication from DOE and Ecology, six projects (L-897, L-895, L-850, L-849, L-826 &amp; L-781) will submit a combined NOC application. All projects will also need to follow the new Hanford site modeling protocol. Total impacts still being assessed. Delays to NOC application approval due to needing additional time to modify the Best Available Control Technology/Toxic-Best Available Control Technology (BACT/T-BACT) analysis to include Selective Catalytic Reduction (SCR) and Diesel Particulate Filter (DPF) technologies, per Ecology's new direction, and to incorporate Volatile Organic Compounds/Ozone Depleting Substances (VOC/ODS) as identified in the recent Liquid Effluent Retention Facility (LERF) NOC application, also per Ecology's direction. This delay is impacting Construction Mobilization, Water to Grid, and Project Complete. <b>The public notice comment period was scheduled for 6/10/2021 and was not met. Public comment period is forecasted to begin 6/28/2021</b></p>															

Unassigned Risks (Pending ownership of identified risks/opportunities)	
<p>L850-0024-T: Ambient Air Boundary on Hanford</p> <p>Legacy Risk #: L850-0024-T</p>	<p>If the Notice of Construction (NOC) application is not approved by the Department of Ecology due to disagreement on the ambient air boundary and ambient air modeling, then installation and testing of backup generator, and subsequent project activities are delayed impacting project schedule and cost.</p> <p>HMIS Comment: No major changes in the month of June.</p> <p>This combined NOC approach has delayed installation of the emergency diesel generator at the 200W Pump House resulting in a delay to the 200E outage and related demolition and construction activities to install new pumps and piping within the 200E Pump House.</p> <p>Delays to NOC application approval due to needing additional time to modify the Best Available Control Technology/Toxic-Best Available Control Technology (BACT/T-BACT) analysis to include Selective Catalytic Reduction (SCR) and Diesel Particulate Filter (DPF) technologies, per Ecology's new direction, and to incorporate Volatile Organic Compounds/Ozone Depleting Substances (VOC/ODS) as identified in the recent Liquid Effluent Retention Facility (LERF) NOC application, also per Ecology's direction. This delay is impacting 200E RW Pumps Installed and Operational and Project Complete.</p> <p>Ecology has indicated that they have not completed their NOC internal review and initiated the public comment period. One of the positions for the reviewers are currently vacant, and it is assumed they would need to include the Nuclear Waste Program Manager (i.e., Richland Office Program Manager). Ecology presumes that this individual is very busy and is getting up to speed on things as they are a new employee. This delay is forecast to impact NOC approval by 12-weeks. Delays in NOC approval from Department of Ecology could drive cost impacts in commodities.</p> <p>The public notice comment period was scheduled for 6/10/2021 and was not met. Public comment period is forecasted to begin 6/28/2021.</p>
<p>L850-0005-T: Discovery of Hazardous Waste or Unknown Container</p> <p>Legacy Risk #: 3091 &amp; L850-0005-T</p>	<p>If hazardous waste or an unknown container is discovered, then project schedule and cost will be impacted.</p> <p>HMIS Comment: No major changes in the month of June.</p>

5.5 HMIS L-888 Project Key Risks

- **BCRs:** No BCRs were processed in **June** that impact the project’s MR or SM profile.
- **Risk Analysis:** A risk analysis was performed on L-888 in January 2021 in support of the development of a Critical Decision (CD) Implementation Approach document and Project Data Sheet (PDS).
- **Current Risk Posture:**

Table B-10. L-888 Risk Posture

Period	Realized	Key	Opened	Closed	Unassigned	Total Risks
May	0	2	0	0	5	10
June	0	1	0	0	5	9

Table B-11. L-888 Key Risks

Unmitigated Risk Impacts	Assessment		Comments												
	Month	Trend													
<b>L-888, 400 Area Fire Station</b>															
<b>Explanation of major changes to the program monthly spotlight chart:</b> L-888 Construction RFP was put on hold; cannot obtain pricing until DOE-RL issues the L-888 Task Order (RPTO-09) to HMIS. The construction services requisition is placed back to pending. RPTO-09 isn't expected to be issued until March 2022.															
<b>Realized Risks</b> (Risks that are currently impacting project cost/schedule)															
No realized risks in <b>June</b> .															
<b>Critical Risks</b> (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)															
No critical risks in <b>June</b> .															
<b>High Risk Threat Value</b> (Recoverable slip to enforceable or incentivized milestone)															
L888-0005-T: Attrition or Staffing Turnover  Legacy Risk #: 1986	If attrition or staffing reductions result in staffing turnover during the project, then efficiency will be impacted, resulting in schedule delays. <b>Risk Handling Strategy:</b> Accept  <b>Probability:</b> Somewhat Likely (74%) <b>Worst Case Impacts:</b> \$0, 48 days		<b>Risk Trigger:</b> Key project position staff turnover may impact project schedule.  <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Identify key personnel during planning.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Establish back up and alternates for key project positions to reduce impacts.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Maintain good documentation in the event a non-coordinated work turnover occurs.</td> <td>Ongoing</td> <td>NA</td> </tr> </tbody> </table> <b>Mitigation Action Assessment:</b> No major changes in the month of <b>June</b> . With little exception, key personnel positions have alternates and project documentation has reduced the impact of staff attrition.	Mitigation Action(s)	FC Date	%	Identify key personnel during planning.	Complete	100	Establish back up and alternates for key project positions to reduce impacts.	Ongoing	NA	Maintain good documentation in the event a non-coordinated work turnover occurs.	Ongoing	NA
Mitigation Action(s)	FC Date	%													
Identify key personnel during planning.	Complete	100													
Establish back up and alternates for key project positions to reduce impacts.	Ongoing	NA													
Maintain good documentation in the event a non-coordinated work turnover occurs.	Ongoing	NA													

# SECTION B



Unmitigated Risk Impacts	Assessment		Comments
	Month	Trend	
<b>L-888, 400 Area Fire Station</b>			
<b>Unassigned Risks (Pending ownership of identified risks/opportunities)</b>			
<p>L888-0017-T: Delayed External Review and Approval Cycles.</p> <p>Legacy Risk # DOEL888-0004-T</p>	<p>If permit and evaluation review/approval cycles external to HMIS are delayed, construction schedule will be impacted.</p> <p>HMIS Comment: NOC application will be transmitted to DOE-RL on 6/21/2021. HMIS anticipates DOR-RL will transmit the NOC application to the Department of Ecology on 8/20/2021. HMIS anticipates a 6-month review period by the Department of Ecology.</p>		
<p>L888-0019-T: Notice of Construction (NOC) application is not approved by the Department of Ecology due to disagreement on the ambient air boundary and ambient air modeling.</p> <p>Legacy Risk # DOEL888-0006-T, HMISL888-0012-T</p>	<p>If the Notice of Construction (NOC) application is not approved by the Department of Ecology due to disagreement on the ambient air boundary and ambient air modeling, then installation and testing of backup generator, and subsequent project activities are delayed impacting project schedule.</p> <p>HMIS Comment: NOC application will be transmitted to DOE-RL on 6/21/2021. HMIS anticipates DOR-RL will transmit the NOC application to the Department of Ecology on 8/20/2021. HMIS anticipates a 6-month review period by the Department of Ecology.</p>		
<p>L888-0020-T: Ecology does not Agree with the Project's Strategy to Submit Separate NOC Applications for Separate and Non-overlapping Air Pollutants.</p> <p>Legacy Risk # DOEL888-0007-T</p>	<p>If the Department of Ecology does not agree with the project's strategy to submit separate NOC applications for separate and non-overlapping air pollutants, and if Ecology's interpretation of the WAC and "start of construction" differs from the project's interpretations and assumptions, then construction activities will be delayed impacting project schedule.</p> <p>HMIS Comment: NOC application will be transmitted to DOE-RL on 6/21/2021. HMIS anticipates DOR-RL will transmit the NOC application to the Department of Ecology on 8/20/2021. HMIS anticipates a 6-month review period by the Department of Ecology.</p>		
<p>L888-0021-T: Enabling assumption: Insufficient Funding</p> <p>Legacy Risk # DOEL888-0008-T</p>	<p>Enabling assumption: Funding may not be sufficient to maintain the Performance Measurement Baseline (PMB) budget.</p> <p>HMIS Comment: DOE-RL notified HMIS of the revised schedule to issue Task Order #9 RFP. The RFP issue date has slipped from 7/27/2021 to 9/6/2021. Further, the Task Order is to be finalized and issued to HMIS on 3/14/2022.</p>		
<p>L888-0022-T: COVID-19 Delays Resuming or a Resurgence After Resumption Causes Further Delays</p> <p>Legacy Risk # DOEL888-0009-T, DOEL888-0011-T</p>	<p>There is a possibility that the L-888 project resumption is delayed due to COVID-19 on going trends or resurgence resulting in schedule delays. If a resurgence were to occur after the resumption, the project may also experience delays if the site reverses phases.</p> <p>HMIS Comment: An email correspondence from Brian Vance to All Hanford Site Employees with the subject "Implementing Revised CDC Guidance for Fully Vaccinated Members of our Hanford Team" was released on 6/8/2021. In the email it stated Hanford would follow the revised CDC guidance starting 6/11/2021, including fully vaccinated workforce members returning to the worksite without masks with a few exceptions.</p>		

5.6 HMIS L-895 Project Key Risks

- **BCRs:** No BCRs were processed in **June** that impact the project’s MR or SM profile.
- **Risk Analysis:** A risk analysis was performed on L-895 in April 2021 in support of the development of a Critical Decision (CD) Implementation Approach document and Project Data Sheet (PDS).
- **Current Risk Posture:**

Table B-12. L-895 Risk Posture

Period	Realized	Key	Opened	Closed	Unassigned	Total Risks
May	2	3	0	0	1	12
June	1	2	0	1	1	11

Table B-13. L-895 Key Risks

Unmitigated Risk Impacts	Assessment		Comments						
	Month	Trend							
<b>L-895, Fire Protection Infrastructure for Plateau Raw Water</b>									
<b>Explanation of major changes to the program monthly stoplight chart:</b> Previously realized risk and key risk, L895-0016-T, <i>If existing (sub)contracts are not novated because of subcontracting expectations, then procurements will have to be re-accomplished impacting project schedule and cost</i> , was resolved and closed in the June reporting period when the A/E Services contract was awarded on 6/17/2021.									
<b>Realized Risks (Risks that are currently impacting project cost/schedule)</b>									
Unassigned risk L895-0015-T, <i>If the Notice of Construction (NOC) application is not approved by the Department of Ecology due to disagreement on the ambient air boundary and ambient air modeling, or delays in receiving an approval order or receiving enforcement discretion, then installation and testing of backup generator, and subsequent project activities are delayed impacting project schedule and cost</i> , is realized and in the Unassigned Risks section.									
<b>Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)</b>									
No critical risks identified in June.									
<b>High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)</b>									
L895-0001-T: End-user requirements change post design phase.  Legacy Risk #: 1866	If the project scope changes during execution because there is a change in end-user or other line organization usage requirements, then a redesign will be likely resulting in schedule and cost impacts.  <b>Risk Handling Strategy:</b> Accept  <b>Probability:</b> Somewhat Likely (50%) <b>Worst Case Impacts:</b> \$500.0K, 70 days	● ↔	<b>Risk Trigger:</b> Change in project scope during execution, of which the W-LAN system and all system modifications are a large contributor.  <table border="1" style="width: 100%;"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Risk is accepted with no mitigation actions planned at this time.</td> <td>Ongoing</td> <td>NA</td> </tr> </tbody> </table> <b>Mitigation Action Assessment:</b> No major changes in the month of June.	Mitigation Action(s)	FC Date	%	Risk is accepted with no mitigation actions planned at this time.	Ongoing	NA
Mitigation Action(s)	FC Date	%							
Risk is accepted with no mitigation actions planned at this time.	Ongoing	NA							
L895-0002-T: Procurement cycle is delayed.  Legacy Risk #: 1863	If procurement bid cycle is delayed because of excessive RFP questions, delay in receipt of bids, vendor supply issues, new procurement thresholds or processes, or quality concerns then additional procurement cycle time may be necessary impacting project schedule.  <b>Risk Handling Strategy:</b> Accept  <b>Probability:</b> Somewhat Likely (50%) <b>Worst Case Impacts:</b> \$0, 48 days	● ↔	<b>Risk Trigger:</b> Delays to award A/E services contract.  <table border="1" style="width: 100%;"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>HMIS Procurements negotiate with A/E firm.</td> <td>Ongoing</td> <td>NA</td> </tr> </tbody> </table> <b>Mitigation Action Assessment:</b> HMIS has received several BAFO submittals from Jacobs. <i>A/E Services contract awarded on 6/17/2021.</i>	Mitigation Action(s)	FC Date	%	HMIS Procurements negotiate with A/E firm.	Ongoing	NA
Mitigation Action(s)	FC Date	%							
HMIS Procurements negotiate with A/E firm.	Ongoing	NA							

	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	

**L-895, Fire Protection Infrastructure for Plateau Raw Water**

Unassigned Risks (Pending ownership of identified risks/opportunities)	
<p>L895-0015-T: Ambient Air Boundary on Hanford.</p> <p>Legacy Risk #: 3219</p>	<p>HMIS Comment: Department of ecology rejected the L-895 NOC based on the ambient air boundary as prescribed by DOE. A combined NOC application is now being pursued for projects L-897, L-895, L-850, L-849, L-826, and L-781 due to recent communication from DOE and Ecology to group or otherwise combine multiple projects. Delays to NOC application approval due to needing additional time to modify the Best Available Control Technology/Toxic-Best Available Control Technology (BACT/T-BACT) analysis to include Selective Catalytic Reduction (SCR) and Diesel Particulate Filter (DPF) technologies, per Ecology's new direction, and to incorporate Volatile Organic Compounds/Ozone Depleting Substances (VOC/ODS) as identified in the recent Liquid Effluent Retention Facility (LERF) NOC application, also per Ecology's direction. This delay is impacting Construction Mobilization, Water to Grid, and Project Complete.</p> <p>Ecology has indicated that they have not completed their NOC internal review and initiated the public comment period. One of the positions for the reviewers are currently vacant, and it is assumed they would need to include the Nuclear Waste Program Manager (i.e., Richland Office Program Manager). Ecology presumes that this individual is very busy and is getting up to speed on things as they are a new employee. This delay is forecast to impact NOC approval by 12-weeks. Delays in NOC approval from Department of Ecology could drive cost impacts in commodities.</p> <p>Risk currently realized: BCR processed in the month of May to push NOC approval to August. <b>The public notice comment period was scheduled for 6/10/2021 and was not met. Public comment period is forecasted to begin 6/28/2021</b></p>

5.7 HMIS L-897 Project Key Risks

- **BCRs:** No BCRs were processed in **June** that impact the project’s MR or SM profile.
- **Risk Analysis:** A risk analysis was performed on L-897 in December 2020 in support of the development of a Critical Decision (CD) Implementation Approach document and Project Data Sheet (PDS).
- **Current Risk Posture:**

Table B-14. L-897 Risk Posture

Period	Realized	Key	Opened	Closed	Unassigned	Total Risks
May	1	2	0	0	3	37
June	1	2	0	0	7	38

Table B-15. L-897 Key Risks

Unmitigated Risk Impacts	Assessment		Comments												
	Month	Trend													
<b>L897 - Central Plateau Water Treatment Facility - Project Risks</b>															
<b>Explanation of major changes to the program monthly stoplight chart:</b> No major changes to the Stoplight Chart in <b>June</b> .															
<b>Realized Risks (Risks that are currently impacting project cost/schedule)</b>															
L897-0015-T: Procurement bid cycle delays.  Legacy Risk #: 2052	If procurement bid cycle is delayed because of excessive RFP questions, delay in receipt of bids, vendor supply issues, or quality concerns then additional procurement cycle time may be necessary impacting project schedule. <b>Risk Handling Strategy:</b> Mitigate  <b>Probability:</b> Likely (75%) <b>Worst Case Impacts:</b> 48 days	  	<b>Risk Event:</b> Membrane vendor does not agree with the Terms and Conditions of HMIS’s service contract, delaying the membrane procurement process.  <table border="1"> <thead> <tr> <th>Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>HMIS Procurements negotiate with vendor.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Award membrane and processing equipment procurement &amp; fabrication contract (L897-6520A).</td> <td>08/2021</td> <td>80</td> </tr> <tr> <td>Notice to commence manufacture (L897-1404).</td> <td>10/2021</td> <td>0</td> </tr> </tbody> </table> <b>Recovery Action Assessment:</b> No major changes in the month of <b>June</b> . On 1/25/2021 HMSEC restarted the procurement process with the membrane vendor leading to a revised procurement schedule. Terms and conditions discussions are ongoing. HMIS new lower procurement notification thresholds, and negotiations of Terms and Conditions are driving a projected delay in Membrane Contract award and downstream install activities. BCR processed in the month of May to incorporate impacts known to date for future BCWS. Based on the BCR, the forecasted completion date for awarding membrane and processing equipment procurement & fabrication contract (L897-6520A) moved from 06/2021 to 08/2021 and the forecasted completion date for notice to commence manufacture (L897-1404) moved from 08/2021 to 10/2021.	Recovery Action(s)	FC Date	%	HMIS Procurements negotiate with vendor.	Ongoing	NA	Award membrane and processing equipment procurement & fabrication contract (L897-6520A).	08/2021	80	Notice to commence manufacture (L897-1404).	10/2021	0
Recovery Action(s)	FC Date	%													
HMIS Procurements negotiate with vendor.	Ongoing	NA													
Award membrane and processing equipment procurement & fabrication contract (L897-6520A).	08/2021	80													
Notice to commence manufacture (L897-1404).	10/2021	0													

# SECTION B

Unmitigated Risk Impacts	Assessment		Comments
	Month	Trend	

**L897 - Central Plateau Water Treatment Facility - Project Risks**

**Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)**

<p>L897-0017-T: Change orders, RCIs, DCNs or change orders.</p> <p>Legacy Risk #: 2054</p>	<p>If there is an abnormal amount of change orders, Request for Clarification or Information (RCIs), Design Change Notices (DCNs), or change orders, then project will be impacted.</p> <p><b>Risk Handling Strategy:</b> Accept</p> <p><b>Probability:</b> Somewhat Likely (50%) <b>Worst Case Impacts:</b> \$300K, 48 days</p>	 	<p><b>Risk Trigger:</b> Abnormal amount of RCIs, DCNs or change orders will increase project schedule and create delays</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Complete a sound and well written FRDC, encourage detail from all reviewers.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Develop a well written SOW that clearly details the scope and end result of the project.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Encourage questions and exchanges during RFP that will eliminate change orders, RCIs and/or DCNs later. Clearly write in RFP the review times for change orders, RCIs and DCNs for all parties to limit delays in responses.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Maintain open communication with design/construction subcontractor to allow for exchanges to happen organically.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Provide change order, RCI and DCN responses within timeframe identified in RFP.</td> <td>Ongoing</td> <td>NA</td> </tr> </tbody> </table> <p><b>Mitigation Action Assessment:</b> No major changes in the month of <b>June</b>. There have been numerous communication issues with A/E reaching out to membrane vendor and incorporating the membrane specs into the project design. The project has implemented ongoing increased communication with the design and construction subcontractors to minimize future potential impacts. All change order, RCI, and DCN responses are provided within the timeframe identified in the RFP. The A/E didn't meet the FRDC water demand documented in Pall RCI 30, driving the necessity of a 4th membrane rack. Contracts continues being diligent on reviewing claims from the A/E and has requested back up to support the labor rates they are charging. MSA negotiated down the A/E labor claims resulting in November 2020's BCR VMSA-21-007.</p>	Mitigation Action(s)	FC Date	%	Complete a sound and well written FRDC, encourage detail from all reviewers.	Complete	100	Develop a well written SOW that clearly details the scope and end result of the project.	Complete	100	Encourage questions and exchanges during RFP that will eliminate change orders, RCIs and/or DCNs later. Clearly write in RFP the review times for change orders, RCIs and DCNs for all parties to limit delays in responses.	Complete	100	Maintain open communication with design/construction subcontractor to allow for exchanges to happen organically.	Ongoing	NA	Provide change order, RCI and DCN responses within timeframe identified in RFP.	Ongoing	NA
Mitigation Action(s)	FC Date	%																			
Complete a sound and well written FRDC, encourage detail from all reviewers.	Complete	100																			
Develop a well written SOW that clearly details the scope and end result of the project.	Complete	100																			
Encourage questions and exchanges during RFP that will eliminate change orders, RCIs and/or DCNs later. Clearly write in RFP the review times for change orders, RCIs and DCNs for all parties to limit delays in responses.	Complete	100																			
Maintain open communication with design/construction subcontractor to allow for exchanges to happen organically.	Ongoing	NA																			
Provide change order, RCI and DCN responses within timeframe identified in RFP.	Ongoing	NA																			

**High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)**

<p>L897-0016-T: Attrition, staffing reductions.</p> <p>Legacy Risk #: 2053</p>	<p>If attrition or staffing reductions result in staffing turnover during the project, then efficiency will be impacted, resulting in schedule delays.</p> <p><b>Risk Handling Strategy:</b> Accept</p> <p><b>Probability:</b> Somewhat Likely (26%) <b>Worst Case Impacts:</b> \$0, 48 days</p>	 	<p><b>Risk Trigger:</b> Key project position staff turnover may impact project schedule.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Identify key personnel during planning.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Establish back up and alternates for key project positions to reduce impacts.</td> <td>Ongoing</td> <td>NA</td> </tr> <tr> <td>Maintain good documentation in the event a non-coordinated work turnover occurs.</td> <td>Ongoing</td> <td>NA</td> </tr> </tbody> </table> <p><b>Mitigation Action Assessment:</b> No major changes in the month of <b>June</b>. With little exception, key personnel positions have alternates and project documentation has reduced the impact of staff attrition.</p>	Mitigation Action(s)	FC Date	%	Identify key personnel during planning.	Complete	100	Establish back up and alternates for key project positions to reduce impacts.	Ongoing	NA	Maintain good documentation in the event a non-coordinated work turnover occurs.	Ongoing	NA
Mitigation Action(s)	FC Date	%													
Identify key personnel during planning.	Complete	100													
Establish back up and alternates for key project positions to reduce impacts.	Ongoing	NA													
Maintain good documentation in the event a non-coordinated work turnover occurs.	Ongoing	NA													

**Unassigned Risks (Pending ownership of identified risks/opportunities)**

<p>L897-0046-T: Ambient Air Boundary on Hanford.</p> <p>Legacy Risk #: 3220</p>	<p>HMIS Comment: Department of ecology rejected the L-895 NOC based on the ambient air boundary as prescribed by DOE. A combined NOC application is now being pursued for projects L-897, L-895, L-850, L-849, L-826, and L-781 due to recent communication from DOE and Ecology to group or otherwise combine multiple projects. Delays to NOC application approval due to needing additional time to modify the Best Available Control Technology/Toxic-Best Available Control Technology (BACT/T-BACT) analysis to include Selective Catalytic Reduction (SCR) and Diesel Particulate Filter (DPF) technologies, per Ecology's new direction, and to incorporate Volatile Organic Compounds/Ozone Depleting Substances (VOC/ODS) as identified in the recent Liquid Effluent Retention Facility (LERF) NOC application, also per Ecology's direction. This delay is impacting Construction Mobilization, Water to Grid, and Project Complete.</p> <p>Ecology has indicated that they have not completed their NOC internal review and initiated the public comment period. One of the positions for the reviewers are currently vacant, and it is assumed they would need to include the Nuclear Waste Program Manager (i.e., Richland Office Program</p>
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# SECTION B



	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
<b>L897 - Central Plateau Water Treatment Facility - Project Risks</b>				
				<p>Manager). Ecology presumes that this individual is very busy and is getting up to speed on things as they are a new employee. This delay is forecast to impact NOC approval by 12-weeks. Delays in NOC approval from Department of Ecology could drive cost impacts in commodities.</p> <p>The public notice comment period was scheduled for 6/10/2021 and was not met. Public comment period is forecasted to begin 6/28/2021.</p>
<p>L897-0043-T: Delayed External Review and Approval Cycles.</p> <p>Legacy Risk # L897-0004-T (2051)</p>				<p>HMIS Comment: Project L-897 has been defined as a potential Reportable General Plant Project (GPP). As the project has progressed and become more defined, the Total Estimated Cost (TEC) is now expected to exceed the GPP threshold of \$20M. Due to this, L-897 is now required to be executed as a Capital Line Item Project consistent with the principles and provisions in DOE 413.3B "Program and Project Management for the Acquisition of Capital Assets". During the development of the Project Data Sheet (PDS), it was established that Risk # L897-0004-T was not within HMIS's ability to manage and the risk was tentatively transferred to DOE-RL, pending official transfer and acceptance via correspondence control and DOE-RL.</p> <p>Ecology has indicated that they have not completed their NOC internal review and initiated the public comment period. One of the positions for the reviewers is currently vacant, and it is assumed they would need to include the Nuclear Waste Program Manager (i.e., Richland Office Program Manager). Ecology presumes that this individual is very busy and is getting up to speed on things as they are a new employee. This delay is forecast to impact NOC approval by 12-weeks. Delays in NOC approval from Department of Ecology could drive cost impacts in commodities.</p> <p>The public notice comment period was scheduled for 6/10/2021 and was not met. Public comment period is forecasted to begin 6/28/2021.</p>
<p>L897-0044-T: Hanford Site Incident.</p> <p>Legacy Risk # L897-0022-T (2067)</p>				<p>HMIS Comment: Project L-897 has been defined as a potential Reportable General Plant Project (GPP). As the project has progressed and become more defined, the Total Estimated Cost (TEC) is now expected to exceed the GPP threshold of \$20M. Due to this, L-897 is now required to be executed as a Capital Line Item Project consistent with the principles and provisions in DOE 413.3B "Program and Project Management for the Acquisition of Capital Assets". During the development of the Project Data Sheet (PDS), it was established that Risk # L897-0022-T was not within HMIS's ability to manage and the risk was tentatively transferred to DOE-RL, pending official transfer and acceptance via correspondence control and DOE-RL.</p>
<p>L897-0047-T: Ecology does not Agree with the Project's Strategy to Submit Separate NOC Applications for Separate and Non-overlapping Air Pollutants.</p> <p>Legacy Risk # DOEL897-0008-T</p>				<p>HMIS Comment: Department of ecology rejected the L-895 NOC based on the ambient air boundary as prescribed by DOE. A combined NOC application is now being pursued for projects L-897, L-895, L-850, L-849, L-826, and L-781 due to recent communication from DOE and Ecology to group or otherwise combine multiple projects. Delays to NOC application approval due to needing additional time to modify the Best Available Control Technology/Toxic-Best Available Control Technology (BACT/T-BACT) analysis to include Selective Catalytic Reduction (SCR) and Diesel Particulate Filter (DPF) technologies, per Ecology's new direction, and to incorporate Volatile Organic Compounds/Ozone Depleting Substances (VOC/ODS) as identified in the recent Liquid Effluent Retention Facility (LERF) NOC application, also per Ecology's direction. This delay is impacting Construction Mobilization, Water to Grid, and Project Complete.</p> <p>Ecology has indicated that they have not completed their NOC internal review and initiated the public comment period. One of the positions for the reviewers is currently vacant, and it is assumed they would need to include the Nuclear Waste Program Manager (i.e., Richland Office Program Manager). Ecology presumes that this individual is very busy and is getting up to speed on things as they are a new employee. This delay is forecast to impact NOC approval by 12-weeks. Delays in NOC approval from Department of Ecology could drive cost impacts in commodities.</p> <p>The public notice comment period was scheduled for 6/10/2021 and was not met. Public comment period is forecasted to begin 6/28/2021.</p>
<p>L897-0048-T: Enabling assumption: Insufficient Funding</p> <p>Legacy Risk # DOEL897-0009-T</p>				<p>Enabling assumption: Funding may not be sufficient to maintain the Performance Measurement Baseline (PMB) budget.</p> <p>HMIS Comment: Reliability Project Task Order (RPTO)-02 is forecasted to be submitted to DOE-RL in August 2021. After submittal, DOE-RL will accept the proposal or open negotiations with HMIS.</p>
<p>L897-0049-T: COVID-19 Delays Resuming or a Resurgence After Resumption Causes Further Delays</p> <p>Legacy Risk # DOEL897-0010-T</p>				<p>There is a possibility that the L-897 project resumption is delayed due to COVID-19 on going trends or resurgence resulting in schedule delays. If a resurgence were to occur after the resumption, the project may also experience delays if the site reverses phases.</p> <p>HMIS Comment: An email correspondence from Brian Vance to All Hanford Site Employees with the subject "Implementing Revised CDC Guidance for Fully Vaccinated Members of our Hanford Team" was released on 6/8/2021. In the email it stated Hanford would follow the revised CDC guidance starting 6/11/2021, including fully vaccinated workforce members returning to the worksite without masks with a few exceptions.</p>
<p>L897-0050-T: Novel Viral Pandemic (COVID-19 Impacts Project Performance)</p>				<p>Unprecedented change in work practices/procedures (e.g. social distancing requirements) because of the novel coronavirus COVID-19 pandemic impact project performance, resulting in cost and schedule impacts.</p> <p>HMIS Comment: An email correspondence from Brian Vance to All Hanford Site Employees with the subject "Implementing Revised CDC Guidance for Fully Vaccinated Members of our Hanford Team" was released on 6/8/2021. In the email it stated Hanford would follow the revised CDC guidance starting 6/11/2021, including fully vaccinated workforce members returning to the worksite without masks with a few exceptions.</p>

# SECTION B



	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
<b>L897 - Central Plateau Water Treatment Facility - Project Risks</b>				
Legacy Risk # DOEL897-0011-T				

5.8 HMIS L-907 Project Key Risks

- **BCRs:** BCR-HMS-21-037, Reliability Projects Alignment with Revised Execution Strategy for Various Projects was processed in June that added three-month duration to L-907 PMB activities and added budget due to escalation for activities moving to FY 2022 for realized risks L907-0001-T & L907-0004-T.
- **Risk Analysis:** No risks analysis conducted in June.
- **Current Risk Posture:**

Table B-16. L-934 Risk Posture

Period	Realized	Key	Opened	Closed	Unassigned	Total Risks
May	-	-	-	-	-	-
June	2	0	0	0	0	8

Table B-17. L-934 Key Risks

Unmitigated Risk Impacts	Assessment		Comments						
	Month	Trend							
<b>L934 – MSC Office Space Gap Reduction – 200E Area - Project Risks</b>									
<b>Explanation of major changes to the program monthly spotlight chart:</b> Project L-907 does not have any key risks in the month of June. However, two risk were realized in the month of June.									
<b>Realized Risks (Risks that are currently impacting project cost/schedule)</b>									
L907-0001-T: SOW doesn't meet the customer's functional requirements.  Legacy Risk #: N/A	If the statement of work (SOW) doesn't fully represent the functional requirements and design criteria (FRDC) because the customer's functional requirements do not agree with the functional design requirements, then the project schedule will be delayed.  <b>Risk Handling Strategy:</b> Accept  <b>Probability:</b> Very Unlikely (5%) <b>Worst Case Impacts:</b> 12 days	  	<b>Risk Event:</b> Fleet Operations/Maintenance selected a tertiary design based off the two presented by the A/E.  <table border="1" style="width: 100%;"> <thead> <tr> <th>Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Extend 30% design submittal (L907-2050).</td> <td>09/2021</td> <td>0</td> </tr> </tbody> </table> <b>Recovery Action Assessment:</b> The additional work being solicited from the A/E represents the impacts of a detailed review by the operating entity (Fleet Operations/Maintenance). That review resulted in an additional alternative being proposed by Fleet over the two contractually required alternatives prepared by the A/E. Upon evaluation of the third alternative, it was determined that this concept would likely result in work flow efficiencies that were not envisioned during the crafting of the FRDC and SOW. While no set footprint was defined in the foundational design documents (site selection/basis of design, FRDC, Fleet Master Plan), the development of either three separate facilities or an L-shaped structure with common core seemed foreshadowed. Fleet's development of a third, unique concept represents a conceptually more complex site layout requiring additional architectural programming. BCR-HMS-21-037 added 3-months to PMB activities for this realized risk	Recovery Action(s)	FC Date	%	Extend 30% design submittal (L907-2050).	09/2021	0
Recovery Action(s)	FC Date	%							
Extend 30% design submittal (L907-2050).	09/2021	0							

Unmitigated Risk Impacts	Assessment		Comments						
	Month	Trend							
<b>L934 – MSC Office Space Gap Reduction – 200E Area - Project Risks</b>									
<p>L907-0004-T: Design is more complicated than estimated. Legacy Risk #: N/A</p>	<p>If the design is more complicated than initially estimated because the initial design requirements were not well understood, then design schedule will be impacted.</p> <p><b>Risk Handling Strategy:</b> Mitigate</p> <p><b>Probability:</b> Very Unlikely (5%) <b>Worst Case Impacts:</b> 32 days</p>		<p style="text-align: center;"></p> <p><b>Risk Event:</b> Fleet Operations/Maintenance selected a tertiary design based off the two presented by the A/E.</p> <table border="1" style="width: 100%;"> <thead> <tr> <th>Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Extend 30% design submittal (L907-2050).</td> <td>09/2021</td> <td>0</td> </tr> </tbody> </table> <p><b>Recovery Action Assessment:</b> The additional work being solicited from the A/E represents the impacts of a detailed review by the operating entity (Fleet Operations/Maintenance). That review resulted in an additional alternative being proposed by Fleet over the two contractually required alternatives prepared by the A/E. Upon evaluation of the third alternative, it was determined that this concept would likely result in work flow efficiencies that were not envisioned during the crafting of the FRDC and SOW. While the FRDC/SOW was based on the best information available at the time, the development of the A/E's alternatives and live visits to fleet maintenance/service facilities led to a broader scope of evaluation on the part of operations staff. BCR-HMS-21-037 added 3-months to PMB activities for this realized risk</p>	Recovery Action(s)	FC Date	%	Extend 30% design submittal (L907-2050).	09/2021	0
Recovery Action(s)	FC Date	%							
Extend 30% design submittal (L907-2050).	09/2021	0							
<b>Critical Risks</b> (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)									
No Critical Risk identified in June.									
<b>High Risk Threat Value</b> (Recoverable slip to enforceable or incentivized milestone)									
No High Risks identified in June.									
<b>Unassigned Risks</b> (Pending ownership of identified risks/opportunities)									
No Unassigned Risks identified in June.									

5.9 HMIS L-934 Project Key Risks

- **BCRs:** No BCRs were processed in **June** that impact the project’s MR or SM profile.
- **Risk Analysis:** No risks analysis conducted in **June**.
- **Current Risk Posture:**

Table B-18. L-934 Risk Posture

Period	Realized	Key	Opened	Closed	Unassigned	Total Risks
May	0	1	0	0	4	9
June	0	0	0	5	1	5

Table B-19. L-934 Key Risks

Unmitigated Risk Impacts	Assessment		Comments
	Month	Trend	
<b>L934 – MSC Office Space Gap Reduction – 200E Area - Project Risks</b>			
<b>Explanation of major changes to the program monthly spotlight chart:</b>			
Risk L934-0021-T, <i>If there is an abnormal amount of change orders, Request for Clarification or Information (RCIs), Design Change Notices (DCNs), or contractor claim orders, then project schedule and cost may be impacted, probability was reduced to unlikely (15%); it was reported as a critical risk last month.</i>			
The following risks were closed in June because of project progression:			
L934-0007-T, <i>If an underground obstruction interference is discovered because of inaccurate ground scans or the as-found conditions are different than expected, the construction will be delayed impacting project schedule.</i>			
L934-0015-T, <i>If an unexpected waste site or radiological area is discovered, then project schedule will be impacted.</i>			
L934-0016-T, <i>If cultural or historical artifacts are found during construction, then project schedule will be impacted.</i>			
L934-0019-T, <i>If contaminated material is discovered during excavation because the process sewer line has leached/ruptured, then affected material will have to be mitigated impacting project schedule and cost.</i>			
L934-0020-T, <i>If overtime with premium is not authorized because HMSEC Clause 1.52 prohibits its use, then electrical, water and sewer utility tie-ins will have to occur during the work week. The affected facilities will have to approve the utility outage during the work week, potentially impacting the project schedule.</i>			
<b>Realized Risks (Risks that are currently impacting project cost/schedule)</b>			
No Realized Risks in June.			
<b>Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)</b>			
No Critical Risks identified in June.			
<b>High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)</b>			
No High Risks identified in June.			
<b>Unassigned Risks (Pending ownership of identified risks/opportunities)</b>			
L934-0018-T: Adverse weather impacts  Legacy Risk #: NA	If there is more adverse weather (hot, windy, snow, smoke, and lightning) than initially planned, design and/or construction progress will slow to compensate for the environmental changes and schedule will suffer.  HMIS Comment: In <b>June reporting period</b> , weather impacts were not reported.		

## 6.0 BASELINE CHANGE REQUESTS

In June, HMIS approved and implemented the following Reliability Project BCR into the CPB:

BCR-HMS-21-037 “Reliability Projects Alignment with Revised Execution Strategy for Various Projects”

The below table reflects upcoming BCRs.

**Table B-20. Upcoming Baseline Change Requests**

Project	BCR Scope	Target Implementation Month	Summary of Change
L-895	PMB	July-21	Add scope, schedule, budget to replace 200W/E Switchgears and replan remaining Construction/Commissioning
L-781/826	PMB	July-21	Replan Design/Construction and add CD fragnets
L-849	PMB	July-21	Replan design payment milestones to align with subcontractor values
L-897	PMB	July-21	Replan membrane payment milestones to align with subcontractor values
L-839	PMB	July-21	Replan engineering subcontract to reflect revised SOW / payment schedule
L-789	PMB	July-21	Add budget for construction change order previously undefinitized
L-911	PMB	July-21	Replan Conceptual Design to reflect revised Design Services SOW
L-888	PMB	July-21	Incorporate Schedule Impacts to RPTO-009 Request for Proposal
Multiple	PMB	July-21	Replan PMB CLIN 4 vs CLIN 7 Scope to Align with Revised DOE Guidance (CBAG Rev 3)

## 7.0 FUNDS ANALYSIS

Table B-21. IIP Funding Status for Reliability Project

HMIS FY 2021 Integrated Investment Portfolio Funding Status Reliability Project - June FY 2021 (\$000)													
CLIN	Task Order	Fund Source	IIP FYTD	FYTD ACWP	Spending Variance	* Funds Received	Remaining Available Funds	** RL Expected Funding	Total EAC	Uncosted Balance	Encum Carryover	Hold Backs	Unencum Balance
CLIN 4	N/A	RL-0020	465.4	152.4	313.0	1,923.5	1,771.1	2,034.0	302.2	1,731.8	1,748.4		(16.6)
CLIN 4	N/A	RL-0201	12,225.6	9,567.8	2,657.8	32,982.0	23,414.2	42,572.7	22,285.2	20,287.5	7,888.7	18,504.3	(6,105.5)
CLIN 7	RPTO-008	RL-0020	389.6	393.8	(4.2)	482.5	88.7	491.3	348.1	143.2			143.2
CLIN 7	RPTO 002	RL-0201	3,068.3	3,350.1	(281.8)	8,890.3	5,540.2	14,253.8	5,417.6	8,836.2			8,836.2
CLIN 7	RPTO 005	RL-0201	1,954.4	2,200.5	(246.1)	2,412.0	211.5	2,007.8	1,385.6	622.2			622.2
CLIN 7	RPTO 006	RL-0201	1,331.4	988.2	343.2	1,443.0	454.8	2,267.8	908.3	1,359.5			1,359.5
CLIN 7	RPTO 007	RL-0201	595.9	716.7	(120.8)	1,520.0	803.3	1,993.1	634.9	1,358.2			1,358.2
CLIN 7	RPTO 008	RL-0201	260.9	262.7	(1.8)	304.5	41.8	260.9	231.5	29.4			29.4
CLIN 7	UF	RL-0201			-		-	1,564.4		1,564.4	7,148.0	516.4	(6,100.0)
CLIN 7	Fee	RL-0201			-		-	1,787.8	1,787.8	-			-
		<b>TOTAL</b>	<b>20,291.5</b>	<b>17,632.2</b>	<b>2,659.3</b>	<b>49,957.8</b>	<b>32,325.6</b>	<b>69,233.6</b>	<b>33,301.2</b>	<b>35,932.4</b>	<b>16,785.1</b>	<b>19,020.7</b>	<b>126.6</b>

\* Funds received through Contract Mod P00077 dated July 12, 2021

\*\* RL Expected Funding thru CBAG Rev 2 - Pending approval of Integrated Investment Portfolio. Includes reductions to be identified by DOE-RL in CBAG Rev 3. These potential reductions of \$9.2M have been identified in the RL Expected Funding, Outlook and Hold Backs.

**Spending Variance Analysis:** The variance is primarily due to Project L-937, Gable East Footprint Reduction - delays in procurement and field work, L-897, Central Plateau Water Treatment Facility - membrane procurement contract delayed, and deferral of road projects (L-534, L-603, L-883). The overrun in RL-0201 (Reliability Project - CLIN 7) is primarily due to Project L839, 12-inch Potable Water Loop-Line - construction started earlier than planned, Project L-934, MSC Office Space Gap Reduction - change in execution and structure of milestone payments and Project L-905, FARS & RFARS Replacement & Upgrade - construction contract change orders. This is offset with an underrun for Project L-895, Fire Protection Infrastructure for PRW - due to a delay in award of the A/E subcontract.

**Uncosted Balance:** The \$35.9M uncosted balance is primarily due to L-612, 230kV Transmission System Reconditioning and Sustainability Repairs in which \$15.2M being held back pending DOE-RL direction and is funding specifically held for Project L-612. A portion of the uncosted balance is for Encumbered Carryover scope totaling \$16.8M that will complete in FY22.

**Table B-22. Key Milestones**

TO	Project	Description	Initial Submittal Date*	Forecast Date
RPTO-002	L-839, L-850, L-897	Task Order Submittal		5/25/21
RPTO-005	L-934	Task Order Submittal	4/08/21	6/3/21
RPTO-006	L-894, L-895	Task Order Submittal	4/27/21	
RPTO-007	L-801, L-905	Task Order Submittal		6/24/21
RPTO-008	L-921	Task Order Submittal		

\* Submitted TO proposals have not yet been accepted by DOE-RL.

## 8.0 MAJOR ISSUES

The Water Projects Notice of Construction Approval Order has been delayed to August 19, 2021. This will delay tie in of the diesel generator for Project L-895 and mobilization of the construction subcontractors for Projects L-850 and L-897. HMIS continues to work with DOE and Washington State Department of Ecology (WDOE) to determine if work arounds can be found to allow activities to start prior to the approval order being received.

Finalizing Negotiations with Pall to allow award of Contract for Membrane Filtration Equipment for Project L-897. This procurement is now critical path for Project L-897. The Project has initiated discussions with Pall related to accelerated delivery of the equipment. In addition, the Project has requested that the Construction Subcontractor evaluate alternative sequencing of work to offset or eliminate any schedule impacts associated with delayed delivery of the filtration equipment.

Project L-895 was notified that the installed National Electrical Manufacturers Association (NEMA) 3R Switchgear Enclosures were not suitable for the environment. The construction specification specified NEMA 4 Enclosures. A root cause analysis is being performed. Cost and schedule estimates for recovery from this situation have been developed and incorporated into the HMIS baseline.

COVID-19 Quarantines, high temperatures and cancelled outages due to BPA equipment inoperability have slowed progress for Project L-789, schedule recovery was expected in June but may slip into July. The Project continues to work with the construction subcontractor and appropriate utility organizations to perform outages and work overtime (as allowed) to ensure Project completion.

### **9.0 DOE ACTIONS/DECISIONS**

Obtain Water Projects NOC Approval Order by 8/19/21

Provide L-897 CD-02/3 Approval by 8/19/21

Provide comments on L-888 Notice of Construction and Health Impacts Assessment by 6/17/21

### **10.0 GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)**

See Section 8.0, *DOE Actions/Decisions*

### **11.0 RELIABILITY PROJECTS**

Additional Reliability Project specific information/data is available upon request.

## **Appendix A**

### **Contract Performance Reports**

Format 1 – Work Breakdown Structure

Format 3 – Baseline

Format 5 – Explanation and Problem Analysis

## 1.0 FORMAT 1, DD FORM 2734/1, WORK BREAKDOWN STRUCTURE

CONTRACT PERFORMANCE REPORT FORMAT 1 - WORK BREAKDOWN STRUCTURE												DOLLARS IN Thousands			FORM APPROVED OMB No. 0704-0188									
<b>1. CONTRACTOR</b>		<b>2. CONTRACT</b>			<b>3. PROGRAM</b>				<b>4. REPORT PERIOD</b>															
a. NAME Hanford Mission Integration Solutions		a. NAME Hanford Mission Essential Services Contract			a. NAME Hanford Mission Essential Services Contract				a. From 2021/05/24															
b. LOCATION (Address and Zip Code) Richland, WA 99352		b. NUMBER 89303320EM000031			b. PHASE Operations				b. To 2021/06/20															
c. TYPE CR, CPAF & IDIQ		d. SHARE RATIO N/A			c. EVMS ACCEPTANCE No X Yes																			
<b>5. CONTRACT DATA</b>																								
a. QUANTITY		b. NEGOTIATED COST		c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK		d. TARGET PROFIT/FEE		e. TARGET PRICE		f. ESTIMATED PRICE		g. CONTRACT CEILING		h. ESTIMATED CONTRACT CEILING		i. DATE OF OTB/OTS								
N/A		\$3,761,420		\$27,516		\$251,639		\$4,013,059		\$4,027,963		4,013,059		4,027,963		N/A								
<b>6. ESTIMATED COST AT COMPLETION</b>												<b>7. AUTHORIZED CONTRACTOR REPRESENTATIVE</b>												
CONTRACT BUDGET BASE (2)						VARIANCE (3)						a. NAME (Last, First, Middle Initial) Wilkinson, Robert E			b. TITLE President & General Manager									
a. BEST CASE \$3,788,936						b. WORST CASE \$3,965,141						c. SIGNATURE <b>ROBERT WILKINSON (Affiliate)</b>			d. DATE SIGNED Digitally signed by ROBERT WILKINSON (Affiliate) Date: 2021.07.27 05:02:45 -07'00'									
c. MOST LIKELY \$3,776,324						3,788,936						12,612												
<b>8. PERFORMANCE DATA</b>																								
Item (1)	Current Period					Cumulative to Date					At Completion													
	Work Scheduled (2)	Work Performed (3)	Actual Cost Performed (4)	Schedule (5)	Cost (6)	Work Scheduled (7)	Work Performed (8)	Actual Cost Performed (9)	Schedule (10)	Cost (11)	Budgeted (12)	Estimated (13)	Variance (14)											
<b>a. WORK BREAKDOWN STRUCTURE ELEMENT</b>																								
4001.01.01 - Contract Transition	0	0	0	0	0	6,405	6,405	5,684	0	721	6,405	5,684	721											
<b>CLIN 1 Subtotal</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,405</b>	<b>6,405</b>	<b>5,684</b>	<b>0</b>	<b>721</b>	<b>6,405</b>	<b>5,684</b>	<b>721</b>											
4001.03.01 - Legacy Benefit Plans	3,225	3,225	2,505	0	721	17,655	17,655	11,005	0	6,650	439,932	428,442	11,491											
<b>CLIN 3 Subtotal</b>	<b>3,225</b>	<b>3,225</b>	<b>2,505</b>	<b>0</b>	<b>721</b>	<b>17,655</b>	<b>17,655</b>	<b>11,005</b>	<b>0</b>	<b>6,650</b>	<b>439,932</b>	<b>428,442</b>	<b>11,491</b>											
4001.04.01 - Utilities & Infrastructure	2,809	2,809	2,542	[0]	267	15,557	15,557	13,683	0	1,874	320,525	318,958	1,568											
4001.04.02 - Transportation	49	49	35	0	14	238	238	188	0	30	405	341	64											
4001.04.03 - Safeguards & Security	4,463	4,360	5,405	[103]	(1,045)	24,442	24,444	27,980	2	(3,536)	562,757	571,208	(8,451)											
4001.04.04 - Emergencies & First Responders	2,761	2,761	2,667	0	94	15,113	15,113	13,732	0	1,382	286,059	284,383	1,676											
4001.04.05 - Training & Workforce Readiness	776	776	1,062	[0]	(287)	4,245	4,245	4,005	0	240	96,681	98,130	(1,448)											
4001.04.06 - Information Technology & Mgmt	2,836	2,883	3,094	47	(211)	15,309	15,305	13,103	(4)	2,202	275,840	275,646	194											
4001.04.07 - Business Services	852	852	1,085	0	(233)	4,663	4,663	4,071	0	592	116,255	116,175	79											
4001.04.08 - Real Property Asset Mgmt	1,311	1,186	1,635	[125]	(449)	6,985	6,573	7,923	(412)	(1,350)	133,221	135,813	(2,592)											
4001.04.09 - Environmental Stewardship & Mgmt	565	565	467	0	99	2,621	2,621	2,346	0	274	44,913	44,115	798											
4001.04.10 - Environmental Integration	1,624	1,624	1,727	0	(103)	8,887	8,887	7,951	0	936	192,319	191,245	1,074											
4001.04.11 - Safety & QA	1,632	1,632	1,786	[0]	(154)	9,367	9,367	9,999	0	(633)	247,468	248,749	(1,280)											
4001.04.12 - General Performance Requirements	3,574	3,574	2,476	0	1,098	18,199	18,199	17,152	0	1,046	251,122	249,849	1,273											
4001.07.01 - IRP - Water System	337	158	197	[179]	(39)	2,986	1,622	1,547	(1,364)	76	5,890	8,687	(2,798)											
4001.07.02 - IRP - Sewer System	4	15	23	10	(8)	133	77	77	(53)	3	133	97	36											
4001.07.03 - IRP - Electrical System	1,328	1,921	1,801	593	120	6,164	4,979	5,010	(1,185)	(32)	8,382	9,683	(1,300)											
4001.07.04 - IRP - Roads & Grounds	0	0	(40)	0	40	68	68	89	0	(21)	68	89	(21)											
4001.07.05 - IRP - Facility System	355	350	342	(5)	8	1,264	1,075	1,047	(189)	28	3,504	4,376	(872)											
4001.07.06 - IRP - Network & Telecom System	(348)	699	585	1,047	114	1,962	1,272	1,068	(691)	204	6,776	6,416	359											
<b>CLIN 4 Subtotal</b>	<b>24,928</b>	<b>26,213</b>	<b>26,887</b>	<b>1,285</b>	<b>(674)</b>	<b>138,183</b>	<b>134,287</b>	<b>130,972</b>	<b>(3,896)</b>	<b>3,315</b>	<b>2,552,318</b>	<b>2,563,960</b>	<b>(11,642)</b>											
4001.05.01 - DOE Small Business Pre-Award Support	18	18	(33)	0	51	80	80	8	0	72	2,373	2,255	118											
<b>CLIN 5 Subtotal</b>	<b>18</b>	<b>18</b>	<b>(33)</b>	<b>0</b>	<b>51</b>	<b>80</b>	<b>80</b>	<b>8</b>	<b>0</b>	<b>72</b>	<b>2,373</b>	<b>2,255</b>	<b>118</b>											
4001.07.01 - IRP - Water System	914	1,111	1,155	197	(44)	3,457	4,002	4,338	545	(336)	15,659	13,275	2,384											
4001.07.03 - IRP - Electrical System	0	437	380	437	58	687	578	717	(109)	(139)	2,325	635	1,690											
4001.07.05 - IRP - Facility System	812	791	787	(21)	5	2,202	2,181	2,200	(21)	(19)	2,387	1,386	1,002											
4001.07.06 - IRP - Network & Telecom System	0	11	50	11	(40)	688	604	656	(84)	(53)	688	580	108											
4001.07.97 - IRP - Out-Year Summary Level Planning Package	0	0	0	0	0	0	0	0	0	0	339,992	339,992	(0)											
<b>CLIN 7 Subtotal</b>	<b>1,726</b>	<b>2,350</b>	<b>2,371</b>	<b>625</b>	<b>(21)</b>	<b>7,034</b>	<b>7,365</b>	<b>7,912</b>	<b>331</b>	<b>(547)</b>	<b>361,051</b>	<b>355,868</b>	<b>5,184</b>											
4001.08.01 - DOE Directed Work Scope	440	440	377	0	63	2,373	2,373	1,835	0	538	2,945	3,555	(611)											
4001.08.03 - Portfolio Management Task Orders	0	0	0	0	0	21	21	13	0	8	21	13	8											
4001.08.97 - DDWS - Out-Year Summary Level Planning Package	0	0	0	0	0	0	0	0	0	0	207,539	200,196	7,344											
<b>CLIN 8 Subtotal</b>	<b>440</b>	<b>440</b>	<b>377</b>	<b>0</b>	<b>63</b>	<b>2,394</b>	<b>2,394</b>	<b>1,848</b>	<b>0</b>	<b>546</b>	<b>210,505</b>	<b>203,764</b>	<b>6,741</b>											
<b>b. COST OF MONEY</b>																								
<b>c. GENERAL AND ADMINISTRATIVE</b>																								
<b>d. UNDISTRIBUTED BUDGET</b>																								
											216,352		216,352	0										
<b>e. SUBTOTAL</b>											30,336		32,246	32,107	1,910									
<b>f. MANAGEMENT RESERVE</b>													0	0	0									
<b>g. TOTAL</b>											30,336		32,246	32,107	1,910	140	171,750	168,185	157,429	(3,565)	10,756	3,788,936	3,776,324	12,612
<b>9. RECONCILIATION TO CONTRACT BUDGET BASE</b>																								
<b>a. VARIANCE ADJUSTMENT</b>																								
<b>b. TOTAL CONTRACT VARIANCE</b>													3,788,936	3,776,324	12,612									

## 2.0 FORMAT 3, DD FORM 2734/3, BASELINE

CONTRACT PERFORMANCE REPORT FORMAT 3 - BASELINE														DOLLARS IN Thousands		FORM APPROVED OMB No. 0704-0188	
<b>1. Contractor</b>		<b>2. Contract</b>			<b>3. Program</b>				<b>4. Report Period</b>								
a. Name Hanford Mission Integration Solutions		a. Name Hanford Mission Essential Services Contract			a. Name Hanford Mission Essential Services				a. From (2021/05/24)								
b. Location (Address and Zip Code) Richland, WA 99352		b. Number 89303320DEM000031			b. Phase Operations				b. To (2021/06/20)								
		c. TYPE CR, CPAF & IDIQ	d. Share Ratio N/A		c. EVMS ACCEPTANCE No <input checked="" type="checkbox"/> Yes												
<b>5. CONTRACT DATA</b>																	
a. ORIGINAL NEGOTIATED COST  \$3,750,727		b. NEGOTIATED CONTRACT CHANGES  \$10,693	c. CURRENT NEGOTIATED COST (a+b)  \$3,761,420	d. ESTIMATED COST OF UNAUTHORIZED UNPRICED WORK  \$27,516				e. CONTRACT BUDGET BASE (C+D)  \$3,788,936		f. TOTAL ALLOCATED BUDGET  \$3,788,936		g. DIFFERENCE (E - F)  \$0					
h. CONTRACT START DATE  2020/8/17		i. CONTRACT DEFINITIZATION DATE  2019/12/5		j. PLANNED COMPLETION DATE  2030/8/16				k. CONTRACT COMPLETION DATE  2030/8/16		l. ESTIMATED COMPLETION DATE  2030/8/16							
<b>6. PERFORMANCE DATA</b>																	
ITEM  (1)	BCWS CUMULATIVE TO DATE (2)	BCWS FOR REPORT PERIOD (3)	BUDGETED COST FOR WORK SCHEDULED (BCWS) (Non-Cumulative)											UNDISTRIBUTED BUDGET (14)	TOTAL BUDGET (15)		
			Six Month Forecast By Month						Remaining Forecast By Month & Fiscal Year								
			JUL FY21 (4)	AUG FY21 (5)	SEP FY21 (6)	OCT FY22 (7)	NOV FY22 (8)	DEC FY22 (9)	Remaining FY22 (10)	BP FY23-25 (11)	OP1 FY25-28 (12)	OP2 FY28-30 (13)					
a. PERFORMANCE MEASUREMENT BASELINE (Beginning of Period)	172,893	31,479	36,255	30,048	48,546	19,748	26,257	26,812	229,274	876,528	946,155	1,213,018	215,335	3,840,869			
b. BASELINE CHANGES AUTHORIZED DURING REPORT PERIOD	(1,143)	(1,143)	81	87	(681)	675	436	668	(668)	(10,093)	(21,464)	(20,848)	1,017	(51,933)			
c. PERFORMANCE MEASUREMENT BASELINE (End of Period)	171,750	30,336	36,336	30,135	47,864	20,423	26,693	27,480	228,606	866,435	924,691	1,192,171	216,352	3,788,936			
7. MANAGEMENT RESERVE													0	0			
8. TOTAL	171,750	30,336	36,336	30,135	47,864	20,423	26,693	27,480	228,606	866,435	924,691	1,192,171	216,352	3,788,936			

1. Contractor	2. Contract	3. Program	4. Report Period
a. Name Hanford Mission Integration Solutions, LLC	a. Name Hanford Mission Essential Services Contract	a. Name Hanford Mission Essential Services Contract	a. From (2021/05/24)
b. Location (Address and Zip Code) PO Box Richland, WA 99352	b. Number-89303320DEM00031	b. Phase - Operations	b. To (2021/06/20)
	c. Type CR, CPAF, IDIQ	d. Share Ratio	
Evaluation			

### 3.0 FORMAT 5, DD FORM 2734/5, EXPLANATIONS AND PROBLEM ANALYSIS

#### Explanation of Variance /Description of Problem:

#### Current Month (CM) Cost Variance (CV):

The favorable CM CV is (+\$140K) or 0.4% primarily driven by:

**(+\$721K) 4001.03.01 - Legacy Benefit Plans** - The favorable CM CV is primarily due to an incorrect P-Card entry that credited the account with the reversal being processed in June, along with the contract startup and transitioning of plans for the from prior entity for the Legacy benefits.

**(+\$267K) 4001.04.01 - Utilities & Infrastructure** – The favorable CM CV is primarily due subcontractor monthly costs not in alignment with billing cycle, and the lack of resource availability to execute the planned scope of work.

**(-\$1,045K) 4001.04.03 - Safeguards & Security** – The unfavorable CM CV is primarily in Labor and Subcontracts. Labor overruns are driven by the exclusion of overtime from the budget but are also impacted by COVID charging (COV charges and COVID Janitorial support), and labor rate resource mix. The Subcontracts overrun is primarily due higher than planned costs to support the current work scope for Physical Security Systems.

**(-\$287K) 4001.04.05 - Training & Workforce Readiness** – The unfavorable CM CV is primarily due to labor attrition supporting LMS and is not planned to be backfill until the July/August time frame. The HAMMER variance is attributed to the AV/IT upgrade subcontract as a milestone payment rather than the originally planned LOE. This variance will continue until final milestone payment is complete, which is anticipated in September.

**(-\$211K) 4001.04.06 - Information Technology & Mgmt.** – The unfavorable CM CV is due to timecard corrections from the CIO account to multiple new charge codes for BMS being completed in the current month. Overhead increase from subcontractor NorthWind effective in the current period, retroactive to beginning of NW contract.

**(-\$233K) 4001.04.07 - Business Services** – The unfavorable CM CV is due to the Personal Property & Material Mgmt. Program and Hanford Workforce Engagement Center experiencing higher staffing levels than planned. These unfavorable variances are partially offset by General

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b. Location (Address and Zip Code) PO Box Richland, WA 99352	b. Number-89303320DEM00031	b. Phase - Operations	b. To (2021/06/20)
	c. Type CR, CPAF, IDIQ	d. Share Ratio	
Evaluation			

Supplies Inventory (GSI) buys and sells resulting in a positive variance when material sales are greater than the current buys.

**(-\$449K) 4001.04.08 - Real Property Asset Mgmt.** – The unfavorable CM CV is due to Subcontractor costs not coming in as planned for the MMP Software Upgrade; invoicing delays with the Terragraphics subcontract, and higher labor supporting Fire System Maintenance than planned.

**(+\$1,098K) 4001.04.12 - General Performance Requirements** – The favorable CM Cost Variance is primarily due to a current monthly revision to the cumulative subcontractor accrual value associated with the management of the Legacy Benefits Plans.

**Impacts** – N/A.

**Corrective Action** – N/A.

**Current Month (CM) Schedule Variance (SV):**

The favorable CM SV is (+\$1,910K) or 6.3% primarily driven by:

**(+\$1,030) 4001.07.03 - IRP - Electrical System** - The CM SV is primarily driven by: Schedule recovery associated L-801 Upgrade SCADA, RTU #1 Install milestone payment which was originally planned in fiscal month May. In addition, schedule recovery associated with L-789 Priority T&D Systems Wood PP Test & Replace catching-up and completing corridor construction.

**(+\$1,058) 4001.07.06 - IRP - Network & Telecom System** - The CM SV is primarily driven by L-937 Gable East Footprint Reduction (Phase 1) implementing a BCR in the current period which replanned the solar array work scope into Q1 of FY22. The replan resulted from realized risks related to extended supply chain lead times.

**Impacts** – N/A.

**Corrective Action** –N/A.

**Cumulative To Date (CTD) Cost Variance (CV):**

The favorable CTD CV is \$10,756K or 6.4% primarily driven by:

1. Contractor	2. Contract	3. Program	4. Report Period
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b. Location (Address and Zip Code) PO Box Richland, WA 99352	b. Number-89303320DEM00031	b. Phase - Operations	b. To (2021/06/20)
	c. Type CR, CPAF, IDIQ	d. Share Ratio	
Evaluation			

**(+\$721K) 4001.01.01 - Contract Transition** - The favorable CTD CV is primarily due to an underrun in transition contract value. Final transition costs are still expected from the MSA corporate account transfer to HMIS CLIN 1.

**(+\$6,650K) 4001.03.01 - Legacy Benefit Plans** - The favorable CTD CV is primarily due to the transitioning of plans from prior entity and claims being less than planned.

**(+\$1,874K) 4001.04.01 - Utilities & Infrastructure** – The favorable CTD CV is primarily due subcontractor monthly costs not in alignment with billing cycle, and the lack of resource availability to execute the planned scope of work.

**(-\$3,536K) 4001.04.03 - Safeguards & Security** – The unfavorable CM CV is primarily in Labor and Subcontracts. Labor overruns are driven by the exclusion of overtime from the budget but are also impacted by COVID charging (COV charges and COVID Janitorial support), and labor rate resource mix. The Subcontracts overrun is primarily due higher than planned costs to support the current work scope for Physical Security Systems.

**(+\$1,382K) 4001.04.04 - Emergencies & First Responders** – The favorable CTD CV is primarily due time phasing of material and equipment costs for consumables supporting level of effort scope, reduced IT costs to transition of scope to North Wind, and non-cash credits received for fire and emergency services provided to Energy Northwest. Other variances include offsetting labor and subcontract deltas. Labor overruns are due to the exclusion of non-standard shifts in the budget for platoon firefighter resources, and the subcontract underrun is primarily due the material difference for increased platoon staffing.

**(+\$2,202) 4001.04.06 - Information Technology & Mgmt.** – The favorable CTD CV is primarily due to the BMS and Records Software scope being LOE rather than time-phased for the expected renewal periods and the majority of software license renewals occur in September, resulting in underruns. Also, there is a favorable variance associated with records scope awarded to a subcontract and HMIS charging direction changes for subcontractor records managers.

**(+\$592K) 4001.04.07 - Business Services** – The favorable CM CV is due to General Supplies Inventory (GSI) buys and sells resulting in a positive variance when material sales are greater than the current buys. This favorable variance is partially offset by Personal Property & Material Mgmt. Program higher than planned staffing levels.

**(-\$1,350K) 4001.04.08 - Real Property Asset Mgmt.** – The unfavorable CTD CV is due to the MMP Software Upgrades is costing more than planned due to the complexity of the software integration. Also, Work Management is overrunning due to the implementation of a new subcontractor and cost associated with the start-up.

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b. Location (Address and Zip Code) PO Box Richland, WA 99352	b. Number-89303320DEM00031	b. Phase - Operations	b. To (2021/06/20)
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Evaluation			

**(+\$936K) 4001.04.10 - Environmental Integration** - The favorable CTD CV is primarily in labor due to staff supporting Work For Others (WFOs), Reliability Projects (RPs) and staff absences.

**(-\$633K) 4001.04.11 – Safety & QA** - The unfavorable CTD CV is primarily in labor as the proposal assumed staffing efficiencies. Instead RL directed HMIS to maintain existing staffing levels that are higher than the planned levels.

**(+\$1,046K) 4001.04.12 - General Performance Requirements** – The favorable CM Cost Variance is primarily due to: Hanford Portfolio Analysis/PS/Independent Assessment establishment is above FY21 performance due to the program not being as robust as planned, staff supporting HMIS proper systems, less materials, and North Wind support than anticipated.

**(+\$538K) 4001.08.01 – DOE Directed Work Scope** - The favorable CTD CV is primarily due to underruns in RL Projects Funded Activities as actual scope has been less than planned.

**Impacts** – N/A.

**Corrective Action** – N/A.

### **Cumulative To Date (CTD) Schedule Variance (SV):**

The unfavorable CTD SV is (-\$3,565K) or (-2.1%) primarily driven by:

**(-\$819K) 4001.07.01 Water Systems** - The CTD SV is primarily driven by three projects and the Project specific drivers include:

- 1) L-839 12in Potable Water Loop-line, favorable variance driven by early receipt and installation of 4" fiber optic conduit and 12" pipe for potable water. (+\$628.0K)
- 2) L-897 Central Plateau Water Treatment Pumps, unfavorable variance driven by ongoing procurement cycle delays to award Membrane Processing Equipment procurement contract. (-\$700.4K)
- 3) L-895 Fire Protection Infrastructure for PRW, unfavorable variance driven by delays to awarding A/E services subcontract which has delayed A/E support during construction including OAT/CAT development. (-\$648.3K)

**(-\$1,294K) 4001.07.03 - IRP - Electrical System** - The CTD SV is primarily driven by L-789 Priority T&D System Wood PP Test & Replace, construction outstanding punch list items, change order scope, and demobilization. Delays are driven by canceled outages, hot-weather

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b. Location (Address and Zip Code) PO Box Richland, WA 99352	b. Number-89303320DEM00031	b. Phase - Operations	b. To (2021/06/20)
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Evaluation			

impacts, and transfer trip issues which have canceled fiber tie-ins. Schedule recovery is anticipated in August FY21.

**(-\$774K) 4001.07.06 - Network & Telecom Systems** - The CTD SV is primarily driven by specific projects impacts:

1) L-937 Gable East Footprint Reduction (Phase 1), unfavorable variance driven by Engineering Change Request (ECR) development taking longer than planned which impacted construction execution. Construction continues to recover schedule. (-\$442.9K)

2) L-919 Emergency Radio Upgrade, unfavorable variance due to delays awarding contracts for installation and material procurements. These are delays are driven by extended durations to develop the Statement of Works (SOW) as engineering requirements are being evaluated. (-\$204.4K)

**Impacts** – N/A

**Corrective Action** – N/A.

### **Variance at Complete (VAC):**

The unfavorable VAC is (+\$12,612K) or (+0.3%) primarily driven by:

**(+\$11,491K) 4001.03.01 - Legacy Benefit Plans** - The favorable VAC is primarily due to the transitioning of plans from prior entity and claims being less than planned.

**(+\$1,568K) 4001.04.01 - Utilities & Infrastructure** – The favorable VAC is primarily due subcontractor monthly costs not in alignment with billing cycle, and the lack of resource availability to execute the planned scope of work.

**(-\$8,451K) 4001.04.03 - Safeguards & Security** – The unfavorable VAC is primarily in Labor and Subcontracts. Labor overruns are driven by the exclusion of overtime from the budget but are also impacted by COVID charging (COV charges and COVID Janitorial support), and labor rate resource mix. The Subcontracts overrun is primarily due higher than planned costs to support the current work scope for Physical Security Systems.

**(+\$1,676K) 4001.04.04 - Emergencies & First Responders** – The favorable VAC is primarily due time phasing of material and equipment costs for consumables supporting level of effort scope, reduced IT costs to transition of scope to North Wind, and non-cash credits received for fire and emergency services provided to Energy Northwest. Other variances include offsetting labor and subcontract deltas. Labor overruns are due to the exclusion of non-standard shifts in the budget for platoon firefighter resources, and the subcontract underrun is primarily due the material difference for increased platoon staffing.

1. Contractor	2. Contract	3. Program	4. Report Period
a. Name Hanford Mission Integration Solutions, LLC	a. Name Hanford Mission Essential Services Contract	a. Name Hanford Mission Essential Services Contract	a. From (2021/05/24)
b. Location (Address and Zip Code) PO Box Richland, WA 99352	b. Number-89303320DEM00031	b. Phase - Operations	b. To (2021/06/20)
	c. Type CR, CPAF, IDIQ	d. Share Ratio	
Evaluation			

**(-\$1,448K) 4001.04.05 – Training & Workforce Readiness** – The unfavorable VAC is due to scope that is forecasted but not bid as part of the proposal for HAMMER Facility & Infrastructure projects as well as the Success Factors Learning Management System (LMS).

**(-\$2,592K) 4001.04.08 - Real Property Asset Mgmt.** – The unfavorable VAC is due to the MMP Software Upgrades is costing more than planned due to the complexity of the software integration. Also, Work Management is overrunning due to the implementation of a new subcontractor and cost associated with the start-up.

**(+\$798K) 4001.04.09 - Environmental Stewardship & Mgmt.** - The favorable VAC is primarily in labor efficiencies supporting Post Cleanup Surveillance & Maintenance and Comprehensive Land Use Plans during FY21.

**(+\$1,074K) 4001.04.10 - Environmental Integration** - The favorable VAC is primarily in labor due to staff supporting Work For Others (WFOs), Reliability Projects (RPs) and staff absences.

**(-\$1,280K) 4001.04.11 – Safety & QA** - The unfavorable VAC is primarily in labor as the proposal assumed staffing efficiencies. Instead RL directed HMIS to maintain existing staffing levels that are higher than the planned levels.

**(+\$1,273K) 4001.04.12 - General Performance Requirements** – The favorable VAC is primarily due to: Hanford Portfolio Analysis/PS/Independent Assessment establishment is above FY21 performance due to the program not being as robust as planned, staff supporting HMIS proper systems, less materials, and North Wind support than anticipated.

**(+\$7,344K) 4001.08.97 – DDWS Out Year Summary Level Planning Package** - The favorable VAC is primarily due to RL directed work scope that was originally bid and budgeted under CLIN 8 DOE Small Business Procurement Post Award Support and Other Directed Work Scope (DDWS) but has since been directed to be performed under CLIN 4 Infrastructure and Site Services. HMIS is waiting on a contract modification to revise the baseline.

**Impacts – Underruns and Overruns** will continue due to the divergent between the budget baseline and the funding targets.

**Corrective Action** – Continue to monitor the EACs for possible cost reductions.

### Negotiated Contract Changes:

1. Contractor	2. Contract	3. Program	4. Report Period
a. Name Hanford Mission Integration Solutions, LLC	a. Name Hanford Mission Essential Services Contract	a. Name Hanford Mission Essential Services Contract	a. From (2021/05/24)
b. Location (Address and Zip Code) PO Box Richland, WA 99352	b. Number-89303320DEM00031	b. Phase - Operations	b. To (2021/06/20)
	c. Type CR, CPAF, IDIQ	d. Share Ratio	
Evaluation			

The Negotiated Contract Cost for June 2021 is \$3,761.4M.

**Changes in Estimated Cost of Authorized Unpriced Work:**

The Authorized Unpriced Work (AUW) for June 2021 is \$27.5M based primarily on Material Differences (MDs).

**Changes in Estimated Price:**

The Estimated Price for June 2021 is \$4,028.0M. The Estimated Price includes the Most Likely Management Estimate at Completion (MEAC) of \$3,776.3M and fee totaling \$251.6M. The estimated fee includes assumed ~7% of Fee from CLINs 7&8 in the amount of ~\$39.9M. The fee is depended on Task Order (TO) negotiations and will be updated as necessary when TOs are definitized.

**Changes in Undistributed Budget:**

The UB for this reporting period is \$216.4M.

**Changes in Management Reserve:**

The Management Reserve (MR) for this reporting period is \$0M.

**Differences in the Baseline:**

This reporting period the Baseline began at \$3,840.9M and decreased to \$3,788.9M.

The following BCRs were implemented:

- **BCR-HMS-21-029** - Align Execution to Proposed Escalation Factor. This BCR adjusted the escalation rates from 2.7% to 2.3% to align with CBAG Rev. 0 guidance.
- **BCR-HMS-21-030** - Align SolarWinds to Proper Funding String 4. This BCR moved budget between level 6 WBSs to account for the updated DOE funding string direction.
- **BCR-HMS-21-032** - Implement Station 93 Boiler Operations. This BCR replanned the Hanford Fire Department operations account to segregate Hanford Fire Station 93 boiler maintenance in FY 2021.
- **BCR-HMS-21-033** - Implement RFS and DDWS Scope Through Contract Modification P00069. This BCR distributed FY 2021 budget for RFSs and DDTOs through contract modification P00069.
- **BCR-HMS-21-034** - Administrative Baseline Changes for June 2021 Reporting. This BCR implemented administrative WBS and coding changes.
- **BCR-HMS-21-037** - Reliability Projects Alignment with Revised Execution Strategy for Various Projects. This BCR replanned Reliability Projects to align with latest execution strategies, proposal submittals, and/or subcontractor construction submittals.

1. Contractor	2. Contract	3. Program	4. Report Period
a. Name Hanford Mission Integration Solutions, LLC	a. Name Hanford Mission Essential Services Contract	a. Name Hanford Mission Essential Services Contract	a. From (2021/05/24)
b. Location (Address and Zip Code) PO Box Richland, WA 99352	b. Number-89303320DEM00031	b. Phase - Operations	b. To (2021/06/20)
	c. Type CR, CPAF, IDIQ	d. Share Ratio	
<b>Evaluation</b>			

- **BCR-HMS-21-038** - Update Program Log for Contract Modifications P00071. This BCR implements the program log entries to transfer the Negotiated Contract Cost (NCC) to UB through contract modification P00071.

**Best/Worst/Most Likely Management Estimate at Completion (MEAC):**

The Best Case MEAC assumes the completion of the approved work scope at the current negotiated contract value consistent with the Contract Budget Base \$3,788.9M. The Most Likely MEAC reflects the EAC including MR, when established \$3,776.3M. The Worst Case Scenario assumes a 5 percent increase to the Most Likely MEAC case scenario \$3,965.1M.

## **Appendix B**

### **Reliability Project Contract Performance Reports**

Format 1 – Work Breakdown Structure

Format 3 – Baseline

Format 5 – Explanation and Problem Analysis

## 1.0 FORMAT 1, DD FORM 2734/1, WORK BREAKDOWN STRUCTURE

CONTRACT PERFORMANCE REPORT													
FORMAT 1 - WORK BREAKDOWN STRUCTURE											DOLLARS IN Thousands		
FORM APPROVED OMB No. 0794-0188													
<b>1. CONTRACTOR</b>		<b>2. CONTRACT</b>			<b>3. PROGRAM</b>			<b>4. REPORT PERIOD</b>					
a. NAME Hanford Mission Integration Solutions		a. NAME Hanford Mission Essential Services Contract			a. NAME Hanford Mission Essential Services Contract			a. From 2021 / 05 / 24					
b. LOCATION (Address and Zip Code) Richland, WA 99352		b. NUMBER 89303320DEM000031			b. PHASE Operations			b. To 2021 / 06 / 20					
c. TYPE CPAF & IDIQ		d. SHARE RATIO N/A			c. EVMS ACCEPTANCE No X Yes								
<b>5. CONTRACT DATA</b>													
a. QUANTITY		b. NEGOTIATED COST		c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK		d. TARGET PROFIT/FEE	e. TARGET PRICE		f. ESTIMATED PRICE		g. CONTRACT CEILING	h. ESTIMATED CONTRACT CEILING	i. DATE OF OTB/OTS
N/A		\$359,813		\$25,991		\$25,187	\$385,000		\$410,403		385,000	410,403	N/A
<b>6. ESTIMATED COST AT COMPLETION</b>													
				CONTRACT BUDGET BASE (2)		VARIANCE (3)		7. AUTHORIZED CONTRACTOR REPRESENTATIVE					
								a. NAME (Last, First, Middle Initial) Wilkinson, Robert E					
								b. TITLE President & General Manager					
a. BEST CASE		\$385,804						c. SIGNATURE ROBERT WILKINSON (Affiliate)					
b. WORST CASE		\$404,477						d. DATE SIGNED Digitally signed by ROBERT WILKINSON (Affiliate)					
c. MOST LIKELY		\$385,216		385,804		588		Date: 2021.07.27 05:03:28 -07'00'					
<b>8. PERFORMANCE DATA</b>													
Item (1)	Current Period					Cumulative to Date					At Completion		
	Budgeted Cost		Actual Cost Work Performed (4)	Variance		Budgeted Cost		Actual Cost Work Performed (9)	Variance		Budgeted (12)	Estimated (13)	Variance (14)
	Work Scheduled (2)	Work Performed (3)		Schedule (5)	Cost (6)	Work Scheduled (7)	Work Performed (8)		Schedule (10)	Cost (11)			
<b>a. WORK BREAKDOWN STRUCTURE ELEMENT</b>													
4001.07.01 - IRP - Water System	337	158	197	(179)	(39)	2,986	1,622	1,547	(1,364)	76	5,890	8,687	(2,798)
4001.07.02 - IRP - Sewer System	4	15	23	10	(8)	133	79	77	(53)	3	133	97	36
4001.07.03 - IRP - Electrical System	1,328	1,921	1,801	593	120	6,164	4,979	5,010	(1,185)	(32)	8,382	9,683	(1,300)
4001.07.04 - IRP - Roads & Grounds	0	0	(40)	0	40	68	68	89	0	(21)	68	89	(21)
4001.07.05 - IRP - Facility System	355	350	342	(5)	8	1,264	1,075	1,047	(189)	28	3,504	4,376	(872)
4001.07.06 - IRP - Network & Telecom System	(348)	699	585	1,047	114	1,962	1,272	1,068	(691)	204	6,776	6,416	359
<b>CLIN 4 Subtotal</b>	<b>1,676</b>	<b>3,142</b>	<b>2,906</b>	<b>1,466</b>	<b>236</b>	<b>12,577</b>	<b>9,095</b>	<b>8,837</b>	<b>(3,482)</b>	<b>258</b>	<b>24,753</b>	<b>29,348</b>	<b>(4,596)</b>
4001.07.01 - IRP - Water System	914	1,111	1,155	197	(44)	3,457	4,002	4,338	545	(336)	15,659	13,275	2,384
4001.07.03 - IRP - Electrical System	0	437	380	437	58	687	578	717	(109)	(139)	2,325	635	1,690
4001.07.05 - IRP - Facility System	812	791	787	(21)	5	2,202	2,181	2,200	(21)	(19)	2,387	1,386	1,002
4001.07.06 - IRP - Network & Telecom System	0	11	50	11	(40)	688	604	656	(84)	(53)	688	580	108
4001.07.97 - IRP - Out-Year Summary Level Planning Package	0	0	0	0	0	0	0	0	0	0	339,992	339,992	(0)
<b>CLIN 7 Subtotal</b>	<b>1,726</b>	<b>2,350</b>	<b>2,371</b>	<b>625</b>	<b>(21)</b>	<b>7,034</b>	<b>7,365</b>	<b>7,912</b>	<b>331</b>	<b>(547)</b>	<b>361,051</b>	<b>355,868</b>	<b>5,184</b>
<b>b. COST OF MONEY</b>													
<b>c. GENERAL AND ADMINISTRATIVE</b>													
<b>d. UNDISTRIBUTED BUDGET</b>													
<b>e. SUBTOTAL</b>													
<b>f. MANAGEMENT RESERVE</b>													
<b>g. TOTAL</b>													
<b>9. RECONCILIATION TO CONTRACT BUDGET BASE</b>													
<b>a. VARIANCE ADJUSTMENT</b>													
<b>b. TOTAL CONTRACT VARIANCE</b>													
											385,804	385,216	588

## 2.0 FORMAT 3, DD FORM 2734/3, BASELINE

CONTRACT PERFORMANCE REPORT															FORM APPROVED OMB No. 0704-0188			
FORMAT 3 - BASELINE															DOLLARS IN Thousands			
<b>1. Contractor</b>			<b>2. Contract</b>				<b>3. Program</b>				<b>4. Report Period</b>							
a. Name Hanford Mission Integration Solutions			a. Name Hanford Mission Essential Services Contract				a. Name Hanford Mission Essential Services				a. From (2021/05/24)							
b. Location (Address and Zip Code) Richland, WA 99352			b. Number 89303320DEM000031				b. Phase Operations				b. To (2021/06/20)							
			c. TYPE CPAF & IDIQ		d. Share Ratio N/A		c. EVMS ACCEPTANCE No <input checked="" type="checkbox"/> Yes											
<b>5. CONTRACT DATA</b>																		
a. ORIGINAL NEGOTIATED COST  \$359,813				b. NEGOTIATED CONTRACT CHANGES  \$0		c. CURRENT NEGOTIATED COST (a+b)  \$359,813		d. ESTIMATED COST OF UNAUTHORIZED UNPRICED WORK  \$25,991			e. CONTRACT BUDGET BASE (C+D)  \$385,804		f. TOTAL ALLOCATED BUDGET  \$385,804		g. DIFFERENCE (E - F)  \$0			
h. CONTRACT START DATE  2020/8/17				i. CONTRACT DEFINITIZATION DATE  2019/12/5			j. PLANNED COMPLETION DATE  2030/8/16			k. CONTRACT COMPLETION DATE  2030/8/16		l. ESTIMATED COMPLETION DATE  2030/8/16						
<b>6. PERFORMANCE DATA</b>																		
ITEM  (1)	BCWS CUMULATIVE TO DATE (2)	BCWS FOR REPORT PERIOD (3)	BUDGETED COST FOR WORK SCHEDULED (BCWS) (Non-Cumulative)															
			Six Month Forecast By Month							Remaining Forecast By Month & Fiscal Year							UNDISTRIBUTED BUDGET (14)	TOTAL BUDGET (15)
			JUL FY21 (4)	AUG FY21 (5)	SEP FY21 (6)	OCT FY22 (7)	NOV FY22 (8)	DEC FY22 (9)	Remaining FY22 (10)	BP FY23-25 (11)	OP1 FY25-28 (12)	OP2 FY28-30 (13)						
a. PERFORMANCE MEASUREMENT BASELINE (Beginning of Period)	20,781	4,572	2,583	2,616	8,084	2,351	2,372	3,018	3,471	0	0	339,402	0	384,678				
b. BASELINE CHANGES AUTHORIZED DURING REPORT PERIOD	(1,170)	(1,170)	66	74	(736)	792	537	761	212	0	0	591	0	1,126				
c. PERFORMANCE MEASUREMENT BASELINE (End of Period)	19,611	3,402	2,649	2,690	7,348	3,142	2,909	3,778	3,683	0	0	339,992	0	385,804				
7. MANAGEMENT RESERVE												0	0	0				
8. TOTAL	19,611	3,402	2,649	2,690	7,348	3,142	2,909	3,778	3,683	0	0	339,992	0	385,804				

<b>1. Contractor</b>	<b>2. Contract</b>	<b>3. Program</b>	<b>4. Report Period</b>
a. Name Hanford Mission Integration Solutions, LLC	a. Name Hanford Mission Essential Services Contract	a. Name Hanford Mission Essential Services Contract	a. From (2021/05/24)
b. Location (Address and Zip Code) PO Box Richland, WA 99352	b. Number-89303320DEM00031	b. Phase - Operations	b. To (2021/06/20)
	c. Type CPAF, IDIQ	d. Share Ratio	
<b>Evaluation</b>		c. EVMS Acceptance NO X YES	

### 3.0 FORMAT 5, DD FORM 2734/5, EXPLANATIONS AND PROBLEM ANALYSIS

#### FORMAT 5, DD FORM 2734/5, EXPLANATIONS AND PROBLEM

(\$K) - June	BCWS	BCWP	ACWP	SV \$	SV %	CV \$	CV %	SPI	CPI
<b>Current:</b>	\$ 3,402	\$ 5,493	\$ 5,278	\$ 2,091	61.5%	\$ 215	3.9%	1.61	1.04
<b>Cumulative:</b>	\$ 19,611	\$ 16,460	\$ 16,749	\$(3,151)	-16.1%	\$ (289)	-1.8%	0.84	0.98
	<b>BAC</b>	<b>EAC</b>	<b>VAC \$</b>	<b>VAC %</b>	<b>TCPI</b>				
<b>At Completion:</b>	\$ 385,804	\$ 385,216	\$ 588	0.2%	1.00				

Includes CLIN 4 & CLIN 7

#### Explanation of Variance /Description of Problem:

#### Current Month (CM) Cost Variance (CV):

The CM favorable CV of (+\$215K) or (+3.9%) is primarily due to:

Cost impacts to IRP – Electrical System Projects (4001.07.03)

- The favorable CM CV is driven by an accrual reversal of (\$100K) on our engineering support during installation contract. This contract is now under a different CACN to reflect the proposed Firm-Fixed Price milestone payment schedule of values as submitted in RPTO-007. This project is still working through pending cost transfers that will be completed in the next fiscal month. (+\$124.0K)

Cost impacts to IRP - Network & Telecom System (4001.07.06)

- The favorable CM CV is driven by completing conceptual design with less resources because the work was less complex than planned. (+\$88.3K)

Impacts – N/A.

Corrective Action – N/A.

#### Current Month (CM) Schedule Variance (SV):

The favorable CM SV of (+\$2,091K) or (+61.5%) is primarily driven by:

Schedule impacts to IRP - Electrical System (4001.07.03)

- L-789 Priority T&D Systems Wood PP Test & Replace, the favorable CM SV is driven by catching-up and completing corridor construction. (+\$758.4K)
- L-801 Upgrade SCADA, the favorable CM SV is driven by the completion of RTU #1 Install milestone payment which was originally planned in fiscal month May. (+\$437.3K)

1. Contractor	2. Contract	3. Program	4. Report Period
a. Name Hanford Mission Integration Solutions, LLC	a. Name Hanford Mission Essential Services Contract	a. Name Hanford Mission Essential Services Contract	a. From (2021/05/24)
b. Location (Address and Zip Code) PO Box Richland, WA 99352	b. Number-89303320DEM00031 c. Type CPAF, IDIQ	b. Phase - Operations c. EVMS Acceptance NO X YES	b. To (2021/06/20)
d. Share Ratio			
<b>Evaluation</b>			

Schedule Impacts to IRP – Network & Telecom System projects (4001.07.06)

- L-937 Gable East Footprint Reduction (Phase 1), The favorable CM SV is driven by the project team replanning the solar array work scope into the fall and winter. Previously yet unidentified risk of initiating a project without a planning phase was realized. Design identified product lines that would require extended supply chain delivery. (+\$1,039.2M)

Impacts - N/A.

Corrective Action – N/A.

**Cumulative To Date (CTD) Cost Variance (CV):**

The unfavorable CTD CV of (+\$289K) or (+1.8%) is within reporting variance.

Impacts – N/A.

Corrective Action – N/A.

**Cumulative To Date (CTD) Schedule Variance (SV):**

The unfavorable CTD SV is (-\$3,151K) or (-16.1%) primarily driven by:

Schedule impacts to IRP - Water Systems (4001.07.01)

- (-\$700.4K) L-897, Central Plateau Water Treatment Plant ongoing procurement cycle delays to award Membrane Processing Equipment procurement contract.
- (-\$648.3K) L-895, Fire Protection Infrastructure for PRW delays to awarding A/E services subcontract which has delayed A/E support during construction including OAT/CAT development.
- (+\$628.0K) L-839 12in Potable Water Loop-line, favorable variance driven by early receipt and installation of 4" fiber optic conduit and 12" pipe for potable water.

Schedule impacts to IRP - Electrical System (4001.07.03)

- (-\$718.7K) L-789, Priority T&D Power Poles Replacements construction outstanding punch list items, change order scope, and demobilization due to canceled outages, hot-weather impacts, and transfer trip issues which have canceled fiber tie-ins.

Schedule impacts to IRP – Network & Telecom Systems (4001.07.06)

- (-\$442.9K) L-937, Gable East Footprint Reduction (Phase 1) Engineering Change Request (ECR) development taking longer than planned which impacted construction execution. Construction continues to recover schedule.

1. Contractor	2. Contract	3. Program	4. Report Period
a. Name Hanford Mission Integration Solutions, LLC	a. Name Hanford Mission Essential Services Contract	a. Name Hanford Mission Essential Services Contract	a. From (2021/05/24)
b. Location (Address and Zip Code) PO Box Richland, WA 99352	b. Number-89303320DEM00031	b. Phase - Operations	b. To (2021/06/20)
	c. Type CPAF, IDIQ	d. Share Ratio	
<b>Evaluation</b>			

- (-\$204.4K) L-919, Emergency Radio Upgrade delays awarding contracts for installation and material procurements. These are delays are driven by extended durations to develop the Statement of Works (SOW) as engineering requirements are being evaluated.

Impacts - N/A.

Corrective Action – N/A.

**Variance at Completion (VAC):**

The favorable VAC of (+\$588K) or +(0.2%) is within reporting variance.

Impacts – N/A.

Corrective Action – N/A.

**Negotiated Contract Changes:**

The Negotiated Contract Cost for June 2021 is \$359.8M.

**Changes in Estimated Cost of Authorized Unpriced Work:**

The Authorized Unpriced Work (AUW) for June 2021 is \$26.0M based on CLIN 7 scope transferred to CLIN 4 base on customer direction.

**Changes in Estimated Price:**

The Estimated Price for June 2021 is \$410.4M. The Estimated Price includes the Most Likely Management Estimate at Completion (MEAC) of \$385.2M. The estimated fee includes assumed ~7% of Fee from CLIN 7 in the amount of \$25.2M. The fee is depended on Task Order (TO) negotiations and will be updated as necessary when TOs are definitized.

**Changes in Undistributed Budget:**

The UB for this reporting period is \$0M.

**Changes in Management Reserve:**

The Management Reserve (MR) for this reporting period is \$0M.

**Differences in the Baseline:**

This reporting period the Baseline began at \$384.7M and increased to \$385.8M.

1. Contractor	2. Contract	3. Program	4. Report Period
a. Name Hanford Mission Integration Solutions, LLC	a. Name Hanford Mission Essential Services Contract	a. Name Hanford Mission Essential Services Contract	a. From (2021/05/24)
b. Location (Address and Zip Code) PO Box Richland, WA 99352	b. Number-89303320DEM00031	b. Phase - Operations	b. To (2021/06/20)
	c. Type CPAF, IDIQ	d. Share Ratio	
<b>Evaluation</b>			

The following BCRs were implemented in June:

- BCR-HMS-21-037 “Reliability Projects Alignment with Revised Execution Strategy for Various Projects”

**Best/Worst/Most Likely Management Estimate at Completion (MEAC):**

The Best Case MEAC assumes the completion of the approved work scope at the current negotiated contract value consistent with the Contract Budget Base \$385.8M. The Most Likely MEAC reflects the EAC including MR \$385.2M. The Worst-Case Scenario assumes a 5 percent increase to the Most Likely MEAC case scenario \$404.5M.