AECOM Environment

Submitted to:
Basin Electric Power Cooperative
Laramie River Station
Wheatland, WY

Submitted by:
AECOM
Fort Collins, CO
60732883
January 2026

Basin Electric Power Cooperative Laramie River Station

Coal Combustion Residual Surface Impoundment Annual Inspection Report – 2025

Inspection Completed by:

I certify that this report has been prepared in accordance with 40 Code of Federal Regulations (CFR) 257.83(b)(2) requiring a written Annual Inspection Report prepared by a Qualified Professional Engineer (QPE) as set forth in the *Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments* for the Basin Electric Power Cooperative (BEPC) Laramie River Station (LRS) surface impoundments for 2025.

Emily Conkling, PE
Environmental Engineer
Wyoming PE #19479
Expires 12-31-2026

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List of Acronyms

AECOM	AECOM Technical Services, Inc.
amsl	above mean sea level
BAP	bottom ash pond
BEPC	Basin Electric Power Cooperative
CCR	coal combustion residual
CFR	Code of Federal Regulations
E-EHP	East Emergency Holding Pond
EL-EHP	Eastern Lobe of East Emergency Holding Pond
FGD	flue gas desulfurization
ft	foot or feet
LRS	Laramie River Station
MG	million gallons
QPE	Qualified Professional Engineer
W-EHP	West-Emergency Holding Pond

1.0 Introduction

In accordance with 40 Code of Federal Regulations (CFR) § 257.83(b)(2), the purpose of this document is to fulfill the requirements for an Annual Inspection Report prepared by a Qualified Professional Engineer (QPE) to ensure the design, construction, operation, and maintenance or the Basin Electric Power Cooperative (BEPC) Laramie River Station (LRS) surface impoundments is consistent with recognized and generally accepted good engineering standards.

LRS operates three coal-fired boilers, resulting in the production of coal combustion residuals (CCRs). CCRs are defined in 40 CFR § 257.53 as: "CCR means fly ash, bottom ash, boiler slag, and flue gas desulfurization materials generated from burning coal for the purpose of generating electricity by electric utilities and independent power producers." CCRs generated at LRS (and thus regulated under 40 CFR 257) include bottom ash, flue gas desulfurization (FGD) materials, and fly ash.

1.1 CCR Production and Handling Background

On a daily average, approximately 1,200 tons of FGD materials and fly ash are generated at LRS. The moisture conditioned CCRs (fly ash and FGD material) are transported by haul truck to the on-site LRS landfill, where the CCRs are dumped, spread, and compacted. Bottom ash is managed in surface impoundments adjacent to the landfill. The CCR landfill is addressed in a separate Annual Inspection Report. **Figure 1** shows the LRS property on a composite United States Geological Survey 7.5 minute topographic map.

Bottom ash and boiler slag from LRS are sluiced to Bottom Ash Pond (BAP) 1 or 3. Water from BAPs are decanted or pumped into the other BAPs and then recirculated for various plant processes. Flue gas emission control residuals and water treatment plant lime slurry are sluiced in the previously retrofit East-Emergency Holding Pond (E-EHP) and into the retrofit West-Emergency holding Pond (W-EHP).

1.2 Impoundments Description

The five CCR surface impoundments at LRS (BAP-1, BAP-2, BAP-3, W-EHP, and E-EHP) were constructed in 1980 during the original construction of the station. The impoundment dikes were largely constructed by excavating the impoundment basins and placing the excavated material directly along the perimeter of the basins to form the impoundment dikes. BAP-1 and 2 and the E-EHP were retrofit in accordance with the CCR Rule requirements in 2020 and 2021 (AECOM 2020, 2022). Because they were considered unlined, BAP-3 and the W-EHP ceased accepting waste prior to April 11, 2021.

BEPC completed partial retrofit of BAP-3 during the 2022 construction season and AECOM Technical Services, Inc. (AECOM) completed retrofit construction certification in January 2023. CCR and CCR-impacted materials were removed from the eastern portion of BAP-3, consolidated into the western portion, and excess materials were disposed of in the onsite CCR Landfill. A new central berm with a composite liner system was constructed on both sides of the berm in accordance with 257.71 of the CCR Rule, and a final cover was installed on the West Hill consisting of a synthetic membrane, soil infiltration layer, and topsoil (AECOM 2023).

BAP-1 and BAP-2 have surface areas of approximately 15.5 and 30.9 acres, respectively, and are separated by a north-south oriented divider dike. The impoundment dikes for BAP-1 and BAP-2 have an approximate 23-ft maximum structural height (BEPC 2016).BAP-3 is located directly south of BAP-1 and BAP-2 and has a surface area of approximately 35.4 acres after the partial retrofit. The impoundment dike for BAP-3 has an approximate 25-ft structural height (BEPC 2016).

The E-EHP and W-EHP have surface areas of approximately 27.9 and 30.1 acres, respectively, and are separated by a northwest-southeast oriented divider dike. Drainage and excavation of materials in the

W-EHP and the inactive eastern lobe of the East-Emergency Holding Pond (EL-EHP) began in May 2024 as part of a liner retrofit project. The W-EHP liner retrofit project has been completed and the W-EHP was placed into service on November 6, 2025 (Barr Engineering 2025b). The drainage of all CCRs and removal of the liner in the EL-EHP was completed in April 2025 and seeding was completed in October 2025.

1.3 Spillways and Diversion Features

LRS is a zero-discharge facility. No spillways are present on the CCR impoundments. The CCR units are all above grade; as such, diversion structures are not used. In 2016, the storage capacity of the impoundments was evaluated for a 24-hour duration design storm for the 1,000-year (yr) Inflow Design Flood (IDF) using an AutoCAD Civil3D computer model. The computer model evaluated the ability of the ponds to collect and control the 1,000-yr IDF under existing operational and maintenance procedures. The Civil3D model results for the impoundments indicate that all the CCR units have sufficient storage to adequately manage inflows during peak discharge conditions created by the 1000-yr IDF. Therefore, the spillway requirements in 257.73(d)(1)(v)(A) and (B) are not applicable to the impoundments at LRS (BEPC 2016, 2016a, 2016b, 2016c, 2016d).

2.0 Review of Existing Information

Existing information regarding the status and condition of the LRS surface impoundments was reviewed as part of the QPE annual inspection effort. The evaluation included review of the facility CCR Rule operating record, files associated with previous state permitting, past inspection reports, inflow design flood control system plans, and liner design certifications. No indications of structural instability have been observed to date for any of the CCR units at LRS.

2.1 CCR Unit Documents and Operating Records

Below is a list of documents reviewed for this annual report:

- Coal Combustion Residual Surface Impoundment Annual Inspection 2020 (BEPC 2021)
- Coal Combustion Residual Surface Impoundment Annual Inspection 2021 (BEPC 2022)
- Coal Combustion Residual Surface Impoundment Annual Inspection 2022 (BEPC 2023)
- Coal Combustion Residual Surface Impoundment Annual Inspection 2023 (BEPC 2024)
- Coal Combustion Residual Surface Impoundment Annual Inspection 2024 (BEPC 2025)
- CCR Construction Certification, Basin Electric Power Cooperative Laramie River Station, East Emergency Holding Pond (AECOM 2020a)
- CCR Rule Report: Initial Inflow Design Flood Control System Plan, Bottom Ash Pond 1 (2016)
- CCR Rule Report: Initial Inflow Design Flood Control System Plan, Bottom Ash Pond 2 (2016a)
- CCR Rule Report: Initial Inflow Design Flood Control System Plan, Bottom Ash Pond 2 (2016b)
- CCR Rule Report: Initial Inflow Design Flood Control System Plan, Bottom Ash Pond 2 (2016c)
- CCR Rule Report: Initial Inflow Design Flood Control System Plan, Bottom Ash Pond 2 (2016d)
- Coal Combustion Residual Surface Impoundment History of Construction Documentation (BEPC 2016e)
- CCR Rule Report: Periodic Safety Factor Assessment, Bottom Ash Pond 1 (AECOM 2021a)
- CCR Rule Report: Periodic Structural Stability Assessment, Bottom Ash Pond 1 (AECOM 2021b)
- CCR Construction Certification, Basin Electric Power Cooperative Laramie River Station, Bottom Ash Pond 1 (AECOM 2021c)
- CCR Rule Report: Periodic Safety Factor Assessment, Bottom Ash Pond 2 (AECOM 2021d)
- CCR Rule Report: Periodic Structural Stability Assessment, Bottom Ash Pond 2 (AECOM 2021e)
- CCR Rule Report: Periodic Safety Factor Assessment, Bottom Ash Pond 3 (AECOM 2021f)
- CCR Rule Report: Periodic Structural Stability Assessment, Bottom Ash Pond 3 (AECOM 2021g)
- CCR Rule Report: Periodic Safety Factor Assessment, East Emergency Holding Pond (AECOM 2021h)
- CCR Rule Report: Periodic Structural Stability Assessment, East Emergency Holding Pond (AECOM 2021i)

- CCR Rule Report: Periodic Safety Factor Assessment, West Emergency Holding Pond (AECOM 2021j)
- CCR Rule Report: Periodic Structural Stability Assessment, West Emergency Holding Pond (AECOM 2021k)
- CCR Construction Certification, Basin Electric Power Cooperative Laramie River Station, Bottom Ash Pond 2 (AECOM 2022a)
- CCR Construction Certification, Basin Electric Power Cooperative Laramie River Station, Bottom Ash Pond 3 (AECOM 2023)
- Design of Alternative Composite Liner, Basin Electric Power Cooperative Laramie River Station, Bottom Ash Surface Impoundment 1 and East Emergency Holding Pond (AECOM 2020b)
- Design of Alternative Composite Liner, Basin Electric Power Cooperative Laramie River Station, Bottom Ash Pond 2 (AECOM 2022b)
- Design of Alternative Composite Liner, Basin Electric Power Cooperative Laramie River Station, Bottom Ash Pond 2 (AECOM 2022c)
- West Emergency Holding Pond Liner Design Certification (2025 Retrofit), Basin Electric Power Cooperative Laramie River Station (Barr Engineering 2025a)
- Coal Combustion Residual Completion of Retrofit Certification, West Emergency Holding Pond, Basin Electric Power Cooperative Laramie River Station (Barr Engineering 2025b)

2.2 Routine Inspection Review

During 2025, qualified individuals (generally the LRS Environmental Coordinator) conducted routine inspections for any appearance of actual or potential structural weakness and other conditions which were disrupting or had the potential to disrupt the operation or safety of the CCR unit(s). Appearances of structural weakness may include but are not limited to: (1) signs of piping and other internal erosion; (2) transverse, longitudinal, and desiccation cracking; (3) slides, bulges, boils, sloughs, scarps, sinkholes, or depressions; (4) animal burrows; (5) excessive or lacking vegetation cover; and (6) slope erosion. A review of the periodic inspection reports for the impoundments indicated no signs of actual or potential structural weakness or other adverse conditions as described above. The completed routine inspection checklists are filed in the operating record. A blank copy of the routine inspection form used by LRS staff is provided as **Attachment A.**

3.0 On-site Annual Inspection of Facility

The annual inspection was completed by AECOM on Monday, September 8, 2025, starting at 10:15 a.m. Mountain Standard Time. The weather was sunny, approximately 75 degrees Fahrenheit, with minimal wind. No snow cover was observed during the inspection visit, and visual observation and site access was not impeded.

Personnel from AECOM in attendance for the inspection included:

- Emily Conkling, PE (WY #19479), AECOM
- Olivia Helinski, EIT, AECOM

A blank copy of the annual inspection form used for each impoundment is provided as **Attachment B**. A blank copy of the weekly inspection form used by LRS staff is provided as **Attachment A**. A photo location figure and photo log showing site conditions during the inspection is included as **Attachment C**.

3.1 Findings

The findings of the annual inspection and a review of facility records are summarized in the following subsections.

Depth and volume measurements listed in **Sections 3.1.1** and **3.1.2** were provided by LRS staff from their monitoring instrumentation, as described under § 257.83(b)(2)(ii) in **Table 3-1** and **3-2** (Dihle 2025). The bottom elevations of the BAPs and E-EHP are based on historical construction documentation and vary slightly, therefore, they should be considered approximations (BEPC 2016). Cited elevations for the toe of the units are also approximated. Cited elevations are not to be considered as-built or uniformly applicable across the bottom of the ponds. Additionally, for all ponds, CCR deposition at the bottom of the pond is not evenly distributed across the entire pond area such that the volume of storage (CCR below the waterline) is approximate as well.

3.1.1 BAPs

The table below summarizes the requirements specified in 40 CFR § 257.83(b)(2).

Table 3-1. Requirements from 40 CFR § 257.83(b)(2) for BAPs

Requirement	Details
§ 257.83(b)(2)(i)	There have been no changes in the geometry of the BAPs since the previous annual inspection.
§ 257.83(b)(2)(ii)	All three BAPs have an AMATEK ultrasonic probe for water level measurements. The probes for BAP-1 and BAP-2 are located in the pumphouse, and the probe for BAP-3 is located at the overflow weir on the north edge of the pond.
§ 257.83(b)(2)(iii)	**Water and CCR depths/elevations:** Minimum since previous inspection: - BAP-1: 33.6 ft / 4,560.6 ft amsl - BAP-2: 7.0 ft / 4,546.0 ft amsl - BAP-3: 11.5 ft / 4,577.0 ft amsl Maximum since previous inspection: - BAP-1: 36.5 ft / 4,563.5 ft amsl - BAP-2: 15.7 ft / 4,554.7 ft amsl - BAP-3: 15.5 ft / 4,581.0 ft amsl At 2025 annual inspection: - BAP-1: 35.7 ft / 4,562.7 ft amsl - BAP-2: 15.3 ft / 4,554.3 ft amsl - BAP-3: 14.5 ft / 4,580.0 ft amsl
§ 257.83(b)(2)(iv)	**Remaining estimated storage capacity (2025 inspection):** - BAP-1: 16.42 MG - BAP-2: 34.86 MG - BAP-3: 87.80 MG
§ 257.83(b)(2)(v)	**Approximate volume of impounded water and CCR (2025 inspection):** - BAP-1: 119.2 MG - BAP-2: 179.3 MG - BAP-3: 151.5 MG
§ 257.83(b)(2)(vi)	There are no appearances of an actual or potential structural weakness of the impoundments, nor are there any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the BAPs and appurtenant structures. Minor erosion and desiccation cracking was noted at BAP-1 and BAP-3 (**Attachment C – Photos 15, 16, and 28**). Connective piping between BAPs appear to be in good condition; however, one of two temporary pump transfer pipes in the northeast corner of BAP-2 was noted as being submerged (**Attachment C – Photo 25**).
§ 257.83(b)(2)(vii)	There are no other changes that may affect the stability or operation of the impounding structure since the previous annual inspection.

Note: ft above mean sea level (ft amsl), million gallons (MG)

3.1.2 EHPs

The table below summarizes the requirements specified in 40 CFR § 257.83(b)(2).

Table 3-2. Requirements from 40 CFR § 257.83(b)(2) for EHPs

Requirement	Details
§ 257.83(b)(2)(i)	There has been no change in the geometry of E-EHP since the previous inspection. Since the previous annual inspection, the liner of the eastern lobe of the E-EHP has been removed and the area has been seeded. The geometry of the W-EHP has changed slightly due to the liner retrofit project which was completed in 2025. The Completion of Retrofit Certification (BEPC 2025b), which is available publicly online, states that the retrofit was completed in general accordance with the initial plans, but eliminated a through-berm transfer trench between W-EHP and E-EHP.
§ 257.83(b)(2)(ii)	An AMATEK ultrasonic probe that measures water level (located at the pump building) is present in the E-EHP. There is no instrumentation currently associated with the W-EHP.
§ 257.83(b)(2)(iii)	**Water and CCR depths/elevations:** Minimum since previous inspection: - W-EHP: Negligible water presence associated with liner retrofit activities - E-EHP: 6.0 ft / 4,520.0 ft amsl Maximum since previous inspection: - W-EHP: Negligible water presence associated with liner retrofit activities - E-EHP:17.0 ft / 4,531.0 ft amsl At 2025 annual inspection: - W-EHP: Negligible water presence associated with liner retrofit activities - E-EHP: 8.5 ft / 4,522.5 ft amsl -
§ 257.83(b)(2)(iv)	**Remaining estimated storage capacity (2025 inspection):** - W-EHP: 178.70 MG - E-EHP: 44.94 MG
§ 257.83(b)(2)(v)	**Approximate volume of impounded water and CCR (2025 inspection):** - W-EHP: 0 MG - E-EHP: 61.5 MG
§ 257.83(b)(2)(vi)	There are no appearances of an actual or potential structural weakness of the impoundments, nor are there any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the EHPs and appurtenant structures.
§ 257.83(b)(2)(vii)	There are no other changes that may affect the stability or operation of the impounding structure since the previous annual inspection.

4.0 Conclusions

As noted in the CCR Rules § 257.83(b)(5), "If a deficiency or release is identified during an inspection, the owner or operator must remedy the deficiency or release as soon as feasible and prepare documentation detailing the corrective measures taken." A deficiency is understood as a condition that would threaten the safety of the CCR unit such as a structural weakness or disrupting condition. Lesser deficiencies may be noted that are a deterioration, deformation, distortion, bedding, sedimentation (likely indication of erosion), and debris (placement) which may negatively affect the operation of the structure.

Items identified during the annual inspection and items identified during the document review that are regarded as potential deficiencies are discussed in **Section 4.1** below.

4.1 Deficiencies Discovered

The following paragraph details the observations noted for the BAPs during the annual inspection:

No significant deficiencies were noted as part of this annual inspection or document review. Minor erosion and desiccation cracking is present alongside BAP-1 and BAP-3 (**Attachment C – Photos 15, 16, and 28**). Large shrubs are present on the southern berm of BAP-2 (**Attachment C – Photo 22**). One of the outfall pipes in the northeast corner of BAP-2 is submerged in the pond (**Attachment C – Photo 25**).

The following paragraph details the observations noted for the EHPs during the annual inspection:

Sediment buildup and vegetation growth is present within the southeast corner of the E-EHP (**Attachment C – Photos 7 and 8**). Ruts have been formed along the south berm of the W-EHP and the side of the EL-ELP, likely due to vehicles used during construction activities (**Attachment C – Photos 2 and 12**).

4.2 Recommendations Other Than Normal Maintenance

While no issues are significant and would impact the structural or containment integrity, based on the observations noted during the annual inspections, it is recommended that LRS staff complete the following action items:

- Monitor the sediment buildup and vegetation growth in the southeast corner of E-EHP.
- Remove the large vegetation present on the southern berm of BAP-2.
- Fix the piping into the northeast corner of BAP-2 to prevent back siphoning.
- Restore the area where two-tracks have formed, upon completion of construction activities.

CCR Rule § 257.83(a)(i) states that routine inspection must occur at intervals not exceeding seven days. LRS staff completed the inspections every week and usually within 7 days or less. It was discussed with LRS staff to complete each inspection within seven days of the previous inspection.

4.3 Corrective Measures Taken

LRS facility personnel were informed of the recommendations given in the 2024 Annual Inspection Report (BEPC 2025). Road maintenance was completed; however, erosion and desiccation conditions remain consistent with those documented in the 2024 inspection. LRS personnel reviewed areas of thin vegetation, noting that the timing of fertilizer application will depend on adequate rainfall. The 2024 inspection noted a small portion of liner sticking up in the northwest corner above the waterline next to the berm roadway of the E-EHP which has been repaired.

On December 17, 2025, LRS staff noted that a tear had occurred in the newly constructed liner on the bottom of the W-EHP due to high wind conditions. The tear of the liner was due to the recent extreme wind event and was approximately 5 to 10 feet (ft) in length. Upon closer inspection, there were also several smaller tears in close proximity to the larger tear that appeared to also be due to the wind event blowing debris onto the liner. The impoundment had been partially filled with liquid across the floor; however, the nearest fluid was 20 to 30 ft downslope of the tears so fluid entering the tears was not a concern and did not occur. The impoundment was immediately taken out of service and was repaired three days later, on December 20, 2025, before being returned to service.

No corrective measures for significant deficiencies were noted that need to be addressed by LRS as part of this 2025 annual inspection.

5.0 References

AECOM Technical Services, Inc. (AECOM). 2020a. CCR Construction Certification, Basin Electric Power Cooperative Laramie River Station, East Emergency Holding Pond. November 3.

AECOM. 2020b. Design of Alternative Composite Liner, Basin Electric Power Cooperative Laramie River Station, Bottom Ash Surface Impoundment 1 and East Emergency Holding Pond. October 5.

AECOM. 2021a. CCR Rule Report: Periodic Safety Factor Assessment, Bottom Ash Pond 1, Laramie River Station. October 12.

AECOM. 2021b. CCR Rule Report: Periodic Structural Stability Assessment, Bottom Ash Pond 1, Laramie River Station. October 12.

AECOM. 2021c. CCR Construction Certification, Basin Electric Power Cooperative Laramie River Station, Bottom Ash Pond 1. March 18.

AECOM. 2021d. CCR Rule Report: Periodic Safety Factor Assessment, Bottom Ash Pond 2, Laramie River Station. October 12.

AECOM. 2021e. CCR Rule Report: Periodic Structural Stability Assessment, Bottom Ash Pond 2, Laramie River Station. October 12.

AECOM. 2021f. CCR Rule Report: Periodic Safety Factor Assessment, Bottom Ash Pond 3, Laramie River Station. October 12.

AECOM. 2021g. CCR Rule Report: Periodic Structural Stability Assessment, Bottom Ash Pond 3, Laramie River Station. October 12.

AECOM. 2021h. CCR Rule Report: Periodic Safety Factor Assessment, East Emergency Holding Pond, Laramie River Station. October 12.

AECOM. 2021i. CCR Rule Report: Periodic Structural Stability Assessment, East Emergency Holding Pond, Laramie River Station. October 12.

AECOM. 2021j. CCR Rule Report: Periodic Safety Factor Assessment, West Emergency Holding Pond, Laramie River Station. October 12.

AECOM. 2021k. CCR Rule Report: Periodic Structural Stability Assessment, West Emergency Holding Pond, Laramie River Station. October 12.

AECOM. 2022a. CCR Construction Certification, Basin Electric Power Cooperative Laramie River Station, Bottom Ash Pond 2. February 4.

AECOM 2022b. Design of Alternative Composite Liner, Basin Electric Power Cooperative Laramie River Station, Bottom Ash Pond 2. January 18.

AECOM 2022c. Design of Alternative Composite Liner, Basin Electric Power Cooperative Laramie River Station, Bottom Ash Pond 3. January 18.

AECOM. 2023. CCR Construction Certification, Basin Electric Power Cooperative Laramie River Station, Bottom Ash Pond 3. January 6.

Barr Engineering. 2025a. West Emergency Holding Pond Liner Design Certification (2025 Retrofit). Basin Electric Power Cooperative, Laramie River Station. June.

Barr Engineering. 2025b. Coal Combustion Residual Completion of Retrofit Certification, West Emergency Holding Pond. Basin Electric Power Cooperative, Laramie River Station. November.

Basin Electric Power Cooperative (BEPC). 2016. CCR Rule Report: Initial Inflow Design Flood Control System Plan, Bottom Ash Pond 1. Basin Electric Power Cooperative, Laramie River Station. October 2016.

BEPC. 2016a. CCR Rule Report: Initial Inflow Design Flood Control System Plan, Bottom Ash Pond 2. Basin Electric Power Cooperative, Laramie River Station. October 2016.

BEPC. 2016b. CCR Rule Report: Initial Inflow Design Flood Control System Plan, Bottom Ash Pond 3. Basin Electric Power Cooperative, Laramie River Station. October 2016.

BEPC. 2016c. CCR Rule Report: Initial Inflow Design Flood Control System Plan, East Emergency Pond. Basin Electric Power Cooperative, Laramie River Station. October 2016.

BEPC. 2016d. CCR Rule Report: Initial Inflow Design Flood Control System Plan, West Emergency Pond. Basin Electric Power Cooperative, Laramie River Station. October 2016.

BEPC. 2016e. Coal Combustion Residual Surface Impoundment History of Construction Documentation, Basin Electric Power Cooperative, Laramie River Station. October.

BEPC. 2021. Coal Combustion Residual Surface Impoundment Annual Inspection 2020, Basin Electric Power Cooperative, Laramie River Station. January.

BEPC. 2022. Coal Combustion Residual Surface Impoundment Annual Inspection 2021, Basin Electric Power Cooperative, Laramie River Station. January.

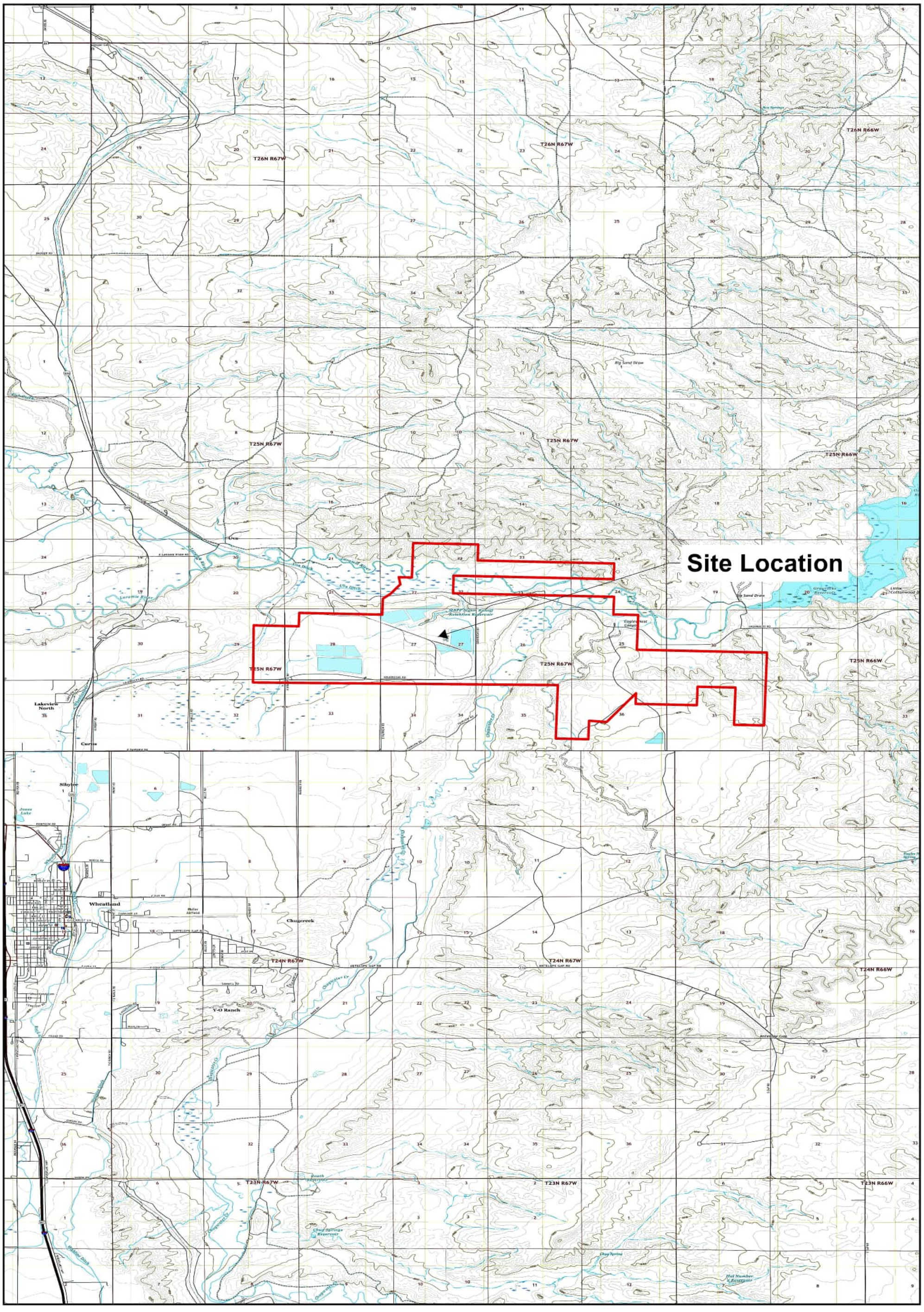
BEPC. 2023. Coal Combustion Residual Surface Impoundment Annual Inspection 2022, Basin Electric Power Cooperative, Laramie River Station. January.

BEPC. 2024. Coal Combustion Residual Surface Impoundment Annual Inspection Report – 2023, Basin Electric Power Cooperative, Laramie River Station. January 17.

BEPC. 2025. Coal Combustion Residual Surface Impoundment Annual Inspection Report – 2024, Basin Electric Power Cooperative, Laramie River Station. January 17.

Dihle, M. 2025. Personal Communication. October 6.

Figures



Basin Electric Power Cooperative
Annual Inspection Report
Wheatland, Wyoming
Project No.: 60732883 Date: 11/21/2025

Site Location Map

AECOM

Figure 1

Path: C:\Users\MoiseR\AECOM\EC GIS Services - GIS CAD PROJECTS\IDCS AMERICAS\REMWEST\F343\Basin Electric Power Cooperative\2024 CCR Inspection Reports\20251121\Work\Figure1_Site_Location_Map.aprx

Attachment A
Blank LRS Weekly Inspection Form

Basin Electric Power Cooperative Laramie River Station (LRS)
CCR Surface Impoundment and CCR Landfill
Periodic Inspection Checklist

Inspector:	Date:

Surface Impoundment Standards: At intervals not exceeding seven days, inspect the surface impoundment for any appearances of actual or potential structural weakness and other conditions which are disrupting or have the potential to disrupt the operation or_ safety of the CCR surface impoundment unit.

Yes	No	NIA	
			1. Does vegetation growth exceed 6" in height on surface impoundment dikes?
			2. Is there excessive, turbid, or sediment-laden seepage present?
			3. Are there signs of piping and other internal erosion?
			4. Is transverse, longitudinal, and severe desiccation cracking present?
			5. Are slides, bulges, boils, sloughs, scarps, sinkholes, or depressions present?
			6. Are there abnormally high or low pool levels?
			7. Are there animal burrows?
			8. Are there areas with excessive or lacking vegetative cover?
			9. Is any slope erosion present?
			10. Is any unusual debris present in the impoundment?

Actions taken to correct deficiencies (any question answered "Yes•) or other comments:

Surface Impoundment Hydraulic Structure Standards: At intervals not exceeding seven days, inspect the discharge of all outlets of hydraulic structures which pass underneath the base of the CCR surface impoundment or through the dike of the CCR surface impoundment. Facilities may have more than one outlet requiring periodic Inspection.

Yes	No	N/A	
			1. Is there any abnormal discoloration at discharge outlets?
			2. Is there any flow or discharge of debris or sediment?

Actions taken to correct deficiencies (any question answered "Yes") or other comments:

Landfill Standards: At intervals not exceeding seven days, inspect for any appearances of actual or potential structural weakness and other conditions w ich are disrupting or have the potential to disrupt the operation or safety of the CCR unit.

Yes	No	NIA	
			1. Are there signs of piping and other internal erosion?
			2. Is transverse, longitudinal, and severe desiccation cracking present?
			3. Are slides, bulges, bolls, sloughs, scarps, sinkholes, or depression's present?
			4. Are there animal burrows?
			5. Is any slope erosion present?

Actions taken to correct deficiencies (any question answered "Yes") or other comments:

CCR Fugitive Dust Standards: At Intervals not exceeding seven days, Inspect for CCR fugitive dust originating from CCR units, roads, and other CCR material management and material handling activities.

Yes	No	NIA	
			1. Is there any CCR dust observed at landfill(s)?
			2. Is there any CCR dust observed at surface impoundments(s)?
			3. Is there any CCR dust observed during ash loading or unloading activities?
			4. Is there any CCR dust observed during ash transport or other handling??

Actions taken to correct deficiencies (any question answered "Yes") or other comments:

Surface Impoundment Instrumentation Standards: At intervals not exceeding 30 days, inspect all CCR surface impoundment unit instrumentation.

Yes	No	NIA	
			1. Is impoundment instrumentation in good working order and functioning as designed? Each BAP & the East EHP have an AMATEK ultrasonic probe for water level measurements (accessed remotely).
			2. Is the staff gauge for pond levels in good working order and functioning as designed?

Actions taken to correct deficiencies (any question answered "No") or other comments:

Signature of Qualified Person: Title:

Attachment B
Blank Federal CCR Annual Inspection Form

Federal CCR Annual Inspection Form - Surface Impoundment

Station: _____ CCR Unit: _____

Date: _____ Inspector(s): _____

Weather Conditions: _____ Ground Conditions: _____

Purpose of Inspection: Per the CCR Rule published by the USEPA and entered into the federal register on October 19, 2015, existing and new CCR units are required to be inspected annually by a qualified professional engineer to ensure that the design, construction, operation, and maintenance of the CCR unit is in good condition and conforms to standard engineering practices for this type of facility.
Please refer to the attached figure to mark location of any identified conditions.

General Information:

Name of Owner/Operator:

Address of Owner/Operator:

State ID number of CCR unit (if available):

Name and size (acres) of the watershed within which the CCR unit is located: Laramie River

Records Review:	**Yes**	**No**	**NA**	**Location ID # or map identifier**
1) Have periodic inspections been conducted by a qualified person?				
2) Have the periodic inspections been recorded in the facility's operating record?				
3) Have any indications of structural instability been observed in the periodic inspections since the last annual inspection:				
3a) signs of piping or other internal erosion				
3b) transverse, longitudinal, or desiccation cracking				
3c) slides, bulges, boils, sloughs, scarps, sinkholes, or depressions				
3d) animal burrows				
3e) excessive or lacking vegetative cover				
3f) slope erosion				
Annual Inspection:				
1) Have there been any changes to the impoundment geometry since the last annual inspection?				
1a) any material removed?				
1b) any berms removed?				
1c) any berms constructed?				
1d) any berms modified?				
1e) any cap/cover system installed?				
1f) any other retrofits?				

Federal CCR Annual Inspection Form - Surface Impoundment

Station: _____ CCR Unit: _____ Date: _____

2) Are there any instruments associated with the impoundment?	☐	☐	☐	
2a) Are the instruments in good condition?	☐	☐	☐	
2b) Location:				
2c) Type:				
2d) Purpose:				
3) Are there any appearances of actual or potential structural weakness?	☐	☐	☐	
3a) signs of piping or other internal erosion	☐	☐	☐	
3b) transverse, longitudinal, or desiccation cracking	☐	☐	☐	
3c) slides, bulges, boils, sloughs, scarps, sinkholes, or depressions	☐	☐	☐	
3d) animal burrows	☐	☐	☐	
3e) excessive or lacking vegetative cover	☐	☐	☐	
3f) slope erosion	☐	☐	☐	
4) Are there any other conditions which are disrupting or have the potential to disrupt the operation and safety of the CCR unit?	☐	☐	☐	
5) Are there any signs of distress or malfunction of the CCR unit and appurtenant structures?	☐	☐	☐	
6) Are there any conditions of the hydraulic structures that could disrupt the structural integrity or continued safe operation?	☐	☐	☐	

Measurements:

Maximum recorded readings of each instrument since previous annual inspection:

Minimum depth and elevation of impounded water and CCR since previous annual inspection:

Maximum depth and elevation of impounded water and CCR since previous annual inspection:

Depth and elevation of impounded water and CCR at time of inspection:

Storage capacity of impounding structure at time of inspection:

Approximate volume of impounded water and CCR at time of inspection:

Surface Area (acres):

Elevation of impoundment dike crest:

Elevation of impoundment dike toe:

Federal CCR Annual Inspection Form - Surface Impoundment

Station: _____ CCR Unit: _____ Date: _____

Additional Comments: _____

_____

_____

_____

_____

Individual Completing Form: _____ _____

Print Signature

Attachment C
Photo Log of Annual Inspection

Aerial Source: Google Earth Pro

Basin Electric Power Cooperative
Bottom Ash Ponds
Wheatland, Wyoming
Project No.: 60732883 Date: 11/18/2025

Bottom Ash Ponds
Photo Map
September 8, 2025

N

350 0 700

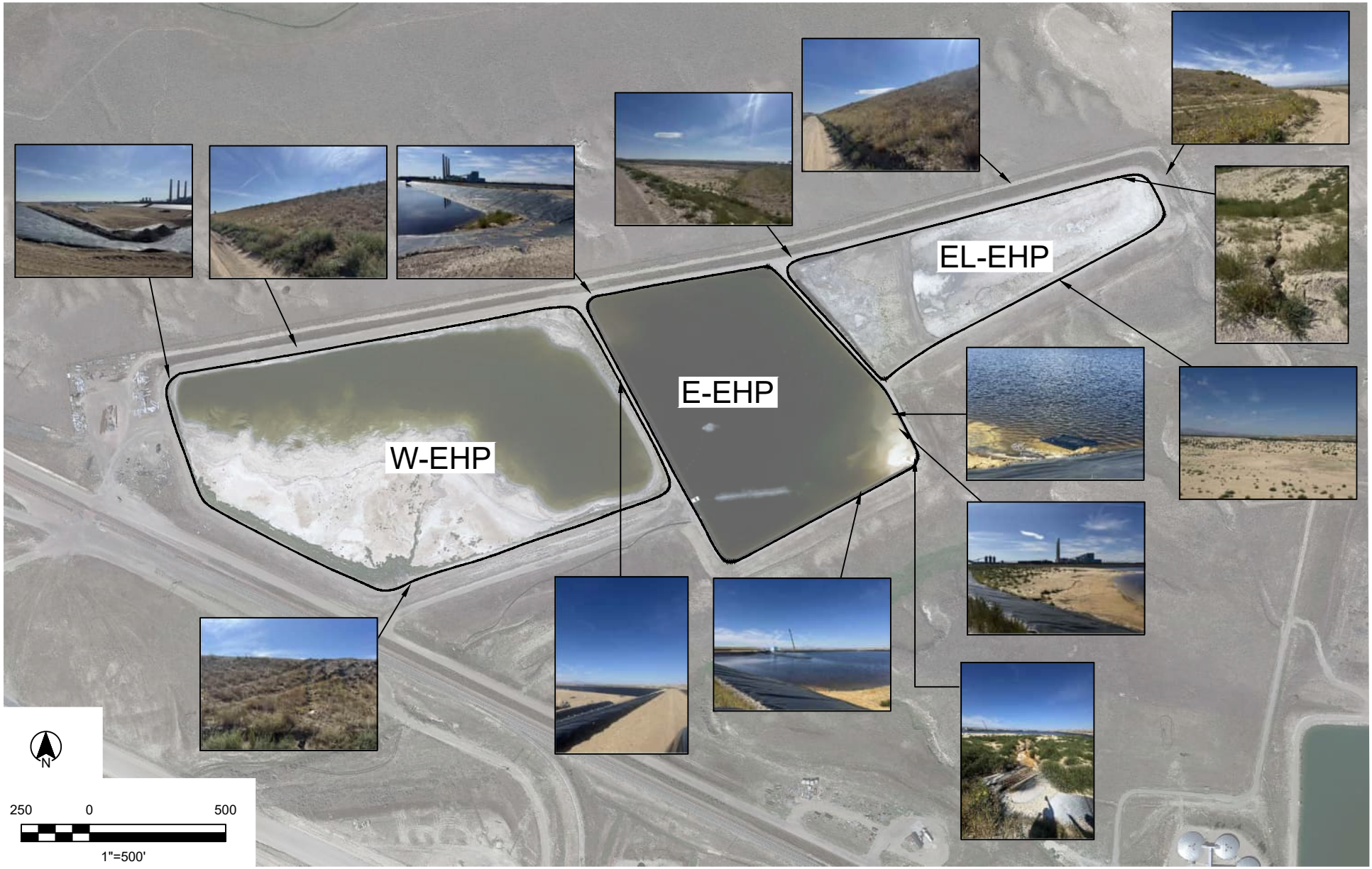
1"=700'

AECOM

Attachment C

File: C:\Users\MoiseR\AECOM\EC GIS Services - GIS CAD PROJECTS\DCS AMERICAS\REMWEST\F343\Basin Electric Power Cooperative\2024 CCR Inspection Reports\20251118\Work\CAD\EHPSPhotoMap_AA.dwg Layout: Ash Sept 2025 Date: 18 Nov, 2025 Xrefs:

Filename: C:\USERS\MOISER\AECOM\EC GIS SERVICES - GIS CAD PROJECTS\DCS AMERICAS\REMWEST\F343\BASIN ELECTRIC POWER COOPERATIVE\2024 CCR INSPECTION REPORTS\20251118\WORK\CAD\EHPSPHOTOMAP_AA.DWG
Last saved by: MOISER(2025-11-18) Last Plotted: 2025-11-18 Project Management Initials: Designer: RIM Checked: Approved:_____ ANSI A 8.5" x 11"



Basin Electric Power Cooperative
Emergency Holding Ponds
Wheatland, Wyoming
Project No.: 60732883 Date: 11/18/2025

Emergency Holding Ponds
Photo Map
September 8, 2025

AECOM

Attachment C

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Basin Electric Power Cooperative	Laramie River Station, Wheatland, WY	60732883

Photo No.	Date:
1	9/8/25

Direction Photo Taken:

Southeast

Description:

Location: Northwest corner of W-EHP.

Liner being installed in W-EHP.

Client Name:	Site Location:	Project No.
Basin Electric Power Cooperative	Laramie River Station, Wheatland, WY	60732883

Photo No.	Date:
2	9/8/25

Direction Photo Taken:

Northwest

Description:

Location: Berm along the south side of W-EHP.

Vehicle tracks along the berm, most likely from construction activities taking place.

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Basin Electric Power Cooperative	Laramie River Station, Wheatland, WY	60732883

Photo No.	Date:
3	9/8/25

Direction Photo Taken:

Northeast

Description:

Location: Berm along the north side of the W-EHP.

Strong vegetation along the berm.

Client Name:	Site Location:	Project No.
Basin Electric Power Cooperative	Laramie River Station, Wheatland, WY	60732883

Photo No.	Date:
4	9/8/25

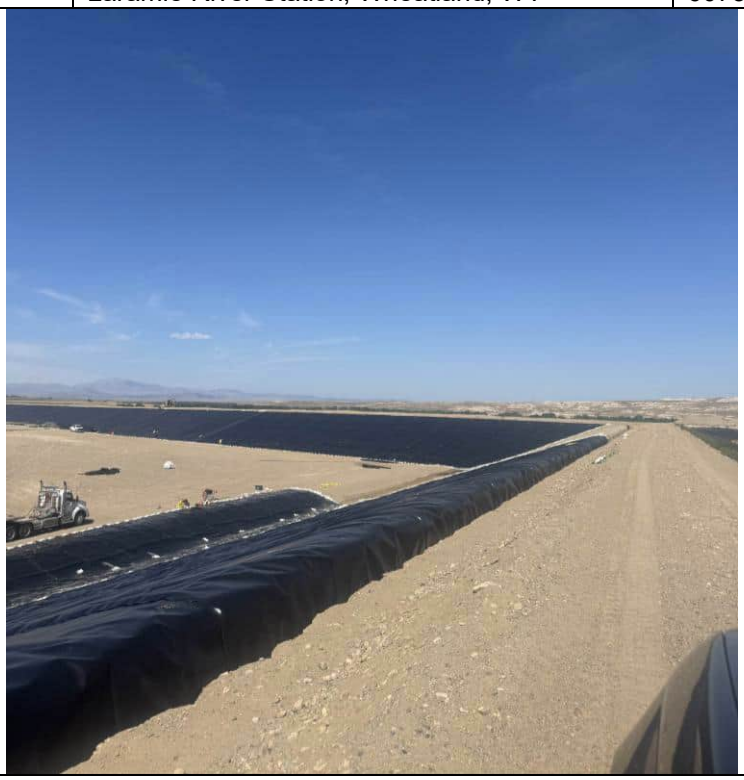
Direction Photo Taken:

Northwest

Description:

Location: Between the W-EHP and E-EHP.

Liner system being installed in W-EHP.



PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Basin Electric Power Cooperative	Laramie River Station, Wheatland, WY	60732883

Photo No.	Date:
5	9/8/25

Direction Photo Taken:

Southwest

Description:

Location: Northwest corner of E-EHP.

Vegetation and sediment buildup in the northwest corner of the E-EHP.

Client Name:	Site Location:	Project No.
Basin Electric Power Cooperative	Laramie River Station, Wheatland, WY	60732883

Photo No.	Date:
6	9/8/25

Direction Photo Taken:

Northeast

Description:

Location: South side of E-EHP.

View of E-EHP and evaporators in the pond.

Client Name: Basin Electric Power Cooperative	Site Location: Laramie River Station, Wheatland, WY	Project No. 60732883

Photo No. 7	Date: 9/8/25

Direction Photo Taken:

North

Description:

Location: Southeast corner of E-EHP.

Outfall into E-EHP and the surrounding sediment and vegetation buildup.

Client Name: Basin Electric Power Cooperative	Site Location: Laramie River Station, Wheatland, WY	Project No. 60732883

Photo No. 8	Date: 9/8/25

Direction Photo Taken:

Southeast

Description:

Location: Eastern side of E-EHP.

Sediment buildup and vegetation growth within the southeast corner of E-EHP.

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Basin Electric Power Cooperative	Laramie River Station, Wheatland, WY	60732883

Photo No.	Date:
9	9/8/25

Direction Photo Taken:

East

Description:

Location: Eastern side of E-EHP.

A piece of debris floating in E-EHP.

Client Name:	Site Location:	Project No.
Basin Electric Power Cooperative	Laramie River Station, Wheatland, WY	60732883

Photo No.	Date:
10	9/8/25

Direction Photo Taken:

Northeast

Description:

Location: Northwest corner of EL-EHP.

A view of EL-EHP, which is empty and no longer has a liner. All CCR was removed.

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Basin Electric Power Cooperative	Laramie River Station, Wheatland, WY	60732883

Photo No.	Date:
11	9/8/25

Direction Photo Taken:

Northeast

Description:

Location: Northern side of EL-EHP.

Strong vegetation along the northern berm of EL-EHP.

Client Name:	Site Location:	Project No.
Basin Electric Power Cooperative	Laramie River Station, Wheatland, WY	60732883

Photo No.	Date:
12	9/8/25

Direction Photo Taken:

Northwest

Description:

Location: Northeast corner of EL-EHP.

A two-track road has formed along the eastern side of EL-EHP, likely from construction activities.

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Basin Electric Power Cooperative	Laramie River Station, Wheatland, WY	60732883

Photo No.	Date:
13	9/8/25

Direction Photo Taken:

Northwest

Description:

Location: Southern side of EL-EHP.

View of EL-EHP. The liner system has been removed and vegetation has started to grow within EL-EHP.

Client Name:	Site Location:	Project No.
Basin Electric Power Cooperative	Laramie River Station, Wheatland, WY	60732883

Photo No.	Date:
14	9/8/25

Direction Photo Taken:

Northeast

Description:

Location: Southeast corner of BAP-3.

Outfall into BAP-3.

Client Name:	Site Location:	Project No.
Basin Electric Power Cooperative	Laramie River Station, Wheatland, WY	60732883

Photo No.	Date:
15	9/8/25

Direction Photo Taken:

East

Description:

Location: Eastern side of BAP-3.

Erosion rills under the piping.

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Basin Electric Power Cooperative	Laramie River Station, Wheatland, WY	60732883

Photo No.	Date:
16	9/8/25

Direction Photo Taken:

East

Description:

Location: Eastern side of BAP-3.

Closeup of an erosion rill under the piping.

Client Name: Basin Electric Power Cooperative	Site Location: Laramie River Station, Wheatland, WY	Project No. 60732883

Photo No. 17	Date: 9/8/25

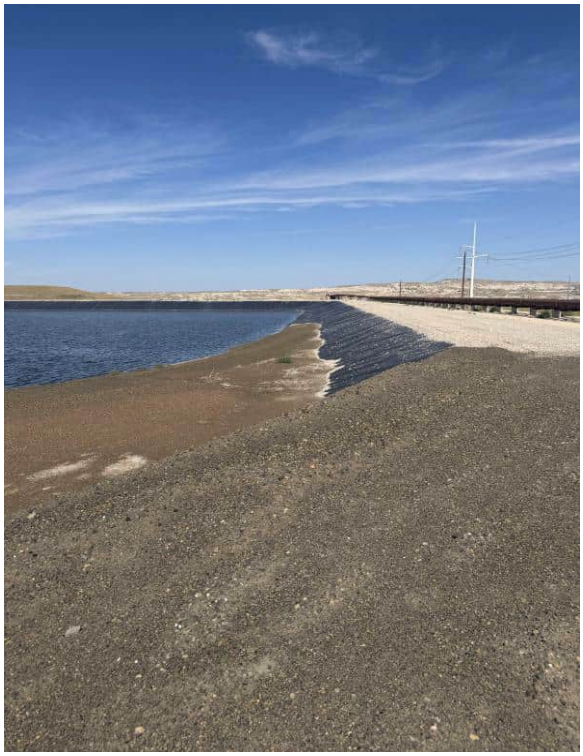
Direction Photo Taken:

North

Description:

Location: Eastern side of BAP-3.

Sediment along the liner.



Client Name: Basin Electric Power Cooperative	Site Location: Laramie River Station, Wheatland, WY	Project No. 60732883

Photo No. 18	Date: 9/8/25

Direction Photo Taken:

Southwest

Description:

Location: Eastern side of BAP-3.

Outfall into BAP-3 with surrounding sediment.

Client Name: Basin Electric Power Cooperative	Site Location: Laramie River Station, Wheatland, WY	Project No. 60732883

Photo No. 19	Date: 9/8/25

Direction Photo Taken:

East

Description:

Location: Southeast corner of BAP-2.

Outfall into BAP-2.

PHOTOGRAPHIC LOG

Client Name: Basin Electric Power Cooperative	Site Location: Laramie River Station, Wheatland, WY	Project No. 60732883

Photo No. 20	Date: 9/8/25

Direction Photo Taken:

West

Description:

Location: Southeast corner of BAP-2.

A piece of debris floating in BAP-2.

Client Name: Basin Electric Power Cooperative	Site Location: Laramie River Station, Wheatland, WY	Project No. 60732883

Photo No. 21	Date: 9/8/25

Direction Photo Taken:

North

Description:

Location: South side of BAP-2.

Evaporators present in BAP-2.

PHOTOGRAPHIC LOG

Client Name: Basin Electric Power Cooperative	Site Location: Laramie River Station, Wheatland, WY	Project No. 60732883

Photo No. 22	Date: 9/8/25

Direction Photo Taken:

South

Description:

Location: Southern berm of BAP-2.

Strong vegetation growing along the berm, which includes some larger plants.

Client Name: Basin Electric Power Cooperative	Site Location: Laramie River Station, Wheatland, WY	Project No. 60732883

Photo No. 23	Date: 9/8/25

Direction Photo Taken:

East

Description:

Location: Southwest corner of BAP-2.

Small amounts of gravel on the southern liner of BAP-2.

Client Name: Basin Electric Power Cooperative	Site Location: Laramie River Station, Wheatland, WY	Project No. 60732883

Photo No. 24	Date: 9/8/25

Direction Photo Taken:

East

Description:

Location: Northwest corner of BAP-2.

Gravel ramp into BAP-2.

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Basin Electric Power Cooperative	Laramie River Station, Wheatland, WY	60732883

Photo No.	Date:
25	9/8/25

Direction Photo Taken:

Northwest

Description:

Location: Northeast corner of BAP-2.

Piping into BAP-2. One of the pipes is submerged in the pond.

Client Name:	Site Location:	Project No.
Basin Electric Power Cooperative	Laramie River Station, Wheatland, WY	60732883

Photo No.	Date:
26	9/8/25

Direction Photo Taken:

Northeast

Description:

Location: Road between BAP-2 and BAP-1.

View of BAP-1.

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Basin Electric Power Cooperative	Laramie River Station, Wheatland, WY	60732883

Photo No.	Date:
27	9/8/25

Direction Photo Taken:

East

Description:

Location: Road between BAP-2 and BAP-1.

Evaporators in BAP-1.

Client Name:	Site Location:	Project No.
Basin Electric Power Cooperative	Laramie River Station, Wheatland, WY	60732883

Photo No.	Date:
28	9/8/25

Direction Photo Taken:

East

Description:

Location: Northern berm of BAP-1.

Erosion along the edge of the roadway.

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Basin Electric Power Cooperative	Laramie River Station, Wheatland, WY	60732883

Photo No.	Date:
29	9/8/25

Direction Photo Taken:

East

Description:

Location: Northern berm of BAP-1.

Strong vegetation along berm.

Client Name:	Site Location:	Project No.
Basin Electric Power Cooperative	Laramie River Station, Wheatland, WY	60732883

Photo No.	Date:
30	9/8/25

Direction Photo Taken:

South

Description:

Location: Southeast corner of BAP-1.

Outfall into BAP-1.

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Basin Electric Power Cooperative	Laramie River Station, Wheatland, WY	60732883

Photo No.	Date:
31	9/8/25

Direction Photo Taken:

Northeast

Description:

Location: Southwest corner of BAP-1.

Second outfall into BAP-1.

Client Name:	Site Location:	Project No.
Basin Electric Power Cooperative	Laramie River Station, Wheatland, WY	60732883

Photo No.	Date:
32	12/17/25

Direction Photo Taken:

Northeast

Description:

Location: Floor of W-EHP.

A tear approximately 5 to 10 feet in length, which appeared to be in the seam of the liner due to high winds. It was repaired three days later.

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Basin Electric Power Cooperative	Laramie River Station, Wheatland, WY	60732883

Photo No.	Date:
33	12/22/25

Direction Photo Taken:

Birds-eye view

Description:

Location: Floor of W-EHP.

The repaired tear as described above. There were also smaller tears in the area which were repaired.

Client Name:	Site Location:	Project No.
Basin Electric Power Cooperative	Laramie River Station, Wheatland, WY	60732883

Photo No.	Date:
34	12/22/25

Direction Photo Taken:

North

Description:

Location: Floor of W-EHP.

A closeup of the smaller tears which were repaired.