FEDERAL ENERGY REGULATORY COMMISSION
Washington, DC 20426
January 13, 2025

OFFICE OF ENERGY PROJECTS

Project No. 14787-004 – Wyoming
Seminoe Pumped Storage Project
Black Canyon Hydro, LLC

**VIA FERC Service**

**Reference: Scoping Document 2 for the Seminoe Pumped Storage Project, P-14787-004**

To the Parties Addressed:

The Federal Energy Regulatory Commission (Commission) is currently reviewing a license application filed on January 18, 2023, by rPlus Hydro, LLLP, on behalf of Black Canyon Hydro, LLC (BCH or applicant), to construct and operate the Seminoe Pumped Storage Project No. 14787-004 (Seminoe Project or project). The proposed project would be located at the U.S. Bureau of Reclamation's (Reclamation) Seminoe Reservoir on the North Platte River in Carbon County, Wyoming, approximately 35 miles northeast of Rawlins, Wyoming. The project would involve constructing a new upper reservoir, water conveyance and maintenance tunnel system, underground powerhouse, access bridge, and two overhead transmission lines. It would use Reclamation's existing Seminoe Reservoir on the North Platte River as its lower reservoir. The project would occupy 1,025.94 acres of land managed by the Bureau of Land Management (BLM) and 77.00 acres managed by Reclamation.

Pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended, Commission staff will prepare either an environmental assessment (EA) or an environmental impact statement (EIS) (collectively referred to as the "NEPA document"), which will be used by the Commission to determine whether, and under what conditions, to issue an original license for the project. Reclamation, BLM, the U.S. Fish and Wildlife Service (FWS), the U.S. Army Corps of Engineers, the Western Area Power Administration, and the Saratoga-Encampment-Rawlins Conservation District will cooperate in preparing the NEPA document. To support and assist our environmental review, we are conducting scoping to ensure that all pertinent issues are identified and analyzed, and that the NEPA document is thorough and balanced. The Commission's

scoping process will satisfy the NEPA scoping requirements, irrespective of whether the Commission issues an EA or an EIS.

Our preliminary review of the scope of environmental issues to be addressed in the NEPA document were described in Scoping Document 1 (SD1), issued on September 6, 2024. We requested comments on SD1 to obtain the views of all interested entities on the scope of issues that should be addressed in the NEPA document. Commission staff conducted an environmental site visit on September 25, 2024, and held scoping meetings on September 24 and September 25, 2024. Based on comments we received during the scoping meetings and written comments filed during the scoping process, we have updated SD1 to reflect our current view of the issues and alternatives to be considered in the NEPA document. ***Key changes from SD1 to Scoping Document 2 (SD2) are identified in bold, italicized type***.

SD2 is being distributed to the Commission's official mailing list (see section 7.0 of the attached SD2). If you wish to be added to or removed from the Commission's official mailing list, please send your request by email to FERCOnlineSupport@ferc.gov or via the U.S. Postal Service to: Debbie-Anne A. Reese, Secretary, Federal Energy Regulatory Commission, 888 First Street, N.E., Room 1A, Washington, DC 20426. Submissions sent via any other carrier must be addressed to: Debbie-Anne A. Reese, Secretary, Federal Energy Regulatory Commission, 12225 Wilkins Avenue, Rockville, Maryland 20852. All written or emailed requests must specify your wish to be added to, or removed from, the mailing list, and must clearly identify the following on the first page: **Seminoe Pumped Storage Project No. 14787-004.**

You may also register online at https://ferconline.ferc.gov/FERCOnline.aspx to be notified via email of new filings and issuances related to this or other pending projects. For assistance, please contact FERC Online Support at ferconlinesupport@ferc.gov.

SD2 is issued for informational use by all interested entities; no response is required. If you have any questions about SD2, the scoping process, or how Commission staff will develop the NEPA document for this project, please contact Michael.Tust@ferc.gov. Additional information about the Commission's licensing process and the Seminoe Pumped Storage Project may be obtained from the Commission's website, http://www.ferc.gov.

Enclosure: Scoping Document 2

SCOPING DOCUMENT 2

# SEMINOE PUMPED STORAGE PROJECT
# (FERC NO. 14787-004)

WYOMING

Federal Energy Regulatory Commission
Office of Energy Projects
Division of Hydropower Licensing
Washington, DC

January 2025

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# SCOPING DOCUMENT 2

## Seminoe Pumped Storage Project (FERC No. 14787-004)

## 1.0 INTRODUCTION

The Federal Energy Regulatory Commission (Commission or FERC), under the authority of the Federal Power Act (FPA),[1] may issue licenses for terms ranging from 30 to 50 years for the construction, operation, and maintenance of non-federal hydroelectric projects. On January 18, 2023, rPlus Hydro, LLLP, on behalf of Black Canyon Hydro, LLC (BCH or applicant), filed an application for an original license to construct and operate the Seminoe Pumped Storage Project No. 14787-004 (Seminoe Project or project).

The Seminoe Project would be located at the U.S. Bureau of Reclamation's (Reclamation) Seminoe Reservoir on the North Platte River in Carbon County, Wyoming, approximately 35 miles northeast of Rawlins, Wyoming. The project would involve constructing a new upper reservoir, water conveyance and maintenance tunnel system, underground powerhouse, access bridge, and two overhead transmission lines. It would use Reclamation's existing Seminoe Reservoir on the North Platte River as its lower reservoir. The project would occupy 1,025.94 acres of land managed by the Bureau of Land Management (BLM) and 77.00 acres managed by Reclamation.

Water from the Seminoe Reservoir would be used to initially fill the new upper reservoir (i.e., 13,400 acre-feet) and provide make-up water (i.e., 672 acre-feet annually). Once the upper reservoir is filled, approximately 10,800 acre-feet could be cycled between the upper reservoir and Seminoe Reservoir each day and the project would be capable of generating 2,916 gigawatt-hours per year. Approximately 317,860 homes could be powered for a year with 2,916 gigawatt-hours of electricity, based on the average annual consumption of 9,173 kWh per household for the state of Wyoming.[2] A detailed description of the project is provided in section 3.0.

[1] 16 U.S.C. § 791(a)-825(r).

[2] See: https://www.eia.gov/consumption/residential/data/2020/state/pdf/ce4.6.el.st.pdf. Accessed September 5, 2024.

The National Environmental Policy Act (NEPA) of 1969,[3] the Commission's regulations, and other applicable laws require that we independently evaluate the environmental effects of licensing the project as proposed and consider reasonable alternatives to the proposed action. Reclamation, BLM, the U.S. Fish and Wildlife Service (FWS), the U.S. Army Corps of Engineers (USACE), the Western Area Power Administration, and the ***Saratoga-Encampment-Rawlins Conservation District (SER Conservation District)*** will cooperate in preparing the NEPA document.[4] We will prepare either an environmental assessment (EA) or an environmental impact statement (EIS) (collectively referred to as the "NEPA document") that describes and evaluates the probable effects, including an assessment of the site-specific and cumulative effects, if any, of the proposed action and alternatives. The Commission's scoping process will help determine the required level of analysis and satisfy the NEPA scoping requirements, irrespective of whether the Commission issues an EA or an EIS.

To construct the project, BCH will need to obtain a lease of power privilege[5] from Reclamation for use of Seminoe Reservoir, a right-of-way authorization from BLM for use of BLM-managed lands, a permit from the USACE under Section 404 of the Clean Water Act, and a license from the Commission, ***along with other state and local permits and authorizations***. Additionally, BLM's Rawlins Field Office Resource Management Plan will need to be amended to support the proposed Seminoe Pumped Storage Project. The NEPA analysis will support Reclamation's, BLM's, and the USACE's decision documents.

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[3] National Environmental Policy Act of 1969, amended (Pub. L. 91-190. 42 U.S.C. §§ 4321–4347, as amended by Pub. L. 94-52, July 3, 1975, Pub. L. 94-83, August 9, 1975, Pub. L. 97-258, §4(b), September 13, 1982, Pub. L. 118-5, June 3, 2023).

[4] ***In Scoping Document 1, we indicated that Wyoming State Parks, Historic Sites, and Trails would also be cooperating in preparing the NEPA document. However, Wyoming State Parks, Historic Sites, and Trails filed a letter on October 10, 2024, indicating that it no longer wanted to be a cooperating agency for the Seminoe Project licensing.***

[5] A Lease of Power Privilege (LOPP) is a contractual right given to a non-federal entity to use a Reclamation project facility for electric power generation consistent with Reclamation project purposes. A LOPP project must not impair the efficiency of Reclamation generated power or water deliveries, jeopardize public safety, or negatively affect any other Reclamation project purposes. More information can be found at: https://www.usbr.gov/power/.

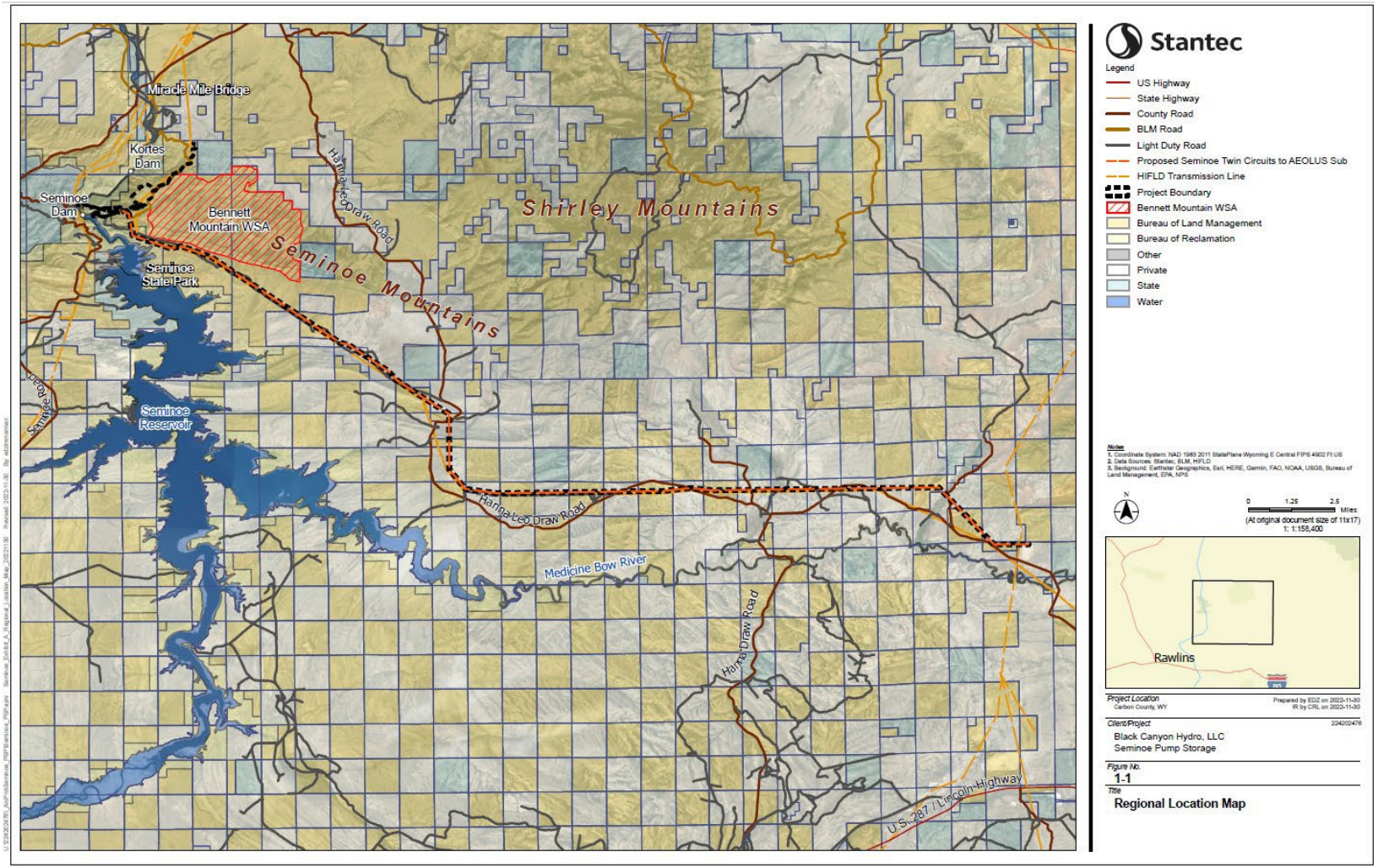


**Figure 1: Location of the Seminoe Pumped Storage Project (Source: License Application).**

# 2.0 SCOPING

This Scoping Document 2 (SD2) is intended to advise all participants as to the potential scope of the NEPA document. This document contains: (1) a description of the scoping process and schedule for the development of the NEPA document, (2) a description of the proposed action and alternatives to the proposed action, (3) a preliminary identification of environmental issues, and (4) a preliminary list of comprehensive plans that are applicable to the project.

## 2.1 PURPOSES OF SCOPING

Scoping is the process used to identify issues, concerns, and opportunities for enhancement or mitigation associated with a proposed action. In general, scoping should be conducted during the early planning stages of a project. The purposes of the scoping process are as follows:

- invite participation of federal, state and local resource agencies, Native American Tribes, non-governmental organizations (NGOs), and the public to identify significant environmental and socioeconomic issues related to the proposed project;

- determine the resource issues, depth of analysis, and significance of issues to be addressed in the NEPA document;

- identify how the project would or would not contribute to cumulative effects in the project area;

- identify reasonable alternatives to the proposed action that should be evaluated in the NEPA document;

- solicit from participants available information on the resources at issue, including existing information; and

- determine the resource areas and potential issues that do not require detailed analysis during review of the project.

## 2.2 SCOPING COMMENTS

***Commission staff issued Scoping Document 1 (SD1) on September 6, 2024, to enable resource agencies, Native-American Tribes, NGOs, and the public to participate more effectively, and contribute to, the scoping process. In SD1, we requested clarification of preliminary issues concerning the Seminoe Pumped Storage Project and identification of any new issues that needed to be addressed in the NEPA document. We revised SD1 based on the comments received during the scoping comment period, which ended November 5, 2024. SD2 presents our current view of issues and alternatives to be considered under NEPA. To facilitate review, key changes to issues from SD1 are identified in bold and italicized type.***

***We conducted two scoping meetings in Casper, Wyoming on September 24, 2024, and conducted a third scoping meeting in Rawlins, Wyoming on September 25, 2024. We conducted an environmental site visit on September 25, 2024. A court reporter recorded oral comments made during the scoping meetings.***

***In addition to the oral comments received at the scoping meetings, written comments were also received from the following entities:***

| *COMMENTING ENTITY* | *FILING DATE* |
|---|---|
| *U.S. Representative Harriet M. Hageman* | *October 17, 2024* |
| *Alan Dorn Hetzel, Jr.* | *October 30, 2024* |
| *rPlus Hydro (on behalf of BCH)* | *November 4, 2024* |
| *BLM* | *November 4, 5, and 7, 2024* |
| *Wyoming Department of Environmental Quality (Wyoming DEQ)* | *November 4, 2024* |
| *Wyoming Wild Sheep Foundation* | *November 5, 2024* |
| *Wyoming State Engineer's Office* | *November 5, 2024* |
| *National Wildlife Federation and Wyoming Wildlife Federation* | *November 5, 2024* |
| *Julia Stuble (on behalf of the Wilderness Society, Wyoming Wilderness Association, and the Wyoming Outdoor Council)* | *November 6, 2024* |
| *Wyoming Game and Fish Department (Wyoming GFD)* | *November 6, 2024* |
| *Wyoming Department of State Parks and Cultural Resources, Division of State Parks, Historic Sites, and Trails (Wyoming State Parks)* | *November 6, 2024* |
| *SER Conservation District* | *November 6, 2024* |

***Scoping meeting transcripts and all comments received are part of the Commission's official record for the project. Information in the official file is***

***available for review on the Commission's website at http://www.ferc.gov using the "eLibrary" link. For assistance, please contact FERC at FERCOnlineSupport@ferc.gov, (866) 208-3676 (toll free), or (202) 502-8659 (TTY).***

## 2.3 ISSUES RAISED DURING SCOPING

***The issues raised during the comment period are summarized and addressed below. As the primary purpose of SD2 is to identify issues to be analyzed in the NEPA document, we revised SD1 to address only those comments relating directly to the scope of the environmental analysis. We do not address general comments supporting or objecting to the project or comments directed at the applicant. We also do not address recommendations for license conditions such as protection, mitigation, and enhancement measures (e.g., pre-construction raptor nest surveys, seasonal construction restrictions for wildlife, etc.), as the need for such measures will be addressed in the NEPA document should they be recommended after issuance of the Commission's Ready for Environmental Analysis Notice. We also do not address comments or recommendations that are administrative in nature, such as requests for changes to the mailing list. Those administrative comments/recommendations will be addressed separate from the environmental analysis.***

***General Comments***

***Comment: Wyoming State Parks and SER Conservation District state that page 2 of SD1 makes no mention of required state permits and is incomplete.***

***Response: This section was not intended to be an exhaustive list of all necessary permits and authorizations needed for the project but was meant to highlight or summarize those that would be required by each of the agencies cooperating with the Commission in preparing the NEPA documents. However, we revised the last paragraph on page 2 to mention that other state and local permits and authorizations would be needed in addition to the various federal permits and authorizations specifically cited in that section.***

***Comment: Wyoming State Parks references the footnote 4 on page 2 of the SD1 describing Reclamation's lease of power privilege (LOPP) and asks "(w)ould any impacts on the State Park and recreation experience need to be mitigated prior to issuance of the LOPP?"***

***Response: The NEPA analysis will evaluate the effects of constructing and operating the project on the State Park and recreation experience and include recommendations for mitigating those effects. If a license and LOPP are issued by the Commission and Reclamation respectively, the Commission's license and Reclamation's LOPP would require implementation of those measures found to be in the public interest.***

***Comment: Wyoming State Parks references footnote 13 on page 31 of the SD1 discussing the need for an amendment to BLM's Rawlins Resource Management Plan and states that the footnote "does not provide details on how the proposal could be sufficiently modified to be in conformance with the RMP. Would this be handled as a project alternative, or would that become the new proposal? Would a new proposal be issued as a Scoping Document 2, or later in the project timeline?"***

***SER Conservation District states that "additional information needs to be provided regarding the extent to which the RMP will have to be amended for both Visual Resource Management and wildlife habitat changes. These two NEPA processes will take time and we believe this will require adjustments to the major milestone list in section 6-Current Processing Schedule."***

***Response: The purpose of the footnote was simply to state that BLM has indicated that a plan amendment will be needed based on the applicant's current proposal. The NEPA analysis will explain the conflicts with the current RMP and consider measures that would minimize those conflicts. Regarding the processing schedule, we indicate in section 5 that any needed revisions to the schedule will be made as appropriate.***

***Comment: At the scoping meeting held on September 25, 2024, Jesse Martinez questioned the long-term public benefit of the project given that the pumped storage project would not be a net producer of energy and the fact that existing wind and nuclear energy projects already provide alternative energy storage.***

***BLM states that given that the project would be "net zero" energy producing and given the "substantial impacts to recreation/visual/wildlife/wilderness/public access," the agency questions if there is a significant need for the project that would justify the potential impacts.***

***Response: Pumped storage projects are generally net energy consumers because they require more energy to pump water to the upper reservoir than is***

***produced when generating. Pumped storage is not meant to replace wind or nuclear but it can complement them by addressing energy variability and demand fluctuations. Wind power is intermittent, producing electricity when the wind blows, which may not align with peak energy demand. Pumped storage contributes to grid stability by offering rapid response times during peak demand or emergencies. While nuclear provides steady baseload power, it cannot ramp up or down quickly to meet sudden demand spikes. Pumped storage can help to fill this gap, enhancing grid reliability. As part of the NEPA analysis, we will compare the current cost to produce project power to an estimate of the cost to provide the same amount of energy and capacity for the region using the most likely alternative source of power (cost of alternative power). Furthermore, while the analysis helps support an informed decision concerning what is in the public interest, project economics is only one of many public interest factors the Commission considers in determining whether, and under what conditions, to issue a license.***

***Comment: The National Wildlife Federation, Wyoming Wildlife Federation, SER Conservation District, and Julia Stuble (on behalf of the Wilderness Society, Wyoming Wilderness Association, and the Wyoming Outdoor Council) state that the project is a major federal action and warrants an environmental impact statement (EIS).***

***Response: Commission staff will decide whether to prepare an EA or EIS after we determine the scope of effects and measures under consideration and after we consult with agencies cooperating with FERC staff on the NEPA document to determine whether the project proposal is sufficiently developed.***

***Comment: Wyoming State Parks asked whether the electricity generated by the Seminoe Pumped Storage Project is expected to be used in Wyoming or transmitted to other states.***

***Response: In the final license application, BCH proposes to develop the Seminoe Pumped Storage Project to support grid reliability for Wyoming and the greater region.***

***<u>Proposed Action</u>***

***Comment: At the scoping meeting held on September 25, 2024, Leigh Nation stated that even though the proposed transmission line would follow an existing transmission corridor, it should still be analyzed for potential effects.***

***Response: Commission staff will assess effects of the proposed transmission line on the environmental resources identified in section 4.2. Therefore no changes to SD2 are needed.***

***Comment: While referencing section 3.2.1, Proposed Project Facilities, BCH clarified that the crest elevation of the upper reservoir is 7,455 feet and the maximum operating pool elevation is 7,445 feet, allowing for a 10-foot freeboard between the maximum operating level and the dam crest.***

***Response: We revised section 3.2.1 to include this information.***

***Comment: BCH stated that the first bullet under the terrestrial resource header in section 3.2.3, Proposed Environmental Measures, regarding wetland mitigation should be revised to state that consultation would occur with the USACE rather than BLM.***

***Response: We modified section 3.2.3 to reflect this change; however, BCH's updated Protection, Mitigation, and Enhancement Summary Table filed December 9, 2024, still indicates it would consult with BLM.***

***Comment: BCH states that the footnote 13 on page 31 of Scoping Document 1 should clarify that the proposed upper reservoir structure would be a ring dam with a maximum height of 185 feet at its deepest point along the foundation perimeter.***

***Response: We revised the footnote to include this information.***

***<u>Alternatives to the Proposed Action</u>***

***Comment: The National Wildlife Federation and Wyoming Wildlife Federation request that the Commission consider a reasonable range of alternatives suggesting that considering a closed loop design over an open loop design as an example. They also state that a "choice in this situation between granting the Project's required permits, and granting nothing at all, does not present a reasonable range of alternatives. Therefore, we urge FERC to analyze alternatives that lie between granting and denying relevant permits."***

***Julia Stuble (on behalf of the Wilderness Society, Wyoming Wilderness Association, and the Wyoming Outdoor Council) states the analysis should consider***

***alternative locations that would lessen or remove the negative impacts to Bennett Mountain WSA's wilderness qualities and visual character of the landscape or modifications to the project design that limits those impacts.***

***SER Conservation District states the SD1 "fails to consider any alternatives that would consider other locations, adjustments to the size of the facility, less impacts to the resources, reduced tunnels, alternative access road locations, or any other alternatives that would provide an appropriate "range of alternatives" required by NEPA."***

***BLM also asks why no alternative project locations are being proposed or discussed.***

***Response: The Commission does not design or site projects. Rather it determines based on a sufficiently developed license application whether a proposed project can be constructed and operated in a fashion that is the public interest and the best comprehensive use of the waterway. Exhibit B of BCH's license application includes information on the types of design alternatives and siting details BCH considered and the reasons for not choosing them as part of their developmental proposal. Our environmental analysis will consider BCH's proposal as well as measures recommended by stakeholders in response to the Commission's Ready for Environmental Analysis Notice, including recommendations for design or operational changes, or other measures designed to avoid or minimize impacts to environmental resources.***

***<u>Cumulative Effects</u>***

***Comment: BCH states that the geographic scope for cumulative effects for big game species and their habitats should reference herd units for each species instead of watersheds. BCH states the relevant herd units for each species are as follows: Ferris-Seminoe herd unit for Bighorn Sheep; Shirley Mountain and Ferris herd units for elk; Medicine Bow, North Ferris, and South Ferris herd units for Pronghorn; and Ferris and Shirley Mountain herd units for Mule Deer.***

***Response: The geographic scope provided in section 4.1.2 is a description of the spatial boundaries of the cumulative effects analysis for big game species and their habitats. Therefore, it is appropriate for staff to define the geographic scope of the cumulative effects analysis by identifying the watersheds where these herd units may be***

***present. The herd units identified by BCH reflect the herd units that will be evaluated within this geographic scope. Therefore, no change to SD2 is needed.***

***Comment: Without elaboration, BCH states that in its view the geographic scope for cumulative effects for water quality and fisheries (i.e., 27-mile-long reach from the upper extent of Seminoe Reservoir downstream to Pathfinder Dam) "seems excessive and may need to be re-evaluated."***

***Response: As we indicate in 4.1.2, our geographic scope of analysis for cumulatively affected resources is defined by the physical limits or boundaries of: (1) the proposed action's effect on the resources, and (2) contributing effects from other hydropower and non-hydropower activities within the basin. Staff have determined that ongoing operation of Seminoe Dam and Reservoir and the downstream Kortes Dam and Reservoir could in combination with the proposed project affect water quality and fish resources (and their habitat) in the North Platte River from Seminoe Reservoir downstream through Seminoe and Kortes Dams and through the 5.5-mile-long "Miracle Mile" reach of the river from the tailrace of Kortes Dam to the reservoir for Pathfinder Dam. BCH did not offer an alternative scope or provide a sufficient rationale why staff's proposed scope is not reasonable or appropriate. Therefore, we have no basis for revising our proposed geographic scope.***

***Comment: Wyoming State Parks requests that "recreation" be added as a cumulatively affected resource, stating that "any impacts to fisheries and wildlife have a consequent impact to recreation, especially in this area where the project area is adjacent to so much public land and popular recreation destinations."***

***Response: Water quality and fish resources have a direct effect on recreation resources at the project. Thus, because staff have determined that ongoing operation of Seminoe Dam and Reservoir and the downstream Kortes Dam and Reservoir could in combination with the proposed project affect water quality and fish resources (and their habitat) in the North Platte River from Seminoe Reservoir downstream through Seminoe and Kortes Dams and through the 5.5-mile-long "Miracle Mile" reach of the river from the tailrace of Kortes Dam to the reservoir for Pathfinder Dam, it is a reasonable request to include recreation as a resource to be analyzed under cumulative effects. Therefore, we have modified section 4.1.1 and 4.1.2 to include recreation.***

***Dam Safety***

***Comment: SER Conservation District raised a concern regarding Seminoe Dam's structural integrity. They mention that during the site visit, it was discussed that the Seminoe Dam was showing some signs of future dam failure and that the engineers present stated that the dam would need to be rebuilt at some point. SER Conservation District is concerned that all the blasting required to create tunnels for this project may contribute to a premature failure of the dam and this issue needs to be thoroughly analyzed during the NEPA process.***

***Response: If a license is issued for the project, the Commission's Division of Dam Safety and Inspections would evaluate the stability of the reservoir embankment dams under all probable loading conditions, including seismic loading. The Division of Dam Safety and Inspections would review geotechnical studies provided in support of the project's final design to ensure that project features are designed to safely withstand all credible loading conditions and ensure safe operating conditions. Furthermore, an independent Board of Consultants would perform a peer-review of the final project design. The Board of Consultants consists of qualified professionals with expertise in the design and construction of dams of commensurate size. The Board of Consultants would review the geology of the project site and surroundings, the project design, the plans and specifications, and would oversee construction of the project. The Commission would not allow construction to begin until the project facilities satisfactorily meet the criteria of the Commission's Engineering Guidelines and the designs are shown to be safe and adequate.***

***Comment: SER Conservation District requests an analysis of the need for a constructed, overflow spillway. They mention that there needs to be a way to let water flow out of the reservoir, not just an "emergency" spillway that would cause water to freely flow over the mountain-side back to the river.***

***Wyoming State Parks asks if there are any public safety measures being considered such as keeping boats and recreators a safe distance away from the lower intake structures.***

***Response: Water levels in pumped storage reservoirs are tightly controlled through pumping and generation cycles. Operators actively manage water movement between reservoirs which generally reduces the overflow potential. In this case, BCH has proposed safety and operational features such as emergency shutoff systems where pumps and turbines can halt operations quickly to prevent further water transfer***

***into an already full reservoir as well as an emergency spillway that would only be utilized in the event of a catastrophic failure to all back up redundant sensors to stop the pumping of water. The proposed emergency spillway would consist of a 200-foot-long, ungated, ogee crest with a weir crest elevation of 7,446 feet (i.e., one foot above the maximum normal water level of 7,445 feet), which if ever utilized would direct the spilling water down a stepped spillway located on the face of the upper reservoir dam into a stilling basin and then into a natural gulley before discharging into Kortes Reservoir. Additionally, Emergency Action Plans (EAPs) are an integral part of the Commission's dam safety program and thus would be required to be filed prior to operation. An EAP is a formal document that identifies potential emergency conditions at a dam and specifies pre-planned actions to be followed to minimize property damage and loss of life. The EAP describes actions the licensee will take to moderate or alleviate a problem at the dam, as well as what actions the licensee, in coordination with emergency management authorities, should take to respond to incidents or emergencies related to the dam. Filing requirements for EAPs are described in Part 12, Subpart C of the Commission's regulations (see also https://www.ferc.gov/industries-data/hydropower/dam-safety-and-inspections/eng-guidelines).***

***<u>Geology and Soil Resources</u>***

***Comment: At the scoping meeting held on September 25, 2024, Leigh Nation expressed concern about whether the surrounding mountain and rock terrain can withstand the proposed blasting that would occur during construction of the tunnels.***

***SER Conservation District states that "geology studies need to be included in the analysis for the stability of the proposed upper reservoir and the entire impacted area to ensure the amount of blasting won't exacerbate existing geologic issues in the area. This area is not a solid bedrock area. The mix of rocks and soils that is present naturally allows for instability for the upper reservoir, access tunnels, and canyon above the river at the bridge location."***

***Response: As stated previously, if a license is issued for the project, the Commission's Division of Dam Safety and Inspections would evaluate the stability of the reservoir embankment dams under all probable loading conditions, including seismic loading. The Division of Dam Safety and Inspections would review geotechnical studies provided in support of the project's final design to ensure that project features are designed to safely withstand all credible loading conditions and ensure safe operating conditions. Furthermore, an independent Board of Consultants***

***would perform a peer-review of the final project design. The Board of Consultants consists of qualified professionals with expertise in the design and construction of dams of commensurate size. The Board of Consultants would review the geology of the project site and surroundings, the project design, the plans and specifications, and would oversee construction of the project. The Commission would not allow construction to begin until the project facilities satisfactorily meet the criteria of the Commission's Engineering Guidelines and the designs are shown to be safe and adequate.***

***Comment: At the scoping meeting held on September 25, 2024, Jesse Martinez questioned whether adding to existing spoil piles would be possible given all the rock materials that will be moved. Mr. Martinez also questioned whether it would even be possible to grow vegetation on top of the mounds of exploded and chipped rock and questioned where the top soil to achieve this would be sourced from and where other materials needed for construction would be imported from.***

***SER Conservation District states that "soil disturbance and dust abatement are of great concern" and also questions whether appropriate amounts of topsoil can be stockpiled for reclamation of disturbed lands at the project.***

***Response: As part of our analysis of geology and soils, we will evaluate BCH's proposal for managing construction spoils on soil erosion and sedimentation and have revised the bullets under section 4.2.3 to specifically evaluate spoil disposal on terrestrial resources (e.g., vegetation and wildlife). Additionally, we will assess the need for additional or modified measures related to managing construction spoils should they be recommended after issuance of the Commission's Ready for Environmental Analysis Notice.***

***<u>Aquatic Resources</u>***

***Comment: At the scoping meeting held on September 25, 2024, Leigh Nation questioned where the water right and the power to pump water would be purchased from.***

***The Wyoming State Engineer's state that the project needs to address the permitting requirements and the contracts and/or agreements that will be used for the initial fill of the reservoir and the annual replacement of water lost to evaporation.***

***SER Conservation District also questions where the water right needed for reservoir filling and annual re-fill would come from and both SER Conservation District and BLM state that the water rights should be permitted before any construction occurs.***

***Response: BCH states in its license application that it anticipates relying on surface water from existing water rights within the North Platte River Basin as its water source for initial fill and make-up water for the Project. They state this would likely require securing a temporary or permanent agreement to acquire water supplies from existing water rights holders in the North Platte River basin. If the project is licensed, the Commission would typically include a standard license article requiring that the licensee acquire all applicable rights necessary or appropriate for the construction, maintenance, and operation of the project. We also revised the second bullet under section 4.2.2 to address effects of project operation (including water withdrawals for initial fill and annual make-up water and pumping/generation operation) on water quantity in the Seminoe Reservoir and downstream North Platte River, in addition to water quality.***

***Comment: At the scoping meeting held on September 25, 2024, Leigh Nation expressed concern that brown trout along with "crustaceans, crawdads, and things that the fish eat or that the birds eat" would be affected by the rise and fall of the water level that would occur under the applicant's proposed operation.***

***Response: We have revised the third bullet under section 4.2.2 to specify that we will analyze effects of water level fluctuations on fish (including brown trout) and macroinvertebrates.***

***Comment: Wyoming DEQ requests that the NEPA document describe the results and conclusions from the applicant's water quality modeling study and sediment resuspension analysis study. Wyoming DEQ states that these documents describe the potential implications to water quality and predicted compliance with Wyoming Surface Water Quality Standards during low water (drought) years.***

***Response: We will review the results of these studies as part of our water quality analysis.***

***Comment: The National Wildlife Federation and Wyoming Wildlife Federation recommend the Commission analyze effects of the project on "water quality and***

***riparian areas, including potential rapid water level fluctuations, water temperature variations, impacts to downstream riparian habitats, and groundwater."***

***Response: These issues are generally covered under sections 4.2.1 and 4.2.2. Therefore, no changes to SD2 are needed.***

***Comment: SER Conservation District asks where the source of water for construction activities including road construction, dust abatement, roller concrete process for dam construction, bridge building, etc. be identified.***

***BLM also asks where the water for construction (particularly concrete) would be sourced from.***

***Response: The applicant's filing on December 2, 2024, states that "construction water will be sourced from the Seminoe Reservoir under a Temporary Water Use Agreement with the US Bureau of Reclamation."***

***Comment: SER Conservation District requests that "impacts to water rights, the water flow of the springs in the area, and the impacts to water quality (surface and groundwater)" be analyzed.***

***Response: As stated previously, we revised the second bullet under section 4.2.2 to address effects of project operation (including water withdrawals for initial fill and annual make-up water and pumping/generation operation) on water quantity in the Seminoe Reservoir and downstream North Platte River, in addition to water quality. The other issues cited by SER Conservation District (i.e., water flow to springs, groundwater, and surface water quality) are already addressed in the bullets under section 4.2.2 and thus no additional changes are needed.***

***Comment: Wyoming GFD states that Seminoe Reservoir supports several sport fisheries for rainbow trout, brown trout, and walleye which can be susceptible to changes in water quality parameters, particularly temperature and dissolved oxygen concentrations. Regarding walleye, Wyoming GFD states that the Seminoe Reservoir walleye fishery is managed as a wild fishery that provides high catch rates with the opportunity to catch larger than average fish and that "changes in aquatic habitat including water temperature, predatory fish abundance, and food sources may have an effect on the wild walleye population." Wyoming GFD states that a decrease in the walleye population would require them to reduce creel limits for anglers and expressed***

***concern that the project may result in the loss of a popular wild walleye fishery program.***

***Response: We have revised the bullets under section 4.2.2 to identify these fish species of interest.***

***Comment: Wyoming GFD states that "operations will likely create a tidal-like ebb and flow of water into and out of Seminoe Canyon. Resultant mixing is likely to prevent stratification resulting in increased temperature throughout the majority of the water column, and significantly increase the temperature of hypolimnetic releases from Seminoe Dam. Dissolved oxygen concentration levels will also be impacted and may negatively affect the fisheries within Seminoe Reservoir through Kortes Reservoir and the Miracle Mile reach of the North Platte River." Wyoming GFD also states project effects on the downstream reach of the North Platte River should be analyzed and that the Miracle Mile segment of the North Platte River is designated as a Class 1 water and contains a Blue Ribbon Trout fishery designated as "Vital" by the Wyoming Game and Fish Commission Mitigation Policy (2016), meaning that impacts to habitat could result in a significant local or landscape-level decline in species abundance or productivity.***

***Response: Section 4.2.2 already identifies effects on water temperature and dissolved oxygen in Seminoe Reservoir and downstream North Platte River as an issue to be analyzed and staff will also assess potential cumulative effects of the proposed project in combination with operations at Seminoe and Kortes Dams on water quantity, water quality, and fisheries from Seminoe Reservoir downstream to Pathfinder Dam (which includes the Miracle Mile reach). Therefore, no changes to SD2 are needed.***

***Comment: Wyoming State Parks states that the "potential for the Seminoe Pumped Storage Project to create conditions which spur harmful cyanobacterial blooms (HCB) should be explored."***

***Response: We revised the second bullet under section 4.2.2 to include effects of project operation and maintenance on the potential proliferation of harmful algal blooms.***

***Comment: SER Conservation District states that "impacts to ice thickness and winter reservoir impacts" should be analyzed.***

***Response: We revised section 4.2.2 to add effects of project operation and maintenance on reservoir ice thickness during the winter months as an issue to be analyzed.***

***Comment: SER Conservation District states that "actual water monitoring data be used to analyze water temperature and dissolved oxygen" rather than relying on modeling data.***

***Response: BCH's water quality modeling study followed generally accepted practices and provides sufficient data to inform an analysis of potential effects to water quality at the project. We disagree that a higher level of precision is needed to characterize overall water quality conditions. However, should SER Conservation District or other stakeholders have other information or sources of data relevant to that discussion, then we recommend filing that information with the Commission so it can be considered.***

***Terrestrial Resources***

***Comment: BLM states that the environmental effects of woody material removal, placement, and disposal should be analyzed.***

***Response: As described in section 4.2.3, the NEPA document will assess the effects of project construction, operation, and maintenance activities on native and/or sensitive-plant communities and wildlife habitat. This analysis would include estimates of the removal and disposal of woody material during construction. Therefore, no changes to SD2 are needed.***

***Comment: SER Conservation District comments that the proposed project impact area has many old-growth limber pines that will be removed. Limber pines are on the BLM sensitive species list which provides for additional levels of consideration during NEPA analysis.***

***BLM states that healthy populations of limber pine are present within the project footprint and that temporary and permanent impacts to limber pine must be evaluated along with species that are dependent on this habitat, such as Clark's nutcracker.***

***BLM further states that temporary and permanent impacts to old growth forest stands must be evaluated along with species that are dependent on this habitat. BLM***

***references the following guidance document: IB 2023-013, Strengthening BLM Management Considerations in Old-Growth and Mature Forests.***

***Response: As described in section 4.2.3, the NEPA document will assess the effects of loss and degradation of old growth stands and limber pine communities/habitat due to project construction, operation, and maintenance activities. Therefore, no changes to SD2 are needed.***

***Comment: BLM provided updated information regarding noxious weeds. BLM states that mountain mahogany is present in the project area, rather than curl-leaf mahogany. Further, BLM states that a large knapweed infestation is missing from project maps. Finally, BLM states that plains prickleypear is not on the State or county list.***

***Response: Thank you for the updated information. BLM is encouraged to file any additional information it may have regarding the presence of noxious weeds in the project area, so that this information can be fully considered in the NEPA document.***

***Comment: The National Wildlife Federation and Wyoming Wildlife Federation state that because the project overlaps Greater sage-grouse general and priority habitat management areas, the Commission and BLM must fully analyze project impacts to this species.***

***The Wyoming GFD states the proposed transmission line would run through the Hanna Sage-Grouse Core Population Area and there are currenty seven occupied Core population area leks within 3.1 miles of the transmission line.***

***Leigh Nation also stated at scoping meeting that the project would affect protected greater sage grouse.***

***Response: As described in section 4.2.3, the NEPA document will assess how project construction and operation would affect greater sage-grouse and its habitat. Therefore, no changes to SD2 are needed.***

***Comment: The National Wildlife Federation and Wyoming Wildlife Federation state that much of the project's footprint overlaps with Core Sagebrush Area which provides important habitat for sage grouse and 350 other species. They state that the Commission and the cooperating agencies should consider the findings in the report, "A Sagebrush Conservation Design to Proactively Restore America's Sagebrush***

***Biome," which identifies threats and opportunities for conserving the sagebrush biome.***

***Response: Commission staff will consider all available information on greater sage-grouse that is relevant to the proposed project, and will review the recommended document.***

***Comment: The Wyoming GFD state that the project is located within habitat which supports a variety of raptor species including their nesting habitat. Additionally, Wyoming GFD state that 66 Species of Greatest Conservation Need (SGCN) have the potential to be impacted by the construction, operation, and maintenance phases of the project, including various migratory birds.***

***BLM states that the license application underestimates the amount of high quality nesting habitat for golden eagles.***

***Response: Commission staff will consider all available information on raptors that is relevant to the proposed project. As described in section 4.2.3, the NEPA document will assess how project construction and operation could affect raptors and their habitat. We modified section 4.2.3 to specifically include effects of project construction and operation on special-status wildlife species, including species identified as SGCN.***

***Comment: At the scoping meeting held on September 25, 2024, Leigh Nation stated that the bighorn sheep herd utilizing habitat at the project is the "only disease-free herd of bighorn sheep in the state of Wyoming." She expressed concern about whether construction dust would adversely affect the herd. At the same scoping meeting, Jesse Martinez expressed concern that bighorn sheep are commonly spotted near the proposed construction spoil pile areas.***

***Wyoming Wild Sheep Foundation state that "due to the known issues with respiratory disease in bighorn sheep, excessive dust in the air from excavation, construction activities, and traffic could impact the respiratory health of the herd and make them more susceptible to disease outbreaks and potential die-offs. As such, dust abatement steps must be taken during construction activities and for traffic associated with the project."***

***Response: As described in section 4.2.3, the NEPA document will assess how project construction and operation, including construction dust, could affect bighorn***

***sheep and its habitat. We modified the fifth bullet under section 4.2.3 to specifically include effects of construction dust on wildlife.***

***Comment: Wyoming Wild Sheep Foundation state "the proposed project site, construction impact area, and adjacent areas are important habitats for the Ferris-Seminoe bighorn sheep herd. Bighorn sheep have been identified as a Tier II Species of Greatest Conservation Need (SGCN) by the Wyoming Game and Fish Department (WGFD). The Ferris-Seminoe herd is a rare success story in that bighorn sheep were successfully reintroduced to the area and continue to expand. This herd is one of the healthiest in the state and is currently the only viable source population for future reintroductions and herd augmentations in Wyoming. However, bighorn sheep are susceptible to various respiratory pathogens that can cause large-scale die-offs. As such, it is paramount that bighorn sheep in this herd remain healthy and have access to their most crucial habitats without long-term stress that could make them more susceptible to disease and die-offs." They also state that "GPS collar data collected from Ferris-Seminoe Bighorn Sheep from 2009-2021 show that the area proposed for the [Seminoe Project's] upper reservoir, the road that will be used to transport excavation spoil, and the area identified for spoil deposition are all in areas important to this herd. Although the footprint of the upper reservoir will displace bighorn sheep use in that area, we are most concerned with the long-term impacts of prolonged construction activities on herd health." They also state that the temporary construction area on the northwest side of the dam, the construction associated with the access bridge, the portion of the Seminoe Road proposed for spoil transport, and the area identified for spoil deposition are all within Wyoming GFD's identified crucial winter-year-long bighorn sheep range and identified in the Wyoming GFD's 2020 Statewide Habitat Plan as a "Crucial Habitat Priority Area." As a result, the Wyoming Wild Sheep Foundation recommend that impacts to the herd and its habitat be analyzed.***

***The Wyoming GFD state the project is located within crucial winter year-long range for the Ferris-Seminoe bighorn sheep herd as well as both the Shirley Mountain and Ferris Mountain mule deer herds and that the proposed transmission line crosses crucial winter year-long range for the Medicine Bow pronghorn herd. Wyoming GFD also states that big game crucial winter range is considered a vital habitat per the Wyoming Game and Fish Commission Mitigation Policy (2016) and that temporary construction impacts over a five-year period is the equivalent of affecting an entire generation for big game species. Further, Wyoming GFD states that because the big game species are known to be present along the public roads to be used for accessing project sites, particularly throughout November-April, there is an increased likelihood for vehicle/wildlife collisions associated with project activities.***

***BLM states that the project is located within "priority" habitat utilized by existing/translocated Big Horn Sheep based on Wyoming GFD telemetry data/studies.***

***The National Wildlife Federation and Wyoming Wildlife Federation also state that the Commission and the cooperating agencies should analyze effects of the project on big horn sheep, mule deer, and pronghorn.***

***Response: As described in sections 4.1 and 4.2.3, the NEPA document will assess how project construction and operation would affect big game species and their habitats, including an analysis of cumulative impacts. Section 4.2.3 as been modified to specifically identify that the effects of project spoil piles on these species will be analyzed in the NEPA document.***

***Comment: BLM indicates that access ramps on the interior of the upper reservoir and the emergency spillway have the potential to serve as ingress/egress locations for wildlife at the project.***

***Response: BCH has proposed to fence the upper reservoir, including across the base of the emergency spillway, to prevent wildlife access. Because the access ramps would not provide ingress/egress locations for wildlife, no changes to SD2 are needed.***

***Threatened and Endangered Species***

***Comment: The Wyoming State Engineer's Office states that "Endangered Species Act issues" need to be addressed, particulary as it pertains the existing Platte River Recovery Implementation Program and new water depletions from filling the upper reservoir and operating the project.***

***Response: Section 4.2.4 already includes effects of the project on Endangered Species Act-listed species and their critical habitat. However, we added a bullet under section 4.2.4 to analyze effects of water withdrawals (i.e., initial fill and annual make-up water) and project operation on the ability to meet downstream flow targets under the Platter River Recovery Implementation Program for listed avian species and pallid sturgeon.***

***Recreation, Land Use. and Aesthetics***

***Comment: SER Conservation District states that "impacts to the grazing***

***allotments in the area must be analyzed."***

***Response: Section 4.2.5 below has been modified to clarify that the NEPA document will assess how project construction, operation, and maintenance will affect rangeland use in the project area, including grazing allotments.***

***Comment: Wyoming State Parks states that the effects of project construction and operation on other resources will also adversely affect recreation and those effects on recreation should be discussed under those resources. For example, geology and soil resources should identify "impacts of sedimentation, erosion, or other land disruptions on recreation" and air quality should discuss dust impacts on recreation. As another example, aquatic resources should identify "recreation impacts due to wetland disruption," and "entrainment and impingement of fish and impacts to recreation due to water storage and flow resources." Wyoming State Parks also assert that recreation impacts should be discussed under socioeconomics and suggest the document specify which components of the BLM RMP would need to be met.***

***Response: As discussed in section 4.2.5, the NEPA document will analyze the effects of project construction, operation, and maintenance on recreation resources. We generally agree that impacts from project construction, operation, and maintenance may impact other resources, such fish and wildlife, and that these impacts can indirectly or directly impact recreation. Thus, while we did not make the requested changes to the specific bullets referenced by Wyoming State Parks, the issues identified will generally be assessed as part of our analysis on recreation.***

***Regarding the BLM Rawlins Resource Management Plan, we note that BLM will be cooperating with Commission staff in preparing the NEPA document. Therefore, Commission staff would expect that the components of the BLM plan that are reviewed for consistency and details on the need for plan amendment(s) would be addressed and elaborated on by BLM in the NEPA document. Commission staff will coordinate early with BLM to ensure that the evaluations presented in the NEPA document are usable by BLM in carrying out BLM's legal responsibilities under its statutes and regulations.***

***Comment: At the scoping meeting held on September 25, 2024, Leigh Nation expressed concern about the need to widen roads for construction vehicles and the potential for this to impact recreationists due to "blasting, noise, and dust." Ms. Nation stated that daily access for construction vehicles to the project site would not be possible during the winter months, presumably due to snow and wintry weather***

***conditions. Ms. Nation and Mr. Martinez also expressed concern about construction traffic and haul trucks affecting tourism including RV access along the existing roadways. Mr. Martinez stated that traffic issues are a major concern and could last for several years during construction.***

***Wyoming State Parks states that recreational access is a key concern and requests an analysis of traffic restrictions along public roads to be used for construction along with an analysis of traffic increases if roads are improved and the public has increased ability to use these roads.***

***SER Conservation District states that transportation needs to be thoroughly analyzed including "impacts to existing public access to the BLM public lands, modifications necessary to the Seminoe road for safety during construction, options for the upper reservoir access road, enhancements to the power line access road, and public access to the public lands surrounding the upper reservoir and facilities." SER Conservation District also states that the Seminoe Road over the pass as it exists is not safe for the amount of increased construction equipment travel required for the proposed project.***

***Response: As described in sections 4.2.3 and 4.2.6, the NEPA document will assess how project construction and operation would affect transportation in the project area. We modified section 4.2.5 to specifically include effects of project construction and operation on public access to the project area.***

***Comment: Wyoming State Parks wonders how public access to the Seminoe Dam tailrace would be handled and states that it "actively discourages recreation near any of the [Seminoe Dam] operations facilities and want to clarify that the proposed bridge would fall within that zone."***

***Response: We modified section 4.2.5 to specifically include effects of project construction and operation on public access to the project area and recreation resources. The analysis would also consider project areas that may not be safe for public access or recreation at the project.***

***Comment: The Wyoming GFD states that "the Seminoe Mountains and associated reservoirs provide a variety of wildlife-related recreational opportunities. People from across the nation come to Miracle Mile to fish the blue ribbon fishery and the Project area is a popular destination for big game hunters. The area is also popular for wildlife photography and wildlife viewing. There will likely be impacts and***

***losses of recreational opportunities during the construction and operation phases of the Project. Potential impacts to recreation include loss of river and reservoir fishing access in areas identified as work zones (i.e., bridge below the dam), restricted access to the gravel quarry west of Seminoe Park which also serves as a popular camping site for hunters in the fall, restricted public access, or no access to BLM Road 3109 road which leads to the upper reservoir location, and restricted public access, or no access to Carbon County Road 351 between Seminoe State Park and the proposed Project bridge over Kortes Reservoir."***

***Wyoming State Parks requests a "strong analysis on the potential effects to recreation and public enjoyment that may stem from habitat, wildlife, and fisheries disruptions in the greater project area."***

***Response: As described in section 4.2.5, the NEPA document will assess effects of project construction, operation, and maintenance on recreational resources and use in the project area (including within the Bennett Mountain WSA, the Morgan Creek Wildlife Management Area, Seminoe Reservoir, and the downstream Miracle Mile), including direct effects on recreationists from anticipated construction noise, vibrations, dust/air quality, and lighting as well as indirect effects on recreation resulting from loss of wildlife habitat or effects to water quality and fish. We modified section 4.2.5 to specifically include effects of project construction and operation on public access to the project area.***

***Comment: At the scoping meeting held on September 25, 2024, Leigh Nation expressed concern that recreational fishing (including popular walleye tournaments) may be affected by the rise and fall of the water level under the applicant's proposed operation.***

***Response: As indicated previously, we revised the third bullet under section 4.2.2 to specify that we will analyze effects of water level fluctuations on fish, including walleye.***

***Comment: At the scoping meeting held on September 25, 2024, Jesse Martinez stated that those who recreate in Seminoe Reservoir know about hidden islands that are periodically exposed in the reservoir (presumably whenever the reservoir levels drop). He expressed concern that the rising and lowering of the Seminoe Reservoir water level under proposed operation may alter the timing of when these islands are exposed compared to existing conditions.***

***Response: The analysis will consider the extent of the reservoir fluctuations on the surface elevations of the reservoir. However, without knowing the specific locations of such "hidden islands," and their elevations and analysis of the operation effects on their exposure would be difficult to impossible. If stakeholders have additional information regarding these islands and their use by recreators, we encourage filing that information so that Commission staff can consider it.***

***Comment: Wyoming State Parks suggests that the analysis consider how project use of roads post-construction may conflict with recreation users.***

***They also request the Commission analyze potential reduction in services to the State Park as a result of the project (including any impacts to boat ramps or access points).***

***SER Conservation District states that impacts to recreationists would occur year-round and states that the analysis should extend to "hunters and remote area seekers" and that "winter recreation" be analyzed.***

***Response: We have revised the first bullet under section 4.2.5 to make clear that the NEPA analysis will consider the effects of project construction, operation (including the use of roads for project-related purposes), and maintenance on annual recreation use, including hunting, angling, and other recreation occurring at the state park. .***

***Comment: The National Wildlife Federation and Wyoming Wildlife Federation state that the creation of the project reservoir and transmission line will impact the viewshed surrounding the project, including on Seminoe Reservoir and on the nearby public lands and request that the Commission and the cooperating agencies fully analyze these impacts.***

***Wyoming State Parks requests that viewshed impacts be considered, including visual intrusion from proposed spoil piles which it states would be directly across from one of Seminoe State Park's busiest access points and most popular campgrounds.***

***Julia Stuble (on behalf of the Wilderness Society, Wyoming Wilderness Association, and the Wyoming Outdoor Council) states that "BLM lands adjacent to Bennett Mountain WSA are managed as Visual Resource Management Class II through the decisions made in the Approved Rawlins Resource Management Plan (2008). The objective for Class II lands is to retain the existing character of the***

***landscape. The level of change to the landscape should be low and management actions should not attract the attention of the casual observer (see BLM Manual H-8410-1-Visual Resource Inventory Section V.B). The simulated view of the proposed upper reservoir for this project illustrates how this project would undoubtedly attract the attention of a casual observer. This project does not fit with the BLM's inventory of visual characteristics and proposed management for this area."***

***Response: As described in section 4.2.5 below, the NEPA document will assess effects of project construction, operation, and maintenance on aesthetic resources, including viewscapes. Therefore, no changes to SD2 are needed.***

***Comment: The National Wildlife Federation and Wyoming Wildlife Federation recommend analyzing effects of the project on the Bennett Mountain Wilderness Study Area and its wilderness characteristics to ensure the project is not contrary to federal law and Congressional intent.***

***Julia Stuble (on behalf of the Wilderness Society, Wyoming Wilderness Association, and the Wyoming Outdoor Council) states it is "undeniable that future discussions about Bennett Mountain's eligibility would take into account the proposed developments and Wilderness status would be made more difficult because of these major alterations to the environment and their impact on the wilderness qualities of Bennett Mountain WSA." She also states the environmental analysis should "not take into account the recommendation in the BLM Wyoming Statewide Wilderness Study Report-Wilderness Study Area Specific Recommendations (1991) that Bennett Mountain WSA was not recommended for Wilderness designation. This recommendation was made under standards and criteria that are no longer relevant or useful today (for example, diversifying the ecosystem types of the National Wilderness Preservation System). The 6,003 acre WSA was found to have, and retains today, the wilderness characteristics that make it eligible for Wilderness designation and BLM is mandated to not allow impairments to this resource."***

***Response: As described in section 4.2.5, the NEPA document will assess effects of project construction, operation, and maintenance on recreation resources, including Bennett Mountain WSA. Therefore, no changes to SD2 are needed.***

***<u>Cultural Resources</u>***

***Comment: The National Wildlife Federation and Wyoming Wildlife Federation state that the Commission and the cooperating agencies must "meaningfully engage***

***with Tribes and Indigenous Peoples consistent with the spirit and the letter of existing laws and policies, including Secretarial Order No. 3403 on Tribal engagement and the Department of Interior Instruction Memorandum No. 2002-11 on Co-Stewardship with Federally Recognized Indian and Alaska Native Tribes Pursuant to Secretary's Order 3403.12." They state that the project may affect areas and resources that are home to landscapes, waters, fish and wildlife, and other resources that carry ancestral, cultural, and spiritual significance to Tribes and Indigenous Peoples and urge the agencies to "engage with Tribes and Indigenous Peoples whose interests may be impacted by the Project and to integrate Indigenous Knowledge into the understanding of the Project's effects." Further, they state that the federal agencies must fulfill their federal trust obligation to Tribes and Indigenous Peoples.***

***Response: As stated in section 4.2.7, the NEPA document will assess the effects of project construction, operation, and maintenance on historic and archaeological resources and traditional cultural properties, including effects on viewscapes and access to exercise traditional practices and treaty rights. The Commission and the other cooperating agencies recognize our responsibility for Tribal consultation and will consider all information provided by interested and affected Tribes that is on the project record. Therefore, no changes to SD2 are needed.***

***Comment: BLM states that it was previously indicated that "the [Historic Properties Management Plan] was going to be used as the [Programmatic Agreement]" and wants to make clear that an agreement document resolving adverse effects will be needed prior to BLM initiating their own record of decision for the BLM right-of-way.***

***Response: Section 106 is implemented through the Council's regulations, "Protection of Historic Properties" (36 CFR Part 800).[6] The Commission typically completes Section 106 by entering into a Programmatic Agreement (PA) or Memorandum of Agreement (MOA) with the license applicant, the Council, and the State and/or Tribal Historic Preservation Officer (SHPO/THPO) and requests other agencies and the applicant to be concurring parties to the PA.[7] An executed***

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[6] ***These regulations became effective on January 11, 2001.***

[7] ***The 1992 amendments to the NHPA include provisions for Indian Tribes to assume the responsibility of the SHPO on Tribal lands. The Council's regulations use the term Tribal Historic Preservation Officer (THPO) to mean the THPO under Section 101(d)(2) of the NHPA for undertakings occurring on or affecting Tribal lands.***

***Programmatic Agreement and the project license would require the development and implementation of a historic properties management plan. The Commission also requires completion of the section 106 process prior to making licensing decision.***

***Comprehensive Plans***

***Comment: Comment: Wyoming State Parks states that several of the comprehensive plans cited in SD1 appear to be outdated.***

***SER Conservation District recommends the following plans be added to the list of Comprehensive Plans in SD1: (1) SER Conservation District's Long Range Land Use and Natural Resource Management Plan for 2022-2026 (https://sercd.org/on-going-land-use-planning-information/); (2) BLM's Rawlins Field Office Resource Management Plan, 2008; (3) Wyoming Domestic/Bighorn Sheep Working Group Final Report and Recommendations presented in 2004 (often referred to as Wyoming Bighorn/Domestic Sheep Interaction Plan), and (4) plans associated with the Platte River Recovery Implementation Program (https://platteriverprogram.org/).***

***Response: Commission staff will review the plans and evaluate whether project operation is compatible with these plans. However, the plans are not currently approved comprehensive plans for Wyoming under section 10(a) of the FPA; thus, we decline to add them to the list in section 6.0 of SD2. If SER Conservation District wants the Commission to consider the plans pursuant to section 10(a) or Wyoming State Parks is aware of updated versions of plans it would like to have added to the list, we encourage the agencies to have the plans filed for consideration with the Commission according to 18 CFR § 2.19 of the Commission's regulations. Please follow the instructions for filing a new or updated plan on page 2 of the following document: https://www.ferc.gov/media/comprehensive-plans. We also note that on September 9, 2024, the FWS submitted three plans applicable to the Platte River Recovery Implementation Program for consideration (https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20240909-5094&optimized=false). If these or other applicable plans submitted are eventually approved by the Commission, they will be included in the list of approved plans discussed in the NEPA document.***

***Comment: SER Conservation District states that the 1985 Bighorn National Forest land and resource management plan should be removed from the list of applicable comprehensive plans as it is not close to the proposed project and has no bearing on the impact area.***

***Response: We removed this plan from the list of applicable plans in section 6.0 of the SD2.***

# 3.0 PROPOSED ACTION AND ALTERNATIVES

In accordance with NEPA, the environmental analysis will consider the following alternatives, at a minimum: (1) the no-action alternative, (2) the applicant's proposed action, and (3) alternatives to the proposed action.

## 3.1 NO-ACTION ALTERNATIVE

In the case of an unconstructed project, the no-action alternative is license denial. Under the no-action alternative, the project would not be built and environmental resources in the project area would not be affected.

### 3.1.1 Seminoe Dam and Reservoir

The Seminoe Project would utilize Reclamation's existing 1,017,280 acre-feet reservoir on the North Platte River as the lower reservoir for the pumped storage facility. The Seminoe Dam and reservoir is located on the North Platte River approximately 72 miles southwest of Casper, Wyoming, and is owned and operated by Reclamation. Construction of the dam was completed in August 1939 as part of Reclamation's Kendrick Project to regulate the flow of the North Platte River for irrigation and electric power generation. It is the uppermost dam on the North Platte River and is located directly upstream from the Kortes Dam, another dam owned and operated by Reclamation. Seminoe Dam lies in a narrow, isolated canyon formed by the North Platte River cutting through the Seminoe Mountains about 40 miles northeast of Rawlins, Wyoming. Seminoe Dam manages water for the purposes of irrigation, power, and flood control.

Seminoe Dam is a concrete-arch structure containing 210,000 cubic yards of concrete and rising 295 feet above the rock foundation. The crest elevation is at 6,361 feet, with a normal headwater elevation of 6,357 feet. Water is released from the reservoir through penstocks to the Seminoe powerhouse, or over a controlled spillway and outlet tunnel that has a capacity of 48,500 cfs at a water elevation of 6,357 feet. The powerhouse is located at the base of the dam and has a rated head of 166 feet. It contains

three units, each composed of a 15,000-kilowatt generator driven by a 20,800-horsepower turbine.

Reclamation operates Seminoe Reservoir to maintain a normal minimum water elevation of 6,290 feet, but a lower minimum water elevation of 6,239 feet (the Active Conservation Level) is possible during extreme drought events or to facilitate repair work on the dam.

### 3.1.2 Bennett Mountain Wilderness Study Area

Certain project facilities proposed by BCH (i.e., new upper reservoir, access road, and transmission line) would be located adjacent to the Bennett Mountain Wilderness Study Area located in the eastern portion of the Seminoe Mountains (Bennett Mountain WSA, see Figure 2 below). Wilderness Study Areas are places that have wilderness characteristics (i.e., minimum size, naturalness, and outstanding opportunities for recreation) which make them eligible for potential designation as wilderness under the Wilderness Act of 1964. In 1976, Congress directed the BLM to evaluate all of its land for the presence of wilderness characteristics, and identified areas became WSAs. The establishment of a WSA served to identify areas for Congress to consider for addition to the National Wilderness Preservation System. Until Congress makes a decision to add or end consideration of a WSA, the BLM manages the area to ensure its suitability for designation as wilderness is not impaired. The Bennett Mountain WSA consists of three major landforms: a mountain plateau, steep ridges with rocky outcrops, and draws.[8]

## 3.2 APPLICANT'S PROPOSAL

### 3.2.1 Proposed Project Facilities

BCH would construct the following new facilities: (1) a 8,498-foot-long circumference, 20-foot wide, 65 to 185-foot-high, roller-compacted concrete (RCC) dam impounding a 10,800-acre-foot upper reservoir at a crest elevation of ***7,455 feet and the maximum operating pool elevation of 7,445 feet, allowing for a 10-foot freeboard between the maximum operating level and the dam crest***; (2) the dam would have a 200-

[8] Additional information can be found on BLM's public website at: https://www.blm.gov/programs/national-conservation-lands/wyoming/bennett-mountain-wsa and at https://www.blm.gov/programs/national-conservation-lands/wilderness. Accessed August 29, 2024.

foot-long concrete, ungated, ogee crest emergency spillway[9]; (3) a 75-foot-diameter, covered bell-mouth intake set near the southwestern edge of the upper reservoir at elevation of 7,295 feet; (4) an approximately 680-foot-long, 32-foot-diameter concrete lined-headrace tunnel connecting to a 615-foot-long, 24-foot-diameter aboveground steel conduit which would extend underground for an additional 2,470 feet before discharging to a 30-foot-diameter vertical, concrete-lined shaft; (5) the vertical shaft then connects to a 165-foot-long, 17-foot-diameter concrete, steel-lined penstock and then to the pump-turbines; (6) three pump-turbines each rated at 324 megawatts (MW) (for a combined total generating capacity of 972 MW) located in the underground powerhouse (machine hall); (7) an approximately 4,070-foot-long, 31-foot-diameter concrete-lined tailrace tunnel discharging water to a lower intake structure within the existing Seminoe Reservoir at normal maximum water surface elevation of 6,357 feet; (8) a transformer cavern containing 18 kilovolt (kV) generator step-up transformers for each unit, and a gas-insulated switchgear switchyard; (9) power would be transmitted from the transformer gallery via 765-foot-long horizontal tunnel to a vertical cable shaft up to a take-off structure at the surface, and then via two separate, 500 kV, overhead primary transmission lines extending to the 500 kV interconnection at Aeolus Substation, approximately 30 miles to the southeast of the Project; (10) an approximately 32-foot-diameter main access tunnel would provide access to the machine hall; (11) a 15-foot-wide, 16-foot-high surge chamber access tunnel lined with shotcrete; (12) an approximately 2.6-mile-long new access road around the upper reservoir; (13) a new 40-foot-wide road to the main access tunnel portal starting from a proposed new bridge over the tailrace of Seminoe Dam; and (14) appurtenant facilities. In addition, portions of Western Area Power Administration's Miracle Mile-Snowy Range 1 115 kV and Miracle Mile-Snowy Range 2 230 kV transmission lines would be relocated around the upper reservoir.

Furthermore, two existing roads would be upgraded. The existing Bennett Mountain Road (also called Dry Lake Road), a rough and often impassable single-lane road, would be upgraded to support construction and maintenance of the proposed upper reservoir. The road is steep, eroded, and has sharp corners, with grades exceeding 20% and even 30% in some areas. To accommodate two-way traffic and heavy equipment, the road would be widened to 24 feet and realigned in places to reduce steep grades and avoid wetlands. The upgrades would follow American Association of State Highway and

[9] An ogee crest spillway, also known as an overflow spillway, is a control structure shape that allows excess water to flow over the top of a dam and reservoir in an uncontrolled manner. The spillway's ogee-shaped crest is designed to maximize the channel's discharge capacity while ensuring the design discharge passes safely.

Transportation Officials design standards. The powerline road from Hanna would serve as the main access route to the lower intake and gate shaft area. Additionally, a small section of the existing rough, single-track road from the proposed gate shaft location to the surge chamber access tunnel exit would be upgraded.

Major project facilities associated with the Seminoe Project are shown in Figure 2. Additional views from key observations points showing where project facilities would be visible along with simulations showing the views with project facilities added are shown in Figures 3-8.

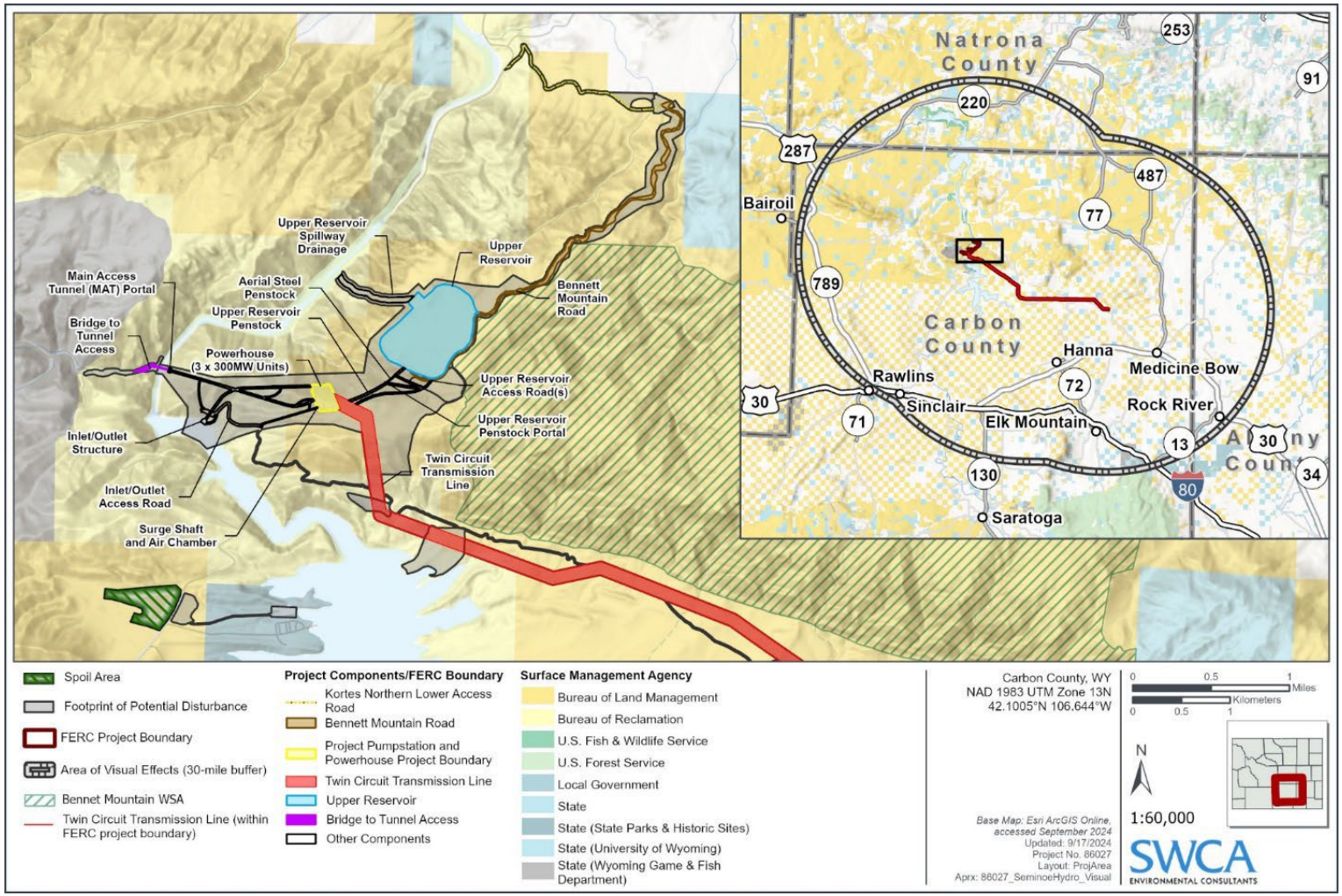


**Figure 2. Major Project Facilities (Source: BCH's filing on December 2, 2024)**

**Figure 3. View from Bennett Mountains Wilderness Study Area looking west towards the proposed upper reservoir site (source: Appendix K of BCH's license application).**

**Figure 4. Simulated view from Bennett Mountains Wilderness Study Area looking west with upper reservoir added (source: Appendix K of BCH's license application).**

**Figure 5. View of Seminoe Reservoir looking towards location of proposed lower intake structure (source: Appendix K of BCH's license application).**

**Figure 6. Simulated view of Seminoe Reservoir with lower intake structure added (source: Appendix K of BCH's license application).**

**Figure 7. View of Seminoe Dam tailrace looking towards location of the proposed bridge connecting to the main access tunnel (source: Appendix K of BCH's license application).**

**Figure 8. View of Seminoe Dam tailrace with the proposed bridge added (source: Appendix K of BCH's license application).**

### 3.2.2 Proposed Operation

BCH would draw a total of 13,400 acre-feet of water from Seminoe Reservoir to initially fill the new upper reservoir. This would consist of 10,800 acre-feet of useable storage that would be cycled back and forth between the reservoirs along with2,600 acre-feet of dead storage that would remain in the upper reservoir and water conveyance system between pumping/generation cycles. The estimated water loss due to evaporation is 272 acre feet from the upper reservoir and 400 acre feet from the lower reservoir, for a total estimated loss of 672 acre feet per year that would need to be replaced each year. BCH states it would either make contractual arrangements) or potentially purchase an additional water right for the annual refill water.

The project would be operated manually and staffed with on-site operations personnel from the plant control room. With modern controls, operation would be possible at each unit control board, from the plant control room, or remotely as determined by BCH.[10]

BCH states that while the nameplate rating of each turbine unit is 324 MW, yielding a combined maximum generating capacity of 972 MW, the output will be limited to 900 MW at the point of interconnection at Aelous substation. BCH states that generation would depend on grid conditions and market demands. In generating mode, the project would have an estimated maximum operating flow rate of 12,600 cfs at maximum hydraulic capacity with all three turbine units operating. In pumping mode, the project would have an estimated maximum pumping flow rate of 10,500 cfs with all three pumps operating against an upper reservoir minimum operating elevation of 7,350 feet. The pumping capacity decreases to 8,298 cfs at the upper reservoir maximum operating elevation of 7,445 feet. The full pumping cycle to recharge the upper reservoir is estimated at approximately 14.6 hours. BCH states that the project is designed to generate for up to approximately 10 hours each day at maximum generating capacity of 972 MW, or for longer durations (up to the maximum of 13 hours) at reduced generating output.

### 3.2.3 Proposed Environmental Measures

BCH would construct and operate the Seminoe Project with the environmental, protection, mitigation, and enhancement (PM&E) measures described below. ***Some of BCH's proposed plans were revised or renamed since the SD1. Therefore, staff have***

[10] Additional details concerning BCH's projections on project-related employment and other economic activity during the construction and operation phases of the project can be found in BCH's Economic Impact Study Report filed August 30, 2024.

***updated this list to be consistent with BCH's revised list of PM&E measures filed on December 9, 2024.***

**General**

- Develop a fire prevention and protection plan.

**Geology and Soils Resources**

- Develop an erosion and sediment control plan with best management practices (BMPs) designed to prevent erosion and scouring and minimize the potential for generating windblown dust during construction.[11]

**Aquatic Resources**

- Develop a stormwater pollution prevention plan that includes BMPs designed to prevent contamination of surface waters from stormwater runoff during construction.

- Develop a hazardous substances spill prevention and cleanup plan that specifies materials handling procedures, storage requirements, spill cleanup procedures, and training protocols to minimize the accidental release of pollutant to surface water, groundwater, or stormwater runoff during project construction, operation, and maintenance activities.

- Conduct pre-construction and post-construction monitoring of water flow in springs located near the proposed upper reservoir site (i.e., Number One Gulch, Number Two Gulch, and Dry Lake Creek) and if impacts to streamflow are identified, work with BLM and other agencies (as applicable) to identify additional mitigation measures that may be needed.

- Install and maintain fish exclusion bar racks at the inlet-outlet within Seminoe Reservoir to reduce fish entrainment during pumping operation.

- Develop an aquatic invasive species construction monitoring and decontamination plan in consultation with BLM and Wyoming Game and Fish Department (Wyoming GFD) that includes measures for monitoring

[11] BCH stated in its June 15, 2023, filing that the erosion and sediment control plan would be developed as a subcomponent of its stormwater pollution prevention plan.

and decontaminating construction equipment used in areas below the ordinary high-water line to minimize spreading invasive aquatic species (e.g., invasive plants and mussel species) in Seminoe Reservoir during construction.

- ***Develop a water temperature adaptive management plan in consultation with Wyoming DEQ that includes provisions for monitoring water temperatures at the USGS river gage in the Miracle Mile reach of the North Platte River downstream of Kortes Dam with particular emphasis on monitoring during low water levels (i.e., when Seminoe Reservoir water levels are below 6,230 feet).***

**Terrestrial Resources**

*Botanical and Wetland Resources*

- Design the transmission facilities and associated access roads to minimize surface disturbing activity in identified 100-year floodplains, areas within 500 feet of perennial waters and wetland/riparian areas, and areas within 100 feet from the inner gorge of ephemeral channels, as specified in the BLM Rawlins Field Office Resource Management Plan. If transmission structures cannot be located outside the buffers, consult with ***the USACE*** on steps to identify mitigation measures to minimize adverse impacts to water features.

- Develop a habitat ***management*** plan to manage, avoid, and mitigate wildlife habitat and associated vegetation losses during construction, operation, and maintenance of the project. The plan will: ***(1) include BMPs to be implemented during project construction; (2) identify specific protection strategies for special status plant species, including persistent sepal yellowcress and Ute ladies'-tresses;*** (3) identify specific measures to restore vegetation disturbed by project-related construction activities; and (4) describe revegetation efforts to prevent soil erosion and the spread of weeds, maintain or restore existing native plant communities and wildlife habitat, and integrate site features within the surrounding environment..

- ***Develop a forest management plan to: (1) document the presence and composition of limber pine and old-growth forest within the proposed project boundary; and (2) describe proposed mitigation and management of these resources.***

- Develop a weed ***and vegetation*** management plan to reduce the spread or introduction of ***state or county-listed*** noxious weed and invasive plant species, including measures to: (1) clean vehicles and equipment; (2) work with land managers to assess, treat, and monitor noxious weeds and invasive plants at the project; and (3) incorporate restrictions and guidelines for the application of herbicides and pesticides. ***The plan would also include BMPs to guide vegetation clearing and maintenance activities and post-construction reclamation and monitoring activities.***

- Develop a biological resources protection training program to help inform construction workers and other project staff of the sensitive biological (botanical and wildlife) resources in the area.

*Wildlife Resources*

- Work with BLM, FWS, and Wyoming GFD to develop project construction windows to minimize disturbance to wildlife during sensitive periods (i.e., breeding and nesting for raptors and greater sage-grouse, and winter range for bighorn sheep, elk, mule deer, and pronghorn).

- Design raptor-safe transmission facilities (including locations of transmission towers) to protect raptors and other avian species from collision or electrocution hazards, in consultation with BLM, FWS, and Wyoming GFD. The design will implement measures from the Avian Power Line Interaction Committee (APLIC) guidelines, including: *Suggested Practices for Avian Protection on Power Lines, The State of the Art in 2006* and *Reducing Avian Collisions with Power Lines: The State of the Art in 2012*.

- Develop a raptor protection plan to establish seasonal and spatial buffers of active raptor nests and bald eagle roost sites prior to implementing ground-disturbing construction activities.

- Develop a greater sage-grouse management plan, in consultation with BLM and Wyoming GFD, to reduce and mitigate project related impacts. The plan will incorporate applicable measures from APLIC's *Best Management Practices for Electric Utilities in Sage-Grouse Habitat* in the transmission line design. The plan will also evaluate mitigation measures needed to

comply with the State of Wyoming's Sage-Grouse Executive Order (2019-3).

- Conduct pre-construction wildlife surveys and habitat assessments,, including for bald eagle winter roost sites, raptor nests, and greater sage-grouse to help inform consultation regarding avoidance and mitigation measures to reduce adverse impacts.

- Use on-site biological construction monitors during construction to monitor sensitive biological resources, including conducting avian nesting surveys of areas near active construction during the nesting season (April 1 to August 31).

- Conduct post-construction greater sage-grouse lek surveys in areas that will be disturbed by the project to comply with the State of Wyoming's Sage-Grouse Executive Order (2019-3).

- Develop a traffic management plan (as described in *Recreation and Aesthetics* section below) that includes a provision to reduce wildlife disturbance and injury (e.g., speed limits and methods of enforcement).

- Develop a project outdoor lighting plan as described in *Recreation and Aesthetics* section below, to incorporate lighting design features that minimize disturbance to wildlife species, including foraging bats and migrating and nocturnal birds, during construction and operation of the project.

- Fence and monitor the upper reservoir to prevent cattle, wild ungulates, and other medium- to large-sized animals from accessing the area.

**Threatened and Endangered Species**

- Develop a habitat ***management*** plan as described in *Botanical and Wetland Resources* section above, including mitigation measures specific to Ute ladies'-tresses.

- Conduct pre-construction botanical surveys for listed Ute ladies'-tresses (three consecutive years) and milkweed (host plant for the monarch

butterfly which is proposed for listing) to help inform consultation regarding avoidance and mitigation measures to reduce adverse impacts.

**Recreation Resources**

- Manage lands over which BCH has control for appropriate public access.

- Prohibit fishing and other recreation in within the upper reservoir and fence the upper reservoir for site security, public safety, and wildlife protection.

- Develop a traffic management plan prior to construction, that includes provisions to: (1) conduct pre-construction counts and estimate construction traffic volume (i.e., the estimated number of workers, trucks, and equipment per day) to understand how traffic volume may change during construction and operation phases; (2) identify which roads will be used for construction traffic (e.g., using Seminoe Road through Morgan Creek Wildlife Habitat Management Area to Miracle Mile or using powerline road from Hanna) and which roads can be used to reduce stress and impacts to wildlife and recreational users; (3) upgrade roads to support construction traffic (i.e., to upper reservoir access road) and develop a plan for winter road maintenance if a year-long schedule is needed; (4) identify the purpose, frequency, timing, and duration of use of the proposed bridge over the North Platte River, located 1,000 feet downstream of Seminoe Reservoir to access to the Main Access Tunnel Portal; and (5) identify placement of safety signage (i.e., speed limits, warning signs) or pull-out areas and other site-specific measures (i.e., dust control and road watering) to reduce potential impacts and more efficiently allow safe passage of construction and public vehicles.

**Visual Resources (Aesthetics) and Noise Resources**

- Develop an outdoor lighting plan that includes provisions for: (1) outdoor lighting to help reduce impacts on foraging bats and migrating and nocturnal birds; (2) localized and portable lighting during construction where and when the work is occurring; (3) power lighting equipment by generators that will have switches to cut power when lighting is not required during construction; (4) minimal exterior lighting (i.e., safety lighting and use dark-sky compliant lighting fixtures); (5) the use of full cutoff luminaires properly shielded and mounted, except as required to meet minimum safety and security requirements (e.g., emergency lighting

triggered by alarms); and (6) the use of lighting that is amber in color, using either low-pressure sodium lamps or yellow LED lighting, to reduce skyglow and wildlife impacts from exterior lighting.

- Use BLM's Standard Environmental Colors, Color Chart CC-001 for selecting surface coatings of fences, gates, and other above-ground facility features and work with BLM to establish a visual resource management class for the project.

- Design the upper reservoir, bridge, and lower intake structure so that materials repeat and/or blend in with the existing form, line, color, and texture of the landscape to the extent feasible.

- Manage noise associated with construction, including sequencing of the use of noise-producing machinery and siting laydown areas and other construction activities to take advantage of natural buffering of noise from vegetation and topography between noise generation and receptors.

**Cultural and Paleontological Resources**

- Develop a historic properties management plan[12] that includes provisions for: (1) identifying the nature and significance of historic properties that may be affected by maintenance and operation; (2) goals for the preservation of historic properties; (3) guidelines for routine maintenance and operation; and (4) procedures for consulting with the State and Tribal Historic Preservation Officers, Tribes, historic preservation experts, and the public concerning effects to historic properties.

- Develop a plan to monitor construction and, if necessary, mitigate adverse impacts to significant paleontological resources (as defined in BLM IM-2009-11) during construction, that includes: (1) identifying when and what factors may place paleontological resources at risk to damage, destruction, or unauthorized collecting; and (2) identifying monitoring strategies to observe, document, and recognize changes or impacts to paleontological resources during construction.

[12] Commission staff designated BCH as its non-federal representative for the purposes of conducting section 106 consultation under the National Historic Preservation Act on June 3, 2020.

**Air Quality**

- Develop an air pollution control plan with BMPs designed to minimize emissions and control construction dust with provisions for: (1) establishing truck exit areas for washing the wheels of all trucks that enter paved roadways from the construction site and dirt roads leading from the construction site; (2) establishing tracking pads at construction exits to prevent dirt from being tracked onto roadways; (3) applying water or dust reducing agents to truck routes and exposed surfaces (e.g., soil piles, graded areas, unpaved parking areas, staging areas, and access roads) and covering routes with gravel to avoid re-suspension of dust; (4) covering or maintaining at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site and cover any haul trucks; (5) using wet power vacuum street sweepers to remove any visible track of mud or dirt onto adjacent public roads; (6) paving all project roadways and sidewalks; (7) using dust collectors and covers limiting pathways for dust into the temporary batch plant if used; and (8) controlling vehicle emissions by minimizing idling time, including signage with directions for workers establishing protocols for inspecting and maintaining vehicles and ensuring all construction equipment is maintain and in proper working condition before using them.

## 3.3 ALTERNATIVES TO THE PROPOSED ACTION

Commission staff will consider and assess all alternative recommendations for operational or facility modifications, as well as protection, mitigation, and enhancement measures identified by the Commission, the agencies, Native American Tribes, NGOs, and the public.

# 4.0 SCOPE OF CUMULATIVE EFFECTS AND SITE-SPECIFIC RESOURCE ISSUES

## 4.1 CUMULATIVE EFFECTS

According to the Council on Environmental Quality's regulations for implementing NEPA (50 C.F.R. 1508.1(g)(3)), a cumulative effect is the effect on the environment that results from the incremental effect of the action when added to other past, present and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative effects can

result from individually minor but collectively significant actions taking place over a period of time, including hydropower and other land and water development activities.

### 4.1.1 Resources that could be Cumulatively Affected

Based on our review of the license application and preliminary staff analysis, we have identified ***water quantity,*** water quality, fisheries (and their habitat), big game species (and their habitat), ***avian species (and their habitat), and recreation*** as resources that could be cumulatively affected by the construction and operation of the Seminoe Project in combination with Reclamation's dam operations at both Seminoe Dam and the downstream Kortes Dam on the North Platte River.

### 4.1.2 Geographic Scope

Our geographic scope of analysis for cumulatively affected resources is defined by the physical limits or boundaries of: (1) the proposed action's effect on the resources, and (2) contributing effects from other hydropower and non-hydropower activities within the basin. We have identified the geographic scope for our cumulative effects analysis for ***water quantity,*** water quality, and fisheries to include the approximate 27-mile reach extending from the upper extent of Seminoe Reservoir downstream to the reservoir for Pathfinder Dam. We chose this geographic scope because the construction, operation, and maintenance of the Seminoe Pumped Storage Project, in combination with other federal dams (i.e., Seminoe Dam and Kortes Dam), agricultural activities, and recreational fishing may affect ***flow and*** water quality conditions and fisheries (and their habitat) in this reach.[13]

The geographic scope for our cumulative effects analysis for big game species (and their habitat) ***and avian species (and their habitat)*** will include the Pathfinder-Seminoe Reservoirs watershed (HUC 10180003) and the Medicine Bow watershed (HUC 10180004). We chose this geographic scope because the construction, operation, and

[13] Within this reach, flows and water quality conditions are largely driven by Reclamation's operation of Seminoe Dam and Kortes Dam; thus, the addition of the Seminoe Pumped Storage Project has the potential to further influence ***water quantity,*** water quality, and fisheries in this reach. This reach also includes the "Miracle Mile" which refers to the 5.5-mile-long reach of the North Platte River from the tailrace of Kortes Dam (approximately two miles downstream of Seminoe Dam) to the reservoir for Pathfinder Dam. It is one of the most popular recreation destinations near the proposed project and supports camping, hunting, and fishing (particularly for trout).

maintenance of the project in combination with other energy projects (WPCI Project, Two Rivers Wind Energy Project, Lucky Star 1 Wind Project, Gateway West Transmission Line Project, Gateway South Transmission Line Project, and Rock Creek Wind Energy Center) in these watersheds may affect habitat availability for big game species (including elk, pronghorn, mule deer, and bighorn sheep) ***and avian species within these watersheds***.

***The presence of multiple dams on the North Platte River may cumulatively affect recreation resources at the project (i.e., multiday paddle trips). Based on our review and stakeholder comments, we find the geographic scope of the cumulative effects on recreation to include the North Platte River from Seminoe Reservoir downstream through Seminoe and Kortes Dams and through the 5.5-mile-long "Miracle Mile" reach of the river from the tailrace of Kortes Dam to the reservoir for Pathfinder Dam.***

### 4.1.3 Temporal Scope

The temporal scope of our cumulative effects analysis in the NEPA document will include a discussion of past, present, and reasonably foreseeable future actions and their effects on each resource that could be cumulatively affected. Based on the potential term of a new license, the temporal scope will look 30 to 50 years into the future, concentrating on the effect on the resources from reasonably foreseeable future actions. The historical discussion will, by necessity, be limited to the amount of available information for each resource. The quality and quantity of information, however, diminishes as we analyze resources further away in time from the present.

## 4.2 RESOURCE ISSUES

In this section, we present a preliminary list of environmental issues to be addressed in the NEPA document. We identified these issues, which are listed by resource area, by reviewing the license application and the Commission's record for the Seminoe Project. This list is not intended to be exhaustive or final, but contains those issues raised to date that could have substantial effects. After the scoping process is complete, we will review the list and determine the appropriate level of analysis needed to address each issue in the NEPA document. Those issues identified by an asterisk (*) will be analyzed for both cumulative and site-specific effects.

### 4.2.1 Geology and Soils Resources

- Effects of project construction, ***operation, and maintenance*** and spoil disposal on soil erosion and sedimentation and debris flows.

- Effects of project ***construction,*** operation***, and maintenance*** on shoreline erosion along Seminoe Reservoir.

- Effects of project construction***, operation, and maintenance*** on areas of expansive soils,[14] especially in the vicinity of the proposed transmission line corridor.

- Effects of project ***construction,*** operation***, and maintenance*** on landslides and debris flows due to a seismic event, or concentration of runoff by a road or drainage structure onto a slope.

- Effect of project construction***, operation,*** operation***, and maintenance*** on existing vents, shafts and underground adit(s) in the area.

- Effects of project construction, operation***, and maintenance*** on landslide susceptibility.

### 4.2.2 Aquatic Resources

- Effects of project construction on water quality (including water temperatures, dissolved oxygen, and turbidity) in the Seminoe Reservoir and downstream North Platte River.*

- Effects of project operation (including water withdrawals for initial fill and annual make-up water and pumping/generation operation) and maintenance on water quality (including water temperatures, dissolved oxygen, turbidity***, and potential proliferation of harmful algal blooms***) ***and water quantity*** in the Seminoe Reservoir and downstream North Platte River.*

- Effects of project construction, operation ***(including water level fluctuations)***, and maintenance on fish resources ***(including brown trout, rainbow trout, walleye, and macroinvertebrates)*** and aquatic habitat in the Seminoe Reservoir and downstream North Platte River.*

[14] Expansive soil is soil that can change volume, or swell and shrink, when its moisture content changes.

- ***Effects of project operation and maintenance on reservoir ice thickness during the winter months.***

- Effects of project construction, operation, and maintenance on wetlands including water flow in seasonal and ephemeral springs.

- Effects of construction, operation, and maintenance activities on groundwater quality, recharge, and flow.

- Effects of entrainment and impingement associated with pumping operations on fish resources ***(including brown trout, rainbow trout, and walleye)*** in the Seminoe Reservoir.*

- Effects of project construction, operation, and maintenance on ongoing operations at Reclamation's Seminoe and Kortes Dams (including water storage and flow releases, etc.).*

### 4.2.3 Terrestrial Resources

- Effects of project construction, operation, and maintenance activities, including maintenance for roads and transmission line right-of-way ***and spoil disposal***, on native and/or sensitive-plant communities.

- Effects of project construction, operation, and maintenance activities, including maintenance for roads and transmission line right-of-way, on the spread and control of noxious and invasive weeds.

- Effects of loss and degradation of old growth stands and limber pine communities/habitat due to project construction, operation, and maintenance activities.

- Effect of permanent and temporary wildlife habitat loss due to construction of project features on foraging and/or nesting raptors, greater sage-grouse, and other birds, and wintering habitat for pronghorn, mule deer, elk, and bighorn sheep.*

- Effect of noise and vibrations, lighting, vehicular traffic***, construction dust, spoil disposal,*** and human presence during project construction, operation, and maintenance activities on movement, nesting, and foraging habitats of

wildlife, especially during sensitive periods (e.g., parturition, wintering, brood-rearing, or nesting).*

- Effects of the new upper reservoir in attracting wildlife (mammals and birds) and potential indirect effects of drowning.*

- Effects of project transmission lines on raptors and other birds, including increased predation and electrocution/collision hazards.*

- ***Effects of project construction, operation, and maintenance on special-status wildlife species, including species identified as Species of Greatest Conservation Need.****

- Effects of project construction, operation, and maintenance on the values which make the Bennett Mountain WSA potentially eligible for inclusion in the National Wilderness Preservation System.

### 4.2.4 Threatened and Endangered Species

- Effects of project construction, operation, and maintenance on the whooping crane, pallid sturgeon, and blowout penstemon, which are federally listed as endangered; the piping plover, Ute Ladies'-tresses, and western prairie fringed orchid, which are federally listed as threatened; the monarch butterfly which is ***federally proposed as threatened***; and the black-footed ferret, which is designated as a non-essential experimental population.*

- ***Effects of water withdrawals (i.e., initial fill and annual make-up water) and project operation on the ability to meet downstream flow targets under the Platter River Recovery Implementation Program for listed avian species and pallid sturgeon.***[15]

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[15] ***In 1997, a cooperative agreement was signed between the states of Nebraska, Wyoming, and Colorado and the U.S. Department of Interior to develop a basin wide Platte River Recovery Implementation Program to improve and maintain the habitats associated with federally listed avian species (i.e., piping plover, whooping crane, and interior least tern) and pallid sturgeon. A long-term objective is to provide sufficient water to and through the central Platte River to benefit these target species and their***

### 4.2.5 Recreation, *Land Use,* and Aesthetics

- Effects of project construction, operation ***(including use of roads for project-related purposes)***, and maintenance on recreational resources, ***public access***, and use in the project area ***year-round*** (including within the Bennett Mountain WSA, the Morgan Creek Wildlife Management Area, Seminoe Reservoir, and the downstream Miracle Mile), including direct effects on recreationists ***(e.g., hunting, angling, and other recreation at the state park)*** from anticipated construction noise, vibrations, dust/air quality, and lighting as well as indirect effects on recreation resulting from loss of wildlife habitat or effects to water quality and fish.*

- ***Effects of project construction, operation, and maintenance on winter recreation resources including direct impacts to ice fishing and public access to the upper reservoir site.***

- Effects of project construction, operation, and maintenance on aesthetic resources in the project area, including lighting***, solitude, wild and natural landscapes,*** and visual viewscapes.

- ***Effects of project construction, operation, and maintenance on rangeland resources in the project area, including direct effects on grazing allotments from anticipated construction noise, vibrations, dust/air quality, lighting, loss of forage, and lighting as well as indirect effects from loss of dispersed water sources, dust covered forage, and changed grazing patterns***.

- Adequacy of project construction design, operation, and maintenance in conforming to the Bureau of Land Management's Resource Management Plan (RMP) for the Rawlins Field Office.[16]

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***associated habitats, including practices to reduce shortages to instream species recovery "target flows" for the central Platte River. More information on the program can be found at: https://platteriverprogram.org/.***

[16] The reservoir formed by a ***roller-compacted concrete*** dam structure ***with a maximum height of 185 feet*** is proposed to be constructed immediately adjacent to the Bennett Mountains Wilderness Study Area overlooking the Seminoe Reservoir and dam. The land area has been inventoried as having high scenic quality and is currently

### 4.2.6 Socioeconomic Resources

- Effects of project construction, operation, and maintenance on socioeconomic resources, including housing, employment, transportation, governmental services, and subsistence resources in the project area.

### 4.2.7 Cultural Resources

- Effects of project construction, operation, and maintenance on historic and archaeological resources and traditional cultural properties[17], including effects on viewscapes and access to exercise traditional practices and treaty rights.

### 4.2.8 Environmental Justice

- Effects of project construction, operation, and maintenance on identified environmental justice communities and whether any identified communities would experience disproportionate adverse environmental effects as it relates to geology and soils, aquatics, terrestrial, recreation, aesthetics, socioeconomic, cultural, and air quality.

### 4.2.9 Air Quality and Greenhouse Gas Emissions

- Effects of project construction, operation, and maintenance (including windblown dust) on air quality.

- Effects of project construction, operation, and maintenance on the generation of greenhouse gasses (GHGs) and hazardous/toxic air pollutants.

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managed by BLM to retain existing natural scenic character. BLM has indicated that BCH's current proposal would not conform with the existing RMP and would thus require an amendment of the RMP unless the the proposal can be sufficiently modified to be in conformance. Further, other project components such as widening and grading of roads, adding fencing, providing staging and laydown areas, permanent removal of vegetation features, spoil piles, transmission lines, other ancillary structures, will alter the land character and will require amending the RMP.

[17] Properties of traditional religious and cultural importance or places important to modern-day living communities for sustaining a shared cultural legacy.

### 4.2.10 Developmental Resources

- Effects of proposed or recommended environmental measures on project generation and economics.

## 5.0 CURRENT PROCESSING SCHEDULE

The decision on whether to prepare and EA or EIS will be made after we fully determine the scope of effects and measures under consideration. The NEPA document will be distributed to all persons and entities on the Commission's service and mailing lists for the Seminoe Project. The NEPA document will include our recommendations for operating procedures, as well as environmental protection and enhancement measures that should be part of any license issued by the Commission. The comment period will be specified in the notice of availability of the NEPA document.

The application will be processed according to the following anticipated processing schedule. Revisions to the schedule will be made as appropriate. The schedule for issuing draft and final NEPA documents is consistent with the Commission's Notice of Revised Schedule for the Seminoe Pumped Storage Project issued October 18, 2024:

| Major Milestone | Target Date |
|---|---|
| Issue Scoping Document 2 | ***January 2025*** |
| Issue Ready for Environmental Analysis (REA) Notice | ***January 2025*** |
| Deadline for Filing Comments, Recommendations and Agency Terms and Conditions/Prescriptions | ***March*** 2025 |
| Applicant's Reply to REA Comments | ***April*** 2025 |
| Commission Issues draft NEPA document | ***September*** 2025 |
| Commission Issues final NEPA document | ***April*** 2026 |

## 6.0 COMPREHENSIVE PLANS

Section 10(a)(2) of the FPA, 16 U.S.C. section 803(a)(2)(A), requires the Commission to consider the extent to which a project is consistent with federal and state comprehensive plans for improving, developing, or conserving a waterway or waterways affected by a project. Commission staff has preliminarily identified that the plans listed below may be relevant to the Seminoe Project. Agencies are requested to review this list

and inform the Commission staff of any changes. If there are other comprehensive plans that should be considered for this list that are not on file with the Commission, or if there are more recent versions of the plans already listed, they can be filed for consideration with the Commission according to 18 CFR § 2.19 of the Commission's regulations. Please follow the instructions for filing a plan at https://cms.ferc.gov/media/comprehensive-plans.

The following is a list of comprehensive plans currently on file with the Commission that may be relevant to the project:

Bureau of Land Management. 1991. Wyoming wilderness study report: Statewide Overview. Department of the Interior, Cheyenne, Wyoming. August 1991.

Forest Service. 2003. Medicine Bow National Forest revised land and resource management plan. Department of Agriculture, Laramie, Wyoming. December 2003.

National Park Service. The Nationwide Rivers Inventory. Department of the Interior, Washington, D.C. 1993.

U.S. Fish and Wildlife Service. 1986. Whooping Crane Recovery Plan. Department of the Interior, Albuquerque, New Mexico. December 23, 1986.

U.S. Fish and Wildlife Service. 2013. Greater Sage-grouse (*Centrocercus urophasianus*) Conservation Objectives: Final Report. Denver, Colorado. February 2013.

U.S. Fish and Wildlife Service. n.d. Fisheries USA: the recreational fisheries policy of the U.S. Fish and Wildlife Service. Washington, D.C.

U.S. Fish and Wildlife Service. Canadian Wildlife Service. 1986. North American waterfowl management plan. Department of the Interior. Environment Canada. May 1986.

Wyoming Department of Commerce, State Parks, and Historic Sites. 1990. Wyoming State Comprehensive Outdoor Recreation Plan (SCORP). Cheyenne, Wyoming.

## 7.0 MAILING LISTS

The list below is the Commission's official mailing list for the Seminoe Project. If you want to receive future mailings for this proceeding and are not included in the list

below, please send your request by email to FERCOnlineSupport@ferc.gov. In lieu of an email request, you may submit a paper request. Submissions sent via the U.S. Postal Service must be addressed to: Debbie-Anne A. Reese, Secretary, Federal Energy Regulatory Commission, 888 First Street NE, Room 1A, Washington, DC 20426. Submissions sent via any other carrier must be addressed to: Debbie-Anne A. Reese, Secretary, Federal Energy Regulatory Commission, 12225 Wilkins Avenue, Rockville, Maryland 20852. All written or emailed requests to be added to the mailing lists must clearly identify the following: **Seminoe Pumped Storage Project (P-14787-004).** You may use the same methods if requesting removal from the mailing list below.

Register online at https://ferconline.ferc.gov/FERCOnline.aspx to be notified via email of new filings and issuances related to these projects or other pending projects. For assistance, please contact FERC Online Support at FERCOnlineSupport@ferc.gov or toll free at 1-866-208-3676, or for TTY, (202) 502-8659.

**Official Mailing List for the Seminoe Pumped Storage Project**

| | |
|---|---|
| Matthew Shapiro<br>Gridflex Energy, LLC<br>424 W. Pueblo Street, No. A<br>Boise, Idaho 83702 | BLM – Rawlins Field Office<br>1300 N. 3rd Street, PO Box 2407<br>Rawlins, Wyoming 82325 |
| ***John Barrasso***<br>***U.S. Senate***<br>***United States Senate***<br>***Washington, District of Columbia 20510*** | Governor of Wyoming<br>Wyoming Office of the Governor<br>State Capitol<br>***200 West 24th Street***<br>Cheyenne, Wyoming 82002 |
| ***Benjamin Peterson***<br>***Assistant Attorney General***<br>***Wyoming Attorney General's Office***<br>***109 State Capitol***<br>***Cheyenne, Wyoming 82002*** | ***Eric Hargett***<br>***Natural Resources Program***<br>***Wyoming Department of Environmental Quality***<br>***200 W. 17th St.***<br>***Cheyenne, Wyoming 82002*** |
| ***Abigail Boudewyns***<br>***Senior Assistant Attorney General***<br>***Wyoming Attorney General's Office***<br>***109 State Capitol***<br>***Cheyenne, Wyoming 82002*** | ***Wyoming Game and Fish Department***<br>***5400 Bishop Blvd***<br>***Cheyenne, Wyoming 82006*** |

| | |
|---|---|
| ***Will E. Schultz***<br>***Habitat Protection Program Supervisor***<br>***Wyoming Game and Fish Department***<br>***5400 Bishop Blvd***<br>***Cheyenne, Wyoming 82009*** | ***Angi Bruce***<br>***Director***<br>***Wyoming Game and Fish Department***<br>***5400 Bishop Blvd***<br>***Cheyenne, Wyoming 82006*** |
| ***Michelle Hubbard***<br>***Wyoming State Engineer's Office***<br>***122 W 25th St.***<br>***Herschler Building 2W***<br>***Cheyenne, Wyoming 82002*** | ***Brandon Gebhart***<br>***Wyoming State Engineer's Office***<br>***122 W 25th St.***<br>***Herschler Building 2West***<br>***Cheyenne, Wyoming 82002*** |
| ***Carly-Ann Carruthers***<br>***Planning Manager***<br>***Wyoming State Parks, Historic Sites, and Trails***<br>***2301 Central Ave***<br>***Cheyenne, Wyoming 82002*** | |