FINAL ENVIRONMENTAL ASSESSMENT

FEDERAL LAND DISPOSAL AND REPLACEMENT OF HYDRO #2 GAME PRODUCTION AREA

LAWRENCE COUNTY, SOUTH DAKOTA

May 3, 2024

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Chapter 1 PURPOSE AND NEED FOR ACTION

1.1 Introduction and Background

The Hydro #2Game Production Area (GPA) (Figure 1) is located in the Black Hills of western South Dakota (SD) and is owned and managed by the Wildlife Division of South Dakota Game, Fish and Parks (SDGFP) for wildlife production, wildlife habitat protection, and expanded public hunting and wildlife related recreation opportunities. SDGFP acquired the Hydro #2 GPA (previously known as the Spearfish Canyon HMC Property) in December 2014, with grant funds from the Pittman-Roberson Wildlife Restoration (PR) Act, a grant program administered by the Wildlife and Sport Fish Restoration Program (WSFR) of the U.S. Fish and Wildlife Service (FWS). FWS provided 75% of the cost of the acquisition through Grant #F15AF00029 (SD #W-154-L-1) (Federal Grant). The property was purchased to provide wildlife production, wildlife habitat protection, and expanded public hunting and wildlife related recreation opportunities.

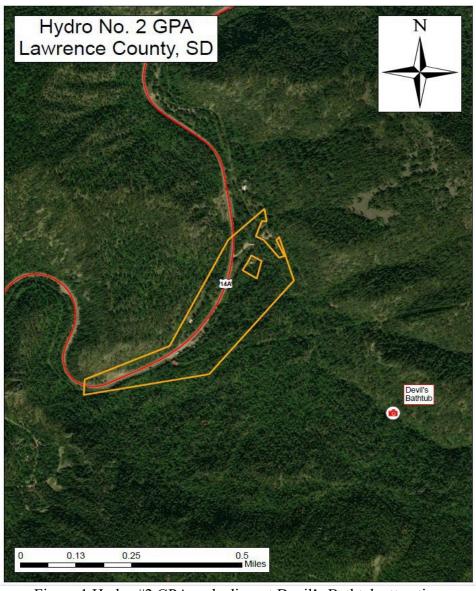


Figure 1 Hydro #2 GPA and adjacent Devil's Bathtub attraction

1.2 Purpose and Need for Action

Public use and expectations of Hydro #2 GPA have expanded beyond those anticipated by SDGFP at the time of purchase. Due to its location in Spearfish Canyon and its adjacency to Spearfish Creek, public use activities, and the seasonality of those uses surrounding a popular location named Devil's Bathtub (Figure 1), have expanded to include more year-round non-consumptive use. Activities such as fishing, hiking, wildlife viewing, and picnicking have become commonplace in addition to the intended primary use as a public hunting area. Consequently, SDGFP faces new management challenges for Hydro #2 GPA. While it currently continues to serve the purpose for which it was acquired – to provide wildlife production, wildlife habitat protection, and expanded public hunting and wildlife related recreation opportunities – the increasing levels of public use will soon make it challenging to meet that purpose. Specifically, if left unmanaged, the increased levels of public use will begin to impair wildlife habitat and production and threaten safe public hunting and other wildlife related recreational uses. The types and levels of public management necessary to maintain the property in the face of the increased public use would include infrastructure such as restroom facilities, additional parking, and maintained hiking trails. However, this type and amount of infrastructure, while accomplishing the goal of better protecting the wildlife habitat, would be inconsistent with the intent of the original Federal Grant that funded the acquisition.

To accommodate the increase in public use of this area, therefore, SDGFP is now requesting approval from the FWS to dispose of the Federal encumbrance on the 32.251 acre Hydro #2 GPA property in exchange for a new Federal encumbrance on the 320 acre Hepler GPA, a property solely owned by SDGFP and also located in Lawrence County, South Dakota. SDGFP will retain title to the Hydro #2 GPA which will allow the agency more flexibility and latitude in its management of the property.

Specifically, SDGFP would be better positioned to provide additional services and amenities made necessary by expanded public uses, and ultimately enable more effective protection of wildlife habitat at Hydro #2 GPA. SDGFP believes the current Federal encumbrance in Hydro #2 GPA, while not itself an impediment to current wildlife and habitat management, presents conflicting use challenges as it broadens its management approach in response to public demands and needs. Upon evaluating the effects of the proposed disposal of the Federal encumbrance, SDGFP has determined that the existing wildlife resources and existing public interests would be unaffected as SDGFP would retain title to property and continue to manage it for its wildlife resources. In addition, by creating a new Federal encumbrance on the Hepler GPA, SDGFP would be able to continue compliance with the original Federal Grant by using that separate property to meet the original grant purposes and management obligations.

1.3 Decision to be Made

The disposal of real property with a federal encumbrance constitutes a Federal action subject to the provisions of the National Environmental Policy Act of 1969 (NEPA), as amended. Disposal of grant-funded property does not meet the criteria for a Categorical Exclusion under NEPA, and the FWS is therefore required to prepare an Environmental Assessment (EA) based on the procedures for real property disposal to analyze the effects on the human environment and document the findings. The FWS will use this Draft EA and associated public review process to determine if the Proposed Action (i.e., disposal of the Federal encumbrance) is likely to result in significant impacts to the human environment. If it is determined there are no significant adverse impacts, the Service will issue a Finding of No Significant Impact (FONSI). If it is determined, conversely, that significant

impacts might occur by disposing of the Federal encumbrance from Hydro #2 GPA, the Service will be required to prepare an Environmental Impact Statement (EIS) to assess the impacts.

Chapter 2 ALTERNATIVES

2.1 Proposed Action

The Proposed Action is to dispose of the Federal encumbrance on 32.251 acres at the Hydro #2 GPA in Lawrence County, South Dakota. The SDGFP will retain title to the property, but under the Proposed Action would remove the Federal encumbrance in land records for Hydro #2 GPA. To remain in compliance with the original Federal Grant that funded acquisition of the property, SDGFP would establish a new Federal encumbrance with the Hepler GPA, a property solely owned by SDGFP (2 CFR 200.311 (c)), such that the Hepler GPA would become obligated to meet all of the Federal Grant purposes and requirements. The Proposed Action is thus administrative in nature but would allow additional flexibility and latitude in SDGFP's management of the Hydro #2 GPA property as they respond to expanded public uses and the associated demand for additional services and amenities associated with those public uses. The Proposed Action will also help address the safety issues that have been created on this property while also minimizing habitat erosion and protecting wildlife from disturbance.

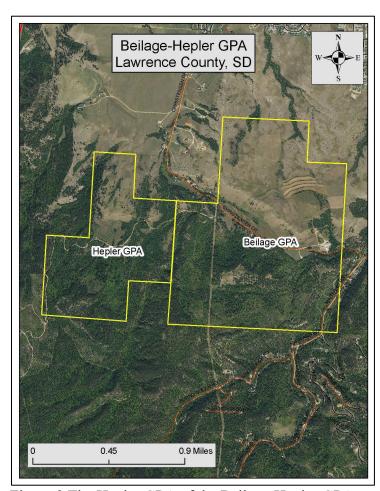


Figure 2 The Hepler GPA of the Beilage-Hepler GPA compound

To approve a real property acquisition as a replacement for grant-funded property no longer serving its authorized purpose, the Service "must determine that the replacement property: (1) Is of at least equal value at current market prices; and (2) Has fish, wildlife, and public-use benefits consistent with the purposes of the original grant (50 CFR 80.135(c)(1-2)).

An appraisal and appraisal review of the Hydro #2 GPA and Beilage-Hepler GPA complex has been prepared in accordance with the Uniform Standards of Professional Appraisal Practices (USPAP) and Uniform Appraisal Standards for Federal Land Acquisitions (UASFLA). Based on the analysis provided through the appraisals, the Hepler GPA tract is of substantial greater monetary value at current fair market prices. Among other purposes, the information provided in this Environmental Assessment will be used to determine whether the Hepler GPA also provides fish, wildlife and public use benefits consistent with the purposes of the original Federal Grant that was used to acquire the Hydro #2 GPA.

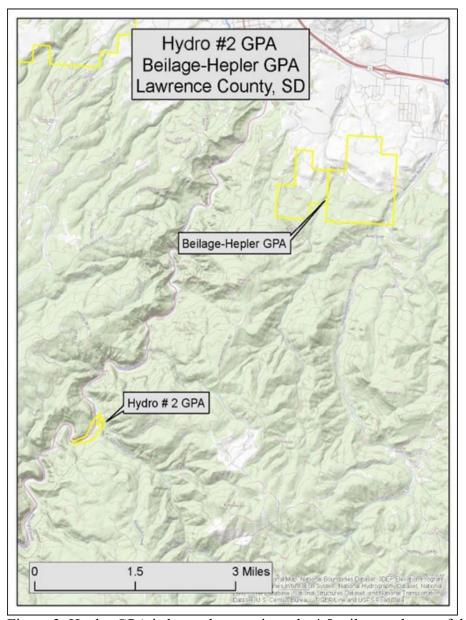


Figure 3. Hepler GPA is located approximately 4.5 miles northeast of the Hydro #2 GPA

2.2 No Action

If no action is taken, SDGFP will continue to own and manage the Hydro #2 GPA and the Federal encumbrance will remain in the Hydro #2 GPA property. However, the potential to respond adequately and effectively to expanded public uses and the associated demand for additional services and amenities associated with those public uses, will likely be unfeasible due to the strict regulations that dictate eligible use of Wildlife Restoration Pittman-Roberson Federal funding. Meanwhile, the increasing public use of the area has potential to degrade habitat and disturb any wildlife present. It is also creating a potentially dangerous situation due to the number of visitors in the area that are parking along the state highway to cross the property to get to Devil's Bathtub on United States Forest Service land that is adjacent to the Hydro #2 GPA. If no action is taken SDGFP will be unable to address these issues by constructing the infrastructure that is needed to protect habitat and manage public use.

Consequently, without the Proposed Action, it is likely that at some point SDGFP will be unable to manage the Hydro #2 GPS consistent with the purposes of the original Federal Grant. If that occurs, and no other property is approved to replace the Hydro #2 GPA, SDGFP may be required to address the lack of compliance by repaying the Federal grant funds at the current market value of the property.

2.3 Alternatives Considered but Eliminated from Further Analysis

Acquire Adjacent Property

Acquiring property adjacent to the existing Hydro #2 GPA was considered as an option for addressing expanded public uses and the associated demand for additional services and amenities associated with those public uses. However, adjoining private properties consist of small privately owned parcels of which all contain a private residence. It was determined impractical and cost ineffective to pursue acquiring and removing a privately owned home in order to accommodate the public use needs associated with Hydro #2 GPA. Additionally, the remaining adjacent property is held by the United States Forest Service, and acquiring Federal property was determined to be impracticable and an inefficient venture. It has been determined this alternative is not viable for SDGFP.

Purchasing Additional Property to Exchange for the Hydro #2 GPA Property

Exchanging Hydro #2 GPA for a newly acquired property that would be as suitable for wildlife habitat and public hunting and would therefore meet the original Federal Grant purpose, rather than using the currently owned Helper GPA as the property to replace the Hydro #2 GPA, was also considered. However, SDGFP was unable to identify a new property available for acquisition that offers comparable wildlife habitat and wildlife related recreation opportunities to Hydro #2 GPA. Therefore, it has been determined this alternative is not viable for SDGFP.

Complete Disposal of the Hydro #2 GPA Property

Complete disposal of Hydro #2 GPA via public auction, as is required by State law, was also considered as an option available to SDGFP for addressing expanded public uses and the associated demand for additional services and amenities associated with those public uses. This option would allow repayment of the original Federal Grant, as that grant purpose would no longer be accomplished. However, disposing of Hydro #2 GPA into private ownership would merely eliminate current and future public uses for all recreation purposes, including its current use as wildlife habitat and a public hunting area. It has been determined this alternative is not viable for SDGFP.

Chapter 3 AFFECTED ENVIRONMENT

3.1 Location

The Hydro #2 GPA is located six miles southwest of Spearfish in Lawrence County, SD, along SD State Highway 14A (Figure 1,3). The property is legally described as HMC Lot 2A, being a portion of Spearfish Placer, M.S. 439, located in the NE¼ of Section 17, Township 5 North, Range 2 East of the BHM, as shown on Plat Document No. 2014-3631 and comprising 32.251 acres, more or less in Lawrence County, SD.

The Hepler GPA is located one mile south of Spearfish in Lawrence County, SD and is approximately 4.5 miles northeast of the Hydro #2 GPA (Figure 2,3). The property is legally described as and W1/2SE1/4, SE1/4NE1/4, NE1/4SE1/4, E1/2SW1/4, W1/2NE1/4 of Section 26, Township 6 North, Range 2 East of BHM, containing 320 acres, more or less, in Lawrence County, SD.

3.2 Recreation

Both Hydro #2 GPA and Hepler GPA are owned and managed by SDGFP as GPAs and are thus open to public hunting and other wildlife related recreation. The Proposed Action is to dispose of the Federal encumbrance in Hydro #2 GPA in exchange for a new Federal encumbrance with the Hepler GPA. While it would allow additional flexibility and latitude in SDGFP management of the Hydro #2 GPA property as they respond to expanded public uses and the associated demand for additional services and amenities associated with those public uses, the proposed action if implemented would not change or in any way diminish existing hunting and wildlife related recreation opportunities. Instead, the proposed action would better ensure that continued public use would be safe and feasible.

3.3 Wetlands and Floodplains

According to information from the National Wetlands Inventory website, Hydro #2 GPA contains approximately 3,300 total linear feet of riverine wetlands, consisting of 2,600 linear feet of Spearfish Creek and 700 linear feet of Cleopatra Creek, a tributary of Spearfish Creek (Figure 4). Isolated, seasonal wetlands are not present at Hydro #2 GPA.

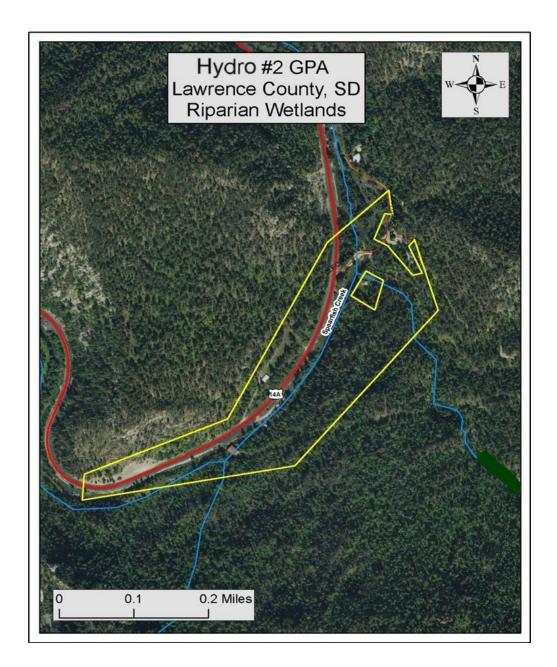


Figure 4 Hydro #2 GPA Riparian Wetlands

The Hepler GPA also contains approximately 600 linear feet of riverine wetland consisting of an unnamed tributary to Spearfish Creek (Figure 5). Isolated, seasonal wetlands are not present on Hepler GPA.

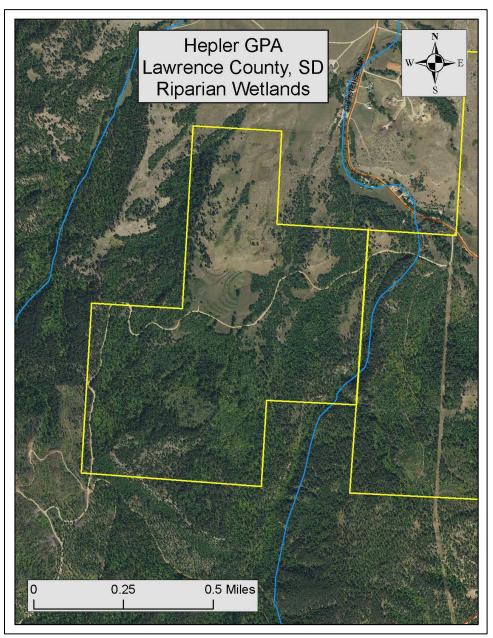


Figure 5 Hepler GPA Riparian Wetlands

According to the Federal Emergency Management Agency (FEMA), much of the area along Spearfish Creek and Cleopatra Creek on the Hydro #2 GPA lie within the 100-year floodplain (Figure 6). No part of the Hepler GPA lies within a FEMA designated flood zone.

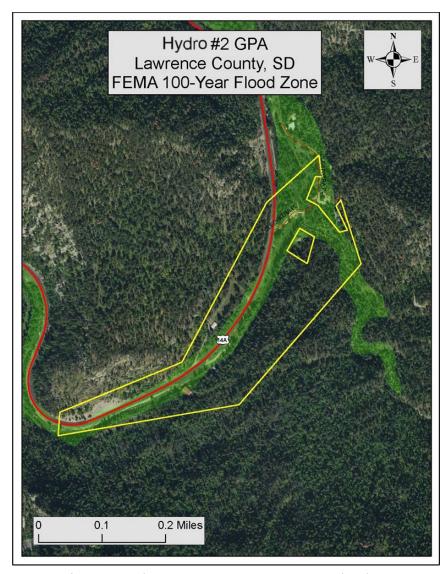


Figure 6 Hydro #2 GPA FEMA 100-Year Flood Zone

The Proposed Action is to dispose of the Federal encumbrance of Hydro #2 GPA in exchange for a new Federal encumbrance with the Hepler GPA. While it would allow additional flexibility and latitude in SDGFP management of the Hydro #2 GPA property as they respond to expanded public uses and the associated demand for additional services and amenities associated with those public uses, the proposed action if implemented would not in any way impact wetland or floodplain resources, except for ownership of those resources.

3.4 Prime and Unique Farmlands

According to the Natural Resources Conservation Service web soil survey, accessed on March 19, 2019, (https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx) neither the Hydro #2 GPA or Hepler GPA contains any prime or unique farmland soils, but instead are located in a ponderosa pine dominated vegetation community. This soil report is attached in Appendix A.

The Proposed Action is to dispose of the Federal encumbrance in Hydro #2 GPA in exchange for a new Federal encumbrance with the Hepler GPA. While it would allow additional flexibility and latitude in SDGFP management of the Hydro #2 GPA property as they respond to expanded public uses and the associated demand for additional services and amenities associated with those public uses, the proposed action if implemented would not change or in any way impact prime and unique farmlands as neither GPA contain soils classified as prime or unique. The Hepler GPA is not currently in agricultural use and will remain in non- agricultural use under future management.

3.5 Historic and Cultural Resources

An Intensive Level III Cultural Resources Survey was conducted at the Hydro #2 GPA site on April 27, 2020. The investigators recommended a Section 106 Finding of No Historic Properties Affected for SDGFP Hydro #2 so long as structure LA00002055 is avoided by future development and site 39LA1711 is avoided or mitigated prior to future development or modification to those locations. The SD State Historical Preservation Office (SHPO) reviewed the report and developed a Memorandum of Agreement (MOA).

According to the Section 106 Project Consultation on June 27, 2022, the SD State Historical Preservation Office (SHPO) concurred with a No Historic Properties Affected determination for the proposed undertaking provided certain stipulations were met. The stipulations were formalized in an MOA and signed by SHPO, United States Fish and Wildlife Service, and South Dakota Game, Fish, and Parks (Appendix B).

The FWS also invited Tribal Governments in South Dakota to consult on the project and each were provided with a copy of the Class III Intensive Cultural Resources Survey on March 14, 2022 (Appendix D). However, no responses were received by Tribes by the end of the 45-day comment period or any time thereafter.

Additional outreach and invitation to consult on the project with the Advisory Council on Historic Preservation (ACHP) occurred on February 24, 2022 (Appendix B). However, no response was received by the end of the 45-day comment period.

The Proposed Action is to dispose of the Federal encumbrance in Hydro #2 GPA in exchange for a new Federal encumbrance with the Hepler GPA. While it would allow additional flexibility and latitude in SDGFP management of the Hydro #2 GPA property as they respond to expanded public uses, safety concerns, and the associated demand for additional services and amenities associated with those public uses, the proposed action if implemented would not in any way impact historical or cultural resources at Hydro #2 GPA. The Helper GPA will continue to be managed for use as a Game Production Area to provide wildlife habitat and public hunting opportunities.

3.6 Vegetation

Both the Hydro #2 GPA and the Hepler GPA are located in a ponderosa pine (*Pinus ponderosa*) dominated vegetation community within the Black Hills ecosystem of South Dakota. The Hydro #2 plant community is typical of a Black Hills forest riparian system with ponderosa pine located on drier limestone outcropping sites, and Black Hills spruce (*Pinus glauca*), quaking aspen (*Populus tremuloides*) and ironwood (*Ostrya virginiana*) communities located within the riparian areas. In addition to the dominant ponderosa pine community, the Hepler GPA also contains a mixed grass prairie plant community containing species such as little bluestem (*Schizachyrium scoparium*), western wheatgrass (*Pascopyrum smithii*), and leadplant (*Amorpha canescens*).

The Proposed Action is to dispose of the Federal encumbrance in Hydro #2 GPA in exchange for a new Federal encumbrance with the Hepler GPA. While it would allow additional flexibility and latitude in SDGFP management of the Hydro #2 GPA property as they respond to expanded public uses, safety concerns, and the associated demand for additional services and amenities associated with those public uses. Currently, there are no plans to disrupt the current vegetation on the property. The proposed action, if implemented in the future, would disturb some areas of vegetation where infrastructure is built, however, this impact will also serve to minimize a larger area of habitat erosion and protect wildlife (and plant communities) from disturbance. By contrast, without the proposed action, the ability to manage impacts and prevent increased damage to vegetation would be impaired.

3.7 Wildlife Resources

Common wildlife species likely occurring on and around the area of Hydro #2 GPA and the Hepler GPA include white-tailed deer (Odocoileus virginianus), wild turkeys (Meleagris gallopavo), Bald eagle (Haliaeetus leucocephalus), red-headed woodpecker (Melanerpes erythrocephalus), Southern red-backed Vole (Clethrionomys gapperi), Cooper's Rocky Mountain Snail (Oreohelix strigosa cooperi), Smooth Green Snake (Opheodrys vernalis), American Dipper (Cinclus mexicanus), Osprey (Pandion haliaetus), Broad-winged Hawk (Buteo platypterus), Townsend's Solitaire (Myadestes townsendi), Ruby-crowned Kinglet (Regulus calendula), Indigo Bunting (Passerina cyanea), Downy Woodpecker (Picoides pubescens), Red-breasted Nuthatch (Sitta canadensis), Yellow-rumped warbler (Setophaga coronate), MacGillivray's warblers (Geothlypis tolmiei), White-throated Swift (Aeronautes saxatalis), Canyon Wren (Catherpes mexicanus), Plumbeous Vireo (Vireo plumbeus), Red-tailed Hawk. (Buteo jamaicensis), Brown Trout (Salmo trutta), Rainbow Trout (Oncorhynchus mykiss), and Brook Trout (Salvelinus fontinalis).

The Proposed Action is to dispose of the Federal encumbrance in Hydro #2 GPA in exchange for a new Federal encumbrance with the Hepler GPA. While it would allow additional flexibility and latitude in SDGFP management of the Hydro #2 GPA property as they respond to expanded public uses, safety concerns, and the associated demand for additional services and amenities associated with those public uses, the proposed action if implemented would not change or in any way impact existing wildlife resources except to protect them from disturbance.

3.8 Federally Listed Species

There are no known occurrences of endangered, rare, or threatened species in the immediate project area. Species considered per the Information for Planning and Consultation tool (IPaC) (www.ipac.ecosphere.fws.gov) for Lawrence County are northern long-eared bat, red knot, and monarch butterflies. A search of the SD Natural Heritage Database does not find any occurrences of endangered, rare, or threatened species in the immediate project area.

The Proposed Action is to dispose of the Federal encumbrance in Hydro #2 GPA in exchange for a new Federal encumbrance with the Hepler GPA. While it would allow additional flexibility and latitude in SDGFP management of the Hydro #2 GPA property as they respond to expanded public uses and the associated demand for additional services and amenities associated with those public uses, the proposed action if implemented would not in any way impact Federally or state listed species. Correspondence from South Dakota Natural Heritage Program is attached as Appendix C.

3.9 State Species of Special Concern

A search was performed of the South Dakota Natural Heritage Database and records identified occurrences of the American Dipper and Osprey, both species listed as threatened in South Dakota, at the Hydro #2 GPA. Bald Eagle and Iowa Skipper have also been documented at the Beilage-Hepler GPA.

The Proposed Action is to dispose of the Federal encumbrance in Hydro #2 GPA in exchange for a new Federal encumbrance with the Hepler GPA. While it would allow additional flexibility and latitude in SDGFP management of the Hydro #2 GPA property as they respond to expanded public uses and the associated demand for additional services and amenities associated with those public uses, the proposed action if implemented would not in any way impact State species of special concern. Correspondence from South Dakota Natural Heritage Program is attached as Appendix C.

Chapter 4 ENVIRONMENTAL CONSEQUENCES

4.1 Alternative 1 - Proposed Action

The Proposed Action is to dispose of the Federal encumbrance in Hydro #2 GPA in exchange for a new Federal encumbrance with the Hepler GPA. The proposed action would allow additional flexibility and latitude in SDGFP management of the Hydro #2 property as they respond to expanded public uses and the associated demand for additional services and amenities associated with those public uses. The scope of the Proposed Action is administrative in nature and would result in no net loss or gain of property owned and managed by SDGFP, nor any net loss of Federal owned and managed real properties.

4.2 Alternative 2 – No Action

Under the No Action alternative, SDGFP will continue to own and manage both the Hydro #2 GPA and the Helper GPA, the Federal encumbrance will remain in the Hydro #2 GPA property, and the potential to adequately and effectively respond to expanded public uses and the associated demand for additional services and amenities associated with those public uses will likely be unfeasible due to the strict regulations that dictate eligible use of Pittman-Roberson Federal funding. If no action is taken, SDGFP will be unable to build the infrastructure that will limit or control public use of the area and will be less successful in protecting the habitat from user impacts. The public safety issues related to the inability to accommodate the number of visitors will remain in place on this GPA and will increase over time.

4.3 Summary of Alternatives

The following table summarizes impacts to identified resources for both the Proposed Action Alternative and the No Action Alternative.

Table 1 - Summary of Potential Impacts to Identified Impact Topics

IMPACT TODIC	IMPACTS BY ALTERNATIVE					
IMPACT TOPIC	Proposed Action	No Action				
RECREATION	The proposed action to dispose of the Federal encumbrance in Hydro #2 GPA in exchange for a new Federal encumbrance with the Hepler GPA is administrative in nature. Under the proposed action alternative wildlife recreation opportunities would not change but the proposed action would better ensure that continued public use would be safe and feasible.	If no action is taken to dispose of Hydro #2 GPA, overtime there will be negative impacts to wildlife related recreation from increasing public use of the area.				
FLOODPLAINS AND WETLAND RESOURCES	The proposed action to dispose of the Federal encumbrance in Hydro #2 GPA in exchange for a new Federal encumbrance with the Hepler GPA is administrative in nature. Under the proposed action alternative, floodplain and wetland resources would be unaffected.	If no action is taken to dispose of Hydro #2 GPA, overtime there will be negative impacts to floodplains and wetland resources from increasing public use of the area.				
PRIME AND UNIQUE FARMLAND	The proposed action to dispose of the Federal encumbrance in Hydro #2 GPA in exchange for a new Federal encumbrance with the Hepler GPA is administrative in nature. Under the proposed action alternative there would be no impact to prime and unique farmlands as none occur on the property.	If no action is taken to dispose of Hydro #2 GPA, there will be no impact to prime and unique farmlands as none occur on the property.				
HISTORIC AND CULTURAL RESOURCES	The proposed action to dispose of the Federal encumbrance in Hydro #2 GPA in exchange for a new Federal encumbrance with the Hepler GPA is administrative in nature. Under the proposed action alternative there would be no impact to known historic and cultural resources as the impacts have been mitigated with a fully executed MOA.	If no action is taken to dispose of Hydro #2 GPA, overtime there will be negative impacts to historic and cultural resources identified on the property from increasing public use of the area.				
VEGETATION RESOURCES	The proposed action to dispose of the Federal encumbrance in Hydro #2 GPA in exchange for a new Federal encumbrance with the Hepler GPA is administrative in nature. Under the proposed action alternative, vegetation resources would be less affected. The infrastructure that is needed in specific areas will minimize a larger area of habitat erosion and protect plant communities from disturbance.	If no action is taken to dispose of Hydro #2 GPA, overtime there will be negative impacts to vegetation resources from increasing public use of the area.				
WILDLIFE RESOURCES	The proposed action to dispose of the Federal encumbrance in Hydro #2 GPA in exchange for a new Federal encumbrance with the Hepler GPA is administrative in nature. Under the proposed action alternative, wildlife resources would be temporarily affected by adding infrastructure in specific areas that	If no action is taken to dispose of Hydro #2 GPA, overtime there will be negative impacts to wildlife resources from increasing public use of the area.				

	will minimize a larger area of habitat erosion and protect wildlife resources.	
FEDERALLY LISTED SPECIES	The proposed action to dispose of the Federal encumbrance in Hydro #2 GPA in exchange for a new Federal encumbrance with the Hepler GPA is administrative in nature. Under the proposed action alternative, there would be no impact to Federally listed species.	If no action is taken to dispose of Hydro #2 GPA, there will be no impact to Federally listed species as none have been found within the project area.
STATE SPECIES OF SPECIAL CONCERN	The proposed action to dispose of the Federal encumbrance in Hydro #2 GPA in exchange for a new Federal encumbrance with the Hepler GPA is administrative in nature. Under the proposed action alternative, there would be no impact to state listed threatened or endangered species, or species of greatest conservation need.	If no action is taken to dispose of Hydro #2 GPA, there may be negative impacts to several state listed species and species of special concern from increasing public use of the area.

4.4. Cumulative Impacts of the Proposed Action

SDGFP acquired the Hydro #2 GPA (previously known as the Spearfish Canyon HMC Property) in December 2014, using grant funds from the Pittman-Roberson Wildlife Restoration Act, resulting in a Federal encumbrance on the property. The property was purchased to provide wildlife production, wildlife habitat protection, and expanded public hunting and wildlife related recreation opportunities. SDGFP is now requesting approval to dispose of the Federal encumbrance on the 32.251-acre Hydro #2 GPA in Lawrence County, South Dakota in exchange for a new Federal encumbrance with the 320 acre Hepler GPA in Lawrence County, South Dakota, a GPA acquired in April 1944 for use as a Game Production Area to provide wildlife habitat and public hunting opportunities.

While the Hydro #2 GPA still currently serves the purposes for which it was acquired, SDGFP has determined public use and public expectations of SDGFP supported services and amenities at Hydro #2 GPA have expanded beyond those anticipated by SDGFP at the time of purchase and will increase over time to a point that it may be infeasible to continue to meet the original Federal Grant purpose. Due to its location off State Highway 14A in Spearfish Canyon and Spearfish Creek, public use activities, and the seasonality of those uses surrounding a popular location named Devil's Bathtub (Figure 1), have expanded to include more year-round non-consumptive use. Activities such as fishing, hiking, wildlife viewing, and picnicking have become commonplace in addition to the intended primary public use as a public hunting area. Overtime these activities will affect the wildlife resources currently located on this property due to the increased public use of the area. If no action is taken in the near future the habitat will no doubt be negatively impacted by the increasing public use of the area and will likely no longer serve the purpose for which it was acquired.

Because SDGFP will retain ownership of Hydro #2, transferring the Federal encumbrance in Hydro #2 GPA will allow the agency more flexibility and latitude in its management of the property due to the strict regulations that dictate eligible use of Pittman-Roberson funding. Specifically, SDGFP would be better positioned to

provide additional services and amenities made necessary by expanded public uses, possibly including items such as restroom facilities, picnic areas, additional parking, and maintained hiking trails. SDGFP believes the current Federal encumbrance in Hydro #2 GPA, while not an impediment to current management, presents conflicting use challenges as it broadens its management approach in response to public demands and needs. Upon evaluating the effects of the proposed disposal of the Federal encumbrance, SDGFP has determined that any wildlife resources and existing public interests would only be temporarily affected by building the infrastructure needed to minimize a larger area of habitat erosion and protect wildlife resources from disturbance.

Chapter 5 CONSULTATION AND COORDINATION

South Dakota GFP consulted with the following state, county, and federal agencies on this project and the relevant responses are addressed in the attached appendices.

Advisory Council for Historic Properties (ACHP) Federal Emergency Management Agency (FEMA) South Dakota Archaeological Research Center (SD ARC)

South Dakota Department of Game, Fish and Parks, Environmental Review Team South Dakota State Historic Preservation Office United States Department of Agriculture, Natural Resources Conservation Service United States Fish and Wildlife Service, Wildlife and Sport Fish Restoration Program

Chapter 6 PUBLIC COMMENTS

The draft EA for this project was posted for public comment (https://www.fws.gov/media/draft-environmental-assessment-federal-land-disposal-and-replacement-hydro-2-game-production) from March 19, 2024 to April 19, 2024 and a link was also placed on the SDGFP website, however, no comments were received during the public comment period.

Chapter 7 LIST OF PREPARERS

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APPENDIX A

Natural Resource Conservation Service, Soil Resource Report for Hydro #2 GPA, Lawrence County, SD

Natural Resource Conservation Service, Soil Resource Report for Hepler GPA, Lawrence County, SD

USDA United States
Department of Agriculture

Natural Resources Conservation

Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Lawrence County, South Dakota

Hydro #2 GPA



Preface

Soil surveys contain information that affects land use planning in suNey areas. They highlight soil limitations that *affect* various land uses and provide information about the properties of the soils in the suNey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conseNationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the suNeys to help them understand, protect, or enhance the environment.

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Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

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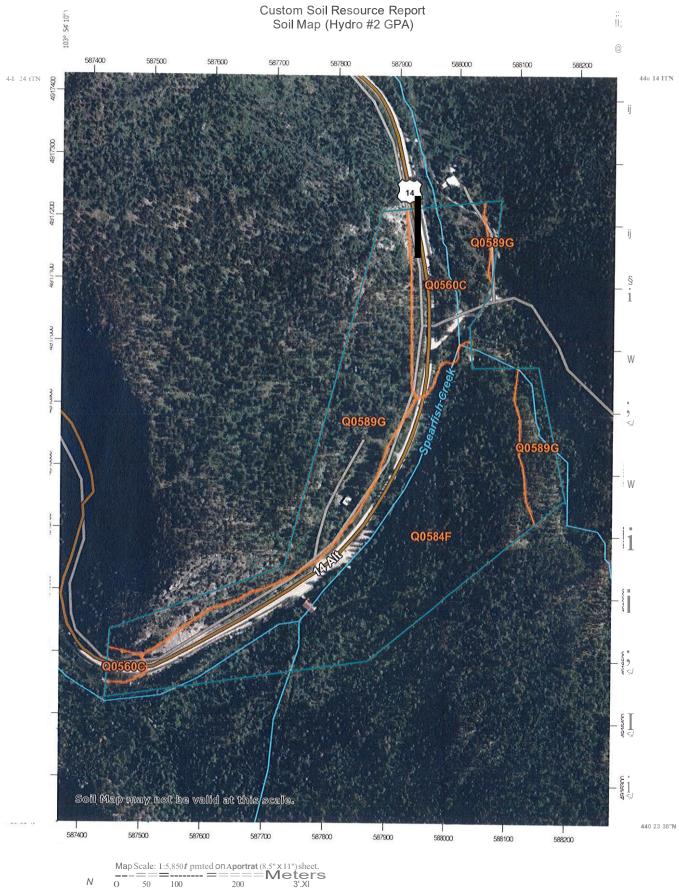
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Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.





MAP LEGEND

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Alea of Inuirest (AOI)

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Closed Oepress,on

Gravel Pit

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Lava Flow 1

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Perennial Water

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Aerial Pholography

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Source of Map Natural Resources Conservation Ser.nee

Web SoilSurvey URL
Coordinate System Web Mercator (EPSG3857)

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Map Unit Legend (Hydro #2 GPA)

Map Unit Symbol	Map Unit Name	Acres in A0I	Percent of AOI
Q0560C	Rapidreek gravelly loam. 2 to 10 percent slopes. rarely flooded	8.6	13.7%
Q0584F	Vanocker-Citadel complex. 20 to 60 percent slopes	34.2	54.6%
Q0589G Vanocker-Sawdust, moist-Rock outcrop complex. 40 to 80 percent slopes		19.9	31.7%
Totals for Area of Interest		62.6	100.0%

Map Unit Descriptions (Hydro #2 GPA)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate

pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, O to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Soil Information for All Uses

Suitabilities and Limitations for Use

The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

Land Classifications

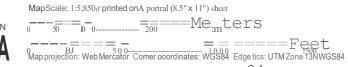
Land Classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

Farmland Classification (Hydro #2 GPA)

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.







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Table-Farmland Classification (Hydro #2 GPA)

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Rating Options-Farmland Classification (Hydro #2 GPA)

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard 02487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nres142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nres.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nres142p2 053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nres142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2 053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nres.usda.gov/wps/portal/nrcs/detaii/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf



NRCS Natural

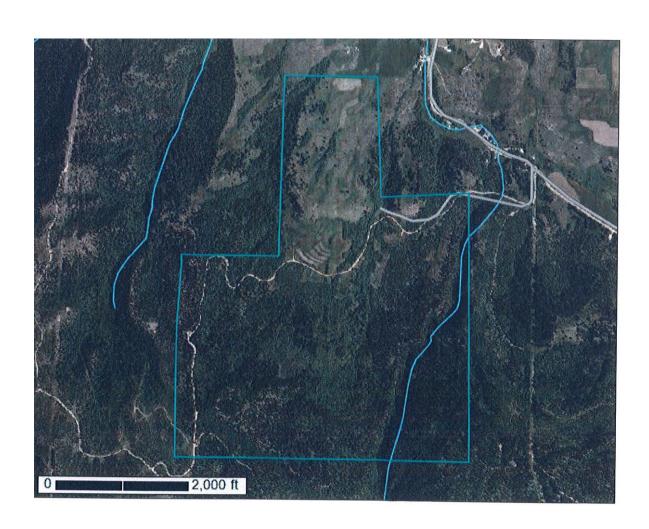
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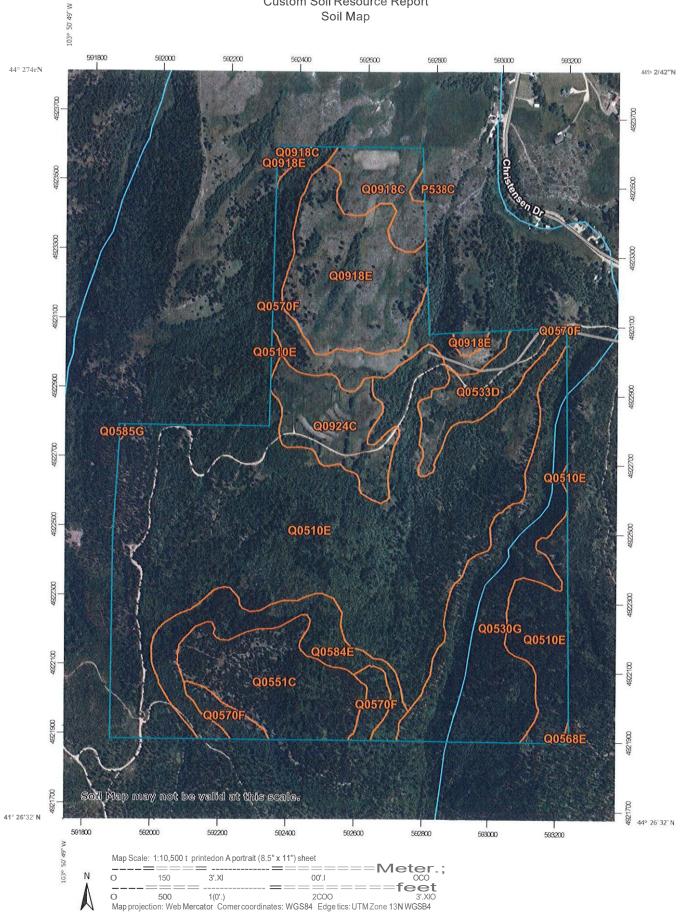
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Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in A0I	Percent of AOI	
P538C	Vale silt loam, 6 to 9 percent slopes	0.6	0.2%	
Q0510E	Citadel-Tollfiat-Danjay complex. 10 to 40 percent slopes	195.7	46.3%	
00530G	Hopdraw-Sawdust-Rock outcrop complex. moist, 40 to 80 percent slopes	53.0	12.6%	
005330	Hickok-Maitland, moist complex, 6 to 25 percent slopes	14.6	3.5%	
Q0551C	Rockerville complex, 2 to 12 percent slopes	30.9	7.3%	
Q0568E	Roubaix silt loam. 6 to 40 percent slopes	0.2	0.0%	
Q0570F	Opechekahta-Citivar- Schaeferville complex. 20 to 60 percent slopes	29.3	6.9%	
00584E	Vanocker-Citadel complex. 1O to 40 percent slopes	23.0	5.4%	
00585G	Vanocker-Danjay-Hopdraw, moist complex, 40 to 80 percent slopes	0.2	0.0%	
Q0918C	Rockerville-Pesowyo complex. 3 to 12 percent slopes	14.3	3.4%	
Q0918E	Rockerville-Pesowyo complex, 10 to 30 percent slopes	40.1	9.5%	
Q0924C	Tilford silt loam, cool, 6 to 10 percent slopes	20.4	4.8%	
Totals for Area of Interest		422.4	100.0%	

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without

including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil* phases. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, Oto 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Soil Information for All Uses

Suitabilities and Limitations for Use

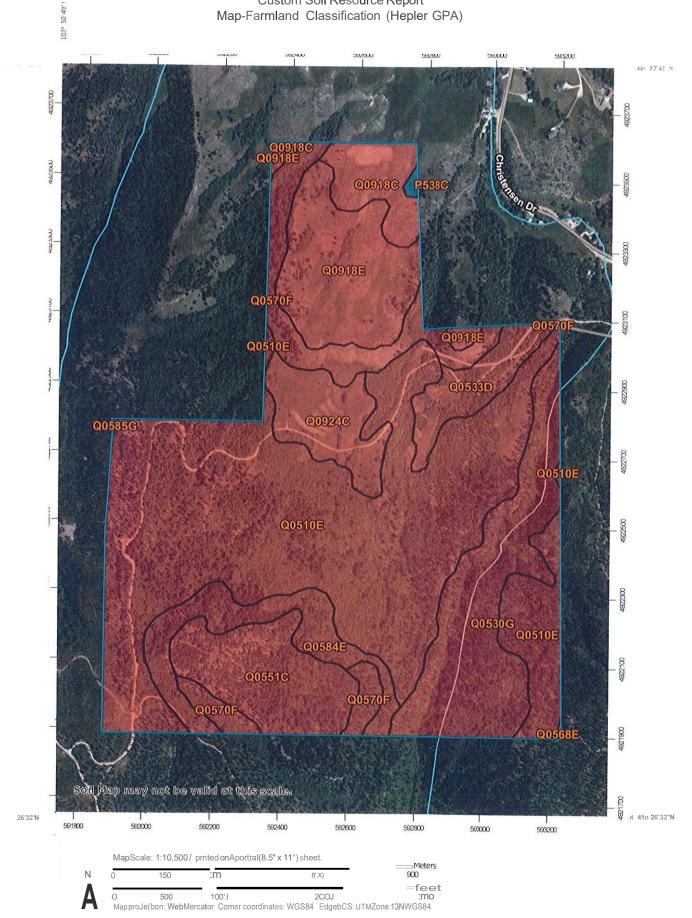
The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

Land Classifications

Land Classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

Farmland Classification (Hepler GPA)

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.



MAP LEGEND	
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						This product is generated from the USDA-NRCS certified data as of me version date(s) hsled below.
						Soll Survey Area Lawrence County. South Dakota Survey Area Data
						S01I map units are labeled (as space allows) for map scales 1 50 000 or larger.
						Date(s) aerial images were photographed Jun 16, 2022-Au 8, 2022
						The orthophoto or other base map on which lhe soil lines were compiled and d191t12ed probably differs from the background imagery displayed on these maps. As a result, some mmor

Table-Farmland Classification (Hepler GPA)

Map unit symbol	Map unit name	Rating	Acres In AOI	Percent of AOI
P538C	Vale silt loam, 6 to 9 percent slopes	Farmland of local importance	0.6	0.2%
Q0510E	Citadel-Tollflat-Danjay complex, 10 to 40 percent slopes	Not prime farmland	195.7	46.3%
Q0530G	Hopdraw-Sawdust-Rock outcrop complex, moist, 40 to 80 percent slopes	Not prime farmland	53.0	12.6%
Q05330	Hickok-Maitland. moist complex. 6 to 25 percent slopes	Not prime farmland	14.6	3.5%
Q0551C	Rockerville complex. 2 to 12 percent slopes	Not prime farmland	30.9	7.3%
Q0568E	Roubaix silt loam, 6 to 40 percent slopes	Not prime farmland	0.2	0.0%
Q0570F	Opechekahta-Citivar- Schaeferville complex, 20 to 60 percent slopes	Not prime farmland	29.3	6.9%
00584E	Vanocker-Citadel complex. 10 to 40 percent slopes	Not prime farmland	23.0	5.4%
Q0585G	Vanocker-Danjay- Hopdraw, moist complex, 40 to 80 percent slopes	Not prime farmland	0.2	0.0%
Q0918C	Rockerville-Pesowyo complex, 3 to 12 percent slopes	Not prime farmland	14.3	3.4%
Q0918E	Rockerville-Pesowyo complex, 10 to 30 percent slopes	Not prime farmland	40.1	9.5%
Q0924C	Tilford silt loam. cool. 6 to 10 percent slopes	Not prime farmland	20.4	4.8%
Totals for Area of Intere	st		422.4	100.0%

Rating Options-Farmland Classification (Hepler GPA)

Aggregation Method. No Aggregation Necessary

Tie-break Rule: Lower

References

American Association of State Highway and Transportation Officials (MSHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard 02487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nres142p2 054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nres.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nres142p2 053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2 053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2 053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2 054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nres.usda.gov/wps/portal/nres/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nres.usda.gov/1nterneUFSE_DOCUMENTS/nrcs142p2_052290.pdf

APPENDIX B

State Historical Preservation Office, Section 106 Project Consultation Memorandum of Agreement, Hydro #2 Game Production Area Advisory Council on Historic Preservation, Invitation to Consult







July 27, 2022

Ms. Tanna Zabel Department of Game, Fish and Parks Foss Building 523 East Capitol Pierre, SD 57501

SECTION 106 PROJECT CONSULTATION

Project: 190415002F - Federal Encumbrance Removal from Spearfish Canyon Hydro #2 GPA

and Transfer Federal Encumbrance to Hepler GPA

Location: Lawrence County

(USFWS/GFP)

Dear Ms. Zabel:

On July 23, 2022, the agreement titled *Memorandum of Agreement Among United States Fish and Wildlife Service, South Dakota State Historic Preservation Officer, and South Dakota Department of Game, Fish, and Parks Regarding the Hydro #2 Game Production Area, Lawrence County, South Dakota* was fully executed pursuant to 54 U.S.C. 306108, also known as Section 106 of the National Historic Preservation Act of 1966, as amended.

Previously, on January 12, 2021, and April 15, 2021, Jana Morehouse of Quality Services, Inc. submitted flash drives to the South Dakota Office of the State Historic Preservation Officer (SHPO) containing photographs, photo keys, a photo log, and historical research. Submission of this documentation fulfills Stipulations I, II, and III of the above-referenced agreement. SHPO will submit the documentation to the South Dakota State Archives for public use and reproduction, as stipulated in the agreement.

SHPO staff will begin the process of nominating the Hydro #2 Building (LA00002055) to the National Register of Historic Places, as South Dakota Department of Game, Fish and Parks (SDGFP) has consented to the nomination of the building in Stipulation IV of the agreement. Please ensure that SDGFP manages LA00002055 and 39LA1711 according to the terms agreed upon in Stipulations V and VI, respectively, of the agreement. As per the stipulations of the agreement, SDGFP must notify SHPO of any planned actions that may disturb or modify either of the properties.

Thank you for the opportunity to work with your agency to resolve the adverse effects of the undertaking on LA00002055 and 39LA1711, pursuant to 36 C.F.R. § 800.6 of the implementing regulations of Section 106 of the National Historic Preservation Act of 1966, as amended.

Should you require additional information, please contact Jenna Carlson Dietmeier at <u>Jenna.CarlsonDietmeier@state.sd.us</u> or at (605)773-8370. Your concern for the non-renewable cultural heritage of South Dakota appreciated.

Sincerely,

Ted M. Spencer

State Historic Preservation Officer

Jenna Carlson Dietmeier, PhD

Jenne Cal Dut

Review & Compliance Coordinator

CC: John Kanta - South Dakota Department of Game, Fish and Parks Sean Blanchette - South Dakota Department of Game, Fish and Parks Paul Coughlin - South Dakota Department of Game, Fish and Parks Karri Springer - United States Fish and Wildlife Service

Adrianna Araya – United States Fish and Wildlife Service



United States Department of the Interior



FISH AND WILDLIFE SERVICE Mountain-Prairie Region

MAILING ADDRESS:

LOCATION:

P.O. Box 25486, Attn: WSFR

Attn: WSFR 134 Union Boulevard, Suite 460B

Denver Federal Center Denver, Colorado 80225-0486

Lakewood, Colorado 80228-1807

MEMORANDUM OF AGREEMENT AMONG

UNITED STATES FISH AND WILDLIFE SERVICE, SOUTH DAKOTA STATE HISTORIC PRESERVATION OFFICER, AND SOUTH DAKOTA DEPARTMENT OF GAME, FISH AND PARKS REGARDING

THE HYDRO #2 GAME PRODUCTION AREA LAWRENCE COUNTY, SOUTH DAKOTA

WHEREAS, the United States Fish & Wildlife Service (USFWS) provides oversight and administrative support to the South Dakota Department of Game, Fish and Parks (SDGFP) through the Wildlife Restoration Grant Program to conserve, protect, and enhance wildlife, their habitats, and the hunting opportunities they provide; and

WHEREAS, SDGFP utilized funding through the Pittman-Roberson Wildlife Restoration Act (grant #F15AF00029 (W-27-L-3) to acquire the Hydro #2 Game Production Area (GPA) in Lawrence County, South Dakota in December 2014; and

WHEREAS, for purposes of enhancing public safety and accommodating the increased public use of the area, the USFWS and SDGFP plan to approve an administrative action whereby the federal interest in the Hydro #2 GPA associated with the Pittman-Roberson Wildlife Restoration grant will be removed to allow the SDGFP to build the infrastructure needed that will also minimize habitat erosion and protect wildlife from disturbance; and

WHEREAS, the Area of Potential Effect (APE) for the proposed administrative action is situated in Spearfish Canyon, Lawrence County, South Dakota, as thoroughly described and depicted in the attached *Intensive Level III Cultural Resources Survey of Hydro No. 2 Game Production Area for Game, Fish and Parks, Lawrence County, South Dakota* (Attachment 1), and is known to contain historic properties 39LA1711 and LA00002055 as identified and described also in Attachment 1; and

WHEREAS, USFWS and SDGFP, in consultation with the South Dakota State Historic Preservation Officer (SHPO) pursuant to 36 C.F.R. § 800.5(a)(2)(vii), have determined such administrative action constitutes an undertaking that will have an adverse effect on historic properties 39LA1711 and LA00002055 as identified in the *Intensive Level III Cultural Resources Survey of Hydro No. 2 Game Production Area for Game. Fish and Parks, Lawrence County, South Dakota*; and

WHEREAS, in accordance with 36 C.F.R. § 800.6, USFWS has notified the Advisory Council on Historic Preservation (ACHP) of its adverse effect determination with specified documentation, and the ACHP has chosen not to participate in the consultation pursuant to 36 CFR part 800.6(a)(1)(iii); and

WHEREAS, USFWS has consulted with and invited comments from the eight South Dakota Tribal Governments regarding the undertaking, to which no responses were received.

NOW, THEREFORE, USFWS, SDGFP, and SHPO agree that the undertaking shall be implemented in accordance with the following stipulations in order to consider the effect of the undertaking on historic properties.

STIPULATIONS

USFWS in coordination with SDGFP and SHPO shall ensure the following measures are carried out:

I. PHOTOGRAPHIC DOCUMENTATION

SDGFP will submit photographic documentation of LA00002055 (Hydro #2 Building) to the SHPO which conforms to the Photography Guidelines for the Purposes of Section 106 Mitigation (Attachment 2). This will include digital color photographs that meet the National Register of Historic Places photograph standards, meaning photos must be at least 2000 x 3000 pixels at 300 dpi, saved as TIFF, and submitted on a CD or flash drive. Photographs shall minimally include full views of the building's primary elevations, closeups of any decorative, character-defining, or structural features, and general views of the building and its environs. Photographs will be labeled according to the SHPO's naming requirements defined in the South Dakota Historic Resource Survey Manual. SHPO must approve the documentation prior to the removal of the federal encumbrance. Upon review and approval of the documentation, SHPO will submit the photographs to the South Dakota State Archives for public use and reproduction.

II. EXISTING RECORD SEARCH

SDGFP will conduct a search for any existing reports, photographs, drawings, plans, or similar documents related to LA00002055 (Hydro #2 Building). The search will include, but is not limited to, any SDGFP or USFWS files, county or city government files, local historical society or museum files, or other repositories that may likely have records related to the building. SDGFP will submit a letter to SHPO documenting what repositories or files were searched.

III. EXISTING RECORD REPRODUCTION

If any publicly available documents related to LA00002055 (Hydro #2 Building) are found while completing Stipulation II and those documents are not otherwise restricted by federal

or state law, SDGFP will either submit the original, if possible, or one copy of those documents to SHPO. SDGFP will also scan any photographs (historic or more recent) of LA00002055 found while completing Stipulation II and provide the images to SHPO. Images will be scanned at 600 dpi, saved as TIFFs, and submitted on a CD or flash drive. Upon receipt and review of the documents and/or images, SHPO will submit the documents and/or images to the South Dakota State Archives for public use and reproduction.

IV. NATIONAL REGISTER OF HISTORIC PLACES NOMINATION OF LA00002055

SDGFP will consent to the nomination of site LA00002055 (Hydro #2 Building) to the National Register of Historic Places.

V. MANAGEMENT OF LA00002055

SDGFP will notify SHPO of any proposed undertaking resulting in any disturbance or modification to LA00002055 (Hydro #2 Building) and will not authorize any third party to modify or occupy the building under a separate arrangement.

VI. MANAGEMENT OF 39LA1711

SDGFP will continue to manage site 39LA1711 in a manner that protects the integrity of the site by maintaining existing fences and locked gates which are in place to block public access to the site. SDGFP will notify SHPO of any planned undertakings that may result in changes to the existing protections, and disturbance or modification to or within the boundaries of 39LA1711.

VII. DURATION

This MOA will expire if its terms are not carried out within five (5) years from the date of its execution. Prior to such time, USFWS may consult with the other signatories to reconsider the terms of the MOA, extend the duration, or amend it in accordance with Stipulation XI below.

VIII. POST-REVIEW DISCOVERIES

SDGFP will notify SHPO if properties are discovered that may be historically significant, or unanticipated effects on historic properties are found immediately upon discovery.

IX. MONITORING AND REPORTING

Each year following execution of the MOA until it expires or is terminated, SDGFP shall provide all parties to this MOA a summary report, detailing work undertaken pursuant to stipulations of this MOA. Such summary report shall be delivered no later than July I and shall include descriptions of any scheduling changes proposed, any problems encountered,

and any disputes and objections received in SDGFP's efforts to carry out the terms of this MOA.

X. DISPUTE RESOLUTION

Should any signatory to this MOA object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, USFWS shall consult with such party to resolve the objection. If USFWS determines that such objection cannot be resolved, it will:

- a. Forward all documentation relevant to the dispute, including the USFWS proposed resolution, to the Advisory Council on Historic Preservation (ACHP). The ACHP shall provide USFWS with its advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision on the dispute, USFWS shall prepare a written response taking into account any timely advice or comments regarding the dispute from the ACHP, signatories and concurring parties, and provide them with a copy of this written response. USFWS will then proceed according to its final decision.
- b. If the ACHP does not provide its advice regarding the dispute within the thirty (30) day period, USFWS may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, USFWS shall prepare a written response taking into account any timely comments regarding the dispute from the signatories and concurring parties to the MOA and provide them and the ACHP with a copy of such written response.
- c. USFWS's responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged.

XI. AMENDMENTS

This MOA may be amended when such an amendment is agreed to in writing by all signatories. Signatories shall consult regarding the nature of the amendment to reach agreement regarding the provisions to be included in the amendment. The amendment will be circulated for signature by all signatories and will become effective on the date a copy signed by all the signatories is filed with the ACHP.

XII. TERMINATION

If any signatory to this MOA determines that its terms will not or cannot be carried out, that party shall immediately consult with the other signatories to attempt to develop an amendment per Stipulation XI, above. If within thirty (30) days (or another time period agreed to by all signatories) an amendment cannot be reached, any signatory may terminate the MOA upon written notification to the other signatories.

Once the MOA is terminated, and prior to work continuing on the undertaking, USFWS must either (a) execute a MOA pursuant to 36 CFR § 800.6 or (b) request, take into

account, and respond to the comments of the ACHP under 36 CFR § 800.7. USFWS shall notify the signatories as to the course of action it will pursue.

Execution of this MOA by the USFWS, SDGFP, and SHPO and implementation of its terms is evidence USFWS has considered the effects of this undertaking on historic properties and afforded the ACHP an opportunity to comment.

SIGNATORIES

ANNA MUNOZ Digitally signed by ANNA MUNOZ Date: 2022.07.15 12:55:26 -06'00'

Regional Director

/ Date

US Fish & Wildlife Service, Mountain-Prairie Region 6

Ted Spencer

Digitally signed by Ted Spencer Date: 2022.07.23 01:59:53 -05'00'

Ted M Spencer, State Historic Preservation Officer / Date South Dakota State Historic Preservation Office

Kevin Robling

Digitally signed by Kevin Robling Date: 2022.07.19 11:08:25 -05'00'

Kevin Robling, Secretary

/ Date

South Dakota Department of Game, Fish & Parks



Advisory Council on Historic Preservation Electronic Section 106 Documentation Submittal System (e106) Form MS Word format

Send to: e106@achp.gov

Please review the instructions at www.achp.gov/e106-email-form prior to completing this form. Questions about whether to use the e106 form should be directed to the assigned ACHP staff member in the Office of Federal Agency Programs.

I. Basic information

I. Dasic iiii	ormauon
1. Purpose	of notification. Indicate whether this documentation is to:
	Notify the ACHP of a finding that an undertaking may adversely affect historic properties
\boxtimes	Invite the ACHP to participate in a Section 106 consultation
	Propose to develop a project Programmatic Agreement (project PA) for complex or multiple undertakings in accordance with 36 C.F.R. 800.14(b)(3)
	Supply additional documentation for a case already entered into the ACHP record system
	File an executed MOA or PA with the ACHP in accordance with 800.6(b)(iv) (where the ACHP did not participate in consultation)
	Other, please describe Click here to enter text.
	roject Number (If the ACHP was previously notified of the undertaking and an ACHP nber has been provided, enter project number here and skip to Item 7 below):
3. Name of agency):	f federal agency (If multiple agencies, list them all and indicate whether one is the lead
Department	of Interior – U.S. Fish and Wildlife Service
4. Name of	fundertaking/project (Include project/permit/application number if applicable):
SD Hydro #	‡2 Game Production Area Property Disposal
	n of undertaking (Indicate city(s), county(s), state(s), land ownership, and whether it would or affect historic properties located on tribal lands):

The Hydro #2 GPA property is located in the Black Hills of western South Dakota in Lawrence County and is owned and managed by the Wildlife Division of South Dakota Game, Fish and Parks (SDGFP). The undertaking will affect historic properties currently located on property with a federal nexus.

6. Name and title of federal agency official and contact person for this undertaking, including email address and phone number:

Adrianna Araya, Grant Program Manager, Wildlife and Sport Fish Restoration Program, adrianna araya@fws.gov, (303) 236-8165.

II. Information on the Undertaking*

7. Describe the undertaking and nature of federal involvement (if multiple federal agencies are involved, specify involvement of each):

SDGFP received federal funding through a Wildlife Restoration grant to acquire the Hydro #2 GPA property in 2014 to provide wildlife production, wildlife habitat protection, and expanded public hunting and wildlife related recreation opportunities. In recent years this property has seen an increase in public use by visitors of Spearfish Canyon, not for purposes for which the property was acquired but to visit adjacent property. In this section of Spearfish Canyon the Hydro #2 GPA is bisected by Highway 14A (Figure 1) and the area has become a safety concern because a large number of visitors are parking on the shoulders of the road and from there traveling on foot across the property to the adjacent property. To address the issue, SDGFP is requesting federal approval to remove the federal interest from Hydro #2 GPA property by a land disposal action. This action would allow the Department to continue to manage the property for purpose for which it was acquired while also accommodating the increased public use of the area. With the federal interest removed, the Department can build the infrastructure that is needed to keep visitors safe while minimizing habitat erosion and protecting wildlife from disturbance.

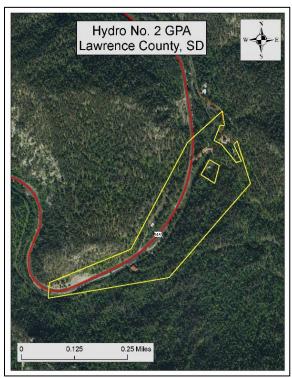


Figure 1. Hydro No. 2 GPA

8. Describe the Area of Potential Effects (APE):

The APE involves the entire Hydro #2 GPA property.

9. Describe steps taken to identify historic properties:

Within the project area, six previous surveys have been conducted, though no archaeological sites, structures, or bridges have been recorded. For this undertaking SDGFP requested a Phase I record search and intensive cultural resources survey for the 40.1 acres of Hydro #2 GPA. On April 27, 2020 a pedestrian survey was conducted and structure recordation within the proposed project area. An Intensive Level III Cultural Resources Survey was also completed on June 23, 2020 (attachment).

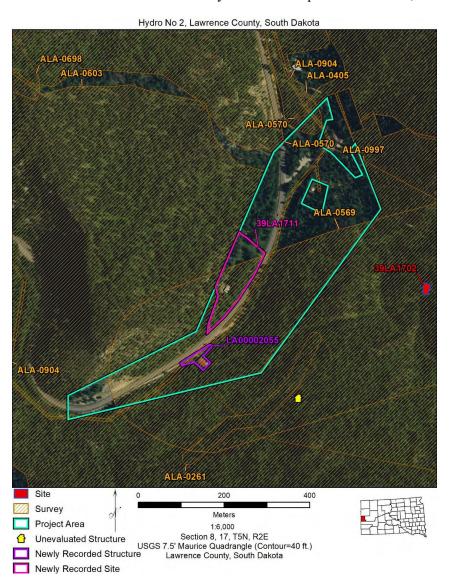


Figure 2. Closeup of Hydro No. 2 APE, newly recorded site and structure, and previously recorded site, surveys, and structure illustrated on Farm Service Agency (FSA) 2018 orthophoto.

10. Describe the historic property (or properties) and any National Historic Landmarks within the APE (or attach documentation or provide specific link to this information):

One newly recorded structure was recorded within the APE and is the Homestake Hydro Electric Plant #2 (LA000002055). The facility was built in 1917 as a hydroelectric facility over Spearfish Creek. The hydroelectric function of the building is no longer in use and the area is owned and operated as a Game Production Area by SDGFP. The building is a two-story structure featuring a concrete foundation laid on three loadbearing, clay brick walls.

Architectural features of the building include four two-story arch windows located on both the east and west walls; one small arch window, one oculus window, one lunette window, and a set of large double doors on the north face of the building; a clay brick exterior; and a brick chimney. Spanning Spearfish Creek, the access bridge is comprised of timber beams and steel framing and is anchored to a stone retaining wall spanning the north side of the creek. Similar timber decking continues from the face of LA00002055 around both the east and west sides. Access to the building is controlled by a gated catwalk, chain-link fencing around the entirety of the structure, and metal wiring over all the arch windows as well as the large double doors on the face of the building (Figure 3). As a result, the south face of the building was not accessible for this survey.

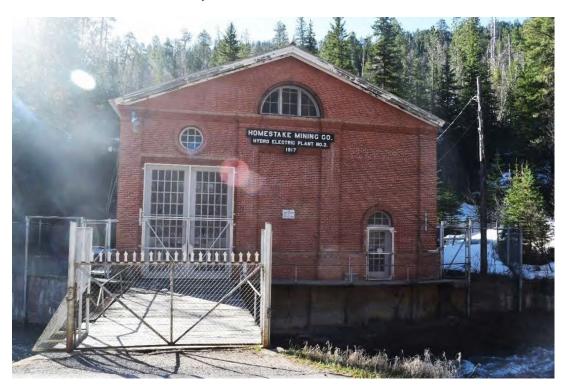


Figure 3. North face of LA00002055. View is to the south-southeast.

Based on the architectural elements, the structure is considered Eligible for listing on the NRHP under Criterion C, as it exhibits architectural design value and provides a good example of early 20th century industrial design. Additionally, the influence of the Homestake Mining Company on Black Hills throughout the late 1800s and mid-1900s was profound and helped to shape the industrial legacy of the regional making LA00002055 Eligible under Criterion A for its association with the early mining history of the region. The SD SHPO concurred with this recommendation of May 28, 2020.

Another new historic period site was recorded during the current survey (39LA1711). Eleven features comprise the site and include both modern and abandoned elements (Figure 4). consists of two foundation remnants, one stone retaining wall, one abandoned fence line, one cistern, one obsolete telephone pole with a discarded glass insulator, and one dump with miscellaneous pieces. Based on

historic records, the site is likely associated with mining or railroad activities at the turn of the twentieth century. Site 39LA1711 is recommended Eligible for the NRHP under Criterion A, for its association with the mining industry of the Black Hills, as well as Criterion D, as it has the potential to provide additional data about the early industrial activities of Spearfish Canyon.



Figure 4. Overview of 39LA1711 showing Features 1-11, illustrated on FSA 2018 orthophoto.

11. Describe the undertaking's effects on historic properties:

The resulting effect from the land disposal action of the Hydro #2 GPA property on historic properties is limited in scope. The LA00002055 structure has not been operated or maintained since it became obsolete and abandoned and has not served a useful purpose for SDGFP since the property was acquired in 2014. SDGFP is restricted from using federal funds to maintain the structure as it would not be considered an ineligible activity or expense under the Pittman-Robertson Wildlife Restoration Act. Likewise, SDGFP cannot use state license revenue to maintain the structure because to do so would violate the requirements of 50 CFR 80.41. Because SDGFP cannot maintain the structure or historic period sites, the historic properties are expected to deteriorate from the exposure to natural weather events.

12. Explain how this undertaking would adversely affect historic properties (include information on any conditions or future actions known to date to avoid, minimize, or mitigate adverse effects):

The Hydro #2 GPA property disposal will remove the federal nexus or interest from the property which will allow the SDGFP greater flexibility to manage the property not only for the purpose for which it was

acquired but also to manage for the increasing amount of public use of the property. Increased public use of the area and pressure on wildlife and wildlife habitat could have unintended consequences, however, the increasing public use of the property and associated safety issues have only become more important to address and mitigate. A draft MOA has been prepared in consultation with SD SHPO with specific stipulations in order to consider the full effect of the undertaking on historic properties.

13. Provide copies or summaries of the views provided to date by any consulting parties, Indian tribes or Native Hawai'ian organizations, or the public, including any correspondence from the SHPO and/or THPO.

See attached draft MOA and identified stipulations 1 -12 (I - XII).

* see Instructions for Completing the ACHP e106 Form

III. Additional Information

14. Please indicate the status of any consultation that has occurred to date, including whether there are any unresolved concerns or issues the ACHP should know about in deciding whether to participate in consultation. Providing a list of consulting parties, including email addresses and phone numbers if known, can facilitate the ACHP's review response.

Consultation has occurred between the SDGFP and SD SHPO office throughout the development of the proposed project and draft MOA. Tribal Governments will also have an opportunity to participate in the consultation and will be provided with a copy of the Intensive Level III Cultural Resources Survey report and findings to help inform their decision to participate. Tribal Governments in South Dakota will be notified by the U.S. Fish and Wildlife Service, Wildlife and Sportfish Restoration Program and provided with information about how they can participate. Comments on the proposed undertaking will be accepted during a 45-day comment period with all comments fully considered.

See attached List of Parties Invited to Consult and Comment.

15. Does your agency have a website or website link where the interested public can find out about this project and/or provide comments? Please provide relevant links:

At this time, SD Tribal Governments and the ACHP are being invited to participate in consultation for this project. Federal regulations for land disposal require that a draft Environmental Assessment be prepared and posted for a 30-day public comment period. The site where the draft EA is expected to be posted for Hydro #2 Game Production Area Property Disposal is: https://www.fws.gov/mountain-prairie/wsfr/nepa.php.

16. Is this undertaking considered a "major" or "covered" project listed on the Federal Infrastructure Projects Permitting Dashboard? If so, please provide the link:

N/A

The following are attached to this form (check all that apply):

- ⊠ Section 106 consultation correspondence (survey and findings report)
- ☐ Maps, photographs, drawings, and/or plans (inserted above)
- ☐ Additional historic property information
- ⊠ Consulting party list with known contact information

APPENDIX C

South Dakota Department of Game, Fish and Parks, Environmental Review Office



SOUTH DAKOTA DEPARTMENT OF GAME, FISH AND PARKS

523 EJ\ST CAPI'J'OLJ\VENUE | PIERRE. SD 57501

March 20, 2023

Tanna Zabel South Dakota Department of Game, Fish and Parks 523 East Capitol Avenue Pierre, SD 57501

RE: Spearfish Canyon Hydro #2 Game Production Area and Hepler Tract of the Beilage-Hepler Game

Production Area, Lawrence County

Dear Tanna,

The Division of Wildlife has reviewed the transfer of a Federal encumbrance from the Spearfish Canyon Hydro #2 Game Production Area (GPA) to the Hepler tract of the Beilage-Hepler GPA in Lawrence County, South Dakota. We have performed a search of the South Dakota Natural Heritage Database. This database monitors species at risk, specifically those species that are legally designated as threatened, endangered or rare. Rare species are those that are declining and restricted to limited habitat or a jurisdiction, may be isolated or disjunct due to geographicor climatic factors that are classified as such due to lack of survey data. We found the following records in the project area:

Hydro #2 Game Production Area

American Dipper (Cine/us mexicanus) nests (2) last documented as active in 2018 along Spearfish Creek. American Dippers are listed as threatened in South Dakota. American Dippers inhabit swift, clear and rocky streams and feed on aquatic insects and small fish. American Dippers typically nest from mid-April to early August in the Black Hills of South Dakota.

Osprey (Pandion haliaetus) nest last documented as active in 2019. The Osprey is listed as threatened in South Dakota. Nesting Osprey and their young can be vulnerable to human disturbance near the nest. In South Dakota, Osprey typically nest from March-August.

Beilage-Hepler Game Production Area

Bald eagle (Haliaeetus leucocephalus) potential winter roost last documented as active in 2001. Iowa Skipper (Atrytone arogos iowa) last documented in 2005. The Iowa Skipper is a prairie dependent butterfly and is considered a species of greatest conservation need by GFP. Big bluestem (Andropogon gerardii) is the most commonly reported larval host for Iowa Skippers.

This project involves transferring the federal encumbrance from the Hydro #2 GPA to the Beilage-Hepler GPA, and will not require any physical work completed on the properties themselves. Based on the information provided above, GFP concludes that this project will have no effect on the species listed above.











We have also reviewed the United States Fish and Wildlife Service's Information for Planning and Consultation (iPaC) website to determine if federally threatened or endangered species, or their designated critical habitat are present in the project area (see attached documentation). No critical habitat was present within the project area.

Species that are known or expected to be in or near the project area (Lawrence County) according to the iPaC system are as follows:

Northern Long-eared bat (Myotis septentrionalis) federally threatened Rufa red knot (Calidris canutus rufa) federally threatened Monarch butterfly (Danus plexippus) candidate species

At the time of this writing, the Northern Long-Eared Bat was reclassified by the USFish and Wildlife SeNice from threatened to endangered. However, the reclassification will not take effect until March 31't, 2023 and the Northern Long-Eared Bat is currently listed as threatened. The Northern Long-eared Bat is a wide-ranging bat species that typically overwinters in caves or mines and spends the remainder of the year in forested habitats. Northern Long-eared bats may be found roosting singly or in colonies underneath bark, in cavities or in crevices of both life trees and dead trees.

The nearest know northern long-eared bat records were approximately 6 miles southeast of the Hydro #2 GPA and 6 miles east of the Beilage-Hepler GPA. Wildlife habitat at the Hydro #2 GPA is a forested riparian area along Spearfish Creek. Wildlife Habitat at the Beilage-Hepler GPA consists of a mix of forested area in the south bordered by grassland habitat with woody draws on the north. False Bottom Creek crosses the southeastern portion of the property. Based on the habitat present in the two properties as described above, this species could occur within the project area. This project does not propose to remove any trees and will not require any physical work to be completed on the properties. Based on this information, GFP concludes that this project will have no effect on northern long-eared bats.

The rufa red knot is a migratory shore bird species primarily located along the Atlantic Coast. There are no records of rufa red knot in the South Dakota Natural Heritage database. Rufa red knot typically require stopover habitat that includes shorelines of large lakes, where they can forage for invertebrates. This project is located in forested, forested riparian and grassland habitats with no large waterbodies present. Based on this information, GFP concludes that this project will have no effect on the rufa red knot.

The Monarch Butterfly is a large, brightly colored migratory butterfly. Adult Monarchs feed on nectar of many flower plants and generally require open, grassy or herbaceous habitats, including roadsides. Monarch butterflies lay eggs on milkweed plants and hatched larvae are dependent upon milkweed for feeding. The Hydro #2 GPA is primarily forested riparian area, and could contain contain suitable habitat for Monarch butterflies. The Beilage-Hepler GPA contains grassland habitat and forested riparian areas which could *seNe* as suitable habitat for the Monarch butterfly. This project will not require any physical work to be completed on the properties. Based on this information, GFP concludes that this project will have no effect on the Monarch butterfly.

In summary, based on the information provided above we anticipate that this project will have no effect to listed or proposed protected species or their designated critical habitats. If you have any question, please contact me at 605-773-6208.

Sincerely,

Hilary Morey

Environmental Review Senior Biologist

523 East Capitol Avenue

Kelony & Many

Pierre, SD 57501

hilary.morey@state.sd.us

APPENDIX D

SD Tribal Governments Invitation to Consult; Section 106 of NHPA



United States Department of the Interior



FISH AND WILDLIFE SERVICE 134 Union Blvd Lakewood, Colorado 80228

In Reply Refer to: FWS/IR05/IR07/WSFR

March 14, 2022

Chairman, Harold Frazier Cheyenne River Sioux Tribe P.O. Box 590 Eagle Butte, SD 57625

Subject: Hydro #2 Game Production Area Proposed Land Disposal, Finding of Adverse Effect

on Historic and Cultural Resources

Dear Chairman Frazier:

The U.S. Fish and Wildlife Service (Service) is extending an invitation to engage in an opportunity to consult on a government-to-government basis with your tribe regarding a proposed project to dispose of real property acquired under a federal award upon which historic and cultural resources have been identified. The project is located on State and Federal-owned lands in the Black Hills of western South Dakota in Lawrence County. The property is legally described as HMC Lot 2A, being a portion of Spearfish Placer, M.S. 439, located in the NE¼ of Section 17, Township 5 North, Range 2 East of the BHM, as shown on Plat Document No. 2014-3631 and comprising approximately 32.251 acres. The Area of Potential Effect is the entire Hydro #2 Game Production Area (GPA).

The Service's Wildlife and Sport Fish Restoration Program (WSFR) is considering a proposal from the South Dakota Game, Fish and Parks Department (SDGFP) to dispose of the Hydro #2 GPA, thus making the project a Federal undertaking subject to compliance with Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulation found at 36 CFR Part 800. At this time, the Service is initiating consultation with your tribe to inform you of the proposed undertaking, to solicit feedback regarding concerns or issues your tribe may have regarding the undertaking of identified properties, and to solicit any information you may be willing to provide regarding places of cultural or religious significance to your tribe that might be affected by the undertaking. Attached to this letter is a list of South Dakota Tribal Governments invited to consult and comment on this project. In addition, the regulations at 36 CFR 800.6(a)(1)) require the Service to notify the Advisory Council on Historic Preservation (ACHP) and invite consultation on the adverse effect by providing the documentation specified in 36 CFR 800.11(e).

INTERIOR REGION 5
MISSOURI BASIN

INTERIOR REGION 7
UPPER COLORADO RIVER BASIN

COLORADO, NEW MEXICO, UTAH, WYOMING

While the federal interest will be removed from the Hydro #2 GPA by the proposed land disposal action, the property will continue to be owned and maintained by SDGFP for the primary purpose of providing wildlife production, wildlife habitat protection, and expanded public hunting and wildlife related recreation opportunities. The action to remove the federal interest by land disposal is intended to allow the Department more flexibility to manage the property for which it was initially acquired while also accommodating the increased public use of the area. With the federal interest removed from the property the Department can then build the infrastructure that is needed to address public safety, minimize habitat erosion, and protect wildlife from disturbance.

This project location has been reviewed by the Archaeological Research Center, a program of the South Dakota State Historical Society. In summary, the entire project area has been surveyed for historic and cultural resources and the results reported in the attached survey:

Vogt, Cassie - 2020. Intensive Level III Cultural Resources Survey of Hydro No. 2 Game Production Area for Game, Fish and Parks, Lawrence County, South Dakota. Contract Investigations Series No. 3605.

The survey identified two historic properties within the project area. Structure LA00002055 is described as the Homestake Hydro Electric Plant #2, built in 1917 as a hydroelectric facility over Spearfish Creek. The hydroelectric function of the building is no longer in use and the area is owned and operated as a Game Production Area by SDGFP. Based on the architectural elements, the structure is considered Eligible for listing on the National Register of Historic Places (NRHP) under Criterion C, as it exhibits architectural design value and provides a good example of early 20th century industrial design.

The second site 39LA1711 is described as a small settlement, mining camp, or railroad station. Based on the data, this site was occupied between the late 1800s and early to mid-1900s and was likely created as a result of either early railroad or mining in the Black Hills. Based on its association with the mining industry of the Black Hills, the site is recommended Eligible for the NRHP under Criterion A and under Criterion D for the potential to provide additional data about early industrial activities in Spearfish Canyon.

The proposed land disposal project will take place within the site's boundary and will affect the sites. As a result, the Service is recommending a finding of Adverse Effect and the development of a Memorandum of Agreement to mitigate the effects of the project on historic properties. Please review the contents of this letter as well as the attached cultural resource survey report. Any comments provided by the Cheyenne River Sioux Tribe will be fully considered by the Service prior to implementation of the undertaking.

INTERIOR REGION 5 MISSOURI BASIN INTERIOR REGION 7
UPPER COLORADO RIVER BASIN

COLORADO, NEW MEXICO, UTAH, WYOMING

If you wish to comment on this undertaking, please respond to this letter via email within 45 days to: fw6 FAGrants@fws.gov; or through the U.S. Postal Service at the following address:

U.S. Fish and Wildlife Service Department of Interior Regions 5, 7 & 9 134 Union Boulevard, Ste 460B Attn: Adrianna Araya, Grant Manager Wildlife and Sport Fish Restoration Programs Lakewood, CO 80228

We value the government-to-government relationship that exists between the Service and the Cheyenne River Sioux Tribe and appreciate this opportunity to consult and work with you on this undertaking. Please feel free to contact Adrianna Araya at adrianna_araya@fws.gov or (303) 236-8165 or me at steve_jose@fws.gov or (303) 236-4411 if you have any questions or concerns regarding this project. Thank you.

Style H. gran

Enclosure: Intensive Level III Cultural Resources Survey of Hydro #2 GPA

cc: Steven Vance, Tribal Historic Preservation Officer and Cultural Resources Director

INTERIOR REGION 5
MISSOURI BASIN

INTERIOR REGION 7
UPPER COLORADO RIVER BASIN

South Dakota Tribal Governments Invited to Consult and Comment

Chairman, Harold Frazier	Chairman, Peter Lengkeek
Cheyenne River Sioux Tribe	Crow Creek Sioux Tribe
P.O. Box 590	P.O. Box 50
Eagle Butte, SD 57625	Fort Thompson, SD 57339
Chairperson, Clyde Estes	Chairman, Robert Flying Hawk
Kul Wicasa Oyate - Lower Brule Sioux Tribe	Yankton Sioux Tribe
P.O. Box 187	P.O. Box 1153
Lower Brule, SD 57548	Wagner, SD 57380
President, Anthony Reider	President, Kevin Killer
Flandreau Santee Sioux Tribe	Oglala Sioux Tribe
P.O. Box 283	P.O. Box 2070
Flandreau, SD 57028	Pine Ridge, SD 57770
President, Rodney Bordeaux	Chairman, Delbert Hopkins Jr.
Rosebud Sioux Tribe	Sisseton-Wahpeton Oyate
P.O. Box 430	P.O. Box 509
Rosebud, SD 57570	Agency Village, SD 57262
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INTERIOR REGION 5
MISSOURI BASIN

INTERIOR REGION 7
UPPER COLORADO RIVER BASIN