

**South Dakota Game, Fish and Parks  
Initial Environmental Assessment  
Rapid City Shooting Range Complex  
Meade County, South Dakota**

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South Dakota Game, Fish and Parks

February 7, 2022

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## **CHAPTER 1: PROJECT SUMMARY, PURPOSE AND NEED**

### **1.1 PROJECT SUMMARY**

State: South Dakota (Map 1)

County: Meade County (Map 2)

Location: 10.45 miles north of Rapid City (Map 3)

Legal: W ½ Section 34 – Township 4N – Range 8E and N ½ of NW ¼ Section 03 – Township 3N – Range 8E (Map 4)

Coordinates: North 44.261°, West -103.147°

The South Dakota Department of Game, Fish and Parks (GFP) proposes to construct a shooting range on property owned by GFP. The proposed site is approximately 11 miles north of Rapid City on Elk Vale Road. The property is 400 acres of rolling prairie topography that is surrounded by rolling prairie.

Proposed improvements to be made at the site include an outdoor shooting range consisting of six 50-yard bays, six 100-yard bays, one bay area for 200/300 yard shooting, 10 stationary shotgun clay target shooting area, one bay for long range shooting for up to 1,200 yards, one Hunter Education building, a parking lot for 100 stalls, eleven 50-yard action bays, three 75-yard action bays, three 100-yard action bays, one 50 yards by 300 yards versatile training bay, twelve shooting locations sporting clays course, and approximately 10 vault toilets throughout the property. (Map 5)

The improvements will be broken down into three areas, Long-Range, South End Range, and North End Range. The Long-Range area located on the southwest end of the property will consist of one bay with twenty lanes with two shooting positions in each lane. The bay will utilize various targets ranging from 300 yards to 1,200 yards in distance. Also included in the Long-Range area will be a Hunter Education Building that will house a staff office that has good visibility of the range and twelve indoor archery/air rifle lanes, gravel parking lot with approximately 100 stalls and a green area for additional parking and activities. All parts of the range will have ADA accessible areas for everyone to enjoy.

The South End range located on the southeast end of the property will consist of six 50-yard bays with five shooting lanes each, six 100-yard bays with ten shooting lanes each, 200/300 yards shooting area with forty shooting positions, ten stationary shotgun shooting clay target area, gravel roads and gravel parking spots to accommodate approximately 100 customers, and vault toilets located throughout the area.

The North End Range is located on the North end of the property protected by topography and in a draw from the Long-Range. The North End Range will consist of eleven 30 yards wide by 50 yards long bays, three 30 yards wide by 75 yards long bays, and three 30 yards wide by 100 yards long bays, one 50 yards wide by 300 yards long bay, a twelve position sporting clays shooting area, gravel roads and gravel parking area by each bay and area, and vault toilets located throughout the area.

The Long-Range bays will have a minimum 12' side berm height and minimum 20' end berm height. Berms will be constructed higher as needed to maintain safety at the range. The stationary clay target area will have 10' by 10' concrete pads with stationary clay target throwers bolted down to the concrete

pads and an open 900' fall out area. All berms will be made of dirt with all the material coming from within the boundaries of the project site.

The South End Range will have a minimum of 12' side berm height and a minimum 20' end berm height at each bay. All berms will be made of dirt with all the material coming from the project site.

The North End range will have a minimum of 12' side berm height and a minimum 20' end berm height at each bay. All berms will be made of dirt with all the material coming from the project site. The Sporting clays area will be developed by pouring 10' by 10' concrete pads at each location. There will be 900' fall out area in the direction of each station.

Lead management guidelines in the EPA Best Management Practices for Lead at Outdoor Shooting Ranges manual (Revised June 2005) will be implemented at this site.

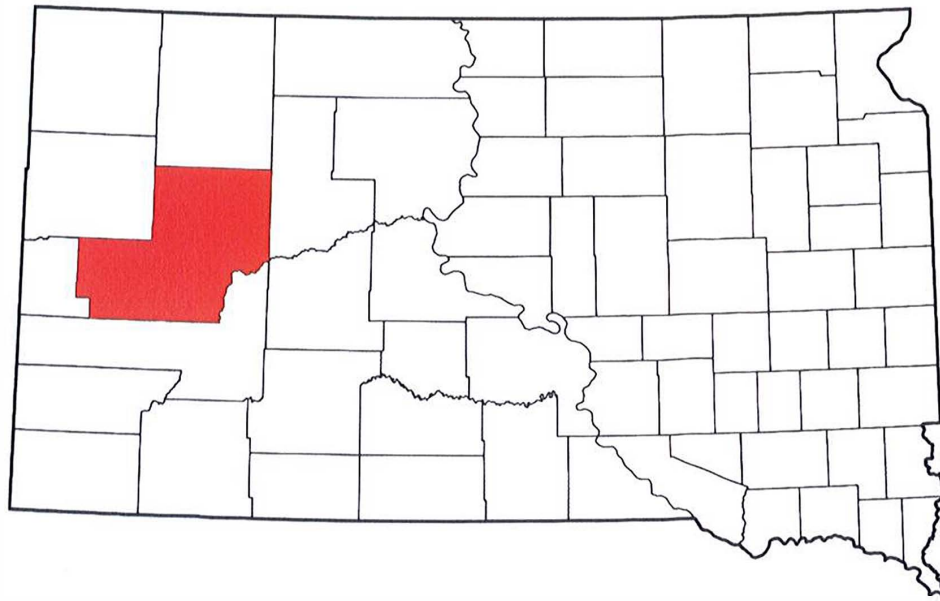
Estimated project costs for the entire project will be approximately \$9,905,524. Funding sources for this proposed project are GFP, Pittman-Robertson Federal Aid in Wildlife Restoration Act funds administered through the U.S. Fish and Wildlife Service (USFWS), and private donations.

**Map 1 – State of South Dakota**

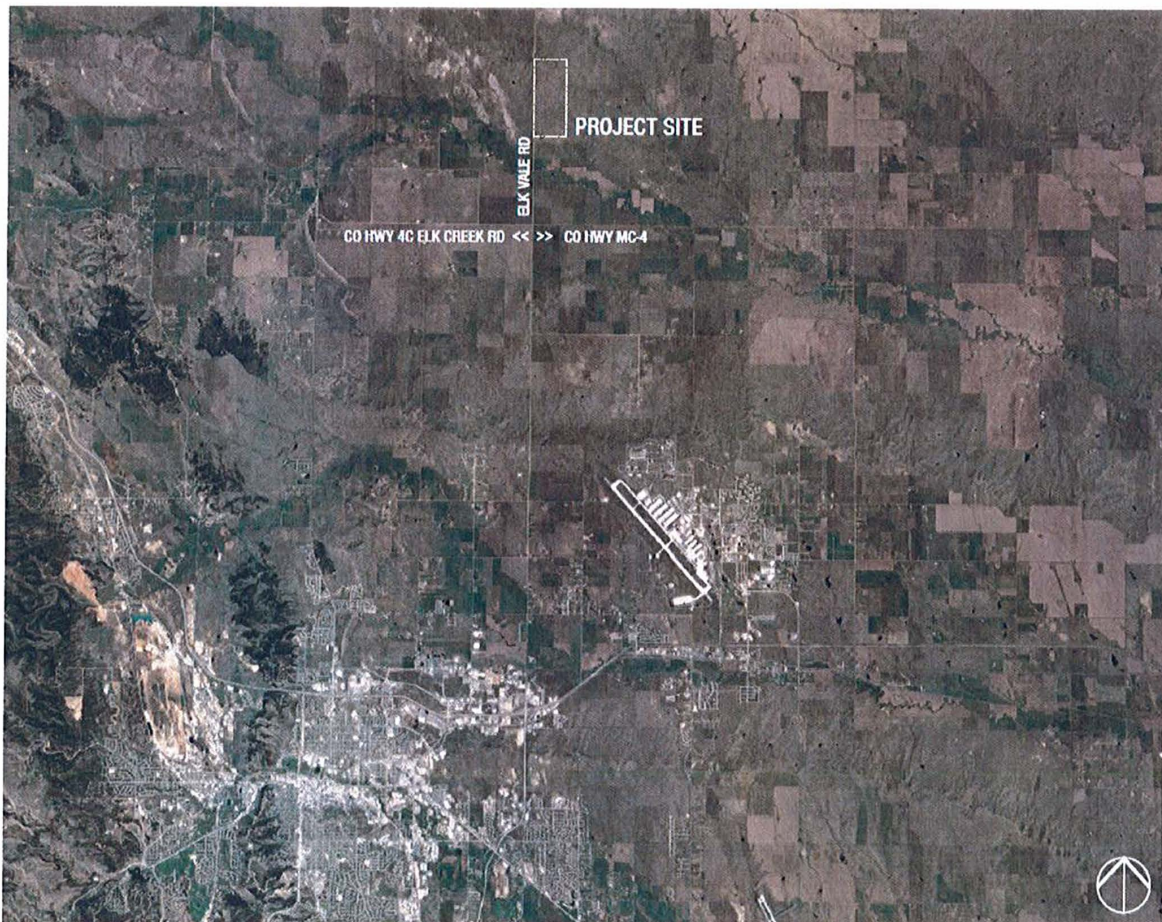




Map 2 – Meade County

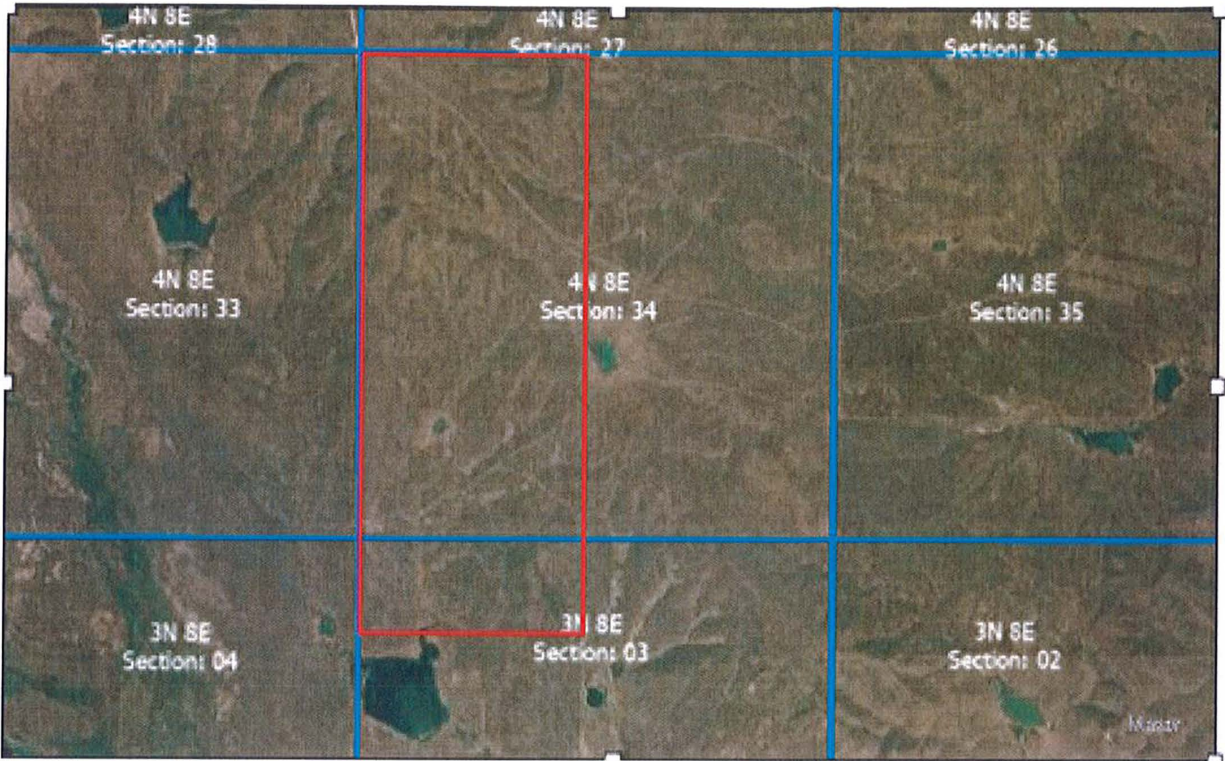


Map 3 – Rapid City Shooting Range Location

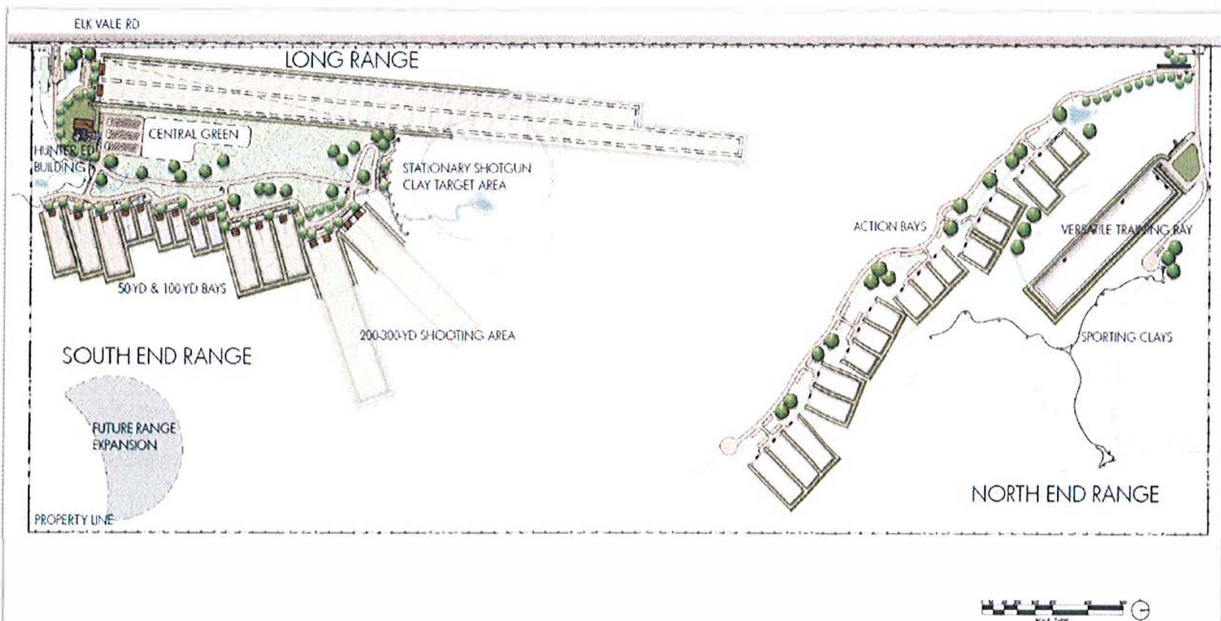




Map 4 – Parcel Map



Map 5 – Gun Range Layout



## **1.2 PURPOSE**

The purpose of this range is to provide a safe setting for shooting rifles, handguns, and shotguns. Expected results and benefits will be to provide safe and accessible indoor and outdoor shooting facilities to the public. Users of the range will include recreational shooters, hunter and other individuals or groups interested in shooting sports.

## **1.3 NEED**

An estimated population of 78,369 in 2020 makes the City of Rapid City the second largest community in the State of South Dakota. A high concentration of shooting enthusiasts exists in the community while access to safe places to shoot in the area is limited.

Area shooting enthusiasts, members of the public and the City of Rapid City and surrounding areas have all expressed support for this proposed facility as a greatly needed, safe, controlled, patrolled, and accessible site for a variety of shooting disciplines. No publicly owned and operated outdoor shooting range currently exists in the area.

Currently, there are no shooting facilities in the Rapid City area that include an outdoor range to accommodate pistol, rifle, and shotgun shooting activities in the same area. Existing shooting ranges are either private or offer shooting opportunities limited to short range rifle/pistol shooting.

Shooting activity currently takes place on private land, scattered public sites or undeveloped state areas because no public multi-purpose shooting range has been established in the Rapid City area. This range will provide a safe, confined, and controlled location for shooting activities.

## **1.4 BACKGROUND**

Property to be developed at the preferred site for this project was purchased from the 7 O Ranch LLC in 2021 by the South Dakota Parks and Wildlife Foundation (SDPWF). South Dakota Game, Fish and Parks (GFP) purchased the property later in 2021 from the SDPWF. The land was used primarily for agricultural/ranching purposes and only one minor improvement was made by the previous owner. The improvement was making an earthen berm in one draw to collect water for watering cattle. There are ten residents located in a 2.5-mile radius from the middle of the proposed range. The closest inhabitant is located to the south approximately .75 miles from the southern most portion of the property. The remaining nine residents are located approximately one mile or more away from the property boundaries. The range will be designed with an east, northeast shooting direction where there are no residences within a five-mile radius of the shooting range.

In 2020, GFP put together a strategic plan group for the enhancement of shooting sports across South Dakota with an immediate goal of building a shooting range in the Rapid City area. GFP enlisted help from area realtors and others to search for property that could be suitable for a firearms range and reasonable comfort that the range would not impede neighboring lands now and into the future. A stakeholder group was formed in February of 2021 consisting of shooting enthusiasts, city and state officials, local gun and shooting clubs, area retailers, and other interested parties. Following months of meetings, a draft plan for the property was adopted.

## **1.5 FUNDING**

The gun range construction costs are estimated at approximately \$9,905,524.00. Funding sources for the project are GFP, Private Donations, and Pittman-Robertson Federal Aid in Wildlife Restoration Act funds administered through the USFWS.

## **1.6 OPERATION AND MAINTENANCE**

Operation and Maintenance of the gun range property will be the responsibility of GFP.

## **DECISIONS THAT NEED TO BE MADE**

GFP and the USFWS will select one of the alternatives reviewed in this environmental assessment and the USFWS's Regional Director will determine if this environmental assessment is adequate to support a finding of no significant impact decision or if an environmental impact statement will be required.

## **CHAPTER 2: ALTERNATIVES**

### **2.1 ALTERNATIVE A – PREFERRED LOCATION**

See Map 3 for Gun Range Location

Development of a shooting range will occur on a site that is approximately 400 acres located in Meade County that will be owned by GFP. Proposed improvements to be made at the site include an outdoor shooting range consisting of pistol range, rifle range, trap shooting ranges, parking lots, sidewalks, outdoor vault toilets and other necessary appurtenances needed to complete the proposed project.

Improvements will be developed in three areas: Long-Range, South End Range, and North End Range. The Long-Range area located on the southwest end of the property will consist of one bay with twenty lanes with two shooting positions in each lane. The bay will utilize various targets ranging from 300 yards to 1,200 yards in distance. Also included in the Long-Range area will be a Hunter Education Building that will house staff offices that have good visibility of the range and twelve archery/air rifle lanes, gravel parking lot with approximately 100 stalls and a green area for additional parking.

The South End range located on the southeast end of the property will consist of six 50-yard bays with five shooting lanes each, six 100-yard bays with ten shooting lanes each, 200/300 yards shooting area with forty shooting positions, ten stationary shotgun shooting clay target area, gravel roads and gravel parking spots to accommodate approximately 100 customers, and vault toilets located throughout the area.

The North End Range is located on the North end of the property protected in a draw from the Long-Range. The North End Range will consist of eleven 30 yards wide by 50 yards long bays, three 30 yards wide by 75 yards long bays, and three 30 yards wide by 100 yards long bays, one 50 yards wide by 300 yards long bay, a twelve position sporting clays shooting area, gravel roads and gravel parking area by each bay and area, and vault toilets located throughout the area.



There are ten residents located in a 2.5-mile radius from the center of the proposed range. The closest inhabitant is located to the south approximately .75 miles from the southernmost property boundary. The remaining nine residents are located approximately one mile or more away from the property boundaries. The range will be designed with an east, northeast shooting direction where there is one resident within a 5-mile radius from the center of the shooting range. That resident located approximately 4.2 miles to the most northeastern property boundary. The site is relatively remote with only one resident within approximately one mile of the proposed shooting range.

All shooting bays will be constructed with dirt side berms at a minimum height of 12' and all end berms at a minimum height of 20'. The dirt berms will be constructed utilizing material that will come from within the boundaries of the project site. See Map 5 for the gun range layout.

## **2.2 ALTERNATIVE B – NO ACTION**

Under the no action alternative, the proposed project site would continue to be used as agriculture/ranch land and no additional shooting facilities would be constructed in the area. Recreational shooting at scattered sites in the area will continue to be the norm and basic shooting safety issues would continue to be an issue.

## **CHAPTER 3: AFFECTED ENVIRONMENT**

### **3.1 PHYSICAL ENVIRONMENT**

The project site is located in a Semiarid Pierre Shale Plains on the Northwestern Great Plains. The project site is located in rural Meade County and is currently used as grazing land for a cattle ranch.

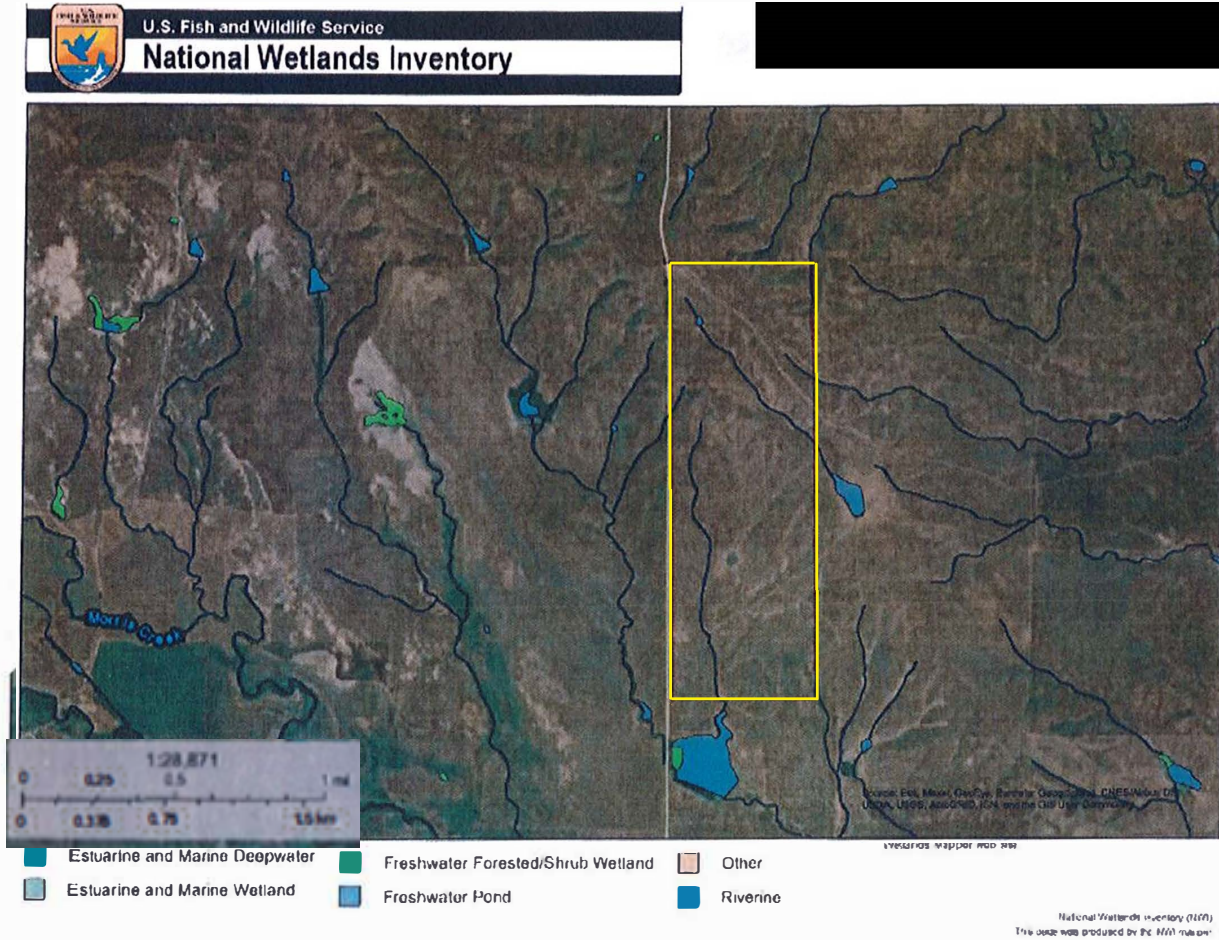
The project site is currently surrounded by rolling plains and is utilized for agricultural/ranching purposes.

### **3.2 WATER**

Intermittent streambeds that are seasonally flooded and one small intermittently flooded manmade impoundment are present within the boundaries of the location (Map 6). There are four areas of runoff streambeds within the boundary that are considered R4SBC which means they are riverine, intermittent streambeds that seasonally flood. There is also one small manmade impoundment that is considered PABFh which means it is a palustrine, aquatic bed that is semi permanently flooded diked/impoundment. The intermittent seasonally flooded areas inside the project area will be minimally impacted as the design of the range incorporates the intermittent seasonally flooded areas. Some of the riverine areas may need to be crossed for construction to continue. Culverts covered by gravel will be utilized to not interrupt the flow of the riverine areas. A jurisdictional determination was completed by the Army Corps of Engineers and they have determined that there are no waters of the United States within the review area (Appendix E). There is currently no designated floodplains on the property per FEMA Flood Hazard Boundary Map (Appendix F).

## Map 6 – Wetlands

### Rapid City Shooting Complex

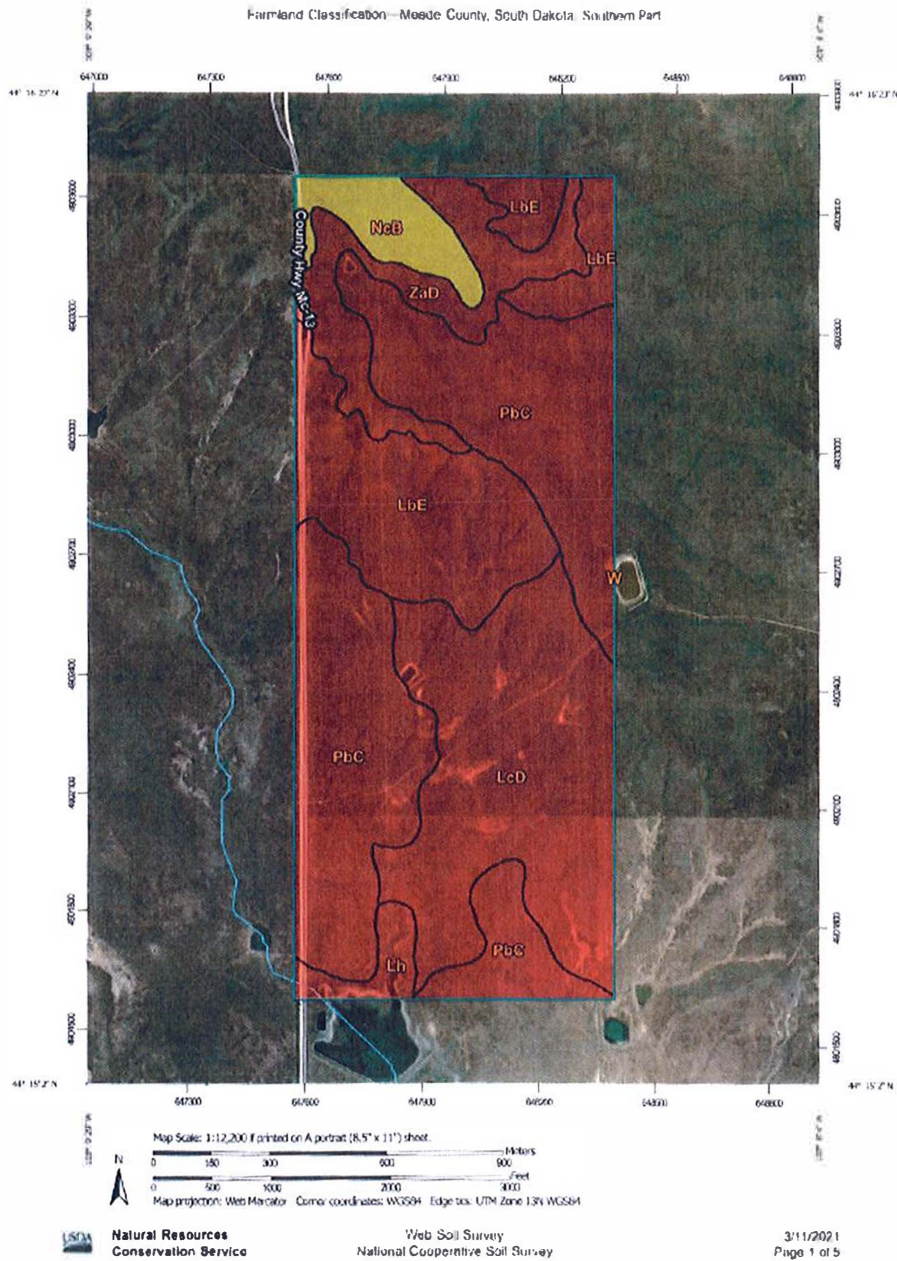


### 3.3 SOILS

Soil types present in the construction site (Map 7) include: KbB: Kyle clay, 2 to 6 percent slopes (0.0%), LbE: Lismas clay, 10 to 40 percent slopes (18.6%), LcD: Lismas-Winler clays, 6 to 25 percent slopes (27.1%), Lh: Lohmiller and Glenberg soils, channeled (2.4%), Ncb: Nunn clay loam, 2 to 6 percent slopes (4.3%), PbC: Pierre clay, 6 to 20 percent slopes (38.3%), ZaD: Zigweid-Nihill complex, 6 to 15 percent slopes (9.1%), W: Water (0.1%). Nun clay loam (NcB) (yellow section on Map 7) is considered prime farmland if irrigated per NRCS. This encompasses 4.3% of the soil type and it must be irrigated to be considered prime farmland.



## Map 7 – Soils Map



### 3.4 AIR QUALITY

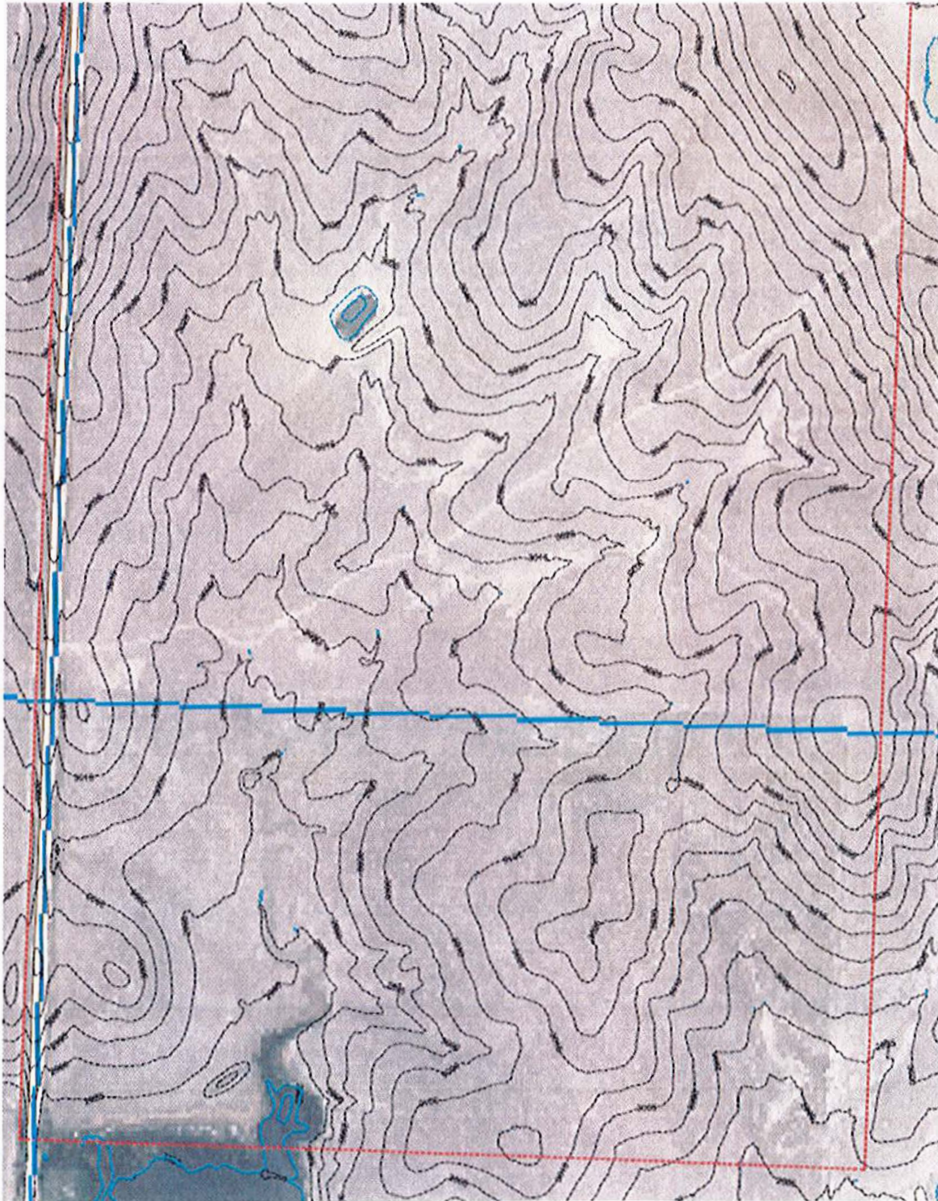
The project area is in rural area and have no known air quality measurements.



### 3.5 TOPOGRAPHY

Elevations at the preferred site (Maps 8 & 9) show an increase of approximately 175 feet in elevation from the south end of the range to the north end of the range. The Long-Range and South End Range will be constructed on the south end of the property where there is minimal elevation change while utilizing a ridge that runs from the northwest side of the property that runs into the middle section of the property as natural berm. The North End Range will be constructed on the backside of the ridge that has minimal decrease in elevation running northwest to southeast. Construction of the ranges will utilize the natural elevation changes throughout the property to use as natural berms for shooting bays.

**Map 8 – Topography at South End of Range (5 Feet Contours)**





Map 9 – Topography of North End of Range (5 Feet Contours)



### **3.6 BIOLOGICAL RESOURCES**

Biological resources at the preferred site are a mixture of vegetation typical to this part of South Dakota. The area contains a mixture of natural short prairie grasses which include blue gramma, buffalograss, little bluestem, prairie junegrass, and threadleaf sedge. The area has not been disturbed. Threatened, endangered or candidate biological resources are not known to be present.

### **3.7 WILDLIFE**

Wildlife on the preferred site is typical to this part of South Dakota. Bird species sighted at the site includes mourning dove, raptors, sharp-tailed grouse, prairie chickens, and migratory songbirds.

Common mammals found on the site include mule deer, opossum, raccoon, skunk, badger, fox, coyote, jack rabbits and an occasional white-tailed deer. Reptiles utilizing the site include garter snakes, bull snakes, rattle snakes, painted turtles and snapping turtles during high moisture times. Birds of Conservation Concern (BCC) considered per IPaC are bald eagles, lesser yellowlegs, and red-headed woodpeckers. These resources are not known to be present in the proposed project area. A search of the SD Heritage Database does not find any occurrences of these birds in the immediate project area. Threatened, endangered or candidate wildlife considered per IPaC for the area are the northern long-eared bat, red knot, whooping crane, and monarch butterflies. These resources are not known to be present and there are no critical habitats located at the proposed shooting range.

### **3.8 FISH AND OTHER AQUATIC SPECIES**

No fish and other aquatic species are present at the preferred site. There is no year around water sources that are sustainable for fish and other aquatic species to inhabit. Threatened, endangered or candidate fish and aquatic species are not known to be present.

### **3.9 THREATENED AND ENDANGERED SPECIES**

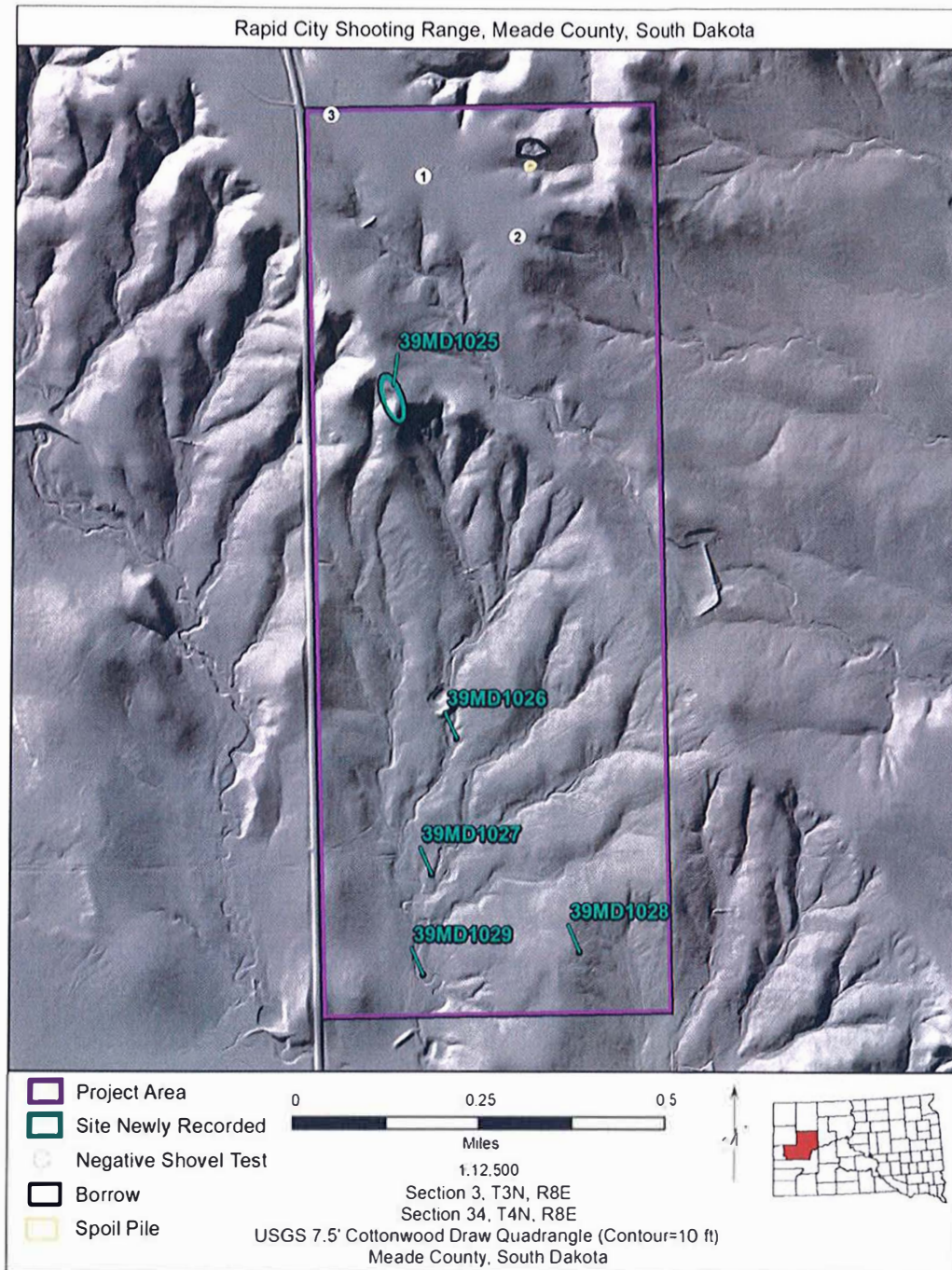
There are no known occurrences of endangered, rare, or threatened species in the immediate project area. Species considered per IPAC are northern long-eared bats, red knots, whooping cranes, monarch butterflies. A search of the SD Natural Heritage Database does not find any occurrences of endangered, rare, or threatened species in the immediate project area.

### **3.10 HISTORIC AND CULTURAL RESOURCES**

A Class I Cultural Resources Record Search was conducted by the Archaeological Research Center (ARC). There was no record of cultural or historical findings in the immediate project area. While there was no record of documented cultural or historical resources there has been no survey conducted in the immediate area. Due to the project area not being disturbed a Cultural and Historical Survey was ordered to ensure that no archaeological resources are present. ARC completed a Class III Intensive Cultural Resources Survey on the proposed property. This report is included in the appendices and is titled **A Class III Intensive Cultural Resources Survey for the South Dakota Game Fish and Parks Rapid City Firearms Range Complex, Meade County, South Dakota**. The survey documented five new archaeological sites. Site 39MD1025 is an American Indian stone cairn site of unknown temporal or cultural affiliation. Sites 39MD1026, 39MD1027, and 39MD1028 are American Indian isolated finds of unknown temporal or cultural affiliation. Site 39MD1029 is an American Indian isolated find of Archaic or Late Prehistoric temporal affiliation. As a result of the survey, relative to site 39MD1025 not to be disturbed, the investigators recommended no historic properties will be affected.



Map 10 - Proposed Rapid City Firearms Range Complex project APE, newly recorded archaeological sites, shovel tests, and impacts illustrated on USGS LiDAR imagery.



**3.11 LAND USE**

The preferred site is currently being utilized as a pasture for grazing cattle. The previous owner of the parcel utilized the land for a large cow/calf ranch operation. Currently in Meade County they do not have a planning or zoning ordinance in that area of the county.

### **3.12 SOCIOECONOMIC CONDITIONS**

Development at the preferred site would contribute indirectly to the local economy. Gun range users generally benefit the local economy by purchasing fuel, food, lodging and retail goods from area businesses.

### **3.13 NOISE**

Noise levels at the preferred site is considered as generally low since the property has not been developed for uses that generate increased use or traffic. The nearest airport (Ellsworth Air Force Base) is located approximately seven miles away and the nearest railroad is located approximately eleven miles away. The preferred location is located along a county road that is paved but turns into gravel at the Meade County/Pennington County line. Shooting activities do not currently occur in the project area. No decibel readings have been taken.

There are ten occupied resident dwellings located in a 2.5-mile radius from the center of the proposed range. The closest inhabitant is located to the south approximately .75 miles from the southernmost property boundary. The remaining nine residents are located approximately one mile or more away from the property boundaries. The site is relatively remote with only one resident within approximately one mile of the proposed shooting range.

## **CHAPTER 4: ENVIRONMENTAL CONSEQUENCES**

Environmental consequences for each area will be examined in this section will be identified as either “No Significant Impact” or “Mitigation Required”. A determination of “No Significant Impact” will be made if the proposed action will not significantly impact the environment. A determination of “Mitigation Required” will be made if the proposed action will have an impact on the environment and recommended mitigation measures will be identified to reduce the overall impact to the environment.

### **4.1 WATER**

Alternative A – Preferred Action – Mitigation Required

#### **Drinking Water**

DANR has reviewed the preferred location on November 15, 2021 and quoted “Based on the information provided, this project will not have adverse environmental effects to drinking water in the area.”

#### **Ground Water**

DANR has reviewed the preferred location on November 15, 2021 and quoted, "The project is unlikely to have adverse effects on ground water quality provided recommended design criteria and best management practices are followed."

### **Surface Water**

DANR has reviewed the preferred location on November 15, 2021 and made the following comments.

"At a minimum and regardless of project size, appropriate erosion and sediment control measures must be installed to control the discharge of pollutants from the construction site. Any construction activity that disturbs an area of one or more acres of land must have authorization under the General Permit for Storm Water."

"Additionally, the shooting range facility should be designed with permanent measures to ensure that all storm water is contained and does not run off site or run to waters of the state."

"A Surface Water Discharge permit may be required if any construction dewatering should occur as a result of this project."

"Impacts to tributaries, creeks, wetlands, and lakes should be avoided by this project. Special construction measures may have to be taken to ensure that water quality standards are not violated."

"The design of the shooting range facility should be such that shooting is not purposefully directed over or near any waters of the state. This includes shooting using non-toxic ammunition above or near ponds or drainages."

GFP officials and DANR officials met on November 22, 2021 to discuss the surface water and mainly the comment "Additionally, the shooting range facility should be designed with permanent measures to ensure that all storm water is contained and does not run off site or run to waters of the state." After the discussion it was clarified that storm water may leave site, but contaminated storm water should not leave the site. SD DANR responded by not recommending retention ponds but to use BMP's to keep lead out of any water, and any of that water from getting to waters of the state.

GFP will follow all recommendations made by DANR and will apply for all pertinent permits. Lead management guidelines in the EPA Best Management Practices for Lead at Outdoor Shooting Ranges manual (Revised June 2005) will be implemented at this site. The following steps will be taken to manage lead at the gun range site:

- Control and contain spent rifle and pistol ammunition with earthen backstops and utilize natural vegetation to control and contain spent shot on the trap range.
- Prevent migration of lead from reaching nearby waterways by leaving existing perimeter berms in place and introduce engineered runoff controls to include but are not limited to; ground contouring, dams, and dikes to keep all lead shot contained within the footprint of the outdoor shooting range.
- Remove and recycle lead shot as needed by utilizing the services of a commercial lead recycler.
- Documenting lead management activities will be the responsibility of GFP.



Alternative B – No Action – No Significant Impact to water if no action is taken.

## **4.2 SOILS**

Alternative A – Preferred Action – No Significant Impact

All the required earthen materials required to construct the shooting range will come from the existing soils within the project area. When earth shaping activities are finished and construction is complete then topsoil will be placed in appropriate areas and seeded.

To complete the Long Range and Hunter Education Building portion of the shooting complex, approximately 180,550 cubic yards of dirt will be moved to grade the area for proper runoff and lead management of water runoff and to create 12 feet minimum side berms and 20 feet minimum end berm. All the dirt that will be moved will come from the area of the long-range shooting range and hunter education building.

To complete the south end range, approximately 306,800 cubic yards of dirt will be moved to grade the area for proper runoff and lead management of the water runoff and to create 12 feet minimum side berms and 20 feet end berms. All the dirt that will be moved will come from the area of the south end shooting range.

To complete the north end range, approximately 291,200 cubic yards of dirt will be moved to grade the area for proper runoff and lead management of water runoff and to create 12 feet minimum side berms and 20 feet minimum end berms.

In total 779,550 cubic yards of dirt will be moved to level, grade, create vegetative swales for lead management, and proper berm height to contain bullets.

Lead management guidelines in the EPA Best Management Practices for Lead at Outdoor Shooting Ranges manual (Revised June 2005) will be implemented at this site. The following steps will be taken to manage lead at the gun range site:

- Control and contain spent rifle and pistol ammunition with earthen backstops and utilize natural vegetation to control and contain spent shot on the trap range.
- Prevent migration of lead from reaching nearby waterways by leaving existing perimeter berms in place to keep all lead shot contained within the footprint of the outdoor shooting range.
- Remove and recycle lead shot as needed by utilizing the services of a commercial lead recycler.
- Documenting lead management activities will be the responsibility of GFP.

Alternative B – No Action – No Significant Impact to soils if no action is taken

## **4.3 AIR QUALITY**

Alternative A – Preferred Action – Minor Impacts

DANR reviewed the preferred location on November 15, 2021 and stated there may be minor impacts to air quality in South Dakota.

“This impact would be through source and fugitive emissions. In many cases, an air quality permit is required to operate equipment with point source emissions. A permit application can be obtained from the Air Quality or Minerals and Mining Program. Fugitive emissions, although not covered under State air quality regulations, are a common source of public concern and may be subject to local or county ordinances. Please contact your local officials to discuss requirements regarding fugitive emissions.”

GFP will follow the guidance of DANR and apply for proper permits for the Rapid City Area.

GFP had a conversation with Meade County’s Deputy Director of Planning and he stated that we will not need air quality permits for the Rapid City Shooting Range.

Alternative B – No Action – No Significant Impact to air quality if no action is taken.

#### **4.4 TOPOGRAPHY**

Alternative A – Preferred Action – Topography Will Be Impacted

Natural existing berms within the topography will be used. During construction some material will be moved away to widen, lengthen, or increase the height of the natural topography. This alteration of the topography of the area will not significantly alter the character of the preferred location.

To complete the Long Range and Hunter Education Building portion of the shooting complex, approximately 180,550 cubic yards of dirt will be moved to grade the area for proper runoff and lead management of water runoff and to create 12 feet minimum side berms and 20 feet minimum end berm. All the dirt that will be moved will come from the area of the long-range shooting range and hunter education building.

To complete the south end range, approximately 306,800 cubic yards of dirt will be moved to grade the area for proper runoff and lead management of the water runoff and to create 12 feet minimum side berms and 20 feet end berms. All the dirt that will be moved will come from the area of the south end shooting range.

To complete the north end range, approximately 291,200 cubic yards of dirt will be moved to grade the area for proper runoff and lead management of water runoff and to create 12 feet minimum side berms and 20 feet minimum end berms.

In total 779,550 cubic yards of dirt will be moved to level, grade, create vegetative swales for lead management, and proper berm height to contain bullets.

Alternative B – No Action – No Significant Impact to topography if no action is taken.

#### **4.5 BIOLOGICAL RESOURCES**

Alternative A – Preferred Action – No Significant Impact

Areas disturbed during construction of the gun range at the preferred location will be seeded to permanent vegetation suitable for mowing and lead reclamation. Vegetation, once established, will not be disturbed beyond normal operation and maintenance activities.

Alternative B – No Action – No Significant Impact if no action is taken.

#### **4.6 WILDLIFE**

Alternative A – Preferred Action – No Significant Impact

GFP environmental review staff have reviewed the preferred location on October 21, 2021. The review determined that there will be no significant impacts to wildlife at the preferred location. Further, there are no occurrences of endangered, rare or threatened species in the immediate project area. The project area is primarily pastureland that currently has heavy use from livestock grazing. There is very little suitable wildlife habitat on this property and very few documented occurrences of wildlife species in general.

Alternative B – No Action – No Significant Impact if no action is taken.

#### **4.7 FISH AND OTHER AQUATIC SPECIES**

Alternative A – Preferred Action – No Significant Impact

No fish and other aquatic species are present within the boundaries of the preferred location since there is no sustainable habitats for fish and other aquatic species within the project location. While there are two small impoundments in the area, they generally dry up during the summers making it inhabitable for fish and other aquatic species. Spent rifle, pistol, and shotgun lead will be confined within the footprint of the shooting range and prevented from reaching nearby waterways by creating side and rear shooting range berms during construction and utilizing vegetation and lead recycling activities.

Alternative B – No Action – No Significant Impact if no action is taken.

#### **4.8 THREATENED AND ENDANGERED SPECIES**

Alternative A – Preferred Action – No Significant Impact

Species considered per IPAC are northern long-eared bats, red knots, whooping cranes, 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. GFP has reviewed the preferred location on April 12, 2021. GFP conducted a search of the SD Natural Heritage Database for the preferred location and did not find any occurrences of endangered, rare, or threatened species in the immediate project area.



Alternative B – No Action – No Significant Impact if no action is taken.

#### **4.9 HISTORICAL AND CULTURAL RESOURCES**

Alternative A – Preferred Action – No Significant Impact

A Class I Cultural Resources Record Search was conducted by the Archaeological Research Center (ARC). There was no record of cultural or historical findings in the immediate project area. While there was no record of documented cultural or historical resources there has been no survey conducted in the immediate area. Due to the project area not being disturbed a Cultural and Historical Survey was ordered to ensure that no archaeological resources are present. ARC completed a Class III Intensive Cultural Resources Survey on the proposed property. This report is included in the appendices and is titled **A Class III Intensive Cultural Resources Survey for the South Dakota Game Fish and Parks Rapid City Firearms Range Complex, Meade County, South Dakota**. The survey documented five new archaeological sites. Site 39MD1025 is an American Indian stone cairn site of unknown temporal or cultural affiliation. Sites 39MD1026, 39MD1027, and 39MD1028 are American Indian isolated finds of unknown temporal or cultural affiliation. Site 39MD1029 is an American Indian isolated find of Archaic or Late Prehistoric temporal affiliation. As a result of the survey, relative to site 39MD1025 not to be disturbed, the investigators recommended no historic properties will be affected.

South Dakota's State Historic Preservation Officer (SHPO) reviewed **A Class III Intensive Cultural Resources Survey for the South Dakota Game Fish and Parks Rapid City Firearms Range Complex, Meade County, South Dakota** on November 17, 2021 and concurred that "No Historic Properties Affected" for the proposed action on the preferred site if the following stipulations are met: "1. Eligible site 39MD1025 is avoided by all project activities 2. Future development or construction at the shooting range, even that without federal funding, should avoid impacts to 39MD1025 and its immediate surrounding, as such future impacts to the site could be an adverse effect to the site which is reasonably foreseeable and later in time from the proposed current federal undertaking 3. All necessary gravel for the undertaking should come from an existing commercial source."

GFP will follow all recommendations and stipulations put forth by SHPO to meet all section 106 requirements.

Alternative B – No Action – No Significant Impact if no action is taken.

#### **4.10 LAND USE**

Alternative A – Preferred Action – No Significant Impact

GFP met with Meade County representatives and they stated that there is currently no Zoning or Planning on the area or in that part of the county. The project site is currently only utilized for grazing cattle so no further action is required.

Alternative B – No Action – No Significant Impact if no action is taken.

#### **4.11 SOCIOECONOMIC CONDITIONS**

##### Alternative A – Preferred Action

The shooting range will increase usage of the area and will result in a positive impact to the local economy through the increased sales of goods and services to the users of the shooting range. Increased sales of goods and services will also increase sales tax revenues to the City of Rapid City and the surrounding areas. Elevate Rapid City completed an Economic Impact Scenario for Rapid City. Rapid City and the surrounding areas could see a potential increase of approximately \$1,865,075 in worker earnings, 55 more jobs, and an approximate increase of \$376,363 in taxes on production and imports.

Alternative B – No Action – No significant impact will happen to the socioeconomic conditions if no action is taken.

#### **4.12 NOISE**

##### Alternative A – Preferred Location

Noise levels will temporarily increase with the shooting range construction and while normal operations at the shooting range will increase noise levels at the site on an ongoing basis. Increased noise levels will not pose a threat to the hearing of the persons living nearby.

There nearest dwelling that has occupants is located approximately .75 mile to the south of the proposed site. There is also a dwelling located approximately one and half miles north of the proposed site. Decibel readings have not been conducted at those locations. The shooting range noise is expected to be muffled by the natural topography of the range, berms, and some tree plantings. Although shots will be audible on an occasional basis, noise levels are not expected to pose a disturbance to nearby residents.

Alternative B – No Action – No significant impact to noise levels if there is no action taken.

#### **4.13 CUMULATIVE IMPACTS**

##### Alternative A – Preferred Location

Total area impacted within the preferred site consists of approximately 400 acres. Topography and soils will be altered during construction as we will utilize the existing topography and soils to construct berms and backstops within each of the bays. Drainage will be altered minimally because the site has not been developed. Within the design of the range minimal impacts will happen with the drainage as we will utilize the natural topography of the land to allow for natural drainage that currently exists at the site. Since EPA's Best Management Practices for Lead at Outdoor Shooting Ranges will be utilized, no negative impact is expected to result from the construction and operation of the shooting range at the preferred site.

Alternative B – No Action – No significant impacts will occur if no action is taken.

## **CHAPTER 5: COORDINATION AND CONSULTATION**

South Dakota GFP consulted with the following state, county, and federal agencies.

Office of Waste Management, South Dakota Department of Agriculture and Natural Resources  
Office of Air Quality, South Dakota Department of Agriculture and Natural Resources  
Office of Drinking Water, South Dakota Department of Agriculture and Natural Resources  
Office of Surface Water, South Dakota Department of Agriculture and Natural Resources  
Office of Ground Water, South Dakota Department of Agriculture and Natural Resources  
South Dakota Game, Fish and Parks  
United States Fish and Wildlife Service  
United States Army Corps of Engineers  
National Resources Conservation Service  
Meade County Office of Planning

## **CHAPTER 6: PUBLIC INVOLVEMENT PROCESS**

Area shooting enthusiasts, members of the public and the City of Rapid City and surrounding areas have all expressed support for this proposed facility as a greatly needed, safe, controlled, patrolled, and accessible site for a variety of shooting disciplines. No publicly owned and operated outdoor shooting range currently exists in the area.

GFP has and will continue to meet with neighbors to the proposed firearm range site, local and county governments, local legislators, and other interested parties. A stakeholder group was formed in February of 2021 consisting of shooting enthusiasts, city and state officials, local gun and shooting clubs, area retailers, and other interested parties. Following months of meetings, a draft plan for the property was adopted. GFP continues to meet with this stakeholder group to allow for public involvement and input on range design and construction. Meetings will be held monthly throughout construction and beyond. GFP has met with and intends to meet as need with the Meade County Commission to advise them of range progress and construction. GFP will hold public meetings as needed to inform the public of range progress and construction.

Along with public meetings, news stories from various news outlets have also reported on the possibility of the shooting range. The news outlets include but are not limited to; South Dakota Public Broadcasting, KOTA News, Black Hills FOX News, KNBN News, Rapid City Journal, Black Hills Pioneer, and South Dakota Free Press.

This is the list of public meetings that have been held thus far:

January 21, 2021	Meet with SD Parks and Wildlife Foundation
February 3, 2021	Meet with surrounding landowner
March 17, 2021	Meet with local industry partner
March 23, 2021	Meet with local law enforcement
March 4, 2021	Meet with local stakeholders
March 5, 2021	SD Game, Fish and Parks commission meeting
May 14, 2021	Meet with local stakeholders



May 26, 2021	Stakeholder Group meeting
July 8, 2021	Stakeholder Group meeting
July 12, 2021	Meet with surrounding landowner
July 13, 2021	All staff information meeting
July 19, 2021	Meet with local law enforcement
July 27, 2021	Present to Meade County Commission
August 2, 2021	Meet with Elevate Rapid City
August 3, 2021	Stakeholder Group meeting
August 11, 2021	Meet with SD Youth Hunting Adventures group
September 1, 2021	SD Game, Fish and Parks commission meeting
September 1, 2021	Stakeholder Group meeting
September 1, 2021	Legislator tour on site
September 20, 2021	Meet with local industry partner
October 8, 2021	SD Game, Fish and Parks commission meeting
October 21, 2021	Meet with local industry partner
October 28, 2021	Stakeholder Group meeting
November 4, 2021	SD Game, Fish and Parks commission meeting
November 9, 2021	Meet with Elevate Rapid City
December 9, 2021	SD Game, Fish and Parks commission meeting
December 9, 2021	Stakeholder Group meeting
December 21, 2021	Present to Meade County Commission
January 3, 2022	Area landowner meeting
January 4, 2022	Meet with Back Hills Sportsman Club

## CHAPTER 7: PREPARERS

Graham Larson, South Dakota Game, Fish and Parks, Grant and Loan Specialist  
 John Kanta, South Dakota Game, Fish and Parks, Terrestrial Section Chief  
 Mike Klosowski, South Dakota Game, Fish and Parks, Region 1 Regional Supervisor

## CHAPTER 8: WORKS CITED

EPA [Best Management Practices for Lead at Outdoor Shooting Ranges](#) manual (Revised June 2005)

City of Rapid City 2020 population estimate: <http://census.gov/>

Map 1 – south-dakota-map.org

Map 2 -

[https://en.wikipedia.org/wiki/Meade\\_County,\\_South\\_Dakota#/media/File:Map\\_of\\_South\\_Dakota\\_highlighting\\_Meade\\_County.svg](https://en.wikipedia.org/wiki/Meade_County,_South_Dakota#/media/File:Map_of_South_Dakota_highlighting_Meade_County.svg)

Maps 3 & 5 – GFP Rapid City Firearms Range JLG Architects

Map 4 – SD Office of Game, Fish and Parks

Map 6 – <https://www.fws.gov/wetlands/data/mapper.html>

Map 7 - <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>

Maps 8 & 9 – Topographical and Property Survey of Rapid City Shooting Range – Brosz Engineering

IPaC – Information for Planning and Consultation – <https://ecos.fws.gov/ipac/>

Map 10 – A Class III Cultural Resources Survey for the South Dakota Game, Fish and Parks Rapid City Firearms Range Complex, Meade County, South Dakota, by Matthew D. Busch, Contract Investigations Series No. 3902, November 12, 2021, Principal Investigator – David T. Williams, MA, RPA

## **APPENDICES**

Appendix A – Consultation letter with the State Historic Preservation Officer

Appendix B – **A Class III Intensive Cultural Resources Survey for the South Dakota Game, Fish and Parks Rapid City Firearms Range Complex, Meade County, South Dakota** by Matthew D. Busch

Appendix C – DANR Environmental Review and Correspondence

Appendix D – Consultation letter South Dakota GFP on Threatened and Endangered Species

Appendix E – Army Corps of Engineers Jurisdictional Determination Letter

Appendix F – FEMA National Flood Hazard Layer FIRMette