

APPENDIX A - LIST OF ENVIRONMENTAL PERMITS REQUIRED

LIST OF ENVIRONMENTAL PERMITS REQUIRED

A.1 REGULATORY FRAMEWORK

This EA has been prepared under the provisions of, and in accordance with the NEPA, the CEQ Regulations Implementing the Procedural Provisions of NEPA, and VA's regulations for implementing NEPA (38 CFR Part 26). In addition, the EA has been prepared as prescribed in VA's NEPA Interim Guidance for Projects (VA 2010). federal, state, and local laws and regulations specifically applicable to this Proposed Action are identified, where appropriate, within this EA, and include:

- Endangered Species Act of 1973, as amended (7 USC 136; 16 USC 1531 et seq.).
- Energy Independence Security Act Section 438.
- Executive Order 11988, *Floodplain Management* (24 May 1977).
- Executive Order 11990, *Protection of Wetlands* (24 May 1977).
- Executive Order 12898, *Environmental Justice* (11 February 1994).
- Executive Order 13834, *Efficient Federal Operations* (17 May 2018).
- Farmland Protection Policy Act (7 USC 4201, et seq.)
- Federal Clean Air Act of 1990 (42 USC 7401 et seq., as amended).
- Federal Clean Water Act (Federal Water Pollution Control Act) of 1948, as amended (1972, 1977) (33 USC 1251 et seq.); Sections 401 and 404.
- Migratory Bird Treaty Act (16 USC 703-712, 3 July 1918; as amended 1936, 1960, 1968, 1969, 1974, 1978, 1986, and 1989).
- Native American Graves Protection and Repatriation Act, as amended (25 USC 3001 et seq.).
- National Historic Preservation Act (NHPA) of 1966, as amended (36 CFR Part 800).
- Nevada Division of Environmental Protection, Bureau of Water Pollution Control, National Pollutant Discharge Elimination System.
- Nevada Administrative Code.
- Elko County Code or Ordinances.
- City of Elko Code of Ordinances.

A.2 ENVIRONMENTAL PERMITS REQUIRED

In addition to the regulatory framework of the NEPA, the CEQ Regulations Implementing the Procedural Provisions of NEPA, VA's NEPA regulations, and VA's NEPA Interim Guidance for Projects, the following federal, state, and/or local environmental permits are required as part of this Proposed Action, and include:

- NDEP National Pollution Discharge Elimination System Stormwater Discharge General Permit Associated with Construction Activity (General Permit).
- NDEP Bureau of Air Pollution Control Surface Area Disturbance Permit.

APPENDIX B – AGENCY CORRESPONDENCE



44265 Plymouth Oaks Blvd.
Plymouth, MI 48170
T 734-455-8600
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July 30, 2018

Elko County Public Works Department
Building, Safety, Planning and Zoning, and Natural Resources
540 Court Street, Suite 104
Elko, Nevada 89801

SUBJECT: Intergovernmental and Interagency Coordination of Environmental Planning (NEPA Scoping Letter) for the: Department of Veterans Affairs (VA) Proposed National Veterans Burial Ground Elko County, Nevada

To Whom It May Concern:

The US Department of Veterans Affairs (VA) is preparing environmental documentation to assist in the Federal decision-making process concerning the acquisition of approximately 10 acres of land in Elko County, Nevada (Site) for the establishment of a National Veterans Burial Ground. This project is part of VA's Rural Veterans Burial Initiative, whereby the VA National Cemetery Administration (NCA) is seeking to establish small NCA-managed Veterans cemeteries in rural areas not served by a nearby National or State Veterans cemetery.

The preferred site is part of an approximately 1,457-acre parcel of land owned by the US Department of the Interior Bureau of Land Management (BLM), is rectangular in shape, and is located north of Cattle Drive, east of Western Way, and west of Rocky Road in a relatively undeveloped area northwest of the City of Elko in unincorporated Elko County. The Site is currently undeveloped, with brushy vegetation (sagebrush). The site location is depicted in **Attachments 1a, 1b and 1c**.

VA is conducting an Environmental Assessment (EA) to evaluate the environmental, cultural, and socioeconomic issues associated with the proposed acquisition, development, operation, and maintenance of a National Veterans Burial Ground at the site pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S. Code (USC) §4321 *et seq.*); the Council on Environmental Quality (CEQ) Regulations Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508); and VA's Implementing Regulations (38 CFR Part 26 (*Environmental Analysis of VA Actions*)).

Information Request: *Information your agency can provide on any of the following environmental issue areas (at or in the vicinity of the proposed site) would be appreciated. Examples of such information includes, but not limited to:*

- Potential environmental concerns or issues;
- Surface and groundwater resources, including streams, wetlands, floodplains, open water features, wells, and local aquifers;

- Federally or state listed threatened or endangered species, or any species proposed for such listing, or critical habitat for such species that may occur within a one-mile radius around the proposed site;
- Parks, nature preserves, conservation areas, designated wild or scenic rivers, migratory bird habitats, or special wildlife issues;
- Natural resource issues;
- Soils and geologic data, including lists of hydric soils;
- Prime and unique farmland (*National Resources Conservation Services (NRCS) only*);
- Traffic, noise, or socioeconomic concerns;
- Air quality concerns; and
- Additional environmental, cultural, land use, or socioeconomic information or concerns your agency may have with regard to the referenced site.

Data that you make available will provide valuable and necessary input into the NEPA process and will be used to scope the NEPA analysis. As part of the NEPA process, local citizens, groups, and agencies, among others, will have opportunity to review and comment on the information and alternatives addressed in the EA.

Other Agencies and Organizations: A listing of agencies and organizations to which this request was sent is provided in **Attachment 2**. VA will conduct separate consultation with the Nevada State Historic Preservation Office (SHPO) and Federally-recognized Native American Tribes that may have ties to the Site area. *Should you know of any additional agencies or organizations that may have data or concerns relevant to this project or site, please forward them a copy of this letter, include their information in your response, or contact us directly with this information.*

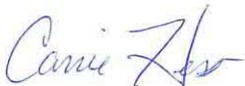
We look forward to and welcome your participation in this process. **Please respond by August 30, 2018** to enable us to complete this scoping phase of the project within the scheduled timeframe. TTL Associates, Inc. is assisting the VA in conducting this NEPA process.

Please send your written responses via regular or e-mail (preferred) to:

TTL Associates, Inc.
44265 Plymouth Oaks Boulevard
Plymouth, Michigan 48170
ATTN: Carrie Hess, Geologist
Chess@tlassoc.com

If you have any questions concerning this request, please direct them to Ms. Hess at (734) 582-4990.

Sincerely,



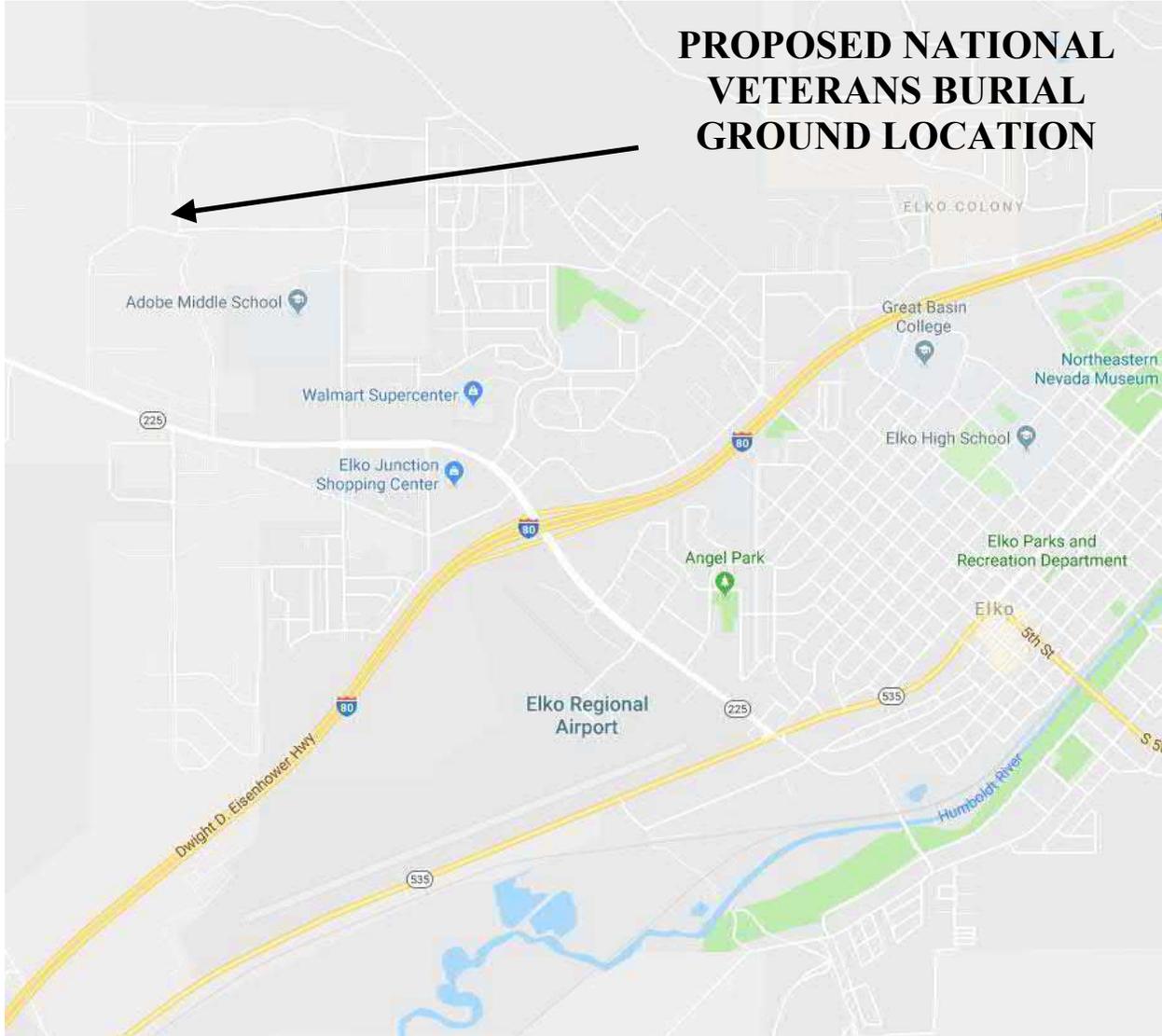
Carrie Hess
Geologist

Attachment 1a – 1c: Site Location Maps
Attachment 2: List of Agencies and Organizations Contacted



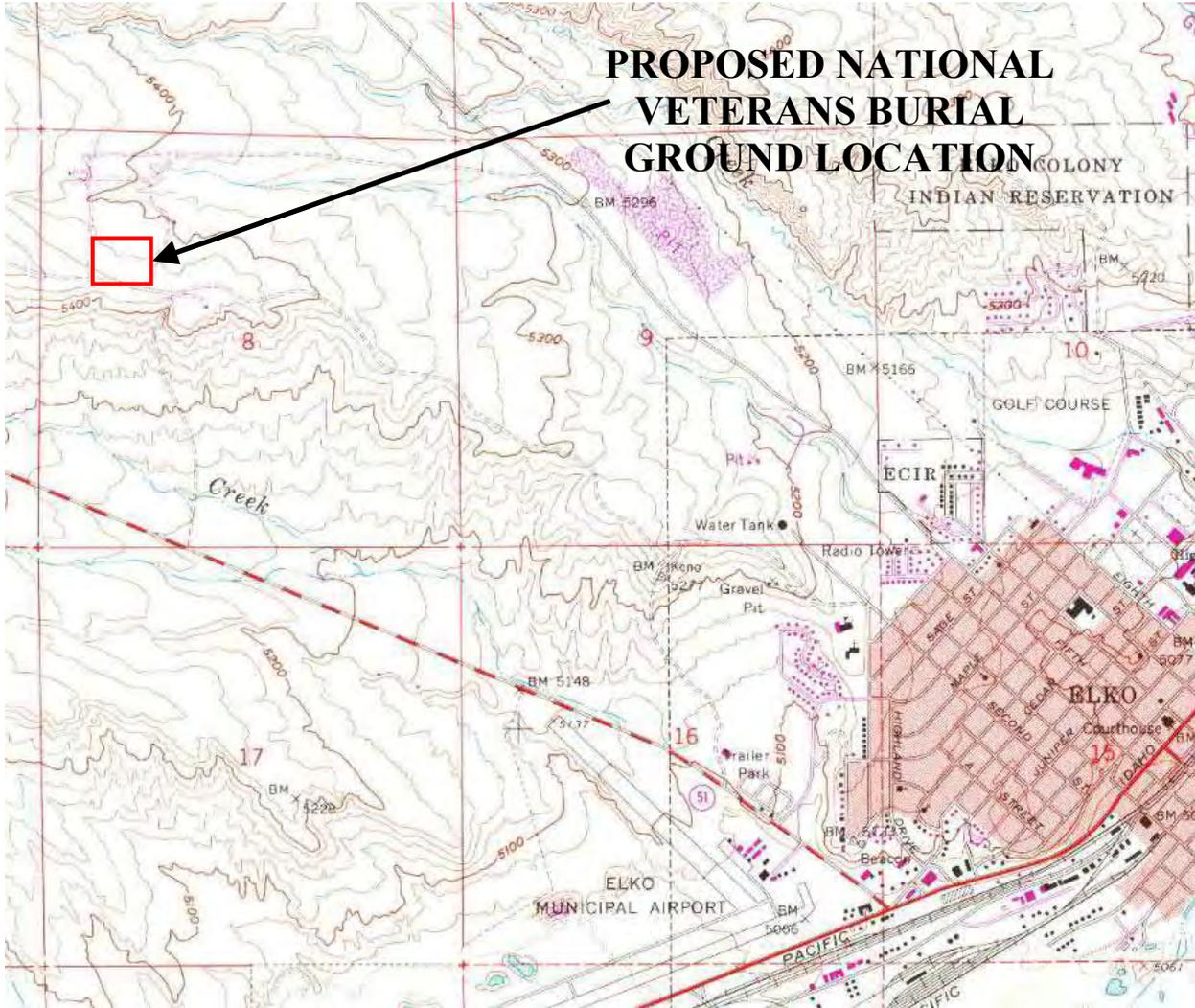
ATTACHMENT 1A

**SITE LOCATION MAP (STREET MAP)
Proposed National Veterans Burial Ground
Elko County, Nevada**



ATTACHMENT 1B

**SITE LOCATION MAP
(1962 PHOTOREVISED 1972 TOPOGRAPHIC MAP)
Proposed National Veterans Burial Ground
Elko County, Nevada**



ATTACHMENT 1C

SITE LOCATION MAP (2014 AERIAL PHOTOGRAPH)

**Proposed National Veterans Burial Ground
Elko County, Nevada**



Attachment 2
List of Agencies and Organizations Contacted
Department of Veterans Affairs
NEPA Environmental Assessment
Proposed National Veterans Burial Ground
Elko County, Nevada

U.S. Fish and Wildlife Service
Nevada Fish and Wildlife Office
1340 Financial Boulevard, Suite 234
Reno, Nevada 89502-7147
Phone: (775) 861-6300

US Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, California 94105
Phone: (415) 947-8702

US Army Corps of Engineers – Sacramento District
Public Affairs Office
1325 J Street - Room 1513
Sacramento, California 95814
Phone: (916) 557-5100

USDA Natural Resource Conservation Service
Nevada State Office
1365 Corporate Boulevard
Reno, Nevada 89502-7102
Phone: (775) 857-8500

Nevada Division of Environmental Protection
Bureau of Air Pollution Control
901 S. Stewart St., Suite 4001
Carson City, Nevada 89701
Phone: (775) 687-9349

Nevada Division of Environmental Protection
Bureau of Safe Drinking Water
901 S. Stewart Street, Suite 4001
Carson City, Nevada 89701
Phone: (775) 687-9447

Nevada Division of Environmental Protection
Bureau of Waste Management
901 S. Stewart Street, Suite 4001
Carson City, Nevada 89701
Phone: (775) 687-9461

Nevada Division of Environmental Protection
Bureau of Water Quality
901 S. Stewart Street, Suite 4001
Carson City, Nevada 89701
Phone: (775) 687-9444

Nevada Division of Environmental Protection
Bureau of Water Pollution Control
901 S. Stewart Street, Suite 4001
Carson City, Nevada 89701-5249
Phone: (775) 687-9418

Nevada Department of Conservation and Natural Resources
Conservation Districts Program
901 S. Stewart Street, Suite 1003
Carson City, Nevada 89701
Phone: (775) 684-2700

Nevada Department of Conservation and Natural Resources
Division of Forestry
2478 Fairview Drive
Carson City, Nevada 89701
Phone: (775) 684-2500

Nevada Department of Conservation and Natural Resources
Natural Heritage Program
901 S. Stewart Street, Suite 5002
Carson City, Nevada 89701-5245
Phone: (775) 684-2900

Nevada Department of Conservation and Natural Resources
Division of Water Resources
901 S. Stewart Street, Suite 2002
Carson City, Nevada 89701
Phone: (775) 684-2800

Nevada Department of Transportation
1263 South Stewart Street
Carson City, Nevada 89712
Phone: (775) 888-7000

Elko County Public Works Department
Building, Safety, Planning and Zoning, and Natural Resources
540 Court Street, Suite 104
Elko, Nevada 89801
Phone: (775) 738-6816

Elko County Roads Department
994 River Street
Elko, Nevada 89801
Phone: (775) 738-5036



NEVADA DIVISION OF
**ENVIRONMENTAL
PROTECTION**

STATE OF NEVADA
Department of Conservation & Natural Resources

Brian Sandoval, Governor
Bradley Crowell, Director
Greg Lovato, Administrator

September 21, 2018

Carrie Hess
TTL Associates
44265 Plymouth Oaks Boulevard
Plymouth, Michigan 48170

**RE: Intergovernmental and Interagency Coordination of Environmental Planning for the:
Department of Veteran Affairs (VA) Proposed National Veterans Burial Ground - Elko County, Nevada**

In reply, please refer to plan review number (EL-0005997-18)

Dear Ms. Hess:

The Bureau of Safe Drinking Water (BSDW) permits public drinking water systems in the State of Nevada. Based on review of your submitted information, the closest permitted public drinking water system to the proposed burial location is the South Crestview Homeowners Association (SCHA). The water system has wells that are located cross gradient from the proposed burial site. The closest well is approximately 5000 feet from the burial location. Water depth in the wells ranges from 362 to 420 feet. Confining layers are reported above the screen intervals. Based on the preceding information, the BSDW does not believe that the proposed location of the burial ground would adversely affect the SCHA's water quality.

Please be aware that there are residences that are believed to be served by private wells that are closer to the burial site. Potential impact to these wells is beyond the scope of this review. Please feel free to contact me at (775) 687-9517 or at jbalderson@ndep.nv.gov, if you have any questions. Thank you.

Sincerely,



Jim Balderson, P.E., Engineering Supervisor
Bureau of Safe Drinking Water
Nevada Division of Environmental Protection

Cc: My-Linh Nguyen PH.D., P.E., Chief, BSDW
Rich Johnson, M.S., Environmental Scientist, BSDW



NEVADA DIVISION OF
**ENVIRONMENTAL
PROTECTION**

STATE OF NEVADA
Department of Conservation & Natural Resources

Brian Sandoval, Governor
Bradley Crowell, Director
Greg Lovato, Administrator

August 8, 2018

Ms. Carrie Hess, Geologist
TTL Associates, Inc.
44265 Plymouth Oaks Boulevard
Plymouth, Michigan 48170

RE: Proposed National Veterans Burial Ground in Elko County

Dear Ms. Hess:

You have requested the Nevada Division of Environmental Protection's comments concerning the Proposed National Veterans Burial Ground in Elko, Nevada and the project's potential impact on air quality. In order to provide comments on whether the recommended development might impact air quality, we would need more information, including a detailed description of the project and how much area would be disturbed. Nevertheless, please note the following requirements that must be complied with during the planning and implementation phases of any project:

1. Pursuant to NAC 445B.22037, if during the course of a project an area in excess of five (5) acres is disturbed, a surface area disturbance permit is required from the Bureau of Air Pollution Control (BAPC). If needed, you may contact Ryan Clark, BAPC Permitting Branch Supervisor, at (775) 687-9536 to discuss permitting requirements.
2. Regardless of the size of the disturbed area, fugitive dust emitted from the project must be controlled at all times through the use of best practical methods. These methods can include, but are not limited to, paving, chemical stabilization, watering, phased construction, and revegetation. For assistance with controlling fugitive dust, please contact Travis Osterhout, BAPC Compliance Branch Supervisor, at (775) 687-9530.

If you have any questions on this review you may call me at (775) 687-9392, or e-mail at sjaunara@ndep.nv.gov.

Sincerely,

Sig Jaunarajs, Supervisor
Planning & Mobile Sources Branch



STATE OF NEVADA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
Nevada Natural Heritage Program

Brian Sandoval
Governor

Bradley Crowell
Director

Kristin Szabo
Administrator

14 August 2018

Carrie Hess
TTL Associates, Inc.
44265 Plymouth Oaks Blvd.
Plymouth, MI 48170

RE: Data request received 03 August 2018

Dear Ms. Hess:

We are pleased to provide the information you requested on endangered, threatened, candidate, and/or At Risk plant and animal taxa recorded within or near the Proposed National Veterans Burial Ground Project area in Elko County. We searched our database and maps for the following, a 2 kilometer radius around area provided, including:

Township 34N Range 55E Section 08

There are no at risk taxa recorded within the given area. However, habitat may be available for: the big brown bat, *Eptesicus fuscus*, a Nevada Bureau of Land Management (BLM) Sensitive Species; the silver-haired bat, *Lasionycteris noctivagans*, a Nevada BLM Sensitive Species; the Nevada viceroy, *Limenitis archippus lahontani*, a Taxon determined to be Critically Imperiled by the Nevada Natural Heritage Program; and the Western Burrowing Owl, *Athene cunicularia hypugaea*, a Nevada BLM Sensitive Species. The Nevada Department of Wildlife (NDOW) manages, protects, and restores Nevada's wildlife resources and associated habitat. Please contact Bonnie Weller, NDOW GIS biologist (775) 688-1439 to obtain further information regarding wildlife resources within and near your area of interest. Removal or destruction of state protected flora species requires a special permit from Nevada Division of Forestry (NRS 527.270).

Please note that our data are dependent on the research and observations of many individuals and organizations and in most cases are not the result of comprehensive or site-specific field surveys. Natural Heritage reports should never be regarded as final statements on the taxa or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments.

Thank you for checking with our program. Please contact us for additional information or further assistance.

Sincerely,

Eric S. Miskow
Biologist/Data Manager



Steve Sisolak
Governor

STATE OF NEVADA
DEPARTMENT OF WILDLIFE

6980 Sierra Center Parkway, Suite 120

Reno, Nevada 89511

Phone (775) 688-1500 • Fax (775) 688-1495

TONY WASLEY
Director

LIZ O'BRIEN
Deputy Director

JACK ROBB
Deputy Director

Carrie Hess
Geologist
TTL Associates, Inc
44265 Plymouth Oaks Boulevard
Plymouth, Michigan 48170

October 29, 2019

Re: Proposed National Veterans Cemetery

Dear Carrie Hess:

I am responding to your request for information from the Nevada Department of Wildlife (NDOW) on the known or potential occurrence of wildlife resources in the vicinity of the Proposed National Veterans Cemetery located in Elko County, Nevada. In order to fulfill your request an analysis was performed using the best available data from the NDOW's wildlife occurrences, raptor nest sites and ranges, greater sage-grouse leks and habitat, and big game distributions databases. No warranty is made by the NDOW as to the accuracy, reliability, or completeness of the data for individual use or aggregate use with other data. These data should be considered **sensitive** and may contain information regarding the location of sensitive wildlife species or resources. All appropriate measures should be taken to ensure that the use of this data is strictly limited to serve the needs of the project described on your GIS Data Request Form. Abuse of this information has the potential to adversely affect the existing ecological status of Nevada's wildlife resources and could be cause for the denial of future data requests.

To adequately provide wildlife resource information in the vicinity of the proposed project the NDOW delineated an area of interest that included a four-mile buffer around the project area provided by you on Tuesday, October 22, 2019. Wildlife resource data was queried from the NDOW databases based on this area of interest. The results of this analysis are summarized below.

Big Game - Occupied mule deer distribution exists throughout the entire project area and four-mile buffer area. Occupied elk and pronghorn antelope distributions exist throughout the entire project area and portions of the four-mile buffer area. No known occupied bighorn sheep distribution exists in the vicinity of the project area. Please refer to the attached maps for details regarding big game distributions relative to the proposed project area.

Greater Sage-Grouse - Greater sage-grouse habitat in the vicinity of the project area has primarily been classified as General habitat by the Nevada Sagebrush Ecosystem Program (<http://sagebrusheco.nv.gov>). Priority and Other habitat also exists in the vicinity of the project area. Please refer to the attached map for details regarding greater sage-grouse habitat relative to the proposed project area. There are no known radio-marked greater sage-grouse tracking locations in the vicinity of the project area. There is one known greater sage-grouse lek site in the vicinity of the project area:

Lek Name	Township/Range/Section	Last Survey	Status
Substation (Adobe Summit)	21 0350N 0540E 025	2016	Inactive

Lahontan Cutthroat Trout - are known to exist in the vicinity of the project area in the Coal Mine Creek-Humboldt River watershed.

Raptors - Various species of raptors, which use diverse habitat types, may reside in the vicinity of the project area. American kestrel, bald eagle, barn owl, burrowing owl, Cooper's hawk, ferruginous hawk, golden eagle, great horned owl, long-eared owl, merlin, northern goshawk, northern harrier, northern saw-whet owl, osprey, peregrine falcon, red-tailed hawk, rough-legged hawk, sharp-shinned hawk, short-eared owl, Swainson's hawk, turkey vulture, and western screech owl have distribution ranges that include the project area and four-mile buffer area. Furthermore, the following raptor species have been directly observed in the vicinity of the project area:

American kestrel	long-eared owl	red-tailed hawk
barn owl	merlin	rough-legged hawk
ferruginous hawk	northern saw-whet owl	sharp-shinned hawk
golden eagle	osprey	turkey vulture
great horned owl	prairie falcon	

Raptor species are protected by State and Federal laws. In addition, bald eagle, burrowing owl, California spotted owl, ferruginous hawk, flammulated owl, golden eagle, northern goshawk, peregrine falcon, prairie falcon, and short-eared owl are NDOW species of special concern and are target species for conservation as outlined by the Nevada Wildlife Action Plan. Per the *Interim Golden Eagle Technical Guidance: Inventory and Monitoring Protocols; and Other Recommendations in Support of Golden Eagle Management and Permit Issuance* (United States Fish and Wildlife Service 2010) we have queried our raptor nest database to include raptor nest sites within ten miles of the proposed project area. There are 64 known raptor nest sites within ten miles of the project area. Please refer to the appendix for details regarding these raptor nest sites.

Other Wildlife Resources

There are no water developments in the vicinity of the project area. Additional species have also been observed in the vicinity of the project area. Please refer to the appendix for details regarding these species.

The proposed project area may also be in the vicinity of abandoned mine workings, which often provide habitat for state and federally protected wildlife, especially bat species, many of which are protected under NAC 503.030. To request data regarding known abandoned mine workings in the vicinity of the project area please contact the Nevada Division of Minerals (<http://minerals.state.nv.us/>).

The above information is based on data stored at our Reno Headquarters Office, and does not necessarily incorporate the most up to date wildlife resource information collected in the field. Please contact the Habitat Division Supervising Biologist at our Eastern Region Elko Office (775.777.2300) to discuss the current environmental conditions for your project area and the interpretation of our analysis. Furthermore, it should be noted that the information detailed above is preliminary in nature and not necessarily an identification of every wildlife resource concern associated with the proposed project. Consultation with the Supervising Habitat biologist will facilitate the development of appropriate survey protocols and avoidance or mitigation measures that may be required to address potential impacts to wildlife resources.

Caleb McAdoo - Eastern Region Habitat Supervisor (775.777.2306)

Federally listed Threatened and Endangered species are also under the jurisdiction of the United States Fish and Wildlife Service. Please contact them for more information regarding these species.

If you have any questions regarding the results or methodology of this analysis please do not hesitate to contact our GIS office at (775) 688-1439.

Sincerely,

Bonnie Weller



Bonnie Weller, GIS Analyst
Data and Technology Services
Nevada Department of Wildlife
6980 Sierra Center Parkway, Ste. 120
Reno, Nevada 89511
(775) 688-1439
bweller@ndow.org

Appendix A: Raptor Nest Sites Table

Probable Use	Last Check	Last Active	Township/Range/Section
Burrowing Owl	7/10/2006	7/10/2006	21 0350N 0550E 035
Buteo	6/10/1975	6/10/1975	21 0330N 0540E 024
Buteo	6/7/1982	6/7/1982	21 0350N 0560E 016
Buteo	1/1/1983	1/1/1983	21 0350N 0560E 017
Buteo	5/23/2001	5/23/2001	21 0330N 0550E 019
Buteo	5/29/2007	5/29/2007	21 0330N 0540E 025
Buteo	6/2/2011	6/2/2011	21 0350N 0540E 015
Buteo	6/2/2011	6/2/2011	21 0350N 0540E 027
Buteo	5/8/2014	5/8/2014	
Corvid	6/14/1975	6/14/1975	21 0350N 0550E 014
Corvid	6/22/1976	6/22/1976	21 0330N 0540E 024
Corvid	5/8/2014	5/8/2014	
Corvid	5/8/2014	5/8/2014	
Corvid	5/8/2014		
Corvid	5/8/2014		
Eagle	1/1/1972	1/1/1972	21 0330N 0550E 004
Eagle	3/21/1972	3/21/1972	21 0360N 0550E 026
Eagle	5/5/1972	5/5/1972	21 0350N 0530E 023
Eagle	5/5/1972		21 0350N 0540E 031
Eagle	4/16/1973		21 0330N 0550E 003
Eagle	4/16/1973		21 0330N 0550E 004
Eagle	1/1/1974	1/1/1974	21 0350N 0540E 014
Eagle	4/13/1982		21 0330N 0550E 019
Eagle	5/23/2001	5/23/2001	21 0330N 0540E 014
Eagle	5/23/2001		21 0330N 0550E 019
Eagle	5/29/2007		21 0330N 0540E 024
Eagle	5/29/2007		21 0330N 0540E 024
Eagle	6/3/2011	6/3/2011	21 0330N 0540E 013
Eagle	6/3/2011		21 0330N 0540E 014
Eagle	6/3/2011		21 0330N 0540E 024
Eagle	6/3/2011		21 0330N 0540E 024
Eagle	6/3/2011		21 0330N 0550E 019
Eagle	5/22/2013	5/22/2013	21 0350N 0550E 017
Eagle	5/22/2013	5/22/2013	21 0360N 0550E 026
Eagle	5/22/2013		21 0360N 0550E 026
Eagle	5/8/2014	5/8/2014	21 0350N 0530E 034
Eagle	5/8/2014		
Eagle	5/8/2014		
Eagle	5/8/2014		
Eagle/Buteo	5/22/2013		21 0350N 0550E 017
Eagle/Buteo	5/22/2013		21 0350N 0550E 017
Eagle/Buteo	5/8/2014	5/5/1972	21 0350N 0530E 013
Eagle/Buteo	5/8/2014		
Falcon - Confirmed	6/22/1976	6/22/1976	21 0330N 0540E 024
Falcon - Confirmed	5/23/2001	5/23/2001	21 0330N 0550E 019

Falcon - Confirmed	5/29/2007	5/29/2007	21 0330N 0540E 024
Falcon - Confirmed	6/3/2011	6/3/2011	21 0330N 0540E 024
Falcon - Probable	5/22/1975	5/22/1975	21 0330N 0540E 013
Falcon - Probable	6/10/1975	6/10/1975	21 0330N 0540E 022
Falcon - Probable	6/18/1975	6/18/1975	21 0330N 0540E 024
Falcon - Probable	1/1/1976	1/1/1976	21 0330N 0540E 024
Falcon - Probable	1/1/1976		21 0330N 0540E 014
Falcon - Probable	1/1/1976		21 0330N 0540E 014
Falcon - Probable	4/13/1982		21 0330N 0550E 016
Falcon - Probable	5/23/2001		21 0330N 0540E 013
Falcon - Probable	5/23/2001		21 0330N 0540E 013
Falcon - Probable	5/23/2001		21 0330N 0540E 014
Falcon - Probable	5/29/2007	5/29/2007	21 0330N 0540E 014
Falcon - Probable	5/29/2007	5/29/2007	21 0330N 0540E 024
Ferruginous Hawk	4/17/1974		21 0350N 0550E 026
Ferruginous Hawk	4/20/2005		21 0330N 0550E 027
Northern Goshawk	8/3/2010	8/3/2010	21 0350N 0550E 036
Owl	3/12/2001	3/12/2001	21 0340N 0550E 011
Turkey Vulture	7/15/1996	7/15/1996	

Appendix B: Other Wildlife Species Table

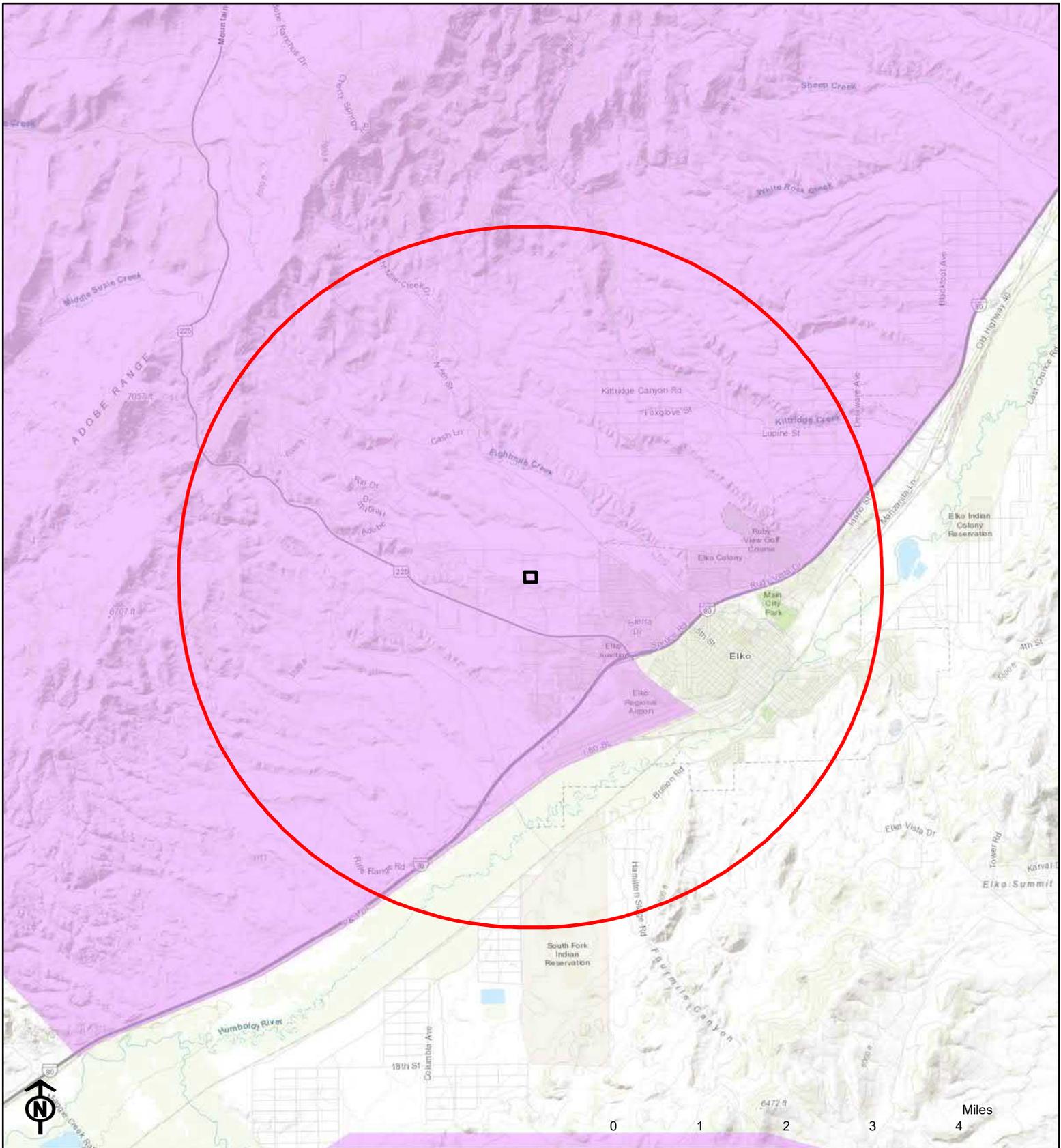
Common Name	ESA	State	SWAP SoCP
American badger			
American redstart		Protected	
American robin		Protected	
Arizona Bell's vireo		Protected	Yes
big brown bat			
black-billed magpie		Protected	
black-tailed jackrabbit		Unprotected	
boat-tailed grackle		Protected	
bobcat		Furbearer	
bobolink		Protected	Yes
Bohemian waxwing		Protected	
Brazilian (Mexican) free-tailed bat		Protected	Yes
buteo (unknown)			
California quail			
cedar waxwing		Protected	
chukar			
common muskrat		Furbearer	
common nighthawk		Protected	Yes
common raven		Protected	
cottontail (unknown)			
coyote		Unprotected	
desert horned lizard			Yes
downy woodpecker		Protected	
Franklin's gull		Protected	
gray partridge			
great-tailed grackle		Protected	
Great Basin fence lizard			
green-winged teal			
mountain cottontail			
mountain sucker			
North American river otter		Furbearer	Yes
northern desert horned lizard			Yes
northern desert nightsnake			
northern shrike		Protected	
redside shiner			
ring-necked pheasant			
ruffed grouse			
silver-haired bat			Yes
Steller's jay		Protected	
striped skunk		Unprotected	
Tahoe sucker			
terrestrial gartersnake			
varied thrush		Protected	
warbling vireo		Protected	
western gray squirrel		Protected	

western gull	Protected
western pipistrelle	
western small-footed myotis	Yes
white-tailed jackrabbit	
white-winged dove	

ESA: Endangered Species Act Status

State: State of Nevada Special Status

SWAP SoCP: Nevada State Wildlife Action Plan (2012) Species of Conservation Priority



-  Project Area
-  Four Mile Buffer Area Boundary
-  Elk Distribution

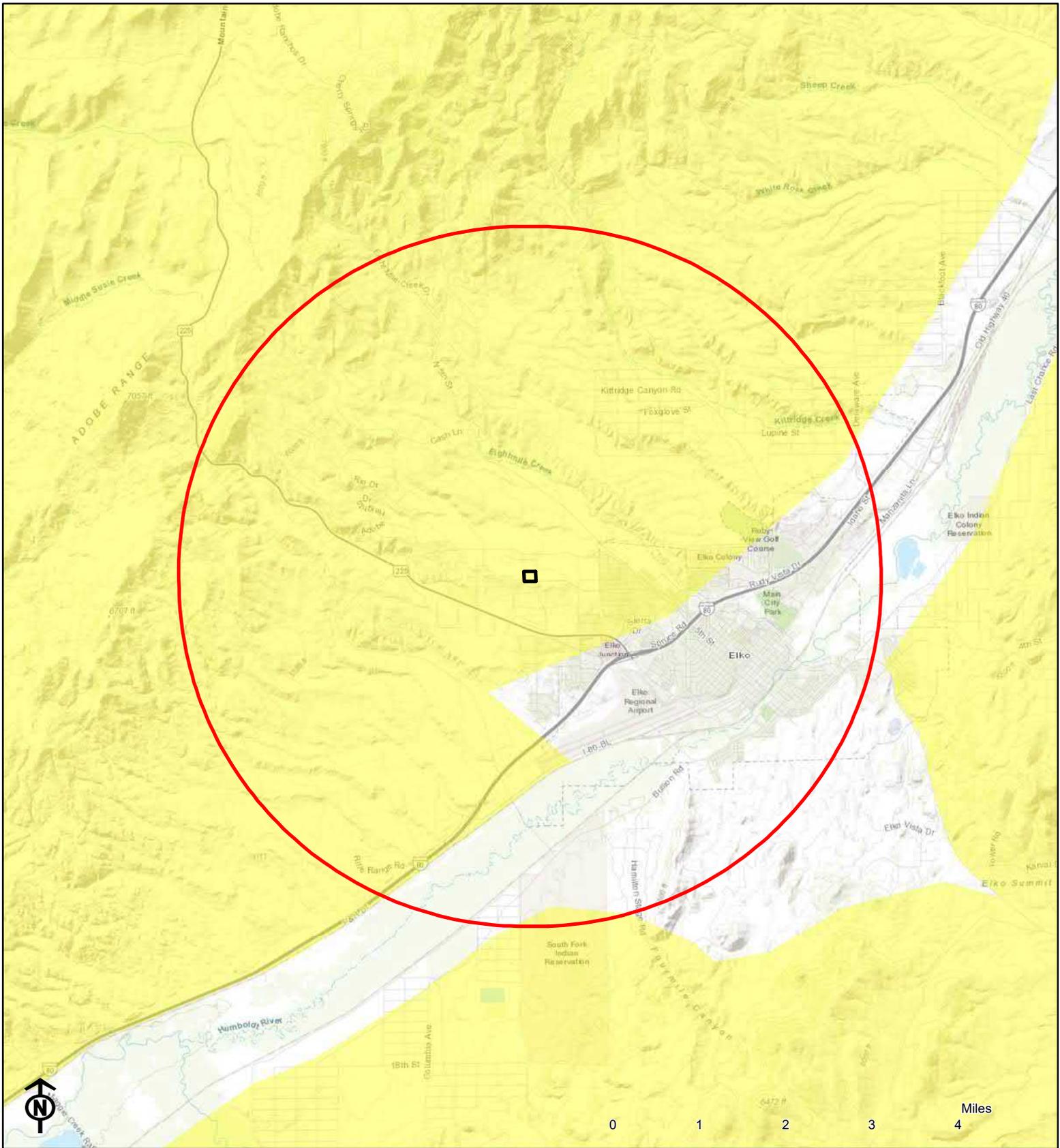
Proposed National Veterans Cemetery Elk Distribution

October 29, 2019

Projection: UTM Zone 11 North, NAD83

No warranty is made by the Nevada Department of Wildlife as to the accuracy, reliability, or completeness of the data for individual use or aggregate use with other data.





-  Project Area
-  Four Mile Buffer Area Boundary
-  Pronghorn Antelope Distribution

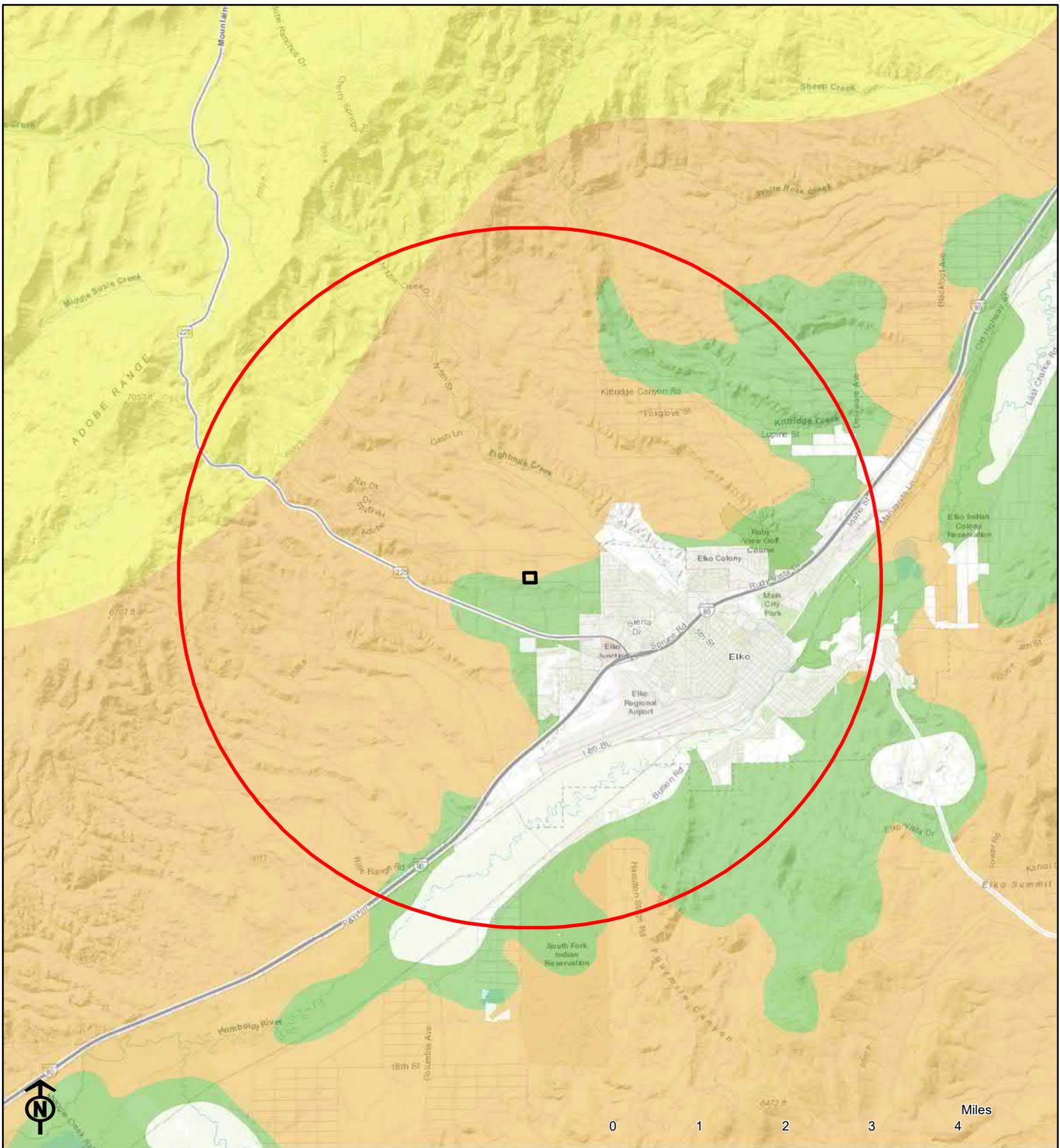
Proposed National Veterans Cemetery Pronghorn Antelope Distribution

October 29, 2019

Projection: UTM Zone 11 North, NAD83

No warranty is made by the Nevada Department of Wildlife as to the accuracy, reliability, or completeness of the data for individual use or aggregate use with other data.





-  Project Area
-  Four Mile Buffer Area Boundary
-  Priority Habitat
-  General Habitat
-  Other Habitat
-  Bi-State Habitat

Proposed National Veterans Cemetery Greater Sage-Grouse Habitat

October 29, 2019

Projection: UTM Zone 11 North, NAD83

No warranty is made by the Nevada Department of Wildlife
as to the accuracy, reliability, or completeness of the data
for individual use or aggregate use with other data.





City of Elko – Assistant City Manager
1755 College Avenue
Elko, NV 89801
Telephone: 775.777.7211
Facsimile: 775.777.7219

August 28, 2018

Ms. Carrie Hess, Geologist
TTL Associates, Inc.
44265 Plymouth Oaks Boulevard
Plymouth, Michigan 48170

Re: Proposed National Veterans Burial Ground, Elko County, NV

Dear Ms. Hess:

Elko County forwarded an information request for the above referenced project to the City of Elko in accordance with the communication policy between the two agencies. The City of Elko offers the following information as the proposed project relates to the City.

- The proposed location is within the sphere of influence established by the city and the county.
- Based on prior meetings with Federal, County and City representatives, the city is under the impression that the proposed facility would require water service either from onsite wells or from the City. The proposed facility is located outside of the city's incorporated boundary. Water service to areas outside the city's incorporated boundary requires an agreement between the party requesting the service and city council. As a practical matter, the proposed location is at a higher elevation than currently served by the City water system. Significant infrastructure would be required to serve the proposed location. Additionally, the extension and maintenance of water service infrastructure that cannot be utilized for future growth of the city is a concern.
- If the proposed facility utilizes city water resources, connection fees apply. Connections fees for water service outside of the City's incorporated boundary are fifty percent higher than connection fees within the incorporated boundary. Water service fees are also fifty percent higher.
- If the agency is proposing the use of city water resources to maintain the facility the potential impact to future growth of the city must be determined. The proposed facility is located in an area where "reuse" water from the City's water reclamation facility is not available under any practical scenario.

- Will the roadway providing ingress/egress to the proposed facility be further developed beyond the existing gravel road?
- What level of traffic counts could be expected? The Nevada Department of Transportation may have to approve the Cattle Drive access to State Route 225
- How will storm water runoff be managed?
- How will sanitary sewer be managed?

Please contact me at 775.777.7211 or sawilkinson@elkocitynv.gov if I can be of further assistance.

Sincerely,



Scott A. Wilkinson
Assistant City Manager

Cc: Curtis Calder, City Manager
Ryan Limberg, Utilities Director
Adeline Thibault, Environmental Coordinator



DEPARTMENT OF VETERANS AFFAIRS
Construction & Facilities Management, Office of Real Property
425 I Street, NW
Washington DC 20001

May 20, 2020

U.S. Fish and Wildlife Service
Nevada Fish and Wildlife Office
1340 Financial Boulevard, Suite 234
Reno, Nevada 89502-7147
Attn: Mr. Paul Souza

**SUBJECT: NEPA Scoping Letter for the
US Department of Veterans Affairs
Proposed National Veterans Burial Ground
Elko, Nevada**

Dear Mr. Souza:

The US Department of Veterans Affairs (VA) is preparing environmental documentation to assist in the Federal decision-making process concerning the proposed acquisition of approximately 15 acres of unimproved land located at the southeast corner of Jennings Way and Rocky Road in the City of Elko, Nevada (Site) for the development and operation of a National Veterans Burial Ground (Proposed Action). This project is part of VA's Rural Veterans Burial Initiative, whereby the VA National Cemetery Administration (NCA) is seeking to establish small NCA-managed Veterans cemeteries in rural areas not served by a nearby National or State Veterans cemetery. In 2018, VA considered an alternative location for the proposed National Veterans Burial Ground; however, that site was later dismissed from consideration.

The Site currently under consideration is part of an approximately 38-acre parcel of land owned by the City of Elko, is rectangular in shape, and is located in a relatively undeveloped/residential area in the northwestern portion of the City of Elko. The Site is currently undeveloped, with brushy vegetation (sagebrush), unimproved roads/trails in the central portion, and an ephemeral stream that runs east-west across the northern portion.

The Site location is shown in Attachments 1A – 1C.

A development plan for the proposed cemetery has not been established. However, it is anticipated that the Site would be developed similarly to other rural VA cemeteries, and would contain pre-placed crypt gravesites, columbarium wall structures, paved roadways, and a committal shelter.

VA is conducting an Environmental Assessment (EA) to evaluate the environmental, cultural, and socioeconomic issues associated with the proposed acquisition, development, operation, and maintenance of a National Veterans Burial Ground at the Site pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S. Code (USC) §4321 *et seq.*); the Council on Environmental Quality (CEQ) Regulations Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508); and VA's Implementing Regulations (38 CFR Part 26 (*Environmental Analysis of VA Actions*)).

Information Request: *Information your agency can provide on any of the following environmental issue areas (at or in the vicinity of the Site) would be appreciated:*

- Potential environmental concerns or issues;
- Surface and groundwater resources, including streams, wetlands, floodplains, open water features, wells, and local aquifers;
- Federally or state listed threatened or endangered species, or any species proposed for such listing, or critical habitat for such species that may occur within a one-mile radius around the Site;
- Parks, nature preserves, conservation areas, designated wild or scenic rivers, migratory bird habitats, or special wildlife issues;
- Natural resource issues;
- Soils and geologic data, including lists of hydric soils;
- Prime and unique farmland (*National Resources Conservation Services (NRCS) only*);
- Traffic, noise, or socioeconomic concerns;
- Air quality concerns; and
- Additional environmental, cultural, land use, or socioeconomic information or concerns your agency may have with regard to the referenced Site.

Data made available will be used to scope the NEPA analysis and will provide valuable and necessary input into the NEPA process. As part of the NEPA process, local citizens, groups, and agencies, among others, will have opportunity to review and comment on the information and alternatives addressed in the EA.

Other Agencies and Organizations: A list of agencies and organizations to which this request was sent is provided in Attachment 2. VA will conduct separate consultation with the Nevada State Historic Preservation Office (SHPO) and Native American Tribes. *Should you know of any additional agencies or organizations that may have data or concerns relevant to this project or Site, please include their information in your response, or contact us directly with this information.*

We look forward to and welcome your participation in this process. **Please respond on or before June 22, 2020** to enable us to complete this scoping phase of the project within the scheduled timeframe.

Please send your written responses via regular mail or e-mail (preferred) to:

U.S. Department of Veterans Affairs (003C2A)
425 I Street, NW, Room 6W417b
Washington, D.C., 20001
ATTN: Fernando Fernández, Environmental Engineer
fernando.fernandez@va.gov

and

TTL Associates, Inc.
44265 Plymouth Oaks Boulevard
Plymouth, Michigan 48170
ATTN: Carrie Hess, Geologist
chess@tlassoc.com

TTL Associates, Inc. is assisting VA in conducting this NEPA process.

If you have any questions concerning this request, please contact me at (202) 632-5529.

Sincerely,

Fernando L. Fernández REM
Environmental Engineer
U.S. Department of Veterans Affairs
Construction & Facilities Management Office

Attachment 1a – 1c: Site Location Maps

Attachment 2: List of Agencies and Organizations Contacted

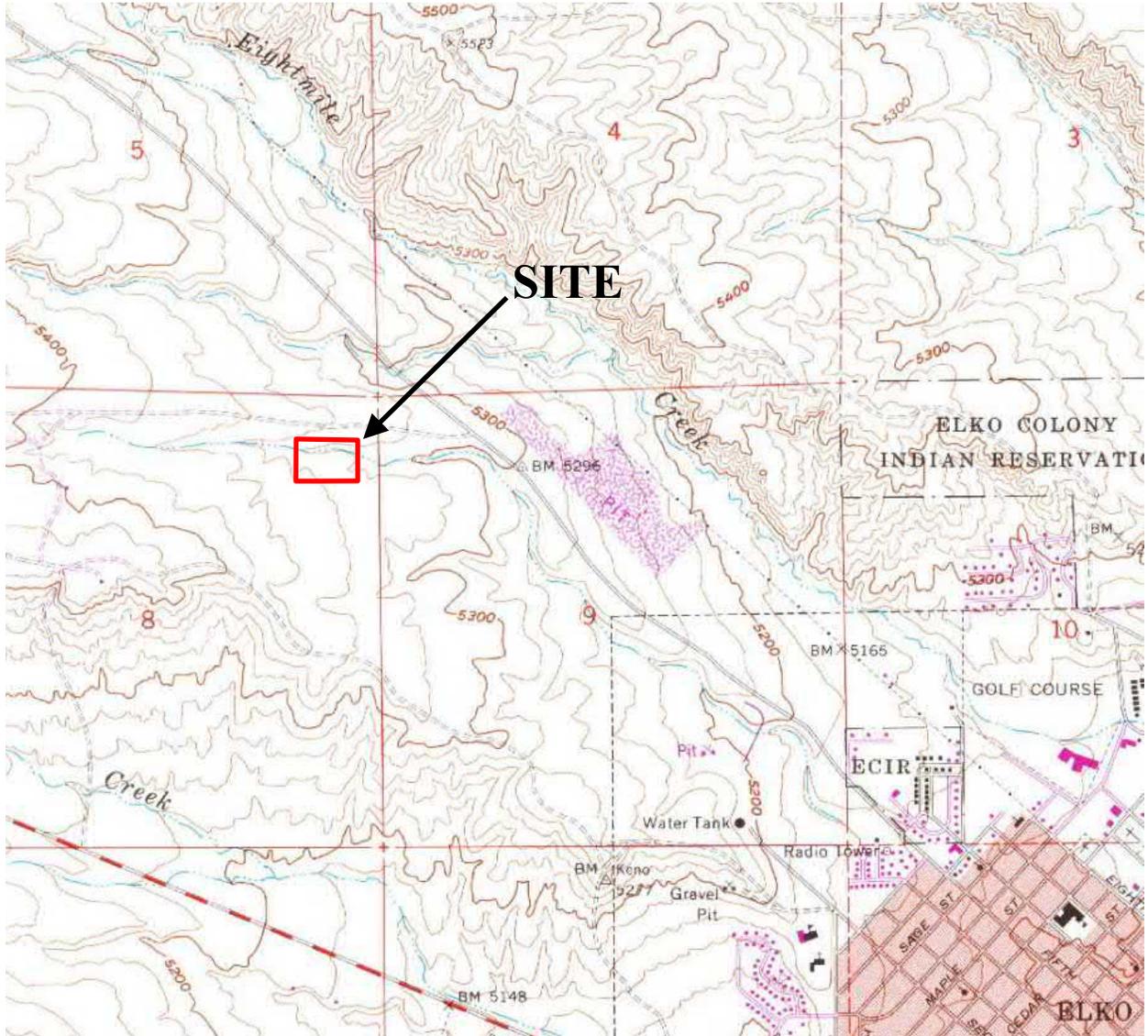
ATTACHMENT 1A

**SITE LOCATION MAP
PROPOSED NATIONAL VETERANS BURIAL GROUND
ELKO, NEVADA**



ATTACHMENT 1B

**SITE TOPOGRAPHIC LOCATION MAP
PROPOSED NATIONAL VETERANS BURIAL GROUND
ELKO, NEVADA**



ATTACHMENT 1C

**SITE AERIAL MAP (2019)
PROPOSED NATIONAL VETERANS BURIAL GROUND
ELKO, NEVADA**



Attachment 2
List of Agencies and Organizations Contacted
Department of Veterans Affairs
Proposed National Veterans Burial Ground
Elko, Nevada

U.S. Fish and Wildlife Service
Nevada Fish and Wildlife Office

Mr. Paul Souza, Regional Director
1340 Financial Boulevard, Suite 234
Reno, Nevada 89502-7147
Phone: (775) 861-6300

US Environmental Protection Agency, Region 9

Mr. John Busterud, Regional Administrator
75 Hawthorne Street
San Francisco, California 94105
Phone: (415) 947-8702

US Army Corps of Engineers – Sacramento District
Public Affairs Office

Col. James Handura, District Commander
1325 J Street - Room 1513
Sacramento, California 95814
Phone: (916) 557-5100

USDA Natural Resource Conservation Service

Ms. Janice Kolvet, State Executive Director
Nevada State Office
1365 Corporate Boulevard, Suite 200
Reno, Nevada 89502-7102
Phone: (775) 857-8500

Nevada Division of Environmental Protection
Bureau of Air Quality Planning

Mr. Danilo Dragoni, PhD, Bureau Chief
901 S. Stewart St., Suite 4001
Carson City, Nevada 89701
Phone: (775) 687-9340

Nevada Division of Environmental Protection
Bureau of Safe Drinking Water

Ms. Kathryn Kochen, Administration Supervisor
901 S. Stewart Street, Suite 4001
Carson City, Nevada 89701
Phone: (775) 687-9518

Nevada Division of Environmental Protection
Bureau of Corrective Actions

Mr. Jeff Collins, Bureau Chief
901 S. Stewart Street, Suite 4001
Carson City, Nevada 89701
Phone: (775) 687-9381

Nevada Division of Environmental Protection
Bureau of Water Quality Planning

Mr. Paul Comba, Bureau Chief
901 S. Stewart Street, Suite 4001
Carson City, Nevada 89701
Phone: (775) 687-9455

Nevada Division of Environmental Protection
Bureau of Water Pollution Control

Ms. Elizabeth Kingsland, Bureau Chief
901 S. Stewart Street, Suite 4001
Carson City, Nevada 89701-5249
Phone: (775) 687-9433

Nevada Division of Environmental Protection
Bureau of Mining Regulation and Reclamation

Mr. Joe Sawyer, PE, Bureau Chief
901 S. Stewart Street, Suite 4001
Carson City, Nevada 89701
Phone: (775) 687-9397

Nevada Department of Conservation and Natural
Resources

Conservation Districts Program

Mr. Zachary Ormsby, Program Manager
901 S. Stewart Street, Suite 1003
Carson City, Nevada 89701
Phone: (775) 684-2717

Nevada Department of Conservation and Natural
Resources

Division of Forestry

Kayce KC, State Forester/Firewarden
2478 Fairview Drive
Carson City, Nevada 89701
Phone: (775) 684-2500

Nevada Department of Conservation and Natural
Resources

Division of Natural Heritage

Ms. Kristin Szabo, Administrator
901 S. Stewart Street, Suite 5002
Carson City, Nevada 89701-5245
Phone: (775) 684-2900

Nevada Department of Conservation and Natural Resources

Division of Water Resources

Ms. Bunny Bishop, Chief
901 S. Stewart Street, Suite 2002
Carson City, Nevada 89701
Phone: (775) 684-2834

Nevada Department of Transportation District 3

Mr. Boyd Ratliff, PE, District Engineer
1951 Idaho Street
Elko, Nevada 89801
Phone: (775) 777-2700

Northeastern Nevada Regional Development Authority

Mr. Sheldon Mudd, Executive Director
Great Basin College
1500 College Parkway
McMullen Hall #103
Elko, Nevada 89801
Phone: (775) 738-2100

Elko County Public Works Department Building, Safety, Planning and Zoning, and Natural Resources

Mr. Jim Kerr, Public Works Superintendent
540 Court Street, Suite 104
Elko, Nevada 89801
Phone: (775) 738-6816

Elko County Roads Department

Mr. Terry Lister, Roads Supervisor
994 River Street
Elko, Nevada 89801
Phone: (775) 738-5036

Elko Development Department

Ms. Michele Rambo, Development Manager
1755 College Avenue
Elko, Nevada 89801
Phone: (775) 777-7100

Elko Engineering Department

Mr. Bob Thibault, Civil Engineer
1755 College Avenue
Elko, Nevada 89801
Phone: (775) 777-7210

Elko Environmental Department

Ms. Adeline Thibault, Environmental Coordinator
1755 College Avenue
Elko, Nevada 89801
Phone: (775) 777-7100

Elko Parks & Recreation Department

Mr. James Wiley, Director
723 Railroad Street
Elko, Nevada 89801
Phone: (775) 777-7260

Elko Planning & Zoning Department

Ms. Cathy Laughlin, City Planner
1751 College Avenue
Elko, Nevada 89801
Phone: (775) 777-7162

Elko Public Works/Street Department

Mr. Dennis Strickland, Director
1751 College Avenue
Elko, Nevada 89801
Phone: (775) 777-7241

Carrie Hess

From: Abele, Steve <steve_abele@fws.gov>
Sent: Thursday, June 4, 2020 3:59 PM
To: fernando.fernandez@va.gov; Carrie Hess
Subject: VA Proposed National Veterans Burial Ground Elko, NV

Good morning Fernando and Carrie,

I am replying in response to your request to Paul Souza, Regional Director for the US Fish and Wildlife Service's Pacific Southwest Region, for information pertaining to Threatened and Endangered species potentially affected by your proposed action.

The Service has gone digital in the past few years to generate, what we call a Species List Request, for proponents interested in understanding the presence of the fish, wildlife, and plant species protected by the Endangered Species Act within their project area. This process greatly expedites your process. Below are direction for initiating this request and receiving an official list from the Service. Some of the input data for species occurrence within our system are course, such as county level occurrence. Thus, you may have species identified in your official list that in fact would not be impacted by your activity. In looking at your location, I do not have any concerns over T&E species presence. But for your records, encourage you to complete and receive an Official Species List request through the IPaC system described below.

If you have any difficult completing this process, please reach out to me directly and I can assist.

IPAC direction:

The Reno Fish and Wildlife Office (RFO) provides project proponents with official species list requests electronically through the U.S. Fish and Wildlife Service's (Service) Information, Planning, and Conservation System (also known as IPaC). This National system is designed for public access to natural resource information for which the Service has trust or regulatory responsibility including threatened and endangered species information. This system is available for both private citizens and agency employees to assist in determining how their activities may impact sensitive natural resources. The information provided by IPaC is generated by the Service and can be obtained quickly electronically. Use of this system will improve project planning efficiency. For more information on IPaC and to obtain an official species list for a specific project area, please visit the IPaC website at: <http://ecos.fws.gov/ipac>. Start by entering the project location. You can enter a physical location such as a street address or define the project location by drawing a sketch, polygon or line, uploading a shapefile, or selecting a state or county. After you have entered the project location, click on "Request an Official Species List" under the Tasks heading in the overview page (please note that selecting "Review Species and Resources" will not provide you with an official species list). When you have filled out the required contact and project information, be sure to scroll to the bottom of the page and click on "Submit Official Species List Request" to complete the request. You should receive an email within 24 hours that will direct you to the location where you can print out the official species list.

regards-steve

Steve Abele
Wildlife Biologist

US Fish and Wildlife Service
1340 Financial Blvd., Suite 234
Reno, NV 89502
775.861.6325

Carrie Hess

From: Gifford, Jim - NRCS, Reno, NV <jim.gifford@usda.gov>
Sent: Tuesday, June 23, 2020 11:44 AM
To: Fernando.Fernandez@va.gov; Carrie Hess
Cc: Dotson, Ray - NRCS, Reno, NV
Subject: Response to NEPA Scoping Letter - Elko, NV
Attachments: Soil Report_Proposed National Veterans Burial Ground.pdf

Hello Mr. Fernandez and Ms. Hess,

Thank you for your NEPA Scoping Letter and information request regarding the Proposed National Veterans Burial Ground in Elko, Nevada. I have addressed two areas of your request that are the most appropriate for the Natural Resources Conservation Service (NRCS) – soils data (including hydric soils) and prime and unique farmland.

There are no hydric soils on the site according to the attached soil survey report.

The soils at this location are not designated as Prime and Unique Farmland according to the attached soil survey report. The soils do fall into the Farmland of Statewide Importance classification. The soil survey provides more information about this classification of soils.

The attached soils report also contains some additional soils information such as chemical, engineering and physical soil properties. I hope you find this report helpful.

As a side note, your letter was addressed to Jan Kolvet at NRCS, but she works for the Farm Service Agency. Ray Dotson is the State Conservationist for NRCS in Nevada. I would recommend that future letters intended for NRCS be addressed to him.

Thank you,

Jim Gifford
USDA NRCS
State Resource Conservationist
1365 Corporate Blvd
Reno, NV 89502
(775)834-0874

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United States
Department of
Agriculture

NRCS

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 Elko County, Nevada, Central Part

Proposed National Veterans Burial Ground



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey 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, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

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.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

Custom Soil Resource Report

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

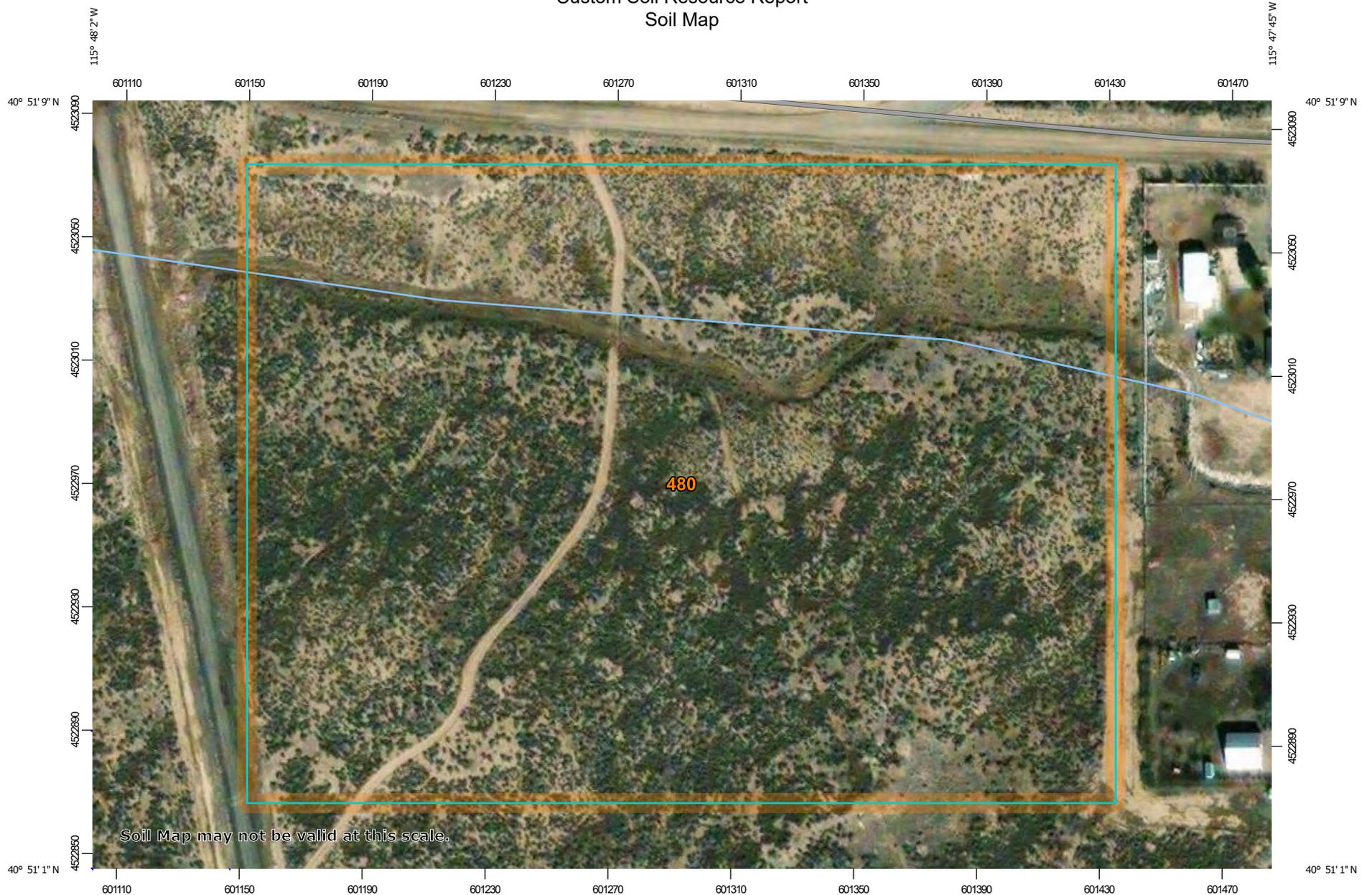
Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

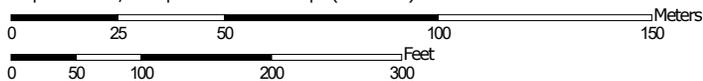
The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Soil Map may not be valid at this scale.

Map Scale: 1:1,760 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Elko County, Nevada, Central Part
 Survey Area Data: Version 13, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 19, 2009—Aug 7, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
480	Hunnton-Wieland-Gance association	14.5	100.0%
Totals for Area of Interest		14.5	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.

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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, 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.

Elko County, Nevada, Central Part

480—Hunnton-Wieland-Gance association

Map Unit Setting

National map unit symbol: j2cd
Elevation: 5,000 to 6,000 feet
Mean annual precipitation: 8 to 10 inches
Mean annual air temperature: 47 to 49 degrees F
Frost-free period: 100 to 120 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Hunnton and similar soils: 35 percent
Wieland and similar soils: 35 percent
Gance and similar soils: 15 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hunnton

Setting

Landform: Fan remnants
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Alluvium derived from mixed rocks, loess and volcanic ash

Typical profile

H1 - 0 to 6 inches: loam
H2 - 6 to 14 inches: clay loam
H3 - 14 to 28 inches: gravelly clay
H4 - 28 to 42 inches: cemented material
H5 - 42 to 60 inches: very gravelly loamy sand

Properties and qualities

Slope: 2 to 4 percent
Depth to restrictive feature: 20 to 39 inches to duripan
Natural drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 40 percent
Salinity, maximum in profile: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 12.0
Available water storage in profile: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: D
Ecological site: LOAMY 8-10 P.Z. (R025XY019NV)
Hydric soil rating: No

Description of Wieland

Setting

Landform: Fan remnants

Down-slope shape: Linear

Across-slope shape: Convex

Parent material: Alluvium derived from mixed rocks, loess and volcanic ash

Typical profile

H1 - 0 to 5 inches: loam

H2 - 5 to 26 inches: gravelly clay

H3 - 26 to 52 inches: gravelly sandy clay loam

H4 - 52 to 60 inches: loam

Properties and qualities

Slope: 4 to 15 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum in profile: 20 percent

Salinity, maximum in profile: Nonsaline to moderately saline (0.0 to 8.0 mmhos/cm)

Sodium adsorption ratio, maximum in profile: 12.0

Available water storage in profile: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: C

Ecological site: LOAMY 8-10 P.Z. (R025XY019NV)

Hydric soil rating: No

Description of Gance

Setting

Landform: Fan remnants

Down-slope shape: Linear

Across-slope shape: Convex

Parent material: Alluvium derived from mixed rocks, loess and volcanic ash

Typical profile

H1 - 0 to 4 inches: very gravelly loam

H2 - 4 to 29 inches: very gravelly clay

H3 - 29 to 68 inches: extremely gravelly sandy loam

Properties and qualities

Slope: 15 to 30 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

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Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 25 percent
Salinity, maximum in profile: Nonsaline to moderately saline (0.0 to 8.0 mmhos/cm)
Available water storage in profile: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: C
Ecological site: LOAMY 8-10 P.Z. (R025XY019NV)
Hydric soil rating: No

Minor Components

Puett

Percent of map unit: 5 percent
Landform: Hills
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: CHALKY KNOLL (R025XY025NV)
Hydric soil rating: No

Orovada

Percent of map unit: 5 percent
Landform: Inset fans
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: LOAMY 8-10 P.Z. (R025XY019NV)
Hydric soil rating: No

Chiara

Percent of map unit: 3 percent
Landform: Fan remnants
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: LOAMY 8-10 P.Z. (R025XY019NV)
Hydric soil rating: No

Kelk

Percent of map unit: 2 percent
Landform: Fan remnants
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: LOAMY 8-10 P.Z. (R025XY019NV)
Hydric soil rating: No

Soil Information for All Uses

Soil Reports

The Soil Reports section includes various formatted tabular and narrative reports (tables) containing data for each selected soil map unit and each component of each unit. No aggregation of data has occurred as is done in reports in the Soil Properties and Qualities and Suitabilities and Limitations sections.

The reports contain soil interpretive information as well as basic soil properties and qualities. A description of each report (table) is included.

Land Classifications

This folder contains a collection of tabular reports that present a variety of soil groupings. The reports (tables) include all selected map units and components for each map unit. 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.

Hydric Soil List - All Components

This table lists the map unit components and their hydric status in the survey area. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council, 1995; Hurt and others, 2002).

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others, 1979; U.S. Army Corps of Engineers, 1987; National Research Council, 1995; Tiner, 1985). Criteria for all of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the

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upper part (Federal Register, 1994). These soils, under natural conditions, are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches. This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the conditions observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

Map units that are dominantly made up of hydric soils may have small areas, or inclusions, of nonhydric soils in the higher positions on the landform, and map units dominantly made up of nonhydric soils may have inclusions of hydric soils in the lower positions on the landform.

The criteria for hydric soils are represented by codes in the table (for example, 2). Definitions for the codes are as follows:

1. All Histels except for Folistels, and Histosols except for Folists.
2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, Pachic subgroups, or Cumulic subgroups that:
 - A. Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
 - B. Show evidence that the soil meets the definition of a hydric soil;
3. Soils that are frequently ponded for long or very long duration during the growing season.
 - A. Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
 - B. Show evidence that the soil meets the definition of a hydric soil;
4. Map unit components that are frequently flooded for long duration or very long duration during the growing season that:
 - A. Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or

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B. Show evidence that the soil meets the definition of a hydric soil;

Hydric Condition: Food Security Act information regarding the ability to grow a commodity crop without removing woody vegetation or manipulating hydrology.

References:

- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. Doc. 2012-4733 Filed 2-28-12. February, 28, 2012. Hydric soils of the United States.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.
- 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.
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.
- Vasilas, L.M., G.W. Hurt, and C.V. Noble, editors. Version 7.0, 2010. Field indicators of hydric soils in the United States.

Report—Hydric Soil List - All Components

Hydric Soil List - All Components—NV767-Elko County, Nevada, Central Part					
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
480: Hunnton-Wieland-Gance association	Hunnton	35	Fan remnants	No	—
	Wieland	35	Fan remnants	No	—
	Gance	15	Fan remnants	No	—
	Puett	5	Hills	No	—
	Orovada	5	Inset fans	No	—
	Chiara	3	Fan remnants	No	—
	Kelk	2	Fan remnants	No	—

Prime and other Important Farmlands

This table lists the map units in the survey area that are considered important farmlands. Important farmlands consist of prime farmland, unique farmland, and farmland of statewide or local importance. This list does not constitute a recommendation for a particular land use.

In an effort to identify the extent and location of important farmlands, the Natural Resources Conservation Service, in cooperation with other interested Federal, State, and local government organizations, has inventoried land that can be used for the production of the Nation's food supply.

Prime farmland is of major importance in meeting the Nation's short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our Nation's prime farmland.

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Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil quality, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. The water supply is dependable and of adequate quality. Prime farmland is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. Slope ranges mainly from 0 to 6 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service.

For some of the soils identified in the table as prime farmland, measures that overcome a hazard or limitation, such as flooding, wetness, and droughtiness, are needed. Onsite evaluation is needed to determine whether or not the hazard or limitation has been overcome by corrective measures.

A recent trend in land use in some areas has been the loss of some prime farmland to industrial and urban uses. The loss of prime farmland to other uses puts pressure on marginal lands, which generally are more erodible, droughty, and less productive and cannot be easily cultivated.

Unique farmland is land other than prime farmland that is used for the production of specific high-value food and fiber crops, such as citrus, tree nuts, olives, cranberries, and other fruits and vegetables. It has the special combination of soil quality, growing season, moisture supply, temperature, humidity, air drainage, elevation, and aspect needed for the soil to economically produce sustainable high yields of these crops when properly managed. The water supply is dependable and of adequate quality. Nearness to markets is an additional consideration. Unique farmland is not based on national criteria. It commonly is in areas where there is a special microclimate, such as the wine country in California.

In some areas, land that does not meet the criteria for prime or unique farmland is considered to be *farmland of statewide importance* for the production of food, feed, fiber, forage, and oilseed crops. The criteria for defining and delineating farmland of statewide importance are determined by the appropriate State agencies. Generally, this land includes areas of soils that nearly meet the requirements for prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. Some areas may produce as high a yield as prime farmland if conditions are favorable. Farmland of statewide importance may include tracts of land that have been designated for agriculture by State law.

In some areas that are not identified as having national or statewide importance, land is considered to be *farmland of local importance* for the production of food, feed, fiber, forage, and oilseed crops. This farmland is identified by the appropriate local agencies. Farmland of local importance may include tracts of land that have been designated for agriculture by local ordinance.

Report—Prime and other Important Farmlands

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Prime and other Important Farmlands—Elko County, Nevada, Central Part		
Map Symbol	Map Unit Name	Farmland Classification
480	Hunnton-Wieland-Gance association	Farmland of statewide importance

Soil Chemical Properties

This folder contains a collection of tabular reports that present soil chemical properties. The reports (tables) include all selected map units and components for each map unit. Soil chemical properties are measured or inferred from direct observations in the field or laboratory. Examples of soil chemical properties include pH, cation exchange capacity, calcium carbonate, gypsum, and electrical conductivity.

Chemical Soil Properties

This table shows estimates of some chemical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Cation-exchange capacity is the total amount of extractable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. Soils having a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. The ability to retain cations reduces the hazard of ground-water pollution.

Effective cation-exchange capacity refers to the sum of extractable cations plus aluminum expressed in terms of milliequivalents per 100 grams of soil. It is determined for soils that have pH of less than 5.5.

Soil reaction is a measure of acidity or alkalinity. It is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

Calcium carbonate equivalent is the percent of carbonates, by weight, in the fraction of the soil less than 2 millimeters in size. The availability of plant nutrients is influenced by the amount of carbonates in the soil.

Gypsum is expressed as a percent, by weight, of hydrated calcium sulfates in the fraction of the soil less than 20 millimeters in size. Gypsum is partially soluble in water. Soils that have a high content of gypsum may collapse if the gypsum is removed by percolating water.

Salinity is a measure of soluble salts in the soil at saturation. It is expressed as the electrical conductivity of the saturation extract, in millimhos per centimeter at 25 degrees C. Estimates are based on field and laboratory measurements at representative sites of nonirrigated soils. The salinity of irrigated soils is affected by the quality of the irrigation water and by the frequency of water application. Hence, the salinity of soils in individual fields can differ greatly from the value given in the

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table. Salinity affects the suitability of a soil for crop production, the stability of soil if used as construction material, and the potential of the soil to corrode metal and concrete.

Sodium adsorption ratio (SAR) is a measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration. Soils that have SAR values of 13 or more may be characterized by an increased dispersion of organic matter and clay particles, reduced saturated hydraulic conductivity and aeration, and a general degradation of soil structure.

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Chemical Soil Properties—Elko County, Nevada, Central Part								
Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	<i>In</i>	<i>meq/100g</i>	<i>meq/100g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
480—Hunnton-Wieland-Gance association								
Hunnton	0-6	9.1-21	—	6.6-8.4	0	0	0.0-4.0	0-5
	6-14	16-24	—	6.6-8.4	0	0	0.0-4.0	0-5
	14-28	26-39	—	7.4-8.4	0-5	0	0.0-4.0	0-5
	28-42	—	—	—	—	—	—	—
	42-60	2.0-8.9	—	7.9-9.0	15-40	0	0.0-4.0	0-12
Wieland	0-5	7.5-18	—	7.4-8.4	0	0	0.0-2.0	0-5
	5-26	29-40	—	7.4-9.0	0-5	0	0.0-4.0	0-12
	26-52	19-26	—	7.9-9.0	5-20	0	0.0-8.0	0-12
	52-60	8.0-16	—	7.9-9.0	5-20	0	0.0-8.0	0-12
Gance	0-4	17-21	—	6.6-8.4	0	0	0	0
	4-29	24-39	—	7.4-8.4	0-10	0	0.0-4.0	0
	29-68	8.0-16	—	7.9-9.0	10-25	0	0.0-8.0	0

Soil Physical Properties

This folder contains a collection of tabular reports that present soil physical properties. The reports (tables) include all selected map units and components for each map unit. Soil physical properties are measured or inferred from direct observations in the field or laboratory. Examples of soil physical properties include percent clay, organic matter, saturated hydraulic conductivity, available water capacity, and bulk density.

Engineering Properties

This table gives the engineering classifications and the range of engineering properties for the layers of each soil in the survey area.

Hydrologic soil group is a group of soils having similar runoff potential under similar storm and cover conditions. The criteria for determining Hydrologic soil group is found in the National Engineering Handbook, Chapter 7 issued May 2007(<http://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=17757.wba>). Listing HSGs by soil map unit component and not by soil series is a new concept for the engineers. Past engineering references contained lists of HSGs by soil series. Soil series are continually being defined and redefined, and the list of soil series names changes so frequently as to make the task of maintaining a single national list virtually impossible. Therefore, the criteria is now used to calculate the HSG using the component soil properties and no such national series lists will be maintained. All such references are obsolete and their use should be discontinued. Soil properties that influence runoff potential are those that influence the minimum rate of infiltration for a bare soil after prolonged wetting and when not frozen. These properties are depth to a seasonal high water table, saturated hydraulic conductivity after prolonged wetting, and depth to a layer with a very slow water transmission rate. Changes in soil properties caused by land management or climate changes also cause the hydrologic soil group to change. The influence of ground cover is treated independently. There are four hydrologic soil groups, A, B, C, and D, and three dual groups, A/D, B/D, and C/D. In the dual groups, the first letter is for drained areas and the second letter is for undrained areas.

The four hydrologic soil groups are described in the following paragraphs:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell

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potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

Depth to the upper and lower boundaries of each layer is indicated.

Texture is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. "Loam," for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is 15 percent or more, an appropriate modifier is added, for example, "gravelly."

Classification of the soils is determined according to the Unified soil classification system (ASTM, 2005) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 2004).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle-size distribution of the fraction less than 3 inches in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, CL-ML.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches in diameter is classified in one of seven groups from A-1 through A-7 on the basis of particle-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

If laboratory data are available, the A-1, A-2, and A-7 groups are further classified as A-1-a, A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-7-5, or A-7-6. As an additional refinement, the suitability of a soil as subgrade material can be indicated by a group index number. Group index numbers range from 0 for the best subgrade material to 20 or higher for the poorest.

Percentage of rock fragments larger than 10 inches in diameter and 3 to 10 inches in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage. Three values are provided to identify the expected Low (L), Representative Value (R), and High (H).

Percentage (of soil particles) passing designated sieves is the percentage of the soil fraction less than 3 inches in diameter based on an oven-dry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field. Three values are provided to identify the expected Low (L), Representative Value (R), and High (H).

Liquid limit and plasticity index (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination. Three values are provided to identify the expected Low (L), Representative Value (R), and High (H).

References:

Custom Soil Resource Report

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 D2487-00.

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Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash. The criteria for determining the hydrologic soil group for individual soil components is found in the National Engineering Handbook, Chapter 7 issued May 2007(<http://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=17757.wba>). Three values are provided to identify the expected Low (L), Representative Value (R), and High (H).

Custom Soil Resource Report

Engineering Properties—Elko County, Nevada, Central Part														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Pct Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			<i>In</i>				<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>
480—Hunnton-Wieland-Gance association														
Hunnton	35	D	0-6	Loam	ML	A-4	0- 0- 0	0- 0- 0	95-98-100	85-93-100	75-88-100	60-68-75	20-28-35	NP-5-10
			6-14	Loam, clay loam, silty clay loam	CL	A-6	0- 0- 0	0- 0- 0	95-98-100	90-95-100	75-85-95	60-75-90	30-33-35	10-13-15
			14-28	Clay, gravelly clay	CH	A-7	0- 0- 0	0- 5- 5	75-85-100	60-75-95	60-75-95	55-70-85	50-55-60	25-30-35
			28-42	Cemented material	—	—	—	—	—	—	—	—	—	—
			42-60	Extremely gravelly loamy sand, very gravelly loamy sand, very gravelly sandy loam	GM, GP-GM	A-1	0- 0- 0	0- 0- 0	25-38-50	20-33-45	15-25-35	5-13-20	0-18-23	NP
Wieland	35	C	0-5	Loam	CL-ML, ML	A-4	0- 0- 0	0- 0- 0	90-95-100	75-88-100	70-80-90	50-63-75	20-25-30	NP-5-10
			5-26	Gravelly clay, clay	CH, SC	A-7	0- 0- 0	0- 3- 5	75-85-95	55-73-90	50-65-80	45-60-75	50-55-60	25-30-35
			26-52	Gravelly sandy clay loam, gravelly clay loam	GC, SC	A-2, A-6	0- 0- 0	0- 3- 5	60-73-85	50-60-70	40-55-70	25-38-50	35-38-40	15-18-20
			52-60	Gravelly sandy loam, loam, gravelly loam	CL-ML, SC-SM, SC	A-2, A-4	0- 0- 0	0- 0- 5	65-85-95	55-80-90	40-63-85	25-48-70	20-25-30	5-8-10
Gance	15	C	0-4	Very gravelly loam	GC	A-2, A-6	0- 0- 0	0-13- 25	45-58-70	30-40-50	25-35-45	20-30-40	30-33-35	10-13-15
			4-29	Very gravelly clay, very gravelly sandy clay, extremely gravelly clay	GC	A-2, A-7	0- 3- 5	0-15- 30	40-55-70	20-38-55	15-35-55	10-25-40	40-50-60	20-28-35

Custom Soil Resource Report

Engineering Properties—Elko County, Nevada, Central Part														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Pct Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			<i>In</i>				<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>
			29-68	Extremely gravelly sandy loam, very cobbly sandy loam, extremely gravelly loam	GC-GM, GM, GP-GM	A-1, A-2, A-4	0- 0- 5	15-35-55	25-38-60	20-33-55	10-25-50	5-20- 40	20-25-30	NP-5-10

Physical Soil Properties

This table shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. In this table, the estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Silt as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. In this table, the estimated silt content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In this table, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, saturated hydraulic conductivity (*K_{sat}*), plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

Moist bulk density is the weight of soil (oven-dry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at 1/3- or 1/10-bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute linear extensibility, shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Saturated hydraulic conductivity (K_{sat}) refers to the ease with which pores in a saturated soil transmit water. The estimates in the table are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity (*K_{sat}*) is considered in the design of soil drainage systems and septic tank absorption fields.

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Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at 1/3- or 1/10-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. The amount and type of clay minerals in the soil influence volume change.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In this table, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter. The content of organic matter in a soil can be maintained by returning crop residue to the soil.

Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Erosion factors are shown in the table as the K factor (K_w and K_f) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and K_{sat} . Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor K_w indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Erosion factor K_f indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind and/or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are described in the "National Soil Survey Handbook."

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Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Reference:

United States Department of Agriculture, Natural Resources Conservation Service.
National soil survey handbook, title 430-VI. (<http://soils.usda.gov>)

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Three values are provided to identify the expected Low (L), Representative Value (R), and High (H).

Physical Soil Properties—Elko County, Nevada, Central Part														
Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	<i>In</i>	<i>Pct</i>	<i>Pct</i>	<i>Pct</i>	<i>g/cc</i>	<i>micro m/sec</i>	<i>In/In</i>	<i>Pct</i>	<i>Pct</i>					
480—Hunnton-Wieland-Gance association														
Hunnton	0-6	-43-	-40-	10-18- 25	1.20-1.23-1.25	4.00-9.00-14.00	0.14-0.16-0.18	0.0- 1.5- 2.9	1.0- 1.5- 2.0	.43	.43	2	5	56
	6-14	-34-	-38-	20-28- 30	1.50-1.53-1.55	1.40-2.70-4.00	0.15-0.18-0.21	3.0- 4.5- 5.9	0.5- 0.8- 1.0	.37	.37			
	14-28	-23-	-29-	40-48- 55	1.20-1.23-1.25	0.42-0.91-1.40	0.10-0.13-0.16	6.0- 7.5- 8.9	0.0- 0.3- 0.5	.15	.28			
	28-42	—	—	—	—	0.00-0.00-0.01	—	—	—					
	42-60	-85-	- 9-	2- 6- 10	1.55-1.60-1.65	4.00-23.00-42.00	0.02-0.04-0.05	0.0- 1.5- 2.9	0.0- 0.3- 0.5	.05	.17			
Wieland	0-5	-44-	-41-	8-15- 22	1.25-1.35-1.45	4.00-9.00-14.00	0.16-0.17-0.18	0.0- 1.5- 2.9	1.0- 1.5- 2.0	.43	.43	5	5	56
	5-26	-23-	-29-	40-48- 55	1.25-1.33-1.40	0.42-0.91-1.40	0.09-0.11-0.13	6.0- 7.5- 8.9	0.5- 0.8- 1.0	.15	.24			
	26-52	-55-	-14-	27-31- 35	1.45-1.53-1.60	0.42-0.91-1.40	0.10-0.14-0.17	3.0- 4.5- 5.9	0.0- 0.3- 0.5	.10	.24			
	52-60	-44-	-41-	10-15- 20	1.45-1.55-1.65	4.00-9.00-14.00	0.09-0.13-0.16	0.0- 1.5- 2.9	0.0- 0.3- 0.5	.43	.43			
Gance	0-4	-40-	-38-	20-23- 25	1.35-1.45-1.55	4.00-9.00-14.00	0.05-0.08-0.11	0.0- 1.5- 2.9	1.0- 1.5- 2.0	.15	.37	5	8	0
	4-29	-26-	-29-	35-45- 55	1.35-1.43-1.50	0.42-0.91-1.40	0.04-0.07-0.10	3.0- 4.5- 5.9	0.0- 0.3- 0.5	.10	.24			
	29-68	-66-	-19-	10-15- 20	1.50-1.60-1.70	1.40-7.70-14.00	0.02-0.07-0.11	0.0- 1.5- 2.9	0.0- 0.3- 0.5	.05	.24			

Soil Qualities and Features

This folder contains tabular reports that present various soil qualities and features. The reports (tables) include all selected map units and components for each map unit. Soil qualities are behavior and performance attributes that are not directly measured, but are inferred from observations of dynamic conditions and from soil properties. Example soil qualities include natural drainage, and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly impact the use and management of the soil.

Soil Features

This table gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

A *restrictive layer* is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers. The table indicates the hardness and thickness of the restrictive layer, both of which significantly affect the ease of excavation. *Depth to top* is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

Subsidence is the settlement of organic soils or of saturated mineral soils of very low density. Subsidence generally results from either desiccation and shrinkage, or oxidation of organic material, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. The table shows the expected initial subsidence, which usually is a result of drainage, and total subsidence, which results from a combination of factors.

Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Temperature, texture, density, saturated hydraulic conductivity (Ksat), content of organic matter, and depth to the water table are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clayey soils that have a high water table in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures.

Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel or concrete in installations that intersect soil boundaries or soil layers is more susceptible to

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corrosion than the steel or concrete in installations that are entirely within one kind of soil or within one soil layer.

For uncoated steel, the risk of corrosion, expressed as *low*, *moderate*, or *high*, is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion also is expressed as *low*, *moderate*, or *high*. It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

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Soil Features—Elko County, Nevada, Central Part									
Map symbol and soil name	Restrictive Layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		<i>Low-RV-High</i>	<i>Range</i>		<i>Low-High</i>	<i>Low-High</i>			
		<i>In</i>	<i>In</i>		<i>In</i>	<i>In</i>			
480—Hunnton-Wieland-Gance association									
Hunnton	Duripan	20-28-39	14-17	Indurated	0	—	Moderate	Moderate	Moderate
Wieland		—	—		0	—	Moderate	Moderate	Moderate
Gance		—	—		0	—	Low	Moderate	Moderate

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 D2487-00.
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- 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>

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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.nrcs.usda.gov/wps/portal/nrcs/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.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

Carrie Hess

From: Bunny Bishop <bbishop@water.nv.gov>
Sent: Monday, June 22, 2020 4:33 PM
To: fernando.fernandez@va.gov; Carrie Hess
Subject: NEPA Scoping Letter for the US Department of Veterans Affairs
Attachments: US Dept. of VA Letter.pdf; FIRMETTE_72749e00-aab1-11ea-ae2b-0050569c218e.pdf; US VA Env.Req. NV WR Mapping.png

Fernando L. Fernandez and Carrie Hess,

Please find attached the written response and maps for the NEPA Scoping Letter for the US Department of Veterans Affairs Proposed National Veterans Burial Ground - Elko, NV.

Please contact me if you have any questions.

Thank you,

Bunny L. Bishop, CFM
Chief, Water Planning and Drought Resiliency
Nevada Division of Water Resources
Department of Conservation and Natural Resources
901 S. Stewart Street, Suite 2002
Carson City, Nevada 89701
Ph. (775) 684-2834
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June 22, 2020

U.S. Department of Veterans Affairs (003C2A)
425 I Street, NW, Room 6W417b
Washington, D.C., 20001
ATTN: Fernando L. Fernandez, Environmental Engineer

RE: NEPA Scoping Letter for the
US Department of Veterans Affairs
Proposed National Veterans Burial Ground
Elko, NV

Dear Fernando L. Fernandez,

Thank you for the opportunity to provide information regarding the NEPA Scoping Letter for the US Department of Veterans Affairs Proposed National Veterans Burial Ground - Elko, NV. The information provided is in reference to floodplains and wells as referenced in your letter from May 20, 2020.

The FEMA Flood Insurance Rate Map panel 32007C5606E for Elko County, Nevada and Incorporated Areas, effective date September 4, 2013 (copy enclosed), indicates the proposed project area intersects Zone X (unshaded) – area of minimal flood hazard. The proposed project does not involve property acquisition, management, construction or improvement within a 100-year floodplain (Zones A or V) identified by FEMA maps. Development occurring in Zone X (unshaded) is not subject to floodplain management building requirements. FEMA Flood Insurance Rate Maps can be found at the FEMA Flood Map Service Center located at <https://msc.fema.gov/portal/home>.

The Nevada Division of Water Resources Nevada Water Rights Mapping Application, located at <http://water.nv.gov/mapping.aspx>, displays the location of Water Rights Points of Diversion and Places of Use in the vicinity of the proposed project area (copy enclosed). All well construction activities and water right changes need to be conducted in accordance with Chapters 533 and 544 of the NRS and NAC.

Please contact me at bbishop@water.nv.gov or (775) 684-2834 if you have any questions.

Re: NEPA Scoping Letter for the US Department of Veterans Affairs Proposed National
Veterans Burial Ground - Elko, NV

June 11, 2020

Page 2

Sincerely,

A handwritten signature in cursive script that reads "Bunny L. Bishop". The signature is written in black ink and is positioned to the right of the word "Sincerely,".

Bunny L. Bishop, CFM
Chief, Water Planning and Drought
Resiliency

National Flood Hazard Layer FIRMette



40°51'19.46"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

40°50'52.25"N

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D

OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D

GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall

OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance
		17.5 Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
OTHER FEATURES		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature

MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 6/9/2020 at 8:29:47 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

USGS The National Map: Orthoimagery. Data refreshed April, 2019.

115°47'33.26"W



Navigation Tools: Print, Layers, Pan, Zoom In, Zoom Out, Initial View, Full Extent, Previous Extent, Point Identify, Permit Search, Basin Search

Layers

Filter Layers... Filter

- Water Rights / Points of Diversion
- Water Rights / Places Of Use
- Basin Boundaries
- Designated Groundwater
- Basin
- Parcels
- Township Range Section
- BLM
- Base Layers



Carrie Hess

From: Gary Reese <greese@forestry.nv.gov>
Sent: Friday, June 12, 2020 6:34 PM
To: fernando.fernandez@va.gov; Carrie Hess
Subject: Review of cemetery project in Elko, NV
Attachments: Reconnaissance Natural Resource Photo Survey of Proposed Cemetery.pdf

Attached is a reconnaissance review of the proposed cemetery project in Elko, Nevada. Basically, I didn't find any environmental issues of concern.

Gary Reese
Nevada Division of Forestry

**Reconnaissance Natural Resource Photo Survey of Proposed Action
National Veterans Burial Ground
Elko, NV
June 10, 2020**

by
Gary Reese
Resource Management Officer
Nevada Division of Forestry
Elko, NV 89801
(775) 299-2821

Upon request of the Nevada Division of Forestry (NDF) State Forester, Kacey KC, I am providing a requested review of a proposed action of the VA National Cemetery Administration. Due to the proximity of the proposed action to the NDF office, I conducted on June 10, 2020 a short natural resources reconnaissance of the land being proposed for a National Veterans Burial Ground in Elko, NV. The following provides a narrative review using photographs of some of the Information Requests in the NEPA Scoping Letter. The narratives are limited to those items which I am professionally qualified to review for purposes of a NEPA analysis.

Ephemeral Stream



This is a view looking east near the eastern edge of the tract. The Information Request refers to an “ephemeral stream,” as characterized on the USGS 24K topographic map. It is better characterized as a drainageway, lacking any hydrologic indicators, lacking hydric soils and having a few basin big sagebrush (*Artemisia tridentata* ssp. *tridentata* - Upland Indicator Status) along the mostly cheatgrass (*Bromus tectorum*) dominated drainageway. It didn’t appear to have

carried water for a long time and would only do so in a thunderstorm or after a fast snowmelt in winter or spring. Thus it does not qualify as a jurisdictional wetland. Note that aside from the few basin big sagebrush along the drainageway, most of the sagebrush in this tract are Wyoming big sagebrush (*A. tridentata* ssp. *wyomingensis*). I would recommend that the burial ground be contoured to retain this as a natural drainage.

Special Wildlife Issues



This tract has the most common vegetation in the Elko area: a Wyoming big sagebrush/cheatgrass plant community. While there was a flush of annual forbs this year, a reconnaissance of the site revealed only one perennial forb species with only a single plant of tapertip hawkweed (*Crepis acuminata*). There was a low density of native grasses, predominately Sandberg's bluegrass (*Poa secunda*) and bottlebrush squirreltail (*Elymus elymoides*). The site is characteristic of lands which have historically been overgrazed and have not recovered under cessation of livestock grazing. In so far as the tract is adjacent on the east side to a subdivision of high density single family homes, it has low value as wildlife habitat. The north and south sides are continuous with sagebrush/cheatgrass vegetation and the tract has the potential to carry wildfire to the subdivision. To that end, a narrow fuelbreak was mowed on the east side, as illustrated below.



Based on my knowledge of the at-risk plant species of Elko Co. and their habitats, I would deem this tract to have no potential for endangered, threatened, or any other special status plant species.

Other Environmental Issues

This tract would appear to be free of any of the other issues being sought for review. There might be some adjacent landowners concerned about their property being in proximity to a cemetery. There is an invasion of noxious thistles on the west boundary, where there is a paved road along the perimeter. The tract is laced with dirt tracks that are used by off road vehicles.

Carrie Hess

From: Eric Miskow <emiskow@heritage.nv.gov>
Sent: Wednesday, June 3, 2020 1:15 PM
To: 'fernando.fernandez@va.gov'
Cc: Carrie Hess
Subject: RE: NEPA Scoping Letter, Proposed National Veterans Burial Ground, Elko NV
Attachments: DVA2020ff01.ltr.docx

Hi Fernando,

Please find the data request for the Proposed National Veterans Burial Ground project in Elko, NV attached. Let me know if you have further questions.

Best Regards,

Eric

Eric Miskow

Biologist/Data Manager
Nevada Division of Natural Heritage
Department of Conservation and Natural Resources
901 S. Stewart Street, Suite 5002
Carson City, NV 89701
emiskow@heritage.nv.gov
(O) 775-684-2905 | (F) 775-684-2909



"Counting fish is like counting trees,
except they are invisible and they keep moving."

John Shepherd



STATE OF NEVADA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

Nevada Division of Natural Heritage

Steve Sisolak
Governor

Bradley Crowell
Director

Kristin Szabo
Administrator

03 June 2020

Fernando Fernandez
U.S. Department of Veterans Affairs
425 I St., NW Room 6W417b
Washington, D.C., 20001

RE: Data request received 02 June 2020

Dear Mr. Fernandez,

We are pleased to provide the information you requested on endangered, threatened, candidate, and/or at-risk plant and animal taxa recorded within or near the Proposed National Veterans Burial Ground project area in Elko County. We searched our database and maps for the following, a two kilometer radius around maps provided, including:

Township 34N Range 55E Section 08

There are no at risk taxa recorded within the given area. However, habitat may be available for: the silver-haired bat, *Lasionycteris noctivagans*, a Nevada Bureau of Land Management (BLM) Sensitive Species; the canyon bat, *Parastrellus hesperus*, a Nevada BLM Sensitive Species; the Nevada viceroy, *Limenitis archippus lahontani*, a Taxon determined to be Critically Imperiled by the Nevada Division of Natural Heritage (NDNH); the pallid sylvinus hairstreak, *Satyrium sylvinus megapallidum*, a Taxon determined to be Vulnerable by the NDNH; and the western small-footed myotis, *Myotis ciliolabrum*, a Nevada BLM Sensitive Species. The Nevada Department of Wildlife (NDOW) manages, protects, and restores Nevada's wildlife resources and associated habitat. Please contact Jinna Larkin, NDOW GIS Coordinator (775) 688-1580 to obtain further information regarding wildlife resources within and near your area of interest. Removal or destruction of state protected flora species (NAC 527.010) requires a special permit from Nevada Division of Forestry (NRS 527.270).

Please note that our data are dependent on the research and observations of many individuals and organizations and, in most cases, are not the result of comprehensive or site-specific field surveys. Natural Heritage reports should never be regarded as final statements on the taxa or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments.

Thank you for checking with our program. Please contact us for additional information or further assistance.

Sincerely,

Eric S. Miskow
Biologist/Data Manager

Carrie Hess

From: Terry Lister <tlister@elkocountynv.net>
Sent: Tuesday, June 2, 2020 4:19 PM
To: fernando.fernandez@va.gov; Carrie Hess
Subject: Proposed National Veterans Burial Ground Elko, Nevada

Dear Fernando and Carrie,

The Elko County Road Department has no objections or concerns about the proposed National Veterans Burial Ground in Elko Nevada. Unfortunately I can't really answer your questions as the property is located in the city.

Sincerely,

Terry Lister
Elko County Road Supervisor

Carrie Hess

From: Bob Thibault <bthibault@elkocitynv.gov>
Sent: Friday, May 29, 2020 4:06 PM
To: fernando.fernandez@va.gov; Carrie Hess
Subject: NEPA Scoping Letter

Mr. Fernandez,

This is in response to your request for information regarding the proposed VA cemetery in Elko, Nevada. Other than the ephemeral stream that you mentioned in your cover letter, I have no knowledge of environmental concerns as requested in your letter.

Sincerely,

Bob Thibault, PE, PLS

Civil Engineer

City of Elko

1751 College Ave

Elko, NV 89801

Phone: 775-777-7214

Fax: 775-777-7219



**APPENDIX C - SECTION 106/NATIVE AMERICAN TRIBE
CORRESPONDENCE**



NEVADA
**STATE HISTORIC
PRESERVATION OFFICE**

Department of Conservation and Natural Resources

**Steve Sisolak, Governor
Bradley Crowell, Director
Rebecca L. Palmer, Administrator, SHPO**

April 19, 2019

Almaira Garcia
Senior Realty Specialist
Department of Veterans Affairs
Office of Construction and Facilities Management
810 Vermont Ave. NW (003C)
Washington, DC 20420

Re: Acquisition and Development of 10-Acre Parcel in Elko, Nevada
Undertaking #2019-5840

Dear Ms. Garcia:

The Nevada State Historic Preservation Office (SHPO) has reviewed the subject documents received March 22, 2019 in accordance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended.

Project Description

The SHPO understands this undertaking to be the acquisition and development of a 10-acre parcel in Elko, Nevada. The development for this parcel is for a new national cemetery.

Area of Potential Effect (APE)

The APE as defined includes only the parcel slated for acquisition and development and does not appear to include areas that will be indirectly affected by the undertaking. Since the project design has not been finalized, the SHPO is unable to comment on the indirect effects. Once the height, color, and massing of the proposed committal shelter, fence, and other site elements are known, our office recommends that the APE be extended to account for the visual effects of this construction.

Identification and Evaluation of Historic Properties

The SHPO acknowledges that a pedestrian survey of the 10-acre parcel was completed by a Secretary of the Interior (SOI) - qualified architectural historian.

In order to determine the archaeological sensitivity of the project area, the Department of Veterans Affairs (VA) consulted the Nevada Cultural Resources Inventory System (NVCRIS) and the Bureau of Land Management's (BLM) cultural resource records. According to these records, the project area has not been inventoried for archaeological resources and no sites have been recorded in the project area. Furthermore, the APE does not appear to be disturbed, is undeveloped, and archaeological resources have been identified in the vicinity of this undertaking. Thus, the SHPO recommends an archaeological inventory of the APE be completed by a SOI - qualified archaeologist.

In order for a SOI – qualified archaeologist to work on BLM managed lands they must have the appropriate permits. For additional information on permitting please contact Bryan Hockett at the Nevada BLM State Office, b50hocke@blm.gov or (775) 861-6546, or the local BLM office archaeologist, Dan Broockmann at dbroockmann@blm.gov or (775) 753-0312.

Native American Consultation

The SHPO reminds the VA that the agency must consult with Native American tribes concerning properties of religious and/or cultural significance that could be affected by the undertaking per 36 CFR §800.4(a)(4). What efforts have been made to provide these representatives with an opportunity to comment on this undertaking? In order to maintain a complete and accurate record of consultation, please forward a brief narrative summary of the results of this consultation to our office so this may be added to the administrative record for this undertaking.

Consulting Parties and Public Consultation

The SHPO reminds the VA that the agency must consult with the public and representatives of organizations that have a demonstrated interest in historic properties per 36 CFR §800.2(c)(5). What efforts have been made to provide the public and interested parties with an opportunity to comment on this undertaking? In order to maintain a complete and accurate record of consultation, please forward a brief narrative summary of the results of this consultation to our office so this may be added to the administrative record for this undertaking.

Finding of Effect

The SHPO will resume review of this undertaking upon receipt of the missing information.

Should you have any questions concerning this correspondence, please contact Jessica Axsom at (775)684-3445 or by e-mail at jaxsom@shpo.nv.gov or SHPO staff architectural historian Kristen Brown at (775) 684-3439 or by e-mail at knbrown@shpo.nv.gov.

Sincerely,



Jessica Axsom

NV SHPO Review and Compliance Archaeologist

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
CULTURAL RESOURCES INVENTORY NEGATIVE REPORT

BLM Office: Elko

BLM Report Number: 1-3316

Organization/Field Crew: BLM/Dan Broockmann and Ariel Belanger

Project Name and Description: VA Land Transfer Survey; survey for the transfer of a land parcel to the VA for a veteran's cemetery

Project Area: 22.24 acres

Legal Description: T34N R55E, Section 8 SW ¼ NW ¼

County: Elko Map Reference: Elko West

UTM Reference: NAD 83 UTM Zone 11N 600241mE 4522840mN (Center)

Records Check: BLM Records; NVCRIS; NR List; State Museum; Other

Results of Previous Inventories: None

Recorded and Unrecorded Sites: None

Expectation: None

Inventory Date(s): 6/5/2019

Inventory Type: Class III

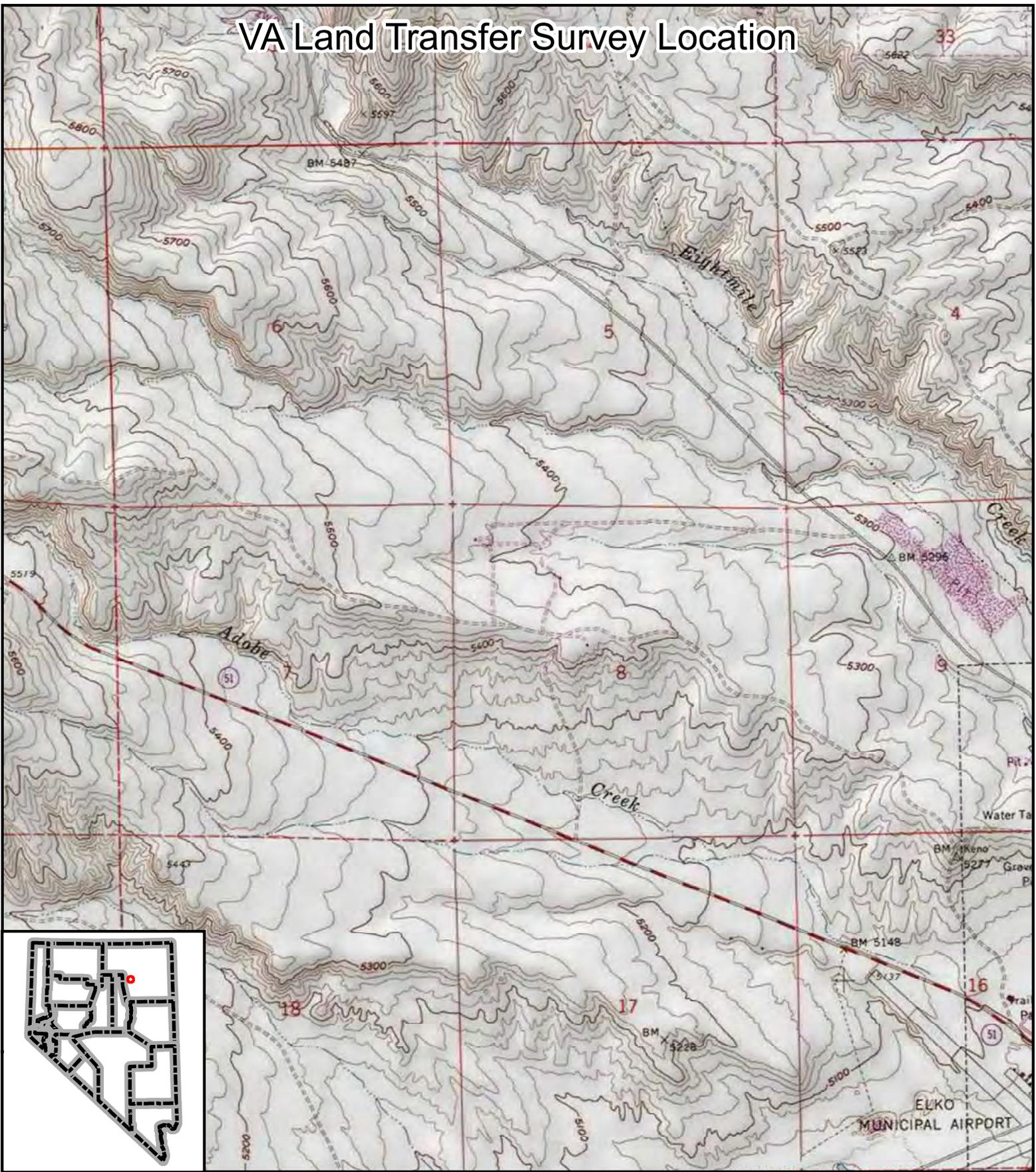
Findings: No cultural resources were encountered during the survey.

**ATTACH CLEAN REPRODUCIBLE 15' or 7.5' MAP(S) SHOWING
AREA OF POTENTIAL EFFECT AND AREA INVENTORIED**

Prepared By: Ariel Belanger Date: 06/06/2019

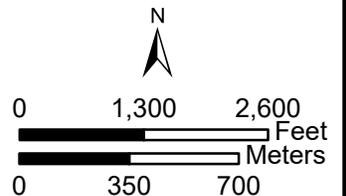
Approved By: [Signature] Date: 06/06/2019

VA Land Transfer Survey Location



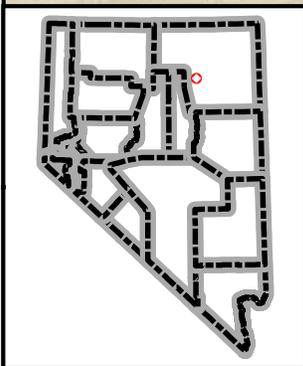
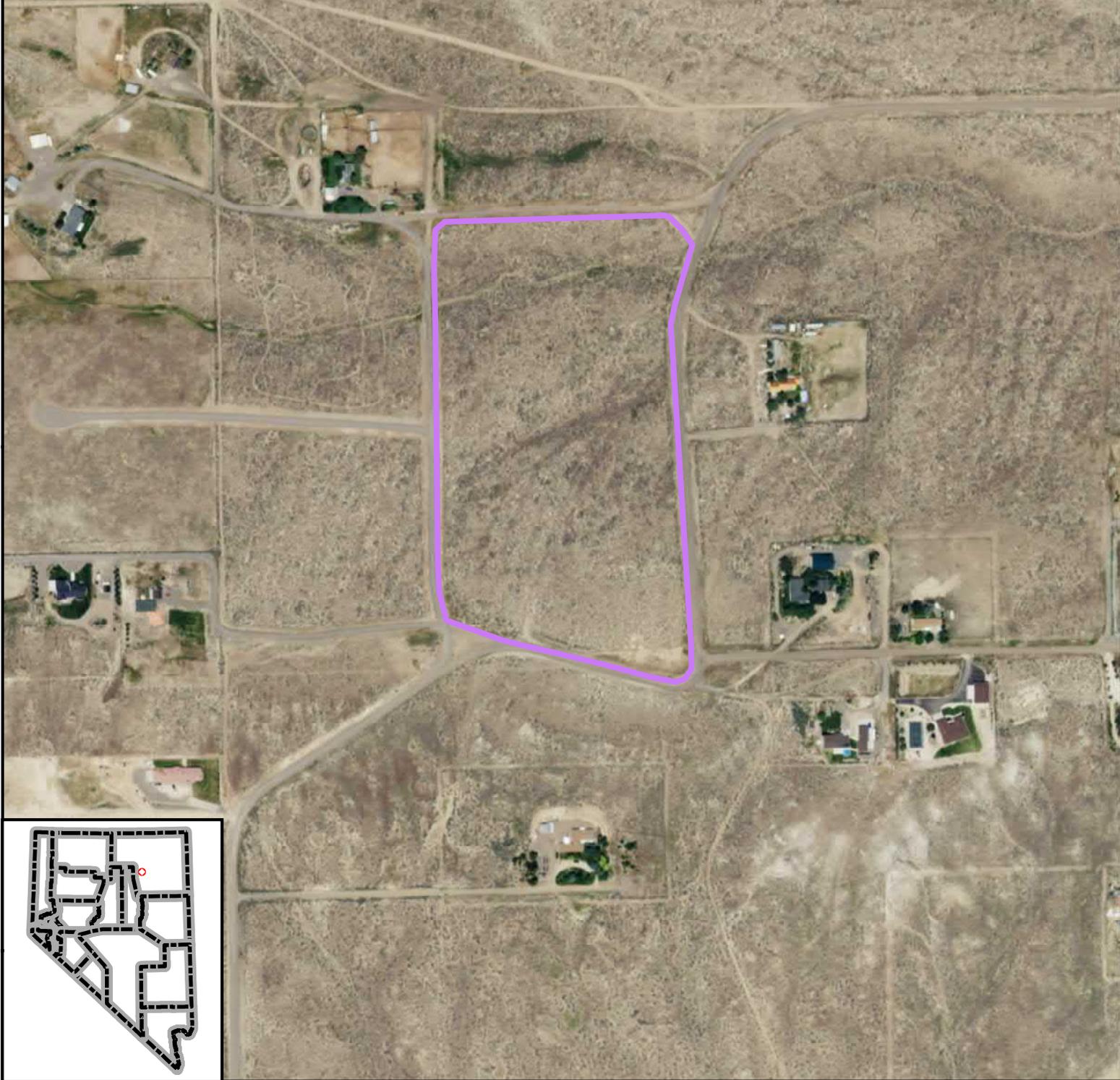
No warranty is made by the Bureau of Land Management as to the accuracy, reliability or completeness of these data for individual use or aggregate use with other data.

 VA Land Parcel Survey APE



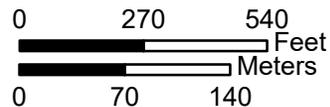
Scale: 1:24,000
Date: 6/6/2019
Author: Ariel Belanger

VA Land Transfer APE



 VA Land Transfer Survey Area

No warranty is made by the Bureau of Land Management as to the accuracy, reliability or completeness of these data for individual use or aggregate use with other data.



Scale: 1:5,000
Date: 6/6/2019
Author: Ariel Belanger



United States Department of the Interior



BUREAU OF LAND MANAGEMENT

Tuscarora Field Office
3900 East Idaho Street
Elko, Nevada 89801

http://www.blm.gov/nv/st/en/fo/elko_field_office.html

In Reply Refer To:
8100 (NVE0200)
BLM Rpt.1-3316 and BLM Rpt. 1-3317

JB 06/06/19
JG/19

Rebecca Palmer
State Historic Preservation Officer
901 S. Stewart Street, Suite 5004
Carson City, NV 89701

Dear Ms. Palmer:

SUBJECT: *Class III Survey of the VA Land Transfer Area* (BLM 1-3316) and *Class III Survey of the Cronin Road Reroute* (BLM 1-3317).

Please find enclosed two reports entitled, *Class III Survey of the VA Land Transfer Area* (BLM 1-3316) and *Class III Survey of the Cronin Road Reroute* (BLM 1-3317). These negative reports were completed by archaeologists Ariel Belanger and Dan Broockmann.

The VA Land Transfer Area was analyzed as a favor to the VA prior to the land transfer from BLM to the VA, and is an under-threshold project not requiring consultation with your office under the Statewide Protocol Agreement. However, the VA has plans to carry out immediate construction on the parcel following the transfer of land. As such, the BLM would like to request your concurrence on our determination of no adverse effects from any proposed activities on the parcel based on a total lack of cultural resources there.

The Cronin Road Reroute was surveyed for a change to an existing right-of-way on BLM lands, and is an under-threshold project not requiring consultation with your office under the Statewide Protocol Agreement. The BLM is submitting this report for incorporation into the Statewide Inventory.

If you have any questions, please contact Dan Broockmann of our office at (775) 753-0312, or he can be reached via email at dbroockmann@blm.gov.

Sincerely,



for Melanie A. Peterson,
Field Manager
Tuscarora Field Office

Enclosures: 1. *Class III Survey of the VA Land Transfer Area (BLM 1-3316)*
2. *Class III Survey of the Cronin Road Reroute (BLM 1-3317).*



NEVADA
**STATE HISTORIC
PRESERVATION OFFICE**

Department of Conservation and Natural Resources

Steve Sisolak, Governor
Bradley Crowell, Director
Rebecca L. Palmer, Administrator, SHPO

September 13, 2019

Almaira Garcia
Senior Realty Specialist
Department of Veterans Affairs
Office of Construction and Facilities Management
810 Vermont Ave. NW (003C)
Washington, DC 20420

Re: Acquisition of Land from the Bureau of Land Management and Development of 10-Acre Parcel in Elko, Nevada (Undertaking #2019-5840)

Dear Ms. Garcia:

The Nevada State Historic Preservation Office (SHPO) has reviewed the subject documents received March 22 and August 16, 2019 (from the Department of Veterans Affairs [VA]) and June 10, 2019 (from the Bureau of Land Management [BLM]), in accordance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended.

Thank you for providing additional information in response to our letters dated April 19 and July 16, 2019.

Project Description

The Department of Veterans Affairs (VA) proposes to acquire and develop a 10-acre parcel in Elko, Nevada for a new national cemetery. The VA has clarified that the design of the proposed cemetery will include in-ground burials, a columbarium, a committal shelter, a memorial area with a flagpole, a fence with entrance gates, landscaping, irrigation systems, and accommodation for stormwater retention. No other buildings (i.e., restrooms, administrative buildings, or maintenance buildings) are planned.

Area of Potential Effect (APE)

The submitted letter does not include a map depicting the APE for visual effects. However, the submitted letter identifies historic properties within a mile radius of the proposed cemetery. Therefore, it appears that in response to our previous questions, the APE has been established as the site where work will occur plus a mile radius in order to account for visual effects.

Our office notes that based on the scale of the undertaking, the visual-effects APE could likely be reduced to include only the blocks along nearby streets from which this undertaking will be visible (i.e., Western Way, Rocky Road, Roper Road, Cattle Drive, and Burgess Lane).

901 S. Stewart Street, Suite 5004 ✦ Carson City, Nevada 89701 ✦ Phone: 775.684.3448 Fax: 775.684.3442

www.shpo.nv.gov

Almaira Garcia
September 13, 2019
Page 2 of 2

Identification and Evaluation of Historic Properties

The SHPO previously concurred with the archaeological identification effort for the undertaking's Direct APE. The submitted report states an architectural historian "conducted a survey and historic research regarding the APE and immediate area," including a "windshield survey of areas adjacent," to identify historic built resources. Based on the submitted report, it appears that the VA did not identify historic properties within the APE for visual effects.

Native American Consultation

The SHPO acknowledges receipt of documentation that the VA consulted with affected Native American tribes concerning properties of religious and cultural significance that could be affected by the undertaking per 36 CFR §800.4(a)(4). This consultation did not result in the identification of properties of cultural significance that could be affected by this undertaking.

Consulting Parties and Public Consultation

The SHPO acknowledges receipt of documentation that the VA consulted with the general public and local governments regarding this undertaking. This consultation did not result in the identification of properties of historic significance that could be affected by this undertaking.

Finding of Effect

The SHPO concurs with the VA's finding of **No Historic Properties Affected** for this undertaking.

Should you have any questions concerning this correspondence, please contact Jessica Axsom at (775)684-3445 or by e-mail at jaxsom@shpo.nv.gov or SHPO staff architectural historian Kristen Brown at (775) 684-3439 or by e-mail at knbrown@shpo.nv.gov.

Sincerely,



Robin K. Reed
Deputy State Historic Preservation Officer

cc. Dan Brockmann, BLM Archaeologist



NEVADA
**STATE HISTORIC
PRESERVATION OFFICE**

Department of Conservation and Natural Resources

Steve Sisolak, Governor
Bradley Crowell, Director
Rebecca L. Palmer, Administrator, SHPO

August 7, 2020

W. Edward Hooker, III
Historic Architect/Cultural Resource Manager
US Department of Veterans Affairs
National Cemetery Administration
Design and Construction Service
810 Vermont Avenue NW (43B)
Washington, DC 20420

Re: Section 106 Review for Elko, Nevada: Property Acquisition for Future Cemetery
Development (UT 2020-6420)

Dear Mr. Hooker:

The Nevada State Historic Preservation Office (SHPO) has reviewed the subject documents received July 9, 2020 in accordance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended.

Project Description

The SHPO understands this undertaking to be the purchase of 15 acres of land from the City of Elko, which is currently part of a 38-acre parcel, for the construction of a new National Cemetery in Nevada. This undertaking will include the sub-division of the current 38-acre parcel, new road construction, burial sections with preplaced crypts (approximately 7-feet deep), and a columbarium development (approximately 7-feet in height and 4-feet deep foundations).

At this time, there does not appear to be a cemetery design for this location.

Area of Potential Effect (APE)

The Department of Veterans Affairs (VA) has determined that all direct physical effects as a result of this undertaking will be contained within a 38-acre area. Furthermore, the VA has determined that the "indirect APE" will be contained within a ¼-mile radius from the center of the acquisition and development parcel.

The SHPO **concurs** with the VA's determination that this APE accounts for all potential effects that may result from this undertaking in keeping with 36 CFR § 800.4(a)(1) and 36 CFR § 800.16(d).

Thank you for providing the photographs, which were taken from the APE, and are keyed to a map of the APE. This information provided clear documentation of possible visual effects that could result from this undertaking.

Identification and Evaluation of Historic Properties

A previous intensive pedestrian survey was completed in 1998 for most of the current APE established for this undertaking. A literature search was completed for the entire APE to identify historic properties. The literature search included the review of previous professional cultural resource inventories, the National and State Registers for Historic Properties, historic aerial photographs, and historic maps of the APE. This effort did not result in the identification of historic properties within the APE.

Native American Consultation

The SHPO notes that consultation with the affected Native American tribes has been initiated per 36 CFR §800.3(f)(2). If this consultation results in the identification of properties of religious and/or cultural significance that could be affected by the undertaking, the SHPO looks forward to consulting with the VA on the National Register eligibility and possible effects of the undertaking on these historic properties per 36 CFR § 800.4(c) and 36 CFR § 800.4(d). In order to maintain a complete and accurate record of consultation, please forward a brief narrative summary of the results of this consultation to our office so this may be added to the administrative record for this undertaking.

Consulting Parties and Public Consultation

The SHPO notes that consultation with the public and representatives of organizations that have a demonstrated interest in historic properties has been initiated in keeping with 36 CFR § 800.2(c)(5). If this consultation results in the identification of historic properties that could be affected by the undertaking, the SHPO looks forward to consulting with the VA concerning the National Register eligibility and possible effects of the undertaking on these historic properties. In order to maintain a complete and accurate record of consultation, please forward a brief narrative summary of the results of this consultation to our office so this may be added to the administrative record for this undertaking.

Finding of Effect

The SHPO concurs with the VA's finding of **No Historic Properties Affected** for this undertaking.

Unanticipated Discovery or Effects

If any buried and/or previously unidentified resources are located during the project activities, the SHPO recommends that all work in the vicinity of the find cease and this office be contacted for additional consultation per 36 CFR §800.13(b)(3) or NRS 383.150-383.190.

W. Edward Hooker, III
August 7, 2020
Page 3 of 3

Should you have any questions concerning this correspondence, please contact Jessica Axsom at (775) 684-3445 or by e-mail at jaxsom@shpo.nv.gov.

Sincerely,



Robin K. Reed
Deputy State Historic Preservation Officer



DEPARTMENT OF VETERANS AFFAIRS
Office of Construction & Facilities Management
Washington DC 20420

January 30, 2019

Confederated Tribes of the Goshute Reservation, Nevada and Utah
Virgil Johnson, Chairman
HC 61, P.O. Box 6104
Ibapah, Utah 84034-6104

SUBJECT: Consultation
Proposed National Veterans Burial Ground
Elko County, Nevada

Dear Mr. Johnson,

The US Department of Veterans Affairs (VA) is preparing environmental documentation to assist in the Federal decision-making process concerning the acquisition of approximately ten acres of land in Elko County, Nevada (Site) for the establishment of a National Veterans Burial Ground (Proposed Action). This project is part of VA's Rural Veterans Burial Initiative, whereby the VA National Cemetery Administration (NCA) is seeking to establish small NCA-managed Veterans cemeteries in rural areas not served by a nearby National or State Veterans cemetery. Elko County was one of eight locations across the country that was targeted for the establishment of a National Veterans Burial Ground.

The Site is part of an approximately 1,457-acre parcel of land owned by the US Government and managed by the US Department of the Interior Bureau of Land Management (BLM). The Site is rectangular in shape and is located north of Cattle Drive, east of Western Way, and west of Rocky Road in a relatively undeveloped area northwest of the City of Elko. The Site has been undeveloped land with brushy vegetation (sagebrush) since at least 1953. The Site is part of a cattle grazing allotment managed by BLM, but likely has not been grazed in many years. The Site location is depicted in Attachments 1a, 1b and 1c.

VA is conducting an Environmental Assessment (EA) to evaluate the environmental, cultural, and socioeconomic issues associated with the Proposed Action pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S. Code (USC) §4321 *et seq.*); the Council on Environmental Quality (CEQ) Regulations Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508); and VA's Implementing Regulations (38 CFR Part 26 (*Environmental Analysis of VA Actions*)).

As part of this evaluation, an Initial Cultural Resource Impact Prediction Survey for the site was completed, which included a review of the Nevada State Historic Preservation Office (SHPO) records to identify previously identified cultural resources in the project area and a pedestrian survey of the Site by an architectural historian. No National Register of Historic Places (NRHP)-listed or eligible-for-listing resources were identified at the Site or within the area of potential effect of the Proposed Action.

To the best of our knowledge and belief, the Proposed Action would have no effect on Native American graves or cultural items, historic properties, or archaeological, historic, or scientific data, but we would appreciate your advice about this, and would be happy to undertake government-to-government consultation with your Tribe in accordance with Executive Order 13175, the Native American Graves Protection and Repatriation Act (NAGPRA), and the National Historic Preservation Act (NHPA). We would also be glad to discuss any other concerns you may have about this project as we carry out our analyses under NEPA. With your advice and assistance, we hope to establish an ongoing cooperative relationship.

Thank you for your review of this VA undertaking. If you have any questions or comments about this project, please contact me at Almaira.Garcia@va.com, (202) 632-5176.

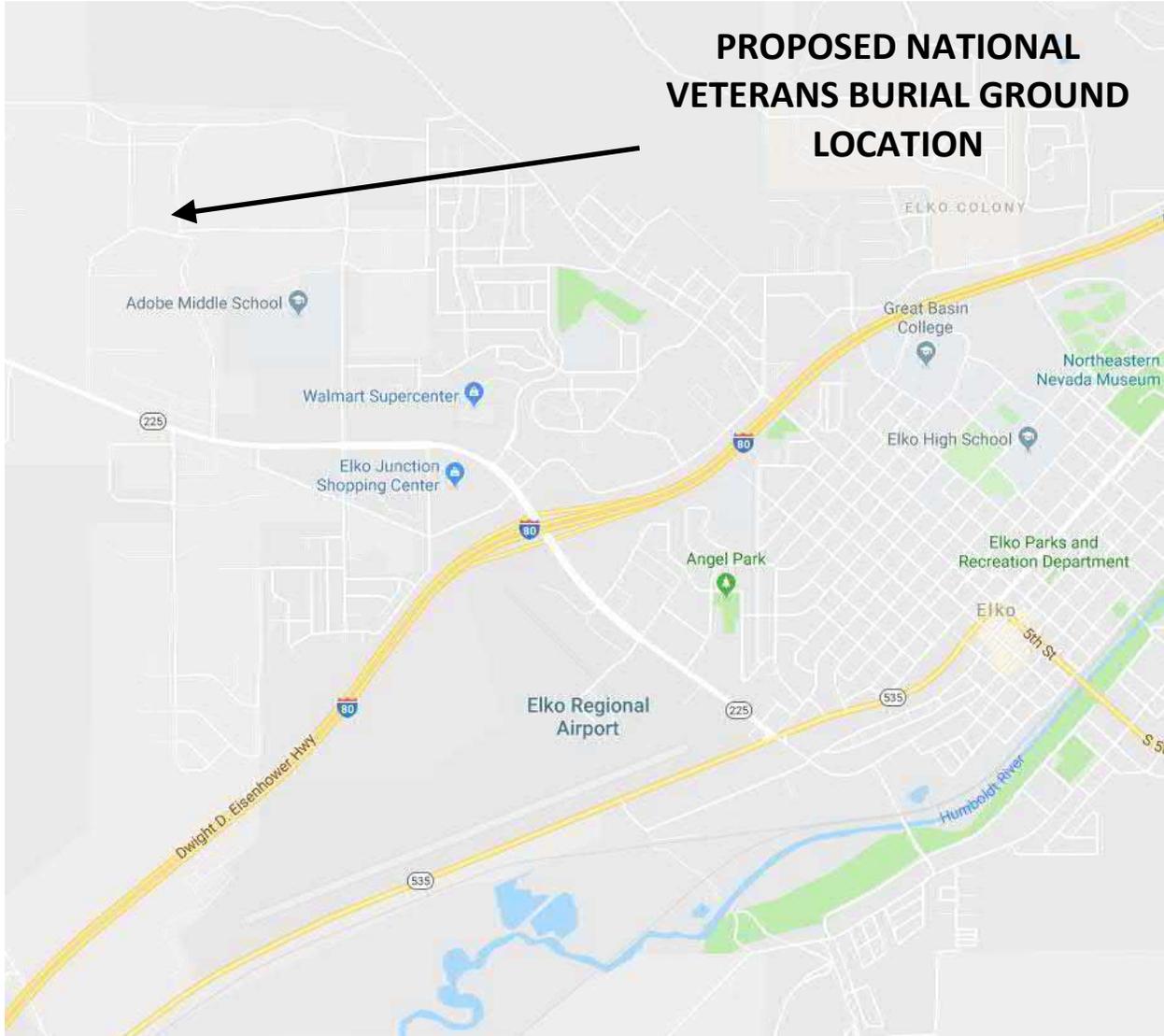
Sincerely,

Almaira Garcia
Senior Realty Specialist
Land Management
U.S. Department of Veterans Affairs
Office of Real Property

Attachment 1a – 1c: Site Location Maps
Attachment 2: List of Tribes Consulted

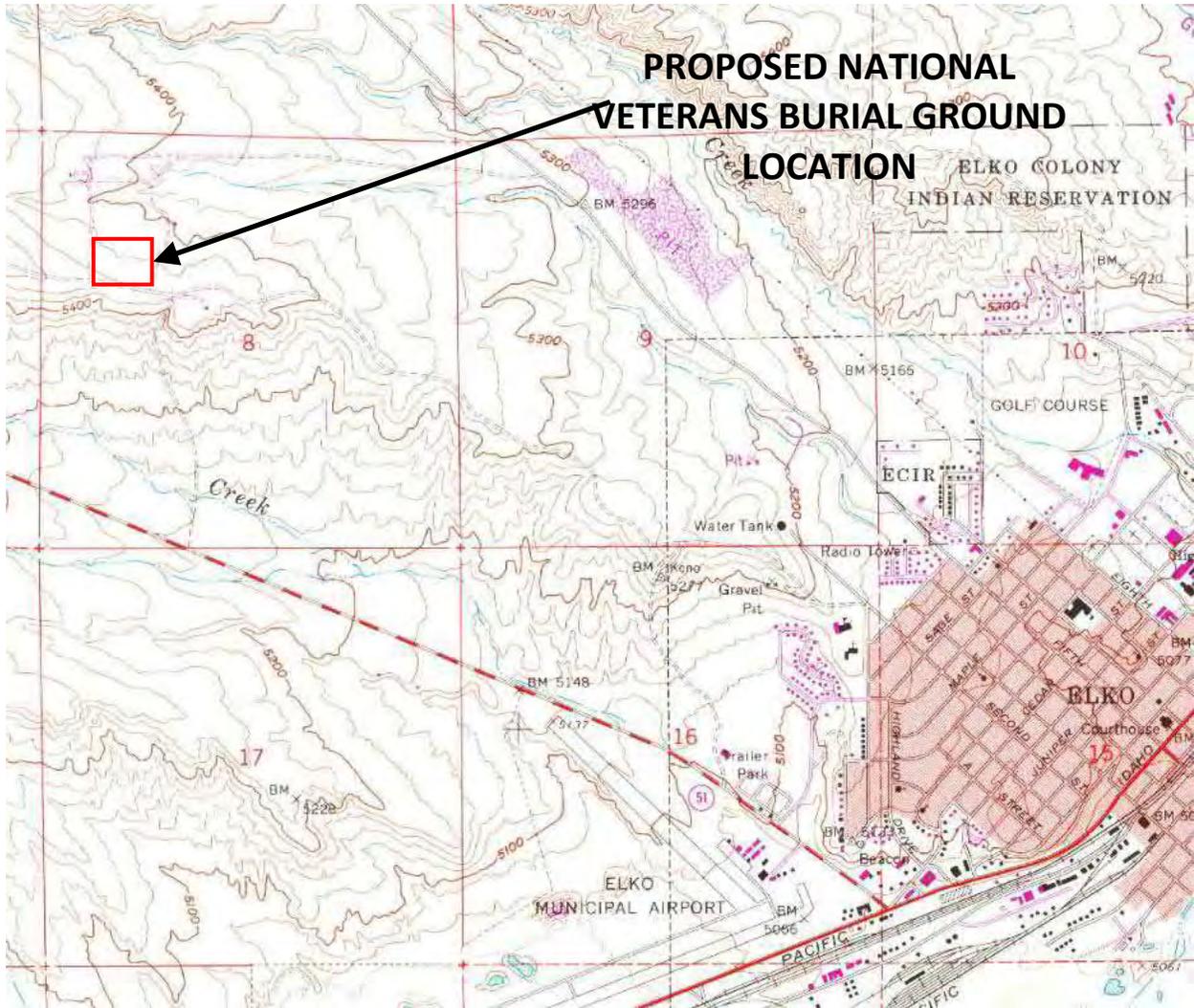
ATTACHMENT 1A

**SITE LOCATION MAP (STREET MAP)
Proposed National Veterans Burial Ground
Elko County, Nevada**



ATTACHMENT 1B

**SITE LOCATION MAP
(1962 PHOTOREVISED 1972 TOPOGRAPHIC MAP)
Proposed National Veterans Burial Ground
Elko County, Nevada**



ATTACHMENT 1C

**SITE LOCATION MAP (2014 AERIAL PHOTOGRAPH)
Proposed National Veterans Burial Ground
Elko County, Nevada**



ATTACHMENT 2

LIST OF TRIBES CONSULTED

NEPA Environmental Assessment Proposed National Veterans Burial Ground Elko County, Nevada

**Confederated Tribes of the Goshute
Reservation, Nevada and Utah**

Virgil Johnson, Chairman
HC 61, Box 6104
Ibapah, Utah 84034-6104
(435) 234-1138

**Shoshone-Paiute Tribes of the Duck Valley
Reservation, Nevada**

Lindsey Manning, Chairperson
P.O. Box 219
Owyhee, Nevada 89832-0219
(208) 759-3100

**Confederated Tribes of the Warm Springs
Reservation of Oregon**

Robert Brunoe, THPO
P.O. Box C
Warm Springs, Oregon 97761-3001
(541) 553-2001

**South Fork Band of the Te-Moak Tribe of
Western Shoshone Indians of Nevada**

Alice Tybo, Chairperson
21 Lee
Spring Creek, Nevada 89815
(775) 744-4273

**Elko Band of the Te-Moak Tribe of Western
Shoshone Indians of Nevada**

Gerald Temoke, Chairperson
1745 Silver Eagle Drive
Elko, Nevada 89801
(775) 738-8889

**Te-Moak Tribe of Western Shoshone Indians
of Nevada**

Davis Gonzales, Chairperson
525 Sunset Street
Elko, Nevada 89801
(775) 738-9251

**Shoshone Tribe of the Wind River
Reservation, Wyoming**

Wilfred Ferris, THPO
P.O. Box 538
Fort Washakie, Wyoming 82514
(307) 332-2081

**Wells Band of the Te-Moak Tribe of Western
Shoshone Indians**

Gracie Begay, Chairwoman
P.O. Box 809
Wells, Nevada 89835-0809
(775) 752-3045

**Shoshone-Bannock Tribes of the Fort Hall
Reservation**

Blaine Edmo, Tribal Chairman
P.O. Box 306
Fort Hall, Idaho 83202
(208) 478-3700

**Yoma Shoshone Tribe of the Yomba
Reservation, Nevada**

Elisha Mockerman, Chairperson
HC 61, Box 6275
Austin, Nevada 89310-9302
(775) 964-2243

APPENDIX D – SITE PHOTOGRAPHS

SITE 1 PHOTOGRAPHS



Photo #1: Looking east along the southern site boundary (along Cattle Drive).



Photo #2: Looking north along the eastern site boundary (along Rocky Road).



Photo #3: Looking east along the northern site boundary.



Photo #4: Looking south along the western site boundary (along Western Way).



Photo #5: Looking southwesterly across the site.



Photo #6: Looking southerly across the central portion of the site.

SITE 1 PHOTOGRAPHS



Photo #7: Erosional drainage ditch located in the south-central portion of the site from Cattle Drive.



Photo #8: Northerly adjoining unimproved land.



Photo #9: Northeasterly adjoining unimproved land and residence beyond Rocky Road.



Photo #10: Easterly adjoining unimproved land and residence beyond Rocky Road.



Photo #11: Southerly adjoining unimproved land located beyond Cattle Drive.



Photo #12: Westerly adjoining unimproved land located beyond Western Way.

SITE 2 PHOTOGRAPHS



Photo #1: Looking northerly along the western site boundary along Jennings Way.



Photo #2: Looking easterly along the northern site boundary and northerly adjoining Rocky Road.



Photo #3: Looking southerly along the eastern site boundary.



Photo #4: Looking westerly across the southern site boundary.



Photo #5: Looking southeast across the site from the northwest corner of the site.



Photo #6: Looking southwest across the site.

SITE 2 PHOTOGRAPHS



Photo #7: Looking easterly from Jennings Way along the intermittent creek located in the northern portion of the site.



Photo #8: Looking southerly along the unimproved road (Roche Way) that crosses from the north-central to southwestern portions of the site.



Photo #9: Looking east toward the off-site discharge point of the drainageway.



Photo #10: Looking west along the drainageway.



Photo #11: Northwest adjoining electrical substation (NV Energy).



Photo #12: North adjoining unimproved land, across Rocky Road (standing near north side of Roche Way).

SITE 2 PHOTOGRAPHS



Photo #13: East adjoining residence and possible private contractor business (425 Rocky Road).



Photo #14: East adjoining residence (3515 Wright Way).



Photo #15: South adjoining unimproved land.



Photo #16: West adjoining unimproved land, across Jennings Way.

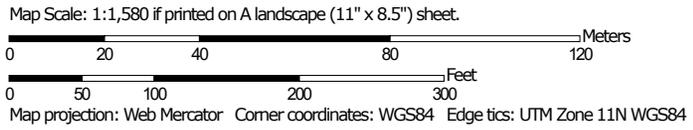
APPENDIX E – OTHER RELEVANT ENVIRONMENTAL DATA

- Soil Maps
- IPaC Reports
- Wetlands Maps
- Floodplain Maps
- EJSCREEN Reports

Soil Map—Elko County, Nevada, Central Part
(Site 1)



Soil Map may not be valid at this scale.



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Elko County, Nevada, Central Part

Survey Area Data: Version 15, Aug 26, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 19, 2009—Aug 7, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

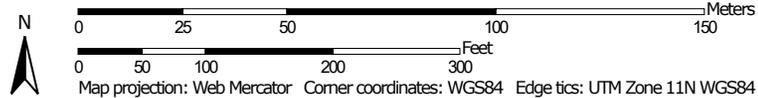
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
480	Hunnton-Wieland-Gance association	10.1	100.0%
Totals for Area of Interest		10.1	100.0%

Soil Map—Elko County, Nevada, Central Part



Soil Map may not be valid at this scale.

Map Scale: 1:1,800 if printed on A landscape (11" x 8.5") sheet.



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Elko County, Nevada, Central Part
 Survey Area Data: Version 13, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 19, 2009—Aug 7, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
480	Hunnton-Wieland-Gance association	15.2	100.0%
Totals for Area of Interest		15.2	100.0%



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Reno Fish And Wildlife Office
1340 Financial Boulevard, Suite 234
Reno, NV 89502-7147
Phone: (775) 861-6300 Fax: (775) 861-6301
<http://www.fws.gov/nevada/>

In Reply Refer To:

November 19, 2020

Consultation Code: 08ENVD00-2018-SLI-0775

Event Code: 08ENVD00-2021-E-00154

Project Name: Proposed Elko County, Nevada National Veterans Burial Ground

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The attached species list indicates threatened, endangered, proposed, and candidate species and designated or proposed critical habitat that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act of 1973, as amended (ESA, 16 U.S.C. 1531 *et seq.*), for projects that are authorized, funded, or carried out by a Federal agency. Candidate species have no protection under the ESA but are included for consideration because they could be listed prior to the completion of your project. Consideration of these species during project planning may assist species conservation efforts and may prevent the need for future listing actions. For additional information regarding species that may be found in the proposed project area, visit <http://www.fws.gov/nevada/es/ipac.html>.

The purpose of the ESA is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the ESA and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or

designated or proposed critical habitat. Guidelines for preparing a Biological Assessment can be found at: http://www.fws.gov/midwest/endangered/section7/ba_guide.html.

If a Federal action agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species, and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this species list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally listed, proposed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally, as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation, for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the attached list.

The Nevada Fish and Wildlife Office (NFWO) no longer provides species of concern lists. Most of these species for which we have concern are also on the Animal and Plant At-Risk Tracking List for Nevada (At-Risk list) maintained by the State of Nevada's Natural Heritage Program (Heritage). Instead of maintaining our own list, we adopted Heritage's At-Risk list and are partnering with them to provide distribution data and information on the conservation needs for at-risk species to agencies or project proponents. The mission of Heritage is to continually evaluate the conservation priorities of native plants, animals, and their habitats, particularly those most vulnerable to extinction or in serious decline. In addition, in order to avoid future conflicts, we ask that you consider these at-risk species early in your project planning and explore management alternatives that provide for their long-term conservation.

For a list of at-risk species by county, visit Heritage's website (<http://heritage.nv.gov>). For a specific list of at-risk species that may occur in the project area, you can obtain a data request form from the website (http://heritage.nv.gov/get_data) or by contacting the Administrator of Heritage at 901 South Stewart Street, Suite 5002, Carson City, Nevada 89701-5245, (775) 684-2900. Please indicate on the form that your request is being obtained as part of your coordination with the Service under the ESA. During your project analysis, if you obtain new information or data for any Nevada sensitive species, we request that you provide the information to Heritage at the above address.

Furthermore, certain species of fish and wildlife are classified as protected by the State of Nevada (<http://www.leg.state.nv.us/NAC/NAC-503.html>). You must first obtain the appropriate license, permit, or written authorization from the Nevada Department of Wildlife (NDOW) to take, or possess any parts of protected fish and wildlife species. Please visit <http://www.ndow.org> or contact NDOW in northern Nevada (775) 688-1500, in southern Nevada (702) 486-5127, or in eastern Nevada (775) 777-2300.

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the Service's wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

The Service's Pacific Southwest Region developed the *Interim Guidelines for the Development of a Project Specific Avian and Bat Protection Plan for Wind Energy Facilities* (Interim Guidelines). This document provides energy facility developers with a tool for assessing the risk of potential impacts to wildlife resources and delineates how best to design and operate a bird- and bat-friendly wind facility. These Interim Guidelines are available upon request from the NFWO. The intent of a Bird and Bat Conservation Strategy is to conserve wildlife resources while supporting project developers through: (1) establishing project development in an adaptive management framework; (2) identifying proper siting and project design strategies; (3) designing and implementing pre-construction surveys; (4) implementing appropriate conservation measures for each development phase; (5) designing and implementing appropriate post-construction monitoring strategies; (6) using post-construction studies to better understand the dynamics of mortality reduction (*e.g.*, changes in blade cut-in speed, assessments of blade “feathering” success, and studies on the effects of visual and acoustic deterrents) including efforts tied into Before-After/Control-Impact analysis; and (7) conducting a thorough risk assessment and validation leading to adjustments in management and mitigation actions.

The template and recommendations set forth in the Interim Guidelines were based upon the Avian Powerline Interaction Committee's Avian Protection Plan template (<http://www.aplic.org/>) developed for electric utilities and modified accordingly to address the unique concerns of wind energy facilities. These recommendations are also consistent with the Service's wind energy guidelines. We recommend contacting us as early as possible in the planning process to discuss the need and process for developing a site-specific Bird and Bat Conservation Strategy.

The Service has also developed guidance regarding wind power development in relation to prairie grouse leks (sage-grouse are included in this). This document can be found at: http://www.fws.gov/southwest/es/Oklahoma/documents/te_species/wind%20power/prairie%20grouse%20lek%205%20mile%20public.pdf.

Migratory Birds are a Service Trust Resource. Based on the Service's conservation responsibilities and management authority for migratory birds under the Migratory Bird Treaty Act of 1918, as amended (MBTA; 16 U.S.C. 703 *et seq.*), we recommend that any land clearing or other surface disturbance associated with proposed actions within the project area be timed to

avoid potential destruction of bird nests or young, or birds that breed in the area. Such destruction may be in violation of the MBTA. Under the MBTA, nests with eggs or young of migratory birds may not be harmed, nor may migratory birds be killed. Therefore, we recommend land clearing be conducted outside the avian breeding season. If this is not feasible, we recommend a qualified biologist survey the area prior to land clearing. If nests are located, or if other evidence of nesting (*i.e.*, mated pairs, territorial defense, carrying nesting material, transporting food) is observed, a protective buffer (the size depending on the habitat requirements of the species) should be delineated and the entire area avoided to prevent destruction or disturbance to nests until they are no longer active.

Guidance for minimizing impacts to migratory birds for projects involving communications towers (*e.g.*, cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

If wetlands, springs, or streams are known to occur in the project area or are present in the vicinity of the project area, we ask that you be aware of potential impacts project activities may have on these habitats. Discharge of fill material into wetlands or waters of the United States is regulated by the U.S. Army Corps of Engineers (ACOE) pursuant to section 404 of the Clean Water Act of 1972, as amended. We recommend you contact the ACOE's Regulatory Section regarding the possible need for a permit. For projects located in northern Nevada (Carson City, Churchill, Douglas, Elko, Esmeralda, Eureka, Humboldt, Lander, Lyon, Mineral, Pershing, Storey, and Washoe Counties) contact the Reno Regulatory Office at 300 Booth Street, Room 3060, Reno, Nevada 89509, (775) 784-5304; in southern Nevada (Clark, Lincoln, Nye, and White Pine Counties) contact the St. George Regulatory Office at 321 North Mall Drive, Suite L-101, St. George, Utah 84790-7314, (435) 986-3979; or in California along the eastern Sierra contact the Sacramento Regulatory Office at 650 Capitol Mall, Suite 5-200, Sacramento, California 95814, (916) 557-5250.

We appreciate your concern for threatened and endangered species. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

The table below outlines lead FWS field offices by county and land ownership/project type. Please refer to this table when you are ready to coordinate (including requests for section 7 consultation) with the field office corresponding to your project, and send any documentation regarding your project to that corresponding office. Therefore, the lead FWS field office may not be the office listed above in the letterhead.

Lead FWS offices by County and Ownership/Program

County	Ownership/Program	Species	Office Lead*
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Alameda	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
Alameda	All ownerships but tidal/estuarine	All	SFWO
Alpine	Humboldt Toiyabe National Forest	All	RFWO
Alpine	Lake Tahoe Basin Management Unit	All	RFWO
Alpine	Stanislaus National Forest	All	SFWO
Alpine	El Dorado National Forest	All	SFWO
Colusa	Mendocino National Forest	All	AFWO
Colusa	Other	All	By jurisdiction (see map)
Contra Costa	Legal Delta (Excluding ECCHCP)	All	BDFWO
Contra Costa	Antioch Dunes NWR	All	BDFWO
Contra Costa	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
Contra Costa	All ownerships but tidal/estuarine	All	SFWO
Del Norte	All	All	AFWO
El Dorado	El Dorado National Forest	All	SFWO
El Dorado	LakeTahoe Basin Management Unit		RFWO
Glenn	Mendocino National Forest	All	AFWO
Glenn	Other	All	By jurisdiction (see map)
Humboldt	All except Shasta Trinity National Forest	All	AFWO

Humboldt	Shasta Trinity National Forest	All	YFWO
Lake	Mendocino National Forest	All	AFWO
Lake	Other	All	By jurisdiction (see map)
Lassen	Modoc National Forest	All	KFWO
Lassen	Lassen National Forest	All	SFWO
Lassen	Toiyabe National Forest	All	RFWO
Lassen	BLM Surprise and Eagle Lake Resource Areas	All	RFWO
Lassen	BLM Alturas Resource Area	All	KFWO
Lassen	Lassen Volcanic National Park	All (includes Eagle Lake trout on all ownerships)	SFWO
Lassen	All other ownerships	All	By jurisdiction (see map)
Marin	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
Marin	All ownerships but tidal/estuarine	All	SFWO
Mendocino	Russian River watershed	All	SFWO
Mendocino	All except Russian River watershed	All	AFWO
Modoc	Modoc National Forest	All	KFWO
Modoc	BLM Alturas Resource Area	All	KFWO
Modoc	Klamath Basin National Wildlife Refuge Complex	All	KFWO
Modoc	BLM Surprise and Eagle Lake Resource Areas	All	RFWO

Modoc	All other ownerships	All	By jurisdiction (See map)
Mono	Inyo National Forest	All	RFWO
Mono	Humboldt Toiyabe National Forest	All	RFWO
Napa	All ownerships but tidal/estuarine	All	SFWO
Napa	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Nevada	Humboldt Toiyabe National Forest	All	RFWO
Nevada	All other ownerships	All	By jurisdiction (See map)
Placer	Lake Tahoe Basin Management Unit	All	RFWO
Placer	All other ownerships	All	SFWO
Sacramento	Legal Delta	Delta Smelt	BDFWO
Sacramento	Other	All	By jurisdiction (see map)
San Francisco	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO
San Francisco	All ownerships but tidal/estuarine	All	SFWO
San Mateo	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO
San Mateo	All ownerships but tidal/estuarine	All	SFWO
San Joaquin	Legal Delta excluding San Joaquin HCP	All	BDFWO

San Joaquin	Other	All	SFWO
Santa Clara	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO
Santa Clara	All ownerships but tidal/estuarine	All	SFWO
Shasta	Shasta Trinity National Forest except Hat Creek Ranger District (administered by Lassen National Forest)	All	YFWO
Shasta	Hat Creek Ranger District	All	SFWO
Shasta	Bureau of Reclamation (Central Valley Project)	All	BDFWO
Shasta	Whiskeytown National Recreation Area	All	YFWO
Shasta	BLM Alturas Resource Area	All	KFWO
Shasta	Caltrans	By jurisdiction	SFWO/AFWO
Shasta	Ahjumawi Lava Springs State Park	Shasta crayfish	SFWO
Shasta	All other ownerships	All	By jurisdiction (see map)
Shasta	Natural Resource Damage Assessment, all lands	All	SFWO/BDFWO
Sierra	Humboldt Toiyabe National Forest	All	RFWO
Sierra	All other ownerships	All	SFWO
Siskiyou	Klamath National Forest (except Ukonom District)	All	YFWO
Siskiyou	Six Rivers National Forest and Ukonom District	All	AFWO
Siskiyou	Shasta Trinity National Forest	All	YFWO

Siskiyou	Lassen National Forest	All	SFWO
Siskiyou	Modoc National Forest	All	KFWO
Siskiyou	Lava Beds National Volcanic Monument	All	KFWO
Siskiyou	BLM Alturas Resource Area	All	KFWO
Siskiyou	Klamath Basin National Wildlife Refuge Complex	All	KFWO
Siskiyou	All other ownerships	All	By jurisdiction (see map)
Solano	Suisun Marsh	All	BDFWO
Solano	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Solano	All ownerships but tidal/estuarine	All	SFWO
Solano	Other	All	By jurisdiction (see map)
Sonoma	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Sonoma	All ownerships but tidal/estuarine	All	SFWO
Tehama	Mendocino National Forest	All	AFWO
Tehama	Shasta Trinity National Forest except Hat Creek Ranger District (administered by Lassen National Forest)	All	YFWO
Tehama	All other ownerships	All	By jurisdiction (see map)
Trinity	BLM	All	AFWO
Trinity	Six Rivers National Forest	All	AFWO
Trinity	Shasta Trinity National Forest	All	YFWO

Trinity	Mendocino National Forest	All	AFWO
Trinity	BIA (Tribal Trust Lands)	All	AFWO
Trinity	County Government	All	AFWO
Trinity	All other ownerships	All	By jurisdiction (See map)
Yolo	Yolo Bypass	All	BDFWO
Yolo	Other	All	By jurisdiction (see map)
All	FERC-ESA	All	By jurisdiction (see map)
All	FERC-ESA	Shasta crayfish	SFWO
All	FERC-Relicensing (non-ESA)	All	BDFWO

***Office Leads:**

AFWO=Arcata Fish and Wildlife Office

BDFWO=Bay Delta Fish and Wildlife Office

KFWO=Klamath Falls Fish and Wildlife Office

RFWO=Reno Fish and Wildlife Office

YFWO=Yreka Fish and Wildlife Office

Attachment(s):

- Official Species List
 - USFWS National Wildlife Refuges and Fish Hatcheries
 - Migratory Birds
 - Wetlands
-

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Reno Fish And Wildlife Office

1340 Financial Boulevard, Suite 234

Reno, NV 89502-7147

(775) 861-6300

Project Summary

Consultation Code: 08ENV00-2018-SLI-0775

Event Code: 08ENV00-2021-E-00154

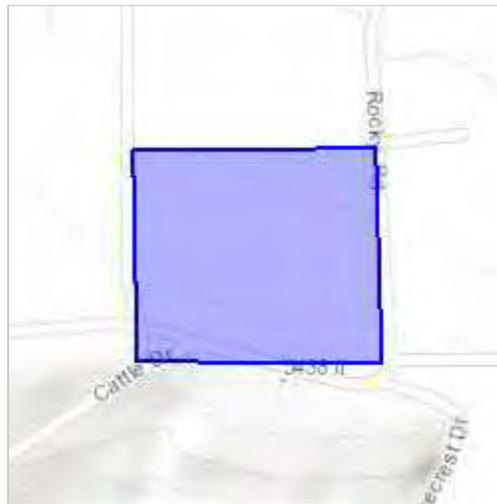
Project Name: Proposed Elko County, Nevada National Veterans Burial Ground

Project Type: LAND - ACQUISITION

Project Description: Approximately 10 acres of undeveloped land located north of Cattle Drive, east of Western Way, and west of Rocky Road.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/40.84952348443491N115.81079009920111W>



Counties: Elko, NV

Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Gray Wolf <i>Canis lupus</i> Population: Western Distinct Population Segment No critical habitat has been designated for this species.	Proposed Endangered

Fishes

NAME	STATUS
Lahontan Cutthroat Trout <i>Oncorhynchus clarkii henshawi</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3964 Species survey guidelines: https://ecos.fws.gov/ipac/guideline/survey/population/233/office/14320.pdf	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

-
1. The [Migratory Birds Treaty Act](#) of 1918.
 2. The [Bald and Golden Eagle Protection Act](#) of 1940.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Dec 1 to Aug 31
Golden Eagle <i>Aquila chrysaetos</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/1680	Breeds Dec 1 to Aug 31

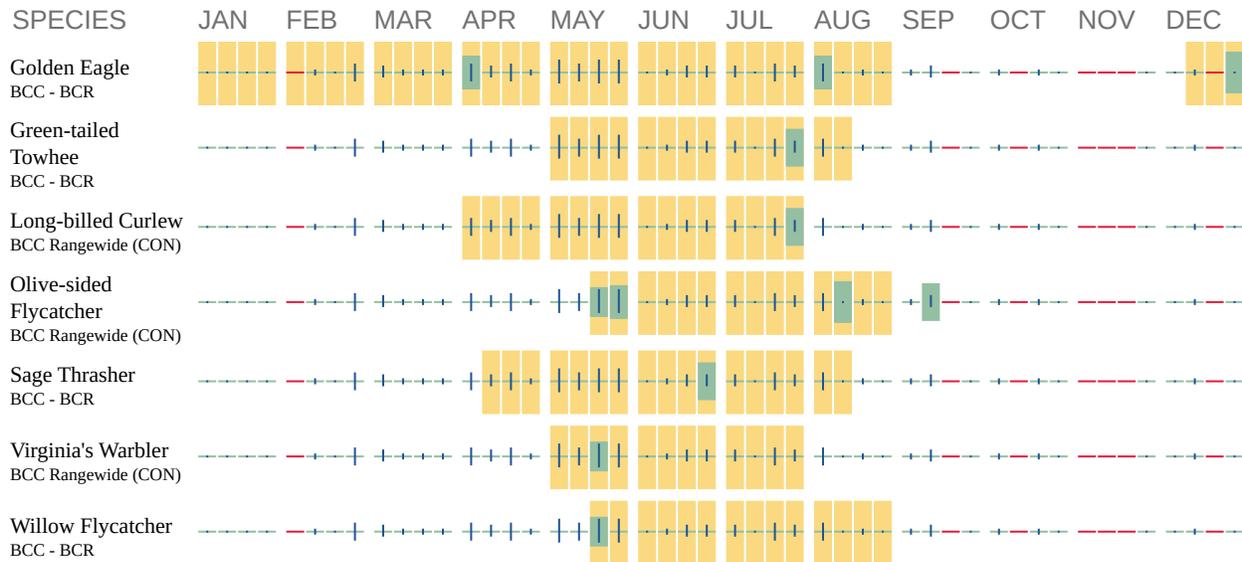
NAME	BREEDING SEASON
Green-tailed Towhee <i>Pipilo chlorurus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9444	Breeds May 1 to Aug 10
Long-billed Curlew <i>Numenius americanus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/5511	Breeds Apr 1 to Jul 31
Olive-sided Flycatcher <i>Contopus cooperi</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Sage Thrasher <i>Oreoscoptes montanus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9433	Breeds Apr 15 to Aug 10
Virginia's Warbler <i>Vermivora virginiae</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9441	Breeds May 1 to Jul 31
Willow Flycatcher <i>Empidonax traillii</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/3482	Breeds May 20 to Aug 31

Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ “Proper Interpretation and Use of Your Migratory Bird Report” before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.



Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

Migratory Birds FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
 2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
 3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).
-

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ “What does IPaC use to generate the migratory birds potentially occurring in my specified location”. Please be aware this report provides the “probability of presence” of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the “no data” indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ “Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds” at the bottom of your migratory bird trust resources page.

Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Reno Fish And Wildlife Office
1340 Financial Boulevard, Suite 234
Reno, NV 89502-7147
Phone: (775) 861-6300 Fax: (775) 861-6301
<http://www.fws.gov/nevada/>

In Reply Refer To:

May 29, 2020

Consultation Code: 08ENVD00-2020-SLI-0455

Event Code: 08ENVD00-2020-E-01232

Project Name: Proposed VA Elko, NV National Veterans Burial Ground

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The attached species list indicates threatened, endangered, proposed, and candidate species and designated or proposed critical habitat that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act of 1973, as amended (ESA, 16 U.S.C. 1531 *et seq.*), for projects that are authorized, funded, or carried out by a Federal agency. Candidate species have no protection under the ESA but are included for consideration because they could be listed prior to the completion of your project. Consideration of these species during project planning may assist species conservation efforts and may prevent the need for future listing actions. For additional information regarding species that may be found in the proposed project area, visit <http://www.fws.gov/nevada/es/ipac.html>.

The purpose of the ESA is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the ESA and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or

designated or proposed critical habitat. Guidelines for preparing a Biological Assessment can be found at: http://www.fws.gov/midwest/endangered/section7/ba_guide.html.

If a Federal action agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species, and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this species list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally listed, proposed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally, as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation, for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the attached list.

The Nevada Fish and Wildlife Office (NFWO) no longer provides species of concern lists. Most of these species for which we have concern are also on the Animal and Plant At-Risk Tracking List for Nevada (At-Risk list) maintained by the State of Nevada's Natural Heritage Program (Heritage). Instead of maintaining our own list, we adopted Heritage's At-Risk list and are partnering with them to provide distribution data and information on the conservation needs for at-risk species to agencies or project proponents. The mission of Heritage is to continually evaluate the conservation priorities of native plants, animals, and their habitats, particularly those most vulnerable to extinction or in serious decline. In addition, in order to avoid future conflicts, we ask that you consider these at-risk species early in your project planning and explore management alternatives that provide for their long-term conservation.

For a list of at-risk species by county, visit Heritage's website (<http://heritage.nv.gov>). For a specific list of at-risk species that may occur in the project area, you can obtain a data request form from the website (http://heritage.nv.gov/get_data) or by contacting the Administrator of Heritage at 901 South Stewart Street, Suite 5002, Carson City, Nevada 89701-5245, (775) 684-2900. Please indicate on the form that your request is being obtained as part of your coordination with the Service under the ESA. During your project analysis, if you obtain new information or data for any Nevada sensitive species, we request that you provide the information to Heritage at the above address.

Furthermore, certain species of fish and wildlife are classified as protected by the State of Nevada (<http://www.leg.state.nv.us/NAC/NAC-503.html>). You must first obtain the appropriate license, permit, or written authorization from the Nevada Department of Wildlife (NDOW) to take, or possess any parts of protected fish and wildlife species. Please visit <http://www.ndow.org> or contact NDOW in northern Nevada (775) 688-1500, in southern Nevada (702) 486-5127, or in eastern Nevada (775) 777-2300.

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the Service's wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

The Service's Pacific Southwest Region developed the *Interim Guidelines for the Development of a Project Specific Avian and Bat Protection Plan for Wind Energy Facilities* (Interim Guidelines). This document provides energy facility developers with a tool for assessing the risk of potential impacts to wildlife resources and delineates how best to design and operate a bird- and bat-friendly wind facility. These Interim Guidelines are available upon request from the NFWO. The intent of a Bird and Bat Conservation Strategy is to conserve wildlife resources while supporting project developers through: (1) establishing project development in an adaptive management framework; (2) identifying proper siting and project design strategies; (3) designing and implementing pre-construction surveys; (4) implementing appropriate conservation measures for each development phase; (5) designing and implementing appropriate post-construction monitoring strategies; (6) using post-construction studies to better understand the dynamics of mortality reduction (*e.g.*, changes in blade cut-in speed, assessments of blade “feathering” success, and studies on the effects of visual and acoustic deterrents) including efforts tied into Before-After/Control-Impact analysis; and (7) conducting a thorough risk assessment and validation leading to adjustments in management and mitigation actions.

The template and recommendations set forth in the Interim Guidelines were based upon the Avian Powerline Interaction Committee's Avian Protection Plan template (<http://www.aplic.org/>) developed for electric utilities and modified accordingly to address the unique concerns of wind energy facilities. These recommendations are also consistent with the Service's wind energy guidelines. We recommend contacting us as early as possible in the planning process to discuss the need and process for developing a site-specific Bird and Bat Conservation Strategy.

The Service has also developed guidance regarding wind power development in relation to prairie grouse leks (sage-grouse are included in this). This document can be found at: http://www.fws.gov/southwest/es/Oklahoma/documents/te_species/wind%20power/prairie%20grouse%20lek%205%20mile%20public.pdf.

Migratory Birds are a Service Trust Resource. Based on the Service's conservation responsibilities and management authority for migratory birds under the Migratory Bird Treaty Act of 1918, as amended (MBTA; 16 U.S.C. 703 *et seq.*), we recommend that any land clearing or other surface disturbance associated with proposed actions within the project area be timed to

avoid potential destruction of bird nests or young, or birds that breed in the area. Such destruction may be in violation of the MBTA. Under the MBTA, nests with eggs or young of migratory birds may not be harmed, nor may migratory birds be killed. Therefore, we recommend land clearing be conducted outside the avian breeding season. If this is not feasible, we recommend a qualified biologist survey the area prior to land clearing. If nests are located, or if other evidence of nesting (*i.e.*, mated pairs, territorial defense, carrying nesting material, transporting food) is observed, a protective buffer (the size depending on the habitat requirements of the species) should be delineated and the entire area avoided to prevent destruction or disturbance to nests until they are no longer active.

Guidance for minimizing impacts to migratory birds for projects involving communications towers (*e.g.*, cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

If wetlands, springs, or streams are known to occur in the project area or are present in the vicinity of the project area, we ask that you be aware of potential impacts project activities may have on these habitats. Discharge of fill material into wetlands or waters of the United States is regulated by the U.S. Army Corps of Engineers (ACOE) pursuant to section 404 of the Clean Water Act of 1972, as amended. We recommend you contact the ACOE's Regulatory Section regarding the possible need for a permit. For projects located in northern Nevada (Carson City, Churchill, Douglas, Elko, Esmeralda, Eureka, Humboldt, Lander, Lyon, Mineral, Pershing, Storey, and Washoe Counties) contact the Reno Regulatory Office at 300 Booth Street, Room 3060, Reno, Nevada 89509, (775) 784-5304; in southern Nevada (Clark, Lincoln, Nye, and White Pine Counties) contact the St. George Regulatory Office at 321 North Mall Drive, Suite L-101, St. George, Utah 84790-7314, (435) 986-3979; or in California along the eastern Sierra contact the Sacramento Regulatory Office at 650 Capitol Mall, Suite 5-200, Sacramento, California 95814, (916) 557-5250.

We appreciate your concern for threatened and endangered species. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

The table below outlines lead FWS field offices by county and land ownership/project type. Please refer to this table when you are ready to coordinate (including requests for section 7 consultation) with the field office corresponding to your project, and send any documentation regarding your project to that corresponding office. Therefore, the lead FWS field office may not be the office listed above in the letterhead.

Lead FWS offices by County and Ownership/Program

County	Ownership/Program	Species	Office Lead*
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Alameda	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
Alameda	All ownerships but tidal/estuarine	All	SFWO
Alpine	Humboldt Toiyabe National Forest	All	RFWO
Alpine	Lake Tahoe Basin Management Unit	All	RFWO
Alpine	Stanislaus National Forest	All	SFWO
Alpine	El Dorado National Forest	All	SFWO
Colusa	Mendocino National Forest	All	AFWO
Colusa	Other	All	By jurisdiction (see map)
Contra Costa	Legal Delta (Excluding ECCHCP)	All	BDFWO
Contra Costa	Antioch Dunes NWR	All	BDFWO
Contra Costa	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
Contra Costa	All ownerships but tidal/estuarine	All	SFWO
Del Norte	All	All	AFWO
El Dorado	El Dorado National Forest	All	SFWO
El Dorado	LakeTahoe Basin Management Unit		RFWO
Glenn	Mendocino National Forest	All	AFWO
Glenn	Other	All	By jurisdiction (see map)
Humboldt	All except Shasta Trinity National Forest	All	AFWO

Humboldt	Shasta Trinity National Forest	All	YFWO
Lake	Mendocino National Forest	All	AFWO
Lake	Other	All	By jurisdiction (see map)
Lassen	Modoc National Forest	All	KFWO
Lassen	Lassen National Forest	All	SFWO
Lassen	Toiyabe National Forest	All	RFWO
Lassen	BLM Surprise and Eagle Lake Resource Areas	All	RFWO
Lassen	BLM Alturas Resource Area	All	KFWO
Lassen	Lassen Volcanic National Park	All (includes Eagle Lake trout on all ownerships)	SFWO
Lassen	All other ownerships	All	By jurisdiction (see map)
Marin	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
Marin	All ownerships but tidal/estuarine	All	SFWO
Mendocino	Russian River watershed	All	SFWO
Mendocino	All except Russian River watershed	All	AFWO
Modoc	Modoc National Forest	All	KFWO
Modoc	BLM Alturas Resource Area	All	KFWO
Modoc	Klamath Basin National Wildlife Refuge Complex	All	KFWO
Modoc	BLM Surprise and Eagle Lake Resource Areas	All	RFWO

Modoc	All other ownerships	All	By jurisdiction (See map)
Mono	Inyo National Forest	All	RFWO
Mono	Humboldt Toiyabe National Forest	All	RFWO
Napa	All ownerships but tidal/estuarine	All	SFWO
Napa	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Nevada	Humboldt Toiyabe National Forest	All	RFWO
Nevada	All other ownerships	All	By jurisdiction (See map)
Placer	Lake Tahoe Basin Management Unit	All	RFWO
Placer	All other ownerships	All	SFWO
Sacramento	Legal Delta	Delta Smelt	BDFWO
Sacramento	Other	All	By jurisdiction (see map)
San Francisco	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO
San Francisco	All ownerships but tidal/estuarine	All	SFWO
San Mateo	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO
San Mateo	All ownerships but tidal/estuarine	All	SFWO
San Joaquin	Legal Delta excluding San Joaquin HCP	All	BDFWO

San Joaquin	Other	All	SFWO
Santa Clara	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO
Santa Clara	All ownerships but tidal/estuarine	All	SFWO
Shasta	Shasta Trinity National Forest except Hat Creek Ranger District (administered by Lassen National Forest)	All	YFWO
Shasta	Hat Creek Ranger District	All	SFWO
Shasta	Bureau of Reclamation (Central Valley Project)	All	BDFWO
Shasta	Whiskeytown National Recreation Area	All	YFWO
Shasta	BLM Alturas Resource Area	All	KFWO
Shasta	Caltrans	By jurisdiction	SFWO/AFWO
Shasta	Ahjumawi Lava Springs State Park	Shasta crayfish	SFWO
Shasta	All other ownerships	All	By jurisdiction (see map)
Shasta	Natural Resource Damage Assessment, all lands	All	SFWO/BDFWO
Sierra	Humboldt Toiyabe National Forest	All	RFWO
Sierra	All other ownerships	All	SFWO
Siskiyou	Klamath National Forest (except Ukonom District)	All	YFWO
Siskiyou	Six Rivers National Forest and Ukonom District	All	AFWO
Siskiyou	Shasta Trinity National Forest	All	YFWO

Siskiyou	Lassen National Forest	All	SFWO
Siskiyou	Modoc National Forest	All	KFWO
Siskiyou	Lava Beds National Volcanic Monument	All	KFWO
Siskiyou	BLM Alturas Resource Area	All	KFWO
Siskiyou	Klamath Basin National Wildlife Refuge Complex	All	KFWO
Siskiyou	All other ownerships	All	By jurisdiction (see map)
Solano	Suisun Marsh	All	BDFWO
Solano	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Solano	All ownerships but tidal/estuarine	All	SFWO
Solano	Other	All	By jurisdiction (see map)
Sonoma	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Sonoma	All ownerships but tidal/estuarine	All	SFWO
Tehama	Mendocino National Forest	All	AFWO
Tehama	Shasta Trinity National Forest except Hat Creek Ranger District (administered by Lassen National Forest)	All	YFWO
Tehama	All other ownerships	All	By jurisdiction (see map)
Trinity	BLM	All	AFWO
Trinity	Six Rivers National Forest	All	AFWO
Trinity	Shasta Trinity National Forest	All	YFWO

Trinity	Mendocino National Forest	All	AFWO
Trinity	BIA (Tribal Trust Lands)	All	AFWO
Trinity	County Government	All	AFWO
Trinity	All other ownerships	All	By jurisdiction (See map)
Yolo	Yolo Bypass	All	BDFWO
Yolo	Other	All	By jurisdiction (see map)
All	FERC-ESA	All	By jurisdiction (see map)
All	FERC-ESA	Shasta crayfish	SFWO
All	FERC-Relicensing (non-ESA)	All	BDFWO

***Office Leads:**

AFWO=Arcata Fish and Wildlife Office

BDFWO=Bay Delta Fish and Wildlife Office

KFWO=Klamath Falls Fish and Wildlife Office

RFWO=Reno Fish and Wildlife Office

YFWO=Yreka Fish and Wildlife Office

Attachment(s):

- Official Species List
 - USFWS National Wildlife Refuges and Fish Hatcheries
 - Migratory Birds
 - Wetlands
-

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Reno Fish And Wildlife Office

1340 Financial Boulevard, Suite 234

Reno, NV 89502-7147

(775) 861-6300

Project Summary

Consultation Code: 08ENVD00-2020-SLI-0455

Event Code: 08ENVD00-2020-E-01232

Project Name: Proposed VA Elko, NV National Veterans Burial Ground

Project Type: LAND - ACQUISITION

Project Description: Approximately 15 acres

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/40.851479317687335N115.79814915457408W>



Counties: Elko, NV

Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Gray Wolf <i>Canis lupus</i> Population: Western Distinct Population Segment No critical habitat has been designated for this species.	Proposed Endangered

Fishes

NAME	STATUS
Lahontan Cutthroat Trout <i>Oncorhynchus clarkii henshawi</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3964 Species survey guidelines: https://ecos.fws.gov/ipac/guideline/survey/population/233/office/14320.pdf	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

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1. The [Migratory Birds Treaty Act](#) of 1918.
 2. The [Bald and Golden Eagle Protection Act](#) of 1940.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Dec 1 to Aug 31
Golden Eagle <i>Aquila chrysaetos</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/1680	Breeds Dec 1 to Aug 31

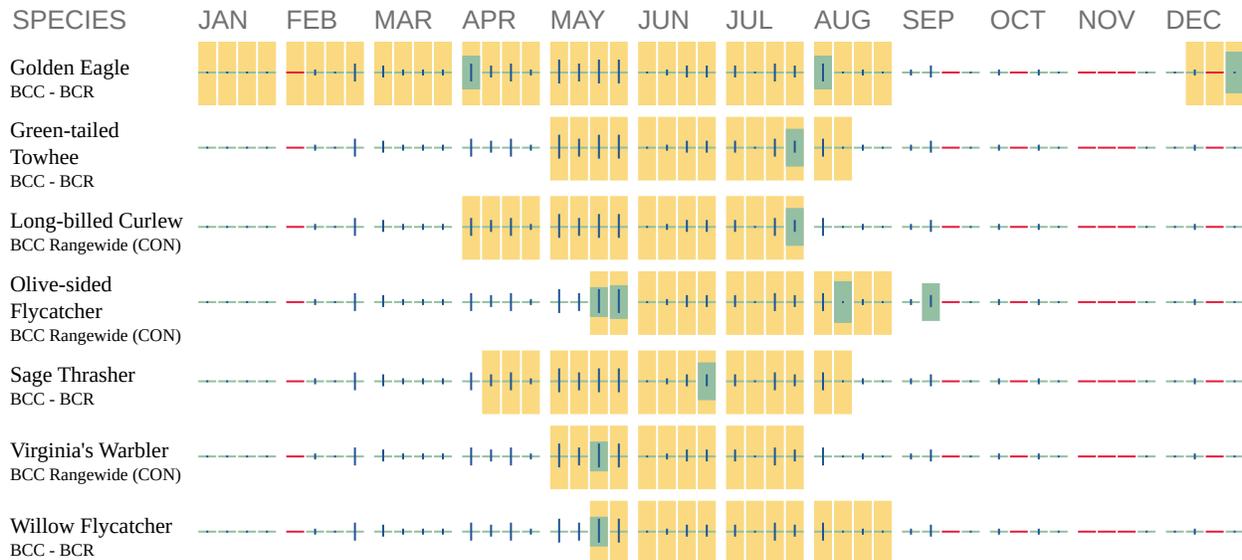
NAME	BREEDING SEASON
Green-tailed Towhee <i>Pipilo chlorurus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9444	Breeds May 1 to Aug 10
Long-billed Curlew <i>Numenius americanus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/5511	Breeds Apr 1 to Jul 31
Olive-sided Flycatcher <i>Contopus cooperi</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Sage Thrasher <i>Oreoscoptes montanus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9433	Breeds Apr 15 to Aug 10
Virginia's Warbler <i>Vermivora virginiae</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9441	Breeds May 1 to Jul 31
Willow Flycatcher <i>Empidonax traillii</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/3482	Breeds May 20 to Aug 31

Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ “Proper Interpretation and Use of Your Migratory Bird Report” before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.



Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

Migratory Birds FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
 2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
 3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).
-

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ “What does IPaC use to generate the migratory birds potentially occurring in my specified location”. Please be aware this report provides the “probability of presence” of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the “no data” indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ “Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds” at the bottom of your migratory bird trust resources page.

Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

RIVERINE

- [R4SBC](#)
-



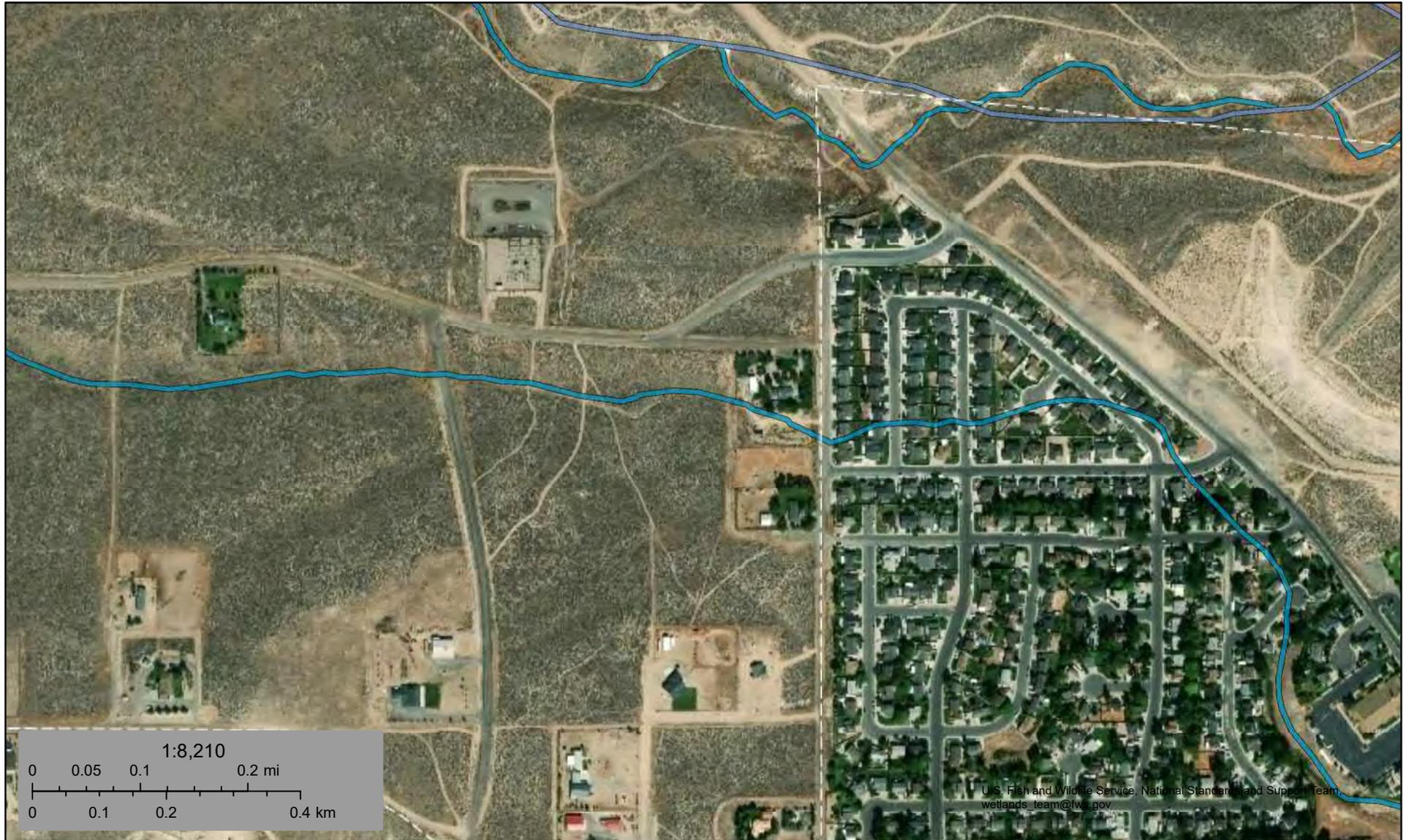
U.S. Fish and Wildlife Service, National Standards and Support Team,
wetlands_team@fws.gov

August 23, 2018

Wetlands

- | | | | | | |
|---|--------------------------------|---|-----------------------------------|---|----------|
|  | Estuarine and Marine Deepwater |  | Freshwater Emergent Wetland |  | Lake |
|  | Estuarine and Marine Wetland |  | Freshwater Forested/Shrub Wetland |  | Other |
| | |  | Freshwater Pond |  | Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



May 20, 2020

Wetlands

- | | | |
|--|---|--|
|  Estuarine and Marine Deepwater |  Freshwater Emergent Wetland |  Lake |
|  Estuarine and Marine Wetland |  Freshwater Forested/Shrub Wetland |  Other |
| |  Freshwater Pond |  Riverine |

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National Flood Hazard Layer FIRMette



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



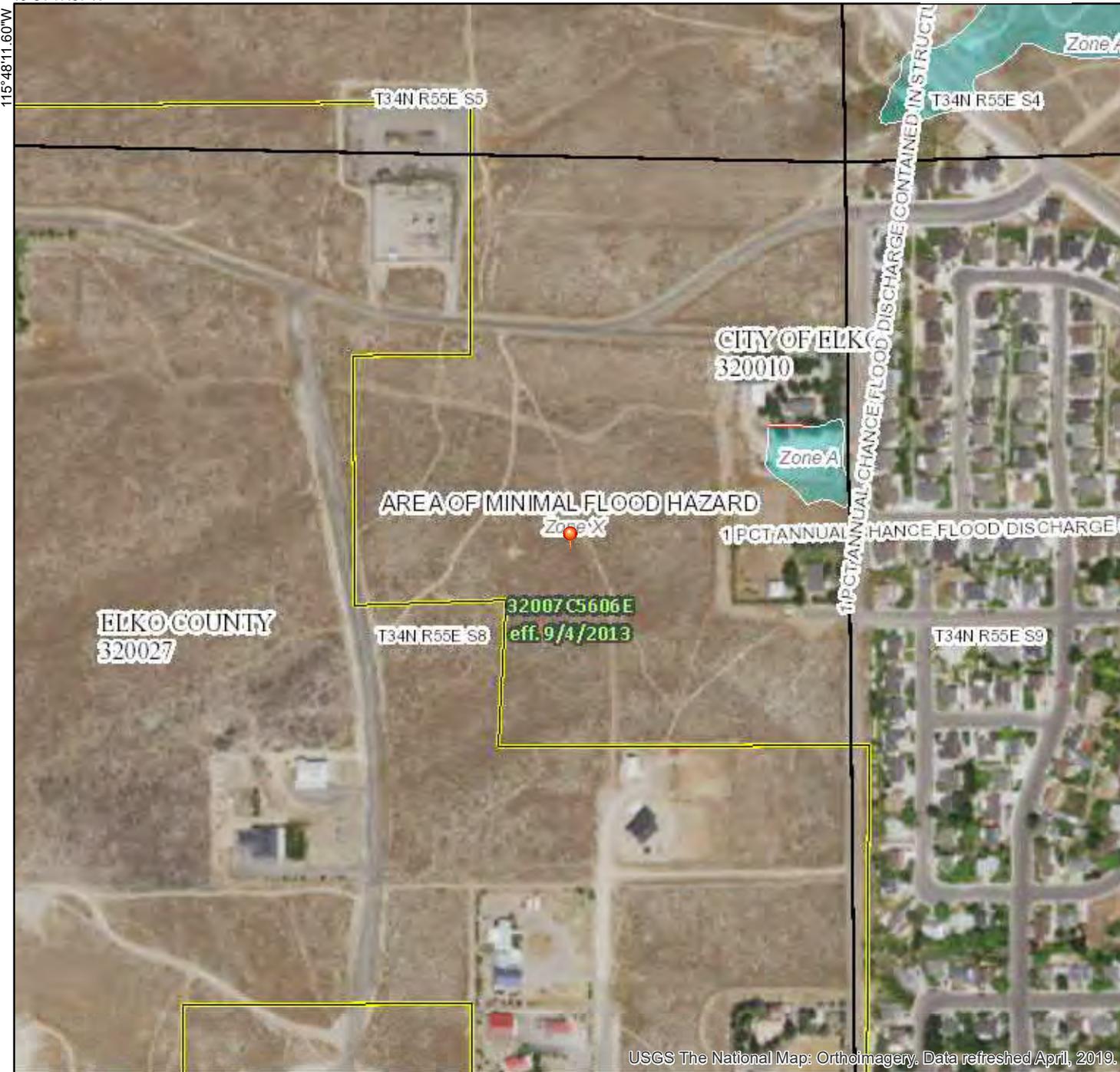
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

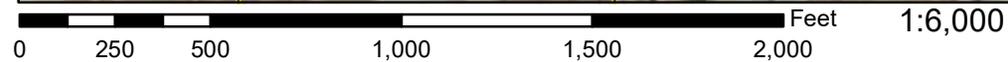
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 5/20/2020 at 10:01:06 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

40°51'17.67"N
115°48'11.60"W



USGS The National Map: Orthoimagery. Data refreshed April, 2019.



40°50'50.45"N
115°47'34.14"W

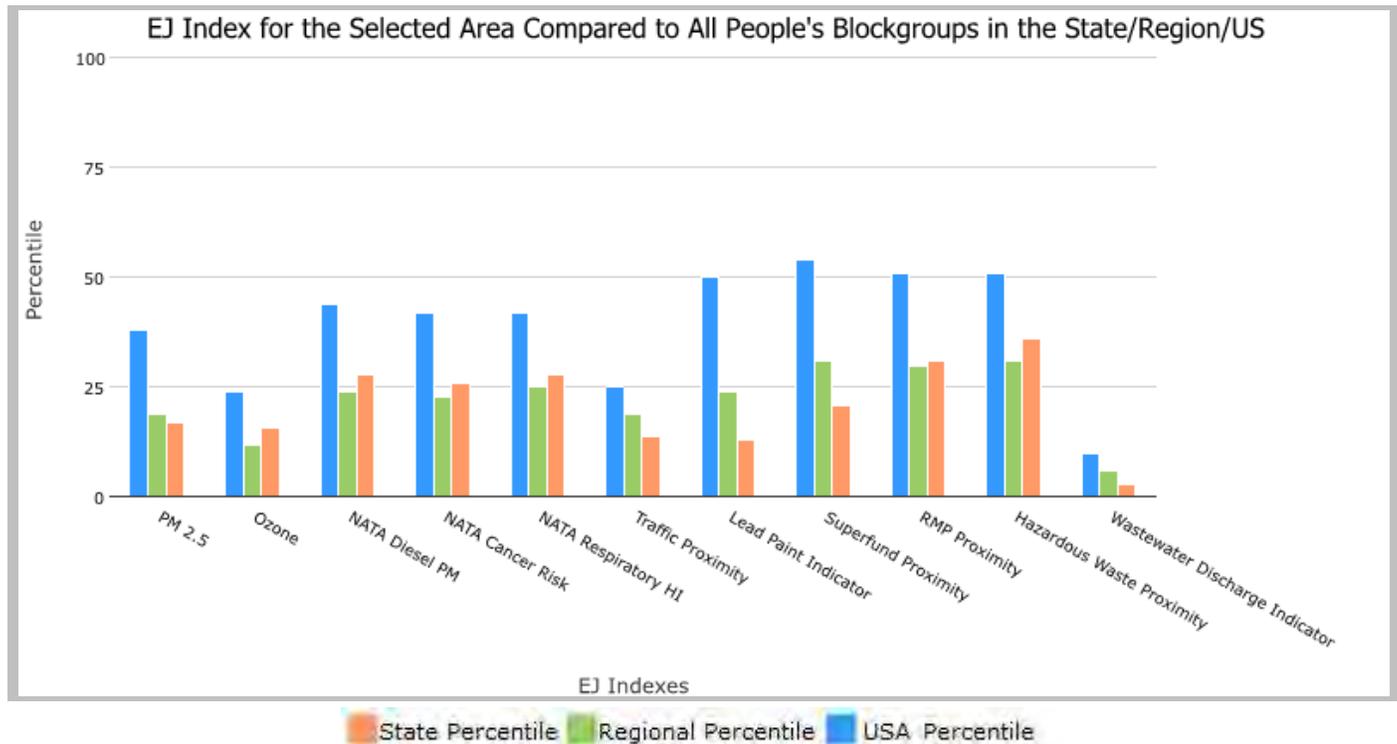
1 miles Ring Centered at 40.849737,-115.810741, NEVADA, EPA Region 9

Approximate Population: 1,416

Input Area (sq. miles): 3.14

Site 1

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	17	19	38
EJ Index for Ozone	16	12	24
EJ Index for NATA* Diesel PM	28	24	44
EJ Index for NATA* Air Toxics Cancer Risk	26	23	42
EJ Index for NATA* Respiratory Hazard Index	28	25	42
EJ Index for Traffic Proximity and Volume	14	19	25
EJ Index for Lead Paint Indicator	13	24	50
EJ Index for Superfund Proximity	21	31	54
EJ Index for RMP Proximity	31	30	51
EJ Index for Hazardous Waste Proximity	36	31	51
EJ Index for Wastewater Discharge Indicator	3	6	10



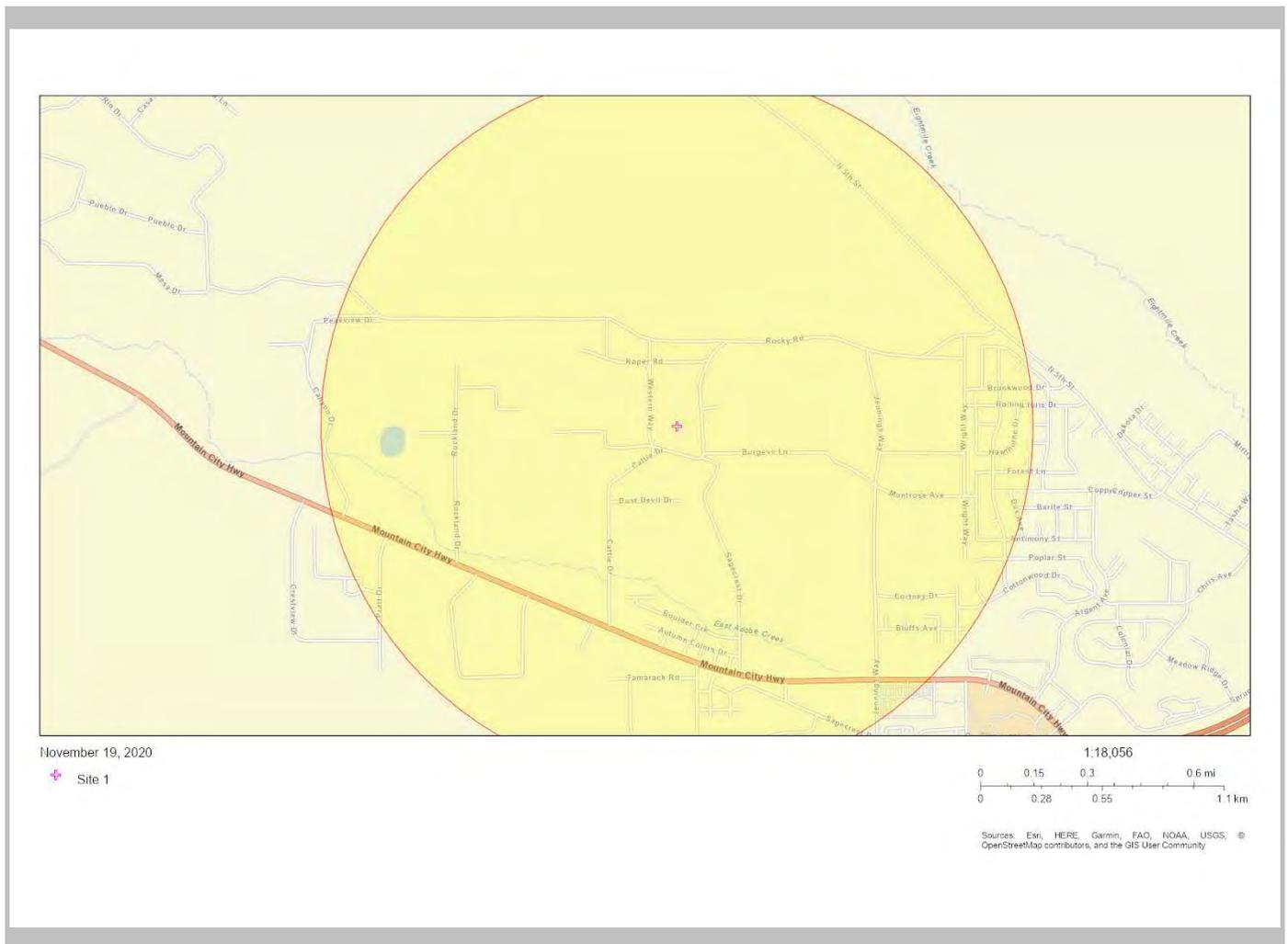
This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

1 miles Ring Centered at 40.849737,-115.810741, NEVADA, EPA Region 9

Approximate Population: 1,416

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Site 1



Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

EJSCREEN Report (Version 2019)



1 miles Ring Centered at 40.849737,-115.810741, NEVADA, EPA Region 9

Approximate Population: 1,416

Input Area (sq. miles): 3.14

Site 1

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Environmental Indicators							
Particulate Matter (PM 2.5 in $\mu\text{g}/\text{m}^3$)	5.01	6.46	8	9.21	1	8.3	1
Ozone (ppb)	45	54.6	1	48.9	31	43	64
NATA* Diesel PM ($\mu\text{g}/\text{m}^3$)	0.116	0.617	12	0.479	<50th	0.479	<50th
NATA* Cancer Risk (lifetime risk per million)	15	33	1	35	<50th	32	<50th
NATA* Respiratory Hazard Index	0.19	0.5	1	0.53	<50th	0.44	<50th
Traffic Proximity and Volume (daily traffic count/distance to road)	120	580	33	1700	18	750	38
Lead Paint Indicator (% Pre-1960 Housing)	0.0043	0.052	57	0.24	17	0.28	11
Superfund Proximity (site count/km distance)	0.0041	0.012	2	0.15	0	0.13	0
RMP Proximity (facility count/km distance)	0.035	0.38	5	0.99	2	0.74	2
Hazardous Waste Proximity (facility count/km distance)	0.032	0.85	4	2.9	2	4	3
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	0.0066	310	83	31	75	14	77
Demographic Indicators							
Demographic Index	24%	42%	19	47%	17	36%	39
Minority Population	25%	50%	18	59%	13	39%	44
Low Income Population	23%	35%	32	34%	37	33%	38
Linguistically Isolated Population	1%	6%	28	8%	21	4%	47
Population With Less Than High School Education	9%	14%	40	17%	39	13%	46
Population Under 5 years of age	3%	6%	23	6%	21	6%	23
Population over 64 years of age	6%	15%	16	14%	17	15%	13

* The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: <https://www.epa.gov/national-air-toxics-assessment>.

For additional information, see: www.epa.gov/environmentaljustice

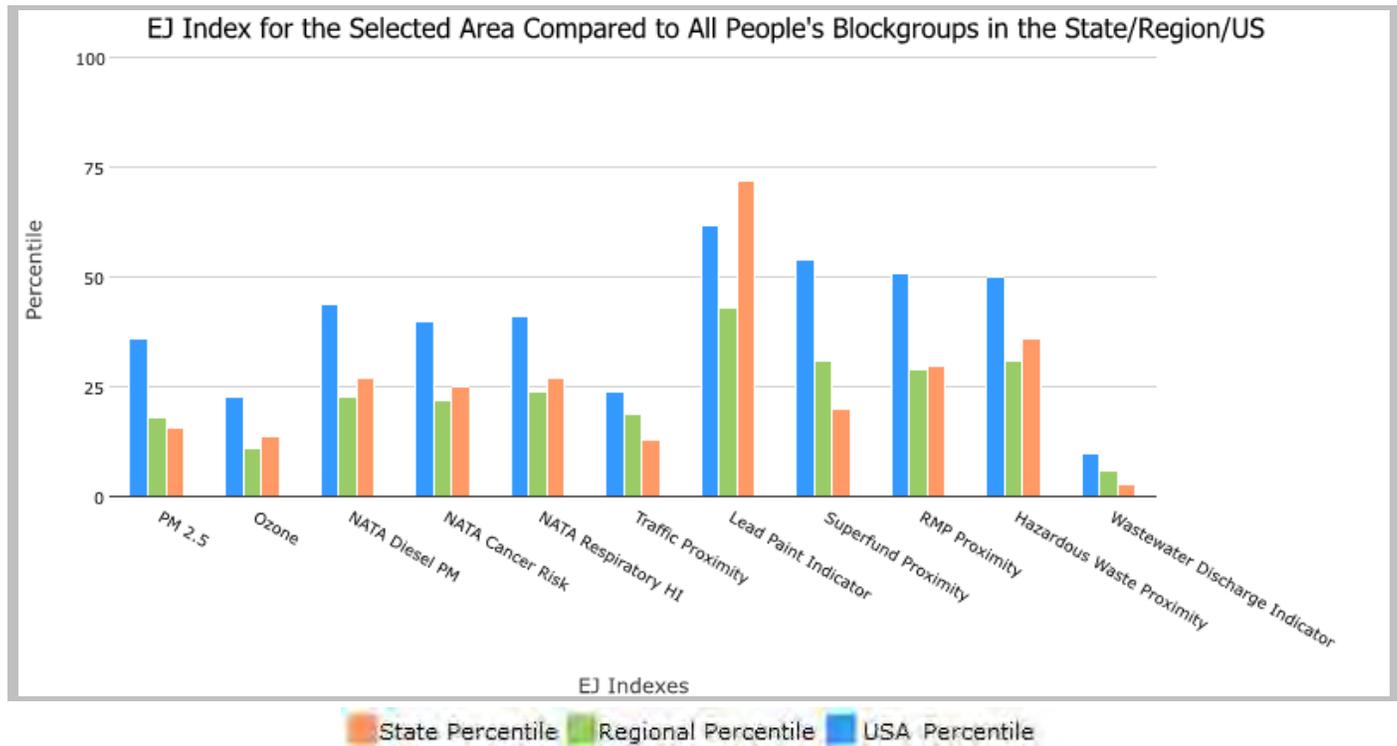
EJSCREEN is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJSCREEN outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.

1 miles Ring Centered at 40.851371,-115.797853, NEVADA, EPA Region 9

Approximate Population: 4,903

Input Area (sq. miles): 3.14

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	16	18	36
EJ Index for Ozone	14	11	23
EJ Index for NATA* Diesel PM	27	23	44
EJ Index for NATA* Air Toxics Cancer Risk	25	22	40
EJ Index for NATA* Respiratory Hazard Index	27	24	41
EJ Index for Traffic Proximity and Volume	13	19	24
EJ Index for Lead Paint Indicator	72	43	62
EJ Index for Superfund Proximity	20	31	54
EJ Index for RMP Proximity	30	29	51
EJ Index for Hazardous Waste Proximity	36	31	50
EJ Index for Wastewater Discharge Indicator	3	6	10

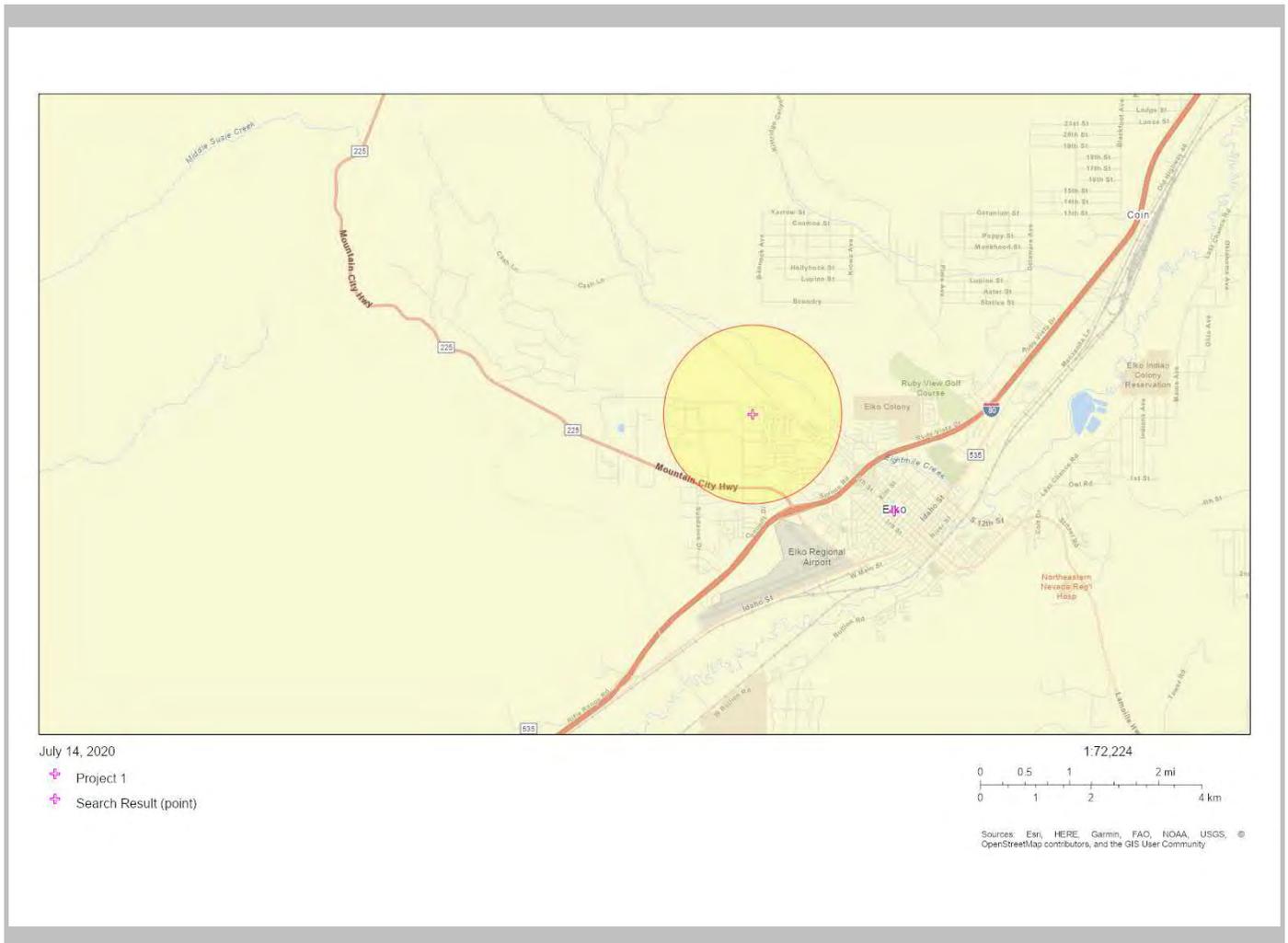


This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

1 miles Ring Centered at 40.851371,-115.797853, NEVADA, EPA Region 9

Approximate Population: 4,903

Input Area (sq. miles): 3.14



Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

EJSCREEN Report (Version 2019)



1 miles Ring Centered at 40.851371,-115.797853, NEVADA, EPA Region 9

Approximate Population: 4,903

Input Area (sq. miles): 3.14

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Environmental Indicators							
Particulate Matter (PM 2.5 in $\mu\text{g}/\text{m}^3$)	4.98	6.46	8	9.21	1	8.3	1
Ozone (ppb)	45	54.6	1	48.9	31	43	63
NATA* Diesel PM ($\mu\text{g}/\text{m}^3$)	0.11	0.617	11	0.479	<50th	0.479	<50th
NATA* Cancer Risk (lifetime risk per million)	15	33	1	35	<50th	32	<50th
NATA* Respiratory Hazard Index	0.19	0.5	1	0.53	<50th	0.44	<50th
Traffic Proximity and Volume (daily traffic count/distance to road)	120	580	33	1700	19	750	39
Lead Paint Indicator (% Pre-1960 Housing)	0	0.052	56	0.24	17	0.28	10
Superfund Proximity (site count/km distance)	0.0041	0.012	2	0.15	0	0.13	0
RMP Proximity (facility count/km distance)	0.035	0.38	5	0.99	2	0.74	2
Hazardous Waste Proximity (facility count/km distance)	0.032	0.85	4	2.9	2	4	3
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	0.0064	310	83	31	75	14	77
Demographic Indicators							
Demographic Index	23%	42%	17	47%	15	36%	37
Minority Population	25%	50%	18	59%	14	39%	44
Low Income Population	21%	35%	29	34%	33	33%	34
Linguistically Isolated Population	1%	6%	27	8%	21	4%	46
Population With Less Than High School Education	8%	14%	39	17%	38	13%	45
Population Under 5 years of age	4%	6%	25	6%	23	6%	25
Population over 64 years of age	7%	15%	20	14%	21	15%	16

* The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: <https://www.epa.gov/national-air-toxics-assessment>.

For additional information, see: www.epa.gov/environmentaljustice

EJSCREEN is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJSCREEN outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.

APPENDIX F – PUBLIC NOTICES AND COMMENTS

NOTICE OF AVAILABILITY

DRAFT ENVIRONMENTAL ASSESSMENT

U.S. DEPARTMENT OF VETERANS AFFAIRS

Proposed National Veterans Burial Ground Elko County, Nevada

The U.S. Department of Veterans Affairs (VA) announces the availability of a Draft Environmental Assessment (EA) for public review and comment. The Draft EA evaluates the potential environmental effects of the acquisition, development, and operation of a new small National Cemetery on approximately 10 to 15 acres of land in the vicinity of Elko, Nevada. VA is considering two alternative sites for the proposed cemetery. Site 1 is located north of Cattle Drive, east of Western Way and west of Rocky Road, in Elko County. Site 2 is located at the southeast corner of Jennings Way and Rocky Road, in the City of Elko.

VA prepared the Draft EA in accordance with the National Environmental Policy Act and regulations implementing the Act. Comments will be addressed in the Final EA, after which VA intends to issue a Finding of No Significant Impact. The public comment period ends on February 8, 2021.

The Draft EA is available for review online at:

<https://www.cfm.va.gov/environmental/index.asp>

Please email comments by February 8, 2021 to Fernando Fernández (fernando.fernandez@va.gov), using the subject line “Elko National Cemetery Draft EA”. If you have any questions or are unable to submit your comments by email, please contact Fernando Fernández at (202) 632-5529.

ELKO DAILY FREE PRESS

3720 Idaho St.

Elko, Nev. 89801

(775) 738-3118

Affidavit of Publication

I, Seana K. Chapman, Legal Clerk of the *Elko Daily Free Press*, published daily at Elko, Nevada, do solemnly swear that a copy of **NOTICE/PROPOSED NATIONAL VETERANS BURIAL GROUND**, as per clipping attached, was published on **January 8, 2021**, in the regular and entire issue of the above said newspaper, with general circulation of Elko and Lander counties, and not in any supplement thereof, for **TWO (2) weeks** commencing with the issue dated **January 8, 2021**, and ending with the issue dated as **January 12, 2021**, with subsequent publications being made as follows:

January 9, 2021

NOTICE OF AVAILABILITY
DRAFT ENVIRONMENTAL ASSESSMENT
U.S. DEPARTMENT OF VETERANS AFFAIRS
Proposed National Veterans Burial Ground
Elko County, Nevada

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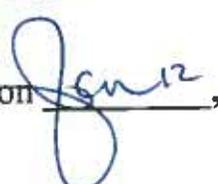
VA prepared the Draft EA in accordance with the National Environmental Policy Act and regulations implementing the Act. Comments will be addressed in the Final EA, after which VA intends to issue a Finding of No Significant Impact. The public comment period ends on February 8, 2021.

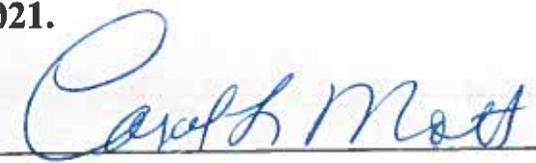
The Draft EA is available for review online at:
<https://www.dfm.va.gov/environmental/index.asp>

Please email comments by February 8, 2021 to Fernando Fernández (fernando.fernandez@va.gov), using the subject line "Elko National Cemetery Draft EA". If you have any questions or are unable to submit your comments by email, please contact Fernando Fernández at (202) 632-5529.

January 8, 9, 12, 2021


Seana K. Chapman

Subscribed and sworn to before me, on  Jan 12,
2021.


Notary Public

State of Nevada

County of Elko





DEPARTMENT OF VETERANS AFFAIRS
Construction & Facilities Management, Office of Real Property
425 I Street, NW
Washington DC 20001

Date: January 4, 2021
Notice: Valued Stakeholders
Subject: Notice of Availability - Draft NEPA Environmental Assessment
Proposed National Veterans Burial Ground
Elko County, Nevada

The U.S. Department of Veterans Affairs (VA) announces the availability of a Draft Environmental Assessment (EA) for public review and comment. The Draft EA evaluates the potential environmental effects of the acquisition, development, and operation of a new small National Cemetery on approximately 10 to 15 acres of land in the vicinity of Elko, Nevada. VA is considering two alternative sites for the proposed cemetery. Site 1 is located north of Cattle Drive, east of Western Way and west of Rocky Road, in Elko County. Site 2 is located at the southeast corner of Jennings Way and Rocky Road, in the City of Elko.

VA prepared the Draft EA in accordance with the National Environmental Policy Act and the Council on Environmental Quality and VA regulations implementing the Act (40 CFR Part 1500, 38 CFR Part 26). Comments will be addressed in the Final EA, after which VA intends to issue a Finding of No Significant Impact. The public comment period ends on February 8, 2021.

The Draft EA is available for review online at:

<https://www.cfm.va.gov/environmental/index.asp>

Please email comments by February 8, 2021, to:

Fernando Fernández
VA Office of Construction & Facilities Management
fernando.fernandez@va.gov

Please put "Elko National Cemetery Draft EA" in the subject line.

If you have any questions or are unable to submit your comments by email, please contact Fernando Fernández at (202) 632-5529.

Sincerely,

FERNANDO L.
FERNANDEZ
336237

Digitally signed by
FERNANDO L.
FERNANDEZ 336237
Date: 2021.01.04
09:46:09 -05'00'

Fernando L. Fernández REM
Environmental Engineer
U.S. Department of Veterans Affairs
Construction & Facilities Management Office



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

February 8, 2021

Fernando Fernández
U.S. Department of Veterans Affairs
Construction & Facilities Management Office
425 I Street, NW
Washington DC 20001

Subject: Draft Environmental Assessment for the Acquisition, Development, and Operation of the National Veterans Burial Ground, Elko County, Nevada

Dear Fernando Fernández:

The U.S. Environmental Protection Agency has reviewed the Draft Environmental Assessment for the subject project. The following comments are provided pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act.

The Draft EA evaluates the potential environmental effects of the acquisition, development, and operation of a new small National Cemetery on approximately 10 to 15 acres of land in the vicinity of Elko, Nevada. The Veterans Administration is considering two alternative sites and does not identify a preferred alternative. We offer the following comments and recommendations for the VA to consider when making a Finding of No Significant Impact (FONSI) determination.

Ephemeral Drainage

The DEA states that the ephemeral drainage that traverses the northern portion of Site 2 is “better characterized as a dry drainageway that likely only contains water following large storms or after a fast snowmelt” (p. 21); however, this is the definition of ephemeral streams, which are also known as rain-dependent streams. The statement on page 29 that the stream does not possess characteristic indicators (hydric soils and wetland vegetation) that would classify it as an ephemeral stream is incorrect, as hydric soils are not a primary indicator of whether a stream is ephemeral; instead flow duration classes are used. Please also be aware that USGS topographic maps often do not depict ephemeral streams and cannot always accurately distinguish between ephemeral and intermittent flow regimes. Because of the arid climate in the study area, it is accurate to classify the drainage as an ephemeral stream or desert wash.

We appreciate that the DEA states that, if Site 2 is selected, “the drainageway located in the northern portion of Site 2 would not be substantially altered” (p. 21) and there is a best management practice to “Maintain the existing drainageway in the northern portion of Site 2, if selected” (p. 41). An environmentally preferable approach would be to ensure the ephemeral drainage is not altered at all and that a small buffer along the drainage that includes some of the xeroriparian vegetation be delineated and marked for preservation in the cemetery design. It is important to note that while ephemeral streams

only flow following precipitation, they provide the same ecological and hydrological functions as perennial streams by moving water, nutrients, and sediment throughout the watershed and they can directly affect the integrity and functional condition of higher-order waters downstream.¹

Recommendation: If Site 2 is selected, commit to complete avoidance of the ephemeral drainage and a vegetation buffer and indicate this in the best management practices in the Final EA. Modify the text of the Final EA regarding the definition of ephemeral stream, as indicated above, for accuracy of the impact assessment.

Invasive Species

The sole mention of invasive species in the Draft EA is in the context of re-vegetating land disturbed by construction; the list of BMPs states that native grasses would be used, to the extent practicable, to avoid potential introduction of non-native or invasive species (p. 41). Invasive plant species/noxious weeds can easily be introduced to a site and spread inadvertently via construction equipment and vehicles. Noxious weeds have become a growing concern in Nevada, based on their ability to degrade and modify native plant communities, monopolize limited sources of moisture, increase fire risk, and adversely affect native pollinators. Active measures are required to prevent this introduction. Executive Order 13112 directs federal agencies to take actions to prevent the introduction of invasive, non-native species and control their impact if introduced.

Recommendation: In the Final EA, evaluate the potential for the spread of noxious weed species and identify management strategies and control techniques to prevent or minimize the establishment or spread of weed populations during construction. Ensure these measures are included in construction contracts. Include plans for ongoing monitoring during the operations phase with an early detection/rapid response program to help locate and eliminate new invaders.

Noise impacts

The Draft EA does not compare noise impacts of the two project sites evaluated, which is required under NEPA to inform decision-making (40 CFR 1502.14). Based on the maps included in the Draft EA, the area east of Site 2 contains two residential properties less than 200 feet from the eastern border of Site 2, and beyond that is a densely developed residential subdivision which appears to be approximately 820 feet from the eastern border of the site. Site 1 has fewer nearby residences. While construction noise is temporary, and BMPs to reduce noise impacts are included, the Draft EA identifies operational noise sources that include power equipment for grave site preparation, maintenance and upkeep, and periodic ceremonial rifle discharges (p. 25). Because many more residences are near Site 2, the impact assessment should differentiate the noise impacts of the two alternative sites.

Recommendation: Discuss the differences in noise impacts for the two project sites. The ceremonial rifle ceremonies have the potential to disturb nearby sensitive noise receptors. We recommend noise mitigation for this source be incorporated into cemetery design, especially if Site 2 is selected. Specifically, we recommend the VA:

- Locate the committal shelter, where ceremonial rifle salutes would occur, as far from residences and other sensitive receptors (such as the Adobe Middle School) as possible.
- Discuss in the Final EA how noise impacts from rifle discharges vary depending on the degree of angle fired in relation to receptors. Orient the committal shelter in the cemetery

¹ https://www.epa.gov/sites/production/files/2015-03/documents/ephemeral_streams_report_final_508-kepner.pdf

design such that the associated rifle volley noise is directed away from the closest existing residences.

- Explore sound shielding, such as from landscaping vegetation, berms, and other buffers, and incorporate in cemetery design as feasible.
- Since this would be a new noise source in an existing quiet area, provide for a noise complaint procedure so residents disturbed by noise from rifle ceremonies can provide feedback to the VA. If numerous complaints are received, the VA could revisit operations and further explore additional mitigation measures.

Induced Growth Impacts

The Draft EA does not discuss the potential for the site alternatives to induce additional growth which could lead to additional indirect impacts as a result of the project. Site 1 has a greater potential to induce growth since it would require installation of potable water lines into a new area. The City of Elko indicated in a letter that the potential extension of municipal water service to Site 1 could impact the future growth of the City (DEA p. 44, and Appendix B, pdf p. 23). Potential impacts from induced growth are considered indirect impacts (effects that are later in time or farther removed in distance) and should be evaluated in the impact assessment (40 CFR 1508.1(g)).

Recommendation: In the Final EA, discuss and compare the induced growth potential of the two alternative project sites. Disclose the potential for further development in the area around Site 1 that would receive potable water supply as a result of the project, and generally the kinds of environmental impacts that would result.

Tribal consultation

The Draft EA states that the VA consulted with federally recognized Native American tribes (p. 45) and that Tribal information and comments have been incorporated into the EA in Section 3.4, that Tribal input is summarized in Section 5, and that Tribal correspondence is provided in Appendix C (p. viii). However, no tribal input is apparent in the body of the EA and the correspondence in Appendix C consists solely of letters from the VA to tribes. The Draft EA indicates that no tribal responses were received (p. 16).

Recommendation: We recommend the statements on page 45 that tribal input has been incorporated into the EA be removed since no tribal input was received. If any additional steps were taken to ensure the project sites do not have religious and/or cultural significance to local area tribes, indicate this in the Final EA.

EPA appreciates the opportunity to review this Draft EA. When the Final EA is completed, please send one electronic copy to Karen Vitulano, lead reviewer for this project, at vitulano.karen@epa.gov. If you have any questions, please contact me at (415) 947-4167, or contact Karen at (415) 947-4178.

Sincerely,

JEAN PRIJATEL Digitally signed by JEAN PRIJATEL
Date: 2021.02.08 15:04:41 -08'00'

Jean Prijatel
Manager, Environmental Review Branch

From:
Sent: Monday, January 25, 2021 6:08 PM
To: Fernandez, Fernando L. (CFM)
Subject: [EXTERNAL] Elko National Cemetery Draft EA

January 25, 2021

Mr. Fernando Fernandez
Environmental Program Office (003C2)
Office of Construction & Facilities Management
U.S. Department of Veterans Affairs
810 Vermont Avenue, NW
Washington, DC 20420

fernando.fernandez@va.gov

Subject: Elko National Cemetery Draft EA

Sir:

I write to address the Draft EA for the Proposed National Veterans Burial Ground, Elko County, Nevada. I read the full document and the appendices. I am familiar with the area and agree with the Draft EA findings of no significant impact for the project. We are pleased to see the VA addressing the need for National Cemeteries in rural areas and encourage the selection of Site 2 for this project.

My father is an elderly U.S. Navy veteran who served from 1956 to 1959. This cemetery would serve him and the family well, as we all live in Elko County. I have talked to many other veterans who also appreciate the efforts of the VA to construct and operate a National Cemetery in the region. Thank you.

The location of Site 2 is positioned for similar future development nearby by the City of Elko. The site also allows for existing utilities. The City of Elko will no doubt be a good neighbor for the VA in the future. We encourage the selection of Site 2.

Thank you for the opportunity to review the Draft EA for this important project.

Sincerely,