Appendix C

Stantec Consulting Services Inc.

Biological Resources Technical Report

Mono County Streams License Amendments Project

November 2018

Biological Resources Technical Report

Mono County Streams License Amendments Project

November 8, 2019

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Sign-off Sheet

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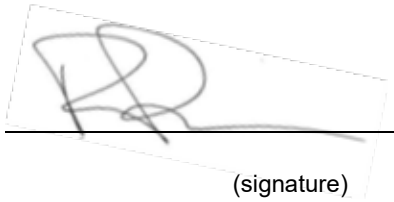
Prepared by 

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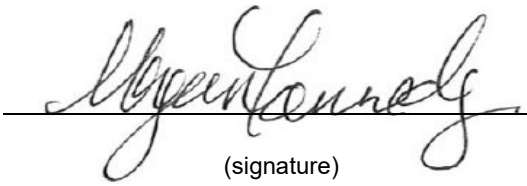
Rocky Brown, Associate Biologist

Reviewed by 

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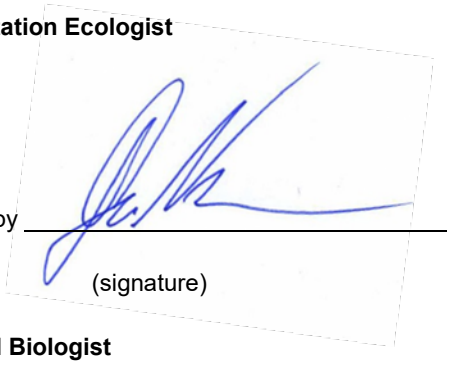
Reviewed and approved by 

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Jared Varonin, Principal Biologist

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Abbreviations

asml	above mean sea level
BRTR	Biological Resources Technical Report
BSA	Biological Study Area
CCH	Consortium of California Herbaria
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CNDDB	California Natural Diversity Database
CFR	Code of Federal Regulations
cfs	cubic feet per second
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CWA	Clean Water Act
DCH	Designated Critical Habitat
EIR	Environmental Impact Report
FACW	Facultative Wetland
FESA	Federal Endangered Species Act
FGC	Fish and Game Code
ESA	Endangered Species Act
LADWP	Los Angeles Department of Water and Power
LSAA	Lake and Streambed Alteration Agreement
MBTA	Migratory Bird Treaty Act
MCV	Manual of California Vegetation
MGORD	Mono Gate One Return Ditch
NCCP	Natural Community Conservation Plan
NEPA	National Environmental Policy Act
NPPA	Native Plant Protection Act
NRCS	National Resources Conservation Service
NWI	National Wetland Inventory
OBL	Obligate
Porter Cologne	Porter Cologne Water Quality Control Act
RWQCB	Regional Water Quality Control Board
SEFs	Stream Ecosystem Flows
SR 158	California State Route 158
SSC	Species of Special Concern
SWRCB	State Water Resources Control Board
WDR	Waste Discharge Requirement
WOTS	Waters of the State

WOTUS	Waters of the United States
WQC	Water Quality Certification
U.S.	United States
U.S. 395	United States Highway 395
USACE	United States Army Corps of Engineers
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

1.0 INTRODUCTION

This Biological Resources Technical Report (BRTR) is intended to document the biological resources that are associated with the Mono County Streams License Amendment Project (Project) located in Mono County, California (refer to Appendix A, Figure 1). The surveys conducted and discussions presented in this BRTR are intended to support planning and eventual regulatory agency permitting and associated documentation. A reconnaissance survey was conducted within accessible portions of the Project Site and within a surrounding 300-foot buffer zone, an approximate 706-acre area defined as the Biological Study Area (BSA) (refer to Appendix A, Figure 2). This BRTR describes the existing environmental conditions that occur within the BSA and surrounding areas and evaluates the potential for biological resources to occur based on those conditions with a special emphasis on special-status plant and wildlife species, wildlife corridors, and special-status/sensitive natural communities.

1.1 PROJECT LOCATION

Grant Lake is a reservoir operated by the Los Angeles Department of Water and Power (LADWP) in west-central Mono County. It is situated along Rush Creek, approximately seven miles southwest of its outfall into Mono Lake. The BSA is generally bordered by U.S. Highway 395 (U.S. 395) on the east and California State Route 158 (SR 158) on the north and west, Grant Lake Reservoir on the southwest, and an unpaved access road extending westward across U.S. 395 from Aeolian Buttes Road on the south. Portions of the southern end of the BSA lie within the Inyo National Forest.

1.2 PROJECT DESCRIPTION

LADWP is proposing amendments to the terms of existing State Water Resources Control Board (SWRCB) License Nos. 10191 and 10192 (License Amendments) related to operations on four Mono County streams. Under the License Amendments, revised instream flow schedules, called Stream Ecosystem Flows (SEFs), would replace existing baseflows, channel maintenance flows, and Stream Restoration Flows. The License Amendments would also require a more reliably fuller Grant Lake Reservoir, via diversion of Lee Vining Creek streamflow throughout most of the runoff year, to increase the magnitude, duration, and frequency of Grant Lake Reservoir spills and to provide cooler dam releases into Rush Creek from a deeper reservoir. The License Amendments also modify the existing monitoring program to ensure that the SWRCB continues to be informed about progress of stream restoration and to inform adaptive management of the SEFs. After the SWRCB issues the License Amendments, implementation by LADWP would require modification of the spillway on Grant Lake Reservoir in Mono County to allow for controlled release of higher volumes of water from the reservoir during specific time periods to simulate historical high flow conditions in Rush Creek.

LADWP proposes to install two 10-foot Langemann® gates in a newly excavated spillway channel to achieve the required SEFs in above normal run off years. The top of the gates will remain at the old spillway elevation of 7,130 feet (2,210 meters) above mean sea level (amsl), so the storage capacity of Grant Lake will remain the same. To acquire the depth and width required to install the two Langemann® gates and provide room for an access road, the

east abutment of the existing spillway will be cut back. This hill is also the west abutment for the dam and was previously excavated during the construction of the dam and the spillway in the late 1930s. [LADWP, 2014]

Fill from the cut will be used to raise the elevation of the access road along the MGORD, so the ditch can safely flow the required 380 cfs during normal and above runoff years. Remaining fill will be contoured into the abutment to the northeast or taken to a spoils pile adjacent to the abutment used during the construction of the dam and spillway. All topsoil will be removed and stored prior to placing fill and will be used to cap the abutment and spoils pile, so that they can be revegetated when the Project is complete. [LADWP, 2014]

The spillway channel from the bottom of the concrete apron to its confluence with Rush Creek will be rehabilitated to accommodate the increased flows. [LADWP, 2014]

With the exception of the road improvements located on United States Forest Service (USFS) property, all other activities will occur on City of Los Angeles property. The Project is also located inside the Mono Basin National Scenic Area and should remain invisible to the public traveling on SR 158, which is west of the Project. [LADWP, 2014]

1.3 SITE DESCRIPTION

The general Project area consists of the area between the Grant Lake Spillway cut, the spillway channel down to the confluence with Rush Creek, the spoil piles, staging areas, and the improvements to the MGORD access road (refer to **Figure 2** in **Appendix A**). Surrounding land use consists of relatively undeveloped open space sparsely interspersed with paved and unpaved roadways.

2.0 METHODOLOGIES

The biological resources assessment of the BSA included, but was not limited to, a literature review, reconnaissance-level survey, non-protocol survey to detect the presence of special-status plant and wildlife species, and non-protocol avian survey to detect the presence of listed birds. Stantec scientists conducted a reconnaissance-level survey for biological resources within the BSA on June 24, 2019, prior to which a preliminary literature review of readily available resources was performed. The survey was conducted by Stantec Associate Biologist Rocky Brown and Geologic Project Specialist Colleen Hulbert. The field survey was conducted by vehicle and on foot within the BSA where accessible based on terrain, safe access, and vegetation cover.

2.1 LITERATURE REVIEW

A literature search focused on the BSA was conducted prior to the field survey. The BSA is located within the United States Geological Survey (USGS) June Lake and Lee Vining, California, 7.5-minute topographic quadrangles. A search of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) was conducted encompassing the BSA and a surrounding 10-mile buffer area to determine special-status plants, wildlife, and vegetation communities that have been documented within the vicinity of the BSA (CDFW, 2019a). The database included portions of the following quadrangles surrounding and including the BSA:

- Mount Dana;
- Lee Vining;
- Mono Mills;
- Koip Peak;
- June Lake;
- Crestview;
- Mount Ritter;
- Mammoth Mountain; and
- Old Mammoth.

Additional data regarding the potential occurrence of special-status species and policies relating to these special-status natural resources were gathered from the following sources:

- State and federally listed endangered and threatened animals of California (CDFW, 2019b);
- Special Animals List (CDFW, 2019c);
- List of California Sensitive Natural Terrestrial Communities (CDFW, 2018);
- Inventory of Rare and Endangered Vascular Plants of California (CNPS, 2019);
- Consortium of California Herbaria (CCH, 2019); and
- Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA, 2019).

2.2 BIOLOGICAL SURVEYS AND HABITAT ASSESSMENT

2.2.1 Site Reconnaissance and Wildlife Surveys

In order to document the existing biological resources that are present in and adjacent to the BSA, Stantec conducted a habitat assessment and reconnaissance-level survey, a focused non-protocol survey for special-status plant and wildlife species, and a non-protocol avian survey to detect the presence of listed birds. The primary goal of the wildlife

surveys was to identify and assess habitat that may be capable of supporting special-status wildlife species and to document the presence/absence of special-status wildlife species.

The survey was conducted during a season and time of day when migratory birds were expected to be present, resident bird species were nesting and fledging, small mammals were active and detectable visually or by sign, above-ground amphibian and reptile movement would generally be detectable, and plants would be blooming and identifiable. However, it should be noted that some wildlife species and/or individuals may have been difficult to detect due to their elusive nature, cryptic morphology, or nocturnal behavior. The survey was conducted during daylight hours when temperatures were such that reptiles and other wildlife would be active (i.e., between 75 to 95° Fahrenheit). It should be noted that this assessment did not include protocol-level surveys for wildlife, nor was it floristic in nature (i.e., intended to identify all plant species occurring within the BSA).

The BSA was investigated by vehicle and on foot by experienced field biologists/environmental scientists. The entire BSA was driven via existing access roads, with periodic stops as necessary to closer investigate areas on foot, identify plants and wildlife observed, and map vegetation. Species were recorded through direct visual observation, sound, or their sign (e.g., scat, tracks, etc.). Species identifications conform to the most up-to-date field guides and technical literature.

2.2.2 Vegetation Mapping

Vegetation mapping was conducted concurrently with the botanical survey. Vegetation descriptions and nomenclature are based on A Manual of California Vegetation (MCV) (Sawyer et al., 2009), where applicable, and have been defined to the alliance level. Vegetation maps were prepared by recording tentative vegetation type boundaries over recent aerial photograph base maps using the ESRI® Collector for ArcGIS app on an Apple® iPad® coupled with a Bad Elf® GNSS Surveyor sub-meter external global positioning system (GPS) unit. Mapping was further refined in the office using ESRI® ArcGIS (version 10.7) with aerial photograph base maps with an accuracy of one foot. Most boundaries shown on the maps are accurate within approximately three feet; however, boundaries between some vegetation types are less precise due to difficulties interpreting aerial imagery and accessing stands of vegetation.

Vegetation communities can overlap in many characteristics and over time may shift from one community type to another. Also note that all vegetation maps and descriptions are subject to variability for the following reasons:

- In some cases, vegetation boundaries result from distinct events, such as wildfire or flooding, but vegetation types usually tend to intergrade on the landscape, without precise boundaries between them. Even distinct boundaries caused by fire or flood can be disguised after years of post-disturbance succession. Mapped boundaries represent best professional judgment, but usually should not be interpreted as literal delineations between sharply defined vegetation types.
- Natural vegetation tends to exist in generally recognizable types, but also may vary over time and geographic region. Written descriptions cannot reflect all local or regional variation. Many (perhaps most) stands of natural vegetation do not strictly fit into any named type. Therefore, a mapped unit is given the best name available in the classification system being used, but this name does not imply that the vegetation unambiguously matches written descriptions.

- Vegetation tends to be patchy. Small patches of one named type are often included within larger stands mapped as units of another type. For the BSA, the minimum mapping unit was approximately three feet, and smaller inclusions are described in the text but are not visible on the maps.

3.0 REGULATORY ENVIRONMENT

3.1 FEDERAL REGULATIONS

3.1.1 Federal Endangered Species Act

Federal Endangered Species Act (FESA) provisions protect federally listed threatened and endangered species and their habitats from unlawful "take" and ensure that federal actions do not jeopardize the continued existence of a listed species or result in the destruction or adverse modification of Designated Critical Habitat (DCH). Under the FESA, "take" is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any of the specifically enumerated conduct." The United States Fish and Wildlife Service's (USFWS) regulations define harm to mean "an act which actually kills or injures wildlife." Such an act "may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering" (50 CFR § 17.3).

DCH is defined in Section 3(5)(A) of the FESA as "(i) the specific areas within the geographical area occupied by the species on which are found those physical or biological features (I) essential to the conservation of the species, and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species upon a determination by the Secretary of Commerce or the Secretary of the Interior (Secretary) that such areas are essential for the conservation of the species." The effects analyses for DCH must consider the role of the critical habitat in both the continued survival and the eventual recovery (i.e., the conservation) of the species in question, consistent with the Ninth Circuit judicial opinion, Gifford Pinchot Task Force versus USFWS.

Activities that may result in "take" of individuals are regulated by the USFWS. Candidate species are not afforded any legal protection under FESA; however, candidate species typically receive special attention from federal and State agencies during the environmental review process.

3.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711) makes it unlawful to possess, buy, sell, purchase, barter or "take" any migratory bird listed in Title 50 of the Code of Federal Regulations (CFR) Part 10. "Take" is defined as possession or destruction of migratory birds, their nests, and/or eggs. Disturbances that cause nest abandonment and/or loss of reproductive effort or the loss of habitats upon which these birds depend may be a violation of the MBTA. The MBTA prohibits killing, possessing, or trading in migratory birds except in accordance with regulations prescribed by the Secretary. The MBTA encompasses whole birds, parts of birds, and bird nests and eggs.

3.1.3 Bald and Golden Eagle Protection Act of 1940 (16 USC 668)

The Bald and Golden Eagle Protection Act (BGEPA) of 1940 (16 USC 668, enacted by 54 Stat. 250) protects bald and golden eagles by prohibiting the taking, possession, and commerce of such birds and establishes civil penalties for violation of this Act. "Take" of bald and golden eagles is defined as follows: "disturb means to agitate or bother a

bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior'' (72 FR 31132; 50 CFR 22.3).

The USFWS is the primary federal authority charged with the management of golden eagles in the U.S. A permit is required for take of golden eagles, including take from disturbance such as loss of foraging habitat. USFWS guidance on the applicability of current BGEPA statutes and mitigation is currently under review. On November 10, 2009, the USFWS implemented rules (74 FR 46835) governing the "take" of golden and bald eagles. The new rules were released under the existing BGEPA, which has been the primary regulation protecting unlisted eagle populations since 1940.

All activities that may disturb or incidentally "take" an eagle or its nest as a result of an otherwise legal activity must be permitted by the USFWS under this act. The definition of disturb (72 FR 31132) includes interfering with normal breeding, feeding, or sheltering behavior to the degree that it causes or is likely to cause decreased productivity or nest abandonment. If a permit is required, due to the current uncertainty on the status of golden eagle populations in the western U.S., it is expected that permits would only be issued for safety emergencies or if conservation measures implemented in accordance with a permit would result in a reduction of ongoing "take" or a net "take" of zero.

3.1.4 Federally Regulated Habitats

Areas meeting the regulatory definition of "Waters of the United States" (WOTUS) are subject to the jurisdiction of the United States Army Corps of Engineers (USACE) under provisions of Section 404 of the Clean Water Act (CWA) (1972) and Section 10 of the Rivers and Harbors Act (1899). WOTUS may include all waters used, or potentially used, for interstate commerce, including all waters subject to the ebb and flow of the tide, all interstate waters, all other waters (e.g., intrastate lakes, rivers, streams, mudflats, sandflats, playa lakes, natural ponds, etc.), all impoundments of waters otherwise defined as WOTUS, tributaries of waters otherwise defined as WOTUS, territorial seas, and wetlands (i.e., "Special Aquatic Sites") adjacent to WOTUS (33 CFR, Part 328, Section 328.3).

Construction activities within WOTUS are regulated by the USACE. The placement of fill into such waters must comply with permit requirements of the USACE. No USACE permit would be effective in the absence of State Water Quality Certification (WQC) pursuant to Section 401 of the CWA. As a part of the permit process the USACE works directly with the USFWS to assess potential project impacts on biological resources.

The Project area falls within the South Pacific Division of the USACE and is under the jurisdiction of the Los Angeles District.

3.1.5 National Environmental Policy Act

The National Environmental Policy Act (NEPA) of 1969 requires all federal agencies to examine the environmental impacts of their actions, incorporate environmental information, and utilize public participation in the planning and implementation of all actions. Federal agencies must integrate NEPA with other planning requirements and prepare appropriate NEPA documents to facilitate better environmental decision making. NEPA requires federal agencies to review and comment on federal agency environmental plans/documents when the agency has jurisdiction by law or special expertise with respect to any environmental impacts involved (42 U.S.C. 4321- 4327; 40 CFR 1500-1508).

3.2 STATE REGULATIONS

3.2.1 California Environmental Quality Act

The California Environmental Quality Act (CEQA) establishes State policy to prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures. CEQA applies to actions directly undertaken, financed, or permitted by State lead agencies. Regulations for implementation are found in the State CEQA Guidelines published by the California Natural Resources Agency. These guidelines establish an overall process for the environmental evaluation of projects.

3.2.2 California Endangered Species Act

Provisions of California Endangered Species Act (CESA) protect State-listed threatened and endangered species. The CDFW regulates activities that may result in "take" of individuals (i.e., "take" means "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill"). Habitat degradation or modification is not expressly included in the definition of "take" under the California Fish and Game Code (FGC). Additionally, the California FGC contains lists of vertebrate species designated as "fully protected" (California FGC §§ 3511 [birds], 4700 [mammals], 5050 [reptiles and amphibians], 5515 [fish]). Such species may not be taken or possessed.

In addition to federal and State-listed species, the CDFW has also produced a list of Species of Special Concern (SSC) to serve as a "watch list." Species on this list are of limited distribution or the extent of their habitats has been reduced substantially, such that threat to their populations may be imminent. SSC may receive special attention during environmental review, but they do not have statutory protection.

Birds of prey are protected in California under the FGC. FGC Section 3503.5 states it is "unlawful to 'take', possess, or destroy any birds of prey (in the order Falconiformes or Strigiformes) or to 'take', possess, or destroy the nest or eggs of any such bird except as otherwise provided by this Code or any regulation adopted pursuant thereto." Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "take" by the CDFW. Under Sections 3503 and 3503.5 of the California FGC, activities that would result in the taking, possessing, or destroying of any birds-of-prey, taking or possessing of any migratory nongame bird as designated in the MBTA, or the taking, possessing, or needlessly destroying of the nest or eggs of any raptors or non-game birds protected by the MBTA, or the taking of any non-game bird pursuant to California FGC Section 3800 are prohibited.

3.2.3 Section 1602 of the California Fish and Game Code

Section 1602 of the California FGC requires any person, State or local governmental agency, or public utility which proposes a project that will substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake, or use materials from a streambed, or result in the disposal or deposition of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into any river, stream, or lake, to first notify the CDFW of the proposed project. Notification is generally required for any project that will take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life and

watercourses having a surface or subsurface flow that support or have supported riparian vegetation. Based on the notification materials submitted, the CDFW will determine if the proposed project may impact fish or wildlife resources.

If the CDFW determines that a proposed project may substantially adversely affect existing fish or wildlife resources, a Lake or Streambed Alteration Agreement (LSAA) will be required. A completed CEQA document must be submitted to CDFW before a LSAA will be issued. The Project area falls within the Inland Deserts Region of the CDFW.

3.2.4 Native Plant Protection Act

Under California FGC Section 1900 to 1913, the Native Plant Protection Act (NPPA) requires all State agencies to utilize their authority to carry out programs to conserve endangered and rare native plants. Provisions of NPPA prohibit the taking of listed plants from the wild and require notification of the CDFW at least 10 days in advance of any change in land use. This allows CDFW to salvage listed plant species that would otherwise be destroyed. A Project applicant is required to conduct botanical inventories and consult with CDFW during project planning to comply with the provisions of the NPPA and sections of CEQA that apply to rare or endangered plants.

3.2.5 Porter-Cologne Water Quality Control Act

California Regional Water Quality Control Boards (RWQCB) regulate the “discharge of waste” to “waters of the State” (WOTS). All projects proposing to discharge waste that could affect WOTS must file a Waste Discharge Report with the appropriate RWQCB. The board responds to the report by issuing Waste Discharge Requirements (WDR) or by waiving WDRs for that project discharge. Both of the terms “discharge of waste” and WOTS are broadly defined such that discharges of waste include fill, any material resulting from human activity, or any other “discharge.” Isolated wetlands within California, which are no longer considered WOTUS, as defined by Section 404 of the CWA, are addressed under the Porter Cologne Water Quality Control Act (Porter Cologne). The Project area falls under the jurisdiction of the Lahontan RWQCB.

3.2.6 State-Regulated Habitats

The State Water Resources Control Board is the State agency (together with the RWQCBs) charged with implementing water quality certification in California.

The CDFW extends the definition of stream to include “intermittent and ephemeral streams, rivers, creeks, dry washes, sloughs, blue-line streams (USGS-defined), and watercourses with subsurface flows. Canals, aqueducts, irrigation ditches, and other means of water conveyance can also be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife” (CDFW, 1994).

Activities that result in the diversion or obstruction of the natural flow of a stream; or which substantially change its bed, channel, or bank; or which utilize any materials (including vegetation) from the streambed, may require that the project applicant enter into a LSAA with the CDFW.

3.3 LOCAL REGULATIONS

3.3.1 Mono County General Plan

The purpose of the Mono County General Plan is to establish policies to guide decisions on future growth, development, and conservation of natural resources in the unincorporated area of the county (Mono County, 2015). The Goals, Objectives, and Policies relative to natural resources that apply to the BSA are as follows:

Goal 2: Maintain an abundance and variety of vegetation, aquatic and wildlife types in Mono County for recreational use, natural diversity, scenic value, and economic benefits.

- **Objective 2.A:** Maintain and restore botanical, aquatic and wildlife habitats in Mono County.
  - **Policy 2.A.1:** Future development projects shall avoid potential significant impacts to animal or plant habitats or mitigate impacts to a level of non-significance, unless a statement of overriding considerations is made through the Environmental Impact Reporting (EIR) process.
  - **Policy 2.A.2:** Protect and restore threatened and endangered plant and animal species and their habitats.
  - **Policy 2.A.3:** Protect and restore sensitive plants, wildlife and their habitat, and those species of exceptional scientific, ecological, or scenic value.
  - **Policy 2.A.4:** Participate in the Bi-State Local Area Working Group on sage grouse conservation and assist with the implementation of the Bi-State Action Plan.
  - **Policy 2.A.5:** Prohibit construction activities such as grading in sensitive habitats prior to environmental review in compliance with CEQA and the Mono County Grading Ordinance.
  - **Policy 2.A.6:** During construction, utilize soil conservation practices and management techniques to conserve naturally occurring soils.
  - **Policy 2.A.7:** Support the acquisition of valuable wildlife areas through outright purchase, land donations, trades, purchases of easements, and related options.
  - **Policy 2.A.8:** Restrict or seasonally limit off highway and other recreational uses in valuable habitat areas in order to protect those resources.
  - **Policy 2.A.9:** Maintain water quality for fishery habitat by enforcing the policies contained in the Water Quality and Agriculture/Grazing/Timber sections of the Conservation/Open Space Element.
  - **Policy 2.A.10:** Support efforts to regulate in-stream flows and lake levels to maintain fishery and other wildlife values, including riparian habitat.

3.4 OTHER APPLICABLE REGULATIONS, PLANS, AND STANDARDS

3.4.1 California Native Plant Society Rare Plant Program

The mission of the California Native Plant Society (CNPS) Rare Plant Program is to develop current, accurate information on the distribution, ecology, and conservation status of California's rare and endangered plants, and to use this information to promote science-based plant conservation in California. Once a species has been identified as being of potential conservation concern, it is put through an extensive review process. Once a species has gone through the review process, information on all aspects of the species (e.g., listing status, habitat, distribution, threats, etc.) are entered into the online CNPS Rare Plant Inventory and given a California Rare Plant Rank (CRPR). The

Program currently recognizes more than 1,600 plant taxa (species, subspecies and varieties) as rare or endangered in California.

Vascular plants listed as rare or endangered by the CNPS, but which might not have a designated status under State endangered species legislation, are defined by the following CRPR:

- CRPR 1A - Plants considered by the CNPS to be extinct in California;
- CRPR 1B - Plants rare, threatened, or endangered in California and elsewhere;
- CRPR 2 - Plants rare, threatened, or endangered in California, but more numerous elsewhere;
- CRPR 3 - Plants about which we need more information – a review list; and
- CRPR 4 - Plants of limited distribution – a watch list.

In addition to the CRPR designations above, the CNPS adds a Threat Rank as an extension added onto the CRPR and designates the level of endangerment by a 1 to 3 ranking, with 1 being the most endangered and 3 being the least endangered and are described as follows:

- 0.1 – Seriously threatened in California (high degree/immediacy of threat);
- 0.2 – Fairly threatened in California (moderate degree/immediacy of threat); and
- 0.3 – Not very threatened in California (low degree/immediacy of threats or no current threats known.

4.0 EXISTING CONDITIONS

4.1 SETTING

The BSA is located to the north-northeast of the Grant Lake reservoir at the base of the eastern Sierra Nevada mountains. It encompasses the spillway channel from Grant Lake to near its intersection with Rush Creek, and also includes the MGORD access road and other unpaved access roads, staging areas, and spoil sites, and portions of U.S. 395 and SR 158. The land occupied by the BSA trends downward toward the northeast, ranging in elevation from approximately 7,250 feet (2,210 meters) amsl at the southern end to 6,850 feet (2,090 meters) amsl at the northern end. The southern portion of the BSA lies within the Inyo National Forest.

4.2 VEGETATION COMMUNITIES AND LAND COVER TYPES

Generally, descriptions of plant communities are attributed using the classification system described in the MCV (MCVII) (Sawyer et al., 2009). As defined in MCV, an "alliance" is "a category of vegetation classification which describes repeating patterns of plants across a landscape. Each 'alliance' is defined by plant species composition, and reflects the effects of local climate, soil, water, disturbance, and other environmental factors." Species scientific and common names correspond to those described in the second edition of The Jepson Manual (Baldwin et al., 2012).

Within the BSA, Stantec biologists/environmental scientists mapped three plant communities defined by the MCV and two additional land cover types: *Artemisia tridentata* Shrubland Alliance, *Salix exigua* Alliance, *Eliocharis macrostachya* Herbaceous Alliance, Disturbed/Developed Land, and Open Water. A discussion of these is presented below and summarized in **Table 1** and vegetation mapping is depicted in **Figure 2** in **Appendix A**.

Table 1 Vegetation Communities/Land Cover Types within the BSA

Land Cover Type	Acres within BSA
Vegetation Communities	
Artemesia tridentata Shrubland Alliance – Big Sagebrush	632.0
Salix exigua Alliance – Sandbar Willow Thickets	8.3
Eliocharis macrostachya Herbacesous Alliance – Pale Spike Rush Marshes	1.4
Land Cover Types	
Disturbed/Developed Land	62.0
Open Water	2.2

4.2.1 Vegetation Communities

Artemisia tridentata Shrubland Alliance (Big Sagebrush)

This community occupies the majority of the BSA (i.e., approximately 632 acres) and surrounding areas. It is composed of shrubs below five meters, dominated by big sagebrush (*Artemesia tridentata*), with a sparse or grassy

herbaceous layer. Other shrub species prominent within this community included bitterbrush (*Purshia tridentata*) and rubber rabbitbrush (*Ericameria nauseosa*). This vegetation alliance is found in habitats such as alluvial fans, valley bottoms, and dry washes at elevations between 300 to 3,000 meters (Sawyer et al., 2009).

Salix exigua Alliance (Sandbar Willow Thickets)

Approximately 8.3 acres of this community were mapped within the BSA associated with Rush Creek. It is composed of shrubs less than seven meters in height, dominated by sandbar willow (*Salix exigua*) and arroyo willow (*S. lasiolepis*), with a variable herbaceous layer. This vegetation alliance is found in habitats such as temporarily flooded floodplains, depositions along rivers and streams, and at springs at elevations between zero and 2,700 meters amsl. The USFWS Wetland Inventory recognizes sandbar willow as a facultative wetland (FACW) plant (i.e., usually occurs in wetlands, but may occur in non-wetlands) (Sawyer et al., 2009).

Eliocharis macrostachya Herbaceous Alliance (Pale Spike Rush Marshes)

This community, which occupies approximately 1.4 acres in a few localized areas just east of the MGORD access road, is composed of herbs less than one meter, with open cover at elevations between 0 and 2,500 meters. The dominant plant making up this vegetation type within the BSA is pale spike rush (*Eliocharis macrostachya*). This vegetation alliance is found in habitats such as swales, vernal pools, and pastures on alluvial soils that are flooded during part of the growing season. The USFWS Wetland Inventory recognizes pale spike rush as an Obligate (OBL) plant (i.e., almost always occur in wetlands) (Sawyer et al., 2009).

4.2.2 Other Land Cover Types

Disturbed/Developed Land

This classification was used to map approximately 62.0 acres of the BSA that are developed, including paved and unpaved roads, the MGORD, and other infrastructure. In general, these areas are unvegetated or vegetation is generally sparse. Where vegetated, these areas are generally composed of ruderal pioneer plant species that readily colonize open disturbed soil and thrive as a result of anthropogenic impacts.

Open Water

Approximately 2.2 acres of Grant Lake within the BSA was mapped as this is an Open Water land cover type (i.e., lake/reservoir).

4.2.3 Soils

Prior to conducting the survey, historical soils data from the NRCS were used to determine potential soil types that may occur within the BSA and where hydric soils have historically occurred (refer to **Appendix A**, **Figure 3**). **Table 1** identifies the soils historically known to occur within the BSA. Of the soils listed in **Table 2**, four appear on the NRCS hydric soils list: Alamedawell-Conway-Xerofluvents complex, 0 to 4 percent slopes; Brantel gravelly coarse sand, 2 to 8 percent slopes; Fluvaquentic Endoaquolls-Xerofluvents complex, 0 to 4 percent slopes; and Warrior-Xerofluvents association, 0 to 4 percent slopes.

Table 2 Soil Units Historically Occurring within the BSA

Map Unit Symbol	Map Unit Name	Description	Acres Within BSA
101	Alamedawell loamy sand, 0 to 2 percent slopes	A moderately well-drained soil that occurs on lake terraces between 6,400 feet (1,950 meters) to 7,100 feet (2,165 meters); parent material consists of volcanic ash over ashy lacustrine deposits; very low runoff; loamy sand (0-21”), loam, sandy loam (21-36”), stratified sand to sandy loam (21-36”).	120.7
104	Alamedawell-Conway-Xerofluvents complex, 0 to 4 percent slopes	**Alamedawel**l: A moderately well-drained soil that occurs on lake terraces between 6,000 feet (1,300 meters) to 7,600 feet (2,320 meters); parent material consists of ashy alluvium over ashy lacustrine deposits; very low runoff; loamy sand (0-24”), loam, sandy loam (24-32”), stratified sand to sandy loam (24-32”). **Conway**: A poorly drained soil that occurs on alluvial fans between 6,000 (1,300 meters) to 7,600 feet (2,320 meters); parents material consists of volcanic ash and alluvium derived from mixed sources; very low runoff; sandy loam (0-4”), gravelly sandy loam (4-42”), gravelly coarse sandy loam (42-60”). **Xerofluvents**: A poorly drained soil that occurs on flood plans on alluvial fans between 6,000 (1,300 meters) to 7,600 feet (2,320 meters); parent material consists of volcanic ash and/or alluvium derived from mixed sources; very low runoff; gravelly sandy loam (0-18”), stratified very gravelly sand to very cobbly sandy loam (18-60”).	25.6
108	Alamedawell-Orecart complex. 0 to 4 percent slopes	**Alamedawell**; A relatively well-drained soil that occurs on lake terraces between 6,400 (1,950 meters) to 7,900 feet (2,410 meters); parent material consists of ashy alluvium over ashy lacustrine deposits; low runoff; loamy sand (0-3”), loamy sand (3-24”), stratified sand to silt loam (24-60”). **Orecart**: A relatively well drained soil that occurs on lake terraces between 6,400 (2,410 meters) to 7,900 feet (2,410 meters); parent material consists of volcanic ash and/or alluvium derived from mixed sources; negligible runoff; loamy sand (0-4”), loamy sand (4-48”), stratified coarse sand to gravelly loamy sand (48-60”).	29.5
125/125bo	Bairs-Kilburn family complex, 8 to 30 percent slopes	**Bairs**: A well-drained soil that occurs on moraines between 5,500 (1,680 meters) to 8,400 feet (2,560 meters); parent material consists of glacial till derived from granite; medium runoff; gravelly loamy sand (0-12”), very cobbly sandy loam, very stony sandy loam (12-60”). **Kilburn**: A well-drained soil that occurs on moraines between 5,500 (1,680 meters) to 8,400 feet (2,560 meters); parent material consists of glacial till derived from granite; low runoff; very stony loamy sand (0-10”), extremely stony sandy loam (10-25”), extremely stony loamy sand, extremely stony sandy loam (25-60”).	158.1

Map Unit Symbol	Map Unit Name	Description	Acres Within BSA
132	Brantel gravelly coarse sand, 2 to 8 percent slopes	An excessively-drained soil that occurs on valley floors and lake terraces between 5,300 (1,615 meters) to 7,600 feet (2,350 meters); parent material consists of volcanic ash; negligible runoff; gravelly coarse sand (0-2”), coarse sand (2-32”), gravelly coarse sand (32-60”).	123.5
174	Torriorthentic Haploxerolls-Rock outcrop complex, 30 to 60 percent slopes	A somewhat well-drained soil that occurs on mountains between 7,000 (2,135 meters) to 8,400 feet (2,560 meters); parent material consists of alluvium and/or colluvium; medium runoff; gravelly sandy loam (0-3”), gravelly sandy loam (3-20”), very cobbly loamy sand (20-60”).	73.2
194	Fluvaquentic Endoaquolls-Xerofluvents complex, 0 to 4 percent slopes	**Fluvaquentic Endoaquolls**: A very poorly-drained soil that occurs on flood plains between 6,000 (1,830 meters) to 7,600 feet (2,320 meters); parent material consists of volcanic ash and/or alluvium derived from mixed sources; low runoff; loam (0-12”), loamy sand (12-36”), loam (36-45”), fine sand (45-55”), silt loam (55-60”). **Xerofluvents**: A poorly-drained soil that occurs on flood plains on stream terraces between 6,000 (1,830 meters) to 7,600 feet (2,320 meters); parents material consists of volcanic ash and/or alluvium derived from mixed sources; low runoff; very cobbly loamy sand (0-11”), stratified very gravelly sand to very cobbly sandy loam (11-60”).	0.2
310	Brantel family, 30 to 60 percent slopes	A somewhat well-drained soil that occurs on terraces between 7,000 (2,130 meters) to 8,500 feet (2,590 meters); parent material consists of pumice and/or residuum weathered from tuff breccia; low runoff; gravelly loamy coarse sand (0-60”).	17.9
347/347bo	Warrior-Xerofluvents association, 0 to 4 percent slopes	**Warrior**: A well-drained soil that occurs on alluvial fans and stream terraces between 5,400 (1,645 meters) to 7,600 feet (2,320 meters); parent material consists of alluvium derived from mixed sources; very low runoff; gravelly loamy sand (0-3”), gravelly sandy loam (3-14”), very cobbly fine sandy loam (14-60”). **Xerofluvents**: A poorly-drained soil that occurs on flood plains on stream terraces between 5,400 (1,645 meters) to 7,600 feet (2,320 meters); parents material consists of volcanic ash and/or alluvium derived from mixed sources; low runoff; very cobbly loamy sand (0-11”), stratified very gravelly sand to very cobbly sandy loam (11-60”).	84.7
350/350bo	Watterson gravelly loamy sand, 0 to 4 percent slopes	A well-drained soil that occurs on alluvial fans between 5,500 (1,680 meters) to 7,200 feet (2,195 meters); parent material consists of volcanic ash and/or alluvium derived from mixed sources; very low runoff; gravelly loamy sand (0-6”), very gravelly sandy loam (6-60”).	67.4
381/W	Water	Water	5.0

Source: USDA, 2019

4.2.4 Jurisdictional Waters/Wetlands

The National Wetlands Inventory (NWI) (USFWS, 2019) has mapped the following types of riparian and wetland habitats within the BSA (data are dated 1985):

- Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Excavated (R2UBHx);
- Riverine, Intermittent, Streambed, Temporary Flooded (R4SBC);
- Riverine, Upper Perennial, Unconsolidated Bottom, Permanently Flooded (R3UBH);
- Riverine, Unknown Perennial, Unconsolidated Bottom, Semi-permanently Flooded, Excavated (R5UBFx);
- Palustrine, Scrub-Shrub, Seasonally Flooded (PSSA);
- Palustrine, Emergent, Persistent, Seasonally Saturated (PEM1B);
- Palustrine, Emergent, Persistent, Seasonally Flooded (PEM1C); and
- Lacustrine, Limnetic, Unconsolidated Bottom, Permanently Flooded, Diked/Impounded (L1UBHh).

Based on the observations collected in the field, the following types of jurisdictional features likely occur within the BSA: USACE and RWQCB wetlands and WOTUS/WOTS, USACE and RWQCB non-wetlands and WOTUS/WOTS, and CDFW jurisdictional waters.

4.3 COMMON WILDLIFE

This section describes the common wildlife observed during the reconnaissance-level survey and expected to occur within the BSA based on habitat characteristics and species known to occur in the region. The only macro wildlife observed during the reconnaissance-level survey include an osprey (*Pandion haliaetus*), sage thrasher (*Oreoscoptes montanus*), and turkey vulture (*Cathartes aura*) (flyover).

4.3.1 Invertebrates and Gastropods

A focused insect survey within the BSA was not performed; however, a variety of common insects are known to occur in the area. Habitat conditions in the BSA provide a suite of microhabitat conditions for a wide variety of terrestrial insects and other invertebrates. As in all ecological systems, invertebrates in the BSA play a crucial role in several biological processes. They serve as the primary or secondary food source for a variety of bird, reptile, and mammal predators; they provide important pollination vectors for numerous plant species; they act as efficient components in controlling pest populations; and they support the naturally occurring maintenance of an area by consuming detritus and contributing to necessary soil nutrients. The reconnaissance-level survey of the BSA detected a variety of common and non-native invertebrates. Some of the orders identified included *Coleoptera* (beetles), *Diptera* (flies), *Lepidoptera* (moths and butterflies), *Hymenoptera* (wasps, bees and ants), and *Orthoptera* (grasshoppers).

4.3.2 Fish

While there are no fish native to the Mono Basin, multiple species have been introduced beginning in the 19th century (Mono Lake Committee, 2019). Historically, Grant Lake and Rush Creek are known to support several fish species and are popular with anglers. Fish species known to occur include rainbow trout (*Oncorhynchus mykiss*), Lahontan cutthroat trout (*Oncorhynchus clarkii henshawi*), brown trout (*Salmo trutta*), and brook trout (*Salvelinus fontinalis*).

None of these fish species were observed during the reconnaissance-level survey performed in the BSA; however, it should be noted that the reconnaissance-level survey did not focus on the aquatic portions of the BSA.

4.3.3 Amphibians

Amphibians generally require a source of standing or flowing water to complete their life cycle. However, some terrestrial species can survive in drier areas by remaining in moist environments found beneath leaf litter and fallen logs, or by burrowing into the soil. Downed logs, bark, and other woody material, in various stages of decay (i.e., coarse woody debris) may provide shelter and feeding sites for a variety of wildlife, including amphibians and reptiles (Maser and Trappe, 1984; Aubry et al., 1988).

Amphibian species were not observed during the reconnaissance survey within the BSA and are not well documented in the area. The BSA is within the range of the Great Basin spadefoot (*Spea intermontana*), which is known to occur along the shores of Mono Lake and where there is sagebrush flat habitat suitable for the species.

4.3.4 Reptiles

The number and type of reptile species that may occur at a given site is related to a number of biotic and abiotic features. These include the diversity of plant communities, substrate, soil type, and presence of refugia such as rock piles, boulders, and native debris. Many reptile species, even if present, are difficult to detect because they are cryptic and their life history characteristics (e.g., foraging, thermoregulatory behavior, fossorial nature, camouflage, etc.) limit their ability to be observed during most surveys. Further, many species are only active within relatively narrow thermal limits, avoiding both cold and hot conditions, and most take refuge in microhabitats that are not directly visible to the casual observer, such as rodent burrows, in crevices, under rocks and boards, and in dense vegetation where they are protected from unsuitable environmental conditions and predators (USACE and CDFG, 2010). In some cases, they are only observed when flushed from their refugia.

Though weather conditions were favorable for reptile activity during the reconnaissance-level survey, none were observed. Although not detected in the BSA, suitable habitat conditions for common reptiles known to occur in the area are present. Reptiles likely inhabiting the site include side-blotched lizard (*Uta stansburiana*), common sagebrush lizard (*Sceloporus graciosus*), gopher snake (*Pituophis catenifer*), and mountain garter snake (*Thamnophis elegans elegans*).

4.3.5 Birds

In addition to the observed individuals listed above, several other bird species are known to inhabit the BSA. Some of these include the yellow-rumped warbler (*Setophaga coronata*), bushtit (*Psaltriparus minimus*), dusky flycatcher (*Empidonax oberholseri*), northern rough-winged swallow (*Stelgidopteryx serripennis*), green-tailed towhee (*Pipilo chlorurus*), Brewer's sparrow (*Spizella breweri*), house wren (*Troglodytes aedon*), and the special-status species burrowing owl (*Athene cunicularia*) and greater sage grouse (*Centrocercus urophasianus*), both of which are CDFW SSC.

4.3.6 Mammals

Generally, the distribution of mammals on a given site is associated with the presence of factors such as access to perennial water, topographical and structural components (e.g., rock piles, vegetation) that provide cover and support prey base, and the presence of suitable soils for fossorial mammals (e.g., sandy areas). Mammal species were not observed during the reconnaissance-level survey within the BSA; however, based on known occurrences in the area and the suitability of the habitat present on the site, several would be expected to occur. These include smaller mammals such as the least chipmunk (*Neotamias minimus*), golden-mantled ground squirrel (*Callospermophilus lateralis*), Belding's ground squirrel (*Urocitellus beldingi*), Audubon's cottontail (*Sylvilagus audubonii*), and black-tailed jackrabbit (*Lepus californicus*) and larger fauna such as mule deer (*Odocoileus hemionus*) and mountain lion (*Puma concolor*).

5.0 SPECIAL-STATUS BIOLOGICAL RESOURCES

The background information presented above, combined with field observations taken during the survey, was used to evaluate special-status natural communities and special-status plant and animal taxa that either occur or may have the potential to occur within the BSA and/or adjacent habitats. For the purposes of this BRTR, special-status taxa are defined as plants or animals that:

- Have been designated as either rare, threatened, or endangered by CDFW or the USFWS, and are protected under either the California or federal ESAs;
- Are candidate species being considered or proposed for listing under these same acts;
- Are recognized as SSC by the CDFW;
- Are ranked by CNPS as CRPR 1, 2, 3, or 4 plant species;
- Are fully protected by the California FGC, Sections 3511, 4700, 5050, or 5515;
- Are of expressed concern to resource/regulatory agencies, or local jurisdictions; and/or
- Are listed as an Inyo National Forest Species of Conservation Concern.

5.1 SPECIAL-STATUS NATURAL COMMUNITIES

Special-status natural communities are defined by CDFW (2009) as, "…communities that are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects." All vegetation within the state is ranked with an "S" rank; however, only those that are of special concern (S1-S3 rank) are generally evaluated under CEQA.

None of the vegetation communities identified within the BSA are listed as sensitive. The BSA does not occur within an area covered under a Natural Community Conservation Plan (NCCP) or other protection plan.

5.2 DESIGNATED CRITICAL HABITAT

DCH is defined by the USFWS (2018) as "geographic areas that contain features essential to the conservation of an endangered or threatened species and that may require special management and protection. Critical habitat may also include areas that are not currently occupied by the species but will be needed for its recovery."

The BSA does not occur within or directly adjacent to any areas of DCH or proposed critical habitat. The nearest DCH is for Sierra Nevada bighorn sheep (*Ovis canadensis sierrae*), approximately 3.3 miles to the west in the eastern Sierra Nevada.

5.3 SPECIAL-STATUS PLANTS

Table 2 presents a list of special-status plants, including federally and State listed species and CNPS CRPR 1 to 4 species that are known to occur within 10 miles (CNDDB) of the BSA or within the USGS 7.5-minute quadrangles including and surrounding the BSA; refer to **Appendix A**, **Figures 5a** and **5b** for a graphical depiction of previously reported species locations.

Record searches of the CNDDB, the CNPS Online Inventory, and the CCH was performed for special-status plant taxa. Each of the taxa identified in the record searches was assessed for their potential to occur within the BSA based on the following criteria:

- **Present**: Taxa were observed within the BSA during recent botanical surveys or population has been acknowledged by CDFW, USFWS, or local experts.
- **High**: Both a documented recent record (within 10 years) exists of the taxa within the BSA or immediate vicinity (approximately 5 miles) and the environmental conditions (including soil type) associated with taxa presence occur within the BSA.
- **Moderate**: Both a documented recent record (within 10 years) exists of the taxa within the BSA or the immediate vicinity (approximately 5 miles) and the environmental conditions associated with taxa presence are marginal and/or limited within the BSA or the BSA is located within the known current distribution of the taxa and the environmental conditions (including soil type) associated with taxa presence occur within the BSA.
- **Low**: A historical record (over 10 years) exists of the taxa within the BSA or general vicinity (approximately 10 miles) and the environmental conditions (including soil type) associated with taxa presence are marginal and/or limited within the BSA.
- **Not Likely to Occur**: The environmental conditions associated with taxa presence do not occur within the BSA.

Table 3 Known and Potential Occurrences of Special-Status Plants within the BSA

Taxa	Status (Federal/State/CRPR)	Habitat and Distribution	Blooming/ Fruiting Period	Potential to Occur*
Abronia alpina Ramshaw Meadows abronia	SCC / - / 1B.1	Dry, open, granitic meadows and edges of lodgepole pine forests; 2400-2700 meters (m).	May-Sep	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA and the site is outside this species' known elevation range.
Agrostis humilis mountain bent grass	SCC / - / 2B.3	Alpine boulder and rock field, meadows and seeps, subalpine coniferous forest; sometimes on calcareous substrates; 1525-3400 m.	Jul-Sep	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA. The nearest recorded occurrence is approximately 5.3 miles to the west of the BSA.
Allium atrorubens var. *atrorubens* Great Basin onion	SCC / - / 2B.3	Rocky or sandy soil in sagebrush scrub, pinyon-juniper woodland, and northern juniper woodland; 1200-2100 m.	May-Jun	**Moderate** Suitable scrub habitat and substrates are present within the BSA; however, this species has not been previously documented within 10 miles of the site.
Antennaria pulchella beautiful pussy-toes	- / - / 4.3	Alpine boulder and rock field (stream margins), meadows and seeps; sometimes carbonate; 2670-3200 m	Jul-Sep	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA.
Arabis repanda var. *greenei* Greene's rockcress	- / - / 3.3	Subalpine coniferous forest, upper montane coniferous forest; granitic, talus, rocky, or sandy; 2385-3600 m	Jun-Aug	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA.
Astragalus cimae var. *sufflatus* inflated Cima milk-vetch	SCC / - / 1B.3	Calcareous substrates, with pinyon pine, generally sagebrush; 1500-2100 m.	May	**Not Likely to Occur** Suitable habitat and substrate for this alpine species does not occur within the BSA.
Astragalus johannis-howellii Long Valley milk-vetch	SCC / - / 1B.2	Sandy areas in sagebrush scrub; 2050-2550 m.	Jun-Aug	**Moderate** Suitable scrub habitat and substrates occur within the BSA; however, this species has not been previously documented within 10 miles of the site.

Taxa	Status (Federal/State/CRPR)	Habitat and Distribution	Blooming/ Fruiting Period	Potential to Occur*
Astragalus kentrophyta var. *danaus* Sweetwater Mountains milk-vetch	- / - / 4.3	Alpine boulder and rock field, subalpine coniferous forest; rocky, talus; 3000-3600 m	Jul-Sep	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA.
Astragalus kentrophyta var. *elatus* spiny-leaved milk-vetch	SCC / - / 2B.2	Open rocky areas in subalpine forests; 2900-3200 m.	Jun-Sep	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA and the site is outside this species' known elevation range.
Astragalus lemmonii Lemmon's milk-vetch	SCC / - / 1B.2	Sagebrush scrub, wetland riparian; moist, alkaline meadows, lake shores; 1300-2900 m.	May-Jul	**Low** Limited suitable habitat occurs within the BSA.
Astragalus lentiginosus var. *kernensis* Kern Plateau milk-vetch	SCC / - / 1B.2	Subalpine forest; sandy areas, meadows; 2350-2750 m.	Jun-Jul	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA and the site is outside this species' known elevation range.
Astragalus monoensis Mono milk-vetch	SCC / SR / 1B.2	Great Basin scrub, upper montane coniferous forest; pumice flats with sparse vegetative cover; 2225-3355 m.	Jun-Aug	**Low** Suitable scrub habitat is present within the BSA; however, shrub cover is generally dense, and the site is slightly outside this species' known elevation range. The nearest recorded occurrence is approximately 3.9 miles to the southeast of the BSA.
Astragalus ravenii Raven's milk-vetch	SCC / - / 1B.3	Alpine fell-fields, red fir forest; gravel; 3400-3450 m.	Jun-Sep	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA and the site is outside this species' known elevation range.

Taxa	Status (Federal/State/CRPR)	Habitat and Distribution	Blooming/ Fruiting Period	Potential to Occur*
Astragalus serenoi var. *shockleyi* Shockley's milk-vetch	SCC / - / 2B.2	Sagebrush scrub, shadscale scrub, pinyon-juniper woodland; open, dry, alkaline gravelly clay; 1150-2300 m.	May-Jun	**Moderate** Marginally suitable habitat and substrates are present within the BSA.
Astragalus subvestitus Kern County milk-vetch	SCC / - / 4.3	Sagebrush scrub, pinyon-juniper woodland; meadows, gravel, sand; 1500-2650 m.	Jun-Jul	**Moderate** Marginally suitable habitat and substrates are present within the BSA.
Boechera bodiensis Bodie Hills rockcress	SCC / - / 1B.3	Alpine boulders and rock field, Great Basin scrub, pinyon and juniper woodland, subalpine coniferous forest. Found in rock crevices, outcrops, and on steep slopes; granite and volcanic substrates; 2010-3535 m.	Jun-Jul (Aug)	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA. The nearest recorded occurrence is approximately 3.5 miles to the north of the BSA.
Boechera cobrensis Masonic rockcress	- / - / 2B.3	Great Basin scrub, pinyon and juniper woodland. Usually found in sandy soils; 1370-3385 m.	Jun-Jul	**Moderate** Marginally suitable habitat and substrates are present within the BSA. The nearest recorded occurrence is approximately 0.5 mile to the southeast of the BSA.
Boechera pendulina rabbit-ear rockcress	SCC / - / 2B.1	Rock outcrops, open gravelly flats, hillsides; 2000-3000 m.	Apr-Jun	**Low** Limited suitable habitat occurs within the BSA.
Boechera pinzliae Pinzl's rockcress	SCC / - / 1B.3	Alpine boulder and rock field, subalpine coniferous forest in steep, unstable scree and sand; 3230-3265 m.	July	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA.
Boechera shockleyi Shockley's rockcress	SCC / - / 2B.2	Pinyon-juniper woodland; rock outcrops, gravelly soil, generally dolomite; 1200-2500 m.	Apr-May	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.
Boechera tiehmii Tiehm's rockcress	SCC / - / 1B.3	Alpine boulder and rock field on windswept rocky ridges and in crevices on rocky slopes; in cushion plant community on granite; 2970-3415 m.	Jul-Aug	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA.

Taxa	Status (Federal/State/CRPR)	Habitat and Distribution	Blooming/ Fruiting Period	Potential to Occur*
Boechera tularensis Tulare rockcress	SCC / - / 1B.3	Subalpine coniferous forest, upper montane coniferous forest, rocky slopes; 1825-3355 m.	(May) Jun-Jul (Aug)	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA.
Botrychium ascendens upswept moonwort	SCC / - / 2B.3	Yellow pine forest; moist meadows, open woodland near streams or seeps; 1500-3200 m.	Jul-Aug	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.
Botrychium crenulatum scalloped moonwort	SCC / - / 2B.2	Bogs and fens, meadows and seeps, upper montane coniferous forest, lower montane coniferous forest, marshes and swamps; moist meadows, freshwater marsh, and near creeks; 1185-3110 m.	Jun-Sep	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.
Botrychium lineare slender moonwort	SCC / - / 1B.1	Moist meadows; 2500-4000 m.	undefined	**Not Likely to Occur** While marginally suitable habitat is present within the BSA, the site is outside this species' known elevation range.
Botrychium lunaria common moonwort	- / - / 2B.3	Meadows and seeps, subalpine coniferous forest, upper montane coniferous forest; 1950-3415 m,	Aug	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA. The nearest recorded occurrence is approximately 5.0 miles to the north of the BSA.
Botrychium minganense Mingan moonwort	SCC / - / 2B.2	Yellow pine forest; meadows, open forest along streams or around seeps; 1500-3100 m.	Jul-Sep	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.
Bruchia bolanderi Bolander's bruchia	SCC / - / 4.2	Lower montane coniferous forest, meadows and seeps, upper montane coniferous forest in damp soil; 1610-3350 m.	undefined	**Low** Limited marginally suitable meadow habitat is present within the BSA.
Calochortus excavatus Inyo County star-tulip	SCC / - / 1B.1	Shadscale scrub; grassy meadows; 1300-2000 m.	Apr-May	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.
Calyptridium pygmaeum pygmy pussypaws	SCC / - / 1B.2	Lodgepole forest, subalpine forest; sandy to gravelly soils; 2100-3200 m.	Jun-Jul	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.

Taxa	Status (Federal/State/CRPR)	Habitat and Distribution	Blooming/ Fruiting Period	Potential to Occur*
Carex congdonii Congdon's sedge	- / - / 4.3	Alpine boulder and rock field, subalpine coniferous forest; 2600-3900 m	Jul-Aug	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA.
Carex davyi Davy's sedge	SCC / - / 1B.3	Subalpine coniferous forest, upper montane coniferous forest; 1605-3230 m.	May-Aug	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA. The nearest recorded occurrence is approximately 5.2 miles to the west of the BSA.
Carex duriuscula Spikerush sedge	SCC / - / 2B.3	Sagebrush scrub, subalpine forest; dry areas; 3500-4100 m.	Jul-Aug	**Not Likely to Occur** While suitable habitat is present within the BSA, the site is well outside this species' known elevation range.
Carex geyeri Geyer's sedge	- / - / 4.2	Great Basin scrub, lower montane coniferous forest; 1155-2195 m.	May-Aug	**Moderate** Suitable habitat is present within the BSA.
Carex idahoa Idaho sedge	SCC / - / 2B.3	Subalpine forest; meadows; 2800-3400 m.	Jul	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA and the site is outside this species' known elevation range.
Carex incurviformis Mount Dana sedge	- / - / 4.3	Alpine boulder and rock field; 3700-4060 m.	Jul-Aug	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA.
Carex petasata Liddon's sedge	SCC / - / 2B.3	Broad-leafed upland forest, lower montane coniferous forest, meadows and seeps, pinyon and juniper woodlands; 835-3030 m.	May-Jul	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.
Carex praticola northern meadow sedge	SCC / - / 2B.2	Meadows and seeps; moist to wet meadows; 15-3200 m.	May-Jul	**Low** Limited marginally suitable meadow habitat is present within the BSA.

Taxa	Status (Federal/State/CRPR)	Habitat and Distribution	Blooming/ Fruiting Period	Potential to Occur*
Carex scirpoidea ssp. *pseudoscirpoidea* western single-spiked sedge	SCC / - / 2B.2	Alpine boulder and rock field, meadows and seeps, subalpine coniferous forest; often on limestone; mesic sites; 2130-3660 m.	Jul, Sep	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA. The nearest recorded occurrence is approximately 5.5 miles to the west of the BSA.
Carex stevenii Steven's sedge	SCC / - / 2B.2	Alpine fell-fields; wetland-riparian, alpine creekbanks; 2800-2900 m.	Jul-Aug	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA and the site is outside this species' known elevation range.
Carex tahoensis Tahoe sedge	- / - / 4.3	Alpine boulder and rock field, subalpine coniferous forest; 2835-3810 m.	Jul-Aug	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA.
Carex tiogana Tioga Pass sedge	SCC / - / 1B.3	Meadows and seeps; on terraces next to lakes; mesic sites; 3000-3310 m.	Jul-Aug	**Not Likely to Occur** While suitable habitat is present within the BSA, the site is well outside this species' known elevation range. The nearest recorded occurrence is approximately 5.2 miles to the west of the BSA.
Carex vallicola western valley sedge	SCC / - / 2B.3	Great Basin scrub, meadows and seeps; mesic sites; 1865-3045 m.	Jul-Aug	**Moderate** Suitable scrub and limited mesic habitat are present within the BSA.
Chaetadelpha wheeleri Wheeler's dune-broom	SCC / - / 2B.2	Sagebrush scrub, creosote bush scrub; sand dunes, alkali flats; 800-1800 m.	May-Sep	**Not Likely to Occur** While suitable sagebrush scrub habitat for this species occurs within the BSA, suitable substrates do not and the site is outside this species' known elevation range.
Claytonia megarhiza fell-fields claytonia	SCC / - / 2B.3	Alpine boulder and rock field, subalpine coniferous forest in the crevices between rocks, rocky or gravelly soil; 2560-3505 m.	Jul-Sep	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA.

Taxa	Status (Federal/State/CRPR)	Habitat and Distribution	Blooming/ Fruiting Period	Potential to Occur*
Cordylanthus eremicus ssp. *kernensis* Kern bird's beak	SCC / - / 1B.3	Lodgepole forest, red fir forest, Jeffrey-pine forest, juniper forest; wetland-riparian; 2100-3000 m.	Jun-Aug	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA.
Crepis runcinata fiddlelead hawksbeard	- / - / 2B.2	Mojavean desert scrub, pinyon and juniper woodland. Found in moist, alkaline valley bottoms; 380-3110 m.	May-Aug	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.
Crepis runcinata ssp. *hallii* Hall's meadow hawksbeard	SCC / - / -	Creosote bush scrub, pinyon-juniper woodland; wetland-riparian, moist, alkaline valleys; 1250-1450 m.	Jun-Jul	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.
Cryptantha glomeriflora cluster-flower cryptantha	- / - / 4.3	Great Basin scrub, meadows and seeps, subalpine coniferous forest, upper montane coniferous forest; 1800-3750 m.	Jun-Sep	**Moderate** Suitable scrub and limited mesic habitat are present within the BSA.
Cuniculotinus gramineus Panamint rock-goldenrod	SCC / - / 2B.3	Subalpine forest, bristlecone-pine forest, pinyon-juniper woodland; 2200-2900 m.	Jul-Aug	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.
Cymopterus globosus globose cymopterus	SCC / - / 2B.2	Sagebrush scrub; sandy open flats; 1200-2100 m.	Mar-May	**Moderate** Suitable habitat for this species occurs within the BSA; however, this species has not been previously documented within 10 miles of the site..
Dedeckera eurekensis July gold	SCC / - / 1B.3	Creosote bush scrub; limestone slopes; 1200-2200 m.	Jun-Oct	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.
Draba asterophora var. *asterophora* Tahoe draba	- / - / 1B.2	Alpine boulder and rock field, subalpine coniferous forest on open talus slopes, rock outcrops, and crevices; on decomposed granite; 2770-3505 m.	Jul-Aug (Sep)	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA. The nearest recorded occurrence is approximately 4.1 miles to the west of the BSA.

Taxa	Status (Federal/State/CRPR)	Habitat and Distribution	Blooming/ Fruiting Period	Potential to Occur*
Draba californica California draba	SCC / - / 4.2	Alpine fell-fields; grassy meadows, open, rocky areas; 3250-4000 m.	Jun-Aug	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA and the site is well outside this species' known elevation range.
Draba cana canascent draba	- / - / 2B.3	Alpine boulder and rock field, meadows and seeps, subalpine coniferous forest; limestone substrates; 2985-3505 m.	Jul	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA. The nearest recorded occurrence is approximately 5.5 miles to the west of the BSA.
Draba monoensis White Mountains draba	SCC / - / 1B.2	Alpine fell-fields; meadows, moist gravel, rock crevices; 3600-4000 m.	Jul-Aug	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA and the site is well outside this species' known elevation range.
Draba praealta tall draba	- / - / 2B.3	Meadows and seeps; mesic sites; 2925-3445 m.	Jul-Aug	**Low** While suitable habitat is present within the BSA, the site is well outside this species' known elevation range. The nearest recorded occurrence is approximately 5.9 miles to the northwest of the BSA.
Draba sharsmithii Mount Whitney draba	SCC / - / 1B.3	Alpine fell-fields; rock crevices, slopes; 3300-3800 m.	Jul-Aug	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA and the site is well outside this species' known elevation range.
Dryopteris filix-mas male fern	SCC / - / 2B.3	Pinyon-juniper woodland; granitic cliffs; 2400-3100 m.	NA	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA and the site is outside this species' known elevation range.

Taxa	Status (Federal/State/CRPR)	Habitat and Distribution	Blooming/ Fruiting Period	Potential to Occur*
Elymus scribneri Scribner's wheat grass	- / - / 2B.3	Alpine boulder and rock field; 2900-4200 m.	Jul-Aug	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA.
Epilobium howellii subalpine fireweed	- / - / 4.3	Meadows and seeps, subalpine forest; wet meadows, mossy seeps; 2000-3120 m.	Jul-Aug	**Low** Limited marginally suitable meadow habitat is present within the BSA.
Eremothera boothii ssp. *alyssoides* Pine Creek evening- primrose	- / - / 4.3	Great Basin scrub; sandy, gravelly; 600-1700 m.	Apr-Aug	**Low** Suitable habitat and substrates are present within the BSA; however, the site is outside this species' known elevation range.
Eremothera boothii ssp. *boothii* Booth's evening-primrose	- / - / 2B.3	Joshua Tree woodland, pinyon and juniper woodland; 285-2290 m.	Apr-Sep	**Moderate** While ideal habitat for this species does not occur within the BSA; it was identified on Rush Creek in 2002 (LADWP, 2014).
Eremothera boothii ssp. *intermedia* Booth's hairy evening-primrose	- / - / 2B.3	Great Basin scrub (sandy), pinyon and juniper woodland; 1500-2150 m.	(May) Jun	**Moderate** Suitable habitat and substrates are present within the BSA.
Ericameria gilmanii Gilman's goldenbush	SCC / - / 1B.3	Subalpine forest, red fir forest, open conifer forest; generally on limestone; 2100-3400 m.	Aug-Sep	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.
Erigeron compactus compact daisy	SCC / - / 2B.3	Pinyon-juniper woodland; rocky slopes; 1800-2300 m.	May-Jun	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.
Erigeron uncialis var. *uncialis*	SCC / - / 1B.2	Sagebrush scrub, subalpine forest; limestone crevices; 2100-2900 m.	Jun-Jul	**Not Likely to Occur** Suitable substrate for this species does not occur within the BSA.

Taxa	Status (Federal/State/CRPR)	Habitat and Distribution	Blooming/ Fruiting Period	Potential to Occur*
Eriogonum alexandrae (*E. ochrocephalum* var. *ochrocephalum*) Alexander's buckwheat (ochre-flowered buckwheat)	SCC / - / 2B.2	Clay; 1300-1700 m.	May-Jun	**Not Likely to Occur** Suitable substrate for this species does not occur within the BSA.
Eriogonum mensicola Pinyon Mesa buckwheat	SCC / - / 1B.3	Rocky slopes; 1800-2700 m.	Jul-Oct	**Low** Marginally suitable substrate occurs within the BSA; however, this species has not been previously recorded in the area.
Eriogonum microthecum var. *alpinum* alpine slender buckwheat	- / - / 4.3	Alpine dwarf scrub, Great Basin scrub; 2500-3300 m.	Jul, Sep	**Low** While suitable habitat is present within the BSA, the site is outside this species' known elevation range.
Eriogonum wrightii var. *olanchense* Olancha Peak buckwheat	SCC / - / 1B.3	Subalpine forest, alpine fell-fields; gravel or rock; 3500-3600 m.	Jul-Aug	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA and the site is well outside this species' known elevation range.
Eriophorum gracile slender cottongrass	- / - / 4.3	Bogs and fens, meadows and seeps, upper montane coniferous forest; acidic substrates; 1280-2900 m.	Map-Sep	**Low** Limited marginally suitable meadow habitat is present within the BSA.
Erythranthe utahensis Utah monkeyflower	- / - / 2B.1	Meadows and seeps, pinyon and juniper woodland; 610-1950 m.	Apr	**Low** Limited marginally suitable meadow habitat is present within the BSA and site is above this species' known elevation range. The nearest recorded occurrence is approximately 2.9 miles to the northeast of the BSA.

Taxa	Status (Federal/State/CRPR)	Habitat and Distribution	Blooming/ Fruiting Period	Potential to Occur*
Festuca minutiflora small-flowered fescue	- / - / 2B.3	Alpine boulder and rock field; 3130-4055 m.	Jul	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA. The nearest recorded occurrence is approximately 5.3 miles to the west of the BSA.
Goodmania luteola Yellow spinecape	SCC / - / 4.2	Creosote bush scrub, valley grassland, alkali sink, wetland-riparian; meadows, playas; clay substrates; 70-2200 m.	Apr-Aug	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.
Greeneocharis circumscissa var. *rosulata* (*Cryptantha circumscissa* var. *rosulata*) rosette cushion cryptantha	SCC / - / -	Barren granitic gravels; 2950-3650 m.	Jul-Aug	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA and the site is well outside this species' known elevation range.
Grusonia pulchella Beautiful cholla	SCC / - / 2B.2	Creosote bush scrub, sagebrush scrub; dunes, borders of dry lakes, sandy flats; 1500-1700 m.	May-Jun	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.
Hackelia brevicula Poison Canyon stickseed	SCC / - / 3.3	Subalpine forest; open slopes, dry streambeds, rocky slopes, open aspen stands; 2700-3150 m.	Jul	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.
Hackelia sharsmithii Sharsmith's stickseed	SCC / - / 2B.3	Subalpine forest, alpine fell-fields; crevices in cliffs, talus slopes; 3150-3700 m.	Jul-Aug	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA and the site is well outside this species' known elevation range.
Helodium blandowii Blandow's bog moss	SCC / - / 2B.3	Montane minerotrophic or "moderately rich" fens or mires, usually with calcareous groundwater.	NA	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.
Hesperidanthus jaegeri Jaeger's hesperidanthus	SCC / - / 1B.2	Subalpine forest, pinyon-juniper woodland; rocky crevices, cliffs, limestone clefts; 1500-2800 m.	Apr-Jun	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.
Hordeum intercedens vernal barley	- / - / 3.2	Coastal dunes, coastal scrub, valley and foothill grassland (saline flats and depressions), vernal pools; 5-1000	Mar-Jun	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA.

Taxa	Status (Federal/State/CRPR)	Habitat and Distribution	Blooming/ Fruiting Period	Potential to Occur*
Horkelia hispidula White Mountains horkelia	SCC / - / 1B.3	Sagebrush scrub, subalpine forest, alpine fell-fields; dry flats; 3000-3400 m.	Jun-Aug	**Not Likely to Occur** While suitable sagebrush scrub habitat for this species occurs within the BSA, the site is well outside this species' known elevation range.
Hulsea brevifolia short-leaved hulsea	SCC / - / 1B.2	Lower montane coniferous forest, upper montane coniferous forest. Found in granitic or volcanic soil of forest openings and road cuts; 1280-2990 m.	May-Aug	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA.
Hulsea vestita ssp. *inyoensis* Inyo hulsea	SCC / - / 2B.2	Sagebrush scrub, pinyon-juniper woodland; open gravel, talus slopes; 1700-3000 m.	Apr-Jun	**Low** While suitable sagebrush scrub habitat for this species occurs within the BSA, substrates are marginal.
Hulsea vestita ssp. *parryi* Parry's sunflower	- / - / 4.3	Lower montane coniferous forest, pinyon and juniper woodland, upper montane forest; granitic or carbonate, rocky openings; 1370-2895 m.	Apr-Aug	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA.
Ivesia campestris field ivesia	SCC / - / 1B.2	Subalpine forest, red fir forest; meadow edges; 2200-3100 m.	Jul-Sep	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA.
Ivesia kingii var. *kingii*	SCC / - / 2B.2	Sagebrush scrub, alkali sink, wetland-riparian; meadows, playas; moist alkaline clay; 1200-2100 m.	Jun-Aug	**Not Likely to Occur** While suitable sagebrush scrub habitat for this species occurs within the BSA, suitable substrates are absent.
Jamesia americana var. *rosea* fivepetal cliffbush	SCC / - / 4.3	Subalpine forest, alpine fell-fields, pinyon-juniper woodland; rocky slopes, cliffs; 2070-3700 m.	Jul-Aug	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.
Kobresia myosuroides seep kobresia	SCC / - / 2B.2	Alpine fell-fields, subalpine forest, wetland-riparian; meadows, rocky seeps; >2700 m.	Aug	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA and the site is well outside this species' known elevation range.

Taxa	Status (Federal/State/CRPR)	Habitat and Distribution	Blooming/ Fruiting Period	Potential to Occur*
Ladeania lanceolata Lance-leaved scurf-pea	SCC / - / 2B.3	Sagebrush scrub; alluvial plains, sand; <2500 m.	May-Jul	**Moderate** Suitable scrub habitat and substrates are present within the BSA.
Lomatium foeniculaceum ssp. *inyoense* Inyo biscuitroot	SCC / - / 4.3	Subalpine forest, bristlecone-pine forest; open summits, subalpine scrub; 2195-3200 m.	Jun-Jul	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA.
Lupinus duranii Mono Lake lupine	SCC / - / 1B.2	Great Basin scrub, subalpine coniferous forest, upper montane coniferous forest; pumice sand flats, coarse barren soils of volcanic origin; 760-3050 m.	May-Aug	**High** Suitable scrub habitat and substrates are present within the BSA. The nearest recorded occurrence is approximately 2.2 miles to the southeast of the BSA.
Lupinus padre-crowleyi Father Crowley's lupine	SCC / - / 1B.2	Sagebrush scrub, lodgepole forest, red fir forest; decomposed granite; 2500-4000 m.	Jun-Sep	**Not Likely to Occur** While suitable sagebrush scrub habitat for this species occurs within the BSA, the site is outside this species' known elevation range.
Meesia longiseta long seta hump moss	- / - / 2B.3	Bogs and fens, meadows and seeps, upper montane coniferous forest on moist soil along streams, often carbonate; 1750-3045 m.	undefined	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.
Mentzelia inyoensis Inyo blazing star	SCC / - / 1B.3	Rocky slopes, canyons, washes, clay hills; 1100-2000 m.	May-Aug	**Moderate** Suitable wash habitat is present within the BSA.
Mentzelia monoensis Mono Craters blazing star	- / - / 4.3	Great Basin scrub, upper montane coniferous forest; pumice, gravelly, disturbed areas; 2005-2480 m.	May-Jul	**High** Suitable scrub habitat and substrates are present within the BSA.
Mentzelia torreyi Torrey's blazing star	SCC / - / 2B.2	Great Basin scrub, Mojavean Desert scrub, pinyon and juniper woodland; sandy or rocky sites; alkaline, usually volcanic soils; 1165-2155 m.	Jun-Aug	**Moderate** Suitable scrub habitat and substrates are present within the BSA. The nearest recorded occurrence is approximately 4.7 miles to the northeast of the BSA.

Taxa	Status (Federal/State/CRPR)	Habitat and Distribution	Blooming/ Fruiting Period	Potential to Occur*
Micranthes marshallii Marshall's saxifrage	- / - / 4.3	Riparian forest and rocky streambanks; 90- 2130 m.	Mar-Aug	**Low** Marginal riparian habitat is present within the BSA.
Mimulus glabratus ssp. *utahensis* Utah monkeyflower	- / - / 2B.1	Pinyon-juniper woodland, wetland-riparian; wet places, springs, seeps, meadows, streams, marshy areas; 1400-2500 m.	May-Aug	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.
Minuartia stricta granite sandwort	- / - / 2B.3	Alpine fell-fields, sedge meadows; alpine; wetland-riparian, sandy wet spots; granitic gravels; 3500-3900 m.	Aug	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA.
Monardella beneolens sweet-smelling monardella	SCC / - / 1B.3	Lodgepole forest, subalpine forest, alpine fell-fields, red fir forest; rocky granitic or metamorphic slopes; 2500-3600 m.	Apr-Sep	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA.
Oreocarya roosiorum bristlecone cryptantha	SCC / - / 1B.2	Subalpine forest, bristlecone pine-limber pine forest; rocky, dry meadows; 2570-3230 m.	Jun-Jul	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA.
Oxytropis deflexa var. sericea blue pendant-pod oxytrope	SCC / - / 2B.1	Lodgepole forest, red fir forest, wetland-riparian; moist meadows, forest openings; 2800-3200 m.	Jun-Aug	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA and the site is well outside of this species' known elevation range.
Parnassia parviflora small-flowered grass-of-Parnassus	- / - / 2B.2	Meadows and seeps; mesic; 2000-2855 m.	Aug-Sep	**Low** Limited marginally suitable meadow habitat is present within the BSA.
Peltigera gowardii western waterfan lichen	- / - / 4.2	Riparian forest on rocks in cold water creeks with little or no sediment or disturbance. Often associated with rich Bryophyte flora; 1065-2375 m.	NA	**Low** Marginal riparian habitat is present within the BSA.
Penstemon calcareus limestone beardtongue	SCC / - / 1B.3	Creosote bush scrub, Joshua tree woodland, pinyon-juniper woodland; limestone crevices, rocky slopes; 1200-1600 m.	Apr-May	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.
Petrophyton caespitosum ssp. *acuminatum* marble rockmat	SCC / - / 1B.3	Conifer forest; limestone cliffs; 900-2350 m.	Jun-Sep	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.

Taxa	Status (Federal/State/CRPR)	Habitat and Distribution	Blooming/ Fruiting Period	Potential to Occur*
Phacelia inyoensis Inyo phacelia	SCC / - / 1B.2	Meadows and seeps; alkaline meadows; 915-3200 m.	Apr-Aug	**Low** Limited marginally suitable meadow habitat is present within the BSA.
Phacelia monoensis Mono County phacelia	SCC / - / 1B.1	Sagebrush scrub, pinyon-juniper woodland; disturbed area, fractured rhyolitic clay soils; 1900-2900 m.	May-Jul	**Low** While suitable scrub habitat is present within the BSA, substrates are not ideal.
Phacelia nashiana Charlotte's phacelia	SCC / - / 1B.2	Creosote bush scrub, Joshua tree woodland, pinyon-juniper woodland; sandy to rocky, granitic east-facing slopes; <2400 m.	Feb-Jun	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.
Physaria ludoviciana silver bladderpod	SCC / - / 2B.2	Sandy, gravelly soils, pastures, hillsides, limestone outcrops; 2150 m.	Apr-Aug	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.
Physocarpus alternans Nevada ninebark	SCC / - / 2B.3	Pinyon-juniper woodland; dry, rocky, limestone outcrops; 1800-3100 m.	Jun-Jul	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.
Plagiobothrys parishii Parish's popcornflower	SCC / - / 1B.1	Joshua tree woodland, wetland-riparian; wet, alkaline soil around desert springs, mud flats; 750-2210 m.	Mar-Jun	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.
Podistera nevadensis Sierra podistera	- / - / 4.3	Alpine boulder and rock field; 3000-4000 m	Jul-Sep	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA.
Pohlia tundrae tundra thread moss	- / - / 2B.3	Alpine boulder and rock field, grows on gravelly, damp soil; 2700-3000 m.		**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA. The nearest recorded occurrence is approximately 6.6 miles to the west of the BSA.
Polemonium chartaceum Mason's sky pilot	SCC / - / 1B.3	Subalpine forest, alpine fell-fields; rocky slopes, talus; 2600-4200 m.	Jul-Aug	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA and the site is well outside this species' known elevation range.

Taxa	Status (Federal/State/CRPR)	Habitat and Distribution	Blooming/ Fruiting Period	Potential to Occur*
Polyctenium williamsiae William's combleaf	SCC / - / 1B.2	Sagebrush scrub; saline soils, vernal pool edges, lake margins, meadows, swales, mud flats, dry streambeds, gravel bars; 100-2500 m.	May-Jul	**Not Likely to Occur** Suitable scrub habitat is present within the BSA; however preferred substrates are absent and this species has not been identified within 10 miles of the site.
Populus angustifolia narrow-leaved cottonwood	SCC / - / 2B.2	Riparian forest, wetland-riparian; streamsides; 1500 m.	Apr-May	**Low** While marginally suitable riparian habitat occurs within the BSA, the site is well outside this species' known elevation range.
Potamogeton robbinsii Robbin's pondweed	- / - / 2B.3	Marshes and swamps; deep water; lakes; 1525-3495 m.	Jul-Aug	**Moderate** The portion of Grant Lake within the BSA provides marginally suitable habitat for this species. The nearest recorded occurrence is approximately 3.0 miles to the west of the BSA.
Potentilla morefieldii Morefield's cinquefoil	SCC / - / 1B.3	Alpine fell-fields; rocky alpine barrens; 3300-4000 m.	Jun-Aug	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA and the site is well outside this species' known elevation range.
Potentilla pulcherrima beautiful cinquefoil	SCC / - / 2B.2	Dry edges of meadows, streams; 3000-3100 m.	Jul-Aug	**Not Likely to Occur** While suitable habitat does occur within the BSA, the site is well outside this species' known elevation range.
Puccinellia simplex California alkali grass	- / - / 1B.2	Chenopod scrub, meadows and seeps, valley and foothill grassland, vernal pools; alkaline, vernally mesic; sinks, flats, and lake margins; 2-930 m.	Mar-May	**Not Likely to Occur** Limited marginally suitable meadow habitat is present within the BSA. The site is outside this species' known elevation range.

Taxa	Status (Federal/State/CRPR)	Habitat and Distribution	Blooming/ Fruiting Period	Potential to Occur*
Ranunculus hydrocharoides frog's-bit buttercup	SCC / - / 2B.1	Freshwater wetlands, wetland-riparian; wet ground, shallow water, creek edges, lakes; 1200-2800 m.	Jun-Aug	**Moderate** The portions of Grant Lake, the MGORD, and Rush Creek within the BSA provide marginally suitable habitat for this species.
Sabulina stricta bog sandwort	- / - / 2B.3	Meadows and seeps, alpine boulder and rock field, alpine dwarf scrub; moist granitic gravelly sites in sedge meadows and other alpine habitats; 2440-3960 m.	Jul-Sep	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA. The nearest recorded occurrence is approximately 4.4 miles to the southwest of the BSA.
Salix brachycarpa var. *brachycarpa* short-fruited willow	- / - / 2B.3	Alpine dwarf scrub, meadows and seeps, subalpine coniferous forest; carbonate; 3000-3500 m.	Jun-Jul	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA.
Salix nivalis snow willow	- / - / 2B.3	Alpine dwarf scrub, lakeshores and stream sides; 2755-3475 m.	Jul-Aug	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA. The nearest recorded occurrence is approximately 5.1 miles to the southwest of the BSA.
Sclerocactus polyancistrus redspined fishhook cactus	SCC / - / 4.2	Creosote bush scrub, Joshua tree woodland; limestone areas, hills and canyons, alluvial slopes; 750-2100 m.	Apr-Jun	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.
Senecio hydrophiloides sweet marsh ragwort	- / - / 4.2	Lower montane coniferous forest; meadows and seeps; mesic; 0-2800 m.	May-Aug	**Low** Limited marginally suitable meadow habitat is present within the BSA.
Silene oregana Oregon campion	- / - / 2B.2	Great Basin scrub, subalpine coniferous forest; 1675-2930 m.	Jul-Sep	**Moderate** Suitable scrub habitat is present within the BSA; however, this species is more often associated with forest openings and meadows (LADWP, 2014).

Taxa	Status (Federal/State/CRPR)	Habitat and Distribution	Blooming/ Fruiting Period	Potential to Occur*
Solorina spongiosa Fringed chocolate chip lichen	SCC / - / 2B.2	In moist, calcareous habitats.	NA	**Low** Limited suitable habitat occurs within the BSA.
Sphaeromeria potentilloides var. *nitrophila* fivefinger chickensage	SCC / - / 2B.2	Wetland-riparian; generally alkaline areas; 1600-2200 m.	May-Jul	**Low** Suitable riparian habitat occurs within the BSA; however, alkaline substrates were not observed.
Sphenopholis obtusata prairie wedge grass	SCC / - / 2B.2	Foothill woodland, wetland-riparian; wet meadows, streambanks, ponds; 240-2870 m.	Apr-Jun	**Moderate** The portions of the MGORD and Rush Creek within the BSA provide marginally suitable habitat for this species.
Stipa divaricata small-flowered ricegrass	SCC / - / 2B.3	Pinyon-juniper woodland; gravel benches, rocky slopes, creek banks; 800-3100 m.	Jun-Sep	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.
Streptanthus gracilis alpine jewelflower	SCC / - / 1B.3	Subalpine forest, red fir forest; rocky slopes; 2600-3600 m.	Jun-Sep	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA and the site is outside this species' known elevation range.
Streptanthus oliganthus Masonic mountain jewelflower	SCC / - / 1B.2	Pinyon woodland, pine forest, subalpine forest, sagebrush scrub; dry, open, rocky; 2000-3050 m.	Jun-Aug	**Moderate** Suitable scrub habitat is present within the BSA.
Stuckenia filiformis ssp. *alpine* slender-leaved pondweed	- / - / 2B.2	Marshes and swamps; shallow, clear water of lakes and drainage channels; 5-2325 m.	May-Jul	**Moderate** The portion of Grant Lake within the BSA provides marginally suitable habitat for this species. The nearest recorded occurrence is approximately 5.1 miles to the south of the BSA.

Taxa	Status (Federal/State/CRPR)	Habitat and Distribution	Blooming/ Fruiting Period	Potential to Occur*
Taraxacum ceratophorum horned dandelion	SCC / - / 2B.1	Moist alpine meadows; 2900-3100 m.	Jun-Aug	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA and the site is outside this species' known elevation range.
Tetradymia tetramers Dune horsebrush	SCC / - / 2B.2	Sagebrush scrub; dunes, deep sand; 1200-2100 m.	May-Sep	**Not Likely to Occur** Suitable substrates for this species do not occur within the BSA.
Thelypodium integrifolium ssp. *complanatum* foxtail thelypodium	SCC / - / 2B.2	Woodlands; wetland-riparian; alkaline or silty soils; 1100-2500 m.	Jun-Aug	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.
Thelypodium milleflorum many-flowered thelypodium	SCC / - / 2B.2	Scrub; sandy soils; 1300-2500 m.	Apr-Aug	**Moderate** Suitable scrub habitat and substrates are present within the BSA.
Townsendia leptotes slender townsendia	SCC / - / 2B.3	Alpine fell-fields; rocky or sandy slopes; 3500-3800 m.	Jun-Jul	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA and the site is outside this species' known elevation range.
Transberingia bursifolia ssp. *virgata* virgate halimolobos	SCC / - / 2B.3	Pinyon-juniper woodland, near aspen groves; meadows; 2000-3700 m.	May-Jul	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA.
Trichophorum pumilum little bulrush	SCC / - / 2B.2	Alpine Fell-fields, wetland-riparian; wet sites, limestone soils; 3100-3250 m.	Summer	**Not Likely to Occur** Suitable habitat for this alpine species does not occur within the BSA and the site is outside this species' known elevation range.
Trifolium dedeckerae Dedecker's clover	SCC / - / 1B.3	Lodgepole forest, subalpine forest, red fir forest, yellow pine forest, pinyon-juniper woodland; rock crevices; 2100-3500 m.	May-Jul	**Not Likely to Occur** Suitable habitat for this species does not occur within the BSA.

Taxa	Status (Federal/State/CRPR)	Habitat and Distribution	Blooming/ Fruiting Period	Potential to Occur*
Viola purpurea ssp. *aurea* golden violet	SCC / - / 2B.2	Great Basin scrub, pinyon-juniper woodland; dry, sandy slopes; 1000-2500 m.	Apr-Jun	**Moderate** Suitable scrub habitat and substrates are present within the BSA. The nearest recorded occurrence is approximately 1.1 miles to the south of the BSA.

Sources: Baldwin et al. 2012; CDFW, 2019a; CNPS, 2019.

***** Species listings for which nearest/most recent data are not listed in this table originated from the CNPS database or USFS list of Inyo Forest Species of Conservation Concern. Metadata for these records are not available from either of these sources.

Status Codes

Federal Designation:

SCC = Inyo National Forest Species of Conservation Concern

CDFW State Designations:

SR = State listed, rare

CNPS CRPR Designations:

1B = Plants rare, threatened, or endangered in California and elsewhere.

2B = Plants presumed extinct in California but more common elsewhere.

3 = Plants about which we need more information – a review list.

4 = Plants of limited distribution – a watch list.

.1 = Seriously threatened in California (high degree/immediacy of threat).

.2 = Fairly threatened in California (moderate degree/immediacy of threat).

.3 = Not very threatened in California (low degree/immediacy of threats or no current threats known).

5.4 SPECIAL-STATUS WILDLIFE

Special-status wildlife taxa include those listed as threatened or endangered under the federal or California ESAs, taxa proposed for such listing, SSC, and other taxa that have been identified by the USFWS, CDFW, or local jurisdictions as unique or rare and which have the potential to occur within the BSA.

The CNDDB was queried for occurrences of special-status wildlife taxa within the USGS topographical quadrangles in which the BSA occurs and the eight surrounding quadrangles, as discussed above in Section 2.0. **Table 3** summarizes the special-status wildlife taxa known to occur regionally and their potential for occurrence in the BSA; refer to **Appendix A**, **Figures 5a** and **5b** for a graphical depiction of previously reported species locations. Each of the taxa identified in the database reviews/searches were assessed for its potential to occur within the BSA based on the following criteria:

- **Present**: Taxa (or sign) were observed in the BSA or in the same watershed (aquatic taxa only) during the most recent surveys, or a population has been acknowledged by CDFW, USFWS, or local experts.
- **High**: Habitat (including soils) for the taxa occurs onsite and a known occurrence occurs within the BSA or adjacent areas (within 5 miles of the BSA) within the past 20 years; however, these taxa were not detected during the most recent surveys.
- **Moderate**: Habitat (including soils) for the taxa occurs onsite and a known regional record occurs within the database search, but not within 5 miles of the BSA or within the past 20 years; or a known occurrence occurs

within 5 miles of the BSA and within the past 20 years and marginal or limited amounts of habitat occurs onsite; or the taxa's range includes the geographic area and suitable habitat exists.

- **Low**: Limited habitat for the taxa occurs within the BSA and no known occurrences were found within the database search and the taxa's range includes the geographic area.
- **Not Likely to Occur**: The environmental conditions associated with taxa presence do not occur within the BSA.

Table 4 Known and Potential Occurrence of Special-Status Wildlife within the BSA

Taxa		Status (Federal / State)	Habitat and Distribution	Comments	Potential to Occur*
Scientific Name	**Common Name**				
Aquatic Invertebrates					
Margaritifera falcata	western pearlshell mussel	SCC / -	Prefers cold clean creeks and rivers that support salmonid populations. Can inhabit headwater streams less than a few feet wide but is more common in larger rivers. Sand, gravel, and cobble are preferred substrates, especially in stable areas of the streambed. Large boulders help create stable environments by anchoring the substrate and creating a refuge from strong currents on the downstream side. Once present from southern Alaska and British Columbia to central California, eastward to western Montana, western Wyoming, and northern Utah in the headwaters of the Missouri River.	Suitable habitat is present within the MGORD and Rush Creek in the BSA.	**Moderate**
Pyrgulopsis owensensis	Owen's Valley springsnail	SCC / -	Occurs throughout the Inyo National Forest and, due to its inability to disperse, is limited to the small springs that it inhabits.	Suitable habitat is not present within the BSA.	**Not Likely to Occur**
Pyrgulopsis wongi	Wong's springsnail	SCC / -	Habitat is restricted to seeps, headsprings, and upper reaches of spring runs. Typically common in watercress and/or on small bits of travertine [sedimentary rock] and stone. Occurs in Owens Valley (where most of the populations occur) and nine other drainage basins from Rose Valley in central California to Mono Lake and the Carson River Valley in Nevada.	Suitable habitat is not present within the BSA.	**Not Likely to Occur**
Terrestrial Invertebrates					
Colias behrii	Sierra sulphur	SCC / -	Endemic to California's Sierra Nevada from Tuolumne County south to Tulare County. Subalpine and alpine meadows, usually above 2745 m.	Suitable habitat is not present within the BSA and the site is well outside this species' known elevation range.	**Not Likely to Occur**

Special-Status Biological Resources

Taxa		Status (Federal / State)	Habitat and Distribution	Comments	Potential to Occur*
Scientific Name	**Common Name**				
Euphilotes battoides mazourka	square dotted blue	SCC / -	Habitat varies by subspecies; includes, prairie, open woodlands, chaparral, dunes, and alpine rock gardens. Spotty distribution from Washington south to Baja California Norte, and west to southern Colorado and New Mexico.	Suitable habitat is not present within the BSA.	**Not Likely to Occur**
Euphydryas editha monoensis	Mono Lake checkerspot	SCC / -	Pinon-juniper woodland, meadows, mountain slopes. Host may be *Collinsia parvifloria*. Eastern slope of the Sierra Nevada from Bishop, CA to Schneider Meadow, near Carson City, NV.	Suitable habitat is not present within the BSA.	**Not Likely to Occur**
Plebejus icarioides inyo	Boisduval's blue	SCC / -	Forest clearings and edges, prairie, sagebrush, chaparral, coastal dunes, fields. British Columbia east to the western edge of the Great Plains, south to New Mexico, Arizona, southern California, and Baja California.	Suitable sagebrush habitat is present within the BSA.	**Moderate**
Plebulina emigdionis	San Emigdio blue	SCC / -	Dry rivercourses and intermittent streamsides as well as adjacent flats. Hostplant is A*triplex canescens*. Southern California, from southern San Joaquin Valley and Mojave Desert south to Victorville area.	Suitable habitat occurs within the BSA; however, hostplant is not present, and the site is outside this species' known range.	**Not Likely to Occur**
Speyeria nokomis apacheana	Apache fritillary	SCC / -	Moderately widespread in Nevada and eastern California, east of the Sierra Nevada.	Ecology and life history information for this species is sparse. Unknown whether the BSA supports habitat; potential to occur is based on fairly widespread distribution.	**Moderate**
Tuberochernes aalbui	a cave obligate pseudoscorpion	SCC / -	Subterranean obligate.	Ecology and life history information for this species is sparse; however, no cave habitat occurs within the BSA.	**Not Likely to Occur**

Taxa		Status (Federal / State)	Habitat and Distribution	Comments	Potential to Occur*
Scientific Name	**Common Name**				
Fish					
Oncorhynchus mykiss aguabonita	California golden trout	SCC / SSC	Cold, clear alpine streams. Generally prefer pool habitat and congregate near emergent sedges and undercut banks. Endemic to the South Fork of the Kern River, which flows into Isabella Reservoir and to Golden Trout Creek, which flows into the Kern River. Initially (1909 and earlier) California golden trout were collected from Golden Trout Creek and transported north, extending their range by some160 km by 1914. They were also translocated into many other waters within and outside California, including Mulkey Creek and the Cottonwood Lakes not far from the headwaters of Golden Trout Creek and headwaters of South Fork Kern River. As a result of stocking in California, these fish are now found in more than 300 high mountain lakes and 1100 km of streams outside their native range.	Suitable habitat is not present within the BSA. This species has not been recorded within 10 miles of the BSA.	**Not Likely to Occur**
Amphibians					
Anaxyrus canorus	Yosemite toad	FT / SSC	Found in the vicinity of wet meadows in central High Sierra from 1,950-3,444 meters (m.) in elevation. Primarily found in montane wet meadows. Also found in seasonal ponds associated with Lodgepole Pine and subalpine conifer forest.	No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 5.8 miles to the west of the BSA.	**Not Likely to Occur**
Anaxyrus exsul	black toad	SCC / ST, FP	Inhabits springs and marshes in an isolated desert basin between the Inyo and White Mountains. Toads are sometimes found in surrounding grasses. The vegetation around these springs is sparse and conditions are very dry with sandy soil. Endemic to California. This toad has one of the smallest ranges of any North American amphibian. It occurs naturally only in a few spring systems in Deep Springs Valley, Inyo county.	Suitable habitat is not present within the BSA and the site is outside of this species' known range. This species has not been recorded within 10 miles of the BSA.	**Not Likely to Occur**

Taxa		Status (Federal / State)	Habitat and Distribution	Comments	Potential to Occur*
Scientific Name	**Common Name**				
Batrachoseps campi	Inyo Mountains slender salamander	SCC / SSC	Inhabits very dry mountain ranges typically in the immediate vicinity of springs, seeps, and their associated riparian growth where there is a small area of suitable habitat surrounded by inhospitable desert terrain. Although they have been found on both slopes of the Inyo Mountains, they are more widely distributed on the east side. 550-2620 m.	Suitable habitat is not present within the BSA and the site is outside of this species' known range. This species has not been recorded within 10 miles of the BSA.	**Not Likely to Occur**
Batrachoseps robustus	Kern Plateau salamander	SCC / -	Moist habitats of pine and fir forests, and pinon pine, sagebrush, and oaks in drier habitats. Found under logs, bark, rocks, and other debris especially near springs, seeps and outflow streams. Occurs on the Kern Plateau of the southeastern Sierra Nevada in Kern County from 1700-2800 m, on the eastern slopes of the Sierra Nevada draining into the Owens Valley and Indian Wells Valley in Inyo County at elevations of 1430-2440 m and the Scodie Mountains in Kern County at elevations of 1980-2025 m.	Marginally suitable habitat occurs within the BSA.	**Moderate**
Rana sierrae	Sierra Nevada yellow-legged frog	FE / ST, WL	Always encountered within a few feet of water. Tadpoles may require 2-4 years to complete their aquatic development.	Suitable habitat occurs within the BSA. This species has been recorded within the BSA; however, this observation was well over 20 years ago. The most recent record is from 2008, approximately 7.3 miles to the southwest.	**Moderate**
Birds					
Accipiter gentilis	northern goshawk	- / SSC	Found within, and in vicinity of, coniferous forest. Uses old nests and maintains alternate sites. Usually nests of north slopes, near water in Red Fir, Lodgepole Pine, Jeffrey Pine, and Aspens.	No suitable nesting/foraging habitat is present within the BSA, though does occur in the nearby Sierra Nevada Mountains. The nearest recorded occurrence is approximately 1.9 miles to the north of the BSA; however, this observation was over 20 years ago.	**Low** (as a transient) **Not Likely to Occur** (nesting and foraging)

Special-Status Biological Resources

Taxa		Status (Federal / State)	Habitat and Distribution	Comments	Potential to Occur*
Scientific Name	**Common Name**				
Aquila chrysaetos	golden eagle	BCC / FP	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	Suitable foraging habitat occurs within the BSA. This species has not been recorded within 10 miles of the BSA.	**Moderate** (foraging) **Not Likely to Occur** (nesting)
Buteo swainsoni	Swainson's hawk	BCC / ST	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch land with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain field supporting rodent populations.	Marginally suitable foraging habitat occurs within and in the vicinity of the BSA. The nearest recorded occurrence is approximately 0.1 mile to the west of the BSA; however, this observation was over 20 years ago.	**Low** (foraging) **Not Likely to Occur** (nesting)
Centrocercus urophasianus	greater sage-grouse	FT / SSC	Limited to sagebrush steppe of western North America, using several types of sagebrush habitat in different parts of the year. Nest in areas with relatively dense cover from *Artemisia tridentata*, though they also use areas with *Chrysothamnos*, *Sarcobatus*, and grassy areas. Leks are located in clear areas such as broad ridgetops, grassy swales, dry lakebeds, and sometimes recently burned areas. May forage in irrigated pastures, wet meadows, and alfalfa fields	Suitable habitat occurs within the BSA; however, available telemetry data indicates infrequent use of the site (LADWP, 2014)	**Moderate** (foraging) **Low** (nesting)
Circus hudsonius	northern harrier	- / SSC	Coastal salt and freshwater marsh. Nest and forage in grasslands, from salt grass in desert sink to mountain cienagas. Nests on ground in shrubby vegetation, usually at marsh edge.	No suitable nesting/foraging habitat is present within the BSA. The nearest recorded occurrence is approximately 4.9 miles to the north of the BSA.	**Low** (as a transient) **Not Likely to Occur** (nesting and foraging)

Taxa		Status (Federal / State)	Habitat and Distribution	Comments	Potential to Occur*
Scientific Name	**Common Name**				
Dendragapus fuliginosus howardi	Mount Pinos sooty grouse	SCC / SSC	In the Sierra Nevada portion of its range, congregates near traditional hooting sites in high-elevation conifer forest. Hooting habitat usually consists of open, mature *Abies*/*Pinus* forest on or near a ridge between 1829–3048 m. Resides on the western slopes of the coastal mountains of British Columbia and southeastern Alaska (including most adjacent islands) and in the major cordilleras of western Washington, western Oregon, and northern and central (formerly southern) California. In California, it occurs in the northern Coast Ranges (south to Sonoma Co.) and in the Klamath and Siskiyou mountains south through the Cascade and Sierra Nevada ranges, with outlying populations in nearby mountains to the east and (formerly) south.	Suitable habitat is not present within the BSA. This species has not been recorded within 10 miles of the BSA.	**Not Likely to Occur** (nesting and foraging)
Empidonax traillii (*E. t. brewsteri* and *E. t. adastus*)	willow flycatcher	BCC, SCC / SE	Inhabits extensive thickets of low, dense willows on edge of wet meadows, ponds, or backwaters; 610-2,440 m. elevation. Requires dense willow thickets for nesting/roosting. Low, exposed branches are used for singing posts/hunting perches.	Suitable habitat occurs within the BSA associated with Rush Creek. This species was recorded within the BSA during biological surveys conducted for the Project in 2014 (LADWP, 2014).	**High** (nesting and foraging)
Falco mexicanus (nesting)	prairie falcon	BCC / WL	Inhabits dry, open terrain, either level or hilly. Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	Marginal foraging habitat occurs within the BSA. This species has been recorded within the BSA; however, the most recent observation was well over 20 years ago.	**Low** (foraging) **Not Likely to Occur** (nesting)
Haliaeetus leucocephalus	bald eagle	Delisted, SCC / SE, FP	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	Suitable foraging habitat occurs within the BSA. This species has not been recorded within 10 miles of the BSA.	**Moderate** (foraging) **Not Likely to Occur** (nesting)

Special-Status Biological Resources

Taxa		Status (Federal / State)	Habitat and Distribution	Comments	Potential to Occur*
Scientific Name	**Common Name**				
Larus californicus (nesting colony)	California gull	- / WL	Littoral waters, sandy beaches, waters and shorelines of bays, tidal mud-flats, marshes, lakes, etc. Colonial nester on islets in large interior lakes, either fresh or strongly alkaline.	Suitable habitat occurs within the BSA associated with Grant Lake. The nearest recorded occurrence is approximately 6.6 miles to the northeast of the BSA.	**Moderate** (foraging or as a transient) **Not Likely to Occur** (nesting)
Pandion haliaetus (nesting)	osprey	- / WL	Ocean shore, bays, freshwater lakes, and larger streams. Large nests are built in tree-tops within 15 miles of a good fish-producing body of water.	This species was observed perching adjacent to Grant Lake during the June 2019 reconnaissance survey.	**Present** (foraging) **Not Likely to Occur** (nesting)
RIparia riparia	bank swallow	FT / -	Low areas along rivers, streams, ocean coasts, and reservoirs. Territories usually include vertical cliffs or banks. Forage in open areas and avoid places with tree cover.	Suitable foraging habitat occurs within the BSA, though nesting habitat is not present. This species has not been recorded within 10 miles of the BSA.	**Moderate** (foraging) **Not Likely to Occur** (nesting)
Setophaga petechia	yellow warbler	BCC / SSC	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	Suitable habitat is present within the BSA associated with Rush Creek and Grant Lake. This species was recorded within the BSA during biological surveys conducted for the Project in 2014 (LADWP, 2014).	**High** (nesting and foraging)
Spizella breweri (nesting)	Brewer's sparrow	BCC / -	East of Cascade-Sierra Nevada crest, mountains and high valleys of Mojave Desert, and mountains at southern end of San Joaquin Valley. For nesting, they prefer high sagebrush plains, slopes, and valley with great basin sagebrush and antelope brush.	Suitable habitat is present within the BSA. This species was recorded within the BSA during biological surveys conducted for the Project in 2014 (LADWP, 2014).	**High** (nesting and foraging)

Taxa		Status (Federal / State)	Habitat and Distribution	Comments	Potential to Occur*
Scientific Name	**Common Name**				
Strix nebulosa	great gray owl	SCC / SE	In the U.S., use pine and fir forests adjacent to montane meadows between 760 and 2290 m. In California and Oregon during the winter months, owls often move downslope into oak woodlands and lower elevation mixed deciduous and evergreen forests. Resident of the boreal forests of North America and Eurasia. The known breeding range in North America is from the boreal forests of Alaska east to Ontario and south to northern Minnesota and Wisconsin. Also breed in northern Idaho, western Montana, northwestern Wyoming, northeastern Utah, west-central Nevada, and the Sierra Nevada.	Suitable habitat is not present within the BSA. This species has not been recorded within 10 miles of the BSA.	**Not Likely to Occur** (nesting and foraging)
Strix occidentalis	California spotted owl	BCC, SCC / SSC	Hardwood, coniferous, and coniferous-hardwood forests including red fir, ponderosa and Jeffrey pine, redwood/California bay, ponderosa pine/hardwood, live oak-bigcone Douglas fir, and oak woodlands. The California spotted owl's range overlaps that of the northern spotted owl in the southern Cascade Range and extends south through the western Sierra Nevada to Tulare County. They also occur in discrete populations in coastal mountainous areas Monterey County, California, to northern Baja California	Suitable habitat is not present within the BSA. This species has not been recorded within 10 miles of the BSA.	**Not Likely to Occur** (nesting and foraging)
Xanthocephalus xanthocephalus	yellow-headed blackbird	- / SSC	Nests in freshwater emergent wetlands with dense vegetation and deep water, often along borders of lakes or ponds. Nests only where large insects such as *Odanta* are abundant. Nesting timed with maximum emergence of aquatic insects.	Marginally suitable habitat is present within the BSA associated with Grant Lake. The nearest recorded occurrence is approximately 4.9 miles to the north of the BSA.	**Low** (nesting and foraging)

Taxa		Status (Federal / State)	Habitat and Distribution	Comments	Potential to Occur*
Scientific Name	**Common Name**				
Mammals					
Aplodontia rufa californica	Sierra Nevada mountain beaver	- / SSC	Dense growth of small deciduous trees and shrubs, wet soil, and abundance of forbs in the Sierra Nevada and east slope. Needs dense understory for food and cover. Burrows into soft soil. Needs abundant supply of water.	Suitable habitat is not present within the BSA. The nearest recorded occurrence is approximately 5.7 miles to the south of the BSA.	**Not Likely to Occur**
Brachylagus idahoensis	pygmy rabbit	- / SSC	Sagebrush, bitterbrush, and pinyon-juniper habitats in Modoc, Lassen, and Mono counties. Tall, dense, large-shrub stages of sagebrush, greasewood and rabbitbrush, may avoid heavily grazed areas.	Suitable habitat is present within the BSA. Species was observed during biological surveys conducted for the Project in 2014 (LADWP, 2014).	**High**
Euderma maculatum	spotted bat	- / SSC	Occupies a wide variety of habitats from arid deserts and grasslands through mixed conifer forests. Feeds over water and along washes. Feeds almost entirely on moths. Needs rock crevices in cliffs or caves for roosting.	Suitable foraging habitat is present within the BSA. The nearest recorded occurrence is approximately 7.3 miles to the west of the BSA.	**Moderate** (foraging)
Eumops perotis californicus	western mastiff bat	- / SSC	Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	Suitable foraging habitat is present within the BSA. The nearest recorded occurrence is approximately 4.4 miles to the northwest of the BSA.	**Moderate** (foraging)
Gulo gulo	California wolverine	FPT / ST, FP	Found in the north coast mountains and the Sierra Nevada. Found in a wide variety of high elevation habitats. Needs water source. Uses caves, logs, burrows for cover and den area. Hunts in more open areas and can travel long distances.	Suitable habitat is not present within the BSA. This species has been recorded approximately 5.8 miles to the southwest and northwest of the BSA; however, these observations are from over 20 years ago.	**Not Likely to Occur**
Lepus townsendii townsendii	western white-tailed jackrabbit	- / SSC	Sagebrush, subalpine conifer, juniper, alpine dwarf shrub, and perennial grassland. Open areas with scattered shrubs and exposed flat-topped hills with open stands of trees, brush, and herbaceous understory.	Suitable habitat is present within the BSA. This species has been recorded within the BSA; however, this observation was well over 20 years ago.	**Moderate**

Taxa		Status (Federal / State)	Habitat and Distribution	Comments	Potential to Occur*
Scientific Name	**Common Name**				
Ovis canadensis nelson	Nelson desert bighorn sheep	FE, SCC / -	Alpine dwarf-shrub, low sage, sagebrush, bitterbrush, pinyon-juniper, palm oasis, desert riparian, desert succulent shrub, desert scrub, subalpine conifer, perennial grassland, montane chaparral, and montane riparian. Occur in the desert mountain ranges from the White Mountains in Mono and Inyo counties, south to the San Bernardino Mountains, then southeast to Mexico. Beyond California, its range extends into southern Nevada, southern Utah, southwestern Arizona, and northwestern Mexico and Baja California, Mexico.	Marginally suitable habitat is present within the BSA; however, the site is outside this species' known range. This species has not been recorded within 10 miles of the BSA.	**Not Likely to Occur**
Martes caurina sierrae	Sierra marten	- / SSC	Occur primarily in high elevation forests with dense canopy cover, especially late successional forests where old-growth characteristics are abundant. Range includes the southern Cascade mountains and Sierra Nevada of northern, central, and southern California and adjacent west-central Nevada.	Suitable habitat is not present within the BSA.	**Not Likely to Occur**
Pekania pennant	fisher	- / ST, SSC	Intermediate to large-tree stages of coniferous forests and deciduous-riparian areas with high percent canopy closure. Uses cavities, snags, logs, and rocky areas for cover and denning. Needs large areas of mature, dense forest.	Suitable habitat is not present within the BSA. The nearest recorded occurrence is approximately 4 miles to the south of the BSA; however, this and the most recent observations were well over 20 years ago.	**Not Likely to Occur**
Sorex lyelli	Mount Lyell shrew	- / SSC	Limited to areas within or near Yosemite National Park, in vicinity of Mt. Lyell. Favors riparian areas and other wet sites. Requires moist soils.	Marginally suitable habitat is present within the BSA. This species has been recorded within the BSA; however, this and the most recent observations were well over 20 years ago.	**Low**
Taxidea taxus	American badger	- / SSC	Prefers drier, open stages of most shrub, forest, and herbaceous habitats with friable soils. Requires open, uncultivated ground.	Limited suitable habitat is present within the BSA. Sign of this species was observed during biological surveys conducted for the Project in 2014 (LADWP, 2014).	**Moderate**

Special-Status Biological Resources

Taxa		Status (Federal / State)	Habitat and Distribution	Comments	Potential to Occur*
Scientific Name	**Common Name**				
Vulpes vulpes necator	Sierra Nevada red fox	- / ST	Historically found from the Cascades down to the Sierra Nevada. Found in a variety of habitats from wet meadows to forested areas. Use dense vegetation and rocky areas for cover and den sites. Prefer forests interspersed with meadows or alpine fell-fields.	Marginally suitable habitat is present within the BSA. The nearest recorded occurrence is approximately 1.6 miles to the west of the BSA; however, this and the most recent observation (1990s from approximately 7.1 miles to the west) were over 20 years ago.	**Low**

Sources: CDFW, 2019a; life history data from CDFW and NatureServe Explorer, 2019.

***** Species listings for which nearest/most recent data are not listed in this table originated from the USFS list of Inyo Forest Species of Conservation Concern. This metadata for these records is not available from this source.

Status Codes

State Designations:

SE= State Endangered
ST = State Threatened
FP = State Fully Protected
WL = CDFW Watch List
SSC = Species of Special Concern

Federal Designations

FE = Federally Endangered
FT = Federally Threatened
FPT = Federally Proposed Threatened
BCC = USFWS Bird of Conservation Concern
SCC = Inyo National Forest Species of Conservation Concern

5.5 WILDLIFE CORRIDORS AND SPECIAL LINKAGES

Linkages and corridors facilitate regional animal movement and are generally centered in or around waterways, riparian corridors, flood control channels, contiguous habitat, and upland habitat. Drainages generally serve as movement corridors because wildlife can move easily through these areas, and fresh water is available. Corridors also offer wildlife unobstructed terrain for foraging and dispersal of young individuals.

As the movements of wildlife species are more intensively studied using radio-tracking devices, there is mounting evidence that some wildlife species do not necessarily restrict their movements to some obvious landscape element, such as riparian corridor. For example, radio-tracking and tagging studies of Coast Range newts (*Taricha torosa torosa*), California red-legged frogs (*Rana draytonii*), southwestern pond turtles (*Emys marmorata pallida*), and two-striped garter snakes (*Thamnophis hammondii*) found that long-distance dispersal involved radial or perpendicular movements away from a water source with little regard to the orientation of the assumed riparian "movement corridor" (Hunt, 1993; Rathbun et al., 1992; Bulger et al., 2002; Trenham, 2002; Ramirez, 2002, 2003a, 2003b). Likewise, carnivores do not necessarily use riparian corridors as movement corridors, frequently moving overland in a straight line between two points when traversing large distances (Newmark, 1995; Beier et.al., 1992, 1993, 1995; Noss, et al., 1996; Noss et al., no date). In general, the following corridor functions can be utilized when evaluating impacts to wildlife movement corridors:

- Movement corridors are physical connections that allow wildlife to move between patches of suitable habitat. Simberloff et al. (1992) and Beier and Loe (1992) correctly state that, for most species, we do not know what corridor traits (length, width, adjacent land use, etc.) are required for a corridor to be useful. But, as Beier and Loe (1992) also note, the critical features of a movement corridor may not be its physical traits but rather how well a particular piece of land fulfills several functions, including allowing dispersal, plant propagation, genetic interchange, and recolonization following local extirpation.
- Dispersal corridors are relatively narrow, linear landscape features embedded in a dissimilar matrix that links two or more areas of suitable habitat that would otherwise be fragmented and isolated from one another by rugged terrain, changes in vegetation, or human-altered environments. Corridors of habitat are essential to the local and regional population dynamics of a species because they provide physical links for genetic exchange and allow animals to access alternative territories as dictated by fluctuating population densities.
- Habitat linkages are broader connections between two or more habitat areas. This term is commonly used as a synonym for a wildlife corridor (Meffe and Carroll, 1997). Habitat linkages may themselves serve as source areas for food, water, and cover, particularly for small- and medium-size animals.
- Travel routes are usually landscape features, such as ridgelines, drainages, canyons, or riparian corridors within larger natural habitat areas that are used frequently by animals to facilitate movement and provide access to water, food, cover, den sites, or other necessary resources. A travel route is generally preferred by a species because it provides the least amount of topographic resistance in moving from one area to another yet still provides adequate food, water, or cover (Meffe and Carroll, 1997).
- Wildlife crossings are small, narrow areas of limited extent that allow wildlife to bypass an obstacle or barrier. Crossings typically are manmade and include culverts, underpasses, drainage pipes, bridges, and tunnels to provide access past roads, highways, pipelines, or other physical obstacles. Wildlife crossings often represent "choke points" along a movement corridor because useable habitat is physically constricted at the crossing by human-induced changes to the surrounding areas (Meffe and Carroll, 1997).

5.5.1 Wildlife Movement in the Project Area

The BSA is located at the in the lower elevations of the eastern Sierra Nevada in a large area of generally undeveloped open space that allows for unimpeded wildlife movement and provides “live-in habitat” (i.e., resident habitat) for a variety of species. Due to the lack of significant development within the BSA, wildlife movement is generally unconstrained throughout the area. U.S. 395 and SR 120 likely serve as impediments to terrestrial wildlife movement due to vehicle traffic, though these corridors are not fenced.

Within the BSA, the lack of structures or other significant development and the presence of relatively intact habitat and features such as drainages and unpaved roads all facilitate wildlife passage. However, the BSA does not occur within any known defined wildlife movement corridor or habitat linkage (Penrod et al, 2001).

6.0 REFERENCES

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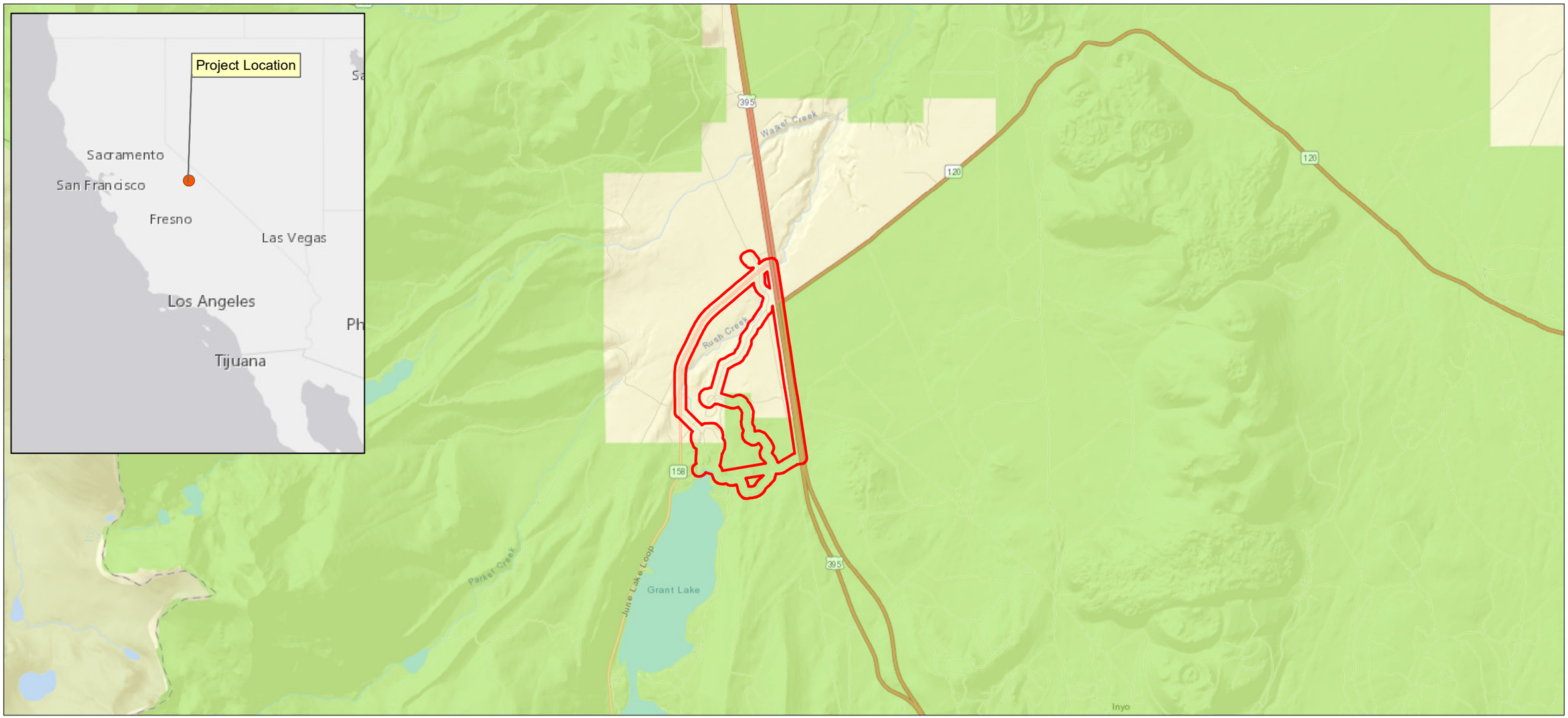
APPENDICES

Appendix A FIGURES



Biological Survey Area

Inyo National Forest Lands

0 1,500 3,000 metres

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Stantec

Project Location
Mono County, CA

Prepared by DL on 2019-07-22
TR by RB on 2019-07-25
IR Review by JV on 2019-07-28

Client/Project
185865231

Mono County Streams License Amendments Project

Figure No.
1

Title
Location Map

Notes
1. Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere
2. Background: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

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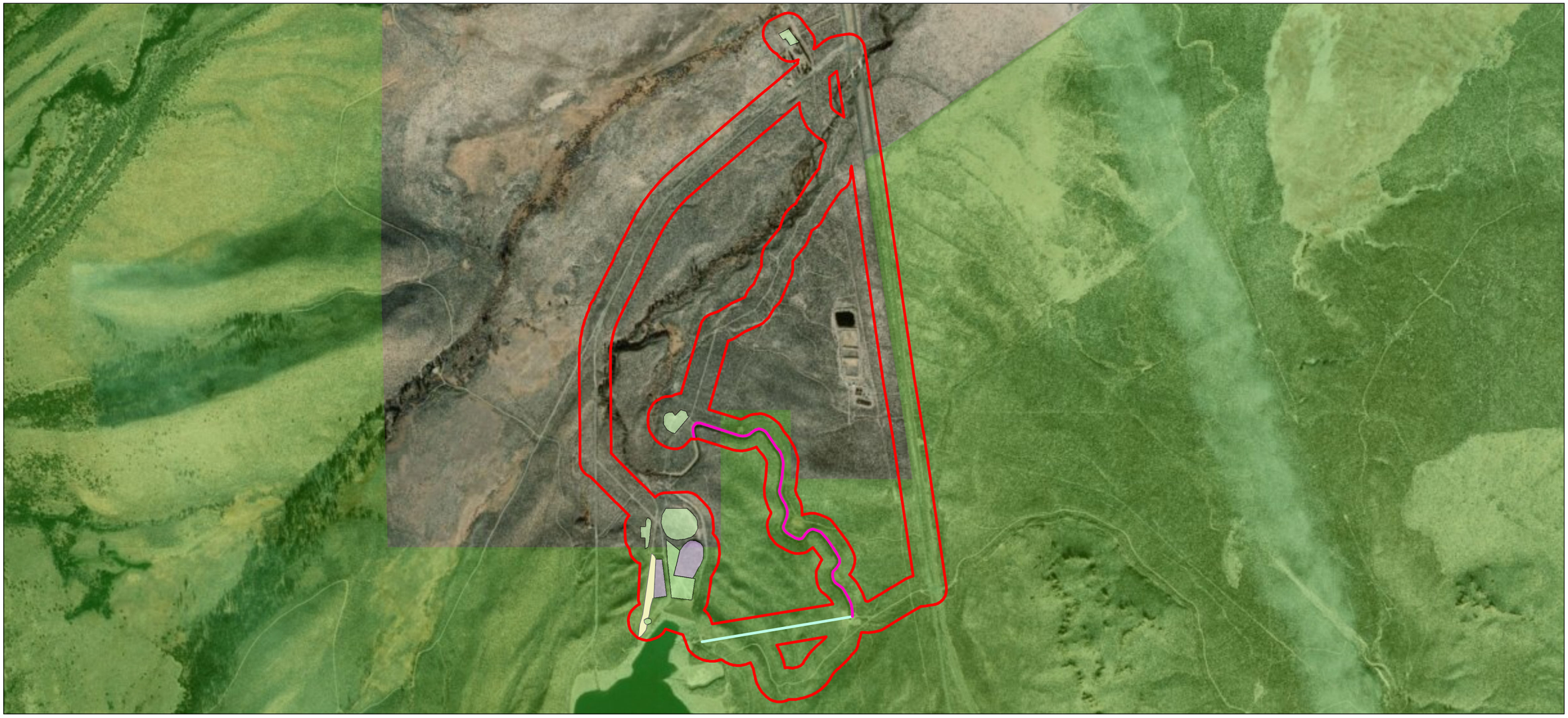

Biological Survey Area
Staging Areas
Soil Stockpile Areas
Cut
Reservoir Outlet Line
MGORD Access Road
Inyo National Forest Lands

Notes
1. Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere
2. Background: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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N

Stantec

Project Location
Mono County, CA

Prepared by DL on 2019-07-22
TR by RB on 2019-07-25
IR Review by JV on 2019-07-28

Client/Project
185865231

Mono County Streams License Amendments Project

Figure No.
2

Title
Project Components

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Biological Survey Area

Vegetation & Land Cover Types

- *Artemisia tridentata* Shrubland Alliance
- *Eleocharis macrostachya* Herbaceous Alliance
- *Salix exigua* Alliance
- Disturbed/Developed
- Open Water

Notes

1. Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere

2. Background: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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Stantec

Project Location
Mono County, CA

Prepared by DL on 2019-07-22
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Client/Project
185865231

Mono County Streams License Amendments Project

Figure No.
3

Title
Vegetation & Land Cover Types

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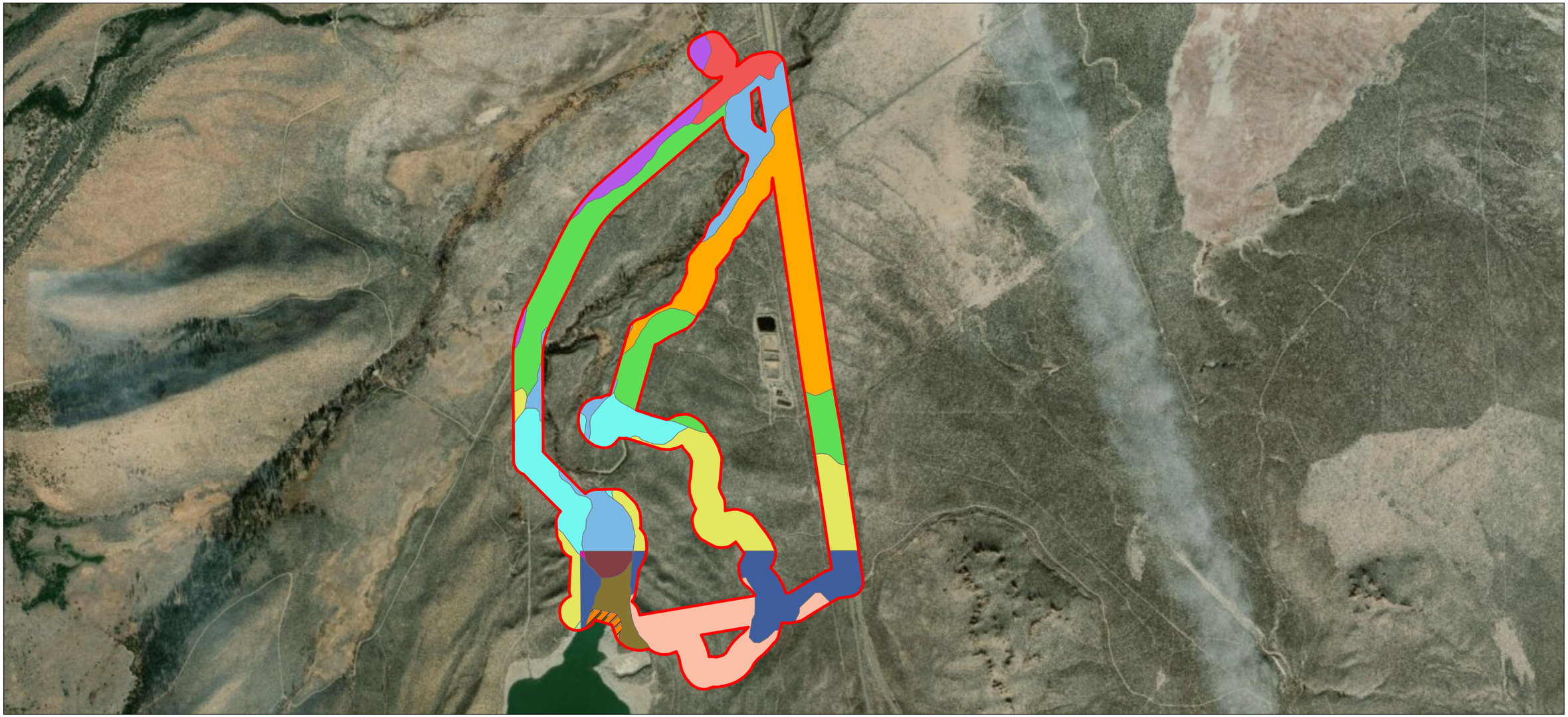

Biological Survey Area

Map Unit Symbol**

101	125	310	381
104	125bo	347	W
108	132	347bo	
	174	350	
	194	350bo	

Notes

****1.** Refer to section 4.2.3 in the Biological Resources Technical Report for more information on soils in the survey area.

2. Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere

3. Background: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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Stantec

Project Location
Mono County, CA

Prepared by DL on 2019-07-22
TR by RB on 2019-07-25
IR Review by JV on 2019-07-28

Client/Project
185865231

Mono County Streams License Amendments Project

Figure No.
4

Title
Historical Soils

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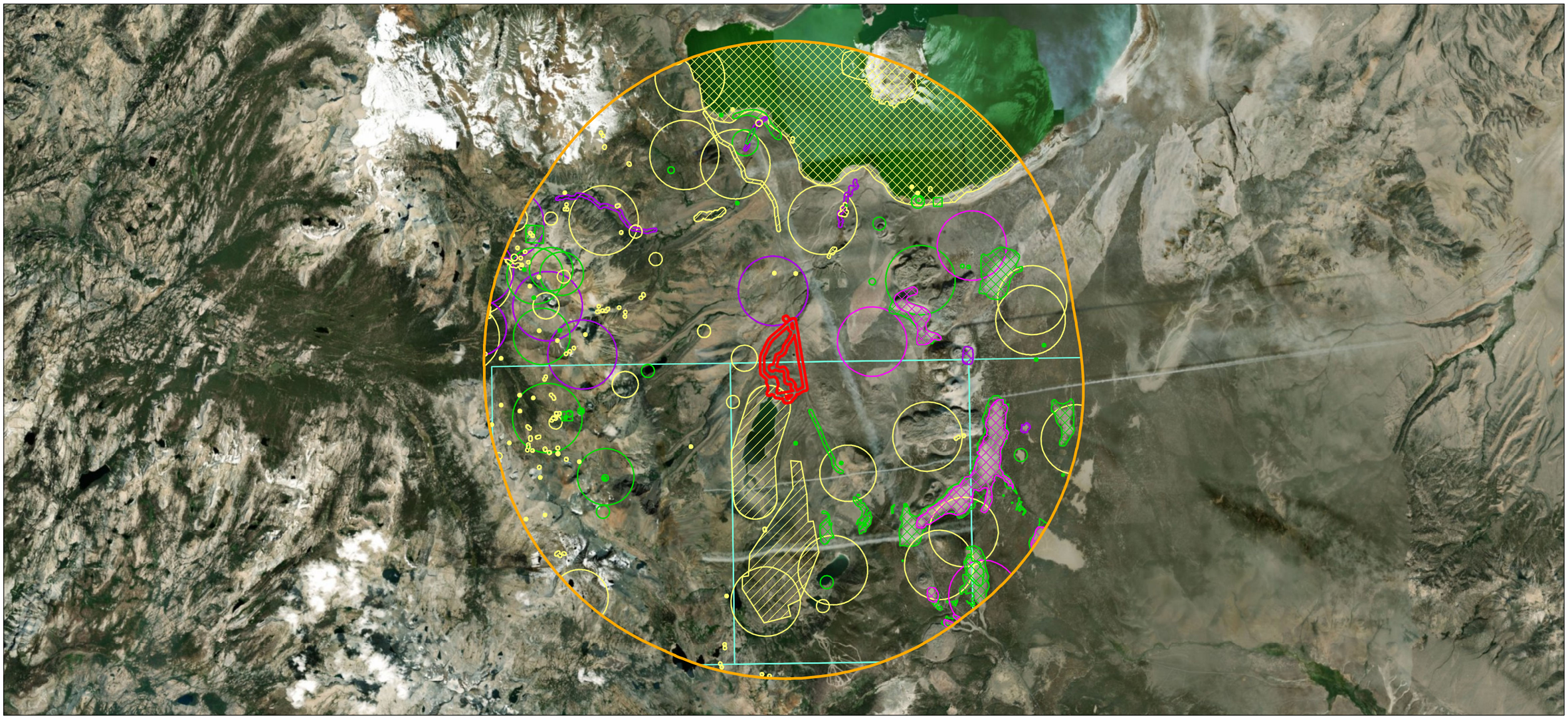

Biological Study Area
10 Mile CNDDB Search Radius
Plant (80m)
Plant (specific)
Plant (non-specific)
Plant (circular)
Animal (80m)
Animal (specific)
Animal (non-specific)
Animal (circular)
Terrestrial Comm. (specific)
Terrestrial Comm. (circular)
Multiple (specific)
Multiple (non-specific)
Multiple (circular)
Sensitive EO's (Commercial only)

0 3,500 7,000 metres

(At original document size of 11x17)
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N

Notes
1. Coordinate System: NAD 1983 2011 StatePlane California III FIPS 0403 Ft US
2. Background: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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Project Location
Mono County, CA

Prepared by DL on 2019-07-22
TR by RB on 2019-07-25
IR Review by JV on 2019-07-28

Client/Project
185865231

Mono County Streams License Amendments Project

Figure No.
5a

Title
10 Mile CNDDB Search

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Biological Study Area

2 Mile CNDDB Search Radius

Plants

Masonic rockcress

Mono Pumice Flat

Golden violet

Animals

Morrison bumble bee

Mount Lyell shrew

Sierra Nevada yellow-legged frog

Swainson's hawk

Prairie falcon

Pygmy rabbit

Western white-tailed jackrabbit

Willow flycatcher

Notes

1. Coordinate System: NAD 1983 2011 StatePlane California III FIPS 0403 Ft US

2. Background: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

0 1,000 2,000 metres

(At original document size of 11x17)
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Stantec

Project Location
Mono County, CA

Prepared by DL on 2019-07-22
TR by RB on 2019-07-25
IR Review by JV on 2019-07-28

Client/Project
185865231

Mono County Streams License Amendments Project

Figure No.
5b

Title
2 Mile CNDDB Search

Document Path: V:\1858\active\185865231\05_report_deliv\dwgs_design\gis_figures\Figure MXDs\Grant Lake Data Download\Fig5b_GrantLakeReservior_2MileCNDDBMap_revised_20191008.mxd

Appendix B SITE PHOTOGRAPHS

Stantec

Photographic Log

Client:	**Los Angeles Department of Water and Power**	**Project:**	**Grant Lake Spillway Modification Project**
Site Name:	**Grant Lake Reservoir**	**Site Location:**	**Mono County, California**

Photograph ID: 1

Survey Date: 6/24/2019

Comments: Overlooking BSA - representative of dominant Big Sagebrush vegetation community.

Photograph ID: 2

Survey Date: 6/24/2019

Comments: North of Grant Lake dam - representative of conditions throughout the BSA.

Client:	**Los Angeles Department of Water and Power**	**Project:**	**Grant Lake Spillway Modification Project**
Site Name:	**Grant Lake Reservoir**	**Site Location:**	**Mono County, California**

Photograph ID: 3

Survey Date:
6/24/2019

Comments:
Big Sagebrush vegetation typifying conditions throughout the BSA.

Photograph ID: 4

Survey Date:
6/24/2019

Comments:
Grant Lake with Big Sagebrush scrub in foreground and patches of Sandbar Willow Thickets vegetation community along shores of the lake.

Client:	**Los Angeles Department of Water and Power**	**Project:**	**Grant Lake Spillway Modification Project**
Site Name:	**Grant Lake Reservoir**	**Site Location:**	**Mono County, California**

Photograph ID: 5 **Survey Date:** 6/24/2019 **Comments:** Small area of Pale Spike Rush Marsh vegetation community to the north of the MGORD.	
Photograph ID: 6 **Survey Date:** 6/24/2019 **Comments:** Pale Spike Rush Marsh vegetation community to the north of the MGORD.	

Client:	**Los Angeles Department of Water and Power**	**Project:**	**Grant Lake Spillway Modification Project**
Site Name:	**Grant Lake Reservoir**	**Site Location:**	**Mono County, California**

Photograph ID: 7 **Survey Date:** 6/24/2019 **Comments:** Grant Lake spillway, looking upstream toward Grant Lake.	
Photograph ID: 8 **Survey Date:** 6/24/2019 **Comments:** Grant Lake spillway, looking downstream toward confluence with Rush Creek.	

Client:	**Los Angeles Department of Water and Power**	**Project:**	**Grant Lake Spillway Modification Project**
Site Name:	**Grant Lake Reservoir**	**Site Location:**	**Mono County, California**

Photograph ID: 9 **Survey Date:** 6/24/2019 **Comments:** The MGORD at its point of origin.	
Photograph ID: 10 **Survey Date:** 6/24/2019 **Comments:** Representative photograph of conditions along the MGORD.	

Client:	**Los Angeles Department of Water and Power**	**Project:**	**Grant Lake Spillway Modification Project**
Site Name:	**Grant Lake Reservoir**	**Site Location:**	**Mono County, California**

Photograph ID: 11 **Survey Date:** 6/24/2019 **Comments:** Representative photograph of Rush Creek, looking downstream, depicting Sandbar Willow Thickets vegetation typical of conditions within the BSA.	
Photograph ID: 12 **Survey Date:** 6/24/2019 **Comments:** Representative photograph of Rush Creek, looking upstream, depicting Sandbar Willow Thickets vegetation typical of conditions within the BSA.