Finding of No Significant Impact

for the Issuance of a Short-Term Incidental Eagle Take Permit for the Allegiant Gold (U.S.) Ltd. Eastside Exploration Project

Nevada

April 2024

U.S. Fish and Wildlife Service
U.S. Department of the Interior
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1.0 Introduction

The United States Fish and Wildlife Service (Service) received an application from Allegiant Gold (U.S.) Ltd. (Applicant) requesting eagle take coverage under the Bald and Golden Eagle Protection Act (Eagle Act) (16 United States Code [U.S.C.] §§ 668–668d and 50 Code of Federal Regulations [CFR] § 22.80) for incidental take of eagles at the Eastside Exploration Project (Project), under the authorized Plan of Operations (BLM 2021). The Project includes construction and operation of facilities that will encompass approximately 69 acres of exploration surface disturbance. Surface-disturbing activities consist of an existing road network for Project access, reverse circulation and core drilling from constructed drill sites, road construction and overland travel, drill pad and sump construction, road maintenance of pre-1981 roads, and authorized exploration roads. Disturbance to eagles could occur from these exploration activities in close proximity to their nests. The Project is located approximately 25 miles west of Tonopah, Nevada, in Esmeralda County, Nevada.

The Applicant requested an incidental take permit (permit) for two incidents of disturbance to, and loss of annual productivity from, breeding golden eagles (*Aquila chrysaetos*) over a five-year period. Issuance of a permit by the Service for take that is incidental to otherwise lawful activities under the Eagle Act constitutes a discretionary federal action that is subject to the National Environmental Policy Act (NEPA) (42 U.S.C. §§ 4321 et seq.). In accordance with NEPA, the Service prepared an Environmental Assessment (EA) analyzing the environmental consequences of issuing a permit for the disturbance take of golden eagles associated with the Project, as well as alternatives to this Proposed Action. This EA is incorporated by reference and attached (**Attachment 1**). This EA assists the Service in ensuring compliance with NEPA and in making a determination as to whether any "significant" impacts to the environment not previously analyzed under the Service's Programmatic Environmental Impact Statement (PEIS) for the Eagle Rule Revision, December 2016 (USFWS 2016), could result from the analyzed actions, which would require preparation of an Environmental Impact Statement (EIS). Determining if effects are "significant" under NEPA is addressed by regulation 40 CFR § 1501.3(b) and requires analysis of the degree of effects of the action, including short- and long-term considerations and beneficial and adverse effects, as well as considering the affected area and its resources.

The Service's purpose in considering the Proposed Action of issuing an eagle incidental take permit is to fulfill our authority under the Eagle Act (16 U.S.C. §§ 668–668d) and its regulations (50 CFR § 22). Applicants whose otherwise lawful activities may result in take of eagles can apply for eagle incidental take permits so that their projects may proceed without potential violations of the Eagle Act. The Service may issue eagle take permits for eagle take that is associated with, but not the purpose of, an activity. Such permits can be issued by the Service when the take that is authorized is compatible with the Eagle Act preservation standard; it is necessary to protect an interest in a particular locality; it is associated with, but not the purpose of, the activity; and it cannot be practicably avoided (50 CFR § 22 and 81 Federal Register 91494).

The need for this federal action is a decision on an eagle incidental take permit application from the Applicant that is compliant with all applicable regulatory requirements set forth under the Eagle Act in 50 CFR § 22.

2.0 Proposed Action and Alternative Considered

In the EA, the Service fully analyzed two potential courses of action, summarized below, to respond to the Applicant's request for an incidental eagle take permit.

2.1 Proposed Action

The Service proposed to issue an incidental eagle take permit, with associated conditions, to the Applicant for disturbance resulting in two incidents of lost annual productivity from breeding golden eagles over a five-year period. The permit would require implementation of all conservation measures and commitments described in the Applicant's submitted permit application.

2.2 Alternative 1: No Action Alternative

Under the No Action Alternative, the Service would take no further action on the Applicant's incidental eagle take permit application.

3.0 Public Scoping and Tribal Coordination

Scoping regarding issuance of eagle take permits was performed for the PEIS (USFWS 2016). Additionally, this Finding of No Significant Impact and attached EA will be published on the Service's regional webpage.[1]

To notify tribes regarding potential issuance of the permit, the Service sent letters to 10 federally recognized tribal governments located within the vicinity of the Project, informing them of the received permit application and the preparation of the EA, as well as offering the opportunity for formal consultation regarding potential issuance of the permit. The Service was not contacted by any of the above tribal governments.

4.0 Selected Alternative

Based on review of the analyses detailed in the EA, the Service selected the Proposed Action of issuing an incidental eagle take permit to the Applicant for disturbance resulting in two incidents of lost annual productivity from breeding golden eagles over a five-year period.

Disturbance take of golden eagles is predicted to occur under both alternatives; however, the Proposed Action fully offsets the take with required compensatory mitigation, which would not occur under the No Action Alternative.

The Proposed Action is consistent with the purpose and need for this federal action and is compliant with all statutory (16 U.S.C. § 668) and regulatory requirements (50 CFR § 22.80 and 50 CFR § 13.21), including the criteria codified for permit issuance (50 CFR § 22.80(f)).

[1] https://www.fws.gov/cno/conservation/MigratoryBirds/EaglePermits.html

5.0 Determining Significance

When considering whether the effects of the Proposed Action are significant, NEPA regulations require agencies to "analyze the potentially affected environment and degree of the effects of the action" (40 CFR § 1501.3(b)). This includes considering the extent of the potentially affected area (national, regional, or local) and its resources, as appropriate to the specific action. Further considerations for the degree of the effects include both short- and long- term effects, both beneficial and adverse effects, effects on public health and safety, and effects that would violate federal, state, tribal, or local law protecting the environment (40 CFR § 1501.3(b)). Below we examine these considerations for the selected Proposed Action.

5.1 Potentially Affected Environment

For purposes of analyzing the selected Proposed Action, the appropriate affected environment associated with the Proposed Action is local and regional because the Proposed Action does not affect statewide or national resource values. Analyses of effects at the local and regional scale are provided in the EA.

Golden eagles are the resource most likely to be affected by the Proposed Action of issuance of the requested incidental eagle take permit. Two known territories have been documented within one mile of the Project disturbance footprint, located within the Plan boundary. Two golden eagle pairs nesting in the vicinity of the Project may be disturbed by the Project activities. However, as discussed in the EA and below, the Applicant will implement conservation measures to minimize the risk to eagles and will offset golden eagle take through compensatory mitigation.

Bald eagles (*Haliaeetus leucocephalus*) are known to occur in the region but have not been identified within the Project area; therefore, bald eagles are not expected to be affected by exploration activities associated with the Project. However, bald eagles may benefit from reduced electrocution risk due to the power pole retrofitting to be done as offsetting compensatory mitigation for the authorized golden eagle take.

Migratory birds are not expected to be negatively affected by the Proposed Action of issuing an eagle take permit to the Applicant. However migratory birds may incidentally benefit from reduced electrocution risk due to the power pole retrofitting to be done for the eagle take permit. Additionally, the Applicant has committed to implementing conservation measures to reduce potential impacts to migratory birds within the Project boundary.

Authorizing incidental eagle take for the Project site is not expected to have effects to species protected by the Endangered Species Act (ESA). Furthermore, no species listed under the ESA were found to be present in or near the Project area.

Eagles and their feathers are revered and considered sacred in many Native American traditions. Issuing a permit for disturbance take of eagles is not expected to interfere with cultural practices and ceremonies related to eagles or to affect Native Americans' ability to obtain or use eagle feathers. Moreover, the Service requests any eagle feathers that are found be sent to our repository and, if in good condition, will be made available for these practices. Therefore, we do not anticipate any adverse effect on cultural resources from the Proposed Action.

5.2 Degree of the Effects

1) Both short- and long-term effects.

Issuance of an eagle take permit for the Project does not set precedent for, or automatically apply to, other eagle take permit applications the Service is reviewing or could review in the future. Each permit request will be evaluated on a case-by-case basis. Therefore, the Proposed Action does not establish precedents for future actions or represent a decision in principle about a future action. Moreover, this Project will not limit the Service's discretion when processing future eagle take permit applications under the Eagle Act's permitting regulations.

The analyses in the EA considered effects to golden eagles at the Project, local, and regional scales and at varying temporal scales.

Short-Term Effects. Under the Proposed Action, the issuance of an incidental eagle take permit would authorize two incidents of disturbance take, resulting in lost annual productivity from breeding golden eagles over a five-year period. However, the Applicant will implement measures to minimize disturbance to the eagles, and no golden eagle nests would be physically removed as a result of the Proposed Action. Analyses provided in the EA indicate the authorized take will have no significant effect on the local or regional eagle population.

Long-Term Effects. Despite short-term disturbance to the eagle pairs, the Project activities are not expected to have long-term effects to eagles, as no golden eagle nests would be physically removed because of the Proposed Action, and the take will be fully offset with compensatory mitigation.

The analyses in the Service's PEIS on issuing incidental eagle take permits provides information and greater certainty in understanding the risks and effects to eagles of issuing these incidental eagle take permits, now and into the future. Furthermore, surveying and monitoring of the golden eagle pairs that would be required under the Proposed Action provides information and increased certainty in our future assessments of the risk to eagles from similar exploration activities.

2) Both beneficial and adverse effects.

Beneficial Effects. As described in the EA, the Proposed Action includes power pole retrofitting as mitigation for take of eagles. Such retrofits are anticipated to protect eagles from electrocution. As the number of retrofits to be done for mitigation is calculated at a 1.2-to-1 ratio, these avoided eagle electrocutions will more than offset Project-related take of eagles, thereby benefiting the eagle population as a whole. Pole retrofits are also expected to benefit bald eagles and other raptors that may be susceptible to electrocution. Furthermore, required monitoring of the eagle nest will be beneficial, as it will support the Service's understanding of impacts from exploration activities in the vicinity of nesting golden eagles.

Adverse Effects. As described in the EA, under the Proposed Action the Applicant would implement conservation measures to minimize the risk to eagles. However, exploration activities could cause disturbance to breeding golden eagles in the vicinity of the Project, resulting in two incidents of disturbance take over a five-year period. The Applicant will offset this golden eagle take through compensatory mitigation. This will ensure that the impacts of

issuing an eagle take permit on the local and regional golden eagle populations will not be significant.

3) *Effects on public health or safety.*

The Proposed Action would include mitigating eagle take by retrofitting power poles to prevent eagle electrocutions. As eagle and other raptor electrocutions on power poles can start fires, decreasing eagle and other raptor electrocutions could benefit human safety by reducing fire risk.

4) *Effects that would violate federal, state, tribal, or local law protecting the environment.*

The Proposed Action, issuance of an incidental take permit under the Eagle Act, will not violate any federal, state, tribal, or local law.

6.0 Finding of No Significant Impact

The Service's Migratory Bird Program concludes from the analysis conducted in the EA and the information provided above that the Proposed Action would not trigger significant impacts on the environment based on considerations and criteria established by regulations, policy, and analysis. Analyses of impacts were conducted at the Project, local, and regional scales, and the degree of effects were assessed. The selected Proposed Action is unlikely to have significant impacts on eagles because all reasonably foreseeable take of eagles is mitigated and the Proposed Action meets the Eagle Act's preservation standard (16 U.S.C. § 668a, 50 CFR § 22.6) and all regulatory requirements (50 CFR § 22.80). Based on the findings discussed herein, we conclude that the Proposed Action will have no significant impact on the environment and is not a major federal action significantly affecting the quality of the human environment pursuant to Section 102(2)(C) of NEPA (42 U.S.C. 4332(2)(C)). Therefore, preparation of an EIS to further analyze possible effects is not required pursuant to NEPA Section 102(2)(c), and our environmental review under NEPA is concluded with this Finding of No Significant Impact (40 CFR 1501.3, 43 CFR 46.325).

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DANIEL BLAKE
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Daniel Blake
Chief, Migratory Bird Program
California-Great Basin Region
U.S. Fish and Wildlife Service

7.0 References

16 United States Code (U.S.C.) § 668. Title 16 – Conservation; Chapter 5a – Protection and Conservation of Wildlife; Subchapter II – Protection of Bald and Golden Eagles; Section (§) 668 – Bald and Golden Eagles. Available online: http://uscode.house.gov

40 Code of Federal Regulations (CFR) § 1501.3. Title 40 – Protection of Environment; Chapter V – Council on Environmental Quality; Subchapter A – National Environmental Policy Act Implementing Regulations; Part 1501 – NEPA and Agency Planning; Section (§) 1501.3 – Determine the appropriate level of NEPA review. Available online: https://www.ecfr.gov

42 United States Code (U.S.C.) §§ 4321–4347. Title 42 – The Public Health and Welfare; Chapter 55 – National Environmental Policy; Subchapters I (Policies and Goals) and II (Council on Environmental Quality); Sections (§§) 4321–4347. Available online: http://uscode.house.gov

43 Code of Federal Regulations (CFR) 46. 2008. Title 43 – Public Lands: Interior; Part 46 – Implementation of the National Environmental Policy Act of 1969. 43 CFR 46. [73 Federal Register (FR) 61314, October 15, 2008, unless otherwise noted.]. Available online: https://www.ecfr.gov and https://www.federalregister.gov/

50 Code of Federal Regulations (CFR) § 13.21. Title 50 – Wildlife and Fisheries; Chapter I – United States Fish and Wildlife Service, Department of the Interior; Subchapter B – Taking, Possession, Transportation, Sale, Purchase, Barter, Exportation, and Importation of Wildlife and Plants; Part 13 – General Permit Procedures; Section (§) 13.21 – Issuance of permits. Available online: https://www.ecfr.gov

50 Code of Federal Regulations (CFR) § 22. Title 50 – Wildlife and Fisheries; Chapter I – United States Fish and Wildlife Service, Department of the Interior; Subchapter B – Taking, Possession, Transportation, Sale, Purchase, Barter, Exportation, and Importation of Wildlife and Plants; Part 22 – Eagle Permits. Available online: https://www.ecfr.gov

81 Federal Register (FR) 91494. 2016. Eagle Permits; Revisions to Regulations for Eagle Incidental Take and Take of Eagle Nests. Vol. 81, No. 242. December 16, 2016. pp. 91494–91554. Available online: https://www.federalregister.gov/

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U.S. Fish and Wildlife Service (USFWS). 2016. Programmatic Environmental Impact Statement for the Eagle Rule Revision. December 2016. Available online: https://www.fws.gov/migratorybirds/pdf/management/FINAL-PEIS-Permits-to-Incidentally-Take-Eagles.pdf

Attachment 1

Environmental Assessment for the Issuance of a Short-Term Incidental Eagle Take Permit for the Allegiant Gold (U.S.) Ltd. Eastside Exploration Project.

Environmental Assessment

for the Issuance of a Short-Term Incidental Eagle Take Permit
for the Allegiant Gold (U.S.) Ltd. Eastside Exploration Project

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ACRONYMS AND ABBREVIATIONS

ACEPM	Applicant-Committed Environmental Protection Measure
Allegiant	Allegiant Gold (U.S.) Ltd.
amsl	above mean sea level
Applicant	Allegiant Gold (U.S.) Ltd.
BLM	Bureau of Land Management
CFR	Code of Federal Regulations
EA	Environmental Assessment
Eagle Act	Bald and Golden Eagle Protection Act of 1940
EIS	Environmental Impact Statement
EMU	Eagle Management Unit
ESA	Endangered Species Act of 1973
LAP	Local Area Populations
mph	miles per hour
NDOW	Nevada Department of Wildlife
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
PEIS	Programmatic Environmental Impact Statement
Plan	Plan of Operations
Project	Eastside Exploration Project
Project area	Plan Boundary and a Four-mile Radius
REA	Resource Equivalency Analysis
Service	United States Fish and Wildlife Service
SWReGAP	Southwest Regional Gap Analysis Project
U.S.	United States
U.S.C.	United States Code

1.0 Introduction

This Environmental Assessment (EA) analyzes the environmental consequences of the United States (U.S.) Fish and Wildlife Service (Service) issuing a permit for the incidental take of golden eagles (*Aquila chrysaetos*) associated with the Applicant, Allegiant Gold (U.S) Ltd. (Allegiant), and their Eastside Exploration Project (Project) pursuant to the National Environmental Policy Act (NEPA) (42 United States Code [U.S.C.] §§ 4321–4347). Issuance of an eagle take permit by the Service for take that is incidental to otherwise lawful activities under the Bald and Golden Eagle Protection Act (Eagle Act) (16 U.S.C. §§ 668–668d and 50 Code of Federal Regulations [CFR] §§ 22.75 and 22.80) constitutes a discretionary federal action that is subject to NEPA. This EA assists the Service in ensuring compliance with NEPA and in determining whether any "significant" impacts could result from the analyzed actions that would require preparation of an Environmental Impact Statement (EIS). This EA evaluates the effects of alternatives for the Service's decision whether to issue an eagle take permit.

The Eagle Act authorizes the Service to issue eagle take permits only when the take is compatible with the preservation of each eagle species, defined as "consistent with the goals of maintaining stable or increasing breeding populations in all eagle management units and the persistence of local populations throughout the geographic range of each species" (50 CFR § 22.6).

The Applicant is requesting Eagle Act take coverage for resource exploration associated with the Project and has submitted an incidental eagle take permit application to the Service. The details within the existing Bureau of Land Management (BLM) NEPA document (BLM 2021a) are the foundation of the application from Allegiant.

The Applicant is requesting a permit for reoccurring disturbance resulting in two incidents of take and lost annual productivity from breeding golden eagles, over a five-year period. This EA evaluates whether issuance of the incidental eagle take permit would have significant impacts on the existing human environment. "Significance" under NEPA is defined by regulation at 40 CFR 1508.27 and requires the NEPA analysis to take into account the short- and long-term consideration of both the context of the Project and its intensity.

This proposal conforms with, and carries out, the management approach analyzed in, and adopted subsequent to, the Service's Programmatic Environmental Impact Statement (PEIS) for the Eagle Rule Revision, December 2016 (USFWS 2016a). Project-specific information not considered in the PEIS has been considered in this EA as described below. Based on this Project-specific analysis and application of the criteria provided in the PEIS, the Service has determined that an EA is the appropriate level of review.

1.1 Purpose and Need

The Service's purpose in considering the Proposed Action is to fulfill their authority under the Eagle Act (16 U.S.C. §§ 668–668d) and its regulations (50 CFR § 22). Applicants whose otherwise lawful activities may result in take of eagles can apply for eagle incidental take permits so that their projects may proceed without potential violations of the Eagle Act. The Service may issue eagle take permits for eagle take that is associated with, but not the purpose of, an activity. Such permits can be issued by the Service when the take that is authorized is compatible with the Eagle Act preservation standard; it is necessary to protect an interest in a particular locality; it is associated with, but not the purpose of, the activity; and it cannot be practicably avoided (50 CFR § 22 and 81 Federal Register 91494).

The need for this action is a decision on an eagle incidental take permit application from Allegiant. The decision must comply with all applicable regulatory requirements and be compatible with the preservation of eagles.

1.2 Authorities

Service authorities are codified under multiple statutes that address management and conservation of natural resources from many perspectives, including, but not limited to, the effects of land, water, and energy development on fish, wildlife, plants, and their habitats. This analysis is based on the Eagle Act (16 U.S.C. §§ 668–668d) and its regulations (50 CFR § 22). The PEIS (USFWS 2016a) has a full list of authorities that apply to this action (USFWS 2016a: Section 1.6, pages 7–12), which are incorporated by reference here.

1.3 Background

Allegiant's Plan of Operations (NVN-093181) (Plan) has been approved by the BLM Battle Mountain District Office, Tonopah Field Office (BLM 2021a). Under the Plan, Allegiant is approved to conduct exploration drilling within the Project Plan boundary (**Figure 1-1**). The Project is located approximately 25 miles west of Tonopah, Nevada, Esmeralda County, on public lands managed by BLM located at the northern end of the Monte Cristo Range. Elevations range from 5,192 feet above mean sea level (amsl) to 6,270 feet amsl.

Allegiant is currently conducting exploration activities under the authorized Plan (Allegiant 2021), which allows for up to 69 acres of exploration disturbance within the 3,676-acre Plan boundary. Surface-disturbing activities are approved for up to 69 acres and consist of an existing road network for Project access, reverse circulation and core drilling from constructed drill sites, road construction and overland travel, drill pad and sump construction, road maintenance of pre-1981 roads, and authorized exploration roads (Allegiant 2021).

Five golden eagle nests (DP-01-A, DP-01-B, DP-03, DPN-03, and DPN-04) constituting two golden eagle territories have been documented within one mile of the Project disturbance footprint

within the Plan boundary (**Figure 1-2**). The Project could have an impact to the golden eagle breeding pairs through the presence of exploration activities in close proximity to their nests, thus causing potential negative impacts to golden eagle breeding and nesting activities.

The Project area (Plan boundary plus a surrounding four-mile radius) includes numerous rocky outcrops serving as potential nesting areas for golden eagles and other raptors. Habitats within and in the vicinity of the Project area also include perch and roost sites and mountainous areas that are suitable for soaring. Limited stands of piñon–juniper woodland around the Project area may provide additional nesting habitat for several raptor species. Additionally, the sagebrush community may host a multitude of prey species, providing foraging habitat for golden eagles within the Project area. There are a total of five seeps and springs, as well as multiple ephemeral drainages, within four miles of the Project area that provide a reliable source of water for golden eagle prey.

1.4 Scoping, Consultation, and Coordination

This EA incorporates by reference the scoping performed for the PEIS (USFWS 2016a: Chapter 6, page 175). Additionally, this EA will be made public on the Service's Pacific Southwest Region webpage (https://www.fws.gov/cno/conservation/MigratoryBirds/EaglePermits.html).

1.5 Tribal Coordination

Tribal participation is an integral part of the NEPA and National Historic Preservation Act (NHPA) process, as well as a key component of determining whether to issue an eagle take permit. Cultural and religious concerns regarding eagles were analyzed in the PEIS (USFWS 2016a), and tribal consultation was conducted for the PEIS (USFWS 2016a). The PEIS (USFWS 2016a) identified tribal coordination as an important issue for subsequent analysis, given the cultural importance of eagles to the tribes. In accordance with Executive Order 13175, Consultation and Coordination with tribal governments (65 Federal Register 67249, November 9, 2000), NHPA Section 106 (36 CFR § 800), and the Service's Native American Policy, the Service consults with Native American tribal governments whenever actions taken under the authority of the Eagle Act may affect tribal lands, resources, or the ability to self-govern. This coordination process is also intended to ensure compliance with the American Indian Religious Freedom Act.

To notify Tribes regarding potential issuance of the requested Permit the Service sent letters to 10 federally recognized tribal governments located within 109 miles (the natal dispersal distance of golden eagles, thought to adequately define the species local area population [LAP]) of the Project, informing them of the received permit application and preparation of this EA and offering the opportunity for formal consultation regarding potential issuance of the permit. The Service was not contacted by any of the above tribal governments.

2.0 Proposed Action and Alternatives

In this analysis, and in our consideration of take authorization to the Applicant, an incident of take is one that results in loss of productivity for a single season for a single golden eagle breeding pair. Take that may result in injury or mortality of golden eagles is not expected or authorized under this permit. While the available data indicates five nests constituting two golden eagle breeding pair territories are most likely to be impacted by activities, as these pairs have nests located in the vicinity of the Project area, golden eagle populations are dynamic with shifting territory boundaries, and golden eagle pairs may establish new nest locations. New territories and new nesting locations may be identified in the Project area or its vicinity over the life of the permit. To allow for operational flexibility, the Applicant may utilize the two take authorizations within a five-year period for the nests identified within the two territories or as needed should nesting locations differ within the Project area. Effects of up to two incidents of take and the resulting loss of annual productivity over a five-year period is expected to be the same, regardless of exact location.

2.1 Proposed Action

Under the Proposed Action, the Service proposes to issue an incidental eagle take permit, with associated conditions, to the Applicant for disturbance resulting in two incidents of lost annual productivity from breeding golden eagles over a five-year period, as allowed by regulation (Proposed Action).

Under this alternative, all monitoring and adaptive management measures, minimization measures, and detection and reporting measures, referred to as environmental protection measures (EPMs), outlined in Section 2.11–2.13 of the BLM NEPA document (BLM 2021a), and included as **Appendix B** herein, would be implemented as conditions of BLM's approval. Monitoring associated with the Service's incidental eagle take permit would be conducted as outlined below, in Section 2.1.3 and 2.3.1, by a third-party monitor as required by our regulations.

2.1.1 Compensatory Mitigation

Compensatory mitigation would be conducted within the Pacific Flyway Eagle Management Unit (EMU). The Applicant would provide compensatory mitigation at the required 1.2:1 ratio by retrofitting electric utility poles, as discussed in the 2016 PEIS. The intent would be to minimize the potential for golden eagle electrocutions and ensure that the effects of golden eagle incidental take are offset at the EMU population level. The amount of compensatory mitigation required for the lost productivity has been determined through the Service's Golden Eagle Resource Equivalency Analysis (REA) (USFWS 2013). The permit would require 47.11 poles to 20.50 poles be retrofitted to offset the impacts from the proposed disturbance take, which would result in two incidents of lost annual productivity from breeding golden eagles over a five-year period. The exact number of retrofits depends on the longevity of each pole's retrofit. Simple retrofits are

accomplished by placing plastic covers on electric components. As plastic covers are a temporary solution, once retrofitted, the power pole is considered "eagle safe" for 10 years. If a pole is reframed or reconstructed, the pole is made permanently safe for golden eagles because adequate spacing is provided between electrical components. The Service gives a 30-year credit for this type of retrofit (USFWS 2013).

Allegiant would provide compensatory mitigation for two incidents of disturbance take.

2.1.2 Adaptive Management

Continued monitoring will inform the Applicant on the status of existing nests as well as if new nests are being constructed near the Project and its associated activities. If monitoring determines that multiple take events may occur in a given year, and that the Applicant is approaching their take permit limits (i.e., up to two incidents of take), coordination with the Service, and adaptive management would be implemented. The Applicant would apply avoidance buffers on in-use nests to prevent incidental take (no surface-disturbing activities within one mile of an in-use nest during the breeding season (i.e., December 15 through July 31). If avoidance is not practicable, the Applicant may request a permit amendment from the Service. Additionally, the Service may consider additional adaptive management strategies, if necessary, in coordination with the Applicant throughout the permit authorization period.

2.1.3 Eagle Nest Monitoring

The Applicant will monitor golden eagle nest sites annually using independent, third-party monitors that report directly to the Service. At least two surveys would be conducted annually during the golden eagle breeding season, with the surveys conducted at least one month apart. The Project area golden eagle nest monitoring will inform the Applicant and agencies when golden eagle nests are in-use within one mile of the Project area in order to validate the number of take incidents that occur and ensure compliance with the permit authorization.

2.2 Alternative 1: No Action Alternative

Under the No Action Alternative, the Service would take no further action on Allegiant's permit application. However, the Service must act on the permit application and determine whether to deny or issue the permit. Accordingly, this alternative is considered because Service policy requires evaluation of a No Action Alternative and it provides a clear comparison of any potential impacts to the human environment from the Proposed Action. The No Action Alternative in this context analyzes predictable outcomes of the Service not issuing a permit. Should a Permit not be issued, compensatory mitigation would not be required. Thus, for purposes of analyzing the No Action Alternative, the conservation measures proposed in the Permit application package would not be required. The Applicant may choose to voluntarily implement some, none, or all those conservation measures proposed under the Permit, as detailed under Section 2.1 above. Under this alternative, the Applicant would still be required to implement the existing EPMs (**Appendix B**)

per the BLM's authorization of the Project (BLM 2021a). Under this alternative, it is assumed that the Applicant would take reasonable steps to avoid taking golden eagles, but Allegiant would not be protected from enforcement for violating the Eagle Act should take of a golden eagle occur.

2.3 Common to All Alternatives

This section describes components of the Project that are the same for the Proposed Action and No Action Alternative whether a permit is issued. If a permit is issued, these measures would become permit requirements.

2.3.1 Monitoring

The Applicant will implement all measures required by other agencies and jurisdictions to conduct the activity at this site, including Applicant-committed Environmental Protection Measures (ACEPMs) as identified in the BLM Decision Record for the Project (BLM ROD) (BLM 2021a).

Per the BLM ROD, Allegiant currently implements an ACEPM to conduct pre-construction clearance surveys during the avian breeding season for all raptors (January 1 through July 31) within a one-mile avoidance buffer of the Project area and proposed disturbance. However, since the issuance of the BLM ROD, updated golden eagle monitoring recommendations have been developed by the Service which recognizes the golden eagle breeding season in Nevada as December 15 through July 31 (USFWS 2023), which applies to the Project Area. Additionally, the Service's recommendations recognize that golden eagle nests should be considered in-use for a given breeding season until they are confirmed to not be in-use on April 15 or later. Prior to April 15, golden eagle nests are considered potentially in-use unless an alternative nest within the same territory is already confirmed in-use.

Therefore, until a take permit is issued, Allegiant is required to conduct appropriate surveys and monitoring to assess golden eagle territory occupancy, document in-use nests, and apply spatial disturbance buffers, as appropriate, during the golden eagle breeding season, per the EPMs in place as approved by the BLM (**Appendix B**) under the Project authorization (BLM 2021a). Thus, in the absence of a take permit, the spatial disturbance buffers should be adhered to until: nests are confirmed to be not in-use; four weeks after nestlings fledge if monitoring confirms approximate fledging date; or after July 31 if they are in-use and not otherwise monitored to verify fledging date (USFWS, 2023).

This commitment supersedes the aforementioned ACEPM as it represents the most up to date recommendations from USFWS for golden eagle impact minimization measures. Under all alternatives, monitoring will be implemented over the life of the Project.

2.3.2 Minimization Measures

Allegiant is implementing the following measures and will continue to implement the measures to minimize impacts to golden eagles from the Project. Additional measures are summarized in the Eagle Conservation Plan Eastside Exploration Project, Esmeralda County, Nevada (Stantec 2021) (**Appendix A**) per the recommended avoidance measures contained in Golden Eagle Best Practices Nevada Mineral Exploration and Mining Industry (NVMA 2018).

Carcass Management: Staff will remove non-eagle carcasses from all roadways within the Plan boundary when on site and dispose of them appropriately to reduce the risk of vehicle collisions. Staff will report all carcasses found to the Nevada Department of Wildlife (NDOW), and the BLM. Eagle mortalities will be reported as described in Section 2.3.3.

Employee Awareness and Training Program: Staff and contractors working on the Project will be provided training on reducing risks to vehicular collisions and other encounters with raptor species.

Vehicle Speed Limits: Vehicle speeds are limited to 25 miles per hour (mph) on county roads and 15 mph on exploration roads to minimize risk of mortality or injury as a result of vehicular collisions.

2.3.3 Detection and Reporting Measures

Eagle injuries, mortalities, and previously undocumented golden eagle nests may be detected through incidental observations by Allegiant personnel and contractors. To improve the probability that injuries and mortalities do not go undetected, Allegiant field staff will be advised to always remain alert for golden eagles within exploration areas and access roads. Any new nest site detection will also occur through incidental observations and any monitoring that occurs.

In the event that a new nest is detected within proximity to exploration activities, the Allegiant Environmental Department or designee will record the circumstances and conditions associated with the observation. Among the information recorded and reported to the Service will be the date and time of the detection, the Global Positioning System location (North American Datum 83), the status of the nest, and if possible, the species.

When Allegiant personnel or their contractors encounter a golden eagle injury or mortality within the Plan boundary, they must report the incident to the Allegiant Environmental Representative. Personnel must not handle dead or injured golden eagles unless specifically directed to do so by the Service. In the event of a golden eagle injury, Allegiant will notify the Service and NDOW immediately (the same business day), and in the event of mortality, notification will occur by the next business day.

2.4 Other Alternatives Considered but Not Evaluated in this Environmental Assessment

The Service considered other alternatives based on communication with the Applicant but concluded that these alternatives did not meet the purpose and need underlying the action because they were impracticable for the Applicant to carry out or did not adequately address the risk of take at the Project. Therefore, the Service did not assess the potential environmental impacts of those alternatives. Below is a summary of the alternatives considered but eliminated from further review.

2.4.1 Alternative 3: Deny Permit

Under this alternative, the Service would deny the permit application because the Applicant falls under one of the disqualifying factors and circumstances denoted in 50 CFR 13.21, the application fails to meet all regulatory permit issuance criteria and required determinations listed in 50 CFR 22.26, or the Service determined that the risk to golden eagles is so low that a take permit is unnecessary.

Our permit issuance regulations at 50 CFR 13.21(b) set forth a variety of circumstances that disqualify an Applicant from obtaining a permit. None of the disqualifying factors or circumstances denoted in 50 CFR 13.21 apply to Allegiant. Next, the Service considered whether the Applicant meets all issuance criteria for the type of permit being issued. For eagle take permits, those issuance criteria are found in § 22.26(f). Allegiant's application meets all the regulatory issuance criteria and required determinations (50 CFR 22.26) for eagle take permits.

When an Applicant for an eagle take permit is not disqualified under 50 CFR 13.21 and meets all the issuance criteria of 50 CFR 22.26, denial of the permit is not a reasonable option. Therefore, this alternative, denial of the permit, was eliminated from further consideration.

3.0 Affected Environment

This section describes the current status of the environmental resources and values that are affected by the Proposed Action and alternatives.

3.1 Golden Eagles

General information on the population trends, distribution, and habitat of golden eagles are detailed in the PEIS (USFWS 2016a: Sections 3.3 and 3.4). This section more specifically describes the golden eagle population in the Project area.

3.1.1 Project Area Habitat

Foraging Habitat

Vegetation communities in the Project area have been mapped by the Southwest Regional Gap Analysis Project (SWReGAP) in land cover files (USGS 2011). The SWReGAP mapping shows nine vegetation communities occurring within the study area (**Table 3-1**). Three are mapped as over five percent of the Project area: Great Basin Xeric Mixed Sagebrush Shrubland (24 percent), Inter-Mountain Basins Mixed Salt Desert Scrub (64 percent), and Inter-Mountain Basins Semi-Desert Shrub Steppe (seven percent). Each of the remaining six communities account for approximately five percent of the Project area. The potential foraging value of the various habitat types present in the region has not been quantified, but in general, they support golden eagle prey base at varying degrees, which supports golden eagle foraging.

Table 3-1 SWReGAP Mapped Vegetation Communities within the Project Area

Vegetation Community	Acres	Percent
Barren Lands, Non-specific	17.1	0.47%
Great Basin Piñon–Juniper Woodland	8.2	0.22%
Great Basin Xeric Mixed Sagebrush Shrubland	863.1	23.54%
Inter-Mountain Basins Big Sagebrush Shrubland	56.7	1.55%
Inter-Mountain Basins Big Sagebrush Steppe	2.4	0.07%
Inter-Mountain Basins Cliff and Canyon	121.1	3.30%
Inter-Mountain Basins Mixed Salt Desert Scrub	2,342.3	63.89%
Inter-Mountain Basins Semi-Desert Shrub Steppe	242.0	6.60%
Invasive Annual Grassland	12.9	0.35%
Total	**3,665.9**	**100%**

Source: Stantec 2022

Other habitat types that are believed to represent important golden eagle foraging habitats in the region include wetlands, natural water sources, and meadows. Wetlands and springs provide a reliable water source for golden eagle prey and, therefore, allow higher concentrations of golden eagle prey in those areas. There are a total of five seeps and springs and multiple ephemeral drainages throughout the study area.

Nesting Habitat

Within the Project area, various rock outcrops were identified as areas with nesting golden eagles. Cliff and rock outcrops exist in the Monte Cristo Range to the south, the Royston Hills to the northeast, and the Cedar Mountains to the north. Limited stands of piñon–juniper woodland around the Project area may provide additional nesting habitat for several raptor species including golden eagles.

Other Topographic Features Attractive to Golden Eagles

The area surrounding the project includes a variety of topographic features including the tops of slopes oriented perpendicular to prevailing winds or near ridge crests of cliff edges that are conducive to slope soaring. Mountainous areas that include ridgelines and slopes with a variety of aspects, which are also suitable for soaring, and saddles or low points on ridge lines or near riparian corridors which may serve as flight paths.

3.1.2 Project Area Golden Eagle Population

The seven golden eagle nesting territories within the four-mile radius of the Project were delineated based on surveys conducted in 2014, 2018, 2020, 2021, 2022, and 2023 (BLM 2021b; Stantec 2022, 2023), with all inventories and monitoring efforts following the standard golden eagle survey protocols accepted by the Service (Pagel et al. 2010). Surveys conducted in 2018 included a 10-mile radius of the nearby Crow Springs Project, which encompassed the Eastside Exploration Project area plus a four-mile buffer (BLM 2021b). **Appendix A** summarizes the golden eagle territories documented to date and the status of nests within the Plan boundary and within one mile of the authorized exploration disturbance, however there are limited data for fledged young in the Project area. During the six years of surveys in the area, 47 raptor nests have been documented within four miles of the Project area. In 2014, one of seven territories within the four-mile radius was documented with an in-use nest (BLM 2021b). Two of seven territories within a 10-mile radius were each documented to have an in-use nest, in 2018 (BLM 2021b). In 2020, two of seven territories within a four-mile radius were each documented with an in-use nest (BLM 2021b). In 2021, two out of seven territories were documented with nests presumed as in-use by species other than golden eagles; no in-use golden eagle nests were documented in 2021 (Stantec 2022). In 2022, no territories were documented with in-use nests (Stantec 2022). In 2023, one of seven territories was documented, with an in-use nest (Stantec 2023). **Figure 1-2** shows the nest locations in the Project area and vicinity.

3.1.3 Territories within One Mile of the Project's Plan Boundary

Two known territories occur within one mile of the Plan boundary, they are identified as Territory #3 and Territory #4 (**Figure 3-1**). There are five nest sites within the two territories (DP-01-A, DP-01-B, DP-03, DPN-03, and DPN-04), and all are located within one mile of the Plan boundary. Nests DP-01-A, DP-01-B, and DP-03 are all within 0.45 miles of each other, belong to Territory #3, and are located on the southern edge of the Plan boundary. Nests DPN-03 and DPN-04 are within 0.39 miles of each other, belong to Territory #4, and are located on the Northern edge of the Plan boundary. Due to their proximity to the Project, incidental take could occur to any of these five nests, which are associated with the two unique territories.

3.1.4 Project Golden Eagle Population Stressors

Exploration Activities

Exploration activities would consist of utilizing the existing road network for Project access, reverse circulation, and core drilling from constructed drill sites, constructed roads, overland travel routes, drill pad and sump construction, maintenance of pre-1981 roads, and authorized exploration roads. Risks to golden eagles include unintentional disturbance from activity near nest sites, such as noise and visual irritation from surface disturbance, vehicular traffic on roads, and drilling.

Roads

Mobile equipment (i.e., vehicles) used in operations at the Project or traveling to or from the Project could strike and injure or kill wildlife. Road-killed wildlife may attract scavenging golden eagles, which in turn could be injured or killed by vehicle collision. Allegiant has speed limits placed on equipment and vehicles operating at the Project. Vehicle speeds would be limited to 25 mph on county roads and 15 mph on exploration roads. Roads within the Project area, particularly improved roads that allow vehicles to travel at higher speeds, may contribute to mortalities. The greater risk for vehicle mortality due to higher speeds and additional traffic is on area roads outside of the Project to the south (i.e., U.S. Highway 95) and to the east (i.e., State Route 89), which are outside of Allegiant's control.

Utilities

Electrical utility infrastructure present in the Project area includes power poles, power lines and guy wires, and transformers. These utilities present risks to golden eagles from electrocution and collision. Electrical transmission and distribution lines that do not include sufficient space between energized lines or ground wires and between energized lines represent an electrocution hazard to large birds. The Project is not authorized to construct additional electrical utility infrastructure; therefore, additional electrical utility infrastructure would not be constructed by the proponent within the Project area. Allegiant has committed to conservation measures that prevent the risk of electrocution to golden eagles. Additionally, Allegiant follows the *Suggested Practices for Raptor Protection on Power Lines*, per the Avian Power Line Interaction Committee (APLIC 2006), which provides guidance on power line construction and design on all future transmission and power lines.

3.2 Bald Eagles

Bald eagles (*Haliaeetus leucocephalus*) are known to occur in the region but have not been identified within the Project area. Bald eagles are not expected to be affected by exploration activities associated with the Project, and disturbance and loss of territory of bald eagles are not expected to result from the Project (BLM 2021a).

3.3 Migratory Birds

Effects to migratory birds have been analyzed in the PEIS (USFWS 2016a). A variety of migratory birds have been identified in the Project area; however, issuance of the proposed permit is not anticipated to affect one or more species of migratory birds. Additionally, Allegiant has ACEPMs to reduce potential impacts to migratory birds within the Plan boundary (BLM 2021a).

3.4 Species Listed under the Endangered Species Act

There are no federally threatened or endangered species listed under the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. §§ 1531–1544), or designated or potential critical habitat within the Plan boundary (BLM 2021a). Additionally, the Service's decision regarding an eagle take permit would not alter the physical footprint of the Project; therefore, disturbance and loss of species or individuals listed under the ESA is not expected to result from the Project or permit decision.

3.5 Cultural and Socio-economic Interests

Bald and golden eagles are important symbols of U.S. history and sacred to many Native American cultures. Some Native American cultures utilize eagles, eagle feathers, and other eagle parts for religious practices and cultural ceremonies. Outside of rituals and practices, wild eagles as live beings are deeply important to many tribes (Lawrence 1990, as cited by USFWS 2016a). Numerous tribes confirmed the importance of wild eagles during scoping and tribal consultation for the PEIS (USFWS 2016a).

Tribal participation is an integral part of the NEPA and NHPA process, as well as a key component of the Service's decision whether to issue an eagle take permit. Cultural and religious concerns regarding eagles were analyzed in the PEIS (USFWS 2016a), and tribal consultation already conducted for the PEIS is incorporated by reference into this EA. The PEIS identified tribal coordination as an important issue for subsequent analysis, given the cultural importance of eagles to the tribes. In accordance with Executive Order 13175, Consultation and Coordination with Tribal Governments (65 FR 67249), NHPA Section 106 (36 CFR § 800), and the Service's Native American Policy, the Service consults with Native American tribal governments whenever our actions taken under the authority of the Eagle Act may affect tribal lands, resources, or the ability to self-govern. This coordination process is also intended to ensure compliance with the American Indian Religious Freedom Act.

To notify Tribes regarding potential issuance of the requested Permit, the Service sent letters to the 10 federally recognized tribal governments located within 109 miles (the natal dispersal distance of golden eagles thought to adequately define the local area population of the golden eagles) of the Project, informing them of the received Permit application and preparation of this EA.

None of the above tribal governments provided comment during scoping and tribal outreach for this EA. The Proposed Action or considered alternatives would not impact cultural or socioeconomic interests beyond the impacts already discussed in the PEIS. Therefore, cultural and socioeconomic interests have not been analyzed further in this EA.

3.6 Climate Change

Climate change was considered in the PEIS (USFWS 2016a: Section 3.9, page 144) and is not analyzed further in this EA.

4.0 Environmental Consequences

This section summarizes the effects on the environment of implementing the Proposed Action or alternatives to the action. The discussion of overall effects to the environment of the eagle take permit program is provided in the PEIS (USFWS 2016a). This section of the EA analyzes only the effects that were not analyzed in the PEIS (USFWS 2016a) that may result from the issuance of an eagle take permit for this Project.

4.1 Proposed Action

In determining the significance of effects of the Project on golden eagles, the Service screened the Proposed Action of issuing an eagle take permit for the take of golden eagles against the analysis provided in the PEIS (USFWS 2016a) and the Service's 2016 report, *Bald and Golden Eagles Population Demographics and Estimation of Sustainable Take in the United States, 2016 Update* (USFWS 2016b). We also assessed Project-specific effects to eagles that were not covered in the PEIS analyses. These effects may occur at the project scale, at the local area eagle population scale, and/or at the regional EMU scale.

4.1.1 Direct and Indirect Effects

Golden Eagles

Under the Proposed Action, the Applicant is requesting authorization for two incidents of disturbance take, over a period of five years from the date of the issuance of the permit. There are five nest sites (DP-01-A, DP-01-B, DP-03, DPN-03, and DPN-04) associated with two unique territories within one mile of authorized Project disturbance. During implementation of exploration activities, golden eagles associated with these territories are the most likely to be the breeding pairs impacted. The Proposed Action would authorize two incidents of disturbance take over a five-year period, regardless of which territory might be disturbed.

The Proposed Action would have a direct impact to the golden eagles through the increased human presence during exploration near their nests, thus causing potential negative impacts to golden eagle breeding and nesting activities.

Disturbance of a golden eagle territory is assumed to result in loss of annual productivity (i.e., number of young reared) from that territory. The Service uses an estimate of 0.59 golden eagle young fledged per nesting territory per year (USFWS 2016c) to estimate loss of annual productivity. The permit applicant asks for coverage for two incidents of take, meaning a total lost productivity of 1.18 golden eagle young over a five-year permit.

Along with the monitoring and minimization measures outlined in **Section 2**, the Applicant would provide compensatory mitigation to offset the expected take. The Service uses electric utility power pole retrofitting to offset authorized take of golden eagles. Electrocutions from power poles are known to be a major cause of eagle mortality. Power poles can be retrofitted by verified methods (such as insulating or covering electrical components or modifying pole elements to increase the distance between electrical components) to reduce the risk of electrocution to eagles, with the maintenance and efficacy of retrofits confirmed through post-installation inspections and monitoring. The effects of retrofitting power poles have been quantified "per eagle," allowing use of the Golden Eagle Resource REA to calculate the number of power pole retrofits needed to offset the authorized take of golden eagles (USFWS 2018).

The Service's REA was used (USFWS 2018) to calculate the required compensatory mitigation to offset disturbance resulting in two incidents of lost annual productivity from breeding golden eagles over a five-year period. Based on the updated Eagle Act permit regulations, a compensatory mitigation ratio of 1.2:1 is used. The 1.2:1 ratio for compensatory mitigation achieves a net benefit to golden eagle populations, ensuring that regional eagle populations are maintained consistent with the preservation standard of the Eagle Act despite indications of declines in golden eagle populations (USFWS, 2016a).

Using the REA, the Applicant would offset the take of golden eagles at the Project by contributing to a Service-approved in-lieu fee program in the amount equal to retrofitting approximately 47.11 to 20.5 poles under the Proposed Action.

The final power pole number depends on the type and expected longevity of each retrofit. As the implementation of compensatory mitigation would fully offset the estimated take for the Project and would provide additional net benefit to eagle populations, there would be no significant negative impacts to eagle populations from issuing an eagle take permit under the Proposed Action Alternatives

The Eagle Act regulations require compensatory mitigation to be conducted in the same EMU in which the take occurs. The Project is located in the Pacific Flyway EMU. The site of power poles to be retrofitted has not yet been determined but would be in the Pacific Flyway.

In addition, the Proposed Action incorporates adaptive management and minimization measures as described in **Section 2**. The proposed ACEPMs would continue to be implemented as permit

stipulations to further reduce the risk of Project-related injury or mortality hazards to golden eagles within the Project boundary.

The Proposed Action meets the purpose and need as it is consistent with the Eagle Act and its regulations and adequately addresses the risk of take at the Project.

Bald Eagles

Because the Project has not changed in scope, timing, or duration, no significant adverse effects are foreseen to bald eagles as a result of the Project (BLM 2021). Although take of bald eagles is not expected to occur at this Project and take of bald eagles would not be permitted, bald eagles in the region may benefit from avoidance and minimization measures established to reduce the risk to golden eagles. Bald eagles may benefit from compensatory mitigation actions provided to offset the take of golden eagles under the Proposed Action.

Migratory Birds

Because the Project has not changed in scope, timing, or duration, no significant adverse effects to migratory bird populations are expected as a result of the Project (BLM 2021a). Issuance of an eagle take permit to the Project may also provide benefits to migratory birds. Power pole retrofits completed as compensatory mitigation for the eagle take permit may minimize electrocution risk for raptors and other migratory birds, just as with golden eagles.

Species Listed under the Endangered Species Act

Section 7 of the ESA requires Federal agencies to consult to "ensure that any action authorized, funded, or carried out" by them "is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [critical] habitat" (16 U.S.C. § 1536(a)(2)).

There are no federally threatened or endangered species listed under the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. §§ 1531–1544), or designated or potential critical habitat within the Plan boundary (BLM 2021a). Additionally, the Service's decision regarding the requested Permit will not alter the physical footprint of the Project and therefore will not alter the Project impacts to federally threatened and endangered species in the Project area.

4.1.2 Cumulative Effects

The purpose of this cumulative effects evaluation is to identify situations where the golden eagle take proposed under the Proposed Action, combined with take from other present or foreseeable future actions and sources, may be approaching levels that are biologically problematic or that cannot reasonably be offset through compensatory mitigation. Effects of take may be cumulative at the project scale, at the local-area golden eagle population scale, and at the EMU scale.

At the Project scale, the alteration of the golden eagle habitat from Project development could cause shifting in golden eagle breeding pair territory boundaries in the vicinity of the Project, which could cause increased antagonistic interactions with surrounding golden eagle breeding pairs, potentially creating a ripple effect of impacts to golden eagles in areas surrounding the Project.

To ensure that golden eagle populations at the local scale are not depleted by cumulative take in the local area, the Service analyzed in the PEIS (USFWS 2016a) the amount of take that can be authorized while still maintaining LAP of golden eagles. The LAP scale is defined for golden eagles as the median natal dispersal distance for the given species, which for golden eagles is a 109-mile radius (USFWS 2016b). In order to issue a permit, cumulative authorized take must not exceed five percent of a LAP unless the Service can demonstrate why allowing take to exceed that limit is still compatible with the preservation of golden eagles. The eagle take permit regulations require the Service to conduct an individual LAP analysis for each permit application as part of the application review.

Therefore, the Service considered cumulative effects to the LAP surrounding the Project Plan boundary (**Figure 4-1**) to evaluate whether the take to be authorized under this permit, together with other sources of permitted take and unpermitted golden eagle mortality, may be incompatible with the persistence of the Project's LAP. Data provided by Allegiant, data on other golden eagle take authorized and permitted by the Service, and other reliably documented unauthorized golden eagle mortalities have been incorporated to estimate cumulative impacts to the LAP. The cumulative effects analysis was conducted as described in the Service's Eagle Conservation Plan Guidance (USFWS 2013).

The LAP for the Project was estimated to be about 640 golden eagles. The five-percent benchmark for authorized take of that LAP is 31.98 golden eagles; the currently authorized take in the LAP, plus that estimated to occur at the Project, is 1.67 golden eagles or 0.26 percent of the LAP per year. This is well below the five percent sustainable take benchmark determined by the Service to maintain the local area population of golden eagles.

The Service must also assess any available data to determine if there is any indication that unauthorized take (take that has not been permitted by the Service) in the LAP may exceed ten percent, as this is roughly the average background level of unpermitted take in local area populations of golden eagles (USFWS 2016a). The Service also does not have any indication that unauthorized take may exceed ten percent of the LAP. Available data suggests that unauthorized take of eagles in the LAP may be around 2.69 percent of the LAP per year. Therefore, effects of take at the local scale would not be significant and would therefore be compatible with the preservation of golden eagles.

Additionally, take of eagles also has the potential to affect the larger eagle population. Therefore, the Service defined regional EMUs and analyzed the effects of permitting take of golden eagles in

combination with ongoing unauthorized sources of human-caused eagle mortality and other present or foreseeable future actions affecting golden eagle populations (USFWS 2016a). As part of the analysis, the Service determined sustainable limits to permitted take within each EMU. The take limit for all golden eagle EMUs was set to zero as golden eagle populations throughout the United States may be declining (USFWS 2016a). Therefore, any authorized take of golden eagles must be offset with compensatory mitigation at a mitigation ratio of 1.2 to 1 (81 FR 91494). The take that would be authorized under the Proposed Action would be offset by the compensatory mitigation that will be provided by the Applicant, as described above, so will not significantly impact the EMU eagle population. The avoidance and minimization measures that would be required under the Permit, along with monitoring, are designed to further ensure that the Permit is compatible with the preservation of the golden eagle at the regional EMU population scale.

4.2 Alternative 1: No Action Alternative

4.2.1 Direct and Indirect Effects

Golden Eagles

The Service assumes the level of take is the same under the Proposed Action and No Action Alternative, but under the No Action Alternative, the Service would take no action on the permit application. A permit would not be issued, and compensatory mitigation would not be required. Under this alternative, direct impacts of the Project on the golden eagle population would be assumed to be disturbance resulting in two incidents of lost annual productivity from breeding golden eagles over a period of five years, and this take would not be offset by compensatory mitigation. The Applicant would continue to implement the monitoring and avoidance measures for the Project as described in Section 2; however, additional measures outside those referenced in Section 2, including compensatory mitigation, would not be implemented.

This alternative does not meet the purpose and need for the action because, by regulation (50 CFR § 13.21), when in receipt of a completed application, the Service must either issue or deny a permit to the Applicant. The No Action Alternative also does not meet the purpose of and need for the action because it would result in the adverse, unmitigated effects to golden eagles described above, and these effects are not compatible with the preservation of golden eagles.

Bald Eagles

The Applicant did not apply for take authorization for bald eagles, nor is take of bald eagles expected to occur from Project activities. However, the No Action Alternative would mean benefits that bald eagles might also incur from avoidance and minimization measures established to reduce the risk to golden eagles and compensatory mitigation actions provided to offset the take of golden eagles, would not occur.

Migratory Birds

Any incidental benefits to migratory birds from minimization measures and compensatory mitigation required under an eagle take permit would not be realized under the No Action Alternative.

Species Listed under the Endangered Species Act

As the Service would be taking no action under this alternative, there would be no effects to ESA-listed species under this No-Action alternative.

4.3 Comparison of Effects of Alternatives

The main differences between the Proposed Action and No Action Alternative are the issuing of a permit with compensatory mitigation requirements to offset the permitted take under the Proposed Action and the level of concurrent and post-construction monitoring that would occur (**Table 4-2**). The Service assumes the level of take is the same under the Proposed Action and No Action Alternative, but under the No Action Alternative, compensatory mitigation would not be required.

Table 4-2 Comparison of the Proposed Action and No Action Alternative

	Proposed Action	Alternative 1: No Action Alternative
Eagle Take Levels	Disturbance resulting in two incidents of lost annual productivity from breeding golden eagles over a five-year period.	Disturbance resulting in lost annual productivity from breeding golden eagles over a five-year period.
Avoidance and Minimization	Applicant will continue to implement the measures to minimize impacts to golden eagles (Section 2) at the Project, including vehicle speed limits, employee awareness and training programs, and carcass management.	Same as detailed under the Proposed Action, as the Applicant is committed to these measures even without issuance of a permit.
Compensatory Mitigation	Retrofitting of power poles to offset the loss of annual productivity from breeding golden eagles for up to two incidents of disturbance take over a five-year period from the date of the issuance of the permit.	None provided.
Detection and Reporting	Applicant will continue to meet their BLM requirements from the 2021 EA, implement the measures to minimize impacts to golden eagles (**Section 2**), including the reporting and detection system to ensure that personnel adhere to the appropriate actions should a previously unidentified nest, injured golden eagle, or deceased golden eagle be identified.	Same as detailed under the Proposed Action.
Unmitigated Eagle Take	None.	Loss of productivity from breeding golden eagles up to two incidents of disturbance take over a five-year period.
Adaptive Management	If continued monitoring determines that the proponent is approaching their take permit limits, adaptive management would be	None.

	Proposed Action	Alternative 1: No Action Alternative
	implemented. First, the Applicant would apply avoidance buffers on in-use nests to prevent incidental take. If avoidance is not practicable, the proponent may request a permit amendment from the Service.	
Data Collection/Monitoring	A qualified third-party biologist will monitor golden eagle nests within one mile of the Project annually to determine nest status. Applicant will also document any golden eagle mortality identified while working at the Project.	Allegiant will conduct annual nest status monitoring for the Project, as the applicant is committed to these measures even without issuance of a permit.
Company Liability for Eagle Take	None if maintained within permitted take limits.	Yes.

5.0 Mitigation

The Proposed Action incorporates measures to minimize and avoid impacts to the maximum degree practicable, as required by regulation. To ensure that regional golden eagle populations are maintained consistent with the preservation standard, regulations require that any golden eagle take that cannot practicably be avoided and is above EMU take limits must be offset by compensatory mitigation at a 1.2:1 ratio. As golden eagle take limits for all EMUs were determined to be zero (USFWS 2016a), compensatory mitigation is necessary to offset any authorized take of golden eagles. The 1.2:1 ratio for compensatory mitigation achieves a net benefit to golden eagle populations, ensuring that regional golden eagle populations are maintained consistent with the preservation standard of the Eagle Act despite indications of declines in golden eagle populations (USFWS 2016a). As this would fully offset the estimated take, as well as provide an additional net benefit to golden eagle populations, there would be no significant effects to golden eagle populations from issuing an eagle take permit under the Proposed Action. **Section 2** provides details of the compensatory mitigation and minimization measures that would be completed under the Proposed Action.

6.0 List of Preparers and Reviewers

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- John Lemback, Environmental Scientist, Stantec Consulting Services Inc.
- Ian Holl, GIS Specialist, Stantec Consulting Services Inc.
- Heather Beeler, Wildlife Biologist, U.S. Fish and Wildlife Service
- James Panaccione, Wildlife Biologist, U.S. Fish and Wildlife Service

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FIGURES

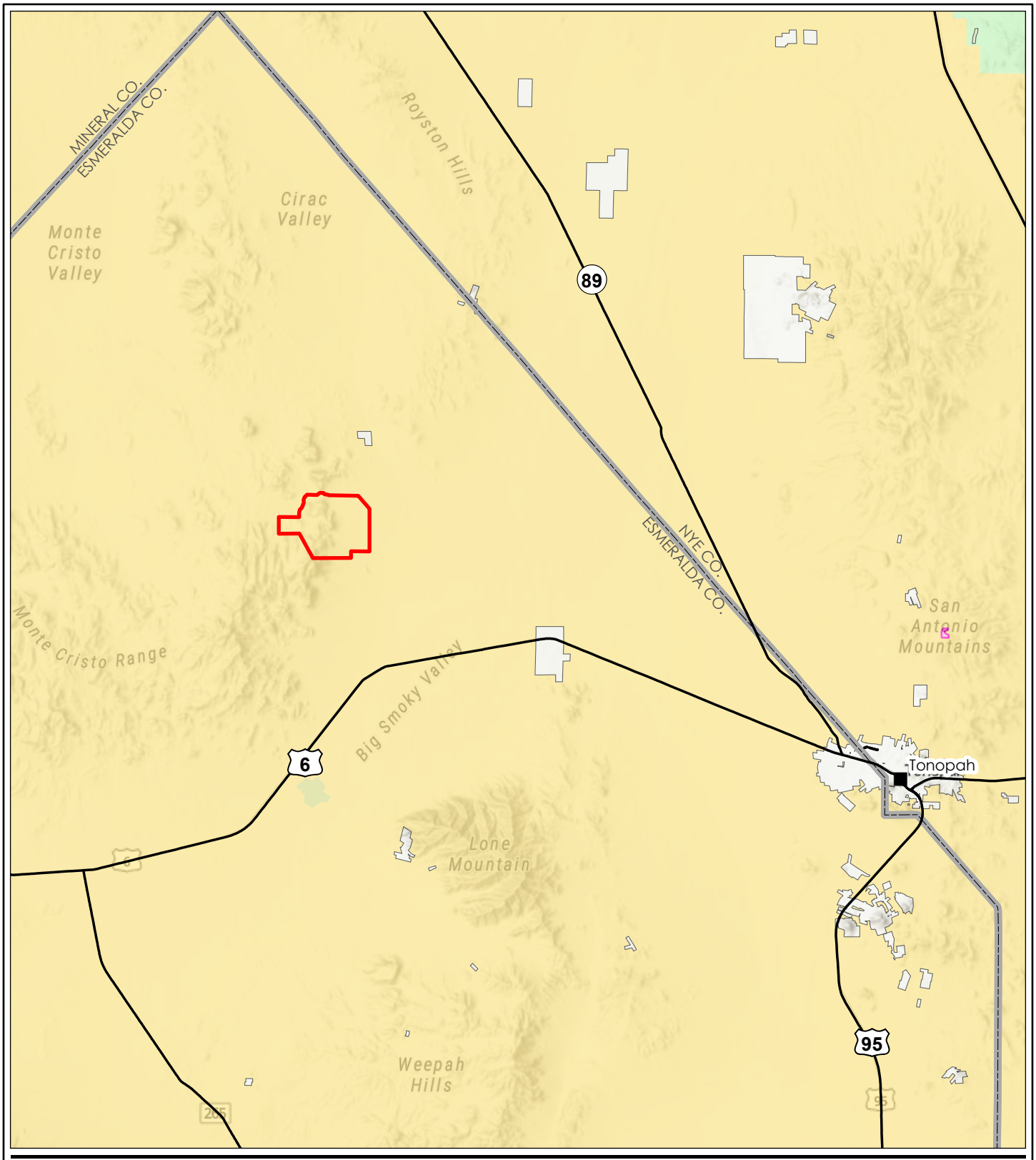
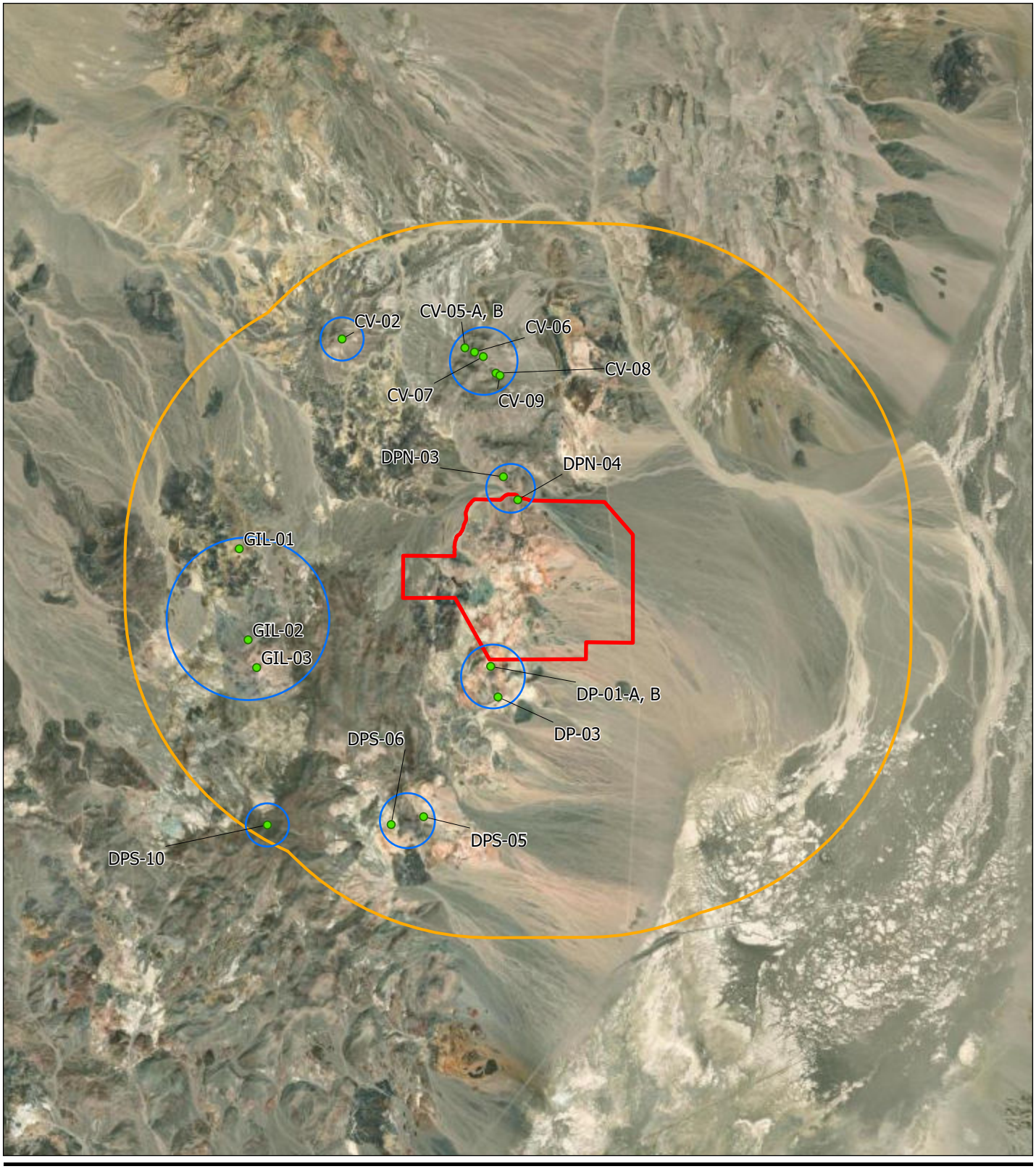


Figure 1-1
Project Location

Eastside Exploration Project
Eagle Incidental Take Permit Environmental Assessment

Service Layer Credits: World Topographic Map: California State Parks, Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USFWS
World Hillshade: Esri, NASA, NGA, USGS



Legend

- Eastside Project Boundary
- Four-Mile Buffer of Disturbance
- Golden Eagle Territories
- Golden Eagle Nests

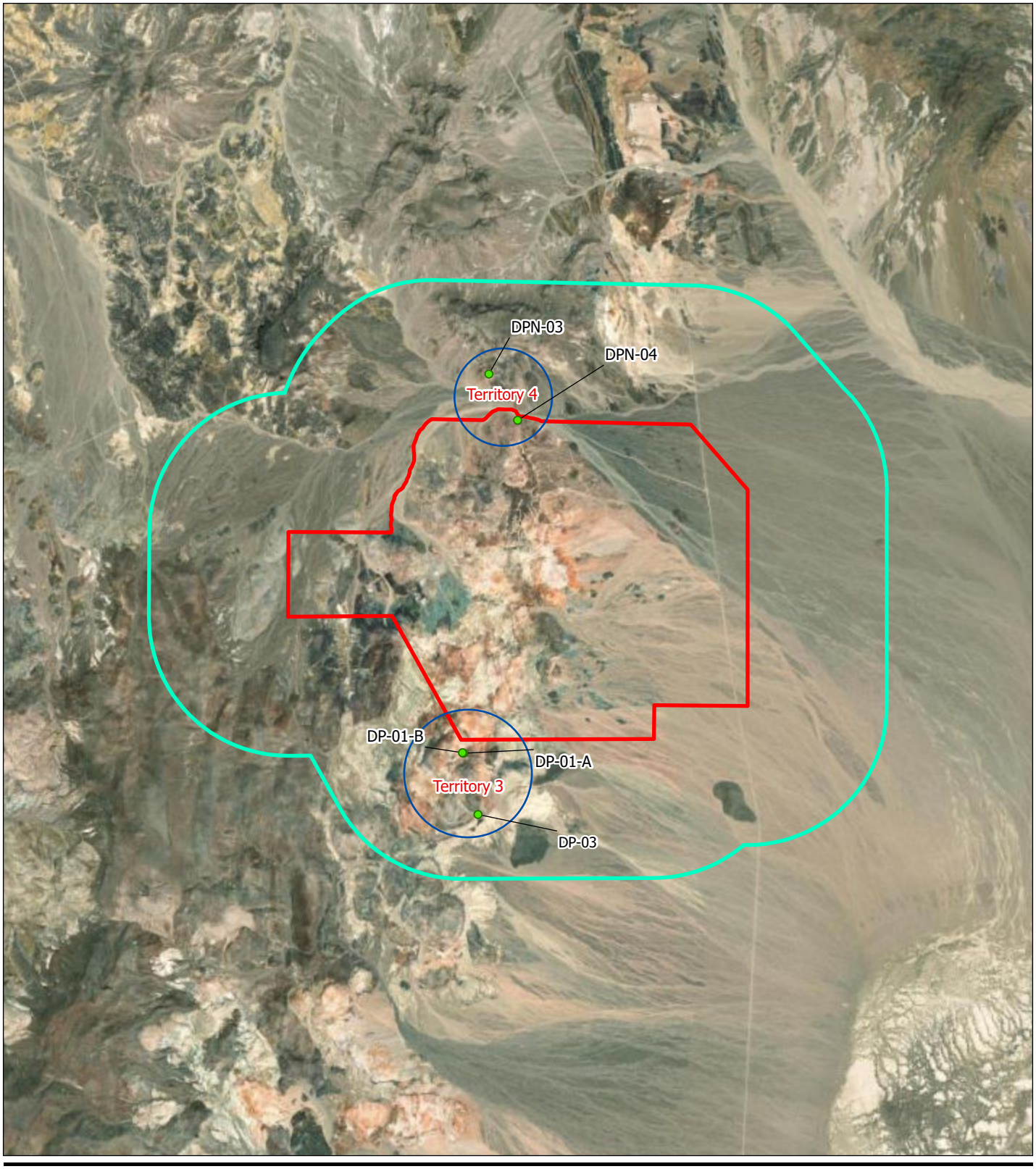
Figure 1-2
Golden Eagle Nests

Eastside Exploration Project
Eagle Incidental Take Permit Environmental Assessment

N

0 1 2 Miles

Service Layer Credits: World Imagery: Earthstar Geographics



Legend

- Eastside Project Boundary
- One-Mile Buffer of Proposed Disturbance
- Golden Eagle Territories
- Golden Eagle Nests

Figure 3-1
Golden Eagle Territories Within
One-Mile of Proposed Surface Disturbance

Eastside Exploration Project
Eagle Incidental Take Permit Environmental Assessment

N

0 0.5 1 Miles

Service Layer Credits: World Imagery: Earthstar Geographics

Legend

- Eastside Project Boundary
- 109-Mile Natal Dispersal Area

Figure 4-1
Cumulative Effects Study Area

Eastside Exploration Project
Eagle Incidental Take Permit Environmental Assessment

N

0 16 32 Miles

Service Layer Credits: World Topographic Map: California State Parks, Esri, HERE, Garmin, FAO, NOAA, USGS, Bureau of Land Management, EPA, NPS
World Hillshade: Esri, USGS

APPENDIX A

Eagle Conservation Plan

EAGLE CONSERVATION PLAN
EASTSIDE EXPLORATION PROJECT
ESMERALDA COUNTY, NEVADA

Application Submission CS0076303
Permit PER0004931

Prepared for:

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Stantec Project Number 203721729

March 15, 2021
Revised July 29, 2021
Revised July 12, 2023
Revised November 13, 2023
Revised January 17, 2024

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ACRONYMS AND ABBREVIATIONS

ACEPM	Applicant-committed Environmental Protection Measure
Allegiant	Allegiant Gold (US) Ltd
APLIC	Avian Power Line Interaction Committee
BGEPA	Bald and Golden Eagle Protection Act of 1940, as amended
BLM	Bureau of Land Management
CFR	Code of Federal Regulations
Cordex	Cordex Exploration Company
ECP	Eagle Conservation Plan
NDOW	Nevada Department of Wildlife
Plan	Plan of Operations
Project	Eastside Exploration Project
Study area	Project Area and a Surrounding Four-mile Buffer
SWReGAP	Southwest Regional Gap Analysis Project
USFWS	United States Fish and Wildlife Service

1.0 PURPOSE OF THIS PLAN

The purpose of this Eagle Conservation Plan (ECP) is to support application(s) for a golden eagle (*Aquila chrysaetos*) nest take permit under the permit regulations of the Bald and Golden Eagle Protection Act of 1940, as amended (BGEPA). Specifically, Allegiant Gold (U.S.) Ltd (Allegiant) is requesting a take permit issued by the United States Fish and Wildlife Service (USFWS) under 50 Code of Federal Regulations [CFR] § 22.26 for the incidental take of golden eagles from otherwise lawful activities associated with the Eastside Exploration Project (Project). The Project is in Esmeralda County, Nevada (**Figure 1**), and is an exploration area authorized by the Bureau of Land Management (BLM) Battle Mountain District, Tonopah Field Office in Nye County, Nevada.

The BGEPA (as amended) prohibits the "take" of bald and golden eagles. BGEPA defines "take" to include "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb," and prohibits take of individuals and their parts, nests, or eggs. Permitting regulations (50 CFR Part 22) were issued in 2009 and revised in 2016. Known as the "Eagle Permitting Rule," these regulations allow the USFWS to administer a permit program allowing for the lawful take of eagles and nests.

Allegiant has prepared this ECP as a precursor to applying for a BGEPA eagle "take" permit. This ECP provides the necessary support materials to accompany an Eagle Incidental Take Permit application and demonstrates that the proposed take is compatible with the preservation of golden eagles and the issuance criteria in 50 CFR § 22.26. There are five nest sites (DP-01-A, DP-01-B, DP-03, DPN-03, and DPN-04) associated with two territories within the one-mile buffer of authorized Project disturbance. This ECP will accompany the Eagle Incidental Take Permit application requesting authorization for two incidents of disturbance take during a five-year period, due to reoccurring disturbance to two golden eagle breeding pairs, resulting in a loss of annual productivity.

An application for a take permit under 50 CFR § 22.26 requires the information listed below. Also provided is a reference to where in this ECP that information is provided.

- The duration of the project for the permit is five years (see Section 1);
- A description of approved activities at the Project and surrounding area (Section 2);
- A discussion of eagle habitat, as it relates to foraging, nesting, and topography, found in the four-mile radius of the Project area (Section 3);
- A brief description of the golden eagle nesting population within a four-mile radius of the proposed Plan of Operations (Plan) boundary (Section 4);
- An assessment of the risks to golden eagles posed by the Project (Section 5);
- A review of practicable avoidance and minimization measures that Allegiant could and are employing to abate the potential risk (Section 6);
- Monitoring and adaptive management of eagle populations (Section 7); and
- Mitigation for impacts as a result of incidental disturbance take (Section 8).

2.0 INTRODUCTION AND BACKGROUND

2.1 EXPLORATION HISTORY

The Project area is located on the northern end of the Monte Cristo Range. Currently, Allegiant owns and operates the exploration Project. However, the exploration Project was previously owned by Cordex Exploration Company (Cordex). Cordex submitted the notice of intent in 2010 and exploration activities began in the Project area in 2014, when Cordex submitted the Plan to the BLM. In January 2015, the Plan was submitted again to the BLM in accordance with the BLM Surface Management Regulations 43 CFR 3809. The Plan for the Project area was authorized by the BLM in a Decision Record in May 2015. Thereafter, Allegiant acquired the Project from Cordex. In November 2020, Allegiant submitted a Plan modification (Allegiant, 2021) to the BLM to continue and expand surface exploration activities at the Project area, which was authorized by the BLM in a Decision Record in September 2021 (BLM, 2021).

2.2 AUTHORIZED AND PROPOSED FACILITIES

Allegiant is authorized to disturb a maximum of 40.2 acres of land. Allegiant is proposing an additional 28.54 acres of surface disturbance totaling 68.74 acres. The following are existing, authorized, and proposed exploration disturbance, which are also shown on **Figure 2**. Some of these features have not yet been constructed. Based on the proposed Plan, authorized and existing facilities at the Project would include: 1) 40.2 acres of existing or authorized disturbance including access roads, drill pads, sumps, and staging areas, and 2) 28.54 acres of proposed disturbance including access roads, overland travel, drill pads, sumps, and staging areas. Authorized surface disturbing activities consist of utilizing the existing road network for Project access, reverse circulation and core drilling from constructed drill sites, constructed roads, overland travel routes, drill pad and sump construction, maintenance of pre-1981 roads, and authorized exploration roads (BLM, 2021).

3.0 AREA HABITATS

The Eagle Conservation Plan Guidance Module 1 – Land-based Wind Energy, Version 2 recommends that an analysis of potential impacts on nesting golden eagles include the Project footprint itself (Plan boundary) and a surrounding four-mile buffer area (study area) (**Figure 1**). Although this guidance was designed for wind energy, no such guidance exists for mineral exploration, and is the best available guidance for analysis of potential impacts.

3.1 FORAGING HABITAT

Vegetation communities in the survey area have been mapped by the Southwest Regional Gap Analysis Project (SWReGAP) in land cover types (**Figure 3**) (USGS, 2011). The SWReGAP mapping shows nine vegetation communities occurring within the study area, the most dominant within the study area being the Inter-Mountain Basins Mixed Salt Desert Scrub and Great Basin Xeric Mixed Sagebrush Shrubland. **Table 1** presents the total acres of the vegetation communities within the study area.

Table 1 SWReGAP Vegetation Communities within the Study Area

SWReGAP Cover Type	Approximate Acres within Study Area	Percent of Total Acreage within Study Area
Barren Lands, Non-specific	130.5	0.21%
Great Basin Pinyon-Juniper Woodland	725.6	1.19%
Great Basin Xeric Mixed Sagebrush Shrubland	10,684.4	17.58%
Inter-Mountain Basins Big Sagebrush Shrubland	1,231.1	2.03%
Inter-Mountain Basins Big Sagebrush Steppe	3.3	0.01%
Inter-Mountain Basins Cliff and Canyon	1,143.3	1.88%
Inter-Mountain Basins Greasewood Flat	2,495.1	4.11%
Inter-Mountain Basins Mixed Salt Desert Scrub	41,420.2	68.16%
Inter-Mountain Basins Playa	990.1	1.63%
Inter-Mountain Basins Semi-Desert Shrub Steppe	1,900.9	3.13%
Invasive Annual Grassland	35.4	0.06%
Mojave Mid-Elevation Mixed Desert Scrub	3.3	0.01%
North American Arid West Emergent Marsh	1.6	<0.01%
Total for Project Area	**60,764.89**	**100%**

A description of the dominant vegetation communities and their relevance for golden eagle use are described below.

Inter-Mountain Basins Mixed Salt Desert Scrub

This extensive ecological system includes open-canopied shrublands of typically saline basins, alluvial slopes and plains across the Intermountain western United States. Substrates are often saline and calcareous, medium- to fine-textured, alkaline soils, but include some coarser-textured soils. The vegetation is characterized by a typically open to moderately dense shrubland composed of one or more *Atriplex* species such as shadscale saltbush (*Atriplex confertifolia*), fourwing saltbush (*Atriplex canescens*), cattle saltbush (*Atriplex polycarpa*), or spinescale saltbush (*Atriplex spinifera*). Other shrubs present to codominant may include Wyoming big sagebrush (*Artemisia tridentata* ssp. *wyomingensis*), yellow rabbitbrush (*Chrysothamnus viscidiflorus*), rubber rabbitbrush (*Ericameria nauseosa*), Nevada jointfir (*Ephedra nevadensis*), spiny hopsage (*Grayia spinosa*), winterfat (*Krascheninnikovia lanata*), desert-thorn (*Lycium* spp.), bud sagebrush (*Picrothamnus desertorum*), or horsebrush (*Tetradymia* spp.). Greasewood (*Sarcobatus vermiculatus*) is generally absent, but if present does not codominate. The herbaceous layer varies from sparse to moderately dense and is dominated by perennial graminoids such as Indian ricegrass (*Achnatherum hymenoides*), blue grama (*Bouteloua gracilis*), thickspike wheatgrass (*Elymus lanceolatus* ssp. *lanceolatus*), western wheatgrass (*Pascopyrum smithii*), James' galleta (*Pleuraphis jamesii*), big galleta (*Pleuraphis rigida*), Sandberg bluegrass (*Poa secunda*), or alkali sacaton (*Sporobolus airoides*). Various forbs are also present (USGS, 2011).

Within the survey area, this community occurs in the mid to low elevations. Black-tailed jackrabbits (*Lepus californicus*) are commonly found in this community. As such, this community represents moderate to high-value golden eagle foraging habitat.

Great Basin Xeric Mixed Sagebrush Shrubland

This ecological system occurs in the Great Basin on dry flats and plains, alluvial fans, rolling hills, rocky hillslopes, saddles, and ridges at elevations between 3,200 and 8,500 feet above mean sealevel. Sites are dry, often exposed to desiccating winds, with typically shallow, rocky, non-saline soils. Shrublands are dominated by black sagebrush (*Artemisia nova*) in mid and low elevations, little sagebrush (*Artemisia arbuscula*) in higher elevations, and may be codominated by Wyoming big sagebrush or yellow rabbitbrush. Other shrubs that may be present include shadscale saltbush, jointfir (*Ephedra* spp.), rabbitbrush (*Ericameria* spp.), spiny hopsage, Shockley's desert-thorn (*Lycium shockleyi*), bud sagebrush, greasewood, and horsebrush. The herbaceous layer is likely sparse and composed of perennial bunch grasses such as Indian ricegrass, desert needlegrass (*Achnatherum speciosum*), Thurber's needlegrass (*Achnatherum thurberianum*), squirreltail (*Elymus elymoides*), or Sandberg bluegrass (USGS, 2011).

Within the survey area, this community occurs in the mid to lower elevations. Black-tailed jackrabbits and mountain cottontails (*Sylvilagus nuttallii*) are found in this community. As such, this community represents moderate to high-value golden eagle foraging habitat.

Golden eagle prey species such as black-tailed jackrabbits (*Lepus californicus*), mountain cottontails (*Sylvilagus nuttallii*), and larger diurnal rodents such as yellow-bellied marmots (*Marmota flaviventris*) are commonly found within many of the vegetation communities present in the study area. Other habitat types that are believed to represent important golden eagle foraging habitats in the region include wetlands, natural water sources, and meadows. Wetlands and springs provide a reliable water source for eagle prey and, therefore, allow higher

concentrations of eagle prey. There are a total of five seeps and springs, and multiple ephemeral drainages throughout the study area. Additionally, golden eagles frequently feed on carrion during the nesting season and especially during winter (Kochert and Steenhof, 2002); there is a potential for carrion to be present as a food source for golden eagles throughout the study area.

3.2 NESTING HABITAT

Within the study area, various rock outcrops were identified as areas with nesting golden eagles. In 2020, there were two in-use golden eagle nests documented in the study area, all of which were on rock outcrops. In 2022, no nests were documented as in-use. In 2023, one nest was documented as in-use by golden eagles. None of the in-use nests documented in 2023 were within one-mile of the Plan boundary. Cliff and rock outcrops exist in the Monte Cristo Range to the south, the Royston Hills to the northeast, and the Cedar Mountains to the north.

3.3 TOPOGRAPHIC FEATURES ATTRACTIVE TO EAGLES

Tops of slopes oriented perpendicular to prevailing winds or near ridge crests of cliff edges are features that are conducive to slope soaring and are attractive features for eagles. Saddles or low points on ridge lines or near riparian corridors may serve as flight paths. Nearby perch and roost sites may also attract eagles. As described above, the area surrounding the Project represents golden eagle potential foraging habitat, though the value of this habitat varies in quality.

Cliffs and outcrops occur in the Monte Cristo Range to the south, the Royston Hills to the northeast, and the Cedar Mountains to the north. Mountainous areas that include ridgelines and slopes with a variety of aspects, such that winds from multiple directions would create deflection currents, are suitable for soaring. Habitats surrounding the Project include perch and roost sites, and the area is suitable golden eagle nesting and foraging habitat as described above.

4.0 GOLDEN EAGLE NESTING TERRITORIES

A major component of the risk assessment is to identify Project activities that could result in a take. Territories with breeding pairs subject to disturbance take are those that have been identified within the Plan boundary and are in the USFWS's one-mile buffer for surface disturbance activities. Raptor and golden eagle surveys have been conducted in the vicinity of the Allegiant Plan boundary in 2014, 2018, 2020, 2021, 2022, and 2023. Inventory and monitoring efforts have followed Pagel et al. (2010), which is the standard golden eagle survey protocol accepted by the USFWS. Surveys focused on completing a thorough inventory of nests within a four-mile (2014, 2020, 2021, 2022, and 2023) radius of the Project area. In 2018, surveys were conducted for the nearby Crow Springs Project within a 10-mile (2018) radius, which encompassed Allegiant's Plan boundary and provided data on territory and nest presence in the vicinity of the Project. Although the 10-mile radius was surveyed in 2018 at the nearby Crow Springs Project, the four-mile radius of the Project area was surveyed in all subsequent years in accordance with the most recent recommendations on survey buffers from USFWS. Survey data from 2018 is incorporated herein as it includes territories and nest status identified within four miles of the Project area. All surveys conducted for the Project and in the vicinity focused on capturing information regarding nest breeding effort, productivity, and success. In 2014 and 2018, two aerial surveys were conducted. The 2014 surveys were conducted between April 30–May 1 and June 9, and the 2018 surveys were conducted in May and June. Surveys in 2020 and 2021 consisted of aerial and ground surveys. In 2020 one aerial survey (February 12) and one ground survey (March 23–27) were conducted, which included all previously identified nests. The ground survey occurred after the mean laying date for golden eagles in Nevada. In 2022 two aerial nest surveys were conducted (June 11 and February 14). In 2023, one aerial nest survey (January 25) and one ground-based survey (March 13 – March 17) were conducted. As recommended by the USFWS, Allegiant obtained permission from the adjacent Crow Springs Project proponent to incorporate their data from recently conducted (within the last two years from the date of request) golden eagle surveys, which included the 2018 surveys that encompassed Allegiant's Project area as detailed above. Detailed information and findings of these surveys is included in their respective reports (EM Strategies, 2018; Stantec, 2014, 2020, 2022, 2023). A figure showing the survey data collected by EM Strategies in 2018, within the 10-mile radius of the Crow Springs Project, is included in **Appendix B**.

An eagle territory is defined (consistent with 50 CFR § 22.3) as an area that contains one or more nests within the home range of a mated pair of eagles regardless of whether such nests were built by the current resident pair. The golden eagle nesting territories for the Project have been delineated based on the results from the years of surveys, as described above. Territory delineations were based on proximity of nests to one another, concurrent nest use of adjacent nests, alternating use (from year to year) of adjacent nests within a cluster, and nearest available quality nesting substrate (i.e., rock outcrop, cliff, pit highwall, etc.). These delineations represent the opinion of wildlife biologists and are subject to modification when/if new data are found that justify re-delineation. The total number of territories could be biased due to the size and position of the study area on the landscape. Because of these biases, Stantec recognizes that actual territory breeding effort rate is likely higher than reported estimates in this analysis; however, the delineations are representative of the data available.

A total of 17 golden eagle nest sites have been documented within a four-mile radius of the Plan boundary during six surveys, in combination with the data received from adjacent exploration projects, over the last nine years (2014, 2018, 2020, 2021, 2022, and 2023). A total of seven territories have been delineated within a four-mile radius of the Project area (**Figure 4**). Golden eagle nests, as well as other documented raptor nests, within the survey areas are detailed in **Table 2**.

Table 2 Golden Eagle Nests in the Study Area and Status (2014-2023)

Territory	Nest ID	Within One Mile of Proposed Surface Disturbance?	2014 Status[1]	2018 Status[2,3]	2020 Status[4]	2021 Status[5]	2022 Status[5]	2023 Status[6]
1	CV-02	No	Alternate	In-Use (GOEA)	Alternate	Alternate	Alternate	Alternate
2	CV-05-A	No	Alternate	Alternate	Alternate	In-Use (PRFA)	Alternate	In-Use (GOEA)
	CV-06	No	Alternate	--	Alternate	In-Use (CORA)	Alternate	Alternate
	CV-07	No	Alternate	Alternate	In-Use (GOEA)	Alternate	Alternate	Alternate
	CV-08	No	Alternate	--	In-Use (PRFA)	Alternate	Alternate	Alternate
	CV-09	No	Alternate	--	Alternate	Alternate	Alternate	Alternate
3	DP-01-A	Yes	Alternate	Alternate	Alternate	Alternate	Alternate	Alternate
	DP-01-B	Yes	Alternate	--	Alternate	Alternate	Alternate	Alternate
	DP-03	Yes	Alternate	--	Alternate	Alternate	Alternate	Alternate
4	DPN-03	Yes	Alternate	--	In-Use (GOEA)	Alternate	Alternate	Alternate
	DPN-04	Yes	Alternate	--	Alternate	Alternate	Alternate	Alternate
5	DPS-05	No	Alternate	--	Alternate	Alternate	Alternate	Alternate
	DPS-06	No	Alternate	In-Use (PRFA)	Alternate	Alternate	Alternate	Alternate
6	DPS-10	No	--	In-Use (GOEA)	Alternate	Alternate	Alternate	Alternate
7	GIL-01	No	Alternate	--	Alternate	Alternate	Alternate	Alternate
	GIL-02	No	Alternate	Alternate	Alternate	In-Use (CORA)	Alternate	Alternate
	GIL-03	No	In-Use (GOEA)	Alternate	Alternate	Alternate	Alternate	Alternate

[1] Stantec, 2014
[2]2018 survey was completed within a 10-mile radius of the nearby Crow Springs Project. All other surveys specific to the Eastside Exploration Project used a four-mile radius per USFWS survey recommendations those years.
[3] EMS, 2018
[4] Stantec, 2020
[5] Stantec, 2022
[6]Stantec, 2023-- Nest not surveyed or no data available
GOEA = golden eagle
In-use = an eagle (bald or golden) nest characterized by the presence of egg(s), dependent young, or an adult on the nest in the past 10 days during the breeding season.
Alternate nest = one of potentially several nests within a nesting territory that is not an in-use nest at the current time. When there is not an in-use nest, all nests in the territory are alternate nest.

During the six surveys conducted for the Project, six nests (CV-02, CV-05-A, CV-07, DPN-03, DPS-10, and GIL-03) were considered in-use by golden eagles. Of these nests, only one nest (DPN-03) is within one-mile of the proposed surface disturbance. The remaining golden eagle nests within one mile of the proposed surface disturbance are associated with two unique territories (Territory 3 and 4), and incidental disturbance take could occur to these two breeding pairs. As such, the potential impacts of the Project would include two incidents of disturbance take over five years applied to the two existing breeding pairs' territories or any new territories that are documented within the one-mile buffer of proposed surface disturbance during future surveys. A viewshed analysis has been conducted using proposed disturbance, topography, and Geographic Information System tools for each nest, which are shown on **Figure 5** to illustrate the portions of anthropogenic activity that are within line-of-sight from the golden eagle territories within one mile of proposed surface disturbance and therefore subject to disturbance take. A description of the nests within Territory 3 and Territory 4 is provided below.

4.1 TERRITORY 3: DP-01-A, DP-01-B, AND DP-03

Territory 3 consists of three nests (i.e., DP-01-A, DP-01-B, and DP-03) to the south of the Project boundary in the central portion of the Doyle Peak area and within one mile of the Project boundary. These nests are within 0.45 miles of each other and have not been simultaneously in use. The closest nest (DPS-05) is 2.03 miles southwest of DP-03, and the next closest nest (DPS-06) is 2.39 miles to the southwest of DP-03. Both closest nests are thought to be part of a separate territory.

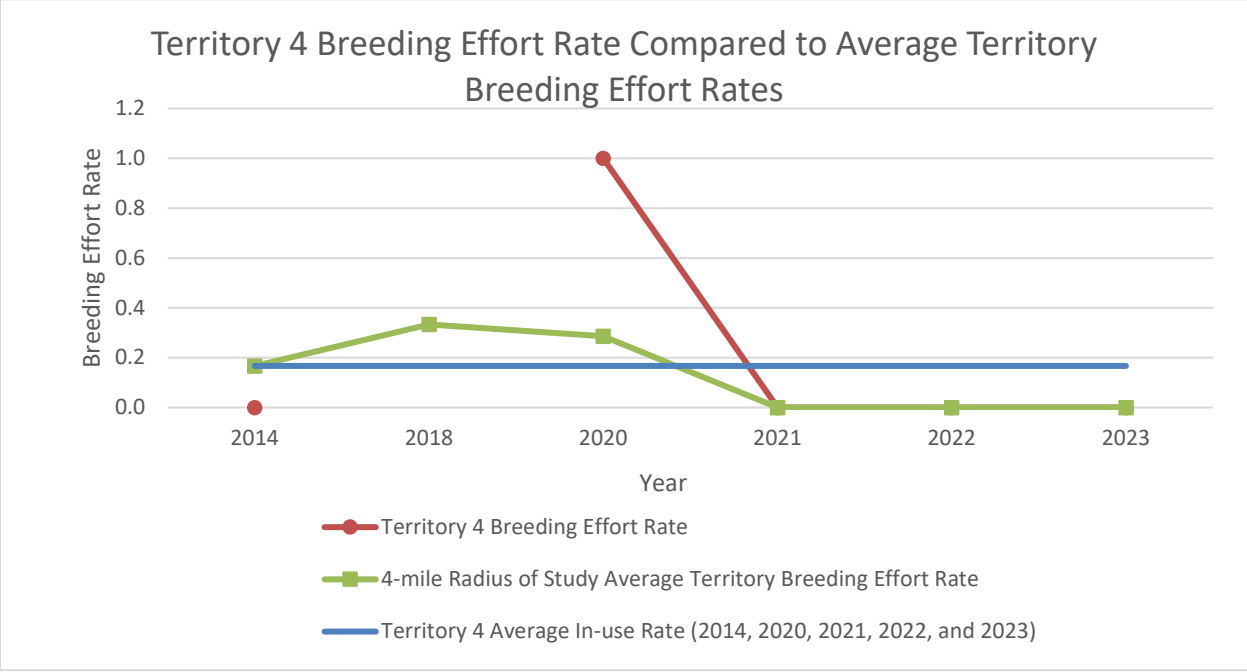
All three nests were found and identified as golden eagle nests in 2014. DP-01-A has never been documented as in use by golden eagles when surveyed. The nest has been surveyed six times (2014, 2018, 2020, 2021, 2022, and 2023) resulting in a breeding effort rate of zero percent. DP-01-B has never been documented as in use. The nest has been surveyed two times (2014 and 2020) resulting in a breeding effort rate of zero percent. DP-03 has never been documented as in use. The nest has been surveyed five times (2014,2020, 2021, 2022, and 2023 resulting in a breeding effort rate of zero percent. Overall, the territory has not been observed as having any in-use nests during the six survey years and as such, there is no graphical representation of breeding effort rate provided for this territory. Territory 3 is considered unclassified (Steenhof et al. 2017), as no signs of in-use nests have been observed during the annual surveys conducted to date; however, ground-based courtship surveys have not been conducted. The territory is below the average breeding effort when compared to territories within the study area (average breeding effort per territory per year is 28.57 percent).

4.2 TERRITORY 4: DPN-03 AND DPN-04

Territory 4 consists of two nests (DPN-03 and DPN-04) to the north of the Project boundary in the northern portion of the Doyle Peak area and within one mile of the Project Boundary. These nests are within 0.39 miles of each other and have not been simultaneously in use. The closest nest (CV-09) is 1.46 miles north of DPN-03, and the next closest nest (CV-07) is 1.75 miles to the north of DPN-03. Both closest nests are thought to be part of a separate territory that has simultaneously been observed to have in-use nests.

Both nests were found and identified as golden eagle nests in 2014. DPN-03 was in-use by golden eagles in 2020. The nest has been surveyed five times (2014,2020, 2021, 2022, and 2023) resulting in a breeding effort rate of 20 percent. DPN-04 has never been documented as in use. The nest has been surveyed five times (2014, 2020, 2021, 2022, and 2023) resulting in a breeding effort rate of zero percent. Overall, the territory was documented as having one in-use nest during the five survey years for a breeding effort rate of 20 percent. It is below the average breeding effort rates (average breeding effort per territory per year – 28.57 percent) for the surrounding population. **Graph 1** presents the territory 4 status per year compared to the average for the territories defined with the study area. Average individual nest breeding effort is 4 percent within the territory.

Graph 1 Territory 4 Breeding Effort Rate Compared to Average Territory Breeding Effort Rates of Study Area



5.0 RISK ASSESSMENT

A major component of the risk assessment is to identify project activities that could result in a take. This section presents a discussion of the assessment of the level of risk from the Project to the golden eagle breeding population in the vicinity of the Project. Principal risks to golden eagles from surface exploration are generally low, and include activities associated with roads, utilities, exploration, and other proposed/authorized exploration activities listed in Section 2.0. The greatest risk-factor to golden eagles associated with an active surface exploration operation will likely occur during the courtship, nesting, and fledging season. This is especially true when golden eagle breeding territories are located within one mile of surface activity.

A summary of proposed incidents of disturbance take to golden eagles anticipated from activities associated with Project is provided in **Table 3**. Discussion of the risk that could be posed by the Project to golden eagles is described below.

Table 3 Summary of Impacts to Eagles at the Eastside Exploration Project

Eagle Impact	Project Impacts
Direct take (mortality)	None anticipated, low risk: Sections 5.2 and 5.3
Indirect take (loss of productivity from disturbance)	Section 4.0: Two incidents of take during the five-year permit period
Habitat loss	Section 5.1
Territory loss (number of territories)	Section 4.0: Not anticipated
Nest removal (number of nests for each territory involved)	None

5.1 HABITAT-RELATED RISKS

The Eastside Exploration Project is approved for total surface disturbance of up to 68.74 acres. Reduction of habitat because of direct exploration disturbance has the potential to impact golden eagles. Specifically, impacts to functional shrublands that support jackrabbit populations could influence prey availability to golden eagles, especially during the breeding season when adults are foraging routinely to provide adequate food for their young. However, since only a small amount of foraging habitat would be disturbed, and due to the extensive amount of available foraging habitat within the four-mile buffer of the Project (**Table 1** and **Figure 3**), scarcity of food resulting from direct loss of habitat does not appear to be a limiting factor to the local golden eagle breeding population.

5.2 UTILITIES-RELATED RISKS

Utility structures pose a risk to birds, including raptors such as golden eagles, and may cause mortality through accidental collisions and electrocutions. Larger birds that inhabit open habitat appear to be at greater risk for electrocution due to the lack of natural perches and nesting sites (APLIC and USFWS, 2005). Electrocution occurs when a bird completes an electric circuit by simultaneously touching two energized parts, or an energized part and a grounded part, of the

electrical structure. Inadequate conductor and/or phase spacing may allow birds to bridge electrical parts, which results in electrocution. Birds of all sizes are at-risk, especially on utility hardware such as transformers, which have many energized parts near one another (APLIC and USFWS, 2005). Risk for avian electrocution on distribution lines increases when: The distance between conductors is less than the wingspan or height of a landing or perching bird, or hardware or equipment cases are grounded and near energized conductors, parts or jumper wires (APLIC and USFWS, 2005). Allegiant has committed to the conservation measures (see Section 6.0), which prevent risk of electrocution to golden eagles. Additionally, Allegiant follows the Suggested Practices for Raptor Protection on Power Lines, per Avian Power Line Interaction Committee (APLIC, 2006) which provides guidance on power line construction and design on all future transmission and power lines.

5.3 VEHICLE COLLISION-RELATED RISKS

Mobile equipment (i.e., vehicles) used in operations at the Project or traveling to or from the Project area could strike and injure or kill wildlife. Because Allegiant already implements conservation measures associated with reducing road mortality risk (see Section 6.0), the potential for eagle mortality due to vehicle collision at the Project is low. Additional traffic controls can be implemented by Allegiant as necessary through direct communication regarding road hazards.

6.0 AVOIDANCE AND MINIMIZATION MEASURES

Allegiant currently employs applicant-committed environmental protection measures (ACEPMs) associated with the authorized Plan. ACEPMs specific to golden eagles and implemented at the Project were adopted from the document titled *Golden Eagle Best Practices Nevada Mineral Exploration and Mining Industry* (NVMA, 2018) and are listed in **Table 4**.

In addition to the ACEPMs, Allegiant has other minimization measures that contribute to the conservation of eagles at the Project. Some of these measures coincide with permit requirements and others have been implemented through recommendations by agencies. Although not specific to golden eagle protection, the implementation and continuation of the following plans will continue to benefit golden eagle conservation: 1) Noxious Weed Control Plan; 2) Solid and Hazardous Waste Management Plan; and 3) Reclamation Plan (Allegiant, 2021). The Noxious Weed Control Plan outlines Allegiant's responsibility for controlling all noxious weeds in newly disturbed areas until the reclamation activities have been determined to be successful. Noxious weeds will be controlled through implementation of the following best management practices (BMPs) outlined in the plans: concurrent reclamation efforts; operator control; removal of invasive, non-native, and noxious weeds on reclaimed areas; washing heavy equipment prior to entering the Project Area; and when possible, avoiding areas of known invasive, non-native, and noxious weeds during periods when the weeds may be spread by vehicles.

The Project's Solid and Hazardous Waste Management Plan outlines BMPs for handling and storage of hazardous materials. Hazardous materials utilized at the Project Area will include diesel fuel, gasoline, and lubricating grease. Measures to prevent spills and measures that will be taken in the event that any oil, hazardous material, or chemicals are spilled during operations are also outlined in the Solid and Hazardous Waste Management Plan.

The Reclamation Plan outlines practices to achieve post-exploration land uses consistent with the BLM's land use management plans for the area. Reclamation is intended to return disturbed land to a level of productivity comparable to pre-exploration levels. Post-exploration land use includes wildlife habitat, livestock grazing, hunting, and dispersed recreation. All Allegiant drill sites, sumps, road construction, and staging areas will be re-contoured and reseeded. Any installed culverts will be removed, low-water crossings will be re-contoured and any gravel used for road stabilization will be removed. Additional reclamation activities include the removal of all equipment, supplies, and materials brought onto public land at the end of the Project life.

Table 4 Monitoring and Impact Minimization Measures Currently Implemented under the Project

Measures	Monitoring Actions	Duration
ACEPM 1	A clearance survey would be conducted by a qualified biologist prior to any surface disturbance associated with exploration activities during the avian breeding season for raptors (January 1 through July 31[1]) within a one-mile avoidance buffer from the Project area and proposed disturbance. Active raptor nests are reported annually to the BLM. After March 16 each year, it is	Annually as needed for the life of the Project.

Measures	Monitoring Actions	Duration
	unlikely that golden eagle nests would become active; thus, annual surveys would be conducted following such date to determine whether the avoidance buffer may be removed. Territory breeding effort may be determined by conducting two early-season surveys, as appropriate, and Project activities would commence with removal of the one-mile avoidance buffer should a particular territory be determined inactive. Allegiant would conduct annual ground-based monitoring surveys of the golden eagle population within a one-mile[3] radius of the Project area for the duration of exploration operations to track breeding effort, productivity, and success of nests within the Project area and to further delineate and refine the understanding of golden eagle territories within one mile of the Project area.	
ACEPM 2	Vehicle speeds would be limited to 25 miles per hour (mph) on county roads and 15 mph on exploration roads.	For the life of the Project.
Carcass Management	Staff will remove carcasses from all roadways within the Project area when on site and dispose of them appropriately to reduce the risk of vehicle collisions. Staff will report all carcasses found to the NDOW, the BLM, and the Service.	For the life of the Project.
Employee Awareness and Training Program	Staff and contractors working on the Project will be provided training on reducing risks to vehicular collisions and other encounters with raptor species.	For the life of the Project.

Source: BLM, 2021

Since the development of the Plan (Allegiant, 2021) and issuance of the BLM Decision Record (BLM, 2021), USFWS has issued recommendations that recognize the golden eagle breeding season in Nevada as December 15 through July 31 (USFWS, 2023), which applies to the Project Area. Nests are considered in-use for a given breeding season until they are confirmed to not be in-use on April 15 or later. Prior to April 15, golden eagle nests are considered potentially in-use unless an alternative nest within the same territory is already confirmed in-use. In the absence of a take permit, spatial disturbance buffers should be adhered to until nests are confirmed to be not in-use by April 15 or later, four weeks after nestlings fledge if monitoring confirms approximate fledging date, or after July 31 if they are in-use and not otherwise monitored to verify fledging date (USFWS, 2023). Until a take permit is issued, Allegiant will commit to this updated survey protocol and adhere to the spatial avoidance buffers (i.e., one-mile spatial buffer of nests within one mile of surface disturbance), as applicable, based on the monitoring data collected and provided to and approved by the USFWS. Once a take permit is received, Allegiant will continue to conduct the required initial golden eagle occupancy surveys, follow up occupancy surveys, and late nestling productivity surveys as set forth in the updated USFWS recommendations (USFWS, 2023). This commitment thus supersedes ACEPM 1 in **Table 4** above as it represents the most up to date recommendations from USFWS for golden eagle impact minimization measures.

7.0 MONITORING AND ADAPTIVE MANAGEMENT

Golden eagle surveys have been conducted in the vicinity of the Plan boundary in 2014, 2018, 2020, 2021, 2022, and 2023. Recent inventory and monitoring efforts follow Pagel et al. (2010), which is the standard golden eagle survey protocol accepted by the USFWS. Surveys focused on completing a thorough inventory of nests within a four-mile radius and capturing information regarding nest breeding effort and productivity. At least two aerial surveys are conducted annually during the golden eagle breeding season with surveys conducted at least one month (30 days) apart. If the aerial surveys are scheduled within the desert bighorn sheep (*Ovis canadensis nelsoni*) lambing season (February 1 to May 15), aerial survey dates will be rescheduled to occur outside of the bighorn lambing season if possible, or ground surveys may be conducted instead. Survey dates are coordinated closely with NDOW each year to confirm possible aerial survey restrictions.

Allegiant will continue aerial and ground surveys of the eagle population within the one-mile radius of the Plan area for the duration of exploration operations. Initial occupancy surveys will generally be conducted between January and February (USFWS, 2023) and will be ground-based, weather permitting. Follow-up occupancy surveys will generally be conducted between March and mid-April, with late nestling productivity surveys late May through June (USFWS, 2023). Surveys may be aerial or ground and will depend on factors such as access to area and desert bighorn sheep lambing season. Monitoring objectives include: 1) To track breeding effort, productivity, and success of nests within the Plan boundary; and 2) To further delineate and refine the understanding of eagle territories and their occupancy within the one-mile radius. As needed, golden eagle nests within proximity to active surface exploration activities will be monitored to document nest breeding effort. Reports associated with this monitoring will be prepared and provided as specified in the take permit conditions.

For adaptive management purposes, verification of implemented avoidance and minimization measures, as provided in Section 6.0, is necessary. Allegiant currently has a monitoring and reporting system for incidents related to wildlife fatality. Any incident that results in wildlife fatality or death, including golden eagles, must be reported immediately to USFWS and included in quarterly NDOW reporting.

Allegiant will continue to monitor the area golden eagle population for additional golden eagle nests. During the life of the Project, Allegiant recognizes the possibility for new construction of golden eagle nests within the Plan boundary and survey area. If a previously undocumented nest is identified, Allegiant will implement the decision tree as shown in **Appendix A**. This decision tree is applicable to scenarios where a new nest is encountered, and potential indirect disturbance could occur. During the Project's life, it is possible that golden eagles will build new nests in unforeseeable locations in the area. The decision tree has been created to guide Allegiant on how to appropriately deal with these new nests. The decision tree shows the process for monitoring, avoiding, and coordinating new golden eagle nests.

8.0 MITIGATION

The eagle conservation measures presented within this ECP include a comprehensive description of measures Allegiant is implementing to avoid and minimize impacts from the Project to eagles and nests. The potential for two incidents of disturbance take over a five-year period is unavoidable due to the location of the mineralized bodies that occur adjacent to the nests, as well as the economic factors that contribute to the profitable extraction of the minerals contained therein. With the goal of achieving a stable or increasing nesting population of golden eagles, take of golden eagles or their nests is mitigated through power pole retrofits. The amount of mitigation required (the number of power poles needed to be retrofitted to offset the proposed take) is determined by using the USFWS Golden Eagle Resource Equivalency Analysis (REA) (USFWS, 2013). The mitigation is calculated in the REA by inputting the number of breeding pairs' territories proposed for take and the number of years that take will occur. The REA then yields output values that vary depending on effectiveness of retrofit. The first value is for 10 years of effectiveness for retrofit, meaning the retrofit of the power pole will last for 10 years and prevent golden eagle electrocution for that duration. The second value is for 30 years of effectiveness for retrofit, meaning that the power pole would be retrofitted preventing electrocution of golden eagles at the pole for at least 30 years.

Within 30 days from the issuance of the take permit, Allegiant will deposit funds into a USFWS-specified mitigation account or in-lieu fee program account for electric pole retrofit for the total retrofit obligation to offset two incidents of disturbance take associated with two breeding pairs over the five-year permit. Accordingly, Allegiant will deposit an amount equal to the mitigation for two disturbance takes. The monetary value of each pole will be determined through coordination with USFWS prior to Allegiant depositing the funds into the specified account. Mitigation will offset two incidents of disturbance take, which could be applied anytime during the five-year permit.

The mitigation obligation was determined using the 2018 Resource Equivalency Calculator, the most recent version available from USFWS. The number of poles for two incidents of disturbance take over a five-year period based on the ratio of 1.2:1 per the BGEPA permit regulations (USFWS, 2016), assuming retrofitting for 10 years is 47.11, and assuming retrofitting for 30 years is 20.5.

It is assumed that Allegiant will opt to pay the required compensatory mitigation in full for the two incidents of disturbance take upon issuance of the five-year permit. However, should Allegiant choose to pay for one incident of disturbance take upon issuance of the permit, and the second permitted incident of disturbance take at a later date during the life of the permit, an annual USFWS review would be required to determine whether disturbance take occurred during the first year of the permit. Using the results of this determination, disturbance take funds that have been paid to date will be either rolled over (either in part or the full sum) or additional payment will be made to the same account, based on actual disturbance take as determined through close coordination with the USFWS and based on observed nest success. Payment of mitigation for the first incident of disturbance take upon permit issuance would include 23.55 poles assuming retrofitting for 10 years and 10.25 poles assuming retrofitting for 30 years.

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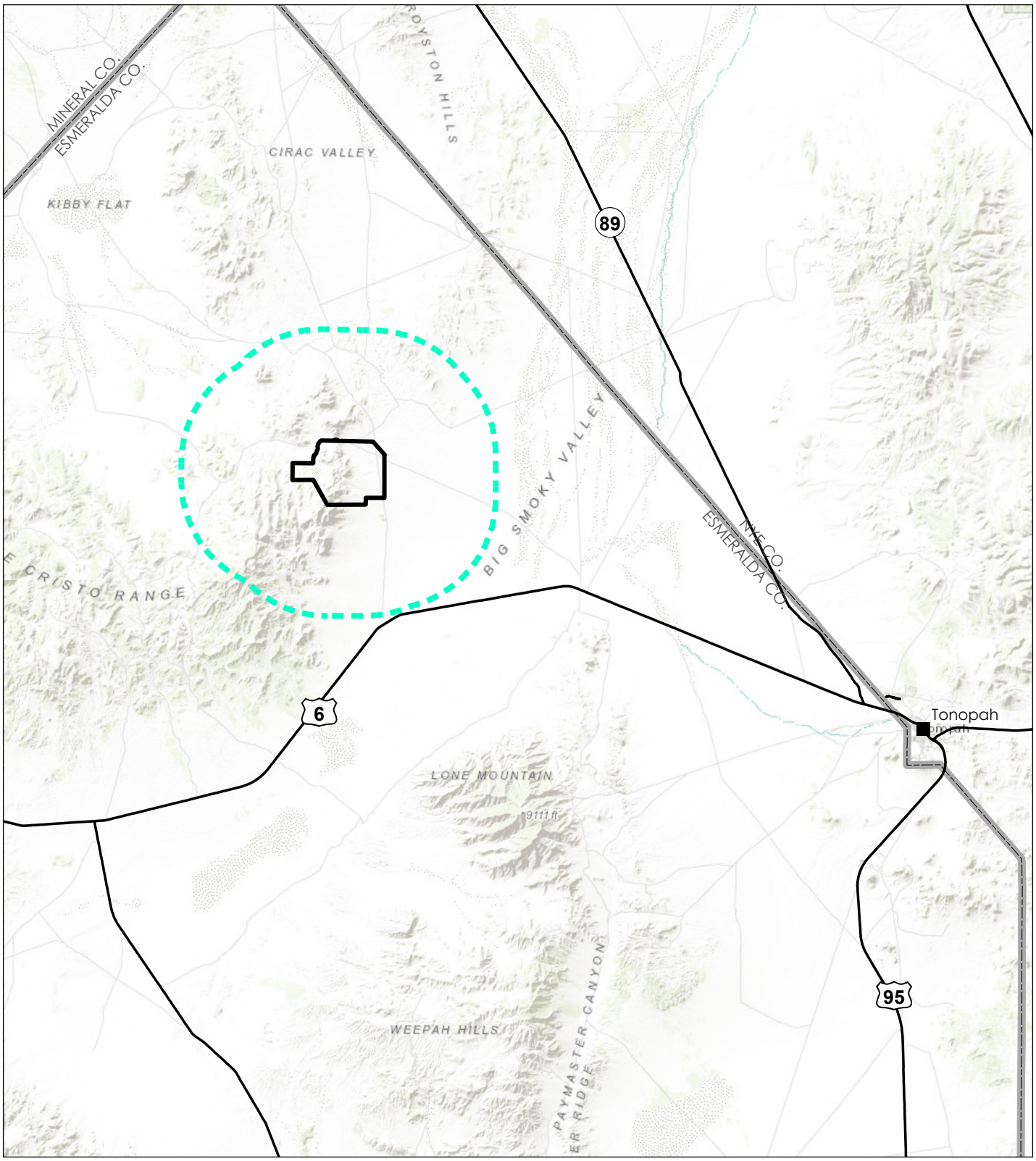
FIGURES



Legend

- Eastside Project Boundary
- Raptor Survey Area (4-mile Radius)

N

Miles

0 2 4

1:316,800

Stantec

Allegiant Gold (U.S.) Ltd.
Eastside Exploration Project
Golden Eagle Conservation Plan

Esmeralda County, NV
NAD 1983 UTM Zone 11N

DRAWN BY: JT	1ST REVIEW: SH	2ND REVIEW: JL
DATE: 2023-07-20	PROJECT NO:	

Figure 1
Project Location and Study Area

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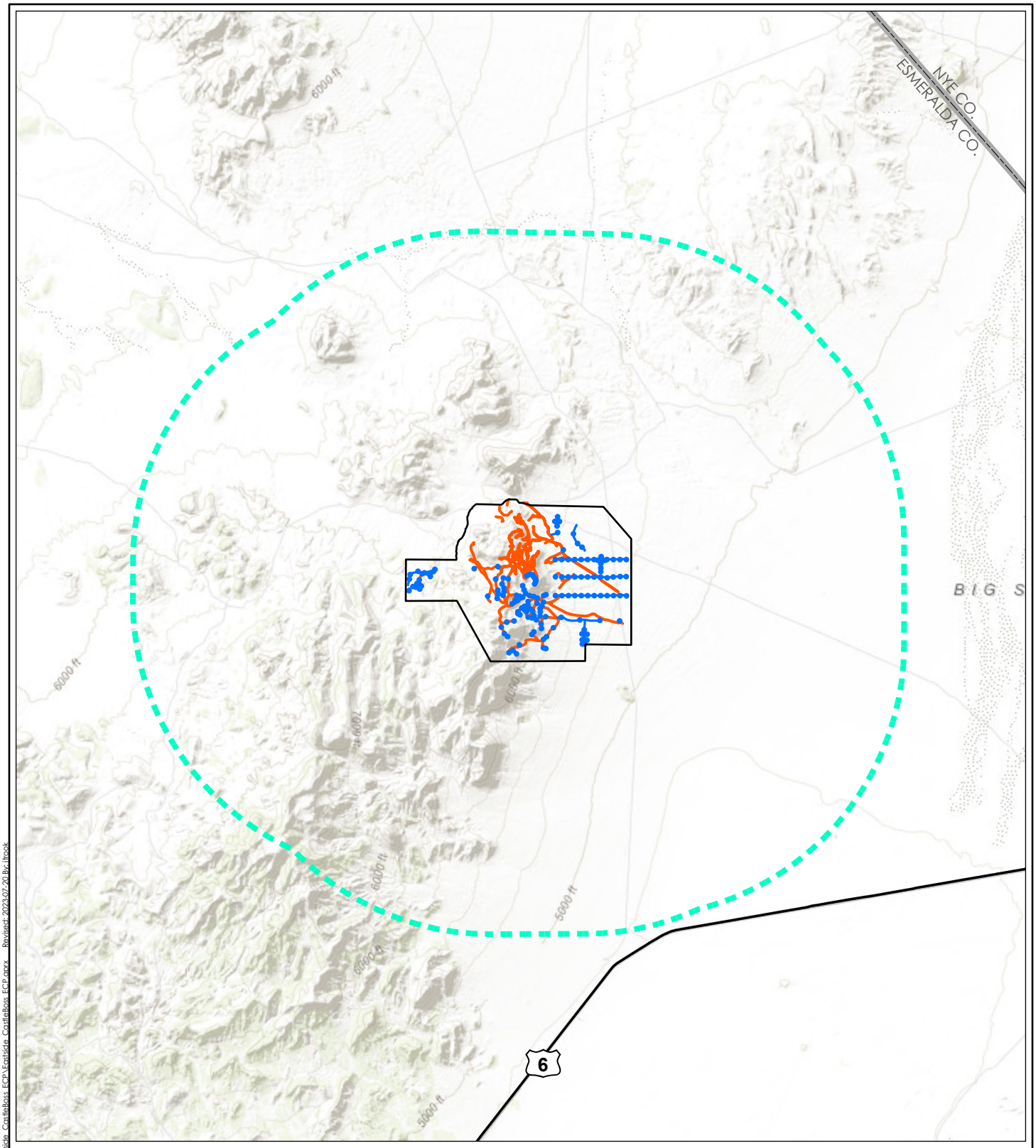
Service Layer Credits: World Topographic Map: Bureau of Land Management, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS



Legend

- Eastside Project Boundary
- Raptor Survey Area (4-mile Radius)
- 2021 Proposed Disturbance
- 2015 Authorized Disturbance

Miles

0 1 2

1:126,720

Stantec

Allegiant Gold (U.S.) Ltd.
Eastside Exploration Project
Golden Eagle Conservation Plan

Esmeralda County, NV
NAD 1983 UTM Zone 11N

DRAWN BY: JT	1ST REVIEW: SH	2ND REVIEW: LB
DATE: 2023-07-20	PROJECT NO:	

Figure 2
Existing and Proposed Facilities

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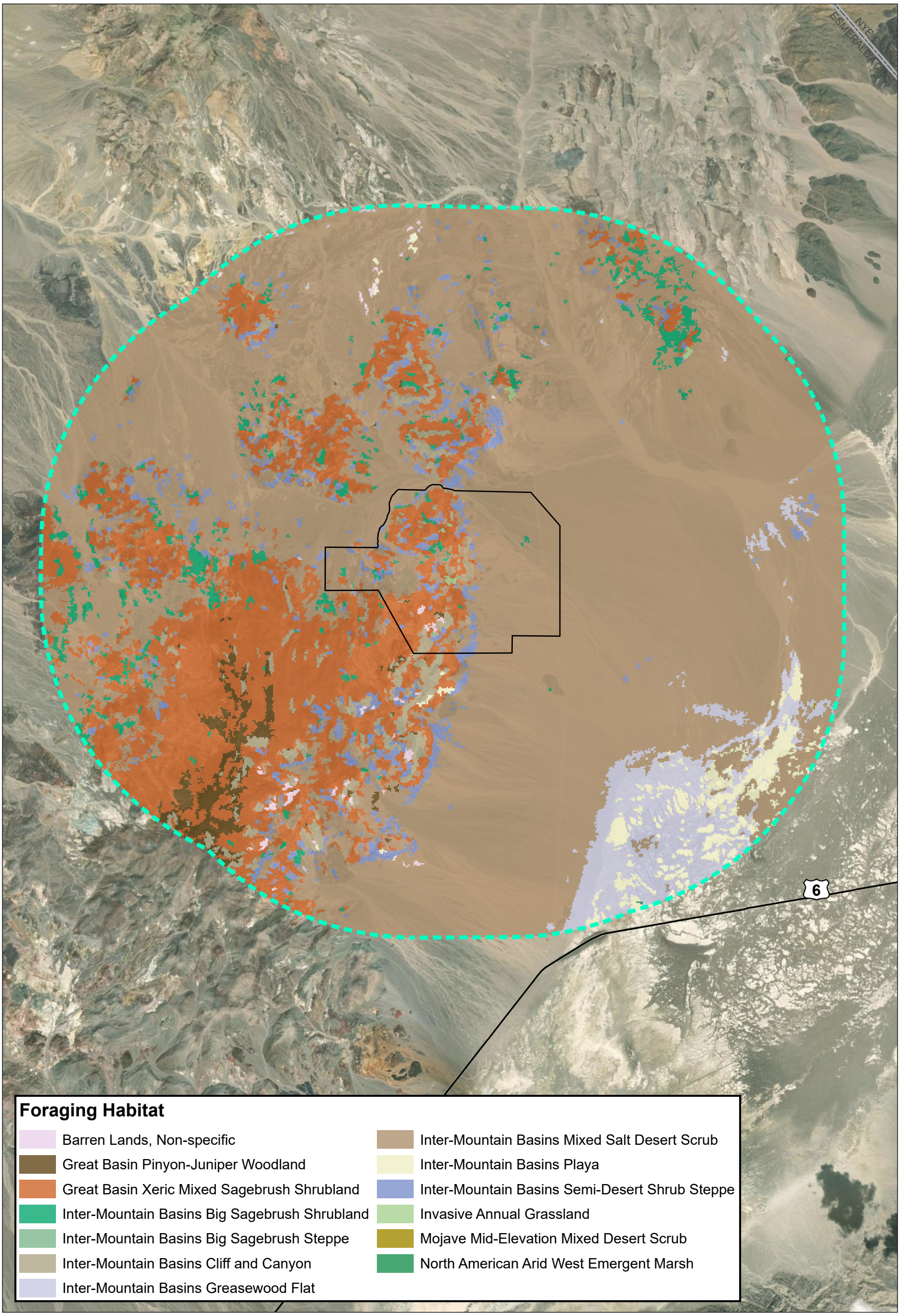
Service Layer Credits: World Topographic Map: Bureau of Land Management, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS



Eastside Project Boundary

Raptor Survey Area (4-mile Radius)

N

Stantec

Feet
0 3,000 6,000
1:84,000

Esmeralda County, NV
NAD 1983 UTM Zone 11N

DRAWN BY: JT | 1ST REVIEW: SH | 2ND REVIEW: JL

DATE: 2023-07-20 | PROJECT NO:

Allegiant Gold (U.S.) Ltd.
Eastside Exploration Project
Golden Eagle Conservation Plan

Figure 3
Foraging Habitat Within the Study Area

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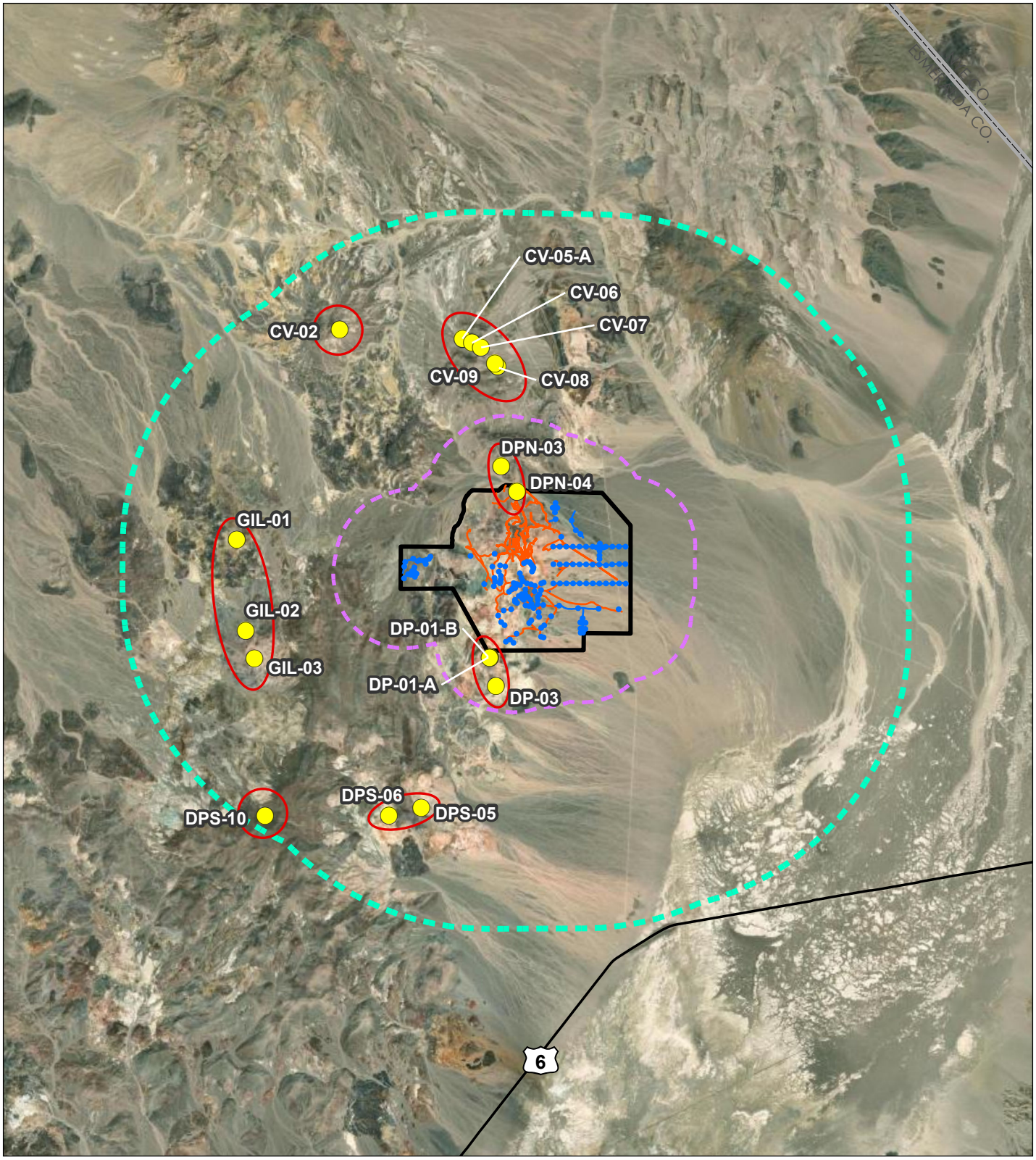
Service Layer Credits: World Imagery: Earthstar Geographics



Legend

- Golden Eagle Nests
- Eastside Project Boundary
- Study Area
- Disturbance 1-Mile Buffer
- Golden Eagle Territories
- Proposed Disturbance
- Authorized Disturbance

N

0 1 2 Miles

1:126,720

Stantec

Allegiant Gold (U.S.) Ltd.
Eastside Exploration Project
Golden Eagle Conservation Plan

Esmeralda County, NV
NAD 1983 UTM Zone 11N

DRAWN BY: JT	1ST REVIEW: JD	2ND REVIEW: SH
DATE: 2023-09-11	PROJECT NO:	

Figure 4
Golden Eagle Territories within the Study Area

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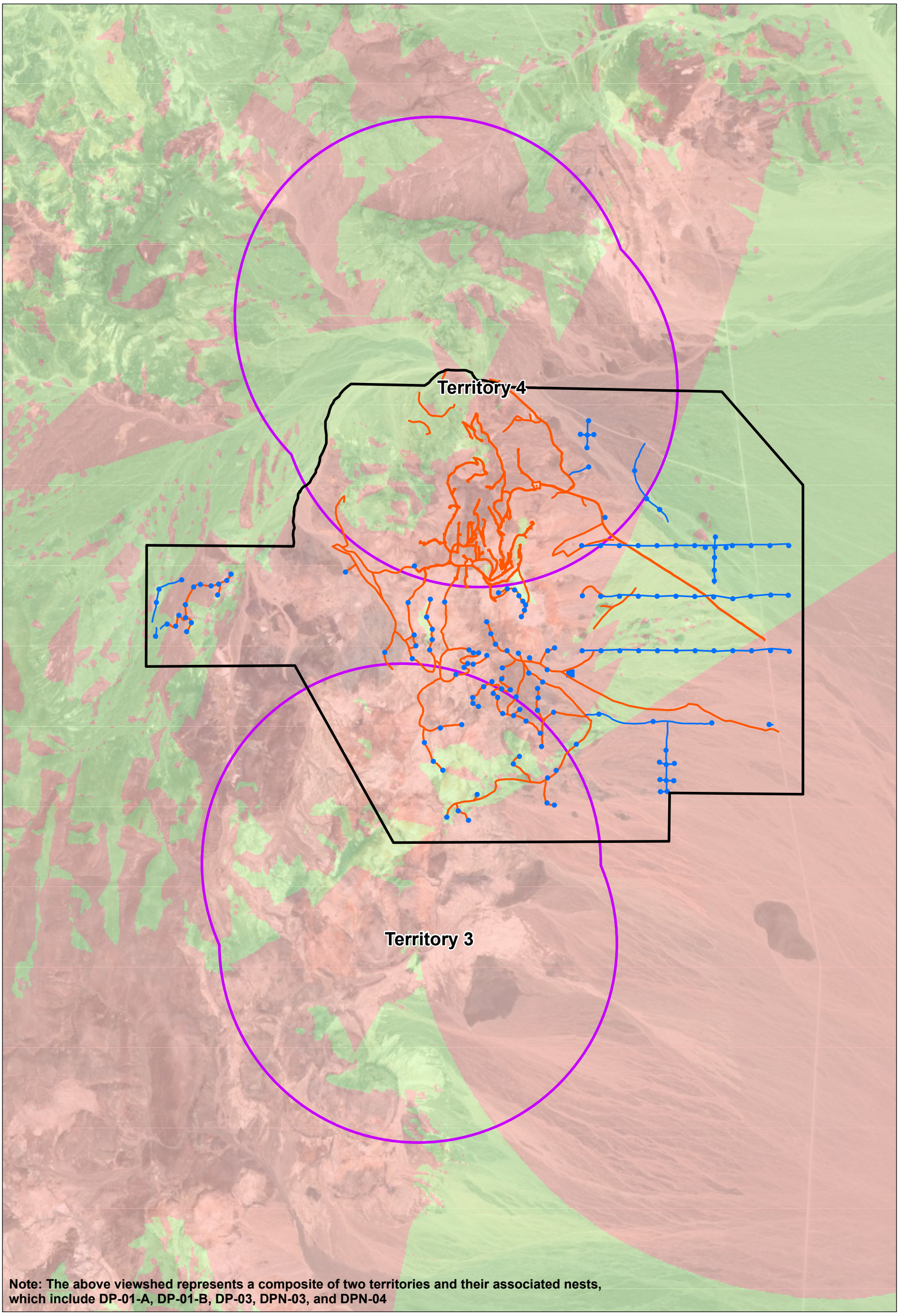
Service Layer Credits: World Imagery: Earthstar Geographics



Eastside Project Boundary
1-mile Buffer of Golden Eagle Nests
2021 Proposed Disturbance
2015 Authorized Disturbance
Area Not Visible
Area Visible

N

Stantec

Feet
0 1,000 2,000
1:30,000

Esmeralda County, NV
NAD 1983 UTM Zone 11N

DRAWN BY: JT | 1ST REVIEW: SH | 2ND REVIEW: JL

DATE: 2023-09-11 | PROJECT NO:

Allegiant Gold (U.S.) Ltd.
Eastside Exploration Project
Golden Eagle Conservation Plan

Figure 5
Golden Eagle Nests Viewshed

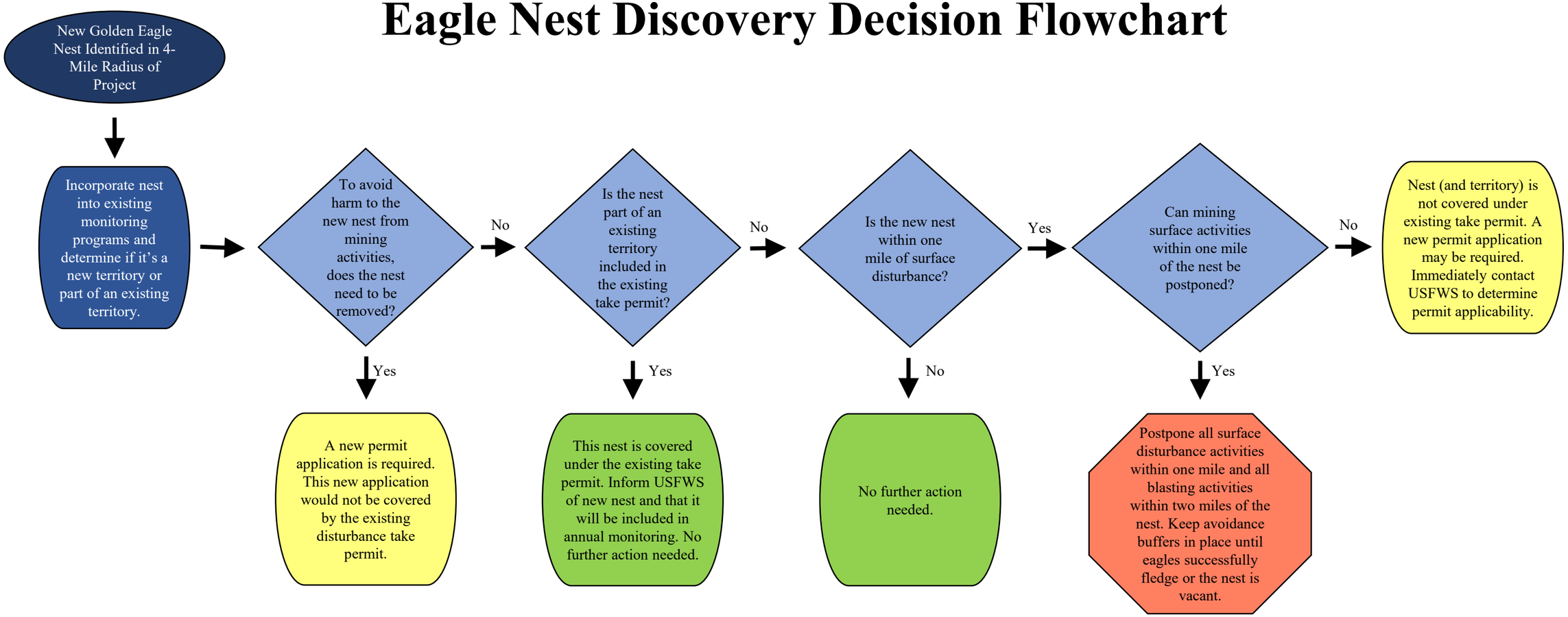
V:\2037\Active\203721729\03_data\gis_cad\dis\pro\Eastside_CastleBoss_ECP\Eastside_CastleBoss_ECP.aprx Revised: 2023-09-11 By: jtrook

Service Layer Credits: World Imagery: Maxar

APPENDIX A

Eagle Nest Discovery Decision Flowchart

Eagle Nest Discovery Decision Flowchart



Introduction:
For Eastside, the current application is for two incidents of disturbance take over five years.

Issue / problem:
During the five-year life of the permit, it is possible that golden eagles will build new nests in unforeseeable locations within the study area, including within one-mile of surface disturbing activities. Allegiant will have to determine how to appropriately deal with these new nests.

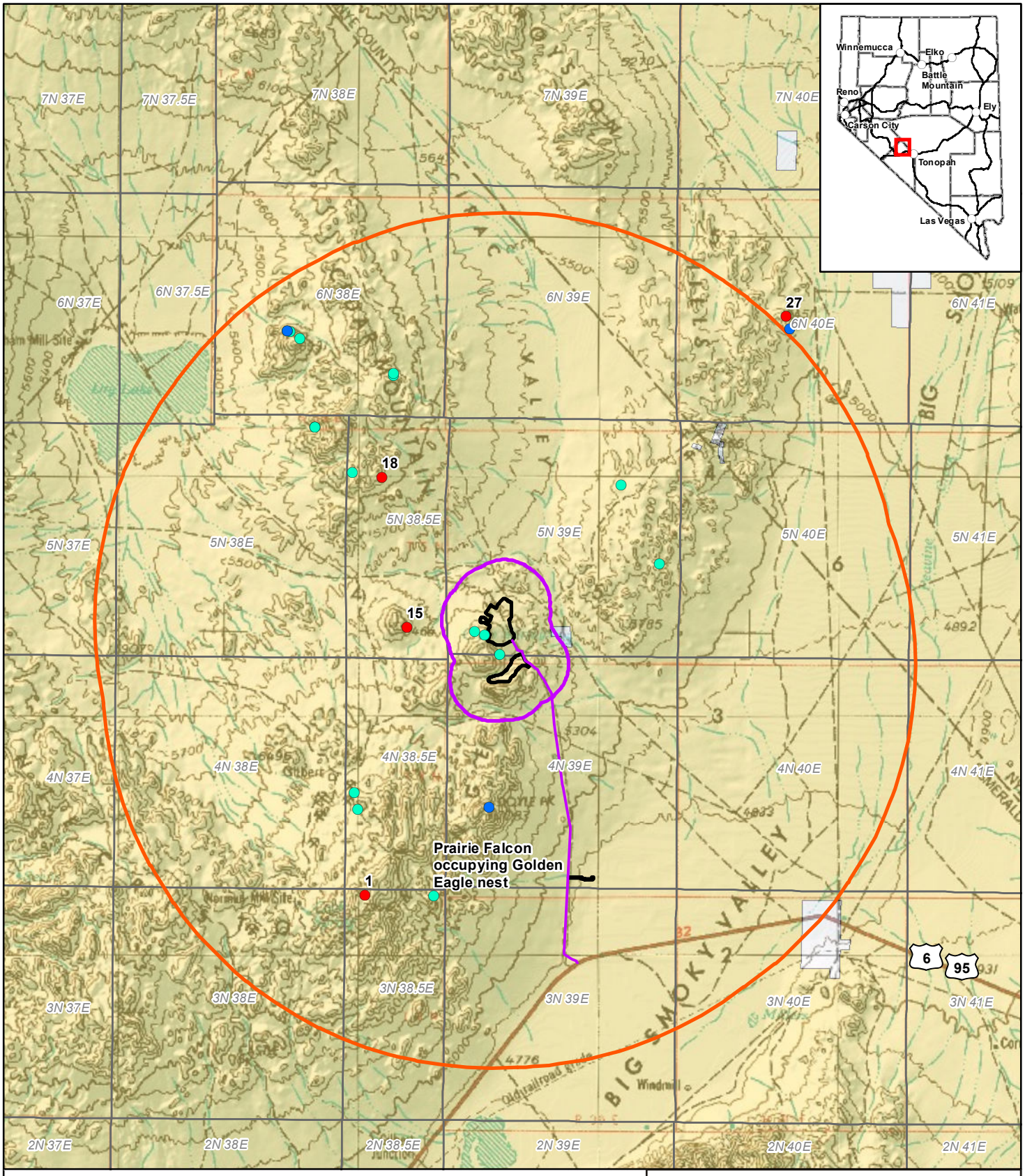
Objective:
Show the decision process for how to proceed when new golden eagle nests are identified.

Key:

Questions in blue
No action decisions in green
Postpone mine activities in red
New permit application needed in yellow

APPENDIX B

2018 Crow Springs Project Raptor Survey Results



SR MINERALS INC.

CROW SPRINGS PROJECT

Aerial Raptor Survey Results

Figure 11

Date: 08/21/2018	Drawn By: WDL
Revised:	Project No.: 4044
Base Map: USGS 100K quad: Tonopah	
File Name: 4044W_CS_BSR_Fig11_AerialRaptor.mxd	

EM STRATEGIES

APPENDIX B

Project BLM-Required Environmental Protection Measures

Appendix B: Project BLM-Required Environmental Protection Measures

Table B-1 presents a summary of the applicant-committed EPMs with monitoring and a schedule for implementation per the existing BLM NEPA document (BLM 2021a).

Table B-1 EPMs for Avian Species Required under BLM Project Authorization

EPM	Resource	Monitoring Actions	Duration
EPM 1	Raptors, including Golden Eagles	A clearance survey would be conducted by a qualified biologist prior to any surface disturbance associated with exploration activities during the avian breeding season for raptors (January 1 through July 31) within a one-mile avoidance buffer from the Project area and proposed disturbance. Active raptor nests are reported annually to the BLM. After March 16 each year, it is unlikely that golden eagle nests would become active; thus, annual surveys would be conducted following such date to determine whether the avoidance buffer may be removed. Territory breeding effort may be determined by conducting two early-season surveys, as appropriate, and Project activities would commence with removal of the one-mile avoidance buffer should a particular territory be determined inactive. Allegiant would conduct annual ground-based monitoring surveys of the golden eagle population within a one-mile radius of the Project area for the duration of exploration operations to track breeding effort, productivity, and success of nests within the Project area and to further delineate and refine the understanding of golden eagle territories within one mile of the Project area.	Annually as needed for the life of the Project.
EPM 2	Migratory Birds	Land clearing or other surface disturbance associated with the activities within the Project Area would be conducted outside of the avian breeding season (March 1 through July 31), whenever feasible, to avoid potential destruction of active bird nests or young birds in the area. When surface disturbance must be created during the avian breeding season, a qualified biologist would survey the area prior to conducting land clearing or surface disturbing activities. Pre-disturbance surveys for migratory birds are only valid for seven days. If the disturbance for the specific location does not occur within seven days of the survey, another survey would be needed. However, if the vegetation has been fully cleared from the work area within the seven-day clearance survey time frame, no additional clearance survey would be required for the disturbed area because it would no longer consist of potential migratory bird nesting habitat. If active nests are located, or if other evidence of nesting (i.e., mated pairs, territorial defense, carrying nesting material, transporting food) is observed, a protective buffer (the size depending on the habitat requirements of the species and location of the nest) would be delineated after consultation with the BLM resource specialist and the entire area avoided, preventing destruction or disturbance to nests until they are no longer actively breeding or rearing young, or until the young have fledged. The start and end dates of	For the life of the Project.

EPM	Resource	Monitoring Actions	Duration
		the seasonal restriction may be based on site-specific information, such as elevation and winter weather patterns, which affect breeding chronology. Allegiant's biologist would recommend to the BLM an avoidance buffer around the nest which the BLM, in coordination with the Nevada Department of Wildlife (NDOW) and the US Fish and Wildlife Service (USFWS), would review and approve prior to surface disturbance. Allegiant's biologist would inform Allegiant when the birds have left the nest. Allegiant would not conduct any drilling or surface disturbing activities within the exclusion zone until the biologist determines that the birds are no longer nesting.	
EPM 3	Relevant to all resources	Vehicle speeds would be limited to 25 miles per hour (mph) on county roads and 15 mph on exploration roads.	For the life of the Project.

Source: BLM 2021a