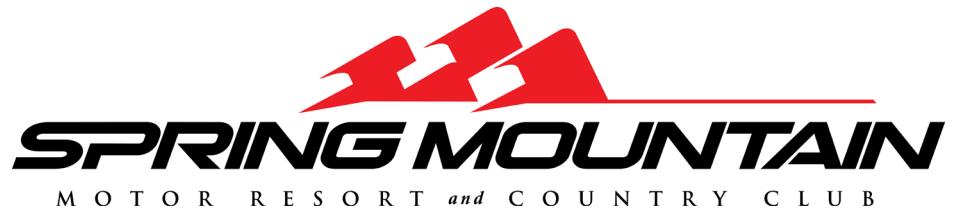


Habitat Conservation Plan

Proposed 56-acre Go-Kart Project Spring Mountain Raceway and Motor Resort Nye County, Nevada



Prepared For:

**Spring Mountain Raceway, LLC
4767 S Highway 160
Pahrump, Nevada 89048
(775)727-6363**

Prepared By:

**BEC Environmental, Inc.
7241 West Sahara Avenue, Suite 120
Las Vegas, Nevada 89117
(702)304-9830
www.becnv.com**

Date:

June 07, 2022

Table of Contents

ACRONYMS.....	V
EXECUTIVE SUMMARY.....	1
1 INTRODUCTION AND BACKGROUND	2
1.1 Overview	2
1.2 Background	2
1.2.1 Existing Facilities.....	2
1.2.2 Potential Future Development	3
1.3 Project and Action Area	3
1.4 Permit Duration	4
1.5 ALTERNATIVES	4
1.6 Summary of Relevant Laws and/or Regulations/Legal Framework	4
1.6.1 Sections 7, 9, and 10 of the Endangered Species Act	4
1.6.2 National Environmental Policy Act	5
1.6.3 National Historic Preservation Act	6
1.6.4 Other Relevant Laws and Regulations.....	6
2 PROJECT DESCRIPTION AND ACTIVITIES COVERED BY THE PERMIT	6
2.1 Project Description	6
2.1.1 Go-Kart Facility Components.....	7
2.2 Activities Covered by the Permit	9
2.2.1 Construction Activities	10
ACTIVITY 1: Desert Tortoise and Security Fence Installation.....	10
ACTIVITY 2: Clearance Surveys, Tortoise Relocation, and Cactus/Yucca Transplanting	10
ACTIVITY 3: Blading, Vegetation Removal, Grading, and Contouring	11
ACTIVITY 4: Go-Kart Tracks and Associated Features Construction.....	11
ACTIVITY 5: Construction of the Buildings, Lighting System, and Parking Lots	11
2.2.2 Water Use During Construction	12
2.3 Operation and Maintenance	12
2.3.1 Inspection and Maintenance of the Tortoise Exclusion Fence (Activity 6)	12
2.3.2 Operation and Maintenance Activities (Activity 7)	12
2.3.3 Water Use During Normal Operations.....	12
2.4 Implementation of Conservation Strategy	13
2.4.1 Avoidance and Minimization Measures	13
2.4.2 Measures to Off-Set Habitat Loss.....	13

3 COVERED WILDLIFE SPECIES.....	13
3.1 Species Evaluated as Potential Covered Species	13
3.2 Covered Species - Mojave Desert Tortoise.....	14
3.2.1 General Information and Habitat Characteristics	14
3.2.2 Status in the Eastern and Northeastern Recovery Units.....	15
3.2.3 Occurrence of the Desert Tortoise in the Project Area	15
4 ENVIRONMENTAL CHARACTERISTICS/SETTING	17
4.1 General Environmental Setting and Considerations	17
4.1.1 Climate	17
4.1.2 Topography and Soils	17
4.1.3 Water and Aquatic Resources	18
4.1.4 Existing Land Uses/Designations	18
4.2 Biological Resources	19
4.2.1 Vegetation	19
4.2.2 Wildlife	19
5 POTENTIAL BIOLOGICAL IMPACTS/TAKE ASSESSMENT.....	20
5.1 Direct Effects on Desert Tortoises.....	20
5.1.1 Habitat Loss	20
5.1.2 Handling and Removal/Relocation/Release of Desert Tortoises	21
5.1.3 Other Direct Impacts on Desert Tortoises	22
5.2 Indirect Impacts on Desert Tortoises.....	22
5.3 Cumulative Impacts.....	23
5.4 Anticipated Take of Desert Tortoises	23
5.5 Anticipated Impact of Take of Critical Habitat	24
5.6 Anticipated Impact of the Taking of Desert Tortoises	24
6 CONSERVATION PROGRAM/MEASURES TO MINIMIZE AND MITIGATE FOR IMPACTS	25
6.1 Biological Goals and Objectives	25
6.2 General Environmental Measures.....	25
6.3 Measures to Avoid and Minimize Take of Desert Tortoises.....	27
6.4 Measures to Off-Set Loss of Mojave Desert Tortoise Habitat	29
7 MONITORING	30
7.1 Monitoring for Baseline Information (Effects Monitoring).....	30
7.2 Effectiveness Monitoring of Minimization Measures.....	31

7.3	<i>Compliance Monitoring</i>	31
7.3.1	Implementation of Minimization Measures.....	31
7.3.2	Allocation of Off-Setting Mitigation Funds by USFWS	31
7.4	<i>Adaptive Management Strategy</i>	31
7.5	<i>Reporting</i>	32
7.5.1	Incidental Take and Non-Compliance Reports	32
7.5.2	Clearance and Relocation Report.....	32
7.5.3	Annual Reports	32
8	FUNDING	33
8.1	<i>Costs Associated with HCP Implementation</i>	33
8.2	<i>Funding Source for Minimization and Mitigation Measures</i>	33
8.3	<i>Funding Mechanism</i>	34
8.3.1	Avoidance and Minimization Measures	34
8.3.2	Off-Setting Mitigation Measures.....	34
9	CHANGED AND UNFORESEEN CIRCUMSTANCES	34
9.1	<i>Changed Circumstances</i>	34
9.1.1	Listing of a New Species or Designation of New Critical Habitat	34
9.1.2	Change in Desert Tortoise Listing Status	35
9.1.3	Wildfire.....	35
9.1.4	Buffer Portion of Action Area	35
9.2	<i>Unforeseen Circumstances</i>	35
10	PERMIT RENEWAL AND AMENDMENTS	36
10.1	<i>Permit Renewal</i>	36
10.2	<i>Permit Amendments</i>	36
10.3	<i>Suspension/Revocation</i>	36
11	REFERENCES	36

List of Tables

Table 1. Estimated size of Project Components.	7
Table 2. Permit Covered Activities.....	9
Table 3. Species Evaluated for Potential Coverage by this HCP.	14

List of Appendices

APPENDIX A – Figures	
APPENDIX B – U.S. Fish and Wildlife Service Guidelines on Desert Tortoise Exclusion Fence Design	

APPENDIX C – Responses to Agency Data Queries

APPENDIX D – Desert Tortoise Survey Report (BEC, 2022)

ACRONYMS

ADTB	Authorized Desert Tortoise Biologist
AMSL	Above Mean Sea Level
BLM	Bureau of Land Management
DTM	Desert Tortoise Monitor
ESA	Endangered Species Act of 1973, as amended
FLPMA	Federal Land Planning and Management Act
GLW	GridLiance West LLC
GPS	Global Positioning System
HCP	Habitat Conservation Plan
IPaC	Information for Planning and Consultation
ITP	Incidental Take Permit
MBTA	Migratory Bird Treaty Act
MCL	Midline Carapace Length
NAC	Nevada Administrative Code
NDEP	Nevada Division of Environmental Protection
NEPA	National Environmental Policy Act of 1970
NFWF	National Fish and Wildlife Federation
NRCS	Natural Resources Conservation Service
NRS	Nevada Revised Statutes
NWI	National Wetland Inventory
SHPO	State Historic Preservation Office
SMR	Spring Mountain Raceway, LLC
SR	State Route
TCA	Tortoise Conservation Area
USC	United State Code
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
WEAP	Worker Environmental Awareness Program
WRCC	Western Regional Climate Center

EXECUTIVE SUMMARY

Spring Mountain Raceway and Motor Resort, LLC (referred to as SMR) is applying for an Incidental Take Permit (ITP) under Section 10(a)(1)(B) of the Endangered Species Act (ESA) for activities associated with the construction of a Go-Kart Facility on 56 acres of mostly undeveloped private land in Pahrump, Nye County, Nevada (Project Area). The activities may affect the Mojave desert tortoise, (*Gopherus agassizii*), a species listed as threatened under the ESA. In accordance with the requirements of the ESA, SMR has developed this Habitat Conservation Plan (HCP) as part of the application package for the ITP. SMR is an independently owned and operated Nevada Limited Liability Company (LLC) located in the town of Pahrump, approximately 55 miles west of downtown Las Vegas.

SMR purchased from the Bureau of Land Management approximately 620 acres of adjacent, undeveloped land to expand their existing facilities. Of the total purchase, an approximately 227-acre portion located north of the current facility is being developed for expansion of the racing facilities (BEC, 2020). Approximately 14 acres of the remaining portion of the acquired property east of the existing facility were sold to GridLiance West, LLC (GLW) for the expansion of the existing Gamebird Substation, approximately 4.2 acres of the remaining SMR property was leased to GLW for construction of a transmission line. An HCP was developed, and an ITP was obtained by GLW for that project (SWCA, 2020). The proposed 56-acre Project Area would be adjacent to the expanded Gamebird Substation and overlap the new transmission line. No additional development within the remaining undeveloped eastern portion of the acquired property (approximately 323 acres) is currently planned, and any future development would be addressed in a separate HCP, should SMR decide to proceed.

The proposed Project includes construction of the Go-Kart Facility composed of two one-mile interconnected tracks, up to four new buildings, stormwater management features, gated security and tortoise exclusion fencing, lights to enable nighttime operations, and all environmental measures conducted in association with construction of the Go-Kart Facility (Project). Construction of the Go-Kart Facility would be implemented within the 56-acre Project Area; environmental measures conducted in association with construction would be implemented in the Project Area.

The Project Area is bounded to the south by the Gamebird Substation facility and associated stormwater basin, a privately held aggregate pit and mining operation, private land subdivided and prepared for residential development, and Nevada State Route (SR)-160. The existing SMR facility and private land prepared for development bound the Project Area to the west, and undeveloped, SMR-owned desert bounds the Project Area to the north and east. The existing SMR facility and Gamebird Substation are fully bounded by fencing or block walls and are inaccessible to desert tortoises.

The proposed Project is within suitable, occupied habitat for the Mojave desert tortoise, and the implementation of this Project will impact individuals potentially present in the area and result in the loss of habitat. The Project Area and surrounding lands are not designated as Critical Habitat, nor are the lands within an area designated as an Area of Critical Environmental Concern. No other species listed under the ESA are likely to be affected by construction of the Project. SMR proposes a series of measures to avoid and minimize the impacts on this species including installation of tortoise exclusion fencing, clearance surveys, relocation of desert tortoises found within the Project Area, and the extension of the weed management and litter control practices in effect from the existing facility. SMR also agrees to provide remuneration funding to off-set the unavoidable loss of 51.8 acres of habitat (56 acres, less the 4.2 acres of habitat disturbed by construction of the Gamebird Transmission Line) at a total of \$77,700. The U.S. Fish and Wildlife Service (USFWS) will direct the expenditure of these funds.

1 INTRODUCTION AND BACKGROUND

1.1 Overview

Spring Mountain Raceway and Motor Resort, LLC (referred to as SMR) is applying for an Incidental Take Permit (ITP) under Section 10(a)(1)(B) of the Endangered Species Act (ESA) for activities associated with construction of a Go-Kart Facility on 56 acres of mostly undeveloped private land (Project Area) in Pahrump, Nye County, Nevada, owned by SMR (**Appendix A, Figure 1 – Go-Kart Project Location and Overview**). The activities may affect the Mojave desert tortoise, (*Gopherus agassizii*), listed as threatened under the ESA.

As stated in ESA Sections 10(a)(2)(A) and 10(a)(2)(B), a Habitat Conservation Plan (HCP) is a mandatory component of all ITP applications. As such, SMR herein provides an HCP in support of their permit application. The HCP describes proposed activities associated with construction of the Go-Kart Facility, measures SMR will take to avoid, minimize, and mitigate the effects of this activity on that species (inclusively referred to as Project), and the effects of the proposed Project on the Mojave desert tortoise, a species listed as threatened under the ESA.

SMR acquired approximately 620 acres from the Bureau of Land Management (BLM) through a modified competitive land sale completed on February 19, 2020, with the objective of expanding the current layout of the Spring Mountain Raceway and Motor Resort to the north (BEC, 2020) and to the east of the current facilities (**Appendix A, Figure 1**). The SMR facilities lie within the town limits of Pahrump in an area zoned for commercial development.

An evaluation of the potential impacts of the land purchase was completed and documented in accordance with the BLM Federal Land Planning and Management Act (FLPMA) and the National Environmental Policy Act (NEPA) (BLM, 2018). The Environmental Assessment was developed, and a Record of Decision was published. The BLM evaluated the potential impacts of the land transfer on the environment but did not consult with the USFWS under the ESA as the act of transferring ownership of the property did not result in the take of a species listed as Threatened or Endangered under the ESA. As such, the responsibility of consulting with the USFWS for development of the land and obtaining an ITP resides with SMR before any actions potentially resulting in take of listed species may occur.

1.2 Background

1.2.1 Existing Facilities

Founded in 2004 by partners John Morris and Brad Rambo, SMR is an independently owned and operated Nevada LLC privately funded and headquartered in Pahrump, Nevada. SMR owns and operates Spring Mountain Raceway and Motor Resort, currently encompassing approximately 250-acres of state-of-the-art racing facilities, a motorsports country club, and a residential community. The facility is located approximately 55 miles west of downtown Las Vegas, Nevada, within the Town of Pahrump.

SMR includes over 6 miles of track, the longest road course in North America; classrooms and training facilities; maintenance facilities, and associated support amenities. The Resort and Country Club also provide an array of amenities including club house, luxury condominiums, Spring Mountain Estates residential community, and a constructed freshwater lake. SMR is also home to the Ron Fellows Corvette School and Ron Fellows Cadillac Academy as wells as Spring Mountain Racing. The resort offers a variety of services, including performance driving instruction, track rentals, team building activities, performance vehicle sales and more. The facility is also bound by desert tortoise exclusion fencing to prevent site access by tortoises.

SMR is currently expanding their facility to the north on approximately 227 acres with approximately 3.6 miles of new track and associated facilities (BEC, 2020). The northern expansion connects to the original facilities, including the track, to the south. The northern expansion enables SMR to run simultaneous track configurations and multiple long track variations for country club members, driving school operations, track rentals and corporate events. The northern expansion also includes new classrooms and an associated parking lot, a paddock area for parking and preparation of track cars, a stormwater management detention basin equipped with berm and swale drainage controls, and an interconnecting tortoise exclusion fence to prevent tortoises from entering the expanded facility. The SMR facility encompasses approximately 477 acres between the original 250-acre facility and the 227-acre northern expansion.

Additionally, GridLiance West LLC (GLW) owns and operates the Gamebird Substation (SWCA, 2020) located south of the proposed Go-Kart Facility Project Area within the eastern expansion area originally owned by SMR (**Appendix A, Figure 1**). SMR sold GLW the property that the original Substation was located on, as well as an additional 14 acres for the expansion of the facility, which has been completed. SMR has also leased to GLW approximately 4.2 acres of land for construction of a transmission line crossing the Project Area and interconnecting to an existing transmission line. The expanded substation will bound the western half of the southern border of the Project Area.

1.2.2 Potential Future Development

SMR purchased approximately 393 acres of land from the BLM to the east of the existing facility with the objective of additional future expansion. The Gamebird Substation expansion and will occupy 14.0 acres of the expansion area, and construction of the Go-Kart Facility would be implemented within the 56-acre Project Area, also located in the eastern expansion area.

No further development on the remaining 323 acres within eastern expansion area has been identified and is not expected to occur within the next three years. If future development is planned in the future, at that time SMR would complete the process for obtaining an ITP for that activity. Any future development in the eastern expansion area is not dependent or otherwise connected to the proposed Project.

1.3 Project and Action Area

The Action Area for this HCP is approximately 63 acres in size. It includes the 56-acre Project Area where construction of the Go-Kart Facility would occur, and an approximately 100-ft buffer (totaling approximately seven additional acres) around the Project Area where desert tortoises would be relocated if found within the Project Area, after construction of the tortoise exclusion fencing (**Appendix A, Figure 2 – Project and Action Area**).

The Go-Kart Facility would be in the town of Pahrump, on the north side of SR-160 and east of the existing facility. The Project Area is within Mount Diablo Meridian, Township 20 South, Range 54 East, Section 34:

- S $\frac{1}{2}$ of NE $\frac{1}{4}$ of SW $\frac{1}{4}$
- N $\frac{1}{2}$ of SE $\frac{1}{4}$ of SW $\frac{1}{4}$
- SW $\frac{1}{4}$ of NW $\frac{1}{4}$ of SE $\frac{1}{4}$
- W $\frac{1}{2}$ of SW $\frac{1}{4}$ of SE $\frac{1}{4}$

Preliminary discussions with the USFWS helped identify the potential for moving a relatively small number of tortoises from the Project Area to adjacent lands, *rather than a distant location requiring tortoise translocation*. The relocation area supports the following elements:

- Contiguous undeveloped lands to the north and east
- High likelihood of being within the existing home range of relocated tortoises

- Habitat suitable for all tortoise life stages
- Same habitat type/quality as the Project Area
- Documented occurrences of resident tortoises and available shelter sites; and
- No foreseeable development or other impacts precluding tortoise occupancy.

Given the short distance of the relocation and habitat similarities, the relocation area was proposed to provide moved tortoises an area with no meaningful difference between their current and new locations, probabilistically within their home range, thus decreasing potential impacts to the relocated tortoises.

1.4 Permit Duration

The permit will become effective on the date USFWS officially issues SMR the permit authorizing take of the species. Construction of the Go-Kart Facility is expected to take ten months to one year to complete; therefore, SMR requests a permit period of two (2) years to account for the construction phase and implementation of the conservation measures (e.g., pre-construction and construction surveys, etc.), with the option to extend the duration if needed. All construction activities, as well as implementation of the conservation actions in the HCP, are expected to be completed within the two-year term of the permit. After the two-year term of the permit, all activities associated with operation and maintenance of this Project will be within the developed Project Area bounded by tortoise exclusion fencing; all tortoise exclusion fencing bounding SMR facilities will continue to be inspected and maintained by SMR until other development precludes tortoises from accessing the SMR facilities. After the two-year term of the permit, death or injury of a tortoise caused by the Project would not be exempt or otherwise authorized.

1.5 ALTERNATIVES

SMR has not identified construction alternatives other than the proposed Project as planned. The land was purchased for the expressed purpose of expanding the existing facility. The entire 56 acres would be bladed and converted to paved track or other facilities; no alternate locations for the Project within the SMR property have been identified. Development on the remaining lands within the eastern expansion area is not evaluated in this HCP given tortoises also occupy those lands. No other parcels in the region were considered as alternatives given the Project objective is to expand the existing facility, requiring contiguous parcels with the existing facility.

A No Action alternative was not considered as the construction of the Project as described was an objective of the land purchase.

1.6 Summary of Relevant Laws and/or Regulations/Legal Framework

1.6.1 Sections 7, 9, and 10 of the Endangered Species Act

Section 9 of the ESA and Federal regulation pursuant to Section 4(d) of the ESA prohibit the “take” of endangered and threatened species, respectively, without special exemption.

- “Take” is defined as actions that “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct”.
- “Harm” is further defined by the USFWS to mean “an act which actually kills or injures wildlife. Such [an] act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering”.

“Incidental take” is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.

Pursuant to Section 11(a) and (b) of the Act, any person who knowingly violates this Section 9 of the Act or any permit, certificate, or regulation related to Section 9, may be subject to civil penalties of up to \$25,000 for each violation or criminal penalties up to \$50,000 and/or imprisonment of up to one year.

Individuals and State and local agencies proposing an action that is expected to result in the take of federally listed species are encouraged to apply for an ITP under Section 10(a)(1)(B) of the Act to comply with the law. Such permits are issued by the USFWS when take is not the intention of and is incidental to otherwise legal activities; an application for an ITP must be accompanied by an HCP. The regulatory standard under Section 10 of the ESA is that the effects of authorized incidental take must be avoided, minimized, and mitigated to the extent practicable. Under Section 10 of the ESA, a proposed Project also must not appreciably reduce the likelihood of the survival and recovery of the species in the wild, and adequate funding for a plan to avoid, minimize and mitigate impacts must be ensured.

Section 7 of the ESA requires Federal agencies to ensure that their actions, including issuing permits, do not jeopardize the continued existence of listed species or destroy or adversely modify listed species' critical habitat. "Jeopardize the continued existence of ..." pursuant to 50 CFR 402.2, means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.

Issuance of an ITP under Section 10(a)(1)(B) of the ESA by the USFWS is a Federal action subject to Section 7 of the ESA. As a federal agency issuing a discretionary permit, USFWS is required to consult with itself (i.e., conduct an internal consultation).

Delivery of the HCP and a Section 10 permit application initiates the Section 7 consultation process within the USFWS.

The requirements of Section 7 and Section 10 substantially overlap. Elements unique to Section 7 include analyses of impacts on designated critical habitat, analyses of impacts on listed plant species, if any, and analyses of indirect and cumulative impacts on listed species. Cumulative effects are effects of future State, tribal, local, or private actions that are reasonably certain to occur in the action area, pursuant to Section 7(a)(2) of the ESA. The "action area" is defined by the influence of direct and indirect impacts of covered activities. The action area may or may not be solely contained within the HCP boundary. These additional analyses are included in this HCP to meet the requirements of Section 7 and to assist the USFWS with its internal consultation.

1.6.2 National Environmental Policy Act

The purpose of NEPA is two-fold: to ensure that Federal agencies examine environmental impacts of their actions (in this case deciding whether to issue an incidental take permit) and to utilize public participation. NEPA serves as an analytical tool on direct, indirect, and cumulative impacts of the proposed Project alternatives to help the USFWS decide whether to issue an ITP (or Section 10(a)(1)(B) permit). NEPA analysis must be done by the USFWS for each HCP as part of the ITP application process.

1.6.3 National Historic Preservation Act

All Federal agencies are required to examine the cultural impacts of their actions (in this case, issuance of an ITP). This may require consultation with the State Historic Preservation Office (SHPO) and appropriate American Indian tribes.

During the NEPA process to support BLM land sale of the Project Area (DOI-BLM-NV-S030-2018-0004-EA), a cultural resource survey of the entire 620-acre area, including the proposed Project Area, was performed. The survey identified two recent scatters but found no National Register of Historic Places-eligible properties on the parcel.

1.6.4 Other Relevant Laws and Regulations

Other federal laws relevant to the HCP and ITP include the Migratory Bird Treaty Act, the Clean Water Act, and the Clean Air Act. Multiple state and local legislation and regulations are relevant to the process addressing biological resources, air quality, water quality, and other resources and issues. **Sections 3 through 5** of this HCP and the associated Categorical Exclusion summarize the resources potentially affected, the potential impacts on them, and the measures to be taken to minimize those impacts.

2 PROJECT DESCRIPTION AND ACTIVITIES COVERED BY THE PERMIT

2.1 Project Description

SMR plans to construct a new Go-Kart Facility that would be composed of two new interconnected Go-Kart tracks, up to four buildings, and associated facilities to expand the services and operations provided by the existing resort and raceway facilities; construction of the Go-Kart Facility would be implemented in the 56-acre Project Area. The Go-Kart Facility will be a component of and accessed from the existing resort and raceway to the west, enabling SMR to expand the breadth of options the resort can offer customers and corporate events.

More specifically, the Go-Kart Facility will include two, one-mile, interconnected tracks; up to four buildings for storage, maintenance, administration, and other services to accommodate customers; parking associated with these facilities; additional storage and parking area; stormwater management features as needed; security and tortoise exclusion fencing with gates to facilitate access to the Gamebird Substation and transmission lines; and lights to enable nighttime use of the tracks. Utilities, including water, sewer, power, telephone, and other services will interconnect with the existing facility to the west. These components and the activities associated with their construction are further described in subsequent subsections.

The entire 56-acre Project Area would be bladed, and the location of the Go-Kart Facility components would be constructed based on preliminary design, as shown in **Appendix A, Figure 3 – Go-Kart Facility Components**. The estimated disturbance area associated with each development component is provided in **Table 1**. During final design or future evaluations, SMR may expand or reconfigure the track layouts to accommodate improved safety or other operational goals.

Table 1. Estimated size of Project Components.

Development Component	Area Estimate Upon Completion*
Go-Kart Tracks and Associated Facilities <i>Paddock Area; Track Area; Facility Lighting; Storage/Maintenance/Admin Facilities; Parking and Storage Area(s)</i>	53 acres
Tortoise Exclusion and Security Fencing	2 acres
Stormwater Management Features	1 acre
Total	56 acres

*Denotes estimates based on preliminary design and construction plans; facilities and associated disturbance will be refined during final design or during operations to accommodate improved safety or other operation goals but will remain within the identified area and acreage.

2.1.1 Go-Kart Facility Components

The sections below provide general descriptions of the facilities proposed for construction. The exact location, configuration, and size of these components may be revised or adjusted as the final layout and design of the development is refined, though the general description of the structures and components reflect the proposed Project. All components will remain within the boundaries of the SMR-owned eastern expansion area.

2.1.1.1 Go-Kart Tracks

The Go-Kart Facility will include construction of approximately two, one-mile interconnected tracks (**Appendix A, Figure 3**) paved with specific emollient mixed with asphalt to produce an extremely smooth surface with excellent grip for added safety operations; two segments of paved track will allow for reconfiguration of the two tracks (**Appendix A, Figure 3**). The exact alignments of the tracks are subject to change based on the contour of the land and desired race configuration determined during final designs. For planning purposes, the paved tracks will be approximately 30 feet wide, and composed of a crushed aggregate base, an asphaltic concrete binder, and an asphaltic concrete track surface.

Areas immediately adjacent to the tracks may include paved aprons or gravel traps to decelerate vehicles leaving the tracks at speed to minimize vehicle damage and driver injury. Tire or other barriers may be constructed where appropriate to further enhance safety. Each of these features will be constructed in accordance with industry best practices for safety. The exact location of these features, if needed, will be determined during final design.

2.1.1.2 Storage, Maintenance, and Administrative Facilities

The Go-Kart Facility will include construction of two to four new buildings for storage, maintenance, and administrative purposes (**Appendix A, Figure 3**). The buildings will also provide a space for the instruction of drivers. A visitor parking area will be developed adjacent to the facilities.

The buildings will utilize common utilities connected from the existing SMR facility, including electricity, telecommunication systems, water, and sewage. The facilities will include a 1000-gallon trailer-mounted fuel tank to be refilled off-site for track maintenance, vehicle refueling, and Go-Kart use. Building design and construction will follow Nye County Building Codes. Nye County Public Works Department will review and permit the design and construction.

Lighting structures will be approximately 20-feet tall and equipped with downward-facing shielding to reduce offsite visibility and disturbance of the night sky. All lighting structures will be installed and operated in accordance with local lighting ordinances.

Lighting structures may provide perching opportunities for avian predator species, including the common raven (*Corvus corax*), a known predator of the Mojave desert tortoise. Lighting-related impacts to tortoises are reviewed in **Section 5.1** and measures to avoid or minimize those impacts are described in **Section 6.3**.

2.1.1.3 Desert Tortoise Exclusion and Security Fencing

Desert tortoise exclusion and security (barbed wire) fencing will be installed along the boundary of the Project Area not currently fitted with fencing or block walls. The western border of the Project Area not adjacent to the existing SMR facility, the southern border not bounded by the new Gamebird Substation fencing/block wall, and the entire northern and eastern borders of the Project Area are open to native desert potentially occupied by desert tortoises. Approximately 5,000 linear feet of tortoise fencing will be needed to bound the 56-acre Project Area and tie-in to the existing SMR and expanded Gamebird Substation facilities (**Appendix A, Figure 4 – Go-Kart Facility and Existing Fence Alignments**).

The fencing will be constructed in accordance with the most recent USFWS tortoise fencing guidelines available prior to construction (included in **Appendix B**). Additionally, the fence will be fitted with shade structures to provide tortoises encountering the fence shelter from the sun and extreme temperatures. Shade structures outside the fence will remain in place and functional for the duration of the operation and management of the Go-Kart Facility; shade structures within the fence would be removed following completion of desert tortoise clearance surveys and blading of the Project Area.

Visitor and SMR staff would access the Project Area (and new Go-Kart Facility) through an entrance from the existing SMR facility to the west. Operation and maintenance access to the two transmission lines crossing the Project Area will be provided via locked gates on the north and east sides of the Project Area (**Appendix A, Figure 4**), and from the south through a gate in the wall of the Gamebird Substation. Access to the Gamebird facility will be coordinated with the operation of the tracks to ensure the safety of the drivers and of the transmission operation and maintenance staff. Gates bounding native habitat will be designed to establish zero ground clearance to ensure tortoises are unable to access the Project Area and gates will remain closed when vehicles are not passing through them.

2.1.1.4 Stormwater Management Features

The Project Area is bisected by ephemeral washes flowing northeast to southwest, draining small water sheds in the local area; these washes drain onto SMR's existing facility and onto adjacent private property south of the existing SMR facility. Stormwater management features will be incorporated to provide the appropriate protection for the facilities within the Project Area, existing SMR facilities, and adjacent properties.

All drainage and flood control features will be developed in accordance with specifications of and review by Nye County Public Works Department. Operation and maintenance of the features will be included as part of the SMR-wide operations and maintenance plan, including litter and weed management for the life of the Project.

2.1.1.5 Utilities

Utilities will be installed to provide power, phone, water, sewer, and other services to the Go-Kart Facility as needed. All utilities will be constructed subsurface and will connect to existing service lines from the existing SMR facility. SMR currently receives power from Valley Electric Association, and water and

sewer are provided through onsite facilities operated by the Great Basin Water Company. Solid waste collection services are provided by C&S Waste Solution’s Pahrump Valley Disposal.

2.2 Activities Covered by the Permit

The Activities to be covered by this HCP and ITP are summarized in **Table 2** and described in further detail throughout this section. Activities to be covered by Section 10(a)(1)(b) of the permit include all Project activities, including the construction of the Go-Kart Facility and the measures to be implemented to avoid, minimize, or mitigate the effects of the Project on desert tortoises, and operation and maintenance of the Go-Kart Facility.

Table 2. Permit Covered Activities.

Activity Number	Description of Activities	Duration*
Activity 1.	Installation of tortoise exclusion and security fencing, including a land survey to delineate the alignment, clearing of vegetation along the fence alignment for an access road and construction of fence. Gates and tortoise guards will be installed as appropriate. All ground disturbance to be cleared and monitored to avoid impacts to tortoises.	6 weeks
Activity 2.	Clearance of tortoises from the Project Area. Salvage and transplant on-site (SMR facility) of cactus and yucca as desired by landowner.	2 weeks
Activity 3.	Blading the Project Area to remove vegetation and debris. Grading and contouring of the Project Area for construction. A biologist will be on-call to respond to observations of desert tortoises encountered during grading and contouring activities within the Project Area.	8 weeks
Activity 4.	Construction of paved road surface, shoulders, safety features, and other associated Go-Kart Facility features.	8 weeks
Activity 5.	Construction of the Go-Kart Facility building structures, lighting system, parking lot, and stormwater management features.	20 weeks
Activity 6.	Inspection and maintenance of the desert tortoise exclusion fencing. The exclusion fencing will be maintained and inspected during construction; inspection and maintenance activities during business operations are described further in Section 2.3.1 .	Ongoing
Activity 7.	Operation and Maintenance of the Go-Kart Facility.	Ongoing

*Denotes estimates based on preliminary design and construction plans; construction of facilities and associated scheduling will be refined during final design, during implementation of construction activities, or during operations to accommodate improved safety or other construction and operation goals.

Construction will follow the sequence described below and will be initiated only after the USFWS approval of the HCP, issuance of the ITP, and subsequent clearance/relocation of resident desert tortoises from the area, as well as acquisition of other state or local permits. Construction of the Go-Kart Facility will require approximately 10-12 months to complete; however, due to the uncertainty of the timing of the issuance of the ITP, the construction start date is uncertain at this time.

Detailed description of the measures to be implemented to avoid, minimize, or mitigate impacts to tortoises are not included in the description of the construction activities, but are summarized at the end of this section and described in further detail in **Section 6**.

2.2.1 Construction Activities

ACTIVITY 1: Desert Tortoise and Security Fence Installation

A qualified, Authorized Desert Tortoise Biologist (ADTB) and Desert Tortoise Monitors (DTMs) will survey ahead of and monitor activities associated with fence installation which may put tortoises in harm's way. Activities to be monitored include cross-country driving; staking; blading and grading; and fence installation.

Land survey will be conducted to establish the fence alignment. Using a full-size utility truck, the survey equipment will be setup to enable a surveyor to walk the property boundary and fence alignment and set stakes at 50-foot intervals.

A Cat 140 blade or similar equipment will be used to clear a path wide enough for a full-size pickup truck to navigate effectively for installation of the fence and will excavate a trench within which the fence will be placed. A water truck will be used to minimize dust generation.

The fence would exclude desert tortoises from entering the Project Area during construction and operation of the planned Go-Kart Facility; the fence would also be fitted with barbed-wire strands to deter human access for safety and security.

Design and construction of the fence will follow the guidelines established and set forth in the most recent publications from the USFWS, currently dated 2009, as shown in **Appendix B**. The ends of the fence will tie into existing tortoise exclusion fencing or existing block walls of the SMR facility to the west and the expanded Gamebird Substation to the south (**Appendix A, Figure 4**).

A skid-steer tractor will be utilized to dig and install fence posts. Fencing will be buried to the correct depth, to meet USFWS standards, with three horizontal strands of barbed wire to prevent wild horses or burros and deter humans from entering the property. Shade structures will be constructed on both sides of the fence to provide protection for tortoises attempting to move through the fence, either exiting the area prior to clearance surveys or attempting to enter the site. Shade structures outside the fence will remain in place for the duration of operation and management of the Go-Kart Facility and shade structures inside the fence will be removed following desert tortoise clearance surveys and blading of the Project Area.

A qualified, ADTB will inspect the desert tortoise exclusion fence during and after fence construction to ensure compliance with the USFWS guidelines. An ADTB or SMR employee will monitor the integrity of the fence during Project construction and make or arrange for necessary repairs as described in **Section 6.3**.

ACTIVITY 2: Clearance Surveys, Tortoise Relocation, and Cactus/Yucca Transplanting

Upon completion and inspection of the tortoise exclusion fence, ADTBs supported by Desert Tortoise Monitors (DTMs) will conduct clearance surveys to locate desert tortoises found within the Project Area. Clearance Surveys will be conducted in accordance with standard protocols established by USFWS in Desert Tortoise (Mojave Population) Field Manual (2009), most recently updated in 2019 (USFWS, 2019a), and summarized in **Section 6.3**.

Tortoises found within the Project Area would be evaluated for identifying marks, sex, and indicators of health and condition; measured for midline carapace length (MCL); and photographed to document the observations. The tortoise would then be released in an adjacent area as described in **Section 6.3**.

ACTIVITY 3: Blading, Vegetation Removal, Grading, and Contouring

Blading and Vegetation Removal

Prior to blading, SMR will salvage cactus and yucca prior or during this activity. All cactus or yucca salvaged during blading/clearing activities from the property will be transplanted in areas adjacent to the bladed area within the Project Area or used in landscaping by SMR throughout the new track or building alignments, or elsewhere on SMR's private property, in accordance with the Nevada Revised Statutes (NRS) 527.050, 527.070, and Nevada Administrative Code (NAC) Section 527.500. If SMR decides to sell or allow the sale of these resources, or to transport them to other properties, SMR will obtain the necessary authorizations, permits and documents described in NRS 527.070 and NAC 527.500. All other vegetation removed during construction will be disposed of in accordance with Nye County ordinances.

Blading of the Project Area will be completed using best management practices using a 15,000-gallon CAT water pull, a CAT 140 Blade and CAT 631 scraper or similar equipment resulting in a drivable surface for water trucks and construction equipment.

Grading and Contouring

Earth-moving equipment will be used to grade and contour the Project Area and establish the stormwater management features. A variety of equipment will be used for this task based on the geology and soils encountered in the area. Fugitive dust emissions will be mitigated during construction using Best Management Practices identified in the Nye County-required Dust Control Plan, and NDEP required Surface Area Disturbance permit.

Grading may use CAT 631 scrapers, CAT water pulls, CAT 140 Blades, CAT 963 loaders or similar equipment. A rough grade using onsite materials will reach a compaction of 90 percent minimum below the finished grade. If needed, aggregate and other materials will be sourced from a local, certified weed-free gravel pit operation and hauled onsite using existing paved roads along State Highway 160 and via existing paved roads throughout the SMR facility. Belly dumps will haul and dump the materials and dust accumulation will be minimized through use of wetted/maintained roads.

Grading and construction of the stormwater management features will be completed during this phase of the construction. Surplus material from construction of the detention basin will be managed onsite.

ACTIVITY 4: Go-Kart Tracks and Associated Features Construction

The surface of the tracks will be paved using water trucks, CAT 140 blades, steel drum rollers or similar equipment to those mentioned previously. Paving would consist of an asphaltic concrete mix using AC-30 asphalt oil and locally sourced materials. The track surface will have estimated life span of 20 years.

ACTIVITY 5: Construction of the Buildings, Lighting System, and Parking Lots

Construction of the storage, maintenance, and administrative buildings will begin after a Nye County Building Permit and all local jurisdictional permits are acquired, and after grading of the area is complete. The building(s) will be a slab-on-grade, wood-framed structure with a stucco and stone exterior and will include a paved parking lot and minimal landscaping per a development agreement with Nye County. The contractors will access the Project Area via the existing SMR facilities.

The permanent vertical lighting structures will be installed to support nighttime operations of the Go-Kart Facility. Lighting structures will be approximately 20-feet tall and equipped with downward facing shielding to reduce disturbance of the night sky. Light structures will be constructed in accordance with all applicable local ordinances.

The parking lot will be paved with an asphaltic concrete mix using AC-30 asphalt oil and locally sourced materials. using a CAT paver, rubber tire roller, steel drum rollers, water trucks, or similar equipment to those mentioned here will be used to construct the parking lot. Additional parking and storage areas will be compacted and left as unpaved soil.

2.2.2 Water Use During Construction

Water use during the construction phase will primarily be for dust control purposes. Projected construction activities, including soil/gravel compaction and dust control, will use up to 15 acre-feet (4,900,000 gallons) over the course of the approximately 8- to 12-month construction period.

2.3 Operation and Maintenance

Operation and maintenance of the Go-Kart Facility will be contained within the fenced boundaries of the Project Area and would be an extension of the current operating procedures and business practices in use at the existing SMR facilities.

2.3.1 Inspection and Maintenance of the Tortoise Exclusion Fence (Activity 6)

An individual trained and authorized to do so will inspect the desert tortoise exclusion fence on a regular basis for the life of the facility, as described in **Section 6.3**, and make necessary repairs to ensure the fence maintains its integrity or until adjacent development otherwise precludes tortoises from accessing the area or SMR ceases operation. In the event damage to the fence cannot be completed by this individual, a temporary repair will be attempted, and arrangements will be made for a more permanent repair solution.

2.3.2 Operation and Maintenance Activities (Activity 7)

Operation and maintenance activities include regular inspection of the tracks, safety barriers, and other infrastructure; implementing repairs as required; and regular sweeping of the tracks to remove dust, gravel, trash, and other debris as needed.

The Go-Kart Facility, as with the existing raceway facility, may operate seven days per week, year-round. Typical use of the existing raceway facility is limited to daylight hours; however, the Go-Kart Facility will be operated day and night.

Maintenance of the Go-Kart tracks and parking lot would occur on an as-needed basis, as is standard for the other SMR tracks and lots. Maintenance may include patching or replacement of paved surfaces due to wear or accidents, replacement or repair of safety barriers or other structures throughout the area, and similar tasks.

Operation of the new buildings would entail clientele training courses, storage, and maintenance practices. Commercial use of the Go-Kart Facility will utilize go karts driven by gasoline-fueled, 4-stroke engines typical of most commercial go-kart tracks. High-performance go karts may be used by individuals or special events.

2.3.3 Water Use During Normal Operations

Facility water use by employees and customers, track upkeep, and cleaning using a PM10-compliant street sweeper will be the only significant uses of water at the site after development and during normal business operations. Projected maximum water use in support of operation and maintenance of the new Go-Kart Facility is 7.5 acre-feet per year (2,500,000 gallons/year). Use of this water includes track maintenance, up to five (5) additional full-time employees, additional customers, and track cleaning using a PM10-compliant street sweeper.

2.4 Implementation of Conservation Strategy

In addition to the construction, operation, and maintenance of the Go-Kart Facility, this HCP and ITP covers implementation of the conservation strategy described in **Section 6**. The conservation strategy includes a series of measures to avoid or minimize the impacts on desert tortoises from the construction of the Project and to mitigate the unavoidable impacts from the loss of desert tortoise habitat.

2.4.1 Avoidance and Minimization Measures

Measures to minimize impacts on desert tortoises and their habitat include worker environmental and desert tortoise awareness training; installation of the exclusionary fencing, clearance surveys and tortoise relocation, and inspection and maintenance of the exclusion fencing; on-call authorized desert tortoise biologist response during construction activities; and reporting to USFWS regarding implementation of minimization measures and observations of desert tortoises. A full description of avoidance and minimization measures can be found in **Section 6.3**.

2.4.2 Measures to Off-Set Habitat Loss

Loss of desert tortoise habitat during construction and associated measures to be implemented to offset this loss are addressed in this HCP and described further in **Section 6.4**.

3 COVERED WILDLIFE SPECIES

3.1 Species Evaluated as Potential Covered Species

Prior to initiating development of the HCP, a list of species expected to be present in the Project Area was obtained from USFWS Information for Planning and Consultation (IPaC) website, and requests for this information were submitted to the Nevada Division of Natural Heritage (NDNH) and Nevada Department of Wildlife (NDOW). Results from these queries are included in **Appendix C – Responses to Agency Data Queries** and summarized below. Information on the range, distribution, and habitat requirements for each species was reviewed to assess potential for impacts, and the species proposed for coverage in this HCP were identified as discussed below and summarized in **Table 3**.

The Mojave desert tortoise is listed as a Threatened species under the ESA and as Threatened by the State of Nevada, and is present in the Project Area and adjacent suitable habitat (BEC, 2020). Critical Habitat has not been identified as being present in the area. Based on the presence of the species and the potential for the Project to impact the species, it has been proposed as a Covered Species in this HCP. Additional information on this species is included in **Section 3.2**.

The southwest willow flycatcher (*Empidonax traillii extimus*) (Endangered) and the Yuma clapper rail (*Rallus longirostris yumanensis*) (Endangered) were identified as having potential to inhabit the area if appropriate habitat was present. However, both bird species require wetland and/or riparian habitat for foraging, shelter, and breeding, and such habitat does not occur within or near the Project Area. No Critical Habitat has been designated for these species within or near the Project Area. These species are not proposed a Covered Species in this HCP.

The Monarch butterfly (*Danaus plexippus*), designated as a candidate for listing under the ESA on December 15, 2020, was identified as potentially present in the Project Area. The Monarch butterfly is widely distributed throughout the western United States, including Nevada (USFWS, 2020). Breeding habitat for the species requires native milkweeds for food for larvae, other flowering plants for nectar for adults, trees/shrubs for shading and roosting, and connectivity among patches of such habitat, typically present within riparian corridors or other mesic sites. Migratory habitat is similar with the lack of a requirement for milkweed for larvae. Wintering habitat consists of groves of large trees to provide microhabitat necessary for survival (WAFWA, 2019). While most species of milkweed are found in

higher elevation or areas with moist soils, several species have the potential to be present scattered in dry washes in desert scrub habitat in southern Nevada (Xerces Society, 2012). However, no sign of their presence was observed during the site survey. Large stands of nectar-producing plants for adults to feed upon and large shrubs or trees to provide shelter and roosting areas for adults were lacking as well. Based on the lack of such habitat, negligible potential exists for this species to be present within the Project Area or impacted by the project. This species is not proposed as a Covered Species in this HCP.

Table 3. Species Evaluated for Potential Coverage by this HCP.

Common Name (Scientific Name)	Status (Federal/State)	Rationale	Proposed as Covered Species
Mojave desert tortoise (<i>Gopherus agassizii</i>)	Threatened/Threatened	Habitat present; Species present	Yes
Southwest willow flycatcher (<i>Empidonax traillii extimus</i>)	Endangered/Endangered	Habitat not present	No
Yuma clapper rail (<i>Rallus longirostris yumanensis</i>)	Endangered/Endangered	Habitat not present	No
Monarch butterfly (<i>Danaus plexippus</i>)	Candidate/None	Habitat marginally suitable; Candidate Status	No

3.2 Covered Species - Mojave Desert Tortoise

3.2.1 General Information and Habitat Characteristics

The desert tortoise is found throughout the Mojave, Sonoran, and Colorado deserts, with two distinct populations: the Sonoran population (*Gopherus morafkai*) and the Mojave population (*Gopherus agassizii*). The Mojave desert tortoise populations north and west of the Colorado River in Arizona and Utah (excluding the Beaver Dam slope population in southwestern Utah) were listed as endangered under an emergency rule on August 4, 1989 (54 FR 42270, 1989). Subsequently, the entire Mojave population of the desert tortoise west of the Colorado River in California and Nevada, and north of the river in Arizona and Utah, including the Beaver Dam slope, was listed as a threatened species on April 2, 1990 (55 FR 12178, 1990). Critical habitat was designated in 1994 (59 FR 5820, 1994) also see corrections 59 FR 9032. The Revised Desert Tortoise (Mojave Population) Recovery Plan (USFWS, 2011) was signed on May 6, 2011. The Mojave desert tortoise is also listed by the State of Nevada as a Protected Reptile, further listed as Threatened in the Nevada Administrative Code (NAC) in 2002 (NAC 803.080, 2002).

The Mojave desert tortoise is medium-sized arid-land reptile with shells that can be tan, olive, or dark brown, with a domed carapace and an unhinged plastron. Tortoise forelimbs are heavy and flattened with large claws; tortoise hindlimbs are more elephantine. Body sizes typically range between 40 millimeters (hatchlings) in midline-carapace-length (MCL) and 380 mm as adults (Ernst & Lovich, 2009). Typical tortoise habitat includes desert scrub vegetation types, primarily creosote bush flats, washes, and hillside slopes or bajadas. Within these vegetation types, desert tortoises potentially can survive and reproduce where their basic habitat requirements are met; requirements include annual forage species, adequate shelter sites, suitable substrates for burrowing and nesting, perennial vegetation structure for cover, and adequate area for movement, dispersal, and gene flow.

Threats to desert tortoise are various (Boarman, 2002). Direct loss of tortoises has occurred from illegal collection by humans for pets or consumption, disease (e.g., upper respiratory tract disease, herpesvirus, shell disease), predation (e.g., by common ravens, kit foxes (*Vulpes macrotis*), feral dogs, coyotes) and collisions with vehicles on paved and unpaved roads. Other threats affecting the desert tortoise include

loss of habitat from construction projects such as roads, housing, utility corridors and energy developments, invasive species, fire, and conversion of native habitat to agriculture (USFWS, 2011).

3.2.2 Status in the Eastern and Northeastern Recovery Units

Five recovery units have been established for desert tortoise, where each recovery unit is represented by 1–7 Tortoise Conservation Areas (TCA's) that have been monitored since 2004 by line-distance sampling. A recent analysis of this survey data indicates an overall large and ongoing population decline in four of five recovery units, with an estimate of more than 124,000 fewer adult desert tortoises in 2014 as present in 2004 (Allison & McLuckie, 2018, p. 441). Furthermore, the proportion of juveniles has been declining in all recovery units since 2007.

The proposed Project occurs in the Eastern Mojave Recovery Unit, adjacent to the Northeastern Recovery Unit, and outside of designated critical habitat. The Eastern Mojave Recovery Unit showed an estimated 11.2% decline with a density estimate of 1.5 tortoises/km² and the Northeastern Recovery Unit showed an estimated 13.1% increase, with a density estimate of 4.4 tortoises / km², although recovery unit size and initial densities affect these totals (Allison & McLuckie, 2018, p. 441).

3.2.3 Occurrence of the Desert Tortoise in the Project Area

3.2.3.1 2018 Desert Tortoise Surveys

Desert tortoise surveys were conducted in 2018 to support the Environmental Assessment of the proposed transfer of 620 acres of BLM-managed lands to SMR. The survey included the 227-acre northern expansion area and the 393-acre eastern expansion area, which includes the Project Area. The information below summarizes the survey results (Darling Geomatics, 2018).

Surveys followed the USFWS desert tortoise survey protocol, including 100% coverage of the surveyed lands. Surveys were performed May 8, 9 and 10, 2018 using USFWS Mojave Desert Tortoise Survey Protocol (USFWS, 2017) when air temperatures were below 35 degrees Celsius (95 degrees Fahrenheit) measured approximately five centimeters from the soil surface in areas of full sun but in the shade of the tortoise surveyor (Darling Geomatics, 2018).

All live desert tortoises observed during the field surveys were documented and all potential tortoise burrows were also catalogued, as well as carcasses and other sign. In accordance with USFWS guidance (USFWS, 2017), a Global Positioning System (GPS) grid of the Project Area was set up with 10-meter-wide or closer belt transects, depending on density of vegetation. Biologists and trained desert tortoise survey assistants walked straight paths on the centerline of each transect by navigating point to point with hand-held GPS. The location of all desert tortoise sign was recorded with a handheld GPS.

Tortoises and tortoise burrows were most abundant in the northern portion of the surveyed areas, but tortoises and tortoise sign were observed in the Project Area. Six adult tortoises and 44 tortoise burrows were observed in the eastern 392 acres. Two tortoise burrows and two adult tortoises were observed within the northeastern portion of the Project Area during the 2018 survey as shown in **Appendix D – Desert Tortoise Survey Report, Figure 3 – Survey Results and Previous Observations** (Darling Geomatics, 2018).

3.2.3.2 SMR Northern Expansion Area - 2018 Desert Tortoise Surveys and 2021 Clearance Surveys

Though not within the Project Area, information on surveys and tortoise abundance in the northern expansion area provides additional information on the status of the species in the region. During the 2018 surveys for the land transfer, three desert tortoises and over 30 desert tortoise burrows were found within the 227-acre area north of the existing raceway (Darling Geomatics, Inc., 2018).

During desert tortoise clearance surveys prior to construction of the facilities for that project, biologists found and translocated 9 adult desert tortoises (MCL >180 mm) and 18 desert tortoises classified as subadult or younger (the number of burrows observed, cleared, and collapsed was not recorded). Based on these observations, the density of tortoises in the SMR Northern Expansion Area was 0.04 adult tortoises per acre, and 0.08 subadult or younger tortoises per acre.

The northern expansion area is higher on the alluvial fan and had substantially denser shrub vegetation, and less evidence of human disturbance than was observed in the Project Area. Additionally, the Project Area had less desert pavement and was dissected by numerous active washes with significant amounts of rock and cobble exposed compared to the northern expansion area, reducing the suitability of area for burrows and cover for tortoises.

3.2.3.3 2022 Desert Tortoise Surveys

The entire 63-acre Action Area, including the entire 56-acre Project Area was again surveyed in February 2022 to support the development of this HCP. Eight burrows were observed in the Action Area, of which four were designated Class 2 burrows (definitively desert tortoise, good condition, but no sign of recent tortoise use), three were designated Class 3 (definitively desert tortoise, deteriorated or collapsed, and no sign of recent tortoise use), and one was designated a Class 4 burrow (possibly tortoise, good condition) (**Appendix D, Figure 3 – Survey Results and Previous Observations**). All burrows observed during the surveys were 12 inches wide or wider indicating they had been constructed or used by adult tortoises. Additionally, all burrows were in the northeastern portion of the Project Area as observed in the previous surveys covering this area. No other sign observed.

No tortoises were observed during these surveys, as was expected given surveys were conducted in the less active season, with concurrence from the USFWS. However, tortoises may have been present in one of the eight burrows found because we could not confirm we saw the back of the burrow and did not investigate thoroughly with scopes or probes.

3.2.3.4 Plan Area Status of Desert Tortoises

No desert tortoises were observed in the Action Area, and only eight burrows with the potential to be used by desert tortoise were present. Surveys rarely detect all desert tortoises in an area, mostly due to the fact they spend so much of their lives underground. For this reason, the USFWS developed an equation and supporting spreadsheet through its range wide monitoring program sampling program to produce point estimates and 95% confidence intervals for survey data (USFWS, 2019a). This equation uses the results of surveys and an estimation of the percentage of desert tortoises that were likely to be above ground at the time of the survey. Given the survey was conducted during a period when tortoises are not expected to be above ground, and for small projects that impact less than 500 acres, the number of tortoises affected is likely to be too small for statistical treatment (USFWS, 2019a), the equation and associated spreadsheet were not used to calculate a the number of tortoises potentially present in the Action Area.

One mechanism for assessing the potential abundance of tortoises in the Project Area would be to use the relative abundance of tortoises in the northern expansion area and extrapolate the abundance within the Project Area. A total of 27 tortoises were moved from 227-acre northern expansion area and of these, 9 were classified as adults (greater than or equal to 180 mm MCL) and 18 were classified as subadults and juveniles (less than 180mm MCL), resulting in a density of 0.04 adult tortoises per acre and 0.08 subadult or younger tortoises per acre. Extrapolating this to the 56-acre Project Area, it is possible to assume 2.2 adult tortoises could be present in the area, and 4.4 subadult or younger tortoises. Assuming 2.2 adult tortoises could be present in the area, and using the assumptions from the equations for calculating abundance that for each adult tortoise 5.2 subadults and 1.3 hatchlings could be present (USFWS, 2019a), it is possible 2.9 hatchlings could be present in the area if construction is initiated August through December, and 11.5 subadults and smaller could be present.

However, the northern expansion area is higher on the alluvial fan, had substantially denser shrub vegetation, and showed less evidence of human disturbance than was observed on the Project Area. Additionally, the Project Area had less desert pavement and was dissected by numerous active washes with significant amounts of rock and cobble exposed compared to the northern expansion area, reducing the suitability of the area for burrows and cover for tortoises.

Given the results from surveys conducted in the Project Area between 2018, 2021, and 2022, as well as monitoring during construction of the transmission line in 2021, the abundance of tortoises in the area appears to be low. An estimate of three to five adult tortoises being present or moving through the Action Area over time seems reasonable, and an estimate of 12 subadult and smaller tortoises is possible despite the lack of observations of tortoises in this age/size-class.

4 ENVIRONMENTAL CHARACTERISTICS/SETTING

4.1 General Environmental Setting and Considerations

4.1.1 Climate

The climate in the Pahrump Valley is typical for the Mojave Desert, with very hot summers, cool winters, and arid conditions. Based on Western Regional Climate Center (WRCC) data collected from 1948 to 2006 (WRCC, 2006), average monthly high temperatures during the summer (June through August) ranged from 95.0°F to 101.2 °F with extreme high temperatures reaching 112 to 115°F during that period. Average monthly low temperatures during the summer ranged from 60.2 to 67.2°F with extremes low temperatures reaching 38 to 42°F. The average monthly high temperature during winter (December through February) ranged from 57.6 to 62.4 with daily extremes of 77 to 85°F. The average monthly low temperature during winter was 26.5 to 32.2°F with extreme lows of -2°F to 6 °F.

During 1948 to 2006 (WRCC, 2006), the Pahrump Valley received an average annual precipitation of 4.83 inches. Precipitation occurs sporadically from either winter rains or summer thundershowers. During the winter months, high-pressure conditions predominate resulting in west-to-east tending winds and precipitation patterns. During the summer months, low-pressure conditions predominate, resulting in southwest-to-northeast trending precipitation patterns.

4.1.2 Topography and Soils

The Pahrump Valley is in southern Nevada in the Basin and Range physiographic province, at an average elevation of about 2,800 feet above mean sea level (AMSL). The Spring Mountains, with maximum elevation of nearly 12,000 feet AMSL, lie to the north and east of Valley. Topography within the Pahrump area varies from dry lake beds and historic lakebed deposits in the bottom of the valley, to alluvial fans deposited from the adjacent mountain range. The Action Area is located on an inset alluvial fan above the lakebed deposits, with slopes ranging from 2 to 4 percent.

The soils in the Action Area are mapped as the Commski-Lastchance association by the U.S. Department of Agriculture (USDA), Natural Resource Conservation Service (NRCS) and are derived from the limestone and dolomite ranges to the east. Soils are classified as very gravelly, fine sandy loam to extremely gravelly, sandy loam. The soils are well drained and show no signs of ponding or hydric soil characteristics (**Appendix A, Figure 5 – NRCS Soils Map and Report**). The Commski-Lastchance association is present throughout the bajadas and toe slopes of the Spring Mountains, and construction of the Go-Kart Facility would result in a minimal loss of this resource. Soils of the Commski-Lastchance association are not classified by NRCS as characterizing Prime or Unique Farmlands (**Appendix A, Figure 6 – Prime or Unique Farmlands**).

4.1.3 Water and Aquatic Resources

The proposed Project would be implemented within the Nevada Division of Water Resources (NDWR) Hydrographic Basin 162 (Pahrump Valley). The Pahrump Valley basin is an internal drainage basin where runoff flows from the surrounding mountains to the west and east of Pahrump down to the valley floor, where dry lake beds have formed.

4.1.3.1 Surface Water

No perennial surface water streams or bodies are present within or near the Action Area; the Action Area and surrounding lands are bisected by ephemeral washes that flow only as a response to rain events in the up-gradient watershed (**Appendix A, Figure 7 – NWI Map**). These washes flow through the Action Area and appear to dissipate into the developed areas of the town of Pahrump. No wetlands are present in the area and none of the surface water resources present in the Action Area have been delineated or determined to be jurisdictional waters of the U.S., as described in Section 404 of the U.S. Clean Water Act.

4.1.3.2 Groundwater

No water wells, monitoring wells, springs, seeps, or other groundwater resources are present within the Action Area (**Appendix A, Figure 8 – NDWR Wells and Springs**). Additionally, the proposed Project does not include drilling new wells or boreholes. NDWR regularly measures static water levels via municipal and private monitoring wells; water levels for wells located within the existing Spring Mountain Raceway facility were between 67 and 143 feet below surface (NDWR, 1998-2018).

Water used for implementation of the proposed Project would be provided by the local utility, from existing, permitted groundwater sources. State agencies and local municipalities monitor static groundwater levels to measure any aquifer drawdown to ensure water discharges and pumpage do not jeopardize anticipated future water supply needs. Pumpage in the Pahrump Valley has decreased every year since 2017, totaling 13,209 acre-feet in 2020 (NDWR, 2020). The highest water need for implementation of the proposed Project would be temporary (during the one-year construction phase of the Go-Kart Facility), and the total amount needed during that period would be approximately 0.11% of the total 2020 pumpage.

4.1.3.3 Floodplains and Flood Hazards

Flood hazard areas have been mapped for the Pahrump Valley Area, including the Action Area, and is available through the FEMA system. Based on data accessed on February 28, 2022, the Action Area includes areas of minimal flood hazard and areas of moderate flood risk. Portions of the area are mapped as “Zone X Shaded” labeled as having a 0.2-percent-annual-chance (i.e., “500-year”) flood, and other areas are mapped as “Zone X Not Shaded” labeled as being Area of Minimal Flood Hazard (**Appendix A, Figure 9 – FEMA Full FIRMETTE**).

To minimize risks associated with flooding, stormwater water management features, including a detention basin (as described in **Section 2.1.1.5**), would be constructed as part of the Go-Kart Facility.

4.1.4 Existing Land Uses/Designations

There are no designated wilderness areas, wilderness study areas, national natural landmarks, or national monuments located within or near the Action Area (**Appendix A, Figure 10 – Wilderness Resources**). Additionally, there are no areas of significant or critical ecological or environmental concerns within or near the Action Area (**Appendix A, Figure 11 – Areas of Critical Ecological/Environmental Concern**), as was the result of the 2018 BLM review (BLM, 2018).

4.2 Biological Resources

4.2.1 Vegetation

4.2.1.1 General Vegetation Associations

Vegetation within the Action Area and surrounding lands is characterized by large areas of desert pavement and stands of native desert shrubs (**Appendix A, Figure 12 – Vegetation Associations**). The vegetation within the Action Area is dominated by creosote bush (*Larrea tridentata*) and white bursage (*Ambrosia dumosa*). Other plants observed throughout the Project Area included four-wing saltbush (*Atriplex canescens*), shadscale (*Atriplex confertifolia*), spiny menodora (*Menodora spinescens*), Nevada ephedra (*Ephedra nevadensis*), little leaf ratany (*Krameria parvifolia*), broom snakeweed (*Gutierrezia sarothrae*), cottontop cactus (*Echinocactus polycephalus*), and Mojave yucca (*Yucca schidigera*).

4.2.1.2 Noxious and Non-Native Invasive Weeds

Non-native invasive species, including red brome (*Bromus rubens*), red stem filaree (*Erodium cicutarium*), and Mediterranean grass (*Schismus barbatus*) were observed scattered throughout the Action Area.

4.2.2 Wildlife

The typical wildlife community in this vegetation association includes a variety of small mammals, reptiles, and birds which may use the area for nesting and foraging. In addition, predators such as coyotes and kit fox may use the area for foraging on these species, but no sign of predators were noted during field surveys or site visits. Sign of use by wild burros (*Equus asinus*) was observed.

4.2.2.1 Migratory Birds

The Migratory Bird Treaty Act (MBTA) (16 USC 703 et. seq.) protects migratory birds and their nests. The list of birds protected under this regulation is extensive and includes numerous birds found within the Mojave Desert of Nevada. Typically, the breeding season is when these species are most sensitive to disturbance; the breeding season generally occurs from February 15th through August 31st depending on the species, when measures to minimize impacts on these species would be required. As discussed later in this document, measures will include surveys prior to ground disturbing activities, establishment of buffers around active nests, and monitoring.

4.2.2.2 Western Burrowing Owl

One migratory bird of special interest in this region is the western burrowing owl (*Athene cunicularia hypugaea*), primarily due to its declining abundance throughout its range. The western burrowing owl is a diurnal bird of prey specialized for shrub-steppe habitats. Burrowing owls are one of the smallest owls in North America, measuring between 7.5 to 10 inches tall with a wingspan of 21 to 24 inches. They have a broad range across western North America, Central America, and South America, and are typically present in southern Nevada from mid-March through August. Burrowing owl habitat in the Mojave Desert typically consists of open, dry, treeless areas on the desert floor where they most frequently inhabit burrows created by other animals such as ground squirrels (*Spermophilus* spp.), coyotes (*Canis latrans*), or desert tortoises, as well as pipes and culverts or man-made structures; the burrows are used for nesting, roosting, cover, and caching prey.

In recent decades, the range and abundance of the burrowing owl have been declining, primarily due to agricultural, industrial, and urban development that reduce habitat and burrow availability. During surveys for desert tortoises, no burrowing owls or sign of their presence were observed within or adjacent to the Action Area (see **Appendix D**); however, the species could move into the area prior to construction. Therefore, surveys prior to construction would be necessary to ensure protection of the species if it is present, as required for other migratory birds.

4.2.2.3 Gila Monster

The Gila monster (*Heloderma suspectum*) is a Nevada state protected species NAC 503.080, 503.090, and 503.093) and was noted by NDOW as a species of interest for the Action Area. The Gila monster is the largest native species of lizard in the US and is the only venomous lizard endemic to the United States, typically found in portions of the Mohave Desert in southwestern Utah, southeastern Nevada, southeastern California, and northwestern Arizona; in the Sonoran Desert in southwestern Arizona and Sonora, Mexico; and in small portions of the Chihuahuan Desert in southeastern Arizona and southwestern New Mexico.

Adults typically have a body length of 12 to 14 inches with the tail adding an additional 6 to 7 inches, are slow-moving lizards, and dependent almost solely on vertebrate eggs and young in nests for food. Gila monsters favor rocky slopes, washes, and sandy valleys, with sites available for protection from weather extremes and predators, typically spending more than 95 percent of its time in underground shelters. Though limited information exists about the relative abundance in Nevada, NDOW has ongoing management investigations addressing the Gila monster's status and distribution. No Gila monsters were observed during field surveys for desert tortoises (see **Appendix D**).

5 POTENTIAL BIOLOGICAL IMPACTS/TAKE ASSESSMENT

5.1 Direct Effects on Desert Tortoises

Direct effects are those caused by the Covered Activities and occur at the same time and place. The direct effects of the covered Activities are the removal or disturbance of approximately 56 acres of desert tortoise habitat with the fencing and construction of the proposed Project, and relocation of desert tortoises. Potential direct effects to desert tortoises of all size classes include the following.

5.1.1 Habitat Loss

Construction of this Project will result in the fencing and thus removal of 56 acres of occupied desert tortoise habitat. The Project Area is bounded to the south by the Gamebird Substation facility and associated stormwater basin, a privately held aggregate pit and mining operation, private land subdivided and prepared for residential development, and SR-160. The existing SMR facility and private land prepared for development bound the Project Area to the west, and undeveloped, SMR-owned desert bounds the Project Area to the north and east. The existing SMR facility and Gamebird Substation are fully bounded by fencing and are inaccessible to desert tortoises. The area to the north and east is contiguous suitable desert tortoise habitat managed by BLM for multiple use (**Appendix A, Figure 1**). The area immediately northeast of the Project Area is a dedicated energy utility corridor, for construction of energy transmission infrastructure. The habitat within the Project Area is bisected with unauthorized trails and other indications of human activities, though the area remains in a relatively natural condition.

The 56 acres of removed habitat represents 0.001 percent of the total 3,968,759 acres available suitable habitat within the Eastern Mojave Recovery Unit, and approximately 0.0003 percent of the 16,926,966 acres of available suitable habitat range-wide (Allison & McLuckie, 2018). Additionally, the area is not within an area designated by the BLM or other agencies as requiring unique conservation or management prescriptions for this species or others, such as Critical Habitat or other designations.

Fragmentation of habitat affects local tortoise movement, connectivity, and gene flow by eliminating opportunities for dispersal within boundary of the proposed Project. However, the size, location, and configuration of the Project would have little additional effect of fragmentation through exacerbation of the existing pinch point (**Appendix A, Figure 1**). Given this configuration and location in relation to the adjacent bounding facilities, the development of this Project Area does not contribute to further fragmentation. Therefore, the proposed Project is not expected to affect tortoises' ability to move freely

between large blocks of undisturbed desert tortoise habitat east of the developed area of Pahrump and the similar habitat north and northwest of Pahrump.

Removal of habitat within a tortoise's home range or segregating individuals from their home range with a fence may result in displacement stress that could result in loss of health, exposure, increased risk of predation, increased intraspecific competition, and death, though this is expected to be minimal for the reasons discussed in this section.

No habitat will be altered within the 100-foot buffer portion of the Action Area outside of the fenced Project Area (approximately seven acres; see **Appendix A, Figure 2**).

5.1.2 Handling and Removal/Relocation/Release of Desert Tortoises

Translocation and relocation of desert tortoises may pose several risks to populations, with unknown long-term effects for this long-lived species. The estimated mortality of translocated tortoises may be as high as 30% (USFWS, 2010), although Dickson et al. (2019) indicated no difference in survivorship between translocated, resident, and control groups during a recent 5-year translocation study in the Mojave Desert, which they suggested was a result of releasing tortoises within or near their original home range. The same study also indicated that factors associated with increased density in the recipient site following translocation appeared to have no influence on survivorship due to the high survivorship of both translocated and resident tortoises (Dickson, et al., 2019). Other studies indicate some translocated male individuals may not fully integrate into the recipient populations into which they are placed (Mulder, et al., 2017). Translocation has the potential to increase the prevalence of diseases in a resident population (Aiello, et al., 2014), although multiple pre-translocation health assessments may minimize this risk (USFWS, 2019b). Moving tortoises short distances into areas likely to be within their home range, with populations of tortoises they already interact with should further minimize the health risk, as is proposed in this HCP.

Tortoises subjected to translocation may experience exacerbated clinical signs of disease due to the stress associated with handling and movement. Demographic and density-related effects may also undermine the health of the resident and translocated tortoise population if resource limitations exist. In addition, resident tortoises within the recipient site may be disturbed during monitoring (USFWS, 2011). However, given the small number of tortoises expected to be encountered and the fact the tortoises will be released within areas they have previously occupied, the negligible increase in the density of tortoises in the area given the likelihood that tortoises will be moved within their home range and within the home range of resident tortoises in the recipient site, there are expected to be no increases to density-related or demographic issues. Moving tortoises short distances, to areas expected to be within their home range would reduce these potential impacts.

The effects of such translocations or relocations on the individual desert tortoises will include the immediate disruption of their behaviors from the handling, processing, and release of the tortoise in the adjacent areas. Additional effects will include some degree of stress on these tortoises as they become established in the recipient site. However, given the short distance the tortoises will be moved, the likelihood is high these tortoises are familiar with the habitat as well as the tortoises resident in the area, and vice-versa, potentially reducing the stress on the released tortoises, and possibly on the resident animals. Regarding potential external stressors of moving tortoises into a new area, the short distance of the translocation, and the general habitat and threat factors in the area are the same as for the tortoises at their current location, there is no meaningful difference in what the tortoises would encounter whether translocated or not, suggesting negligible impacts to the release area habitat.

Additionally, given the difficulty in accurately detecting and therefore predicting the abundance of juvenile tortoises, the number of such individuals to be moved to the adjacent area is unknown. Likewise, the number of tortoise eggs to be encountered and translocated cannot be determined at this time.

5.1.3 Other Direct Impacts on Desert Tortoises

Other direct effects on desert tortoises in the Project Area may include:

- Potential harm during site preparation.
- Potential entrapment within open trenches and pipes or other project features.
- Potential displacement (e.g., by noise and vibration), injury, or mortality by vehicles or heavy equipment.
- Potential crushing or entombment in their burrows during construction.
- During tortoise exclusion fence construction, tortoises could take shelter under parked vehicles and need to be translocated or could be killed or injured when the vehicle is moved if not seen; worker-training and presence of ADTBs and DTMs will minimize the risk.
- Implementation of minimization measures such as capture, handling, removal and release from the area could cause mortality or harm to desert tortoise, even when proper methods are being implemented.
- Desert tortoise mortality associated with interacting with (e.g., pacing) the fence; shade structures will be installed to help minimize adverse effects of pacing.
- Over time, breaches in the desert tortoise exclusionary fencing could occur, thus allowing tortoises to pass through the barrier and access the Project which could result in capture, injury, or mortality.

The likelihood of occurrence of these direct impacts to tortoises is greatly reduced by implementation of the avoidance and minimization measures proposed by SMR as described in the Conservation Plan described in Section 6 of this HCP.

5.2 Indirect Impacts on Desert Tortoises

Indirect effects are those effects that are caused by or that will result from the Covered Activities and are later in time but are still reasonably certain to occur. Indirect effects can be both spatial and/or temporal in nature. Indirect effects are of concern for long-lived species such as the desert tortoise because project-related effects may not become evident in individuals or populations until years later. Potential indirect effects to the desert tortoise may include:

- An increase in weed species, especially non-native grasses, within the Project Area could lead to increased risk of fire in desert habitat within the Project Area, which may extend into adjacent, occupied tortoise areas leading to a degradation of habitat and desert tortoise mortality.
- An increase in weed species, especially non-native grasses, within the Project Area could result in a spread of such weeds beyond the boundary into adjacent, occupied tortoise areas, resulting in reduced availability and quality of desert tortoise forage.
- Raven activity in the Project Area could increase due to the creation of raven subsidies of roost sites, and water and food sources from human presence thereby leading to increased desert tortoise predation in adjacent areas.
- Increase in canid (e.g., coyote) activity due to the creation of subsidies of water and food sources from human presence thereby leading to increased desert tortoise predation in adjacent areas.
- Injury, mortality, or increased disease incidence could occur from desert tortoise monitoring efforts.
- Temporary increase in noise and dust during construction could affect areas adjacent to the Project Area.

The likelihood of occurrence of these indirect impacts to tortoises is greatly reduced by implementation of the avoidance and minimization measures proposed by SMR as described in the Conservation Plan described in Section 6 of this HCP.

5.3 Cumulative Impacts

Impacts in the Project Area include continued development within and along the edges of the existing developed areas of the Town of Pahrump. The loss of habitat from this project will be cumulative with these other developments. However, the relatively small size of the project in relation to the amount of desert tortoise habitat within the Pahrump Valley, the isolated/surrounded nature of this parcel, and the anticipated lack of substantial impacts of the project on adjacent habitat, the cumulative impacts of this project are not anticipated to be significant.

Direct, indirect, and cumulative impacts are likely to be local in their effect and are anticipated to be offset by the Minimization Measures and Mitigation (**Section 6**).

5.4 Anticipated Take of Desert Tortoises

SMR is requesting an ITP for the activities described in this HCP. SMR anticipates the most Take will be in the form of capture and removal of adult tortoises (>180 mm MCL), smaller tortoises (<180 mm MCL), and tortoise eggs to an area immediately adjacent to the proposed project. Smaller tortoises (<180 mm MCL) and tortoise eggs are more difficult to detect than larger desert tortoises and are therefore more likely to be missed during clearance surveys and may be killed during construction activities.

Based on the best available information regarding the number of desert tortoises present in the Project Area, the types of activities, and the proposed minimization measures, SMR anticipates potential incidental take during the permit term for the desert tortoise as described below.

Construction:

- Five (5) desert tortoises larger than 180 mm in length in the form of capture through translocation.
- One (1) desert tortoise larger than 180 mm in the form of injury or kill.
- Ten (10) desert tortoises smaller than 180 mm in length in the form of capture through translocation.
- Five (5) desert tortoises smaller than 180 mm in length in the form of injury or kill.
- Twelve (12) undetected desert tortoises smaller than 180 mm in length in the form of injury or kill.
- An unknown number of eggs in the form of capture through excavation and translocation, injury, or kill.

Operation & Maintenance:

- Two (2) desert tortoises smaller than 180 mm in length in the form of capture through translocation from within the area or along the outside of the tortoise exclusion fencing.
- Two (2) desert tortoises smaller than 180 mm in length in the form of injury or kill.

SMR will transport any wounded desert tortoises to a qualified veterinarian for treatment. If the desert tortoise can be rehabilitated to the degree that it is released to the wild, we propose that the individual be considered to have been taken in the form of capture. If the animal cannot be released to the wild because of wounds it experienced because of Project activities, we propose that the individual be considered to have been taken in the form of kill.

5.5 Anticipated Impact of Take of Critical Habitat

The proposed Project is not in an area of Designated Critical Habitat, and the nearest Designated Critical Habitat is the Ivanpah Unit, approximately 34 miles south of the Project Area. The proposed Project will have no effect on Designated Critical Habitat.

5.6 Anticipated Impact of the Taking of Desert Tortoises

Take on this Project may include capture and translocation during construction and operations, and a small possibility of injury or mortality during construction and operations, and the permanent modification of 56 acres of suitable desert tortoise habitat. Translocation of tortoises and potential tortoise eggs into an adjacent, suitable area would disrupt the behavior of these few animals and may have some degree of effect on the behavior of the resident tortoises in the release area. These impacts are not expected to be substantial on the recovery of the species given the small number of tortoises expected to be moved, and the fact the Project Area is immediately adjacent to the habitat the tortoises currently occupy, thus is likely within the home ranges of both tortoises translocated and nearby resident tortoises. The small number of adult desert tortoises expected to be taken by the Project relative to the regional population and the Eastern Mojave Recovery Unit is unlikely to appreciably diminish the ability of the desert tortoise to reach stable or increasing population trends in the future.

Handling of these tortoises will have some degree of impact to these individuals in the form of stress of handling and moving them, however, given they likely are moving into an area they are familiar with, and through the strict adherence to handling guidelines, this impact is anticipated to be minimal. Likewise, the resident tortoises in the release area may respond to and be impacted by the release of tortoises in this area, however, given the short distance tortoises will be moved, the tortoises likely have interacted with the resident tortoises, further tempering the level of impact to the released and the resident individuals.

Given the potential impacts on the local tortoises are expected to be minimal, the anticipated impacts on the tortoise population in the Recovery Unit and range-wide are expected to be minimal to negligible. The 2014 abundance estimate for the Eastern Mojave Recovery Unit was 24,664 adult desert tortoises (Allison & McLuckie, 2018). Consequently, even the loss of all 6 adult desert tortoises estimated to be translocated or moved from the Project would comprise a very small portion (approximately 0.02 percent) of the overall adult population within the Eastern Mojave Recovery Unit and an even smaller portion (0.003 percent) of adult desert tortoises range-wide (212,343 tortoises).

Similarly, the project will permanently remove approximately 56 acres of habitat, which is 0.001 percent of the total 3,968,759 acres of available, suitable habitat within the Eastern Mojave Recovery Unit, and would result in a loss of approximately 0.0003 percent loss of the 16,926,966 acres of available habitat range-wide (Allison & McLuckie, 2018). No take of Critical Habitat will occur as none has been designated in the Project Area.

The impacts of this “take” are minor/minimal locally, negligible regionally, and not present within the range of the species. Mitigation that is commensurate with anticipated impacts implemented. Mitigation measures to address the removal of habitat and the movement of tortoises from the Project Area will be implemented. No additional measures will be implemented to address the minimal impacts anticipated for the resident tortoises where project tortoises will be released.

6 CONSERVATION PROGRAM/MEASURES TO MINIMIZE AND MITIGATE FOR IMPACTS

6.1 Biological Goals and Objectives

As part of the "Five Point" Policy adopted by the FWS in 2000, HCPs must establish biological goals and objectives (65 FR 35242, June 1, 2000). The purpose of the biological goals is to ensure the operating conservation program of the HCP is consistent with the conservation and recovery goals established for the species. The biological goals also intend to inform the applicant of the intentions of the conservation and recovery goals for the species. The biological goals should be developed based upon the species' biology, threats to the species, the potential effects of the covered activities, and the scope of the HCP.

The Biological Goals of this HCP are to:

- Avoid take of the desert tortoise in the form of mortality or injury resulting from the development of the Go-Kart Facility, and
- Off-set the loss of desert tortoise habitat.

To fulfill the Biological Goals, the following Biological Objectives of this HCP were developed:

- Avoid impacts to tortoises in the form of death or injury by moving them to adjacent suitable habitat prior to commencement of construction activities.
- Ensure tortoises do not enter the Project Area during operations and maintenance of the Go-Kart Facility.
- Implement or provide sufficient funds to allow implementation of conservation measures to off-set the loss of desert tortoise habitat associated with this Project. Specific conservation projects will be determined by USFWS and will be included as part of the final findings document.

6.2 General Environmental Measures

In addition to measures to minimize impacts to desert tortoises, SMR will implement a series of best management practices and other measures to minimize general environmental impacts and comply with other laws and regulations as required. Each measure is assigned a unique identifier for reference later in this document.

GM-01 Worker Environmental Awareness Program Training. SMR will develop a Worker Environmental Awareness Program (WEAP), and each worker involved in the construction of the Project will receive WEAP Training before beginning work onsite. The WEAP will include information on desert tortoises and other special-status species, nonnative invasive weed species (and how to reduce/limit their spread), dust control, and measures to be implemented to minimize impacts to the environment. The WEAP shall be administered to all construction personnel and documentation of completed training sessions with acknowledgements signed by each worker shall be provided. The WEAP shall be implemented during site construction and as needed/requested by SMR.

GM-02 Dust Control and Air Quality. SMR will use water to control dust during the construction within the Project Area in accordance with the county-required dust control plan and the Nevada Department of Environmental Protection (NDEP)-required surface area disturbance permit. Water will be applied to the work areas prior to ground disturbance and during the construction activities. Given the attraction of puddled water by ravens and other predators, SMR will minimize areas of puddled water to avoid attracting ravens to the Project Area.

- GM-03 **Litter Control.** SMR will implement a litter control program during construction activities; all trash, including food scraps will be stored in a predator-resistant container and removed from the construction area each day. During operations of the Go-Kart Facility, SMR employees will remove litter from the Project Area and all fences throughout the year.
- GM-04 **Weed Management.** SMR will avoid the introduction of non-native weed plant species, and then manage species in the event they become established. The introduction of these plant species will be avoided by ensuring all equipment is cleaned of soils and vegetative material before entering the Project Area. All fill or aggregate material to be imported to the Project Area will be sourced from certified weed-free sources facilities.
- To prevent the establishment of the weeds in the Project Area during operation, SMR will continue inspection of developed areas on a regular basis to identify any weed introduction or invasion. When noxious weed species are observed, they are removed and disposed of through the solid waste hauling service. When weed invasions become too large for manual removal, SMR uses commercially approved herbicides in accordance with their labeling, all state and federal laws, and guidance included in GM-07 below.
- Weed management within the Project Area will reduce the potential for increased density of non-native species, or establishment of noxious weeds. No activities other than the release of tortoises in the 100-foot buffer portion of the Action Area will be implemented as part of the proposed Project, therefore weed management will not be implemented in the 100-foot portion of the Action Area.
- GM-05 **Migratory Bird Mitigation Measures.** Prior to blading and vegetation removal activities in vegetated habitat during the migratory bird breeding season, typically February 15 – August 31, one or more qualified avian biologists will survey the area no more than 3 days prior to the ground disturbance to locate active nests, including those of burrowing owls. Active nests are defined as any nest with eggs or young of a species listed as a migratory on the MBTA list. If an active nest is found, activities near that nest will be halted, a 100-foot buffer will be established around the nest, and the nest will be monitored by the avian biologist until the young have fledged or until the biologist confirms the nest has failed. The biologist will document the monitoring efforts and the fate of the nest.
- GM-06 **Gila Monster Mitigation Measures.** During all construction activities, if a Gila monster is observed, all activities that may cause it harm will be halted and a qualified and permitted biologist will capture the Gila monster, place it in a secure container in a safe location, and notify NDOW in accordance with the biologists' NDOW special purpose permits.
- GM-07 **Monarch Butterfly and Other Pollinator Measures.** During construction, operation, and maintenance, the following measures will be taken to minimize potential impacts to insect pollinators.
- a. Protect monarchs, other pollinators, and their habitats from pesticides (e.g., insecticides and herbicides).
 - b. Avoid the use of pesticides when monarchs may be present. Monarchs are estimated to be present at SMR from March 16 to November 30.
 - c. Screen all classes of pesticides for pollinator risk to avoid harmful applications, including biological pesticides such as *Bacillus thuringiensis* (Information can be found at UC Integrated Pest Management; <https://www2.ipm.ucanr.edu/beeprecaution/>).

- d. Avoid the use of neonicotinoids or other systemic insecticides, including coated seeds, any time of the year in monarch habitat due to their ecosystem persistence, systemic nature, and toxicity.
- e. Avoid the use of soil fumigants.
- f. Consider non-chemical weed control techniques, when feasible (Information can be found at Cal-IPC Non-chemical BMPs; <https://www.cal-ipc.org/resources/library/publications/non-chem/>).
- g. Avoid herbicide application on blooming flowers. Apply herbicides during young plant phases, when plants are more responsive to treatment, and when monarchs and other pollinators are less likely to be nectaring on the plants. Monarchs are less likely to be nectaring on plants at SMR from December 1 to March 15.
- h. Use targeted application herbicide methods, avoid large-scale broadcast applications, and take precautions to limit off-site movement of herbicides (e.g., drift from wind and discharge from surface water flows).

6.3 Measures to Avoid and Minimize Take of Desert Tortoises

SMR will implement the following series of measures to minimize and mitigate the potential impacts of the Project on desert tortoises.

DT-01 Authorization of Desert Tortoise Biologists. SMR will submit the name, statement of qualifications, and other information, as required for qualified biologists to be evaluated and approved by the USFWS and the NDOW, for authorization to implement the specific activities within this plan at least 30 days prior to initiation of the proposed Project. The authorized biologists will have primary responsibility for overseeing compliance with and implementation of the measures included in this HCP and ITP related to desert tortoise protection and conservation during construction of the Go-Kart Facility, in accordance with the activities they are authorized to implement. Biologists authorized to do so will lead or directly supervise clearance surveys, the handling and removal of desert tortoises, clearing and collapsing of tortoise burrows, excavation and relocation of tortoise nests, and construction monitoring. Authorized biologists may be assisted by other biologists for these efforts while under the supervision of the authorized biologist. Biologists may be replaced throughout implementation of the proposed Project, but the new biologists must be approved prior to fulfilling that role.

All biologists will be responsible for reporting non-compliance with mitigation measures and any incidental take of desert tortoises to the USFWS and NDOW.

DT-02 Flagging and Staking and Monitoring of the Fence Alignment. Prior to initiation of ground-disturbing activities, the boundary of the areas to be cleared will be staked and flagged. These areas will be surveyed for desert tortoise and other resources prior to ground-disturbing activities and all cross-country driving and ground-disturbing activities associated with the staking and flagging activities will be monitored by a biologist authorized to do so.

DT-03 Desert Tortoise Exclusion Fence Installation. Prior to other construction activities, SMR will design, install, and maintain a permanent tortoise exclusion fence around the Project Area in accordance with USFWS guidelines (**Appendix B**) to ensure tortoises do not gain access to the Project Area or wander into harm's way during construction and operation of the Go-Kart Facility. Shade structures will be installed on both sides of the tortoise exclusion fence to provide cover for tortoises that may attempt to exit the area before clearance surveys are completed or enter the area after they have been removed from the area. Shade structures on the Project side of the fence would be removed after clearance surveys have been

conducted, tortoises have been removed, and blading activities have been completed. Shade structures outside the fence will remain in place and be maintained for the duration of operation and management of the Go-Kart Facility.

DT-04 Pre-Construction Surveys and Monitoring for Fence Installation. Prior to construction of the fence, biologists authorized to do so will survey for desert tortoises within the proposed fence alignment and search burrows for tortoises and tortoise nests. Biologists authorized to do so will also monitor the installation of the tortoise exclusion fence to ensure the fence meets proper specifications and to ensure tortoises are not impacted during the installation.

During fence construction monitoring, all workers will report observations of tortoises to the biologists and biologists will have the authority to halt any activities in violation of the measures included in this HCP and the ITP. Work will proceed only after hazards to the tortoise are removed and the species is no longer at risk, or the tortoise has been removed in accordance with the ITP. Any observed nests and tortoises will be removed from harm's way in accordance with USFWS handling protocols and the ITP.

The biologists onsite or on-call will be responsible for documenting all non-compliance occurrences and take of desert tortoises and reporting these incidents to the USFWS and NDOW within 24 hours.

DT-05 Fence Inspections. Following installation of the desert tortoise exclusion fence, biologists authorized to do so or SMR employees will inspect the fence and make necessary repairs as described below. If tortoises are encountered experiencing stress, an onsite or on-call ADTB will move the tortoise to a burrow and provide water and other care as necessary.

- The fence will be inspected once daily during the active season while blading and grading activities are underway to ensure the fence is not damaged and to identify any tortoises potentially located along the fence. Inspections will occur weekly if blading and grading activities occurs during the less-active season.
- Upon completion of blading and grading activities, the fence will be inspected weekly by an authorized biologist or SMR employee throughout the first active season (March through May or September through October) to locate any tortoises attempting to enter the Project Area and to identify damage to the fence. The fence will be inspected once monthly after the first active season for the remainder of the life of the facility or until adjacent development precludes tortoise access to the area.
- The fence will be inspected within 24 hours following a rain-fall event that may damage the fence during the active season, or within 7 days following the event in the less-active season. Necessary repairs to the fence will be implemented within 48 hours after the inspections during the active season and within 7 days in the less-active season.

- DT-06 **Clearance Surveys and Desert Tortoise Removal.** Upon completion of construction of the desert tortoise exclusion fencing, biologists authorized to do so will conduct a series of clearance surveys within the fenced Project Area to locate and remove desert tortoises from the Project Area. The clearance survey and tortoise removal effort will be conducted in accordance with the USFWS Field Manual (2009, p. Chapter 3) and will entail the following steps:
- Clearance survey of the Project Area will generally be completed using two consecutive, perpendicular passes with a maximum of 15-foot spacing to locate all desert tortoises within the Project Area. Burrows will be searched for tortoises and tortoise nests, documented, and collapsed. During the survey, tortoises will be monitored until an ADTB is available to process and remove the tortoise.
 - Clearance survey will coincide with the active tortoise season (late March through May or September through October) while temperatures are below 104°F.
- DT-07 **On-Call Biologist.** After clearance surveys have been conducted and tortoises have been removed from the Project Area, a biologist authorized to handle tortoises will be on-call to respond in the event a desert tortoise is observed within the Project Area.

6.4 Measures to Off-Set Loss of Mojave Desert Tortoise Habitat

- DT-08 **Remuneration Fee.** In addition to the measures proposed and to be implemented by the proponent to avoid and minimize potential impacts from a project, developers must offset the loss of suitable habitat of threatened or endangered species. The development of the Go-Kart Facility will result in the loss of 56 acres of suitable, occupied desert tortoise habitat through the construction of the desert tortoise exclusion fence and development of the proposed Project. However, approximately 4.2 acres of the Project Area was disturbed as part of the construction of the transmission line for the Gamebird Substation, therefore only 51.8 acres of habitat would be lost due to the Proposed Go-Kart Project.

FUNDING OF CONSERVATION/MANAGEMENT PROJECTS: To fulfill the obligation to off-set the loss of habitat, SMR has agreed to deposit funds in an account administered by the National Fish and Wildlife Foundation (NFWF) as directed by the USFWS. SMR agreed to a remuneration fee of \$77,700 (51.8 acres x \$1,500/acre).

ALLOCATION OF FUNDS TO CONSERVATION/MANAGEMENT PROJECTS: SMR and the USFWS agree the USFWS will use these funds to implement conservation or management measures and/or projects deemed to benefit the recovery of the Mojave desert tortoise. The specific conservation or management project the funds are directed to is at the discretion of the USFWS. The project the USFWS chose is described below:

Habitat Restoration Project for the Stump Springs and Trout Canyon Translocation Areas: The mitigation funds provided by the project will be used to fund a habitat restoration project in the nearby Stump Springs and Trout Canyon translocation areas. This project will serve to directly benefit the species, including tortoises directly affected by the proposed Project, and serve to fully mitigate the loss of 51.8 acres of habitat in several ways. The USFWS will work with BLM, the US Geological Survey, and other partners to apply vegetation management to restore native vegetation and reduce or eliminate the invasive annual grass red brome (*Bromus rubens*) and other non-native plant species in the Stump Springs and Trout Canyon translocation areas. This project is expected to benefit desert tortoise recovery by both improving habitat, and specifically foraging habitat, for the desert

tortoise, but also by serving to refine restoration techniques for desert tortoise habitat restoration that can be applied in the Eastern Mojave Recovery Unit and potentially range-wide for the species. Restoring habitat for desert tortoise in these translocation areas will improve habitat for desert tortoises released in these areas that are displaced by development projects throughout southern Nevada and will thus enhance the survivorship of tortoises released in these areas, and further the USFWS goal for these focus areas of population augmentation. These translocation areas also serve to maintain connectivity through the region, which will also directly benefit tortoises in the Project Area that are also part of this connectivity corridor. This project is necessary for the effective establishment of these translocation areas and the successful augmentation of the populations in these areas and will fully mitigate for the adverse effects of the proposed Project by directly furthering desert tortoise recovery.

Mitigation funding will be transferred to the third-party organization as directed by USFWS soon after permit issuance and before groundbreaking activities.

7 MONITORING

As stated in the HCP handbook, the monitoring program of an HCP should provide information to determine if:

- SMR is in complying with the incidental take permit and the HCP.
- Progress is being made toward fulfilling the biological goals and objectives.
- Whether the HCP's conservation program is effective at minimizing and/or mitigating impacts.
- Adjustments to the measures are needed to improve the HCP's conservation strategy.

The HCP handbook divides monitoring and reporting into three categories for HCPs:

- Monitoring for baseline information (effects monitoring).
- Effectiveness monitoring to support ongoing conservation decisions.
- Monitoring to evaluate compliance with the ITP terms and conditions.

SMR will be responsible for ensuring that monitoring data are collected, compiled, and reported to the USFWS for the duration of the permit period as described below and in **Section 7.5**.

7.1 *Monitoring for Baseline Information (Effects Monitoring)*

Baseline information is used to determine the potential effects of the proposed Project on the covered species and habitat, and additional information collected and reported during implementation of the Project provides SMR and USFWS an opportunity to monitor the level of effects of the Project in comparison to the levels predicted in the HCP and authorized in the ITP.

Baseline information on the number of tortoises observed during the biological resource surveys of the Project Area, and the number of tortoises predicted to be present are provided in **Section 3.2.3** of this HCP. The following reports and submittals will be provided to the USFWS throughout the Project, providing additional baseline information and opportunities to monitor effects:

- Clearance and Relocation Report – Submitted upon completion of the clearance surveys.
- Incidental Take Reports – Submitted by an authorized biologist to the USFWS documenting any incidental take occurring during implementation of the proposed Project (e.g., capture for relocation, injury, or mortality).

- Annual Reports summarizing progress of construction, documentation of compliance with all mitigation measures, incidental take, compliance issues, and other items occurring throughout the previous permit year.

7.2 Effectiveness Monitoring of Minimization Measures

Monitoring and the review of minimization measure effectiveness at reducing the risk and severity of impacts is intended to inform the Adaptive Management Strategy of this HCP.

SMR will compile information on the effectiveness of minimization measures using information collected during implementation of the measures. SMR, with assistance from biologists authorized to implement the measures during construction, will review clearance survey and compliance monitoring results to identify potential modifications necessary to further reduce the risk and severity of effects to desert tortoise, if any are needed. SMR will coordinate with USFWS should effectiveness monitoring of minimization measures determine adaptive management is needed.

Additionally, SMR and USFWS will evaluate each incidence of take as it is reported to assess if all mitigation measures were being implemented as stated in the ITP, if adjustments to the take measures would have substantially reduced the likelihood of the take, and if those adjustments are reasonable and prudent.

7.3 Compliance Monitoring

7.3.1 Implementation of Minimization Measures

SMR will coordinate with USFWS to designate a primary or lead biologist to oversee implementation of the Minimization and Mitigation Measures included in this HCP. The lead biologist is authorized to oversee implementation of these measures, document completion of and compliance with the measures, evaluate the effectiveness of the measures, and report to both SMR and the USFWS. The lead biologist is responsible for reporting all incidental take of desert tortoises as well as non-compliance with the ITP requirements to both SMR and the USFWS.

7.3.2 Allocation of Off-Setting Mitigation Funds by USFWS

SMR will monitor and document the allocation and disbursement of remuneration funds deposited with NFWF in accordance with agreements established between USFWS and SMR. SMR will include updates on the status of the funds in the Annual Report, as made available by USFWS.

7.4 Adaptive Management Strategy

Adaptive management is an integral aspect of an effective mitigation program due to the uncertainties inherent in the natural environment and the conservation of the desert tortoise, as well as the construction process. The purpose of adaptive management is to provide a framework by which SMR and the USFWS can evaluate information obtained during implementation of the conservation program (see **Section 6**) and determine if changes in conditions warrant adjustments to further reduce risks of impacts to tortoises, or possibly alleviate requirements on SMR if risks have passed or are less than anticipated.

Implementation of the Monitoring described in **Section 7.3**, and the Reporting described in **Section 7.5** will provide SMR and the USFWS multiple opportunities to evaluate the effectiveness of the conservation program, the minimization and mitigation measures being implemented, and the effects on the species being observed. If either SMR or the USFWS observe issues or conditions warranting an evaluation of this HCP and the included measures, either party can request a discussion.

Due to the short-term nature of the Project, the need for long-term adaptive management is not expected.

7.5 Reporting

SMR will be responsible for compiling and providing the USFWS information needed to document the implementation of and compliance with this HCP and the associated ITP. The reporting of this information will come in the form of the following documents:

- Incidental Take and Non-Compliance Reports
- Clearance and Relocation Report
- Annual Reports

7.5.1 Incidental Take and Non-Compliance Reports

The lead biologist is responsible for reporting all incidental take in the form of injury or death of any desert tortoise to the USFWS, including an assessment of whether the Project was complying with the ITP terms and conditions, and other factors which may have contributed to the take of the animal. The lead biologist also is responsible for reporting all occurrences of non-compliance with the ITP terms and conditions observed during the implementation of the proposed Project.

7.5.2 Clearance and Relocation Report

A Clearance and Relocation Report will be developed and included in the Annual Report to be submitted by SMR to USFWS. The Clearance and Relocation Report will document the relocation actions completed and will provide information related to the number and condition of the tortoises relocated, the location where they were relocated to, and recommendations for improving the process if appropriate.

7.5.3 Annual Reports

Annual Reports documenting implementation of covered activities and results of monitoring efforts (i.e., baseline, compliance, and effectiveness) will be prepared and submitted to USFWS throughout the term of the permit by March 1st the following the year.

At a minimum, the annual report will include the following information:

- Summary of the status of biological goals and objectives of this HCP.
- Description of covered activities and measures implemented during the reporting period.
- Assessment of effectiveness of minimization implementation, including effectiveness at reducing effects to desert tortoise, and a discussion and explanation of any minimization measures that may need to be modified.
- Summary of desert tortoise observations.
- Year-to-date and cumulative summary (i.e., from start of permit term) of effects (in acres) to desert tortoise habitat and any documented incidental take of the species (e.g., captured [and moved from harm's way], injured, killed).
- Year-to-date and cumulative summary of off-setting mitigation actions, including updates on the allocation and disbursement of the remuneration funds by the USFWS.
- Description of circumstances that made adaptive management necessary; documentation of discussions with USFWS; and description of how adaptive management was implemented.
- Description of any changed or unforeseen circumstances and how they were addressed.
- The Clearance and Relocation Report.

8 FUNDING

8.1 Costs Associated with HCP Implementation

Table 5 summarizes the projected costs associated with implementing the terms included in this HCP. The assumptions used to generate the costs address the current understanding of the planned activities, the estimated density of desert tortoises on the Project Area, and estimated costs of mitigation efforts.

Table 5: Summary of Costs Associated with Impacts to Desert Tortoises by Covered Activities.

Mitigation, Minimization, or other Measure	Associated Measure ID's	Total Estimated Costs	Basis and Assumptions
General Environmental Measures	GM-01 – GM-07	\$15,700	Worker environmental awareness program; ongoing dust and litter control; annual weed management; migratory bird surveys (during blading).
Authorized Biologists – Evaluations and Approval	DT-01	\$2,000	ADTB application and approval by USFWS and NDOW to implement the minimization measures described in Section 6.3 .
Monitoring of Flagging and Staking Activities	DT-02	\$2,000	Monitoring of flagging and staking activities of the tortoise fence alignment and Go-Kart Facility components.
Exclusion Fencing – Construction, Pre-Construction Surveys, Construction Monitoring, and Inspection	DT-03 – DT-05	\$124,250	Construction of tortoise fencing (5,000 ft); clearance survey prior to fence construction; construction monitoring for fence installation; exclusion fence inspection during construction, post-construction; after rain events; ongoing fence maintenance.
Clearance Survey and Desert Tortoise Relocation	DT-06	\$30,000	Clearance surveys and relocation efforts.
On-Call Biologists	DT-07	\$9,000	On-call biologists post-clearance to respond to tortoises observed within the Project Area.
Off-Setting Mitigation	DT-08	\$77,700	SMR will provide remuneration to the USFWS for conservation measures discussed in Section 6.4 .
Monitoring and Reporting	NA	\$36,000	Clearance and Relocation Report; Annual Reports
Total		\$296,650	\$218,950 excluding mitigation fees (remuneration)

8.2 Funding Source for Minimization and Mitigation Measures

SMR has sufficient financial assets to implement the terms of this HCP and will provide financial assurances to guarantee that an adequate level of funding is available to implement all aspects of the HCP.

8.3 Funding Mechanism

8.3.1 Avoidance and Minimization Measures

SMR will establish contracts with the construction contractor to construct the necessary minimization measures, such as the desert tortoise exclusion fencing. SMR will contract an environmental consulting firm with the appropriate experience and capacity to implement each of the minimization measures delineated within this HCP.

8.3.2 Off-Setting Mitigation Measures

SMR will establish the necessary agreements and financial commitments or transfers to support the off-setting mitigation measures deemed appropriate by SMR and the USFWS.

In the event funds are to be made available to other entities for them to implement such measures, SMR will transfer the appropriate funds to a repository fund established by the USFWS Southern Nevada Field Office with the non-profit organization NFWF. The USFWS would then direct the funds as agreed to within this HCP and associated documents.

9 CHANGED AND UNFORESEEN CIRCUMSTANCES

Implementing regulations for HCPs and ITPs provide for regulatory and economic assurances to permit holders concerning future obligations under the HCP and ITP that no additional commitment of land, water, or financial resources will be required with respect to covered species, and no restrictions on the use of land water or other natural resources will be imposed beyond those specified in the HCP without consent of SMR so long as SMR is properly implementing the HCP and the ITP, referred to as the “No Surprises Rule” (50 CFR 17.22[b][1]-[8], and 50 CFR 17.32[b][1]-[8];). Per the No Surprises Rule, an HCP must address two considerations: “Changed Circumstances” and “Unforeseen Circumstances.”

9.1 Changed Circumstances

Changed circumstances are defined in the No Surprises Rule as “changes in circumstances affecting a species or geographic area covered by a conservation plan or agreement that can reasonably be anticipated by plan or agreement developers and the Service [USFWS] and that can be planned for (e.g., the listing of new species, or a fire or other natural catastrophic event in areas prone to such events)” (50 CFR 17.3).

The HCP has included reasonably foreseeable circumstances that may arise during the period of the permit and within the permit area. For each circumstance, the HCP has identified actions to be taken by SMR and the USFWS in response to the changed circumstance. If SMR becomes aware of a changed circumstance, SMR will promptly notify USFWS in writing. At that time, SMR will modify implementation of the plan in the manner described below, to the degree necessary to address the effects of the changed circumstance.

9.1.1 Listing of a New Species or Designation of New Critical Habitat

If a species not covered by this HCP but which may be affected by covered activities, were to become a candidate for listing, proposed for listing, or is listed under the ESA during the permit period, SMR will be notified by the USFWS. SMR and USFWS will (1) avoid the newly listed species and evaluate (2) the degree to which the uncovered species has potential to be taken by the covered activities; (3) the degree to which the HCP, as it is being implemented, is providing conservation benefits to the species; and (4) what additional measures, if any, SMR could implement through the HCP to provide conservation benefits for

the species. Depending on this evaluation, SMR will work with USFWS and determine whether to seek coverage of the species through an amendment to ITP, or by applying for a new ITP.

9.1.2 Change in Desert Tortoise Listing Status

If the desert tortoise is delisted, SMR may elect to relinquish the ITP in accordance with applicable regulations or choose to continue the minimization and mitigation measures to further reduce threats to the species. In the event the species listing status is changed from Threatened to Endangered status, no changes to the HCP or the ITP would be imposed if the HCP is being implemented properly.

9.1.3 Wildfire

The eastern Mojave Desert ecosystem has experienced an increasing frequency, intensity, and size of wildfires because of the establishment and proliferation of the non-native and invasive annual grass species. These desert ecosystems did not include a fire regime in their evolution, and they do not recover rapidly, resulting in an extended loss of habitat for many species, including desert tortoises.

If wildfire from adjacent lands were to affect the Project Area, the Go-Kart Facility infrastructure would be affected. However, given the Project Area will be surrounded by a tortoise exclusion fence, and tortoises will have been removed, no additional impacts to desert tortoises would occur and no changes to the minimization and mitigation measures described in the HCP and ITP would be warranted.

If a fire starts within the Project Area, SMR will notify Pahrump Valley Fire and Rescue. If the fire has the potential to extend beyond the property boundary onto public lands, Pahrump Valley Fire and Rescue would notify the BLM Fire Aviation responders. SMR would cooperate with BLM in subsequent investigations, if any, to determine the cause of the wildfire on adjacent public lands. Also, SMR would support post-fire response efforts by BLM for any revegetation efforts.

9.1.4 Buffer Portion of Action Area

The 100-foot buffer portion of the Action Area immediately outside the Project Area is susceptible to each factor discussed in this section as with any other portion of the desert. However, these events would not warrant a response or additional action by SMR. Similarly, the areas where the selected mitigation projects would be implemented are managed by the BLM, where these potential changed circumstances are being addressed and minimized to the extent possible. Therefore, no additional response or action by the applicant would be warranted in the event these or other circumstances were to change.

9.2 Unforeseen Circumstances

Unforeseen circumstances are defined as “changes in circumstances affecting a species or geographic area covered by a conservation plan or agreement that could not reasonably have been anticipated by plan or agreement developers and the Service [USFWS] at the time of the conservation plan's or agreement's negotiation and development, and that result in a substantial and adverse change in the status of the covered species (50 CFR 17.3).

In the event a potential unforeseen circumstance is identified by SMR or the USFWS, the USFWS will determine if the unforeseen circumstances exists using a number of factors such as the range of the species, the proportion of the range within and ecological significance of the covered area, and whether failure to implement additional conservation measures would appreciably reduce the likelihood of survival and recovery on the species (50 CFR 17.22(b)(5)(iii)(C) and 17.32(b)(5)(iii)(C). If the USFWS demonstrates additional conservation measures are warranted where the HCP is being properly implemented, SMR may consider implementing some or all additional measures identified by USFWS but is not required to provide additional resources or funds to resolve unforeseen circumstances.

10 PERMIT RENEWAL AND AMENDMENTS

10.1 Permit Renewal

This HCP and ITP is eligible for renewal pursuant to federal regulation. If the SMR files such a request at least 30 days prior to the permit expiration date, the permit will remain valid while the request is being processed (50 CFR 13.22). If SMR fails to file a request at least 30 days prior to permit expiration, the permit will become invalid on the original expiration date. The USFWS will honor the “No Surprises” assurances as much as practicable to the extent the assurances comply with the statutory and regulatory requirements in place at the time of the renewal request.

10.2 Permit Amendments

This HCP and ITP may be amended at the discretion of the USFWS in accordance with the agency regulations in place at the time of the amendment (50 CFR § 13.22 and 50 CFR 13.32). SMR may request clarifications or administrative amendments from the USFWS to address small errors, omissions, or language that may be too general or too specific for practical application found in the HCP or ITP. SMR and USFWS will address minor changes to the conservation measures via formal correspondence or addenda to the HCP and such changes will not re-open the HCP or ITP to the NEPA or further ESA processes.

SMR and the USFWS may initiate an amendment to the HCP and ITP. If proposed changes to the HCP and ITP increase the incidental take authorization or modify the Covered Activities in ways not analyzed previously in the NEPA or ESA Section 7 documents, a permit amendment is required and the amendment may be subject to additional NEPA or Section 7 review (USFWS, 2016). The USFWS ultimately retains discretion over the level of review needed to address an amendment.

10.3 Suspension/Revocation

USFWS may suspend or revoke its permit should SMR fail to implement the measures identified in the HCP in accordance with the terms and conditions of the ITP, or should suspension or revocation be otherwise required by law. USFWS may suspend or revoke the ITP for cause in accordance with the laws and regulations in force at the time of such suspension or revocation (see Title 5, Part 558 of the U.S. Code [5 USC 558]; 50 CFR 13.27 through 13.29; 15 CFR 904). The exception is that USFWS may revoke the ITP based on a determination that continuing covered activities will be likely to jeopardize the continued existence of the desert tortoise only if USFWS has not been successful in remedying the situation in a timely fashion through other means as provided in the No Surprises Rule (50 CFR 17.22[b][5] and 50 CFR 17.32[b][5]).

Such suspension or revocation may apply to the entire ITP, or only to specified areas within the Project Area boundary or certain covered activities. In the event of suspension or revocation, SMR’s obligations under the HCP will continue until USFWS determines that all take of desert tortoise that occurred under the ITP has been mitigated to the maximum extent practicable in accordance with the HCP.

11 REFERENCES

- Aiello, C. M., Nussear, K. E., Walde, A. D., Esque, T. C., Emblidge, P. G., Sah, P., . . . Hudson, P. J. (2014). Disease dynamics during wildlife translocations: disruptions to the host population and potential consequences for transmission in desert tortoise contact networks. *Animal Conservation*(17), 27-39.
- Allison, L., & McLuckie, A. M. (2018). Population trends in Mojave desert tortoises (*Gopherus agassizii*). *Herpetological Conservation and Biology*, 2(13), 433-452.

- BLM. (1998, October). *ePlanning*. Retrieved May 15, 2020, from Bureau of Land Management: https://eplanning.blm.gov/epl-front-office/projects/lup/78155/128947/156899/1998_LV_RMP_ROD.pdf
- Boarman, W. (2002). *Threats to Desert Tortoise Populations: A Critical Review of the Literature*. U.S. Geological Survey, Western Ecological Research Center. Retrieved from https://www.fws.gov/nevada/desert_tortoise/documents/misc/tortoise_threats_boarman_usgs_2002.pdf
- Dickson, B. G., Sherer, R. D., Kissel, A. M., Wallace, B. P., Langin, K. M., Gray, M. E., . . . Weise, B. (2019). Multiyear monitoring of survival following mitigation-driven translocation of a long-lived threatened reptile. *Conservation Biology*, 0(0), 1-12.
- Mulder, K., Walde, A., Boarman, W. I., Woodman, A. P., Latch, E. K., & Fleischer, R. C. (2017). No paternal genetic integration in desert tortoises (*Gopherus agassizii*) following translocation into an existing population. *Biological Conservation*(210), 218-234.
- Nussear, K., Inman, R., & Tracy, R. (2009). Detecting trends in desert tortoise population growth: elusive behavior inflates variance in estimates of population density. *Endangered Species Research*, 10, 295-304.
- Turner, F. B., Berry, K. H., Randall, D. C., & White, G. C. (1987). *Population ecology of the desert tortoise at Goffs, California, 1983-1986*. Report to Southern California Edison Co., Rosemead, CA.
- U.S. Climate Data. (2018). *Pahrump*. Retrieved from <https://www.usclimatedata.com/climate/pahrump/nevada/united-states/usnv0072>
- USFWS. (2010). *Biological Opinion on BrightSource Energy's Ivanpah Solar Electric Generating System Project*. U.S. Fish and Wildlife Service, Department of the Interior, San Bernardino County, CA.
- USFWS. (2011). *Revised Recovery Plan for the Mojave Population of the Desert Tortoise (Gopherus agassizii)*. Region 8, Pacific Southwest Region of the U.S. Fish and Wildlife Service, Department of the Interior, Sacramento, CA. Retrieved from https://www.fws.gov/nevada/desert_tortoise/documents/recovery_plan/RRP%20for%20the%20Mojave%20Desert%20Tortoise%20-%20May%202011.pdf
- USFWS. (2016). *Habitat Conservation Planning and Incidental Take Permit Processing Handbook*. U.S. Retrieved from https://www.fws.gov/guidance/sites/default/files/documents/Habitat_Conservation_Planning_and_Incidental_Take_Permit_Processing_Handbook_December%2021%2C%202016.pdf
- USFWS. (2017). *Mojave Desert Tortoise Survey Protocol*. U.S. Fish and Wildlife Service, Department of the Interior. Retrieved from https://www.fws.gov/nevada/desert_tortoise/documents/manuals/Mojave%20Desert%20Tortoise_Pre-project%20Survey%20Protocol_2017.pdf
- USFWS. (2019a). *Preparing for any action that may occur within the range of the mojave desert tortoise (Gopherus agassizii)*. U.S. Fish and Wildlife Service, Department of the Interior. Retrieved from https://www.fws.gov/nevada/desert_tortoise/documents/manuals/MojaveDesertTortoisePre-projectSurveyProtocol_2019_v2.pdf

- USFWS. (2019b). *Health Assessment Procedures for the Mojave Desert Tortoise (Gopherus agassizii): A Handbook Pertinent to Translocation*. Reno, NV: U.S. Fish and Wildlife Service.
- WRCC. (2006). *Period of record general climate summaries for temperature and precipitation*. Retrieved January 2, 2020, from Western Regional Climate Center: www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?nvpahr

APPENDIX A
Figures

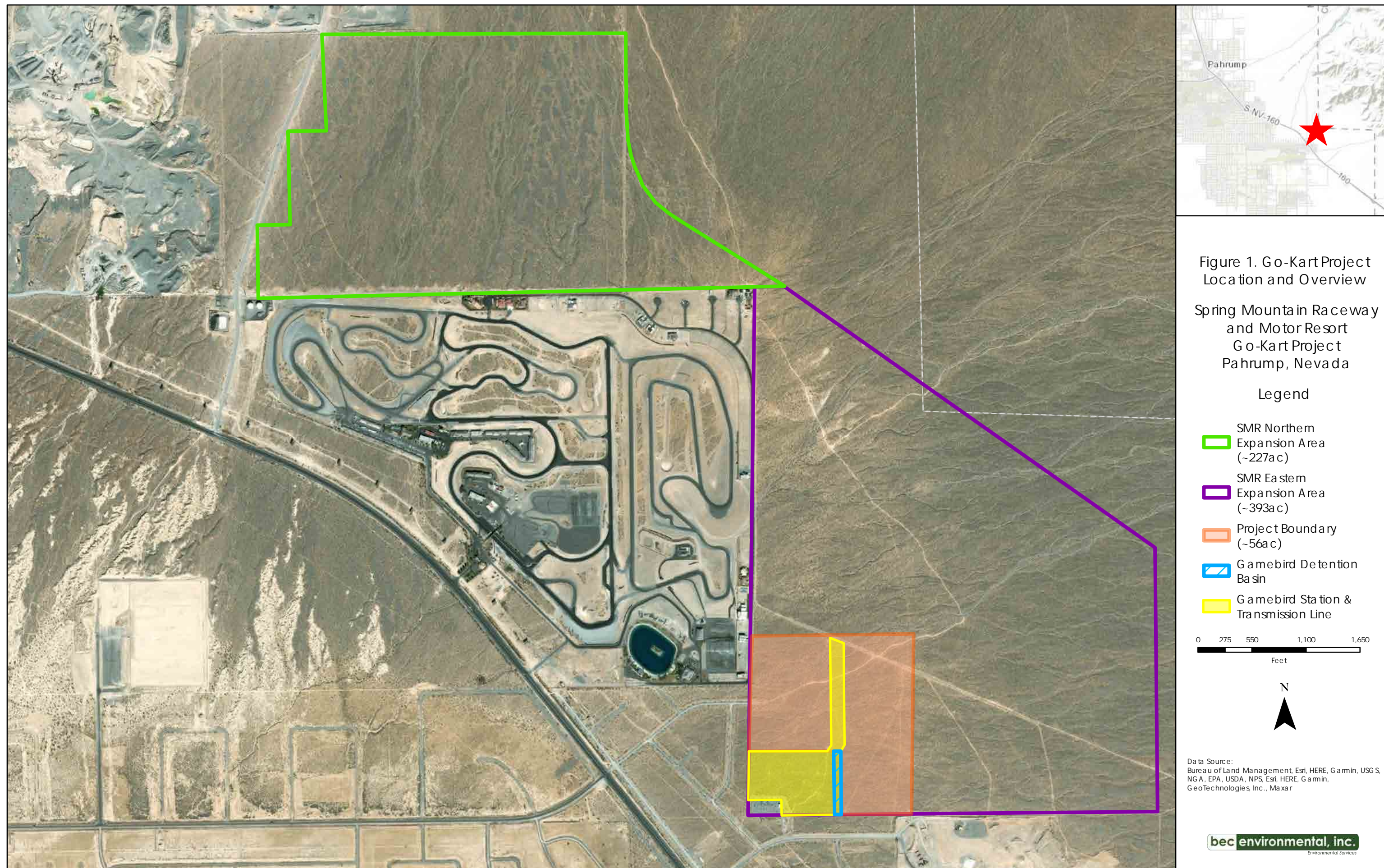


Figure 1. Go-Kart Project Location and Overview

Spring Mountain Raceway and Motor Resort
Go-Kart Project
Pahump, Nevada

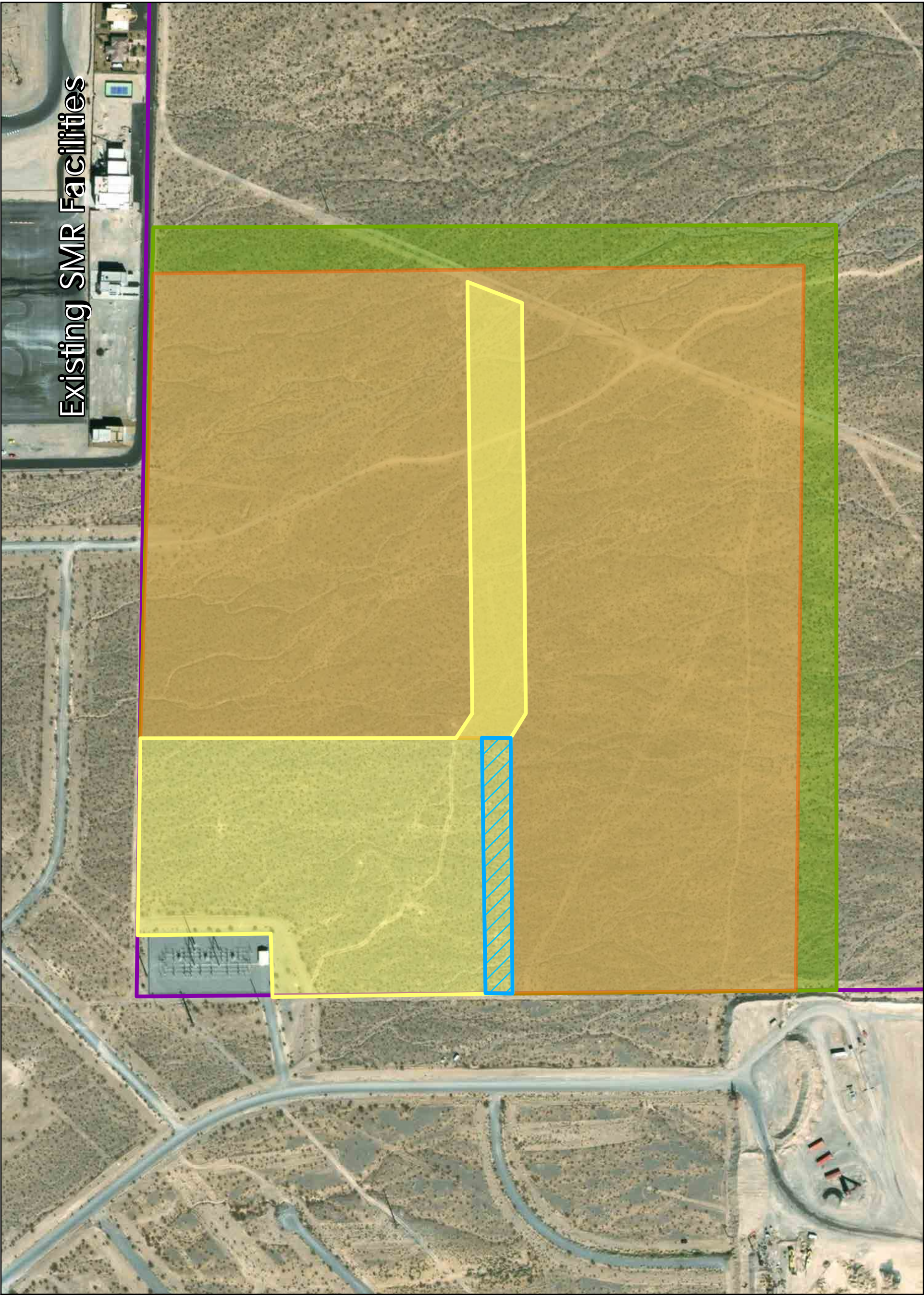
Legend

- SMR Northern Expansion Area (~227ac)
- SMR Eastern Expansion Area (~393ac)
- Project Boundary (~56ac)
- Gamebird Detention Basin
- Gamebird Station & Transmission Line

0 275 550 1,100 1,650
Feet



Data Source:
Bureau of Land Management, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS, Esri, HERE, Garmin, GeoTechnologies, Inc., Maxar



Existing SMR Facilities



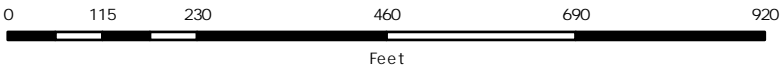
Figure 2. Project and Action Area
Spring Mountain Raceway
and Motor Resort
Go-Kart Project
Pahrump, Nevada

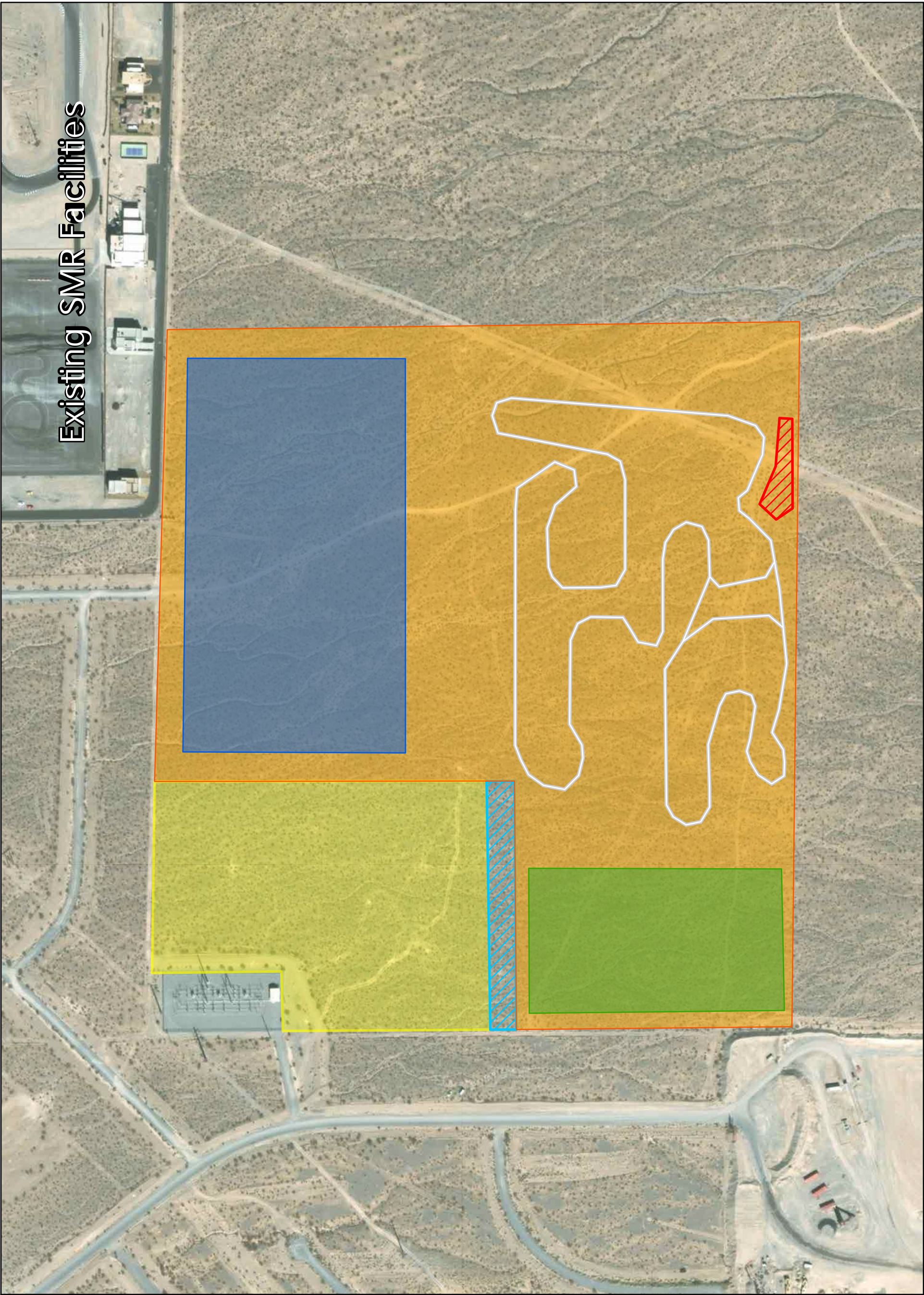
Data Source:
Esri, HERE, Garmin, GeoTechnologies, Inc., Esri, HERE,
Garmin, FAO, NOAA, USGS, EPA, Maxar
bec environmental, inc.
Environmental Services

Legend

- Action Area (~63ac)
- Project Boundary (~56ac)
- Gamebird Substation & Transmission Line
- Gamebird Detention Basin
- SMR Northern Expansion Area (~227ac)
- SMR Eastern Expansion Area (~393ac)

Note: Aerial imagery is from 2021 and does not include the Gamebird Substation expansion components





Existing SMR Facilities

Figure 3. Go-Kart Facility Components

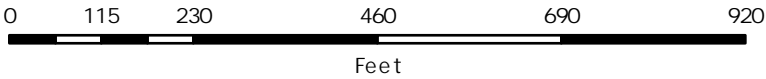
Spring Mountain Raceway
and Motor Resort
Go-Kart Project
Pahrump, Nevada

Data Source:
Maxar, Microsoft, Esri, HERE, Garmin, FAO, NOAA, USGS,
EPA



Legend

- Detention Basin
- Building(s) Area
- Parking & Staging Area
- Go-Kart Track Alignment
- Fenced Gamebird Expansion Area
- Gamebird Detention Basin
- Go-Kart Project Boundary (~56ac)



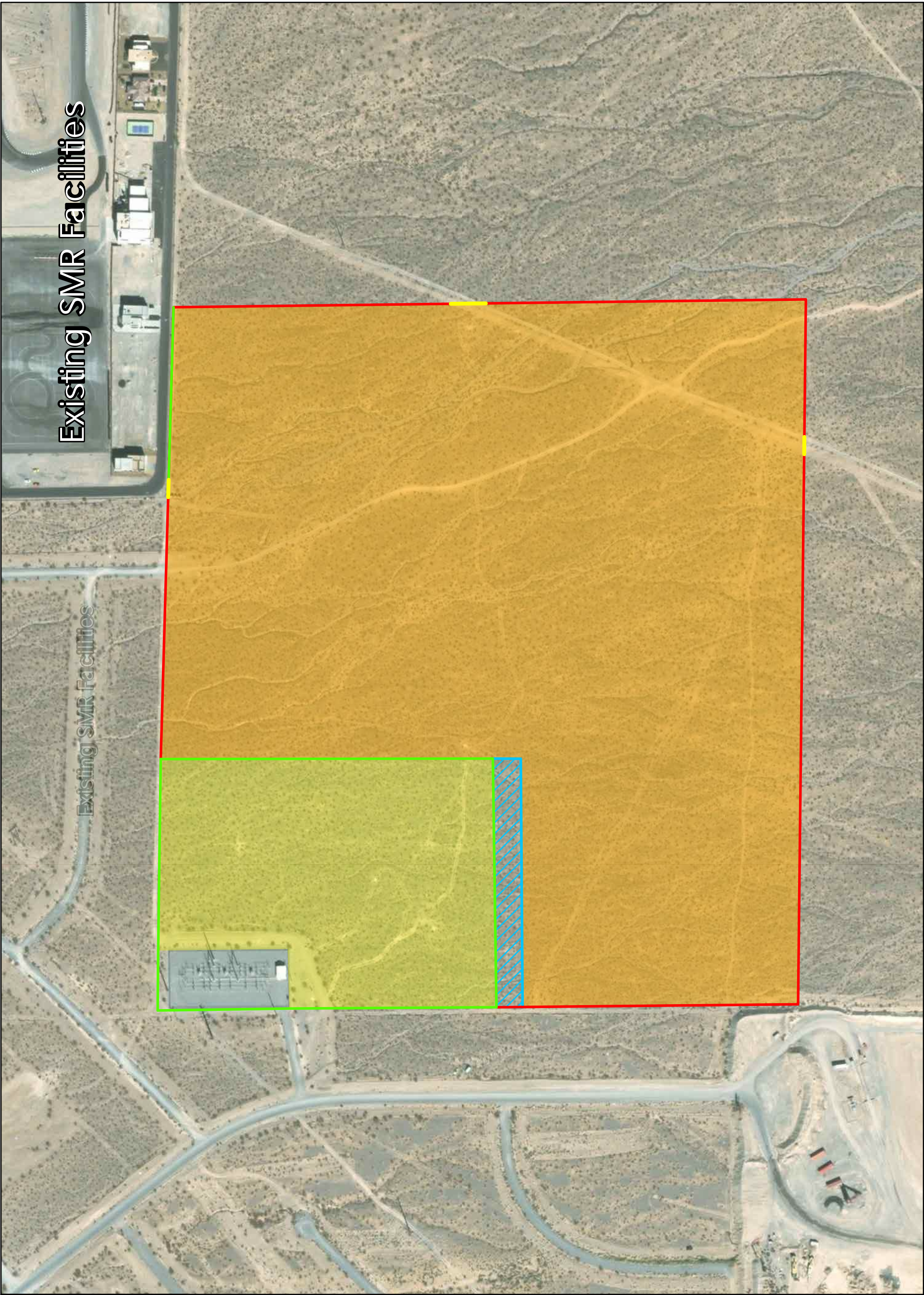


Figure 4. Go-Kart Facility
and Existing Fence Alignments
Spring Mountain Raceway
and Motor Resort
Go-Kart Project
Pahump, Nevada

Data Source:
Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, Maxar

bec environmental, inc.
Environmental Services

Legend

Go-Kart Access Gates	Gamebird Detention Basin
Adjacent Existing Fence Alignment	Fenced Gamebird Expansion Area
Go-Kart Fence Alignment	Go-Kart Project Boundary (~56ac)

0 115 230 460 690 920

Feet

N

Soil Map—Clark County Area, Nevada; and Nye County, Nevada, Southwest Part
(SMR Go-Karts Soils Map)



Soil Map—Clark County Area, Nevada; and Nye County, Nevada, Southwest Part
(SMR Go-Karts Soils Map)

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

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

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

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

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

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Clark County Area, Nevada

Survey Area Data: Version 17, Sep 11, 2021

Soil Survey Area: Nye County, Nevada, Southwest Part

Survey Area Data: Version 14, Sep 9, 2021

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

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

Date(s) aerial images were photographed: Apr 3, 2019—May 14, 2019

MAP LEGEND

MAP INFORMATION

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
202	Commski-Lastchance association	35.9	62.8%
Subtotals for Soil Survey Area		35.9	62.8%
Totals for Area of Interest		57.2	100.0%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
1317	Commski-Lastchance association	21.3	37.2%
Subtotals for Soil Survey Area		21.3	37.2%
Totals for Area of Interest		57.2	100.0%

Clark County Area, Nevada

202—Commski-Lastchance association

Map Unit Setting

National map unit symbol: n7nf

Elevation: 2,920 to 4,460 feet

Mean annual precipitation: 3 to 7 inches

Mean annual air temperature: 57 to 70 degrees F

Frost-free period: 180 to 300 days

Farmland classification: Not prime farmland

Map Unit Composition

Commski and similar soils: 70 percent

Lastchance and similar soils: 15 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Commski

Setting

Landform: Inset fans

Landform position (two-dimensional): Summit

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Alluvium derived from limestone and dolomite

Typical profile

H1 - 0 to 5 inches: very gravelly fine sandy loam

H2 - 5 to 60 inches: extremely gravelly sandy loam

Properties and qualities

Slope: 2 to 8 percent

Surface area covered with cobbles, stones or boulders: 5.0 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): High
(1.98 to 5.95 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 45 percent

Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0
mmhos/cm)

Sodium adsorption ratio, maximum: 12.0

Available water supply, 0 to 60 inches: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: A
Ecological site: R030XA058NV - LIMY 5-7 P.Z.
Other vegetative classification: Calcareous Loam 5-7 p.z.
(030XA066NV_1)
Hydric soil rating: No

Description of Lastchance

Setting

Landform: Fan remnants
Landform position (two-dimensional): Summit
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Alluvium derived from limestone and dolomite

Typical profile

H1 - 0 to 2 inches: extremely gravelly loam
H2 - 2 to 20 inches: very gravelly loam
H3 - 20 to 60 inches: cemented material

Properties and qualities

Slope: 2 to 8 percent
Depth to restrictive feature: 20 to 30 inches to petrocalcic
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low
to moderately high (0.00 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 50 percent
Maximum salinity: Nonsaline to slightly saline (0.4 to 4.0
mmhos/cm)
Sodium adsorption ratio, maximum: 13.0
Available water supply, 0 to 60 inches: Very low (about 1.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: C
Ecological site: R030XA058NV - LIMY 5-7 P.Z.
Other vegetative classification: LIMY 5-7 P.Z. (030XA058NV_1)
Hydric soil rating: No

Minor Components

Arizo

Percent of map unit: 9 percent
Landform: Drainageways
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R030XA076NV - UPLAND WASH
Hydric soil rating: No

Commski

Percent of map unit: 3 percent

Landform: Inset fans

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: R030XB073NV - VOLCANIC SLOPE 5-7 P.Z.

Other vegetative classification: LIMY 3-5 P.Z. (030XA073NV_1)

Hydric soil rating: No

Lastchance

Percent of map unit: 3 percent

Landform: Fan remnants

Down-slope shape: Linear

Across-slope shape: Convex

Ecological site: R030XA071NV - COBBLY LOAM 5-7 P.Z.

Hydric soil rating: No

Data Source Information

Soil Survey Area: Clark County Area, Nevada

Survey Area Data: Version 17, Sep 11, 2021

Soil Survey Area: Nye County, Nevada, Southwest Part

Survey Area Data: Version 14, Sep 9, 2021

Nye County, Nevada, Southwest Part

1317—Commski-Lastchance association

Map Unit Setting

National map unit symbol: nc8b

Elevation: 2,800 to 4,100 feet

Mean annual precipitation: 4 to 7 inches

Mean annual air temperature: 57 to 64 degrees F

Frost-free period: 180 to 250 days

Farmland classification: Not prime farmland

Map Unit Composition

Commski and similar soils: 70 percent

Lastchance and similar soils: 15 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Commski

Setting

Landform: Inset fans

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Alluvium derived from limestone and dolomite

Typical profile

H1 - 0 to 5 inches: very gravelly fine sandy loam

H2 - 5 to 14 inches: extremely gravelly sandy loam

H3 - 14 to 60 inches: extremely gravelly coarse sandy loam

Properties and qualities

Slope: 2 to 8 percent

Surface area covered with cobbles, stones or boulders: 2.0 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 50 percent

Maximum salinity: Slightly saline to moderately saline (4.0 to 8.0 mmhos/cm)

Sodium adsorption ratio, maximum: 12.0

Available water supply, 0 to 60 inches: Very low (about 2.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: B
Ecological site: R030XA007NV - GRAVELLY LOAM 5-7 P.Z.
Other vegetative classification: LIMY 5-7 P.Z. (030XA058NV_1)
Hydric soil rating: No

Description of Lastchance

Setting

Landform: Fan remnants
Across-slope shape: Convex
Parent material: Alluvium derived from limestone and dolomite

Typical profile

H1 - 0 to 2 inches: extremely gravelly loam
H2 - 2 to 20 inches: very gravelly loam
H3 - 20 to 60 inches: cemented material

Properties and qualities

Slope: 2 to 8 percent
Surface area covered with cobbles, stones or boulders: 0.0 percent
Depth to restrictive feature: 20 to 39 inches to petrocalcic
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low
to moderately high (0.00 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 50 percent
Maximum salinity: Nonsaline to slightly saline (0.4 to 4.0
mmhos/cm)
Sodium adsorption ratio, maximum: 13.0
Available water supply, 0 to 60 inches: Very low (about 1.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: C
Ecological site: R030XA007NV - GRAVELLY LOAM 5-7 P.Z.
Other vegetative classification: LIMY 5-7 P.Z. (030XA058NV_1)
Hydric soil rating: No

Minor Components

Arizo

Percent of map unit: 9 percent
Landform: Drainageways
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R030XA076NV - UPLAND WASH
Hydric soil rating: No

Lastchance

Percent of map unit: 3 percent

Landform: Fan remnants
Across-slope shape: Convex
Ecological site: R030XA071NV - COBBLY LOAM 5-7 P.Z.
Hydric soil rating: No

Commski

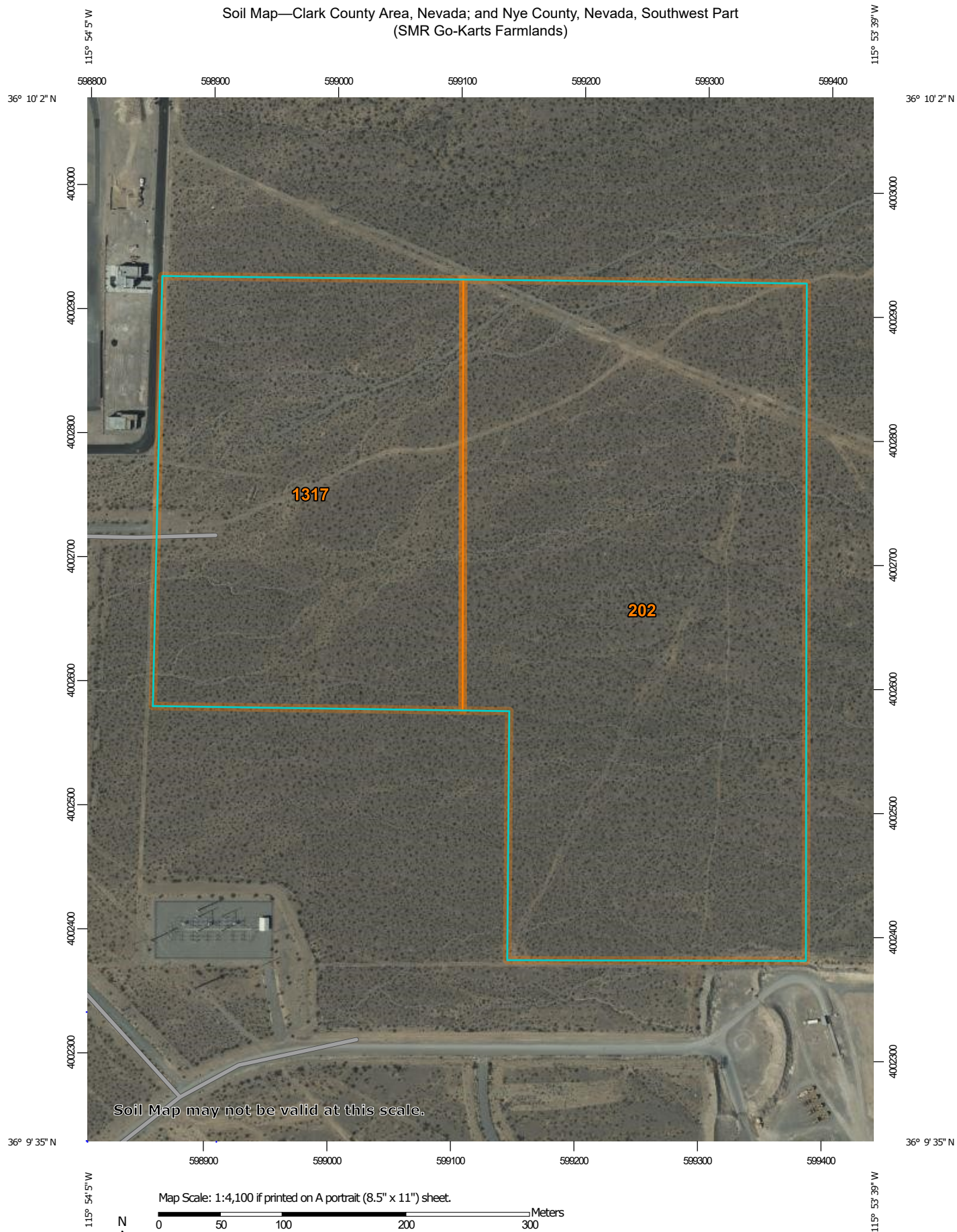
Percent of map unit: 3 percent
Landform: Inset fans
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: LIMY 3-5 P.Z. (030XA073NV_1)
Hydric soil rating: No

Data Source Information

Soil Survey Area: Clark County Area, Nevada
Survey Area Data: Version 17, Sep 11, 2021

Soil Survey Area: Nye County, Nevada, Southwest Part
Survey Area Data: Version 14, Sep 9, 2021

Soil Map—Clark County Area, Nevada; and Nye County, Nevada, Southwest Part (SMR Go-Karts Farmlands)



Prime and other Important Farmlands

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

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

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

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

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

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

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

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

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

Report—Prime and other Important Farmlands

Prime and other Important Farmlands—Clark County Area, Nevada		
Map Symbol	Map Unit Name	Farmland Classification
202	Commski-Lastchance association	Not prime farmland

Prime and other Important Farmlands—Nye County, Nevada, Southwest Part		
Map Symbol	Map Unit Name	Farmland Classification
1317	Commski-Lastchance association	Not prime farmland

Data Source Information

Soil Survey Area: Clark County Area, Nevada

Survey Area Data: Version 17, Sep 11, 2021

Soil Survey Area: Nye County, Nevada, Southwest Part

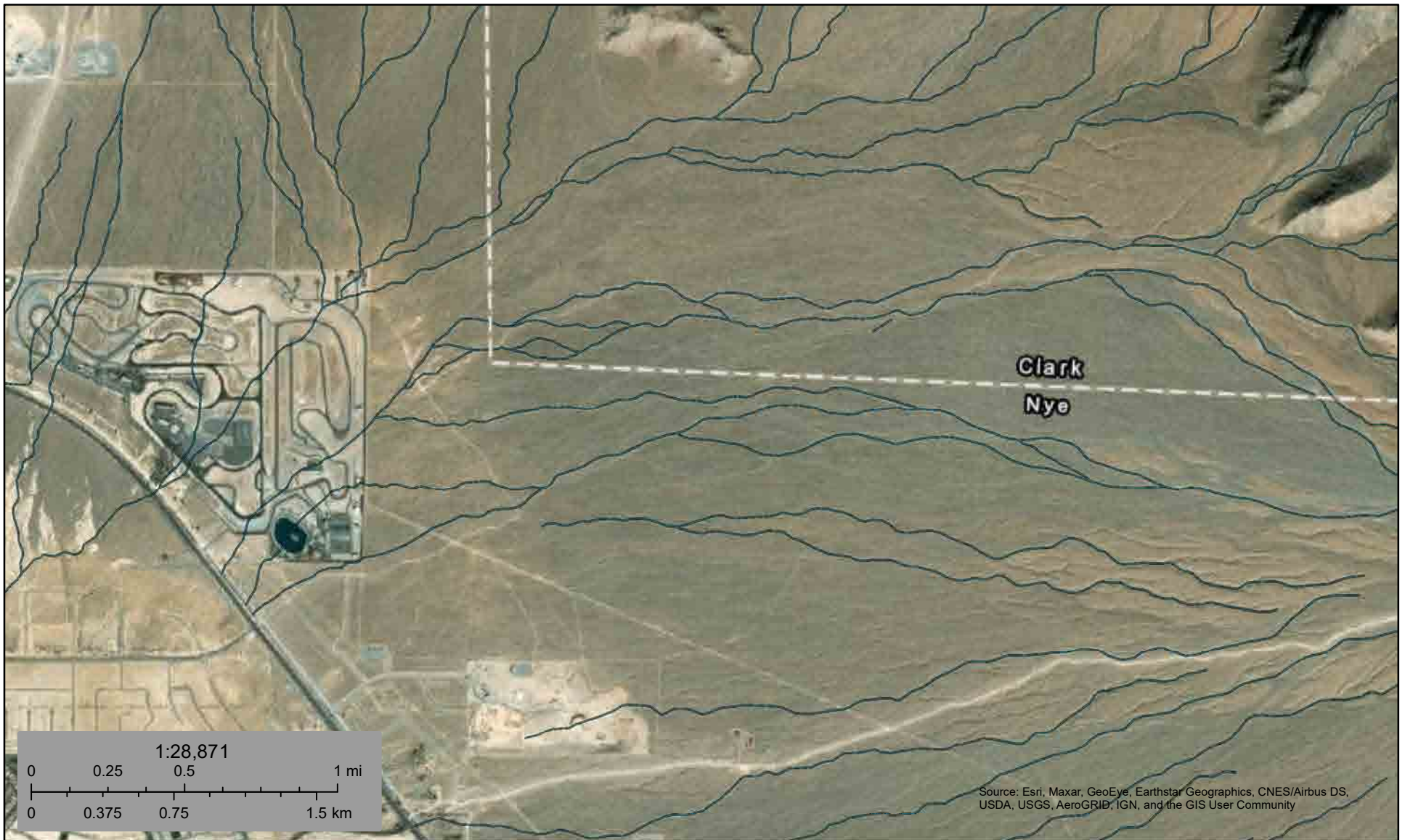
Survey Area Data: Version 14, Sep 9, 2021



U.S. Fish and Wildlife Service

National Wetlands Inventory




SMR Go-Karts NWI Map



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

February 22, 2022

Wetlands

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

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



NDWR Wells & Springs Map



Legend

- Mining & Dewatering
- Power
- Municipal
- Domestic
- Industrial Commercial
- Monitoring
- Irrigation & Stock
- All Others
- Major Roads
 - Interstate
 - US Highway
 - State Highway
- Local Roads
- Spring Discharge Measuremer
 - No Status
 - Active
 - Inactive
- Stream Discharge Measureme
 - No Status
 - Active
 - Inactive
- State Boundary

1.1 0 0.56 1.1 Miles

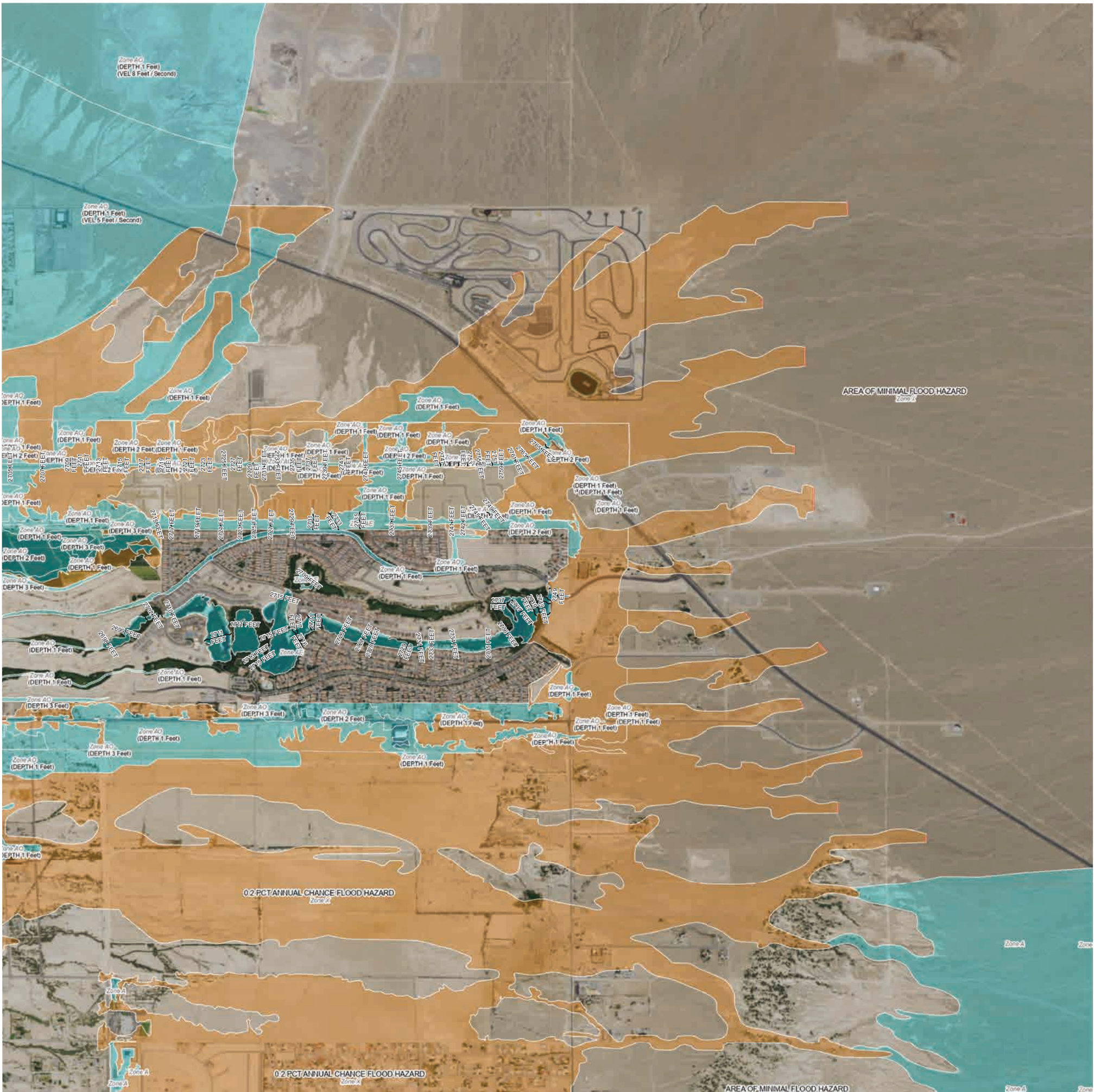
WGS_1984_Web_Mercator_Auxiliary_Sphere
2/23/2022

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

THIS MAP IS NOT TO BE USED FOR NAVIGATION

1: 35,259





FLOOD HAZARD INFORMATION

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

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

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at <https://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM index. These may be ordered directly from the Flood Map Service Center at the number listed above.

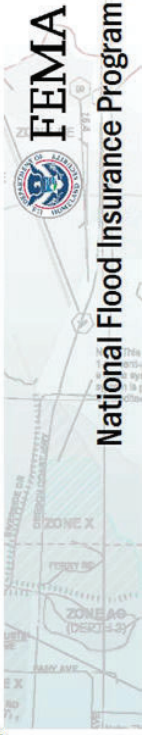
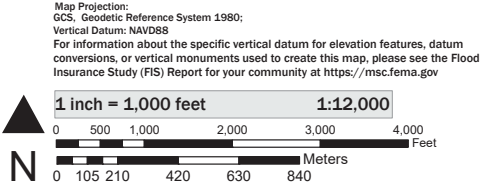
For community and countywide map dates, refer to the Flood Insurance Study Report for this jurisdiction. To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-636-6620.

Basemap information shown on this FIRM was provided in digital format by the United States Geological Survey (USGS). The basemap shown is the USGS National Map: Orthoimagery. Last refreshed October, 2020.

This map was exported from FEMA's National Flood Hazard Layer (NFHL) on 2/28/2022 11:35 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time. For additional information, please see the Flood Hazard Mapping Updates Overview Fact Sheet at <https://www.fema.gov/media-library/assets/documents/118418>

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards. This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date.

SCALE



NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP




PANEL 8845 OF 8940

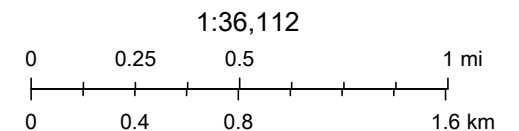
Panel Contains:		
COMMUNITY	NUMBER	PANEL
NYE COUNTY	320018	8845

SMR Go-Karts Wilderness Resources Map



2/28/2022, 12:13:18 PM

-  NLCS National Monuments, National Conservation Areas and Similar Designations Polygons
-  NLCS Wilderness Study Area
-  NLCS Wilderness Area



Bureau of Land Management, Network Operations Center (NOC), Bureau of


ArcGIS Web AppBuilder

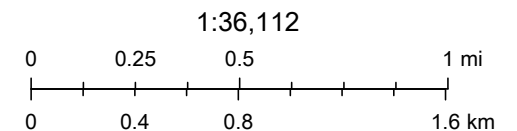
BLM Energy, Minerals & Realty Management | U.S. Department of Interior, Bureau of Land Management (BLM), Alaska State Office | Compiled by the Bureau of Land Management (BLM), National Operations Center (NOC), OC-530. | Bureau of Land Management |

SMR Go-Karts Areas of Critical Ecological/Environmental Concern



2/28/2022, 12:22:26 PM

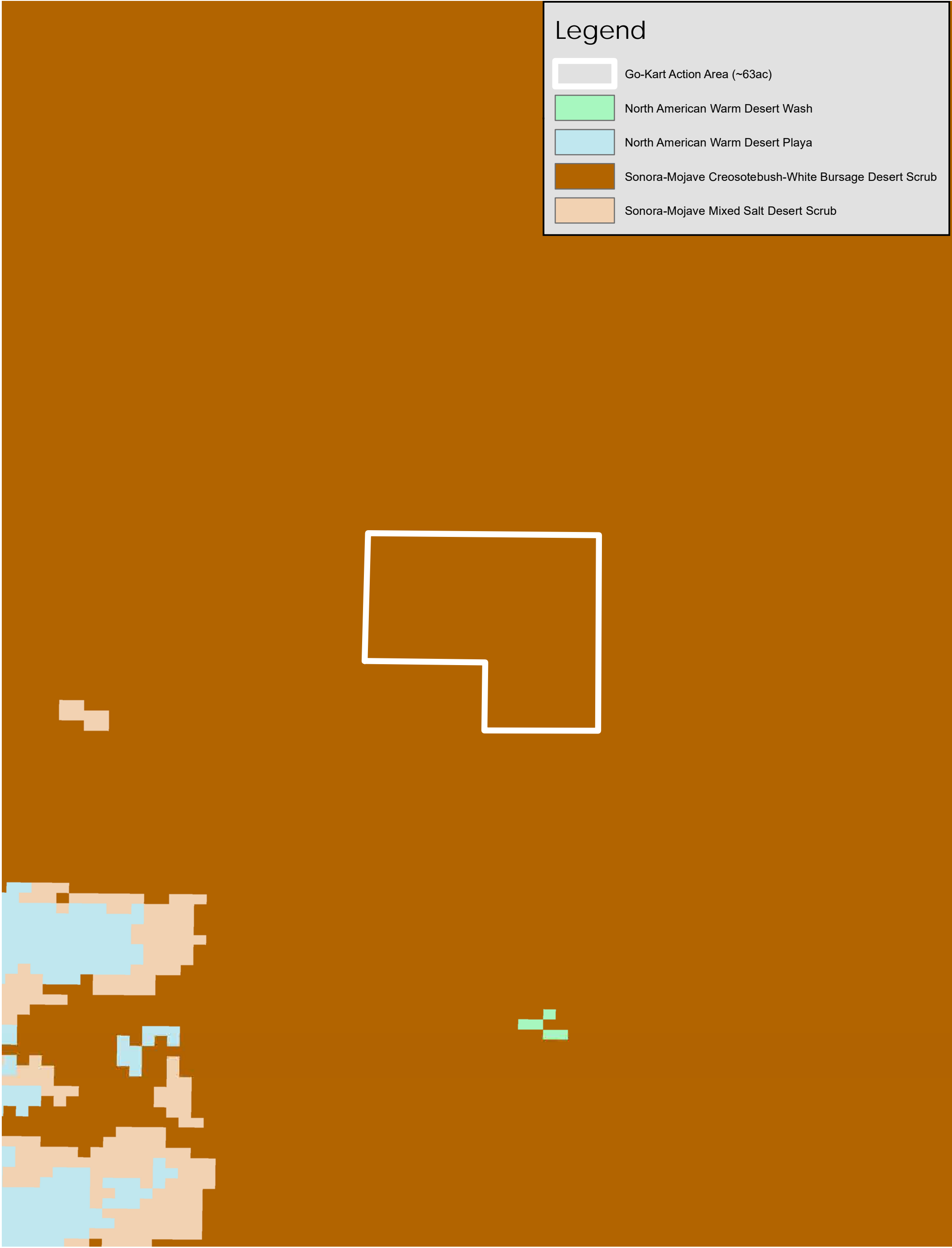
 Data for public viewing



Compiled by the Bureau of Land Management (BLM), National Operations

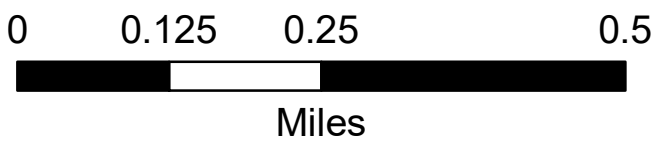
ArcGIS Web AppBuilder

BLM Energy, Minerals & Realty Management | U.S. Department of Interior, Bureau of Land Management (BLM), Alaska State Office | Compiled by the Bureau of Land Management (BLM), National Operations Center (NOC), OC-530. | Bureau of Land Management |



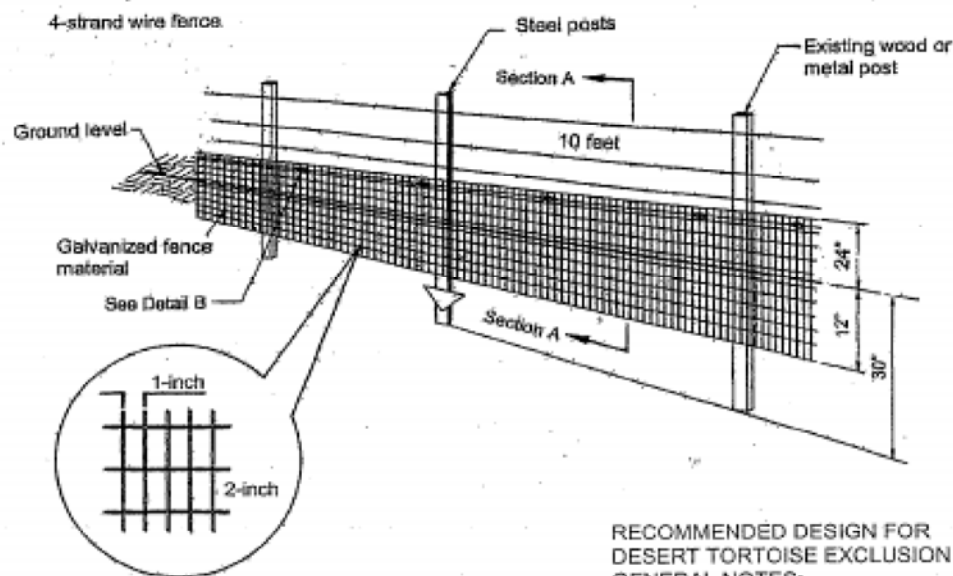
Spring Mountain Raceway and Motor Resort
Habitat Conservation Plan
ITP Application Package
Nye County, Nevada

Figure 12. Veg Association Map

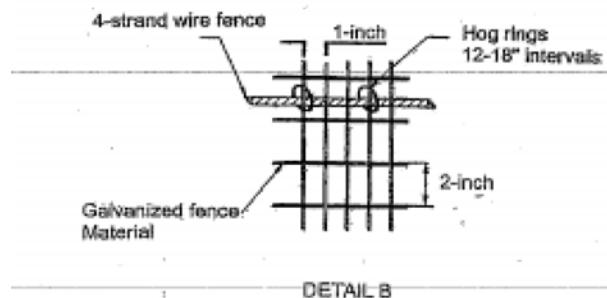


*APPENDIX **B***
USFWS Guidelines For Desert Tortoise Exclusion Fence

DESERT TORTOISE EXCLUSION FENCE (2005)

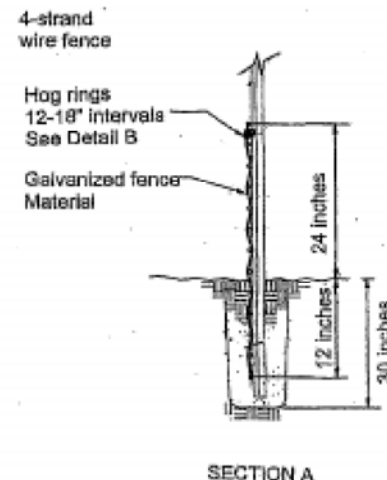


DETAIL A



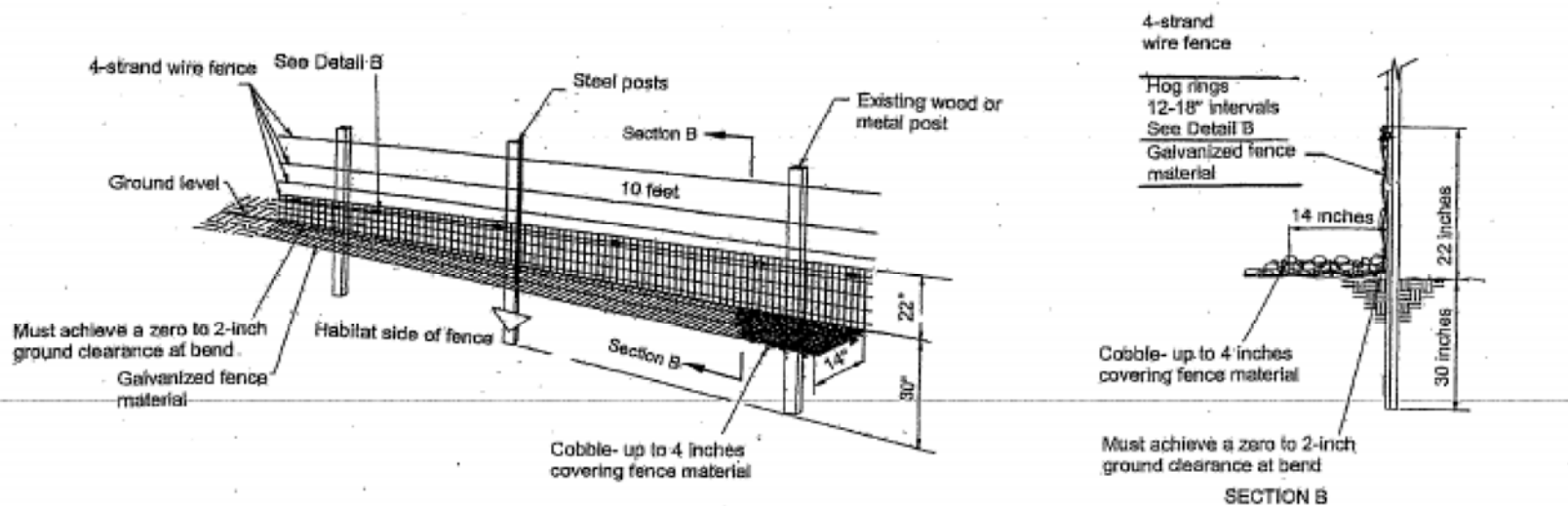
RECOMMENDED DESIGN FOR DESERT TORTOISE EXCLUSION FENCE GENERAL NOTES:

1. Ensure that fence posts and materials conform to the standards approved by the U.S. Fish and Wildlife Service.
2. Ensure that the height above ground level is no less than 18 inches and no higher than 24 inches.
3. Ensure that the depth of fence material below ground level is about 12 inches but no less than 6 inches. (See SECTION A above)
4. Install additional steel posts when span between existing fence posts exceed 10 feet.
5. Attach fence material to existing fence or wire using hog rings at 12-inch intervals.
6. Fasten fence material to posts with 3 tie wires with a wire near the top, bottom, and center of the fence material.
7. Backfill trenches with excavated material and compact the material.
8. Attach fence material to all gates. Ensure that clearance at base of gate achieves zero ground clearance.
9. Substitute smooth wire for barbed wire if additional support wires are necessary.
10. The number and placement of support wires may be modified to allow sheep and deer to pass safely.
11. Erosion at the edge of the fence material where the fence crosses washes may occur and requires appropriate and timely monitoring and repair.
12. Tie the fence into existing culverts and cattle guards when determined necessary to allow desert tortoise passage underneath roadways.



FOR BEDROCK OR CALICHE SUBSTRATE

1. Use this fence design (see below) only for that portion of the fence where fence material cannot be placed 6 inches below existing ground level due to presence of bedrock, large rocks or caliche substrate.
2. Ensure that the fence height above ground level is no less than 22 inches.
3. Ensure that there is a zero to 2-inch ground clearance at the bend.
4. Ensure that the bent portion of the fence is lying on the ground and pointed in the direction of desert tortoise habitat.
5. Cover the portion of the fence that is flush with the ground with cobble (rocks placed on top of the fence material to a vertical thickness up to 4 inches).
6. When substrate no longer is composed of bedrock or caliche, install fence using design shown above.



APPENDIX **C**
Agency Data Queries



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Southern Nevada Fish And Wildlife Office
4701 N. Torrey Pines Drive
Las Vegas, NV 89130-2301
Phone: (702) 515-5230 Fax: (702) 515-5231

In Reply Refer To:

January 21, 2022

Consultation Code: 08ENVS00-2022-SLI-0084

Event Code: 08ENVS00-2022-E-00162

Project Name: Spring Mountain Raceway and Motor Resort - Go-Kart Expansion Project

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

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

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

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

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2))

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

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

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

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

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at:

<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>;

<http://www.towerkill.com>; and

www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

[http://](http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html)

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

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

Official Species List

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

This species list is provided by:

Southern Nevada Fish And Wildlife Office

4701 N. Torrey Pines Drive
Las Vegas, NV 89130-2301
(702) 515-5230

Project Summary

Consultation Code: 08ENVS00-2022-SLI-0084

Event Code: Some(08ENVS00-2022-E-00162)

Project Name: Spring Mountain Raceway and Motor Resort - Go-Kart Expansion Project

Project Type: DEVELOPMENT

Project Description: Project includes expansion of existing facilities to include a go-kart track and new buildings on approximately 47 acres of private lands in Pahrump, Nevada.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@36.16392425,-115.89796184674725,14z>



Counties: Clark and Nye counties, Nevada

Endangered Species Act Species

There is a total of 4 threatened, endangered, or candidate species on this species list.

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

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

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

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

Birds

NAME	STATUS
Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered
Yuma Ridgways (clapper) Rail <i>Rallus obsoletus [=longirostris] yumanensis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3505	Endangered

Reptiles

NAME	STATUS
Desert Tortoise <i>Gopherus agassizii</i> Population: Wherever found, except AZ south and east of Colorado R., and Mexico There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/4481	Threatened

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

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

USFWS National Wildlife Refuge Lands And Fish Hatcheries

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

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

Migratory Birds

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

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

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

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

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

NAME	BREEDING SEASON
Costa's Hummingbird <i>Calypte costae</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9470	Breeds Jan 15 to Jun 10
Golden Eagle <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Dec 1 to Aug 31

NAME	BREEDING SEASON
Long-eared Owl <i>asio otus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3631	Breeds Mar 1 to Jul 15
Pinyon Jay <i>Gymnorhinus cyanocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9420	Breeds Feb 15 to Jul 15

Probability Of Presence Summary

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

Probability of Presence (■)

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

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season (■)

Survey Effort (|)

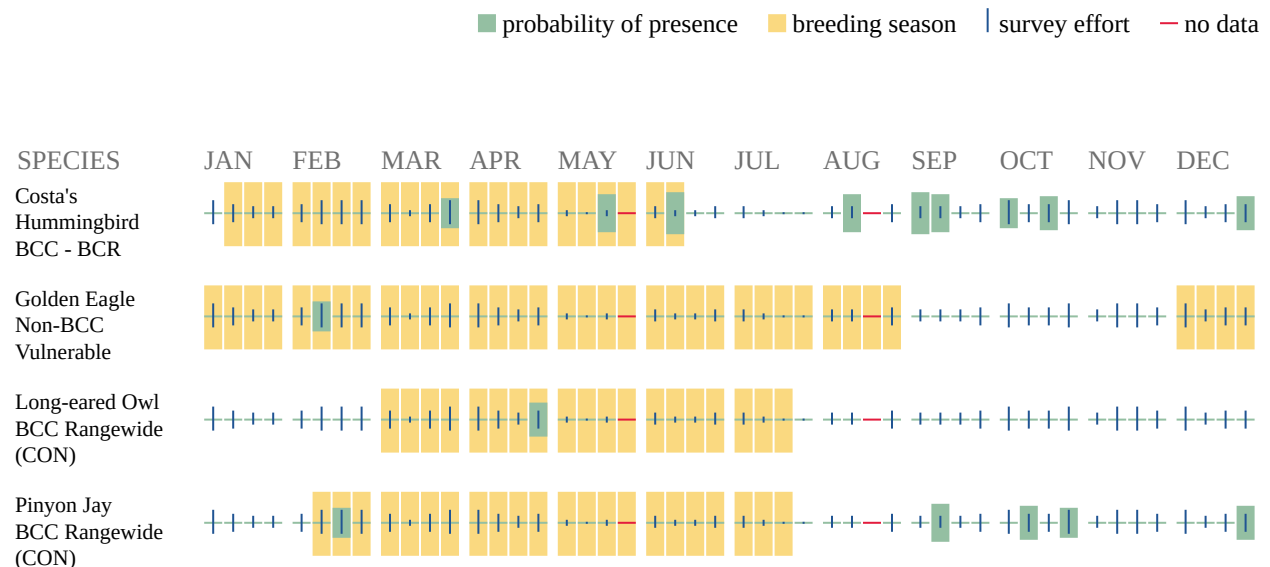
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Additional information can be found using the following links:

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

Migratory Birds FAQ

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

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

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

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

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

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

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

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

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

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

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your

project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

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

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

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

Details about birds that are potentially affected by offshore projects

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

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

What if I have eagles on my list?

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

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no

data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Wetlands

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

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

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

WETLAND INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED.
PLEASE VISIT [HTTPS://WWW.FWS.GOV/WETLANDS/DATA/MAPPER.HTML](https://www.fws.gov/wetlands/data/mapper.html) OR CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.



STEVE SISOLAK
Governor

STATE OF NEVADA

DEPARTMENT OF WILDLIFE

6980 Sierra Center Parkway, Suite 120

Reno, Nevada 89511

Phone (775) 688-1500 • Fax (775) 688-1595

TONY WASLEY
Director

BONNIE LONG
Deputy Director

JACK ROBB
Deputy Director

Joshua Eastes
Environmental Scientist
BEC Environmental
7251 W Sahara Ave, Ste #120
Las Vegas, Nevada 89117

January 24, 2022

Re: SpringMtnRaceway

Dear Joshua Eastes:

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

To adequately provide wildlife resource information in the vicinity of the proposed project the NDOW delineated an area of interest that included a four-mile buffer around the project area provided by you on Friday, January 21, 2022. Wildlife resource data was queried from the NDOW databases based on this area of interest. The results of this analysis are summarized below.

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

Greater Sage-Grouse - There is no known greater sage-grouse habitat in the vicinity of the project area.

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

Raptor species are protected by State and Federal laws. In addition, bald eagle, burrowing owl, California spotted owl, ferruginous hawk, flammulated owl, golden eagle, northern goshawk, peregrine falcon, prairie falcon, and short-eared owl are NDOW species of special concern and are target species for conservation as outlined by the Nevada Wildlife Action Plan. Per the *Interim Golden Eagle Technical Guidance: Inventory and Monitoring Protocols; and Other Recommendations in Support of Golden Eagle Management and Permit Issuance* (United States Fish and Wildlife Service 2010) we have queried our

raptor nest database to include raptor nest sites within ten miles of the proposed project area. There is one known raptor nest site within ten miles of the project area:

Last Active	Last Check	Township/Range/Section	Probable Use
	3/18/1975		falcon

Other Wildlife Resources

There are no big game and one small game water developments in the vicinity of the project area. The following species have also been observed in the vicinity of the project area:

Common Name	ESA	State	SWAP SoCP
coachwhip			
common chuckwalla			Yes
common kingsnake			
common raven		Protected	
desert banded gecko			Yes
desert glossy snake			
desert horned lizard			Yes

ESA: Endangered Species Act Status

State: State of Nevada Special Status

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

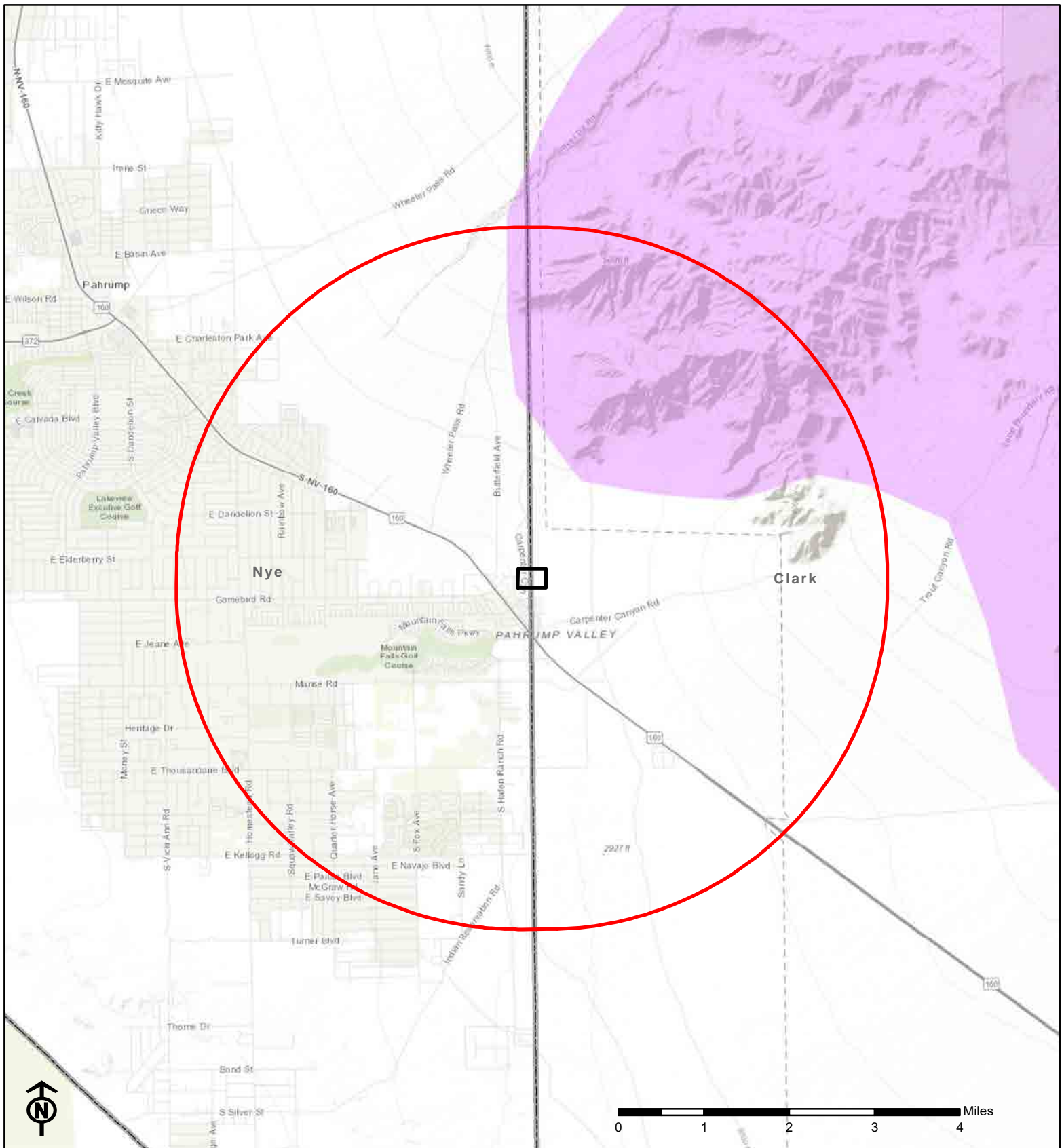
The proposed project area may also be in the vicinity of abandoned mine workings, which often provide habitat for state and federally protected wildlife, especially bat species, many of which are protected under NAC 503.030. To request data regarding known abandoned mine workings in the vicinity of the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




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

Brad Hardenbrook - Southern Region Supervising Habitat Biologist (702.668.3960)

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

If you have any questions regarding the results or methodology of this analysis, please do not hesitate to contact Jinna Larkin at (775) 688-1580.



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

SpringMtnRaceway Elk Distribution

January 24, 2022

Projection: UTM Zone 11 North, NAD83

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





STATE OF NEVADA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
Nevada Division of Natural Heritage

Steve Sisolak
Governor

Bradley Crowell
Director

Kristin Szabo
Administrator

24 January 2022

Joshua Eastes
BEC Environmental, Inc.
7241 W. Sahara Ave., Suite 120
Las Vegas, NV 89117

RE: Data request received 21 January 2022

Dear Mr. Eastes:

We are pleased to provide the information you requested on endangered, threatened, candidate, and/or At-Risk plant and animal taxa recorded within or near the Spring Mountain Raceway and Motor Resort-Go Kart Expansion Project area, in Nye County. We searched our database and maps for the following, a 2-kilometer radius around map and project shapefile provided.

Township 20S Range 54E Section 34

There are no at-risk taxa recorded within the given area. However, habitat may be available for: the halfring milkvetch, *Astragalus mohavensis* var. *hemigyus*, a Nevada Bureau of Land Management (BLM) Sensitive Species; the Mojave desert tortoise, *Gopherus agassizii*, a Federally Threatened Taxon; and the Mexican free-tailed bat, *Tadarida brasiliensis*, a Nevada BLM Sensitive Species. The Nevada Department of Wildlife (NDOW) manages, protects, and restores Nevada's wildlife resources and associated habitat. Please contact Jinna Larkin, NDOW GIS Coordinator (775) 688-1580 to obtain further information regarding wildlife resources within and near your area of interest. Removal or destruction of state protected flora species requires a special permit from Nevada Division of Forestry (NRS 527.270).

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

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

Sincerely,

A handwritten signature in blue ink, appearing to read "Eric S. Miskow".

Eric S. Miskow
Biologist/Data Manager

*APPENDIX **D***

Desert Tortoise Survey Report
BEC, 2022



Desert Tortoise Presence/Absence Survey Report

Spring Mountain Raceway and Motor Resort Go Kart Project

Prepared For:

*Spring Mountain Raceway, LLC
4767 S Highway 160
Pahrump, NV 89048
(775)727-6363*

Prepared By:

*BEC Environmental, Inc.
7241 West Sahara Avenue, Suite 120
Las Vegas, Nevada 89117
(702)304-9830
www.becnv.com*

Project No. 114.21.003

Date 03/7/2022

Table of Contents

STANDARD ABBREVIATIONS.....	II
1 INTRODUCTION AND BACKGROUND	1
1.1 Overview	1
1.2 Background	1
1.3 Proposed Project Area and Associated Action Area	1
2 PREVIOUS SURVEY RESULTS.....	2
2.1 2018 BLM Land Transfer Survey Results	2
2.2 2020 Gamebird Expansion Project Results.....	2
3 SURVEY METHODS	2
3.1 Site Characterization.....	3
3.2 Desert Tortoise Presence/Absence Surveys.....	3
4 SITE CHARACTERIZATION AND PRESENCE/ABSENCE SURVEY RESULTS.....	3
4.1 Site Characterization Results	3
4.2 Presence/Absence Survey Results	4
5 SUMMARY/DISCUSSION AND PRELIMINARY EFFECT FINDING	5
5.1 Summary/Discussion	5
5.2 Preliminary Effect Finding.....	5
REFERENCES.....	6

List of Tables

Table 1. Burrows Observed within the Survey Area.	4
Table 2. Winter Precipitation in Pahrump, Nevada (2016 through 2022).....	5

List of Appendices

APPENDIX A – Figures
APPENDIX B – Photo Log – Site Characterization
APPENDIX C – Photo Log – Observed Burrows
APPENDIX D – Field Forms

STANDARD ABBREVIATIONS

BSP	Biological Survey Plan
DT	Desert Tortoise
DTSR	Desert Tortoise Survey Report
ESA	Endangered Species Act
IPaC	Information for Planning and Consultation
MBTA	Migratory Bird Treaty Act
NDOW	Nevada Department of Wildlife
NNHP	Nevada Natural Heritage Program
NRCS	Natural Resources Conservation Service
MSHCP	Multiple Species Habitat Conservation Plan
SWReGAP	Southwest Regional Gap Analysis Program
USFWS	United States Fish and Wildlife Service
USGS	United State Geological Survey

1 INTRODUCTION AND BACKGROUND

1.1 Overview

Spring Mountain Raceway and Motor Resort, LLC (referred to as SMR) is applying for an Incidental Take Permit (ITP) under Section 10(a)(1)(B) of the Endangered Species Act (ESA) for activities associated with the development of a new Go Kart Track and associated facilities on approximately 56 acres of relatively undeveloped private land in Pahrump, Nye County, Nevada (**Appendix A, Figure 1**). The project would entail installation of tortoise exclusion fencing, blading, grading, and construction of a go-kart track, administrative buildings, stormwater management features, and multiple parking lots. These development activities may affect the Mojave Desert tortoise (*Gopherus agassizii*), a species listed as threatened under the ESA. In accordance with the requirements of the ESA, SMR contracted BEC Environmental, Inc. (BEC) to develop a Habitat Conservation Plan (HCP) in support of the permit application.

BEC conducted a desert tortoise presence/absence survey to inform the development of the HCP and to facilitate the consultation process with the U.S. Fish and Wildlife. Results of the presence/absence survey are summarized in this report.

1.2 Background

SMR acquired approximately 620 acres from the Bureau of Land Management (BLM) through a modified competitive land sale completed on February 19, 2020, with the objective of expanding the current 250-acre layout of the Spring Mountain Raceway and Motor Resort to the north and east of the existing facilities. Construction of the 227-acre northern expansion project is currently underway in accordance with an HCP (BEC, 2020) and Incidental Take Permit (USFWS, 2021).

Presence/absence surveys to support the land acquisition were completed in 2018 (Darling Geomatics, 2018) and included the northern expansion project, as described in the SMR northern expansion HCP. The SMR Go-Kart Project would be located on an approximately 56-acre portion of the eastern expansion area, adjacent to the Gamebird substation (**Appendix A, Figure 1**).

GridLiance West LLC (GLW) acquired from SMR approximately 14 acres of lands east of the existing SMR facility that included the existing Gamebird Substation and open area; GLW expanded the existing facility (**Appendix A, Figure 1**) within the 14-acre plot. GLW also acquired an easement of 4.2 acres of land from SMR for construction of the transmission interconnect north of the substation. These activities were conducted in accordance with an HCP (SWCA, 2020a). The expanded Gamebird substation borders the Go-Kart Project Area to the south, and the transmission interconnect bisects the central portion of the Project Area (**Appendix A, Figure 2**).

1.3 Proposed Project Area and Associated Action Area

The Proposed Project Area includes approximately 56 acres; all construction activities would be conducted within the 56-acre Project Area. The Project Area would be bounded by desert tortoise exclusion fencing followed by relocation activities to remove tortoises from the area. After tortoises are relocated from the Project Area, blading, grading, and construction would be initiated.

The Action Area for this survey and associated report includes the footprint of the Proposed Project Area and an approximately 100-ft buffer around the north and eastern boundary of the Project Area where desert tortoises would be relocated if found within the Project Area. The Action Area encompasses approximately 63 acres.

The Proposed Project is in the town of Pahrump, on the north side of State Route 160 and east of the existing SMR facility (**Appendix A, Figure 1**), within the Mount Diablo Meridian, Township 20 South, Range 54 East, Section 34:

- S ½ of NE ¼ of SW ¼
- N ½ of SE ¼ of SW ¼
- SW ¼ of NW ¼ of SE ¼
- W ½ of SW ¼ of SE ¼

2 PREVIOUS SURVEY RESULTS

Desert tortoise surveys were conducted on all or portions of the 620-acre area purchased by SMR in 2018 from BLM and were used to inform the development of the SMR northern expansion HCP (BEC, 2020). In 2020, surveys were conducted in support of the development of the Gamebird substation expansion HCP (SWCA, 2020a).

The methods and results of these surveys were considered while planning the current survey effort, and for discussing the proposed surveys with USFWS. Brief summaries of the methods and results of the previous surveys are included in the following sections to support a comparison of the prior results to those of the current efforts.

2.1 2018 BLM Land Transfer Survey Results

Desert tortoise surveys were conducted in 2018 on approximately 692 acres to support the Environmental Assessment of the proposed transfer of 620 acres from BLM to SMR (Darling Geomatics, 2018). The survey included the northern and eastern expansion areas, including the current Proposed Project Area. Surveys were conducted on May 8, 9, and 10, 2018 in accordance with the USFWS Mojave Desert Tortoise Survey Protocol (USFWS, 2017).

No tortoises were observed within the Proposed Project Boundary. Two adult desert tortoises were observed inside burrows within the eastern expansion area, near the eastern boundary of the current Proposed Project (see **Appendix A, Figure 3**). In addition to the desert tortoises, over 40 burrows in varying stages of use and disrepair were observed in the eastern expansion area (Darling Geomatics, 2018).

2.2 2020 Gamebird Expansion Project Results

Tortoise surveys were also conducted in 2020 to support development of the HCP for the Gamebird substation expansion project. The survey covered the entire substation expansion and transmission line; approximately 4.2 acres surveyed as part of those surveys bisect the current Project (SWCA, 2020b). Given the linear nature of the transmission line, adjacent habitat was also surveyed using belt transects and wide transects parallel to the transmission line corridor (SWCA, 2020b). Surveys were conducted on April 24, May 18, and May 23, 2020, in accordance with USFWS survey protocols (USFWS, 2017).

Four burrows and two adult tortoises were located during the surveys and are included in **Appendix A, Figure 3**.

3 SURVEY METHODS

Considering the results of the previous surveys, BEC biologists proposed to USFWS surveys for the Proposed Project be conducted in accordance with the USFWS 2019 pre-project survey protocols for small projects, like those used for the 2020 surveys, including conducting surveys in the less-active

season. USFWS concurred with the species targeted for surveys, and the associated survey methods; the tortoise surveys were implemented as described in the following sections. USFWS concurred that no other species warranted targeted surveys as part of the current effort.

3.1 Site Characterization

During the tortoise surveys, biologists were prepared to record incidental observations of other sensitive species and habitat within the Proposed Project Area; no other sensitive species were observed. Biologists also noted cactus and yucca species present in the area, but an inventory was not developed as the Project would occur on private lands. Additionally, biologists sought out non-native and noxious weed species listed on the Nevada Noxious Weeds list maintained by the Nevada Department of Agriculture.

3.2 Desert Tortoise Presence/Absence Surveys

Based on guidance provided during an initial meeting with USFWS, the surveys were conducted using similar methods to those followed for the 2018 and 2020 surveys, and in accordance with the *Preparing for Any Action That May Occur Within the Range of The Mojave Desert Tortoise (Gopherus agassizii)* (USFWS, 2019).

Protocols for small projects (<500 acres) were utilized based on the 63-acre Action Area. Specifically, the protocol implemented included:

- Belt transects approximately 10 meters (30 feet) apart were walked to achieve 100% coverage of the area surveyed.
- Observed sign of the tortoise (i.e., individuals, burrows, carcasses, scat, etc.) was documented, including photographs, survey data forms, and GPS location data.
 - Burrows were photographed, the location recorded, but were not physically investigated for occupation (i.e., scoped, tapped) to avoid harassing tortoises if present.
 - Tracks documenting the location of each transect were recorded and are included in the report.
 - Incidental observations of all wildlife and habitat (including the other protected species described in above) were recorded.
- Burrow condition class, type (material), approximate size (width, height, and depth), back wall visibility, number of entrances, UTM's location, photographs, and signs of recent use (scat, tracks, etc.) were recorded for all burrows.

4 SITE CHARACTERIZATION AND PRESENCE/ABSENCE SURVEY RESULTS

4.1 Site Characterization Results

As previously discussed, the Project boundary was bounded by the completed block wall of the expanded Gamebird substation. Adjacent to the east wall of the Gamebird substation is a large stormwater management basin. The southeastern portion of the Project Boundary was bounded by a large berm associated with the material pit on the adjacent property. The remainder of the southern Project Boundary is bounded by a section-line road, and farther south by the access road to the material pit. The northwest corner of the Project Area is bounded by the existing SMR facility.

The Project Area is bisected by three roads and numerous small trails. Two of the roads are associated with the transmission lines bisecting the area, and the third is a road from private land southwest of the Project Area used by the public to access adjacent public lands to the east. Existing disturbance along

these transmission lines and roads was approximately 20 meters wide (**Appendix B, Photos 1-2**). Occasional trash and debris were observed.

Dominant vegetation throughout the Project Area included creosote bush (*Larrea tridentata*) and white bursage (*Ambrosia dumosa*) shrubs. Rhatany (*Krameria* sp.), and ephedra (*Ephedra nevadensis*) were also sparse across the survey area (**Appendix B, Photo 5**). Saltbush (*Atriplex polycarpa*) was observed within several ephemeral washes throughout the eastern half of the Project Area. Silver cholla (*Cylindropuntia echinocarpa*), Cotton-top cactus (*Echinocactus polycephalus*), beavertail pricklypear (*Opuntia basilaris*), Mojave yucca (*Yucca shidigera*), and fishhook cactus (*Mammillaria* sp.) were present but not abundant in the area (**Appendix B, Photos 3-4**).

Numerous ephemeral washes flow northeast to southwest through the Project Area. Indications of relatively recent and significant flows through the area were observed, including exposed cobble, scour marks, and sediment deposition. Smaller areas with indications of sheet flow were present between these washes as well. The observations are consistent with monsoonal rain events that occurred in July 2021. Observed soils were gravely/cobbly loam with patches of well-developed cryptobiotic crusts (**Appendix B, Photo 6**).

4.2 Presence/Absence Survey Results

BEC biologists, led by Authorized Desert Tortoise Biologist Danny Rakestraw, surveyed the Project Area for live tortoises, burrows, and other tortoise sign on February 11, 2022. The temperature recorded onsite ranged from 36°F in the morning to 73°F in the afternoon, as is typical for this season and area (NOAA, 2022).

The biologists surveyed a total of 33.6 km of transects (**Appendix A, Figure 4**) and found eight burrows within the boundary of the Proposed Project (**Table 1**; and **Appendix A, Figure 3**). A photo log of observed burrows is provided in **Appendix C**. Field forms from the survey are also provided in **Appendix D**.

Table 1. Burrows Observed within the Survey Area.

Burrow ID	Burrow Type	Burrow Condition Class	Width (in)	Height (in)	Depth (in)	Back Visible?	# of Entrances	Photo Log #
B1	Soil	3. Definitely DT - Deteriorated/Collapsed	15	10	12	Yes	1	1
B2	Caliche	3. Definitely DT - Deteriorated/Collapsed	15	12	24	Yes	1	2
B3	Soil	3. Definitely DT - Deteriorated/Collapsed	12	6	22	Yes	1	3
B4	Soil	2. Definitely DT - Good Condition	14	12	24	Yes	1	4
B5	Soil	2. Definitely DT - Good Condition	13	10	30	Yes	1	5
B6	Soil	2. Definitely DT - Good Condition	13	10	36	No	1	6
B7	Soil	4. Possibly DT - Good Condition	13	10	30	Yes	1	7-8
B8	Soil	2. Definitely DT - Good Condition	12	9	36	Yes	1	9-10

5 SUMMARY/DISCUSSION AND PRELIMINARY EFFECT FINDING

5.1 Summary/Discussion

The Project Area is located within suitable habitat for the Mojave desert tortoise, but no live tortoises or active burrows were observed during the presence/absence survey. Given the timing of the survey, and the results of previous surveys, these results are consistent with what was expected.

The survey was conducted on a day when temperatures reached 73°F, below the 95°F threshold for the typical tortoise active season; and though temperatures were unseasonably warm, they had not consistently been within the range (63-66 °F) typically associated with higher tortoise activity (e.g., foraging, etc.) to expect tortoise behavior attributed to the active tortoise season (USFWS, 2009). Additionally, precipitation in Pahrump, Nevada in the 2020-2021 winter was low compared to the previous four winters, and was under 1.5-in, further reducing the probability that tortoises would be observed outside burrows (USFWS, 2017).

Table 2. Winter Precipitation in Pahrump, Nevada (2016 through 2022).

Year	Precipitation (in)						Total
	Oct	Nov	Dec	Jan	Feb	Mar	
2016-2017	1.13	0.13	0.93	1.93	0.97	0.00	18.52
2017-2018	0.00	0.00	0.00	1.13	0.20	0.60	13.43
2018-2019	0.05	0.35	0.30	0.89	1.56	1.72	11.5
2019-2020	0.00	1.12	1.15	0.00	0.31	1.99	6.63
2020-2021	0.00	0.03	0.06	0.74	0.02	0.00	2.06
2021-2022	0.37	0.00	0.77	0.07	N/A	N/A	1.21

Source: Western Regional Climate Center

Though not definitively the same, all the desert tortoise burrows reported in the Gamebird Substation Expansion Desert Tortoise Survey Report (SWCA, 2020b) occurring in the Project Area were confirmed to be present during the current survey, except for one that was within the expanded substation. Five additional burrows not found during the Gamebird surveys were observed within the surveyed Project Area (**Appendix A, Figure 3**); these additional burrows were observed in areas previously surveyed using wide belt transects parallel to the transmission line.

One burrow found during the land acquisition tortoise survey (Darling Geomatics, 2018) was also confirmed (**Appendix A, Figure 3**).

5.2 Preliminary Effect Finding

The Proposed Project is within habitat suitable for the Mojave desert tortoise, though it is not located within conservation areas identified as essential to the survival and/or recovery of the Mojave Desert tortoise. Further, the project is not within and will not result in the destruction or adverse modification of designated Critical Habitat for the species.

Though tortoises were not observed during the presence/absence survey conducted for this project, the presence of suitable habitat and relatively recent tortoise burrows, supplemented by the results of the 2018 and 2020 survey reports, confirm that tortoises have been and have the potential to be present in the Project Area. Based on this information, the BEC biologist recommends a determination that the Proposed Project *may affect but is likely to adversely affect* the Mojave desert tortoise, however the minimal sign and proximity to other activities indicates the number of tortoises potentially affected would be small.

REFERENCES

- BEC. (2020). *Habitat Conservation Plan for the Spring Mountain Raceway and Motor Resort Northern Expansion Project*. Pahrump, Nevada: BEC Environmental, Inc. and Spring Mountain Raceway and Motor Resort. Retrieved January 2022
- Darling Geomatics. (2018). *Spring Mountain Raceway Expansion Project Desert Tortoise Survey, Pahrump, Nevada*. Retrieved February 2022
- SWCA. (2020a). *Low-Effect Habitat Conservation Plan for the Gamebird Substation Expansion*. Nye County, Nevada: SWCA Environmental Consultants and Bullen Law, LLC. Retrieved January 2022
- SWCA. (2020b). *Gamebird Substation Expansion Mojave Desert Tortoise Survey Report*.
- USFWS. (2009). *Desert Tortoise (Mojave Population) Field Manual: (Gopherus agassizii)*. Region 8, Sacramento, California.
- USFWS. (2017). *Preparing For Any Action That May Occur Within the Range of the Mojave Desert Tortoise*.
- USFWS. (2019). *Preparing for Any Action that may Occur within the Range of the Mojave Desert Tortoise*. Desert Tortoise Recovery Office. U.S. Fish and Wildlife Service. Retrieved January 2022
- USFWS. (2021). *Incidental Take Permit, Number ESPER0003714*. Endangered Species Permit Office. U.S. Fish and Wildlife Service. Retrieved February 2022

APPENDIX A

Project Map and Burrow Locations

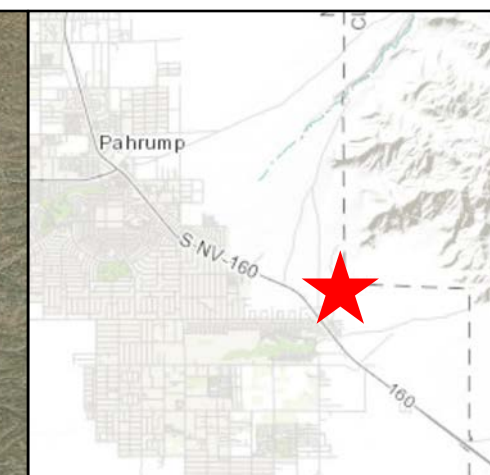
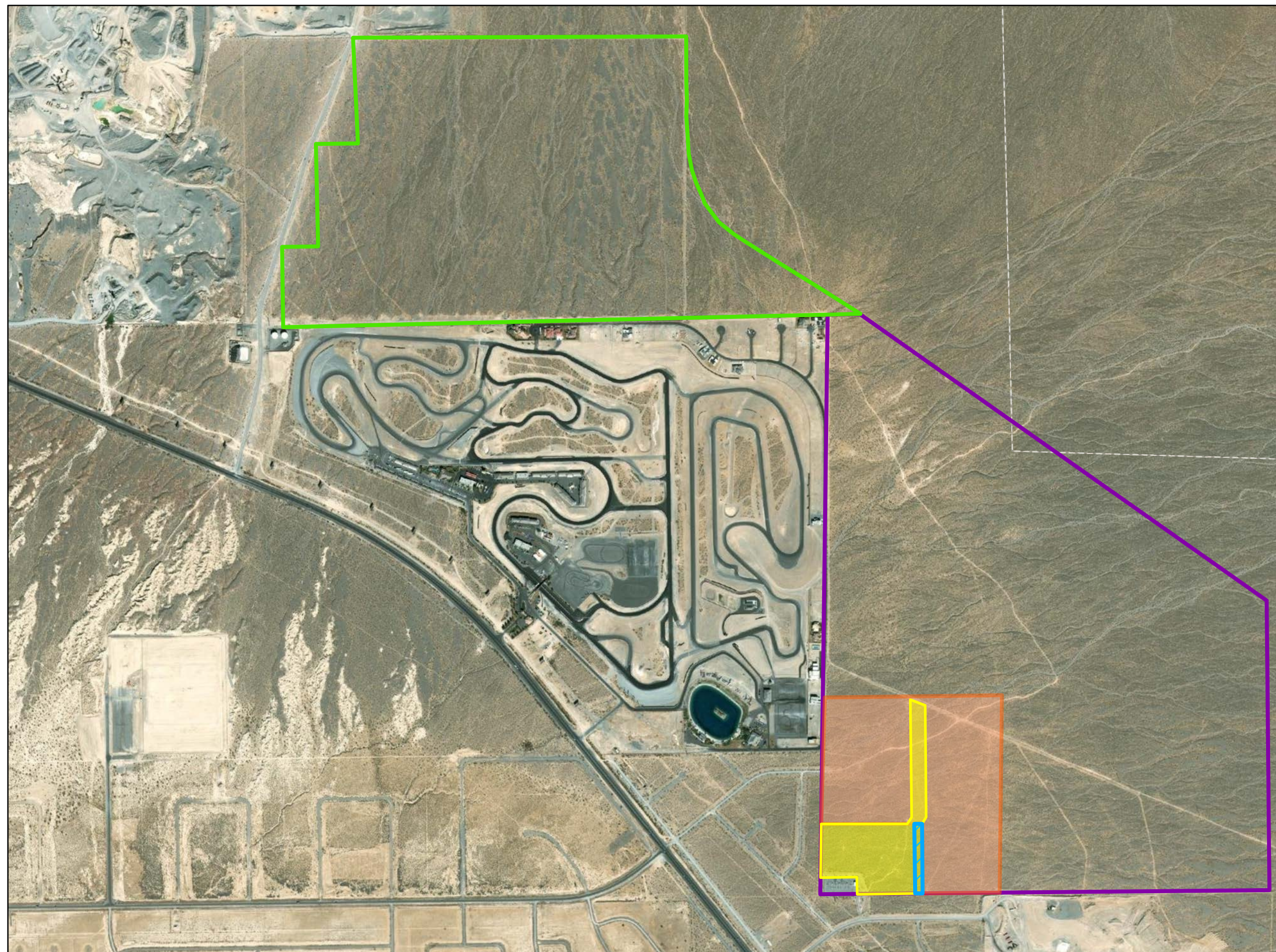


Figure 1. Go-Kart Project Location and Overview

Spring Mountain Raceway and Motor Resort
Go-Kart Project
Pahrump, Nevada

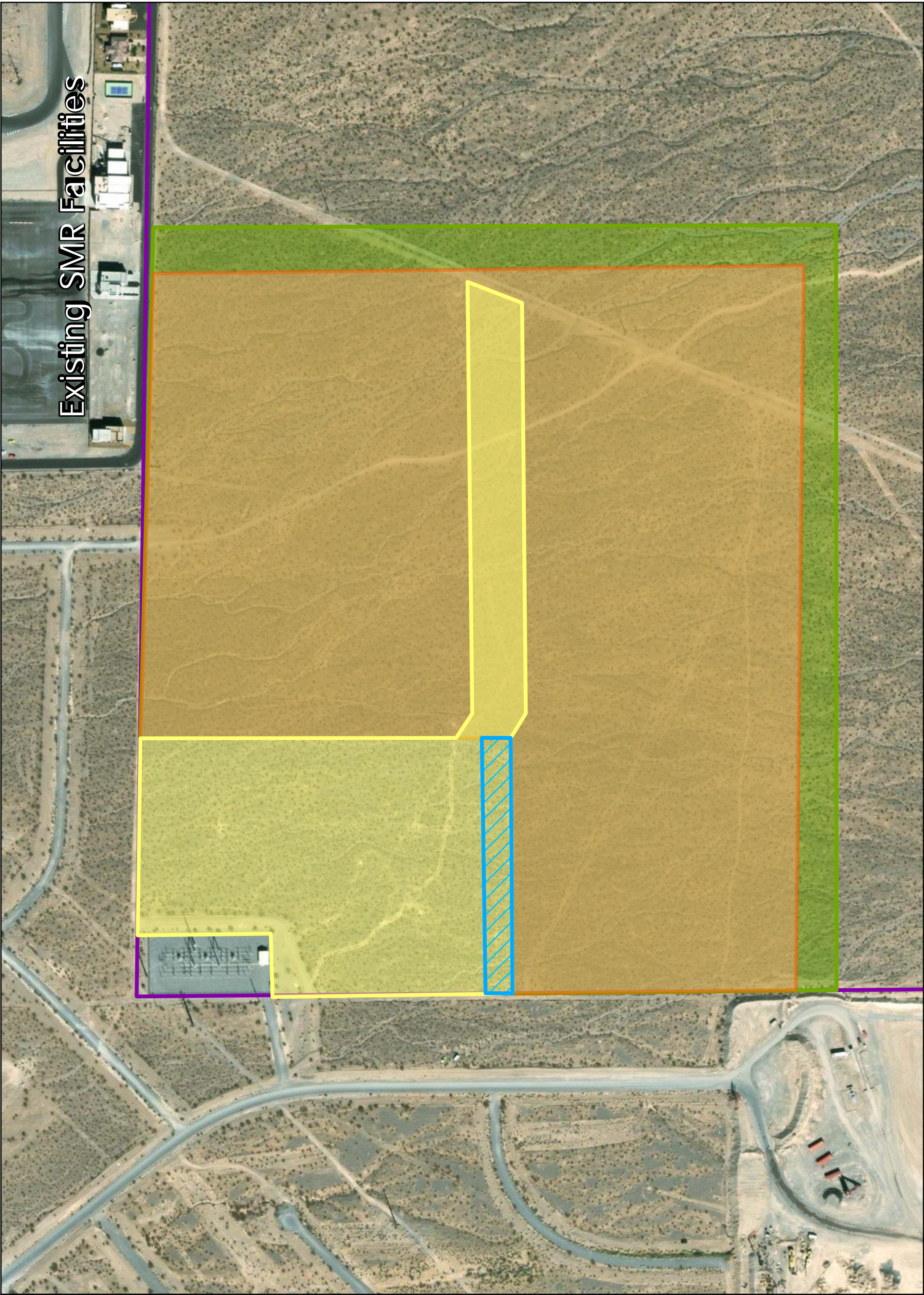
Legend

- SMR Northern Expansion Area (~227ac)
- SMR Eastern Expansion Area (~393ac)
- Project Boundary (~56ac)
- Gamebird Detention Basin
- Gamebird Station & Transmission Line

0 275 550 1,100 1,650
Feet



Data Source:
Bureau of Land Management, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS, Esri, HERE, Garmin, GeoTechnologies, Inc., Maxar



Existing SMR Facilities



Figure 2. Project and Action Area
Spring Mountain Raceway
and Motor Resort
Go-Kart Project
Pahrump, Nevada

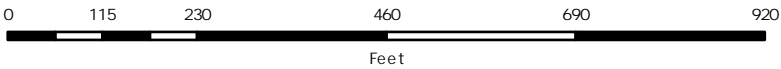
Data Source:
Esri, HERE, Garmin, GeoTechnologies, Inc., Esri, HERE,
Garmin, FAO, NOAA, USGS, EPA, Maxar

bec environmental, inc.
Environmental Services

Legend

- | | |
|---|--------------------------------------|
| Action Area (~63ac) | Gamebird Detention Basin |
| Project Boundary (~56ac) | SMR Northern Expansion Area (~227ac) |
| Gamebird Substation & Transmission Line | SMR Eastern Expansion Area (~393ac) |

Note: Aerial imagery is from 2021 and does not include the Gamebird Substation expansion components



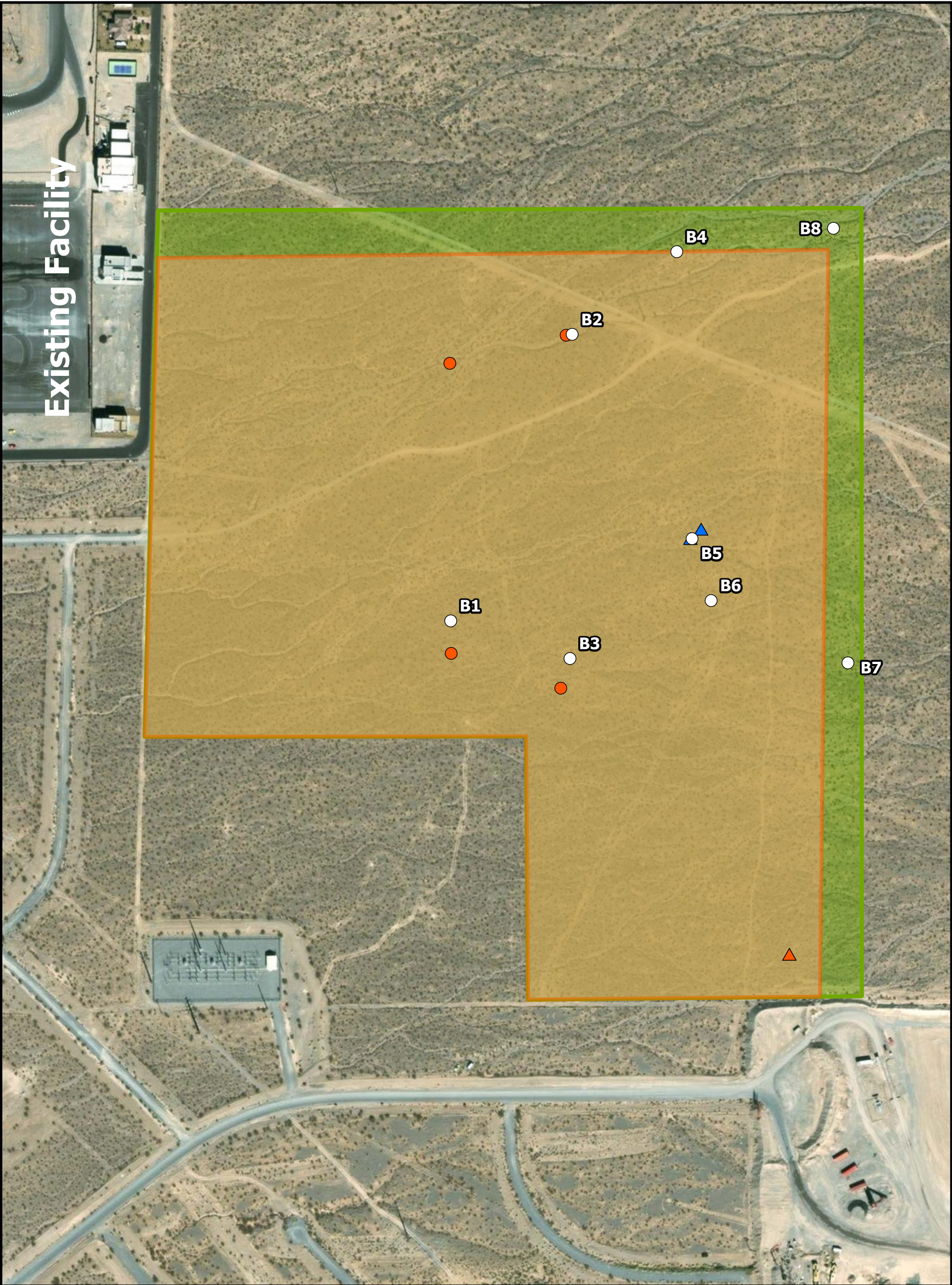


Figure 3. Survey Results and Previous Observations

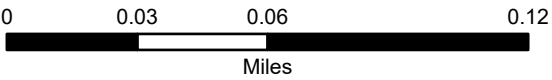
Spring Mountain Raceway
and Motor Resort
Go-Kart Project
Pahrump, Nevada

Data Source:
Service Layer Credits: World Imagery: Maxar, Microsoft
World Boundaries and Places: Esri, HERE, Garmin, GeoTechnologies, Inc.
Topographic: Bureau of Land Management, Esri, HERE, Garmin, USGS,
NGA, EPA, USDA, NPS

bec environmental, inc.
Environmental Services

Legend

- ▲ Darling, 2018 Tortoise
- SWCA, 2020 Burrow
- ▲ SWCA, 2020 Tortoise
- BEC, 2022 Burrow
- ▭ Project Boundary (~56ac)
- ▭ Action Area (~63ac)





**Figure 4. Desert Tortoise
Survey Tracks**

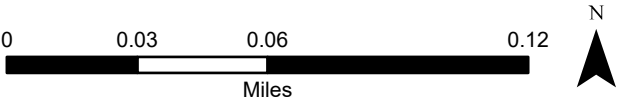
Spring Mountain Raceway
and Motor Resort
Go-Kart Project
Pahrump, Nevada

Data Source:
Service Layer Credits: World Boundaries and Places: Esri, HERE, Garmin,
GeoTechnologies, Inc.
World Imagery: Maxar
Topographic: Esri, HERE, Garmin, FAO, USGS, NGA, EPA, NPS

bec environmental, inc.
Environmental Services

Legend

- DT Survey Tracks
- Project Boundary (~56ac)
- Action Area (~63ac)



APPENDIX B

Photo Log - Site Characterization

Photo 1



Disturbance from construction of transmission towers and associated unpaved roads was observed.

Photo 2



Disturbance from an undesignated unpaved access road was observed.

Photo 3



The vegetation of the project area was dominated by creosote bush and white bursage.

Photo 4



Fishhook cacti were observed throughout the project area in small numbers.

Photo 5



Few Mojave yucca were observed throughout the project area.

Photo 6



Soils in the project area were observed to be gravelly/cobbly loam.
Areas of well-developed cryptobiotic crusts were present.

APPENDIX C

Photo Log - Observed Burrows

Photo 1



Burrow B1 - Condition Class 3 (Definitely Desert Tortoise - Deteriorated or Collapsed)

Photo 2



Burrow B2 - Condition Class 3 (Definitely Desert Tortoise - Deteriorated or Collapsed)

Photo 3



Burrow B3 - Condition Class 3 (Definitely Desert Tortoise - Deteriorated or Collapsed)

Photo 4



Burrow B4 - Condition Class 2 (Definitely Desert Tortoise - Good Condition)

Photo 5



Burrow B5 - Condition Class 2 (Definitely Desert Tortoise - Good Condition)

Photo 6



Burrow B6 - Condition Class 2 (Definitely Desert Tortoise - Good Condition)

Photo 7



Burrow B7 - Condition Class 4 (Possibly Desert Tortoise - Good Condition)

Photo 8



Burrow B7 - View of soil pile outside of burrow entrance that looks to have been created by a predator.

Photo 9



Burrow B8 - Condition Class 2 (Definitely Desert Tortoise - Good Condition)

APPENDIX D

Field Forms

Desert Tortoise Pre-Project Survey Data Sheet

Page 1 of 2

Survey Date	2/11/22		Biologists	DLR, EKB, VTS, JGH	
Project Name	SMR 90 KAWT Expansion		Site/Location	Pahrump	
County/State	Nye County NV		Survey Type	Large Project <u>or</u> Small Project	Site Size 56-66 - acres
Elevation	~1900 - 2907 M (Ft)		Transects #'s Covered	17 / biologist	
UTMs - Zone <u>11</u> N (S)			Time	Temp	Habitat (Dominant Vegetation, Topography, Disturbance)
Start	E: 0598849	N: 4002576	700 am/pm	57.6 C/F	creosote - bursage flat, washes
End	E: 0599381	N: 4002958	200 am/pm	C/F	

ID #	UTMs (of Burrow/Sign)	Transect #	Time	# pics	Burrow						Tortoise				Scat	Pallet	Carcass				Comments			
					Type	Condition	Width (cm /in)	Height (cm /in)	Length (cm /in)	See Back? Y/N	# of Entrances	Age Class	Est. MCL (mm) (All Tortoises)	Sex (M/F/U)	Behavior	# Other torts?	Class	Aging	Class	Age Class		Est MCL (mm)	Sex (M/F/U)	Condition Class
B1	E 0 0599080 N 4002659		921		Soil	3.5	15	10	12	y	1													REMEMBER: Set a GPS waypoint for all Transect Start and End points.
B2	E 0 599171 N 4002874		1020		Soil	3	15	12	24	y	1													
B3	E 0 599167 N 4002634		1035		Soil	3	12	16	22	y	1													
B4	E 0 599249 N 4002937		1221		Soil	2	14	12	24	y	1													
B5	E 0 599262 N 4002921		1235		Soil	2	13	10	30	y	1													

Burrow			Tortoise					Pallet	
Type	Condition	Age Class	Behavior			Condition			
1 Soil	1 Definitely DT - Currently Active	1 Adult → >180mm	1 Foraging	6 Walking	Definitely DT - Currently Active				
2 Caliche	2 Definitely DT - good condition	2 Juvenile - <180mm	2 Mating/Courtship	7 Basking	Definitely DT - good condition				
3 Rock	3 Definitely DT - deteriorated/collapsed	3 Unknown	3 Not Visible	8 Other	Definitely DT - deteriorated/collapsed				
4 Artificial	4 Possibly DT - good condition		4 Resting		Possibly DT - good condition				
5 Other	5 Possibly DT - deteriorated/collapsed		5 Territorial		Possibly DT - deteriorated/collapsed				
Carcass					Scat				
Condition Class			Aging		Class		Aging		
1	<1 year, fresh, putrid, scutes mostly adhered, sheen on exposed scutes, unexposed bone waxy & solid		1 Fresh		Wet (not from rain or dew) or freshly dried; obvious odor		1 Fresh		
2	1-2 years, scutes mostly adhered to bone, exposed scutes pale with no sheen, unexposed bone silky		2 This Year		Dried; with glaze; some odor; dark brown		2 This Year		
3	2-3 years, scutes peeling off bone, unexposed scutes pale & without sheen, no growth ring peeling		3 Not This Year		Dried; no glaze/odor; bleaching (light brown), tightly packed material		3 Not This Year		
4	4 years, shell bone falling apart; growth rings on scutes peeling; bone fissured				Dried; light brown to pale yellow, loose material, scaly appearance				
5	>4 years disarticulated and scattered				Bleached, or consisting only of plant fiber				

Survey Date		Biologists																							
Project Name		Site/Location																							
ID #	UTMs	Transect #	Time	# pics	Burrow						Tortoise				Scat	Pallet	Carcass				Egg shells (Y/N)	Dig/Tracks (Y/N)	Comments		
					Type	Condition	Width (cm/in)	Height (cm/in)	Length (cm/in)	See Back? Y/N	# of Entrances	Age Class	Est. MCL (mm)	Sex (M/F/U)	Behavior	# Other torts?	Class	Aging	Class	Age Class				Est MCL (mm)	Sex (M/F/U)
B0	E 0599271		1247		soil	2	13	10	36+	N	1														
B0	N 4002674				soil	2	13	10	36+	N	1														
B7	E 0599377		147		soil	4	13	14	34	Y	1														
B7	N 4002628				soil	4	13	14	34	Y	1														
B8	E 0599348		249		soil	2	12	9	36	X	1														photos in soilocator
B8	N 4002954				soil	2	12	9	36	X	1														
	E 0																								
	N																								
	E 0																								
	N																								
	E 0																								
	N																								
	E 0																								
	N																								
	E 0																								
	N																								

Comments/Notes

Biological Resources

Field Observation Form

Page 1 of 2

Survey Date	February 11, 2022		Biologists	DLR, EKB, VTS, JGH		
Project Name	SMR GO Kart Expansion		Site/Location	Pahrump, NV		
County/State	Nye Co. / NV		Purpose of Obs.	Desert Tortoise Survey		
	UTMs - Zone <u>11</u> <u>N/S</u>		Time	Temp	Wind (mph)	Sky <u>(Clear)</u> Ptly Cloudy, Cloudy, fog)
Start	E: 0598849	N: 4002576	630 <u>am</u> /pm	57.6 C/F	2.6	clear
End	E: 0599381	N: 4002958	200 <u>am</u> /pm	N/A C/F	N/A	clear

[illegible][illegible][illegible]

Survey Date	2 / 11 / 22	Biologists	DLR / EKB / VTS / JGH
Project Name	SMR GO Kart Expansion	Site/Location	Pahmmp / NV

Birds (continued)	
Species (common or scientific)	Number (est.)

Vegetation (continued)	
Species (common or scientific)	Dom/Sub/Sparse/Rare

Bird Nests		
Species (common/ scientific)	Contents	Coordinates
		E: N:
		E: N:
		E: N:

<p>Soil Classification Notes:</p> <p>• Gravelly / cobbly loam? rocky</p>
<p>Additional Notes/Comments:</p> <p>• cryptobiotic crusts present</p> <p>• washes (dry)</p>

Disturbance	
Type	Extent