

County of Mariposa

California Environmental Quality Act Initial Study

A. PROJECT INFORMATION:

Project Title: **Conditional Use Permit Application No. 2023-078**

Lead Agency: County of Mariposa

Date: February 14, 2025

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Location: The Project site is located at 5030 CYA Road, Mariposa, CA 95338 just east of the Mount Bullion area and the Mariposa Yosemite Airport. The Assessor's Parcel Number for the 249.24-acre project site is 012-041-002. The property is situated in the NW ¼ of Section 25, T.3 S., R. 20 E., MDBM. It is located on the Bear Valley, California 7.5 Minute USGS Quadrangle (37°30'41.91" N and 120°01'53.37" W)

Project Description: The Proposed Project is being proposed by Happy Goat Farm to facilitate a visitor experience at their regenerative farm located on an approximately 250-acre parcel, hereinafter referred to as the "Proposed Project." The Proposed Project covers approximately twenty-nine (29) acres of the site. The property is split zoned – with the majority being Mountain General and the remaining area being Mountain Transition with a land use designation of Natural Resources, within the proposed expanded Mariposa Town Planning Study Area. The parcel is also within the Airport Overlay.

The Project site is located on the southeastern floor of Bullion Mountain in the central portion of Mariposa County. Elevation on the site is about 2,250 feet above mean sea level. The entirety of the Project site consists of an open blue oak savannah, valley and foothill woodland, farmed/grazed fields, and a valley oak riparian habitat that has been disturbed by agricultural development.

The Project site is improved with a 108'X65' "big barn," six (6) greenhouses, a 70'X84' goat/work barn. The existing "big barn" on-site is 6,912 square feet. The existing goat/work barn on-site is 5,880 square feet.

The six (6) existing greenhouses on-site are located on a 250'X115' pad and have a combined square footage of approximately 18,000 square feet. The only permanent structure being proposed under the Proposed Project are the container bathroom(s). The proposed bathrooms would be approximately 8'X20' for a total of 160 square feet. Including the proposed container bathrooms, the total square footage of all permanent structures on the 29-acre project site would be approximately 30,952 square feet.

The Proposed Project includes daily public farm tours (four (4) to five (5) hours in length), bi-weekly outdoor education schools, and occasional special events and workshops. The bi-weekly outdoor education schools would include up to 50 guests per group. Up to 175 guests are anticipated on a daily basis, and up to 300 guests during special events. The applicant proposes to permit their events pursuant to Mariposa County Code Title 17.108.220 Special Events Facilities. Based on the proposed duration and proposed number of attendees for special events, a Conditional Use Permit (CUP) is required.

Specifically, the Proposed Project consists of the following:

Employees and Hours of Operation:

The Proposed Project would employ a total of 17 employees. The facility would operate on two shifts. The first shift would have a total of 15 employees on-site from 7:00 a.m. to 4:00 p.m., and the second shift would have a total of 5 employees on-site from 4:00 p.m. to 10:00 p.m. Operational hours would be between 9:00 a.m. and 10:00 p.m.

Daily Activities:

The Proposed Project includes afternoon visits that would take place for approximately four (4) to five (5) hours on a daily basis. Afternoon visits would include access to the existing "goatnasium" and terraces on-site. Additionally, food and beverages would be provided to guests during their visit.

School Field Trips:

The Proposed Project also includes outdoor education field trips for students at the existing greenhouses on-site. The proposed field trips would take place bi-weekly, and would take place in the morning prior to the proposed daily afternoon visits. School field trips would occur bi-weekly and include up to 50 students.

Workshops:

The Proposed Project would also offer culinary workshops within the big barn. Additional workshops related to farm activity may be provided in the big barn in the future. The workshops would be conducted entirely indoors.

Special Events:

Special events would occur up to once a month under the Proposed Project. Proposed special events include corporate retreats, weddings, trade gatherings, car shows, and an annual community Harvest Festival. Up to 300 guests would be on-site during the proposed special events.

Live Music:

Live music would be performed on the terraces on a daily basis. During special events, live music would also be performed inside the 108'x64' big barn. The live music is required to comply with Mariposa County's maximum decibel regulations. All events with music would conclude at 10:00 PM. Live music is also anticipated to be performed at the existing Rose Garden on-site in the future.

Mobile Catering:

The Proposed Project would include food trucks to prepare and serve food to guests for daily activities, workshops, and special events. The proposed food trucks would be located on existing concrete pads and flat areas near the existing terraces on-site, east of the "big barn." Up to one (1) food truck would be located on-site at any given time. A temporary bar would also be located near the terraces.

Barn Remodel:

The Proposed Project includes the remodel of the existing 108'X64' "big barn" on-site to achieve Occupancy Class A status. Occupancy Class A status would permit the barn to host workshops, classes, and vocational culinary training. Additionally, the barn would be utilized as a dining area during special events.

Water System:

The Proposed Project would provide bottled water to guests during their visit, including during proposed special events. Water service for fire suppression activities and handwashing under the Proposed Project will be provided by existing on-site wells and water tanks. Water distribution includes water tanks, distribution lines, pumps, source development, and services to the bathrooms.

Four (4) existing water tank pads are located throughout the property. Each pad consists of five 5,000-gallon interconnected tanks for a total of 25,000 gallons per pad and 100,000 gallons total for the property. Of that, approximately 30,000 gallons would be dedicated to fire suppression. Additionally, fire hose standpipes with 1 ½" fire hose connections are located throughout the Project site, which may be utilized by responding fire agency personnel for fire suppression activities.

Sanitation Facilities:

The Proposed Project includes the construction of a container bathroom adjacent to the existing "big barn." The proposed container bathrooms would include a minimum of three (3) restrooms, with one (1) restroom being ADA accessible.

Porta-potties with contracted waste removal services and hand-washing stations would also be provided adjacent to four (4) different areas on-site, including the terraces, the goatnasium, the greenhouses, and parking area "A." Porta-potties would be maintained routinely. Additional porta-potties may be required for special events.

Septic System:

The Proposed Project includes the installation of public restroom facilities that would require the implementation of a septic system. The Proposed Project identifies potential locations for the leach field; A soil test is required to determine the best location and would include the construction of one (1) leach field or as may be required by County Environmental Health Unit to meet applicable sewage disposal requirements.

Access and Traffic:

The Project site's primary access is provided by an existing improved, two-lane road connection to CYA Road approximately 470 feet north of State Route 49. The existing primary access road is 24 feet in width with a gravel surface and a 1-foot shoulder on either side. Additionally, the Proposed Project includes a 10-foot wide gravel-covered secondary access road would connect the existing greenhouses on-site and SR 49. The proposed secondary access road would provide additional egress for guests in the event of an emergency.

Directional signage would be provided on-site to direct guests to and from parking areas. Happy Goat employees would act as traffic and parking coordinators during special events.

Parking:

The Proposed Project includes ninety-two (92) off-street parking spaces with dimensions of 20'x10'. The Site Plan (See Figure 2) illustrates four (4) parking areas and an additional overflow lot. Parking area "A" would provide twenty-eight (28) parking spaces, parking area "B" would provide twelve (12) parking spaces, parking area "C" would provide seventeen (17) spaces, parking area "D" would provide fifteen (15) spaces, and the overflow lot would provide twenty (20) spaces. Additionally, two (2) ADA parking stalls would be provided adjacent to the existing "big barn" on-site and parking area "C," respectively.

Project Goals:

The primary objective of the Proposed Project is to facilitate on-site improvements at Happy Goat Farm that would provide a visitor experience. The Proposed Project is separate from the existing farming operations located on the property as it relates to permitting but will utilize components of the existing farm (e.g., existing parking areas, buildings, etc.). The Proposed Project would cover approximately 29 acres of the property.

As noted, the Proposed Project includes daily public farm tours, bi-weekly outdoor education schools, and occasional special events and workshops, which would provide an inviting and educational experience for visitors.

General Plan/Zoning

The Project site is split zoned – with the majority being Mountain General and the remaining area being Mountain Transition with a land use designation of Natural Resources (See Figure 1). The parcel is within the Airport Overlay as well as the proposed expanded Mariposa Town Planning Study Area. Until the Mariposa Town Plan is updated, the future expansion area will retain existing zoning districts and land use regulations.

Additionally, the Project site is located within Airport Safety Zone B as identified in the Mariposa-Yosemite Airport Comprehensive Land Use Plan. The Proposed Project's structural coverage is less than 50% of the total land area and no more than 50 people per acre will gather in compliance with the requirements of Airport Safety Zone B.

Surrounding Land
Uses:

North	Agricultural Properties
East	Agricultural Properties with Residential Uses
South	State Route 49 N
West	Mariposa-Yosemite Airport

Site Development
Characteristics:

Project site is located on the southeastern floor of Bullion Mountain in the central portion of Mariposa County. Elevation on the site is about 2,250 feet above mean sea level. The entirety of the Project site consists of an open blue oak savannah, valley and foothill woodland, farmed/grazed fields, and a valley oak riparian habitat that has been disturbed by agricultural development. The existing agricultural activities on-site include but are not limited to barns, produce/garden beds, greenhouses (as noted above), ranch roads, wells, mulch and compost activities, "goatnasium" grazing lands for goats, and fencing.

Project Studies:

The following studies and additional material submitted by the project proponent as part of the application for this project are available for review (except the Cultural Resources Survey) at the Mariposa County Planning Department, which can be reached at (209) 966-5151 or at 5100 Bullion Street (lower floor), Mariposa, CA. Recommendations and conclusions of these studies are discussed in this study and are part of the Proposed Project. These Project Studie are attached as Appendices.

- a. Acoustical Analysis for Happy Goat, Inc., Happy Goat Farm, Mariposa County, California, Highway 41, WJV Acoustics, Inc., January 29, 2024.
- b. Biological Resource Evaluation for Happy Goat Inc., Happy Goat Experience Project, QK, June 2023.
- c. Cultural Resource Inventory for the Proposed Development of the Cahalin Ranch, Mariposa, California, Culturescape, October 2020. (Not available for public review)
- d. Cultural Resource Treatment Plan, Compliance Report for the Happy Goat Farm Conditional Use Permit, CUP #2023-078, Culturescape, February 2, 2024. (Not available for public review)
- e. Revised Cultural Resource Treatment Plan, Compliance Report for the Happy Goat Farm Conditional Use Permit, CUP #2023-078, Culturescape, July 19, 2024. (Not available for public review)
- f. Fire Hazard Mitigation Plan for Happy Goat, Inc., Happy Goat Experience Project, Dudek, February 2024.
- g. Focused Air Quality Study for Happy Goat, Inc., Happy Goat Experience Project, Mariposa County, CA, Trinity Consultants, December 2023.
- h. Lighting Plan.
- i. Solid Waste Management Plan for Happy Goat Inc., 5030 CYA Rd., Mariposa, CA 95338, October 1, 2023.
- j. Trip Generation Memorandum for the Happy Goat Farm Project, Wood Rogers, December 8, 2023.

k. Well Information via Email dated January 9, 2025 and Well Completion Reports

Reference Documents: All of the documents cited and relied upon in the preparation of this initial study are available at the County of Mariposa Planning Department located at 5100 Bullion St. (lower floor), Mariposa, CA (209) 966-5151 with the exception of the Cultural Resource Survey and Cultural Resource Treatment Plan for this property, which is confidential, and are hereby incorporated into the record for this initial study. Documents are also available at: <https://www.mariposacounty.org/1129/Current-Projects>

State Agency Project Approvals:

- State Water Resources Control Board – Division of Drinking Water
- Regional Water Quality Control Board (RWQCB) – General Permit for Discharges of Storm Water Associated with Construction Activity.
- CAL FIRE – Emergency Evacuation Plan.

B. SUMMARY OF PROJECT IMPACT TO ENVIRONMENTAL FACTORS:

(blank): no impact

L: Less than Significant Impact

M: Less than Significant Impact with Mitigation

PS: Potentially Significant

L	<i>Aesthetics</i>		<i>Agriculture/Forest Res.</i>	L	<i>Air Quality</i>
M	<i>Biological Resources</i>	M	<i>Cultural Resources</i>	L	<i>Energy</i>
M	<i>Geology/Soils</i>	L	<i>Greenhouse Gas Emissions</i>	L	<i>Hazards and Hazardous Mat.</i>
L	<i>Hydrology/Water Quality</i>	L	<i>Land Use/Planning</i>		<i>Mineral Resources</i>
L	<i>Noise</i>		<i>Population/Housing</i>	L	<i>Public Services</i>
	<i>Recreation</i>	L	<i>Transportation</i>	M	<i>Tribal Cultural Res.</i>
L	<i>Utilities/Service Systems</i>	L	<i>Wildfire</i>	M	<i>Mandatory Findings of Significance</i>

This study found that the project has the potential to have significant impacts on Biological Resources, Cultural Resources, Geology and Soils (septic system), and Tribal Cultural Resources. Mitigation measures are proposed to reduce these potentially significant impacts to less than significant levels. These measures are shown in the Biological Resources, Cultural Resources, Geology and Soils, and Tribal Cultural Resources sections of this study, and in Section D, Mitigation Monitoring.

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Section A

CEQA DETERMINATION OF IMPACT

On the basis of this initial evaluation:

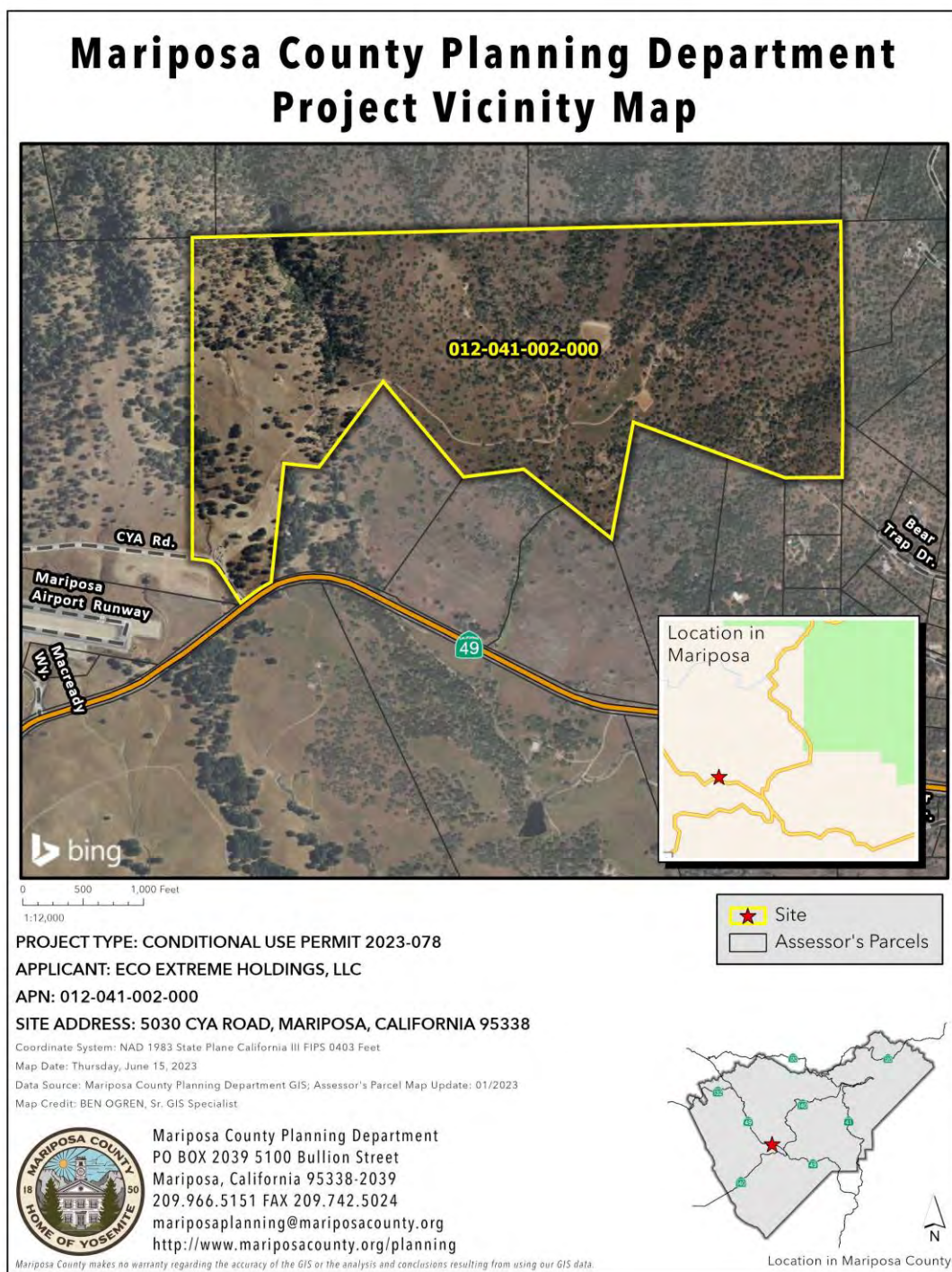
- ☐ 1) I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ 2) I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ 3) I find the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ 4) I find the proposed project MAY have a “potentially significant impact” or “Less Than Significant With Mitigation” impact on the environment, but at least one effect: 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ 5) I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects: (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR, or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

By: Steve Engfer Date: February 14, 2025

Title: Planning Director Representing: County of Mariposa

Signature: 

**Figure 1
Project Vicinity Map**



[illegible]

Section B

CEQA ENVIRONMENTAL CHECKLIST

EVALUATION OF ENVIRONMENTAL IMPACTS

1. AESTHETICS

1. AESTHETICS Would the project:	Potentially significant impact	Less than significant with mitigation incorporation	Less than significant impact	No impact
a) Have a substantial adverse effect on a scenic vista?			√	
b) Substantially damage scenic resources, including but not limited to: trees, rock outcroppings, and historic buildings within a state scenic highway?				√
c) In nonurbanized areas, substantially degrade the existing visual character or quality of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			√	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			√	

1. a & c Scenic Vistas/Visual Character

A significant impact would be one having a substantial adverse effect on a scenic vista or substantially degrade the existing visual character in the area. The Proposed Project is located on the southeastern floor of Bullion Mountain in the central portion of Mariposa County. The Project site consists of an open blue oak savannah, valley and foothill woodland, farmed/grazed fields, and a valley oak riparian habitat that has been disturbed by agricultural development.

The Project site is improved with a 108'X65' "big barn," six (6) greenhouses, a 70'X84' goat/work barn. The existing "big barn" on-site is 6,912 square feet. The existing goat/work barn on-site is 5,880 square feet. The six (6) existing greenhouses on-site are located on a 250'X115' pad and have a combined square footage of approximately 18,000 square feet. The only permanent structures being proposed under the Proposed Project are the container bathroom(s). The proposed bathrooms would be approximately 8'X20' for a total of 160 square feet. Including the proposed container bathrooms, the total square footage of all permanent structures on the 29-acre project site would be approximately 30,952 square feet.

There are two elements involved in determining the level of significance of potential impacts to visual quality; the effect of the project on:

- 1) The rural character of the area, as that character is defined by the General Plan; and
- 2) Viewsheds in relation to the values expressed in the Mariposa County General Plan regarding noted types of sensitive landscape elements.

The General Plan EIR points of significance (Table 4.12-1, pg. 4-69) indicate potentially significant impact will occur with development of *non-single family residential development* that does not adhere to related General Plan policies of Chapter 5, 7, 10, 11 and 14.

The Proposed Project includes daily public farm tours, bi-weekly outdoor education schools, and occasional special events and workshops. The bi-weekly outdoor education schools would include up to 50 guests per group. Up to 175 guests are anticipated on a daily basis, and up to 300 guests during special events. All existing buildings would remain and were previously permitted under Mariposa County Rules and Regulations. The “Big Barn” would be remodeled as part of the Proposed Project to achieve an Occupancy Class “A” status. This would permit the barn to host workshops, classes, and vocational culinary training. Additionally, the “Big Barn” would be utilized as a dining area during special events. As noted in the Project Description, the Proposed Project would cover approximately 29-acres of the 250-acre parcel. The remaining 221-acres would remain undisturbed/undeveloped, which equals approximately 88% of the project site.

The proposed roadways are primarily along existing pathways, including access to Mt. Bullion Cutoff Road and HWY 49. The locations and activities are within existing disturbed set away from views from HWY 49 and nearby residential structures. In addition, the natural vegetation and elevation create a buffer area and due to minimal improvements proposed, the vegetative buffer would remain with project implementation, which will significantly reduce light and glare impacts.

The Proposed Project will be subject to all General Plan and zoning standards relating to commercial development. Although no signage is proposed as part of the Proposed Project, all future outdoor advertising displays visible on State Highway facilities that are subject to provisions of the Outdoor Advertising Act (Business and Professions Code §5200 et seq.) will be subject to an Outdoor Advertising Permit which is obtained from Caltrans. In addition, signage will be subject to all applicable standards in the Mariposa County Municipal Code.

Given these factors, the Proposed Project would have a less than significant impact on scenic vista and the visual quality of the area.

1.b State Scenic Highway

A significant impact would be one that substantially damages scenic resources within a state scenic highway. Highway 140 is a designated state scenic highway from Mariposa to El Portal. However, the project is not adjacent to, or visible from, this scenic highway. *Thus, the project will have no impact.*

1.d. Create Light or Glare

A significant impact would be one that creates a new source of substantial light or glare that would adversely affect day or nighttime views in the area. The Conservation and Open Space Element of the Mariposa County General Plan contains a policy and implementation measure relating to limiting light and glare impacts from new development. Policy 11-1d states the following: “Ensure that light sources in new development are compatible with rural character and that the light sources do not produce glare that interferes with vision.”

This policy is followed by Implementation Measure 11-1d(1) which states:

Include as part of the comprehensive development standards:

- *Lighting standards established by the International Dark Sky Association; and*
- *Require that building materials have a low reflective index.*

The Lighting Plan, received by Mariposa County Planning on February 28, 2024 (See Appendix E), illustrates lighting levels along the primary access road and the internal access roads throughout the project site. The average illuminance for off-street parking area “A” is 1.0 foot candle (fc) and 1.23 fc for off-street parking areas “B” and “C”. The Proposed Project would be required to adhere to General Plan Policy 11-1d and Implementation Measure 11-1d(1) related to lighting sources and glare. As noted above, the Project site is screened from residences and roadways in the general area by distance, terrain, and vegetation. *Due to these factors, the project would have a less than significant impact on light and glare.*

2. AGRICULTURE and FOREST RESOURCES

2. AGRICULTURE RESOURCES Would the project:	Potentially significant impact	Less than significant with mitigation incorporation	Less than significant impact	No impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				√
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				√
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined in Public Resources Code section 4526) or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?				√
d) Result in loss of forest land or conversion of forest land to non-forest use?				√
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				√

2.a Farmland

A significant impact would be one that converts farmland designated as “prime”, “unique” or “farmland of statewide importance” to nonagricultural uses. The Project site is not located in an important farmland area. The 29-acre Project site identified as “Other Land” on the 2020 Mariposa County Important Farmland Map prepared by the state Department of Conservation under the Farmland Mapping and Monitoring Program. Other land is not included in any mapping category. *Due to these factors, the Proposed Project would have no impact on any important farmland category.*

2.b Agricultural Zoning/Williamson Act Contract

A significant impact would be one that causes a conflict with existing zoning for agricultural use or a Williamson Act contract. The Project site is split zoned – with the majority being Mountain General and the remaining area being Mountain Transition with a land use designation of Natural Resources. The parcel is within the Airport Overlay as well as the proposed expanded Mariposa Town Planning Study Area. Until the Mariposa Town Plan is updated, the future expansion area will retain existing zoning districts and land use regulations. The Project site is not within an agricultural zoning district or under a Williamson Act Contract. *The Proposed Project would have no impact on this issue.*

2.c Forest Land Zoning

A significant impact would occur if the project conflicts with forest land zoning, rezones defined forest land or timberland, or conflicts with timberland zoned Timber Production. The Project site is not zoned as forest land, nor will it cause rezoning of forest land as defined by Public Resources Code Section 12220(g) or timberland as defined in Public Resources Code Section 4526. The Project site has a General Plan Land Use Designation of Natural Resources and according to the Mariposa County General Plan, this classification “defines lands for open space, recreation, ecosystem conservation, watershed protection, environmental protection, conservation of natural resources, and protection of public health and safety”. The Project site, with an elevation of about 2,250 feet above mean sea level, consists of an open blue oak savannah, valley and foothill woodland, farmed/grazed fields, and a valley oak riparian habitat that has been disturbed by agricultural development. *The Proposed Project would have no impact on this issue.*

2.d Loss or Conversion of Forest Land

A significant impact would occur if the project resulted in the loss of forest land or conversion of forest land to a non-forest use. The 29-acre Project site is not considered to be forest land. *The Proposed Project would have no impact on this issue.*

2.e Conversion of Farmland; Conversion of Forest Land

A significant impact would occur if the project resulted in the conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. The project would not result in the conversion of farmland to a non-agricultural use nor would it convert forest land to non-forest use. *Thus, the project will have no impact on this issue.*

B.3 AIR QUALITY

3. AIR QUALITY – [Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.] Would the project:	Potentially significant impact	Less than significant with mitigation incorporation	Less than significant impact	No impact
a) Conflict with or obstruct implementation of the applicable air quality plan?			√	
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			√	
c) Expose sensitive receptors to substantial pollutant concentrations?			√	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				√

An assessment of the Proposed Project’s potential impacts on air quality was prepared by Trinity Consultants. The title of the assessment is *Focused Air Quality Study – Happy Goat Experience Project*, and is dated December 2023. The assessment is available for review by contacting the Mariposa County Planning Department at (209) 966-5151 or at 5100 Bullion Street (lower floor) Mariposa, CA.

The Focused Air Quality Study describes in detail the regulatory environment relating to air quality and greenhouse gas emissions, the Project site’s environmental setting, air quality impact methodologies, and impact determinations and recommended mitigation. This initial study section summarizes the conclusions of the air quality portion of the study. The greenhouse gas portion of the assessment is discussed in Section B.8 – *Greenhouse Gas Emissions*.

B.3.a Air Quality Plan and Violation of Air Quality Standards

A significant impact would be one that conflicts with or obstructs implementation of the applicable air quality plan. The Mariposa County State Implementation Plan (SIP) is a compilation of the Mariposa County Air Pollution Control District (MCAPCD) rules and regulations. The Proposed Project will comply with the applicable MCAPCD rules and regulation; therefore, the Proposed Project will be consistent with the Mariposa County SIP, which is the applicable air quality plan for the project area. *Thus, the impact would be considered less than significant.*

The Mariposa County General Plan includes various policies and actions that both directly and indirectly address air quality issues and GHG emissions within the County. Many of the measures included in the general plan fall under the responsibility of the County for implementation, including requirements for implementing state and federal regulations as well as collaborating with other agencies.

Although these measures do not fall under the responsibility of the Proposed Project and its proponents, *the Proposed Project would not conflict with or hinder the County's implementation of any of the measures related to air quality and the impact would be considered Less Than Significant.*

The MCAPCD has identified quantitative emissions thresholds to determine whether the potential air quality impacts of a project require analysis in the form of an Environmental Impact Report (EIR). The MCAPCD air quality Thresholds of Significance are presented in the table below (MCAPCD 2006).

Pollutant/Precursor	Project Emissions
	Emission (tpy)
CO	100
NOx	100
ROG	100
SOx	100
PM ₁₀	100
PM _{2.5}	100

Source: MCAPCD 2006

According to the Focused Air Quality Study, criteria pollutants were estimated using the California Emissions Estimator Model (CalEEMod). Potential project impacts are associated with short-term construction impacts and long-term operational impacts.

Short-Term Construction Impacts

The Table below shows the construction emission levels using default conservative construction schedule (8 weeks of construction) and equipment assumptions (CalEEMod default for the building phase) and CalEEMod factors for construction of septic fields.

Construction emission estimates also included the following standard construction practices to reduce particulate matter emissions for all projects:

- Water exposed area 3 times per day; and
- Reduce vehicle speed to less than 15 miles per hour.

Based on the anticipated activity levels, the Project construction activities would not exceed construction emission thresholds and were found to be Less Than Significant.

Emissions Source	Pollutant					
	ROG	NOx	CO	SOx	PM ₁₀	PM _{2.5}
	(tons/year)					
2024 Construction Emissions	0.033	0.273	0.347	0.001	0.017	0.013
MCAPCD Construction Emissions Thresholds	100	100	100	100	100	100
Is Threshold Exceeded?	No	No	No	No	No	No

Long-Term Operational Impacts:

The Table below presents the Proposed Project's long-term operations emissions which will mostly be generated from mobile sources of visitors and workers driving to and from the Project site as well as from water use and waste generation emissions.

The following changes to default values were incorporated during the CalEEmod analysis:

- Vehicle trips were adjusted to match the traffic survey.

Emissions Source	Pollutant					
	ROG	NOx	CO	SOx	PM ₁₀	PM _{2.5}
	(tons/year)					
Proposed Project	0.118	0.152	0.787	0.001	0.092	0.026
MCAPCD Operational Emissions Thresholds – non-permitted sources	100	100	100	100	100	100
Is Threshold Exceeded?	No	No	No	No	No	No

As calculated, the long-term operational emissions associated with the Proposed Project would be less than MCAPCD significance threshold and would, therefore, not pose a significant impact to criteria air pollutants.

B.3.b Cumulative Impacts

A significant impact would be one that results in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standards.

Mariposa County is considered to be a nonattainment area for the state 1-hour ozone standard, and the federal 8-hour ozone standard. Construction and operational emissions of ozone precursors (reactive Organic Gases and nitrogen dioxide) could cumulatively contribute to pollutant concentrations that would exceed the federal and state ambient air quality standards. Cumulative impacts were evaluated in the Focused Air Quality Study; however, cumulative emissions were not quantified because no other tentative projects were found within a one-mile radius of the Proposed Project that provided enough project detail information to accurately estimate emissions. Owing to the inherently cumulative nature of air quality impacts, the threshold for whether a project would make a cumulatively considerable contribution to a significant cumulative impact is currently based on whether the Proposed Project would exceed established project-level thresholds. *As such, a qualitative evaluation of the cumulative projects supports a finding that the Project's contribution considerable because the Proposed Project's incremental emissions increase would be Less Than Significant.*

B.3.c Sensitive Receptors to Pollutants

A significant impact would be one that exposes sensitive receptors to pollutant concentration. Sensitive receptors are defined as members of a population who are most sensitive to the adverse health effects of air pollutant and the land uses where these populations groups would reside for long periods. These groups include children, elderly, the acutely ill and the chronically ill, and typical land uses include schools, residential care facilities, and hospitals.

As noted in the Focused Air Quality Study, the Proposed Project is located at the existing Happy Goat Farm and the closest non-residential sensitive receptor is Victory Baptist Christian School located 2.20 miles to the southeast, and the closest daycare facility is Where the Wild Things at 3.35 miles to the southeast of the Project.

Based on the predicted operational emissions and activity types, the Proposed Project is not expected to affect any on-site or off-site sensitive receptors and is not expected to have any adverse impacts on any known sensitive receptor. Therefore, the Proposed Project would have a less than significant impact on sensitive receptors.

B.3.d Other Emissions Affecting Substantial Number of People

A significant impact would be one that results in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Typical land uses that have the potential to generate continuous odorous impacts and odor complaints during operation include wastewater treatment plants, landfills, confined animal facilities, composting stations, food manufacturing plants, refineries, and chemical plants. The Proposed Project is an experience located on an existing goat farm.

The expected use would not create any additional odors than already present at the existing facility. The Proposed Project is therefore not anticipated to have substantial odor impacts and is anticipated to have a Less Than Significant Impact.

B.4 BIOLOGICAL RESOURCES

4. BIOLOGICAL RESOURCES Would the project:	Potentially significant impact	Less than significant with mitigation incorporation	Less than significant impact	No impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		√		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?			√	
c) Have a substantial adverse effect on state or federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			√	
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				√
e) Conflict with any local policies or ordinances protecting biological				√

resources, such as a tree preservation policy or ordinance?				
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				√

A Biological Resource Evaluation (BRE) of the Project site has been prepared by QK, Inc.. The title of the evaluation is *Biological Resource Evaluation, Happy Goat Experience Project* and is dated June 2023. The BRE is available for review by contacting the Mariposa County Planning Department at (209) 966-5151 or at 5100 Bullion Street (lower floor) Mariposa, CA.

The Biological Study Area (BSA) includes the Project site and a 100-foot survey buffer surrounding the Project disturbance footprint and is included in the BRE as Figure 2-1 on Page 2-4. The BRE includes the results of a natural resource database search and a biological survey conducted by QK biologists at the Project site. The report is consistent with the requirements for an analysis of impacts to biological resources needed for an Initial Study/Mitigated Negative Declaration following guidelines established by the California Environmental Quality Act (CEQA).

The primary focus of the BRE is to provide information about the presence of sensitive biological resources on and near the Proposed Project and develop measures to avoid and minimize impacts of the Proposed Project on those resources. To accomplish that goal, the BRE provides information on the condition and sensitivity of the sensitive biological resources potentially present on and near the Project site and evaluates Project impacts to those resources. The BRE focuses on providing information about sensitive natural communities, special-status plant and wildlife species, critical habitats, wildlife movement corridors, and wetlands and waters by conducting a desktop analysis of site conditions and verifying those findings with an on-site biological survey. The following summary reflects the information contained in the BRE.

B.4.a Candidate, Sensitive or Special Status Species

A significant impact would occur if the project had a substantial adverse effect on any candidate, sensitive or special status species (rare, endangered or threatened).

There were twenty-two (22) special-status plant species identified in the literature and database review that are known or have potential to occur within the nine-quadrangle queries centered on the Project site. There are two (2) CNDDDB records of special-status plant species, Mariposa cryptantha (*Cryptantha mariposae*) and shagghair lupin (*Lupinus spectabilis*) that overlap a western portion of the BSA. The plants' Threat Code Extensions are as follows:

- Rawhide Hill onion – California Rare Plant Rank (CRPR) Threat Code Extension: fairly endangered in California
- Big-scale balsamroot – CRPR Threat Code Extension: Fairly endangered in California
- Hoover's calycadenia – CRPR Threat Code Extension: Not very endangered in California
- Mariposa pussypaws – CRPR Threat Code Extension: Seriously endangered in California
- Small's southern clarkia – CRPR Threat Code Extension: Fairly endangered in California
- Mariposa clarkia – CRPR Threat Code Extension: Fairly endangered in California
- Merced clarkia – CRPR Threat Code Extension: Seriously endangered in California
- Beaked clarkia – CRPR Threat Code Extension: Not very endangered in California
- Mariposa cryptantha – CRPR Threat Code Extension: Not very endangered in California
- Yellow-lip pansy monkeyflower – CRPR Threat Code Extension: Fairly endangered in California

- Koch's cord moss – CRPR Threat Code Extension: Not very endangered in California
- Mariposa daisy – Presumed extinct in California
- Congdon's woolly sunflower – CRPR Threat Code Extension: Fairly endangered in California
- Slender-stemmed monkeyflower – CRPR Threat Code Extension: Fairly endangered in California
- Slender-stalked monkeyflower – CRPR Threat Code Extension: Fairly endangered in California
- Parry's horkelia – CRPR Threat Code Extension: Fairly endangered in California
- Madera leptosiphon – CRPR Threat Code Extension: Fairly endangered in California
- Congdon's lomatium – CRPR Threat Code Extension: Fairly endangered in California
- Mariposa lupine – CRPR Threat Code Extension: Fairly endangered in California
- Shaggyhair lupine – CRPR Threat Code Extension: Fairly endangered in California
- Elongate copper moss – CRPR Threat Code Extension: Not very endangered in California
- Shevock's copper moss – CRPR Threat Code Extension: Fairly endangered in California

No special-status plant species were present within the BSA. The survey coincided with some, but not all the plant species' optima blooming periods. However, none of the species identified in the database queries are expected to occur on-site because of a lack of suitable habitat conditions consisting of disturbed site conditions, inappropriate plant associations and unsuitable soil types or because the BSA is located outside of the species' known range. The Project site has been disturbed by agricultural and construction activities, but even with this disturbance, there were some native plant species present because of the no-till agricultural practices being employed.

Twenty (20) special-status wildlife species identified in the literature and database review that are known or have the potential to occur within the nine-quad search area centered on the Project. There is one (1) historical CNDDB record (EONDX 76077) of the limestone salamander (*Hydromantes brunus*) that overlaps with the BSA. They are:

Invertebrates

- Crotch bumble bee
- Valley elderberry longhorn beetle – Federal Endangered Species

Fish

- Hardhead – California Department of Fish and Game Species of Special Concern

Amphibians

- California tiger salamander – Federal Threatened Species and California Threatened Species
- Limestone salamander – California Threatened Species
- Foothill yellow-legged frog – Federally Protected Species
- Seirra Nevada yellow-legged frog – Federally Endangered Species and California Threatened Species
- Western spadefoot – California Department of Fish and Game Species of Special Concern

Reptiles

- Western pond turtle – California Department of Fish and Game Species of Special Concern

Birds

- Great gray owl – California Endangered Species
- California Spotted Owl – California Threatened Species
- California condor – Federal Endangered Species and California Endangered Species

Mammals

- Pallid bat – California Department of Fish and Game Species of Special Concern

- Townsend's big-eared bat – California Department of Fish and Game Species of Special Concern
- Spotted bat – California Department of Fish and Game Species of Special Concern
- Western red bat
- Fisher – southern Sierra Nevada pop. – Federal Endangered Species and California Threatened Species

According to the BRE, there was foraging habitat present within the BSA that would be suitable for the Crotch bumble bee (*Bombus crotchii*). In addition, the BSA is within the known range of this species. The nearest CNDDDB record (EONDX 119710) is 6.48 miles northeast of the BSA.

There is a CNDDDB record (EONDX 34486) of the Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) that occurs 2.3 miles southeast of the BSA, but there were no elderberry bushes present within the BSA, which is required to support the Valley elderberry longhorn beetle, and so that species would not be present. There are plans to plant elderberry bushes on the farm in the future, but the Project would not impact that species if it did become established. There were no canyons or rockslide areas within the BSA that would support Merced canyon shoulderband (*Helminthoglypta allynsmithi*). There were no limestone caves or underground water habitat present within the BSA that would support Wengeror's cave amphipod (*Stygobromus wengerorum*).

The hardhead (*Mylopharodon conocephalus*) could occur within the BSA because habitat capable of supporting this species, consisting of streams, ponds, and reservoirs bottoms, is present within the Project site. The BSA is within the known range of the species.

The Sierra Nevada yellow-legged frog (*Rana sierrae*) is absent from the BSA because this species occurs at a much higher elevation (1,200 feet higher) than the Project's site. No amphibian sign (e.g., scat or tadpoles) were found within the BSA, but suitable habitat exists for California tiger salamander (*Ambystoma californiense*), limestone salamander (*Hydromantes brunus*), foothill yellow-legged frog (*Rana boylei*), and western spadefoot (*Spea hammondi*). These species could occur within the BSA. They would mostly be limited to wetlands and waters or dispersal areas near wetlands or waters, except for the California tiger salamander which is known to travel up to 1.25 miles from its breeding ponds.

Western pond turtles (*Emys marmorata*) were not observed but could potentially occur within the BSA. There was a pond present within the BSA that could potentially support this species, but they likely would have been seen if present. There are three (3) CNDDDB records of this species that occur within ten (10) miles of the BSA. The closest (EONDX 867) is approximately 2.26-miles southeast of the BSA.

There are no dense woodlands with coniferous or broadleaved trees near a water source that could provide suitable habitat for the great gray owl (*Strix nebulosa*) or California spotted owl (*Strix occidentalis occidentalis*), with open fields and livestock, which could provide a food source once deceased and if not quickly removed. California condor nesting habitat is not present, and they are not known to nest this far north in the Sierra Mountains. It is highly unlikely that California Condors, great grey owl, or California spotted owl occurs within the BSA, even as transients.

Foraging or roosting habitat is present within the BSA for the following bat species: pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsendii*), spotted bat (*Euderma maculatum*), western red bat (*Lasiurus frantzii*), and Yuma myotis (*Myotis yumanensis*). There is one (1) CNDDDB record for the pallid bat (EONDX 69317) that occurs approximately 6.47 miles northeast of the BSA. There are two (2) CNDDDB records of the Townsend's big-eared bat within 10 miles of the BSA. The closest (EONDX 24312) that occurs approximately 1.09 miles of the BSA. There is one (1) CNDDDB record of spotted bat (EONDX 66357) that occurs approximately 6.45 miles northeast of the BSA. There are no CNDDDB records of western red bat within 10 miles of the BSA. There is one (1) CNDDDB record of Yuma myotis (EONDX 69318) approximately 6.48 miles northeast of the BSA. Any of these species could be present within the BSA.

There are no CNDDDB records of the fisher (*Pekania pennanti*) occurring within 10 miles of the BSA. There were no suitable dens (which occur in decaying, fallen trees or in large cavities in standing trees) observed in the BSA. The BSA lacks preferred tree habitat consisting of spruce, fir, or white cedar, which would support this species. This species is not likely to be present within the BSA.

There were no active migratory birds or raptor nests observed within the BSA. Two (2) inactive nests were present within the Project site, one (1) stick and one (1) cluster of cavity nests. The trees, buildings, and utility poles in and outside the BSA could support a variety of nesting bird species, but current high levels of activity at the site consisting of ongoing agricultural operations and farm-related construction activities likely to reduce potential for pervasive nesting activities.

There is one (1) special-status wildlife species that could potentially be impacted by the Proposed Project, which is the California tiger salamander. That species was not verified to be present, but it could occur. Project impacts to that species could result from a disruption of migrations between upland refugia sites and breeding ponds, but that impact is anticipated to be minimal because vehicle and foot traffic from Project activities are not likely to occur concurrently with migration activities. There is potential for impacts to occur to nesting and foraging birds and raptors, but that impact is anticipated to be minimal because of the lack of nesting activity on and near the Project site. *Implementation of the following measure will reduce project impacts to these species to a Less Than Significant level.*

Large portions of the ranges for each of these species overlap federally- and State-owned lands which would not be subject to intense and widespread development, thus buffering the impact the proposed project may cause. The following avoidance and minimization measures would further help to reduce the impact of the project special-status animal species. *Implementation of the following measures will reduce project impacts to these species to a less than significant level.*

Mitigation Measure 4.a.1

The project proponent shall implement the following best management practices during project activities:

- *A pre-activity survey of the Project and within a 250-foot buffer for nesting migratory birds and a 500-foot buffer for nesting raptors surrounding the Project footprint should be conducted yearly, in April or May, to identify active bird nests. Areas within 250 feet of the active nests should be designated as “quiet zones” where noise and activities would be curtailed until you have fledged from the nest. The survey should be conducted by a qualified biologist with adequate training and experience conducting surveys for nesting birds.*
- *An informational brochure containing information on sensitive natural communities and special-status species that could be present in the area should be provided to all visitors so that they are aware of the unique species that could potentially occur on the site.*
- *Noise limits should be established for night events to reduce noise pollution that could affect bat foraging activities. Noise levels after sundown should be limited to no greater than 95 decibels (dBA scale) and night tours should be prohibited past 10 PM.*
- *Project-related vehicles should observe a 20-mph speed limit in all Project areas, except on County roads and State and federal highways. This is particularly important at night when certain animals are most active. To the extent possible, nighttime traffic should be minimized. Off-road traffic outside of designated project areas should be prohibited.*
- *All trash and food items that attract wildlife should be discarded into closed containers and properly disposed of at the end of each workday.*
- *To prevent harassment or mortality of special status species, no pets from visitors aside from service animals and emotional support animals should be permitted on the Project site.*

Monitoring for Mitigation Measure 4.a.1:

This mitigation measure will be monitored by the Mariposa County Planning Department through the project construction permitting process.

B.4.b Sensitive Natural Communities

A significant impact would occur if the project had a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. The BRE found no sensitive natural vegetation communities in the BSA by database searches. However, within the BSA there were four (4) sensitive natural communities identified. Two (2) were oak woodlands, one (1) was foothill pine/oak, and one (1) was riparian forest. The Proposed Project has potential to have a minimal impact on four (4) sensitive natural communities by installing fencing. This minimal impact may include trimming of oak trees and clearing of ground vegetation along fence line. This minimal impact would constitute no measures being warranted for mitigation. Foot traffic generated from the Proposed Project would not have an impact on it due to all traffic being restricted to existing roads. *Therefore, the Proposed Project would have a Less Than Significant impact on sensitive natural communities or critical habitats.*

B.4.c Wetlands

As significant impact would occur if the project would have a substantial adverse effect on State or federally protected wetlands. According to the BRE, the two (2) riverine features and one (1) pond were identified by the NHD and verified to exist during the biological field survey. One (1) riverine feature, Agua Fria Creek, bisects the BSA through the access road west of the primary agricultural area and goat farm. The creek follows to the southeast, towards SR 49. The other riverine feature is east of the Project site but intersects the BSA, then flows southwest toward SR49. Stream indicators such as mud cracks, streambeds and/or banks were identified at both riverine features. Hydrologic, topographic features, and/or aquatic plant species were observed at both features that indicate these to be intermittent riverine features. The pond holds water nearly year-round and is fed by an intermittent spring located further up slope.

Neither of these features would be impacted by Project activities because the use of these features will not occur, and the Project would not result in any predictable form of degradation to these features. The pond would also not be used or degraded by Project activities. *Therefore, the Proposed Project would have a Less Than Significant Impact in this area.*

B.4.d Native Species/Wildlife Corridors/Nursery Sites

A significant impact would occur if the project substantially interfered with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. There are no known wildlife movement corridors or habitat linkages that intersect the BSA. The Proposed Project is situated within a disturbed area that is predominately used for agricultural development. The site provides some continued linkage between suitable natural habitats that surround the BSA. Even with the ongoing disturbances from construction activities and the ongoing agricultural operations, the site provides substantial opportunities for wildlife movements. The BSA provides no substantial nursery sites, except for nesting migratory birds and raptors. *Therefore, the Proposed Project would not impact any movement corridors, fisheries, nursery sites, or habitat linkages.*

B.4.e Ordinances and Policies Protecting Biological Resources

A significant impact would be one that conflicts with any local policies or ordinances protecting biological resources. The BRE reviewed Mariposa County policies relating to protection of biological resources and concludes that the implementation of mitigation measures as listed in the Biological Resources section of this initial study will facilitate compliance with local policies and ordinances. The report recommends no additional measures. *The project would have no impact on this issue.*

B.4.f Habitat Conservation/Community Preservation Plans

A significant impact would be one that conflicts with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. The Proposed Project is not located within the boundaries of any habitat conservation plan or Natural Community Conservation Plan. *The Proposed Project would have no impact on this issue.*

B.5 CULTURAL RESOURCES

5. CULTURAL RESOURCES Would the project:	Potentially significant impact	Less than significant with mitigation incorporation	Less than significant impact	No impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?		√		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		√		
c) Disturb any human remains, including those interred outside of dedicated cemeteries?		√		

A Cultural Resources Inventory for the project was conducted on an 1,800-acre area that encompasses the potential project area (project site of 29-acres). The inventory was conducted by Culturescape and is dated October 2020. Additionally, a Cultural Resource Treatment Plan was prepared by Culturescape and is dated September 2023 with revisions as of July 19, 2024. The following text summarizes the Cultural Resources Inventory and the Cultural Resource Treatment Plan.

B.5.a, b, & c Historic/Archaeological Resources/Human Remains

A significant impact would be one that would cause a substantial adverse change in the significance of an historic, archaeological, unique paleontological resource; or a unique geologic feature. On May 21, 2020, a Record Search was conducted by the Central California Information Center (CCIC). This resulted in four (4) previously reported cultural resources within the project area; P-22-001510, placer mining, 2525, a bedrock milling station, 2526, a road segment, and 3822, a multicomponent site featuring prehistoric habitation site which includes burials, evidence of housing pits and roundhouse. This site included a mining landscape with a road, tailings and a collapsed cabin. Two (2) sites were located in close proximity to the town site of Mount Ophir, directly across Highway 49. Site P-22-001719 is the Trabucco Store.

Correspondence with the Native American Heritage Commission (NAHC) did not locate any listed tribal locations of significance. A list of tribal representatives was provided by the NAHC on May 21, 2020. A location map and a description of the project with a request for feedback were mailed to all listed parties on May 22, 2020. A follow-up telephone call was attempted on June 12, 2020 to confirm delivery of project materials and to solicit tribal input. Additionally and according to the Cultural Resource Treatment Plan, Culturescape contacted the NAHC on November 28, 2022 to request a search of its Sacred Land File to determine if any Native American cultural resources have been recorded in the project area. Culturescape also requested a list of individuals and groups that may have interest or knowledge of resources of sacred or special cultural and spiritual significance in the project areas.

A total of seven (7) cultural resources were identified including:

1. P-22-003972 (EZM 1/H);
2. P-22-003998 (EZM 25H);
3. P-22-004000 (EZM 34/H);
4. P-22-004001 (EZM 35);
5. P-22-003973 (EZM 2);
6. P-22-004006 (EZM 3H); and
7. P-22-003993 (EZM 23H).

These sites were recorded to meet the Secretary of the Interior / Standards and Guidelines for Archaeology and Historic Preservation. A formal Extended Phase 1 investigation was completed at sites P-22-003972 (EZM 1/H), 3973 (EZM 2), 4000 (EZM 34H), at the well site, and where the new road was constructed at P-22-004001 (EZM 35). A 15-foot buffer was created for P-22-004006 (EZM 3H). Sites P-22-003993 (EZM 23H) and P-22-003998 (EZM 29H), were found to be ineligible for inclusion into either the California List of Historic Places or the National Register of Historic Places. No cultural resources investigation is therefore recommended or warranted.

Should human remains be encountered in the Project area, the finds must be evaluated by a qualified archaeologist. Should human remains be encountered, the County coroner must be contacted immediately; if the remains are determined to be Native American, then the NAHC must be contacted as well. Should any prehistoric or historical components be uncovered, that is, resources possessing physical evidence of human activities over 45 years old, then all work is to stop, and a qualified professional of the appropriate discipline is to be contracted to evaluate the discovery. Mariposa County applies the following mitigation to development projects to address the issue of finds during project construction. *Implementation of these measures would reduce potential impacts on cultural resources and human remains during project construction to a less than significant level.*

Mitigation Measure 5.a.1:

As provided by Health and Safety Code 7050.5., if human remains are uncovered during future work, then all work is to stop until the county coroner can determine whether the remains are subject to the provisions of the Government Code. Pursuant to the Public Resources Code Section 5097.98, if the coroner finds that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be Native American, the coroner has 24 hours to contact the Native American Heritage Commission. They will contact the most likely descendent who will make recommendations on how to proceed. The most likely descendent has 24 hours to respond. If the most likely descendant does not respond in 24 hours, the owner may reinter the remains in an area of the property secure from further disturbance. If the owner does not accept the descendant's recommendations, the owner or the descendant may request mediation by the Native American Heritage Commission.

Monitoring for Mitigation Measure 5.a.1: The project proponent or his on-site designee shall be responsible for ensuring compliance with this mitigation and the Mariposa County Planning Department will monitor the measure through the project construction permitting process.

Mitigation Measure 5.a.2

Should any prehistoric or historical components be uncovered, that is, resources possessing physical evidence of human activities over 45 years old, then all work is to stop, and a qualified professional of the appropriate discipline is to be contacted to evaluate the discovery.

Monitoring for Mitigation Measure 5.a.2: The project proponent or his on-site designee shall be responsible for ensuring compliance with this mitigation and the Mariposa County Planning Department will monitor the measure through the project construction permitting process.

B.6 ENERGY

6. ENERGY Would the project:	Potentially significant impact	Less than significant with mitigation incorporation	Less than significant impact	No impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			√	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			√	

B.6. a & b **Energy**

A significant impact would occur if the project resulted in potentially significant environmental impact due to wasteful, inefficient or unnecessary energy consumption or conflicted with renewable energy or energy efficiency plans. The Proposed Project includes daily public farm tours, bi-weekly outdoor education schools, and occasional special events and workshops. The operation of the Proposed Project would require minimal energy usage in comparison to other more intensive commercial/recreational projects. During construction, there would be a temporary consumption of energy resources required for the movement of equipment and materials (particularly in relation to the proposed improvements to the “Big Barn”); however, the duration is limited due to the scope of the construction and the limited area of construction. Compliance with local, state, and federal regulations would reduce short-term energy demand during the project’s construction to the extent feasible, and the project construction would not result in a wasteful or inefficient use of energy. Overall, the construction and operation of the Proposed Project would not require the creation of a new energy source.

There are no unusual project characteristics or processes involved in this project that would require the use of equipment that would be more energy intensive than is used for comparable activities, or the use of equipment that would not conform to current emissions standards and related fuel efficiencies. Furthermore, through compliance with applicable requirements and/or regulations through the building permit process, the project would be consistent with State requirements, and would not consume energy resources in a wasteful or inefficient manner.

State and local agencies regulate the use and consumption of energy through various methods and programs. As a result of the passage of Assembly Bill 32 (AB 32), which seeks to reduce the effects of Greenhouse Gas (GHG) Emissions, a majority of the state regulations are intended to reduce energy use and GHG emissions. These include, among others, California Code of Regulations Title 24, Part 6–Energy Efficiency Standards, and the California Code of Regulations Title 24, Part 11– California Green Building Standards (CALGreen). The Mariposa County Building Department enforces the applicable requirements of the Energy Efficiency Standards and Green Building Standards in Title 24. Accordingly, the proposed project would not conflict with or obstruct State or local plans for renewable energy or energy efficiency.

The Proposed Project will have a Less Than Significant Impact on the issue of energy.

B.7 GEOLOGY AND SOILS

7. GEOLOGY AND SOILS -- Would the project:	Potentially significant impact	Less than significant with mitigation incorporation	Less than significant impact	No impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			√	
ii) Strong seismic ground shaking?			√	
iii) Seismic-related ground failure, including liquefaction?			√	
iv) Landslides?			√	
b) Result in substantial soil erosion or the loss of topsoil?			√	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			√	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			√	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?		√		
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			√	

B.7.a Faults, Ground Shaking, Ground Failure and Landslides

A significant impact would be one that would result in potential adverse effects associated with earthquake, seismic ground shaking, liquefaction or landslides.

Earthquake Faults

The Seismic Hazards Acts of 1990 directs the California Department of Conservation to map the state's most prominent earthquake hazard area in California. These areas are called "Special Study Zones" and appear on a set of maps named the Alquist-Priolo Earthquake Fault Zone maps. Mariposa County is not a Special Study Zone and a map has not been created for Mariposa. The majority of the county falls within the lowest earthquake hazard zone of 10-20 percent probability. However, the potential for earthquakes and related hazards does exist in Mariposa County. There are two (2) fault zones in the County, the Bear Mountain on the western edge and the Melones on the eastern edge. These compromise the Foothills Fault System and were thought to be inactive until the Oroville Earthquake occurred in 1975 along the Bear Mountain Fault zone. Based on the Oroville Earthquake, and other geologic findings in the northern part of the system, the Foothills Fault System is considered active. The Five-County Safety Study, developed in July 1974 reported three (3) other faults known to be active near Mariposa County: the San Andreas fault to the west, the Owens Valley fault to the east, and possibly the White Wolf fault to the south. According to the Study, the three (3) faults may cause small periodic local earthquakes.

Section 8.2.02 – Physical Geology in Volume III of the Mariposa County General Plan states that the probability of earthquake occurrence on the Foothills Fault System is rated low. *Thus, the Proposed Project will have a less than significant impact.*

Ground Shaking

All construction in California is required to comply with all California Building Code standards with respect to seismic design category applicable to a specified area. Although the Proposed Project does not include the construction of new buildings, the Proposed Project consists of the remodeling of the "Big Barn" to achieve Occupancy A status and the placement of container restroom(s). The modeling and the pre-manufactured container restroom(s) will be required to be consistent with these standards. *Thus, the Proposed Project will have a less than significant impact.*

Ground Failure

Liquefaction hazards areas have not been identified in Mariposa County. Since there are no known faults within the immediate area, ground rupture from surface faulting should not be a potential problem. The State's Seismic Hazard Mapping Program has not yet mapped the County of Mariposa to determine the probability of various types of ground failure likely to occur as a result of earthquake activity. *Thus, the Proposed Project will have a less than significant impact.*

Landslides

The Five County Seismic Safety Study performed a generalized landslide risk appraisal and found that there was minimal risk of landslides caused by earthquakes in areas of low relief and moderate to high risk found in remaining mountain areas of the county. Although the Project area is elevated from SR 49, the Project site in which daily and special events would take place is not steep and has a low risk for landslide. *The impact is less than significant.*

Many other factors can play a role in the development of landslides, including rock types susceptible to sliding, steep slopes, heavy rainfall during winter months, and slopes that have been modified by development activity. Landslides generally occur on slopes of 15 percent or greater. Some grading will be necessary to implement the Proposed Project and this grading is required to be consistent with County standards. *Thus, the Proposed Project would have a less than significant impact.*

B.7.b, c Soil Erosion/Unstable Soils

A significant impact would be one that results in substantial soil erosion or loss of topsoil. A Geotechnical Report will be required for the Building Permit. Grading will need to occur in order to implement the Proposed Project, especially with the placement of the container restroom(s) at specified locations on the Project site. All applicable grading standards will apply to site grading work. This contains requirements for soil compaction and sediment control during construction, and permanent re-vegetation following construction. Onsite inspections would be conducted by the Building Department to ensure compliance with County requirements. The adopted policies and ordinance requirements, and the required permits and onsite inspections would ensure *a less than significant impact* from future grading activities associated with the Proposed Project. *As such, the Proposed Project would have a less than significant impact on this issue.*

B.7.d Expansive Soils

A significant impact would occur if the project is placed on expansive soils and creates substantial risk to life or property. The Proposed Project would not include significant grading activities. The Proposed Project includes the remodeling of the “Big Barn” to achieve Occupancy A status and the placement of pre-manufactured container restroom(s). *Thus, the Proposed Project would have a less than significant impact on this issue.*

B.7.e Septic Systems

A significant impact would occur if septic tanks or systems are utilized for the project and the soil is unable to support their use. The Proposed Project includes the construction of a septic system and associated leach field(s). The Proposed Project would include the placement of a pre-manufactured container bathroom(s) on the project site and the container bathroom(s) would connect to the constructed on-site septic system. The Proposed Project may include the construction of multiple leach fields depending on soil condition and recommendations from the Mariposa County Environmental Health Unit. The proposed Wastewater Treatment System for the Proposed Project will be required to meet existing regulatory requirements as applicable including but not limited to preparation of a Soils Report, Grading Plans, Engineering Plans, etc.

The septic system would be required to comply with all Mariposa County standards for design, installation, and maintenance of septic systems. *Implementation of the following mitigation measure will ensure that potential project impacts on the issue of septic disposal will be less than significant:*

Mitigation Measure 7.e.1:

Prior to the issuance of a grading or building permit for any structure or improvements within the project site, the septic system and associated leach field(s) shall be approved for septic disposal by the Mariposa County Environmental Health Unit and installed by the project proponent prior to operation of any Conditional Use permit project activities.

Monitoring for Mitigation Measure 7.e.1:

This mitigation measure will be monitored by the Mariposa County Planning Department through the project construction permitting process.

B.7.f Paleontological or Unique Geologic Features

A significant impact would occur if the project would directly or indirectly destroy a unique paleontological resource or site or unique geological feature. It is unlikely that the proposed development project will have an effect on important archaeological, historical, or other cultural resources. No further cultural resources investigation is therefore recommended. Mitigation Measure 5.a.1 as shown in B.5 – *Cultural Resources* of this initial study will reduce potential impacts to paleontological resources found during site excavation to a less than significant level. There are no known unique geologic features on the project site. *The project will have a less than significant impact on this issue.*

B.8 GREENHOUSE GAS EMISSIONS

8. GREENHOUSE GAS EMISSIONS Would the project:	Potentially significant impact	Less than significant with mitigation incorporation	Less than significant impact	No impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			√	
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?			√	

An assessment of the Proposed Project's potential impacts on air quality was prepared by Trinity Consultants. The title of the assessment is *Focused Air Quality Study – Happy Goat Experience Project*, and is dated December 2023. The assessment is available for review by contacting the Mariposa County Planning Department at (209) 966-5151 or at 5100 Bullion Street (lower floor) Mariposa, CA.

The Focused Air Quality Study describes in detail the regulatory environment relating to air quality and greenhouse gas emissions, the Project site's environmental setting, air quality impact methodologies, and impact determinations and recommended mitigation. This initial study section summarizes the conclusions of the greenhouse gas emissions portion of the study.

B.8.a & b Impacts: Greenhouse Gas (GHG) Emissions

A significant impact would occur if the project generated greenhouse gas emissions that may have a significant impact on the environment or conflict with a plan adopted to reduce the emissions of greenhouse gases. The Proposed Project's greenhouse gas (GHG) emissions are primarily from mobile source activities. Not all GHGs exhibit the same ability to induce climate change; as a result, GHG contributions are commonly quantified as carbon dioxide equivalents (CO₂e). The Proposed Project's operational CO₂e emission were estimated using CalEEMod. These emissions are summarized in the following Table:

	CO ₂ Emissions metric tons	CH ₄ Emissions metric tons	N ₂ O Emissions metric tons	CO ₂ e Emissions metric tons
2024 Project Operations	106.65	0.042	0.007	109.69
Source: Focused Air Quality Study, Trinity Consultants, December 2023				

MCAPCD does not have a set of guidelines to determine significance whether a project would generate significant amount of greenhouse gas emissions; therefore, the Focused Air Quality Study reviewed the San Joaquin Valley Air Pollution Control District (SJVAPCD) guidelines. SJVAPCD's guidelines were adopted in 2009, in the decade after SJVAPCD adopted their Guidance for Valley Land-Use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA, several new laws and executive orders were adopted that require additional reductions in years after 2020.

For instance, Senate Bill 32 requires that GHG emissions be 40% less than 1990 levels by 2030. More drastic still, Senate Bill 100 which was signed by the Governor requires 100% zero-carbon electricity by 2045. On the day SB100 was signed into law, the Governor also signed Executive Order B-55-18 which commits California to total, economy-wide carbon neutrality by 2045.

The Proposed Project's largest contributors to GHG emissions are exhaust from transportation fuels. Transportation fuels are, in effect, regulated by requiring providers and importers of fuel to participate in the GHG Cap-and-Trade Program and other Programs (e.g., low carbon fuel standard, renewable portfolio standard, etc.). Each sector-wide program exists within the framework of AB 32 and its descendant laws the purpose of which is to achieve GHG emissions reductions consistent with the AB 32 Scoping Plan.

The Proposed Project would generate GHGs from combustion of gasoline/diesel fuels, each of which is regulated near the top of the supply-chain. As such, each citizen of California (including those creating emission of this Project) will have no choice but to purchase fuels produced in a way that is acceptable to the California market. Thus, Project GHG emissions will be consistent with the relevant plan (i.e., AB 32 Scoping Plan). The Proposed Project would meet its fair share of the cost to mitigate the cumulative impact of global climate change based on fuel purchases from the California market. Thus, consumers of transportation fuels are in effect regulated by higher level emissions restrictions on the producers of these energy sources. *Therefore, the Proposed Project would have a Less Than Significant Impact on applicable GHG reduction plans and the Proposed Project's contribution to cumulative global climate change impacts would not be cumulatively considerable.*

B.9 HAZARDS AND HAZARDOUS MATERIALS

9. HAZARDS AND HAZARDOUS MATERIALS Would the project:	Potentially significant impact	Less than significant with mitigation incorporation	Less than significant impact	No impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			√	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			√	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				√
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				√
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety			√	

hazard for people residing or working in the project area?				
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			√	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			√	

B.9.a & b Transport of Hazardous Materials/Upset and Accident

A significant impact would be one that produces a substantial risk to the public from routine transportation, use, or disposal of hazardous material, or from reasonably foreseeable accidental release into the environment of such material through upset or accident. The Proposed Project is a visitor experience that is consistent with recreation uses. The Proposed Project would not result in the handling, transport, or use of hazardous materials except for those associated with typical recreational development and operation. Recreational uses typically do not use or store large amounts of hazardous materials. The Proposed Project would observe all fire safety procedures and maintain on-site commercial generators, fuel storage, spark arrestors, and vegetation abatement. Construction activity may include the temporary storage and use of potentially hazardous materials such as fuel and oil. Outdoor cooking, open fires, and fireworks would not be permitted under the Proposed Project. Any spills would be subject to local, state, and federal regulations, which minimize the risk associated with construction activities.

The Proposed Proponent proposes to have a Fire Safety Coordinator on-site at all times that would have responsibilities such as vegetation management and fuel treatment, overseeing emergencies and evacuations, inspecting emergency tools and equipment, communicating with fire agencies, and leading staff trainings. Additionally, an annual risk assessment would be conducted with Mariposa County Fire Department to implement all risk reductions measures identified during the assessment.

Due to these factors, the Proposed Project would have a less than significant impact on these issues.

B.9.c School Proximity

A significant impact would be one that emits hazardous emissions or results in the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

There are no schools located within a quarter-mile of the Project site. There are no known plans for a school within a quarter-mile of the Project site. *Thus, the Proposed Project would have no impact.*

B.9.d Exposure from Existing Contaminated Sites

A significant impact would be one that is located on a listed contamination site and exposes the public or the environment to the hazard. The Mariposa County General Plan, Volume III states that there are no contaminated sites within the County that are on the EPA's National Priority List of Superfund sites. Additionally, the Project site is not listed on the Mariposa County Environmental Health Unit's list of hazardous sites. *Thus, there would be no impact on this issue.*

B.9.e Hazards Near Airports and Airstrips

A significant impact would be one that results in a safety hazard for people residing or working in the vicinity of a public airport or private airstrip. The Mariposa-Yosemite Airport is located to the west of the Project site. The Mariposa-Yosemite Airport Comprehensive Land Use Plan identifies three safety zones surrounding the Airport

that intend to protect people from hazards and prevent property damage. The Project site is located within Airport Safety Zone B under the Mariposa-Yosemite Airport Comprehensive Land Use Plan. The Proposed Project's structural coverage is less than 50% of the total land area and no more than 50 people per acre would gather in compliance with the requirements of Airport Safety Zone B. *Thus, the Proposed Project would have a less than significant impact on this issue.*

B.9.f Emergency Response/Evacuation Plans

A significant impact would be one that impairs the implementation of or interferes with an emergency response or evacuation plan. CAL FIRE fire hazard severity zone mapping for Mariposa County dated September 29, 2023, prepared under the California Fire and Resource Assessment program, identifies the Project site as being in the "very high" fire hazard severity zone.

A Fire Hazard Mitigation Plan (FHMP), dated February 2024, was prepared by Dudek for the Proposed Project and was reviewed by the FHMP. The FHMP identifies evacuation protocols to be used in the event of an emergency on-site. Additionally, the FHMP states that a "Ready, Set, Go!" approach would be formally adopted, practiced, and implemented for the Proposed Project. The FHMP states that the "Ready, Set, Go!" concept is widely known and encouraged by the State of California and most fire agencies. Pre-planning for emergencies, including wildfire emergencies, focuses on being prepared, having a well-defined plan, minimizing potential for errors, maintaining the Proposed Project's fire protection systems, and implementing a conservative (evacuate as early as possible) approach to evacuation and Proposed Project operations during periods of fire weather extremes.

The Proposed Project would also employ a Fire Safety Coordinator that is on-site at all times and would be responsible for overseeing emergencies and evacuations.

Table 13-4 under Volume III of the Mariposa County General Plan lists the County's evacuation staging areas. The Proposed Project would not interfere with the evacuation staging areas listed. The Proposed Project would be subject to all applicable regulations relating to emergency response and evacuation, including in the event of a fire. The Mariposa County Fire Department provided input on the Proposed Project by listing sections of the California Fire Code applicable to the Proposed Project, including dimensions, surfacing and dead-end road length of fire apparatus access roads. The FHMP states that site access, including road widths and connectivity, for the Proposed Project would comply with the requirements of the Mariposa County Fire Department. The Proposed Project would provide an emergency secondary access that is available to guests for egress purposes in the event of an emergency.

Implementation of the Proposed Project's Fire Hazard Mitigation Plan and all State code relating to fire safety requirements would reduce potentially significant impacts associated with emergency situations to less than significant levels.

B.9.g Risk of Wildland Fires

A significant impact would be one that exposes people or structures to a significant risk of wildland fires. The Fire Hazard Mitigation Plan (FHMP) prepared for the Proposed Project includes a fire risk assessment. The FHMP's fire risk assessment determined that based on the Project site's location, climate, and fire history, it can be anticipated that periodic wildfires may start on, burn onto, or spot into the Project site. On-site wildfire ignitions could occur as a result of stoves, cigarettes, arson, or equipment use. Off-site ignitions could occur along CA-49 (vehicle fire, discarded cigarette, dragging tow chain), or through adjacent lands. However, the maintained treatment areas and fuel modification buffers would significantly reduce the likelihood of fire spreading off the site. Fire risk at the Project site would be managed through annually maintaining the recommended fuel modification around the Proposed Project, ensure the required fire department access roadways and water supply systems are fully operational, and regularly inform guests of the fire protection features and evacuation plans for the Proposed Project at acceptable levels.

The FHMP contains sections on fire risk analysis, which includes a modeling analysis of potential fire behavior; emergency response and service; fire safety measures, which discusses vegetation and woodland management, roads and access, water supply (water tanks and fire hose standpipes), operations, equipment inventory and maintenance, staff training, and visitor education; and, as described above, evacuation.

Additionally, the FHMP lists the following wildfire prevention measures that would be implemented under the Proposed Project:

- All structures to comply with CBC Chapter 7A Materials and Construction Methods for Exterior Wildfire Exposure.
- Smoking would be restricted to designated areas with receptacles for cigarette waste. The area and a minimum 50-foot buffer would have vegetative material cleared to bare mineral soil.
- Basic fire and first aid training would be provided to all employees, and it is recommended that at least one employee on-site at any given time has advanced first aid training (Emergency Medical technician or similar) to be coordinated with the Fire Department.
- Prior to operation, an Emergency Operations Plan would be developed to address wildfire and other emergency incidents at the site. This plan would be subject to review and approval by applicable emergency services providers. The Plan would include, at a minimum:
 - A Training and Exercise Plan, to be implemented annually with all employees, covering the Emergency Operation Plan and issues such as response to fire, fire extinguisher and firehose use, first aid and emergency medical response, and dealing with problem guests.
 - An orientation briefing for guests concerning potential hazards and what to do in the event of an emergency incident.
 - A site evacuation plan, defining routes of ingress and egress, rally points, and protocols for disabled guests and/or guests without their own transportation.

The FHMP states that the Proposed Project would also implement fuel reduction treatments that reduce the size and distribution of surface fuels to a level that moderate fire behavior to facilitate direct attack by firefighters.

The Proposed Project would provide four water tank pads throughout the property to supply domestic and fire suppression needs. The FHMP states that each pad consists of five 5,000-gallon interconnected tanks for a total of 25,000 gallons per pad and 100,000 gallons total for the property. Of that, approximately 30,000 gallons would be dedicated to fire suppression, based on NFPA Standard 1142 (Standard on Water Supplies for Suburban and Rural Fire Fighting). The tanks would be equipped with a pump that meets the requirements of NFPA Standard 1142. The pumps would be provided with a generator for backup power. Additionally, fire hose standpipes with 1 ½" fire hose connections are located throughout the Project site. Responding fire agency personnel (e.g., CAL FIRE, Mariposa County Fire Department) may utilize these water connections for fire suppression activities. Water connections would also be used by trained staff should a small fire occur on-site.

With the implementation of the Proposed Project's Fire Hazard Mitigation Plan and adherence to all applicable regulations and code standards relating to the issue of wildland fires, including fire safe provisions required by Cal Fire and the Mariposa County Fire Department, the Proposed Project would have a less than significant impact on this issue.

B.10 HYDROLOGY & WATER QUALITY

10. HYDROLOGY AND WATER QUALITY Would the project:	Potentially significant impact	Less than significant with mitigation incorporation	Less than significant impact	No impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			√	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			√	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in a substantial erosion on- or off-site;			√	
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site			√	
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			√	
iv) impede or redirect flood flows?			√	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				√
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			√	

B.10.a Water Quality Standards/Waste Discharge Requirements/Water Quality

A significant impact would occur if the project violated a water quality standard or waste discharge requirements or otherwise substantially degraded surface or groundwater quality. The project will utilize a septic system to serve the development on the site. Septic disposal is addressed in detail in subsection B.7.e of this initial study.

The Mariposa County Environmental Health Unit (EHU) requires that a full design of the proposed system including soil profile and percolation test results be submitted for review and approval at the building permit phase of project implementation.

The California Code of Regulations Title 24, Parts 1-12 standards contain drainage plan requirements to ensure that any changes to existing drainages are done in such a way as to ensure that the function and capacity of the affected drainage course is maintained following construction. Soil compaction standards, provisions for sediment control during construction, and re-vegetation following construction are contained in this ordinance. Onsite inspections by the Building Department are conducted to ensure compliance with these requirements. Although the Proposed Project includes the remodeling of the “Big Barn, daily public farm tours, bi-weekly outdoor education schools, and occasional special events and workshops, existing drainage patterns could be affected. Compliance with State and County regulations related to drainage would ensure that impacts are minimal.

Due to these factors, the Proposed Project would have a less than significant impact on water quality standards.

B.10.b & e Changes in Groundwater Resources

A significant impact would be one that substantially depletes groundwater quantities or interfere with groundwater recharge. There are currently four (4) wells on-site that produce 120 gallons per minute (gpm), 15 gpm, 45 gpm, and 12 gpm, respectively according to Well Completion Reports in 2021. Each well has a tank pad of five (5) 5,000 gallon tanks which equals 25,000 gallons of storage at each well site and a total of 100,000 gallons of water storage at the Project site. The wells can produce 276,480 gallons per day.

According to the Project proponent, agricultural uses at the Project site utilize an average of 19,338 gallons of water per day from the on-site wells. The Project proponent provided the County with estimated demand for the Proposed Project. At maximum use there would be 300 guests and 15 employees, with an average daily use of water for restrooms and handwashing at 15 gallons per person. As such, the total demand for the Proposed Project would be 34,725 gallons per day. Including agricultural water use, the total gallons of water per day would be 54,063 gallons.

As noted above, the Project site has up to 100,000 gallons of water storage and can produce 276,480 gallons per day, which is sufficient to meet the Proposed Project’s water demand, including the existing agricultural water use.

Fire Flow Demand:

A Fire Hazard Mitigation Plan (FHMP), dated February 2024, was prepared by Dudek for the Proposed Project. The FHMP identifies evacuation protocols to be used in the event of an emergency on-site and included an analysis of the fire flow demand needed for the Proposed Project. The FHMP states that of the 100,000 gallons of water storage available for the property, approximately 30,000 gallons would be dedicated to fire suppression, based on NFPA Standard 1142 (Standard on Water Supplies for Suburban and Rural Fire Fighting). The tanks would be equipped with a pump that meets the requirements of NFPA Standard 1142. The pumps would be provided with a generator for backup power. Additionally, fire hose standpipes (fire hydrants) with 1 ½” fire hose connections are located throughout the Project site. Responding fire agency personnel (e.g., CAL FIRE, Mariposa County Fire Department) may utilize these water connections for fire suppression activities. Water connections would also be used by trained staff should a small fire occur on-site.

The Mariposa County Fire Department commented on this study and provided input regarding construction requirements for potential occupancies, the location of fire hydrants, and the requirement for an Emergency Plan.

Due to these factors, the Proposed Project would have a less than significant impact on changes in groundwater resources.

B.10.c Drainage Patterns/Impervious Surfaces; Substantial Erosion; Flooding; Stormwater System Capacity; Polluted Runoff

A significant impact would be one that substantially alters drainage and surface flows through alteration of the course of a stream or river or through the addition of impervious surfaces in a manner that results in substantial erosion or siltation on- or off-site; substantially impacts drainage patterns causing flooding on- or off-site; contributes runoff causing the capacity of drainage systems to be exceeded or provides substantial polluted runoff; or redirects flood flows. The Proposed Project will not alter the course of a stream or river; result in substantial erosion on- or off-site; substantially increase the rate of system capacity; provide substantial additional sources of polluted runoff; or redirect flood flows. Minimal site grading would be subject to the standards of the California Code of Regulations Title 24, Parts 1-12 which would include soil compaction and sediment control during construction and permanent re-vegetation following construction. The Proposed Project would be located in an area of the Project site that has been previously disturbed by the existing agricultural operation. *Thus, the Proposed Project would have a less than significant impact on this issue.*

B.10.d Release of Pollutants in Flood Hazard, Tsunami or Seiche Zones from Project Inundation:

The project site is not in a flood hazard zone. The Biological Resource Evaluation for the project states that according to FEMA, the Project site is located within an Area of Minimal Flood Hazard. The corresponding map in the Report shows the project site within an area of “Area of Minimal Flood Hazard” (See Figure 3-2). The project is not located in a dam inundation zone and is not subject to seiche. Mariposa County is not subject to tsunamis. *The project would have no impact on these issues.*

B.11 LAND USE & PLANNING

11. LAND USE AND PLANNING Would the project:	Potentially significant impact	Less than significant with mitigation incorporation	Less than significant impact	No impact
a) Physically divide an established community?				√
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			√	

B.11.a Physically Divide an Existing Community

A significant impact would occur if the Proposed Project physically divided an established community. The 29-acre Project site is located on a 250-acre parcel that is currently used for farming operations. As a result, a majority of the structures and improvements on-site are existing. Construction under the Proposed Project includes roadway improvements, upgrading the existing “Big Barn” on-site to obtain Occupancy Class A status, the addition of container restrooms, and trenching for the installation of one leach field. The Project site is bordered by agricultural properties to the north and east, the Mariposa-Yosemite airport to the west, and State Route 49N to the south. Therefore, the Proposed Project would not divide an established community. *The Proposed Project would have no impact on this issue.*

B.11.b Conformance with General Plan Designation, Zoning and Other Environmental Policies

A significant impact would occur if the Proposed Project conflicted with a land use plan, policy or regulation adopted to avoid or mitigate an environmental effect. The Project site is split zoned – with the majority being Mountain General and the remaining area being Mountain Transition with a land use designation of Natural Resources.

The parcel is also located within the proposed expanded Mariposa Town Planning Study Area. The Mariposa County General Plan states that all recreation uses are consistent with the purpose of a town planning area. The Proposed Project is a visitor experience that is consistent with recreation uses. Until the Mariposa Town Plan is updated, the future expansion area will retain existing zoning districts and land use regulations. The Proposed Project would comply with all applicable standards of the Mountain General and Mountain Transition zones and the Natural Resources land use designation.

The Land Use Element of the Mariposa County General Plan contains a policy and implementation measure relating to maintaining the rural character of Mariposa County. Policy 5-1a states the following:

New development shall be in keeping with the County's rural character.

This policy is followed by Implementation Measure 5-1a(1) which states:

Land development regulations shall define thresholds within which uses are complementary to the concept of rural character as defined by the General Plan and in regulations associated with the Area Plans.

Additionally, the Agricultural Element promotes small farms, specialty crops, and working ranches to provide opportunities for agritourism. Specifically, Policy 10-5a states the following:

Identify adaptive uses of agricultural properties.

This policy is followed by Implementation Measure 10-5a(1):

Accommodate agritourism uses through changes in Agricultural zones.

The Mountain General and Mountain Transition Zoning Districts applicable to the Project site permit agricultural related uses listed under Chapter 17.108 of the Mariposa County Municipal Code. Agricultural uses permitted under Chapter 17.108 include but are not limited to animal husbandry, livestock grazing, the production of crops, horticulture, viticulture, silviculture, sale of agricultural products, and accessory uses and structures appurtenant to the agricultural use, subject to specific standards in Chapter 17.108. The Proposed Project would conduct daily and occasional special events under a Conditional Use Permit.

Specifically, the Proposed Project includes uses that are complementary to the concept of rural character. The Proposed Project includes daily public farm tours, bi-weekly outdoor education schools, and occasional special events and workshops. The bi-weekly outdoor education schools would include up to 50 guests per group. Up to 175 guests are anticipated on a daily basis, and up to 300 guests during special events. The proposed hours of operation are from 9:00 a.m. to 10:00 p.m. The applicant proposes to permit their events pursuant to Mariposa County Code Title 17.108.220 Special Events Facilities. Based on the proposed duration and proposed number of attendees for special events, a Conditional Use Permit (CUP) is required for the Proposed Project. Approval of the Conditional Use Permit under Mariposa County Code Title 17.108.220 would ensure that the rural character of surrounding communities and areas are protected under the Proposed Project.

The Proposed Project would not conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect. *Therefore, the Proposed Project would have less than significant impact on this issue.*

B.12 MINERAL RESOURCES

12. MINERAL RESOURCES Would the project:	Potentially significant impact	Less than significant with mitigation incorporation	Less than significant impact	No impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				√
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local General Plan, specific plan or other land use plan?				√

B.12.a, b Mineral Resources

A significant impact would occur if the Proposed Project resulted in the loss of availability of a mineral resource of value to the region and state, or resulted in the loss of a locally important mineral resource shown on land use planning maps. The Mariposa County General Plan does not identify the Project area as an important mineral recovery site. The site is not known to contain mineral resources valuable to the region or state. The subject property is currently used for farming operations. The Proposed Project would not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state, nor result in the loss of availability of a locally-important mineral resource recovery site. *Thus, the Proposed Project would have No Impact.*

B.13 NOISE

13. NOISE Would the project result in:	Potentially significant impact	Less than significant with mitigation incorporation	Less than significant impact	No impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			√	
b) Generation of excessive groundborne vibration or groundborne noise levels?			√	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or			√	

public use airport, would the project expose people residing or working in the project area to excessive noise levels?				
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An assessment of the Proposed Project’s potential noise impacts was prepared by WJV Acoustics, Inc. (WJVA). The title of the assessment is *Acoustical Analysis, Happy Goat Farm, Mariposa County, California, Highway 41, WJVA Report No. 17-041*, and is dated January 29, 2024. The assessment is available for review by contacting the Mariposa County Planning Department at (209) 966-5151 or at 5100 Bullion Street (lower floor) Mariposa, CA.

The acoustical analysis determined that the Proposed Project is in compliance with Mariposa County noise standards and that the addition of mitigation measures is not required. This initial study section summarizes the conclusions of the acoustical analysis.

B.13.a Generation of Substantial Noise That Exceeds Established Standards

A significant impact would occur if the Proposed Project resulted in the generation of substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Mariposa County Code Title 17.108.220 (Special Event Facilities) states that noise generated by, and for the duration of, a special event, including amplified sound, shall not exceed 60 decibels at all property lines. The Project application material submitted by the Project Proponent states that all events, visits, and associated noise and music would conclude by 10:00 pm. Pursuant to the Mariposa County General Plan, the applicable noise level standard for the Proposed Project is 50 dB L_{eq}.

The Project site is generally surrounded by undeveloped forest land, with a few rural residential land uses in the vicinity of the Project site. The two closest rural residential land uses adjacent to the Project site are approximately 3,000 feet and 1,700 feet away from the proposed event area. WJVA conducted a simulated event in which music was amplified through a speaker system supplied by a live musician located at the proposed event area on-site. The acoustical analysis states that noise levels measured at the closest rural residential property lines during the simulated live music event did not exceed 50 dB L_{eq}.

Given the uses proposed by the Proposed Project and restrictions on hours of events and live music activities, it can be determined that the Proposed Project would have a less than significant impact on the issue of noise.

B.13.b Groundborne Vibration or Noise

A significant impact would occur if the Proposed Project resulted in the generation of excessive ground-borne vibration or ground-borne noise levels. The acoustical analysis states that there are substantial topographic changes between the proposed live music area on-site and the closest off-site rural residential property lines. As a result, the topographic changes would provide acoustical shielding between the live music and the property lines.

Construction under the Proposed Project includes roadway improvements, upgrading the existing “Big Barn” on-site to obtain Occupancy Class A status, the addition to the construction/placement of the proposed container restroom(s), and trenching for the installation of the leach field(s). Noise associated with the construction under the Proposed Project would be of short duration and typically occur during the daytime hours. Therefore, the Proposed Project would not generate excessive groundborne vibration or groundborne noise. *The Proposed Project would have a less than significant impact.*

B.13.c Exposure to Airport or Airstrip Noise

A significant impact would occur if there is exposure of people residing or working in the project area to excessive noise from public airports or private airstrips. The Project site is located within two miles of the Mariposa Yosemite Airport. The Mariposa Yosemite Airport Comprehensive Land Use Plan states that noise levels up to 65 dB CNEL are considered to be compatible for outdoor recreation land uses. Additionally, the Mariposa Yosemite Airport Comprehensive Land Use Plan states that the Project site is not located within any of the provided airport noise contours (50-65 dB CNEL). The WJVA assessment concludes that the Proposed Project is compatible with the Mariposa Yosemite Airport Comprehensive Land Use Plan. *The Proposed Project would have a less than significant impact.*

B.14 POPULATION & HOUSING

14. POPULATION AND HOUSING Would the project:	Potentially significant impact	Less than significant with mitigation incorporation	Less than significant impact	No impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				√
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				√

B.14.a Population Growth Inducement

A significant impact would result if the project induces substantial population growth in the area. The Proposed Project includes daily public farm tours, bi-weekly outdoor education schools, and occasional special events and workshops. The bi-weekly outdoor education schools would include up to 50 guests per group. Up to 175 guests are anticipated on a daily basis, and up to 300 guests during special events. The Proposed Project would employ a total of seventeen (17) employees that would operate on two (2) shifts. It is likely that the proposed employees would be drawn from the local population, and there are no extension of roads or infrastructure proposed that would induce population growth. *Thus, the Proposed Project would have No Impact on this issue.*

B.14.b Displacement of Housing/People

A significant impact would result if the project displaced substantial numbers of existing people or housing, necessitating the construction of replacement housing. The Proposed Project has no potential to displace substantial numbers of existing people or housing. The Proposed Project includes daily public farm tours, bi-weekly outdoor education schools, and occasional special events and workshops. There are no existing residences that would be displaced. *Thus, the Proposed Project would have No Impact on this issue.*

B.15 PUBLIC SERVICES

15. PUBLIC SERVICES	Potentially significant impact	Less than significant with mitigation incorporation	Less than significant impact	No impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?			√	
b) Police protection?			√	
c) Schools?				√
d) Parks?				√
e) Other public facilities?			√	

A significant impact would occur if the project had a substantial adverse impact on the provision of the following public service facilities or result in a need to construct new or the physical alteration of such facilities, the construction of which would cause significant environmental impacts.

B.15.a & b Emergency Services Improvement Impacts

A Fire Hazard Mitigation Plan has been prepared for the Proposed Project by Dudek, dated February 2024. The Fire Hazard Mitigation Plan is available for review by contacting the Mariposa County Planning Department at (209) 966-5151 or at 5100 Bullion Street (lower floor) Mariposa, CA. The content of this plan are summarized in Sections B.9.f and B.9.g above and Section 5.20 (Wildfire) below. Existing emergency response facilities will provide adequate service to the project. Goal 9-9 of the General Plan states as its goal, “*Maintain quality emergency service delivery.*” Policy 9-9a calls for defining acceptable service standards and creating a comprehensive plan to attain and maintain service delivery, and Implementation Measures 9-9a(1) and 9-9a(2) call for the preparation and implementation of emergency services plan to implement the goal. The Proposed Project will not have a negative impact on this Goal, Policy or these Implementation Measures.

The Project site is located within a State Responsibility Area (SRA) for fire protection responsibility. The Mariposa County Fire Department (MCFD) and CalFire are jointly responsible for providing structural fire protection and emergency medical services to the Project site, though they also have wildland firefighting resources and can provide wildland fire protection as needed. The MCFD is administered by Calfire under a cooperative agreement with Mariposa County. The MCFD is headquartered in Mariposa and includes 14 fire stations, with 14 response zones dispersed across the County and resourced by volunteer firefighters. Regional response support is available in the form of Calfire initial attack resources. Additional resources in the region are available through cooperative agreements that include National Park Service fire resources and USDA Forest Service fire response resources.

The nearest MCFD firefighting resources are located at Fire Station 25 at the Mariposa-Yosemite Airport, immediately adjacent to the Project site and main entrance, approximately 1.2 road miles from the Project site. Resources include one (1) Type 1 fire engine and one (1) Type 6 fire engine.

There are two (2) MCFD Fire Stations that provide secondary coverage to Mariposa: Stations 23 and 21. Station 23 is located at McKay Park in Catheys Valley (7 miles away). Resources include one (1) Type 1 fire engine one (1) Type 1 water tender and one (1) Type 6 engine. Station 21 is located at the Midpines Park (10 miles away). Resources include one (1) Type 1 fire engine, one (1) Type 6 fire engine assigned to the company.

Water service for the Proposed Project is provided by existing on-site wells and water tanks. Water distribution includes water tanks, distribution lines, pumps, source development, and services to the bathrooms. Four (4) water tank pads (elevations at 2,410', 2,505', 2,510', and 2,545') are located throughout the property to supply domestic and fire suppression needs. Each pad consists of five (5) 5,000-gallon interconnected tanks for a total of 25,000 gallons per pad and 100,000 gallons total for the property. Of that, approximately 30,000 gallons will be dedicated to fire suppression, based on NFPA Standard 1142 (Standard on Water Supplies for Suburban and Rural Fire Fighting). The tanks are equipped with a pump that meets the requirements of NFPA Standard 1142. The pumps are provided with a generator for backup power.

Fire hose standpipes with 1 ½" fire hose connections are located throughout the Project site. Responding fire agency personnel (e.g., Calfire, MCFD) may utilize these water connections for fire suppression activities. These water connections may also be used by trained staff should a small fire occur onsite.

As detailed in the Fire Hazard Mitigation Plan, the Proposed Project is required to implement fire safety operational standards, including but not limited to identifying a Fire Safety Coordinator, conduction annual risk assessment with MCFD, prohibit the use of fires, fireworks, and outdoor cooking, maintenance of on-site commercial generators, and posting emergency procedures. These standards will be incorporated into the Project's Conditions of Approvals.

Police services are provided by the Mariposa County Sheriff's Department. The Mariposa County Sheriff's Office is located at 5099 Old Hwy N in Mariposa, four (4) miles away from the Project site. The Proposed Project includes daily public farm tours, bi-weekly outdoor education schools, and occasional special events and workshops. A Site Management Plan will be required as part of the Proposed Project's Conditions of Approval, which would include security requirements for Special Events and would establish a designated contact person for daily and special events. The Site Management Plan would be on file with the Mariposa County Sheriff's Department.

The Proposed Project would have a Less Than Significant Impact on Emergency Services.

B.15.c School Improvement Impacts

The Proposed Project would not result in the construction of new schools or cause the alteration of existing schools. New construction on the Project site is limited to the remodel of the "Big Barn" and placement of a new container bathroom(s). *As such, there are no potential impact on schools associated with the Proposed Project.*

B.15.d Park Improvement Impacts

The project has no potential to create new demand for parks facilities. The project will not result in new growth which would cause a demand for new park facilities. Existing facilities will provide adequate service to the project; no new facilities are needed. *Thus, the project will have no impact on parks facilities.*

B.15.e Other Public Facility Impacts, Including Road Improvement Impacts

Water and Sewer Public Facilities

See B.19 (Utilities and Service Systems) section below for a discussion of project impacts on water and sewer public facilities. The Proposed Project will provide its own water and sewage facilities.

Roads:

See B.17 (Transportation) section below for a discussion on impacts on area roadways. The Trip Generation Memorandum found that the Proposed Project would have a less than significant impact.

The project will have a less than significant impact on other public facilities.

B.16 RECREATION

16. RECREATION	Potentially significant impact	Less than significant with mitigation incorporation	Less than significant impact	No impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			√	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				√

B.16.a Use of Existing Recreational Facilities

A significant impact would result if the project substantially increased the use of existing parks or other recreational facilities and the increase in use had the potential to cause or accelerate substantial physical deterioration of facilities. The Proposed Project is recreational in nature and would include daily public farm tours, bi-weekly outdoor education schools, and occasional special events and workshops. The bi-weekly outdoor education schools would include up to 50 guests per group. Up to 175 guests are anticipated on a daily basis and up to 300 guests during special events. The Proposed Project would attract guests who would participate in the scheduled events, including special events. The Proposed Project would not impact existing recreational facilities, including Mariposa County Park in the community of Mariposa, as all events, including special events are to be held at the Project site. *As such, the Proposed Project would have a Less Than Significant Impact on use of existing recreational facilities.*

B.16.b Construction or Expansion of New Recreational Facilities

A significant impact would result if the project included recreational facilities that might adversely affect the physical environment due to construction or expansion. The project does not include development of recreational facilities and none would be required to be constructed due to this project. *The Proposed Project would have No Impact on this issue.*

B.17 TRANSPORTATION

17.TRANSPORTATION Would the project:	Potentially significant impact	Less than significant with mitigation incorporation	Less than significant impact	No impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			√	
b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?			√	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			√	
d) Result in inadequate emergency access?			√	

B.17.a Circulation System

A significant impact would result if the project conflicted with a program, plan, ordinance or policy addressing the circulation system.

An analysis of the Proposed Project's potential traffic impacts were prepared by Wood Rodgers, Inc. The title of the assessment is *Trip Generation Memorandum for the Happy Goat Farm Project* ("Memorandum"), and is dated December 8, 2023. The analysis is available for review by contacting the Mariposa County Planning Department at (209) 966-5151 or at 5100 Bullion Street (lower floor) Mariposa, CA.

The Memorandum provides a daily and peak hour trip generation estimate for the Proposed Project based on proposed day-to-day operations and compares the Project against Vehicle Miles Traveled (VMT) criteria. Additionally, the Memorandum includes corner sight distance and truck turn analysis at the CYA Road and SR 49 intersection.

This Initial Study subsection summarizes the conclusions of the Memorandum.

Typical Operations

The Trip Generation Memorandum conservatively assumed all Project employees would arrive in the morning during the AM Peak Hour and leave during the PM Peak Hour, resulting in 2 trips per employee per day. The Proposed Project's use is group tours/field trips, which would result in up to 175 visitors per day. Due to the high level of carpooling that occurs for these types of trips, group tours and field trips, the Trip Generation Memorandum anticipated these events to have an occupancy of 4 persons per vehicle. The visitors would primarily arrive in the morning or afternoon and would stay several hours during the experience. The Trip Generation Memorandum assumed that all visitors would arrive during AM peak hour and depart during the PM peak hour.

The following table provides a summary of the typical daily and peak hour trip generation for the Proposed Project. As shown in the table, the Proposed Project is estimated to generate a total of 98 daily weekday trips, with 49 AM peak hour trips (49 inbound and 0 outbound), and 49 PM peak hour trips (0 inbound and 49 outbound).

Trip Type	Quantity	Units	Daily Trips			AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total	In	Out	Total
Employees	5	Employees	5	5	10	5	0	5	0	5	5
Visitors	175	Visitors ¹	44	44	88	44	0	44	0	44	44
Total			49	49	98	49	0	49	49	0	49
Notes											
¹ Visitor groups have an expected occupancy of 4 persons per vehicle.											

Since the Proposed Project is only estimated to generate up to 49 peak hour trips, the Project traffic is not projected to cause any traffic operational deficiencies at nearby roadway facilities.

Special Events

The Proposed Project would host up to approximately one (1) special event per month with a maximum allowable guest count of 300. Assuming the same occupancy of 4 persons per vehicle for special event traffic, the maximum daily traffic generated by the Proposed Project during a special event would be 80 vehicles (5 employee vehicles and 75 guest vehicles), which would result in up to 160 daily trips. Timing of special event traffic would vary and could occur on weekdays or weekends, inside or outside of peak commute hours.

Based on the conclusions of the Trip Generation Memorandum, the Proposed Project will have a less than significant impact on the county's circulation system and affected roadways.

B.17.b Conflict With CEQA Guidelines §15064.3, Subdivision (b)

A significant project impact would be one that conflicts with CEQA Guidelines §15064.3. Senate Bill 743 (SB 743), signed in 2013, required changes to CEQA Guidelines on the measurement and identification of transportation impacts due to new projects in California. Revised CEQA Guidelines were adopted in 2018 which identified Vehicle Miles Traveled (VMT) as the most appropriate metric to evaluate transportation impacts. Statewide implementation of assessment of VMT is a metric of transportation impact occurred for all jurisdictions on July 1, 2020. The Governor's Office of Land Use and Climate Innovation (previously Office of Planning and Research) *Technical Advisory on Evaluating Transportation Impacts in CEQA* (OPR Technical Advisory) (December 2018), contains technical recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures. As the County has not currently adopted guidelines for the analysis of VMT due to new developments, VMT analysis for the Proposed Project were performed in accordance with guidelines from the OPR Technical Advisory.

The OPR Technical Advisory states that "Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less than significant transportation impact." As shown in the Table above, the Proposed Project is estimated to generate fewer than 110 daily. Daily trips generated by special events would not be considered for VMT evaluation, as the special events would occur infrequently enough that they would not significantly affect annual average daily Project trips.

The Trip Generation Memorandum concludes that based upon the above screening analysis, the VMT impact due to the Proposed Project is assumed to be less than significant.

B.17.c Increase Hazards due to Geometric Design Features

A significant impact would result if the project resulted in sharp curves or dangerous intersections or incompatible uses. The Trip Generation Memorandum includes an access evaluation of corner sight distance and truck turns at the CYA Road & SR 49 intersection, as requested by Caltrans Staff in a meeting on November 9, 2023.

Corner Sight Distance

Within the intersection's vicinity, SR 49 has a posted speed limit of 55 mph. The design speed was conservatively assumed to be 60 mph, which is 5 mph higher than the posted speed limit. Based on requirements for roadways with a designated speed of 60 mph, the minimum CSD for vehicles making right-turn from stop is 574 feet and the minimum CSD for vehicles making a left-turn from stop is 662 feet. The Trip Generation Memorandum concludes that the CSD at the CYA Road & SR 49 intersection meets or exceeds Caltrans requirements (See Attachment B of the Trip Generation Memorandum).

Truck Turns

Inbound and outbound truck turns were evaluated in the Trip Generation Memorandum for the CYA Road & SR 49 intersection using a 40-foot Single Unit (SU-40) Truck design vehicle. An SU-40 design vehicle is the largest design vehicle anticipated to visit the Project site. Exhibits contained in the Trip Generation Memorandum (Attachment C) illustrate ingress and egress turn templates for the intersection. The Trip Generation Memorandum concluded that the CYA Road & SR 49 intersection would accommodate the largest design vehicle anticipated to visit the Project site.

Based on the conclusions of the Trip Generation Memorandum and the Corner Sight Distance evaluation, *the Proposed Project would have a less than significant impact on the issue of traffic hazards.*

B.17.d Emergency Access

A significant impact would result if the project resulted in inadequate emergency access. The issue of emergency response and emergency evacuation is addressed in section B.9.f above. In accordance with the Fire Hazard Mitigation Plan (FHMP), prepared by Dudek, prior to commencement of operation, the project proponent will develop an Emergency Operations Plan that will address wildfire and other emergency incidents at the site. (The full FHMP is available for review at the Mariposa County Planning Department, 5100 Bullion Street [lower floor], Mariposa, CA.). The plan will be subject to review and approval by applicable emergency services providers. The Emergency Operations Plan includes the following:

- A Training and Exercise Plan, to be implemented annually with all employees, covering the Emergency Operation Plan and issues such as response to fire, fire extinguisher and firehose use, first aid and emergency medical response, and dealing with problem guests;
- An orientation briefing for guests concerning potential hazards and what to do in the event of an emergency incident; and
- A site evacuation plan, defining routes of ingress and egress, rally points, and protocols for disabled guests and/or guests without their own transportation.

Project driveways will be required to meet all emergency access requirements contained in Public Resources Code 4290. Implementation of these requirements will ensure adequate access to the site by emergency vehicles. See Section B.9.f *Emergency Response/Evacuation Plans* for a discussion of the project's impacts on emergency response and evacuation plans. *That section concludes that the project would have a less than significant impact on this issue. Due to these factors, the project will have a less than significant impact on emergency access.*

B.18 TRIBAL CULTURAL RESOURCES

18. TRIBAL CULTURAL RESOURCES	Potentially significant impact	Less than significant with mitigation incorporation	Less than significant impact	No impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or			√	
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		√		

B.18.a, b Tribal Cultural Resources

A significant impact would occur if the project had a significant impact on tribal cultural resources, which are defined in the table above. As noted in Section B.5 – *Cultural Resources*, a Cultural Resources Inventory for the project was conducted on an 1,800-acre area that encompasses the project area (project site of 29-acres). The survey of the site was conducted by Culturescape and is dated October 2020. Additionally a Cultural Resource Treatment Plan was prepared by Culturescape and is dated September 2023 with revisions as of July 19, 2024.

Cultural resources were identified as a result of the survey of the site; however, treatment options were identified in the Cultural Resource Treatment Plan. The report further states that should any prehistoric or historical components be uncovered, the finds must be evaluated by a qualified professional of the appropriate discipline to be contacted to evaluate the discovery. Should human remains be encountered, the County Coroner must be contacted immediately; if the remains are determined to be Native American, then the Native American Heritage Commission must be contacted as well. Implementation of Mitigation Measure 5.a.1 as described in the Cultural Resources section of this study will reduce potential impacts on cultural resources and/or human remains discovered during site development to a less than significant level.

This project involves the proposed adoption of a Mitigated Negative Declaration under CEQA. When such a document is proposed for adoption, Native American tribes on the County's Native American contact list, which is obtained from the Native American Heritage Commission (NAHC), are notified that they have thirty (30) days to request a consultation on the project. Mariposa Planning sent a certified letter dated January 24, 2025 to tribal representatives on the contact list notifying them that they had until February 23, 2025 to request a consultation.

The following is a list of Native American tribes who were notified as per the contact list provided by NAHC:

- Buena Vista Rancheria of Me-Wuk Indians
- Calaveras Band of Mi-Wuk Indians
- Chicken Ranch Rancheria of Me-Wuk Indians
- Ione Band of Miwok Indians
- Jackson Rancheria Band of Miwuk Indians
- Nashville Enterprise Miwok-Maidu-Nishman Tribe
- Pakan'yani Maidu of Strawberry Valley Rancheria
- Picayune Rancheria of Chukchansi Indians
- Southern Sierra Miwuk Nation
- Tule River Indian Tribe
- Tuolumne Band of Me-Wuk Indians
- Wuksache Indian Tribe/Eshom Valley Band

A Tribe listed above responded to the Notification Letter and indicated that there may be known resources on the property that could be discovered during grading activities. Monitoring during construction activities was recommended to ensure any potential impacts are reduced to a less than significant level through tribal monitoring. As such, Mitigation Measure 18.b.1 is included to require that a Native American monitor be on-site for the duration of ground disturbance activities. *Implementation of the following mitigation measure will ensure that potential impacts on the issue of tribal cultural resources will be less than significant.*

Mitigation Measure 18.b.1:

A Native American monitor shall be on-site for the duration of ground disturbance activities. During road grading, soil testing and/or construction, or any activity that involves ground disturbance necessary to implement project conditions of approval, if any signs of prehistoric, historic, archaeological, paleontological resources are evident, all work activity within fifty feet of the find shall stop and the Mariposa County Planning Department shall be notified immediately. No work shall be done within fifty feet of the find until Planning has identified appropriate measures to protect the find and those measures have been implemented by the applicant. Protection measures for the site may include, but not be limited to, requiring the applicant to hire a qualified archaeologist who shall conduct necessary inspections and research, and who may supervise all further ground disturbance activities and make any such recommendations as necessary to ensure compliance with applicable regulations.

Monitoring for Mitigation Measure 10.b.1:

This mitigation measure will be monitored by the Mariposa County Planning Department through the project grading activities.

B.19 UTILITIES & SERVICE SYSTEMS

19. UTILITIES AND SERVICE SYSTEMS Would the project:	Potentially significant impact	Less than significant with mitigation incorporation	Less than significant impact	No impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			√	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			√	
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				√
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			√	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			√	

B.19.a Water, Wastewater Treatment; Stormwater Drainage; Electric Power, Natural Gas, Telecommunications Facilities

A significant impact would result if the project required or resulted in the relocation or construction of these facilities that would cause significant environmental effects. The Proposed Project would use on-site water and sewage disposal systems. It will not connect to any off-site system. The issue of sewage disposal is discussed in detail in sections B.7.e and B.10.a of this study. The issue of water provision is discussed in section B.10.b, e. The water system will operate under a permit from the State Water Resources Control Board – Division of Drinking Water. No stormwater facility is expected to be constructed or relocated to implement the project. *The Proposed Project would have a less than significant impact on this issue.*

B.19.b Water Supply

A significant impact would result if the project did not have sufficient water supplies and reasonably foreseeable future development in normal, dry or multiple dry years. The project's proposed water system and potential impact on groundwater is discussed in detail in subsection B.10.b & e of this initial study.

It is also discussed in subsection B.15.e of this initial study. Water service for the Proposed Project is provided by existing on-site wells and water tanks. Water distribution includes water tanks, distribution lines, pumps, source development, and services to the bathrooms. Four (4) water tank pads (elevations at 2,410', 2,505', 2,510', and 2,545') are located throughout the property to supply domestic and fire suppression needs. Each pad consists of five (5) 5,000-gallon interconnected tanks for a total of 25,000 gallons per pad and 100,000 gallons total for the property. Of that, approximately 30,000 gallons will be dedicated to fire suppression, based on NFPA Standard 1142 (Standard on Water Supplies for Suburban and Rural Fire Fighting). The tanks are equipped with a pump that meets the requirements of NFPA Standard 1142. The pumps are provided with a generator for backup power. *The analysis in these sections concludes that the project's potential impact on groundwater is less than significant.*

B.19.c Wastewater Treatment Capacities

A significant impact would result if a wastewater treatment provider does not have the capacity to serve the project in addition to its existing commitments. The project will be served by an on-site septic disposal system(s) each with secondary treatment. The proposed system is discussed in detail in subsection B.7.e of this initial study. It will not be served by an existing wastewater treatment system. *The project will have no impact on a wastewater treatment provider.*

B.19.d,e Solid Waste

A significant impact would occur if a project generated solid waste in excess of state or local standards or in excess of the capacity of local infrastructure; otherwise impaired the attainment of solid waste reduction goals; or did not comply with reduction statutes related to solid waste. The Proposed Project will generate solid waste during daily activities and proposed special events. However, waste generated is not expected to significantly impact the capacity of the county's landfill, nor impact the attainment of solid waste reduction goals. The Proposed Project would include the placement of large trash and recycle dumpsters on the Project site.

Smaller trash and recycling receptacles will be placed throughout the project site to accommodate daily and special events. Maintenance/housekeeping personnel will transfer the contents of the smaller bins to the dumpsters throughout the day depending on occupancy. The dumpsters will be emptied by the current vendor at the project site one or two times per week, depending on occupancy. *Due to these factors, the Proposed Project would have a less than significant impact.*

B.20 WILDFIRE

20. WILDFIRE If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially significant impact	Less than significant with mitigation incorporation	Less than significant impact	No impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			√	
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			√	
c) Require the installation or maintenance			√	

of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			√	

B.20.a Emergency Response or Evacuation Plan

A significant impact would result if a project located in or near State Responsibility Areas or very high fire hazard severity zones would result in substantial impacts on adopted emergency response or emergency evacuation plans. (Please see subsection B.9.f in the Hazard and Hazardous Materials section of this study for a discussion of the project impacts on emergency response and evacuation plans. *The project's potential impact on emergency response and evacuation plans is considered to be less than significant.*

B.20.b & c Exposure to Pollutant Concentrations/infrastructure Installation

A significant impact would occur if the project exposed project occupants to pollutant concentrations from wildfire. The Fire Hazard Mitigation Plan (FHMP) prepared for the Proposed Project includes a fire risk assessment. The FHMP's fire risk assessment determined that based on the Project site's location, climate, and fire history, it can be anticipated that periodic wildfires may start on, burn onto, or spot into the Project site. On-site wildfire ignitions could occur as a result of stoves, cigarettes, arson, or equipment use.

Off-site ignitions could occur along CA-49 (vehicle fire, discarded cigarette, dragging tow chain), or through adjacent lands. However, the maintained treatment areas and fuel modification buffers would significantly reduce the likelihood of fire spreading off the site. Fire risk at the Project site would be managed through annually maintaining the recommended fuel modification around the Proposed Project, ensure the required fire department access roadways and water supply systems are fully operational, and regularly inform guests of the fire protection features and evacuation plans for the Proposed Project at acceptable levels.

The FHMP contains sections on fire risk analysis, which includes a modeling analysis of potential fire behavior; emergency response and service; fire safety measures, which discusses vegetation and woodland management, roads and access, water supply (water tanks and fire hose standpipes), operations, equipment inventory and maintenance, staff training, and visitor education; and, as described above, evacuation.

Additionally, the FHMP lists the following wildfire prevention measures that would be implemented under the Proposed Project:

- All structures to comply with CBC Chapter 7A Materials and Construction Methods for Exterior Wildfire Exposure.
- Smoking would be restricted to designated areas with receptacles for cigarette waste. The area and a minimum 50-foot buffer would have vegetative material cleared to bare mineral soil.
- Basic fire and first aid training would be provided to all employees, and it is recommended that at least one employee on-site at any given time has advanced first aid training (Emergency Medical technician or similar) to be coordinated with the Fire Department.
- Prior to operation, an Emergency Operations Plan would be developed to address wildfire and other emergency incidents at the site. This plan would be subject to review and approval by applicable emergency services providers. The Plan would include, at a minimum:

- A Training and Exercise Plan, to be implemented annually with all employees, covering the Emergency Operation Plan and issues such as response to fire, fire extinguisher and firehose use, first aid and emergency medical response, and dealing with problem guests.
- An orientation briefing for guests concerning potential hazards and what to do in the event of an emergency incident.
- A site evacuation plan, defining routes of ingress and egress, rally points, and protocols for disabled guests and/or guests without their own transportation.

The FHMP states that the Proposed Project would also implement fuel reduction treatments that reduce the size and distribution of surface fuels to a level that moderate fire behavior to facilitate direct attack by firefighters.

The Proposed Project would provide four water tank pads throughout the property to supply domestic and fire suppression needs. The FHMP states that each pad consists of five 5,000-gallon interconnected tanks for a total of 25,000 gallons per pad and 100,000 gallons total for the property. Of that, approximately 30,000 gallons would be dedicated to fire suppression, based on NFPA Standard 1142 (Standard on Water Supplies for Suburban and Rural Fire Fighting). The tanks would be equipped with a pump that meets the requirements of NFPA Standard 1142. The pumps would be provided with a generator for backup power. Additionally, fire hose standpipes with 1 ½” fire hose connections are located throughout the Project site. Responding fire agency personnel (e.g., CAL FIRE, Mariposa County Fire Department) may utilize these water connections for fire suppression activities. Water connections would also be used by trained staff should a small fire occur on-site.

Given these factors, the project’s impact on this issue is less than significant.

B.20.d Exposure of People or Structures to Risks

A significant impact would occur if the project exposed people or structures to significant risks as described in the table above. The project site would not be subject to flooding. The project site is located in a general area that has experienced threats from wildfire. However, it is unlikely, given the site topography, that people or structures would be exposed to significant risk, including from landslides, as a result of runoff, post fire instability, or drainage changes. The Proposed Project would include the remodel of the “Big Barn” to achieve Occupancy A status. The remodel would be constructed to all applicable standards. As noted in B.20.b above, a Fire Hazard Mitigation Plan prepared for the Proposed Project includes a fire risk assessment and evacuation analysis. Please see subsection B.7.a, b, c & d *Faults, Ground Shaking, Ground Failure and Landslides/Soil Erosion/Expansive Soil* in the Geology and Soils section of this initial study for a discussion of soils on the project site, and subsection B.10.c *Drainage Patterns/Impervious Surfaces; Substantial Erosion; Flooding; Stormwater System Capacity; Polluted Runoff* in the Hydrology and Water Quality section of this initial study for a discussion of drainage issues. *The Proposed Project would have a less than significant impact on this issue.*

Section C

MANDATORY FINDINGS OF SIGNIFICANCE

<i>Finding:</i>	Potentially Significant Impact	Less Than Significant With Mitigation	Less than Significant Impact	No Impact
1. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
2. Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
3. Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Impact Discussion & Conclusions:

- The project has the potential to significantly impact biological resources, specifically, special status plant and animal species; raptors; and aquatic resources. Mitigation measures are proposed to reduce these potentially significant impacts to less than significant levels. The project has the potential to impact cultural resources during grading and construction activities on the project site. A mitigation measure is proposed to reduce this potentially significant impact to a less than significant level.
- The project will result in increased air emissions, including greenhouse emissions; groundwater use; noise; traffic; demand for public services; and potentially increased risks to property and people from wildland fires. However, these impacts are not considered to be significant, are individually limited, and not cumulatively considerable. Mariposa County adopts a standard condition of approval on commercial development that addresses potentially significant noise impacts. The project’s potential impacts on on-site biological and cultural resources can be reduced to less than significant levels with the implementation of proposed mitigation measures. The project’s potential impacts on these issues as well as the issues of geology and soils from septic system(s) installation are individually limited and not cumulatively considerable and can be reduced to levels of insignificance with implementation of mitigation measures.
- The project has the potential to cause direct substantial adverse effects on human beings relating to septic system installation. Mitigation is proposed to reduce these potentially significant impacts to less than significant levels.

Based upon the environmental review conducted within this initial study, and the anticipated level of impact as a result of the project, a mitigated negative declaration will be adopted for the project.

Section D

MITIGATION MONITORING

Mitigation Measure No.	Mitigation Measure	Mitigation Monitoring
4.a.1	<i>The project proponent shall implement the following best management practices during project activities:</i> <i>• A pre-activity survey of the Project and within a 250-foot buffer for nesting migratory birds and a 500-foot buffer for nesting raptors surrounding the Project footprint should be conducted yearly, in April or May, to identify active bird nests. Areas within 250 feet of the active nests should be designated as “quiet zones” where noise and activities would be curtailed until you have fledged from the nest. The survey should be conducted by a qualified biologist with adequate training and experience conducting surveys for nesting birds.</i> <i>• An informational brochure containing information on sensitive natural communities and special-status species that could be present in the area should be provided to all visitors so that they are aware of the unique species that could potentially occur on the site.</i> <i>• Noise limits should be established for night events to reduce noise pollution that could affect bat foraging activities. Noise levels after sundown should be limited to no greater than 95 decibels (dBA scale) and night tours should be prohibited past 10 PM.</i> <i>• Project-related vehicles should observe a 20-mph speed limit in all Project areas, except on County roads and State and federal highways. This is particularly important at night when certain animals are most active. To the extent possible, nighttime traffic should be minimized. Off-road traffic outside of designated project areas should be prohibited.</i> <i>• All trash and food items that attract wildlife should be discarded into closed containers and properly disposed of at the end of each workday.</i> <i>• To prevent harassment or mortality of special status species, no pets from visitors aside from service animals and emotional support animals should be permitted on the Project site.</i>	This mitigation measure will be monitored by the Mariposa County Planning Department through the project construction permitting process.
5.a.1	<i>As provided by Health and Safety Code 7050.5., if human remains are uncovered during future work, then all work is to stop until the county coroner can determine whether the remains are subject to the provisions of the Government Code. Pursuant to the Public Resources Code Section</i>	The project proponent or his on-site designee shall be responsible for ensuring compliance with this mitigation and the

	<i>5097.98, if the coroner finds that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be Native American, the coroner has 24 hours to contact the Native American Heritage Commission. They will contact the most likely descendent who will make recommendations on how to proceed. The most likely descendant has 24 hours to respond. If the most likely descendant does not respond in 24 hours, the owner may reinter the remains in an area of the property secure from further disturbance. If the owner does not accept the descendant's recommendations, the owner or the descendant may request mediation by the Native American Heritage Commission.</i>	Mariposa County Planning Department will monitor the measure through the project construction permitting process.
5.a.2	<i>Should any prehistoric or historical components be uncovered, that is, resources possessing physical evidence of human activities over 45 years old, then all work is to stop, and a qualified professional of the appropriate discipline is to be contacted to evaluate the discovery.</i>	The project proponent or his on-site designee shall be responsible for ensuring compliance with this mitigation and the Mariposa County Planning Department will monitor the measure through the project construction permitting process.
7.e.1	<i>Prior to the issuance of a grading or building permit for any structure or improvements within the project site, the septic system and associated leach field(s) shall be approved for septic disposal by the Mariposa County Environmental Health Unit and installed by the project proponent prior to operation of any Conditional Use permit project activities.</i>	This mitigation measure will be monitored by the Mariposa County Planning Department through the project construction permitting process.
18.b.1	<i>A Native American monitor shall be on-site for the duration of ground disturbance activities. During road grading, soil testing and/or construction, or any activity that involves ground disturbance necessary to implement project conditions of approval, if any signs of prehistoric, historic, archaeological, paleontological resources are evident, all work activity within fifty feet of the find shall stop and the Mariposa County Planning Department shall be notified immediately. No work shall be done within fifty feet of the find until Planning has identified appropriate measures to protect the find and those measures have been implemented by the applicant. Protection measures for the site may include, but not be limited to, requiring the applicant to hire a qualified archaeologist who shall conduct necessary inspections and research, and who may supervise all further ground disturbance activities and make any such recommendations as necessary to ensure compliance with applicable regulations.</i>	This mitigation measure will be monitored by the Mariposa County Planning Department through the project grading activities.

Attachments List

Appendix

- A. Acoustical Analysis for Happy Goat, Inc., Happy Goat Farm, Mariposa County, California, Highway 41, WJV Acoustics, Inc., January 29, 2024.
- B. Biological Resource Evaluation for Happy Goat Inc., Happy Goat Experience Project, QK, June 2023.
- C. Cultural Resource Inventory for the Proposed Development of the Cahalin Ranch, Mariposa, California, Culturescape, October 2020. **(Not available for public review and not attached to this document)**
- D. Cultural Resource Treatment Plan, Compliance Report for the Happy Goat Farm Conditional Use Permit, CUP #2023-078, Culturescape, February 2, 2024. **(Not available for public review and not attached to this document)**
- E. Revised Cultural Resource Treatment Plan, Compliance Report for the Happy Goat Farm Conditional Use Permit, CUP #2023-078, Culturescape, July 19, 2024. **(Not available for public review and not attached to this document)**
- F. Fire Hazard Mitigation Plan for Happy Goat, Inc., Happy Goat Experience Project, Dudek, February 2024.
- G. Focused Air Quality Study for Happy Goat, Inc., Happy Goat Experience Project, Mariposa County, CA, Trinity Consultants, December 2023.
- H. Lighting Plan.
- I. Solid Waste Management Plan for Happy Goat Inc., 5030 CYA Rd., Mariposa, CA 95338, October 1, 2023.
- J. Trip Generation Memorandum for the Happy Goat Farm Project, Wood Rogers, December 8, 2023.
- K. Well Information via Email dated January 9, 2025 and Well Completion Reports
- L. Happy Goat Plan Set, dated July 18, 2024
- M. Happy Goat Illustrative Site Plan

RECEIVED

FEB 28 2024

Mariposa County Planning Department

ACOUSTICAL ANALYSIS
HAPPY GOAT FARM
MARIPOSA COUNTY, CALIFORNIA
HIGHWAY 41

WJVA Report No. 17-041

PREPARED FOR

HAPPY GOAT, INC.
110 SE 6TH STREET
FT. LAUDERDALE, FLORIDA 33301

PREPARED BY

WJV ACOUSTICS, INC.
VISALIA, CALIFORNIA



wjv acoustics

JANUARY 29, 2024

1. INTRODUCTION

a. Project Description

The Project, Happy Goat Farm, would develop a "Happy Goat Experience" that would cover approximately 29- acres of the overall site and involve guest tours, educational field trips, and occasional special events. Primary access to the Project would be provided via an improved Project Access Road connection to CYA Road approximately 470 feet north of SR 49. A portion of the Project site contains existing farming operations which would be separate from and unaffected by the proposed Project. The County's General Plan Land Use Diagram designates the site as NR/Planning study Area Mariposa TPA. The site is zoned MGZ (Mountain General Zone) and MTZ Mountain Transition Zone). A Project site plan is included and provided as Figure 1.

The Happy Goat Experience would operate seven days a week between 9:00 a.m. and 10:00 p.m. The Project site currently has 12 existing farm employees, and the proposed Happy Goat Experience would add up to 5 new employees. Typical operations would consist of up to approximately 175 visitors per day attending educational tours (for example, school field trips). Up to approximately once a month a special event may be held with a maximum guest count of 300 people.

b. Project Location

The project site is located within an unincorporated portion of Mariposa County, near the community of Mariposa. The site lies northeast of the California State Route 49 (SR 49) & CYA Road intersection on an approximately 250-acre parcel designated as Assessor's Parcel Number (APN) 012-041-002.

2. THRESHOLDS OF SIGNIFICANCE

The CEQA Guidelines apply the following questions for the assessment of significant noise impacts for a project:

- a. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?
- c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Appendix A provides definitions of the acoustical terminology used in this report. Unless otherwise stated, all sound levels reported in this analysis are A-weighted sound pressure levels in decibels (dB). A-weighting de-emphasizes the very low and very high frequencies of sound in a manner similar to the human ear. Most community noise standards utilize A-weighted sound levels, as they correlate well with public reaction to noise. Appendix B provides typical A-weighted sound levels for common noise sources.

In terms of human perception, a 5 dB increase or decrease is considered to be a noticeable change in noise levels. Additionally, a 10 dB increase or decrease is perceived by the human ear as half as loud or twice as loud. In terms of perception, generally speaking the human ear cannot perceive an increase (or decrease) in noise levels less than 3 dB.

a. Noise Level Standards

Mariposa County

The Mariposa County Noise Element of the General Plan¹ (adopted in 2006) establishes noise level criteria in terms of the Day-Night Average Level (L_{dn}) metric. The L_{dn} is the time-weighted energy average noise level for a 24-hour day, with a 10 dB penalty added to noise levels occurring during the nighttime hours (10:00 p.m.-7:00 a.m.). The L_{dn} represents cumulative exposure to noise over an extended period of time and is therefore calculated based upon *annual average* conditions.

For transportation noise sources, Table C-2 of Appendix C (Future Consideration) of the Noise Element establishes a land use compatibility criterion of 60 dB L_{dn} for exterior noise levels in

outdoor activity areas of residential and transient lodging developments. Outdoor activity areas generally include individual backyards of single-family residential land uses and patios or common use areas (pools, gathering areas) of transient lodging. The intent of the exterior noise level requirement is to provide an acceptable noise environment for outdoor activities and recreation.

Additionally, Table C-2 of Appendix C of the Noise Element requires that interior noise levels attributable to exterior transportation noise sources not exceed 45 dB L_{dn}. The intent of the interior noise level standard is to provide an acceptable noise environment for indoor communication and sleep.

For non-transportation noise sources, Table C-1 of Appendix C of the Noise Element establishes hourly performance standards, in terms of the L_{eq} (energy average). The standards are to be adjusted by -5 dB if the noise source of concern consists primarily of speech or music. The ordinance is to be applied during any one-hour time period of the day or night and the standards are 10 dB more restrictive during the nighttime hours of 10:00 p.m. to 7:00 a.m. Table I provides the applicable noise level standards for non-transportation noise sources.

TABLE I EXTERIOR NOISE LEVEL PERFORMANCE STANDARDS, DBA NON-TRANSPORTATION NOISE SOURCES MARIPOSA COUNTY GENERAL PLAN		
Noise Level Descriptor	Daytime (7 am-10 pm)	Nighttime (10 pm-7 am)
L _{eq}	55 (50) ¹	45 (40) ¹

¹Noise levels in parenthesis are adjusted standard for a noise source consisting primarily of speech or music.

Source: Table C-1 of Appendix C of the Mariposa County General Plan

State of California

There are no state noise standards that are applicable to the project.

Federal Noise Standards

There are no federal noise standards that are applicable to the project.

3. SETTING

The project site is located within an unincorporated portion of Mariposa County, near the community of Mariposa. The site lies northeast of the California State Route 49 (SR 49) & CYA Road intersection on an approximately 250-acre parcel.

The subject property is currently owned by the project applicant. The project site is generally surrounded by undeveloped forested land, with a few rural residential land uses in the vicinity of the project site. The Mariposa-Yosemite Airport is located southwest of the project site.

a. Existing Noise Environment

WJVA staff conducted background (ambient) noise level measurements within the project site on October 24, 2023. Ambient noise levels were measured at the two (2) closest property lines, where the overall project site is adjacent to rural residential land uses. Background (ambient) noise level measurements were conducted at the two noise measurement sites (R-1 and R-2) when no amplified speech or music was occurring at the Event Area location.

The project vicinity (Event Area) and noise measurement sites are provided as Figure 2. Photographs of noise measurement sites R-1 and R-2 are provided as Figures 3 and Figure 4, respectively. Measurement site R-1 was located approximately 3,000 feet southwest from the proposed Event Area and measurement site R-2 was located approximately 1,700 feet southeast from the proposed Event Area. It should be noted, there is substantial topographic changes between the Event Area and the closest off-site rural residential property lines (R-1 and R-2). This topography provides acoustical shielding between the noise source (amplified music at the Event Area) and the property lines.

Noise monitoring equipment utilized for the measurements consisted of Larson-Davis Laboratories Model LDL-820 sound level analyzers equipped with a B&K Type 4176 1/2" microphones. The equipment complies with the specifications of the American National Standards Institute (ANSI) for Type I (Precision) sound level meters. The meters were calibrated in the field prior to use with a B&K Type 4230 acoustic calibrator to ensure the accuracy of the measurements. The microphones were located on a tripod at 5 feet above the ground.

Table IV summarizes the ambient noise measurement results. Noise levels were measured in consecutive 5-minute intervals. Noise sources contributing to the ambient noise levels included distant vehicle traffic, occasional aircraft overflights, agricultural activities, and noises associated with rural residential land uses. The noise level data summarized by Table IV are representative of afternoon conditions in the project area.

TABLE IV		
SUMMARY OF AMBIENT NOISE LEVEL MEASUREMENTS HAPPY GOAT FARM, MARIPOSA COUNTY OCTOBER 24, 2023		
Location	A-weighted Decibels, dBA	
	L_{max} , average (range)	L_{eq} , average (range)
R-1	49 (43-53)	38 (36-39)
R-2	39 (35-46)	29 (28-34)

Source: WJV Acoustics, Inc.

4. PROJECT RELATED NOISE LEVELS

a. Amplified Music and Speech

The County's applicable noise level standards for the project are provided above in Table I. According to the project applicant, all amplified music and speech would conclude by 10:00 p.m. As such, the applicable noise level standard for the project (when adjusted for noise consisting primarily of music and speech) is 50 dB L_{eq} .

On October 24, 2023 WJVA staff measured noise levels at the project site while music was being amplified through a speaker system supplied by a live musician, located at the Event Area. According to the musician and applicant, amplified noise levels during the simulated event were comparable to that which would be experienced during a special event. WJVA staff also agreed with this assessment. This simulated event was conducted at the area indicated as "Event Area" on Figure 2. Noise levels were then measured at the same two locations described above, while amplified music was playing.

Table V summarizes the noise measurement results conducted while amplified music was occurring at the Event Area.

TABLE V		
SUMMARY OF PROJECT-RELATED NOISE LEVEL MEASUREMENTS HAPPY GOAT FARM, MARIPOSA COUNTY OCTOBER 24, 2023		
Location	A-weighted Decibels, dBA	
	L_{max} , average (range)	L_{eq} , average (range)
R-1	48 (46-51)	36 (35-37)
R-2	40 (36-44)	29 (27-32)

Source: WJV Acoustics, Inc.

Reference to Table V indicates that noise levels measured at the closest rural residential property lines did not exceed the County's applicable daytime noise level standard of 50 dB L_{eq} . Furthermore, a comparison of noise levels measured at the residential property lines when no

amplified music was occurring at the Event Area (Table IV) and noise levels measured at the residential property lines while amplified music was occurring at the Event Area (Table V) indicate no changes in measured noise levels. Noise levels associated with amplified speech and music at the Event Area would not result in an increase over existing (without amplified music) noise levels at any off-site residential property line. The addition of mitigation measures is not required for project compliance with Mariposa County noise standards.

b. Noise Impacts From Nearby Airports or Airstrips (Less Than Significant)

The proposed project site is located within two miles of the Mariposa Yosemite Airport. WJVA staff reviewed the Mariposa Yosemite Airport Comprehensive Land Use Plan². According to the Mariposa Yosemite Airport Comprehensive Land Use Plan, noise levels up to 65 dB CNEL are considered to be compatible for outdoor recreation land uses. According to the Mariposa Yosemite Airport Comprehensive Land Use Plan, the project site is not located within any of the provided airport noise contours (50-65 dB CNEL). As such, the project is considered compatible with the Mariposa Yosemite Airport Comprehensive Land Use Plan.

5. SOURCES CONSULTED

1. Mariposa County General Plan, 2006.
2. Mariposa Yosemite Airport Comprehensive Land Use Plan, 1995.

FIGURE 1: PROJECT SITE PLAN

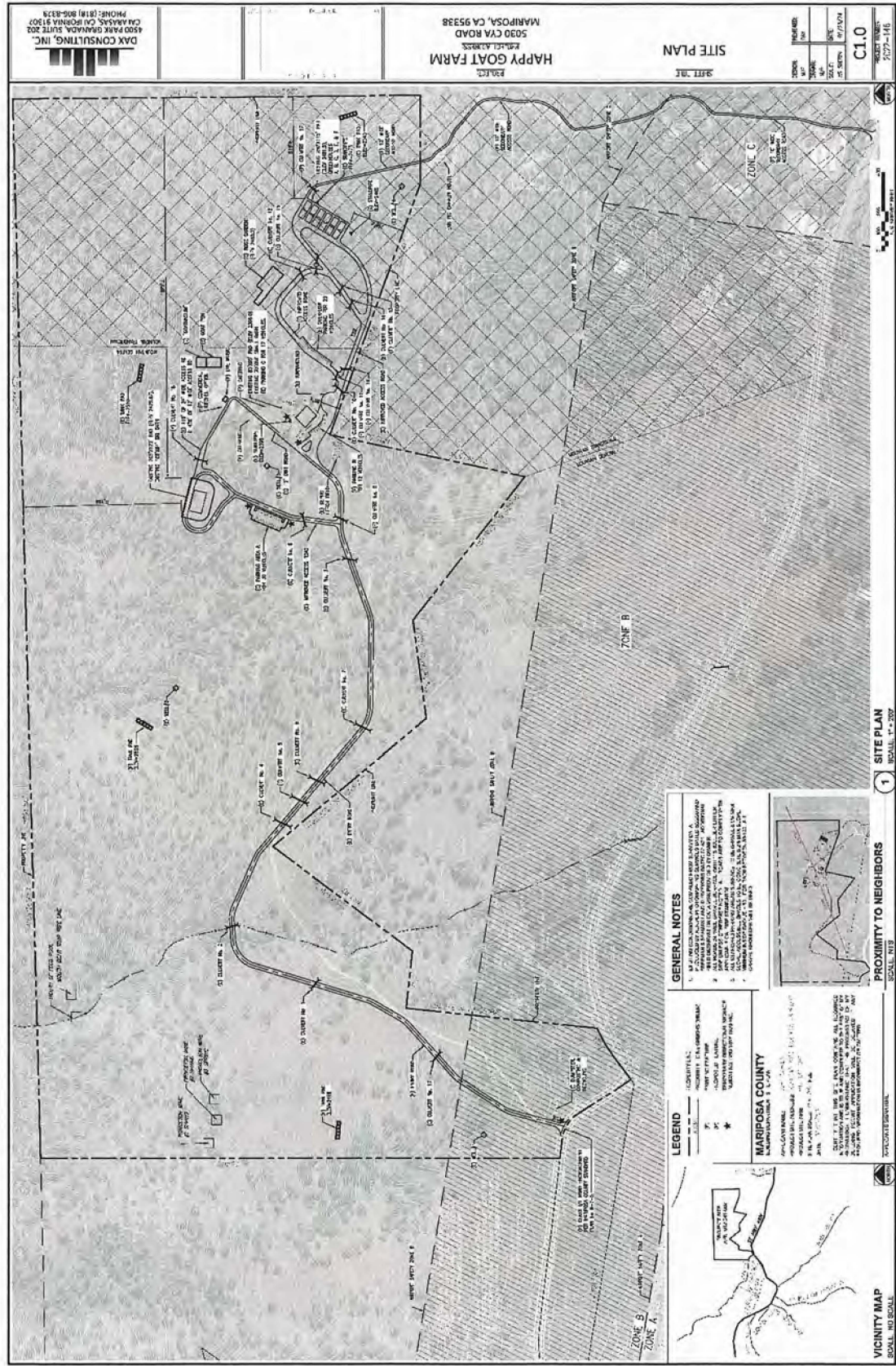


FIGURE 2: PROJECT VICINITY AND NOISE MONITORING SITE LOCATIONS



FIGURE 3: NOISE MEASUREMENT SITE R-1



FIGURE 4: NOISE MEASUREMENT SITE R-2



APPENDIX A-1

ACOUSTICAL TERMINOLOGY

AMBIENT NOISE LEVEL:	The composite of noise from all sources near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.
CNEL:	Community Noise Equivalent Level. The average equivalent sound level during a 24-hour day, obtained after addition of approximately five decibels to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and ten decibels to sound levels in the night before 7:00 a.m. and after 10:00 p.m.
DECIBEL, dB:	A unit for describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter).
DNL/L_{dn}:	Day/Night Average Sound Level. The average equivalent sound level during a 24-hour day, obtained after addition of ten decibels to sound levels in the night after 10:00 p.m. and before 7:00 a.m.
L_{eq}:	Equivalent Sound Level. The sound level containing the same total energy as a time varying signal over a given sample period. L _{eq} is typically computed over 1, 8 and 24-hour sample periods.
NOTE:	The CNEL and DNL represent daily levels of noise exposure averaged on an annual basis, while L _{eq} represents the average noise exposure for a shorter time period, typically one hour.
L_{max}:	The maximum noise level recorded during a noise event.
L_n:	The sound level exceeded "n" percent of the time during a sample interval (L ₉₀ , L ₅₀ , L ₁₀ , etc.). For example, L ₁₀ equals the level exceeded 10 percent of the time.

ACOUSTICAL TERMINOLOGY

NOISE EXPOSURE CONTOURS:

Lines drawn about a noise source indicating constant levels of noise exposure. CNEL and DNL contours are frequently utilized to describe community exposure to noise.

NOISE LEVEL REDUCTION (NLR):

The noise reduction between indoor and outdoor environments or between two rooms that is the numerical difference, in decibels, of the average sound pressure levels in those areas or rooms. A measurement of "noise level reduction" combines the effect of the transmission loss performance of the structure plus the effect of acoustic absorption present in the receiving room.

SEL or SENEL:

Sound Exposure Level or Single Event Noise Exposure Level. The level of noise accumulated during a single noise event, such as an aircraft overflight, with reference to a duration of one second. More specifically, it is the time-integrated A-weighted squared sound pressure for a stated time interval or event, based on a reference pressure of 20 micropascals and a reference duration of one second.

SOUND LEVEL:

The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the response of the human ear and gives good correlation with subjective reactions to noise.

SOUND TRANSMISSION CLASS (STC):

The single-number rating of sound transmission loss for a construction element (window, door, etc.) over a frequency range where speech intelligibility largely occurs.

APPENDIX B EXAMPLES OF SOUND LEVELS

NOISE SOURCE	SOUND LEVEL	SUBJECTIVE DESCRIPTION
AMPLIFIED ROCK 'N ROLL ▶	120 dB	DEAFENING
JET TAKEOFF @ 200 FT ▶		
	100 dB	VERY LOUD
BUSY URBAN STREET ▶		
	80 dB	LOUD
FREEWAY TRAFFIC @ 50 FT ▶		
	60 dB	MODERATE
CONVERSATION @ 6 FT ▶		
TYPICAL OFFICE INTERIOR ▶		
	40 dB	FAINT
SOFT RADIO MUSIC ▶		
RESIDENTIAL INTERIOR ▶		VERY FAINT
	20 dB	
WHISPER @ 6 FT ▶		
HUMAN BREATHING ▶	0 dB	

BIOLOGICAL RESOURCE EVALUATION

HAPPY GOAT INC. HAPPY GOAT EXPERIENCE PROJECT



JUNE 2023



BIOLOGICAL RESOURCE EVALUATION

HAPPY GOAT EXPERIENCE PROJECT

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June 2023

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Appendix C	Plants and Wildlife Species Observed On-Site
Appendix D	Special-Status Species in The Regional Vicinity of The Project Site

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EXECUTIVE SUMMARY

This Biological Resource Evaluation report provides the results of a biological survey conducted by Quad Knopf, Inc. for the Happy Goat Farm Experience Project (Project) proposed by Happy Goat Inc. The Project is limited to providing tours to the public at an existing farming facility, which requires a permit from Mariposa County. Issuance of the permit requires the preparation of an Initial Study/Mitigated Negative Declaration in accordance with the California Environmental Quality Act. The County of Mariposa is the lead agency. QK conducted a biological evaluation of the project site to identify the potential for sensitive biological resources to occur on or near the Project site and evaluated potential impacts of the Project.

The Project is northwest of the town of Mariposa, California. It covers approximately 29 acres and is situated on Assessor Parcel Number 012-041-32. The Project site is disturbed, having been grazed and farmed for several seasons. Some native vegetation remains on site because of the no-till farming practices employed. The Project site is bordered by an airport to the southwest and farmland to the north, south, and east.

A review of available literature and agency databases was conducted to obtain information of the occurrences of sensitive natural communities and special-status plant and wildlife species known or with potential to occur in the vicinity of the Project site. QK conducted a biological reconnaissance survey on May 17, 2023, to determine the locations and extent of current land use, natural vegetation communities, the potential for occurrences of special-status plant and wildlife species, and to verify the presence of wetlands and Waters of the US and Waters of the State.

No special-status plant species or special-status wildlife species, or diagnostic sign thereof, were found to occur on the site during reconnaissance surveys. Several sensitive natural communities were identified in the field. Two water features that intersect the Project site were identified by the National Hydrology Database and National Wetlands Inventory databases. Those features were verified to exist on the Project site. Two nests were discovered during reconnaissance surveys and there is potential for more nesting migratory birds and other raptors species, which are protected by the Migratory Bird Treaty Species Act, to occur on and near the Project site. Because of the high level of vehicle and foot traffic and high levels of construction and farming activity at the site, very few bird nests were found near the Project, and none were active at the time of the survey.

With the implementation of Best Management Practices and recommended avoidance measures, impacts of the Project to sensitive biological resources are not expected to occur, or will be minimal. Nonetheless, some best management practices are recommended that would reduce any potential impacts of the Project.

SECTION 1 - INTRODUCTION

Happy Goat Inc. proposes to operate an experience at their regenerative farm; Happy Goat Farm is a farm on approximately 250 acres in Mariposa County, California. The proposed experience is separate from the existing farming operations, which includes all current and pending construction of agricultural-related buildings and paving of access roads. The Happy Goat Farm Experience (Project) includes only those activities and construction-related operations associated with supporting public tours, which includes vegetation removal at a picnic area and parking areas, and the installation of public restroom facilities that will consist of trenching for the installation of a leach field. The restrooms will be mobile facilities placed on an existing concrete pad. Quad Knopf Inc. (QK) conducted a biological evaluation to identify the potential for sensitive biological resources to occur on or near the Project site. This Biological Resource Evaluation (BRE) is intended to provide the basic biological information needed for the County of Mariposa to issue a permit for the Project while maintaining compliance with provisions of the California Environmental Quality Act.

1.1 - Project Location

The Project is approximately 1.6 miles northwest of the town of Mariposa, California (Figure 1-1) and approximately 0.11 mile east of Mount Bullion, California. It covers approximately 29 acres and is situated on Assessor Parcel Number (APN) 012-041-32. The unincorporated community of Mount Bullion at the base of Mt. Bullion and is between the Guadalupe Mountains and Central Sierra Mountain Range. The Project site is east of C Y A Road and Mt. Bullion Access Road and north of State Route 49 North (Figure 1-2). It is in Section 00, Township 5 South, Range 18 East, Mount Diablo Base and Principal Meridian, and is within the *Bear Valley, California* U.S. Geological Survey (USGS) 7.5-minute quadrangle.

1.2 - Project Description

The proposed Happy Goat Farm Experience (Project) will operate tours so the public can experience the no-till agricultural and goat farm on the approximately 29-acre site. The Project would use existing and planned farm facilities including approximately 1.1 miles of access roads that will be used for vehicle access and as walking trails. The experience provided to guests will include enjoying catered food and drinks, and music, in a rose garden, viewings of the "Goatnasium", walking goats on leashes within specially designated areas, and communing with baby goats at the petting barn.

The experience will serve up to a maximum of 150 guests per day with 25 employees working to ensure the safety of the guests and goats. The hours open will change depending on the season, with the average visit being between 4 to 5 hours with the possibility of extension due to dinner extensions. The Happy Goat Experience will also be available for special events that could host up to a maximum of 500 guests without adversely impacting the area or operations.

1.3 - Purpose, Goals, and Objectives for this Report

This BRE report includes the results of a natural resource database search and a biological survey conducted by QK biologists at the Project site. This report is consistent with the requirements for an analysis of impacts to biological resources needed of an Initial Study/Mitigated Negative Declaration following guidelines established by CEQA.

The primary focus of this report is to provide information about the presence of sensitive biological resources on and near the Project and develop measures to avoid and minimize impacts of the Project on those resources. To accomplish that goal, this BRE provides information on the condition and sensitivity of the sensitive biological resources potentially present on and near the Project site and evaluates Project impacts to those resources. This BRE focuses on providing information about sensitive natural communities, special-status plant and wildlife species, critical habitats, wildlife movement corridors, and wetlands and waters by conducting a desktop analysis of site conditions and verifying those findings with an on-site biological survey.





SECTION 2 - METHODS

2.1 - Definition of Biological Study Area

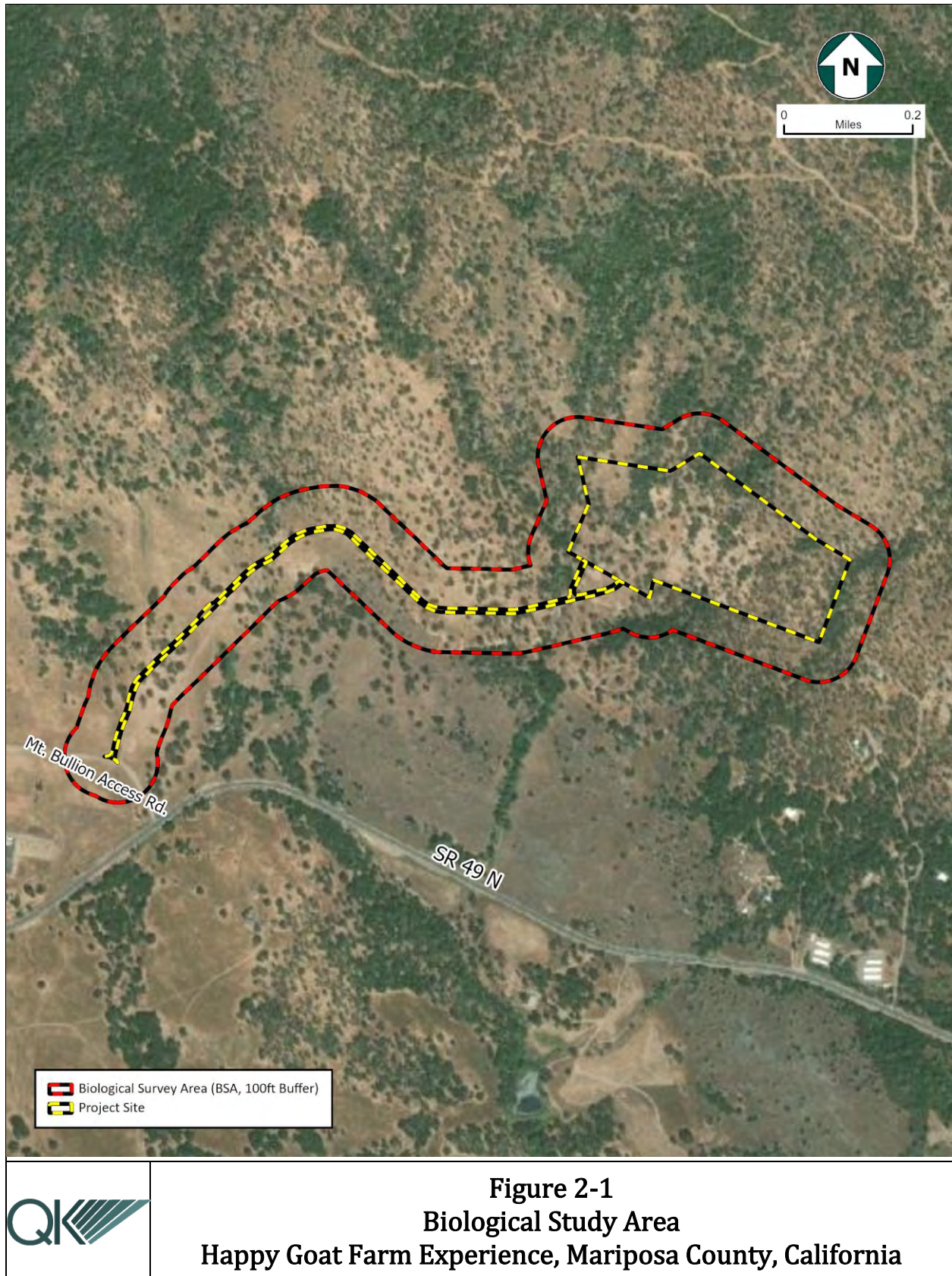
The Biological Study Area (BSA) includes the Project site and a 100-foot survey buffer surrounding the Project disturbance footprint (Figure 2-1).

2.2 - Literature Review and Database Analysis

The following sources were reviewed for information on special-status biological resources in the Project vicinity:

- California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDDB; CDFW 2023a).
- CDFW's Biogeographic Information and Observation System (BIOS; CDFW 2023b).
- CDFW's Special Animals List (CDFW 2023c).
- CDFW's California Wildlife Habitat Relationships (CWHR) System (Mayer and Laudenslayer 1988).
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California (CNPS 2023).
- United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation System (IPaC; USFWS 2023a).
- USFWS Critical Habitat Mapper (USFWS 2023b).
- USFWS National Wetlands Inventory (NWI; USFWS 2023c).
- USGS National Hydrography Dataset (NHD; USGS 2023).
- Federal Emergency Management Agency (FEMA) flood zone maps (FEMA 2023).
- United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Web Soil Survey (NRCS 2023a)
- Current and historical aerial imagery (Google LLC 2023; Netroline 2023).

The CNDDDB and CNPS queries focused on the *Bear Valley* USGS 7.5-minute quadrangle in which the Project is located, plus the surrounding eight quadrangles: *Buckhorn Peak*, *Kinsley*, *Feliciano Mountain*, *Mariposa*, *Catheys Valley*, *Indian Gulch*, *Coulterville*, and *Hornitos*. To satisfy other standard search criteria, CNDDDB records within a 10-mile radius of the project site were queried separately from the broader database search.



The CNDDDB provides element-specific spatial information on individual documented occurrences of special-status species and sensitive natural vegetation communities. The CNPS database provides similar information, but at a much lower spatial resolution, for additional sensitive plant species tracked by the CNPS. The CDFW Special Animals List and USFWS IPaC provides no spatial data on wildlife occurrences and provides only lists of species potentially present. Wildlife species designated as “Fully Protected” by California Fish and Game Code Sections 5050 (Fully Protected reptiles and amphibians), 3511 (Fully Protected birds), and 4700 (Fully Protected mammals) are also included on the final list of evaluated species. The database search results can be found in Appendix A.

A review of the NWI was completed to identify whether wetlands have previously been documented on or adjacent to the Project site. The NWI, which is operated by the USFWS, is a collection of wetland and riparian maps that depicts graphic representations of the type, size, and location of wetland, deep water, and riparian habitats in the United States. In addition to the NWI, regional hydrologic information from the NHD was obtained from the USGS to evaluate the potential occurrence of blueline streams within or near the Project site.

Soils data were obtained from the USDA NRCS Web Soil Survey, climate information was obtained from the Western Regional Climate Center, and land use information was obtained from available aerial imagery (NRCS 2023a; WRCC 2023; Google LLC 2023). Information about flood zones was obtained from the Federal Emergency Management Agency, Department of Homeland Security (FEMA 2023).

The results of the database inquiries were reviewed to extract pertinent information on site conditions and evaluate the potential for sensitive biological resources to occur within or near the proposed Project site. Only those resources with the potential to be present and affected by the Project were included and considered in this document. The potential presence of natural communities and special-status species was based on distributional ranges overlapping the Project site and the presence of habitat and/or primary constituent habitat elements.

2.3 - Biological Field Survey

A biological survey of the BSA was conducted by QK Principal Environmental Scientist Curtis Uptain and Associate Environmental Scientist Mattole Whitaker on May 17, 2023. The survey consisted of walking meandering pedestrian transects spaced 50 to 100 feet apart throughout the BSA, where access was available. Botanical surveys were conducted in several different areas including the Market Garden Field, Big Barn Area, Beer Garden, and Greenhouse Area. Areas with suitable habitat that could not be accessed were surveyed using high-power binoculars.

Tasks completed during the survey included determining and documenting current land use, developing an inventory of plant and wildlife species, identifying wildlife sign (e.g., scat, burrows, nests, feathers, tracks), characterizing vegetation associations and habitat conditions within the BSA, and assessing the potential for special-status plant and wildlife species to occur on and near the Project site based on existing conditions. The potential for

migratory birds and raptors to nest on and near the Project site was evaluated. All historical wetland and water features documented by NWI and NHD were field verified. All spatial data were recorded using Environmental Systems Research Institute (ESRI) Collector for ArcGIS software installed on an iPad. Site conditions were documented with representative photographs (Appendix B).

SECTION 3 - ENVIRONMENTAL SETTING

This section identifies the regional and local environmental setting of the Project and describes existing baseline conditions. The environmental setting of the BSA was obtained from various sources of literature, databases, and aerial photographs. Site conditions were verified and updated during the site reconnaissance survey conducted by QK Environmental Scientists (Table 3-1).

Table 3-1
Field Survey Personnel and Timing

Date	Personnel	Time	Weather Conditions	Temperature
05/17/2023	Curtis Uptain and Mattole Whitaker	0837 - 1345	Sunny, Clear	78 - 90 °F

3.1 - Topography

The BSA is on the southeastern floor of Bullion Mountain in the central portion of Mariposa County. The BSA varies in topography and is at an elevation of about 2,250 feet above mean sea level.

3.2 - Climate

The BSA is within an area that has a Mediterranean climate of hot summers and mild, wet winters. Average high temperatures range from 51°F in January to 89°F in July, with daily temperatures rarely exceeding 100°F (WRCC 2023). Average low temperatures range from 34°F in December to 60°F in July. Precipitation occurs primarily as rain, most of which falls from November to April, with an average of 30.08 inches of rainfall per year. Rain rarely falls during the summer months.

3.3 - Land Use

The Project site is situated within a matrix of annual grasslands and oak woodlands that are used primarily for grazing. There is an airport to the west of the Project and scattered rural residences in the surrounding area.

3.4 - Soils

The United States Department of Agriculture, Natural Resources Conservation Service (NRCS) Web Soil Survey database contains soil digital data for the region. The most common soil in the BSA is Loafercreek-Bonanza complex, but there are three other types of soil present (Table 3-4).

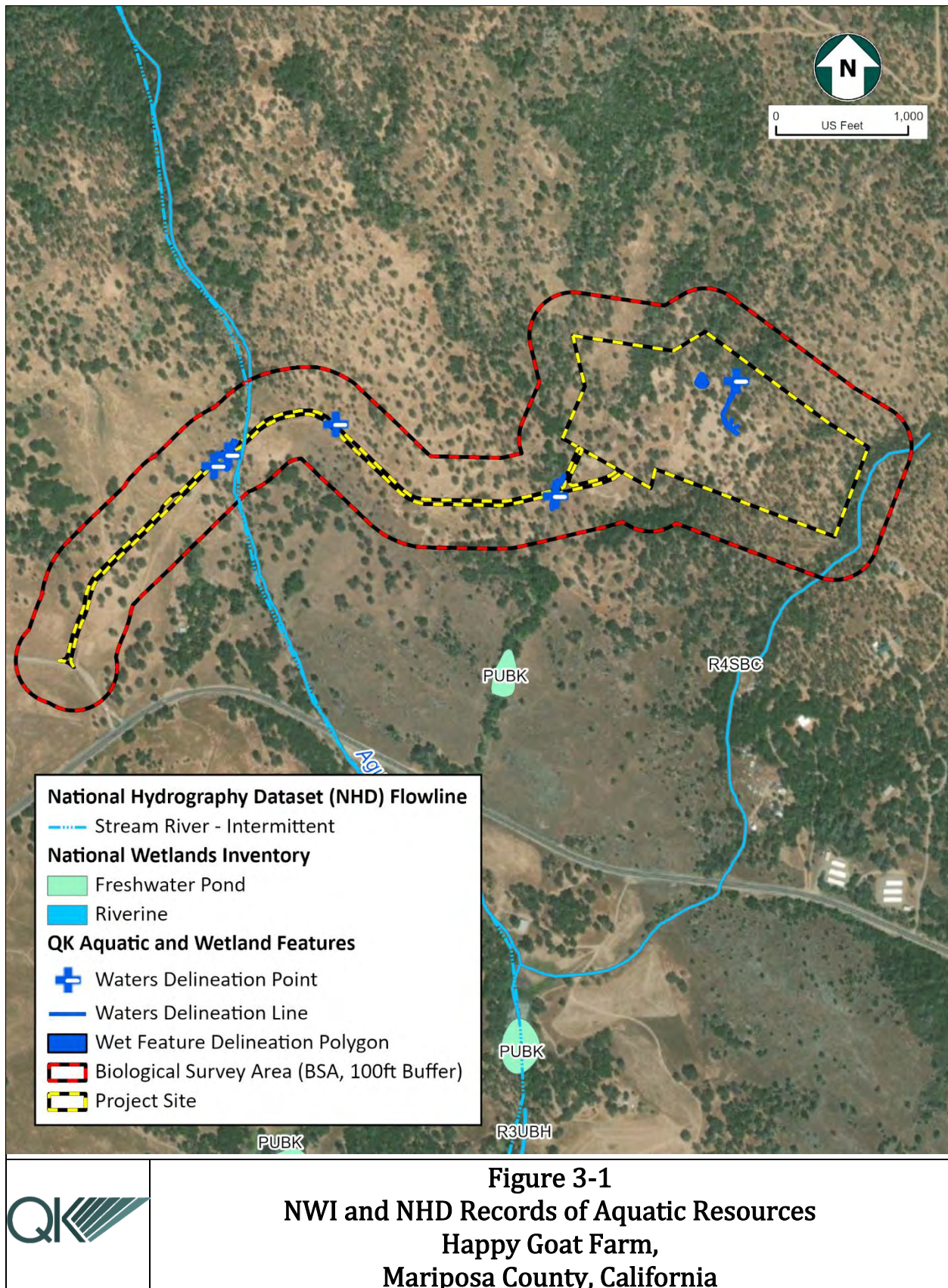
Table 3-4
NRCS Soil Survey Results for BSA.

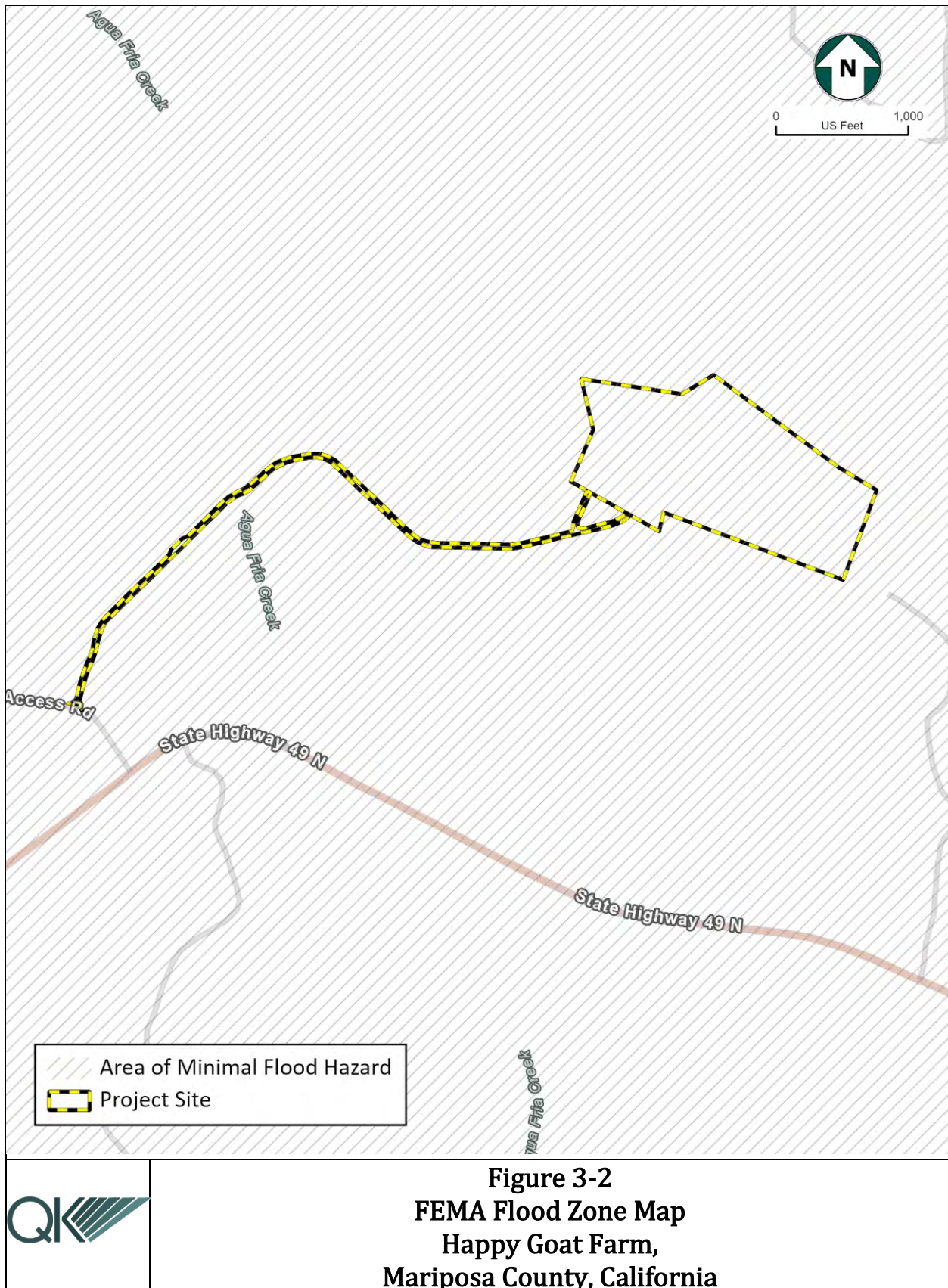
Soil type	Acres in BSA	Percent of BSA
Loafercreek-Bonanza complex, 3 to 15% slopes	49.6	77.0%
Loafercreek-Gopheridge complex, 30 to 60% slopes	8.4	13.0%
Trabuco-Jasperpeak-Rock outcrop complex, 8 to 30% slopes	3.9	6.1%
Henneke extremely rock clay loam, 15 to 75 percent slopes	2.5	3.9%
Totals for BSA	64.4	100.0%

3.5 - Hydrology

There are records of two wetland features within the BSA, as defined by the NWI (USFWS 2023c) (Figure 3-1). One, Agua Fria Creek, is a Water of the US that bisects a portion of the BSA that is part of the new roadway, starting near the middle of the western road area flowing southeast towards SR 49. The second jurisdictional wetland bisects a portion of the BSA to the east of the greenhouse area and flows southwest towards SR 49. Both features are described as an intermittent riverine. Features under the Riverine system include all wetlands and deepwater habitats contained within a channel, with two exceptions: 1) wetlands dominated by trees, shrubs, persistent emergent, emergent mosses, or lichens, and 2) habitats with water containing ocean-derived salts of 0.5 ppt or greater. There are additional aquatic features present in the BSA including a holding pond that was delineated during the previous EV park surveys (Figure 3-1).

According to FEMA, the BSA is within an Area of Minimal Flood Hazard (Figure 3-2).





3.6 - General Biological Conditions

The entirety of the Project site consists of an open blue oak savannah, valley and foothill woodland, farmed/grazed fields and a valley oak riparian habitat that has been disturbed by agricultural development. The Project site is bordered by agricultural properties to both north and east. Mariposa-Yosemite airport is to the west, and state route 49 N to the south.

Four different sensitive natural communities were identified within the BSA during reconnaissance. No special status plants were seen within the BSA during reconnaissance. Vegetation observed included wild oat (*Avena fatua*), ripgut brome (*Bromus diandrus*), Mediterranean barley (*Hordeum murinum*), interior live oak (*Quercus wislizeni*), purple clarkia (*Clarkia purpurea*), and blue oak (*Quercus douglasii*).

Two avian nests were observed within the Project site, but further nests could be found since suitable trees and structures near the BSA could support nesting birds and/or raptors. Migratory bird species observed includes red tailed hawk (*Buteo jamaicensis*), acorn woodpecker (*Melanerpes formicivorus*), northern mockingbird (*Mimus polyglottos*), and turkey vultures (*Cathartes aura*).

No hollow downed logs or large trees with cavities that could be utilized by fishers (*Pekania pennanti*) were observed within the BSA. A complete list of plant and wildlife species observed within the BSA during the biological reconnaissance survey is included in Appendix C.

SECTION 4 - FINDINGS

4.1 - Sensitive Natural Communities

4.1.1 - RESULTS OF LITERATURE REVIEW AND DATABASE SEARCHES

Literature results from the nine-quadrangle queries for the Project site were conducted and provide information for the potential of occurrence and verified during the field survey.

4.1.2 - PRESENCE OF SENSITIVE NATURAL COMMUNITIES

No sensitive natural vegetation communities were identified within the BSA by database searches. However, within the BSA there were 4 sensitive natural communities identified. Two were oak woodlands, one was foothill pine/ oak woodland, and one was riparian forest (Table 4-1).

Table 4-1
Sensitive Natural Communities Occurring in the BSA

Scientific Name	Common Name	Status
<i>Pinus Sabiana/Quercus spp.</i>	Foothill pine woodland	2B.3
<i>Quercus douglasii</i>	Blue oak woodland	1B.1
<i>Quercus douglasii – Quercus wislizeni</i>	Mixed oak forest and woodland	2B.2
<i>Quercus lobata riparian</i>	Valley oak riparian forest and woodland	1B.2

Source: VegCamp 2023, CNPS 2023 and USFWS 2023

1A Presumed Extinct in California.

1B Rare, Threatened, or Endangered in California and elsewhere.

2A Plants presumed extirpated in California, but more common elsewhere.

2B Plants Rare, Threatened, or Endangered in California, but more common elsewhere.

CRPR Threat Code Extension:

.1 Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2 Fairly endangered in California (20-80% occurrences threatened)

.3 Not very endangered in California (<20% of occurrences threatened) Abbreviations:

4.2 - Special-Status Plants

4.2.1 - RESULTS OF LITERATURE REVIEW AND DATABASE SEARCHES

There were 22 special-status plant species identified in the literature and database review that are known or have potential to occur within the nine-quadrangle queries centered on the Project site (Table 4-2). There are two CNDDDB records of special-status plant species, Mariposa cryptantha (*Cryptantha mariposae*) and shaggyhair lupin (*Lupinus spectabilis*), that overlap a western portion of the BSA.

Table 4-2
Special-Status Plant Species Occurring in the Region of the BSA

(Source: CNDDDB 2023, CNPS 2023,	Common Name	Status
<i>Allium tuolumnense</i>	Rawhide Hill onion	1B.2
<i>Balsamorhiza macrolepis</i>	big-scale balsamroot	1B.2
<i>Calycadenia hooveri</i>	Hoover's calycadenia	1B.3
<i>Calyptridium pulchellum</i>	Mariposa pussypaws	FT/1B.1
<i>Clarkia australis</i>	Small's southern clarkia	1B.2
<i>Clarkia biloba</i> ssp. <i>australis</i>	Mariposa clarkia	1B.2
<i>Clarkia lingulate</i>	Merced clarkia	SE/1B.1
<i>Clarkia rostrata</i>	beaked clarkia	1B.3
<i>Cryptantha mariposae</i>	Mariposa cryptantha	1B.3
<i>Diplacus pulchellus</i>	yellow-lip pansy monkeyflower	1B.2
<i>Entosthodon kochii</i>	Koch's cord moss	1B.3
<i>Erigeron mariposanus</i>	Mariposa daisy	1A
<i>Eriophyllum congdonii</i>	Congdon's woolly sunflower	1B.2
<i>Erythranthe filicaulis</i>	slender-stemmed monkeyflower	1B.2
<i>Erythranthe gracilipes</i>	slender-stalked monkeyflower	1B.2
<i>Horkelia parryi</i>	Parry's horkelia	1B.2
<i>Leptosiphon serrulatus</i>	Madera leptosiphon	1B.2
<i>Lomatium congdonii</i>	Congdon's lomatium	1B.2
<i>Lupinus citrinus</i> var. <i>deflexus</i>	Mariposa lupine	ST/1B.2
<i>Lupinus spectabilis</i>	shaggyhair lupine	1B.2
<i>Mielichhoferia elongate</i>	elongate copper moss	4.3
<i>Mielichhoferia shevockii</i>	Shevock's copper moss	1B.2

1A Presumed Extinct in California.

1B Rare, Threatened, or Endangered in California and elsewhere.

2A Plants presumed extirpated in California, but more common elsewhere.

2B Plants Rare, Threatened, or Endangered in California, but more common elsewhere.

CRPR Threat Code Extension:

.1 Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2 Fairly endangered in California (20-80% occurrences threatened)

.3 Not very endangered in California (<20% of occurrences threatened) Abbreviations:

Abbreviations:

FC Federal Candidate

FE Federal Endangered Species

FT Federal Threatened Species

SFP Fully Protected Animal, CDFW

SE California Endangered Species

ST California Threatened Species

SC California Candidate Species

SSC California Department of Fish and Game Species of Special Concern

4.2.2 - PRESENCE OF SPECIAL-STATUS PLANTS

No special-status plant species were present within the BSA. The survey coincided with some, but not all the plant species' optimal blooming periods. However, none of the species identified in the database queries are expected to occur on-site because of a lack of suitable habitat conditions consisting of disturbed site conditions, inappropriate plant associations and unsuitable soil types or because the BSA is located outside of the species' known range. The Project site has been disturbed by agricultural and construction activities, but even with this disturbance there were some native plant species present because of the no-till agricultural practices being employed. A complete list of plant species observed during the biological reconnaissance survey is included in Appendix C.

4.3 - Special-Status Wildlife

4.3.1 - RESULTS OF LITERATURE REVIEW AND DATABASE SEARCHES

There were 20 special-status wildlife species identified in the literature and database review that are known or have the potential to occur within the nine-quad search area centered on the Project (Table 4-3). There is one historical CNDDDB record (EONDX 76077) of the limestone salamander (*Hydromantes brunus*) that overlaps with the BSA.

Table 4-3
Special-Status Wildlife Species Occurring in the Region of the BSA
(Source: CNDDDB 2023, and USFWS 2023)

Scientific Name	Common Name	Status
Invertebrates		
<i>Bombus crotchii</i>	Crotch bumble bee	CE
<i>Desmocerus californicus dimorphus</i>	valley elderberry longhorn beetle	FT
Fish		
<i>Mylopharodon conocephalus</i>	hardhead	SSC
Amphibians		
<i>Ambystoma californiense</i>	California tiger salamander - central California DPS	FT/ST
<i>Hydromantes brunus</i>	limestone salamander	FP/ST
<i>Rana boylei</i>	foothill yellow-legged frog	FP
<i>Rana sierrae</i>	Sierra Nevada yellow-legged frog	FE/ST
<i>Spea hammondi</i>	western spadefoot	SSC
Reptiles		
<i>Emys marmorata</i>	western pond turtle	SSC
Birds		
<i>Strix nebulosa</i>	great gray owl	SE
<i>Strix occidentalis occidentalis</i>	California spotted owl	ST

Scientific Name	Common Name	Status
<i>Gymnogyps californianus</i>	California condor	FE/SE
Mammals		
<i>Antrozous pallidus</i>	pallid bat	SSC
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	SSC
<i>Euderma maculatum</i>	spotted bat	SSC
<i>Lasiurus frantzii</i>	western red bat	FP
<i>Pekania pennanti</i>	fisher - southern Sierra Nevada pop.	FE/SE

Abbreviations:

FC	Federal Candidate
FE	Federal Endangered Species
FGC	Fish and Game Code
FT	Federal Threatened Species
SFP	Fully Protected Animal, CDFW
SE	California Endangered Species
ST	California Threatened Species
SSC	California Department of Fish and Game Species of Special Concern

4.3.2 - PRESENCE OF SPECIAL-STATUS WILDLIFE

There was foraging habitat present within the BSA that would be suitable for the Crotch bumble bee (*Bombus crotchii*). In addition, the BSA is within the known range of this species. The nearest CNDDDB record (EONDX 119710) is 6.48 miles northeast of the BSA. There is a CNDDDB record (EONDX 34486) of the Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) that occurs 2.3 miles southeast of the BSA, but there were no elderberry bushes present within the BSA, which is required to support the Valley elderberry longhorn beetle, and so that species would not be present. There are plans to plant elderberry bushes on the farm in the future, but the Project would not impact that species if it did become established. There were no canyons or rockslide areas within the BSA that would support Merced canyon shoulderband (*Helminthoglypta allynsmithi*). There were no limestone caves or underground water habitat present within the BSA that would support Wengerers' cave amphipod (*Stygobromus wengerorum*).

The hardhead (*Mylopharodon conocephalus*) could occur within the BSA because habitat capable of supporting this species, consisting of streams, ponds, and reservoirs bottoms, is present within the project site. The BSA is within the known range of the species.

The Sierra Nevada yellow-legged frog (*Rana sierrae*) is absent from the BSA because this species occurs at a much higher elevation (1,200 feet higher) than the Project. No amphibian sign (e.g., scat or tadpoles) were found within the BSA, but suitable habitat exists for California tiger salamander (*Ambystoma californiense*), limestone salamander (*Hydromantes brunus*), foothill yellow-legged frog (*Rana boylei*), and western spadefoot (*Spea hammondi*). These species could occur within the BSA. They would mostly be limited to wetlands and waters or dispersal areas near wetlands or waters, except for the California tiger salamander which is known to travel up to 1.25 miles from its breeding ponds.

Western pond turtles (*Emys marmorata*) were not observed but could potentially occur within the BSA. There was a pond present within the BSA that could potentially support this species, but they likely would have been seen if present. There are three CNDDDB records of this species that occur within 10 miles of the BSA. The closest (EONDX 867) is approximately 2.26 miles southeast of the BSA.

There are no dense woodlands with coniferous or broadleaved trees near a water source that could provide suitable habitat for the great gray owl (*Strix nebulosa*) or California spotted owl (*Strix occidentalis occidentalis*). There is foraging habitat for the California condor (*Gymnogyps californianus*), with open fields and livestock, which could provide a food source once deceased and if not quickly removed. California condor nesting habitat is not present, and they are not known to nest this far north in the Sierra Mountains. It is highly unlikely that California Condors, great gray owl, or California spotted owl occurs within the BSA, even as transients.

Foraging or roosting habitat is present within the BSA for the following bat species; pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsendii*), spotted bat (*Euderma maculatum*), western red bat (*Lasiurus frantzi*), and Yuma myotis (*Myotis yumanensis*). There is one CNDDDB record for the pallid bat (EONDX 69317) that occurs approximately 6.47 miles northeast of the BSA. There are two CNDDDB records of the Townsend's big-eared bat within 10 miles of the BSA. The closest (EONDX 24312) that occurs approximately 1.09 miles of the BSA. There is one CNDDDB record of spotted bat (EONDX 66357) that occurs approximately 6.45 miles northeast of the BSA. There are no CNDDDB records of western red bat within 10 miles of the BSA. There is one CNDDDB record of Yuma myotis (EONDX 69318) approximately 6.48 miles northeast of the BSA. Any of these species could be present within the BSA.

There are no CNDDDB records of the fisher (*Pekania pennanti*) occurring within 10 miles of the BSA. There were no suitable dens (which occur in decaying, fallen trees or in large cavities in standing trees) observed in the BSA. The BSA lacks preferred tree habitat consisting of spruce, fir, or white cedar, which would support this species. This species is not likely to be present within the BSA.

4.3.3 - NESTING MIGRATORY BIRDS AND RAPTORS

There were no active migratory birds or raptor nests observed within the BSA. Two inactive nests were present within the Project site, one stick and one cluster of cavity nests (see Section 3.6). The trees, buildings, and utility poles in and outside the BSA could support a variety of nesting bird species, but current high levels of activity at the site consisting of ongoing agricultural operations and farm-related construction activities likely reduce the potential for pervasive nesting activities. A list of birds observed at the site was prepared (see Appendix C), indicating those species that would be most likely to nest in and near the BSA.

4.4 - Critical Habitat, Movement Corridors, and Linkages

4.4.1 - PRESENCE OF CRITICAL HABITAT

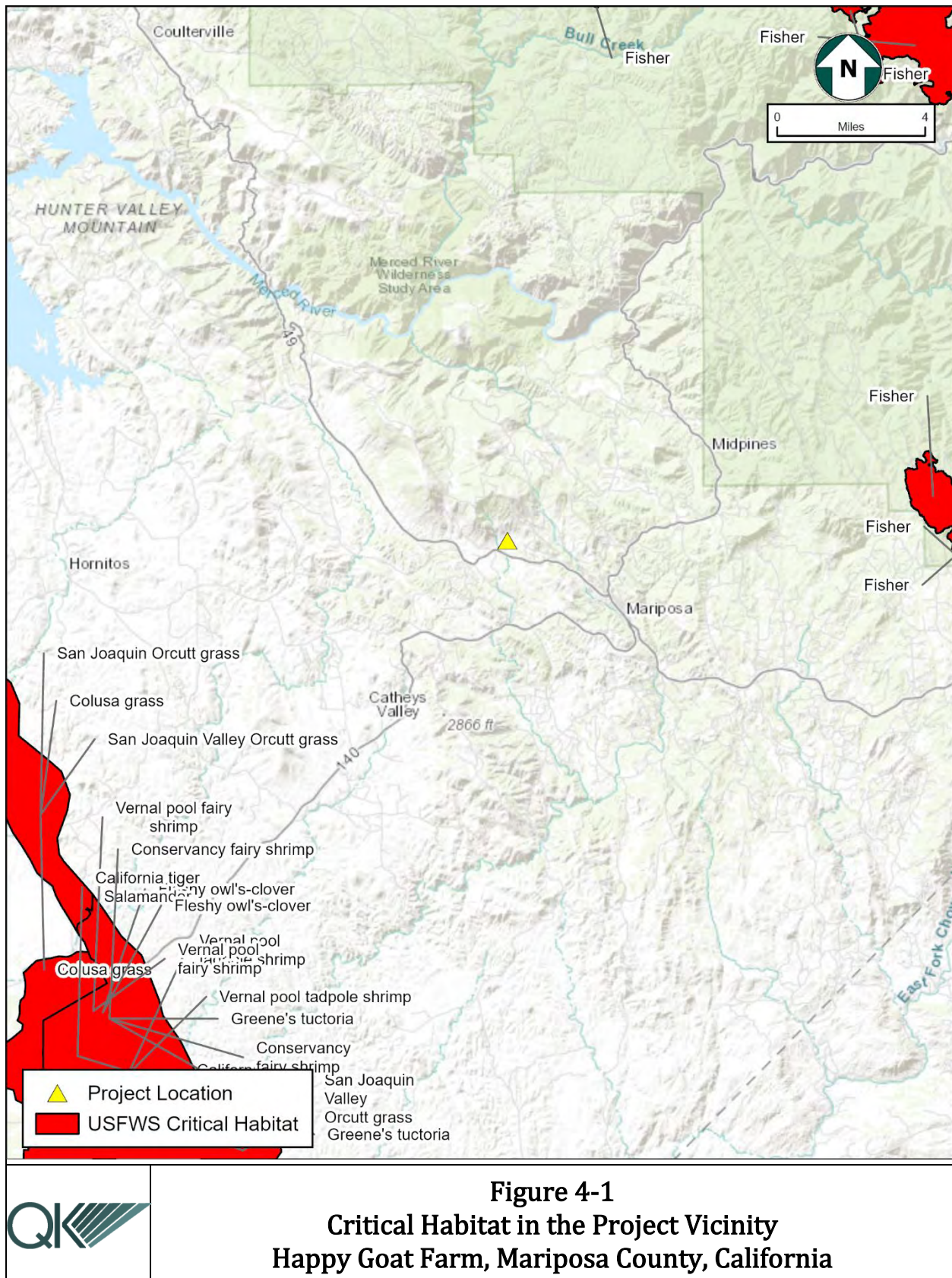
No designated critical habitat occurs within the BSA. The nearest USFWS designated critical habitat is for fisher, which is approximately 13.1 miles east of the BSA (Figure 4-1).

4.4.2 - PRESENCE OF MOVEMENT CORRIDORS AND LINKAGES

There are no known wildlife movement corridors or habitat linkages that intersect the BSA. The Project is situated within a disturbed area that is predominately used for agricultural development. The site provides some continued linkage between suitable natural habitats that surround the BSA. Even with the ongoing disturbances from construction activities and the ongoing agricultural operations, the site provides substantial opportunities for wildlife movements. The BSA provides no substantial nursery sites, except as previously mentioned for nesting migratory birds and raptors.

4.5 - Wetlands and Other Waters

The two riverine features and one pond were identified by the NHD and verified to exist during the biological field survey. One riverine feature, Agua Fria Creek, bisects the BSA through the access road west of the primary agricultural area and goat farm. The creek flows to the southeast, towards SR 49. The other riverine feature is east of the Project site but intersects the BSA, then flows southwest toward SR 49. Stream indicators such as mud cracks, streambeds, and/or banks were identified at both riverine features. Hydrologic, topographic features, and/or aquatic plant species were observed at both features that indicate these to be intermittent riverine features. The pond holds water nearly year-round and is fed by an intermittent spring located further up slope.



SECTION 5 - POTENTIAL PROJECT IMPACTS

The purpose of this section is to present an evaluation of the potential for Project-related impacts that include noise pollution, dust, traffic, fence installation, use of livestock dogs, and trampling to sensitive biological resources to occur resulting from Project construction activities. Although the potential for impacts of the Project is anticipated to be minor because the Project site is disturbed, there are some risks of Project impacts. These are discussed below.

5.1 - Potential Impacts to Sensitive Vegetation Communities

Four sensitive vegetation communities occur within the BSA. The Project has potential to have a minimal impact on four sensitive natural communities by installing fencing. This minimal impact may include trimming of oak trees and clearing of ground vegetation along fence line. This minimal impact would constitute no measures being warranted for mitigation. Foot traffic generated from the Project will not have an impact on it due to all traffic being restricted to existing roads.

5.2 - Potential Impacts to Special-Status Plant Species

No special-status plant species were observed within the BSA, and it is unlikely that any sensitive plant is present because of the extensive agricultural operations that employ drilling or broadcast seeding, cover crops, and hand planting seedlings that have been grown in the 6 on-site greenhouses. The Project would not impact any special-status plant species.

5.3 - Potential Impacts to Special-Status Wildlife Species

Special-status wildlife species including Crotch's bumble bee (*Bombus crotchii*), several bat species, amphibians, fishers, hardheads, and various bird species were determined to have potential to occur within the BSA. No potential impacts would occur to Crotch's bumble bee from the Project because all vehicle and foot traffic will be restricted to existing roads where substantial disturbance exists. Similarly, there would be no impacts to hardheads, if they occur, because they would be restricted to the two streams, which would not be impacted or encroached up by Project activities. Similarly, there would be no impacts to amphibian species from the Project because all wetlands and waters, and riparian habitat will be avoided by the Project. The Happy Goat Farm Experience will not interfere with riparian habitat needed for breeding or degrade normal residential and foraging habitat for the special-status amphibian species. No impacts to the western pond turtles would occur because the one pond that is on-site that could potentially harbor this species will be avoided by Project activities. The Project will not impact the California condor because they would most likely not be present, and if they would occur, they would only be present for short periods of time as transient foragers in adjacent fields. There would be minimal impacts to special-status bat species due to noise from visitors, especially in the evening when dinner hosting and other events hosted at the Project to occur during the period when bats would be actively foraging.

Although no California tiger salamanders (*Ambystoma californiense*) were observed in or near BSA, they could be present in upland aestivation burrows and migrate through the site to nearby breeding ponds during fall and winter migrations. Impacts to this species would be minimal because vehicle and foot traffic would be present during the day while this species mostly migrates during late evening and at night, and vehicle and foot traffic would not be common during rain events.

5.4 - Potential Impacts to Nesting Birds and Raptors

Two inactive nests were observed within the BSA. There is potential for birds to forage and nest within the BSA in existing structures, in tress and trees in the surrounding areas. However, because of the extensive agricultural operations, the number of nesting birds in the Project site is minimal. If there are active nests present during Project activities, there could be Project impacts such as dust, noise, and vehicle and foot traffic that could interfere with normal breeding behaviors. The effects of the Project would be minimal when compared to the extensive agricultural activities that would be continuous on the site, and thus Project impacts are not likely to be substantial.

5.5 - Potential Impacts to Critical Habitat, Movement Corridors, Fisheries, Nurseries, and Linkages

5.5.1 - POTENTIAL IMPACTS TO CRITICAL HABITAT

The Project would not impact any designated critical habitat.

5.5.2 - POTENTIAL IMPACTS TO MOVEMENT CORRIDORS, FISHERIES, NURSERIES, AND LINKAGES

Project activities would not impact any movement corridors, fisheries, nursery sites, or habitat linkages.

5.6 - Potential Impacts to Wetlands and Waters

There were two records of a water feature within the BSA, both are likely to be Waters of the State and Waters of the US. Neither of these features would be impacted by Project activities because the use of these features will not occur, and the Project would not result in any predictable form of degradation to these features. There was one pond that occurs within the BSA, which also will not be used or degraded by Project activities.

SECTION 6 - RECOMMENDATIONS

The Project is anticipated to have no impacts to minimal impacts to sensitive natural communities, special-status plants, wetlands and water features, Critical Habitat, fisheries, nursery sites, and migratory corridors. There is only one special-status wildlife species that could potentially be impacted by the project, which is the California tiger salamander. That species was not verified to be present, but it could occur. Project impacts to that species could result from a disruption of migrations between upland refugia sites and breeding ponds, but that impact is anticipated to be minimal because vehicle and foot traffic from Project activities are not likely to occur concurrently with migration activities. There is potential for impacts to occur to nesting and foraging birds and raptors, but that impact is anticipated to be minimal because of the lack of nesting activity on and near the Project site. The following measures be implemented as Best Management Practices (BMPs) during Project activities:

- A pre-activity survey of the Project and within a 250-foot buffer for nesting migratory birds and a 500-foot buffer for nesting raptors surrounding the Project footprint should be conducted yearly, in April or May, to identify active bird nests. Areas within 250 feet of the active nests should be designated as “quiet zones” where noise and activities would be curtailed until you have fledged from the nest. The survey should be conducted by a qualified biologist with adequate training and experience conducting surveys for nesting birds.
- An informational brochure containing information on sensitive natural communities and special-status species that could be present in the area should be provided to all visitors so that they are aware of the unique species that could potentially occur on the site.
- Noise limits should be established for night events to reduce noise pollution that could affect bat foraging activities. Noise levels after sundown should be limited to no greater than 95 decibels (dBA scale) and night tours should be prohibited past 10 PM.
- Project-related vehicles should observe a 20-mph speed limit in all Project areas, except on County roads and State and federal highways. This is particularly important at night when certain animals are most active. To the extent possible, nighttime traffic should be minimized. Off-road traffic outside of designated project areas should be prohibited.
- All trash and food items that attract wildlife should be discarded into closed containers and properly disposed of at the end of each workday.
- To prevent harassment or mortality of special status species, no pets from visitors aside from service animals and emotional support animals should be permitted on the Project site.

SECTION 7 - SUMMARY AND CONCLUSIONS

Land within the Project site is disturbed and contains some habitat that could support special-status plant species, special-status wildlife, and sensitive natural communities. There are no designated Critical Habitats, movement corridors, or wetlands, that would be impacted by the Project. However, there is one water feature, Agua Fria Creek, that will not be substantially impacted by the Project. Based on the literature and database searches and results of the site survey, there is potential for special-status species to occur on the site: a list of which can be found in Table 4-2 and Table 4-3. Due to the disturbed nature of the Project, surrounded by active construction, agricultural work, and the lack of a suitable prey base, impacts to the fisher are not anticipated to occur. If nesting birds were to nest in the vicinity of the Project, impacts to the species could occur. Implementation of the recommended BMPs and avoidance measures outlined in Section 6 would minimize any Project impacts to these species.

This BRE has been performed in accordance with professionally accepted biological investigation practices conducted at this time and in this geographic area. The findings and opinions conveyed in this report are based on findings derived from specified historical and literary sources and a reconnaissance survey of the Project site and surrounding area. The biological investigation was limited by the scope of work performed. The reconnaissance survey may not have been performed during blooming periods or periods of seasonal or daily wildlife activity that would provide positive identification if resources were present, and therefore the findings of this report might not be definitive. The reconnaissance survey was also limited by the environmental conditions present at the time of the survey. In addition, general biological (or protocol) surveys do not guarantee that the organisms are not present and would not be discovered in the future within the site. Mobile wildlife species could occupy the site on a transient basis or re-establish populations in the future. No other guarantees or warranties, expressed or implied, are provided.

SECTION 8 - REFERENCES

- California Department of Fish and Wildlife (CDFW). 2023a. California Natural Diversity Database (CNDDDB), Accessed via: <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>.
- California Department of Fish and Wildlife (CDFW). 2023b. Biogeographic Information and Observation System (BIOS). Accessed via: www.wildlife.ca.gov/data/BIOS.
- California Department of Fish and Wildlife (CDFW). 2023c. CDFW's Special Animals List
- California Native Plant Society (CNPS). 2023. Inventory of Rare and Endangered Plants. Accessed via: www.rareplants.cnps.org.
- Federal Emergency Management Agency (FEMA) 2023. On-line Map Service Center.
- Google LLC. 2023. Google Earth Pro.
- Mayer, K.E. and W.F. Laudenslayer, Jr. 1988. *A guide to wildlife habitats of California. State of California*. Resources Agency, Department of Fish and Game. Sacramento, CA. 166 pp. Accessed via: <https://www.wildlife.ca.gov/Data/CWHR/Wildlife-Habitats>.
- Netronline. 2023. Historic Aerials Viewer. Accessed via: www.historicaerials.com/viewer.
- United States Department of Agriculture, Natural Resources Conservation Service (NRCS). 2023. Web Soil Survey. Accessed via: <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>
- United States Fish and Wildlife Service (USFWS). 2023a. Information for Planning and Consultation online project planning tool. Accessed via: <https://ecos.fws.gov/ipac/>.
- United States Fish and Wildlife Service (USFWS). 2023b. Critical Habitat Portal. Accessed via: <https://ecos.fws.gov/ecp/report/table/critical-habitat.html>.
- United States Fish and Wildlife Service (USFWS). 2023c. National Wetlands Inventory Wetlands Mapper (NWI). U.S. Geological Survey.
- United States Geological Survey (USGS). 2023. National Hydrography Dataset (NHD). Accessed via: <https://www.usgs.gov/core-science-systems/ngp/national-hydrography>.
- Western Regional Climate Center (WRCC). 2023. Cooperative Climatological Data Summaries, NOAA Cooperative Station Trona, California (049035). Accessed via: <https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca0439>.

APPENDIX A

SPECIAL-STATUS SPECIES DATABASE SEARCH RESULTS

HAPPY GOAT FARM EXPERIENCE



Selected Elements by Common Name
California Department of Fish and Wildlife
California Natural Diversity Database



Query Criteria: Quad IS (Homewood Canyon (3511784) OR Slate Range Crossing (3511783) OR Manly Fall (3511782) OR Trona East (3511773) OR Trona West (3511774) OR Copper Queen Canyon (3511772) OR Westend (3511764) OR Searles Lake (3511763) OR Layton Spring (3511762))



Selected Elements by Common Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Amargosa beardtongue <i>Penstemon fruticiformis</i> var. <i>amargosae</i>	PDSCR1L2F2	None	None	G4T3	S2	1B.3
Booth's evening-primrose <i>Eremothera boothii</i> ssp. <i>boothii</i>	PDONA03052	None	None	G5T4	S3	2B.3
burrowing owl <i>Athene cunicularia</i>	ABNSB10010	None	None	G4	S3	SSC
Clokey's cryptantha <i>Cryptantha clokeyi</i>	PDBOR0A3M0	None	None	G3	S3	1B.2
Darwin Mesa milk-vetch <i>Astragalus atratus</i> var. <i>mensanus</i>	PDFAB0F0Z3	None	None	G4G5T2	S2	1B.1
desert bighorn sheep <i>Ovis canadensis nelsoni</i>	AMALE04013	None	None	G4T4	S3	FP
desert tortoise <i>Gopherus agassizii</i>	ARAAF01012	Threatened	Threatened	G3	S2S3	
Emory's crucifixion-thorn <i>Castela emoryi</i>	PDSIM03030	None	None	G3G4	S2S3	2B.2
Inyo California towhee <i>Melospiza crissalis eremophilus</i>	ABPBX74071	Threatened	Endangered	G4G5T2	S2	
Le Conte's thrasher <i>Toxostoma lecontei</i>	ABPBK06100	None	None	G4	S3	SSC
long-eared owl <i>Asio otus</i>	ABNSB13010	None	None	G5	S3?	SSC
Mohave ground squirrel <i>Xerospermophilus mohavensis</i>	AMAFB05150	None	Threatened	G3	S2	
Morrison bumble bee <i>Bombus morrisoni</i>	IIHYM24460	None	None	G3	S1S2	
pallid bat <i>Antrozous pallidus</i>	AMACC10010	None	None	G4	S3	SSC
Panamint alligator lizard <i>Elgaria panamintina</i>	ARACB01050	None	None	G3	S3	SSC
prairie falcon <i>Falco mexicanus</i>	ABNKD06090	None	None	G5	S4	WL
Ripley's aliciaella <i>Aliciaella ripleyi</i>	PDPLM041E0	None	None	G3	S2	2B.3
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	AMACC08010	None	None	G4	S2	SSC
western mastiff bat <i>Eumops perotis californicus</i>	AMACD02011	None	None	G4G5T4	S3S4	SSC
western small-footed myotis <i>Myotis ciliolabrum</i>	AMACC01230	None	None	G5	S3	
western snowy plover <i>Charadrius nivosus nivosus</i>	ABNNB03031	Threatened	None	G3T3	S3	SSC

Record Count: 21

CNP Rare Plant Inventory



Search Results

10 matches found. Click on scientific name for details

Search Criteria: 9-Quad include [3712051]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	PLANT RANK	CA RARE RANK	CA ENDEMIC	DATE ADDED	PHOTO
Allium sanbornii var. congonii	Congdon's onion	Alliaceae	perennial bulbiferous herb	Apr-Jul	None	None	G4T3	S3	4.3	Yes		1994-01-01	 © 2008 Steven Perry
Balsamorhiza macrolepis	big-scale balsamroot	Asteraceae	perennial herb	Mar-Jun	None	None	G2	S2	18.2	Yes		1974-01-01	 ©1998 Dean Wm. Taylor
Clarkia biloba ssp. australis	Mariposa clarkia	Onagraceae	annual herb	Apr-Jul	None	None	G4G5T3	S3	18.2	Yes		1980-01-01	No Photo Available
Clarkia rostrata	beaked clarkia	Onagraceae	annual herb	Apr-May	None	None	G2G3	S2S3	18.3	Yes		1974-01-01	No Photo Available
Cryptantha mariposae	Mariposa cryptantha	Boraginaceae	annual herb	Apr-Jun	None	None	G2G3	S2S3	18.3	Yes		1974-01-01	No Photo Available
Eriogonum tripodum	tripod buckwheat	Polygonaceae	perennial deciduous shrub	May-Jul	None	None	G4	S4	4.2	Yes		1974-01-01	 ©2008 Steven Perry
Eriophyllum confertiflorum var. tanacetiflorum	tansy-flowered woolly sunflower	Asteraceae	perennial shrub	May-Jul	None	None	G5T2?Q	S2?	4.3	Yes		2001-01-01	No Photo Available
Githopsis pulchella ssp. serpentinicola	serpentine bluecup	Campanulaceae	annual herb	May-Jun	None	None	G4T3	S3	4.3	Yes		2001-01-01	 © 2019 Bany Breckling
Jepsonia heterandra	foothill jepsonia	Saxifragaceae	perennial herb	Aug-Dec	None	None	G3	S3	4.3	Yes		1994-01-01	 © 2014 Belinda Lo

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United States Department of the Interior

FISH AND WILDLIFE SERVICE

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713



In Reply Refer To:
Project Code: 2023-0088731
Project Name: Happy Goat

June 01, 2023

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>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/birds/policies-and-regulations.php>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php>.

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 Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

06/01/2023

3

Attachment(s):

- Official Species List

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:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

PROJECT SUMMARY

Project Code: 2023-0088731

Project Name: Happy Goat

Project Type: Commercial Development

Project Description: The proposed Happy Goat Farms Experience (Project) will construct and operate an experience of the farm on approximately 29 acres. The Project would install approximately 1.8 kilometers of roadway on the site as well as fencing along the walking pathways and roadway. The experience provided to guests would include enjoying catered food and drinks in the rose garden, viewings of the "Goatnasium", walking goats on leashes within specially designated areas, and the baby goat experience. The proposed experience will serve up to 150 guests per day with 25 employees working to ensure the safety of the guests and goats. The hours open will change depending on the season, with the average visit being between 4-5 hours with the possibility of extension due to dinner extensions. The Happy Goat Experience will also be used as a special event facility that could host up to 500 guests without adversely impacting the area or operations.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@37.74860875,-120.0625018750473,14z>



Counties: Mariposa and Tuolumne counties, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 8 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.

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

MAMMALS

NAME	STATUS
Fisher <i>Pekania pennanti</i> Population: SSN DPS There is proposed critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3651	Endangered

BIRDS

NAME	STATUS
California Condor <i>Gymnogyps californianus</i> Population: U.S.A. only, except where listed as an experimental population There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8193	Endangered
California Spotted Owl <i>Strix occidentalis occidentalis</i> Population: Sierra Nevada No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7266	Proposed Threatened

AMPHIBIANS

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander <i>Ambystoma californiense</i> Population: U.S.A. (Central CA DPS) There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened
Foothill Yellow-legged Frog <i>Rana boylei</i> Population: South Sierra Distinct Population Segment (South Sierra DPS) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5133	Proposed Endangered
Sierra Nevada Yellow-legged Frog <i>Rana sierrae</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9529	Endangered

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 is 1 critical habitat wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Fisher <i>Pekania pennanti</i> https://ecos.fws.gov/ecp/species/3651#crithab	Proposed

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Mattole Whitaker
Address: 601 E Pollasky Ave Suite 301
City: Clovis
State: CA
Zip: 93612
Email: mattole.whitaker@qkinc.com
Phone: 5594492400

APPENDIX B

REPRESENTATIVE PHOTOGRAPHS OF THE

TRONA 4 AND 7 SOLAR PROJECT



Photograph 1. Goat corral contains nesting boxes for chickens and fenced paddock with two small and two big corrals.
 Coordinates: 37.5162 °N, -120.01832°W facing northwest.
 Photo taken by Mattole Whitaker on May 17, 2023.



Photograph 2. Pond mainly filled with runoff from small spring.
 Coordinates: 37.51613 °N, -120.01844 °W facing southwest.
 Photo taken by Mattole Whitaker on May 17, 2023.



Photograph 3. Pond mainly filled with runoff from small spring.
 Coordinates: 37.51621 °N, -120.01832 °W facing southeast.
 Photo taken by Mattole Whitaker on May 17, 2023.



Photograph 4. Market garden field.
 Coordinates: 37.51538 °N, -120.01948 °W facing southeast.
 Photo taken by Mattole Whitaker on May 17, 2023.



Photograph 5. Field of wheat, oat, barley, vetch, and rye serving as a cover crop.
Coordinates: 37.51505 °N, -120.01992 °W facing southwest.
Photo taken by Mattole Whitaker on May 17, 2023.



Photograph 6. Big barn serving as storage, workshop, and office.
Coordinates: 37.51666 °N, -120.02019 °W facing south.
Photo taken by Mattole Whitaker on May 17, 2023.



Photograph 7. Field that has been composted, grazed, and cleared for future apple orchard.
 Coordinates: 37.51662 °N, -120.02009 °W facing west.
 Photo taken by Mattole Whitaker on May 17, 2023.



Photograph 8. Field containing Native American archaeology, roundhouse impressions present.
 Coordinates: 37.51464 °N, -120.02041 °W facing northeast.
 Photo taken by Mattole Whitaker on May 17, 2023.



Photograph 9. Fence of archaeology field.
 Coordinates: 37.5146 °N, -120.02041°W facing southeast.
 Photo taken by Mattole Whitaker on May 17, 2023.



Photograph 10. Neighboring field, untouched by grazing.
 Coordinates: 37.51475 °N, -120.01934 °W facing southeast.
 Photo taken by Mattole Whitaker on May 17, 2023.



Photograph 11. Seeded terraced area. Future beer garden and picnic area.
Coordinates: 37.51541 °N, -120.01715 °W facing northwest.
Photo taken by Mattole Whitaker on May 17, 2023.



Photograph 12. Upper terrace of beer garden.
Coordinates: 37.51544 °N, -120.01657 °W facing southwest.
Photo taken by Mattole Whitaker on May 17, 2023.



Photograph 13. Greenhouse area that once completed will have 18,000 square feet of greenhouse.
 Coordinates: 37.51449 °N, -120.01573 °W facing southwest.
 Photo taken by Mattole Whitaker on May 17, 2023.



Photograph 14. Staged material for greenhouse construction.
 Coordinates: 37.51471 °N, -120.01556 °W facing northwest.
 Photo taken by Mattole Whitaker on May 17, 2023.



Photograph 15. Upstream of creek near greenhouse.
 Coordinates: 37.51472 °N, -120.01539 °W facing northwest.
 Photo taken by Mattole Whitaker on May 17, 2023.



Photograph 16. Downstream of creek near greenhouse.
 Coordinates: 37.51468 °N, -120.01546 °W facing northeast.
 Photo taken by Mattole Whitaker on May 17, 2023.



Photograph 17. Overview of the Happy Goat Experience from top of nearby hill.
 Coordinates: 37.51888 °N, -120.02576 °W facing northeast.
 Photo taken by Mattole Whitaker on May 17, 2023.



Photograph 18. Goats and kids in corral near “Goatnasium”.
 Coordinates: 37.5163 °N, -120.01821 °W facing northwest.
 Photo taken by Mattole Whitaker on May 17, 2023.



Photograph 19. "Goatnasium".
 Coordinates: 37.51642 °N, -120.01818 °W facing northwest.
 Photo taken by Mattole Whitaker on May 17, 2023.



Photograph 19. "Goatnasium".
 Coordinates: 37.51641 °N, -120.01814 °W facing northwest.
 Photo taken by Mattole Whitaker on May 17, 2023.



Photograph 20. "Goatnasium".
 Coordinates: 37.51641 °N, -120.01815 °W facing southwest.
 Photo taken by Mattole Whitaker on May 17, 2023.



Photograph 21. Baby goats barn.
 Coordinates: 37.51536 °N, -120.01933 °W facing northeast.
 Photo taken by Mattole Whitaker on May 17, 2023.



Photograph 22. Woodpecker granary tree off road near greenhouse.
 Coordinates: 37.51419 °N, -120.01682 °W facing northwest.
 Photo taken by Mattole Whitaker on May 17, 2023.



Photograph 23. Larger nest cavities within the grainary tree.
 Coordinates: 37.51419 °N, -120.01685 °W facing southeast.
 Photo taken by Mattole Whitaker on May 17, 2023.



Photograph 24. Main road going through Agua Fria Creek, culverts are to be installed.
Coordinates: 37.51494 °N, -120.02855 °W facing northwest.
Photo taken by Mattole Whitaker on May 17, 2023.



Photograph 25. Agua Fria Creek downstream of main access road.
Coordinates: 37.51496 °N, -120.02849 °W facing northeast.
Photo taken by Mattole Whitaker on May 17, 2023.



Photograph 26. Agua Fria Creek upstream of main access road.
Coordinates: 37.51499 °N, -120.02845 °W facing northwest.
Photo taken by Mattole Whitaker on May 17, 2023.

APPENDIX C

PLANT AND WILDLIFE SPECIES OBSERVED

HAPPY GOAT EXPERIENCE

Table C - 1
Plant and Wildlife Species Observed within the BSA

Scientific Name	Common Name	Status
Plants		
<i>Achyrachaena mollis</i>	Blow wives	None
<i>Aesculus californica</i>	California buckeye	None
<i>Agoseris heterophylla</i> var. <i>cryptopleura</i>	Mountain dandelion	None
<i>Allium amplexans</i>	Narrow leaved onion	None
<i>Amsinckia intermedia</i>	Fiddleneck	None
<i>Avena fatua</i>	Wild oat	None
<i>Avena sativa</i>	Cayuse oats *	None
<i>Brassica hirta</i>	Martigena mustard *	None
<i>Brassica juncea</i>	Oriental mustard *	None
<i>Brassica nigra</i>	Black mustard	None
<i>Bromus diandrus</i>	Ripgut	None
<i>Bromus hordeaceus</i>	Soft chess	None
<i>Calochortus luteus</i>	Yellow Mariposa lily	None
<i>Calochortus superbus</i>	Yellow Mariposa	None
<i>Carduus pycnocephalus</i>	Italian thistle	None
<i>Clarkia purpurea</i>	Purple clarkia	None
<i>Clarkia purpurea</i> ssp. <i>quadrivulnera</i>	Purple clarkia	None
<i>Claytonia perfoliata</i>	Miner's lettuce	None
<i>Collinsia heterophylla</i>	Purple Chinese houses	None
<i>Cyperus eragrostis</i>	Tall flatsedge	None
<i>Daucus pusillus</i>	Wild carrot	None
<i>Dichelostemma capitatum</i> ssp. <i>capitatum</i>	Blue dicks	None
<i>Elymus caput-medusae</i>	Medusahead	None
<i>Eriodictyon californicum</i>	Yerba santa	None
<i>Erodium cicutarium</i>	Red stemmed filaree	None
<i>Erythranthe guttata</i>	Yellow monkey flower	None
<i>Eschscholzia caespitosa</i>	Foothill poppy	None
<i>Ficus carica</i>	Common fig	None
<i>Holocarpha virgata</i>	Narrow tarplant	None
<i>Hordeum murinum</i>	Mediterranean barley	None
<i>Hordeum vulgare</i>	UC937 barley *	None
<i>Juglans hindsii</i>	Northern California black walnut	None
<i>Lepidium</i> sp.	Peppergrass	None
<i>Lolium multiflorum</i>	Annual rye grass *	None
<i>Lotus corniculatus</i>	Bird's foot trefoil	None

<i>Lupinus benthamii</i>	Spider lupine	None
<i>Lupinus bicolor</i>	Miniature lupin	None
<i>Madia exigua</i>	Small tarweed	None
<i>Matricaria discoidea</i>	Pineapple weed	None
<i>Micropus californicus</i>	Q tip	None
<i>Phoradendron</i> sp.	Mistletoe	None
<i>Pinus sabiniana</i>	Bull pine	None
<i>Pisum sativum</i>	Snap pea	None
<i>Plagiobothrys</i> sp.	Popcorn flower	None
<i>Psilocarphus tenellus</i>	Slender wooly marbles	None
<i>Quercus douglasii</i>	Blue oak	None
<i>Quercus wislizeni</i>	Interior live oak	None
<i>Silybum marianum</i>	Milk thistle	None
<i>Sorghum halepense</i>	Johnson grass	None
<i>Torilis arvensis</i>	Field hedge parsley	None
<i>Trifolium incarnatum</i>	Crimson Clover *	None
<i>Umbellularia californica</i>	California bay	None
<i>Vicia sativa</i>	Common vetch *	None
<i>x Triticosecale wittmack</i>	Forerunner triticales *	None
<i>Achyrachaena mollis</i>	Blow wives	None
<i>Aesculus californica</i>	California buckeye	None
<i>Agoseris heterophylla</i> var. <i>cryptopleura</i>	Mountain dandelion	None
<i>Allium amplexans</i>	Narrow leaved onion	None
<i>Amsinckia intermedia</i>	Fiddleneck	None
<i>Avena fatua</i>	Wild oat	None
<i>Avena sativa</i>	Cayuse oats *	None
<i>Brassica hirta</i>	Martigena mustard *	None
<i>Brassica juncea</i>	Oriental mustard *	None
<i>Brassica nigra</i>	Black mustard	None
<i>Bromus diandrus</i>	Ripgut	None
<i>Bromus hordeaceus</i>	Soft chess	None
<i>Calochortus luteus</i>	Yellow Mariposa lily	None
<i>Calochortus superbis</i>	Yellow Mariposa	None
<i>Carduus pycnocephalus</i>	Italian thistle	None
<i>Clarkia purpurea</i>	Purple clarkia	None
<i>Clarkia purpurea</i> ssp. <i>quadrivulnera</i>	Purple clarkia	None
<i>Claytonia perfoliata</i>	Miner's lettuce	None
<i>Collinsia heterophylla</i>	Purple Chinese houses	None
<i>Cyperus eragrostis</i>	Tall flatsedge	None
<i>Daucus pusillus</i>	Wild carrot	None

<i>Dichelostemma capitatum</i> ssp. <i>capitatum</i>	Blue dicks	None
<i>Elymus caput-medusae</i>	Medusahead	None
<i>Eriodictyon californium</i>	Yerba santa	None
<i>Erodium cicutarium</i>	Red stemmed filaree	None
<i>Erythranthe guttata</i>	Yellow monkey flower	None
<i>Eschscholzia caespitosa</i>	Foothill poppy	None
<i>Ficus carica</i>	Common fig	None
<i>Holocarpha virgata</i>	Narrow tarplant	None
<i>Hordeum murinum</i>	Mediterranean barley	None
<i>Hordeum vulgare</i>	UC937 barley *	None
<i>Juglans hindsii</i>	Northern California black walnut	None
<i>Lepidium</i> sp.	Peppergrass	None
<i>Lolium multiflorum</i>	Annual rye grass *	None
<i>Lotus corniculatus</i>	Bird's foot trefoil	None
<i>Lupinus benthamii</i>	Spider lupine	None
<i>Lupinus bicolor</i>	Miniature lupin	None
<i>Madia exigua</i>	Small tarweed	None
<i>Matricaria discoidea</i>	Pineapple weed	None
<i>Micropus californicus</i>	Q tip	None
<i>Phoradendron</i> sp.	Mistletoe	None
<i>Pinus sabiniana</i>	California foothill pine	None
<i>Pisum sativum</i>	Snap pea	None
<i>Plagiobothrys</i> sp.	Popcorn flower	None
<i>Psilocarphus tenellus</i>	Slender wooly marbles	None
<i>Quercus douglasii</i>	Blue oak	None
<i>Quercus wislizeni</i>	Interior live oak	None
<i>Silybum marianum</i>	Milk thistle	None
<i>Sorghum halepense</i>	Johnson grass	None
<i>Torilis arvensis</i>	Field hedge parsley	None
<i>Trifolium incarnatum</i>	Crimson Clover *	None
<i>Umbellularia californica</i>	California bay	None
<i>Vicia sativa</i>	Common vetch *	None
<i>x Triticosecale wittmack</i>	Forerunner triticales *	None
Wildlife		
<i>Accipiter cooperii</i>	Cooper's hawk	G5/S4
<i>Accipiter striatus</i>	sharpshin hawk	G5/S4
<i>Apelocoma californica</i>	California scrub jay	G5/SNR
<i>Buteo jamaicensis</i>	red tailed hawk	G5/SNR
<i>Callipepla californica</i>	California quail	G5/SNR
<i>Capra hircus</i>	goat	None

<i>Cathartes aura</i>	turkey vulture	G5/SNR
<i>Corvus brachyrhynchos</i>	American crow	G5/SNR
<i>Corvus corax</i>	raven	G5/SNR
<i>Felis catus</i>	domesticated feline	None
<i>Hirundo rustica</i>	barn swallow	G5/SNR
<i>Junco hyemalis</i>	dark eyed junco	G5/SNR
<i>Melanerpes formicivorus</i>	acorn woodpecker	G5/SNR
<i>Mimus polyglottos</i>	northern mockingbird	G5/SNR
<i>Myiarchus cinerascens</i>	ash throated flycatcher	G5/SNR
<i>Otospermophilus beecheyi</i>	California ground squirrel	G5/SNR
<i>Streptopelia decaocto</i>	Eurasian collared dove	G5
<i>Zenaida macroura</i>	mourning dove	G5/SNR

*Plant species marked with a * were part of cover crop seeds used by farm manager.*

APPENDIX D

SPECIAL-STATUS SPECIES IN THE REGIONAL VICINITY OF THE PROJECT SITE

HAPPY GOAT EXPERIENCE

Special-Status Species in the Regional Vicinity of the Project Site Happy Goat Farm Experience, Mariposa County, California							
Scientific Name	Common Name	Global Rank	State Rank	Status	General Habitat Description	Potential To Occur (Present/Yes/No)	Rationale
SENSITIVE NATURAL COMMUNITIES							
<i>Quercus douglasii</i>	Blue Oak Woodland	G4	S4	-/-	Generally these woodlands have an overstory of scattered trees; canopy dominated by broad-leaved trees 5 to 15 feet tall, commonly forming savanna-like stands on dry ridges and gentle slopes; shrubs often present but rarely extensive, often occur on rock outcrops; typical understory composed of annual grassland vegetation	Present	This community is present throughout the BSA and was observed during the 2023 field surveys.
<i>Quercus douglasii</i> – <i>Quercus wislizeni</i>	Mixed oak forest and woodland	G4	S4	-/-	Trees less than 98 feet tall; open to continuous canopy that may be two tiered; shrubs may be common or infrequent; understory may be sparse or abundant with or without grass.	Present	This community is present throughout the BSA and was observed during the 2023 field surveys
<i>Pinus Sabiana/Quercus spp</i>	Foothill Pine woodland	G4	S4	-/-	Canopy cover 10 to 59 percent; diverse hardwoods, conifers, and shrubs with variable overstories; found on steeper, dryer slopes with shallower soils than blue oak woodlands; lower elevations on gentle slopes mixed with grasslands and shrublands.	Present	This community is present throughout the BSA and was observed during the 2023 field surveys
<i>Quercus lobata riparian</i>	Valley oak riparian forest and woodland	G3	S3	-/-	Trees less than 98 feet tall; open to continuous canopy or savanna-like; open to continuous shrub layer; understory may or may not be grassy; seasonal saturated and/or intermittently flooded alluvial or residual soils.	Present	This community is present throughout the BSA and was observed during the 2023 field surveys
PLANTS							
<i>Allium tuolumnense</i>	Rawhide Hill onion	G2	S2	-/- 1B.2	Perennial bulbiferous herb; blooms from March to May; elevations from approximately 980 to 1,970 feet; occurs in serpentinite cismontane woodland; threatened by grazing, foot traffic, urbanization, road maintenance, and vehicles.	No	Serpentinite cismontane woodland habitat occurs on the BSA. There are no CNDDDB records of this species within 10 miles of the BSA. This species was not observed during the 2023 field surveys and is not expected to occur within the BSA.
<i>Balsamorhiza macrolepis</i>	big-scale balsamroot	G2	S2	-/- 1B.2	Perennial herb; blooms March to June; occurs in chaparral, cismontane woodland, and valley and foothill grassland, ultramafic sometimes on serpentinite soils; elevation approximately 147 to 5,101 feet; threatened by grazing and potentially residential, recreational, and energy development; occurrences are scattered along lower foothill and mountain regions along perimeter of Sacramento Valley.	Yes	Chaparral, cismontane woodland, and foothill grassland habitat on ultramafic and serpentinite soils occurs on the BSA. There are four CNDDDB records of this species within 10 miles of the BSA. The closest (EONDX 109045) is located approximately 4.43 miles to the northwest of the BSA. This species was not observed during the 2023 field surveys, but supportive habitat is present within the BSA, and this species has potential to occur within the BSA.
<i>Calycadenia hooveri</i>	Hoover's calycadenia	G2	S2	-/- 1B.3	Annual herb; blooms from July to September; elevations from approximately 210 to 985 feet; occurs in cismontane woodland, valley and foothill grassland; threatened by development.	No	The BSA is outside of this species elevation range. There are no CNDDDB records of this species within 10 miles of the BSA. This species was not observed during the 2023 field surveys and is not expected to occur within the BSA.
<i>Calyptridium pulchellum</i>	Mariposa pussypaws	G1	S1	FT/- 1B.1	Annual herb; blooms April to August; occurs in decomposed and exposed sites on granite domes within cismontane woodland and chaparral; California endemic; elevation from approximately 1,450 to 3,600 feet; threatened by development, grazing, non-native plants, and vehicles.	Yes	Cismontane woodland and chaparral habitat occur on the BSA. There are two CNDDDB records of this species within 10 miles of the BSA. The closest (EONDX 4005) is located approximately 6.40 miles to the southeast of the BSA. This species was not observed during the 2023 field surveys, but supportive habitat is present within the BSA, and this species has potential to occur within the BSA.
<i>Clarkia australis</i>	Small's southern clarkia	G2	S2	-/- 1B.2	Annual herb; blooms May to August; occurs in open, rocky sites in conifer forest or oak woodland; cismontane woodland, lower montane coniferous forest; California endemic; elevation from approximately 2,986 to 6,808 feet; threatened by logging.	Yes	Open rocky sites in cismontane woodland habitat occurs on the BSA. There are no CNDDDB records of this species within 10 miles of the BSA. This species was not observed during the 2023 field surveys, but supportive habitat is present within the BSA, and this species has potential to occur within the BSA.
<i>Clarkia biloba</i> ssp. <i>australis</i>	Mariposa clarkia	G4G5T3	S3	-/- 1B.2	Annual herb; blooms April to July; occurs in serpentinite soils, and in chaparral, ultramafic, and foothill woodlands sometimes with riparian areas as well as large talus rockslides; California endemic; elevation from approximately 984 to 4,790 feet; threatened by road maintenance, foot traffic and non-native plants.	Yes	Serpentinite soils, chaparral, ultramafic, and foothill woodland occurs on the BSA. There are 19 CNDDDB records of this species within 10 miles of the BSA. The closest (EONDX 77314) is located approximately 1.11 miles to the southeast of the BSA. This species was not observed during the 2023 field surveys, but supportive habitat is present within the BSA, and this species has potential to occur within the BSA.
<i>Clarkia lingulate</i>	Merced clarkia	G1	S1	-/SE 1B.1	Annual herb; blooms May to June; occurs metamorphic gravels, talus, and in red clay in chaparral and cismontane woodlands and closed-cone pine forest, usually on north-facing slopes; California endemic; elevation from approximately 1,312 to 1,493 feet; threatened by pesticides and road widening.	No	The BSA is outside of this species elevation range. There are no CNDDDB records of this species within 10 miles of the BSA. This species was not observed during the 2023 field surveys and is not expected to occur within the BSA.
<i>Clarkia rostrata</i>	beaked clarkia	G2G3	S2S3	-/- 1B.3	Annual herb; blooms April to May; occurs in cismontane woodlands and valley and foothill grasslands; elevation from approximately 197 to 1,640 feet.	Yes	Cismontane woodlands and foothill grasslands occurs on the BSA. There are 10 CNDDDB records of this species within 10 miles of the BSA. The closest (EONDX 80315) is located approximately 0.33 miles to the southeast of the BSA. This species was not observed during the 2023 field surveys but supportive habitat is present within the BSA, and this species has the potential to occur within the BSA.
<i>Cryptantha mariposae</i>	Mariposa cryptantha	G2G3	S2S3	-/- 1B.3	Annual herb; blooms April to June; occurs in chaparral (serpentinite, rocky) and ultramafic; elevation from 655 to 2,135 feet.	Yes	Serpentinite and ultramafic soils occur on the BSA. There are two CNDDDB records of this species within 10 miles of the BSA. The closest (EONDX 79970) overlaps the BSA. This species was not observed during the 2023 field surveys, but supportive habitat is present within the BSA, and this species has potential to occur within the BSA.
<i>Diplacus pulchellus</i>	yellow-lip pansy monkeyflower	G2	S2	-/- 1B.2 -/- 1B.3	Annual herb; blooms April to July; occurs in vernal wet and often disturbed areas; on clay, volcanic, or granitic soils; lower montane coniferous forest, meadows and seeps; California endemic; elevation from approximately 1,969 to 6,562 feet; threatened by vehicles, logging, non-native plants, and grazing, and potentially threatened by development.	Yes	Vernally wet and disturbed areas occur on the BSA along drainages and roads. There is 1 CNDDDB record of this species within 10 miles of the BSA. The closest (EONDX 56968) is located approximately 8.0 miles to the southeast of the BSA. This species was not observed during the 2023 field surveys, but supportive habitat is present within the BSA, and this species has potential to occur within the BSA.
<i>Entosthodon kochii</i>	Koch's cord moss	G1	S1		Nonvascular moss; occurs in cismontane woodland; elevation from 590 to 3,280 feet.	Yes	Cismontane woodlands occur on the BSA. There is one CNDDDB record of this species (EONDX 45400) that occurs approximately 6.46 miles northeast of the BSA. This species was not observed during the 2023 field surveys, but supportive habitat is present within the BSA, and this species has potential to occur within the BSA.
<i>Erigeron mariposanus</i>	Mariposa daisy	GX	SX	-/- 1A	Perennial herb; blooms June to August; occurs in cismontane woodland; elevation from approximately 1,965 to 2,625 feet.	Yes	Cismontane woodlands occur on the BSA. There is one CNDDDB record of this species (EONDX 3853) that occurs approximately 2.26 miles southeast of the BSA. This species was not observed during the 2023 field surveys, but supportive habitat is present within the BSA, and this species has potential to occur within the BSA.
<i>Eriophyllum congdonii</i>	Congdon's woolly sunflower	G2	S2	-/- 1B.2	Annual herb; blooms April to June; occurs in cracks in rocky outcroppings, and on talus; sometimes with <i>Quercus douglasii</i> ; rocky and metamorphic soils; chaparral, cismontane woodland, lower montane	Yes	Rocky outcroppings, chaparral, cismontane woodland, and foothill grasslands occur on the BSA. There are no CNDDDB records of this species within 10 miles of the BSA. This species was not observed during

Scientific Name	Common Name	Global Rank	State Rank	Status	General Habitat Description	Potential To Occur (Present/Yes/No)	Rationale
				-/- 1B.2	coniferous forest, valley and foothill grassland; California endemic; elevation from approximately 1,640 to 6,234 feet; threatened by development, road maintenance, and non-native plants.	Yes	the 2023 field surveys, but supportive habitat is present within the BSA, and this species has potential to occur within the BSA.
<i>Erythranthe filicaulis</i>	slender-stemmed monkeyflower	G2	S2		Annual herb; blooms April to August; moist granitic sand and meadow edges and seeps; vernal mesic sites; cismontane woodland, lower montane coniferous forest, meadows and seeps, upper montane coniferous forest; California endemic; elevation from approximately 2,953 to 5,742 feet; threatened by logging and reforestation with herbicides, and possibly by grazing and foot traffic.		Vernal mesic areas, cattle ponds, and cismontane woodland occur on the BSA. There are no CNDDDB records of this species within 10 miles of the BSA. This species was not observed during the 2023 field surveys, but supportive habitat is present within the BSA, and this species has potential to occur within the BSA.
<i>Erythranthe gracilipes</i>	slender-stalked monkeyflower	G2	S2		-/- 1B.2	Annual herb; blooms April to June; occurs often in burned or disturbed areas; also on thin granitic soil in cracks in large granite rocks; chaparral, cismontane woodland, lower montane coniferous forest; California endemic; elevation from approximately 1,640 to 4,265 feet; threatened by logging, grazing, vehicles, and non-native plants.	Yes
<i>Horkelia parryi</i>	Parry's horkelia	G2	S2	-/- 1B.2	Perennial herb; blooms April to September; occurs in lone formation and other soils (has been observed in fuel break); chaparral, cismontane woodland; California endemic; elevation from approximately 262 to 3,511 feet; potentially threatened by clay mining, road maintenance, erosion, vehicles and non-native plants.	Yes	Cleared areas and fuel breaks, chaparral, and cismontane woodland habitat occurs on the BSA. There are three CNDDDB records of this species within 10 miles of the BSA. The closest (EONDX 73793) is located approximately 7.68 miles to the northeast of the BSA. This species was not observed during the 2023 field surveys, but supportive habitat is present within the BSA, and this species has potential to occur within the BSA.
<i>Leptosiphon serrulatus</i>	Madera leptosiphon	G3	S3	-/- 1B.2	Annual herb; blooms April to May; occurs in cismontane woodland and lower montane coniferous forest; California endemic; elevation from approximately 980 to 4,265 feet; threatened by road maintenance, exotic plant control, and erosion.	Yes	Cismontane woodland habitat occurs on the BSA. There are two CNDDDB records of this species within 10 miles of the BSA. The closest (EONDX 75603) is located approximately 1.02 miles to the south of the BSA. This species was not observed during the 2023 field surveys, but supportive habitat is present within the BSA, and this species has potential to occur within the BSA.
<i>Lomatium congdonii</i>	Congdon's lomatium	G2	S2		Perennial herb; blooms March to June; occurs in chaparral and cismontane woodland in serpentinite soils; California endemic; elevation from approximately 980 to 6,890 feet; threatened by vehicles and mining.	Yes	Chaparral and cismontane woodland habitat, and serpentinite soils occur on the BSA. There is one CNDDDB record of this species (EONDX 3855) that occurs approximately 2.26 miles southeast of the BSA. This species was not observed during the 2023 field surveys, but supportive habitat is present within the BSA, and this species has potential to occur within the BSA.
<i>Lupinus citrinus</i> var. <i>deflexus</i>	Mariposa lupine	G2T1T2	S1S2	-/ST 1B.2	Annual herb; blooms April to May; occurs in chaparral and cismontane woodland in granitic, sandy soils; California endemic; elevation from approximately 1,310 to 2,000 feet; threatened by development, vehicles, and grazing.	Yes	Chaparral and cismontane woodland habitat occur on the BSA. There are seven CNDDDB records of this species within 10 miles of the BSA. The closest (EONDX 75960) is located approximately 4.94 miles to the southeast of the BSA. This species was not observed during the 2023 field surveys, but supportive habitat is present within the BSA, and this species has potential to occur within the BSA.
<i>Lupinus spectabilis</i>	shaggyhair lupine	G2	S2	-/- 1B.2	Annual herb; blooms April to May; occurs in chaparral and cismontane woodland in serpentinite soils; California endemic; elevation from approximately 850 to 2,705 feet; threatened by mining, grazing, and road construction.	Yes	Chaparral and cismontane woodland habitat, and serpentinite soils occur on the BSA. There are 12 CNDDDB records of this species within 10 miles of the BSA. The closest (EONDX 79579) overlaps the BSA. This species was not observed during the 2023 field surveys, but supportive habitat is present within the BSA, and this species has potential to occur within the BSA.
<i>Mielichhoferia elongate</i>	elongate copper moss	G5	S3S4	-/- 4.3	Nonvascular moss; occurs in broadleafed upland forest, chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, subalpine coniferous forest; elevation from approximately sea level to 6,430 feet; threatened by road maintenance.	Yes	Chaparral and cismontane woodland habitats occur on the BSA. There are no CNDDDB records of this species within 10 miles of the BSA. This species was not observed during the 2023 field surveys, but supportive habitat is present within the BSA, and this species has potential to occur within the BSA.
<i>Mielichhoferia shevockii</i>	Shevock's copper moss	G2	S2		Nonvascular moss; occurs in cismontane woodland with metamorphic, rock, mesic soils; California endemic; elevation from approximately 2,460 to 4,595 feet; threatened by road widening.	Yes	Cismontane woodland habitat occurs on the BSA. There are no CNDDDB records of this species within 10 miles of the BSA. This species was not observed during the 2023 field surveys, but supportive habitat is present within the BSA, and this species has potential to occur within the BSA.
	INVERTEBRATES						
<i>Bombus crotchii</i>	Crotch bumble bee	G2	S2	-/-CE	This bee occurs in relatively warm and dry environments, including the inner Coast Range of California and the margins of the Mojave Desert. It inhabits grassland and scrub habitats, where it nests in abandoned rodent burrows, occasionally nesting above ground in tufts of grass, rock piles, or cavities in dead trees. This species is classified as a short-tongued species, whose food plants include <i>Asclepias</i> , <i>Chaenactis</i> , <i>Lupinus</i> , <i>Medicago</i> , <i>Phacelia</i> , and <i>Salvia</i> . The species is threatened by habitat loss and degradation, including agricultural intensification and rapid urbanization.	No	Although grassland and the preferred food source is present on the BSA, there are limited rodent burrows for refugia and is outside the suspected range of this species. There are two CNDDDB records of this species (EONDX 119710) that occur approximately 6.48 miles northeast of the BSA. This species was not observed during the 2023 field surveys and is not expected to occur within the BSA.
<i>Desmocerus californicus dimorphus</i>	valley elderberry longhorn beetle	G3T2T3	S3		FT/-	Closely associated with elderberry shrubs (<i>Sambucus</i> sp.) for food and reproduction; usually along rivers and streams; eggs laid on bark, and larvae hatch and burrow into the stems; adults eat elderberry leaves and flowers; stem diameter must be minimum one inch; exit holes in stems are most common methods for identification; ranges from southern Shasta County to Fresno County.	No
<i>Helminthoglypta allynsmithi</i>	Merced Canyon shoulderband	G1	S1	-/-	This species inhabits canyons and rockslides and requires moist, shaded areas; ranges from Merced County to Mariposa County.	No	No canyon or rockslide areas occur within the BSA. There are no CNDDDB records of this species within 10 miles of the BSA. This species was not observed during the 2023 field surveys and is not expected to occur within the BSA.
<i>Stygobromus wengerorum</i>	Wengerors' Cave amphipod	G1	S1	-/-	Occurs in subterranean groundwater habitats, limestone caves. Little is known about the life history of this amphipod.	No	No subterranean groundwater habitat or limestone caves are present within the BSA. There are two CNDDDB record of this species within 10 miles of the BSA. The closest (EONDX 22588) is located 7.43 miles to the north of the BSA. This species was not observed during the 2023 field surveys and is not expected to occur within the BSA.
	FISH						
<i>Mylopharodon conocephalus</i>	hardhead	G3	S4	-/- SSC	This species occurs in clear, deep pools with sand-gravel-boulder bottoms and slow water velocity; it ranges in low to mid-elevation streams in the Sacramento-San Joaquin drainage and the Russian River; has also been documented in lakes.	Yes	The BSA is outside of this species range. There are no CNDDDB records of this species within 10 miles of the BSA. This species was not observed during the 2023 field survey and is not expected to occur within the BSA.
	AMPHIBIANS						
<i>Ambystoma californiense</i>	California tiger salamander - central California DPS	G2G3	S3	FT/ST	This stocky salamander spends the majority of its life aestivating in upland habitat in abandoned small mammal burrows, such as those of ground squirrels. After a sufficient winter rain event, adults emerge to breed in ephemeral pools or artificial ponds, which must remain inundated for at least 12 weeks for reproductive success. Young hatch as larvae with external gills and feed on benthic invertebrates and	Yes	Suitable aquatic features for California tiger salamander are located in or near the BSA in the form of riverine streams and ponds. There are no CNDDDB records within 10 miles of the BSA. This species was not observed during the 2023 field survey and is not expected to occur within the BSA.

Scientific Name	Common Name	Global Rank	State Rank	Status	General Habitat Description	Potential To Occur (Present/Yes/No)	Rationale
					smaller tadpoles; adults feed on a variety of terrestrial invertebrates, small fish, and small mammals. Upland habitat typically consists of valley and foothill grasslands but can also include oak woodlands and uncommonly riparian habitats. The species is found in the Central Valley and Central Coast at elevations up to 3,200 feet. Threatened by habitat loss, predation by larger amphibians and fish, and hybridization with other tiger salamander species.		
<i>Hydromantes brunus</i>	limestone salamander	G2G3	S2S3	-/ST FP	This species is found in mossy limestone crevices and talus in the grey pine, oak, buckeye, and chaparral belt of the lower Merced River Canyon, typically on steep slopes. Seeks out cover under woody debris or limestone rocks in habitats where they exist.	Yes	Grey pine, oak, and buckeye habitat, and steep slopes are present within the BSA. There are 20 CNDDB records of this species within 10 miles of the BSA. The closest (EONDX 28310, 33609, 76077, and 76078) overlap the BSA. This species was not observed during the 2023 field surveys, but supportive habitat is present within the BSA, and this species has potential to occur within the BSA.
<i>Rana boylei</i>	foothill yellow-legged frog	G3T2	S2	-/SE SSC	This species occurs in quiet pools of small streams, ponds, and marshes, preferably with dense shrubby vegetation such as cattails and willows near deep water pools.	Yes	Quiet pools of small streams and cattle ponds are present within the BSA. There are 9 CNDDB records of this species within 10 miles of the BSA. The closest (EONDX 111439) is located approximately 2.16 miles to the southeast of the BSA. This species was not observed during the 2023 field surveys, but supportive habitat is present within the BSA, and this species has potential to occur within the BSA. Bullfrogs are present throughout the BSA and the likelihood of this species being present within the BSA is low due to predation.
<i>Rana sierrae</i>	Sierra Nevada yellow-legged frog	G1	S1	FE/ST WL	This species occurs in streams, lakes, and ponds in montane riparian, lodgepole pine, subalpine conifer, and wet meadow habitats. Highly aquatic species that is always found within a couple meters of the edge of water. Breeding can begin late winter to April or even as late as June or July in lower elevations. Elevational range is from 4,500 to 12,000 feet but can occur as low as 3,500 feet. Breeding occurs in aquatic habitats, eggs are attached to debris or left unattached based on velocity of water. Egg-laying site must be connected to permanent pond or lake that does not freeze completely to the bottom during winter.	No	Ephemeral streams and cattle ponds occur within the BSA. There are no CNDDB records of this species within 10 miles of the BSA. In addition the BSA is outside of the elevation range required for this species. This species was not observed during the 2023 field surveys, but supportive habitat is present within the BSA, and this species has potential to occur within the BSA.
<i>Spea hammondi</i>	western spadefoot	G2G3	S3S4	-/ SSC	This species occurs primarily in grassland habitats but can also be found in valley-foothill hardwood woodlands. Grasslands with shallow temporary pools are optimal habitats for breeding and egg laying.	Yes	Habitat consisting of cattle ponds within grassland habitat is present within the BSA. There are no CNDDB records of this species within 10 miles of the BSA. This species was not observed during the 2023 field surveys but habitat that could support this species occurs within the BSA.
		REPTILES					
<i>Emys marmorata</i>	western pond turtle	G3G4	S3	-/ SSC	This species occurs in ponds and small lakes with abundant vegetation; also found in marshes, slow moving streams, reservoirs, and brackish water. Require basking sites.	Yes	Although cattle ponds are present within the BSA, lakes, marshes, reservoirs, or streams are not present. There are three CNDDB records of this species that occur within 10 miles of the BSA. The closest (EONDX 867) occurs approximately 2.26 miles southeast of the BSA. This species was not observed during the 2023 field surveys and is not expected to occur within the BSA.
		BIRDS					
<i>Strix nebulosa</i>	great gray owl	G5	S1	-/SE	This species occurs in a wide range of habitats and elevations but prefer forests and meadow associations across their range. Requires large diameter snags in forests with high canopy closure. Generally, occurs from approximately 4,500 to 7,500 feet in the Sierra Nevada from the vicinity of Quincy, Plumas Co. south to the Yosemite region. Most recent records are from the Merced and Tuolumne River drainages of Yosemite National Park. It is occasionally reported in northwestern California in the winter and in the Warner Mountains in the summer. It breeds in old-growth red fir, mixed conifer, or lodgepole pine habitats, always in the vicinity of wet meadows.	No	Nesting habitat consisting of forests and meadows with large diameter snags and high canopy closure, located between 4500 to 7500 feet in elevation are absent from the BSA. There are no CNDDB records of this species within 10 miles of the BSA. This species was not observed during the 2023 field survey and is not expected to occur within the BSA.
<i>Strix occidentalis occidentalis</i>	California spotted owl	G3G4	SNR	-/ST	The California spotted owl is a subspecies of spotted owl that occurs throughout the Sierra Nevada mountain range on both east and west sides. The preferred habitat is old growth forests , with a majority preferring mid-elevation ponderosa pine, mixed conifer, white fir, and mixed evergreen forest types. However they can also be found in riparian/hardwood forests, live oak forests, and redwood forests.	No	The BSA does not contain suitable old growth forest preferred by the California spotted owl. There is one CDFW confirmed observation 9.24 miles northeast of the BSA.
<i>Gymnogyps californianus</i>	California condor	G1	S1	FE/SE	This condor has been documented in southern and northern California, northern Baja California, Oregon, southern British Columbia, and Arizona, Utah, and Nevada where the three states come together. It is a rare visitor to the San Joaquin Valley, found at elevation ranges from sea level to 9,000 feet. Their main characteristics sought for a nest site are 1) partially sheltered from the weather and 2) located on a cliff, steep slope, or tall trees. Nests are located between 2,000 to 6,500 feet in elevation. They are threatened by lead poisoning, micro trash ingestion, collisions, electrocution by powerlines, drownings, and predation. More recent threats have been from shootings.	Yes	There is potential for the California condor to fly through the BSA, even though no suitable nesting habitat can be found within. Suitable foraging habitat (open fields with livestock mortalities) are present in and nearby the BSA. There are no CNDDB records within 10 miles of the BSA
		MAMMALS					
<i>Antrozous pallidus</i>	pallid bat	G4	S3	-/ SSC	This species occurs in deserts, grasslands, shrublands, woodlands and forests. It is most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. It is very sensitive to disturbance of roosting sites.	Yes	Annual grassland and woodland habitat with dry rocky areas for roosting that could support this species occurs within the BSA. There is one CNDDB record of this species (EONDX 69317) that occurs approximately 6.47 miles northeast of the BSA. This species was not observed during the 2023 field surveys, but supportive habitat is present within the BSA, and this species has potential to occur within the BSA.
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	G4	S2	-/ SSC	This species occurs in coniferous forests, mixed meso-phytic forests, deserts, native prairies, riparian communities, active agricultural areas, and coastal habitat types. Distribution is correlated with the availability of caves and cave-like roosting habitat, occurring in areas dominated by exposed, cavity forming rock and/or historic mining districts. It prefers open roosting areas in large areas and do not tuck themselves into cracks and crevices like many bat species do. Extremely sensitive to human disturbance.	Yes	Roosting habitat for this species is present within the BSA. There are two CNDDB records of this species within 10 miles of the BSA. The closest (EONDX 24312) that occurs approximately 1.09 miles of the BSA. This species was not observed during the 2023 field survey but roosting and foraging habitat that could support this species occurs within the BSA.
<i>Euderma maculatum</i>	spotted bat	G4	S3	-/ SSC	This species occurs in a wide variety of habitats from arid deserts and grasslands through mixed conifer forests. It feeds over water and along washes. It also feeds almost entirely on moths. This species needs rock crevices in cliffs or caves for roosting.	Yes	Grasslands with cattle ponds and rock outcroppings for roosting habitat occur within the BSA. There is one CNDDB record of this species (EONDX 66357) that occurs approximately 6.45 miles northeast of the BSA. This species was not observed during the 2023 field surveys, but supportive habitat is present within the BSA, and this species has potential to occur within the BSA.
<i>Lasiurus frantzii</i>	western red bat	G4	S3	-/ SSC	Locally common in areas from Shasta County to Mexican border, west of the Sierra Nevada/Cascade crests; migrates between summer and winter ranges; roosts in forests and woodlands from sea level up through mixed conifer forests; not in deserts; feeds on insects over grasslands, shrublands, open woodlands and	Yes	Grassland habitat that could support this species occurs within the BSA. There are no CNDDB records of this species within 10 miles of the BSA. This species was not observed during the 2023 field surveys, but supportive habitat is present within the BSA, and this species has potential to occur within the BSA.

Scientific Name	Common Name	Global Rank	State Rank	Status	General Habitat Description	Potential To Occur (Present/Yes/No)	Rationale
				-/-	forests, and croplands; roosts primarily in trees on edge habitats near streams, fields, or urban areas, less often in shrubs; requires water; maternity season from late May through early July; usually does not roost with other bats; rabies is common in this species.	Yes	There are buildings and structures that could provide roosting habitat for this species are within the BSA. There is one CNDDDB record of this species within 10 miles of the BSA. There is one CNDDDB record of this species (EONDX 69318) that occurs approximately 6.48 miles northeast of the BSA. This species was not observed during the 2023 field surveys but foraging habitat that could support this species occurs within the BSA.
<i>Myotis yumanensis</i>	Yuma myotis	G5	S4		Common throughout California except desert regions; wide variety of habitats from sea level to 11,000 feet; prefers open forests and woodlands with sources of water; forages for small fly insects over water sources; roosts in buildings, mines, caves, or crevices, occasionally in swallow nests and under bridges; large maternity colonies; maternity season from late May through June, sometimes August.		
<i>Pekania pennanti</i>	fisher - southern Sierra Nevada pop.	G5	S2S3	FE/SE/ST/SSC	This species occurs in intermediate to large tree stages of coniferous forests and deciduous-riparian areas with high percent canopy closure. It uses cavities, snags, logs, and rocky areas for cover and denning. Trees typically used for cover or denning include spruce, fir, white cedar, and some hardwoods. Male and female home range size varies from 5.7 to 13.5 square miles with male home ranges typically large than those of female.	No	No suitable dens in the form of fallen tree or large cavities observed in the BSA, as well as lack of suitable tree species (spruce, fire, white cedar, and some hardwoods). There are no CNDDDB records within ten miles of the BSA and no fisher was observed during 2023 field surveys. A portion of official fisher critical habitat can be found within the 9 quad search.

Sources:
California Department of Fish and Game. 1998. California Wildlife Habitat Relationships System (CWHRS): Blue Oak-Foothill Pine, California Interagency Wildlife Task Group
California Department of Fish and Wildlife (CDFW). 2021a. California Natural Diversity Database (CNDDDB), California Department of Fish and Wildlife Sacramento, CA.
California Department of Fish and Game. 1998. California Wildlife Habitat Relationships System (CWHRS): Blue Oak Woodland, California Interagency Wildlife Task Group
California Native Plant Society (CNPS). 2021. Inventory of Rare and Endangered Plants (online edition, v6-05b 4-11-05). Rare Plant Scientific Advisory Committee. California Native Plant Society. Sacramento, CA.
California Native Plant Society (CNPS). 2021. *Quercus lobata* Riparian Forest & Woodland Alliance. A Manual of California Vegetation Online
California Native Plant Society (CNPS).1995. *Quercus (agrifolia, douglasii, garryana, kelloggii, lobata, wislizeni)* Forest & Woodland Alliance). A Manual of California Vegetation Online
Unites States Fish and Wildlife Service (USFWS). 2021b. Federal Endangered and Threatened Species List.

- Abbreviations:
- FE Federal Endangered Species
 - FT Federal Threatened Species
 - CE Candidate Endangered
 - SE State Endangered Species
 - ST State Threatened Species
 - SSC State Species of Special Concern
 - SR State Rare Species
 - FP State Fully Protected Species
 - WL State Watch List
 - 1A CNPS List 1A Species- Plants Categorized as Presumed Extirpated or Extinct; Plants presumed extirpated in California and either rare or extinct elsewhere.
 - 1B.1 CNPS List 1B Species-Plants Categorized as Rare, Threatened, or Endangered in California and Elsewhere; Seriously threatened in California (over 80% occurrences threatened)
 - 1B.2 CNPS List 1B Species-Plants Categorized as Rare, Threatened, or Endangered in California and Elsewhere; Moderately threatened in California (20-80% occurrences threatened)
 - 1B.3 CNPS List 1B Species-Plants Categorized as Rare, Threatened, or Endangered in California and Elsewhere; Not very threatened in California (<20% occurrences threatened)
 - 3.0 CNPS List 3 Species-Plants Categorized as Needs More Information; may be taxonomically problematic and lack the necessary information to assign them to one of the other ranks or to reject them.
 - 4.2 CNPS List Plants of limited distribution; Watch list, moderately threatened in California (20-80% occurrences threatened)
 - 4.3 CNPS List Plants of limited distribution; Watch list, Not very threatened in California (<20% occurrences threatened)

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Mariposa County Planning Department

Fire Hazard Mitigation Plan

Happy Goat Experience Project

FEBRUARY 2024

Prepared for:

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1 Introduction

This Fire Hazard Mitigation Plan (FHMP) has been prepared for the Happy Goat Experience Project (Project), located in Mariposa County, California. The purpose of this FHMP is to evaluate potential wildland fire hazards, identify measures to reduce wildfire risk to the Project, and memorialize the Project's fire safety requirements. Wildfire risk reduction recommendations detailed in this FHMP are based on site-specific characteristics, applicable code requirements, and input from the Project Team. As part of the assessment, this FHMP includes the evaluation of property location, topography, vegetation (fuel types), climate, and fire history. This FHMP addresses water supply, access/egress, fuel treatment (vegetation management), fire protection features, defensible space, fire prevention and evacuation. [Note: A Fire Hazard Mitigation Plan is similar to, and satisfies the requirements of, a Fire Safety and Protocol Plan.]

The following tasks were performed to complete this FHMP:

- Gathered site specific vegetation, terrain, and access data.
- Processed and analyzed the data using the latest GIS technology.
- Modeled fire behavior using scientifically based fire behavior models, comparisons with actual wildfires in similar terrain and fuels, and experienced judgment.
- Analyzed the proposed Project development plan and the Project's proposed wildfire hazard reduction measures.
- Analyzed existing emergency response capabilities.
- Assessed fire risk associated with the Project.

1.1 Applicable Codes, Regulations, and Conditions

This FHMP demonstrates that the Project would generally comply with applicable portions of the Mariposa County Fire Safety Standards or provide alternative fire protection measures that are equivalent to, or exceed, those standards. The Project is within an area statutorily designated as a Very High Fire Hazard Severity Zone (FHSZ) within a State Responsibility Area (SRA) by the California Department of Forestry and Fire Protection (CAL FIRE) (CAL FIRE FRAP 2023), which under Chapter 7A of the 2022 California Building Code (CBC) requires new structures located in any Fire Hazard Severity Zone to comply with the ignition resistant construction provisions of the chapter.

The Project is proposing several structures on site, some habitable and others accessory in nature; however, the Project will implement a number of design features (detailed below) that meet the requirements of CBC Chapter 7A to resist the intrusion of flames or burning embers projected by a vegetation fire. The Project also would be consistent with applicable portions of CBC Chapter 31 and the 2022 California Fire Code (CFC) Chapter 3. CBC Chapter 31 addresses special building construction (e.g., greenhouses, temporary structures).

Chapter 7A of the CBC focuses primarily on preventing ember penetration into buildings, a leading cause of structure loss from wildfires. Thus, it is an important component of this FHMP given the Project's wildland/urban interface (WUI) location and FHSZ designation. The designations of fire hazards are based on topography, vegetation, and weather, amongst other factors, with more hazardous sites including steep terrain, un-maintained fuels/vegetation, and WUI locations. Projects situated in FHSZs require fire hazard analysis and application of fire protection measures that have been developed to specifically result in defensible communities in these WUI locations.

As described in this FHMP, the proposed Project will meet the intent of applicable fire and building code requirements. These codes have been developed through decades of after-fire structure save-and-loss evaluations to determine what causes building loss during wildfires. The resulting fire codes now focus on mitigating structural vulnerabilities through construction techniques and materials so that the buildings are resistant to ignitions from direct flames, heat, and embers, as indicated in the 2022 California Building Code.

The proposed Project will also be consistent with the following codes and regulations:

- **2022** (or other as applicable) **California Building Code.**
- **2022** (or other as applicable) **California Fire Code, Chapter 49** – Requirements for Wildland-Urban Interface Fire Areas: minimum standards to increase the ability of a building to resist the intrusion of flame or burning embers being projected by a vegetation fire.
- **2022** (or other as applicable) **California Code of Regulations, Title 14, Div. 1.5, Chapter 7, Sub-Ch. 2** – SRA FHSZ Fire Safe Regulations: minimum wildfire protection standards in conjunction with building, construction and development in the State Responsibility Area.
- **California Public Resources Code, Div. 4, Part 2, Chapter 3, Sec. 4290:** Minimum fire safety standards related to defensible space in Hazardous Fire Areas; **Sec. 4291:** Defensible space maintenance on Mountainous, Forest-, Brush- and Grass-Covered Lands.
- **California Government Code, Title 14, Div. 1.5, Ch. 7 Sec. 1299.03:** Requirements for Defensible Space.
- **Mariposa County Code 17.108.220 Special Event Facilities:** C.8. Fire safety provisions; D.3. Access; D.4. Driveways; D.15. Fire Safe Standards

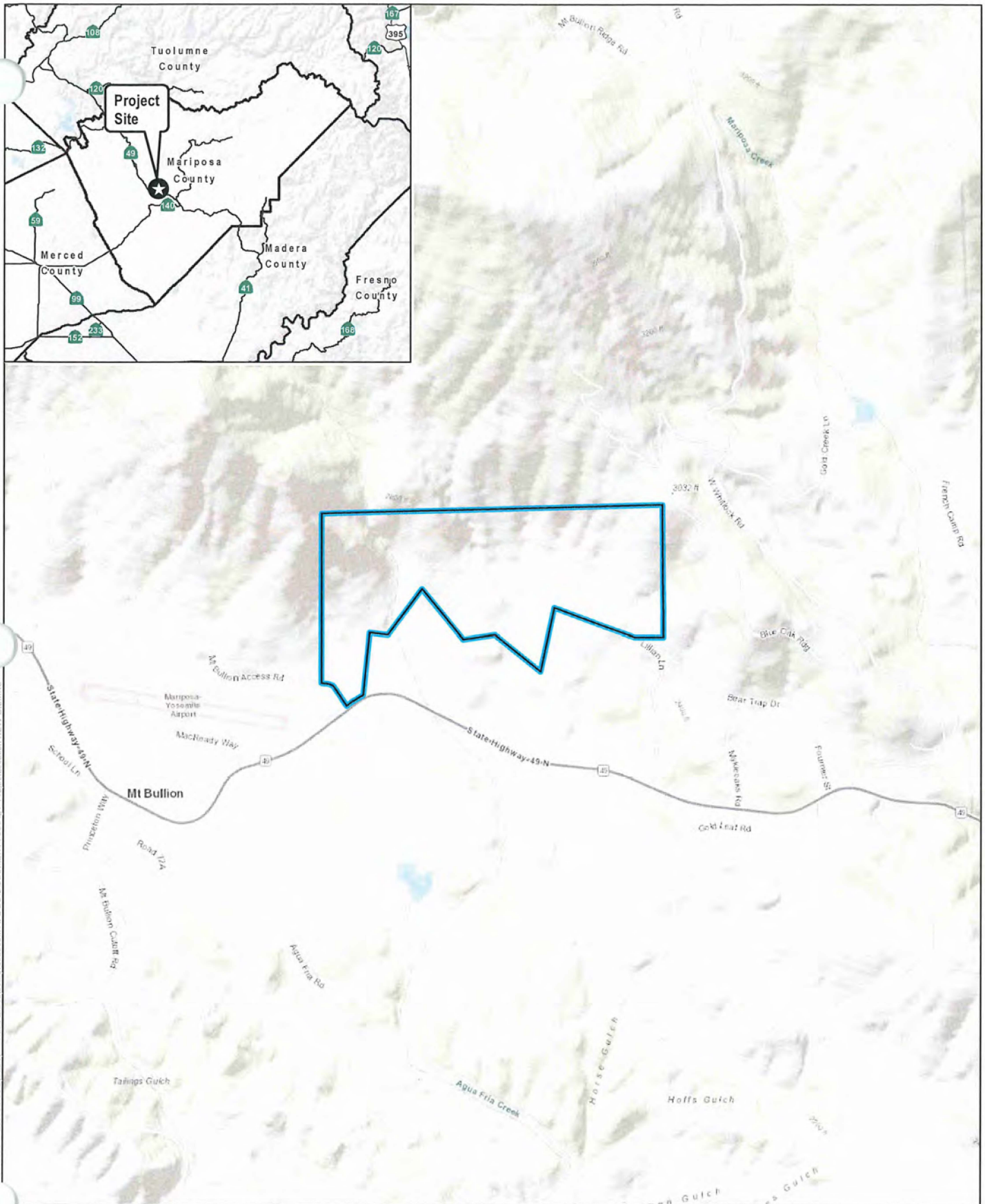
1.2 Project Summary

1.2.1 Location

The Project site is located northwest of the town of Mariposa and west of Yosemite National Park in central Mariposa County on the Bear Valley, CA 7.5' U.S. Geological Survey (USGS) Quadrangle (Figure 1, Project Location), on private land in the foothills east of the Mariposa-Yosemite Airport. The Project site is located within unincorporated Mariposa County and is located on one parcel (APN 012-041-002), totaling 249.25 acres. Access to the site is available directly off CA Highway 49. Elevation on the Project site ranges from 2,231 feet above mean sea level (amsl) in the southwest to 3,000 feet amsl in the northeast.

The site has for many years remained undeveloped, being used only for grazing, and is currently partially used for agricultural purposes. Structures recently constructed on site include two barns and five greenhouses with access provided by a main driveway. Adjacent land uses to the north, east and west include grazing and rural residential; to the south and southeast is rural residential; southwest is the Mariposa-Yosemite Airport; northwest is the Mt. Bullion Conservation Camp #39.

Based on Fire Hazard Severity Zone (FHSZ) mapping data (CAL FIRE FRAP 2023), the Project site is located in a Very High FHSZ. The California Department of Forestry and Fire Protection (CAL FIRE) uses FHSZs to classify anticipated fire-related hazards for the entire state and includes classifications for State Responsibility Areas (SRAs), Local Responsibility Areas (LRAs), and Federal Responsibility Areas (FRAs). Fire hazard severity classifications consider the following elements: vegetation, topography, weather, crown fire production, and ember production and movement. The Fire Hazard Severity Zone designations are attributed to a variety of factors including flammable vegetation; seasonal winds, and a Mediterranean climate that results in vegetation drying during the summer and fall months.



SOURCE: USGS 7.5 Minute Series, Bear Valley Quadrangle

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0 1,000 2,000 Feet

FIGURE 1

Project Location

Fire Hazard Mitigation Plan for the Happy Goat Experience Project

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1.2.2 Project Description

Overview and Background

Happy Goat, Inc. proposes to operate a visitor experience at their regenerative farm; Happy Goat Farm is located on approximately 250 acres in Mariposa County, California. The purpose of the proposed project is to allow daily tours of the farm and for guests to participate in the "Happy Goat Experience" (HGE), within the current Mountain General (MG)/Mountain Transitional (MT) zoning, through the preparation of a Conditional Use Permit (CUP) under the Special Events Facilities (SEF) section of the County's Code. Happy Goat, Inc. is a non-profit organization, and proceeds from guest operations will support educational programming on-site and free fire grazing in the community by Happy Goat.

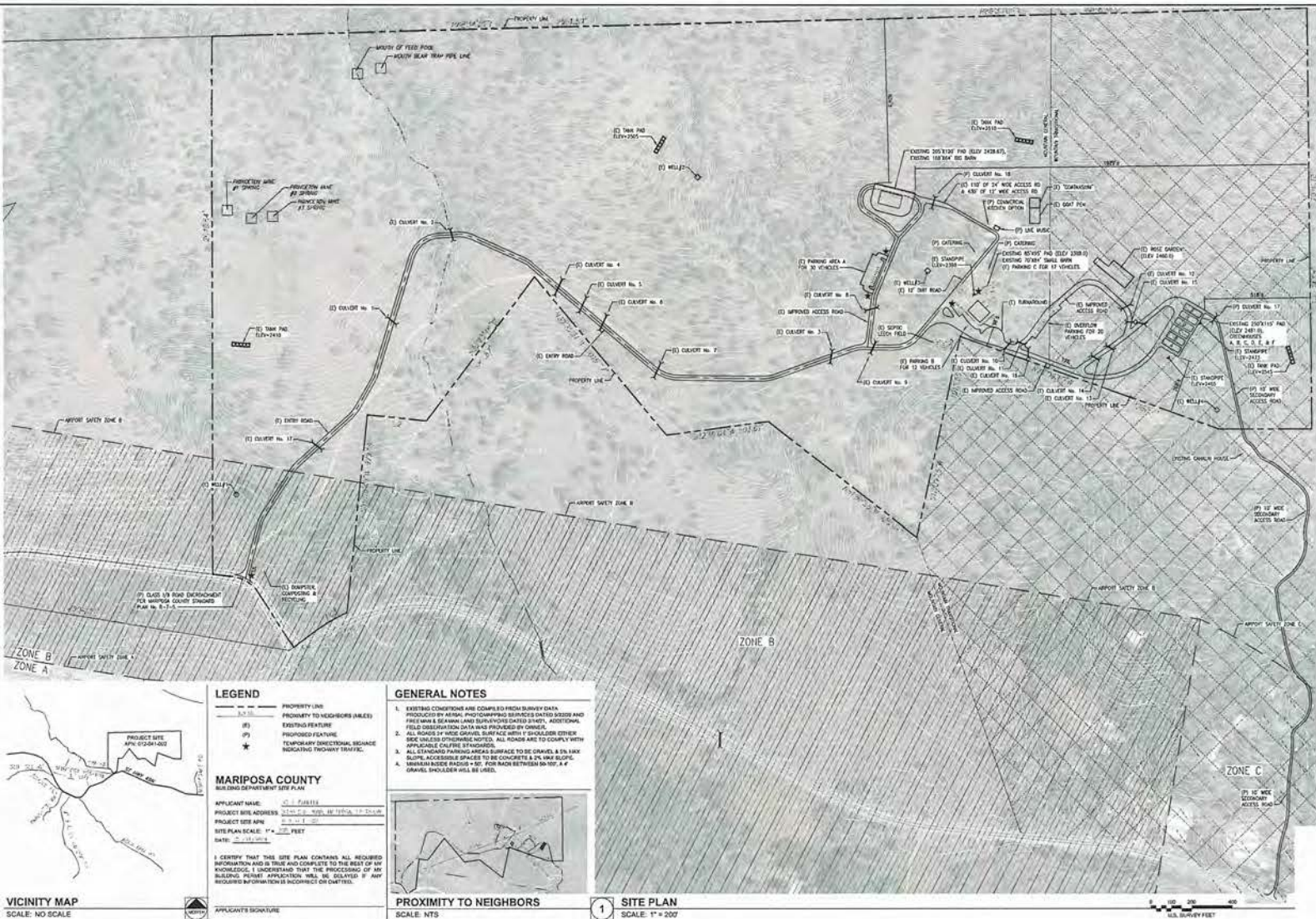
The proposed HGE is separate from the existing farming operations. The experience area covers approximately 29 acres (Site Plan, Figure 2). The Happy Goat Farm Experience (Project) includes only those activities and construction-related operations associated with supporting public tours and workshops, which include vegetation removal at a picnic area and parking areas and the addition of public restroom facilities that will consist of barn remodeling and trenching for the installation of two leach fields.

Guests will arrive at the farm's main entrance on CYA Road and park at one of the three existing parking areas and walk along existing roads. Signage will help to create clearly marked walking paths so that guests can quickly and safely find their way around the farm. Up to 150 guests per day may visit the farm consisting of either individuals or one group.

The project/farm will continue to host outdoor education school field trips utilizing the existing greenhouses. These field trips occur bi-weekly in the morning (before guests arrive for the HGE) and include groups of less than 50 people.

Utility improvements to support the project include four water supply wells, four water tank pads (each with five water tanks), and commercial power (Site Plan, Figure 2).

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SOURCE: DAX CONSULTING, INC. 2024

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FIGURE 2
Project Site Plan

Fire Hazard Mitigation Plan for the Happy Goat Experience Project

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2 Fire Risk Analysis

2.1 Field Assessment

Following review of available digital Project site and area information, including topography, vegetation types, fire history, and the Project's development plan, Dudek conducted a field assessment of the Project site with other Project Team members on October 4, 2023. Among the field tasks completed were the following:

- Fuel type/load analysis
- Topographic features documentation
- Photographic documentation
- Confirmation/verification of hazard assumptions
- Ingress/egress documentation

Project site photographs were collected, and fuel conditions were documented. Field observations augmented existing Project site data in generating the fire behavior models and formulating the fire safety recommendations provided in this FHMP.

2.2 Project Area Fire Environment

Fire environments are dynamic systems and are influenced by many types of environmental factors and site characteristics. Fires can occur in any environment where conditions are conducive to ignition and fire movement. The three major components of fire environment are vegetation (fuels), weather, and topography. The state of each of these components and their interactions with each other determines the potential characteristics and behavior of a wildfire. The following sections provide more information regarding the fire environment associated with the Project site.

2.2.1 Topography

Topography influences fire risk by affecting fire spread rates. Typically, steep terrain results in faster fire spread upslope and slower spread downslope. Terrain that forms a funneling effect, such as chimneys, chutes, or saddles on the landscape can result in especially intense fire behavior. Conversely, flat terrain tends to have little effect on fire spread, resulting in fires that are driven by vegetation and wind.

The Project site's topography ranges from gentle to moderate slopes, with the majority of the area on slopes less than 30%. Most of the property and Project site has a southern trending aspect. Elevation on the Project site ranges from 2,231 feet above mean sea level (amsl) in the southwest to 3,000 feet amsl in the northeast.

The Project area's topography is impacted by the typical major wind events (Diablo's), which affect the western slopes of Sierra Nevada and can influence fire spread by creating wind-driven fires, especially when moving upslope. The site would be subject to a topography driven wildfire approaching the project area from the south-southwest.

2.2.2 Climate

Mariposa County, including the Project area, experiences a Mediterranean type of climate with hot and dry summers and mildly cold and wet winters. Local climate, which has a large influence on fire risk, is typical of a Mediterranean area. The average high temperature reaches 89°F (31.7°C) in the middle of July. Drying vegetation (fuel moisture of less than 5% for 1-hour fuels is possible) during the summer months becomes fuel available to advancing flames should an ignition occur. Relative humidity of 20% or less is possible during fire season (Weather Spark 2020). Winters are mildly cold, with an average low temperature of 33°F (0.6°C) at the peak of December. The climate varies with elevation with a drop in temperatures, an increase in rain, and snowfall at higher altitudes. Rainfall mainly occurs during the winter months as the annual precipitation averages 31 inches (878.4mm). Spring and autumn have more mild weather compared to the summer and winter.

Predominant winds are from the northwest, and during storm events from the southeast.¹

2.2.3 Vegetation (Fuels)

The 29-acre Project site is currently partially developed and is comprised of several vegetation types. Vegetation type identification is useful for fire planning because it enables each vegetation community to be assigned a fuel model, which is used by a software program to predict fire characteristics, as discussed in Section 2.3 below.

The Project site's habitat is primarily hardwood-conifer woodland and oak woodland, intermixed with grazed annual grassland, and disturbed/developed areas (roads, parking areas, structures, corrals, etc.). The dominant woodland tree species include interior live oak (*Quercus wislizeni*), canyon live oak (*Quercus chrysolepis*), and foothill pine (*Pinus sabiniana*). Non-native annual grasses dominate the ground cover.

2.2.4 Fire History

Fire history is an important component in understanding a site's wildfire risk. As represented in Appendix B, Fire History, there have been 21 fires recorded by CAL FIRE from 1911 to 2022 on the Fire and Resource Assessment Program database within five miles of the Project (CAL FIRE 2020a). There have been no fires that burned onto the Project property. The largest was the 2017 Detweiler Fire which burned almost 82,000 acres. Mariposa County Fire Department may have data regarding other smaller, undocumented fires that have occurred in the Project area that have not been included herein as fires under 10 acres are not recorded in CAL FIRE's database (CAL FIRE 2020a).

2.3 Potential Fire Behavior

Following field data collection efforts and available data analysis, fire behavior modeling was conducted to document the type and intensity of fire that would be expected on the project site given characteristic site features such as topography, vegetation, and weather. Dudek utilized BehavePlus software package version 6 (Andrews, Bevins, and Seli 2008) to analyze potential fire behavior. [A discussion of fire behavior modeling is presented in Appendix A, Fire Behavior Modeling.]

¹ Personal communication, Capt. Jim Monty, MCFD.

2.3.1 BehavePlus Fire Behavior Modeling Analysis

An analysis was conducted to evaluate fire behavior variables and to objectively predict flame lengths, intensities, and spread rates for four modeling scenarios². These fire scenarios incorporated observed fuel types representing the dominant vegetation representative of the site and adjacent land, in addition to slope gradients, and wind and fuel moisture values. Modeling scenario locations were selected to better understand different fire behavior that may be experienced on or adjacent to the site.

Vegetation types, which were derived from available resource materials and confirmed during the field assessment for the Project, were classified into a fuel model. Fuel models are selected by their vegetation type, fuel stratum most likely to carry the fire, and depth and compactness of the fuels. Fire behavior modeling was conducted for vegetative types that are both on and adjacent to the proposed development. Fuel models were also assigned to illustrate post-project fire behavior changes.

Based on the anticipated pre- and post-project vegetation conditions, four different fuel models were used in the fire behavior modeling effort presented herein. Table 2.3.1.A provides a description of the four fuel models observed that were subsequently used in the analysis for this project. Modeled areas include grass dominated ground fuel (Fuel Models GR1 and GR4); woodland litter ground fuel (Fuel Models TL6, TL8). For modeling the post-development condition, fuel model assignments were re-classified to Fuel Models GR1 (grazed grassland).

Table 2.3.1.A. Fuel Models used for Fire Behavior Modeling

Fuel Model Type	Title	Description	Application (Behave Run)
Existing Conditions			
GR1	Grass – Light Load, Dry Climate	The primary carrier of fire is sparse grass, though small amounts of fine dead fuel may be present. Nearly pure grass and/or forb type. The grass is generally short, either naturally or by grazing, and may be sparse or discontinuous. Spread rate moderate; flame length low.	Grazed grassland. (2, 3)
GR4	Grass – Moderate Load, Dry Climate	The primary carrier of fire is coarse grass. Nearly pure grass and/or forb type. Moderately coarse continuous grass, average depth about two feet. Spread rate very high; flame length high.	Non-grazed grasslands. (2)
TL6	Timber Litter – Moderate Load, Broadleaf	Dead and down woody fuel (litter) beneath a forest/woodland canopy (hardwood). Fuelbed not recently burned; composed of broadleaf (hardwood) litter. Moderate load, less compact. Spread rate moderate; flame length low.	Beneath an oak canopy. (1, 3)
TL8	Timber Litter – Moderate Load, Long-needle Pine	Dead and down woody fuel (litter) beneath a forest/woodland canopy (conifer); Fuelbed not recently burned. Fuelbed composed of long-needle pine litter. Moderate load and compactness may include small amount of herbaceous load. Spread rate moderate; flame length low.	Beneath a pine canopy. (1)

² Each scenario utilizes a different set of modeling input variables including location, fuel type (vegetation), fuel moisture, weather (wind), topography (slope and aspect), and other related factors.

Table 2.3.1.B summarizes the weather and wind input variables used in the BehavePlus modeling process.

Table 2.3.1.B. Fuel Moisture and Wind Inputs

Variable	Weather Condition (90th Percentile)	Weather Condition (50th Percentile)
1h Moisture	4%	5%
10h Moisture	5%	7%
100h Moisture	7%	9%
Live Herbaceous Moisture	70%	80%
Live Woody Moisture	50%	70%
20-foot Wind Speed (mph)	40	20
BehavePlus Wind Adjustment Factor	0.4	0.4

2.3.2 Modeling Results

The results of fire behavior modeling analysis for pre- and post-project conditions are presented in Tables 2.3.2.1 and 2.3.2.2, respectively. Identification of modeling run (fire scenarios) locations is presented graphically in Figure 3, Fire Behavior Analysis Map.

Fire Scenario descriptions:

- **Scenario 1.** Fire flaming front approaching from the north toward through grassland and hardwood-conifer woodland (Fuel Models GR4, TL6, TL8) toward the Big Barn, with north winds. Post-development includes the fuel treatment recommendations (Fuel Model GR1).
- **Scenario 2.** Fire flaming front approaching from the northeast through grassland and oak woodland (Fuel Models GR4, TL6) toward the greenhouses, with northeastern winds. Post-development includes the fuel treatment recommendations (Fuel Model GR1).
- **Scenario 3.** Fire flaming front approaching from the southeast through grassland and hardwood-conifer woodland (Fuel Models GR4, TL6, TL8) toward the Small Barn, southeastern winds. Post-development includes the fuel treatment recommendations (Fuel Model GR1).
- **Scenario 4.** Fire flaming front approaching from the southwest through grassland and oak woodland (Fuel Models GR4, TL6) towards the main entrance and western portion of the property, with southwestern winds. Post-development includes the fuel treatment recommendations (Fuel Model GR1).

Existing Conditions

As presented in Table 2.3.2.1, wildfire behavior in grass groundcover fuel beds, presented as Fuel Model GR4, represents the most extreme conditions in Scenarios 1 and 2. In these scenarios, flame lengths are calculated to reach 17.5 feet with 40 mph winds; spread rates reach 4.1 mph. The spotting distance, where airborne embers can ignite new fires downwind of the initial fire, is calculated at 0.8 mile. In comparison, a woodland litter fuel type could generate flame lengths up to 6.6 feet high with a spread rate of 0.5 mph. The calculated fire could potentially be spotting for a distance of 0.4 mile.

Table 2.3.2.1. Fire Behavior Model Results Existing Conditions

Fire Scenarios	Flame Length (feet)	Fireline Intensity (BTU/feet/second)	Spread Rate (mph)	Spotting Distance (miles)
Scenario 1: Grassland, Hardwood-conifer woodland, 25% downhill slope, 40 mph N wind				
Fuel Model GR4 – grass, moderate load, dry climate (not grazed)	17.5	2848	4.1	0.8
Fuel Model TL6 – broadleaf litter, moderate load	6.6	339	0.5	0.3
Fuel Model TL8 – long-needle pine litter, moderate load	7.8	490	0.4	0.4
Scenario 2: Grassland, Oak woodland 25% downhill slope, 40 mph NE wind				
Fuel Model GR4 – grass, moderate load, dry climate (not grazed)	17.5	2848	4.0	0.8
Fuel Model TL6 – broadleaf litter, moderate load	6.6	339	0.5	0.3
Scenario 3: Grassland, Hardwood-conifer woodland, 15% downhill slope, 20 mph SE wind				
Fuel Model GR4 – grass, moderate load, dry climate (not grazed)	9.1	696	1.1	0.3
Fuel Model TL6 – broadleaf litter, moderate load	3.8	105	0.2	0.1
Fuel Model TL8 – long-needle pine litter, moderate load	4.7	163	0.2	0.2
Scenario 4: Grassland, Oak Woodland, 15% uphill slope, 20 mph SW wind				
Fuel Model GR4 – grass, moderate load, dry climate (not grazed)	9.3	720	1.1	0.3
Fuel Model TL6 – broadleaf litter, moderate load	3.9	109	0.2	0.1

Notes: Spotting distance from a wind driven surface fire.

Post-Project Conditions

As presented in Table 2.3.2.2, Dudek conducted modeling of the site for post-development fuel modification recommendations for this project. The existing fuel model assignments were re-classified for each scenario to reflect the fuel modification recommendations. Fuel modification includes the fuel treatment proposed as part of the site preparation and ongoing vegetation management.

The treatments in each area resulted in a reduction in flame length and intensity. The 17.5-foot-long flames predicted in the grass fuel bed during pre-development were reduced to 1.9 feet long; the fireline intensity was reduced from 2848 BTU/ft/sec to 22 BTU/ft/sec.

Table 2.3.2.2. Fire Behavior Modeling Results for Post-Project Conditions

Scenario	Flame Length (feet)	Fireline Intensity (BTU/feet/second)	Spread Rate (mph)	Spotting Distance (miles)
Scenario 1: Grassland, Hardwood-conifer woodland, 25% downhill slope, 40 mph N wind				
Fuel Model GR1 – grass, light load, dry climate	1.9	22	0.2	0.1
Scenario 2: Grassland, Oak woodland 25% downhill slope, 40 mph NE wind				
Fuel Model GR1 – grass, light load, dry climate	1.9	22	0.2	0.1
Scenario 3: Grassland, Hardwood-conifer woodland, 15% downhill slope, 20 mph SE wind				
Fuel Model GR1 – grass, light load, dry climate	1.5	13	0.1	0.0
Scenario 4: Grassland, Oak Woodland, 15% uphill slope, 20 mph SW wind				
Fuel Model GR1 – grass, light load, dry climate	1.5	13	0.1	0.0

2.4 Project Fire Risk Assessment

Based on the Project site's location, climate, and fire history, it can be anticipated that periodic wildfires may start on, burn onto, or spot into the Project site. On-site wildfire ignitions could occur as a result of stoves, cigarettes, arson, or equipment use. Off-site ignitions could occur along CA-49 (vehicle fire, discarded cigarette, dragging tow chain), or through adjacent lands. However, the maintained treatment areas and fuel modification buffers will significantly reduce the likelihood of fire spreading off the site. Fire risk at the site will be managed through annually maintaining the recommended fuel modification around the Project, ensure the required fire department access roadways and water supply systems are fully operational, and regularly informing guests of the fire protection features and evacuation plans for the Project at acceptable levels.

Fire Behavior Model Results Existing Conditions

Fire Scenarios	Flame Length (feet)	Fireline Intensity (BTU/feet/second)	Spread Rate (mph)	Spotting Distance (miles)
Scenario 1: Grassland, Hardwood-conifer woodland, 25% downhill slope, 40 mph N wind				
Fuel Model GR4 - grass, moderate load, dry climate (not grazed)	17.5	2848	4.1	0.8
Fuel Model TL6 - broadleaf litter, moderate load	6.6	339	0.5	0.3
Fuel Model TL8 - long-needle pine litter, moderate load	7.8	490	0.4	0.4
Scenario 2: Grassland, Oak woodland 25% downhill slope, 40 mph NE wind				
Fuel Model GR4 - grass, moderate load, dry climate (not grazed)	17.5	2848	4.0	0.8
Fuel Model TL6 - broadleaf litter, moderate load	6.6	339	0.5	0.3
Scenario 3: Grassland, Hardwood-conifer woodland, 15% downhill slope, 20 mph SE wind				
Fuel Model GR4 - grass, moderate load, dry climate (not grazed)	9.1	696	1.1	0.3
Fuel Model TL6 - broadleaf litter, moderate load	3.8	105	0.2	0.1
Fuel Model TL8 - long-needle pine litter, moderate load	4.7	163	0.2	0.2
Scenario 4: Grassland, Oak Woodland, 15% uphill slope, 20 mph SW wind				
Fuel Model GR4 - grass, moderate load, dry climate (not grazed)	9.3	720	1.1	0.3
Fuel Model TL6 - broadleaf litter, moderate load	3.9	109	0.2	0.1

Fire Behavior Modeling Results for Post-Project Conditions

Scenario	Flame Length (feet)	Fireline Intensity (BTU/feet/second)	Spread Rate (mph)	Spotting Distance (miles)
Scenario 1: Grassland, Hardwood-conifer woodland, 25% downhill slope, 40 mph N wind				
Fuel Model GR1 - grass, light load, dry climate	1.9	22	0.2	0.1
Scenario 2: Grassland, Oak woodland 25% downhill slope, 40 mph NE wind				
Fuel Model GR1 - grass, light load, dry climate	1.9	22	0.2	0.1
Scenario 3: Grassland, Hardwood-conifer woodland, 15% downhill slope, 20 mph SE wind				
Fuel Model GR1 - grass, light load, dry climate	1.5	13	0.1	0.0
Scenario 4: Grassland, Oak Woodland, 15% uphill slope, 20 mph SW wind				
Fuel Model GR1 - grass, light load, dry climate	1.5	13	0.1	0.0

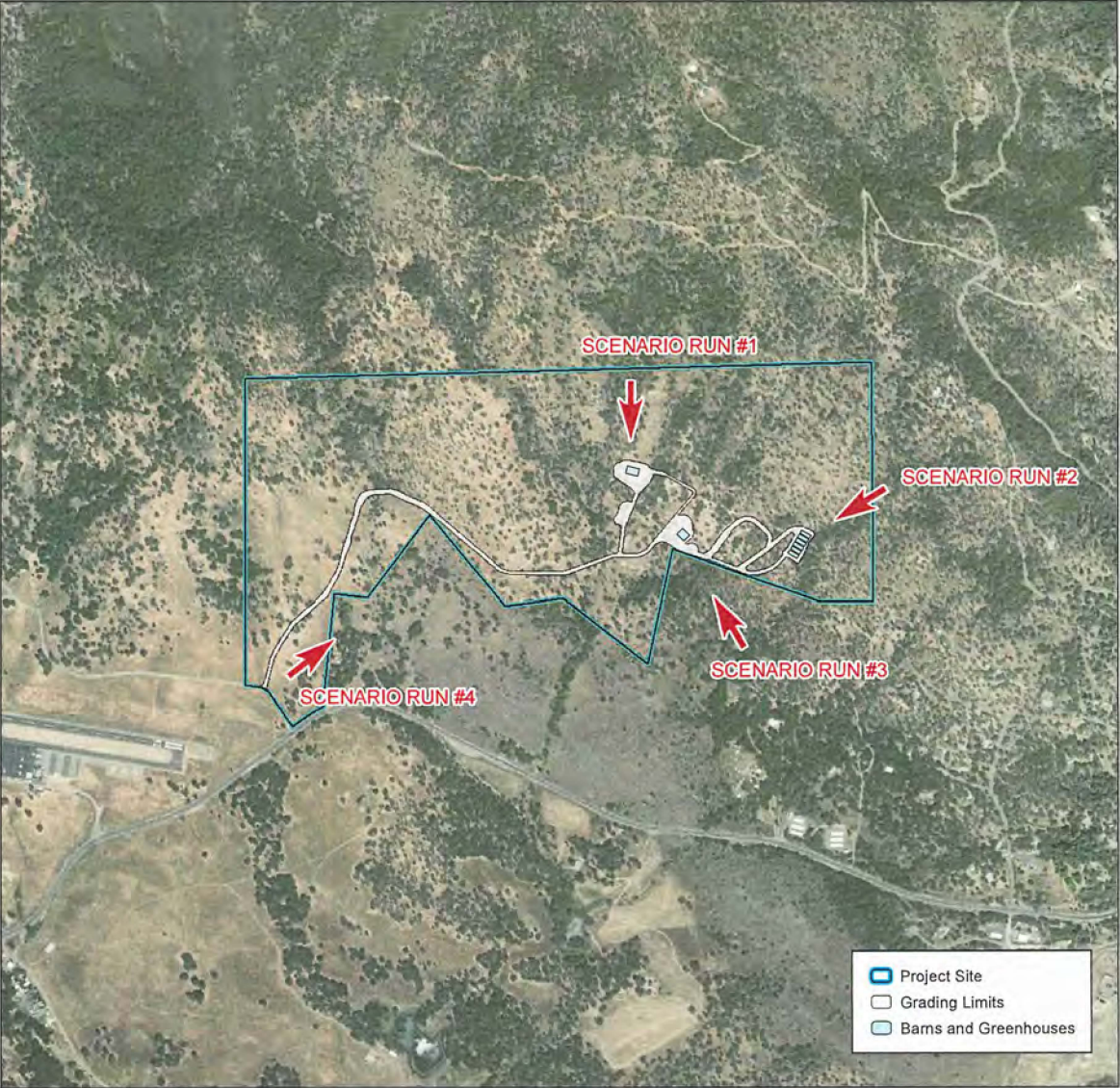


FIGURE 3

BehavePlus Analysis

Fire Hazard Mitigation Plan for the Happy Goat Experience Project

SOURCE: AERIAL-ESRI IMAGERY SERVICE 2023

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3 Emergency Response and Service

3.1 Existing Fire Department Response Capabilities

The Project site is on private land, with surrounding private lands in all directions, aside from the airport along a portion of the western property boundary. As is the case with all private land parcels in the vicinity, the site is located within a State Responsibility Area (SRA) for fire protection responsibility.

The Mariposa County Fire Department (MCFD) and CalFire are jointly responsible for providing structural fire protection and emergency medical services to the Project site, though they also have wildland firefighting resources and can provide wildland fire protection as needed. The MCFD is administered by CAL FIRE under a cooperative agreement with Mariposa County. MCFD is headquartered in Mariposa and includes 14 fire stations, with 14 response zones dispersed across the County and resourced by volunteer firefighters. Regional response support is available in the form of CALFIRE initial attack resources. Additional resources in the region are available through cooperative agreements that include National Park Service fire resources and USDA Forest Service fire response resources.³

The nearest MCFD firefighting resources are located at Fire Station 25 at the Mariposa-Yosemite Airport, immediately adjacent to the property and main entrance, approximately 1.2 road miles from the project site. Resources include one Type 1 fire engine and one Type 6 engine.

There are two MCFD Fire Stations that provide secondary coverage to Mariposa: Stations 23 and 21. Station 23 is located at McKay Park in Catheys Valley (7 miles away). Resources include one Type 1 fire engine, one Type 1 water tender and one Type 6 engine. Station 21 is located at the Midpines Park (10 miles away). Resources include one Type 1 fire engine, one Type 1 water tender and one Type 6 engine assigned to the company.

Fire Station 22 is located in Mariposa (3.5 miles away) and is managed by the Mariposa Public Utility District (MPUD) and fire personnel from the MPUD staff. Rescue 22 (Light Rescue Unit) responds to all structure fires, medical aids, vehicle accidents and other incidents south of the Merced River.⁴ Also in Mariposa is the CalFire headquarters which is staffed with two Type 3 engines.

The MCFD prepared a Standards of Coverage in 2002 to create a system to increase fire prevention and protection opportunities for property owners. Communities throughout the county are classified with an ISO rating; those with hydrant systems are rated Rural 5 or 6; the MPUD service area is assigned a rating of 3; outlying areas are classified as ISO Rural 8, 9 or 10. ISO 8 is within the coverage response time of a fire station (area within 5 road miles of a fire station operating an engine and water tender); ISO 9 have fire protection, but longer response times (area over 5 miles but less than ten miles from a fire station operating an engine and water tender); ISO 10 areas are considered unprotected (area over ten miles from a fire station; no recognized service).⁵ In 2005 the County had an ISO rating of 5. The Project site is located in the ISO 8 Area just outside the Mariposa Town Planning Area (TPA) and the MPUD district boundary.

³ Mariposa County CWPP.

⁴ MCFD website.

⁵ Mariposa County General Plan Safety Element.

MCFD response time objectives:⁶

1. Three minutes for turnout time.
2. Ten additional minutes or less for the arrival of the first arriving engine company at a fire suppression incident and/or 12 minutes or less for the deployment of a full first alarm assignment at a fire suppression incident. Note: this response zone will be no more than 5.9 road miles from the fire station and is referred to the "Eight Zone".
3. A total thirteen minutes or less for the arrival of a unit with first responder or higher-level capability at an emergency medical incident within the "Eight Zone".
4. Safely initiate attack on fire within a total of fifteen minutes 90% of the time for all areas within the "Eight Zone".

In addition to MCFD, CAL FIRE has entered into various cooperative and fire assistance agreements with the USFS, U.S. Bureau of Land Management, National Park Service. Based upon these and other interagency agreements, most large wildfire events in the region are responded to by multiple agencies operating under the varying levels of the incident command structure, which is a standardized approach to the command, control, and coordination of emergency response providing a common hierarchy within which responders from multiple agencies can be effective.

3.2 Project-Related Emergency Response Calls

The Mariposa County Fire Department (MCFD) responds to about 530 calls annually⁷. With a population of approximately 18,000 in the county, that is a per capita call rate of 0.03. With a maximum daily facility population of 175 guests and staff, it is estimated that the proposed Project will generate approximately five calls per year, which is well within the capacity of the MCFD based on current call volume.

⁶ MCFD Standards of Cover, 2002.

⁷ Data obtained from the weekly Fire Call Log posted online by Sierra Sun Times; goldrushcam.com/sierrasuntimes.

4 Fire Safety Measures

The fire safety measures included in the following sections have been developed to reduce wildfire risk during operations of the proposed Project.

4.1 Vegetation/Woodland Management

Initial Project site development activities include selective hazardous fuel reduction efforts throughout the property. These fuel reduction treatments would reduce the size and distribution of surface fuels to a low to moderate fire behavior level to facilitate direct attack by firefighters. The reduction efforts would include treatment of surface fuels (grazing of grass and shrubs, removal of litter) and ladder fuels (pruning and thinning large shrubs, small trees and tree branches).

4.1.1 Developed Area Vegetation Management

Following is a list of the existing/proposed facilities, along with the recommended vegetation management and/or fuel treatments to occur within the Fuel Modification Area surrounding them.

Barns/Greenhouses

Two barns and five greenhouses are currently on site.

- A 100-foot Fuel Modification Area is recommended for the Barns and greenhouses, measured horizontally from the exterior wall of the structures in all directions.

Bathroom and Ancillary Facilities

To serve the facility, various amenity facilities are proposed.

- A 30-foot Fuel Modification Area is recommended for the ancillary facilities, measured horizontally from the outermost wall in all directions.

Water Wells, Pumps

Water at the facility would be provided by groundwater source wells; water distribution would include generators and pumps.

- A 30-foot Fuel Modification Area is recommended for the Water Wells, Tanks, and Pumps, measured horizontally from the outermost edge of the equipment or enclosure in all directions.

Standby Generator and Propane Tank

To provide electric power to the site during power outages, a propane-powered standby generator would be installed.

- A 30-foot Fuel Modification Area is recommended for the Standby Generator and Propane Tank, measured horizontally from the outermost edge of the equipment or tank in all directions. Branches and other

vegetation above the generator exhaust pipe are to be removed and maintained to establish clearance to the sky.

Treatment Standards

The following vegetation management and fuel treatment standards are applicable to the Project's Fuel Modification Areas (Figure 4, Fuel Modification Areas), as defined above:

- Removal of dead, down, dying, diseased, and hazard trees.
- Pruning (limbing) of live branches within six (6) to eight (8) feet above ground level, but no more than one-third (1/3) the live crown, for all trees in a Fuel Modification Area.
- Trimming and/or thinning of shrubs to eliminate ladder fuels.
- Maintaining annual grasses to within 3" of ground level.
- All accumulations of needle and leaf litter shall be removed regularly from structures, roofs, decks/platforms.
- Liquid Propane Gas tanks shall have a minimum of ten (10) feet of bare mineral soil clearance with no flammable vegetation around their exterior.
- Debris and trimmings produced by thinning and pruning shall be treated, such as for larger woody debris that may be chipped and left on the ground for weed and erosion control.

Project Wildfire Hazard Reduction Measures

The following summarizes identified wildfire hazard reduction measures that would be implemented by the Project.

Fuel Treatment

Initial Project site development activities has included fuel reduction efforts. These fuel reduction treatments reduce the size and distribution of surface fuels to a level that moderate fire behavior to facilitate direct attack by firefighters. The fuel reduction effort involves the removal of ladder fuels and treatment of surface fuels in specific areas of the Project site utilizing the herd of goats that reside on the farm. This is an ongoing process as the herd of goats is rotated around the facility throughout the year.

Wildfire Prevention

Wildfire prevention measures would include:

- All structures to comply with CBC Chapter 7A Materials and Construction Methods for Exterior Wildfire Exposure.
- Smoking would be restricted to designated areas with receptacles for cigarette waste. The area and a minimum 50-foot buffer would have vegetative material cleared to bare mineral soil.
- Basic fire and first aid training would be provided to all employees, and it is recommended that at least one employee onsite at any given time has advanced first aid training (Emergency Medical Technician or similar) to be coordinated with the fire department.

- Prior to operation, an Emergency Operations Plan would be developed to address wildfire and other emergency incidents at the site. This plan would be subject to review and approval by applicable emergency services providers. The plan would include, at a minimum:
 - A Training and Exercise Plan, to be implemented annually with all employees, covering the Emergency Operation Plan and issues such as response to fire, fire extinguisher and firehose use, first aid and emergency medical response, and dealing with problem guests.
 - An orientation briefing for guests concerning potential hazards and what to do in the event of an emergency incident.
 - A site evacuation plan, defining routes of ingress and egress, rally points, and protocols for disabled guests and/or guests without their own transportation.

4.1.2 Roadside Vegetation Management

Internal circulation would be provided by a main internal access road and access roadways. On-site roadways would be covered with gravel where needed. All access roadways have an unobstructed width of not less than 24 feet (two lanes of travel) and an unobstructed vertical clearance of not less than 13.5 feet.

Parking would be provided in three designated parking areas and an overflow parking area.

Roadsides and parking areas will have a minimum 25-foot-wide fuel modification zone maintained at all times from edges/perimeters.

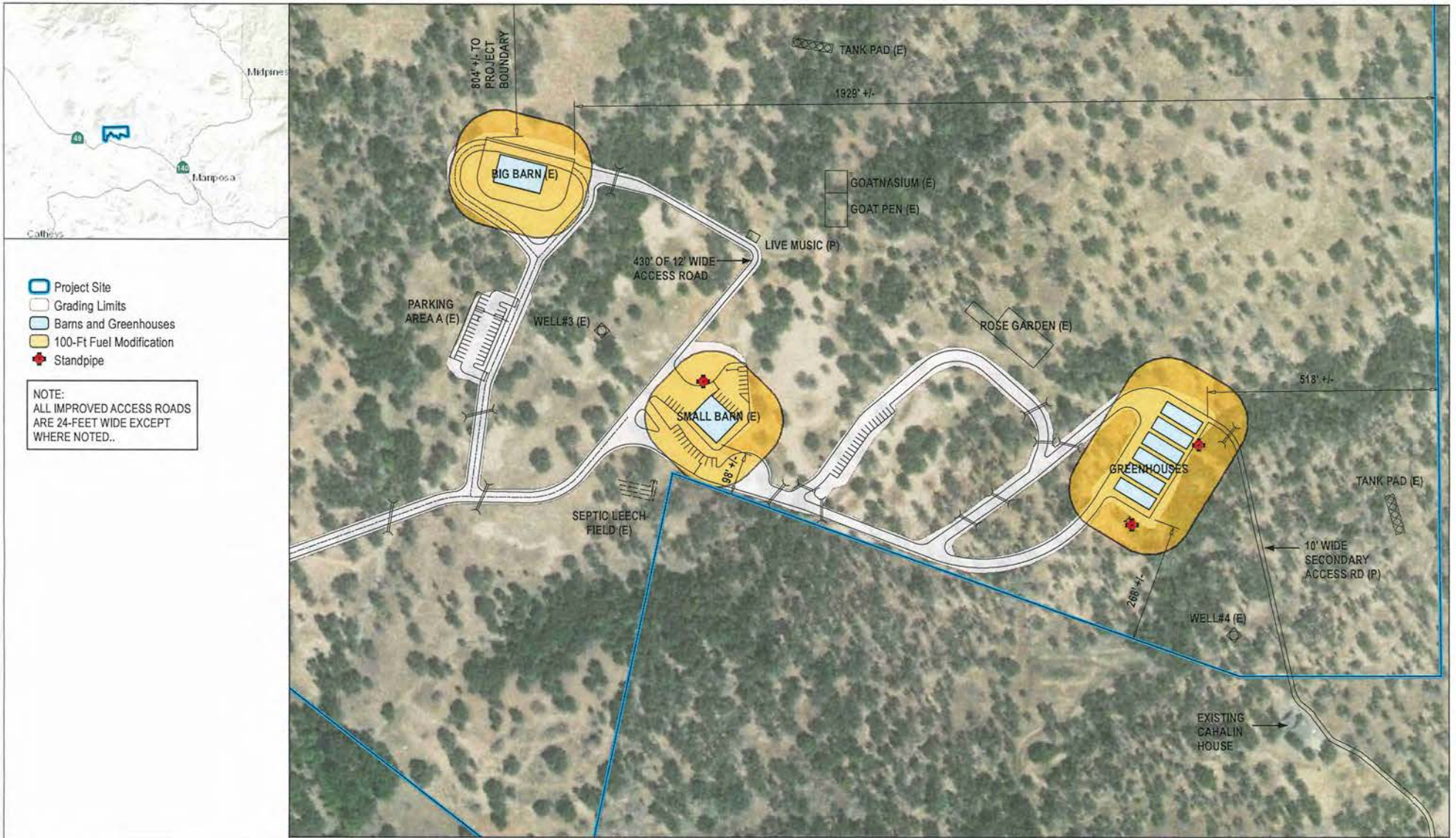
The following vegetation/fuel treatment standards are applicable to the Project's roadside management areas, as defined above (applicable within 25 feet of the outside edge of the road surface, on both sides of all on-site Project roads:

- Maintain all designated fire access roads (any road that a responding fire engine would use to access an emergency) unobstructed at all times, no branches or tree canopies lower than 13.5 feet, no tree trunks intruding into roadway width, and clear of flammable vegetation.
- Maintain 25 feet from the edge of all parking areas.
- Treat or maintain vegetation on each side, as follows:
 - Remove dead, down, dying, diseased, and hazard trees.
 - Pruning (limbing) of live branches within six (6) to eight (8) feet above ground level, but no more than one-third (1/3) the live crown, for all trees in a Fuel Modification Area.
 - Trimming and/or thinning of shrubs to eliminate ladder fuels.
 - Cutting/grazing of annual grasses to within 3" of ground level.
 - Debris and trimmings produced by thinning and pruning shall be removed or mulched, except for larger woody debris that may be chipped and left for weed and erosion control.

4.1.3 Routine Maintenance

Vegetation management as described above would be completed annually and more often as needed for fire safety, as determined by the MCFD.

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SOURCE: AERIAL-ESRI IMAGERY SERVICE 2023

DUDEK 0 100 200 Feet

FIGURE 4

Fuel Modification Map

Fire Hazard Mitigation Plan for the Happy Goat Experience Project

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4.2 Roads and Access

Internal circulation is provided by a gravel-covered main internal access road and access roadways. The main access road begins at CYA Road off of highway CA-49 and extends to the core project area. On-site roadways would be covered with gravel where needed.

All roadways have been constructed with an unobstructed width of not less than 24 feet (two lanes) and an unobstructed vertical clearance of not less than 13.5 feet. For any dead-end roadways in excess of 150 feet in length, the project would provide a turnaround for fire apparatus.

Access Roads

Project site access, including road widths and connectivity, would comply with the requirements of the Mariposa County Fire Department (see Site Plan, Figure 2, for roadways).

- All fire access and vehicle roadways are of approved surfacing materials and designed and maintained to support the imposed loads of fire apparatus (not less than 75,000 pounds) that may respond, typically Type III engines and ambulances.
- All roadways have an unobstructed width of not less than 24 feet (two lanes).⁸
- Any dead-end roads longer than 150 feet would have approved provisions for a fire apparatus turnaround.
- Roadways would provide fire department access to within 150 feet of all structures.
- Vertical clearance of vegetation along roadways would be maintained at 13.5 feet.

Emergency Secondary Access

Providing an emergency secondary access is required by the MCFD.⁹ A 10-foot-wide gravel-covered roadway will be provided between the greenhouses and the common property line with the property at 5680 Highway 49. The roadway would be available to guests for egress purposes in the event of an emergency. From that point there is an existing private roadway that connects with CA-49.

Traffic Management

The overarching goal for traffic management onsite is to maintain safety, clarity and organization to avoid visitor confusion or hazards. Project-related vehicles will observe a 20-mph speed limit in all Project areas; off-road traffic outside of designated project areas is prohibited.

Daily Operations

Ingress and egress for the Project site occurs from CYA Road. Once onsite, vehicles will travel through the property and park in one of three clearly marked parking areas ("A," "B" and "C") (which provide a total of 59 parking spaces) and the additional two ADA parking stalls located at each barn. The same route will be followed when exiting the site.

⁸ The provision of a dual-lane 24-foot-wide main driveway would be consistent with the design approved for the Wildhaven Yosemite facility at 4808 Highway 140, Mariposa, CA.

⁹ Mariposa County Fire Department, July 13, 2023 memo, Conditional Plan Review comments; personal communication with Capt. Jim Monty, November 9, 2023.

As part of the daily operations, entry signage will direct guests to continue down the private on-site road to the appropriate parking areas and the ADA spaces by each barn. Parking in the lots, and the ADA spaces, will be adequate for daily farm tours. Should additional parking need to be accommodated, overflow parking is available.

Emergency Event

In an emergency event, there is adequate room for automobiles to pull over on the shoulder of the access roadways to allow emergency vehicles to pass. All of the proposed roads include a 24' wide gravel surface with a 1' shoulder on either side. All roads comply with applicable CalFire Standards. If needed, guests would also be able to egress the facility using the roadway east of the greenhouses.

Special Events

During larger events, Happy Goat staff will serve as greeters, traffic directors, and parking coordinators. Signage and personnel will be utilized to direct guests to the best parking options and clear instructions will be provided as to which parking areas are open to guests. The parking coordinators will keep track of available parking spaces and direct vehicles initially to the three parking areas ("A," "B" and "C") and the two ADA spaces as needed. Once those lots are full, as indicated by those monitoring the parking areas, staff would radio to personnel near the farm entrance to indicate that any additional vehicles arriving should park in the overflow area located near the rose garden (consisting of 20 spaces). Parking coordinators will determine the appropriate time to direct guests to the overflow parking area and will keep track of departing guests, remaining aware of free spaces. Detailed instructions for staff managing parking and traffic for larger events will be provided to those working that day.

Each parking lot will be clearly marked (ADA, A, B, C and overflow). When one lot is full, a sign will be placed by staff indicating to use the next available lot.

4.3 Water Supply

Water service for the Project is provided on site by wells and water tanks. Water distribution includes water tanks, distribution lines, pumps, source development, and services to the bathrooms. All water storage, mains, and water pressures fully comply with Mariposa County requirements.

4.3.1 Water Tanks

Four water tank pads (Elevations at 2410', 2505', 2510' and 2545') are located throughout the property to supply domestic and fire suppression needs. Each pad consists of five 5,000-gallon interconnected tanks for a total of 25,000 gallons per pad and 100,000 gallons total for the property. Of that, approximately 30,000 will be dedicated to fire suppression, based on NFPA Standard 1142 (Standard on Water Supplies for Suburban and Rural Fire Fighting). The tanks are equipped with a pump that meets the requirements of NFPA Standard 1142. The pumps are provided with a generator for backup power.

4.3.2 Fire Hose Standpipes

Fire hose standpipes with 1 ½" fire hose connections are located throughout the Project site (Site Plan, Figure 2). Responding fire agency personnel (e.g., CAL FIRE, MCFD) may utilize these water connections for fire suppression activities. These water connections may also be used by trained staff should a small fire occur on site.

4.4 Operations

The business model of the facility is to operate an experience facility consisting of barns, greenhouses, livestock and support facilities throughout the year¹⁰.

Arrival: As part of the HGE, guests will arrive at the farm's main entrance on CYA Road through the entry gate and park at one of the three existing Parking Areas (labeled as Parking "A," "B" and "C") and walk along existing roads at all times. An ADA parking stall is provided at each of the two barns (Big Barn and Small Barn). Signage will help to create clearly marked walking paths so that guests can quickly and safely find their way around the farm. Guests may also arrive by plane at the nearby Mariposa-Yosemite Airport (the project applicant is in the process of obtaining a charter license).

HGE: Once guests have arrived safely on site, there are essentially four parts to the daily Happy Goat Experience (HGE) that allow guests to move at their own pace in the order they choose:

1. The existing "Goatnasium" allows guests to watch the goats play on this custom-designed jungle gym structure during their evening feeding.
2. Goat Walk: The goats are leash-trained, and guests can walk with a goat in designated areas.
3. Baby Goat Experience: Guests will gather in the existing Small Barn and witness roughly 100 goats pass from the Goatnasium into the Small Barn. The babies will be placed with those guests who want some snuggle time.
4. Food and beverages will be provided in two areas (shown on the site plan as "catering" in two locations).

Guests: Up to 175 guests per day may visit the farm consisting of either individuals or one group. As part of events, larger groups are allowed.

Number of employees: The Project site currently has 12 existing farm employees, and the proposed Happy Goat Experience would add up to five new employees. A total of 15 employees will be on site between 7:00 am and 12:00 pm and a total of five employees will be on site between 4:00 pm and 9:00 pm.

Hours: Happy Goat is requesting operational hours between 9:00 am and 10:00 pm to provide those working on the experience access to the farm. However, the duration of the guest experience will be approximately four to five hours. A sunset dinner is included as part of the experience, and therefore, dinner times will change accordingly depending on the season.

Special Events:

The CUP is being processed under the Special Event Facilities section of the County's Code. As such, the daily Happy Goat Experience is also what would be marketed to outside groups for "special events." It is essentially a buyout of the daily HGE model and would operate the same, with the only differentiation being potentially more than 175 people attending. To clarify, special events do not translate to a different model for large groups looking to buy out the experience, rather it is akin to how a restaurant would look at it, a private party, with Happy Goat staff on site at all times.

¹⁰ Refer to the CUP application for more details regarding the operation of the facility.

Due to the size of the experience area, larger groups (no more than 300 guests) at the farm for special events would not have an additional impact on daily operations. If a large group were to visit the farm, overflow parking would be accommodated near the rose garden.

Health and Safety: Cell phone service is currently available on-site. The on-site security team will be made up of Happy Goat staff.

Name and contact information for person(s) responsible during events: Mr. John Cahalin, 954.444.4121

Fire Safety: The fire safety operational standards presented below are designed for the year-round operational periods when the facility will be staffed and occupied.

The following facility operational standards shall be implemented:

- All fires occurring on site shall be immediately reported to MCFD.
- Happy Goat shall identify a Fire Safety Coordinator. Considering staff scheduling, it is anticipated that more than one staff person will fill this role so that a Fire Safety Coordinator will be on site at all times when staff and visitors are on site. The Fire Safety Coordinator shall be responsible for the following:
 - Initial point of contact for all emergencies
 - Communication with fire agencies
 - Annual Staff Training (see Section 4.6)
 - Annual inspection and regular operation of all emergency tools and equipment
 - Annual vegetation management and fuel treatment
 - Oversight of Visitor Education program (see Section 4.7)
 - Oversight of evacuations.
- Scheduling and conducting an annual risk assessment with MCFD, implementing all risk reductions measures identified during this assessment, and scheduling follow-up assessments with MCFD, as necessary.
- Certain weather conditions can increase fire risk, resulting in the declaration of a Red Flag Warning (RFW) by the National Weather Service (NWS). To ensure compliance with Red Flag Warnings restrictions, the NWS website shall be monitored no less than daily when staff and visitors are on site. If vehicles are required to be used during RFW conditions, vehicles shall remain only on designated Project roads.
- Open fires, fireworks, and outdoor cooking will not be permitted on site.
- On-site commercial generators will be maintained observing all fire safety procedures including spark arrestors, fuel storage and vegetation abatement.
- Emergency procedures will be posted in areas where people gather.

All fire safe standards required by Cal Fire and the MFD will be implemented.

4.5 Equipment Inventory and Maintenance

While it is not expected that the Happy Goat Farm Experience staff assume the role intended for professional firefighters, there should be an inventory on site of tools and equipment that can be used in an initial attack role for small ignitions that originate on site. In all instances, MCFD should be called first. If the fire does not pose an immediate threat, first evacuate guests, and then attack the fire.

For additional fire protection support, water tanks with pump (and generator for backup power) for fire suppression water that meets the requirements of NFPA 1142 standard (approximately 30,000 gallons) are available on site.

Located throughout the Project are fire hose standpipes with 1-1/2" fire hose connections.

4.6 Staff Training

All staff should be trained each year following the guidelines in the Training and Exercise Plan for fire prevention, initial response, medical emergencies, and fire reporting, along with reviewing the Emergency Operations Plan. The training should also include a comprehensive site and facility field review identifying all emergency features, equipment and resources. Where applicable, the safe and proper operation of emergency equipment and tools should be demonstrated.

The primary purpose of staff is guest safety. Staff will follow the guidelines established by the wildland fire and operational plans approved by MCFD. Those plans will include emergency alert and evacuation guidelines that staff will implement to ensure the safety of all visitors.

4.7 Visitor Education

The Owner/Operator would be required to educate visitors regarding fire risk and prevention, which would include providing emergency evacuation information. It is also recommended that visitors are encouraged to subscribe to the National Park Service Yosemite Alert System, <https://member.everbridge.net/index/453003085619123/#/signup>. To encourage visitors to register, the QR Code in Figure 5 shall be posted/provided in communal or informational areas within the Project site. Additionally, this information should be made available on the Project's website.

Emergency Operations Plan

All guests should participate in an orientation briefing, reviewing the applicable portions of the Emergency Operations Plan concerning potential hazards and what to do in the event of an emergency incident.

- Review the site fire and emergency alert system designed to notify site visitors in the event of an emergency.
- Review the site evacuation plan, defining routes of ingress and egress, rally points, and protocols for disabled visitors and/or visitors without their own transport.
- Review temporary refuge areas if evacuation is not possible.

The Owner/Operator of the Project would be responsible for maintaining fuel modification zones, ensuring fire safety measures detailed in this FHMP have been implemented, and educating visitors on wildfire. MCFD would review and approve all wildfire educational material/programs before printing and distribution.

Figure 5. QR Code for Local Emergency Alert Systems

NPS Yosemite Alert System



5 Evacuation

Early evacuation for any type of wildfire emergency at the Project is the preferred method of providing for visitor safety, consistent with CAL FIRE's current approach and adopted by Mariposa County. As such, the Project would formally adopt, practice, and implement a "Ready, Set, Go!" (International Fire Chiefs Association 2013) approach to evacuation. The "Ready, Set, Go!" concept is widely known and encouraged by the State of California and most fire agencies. Pre-planning for emergencies, including wildfire emergencies, focuses on being prepared, having a well-defined plan, minimizing potential for errors, maintaining the Project's fire protection systems, and implementing a conservative (evacuate as early as possible) approach to evacuation and Project operations during periods of fire weather extremes.

Note that large-scale evacuations during wildfire or other emergencies are managed by agencies including the Office of Emergency Services, law enforcement, and fire agencies. Emergencies are often fluid events and on-scene emergency personnel provide key information and direction regarding evacuations. This FHMP provides limited information regarding wildfire evacuation, and actual evacuation procedures would be a case-by-case basis and managed and controlled by the aforementioned agencies.

Directions provided by the Mariposa County Office of Emergency Services would be the basis for evacuation planning for the Project site.

Notifications

Evacuation notifications at the Project site may be made using several methods: Everbridge Emergency Response Notification System, local radio stations, online at MyMotherlode.com, and face-to-face when feasible. Two types of notifications are issued: an Evacuation Warning is issued when an evacuation order is imminent; an Evacuation Order is issued when there is an immediate threat to life and/or property.

It is crucial to leave when an evacuation is ordered. The direction of the evacuation route will depend upon the location of the fire or other emergency in relation to the Project site.

Preparation

Visitors and staff must be prepared for an evacuation at all times because of the remote location of the site. It is important that a meeting place is designated in advance for reuniting during and after an evacuation. Likewise, staff should also have a designated meeting place. All visitors and staff should become familiar with travel route options in advance.

If a wildfire is approaching, or following issuance of an Evacuation Warning, vehicles should be parked facing the road for a quick departure. If time permits, belongings should be placed in vehicles and staff/visitors should put on a long sleeve shirt and long pants and cover face with bandanas. Following issuance of an Evacuation Order, staff and visitors should leave immediately.

The Fire Safety Coordinator shall ensure that all gates are unlocked and open to vehicle traffic following issuance of an Evacuation Warning or Order.

During an Evacuation

Leave immediately after being notified of the Evacuation Order.

Observe instructions provided by emergency personnel for areas to be evacuated, travel routes, traffic control and safe locations. Never block the travel route.

If trapped by fire while evacuating, park in a clear area, close all windows and vents, cover up and lie low if possible.

Refuge Area

Temporary refuge areas are designed as temporary holding areas for smaller groups of people. Because of the project location, surrounding vegetation, lack of suitable sites usable as refuge areas, and the large number of potential visitors at the site, it is not recommended that a refuge area be designated or utilized.

Emergency Resources

Mariposa County Office of Emergency Services: The Mariposa County Office of Emergency Services (OES) is housed under the Mariposa County Sheriff's Office. OES coordinates planning and preparedness, response, and recovery efforts for disasters occurring within the unincorporated area of the County.

Sheriff's Office

Physical Address:
5099 Old Highway Road
Mariposa, California 95338

Mailing Address:
P.O. Box 276
Mariposa, California 95338

Phone: 209.966.3615

Online: myMotherlode.com

6 Recommendations

The following recommendations are offered as mitigation measures to ensure code compliance and fire protection safety for the proposed project. In the event the recommendations are not feasible, a request for alternative materials or methods of construction may need to be submitted to the authority having jurisdiction.

- Provide fire tool lockers and fire extinguishers at key locations throughout the site, meeting the requirements of Public Resources Code (PRC) 4428 and 4429. Provide fire extinguishers (2A 10BC) in each structure, as well as in all other facilities as required.

It is recommended that some basic initial attack firefighting equipment be maintained in centrally located, on-site caches (fire tool lockers). This would include:

- Fire extinguishers and backpack pumps;
- **Fire line tools:** round pointed shovels, Pulaski's, and adze hoes (approximately 10 each) and one dedicated chain saw;
- Spare fire hose, adapters and wrenches;
- **Personal Protective Equipment:** helmets, Nomex jackets and pants, gloves, goggles. Provide fire hose stations with fire hoses and nozzles throughout the site, with 150 feet of fire hose at each station. Locate the stations in such a manner that no structure is greater than 150 feet from a fire hose station.
- Provide a site fire and emergency alert system to notify site occupants in the event of an emergency.
- Harden the Big Barn structure (exterior and interior) so it exceeds the minimum code-required fire protection measures and could be used as a temporary place of refuge.

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7 List of Preparers

Project Manager

Michael Huff
Senior Director
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Fire Protection Planners

Doug Nickles, RPF, CF
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8 References Cited (Including References Cited in Appendices)

- Anderson, Hal E. 1982. *Aids to Determining Fuel Models for Estimating Fire Behavior*. USDA Forest Service Gen. Tech. Report INT-122. Intermountain Forest and Range Experiment Station, Ogden, UT.
http://www.fs.fed.us/rm/pubs_int/int_gtr122.pdf
- Andrews, P.L. 1980. Testing the fire behavior model. In *Proceedings 6th conference on fire and forest meteorology*. April 22–24, 1980. Seattle, WA: Society of American Foresters. Pp. 70–77.
- Andrews, Patricia L., Collin D. Bevins, and Robert C. Seli. 2008. BehavePlus fire modeling system, version 4.0: User's Guide. Gen. Tech. Rep. RMRS-GTR-106WWW Revised. Ogden, UT: Department of Agriculture, Forest Service, Rocky Mountain Research Station. 132p.
- Barrett, S.; Havlina, D.; Jones, J.; Hann, W.; Frame, C.; Hamilton, D.; Schon, K.; Demeo, T.; Hutter, L.; and Menakis, J. 2010. Interagency Fire Regime Condition Class Guidebook. Version 3.0 [Homepage of the Interagency Fire Regime Condition Class website, USDA Forest Service, US Department of the Interior, and The Nature Conservancy]. [Online]. Available: www.frcc.gov.
- CAL FIRE (California Department of Forestry and Fire Protection). 2020a. Fire and Resource Assessment Program. GIS Data Set: Fire Perimeters Version 19_1. Available at: https://frap.fire.ca.gov/media/10969/fire19_1.zip.
- CAL FIRE. 2020b. "Top 20 Largest California Wildfires." November 3. https://www.fire.ca.gov/media/11416/top20_acres.pdf.
- CAL FIRE. 2007. GIS Data Set: FHSZ Maps. Available at: <https://osfm.fire.ca.gov/media/6012/fhszs55sn.zip>
- Grabner, K., J. Dwyer, and B. Cutter. 1994. "Validation of Behave Fire Behavior Predictions in Oak Savannas Using Five Fuel Models." *Proceedings from 11th Central Hardwood Forest Conference*. 14 p.
- Grabner, K.W. 1996. "Validation of BEHAVE fire behavior predictions in established oak savannas." M.S. thesis. University of Missouri, Columbia.
- International Fire Chiefs Association. 2013. "Ready, Set, Go." <http://wildlandfirersg.org/>.
- Linn, R. 2003. "Using Computer Simulations to Study Complex Fire Behavior." Los Alamos National Laboratory, MS D401. Los Alamos, NM.
- Mariposa County Fire Safe Council, Mariposa CA <https://www.mariposafiresafecouncil.org/>
- Mariposa County General Plan, 2006
- Mariposa County Safety Element, 2017
- Mariposa County Local Hazard Mitigation Plan, 2020

Mariposa County Community Wildfire Protection Plan, 2021

Mariposa County Fire Department, Standards of Cover, 2002

McAlpine, R.S. and G. Xanthopoulos. 1989. Predicted vs. observed fire spread rates in Ponderosa pine fuel beds: a test of American and Canadian systems. In Proceedings 10th conference on fire and forest meteorology, April 17–21, 1989. Ottawa, Ontario. pp. 287–294.

NFPA Standard 1142

Rothermel, R.C., and G.C. Rinehart. 1983. "Field procedures for verification and adjustment of fire behavior predictions." Res. Pap. INT-142. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station. 25 p.

Scott, Joe H. and Robert E. Burgan. 2005. *Standard Fire Behavior Fuel Models: A Comprehensive Set for Use with Rothermel's Surface Fire Spread Model*. Gen. Tech. Rep. RMRS-GTR-153. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 72 p.

Sneeuwjagt, R.J., and W.H. Frandsen. 1977. "Behavior of experimental grass fires vs. predictions based on Rothermel's fire model." *Canadian Journal of Forest Resources*. 7:357–367.

Weather Spark, 2020. Average Weather in Yosemite, CA (website). Available at: <https://weatherspark.com/m/1526/6/Average-Weather-in-June-in-Yosemite-Lakes-California-United-States#Sections-Humidity>, accessed Dec 2020.

Appendix A

Fire Behavior Modeling

1 Fire Behavior Modeling Background

Fire behavior modeling has been used by researchers for approximately 50+ years to predict how a fire will move through a given landscape (Linn 2003). The models have had varied complexities and applications throughout the years. One model has become the most widely used for predicting fire behavior on a given landscape. That model, known as "BEHAVE," was developed by the U. S. Government (USDA Forest Service, Rocky Mountain Research Station) and has been in use since 1984. Since that time, it has undergone continued research, improvements, and refinement. The current version, BehavePlus, V6, includes the latest updates incorporating years of research and testing. Numerous studies have been completed testing the validity of the fire behavior models' ability to predict fire behavior given site specific inputs. One of the most successful ways the model has been improved has been through post-wildfire modeling (Brown 1972, Lawson 1972, Sneeuwjagt and Frandsen 1977, Andrews 1980, Brown 1982, Rothermel and Rinehart 1983, Bushey 1985, McAlpine and Xanthopoulos 1989, Grabner, et al. 1994, Marsden-Smedley and Catchpole 1995, Grabner 1996, Alexander 1998, Grabner et al. 2001, Arca et al. 2005). In this type of study, BehavePlus is used to model fire behavior based on pre-fire conditions in an area that recently burned. Real-world fire behavior, documented during the wildfire, can then be compared to the prediction results of BehavePlus and refinements to the fuel models incorporated, retested, and so on.

Fire behavior modeling includes a high level of analysis and information detail to arrive at reasonably accurate representations of how wildfire would move through available fuels on a given site. Fire behavior calculations are based on site specific fuel characteristics supported by fire science research that analyzes heat transfer related to specific fire behavior. Predicting wildland fire behavior is not an exact science. As such, the minute-by-minute movement of a fire will probably never be predictable, especially when considering the variable state of weather and the fact that weather conditions are typically estimated from forecasts made many hours before a fire. Nevertheless, field-tested and experienced judgment in assessing the fire environment, coupled with a systematic method of calculating fire behavior yields surprisingly accurate results. To be used effectively, the basic assumptions and limitations of fire behavior modeling applications must be understood.

1. First, it must be realized that the fire model describes fire behavior only in the flaming front. The primary driving force in the predictive calculations is the dead fuels less than 0.25 inches in diameter. These are the fine fuels that carry fire. Fuels greater than one inch have little effect, while fuels greater than three inches have no effect on fire behavior.
2. Second, the model bases calculations and descriptions on a wildfire spreading through surface fuels that are within six feet of the ground and contiguous to the ground. Surface fuels are often classified as grass, brush, litter, or slash.
3. Third, the software assumes that weather and topography are uniform. However, because wildfires almost always burn under non-uniform conditions, creating their own weather, length of projection period and choice of fuel model must be carefully considered to obtain useful predictions.
4. Fourth, fire behavior computer modeling systems are not intended for determining sufficient fuel modification zone/defensible space widths. However, it does provide the average length of the flames, which is a key element for determining defensible space distances for minimizing structure ignition.

Although BehavePlus has limitations, it can still provide valuable fire behavior predictions, which can be used as a tool in the decision-making process. In order to make reliable estimates of fire behavior, one must understand the relationship of fuels to the fire environment and be able to recognize the variations in these fuels. Natural fuels are made up of the various components of vegetation, both live and dead, that occur in a particular landscape. The type and quantity will depend upon soil, climate, geographic features, and fire history. The major fuel groups of grass, shrub, trees, and slash are defined by their constituent types and quantities of litter and duff layers, dead woody material, grasses and forbs, shrubs, regeneration, and trees. Fire behavior can be predicted largely by analyzing the characteristics of these fuels. Fire behavior is affected by seven principal fuel characteristics: fuel loading, size and shape, compactness, horizontal continuity, vertical arrangement, moisture content, and chemical properties.

2 Modeling Inputs

2.1 Fuels

The seven fuel characteristics help to define the 13 standard fire behavior fuel models (Anderson 1982). According to the model classifications, fuel models used for fire behavior modeling (BehavePlus) have been classified into four groups, based upon fuel loading (tons/acre), fuel height, and surface-to-volume ratio. Observation of the fuels in the field (on site) determines which fuel models should be applied in modeling efforts. The following describes the distribution of fuel models among general vegetation types for the standard 13 fuel models:

- | | |
|-----------------|----------------------------|
| ▪ Grasses | Fuel Models 1 through 3 |
| ▪ Brush | Fuel Models 4 through 7 |
| ▪ Timber | Fuel Models 8 through 10 |
| ▪ Logging slash | Fuel Models 11 through 13. |

In addition, the aforementioned fuel characteristics were utilized in the recent development of 40 additional fire behavior fuel models (Scott and Burgan 2005) developed for refining use of the BehavePlus modeling system. These models attempt to improve the accuracy of the 13 standard fuel models outside of severe fire season conditions, and to allow for the simulation of fuel treatment prescriptions. The following describes the distribution of fuel models among general vegetation types for the 40 new fuel models:

- | | |
|---------------------|--------------------------------|
| ▪ Non-burnable | Models NB1, NB2, NB3, NB8, NB9 |
| ▪ Grass | Models GR1 through GR9 |
| ▪ Grass shrub | Models GS1 through GS4 |
| ▪ Shrub | Models SH1 through SH9 |
| ▪ Timber understory | Models TU1 through TU5 |
| ▪ Timber litter | Models TL1 through TL9 |
| ▪ Slash blowdown | Models SB1 through SB4. |

For each fire behavior analyses, fuel model assignments are based on observed field conditions. As is customary for this type of analysis, the terrain and fuels directly adjacent to the proposed development are used for determining flame lengths and fire spread. It is these fuels that would have the potential to affect a project's structures from a radiant and convective heat perspective, as well as from direct flame impingement.

Fuel beds, including grass, shrubs, timber and slash, may be observed on and adjacent to a proposed development. Often fuel types may produce flying embers that could affect a project; defenses can be built into a project design to minimize ember generation and potential impact. In most instances, various combinations of fuels are observed and the predominate fuel likely to carry the flaming front of a wildfire determined the fuel model selected.

Modeling of the site is also conducted for post-development recommendations for this project, including fuel treatment proposed as part of the site preparation and ongoing vegetation management. Fuel modification usually includes routine vegetation management around structures, improvements, alongside roadways, and infrastructure, as well as the project periphery.

2.2 Weather

Analyses are conducted for conservative, worst case, 90th percentile weather condition scenarios. Fuel moisture and wind speed information data is incorporated into the BehavePlus modeling runs. The input wind speed and direction is roughly an average surface wind at 20 feet above the vegetation over the analysis area.

2.3 Slope

Slope is a measure of angle in degrees from horizontal and can be presented in units of degrees or percent. Slope is important in fire behavior analysis as it affects the exposure of fuel beds. Additionally, fires burning uphill spread faster than those burning on flat terrain or downhill as uphill vegetation is pre-heated and dried in advance of the flaming front, resulting in faster ignition rates. For the BehavePlus analysis, slope values are determined by field observation and use of topographical data at the locations selected for each modeling scenario.

3 BehavePlus Analysis

To objectively predict flame lengths, intensities, and spread rates, the BehavePlus V6 fire behavior modeling system (Andrews, Bevins, and Seli 2004) is used in one or more modeling scenarios and incorporates observed fuel types representing the dominant vegetative fuels, slope gradients, and wind and fuel moisture values. Modeling scenario locations are selected to better understand different fire behavior that may be experienced on or adjacent to the site.

Fuel modification includes fuel treatment proposed as part of the site preparation and ongoing vegetation management. For modeling the post-development condition, fuel model assignments are re-classified for each scenario. The fuel treatments in usually result in noticeable reductions of both flame length and intensity.

It should be noted that the results (outputs) depict values based on inputs to the BehavePlus software. Changes in slope, weather, or pockets of different fuel types are not accounted for in this analysis, but models provide a worst-case wildfire condition as part of a conservative approach. Further, this modeling analysis assumes a correlation between the site vegetation and fuel model characteristics. Model results should be used as a basis for planning only, as actual fire behavior for a given location will be affected by many factors, including unique weather patterns, small-scale topographic variations, or changing vegetation patterns.

The Fire Suppression Information in Table B-1 pertains to interpretation of flame length and fireline intensity as it relates to fire suppression efforts. Calculated flame lengths under 4.0 feet tall, fire fighters should be able to conduct a direct attack on the fire.

Table B-1. Fire Suppression Interpretation

Flame Length (ft)	Fireline Intensity (Btu/ft/s)	Interpretations
Under 4	Under 100	Fires can generally be attacked at the head or flanks by persons using hand tools. Hand line should hold the fire.
4 to 8	100-500	Fires are too intense for direct attack on the head by persons using hand tools. Hand line cannot be relied on to hold the fire. Equipment such as dozers, pumpers, and retardant aircraft can be effective.
8 to 11	500-1000	Fires may present serious control problems – torching out, crowning, and spotting. Control efforts at the fire head will probably be ineffective.
Over 11	Over 1000	Crowning, spotting, and major fire runs are probable. Control efforts at head of fire are ineffective.

4 References

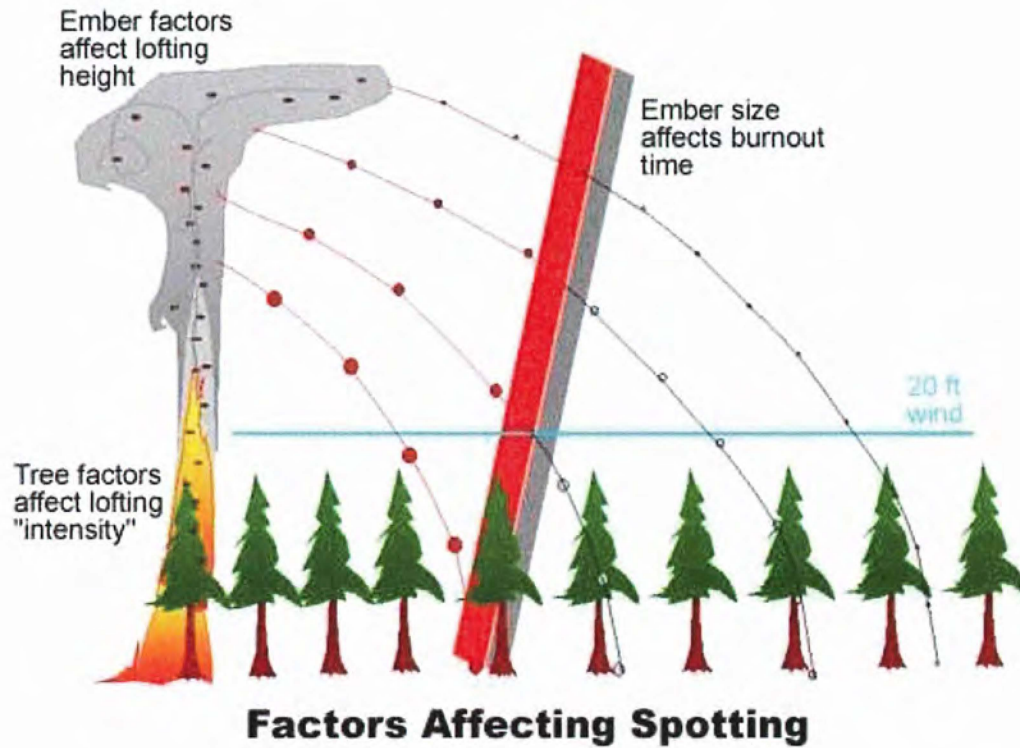
- Alexander, M.E. 1998. Crown fire thresholds in exotic pine plantations of Australasia. Australian National University, Canberra, Australian Capital Territory. Ph.D. Thesis. 228p.
- Anderson, Hal E. 1982. *Aids to Determining Fuel Models for Estimating Fire Behavior*. USDA Forest Service Gen. Tech. Report INT-122. Intermountain Forest and Range Experiment Station, Ogden, UT. http://www.fs.fed.us/rm/pubs_int/int_gtr122.pdf
- Andrews, P.L. 1980. Testing the fire behavior model. In *Proceedings 6th conference on fire and forest meteorology*. April 22–24, 1980. Seattle, WA: Society of American Foresters. Pp. 70–77.
- Andrews, Patricia L., Collin D. Bevins, and Robert C. Seli. 2008. BehavePlus fire modeling system, version 4.0: User's Guide. Gen. Tech. Rep. RMRS-GTR-106WWW Revised. Ogden, UT: Department of Agriculture, Forest Service, Rocky Mountain Research Station. 132p.
- Brown, J.K. 1972. Field test of a rate-of-fire-spread model in slash fuels. USDA Forest Service Res. Pap. Int-116. 24 p.
- Brown, J.K. 1982. Fuel and fire behavior prediction in big sagebrush. USDA Forest Service Res. Pap. INT-290. 10p.

- Bushey, C.L. 1985. Comparison of observed and predicted fire behavior in the sagebrush/ bunchgrass vegetation-type. In J.N. Long (ed.), *Fire management: The challenge of protection and use: Proceedings of a symposium*. Society of American Foresters. Logan, UT. April 17–19, 1985. Pp. 187–201.
- FireFamily Plus 2008. <http://www.firelab.org/project/firefamilyplus>.
- Grabner, K., J. Dwyer, and B. Cutter. 1994. "Validation of Behave Fire Behavior Predictions in Oak Savannas Using Five Fuel Models." *Proceedings from 11th Central Hardwood Forest Conference*. 14 p.
- Grabner, K.W. 1996. "Validation of BEHAVE fire behavior predictions in established oak savannas." M.S. thesis. University of Missouri, Columbia.
- Grabner, K.W., J.P. Dwyer, and B.E. Cutter. 2001. "Fuel model selection for BEHAVE in midwestern oak savannas." *Northern Journal of Applied Forestry*. 18: 74–80.
- Lawson, B.D. 1972. Fire spread in lodgepole pine stands. Missoula, MT: University of Montana. 110 p. thesis.
- Linn, R. 2003. "Using Computer Simulations to Study Complex Fire Behavior." Los Alamos National Laboratory, MS D401. Los Alamos, NM.
- Marsden-Smedley, J.B. and W.R. Catchpole. 1995. Fire behaviour modelling in Tasmanian buttongrass moorlands. II. Fire behaviour. *International Journal of Wildland Fire*. Volume 5(4), pp. 215–228.
- McAlpine, R.S. and G. Xanthopoulos. 1989. Predicted vs. observed fire spread rates in Ponderosa pine fuel beds: a test of American and Canadian systems. In *Proceedings 10th conference on fire and forest meteorology*, April 17–21, 1989. Ottawa, Ontario. pp. 287–294.
- Rothermel, Richard C. 1983. How to predict the spread and intensity of forest and range fires. GTR INT-143. Ogden, Utah: USDA Forest Service Intermountain Research Station. 161
- Rothermel, R.C., and G.C. Rinehart. 1983. "Field procedures for verification and adjustment of fire behavior predictions." Res. Pap. INT-142. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station. 25 p.
- Rothermel, R.C., and G.C. Rinehart. 1983. "Field procedures for verification and adjustment of fire behavior predictions." Res. Pap. INT-142. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station. 25 p.
- Scott, Joe H. and Robert E. Burgan. 2005. *Standard Fire Behavior Fuel Models: A Comprehensive Set for Use with Rothermel's Surface Fire Spread Model*. Gen. Tech. Rep. RMRS-GTR-153. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 72 p.
- Sneeuwjagt, R.J., and W.H. Frandsen. 1977. "Behavior of experimental grass fires vs. predictions based on Rothermel's fire model." *Canadian Journal of Forest Resources*. 7:357–367.
- Weise, D.R. and J. Regelbrugge. 1997. Recent chaparral fuel modeling efforts. Prescribed Fire and Effects Research Unit, Riverside Fire Laboratory, Pacific Southwest Research Station. 5p.

Figure 1. Flame Length



Figure 2. Factors Affecting Spotting

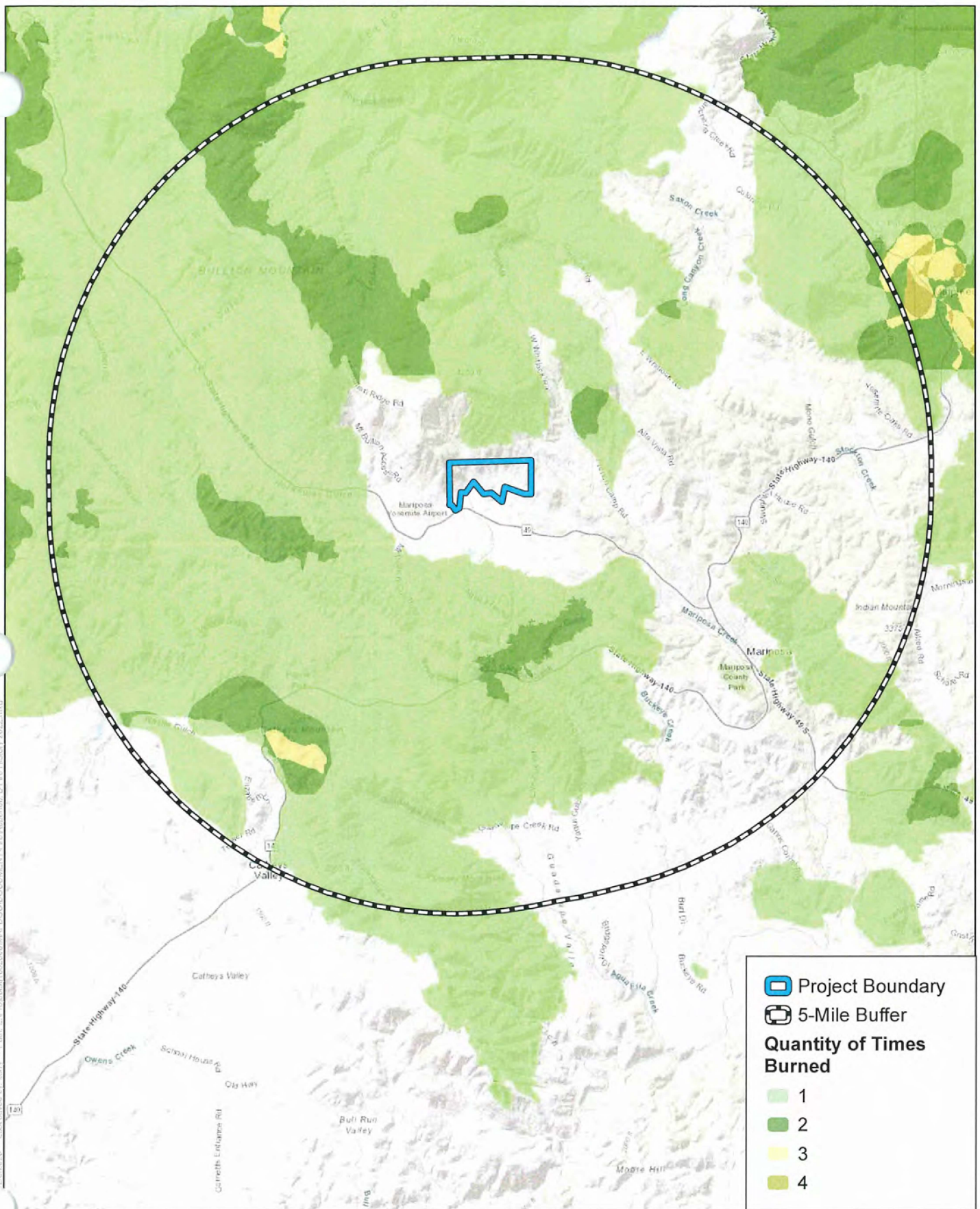


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Appendix B

Fire History

1/25/2023 1:11:47 PM - Leaflet by Mapbox, Imagery © Mapbox, Data © OpenStreetMap contributors, Imagery © Mapbox, Data © OpenStreetMap contributors



SOURCE: BASE MAP- ESRI MAPPING SERVICE; FIRE DATA-CALFIRE 2022

DUDEK



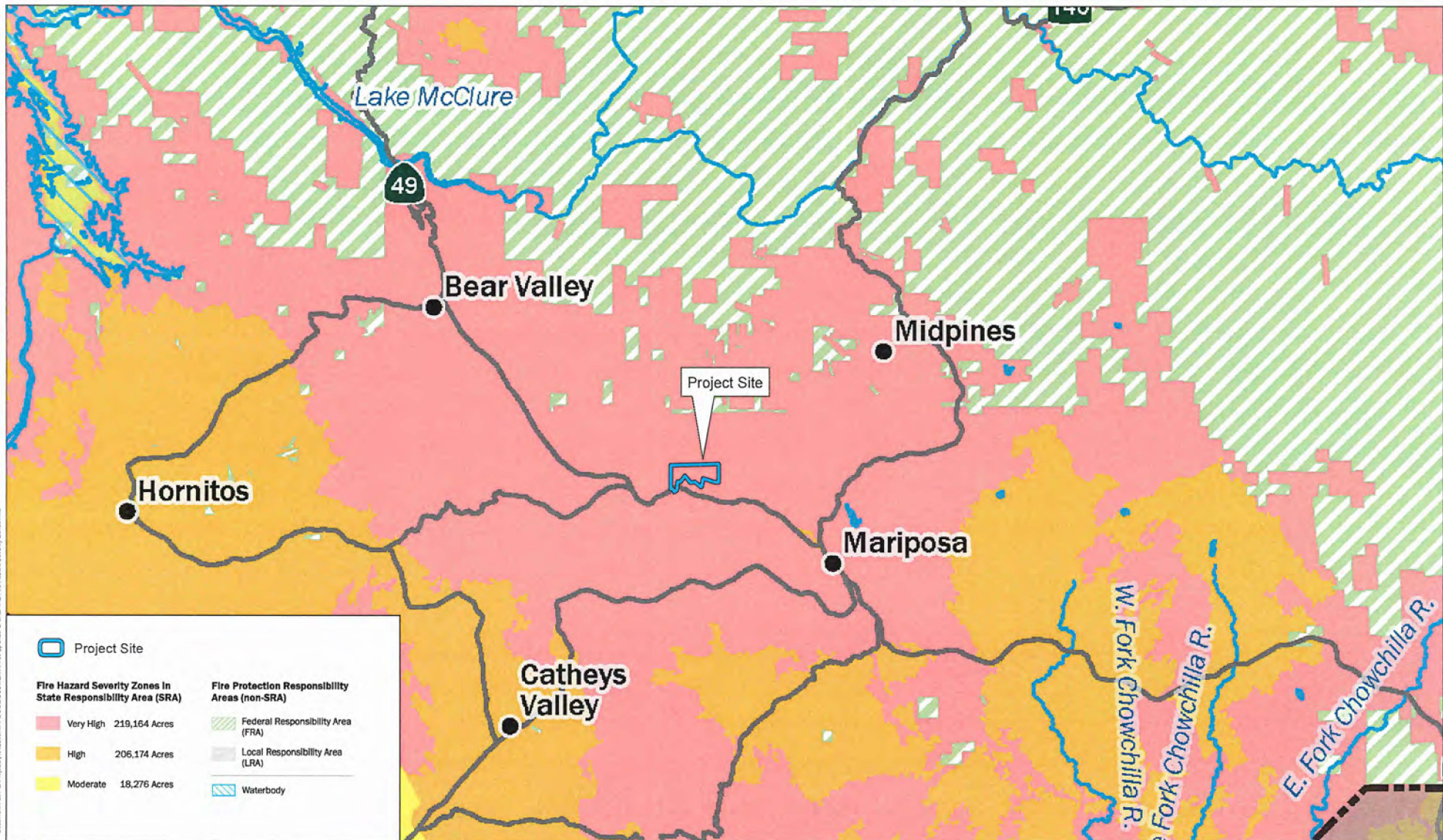
APPENDIX B

Fire History Map

Fire Hazard Mitigation Plan for the Happy Goat Experience Project

Appendix C

Fire Hazard Severity Zones



SOURCE: ESRI IMAGERY SERVICE; FIRE DATA- CAL FIRE; Mariposa County June 2023

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Mariposa County Planning Department

FOCUSED AIR QUALITY STUDY

Happy Goat Experience Project

Mariposa County, CA

Prepared For:

Happy Goat, Inc.
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Prepared By:

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December 2023

Project 230505.0253



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1. EXECUTIVE SUMMARY

1.1 Executive Summary

Trinity Consultants (Trinity) has completed a Focused Air Quality Study (FAQS) for a "Happy Goat Experience" at the existing Happy Goat Farm located on approximately 250 acres in Mariposa County, California. The Project covers approximately 29 acres and includes guest tours, educational field trips, and occasional special events. The proposed experience is separate from the existing farming operation and requires limited additional construction including the addition of public restroom facilities that will consist of barn remodeling and trenching for the installation of one leach field.

This FAQS was prepared pursuant to the Mariposa County Air Pollution Control District's (MCAPCD) California Environmental Quality Act (CEQA) Threshold of Significance (MCAPCD 2006), the CEQA (Public Resources Code 21000 to 21189) and the CEQA Guidelines (California Code of Regulations Title 14, Division 6, Chapter 3, Sections 15000 – 15387).

1.2 Statement of Finding

Based on the thresholds established by MCAPCD, the emissions estimates prepared pursuant to this FAQS assessment do not exceed the MCAPCD's established emissions significance thresholds for all CEQA air quality contaminants, therefore, this Project would not pose a significant impact to the Mountain Counties Air Basin and would have a less than significant air quality impact.

2. PROJECT INFORMATION

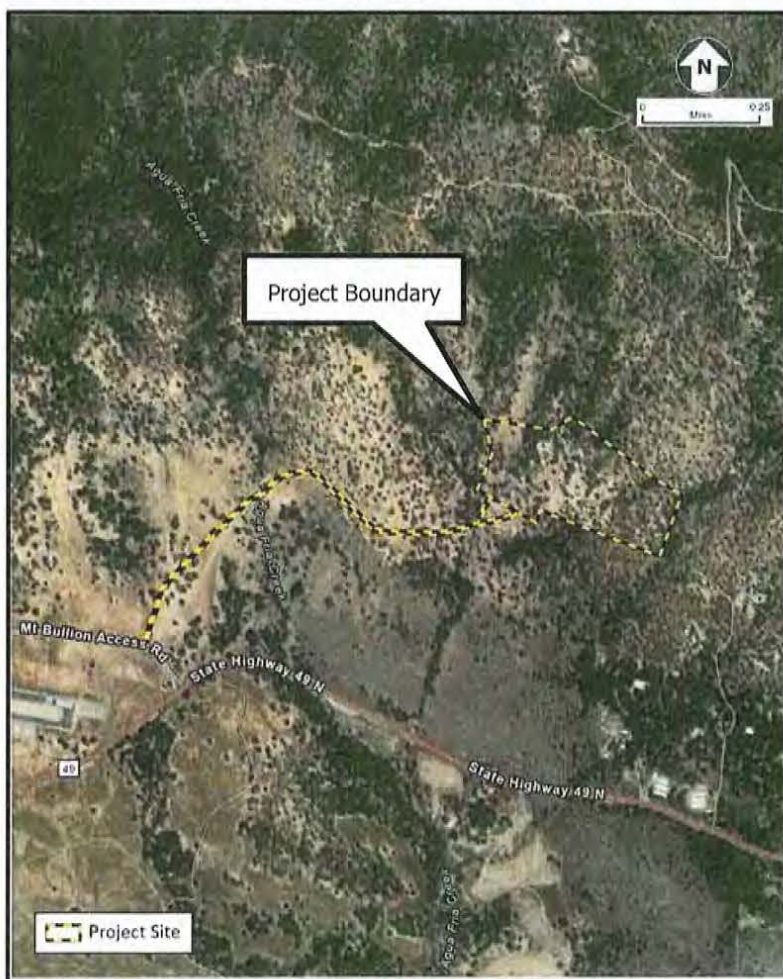
2.1 Introduction

The Project site is located at the existing Happy Goat Farm 5030 CYA Road, Mariposa County, California on APN 012-041-002. The Project includes guest tours, educational field trips, and occasional special events. The proposed experience is separate from the existing farming operations and requires no additional construction other than installation of a septic field. Typical operations would consist of up to approximately 175 visitors a day attending educational tours and up to approximately once a month one special event may be held with a maximum guest count of 300 people. This assessment examines the projected gross impacts to air quality posed by this Project to the Mountain Counties Air Basin to determine whether or not the Project remains below established air quality thresholds of significance.

2.2 Project Location

The Project site is located at the existing Happy Goat Farm located on approximately 250 acres in Mariposa County, California. **Figure 2-1** depicts the Project location within the County of Mariposa.

Figure 2-1. Project Location



3. AIR QUALITY IMPACTS THRESHOLDS AND EVALUATION METHODOLOGY

Significance thresholds are based on the CEQA Appendix G Environmental Checklist Form (not included herein) and MCAPCD air quality thresholds (MCAPCD 2006). A potentially significant impact to air quality, as defined by the CEQA Checklist, would occur if the project caused one or more of the following to occur:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard;
- Expose sensitive receptors to substantial pollutant concentrations; and/or
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number people.

The MCAPCD has identified quantitative emission thresholds to determine whether the potential air quality impacts of a project require analysis in the form of an Environmental Impact Report. The MCAPCD air quality thresholds of significance are presented in **Table 3-1** (MCAPCD 2006).

Table 3-1. MCAPCD Air Quality Thresholds of Significance - Criteria Pollutants

Pollutant/ Precursor	Project Emissions
	Emissions (tpy)
CO	100
NO _x	100
ROG	100
SO _x	100
PM ₁₀	100
PM _{2.5}	100

Source: MCAPCD 2006

Criteria pollutant emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2020.4.0 (California Air Pollution Control Officers Association (CAPCOA) 2021). This project would generate short-term construction emissions and long-term operational emissions.

An air quality evaluation also considers: 1) exposure of sensitive receptors to substantial pollutant concentrations; and 2) the creation of other emissions (such as those leading to odors) adversely affecting a substantial number of people. The criteria for this evaluation are based on the Lead Agency's determination of the proximity of the proposed Project to sensitive receptors. A sensitive receptor is a location where human populations, especially children, senior citizens and sick persons, are present, and where there is a reasonable expectation of continuous human exposure to pollutants, according to the averaging period for ambient air quality standards, i.e. the 24-hour, 8-hour or 1-hour standards. Commercial and industrial sources are not considered sensitive receptors.

4. ENVIRONMENTAL EFFECTS

This document was prepared pursuant to the MCAPCD's CEQA significant thresholds and CEQA and provides a cursory review of the Project emissions to demonstrate that it would not exceed established air quality emissions thresholds.

4.1 Short-Term Emissions

Table 4-1 shows the construction emission levels using default conservative construction schedule (8 weeks of construction) and equipment assumptions (CalEEMod default for the building phase) and CalEEMod factors for construction of septic fields at Happy Goat Farms for the Happy Goat Experience (see **Appendix A**).

Construction emission estimates also included the following standard construction practices to reduce particulate matter emissions for all projects:

- ▶ Water exposed area 3 times per day; and
- ▶ Reduce vehicle speed to less than 15 miles per hour.

Based on these anticipated activity levels, the Project construction activities would not exceed construction emissions thresholds (**Table 4-1**) and were found to be less than significant. No further evaluation is required.

Table 4-1. Construction Emissions

Emissions Source	Pollutant					
	ROG	NOx	CO	SOx	PM ₁₀	PM _{2.5}
	(tons/year)					
2024 Construction Emissions	0.033	0.273	0.347	0.001	0.017	0.013
MCAPCD Construction Emissions Thresholds	100	100	100	100	100	100
Is Threshold Exceeded?	No	No	No	No	No	No

4.2 Long-Term Emissions

Table 4-2 presents the Project's long-term operations emissions which will mostly be generated from mobile sources of visitors and workers driving to and from the experience as well as from water use and waste generation emissions. The following changes to default values were incorporated during the CalEEMod analysis:

- ▶ Vehicle trips were adjusted to match the traffic study.

Table 4-2. Total Project Operational Emissions

Emissions Source	Pollutant					
	ROG	NOx	CO	SOx	PM ₁₀	PM _{2.5}
	(tons/year)					
Operational Emissions						
Proposed Project	0.118	0.152	0.787	0.001	0.092	0.026
MCAPCD Operational Emissions Thresholds – non-permitted sources	100	100	100	100	100	100
Is Threshold Exceeded?	No	No	No	No	No	No

As calculated (see **Appendix A**), the long-term operational emissions associated with the proposed Project would be less than MCAPCD significance threshold levels and would, therefore, not pose a significant impact to criteria air pollutants.

4.3 Greenhouse Gas Emissions

The Project's greenhouse gas (GHG) emissions are primarily from mobile source activities. Not all GHGs exhibit the same ability to induce climate change; as a result, GHG contributions are commonly quantified as carbon dioxide equivalents (CO₂e) (see **Appendix A**). The proposed Project's operational CO₂e emissions were estimated using CalEEMod. These emissions are summarized in **Table 4-3**.

Table 4-3. Estimated Annual Greenhouse Gas Emissions

	CO ₂ Emissions metric tons	CH ₄ Emissions metric tons	N ₂ O Emissions metric tons	CO ₂ e Emissions metric tons
2024 Project Operations	106.65	0.042	0.007	109.69

MCAPCD does not have a set of guidelines to determine significance whether a project would generate significant amount of greenhouse gas emissions; therefore, for this analysis, the San Joaquin Valley Air Pollution Control District (SJVAPCD) guidelines were reviewed. SJVAPCD's guidelines were adopted in 2009, in the decade after SJVAPCD adopted their Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA, several new laws and executive orders were adopted that require additional reductions in years after 2020. For instance, Senate Bill 32 requires that GHG emissions be 40% less than 1990 levels by 2030. More drastic still, Senate Bill 100 which was signed by the Governor recently requires 100% zero-carbon electricity by 2045. On the day SB 100 was signed into law, the Governor also signed Executive Order B-55-18 which commits California to total, economy-wide carbon neutrality by 2045. Clearly, the 2009 Guidance may be somewhat inadequate in producing a meaningful comparison by today's standards which propose a grand vision that, if achieved, would fundamentally change how business is conducted and citizens live in the State. Thus, as discussed in the most recent updates to the Scoping Plan, objectives of the Scoping Plan affect all sectors of the economy and it no longer makes sense to evaluate GHG emissions on a project-level.

For these reasons, Project GHG emissions levels presented in Table 4-3 are primarily for disclosure purposes. The Project's largest contributors to GHG emissions are exhaust from transportation fuels. Transportation fuels are, in effect, regulated by requiring providers and importers of fuel to participate in the GHG Cap-and-Trade Program and other Programs (e.g., low carbon fuel standard, renewable portfolio standard, etc.). Each sector-wide program exists within the framework of AB 32 and its descendant laws the purpose of which is to achieve GHG emissions reductions consistent with the AB 32 Scoping Plan.

The Project would generate GHGs from combustion of gasoline/diesel fuels, each of which is regulated near the top of the supply-chain. As such, each citizen of California (including those creating emissions of this Project) will have no choice but to purchase fuels produced in a way that is acceptable to the California market. Thus, Project GHG emissions will be consistent with the relevant plan (i.e., AB 32 Scoping Plan). The Project would meet its fair share of the cost to mitigate the cumulative impact of global climate change based on fuel purchases from the California market. Thus, consumers of transportation fuels are in effect regulated by higher level emissions restrictions on the producers of these energy sources. Therefore, the Project would have a less than significant impact on applicable GHG reduction plans and the Project's contribution to cumulative global climate change impacts would not be cumulatively considerable.

4.4 Potential Impact on Sensitive Receptors

The proposed Project is located at the existing Happy Goat Farm 5030 CYA Road, Mariposa County, California. Sensitive receptors are defined as areas where young children, chronically ill individuals, the elderly, or people who are more sensitive than the general population reside. Schools, hospitals, nursing homes and daycare centers are locations where sensitive receptors would likely reside. The closest non-residential sensitive receptor is Victory Baptist Christian School located 2.20 miles southeast of the project. The closest healthcare facility is John C. Fremont Healthcare District at 2.62 miles to the southeast, and the closest daycare facility is Where the Wild Things Play at 3.35 miles to the southeast of the Project.

Based on the predicted operational emissions and activity types, the proposed Project is not expected to affect any on-site or off-site sensitive receptors and is not expected to have any adverse impacts on any known sensitive receptor.

4.5 Potential Impacts to Visibility to Nearby Class 1 Areas

It should be noted that visibility impact analyses are not usually conducted for area sources. The recommended analysis methodology was initially intended for stationary sources of emissions which were subject to the Prevention of Significant Deterioration (PSD) requirements in 40 CFR Part 60. Since the Project's emissions are predicted to be significantly less than the PSD threshold levels, an impact at Yosemite National Park (the nearest Class 1 area to the Project) is extremely unlikely. Therefore, based on the Project's predicted emissions, the Project is not expected to have any adverse impact to visibility at any Class 1 Area.

4.6 Potential Odor Impacts

The proposed Project is an experience located at an existing goat farm. The expected use will not create any additional odors than already present at the existing facility. The facility is currently not known to be a source of nuisance odors. The Project is therefore not anticipated to have substantial odor impacts. The Project is therefore anticipated to have a less than significant odor impact.

4.7 Ambient Air Quality Impacts

MCAPCD does not have any screening guidelines in place to require an Ambient Air Quality Analysis. Therefore, for this analysis, the SJVAPCD guidelines were used. As stated in the SJVAPCD's Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI) (SJVAPCD 2015), SJVAPCD has developed screening levels for requiring an Ambient Air Quality Analysis (AAQA). The SJVAPCD recommends that an AAQA be performed for all criteria pollutants when emissions of any criteria pollutant resulting from project construction or operational activities exceed the 100 pounds per day screening level, emissions less than this level are not anticipated to create significant ambient air quality impacts.

As shown above in **Table 4-1** and **Table 4-2**, average daily emissions for construction and operational activities associated with this Project would not exceed 100 pounds per day. Therefore, an AAQA is not required for this Project.

4.8 Toxic Air Contaminant (TAC) Impacts

TACs, as defined by the California Health & Safety Code (CH&SC) §44321, are listed in Appendices AI and AII in AB 2588 Air Toxic "Hot Spots" and Assessment Act's Emissions Inventory Criteria and Guideline Regulation document.

The proposed Project would result in emissions of Hazardous Air Pollutants (HAPs) during a short construction period only and would not be located near existing residents; therefore, based on a construction period of less than two months it can be determined that the HAP emissions from construction equipment will be negligible and not create any significant health risk exposure to any receptors. Therefore, the potential risk to the population attributable to emissions of HAPs from the proposed Project would be less than significant.

4.9 Cumulative Impacts

Cumulative impacts were also evaluated; however, cumulative emissions were not quantified because no other tentative projects were found within a one-mile radius of the Proposed Project that provided enough project detail information to accurately estimate emissions. Owing to the inherently cumulative nature of air quality impacts, the threshold for whether a project would make a cumulatively considerable contribution to a significant cumulative impact is currently based on whether the proposed Project would exceed established project-level thresholds. As such, a qualitative evaluation of the cumulative projects supports a finding that the Project's contribution would not be cumulatively considerable because the proposed Project's incremental emissions increase would be less than significant.

5. CONCLUSIONS

Based on the criteria established by the MCAPCD, the proposed Project does not meet the minimum standards to require a full Air Quality Impact Analysis. Furthermore, the Project as proposed would not exceed the MCAPCD's criteria air pollutant emission levels and would generate *less than significant air quality impacts*.

6. REFERENCES

- California Air Pollution Control Officers Association (CAPCOA). 2022. California Emissions Estimator Model tm (CalEEMod), version 2022.1.1.13.
- , 2016. "Air Toxic Hot Spots" Facility Prioritization Guidelines, Revised 2016. Final August 2016 <http://www.capcoa.org/wp-content/uploads/2016/08/CAPCOA%20Prioritization%20Guidelines%20-%20August%202016%20FINAL.pdf>.
- California Air Resources Board (CARB). 2015. Hotspots Analysis and Reporting Program (HARP2) User Guide. <https://ww2.arb.ca.gov/sites/default/files/classic/toxics/harp/docs2/harp2admrtuserguide.pdf>, accessed June 2023.
- California Environmental Quality Act (CEQA). 2022. (Public Resources Code 21000 - 21189) and CEQA Guidelines (California Code of Regulations Title 14, Division 6, Chapter 3, Sections 15000 – 15387).
- , 2022. CEQA, Appendix G – Environmental Checklist Form, Final Text.
- Mariposa County Air Pollution Control District (MCAPCD). 2006. CEQA Thresholds of Significance – The County of Mariposa General Plan Volume IV. 2006. [KM 224e-20160318144502 \(mariposacounty.org\)](https://www.mariposacounty.org/DocumentCenter/View/224e-20160318144502)
- San Joaquin Valley Air Pollution Control District (SJVAPCD). 2009. Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA. December 17, 2009.
- , 2015. Guidance for Assessing and Mitigating Air Quality Impacts. March 19, 2015.

APPENDIX A. CALEEMOD EMISSIONS ESTIMATES OUTPUT FILE

Happy Goat Experience - Mariposa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Happy Goat Experience

Mariposa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	29.00	Acre	29.00	1,263,240.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	3			Operational Year	2024
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MW hr)	203.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot Acreage matches the size of the Happy Goat Experience - City Park was used as the Land Use as what would be considered the closest match to the type of pre built in land use in CalEEMod

Construction Phase - Conservative estimate of 8 weeks for construction of the Septic Fields

Off-road Equipment - Estimated construction equipment to be used

Trips and VMT - Estimated construction worker, vendor and haul trips were used with CalEEMod default trip lengths

Vehicle Trips - Trip rates based on Traffic study (98 trips per day) and includes added trips for special events.

Fleet Mix -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblCor	NumDays	44	40.00

Happy Goat Experience - Mariposa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstructionPhase	PhaseEndDate	9/5/2025	2/23/2024
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	0.00	1.00
tblTripsAndVMT	VendorTripNumber	207.00	1.00
tblTripsAndVMT	WorkerTripNumber	531.00	20.00
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.96	3.45
tblVehicleTrips	SU_TR	2.19	3.45
tblVehicleTrips	WD_TR	0.78	3.45

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction

[illegible]

Happy Goat Experience - Mariposa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2024	3-31-2024	0.2959	0.2959
		Highest	0.2959	0.2959

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0119	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.2000e-004	5.2000e-004	0.0000	0.0000	5.5000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1058	0.1516	0.7867	1.0300e-003	0.0900	1.5100e-003	0.0915	0.0242	1.4200e-003	0.0256	0.0000	94.9566	94.9566	0.0100	6.4900e-003	97.1403
Waste						0.0000	0.0000		0.0000	0.0000	0.5055	0.0000	0.5055	0.0299	0.0000	1.2522
Water						0.0000	0.0000		0.0000	0.0000	0.0000	11.1894	11.1894	1.8100e-003	2.2000e-004	11.3000
Total	0.1177	0.1516	0.7870	1.0300e-003	0.0900	1.5100e-003	0.0915	0.0242	1.4200e-003	0.0256	0.5055	106.1465	106.6520	0.0417	6.7100e-003	109.6931

Happy Goat Experience - Mariposa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0119	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.2000e-004	5.2000e-004	0.0000	0.0000	5.5000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1058	0.1516	0.7867	1.0300e-003	0.0900	1.5100e-003	0.0915	0.0242	1.4200e-003	0.0256	0.0000	94.9566	94.9566	0.0100	6.4900e-003	97.1403
Waste						0.0000	0.0000		0.0000	0.0000	0.5055	0.0000	0.5055	0.0299	0.0000	1.2522
Water						0.0000	0.0000		0.0000	0.0000	0.0000	11.1894	11.1894	1.8100e-003	2.2000e-004	11.3000
Total	0.1177	0.1516	0.7870	1.0300e-003	0.0900	1.5100e-003	0.0915	0.0242	1.4200e-003	0.0256	0.5055	106.1465	106.6520	0.0417	6.7100e-003	109.6931

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2024	2/23/2024	5	40	

Acres of Grading (Site Preparation Phase): 0

Happy Goat Experience - Mariposa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Welders	1	8.00	46	0.45
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	20.00	1.00	1.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Happy Goat Experience - Mariposa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0294	0.2689	0.3233	5.4000e-004		0.0123	0.0123		0.0115	0.0115	0.0000	46.3698	46.3698	0.0110	0.0000	46.6440
Total	0.0294	0.2689	0.3233	5.4000e-004		0.0123	0.0123		0.0115	0.0115	0.0000	46.3698	46.3698	0.0110	0.0000	46.6440

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	1.8000e-004	2.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0366	0.0366	0.0000	1.0000e-005	0.0383
Vendor	5.0000e-005	1.6900e-003	3.0000e-004	0.0000	1.2000e-004	1.0000e-005	1.3000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.4217	0.4217	0.0000	6.0000e-005	0.4392
Worker	3.6300e-003	2.4000e-003	0.0237	5.0000e-005	4.9300e-003	4.0000e-005	4.9700e-003	1.3100e-003	3.0000e-005	1.3500e-003	0.0000	4.1345	4.1345	1.8000e-004	1.6000e-004	4.1880
Total	3.6800e-003	4.2700e-003	0.0240	5.0000e-005	5.0600e-003	5.0000e-005	5.1100e-003	1.3400e-003	4.0000e-005	1.3900e-003	0.0000	4.5928	4.5928	1.8000e-004	2.3000e-004	4.6655

Happy Goat Experience - Mariposa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0294	0.2689	0.3233	5.4000e-004		0.0123	0.0123		0.0115	0.0115	0.0000	46.3698	46.3698	0.0110	0.0000	46.6439
Total	0.0294	0.2689	0.3233	5.4000e-004		0.0123	0.0123		0.0115	0.0115	0.0000	46.3698	46.3698	0.0110	0.0000	46.6439

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	1.8000e-004	2.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0366	0.0366	0.0000	1.0000e-005	0.0383
Vendor	5.0000e-005	1.6900e-003	3.0000e-004	0.0000	1.2000e-004	1.0000e-005	1.3000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.4217	0.4217	0.0000	6.0000e-005	0.4392
Worker	3.6300e-003	2.4000e-003	0.0237	5.0000e-005	4.9300e-003	4.0000e-005	4.9700e-003	1.3100e-003	3.0000e-005	1.3500e-003	0.0000	4.1345	4.1345	1.8000e-004	1.6000e-004	4.1880
Total	3.6800e-003	4.2700e-003	0.0240	5.0000e-005	5.0600e-003	5.0000e-005	5.1100e-003	1.3400e-003	4.0000e-005	1.3900e-003	0.0000	4.5928	4.5928	1.8000e-004	2.3000e-004	4.6655

Happy Goat Experience - Mariposa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1058	0.1516	0.7867	1.0300e-003	0.0900	1.5100e-003	0.0915	0.0242	1.4200e-003	0.0256	0.0000	94.9566	94.9566	0.0100	6.4900e-003	97.1403
Unmitigated	0.1058	0.1516	0.7867	1.0300e-003	0.0900	1.5100e-003	0.0915	0.0242	1.4200e-003	0.0256	0.0000	94.9566	94.9566	0.0100	6.4900e-003	97.1403

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	100.05	100.05	100.05	240,360	240,360
Total	100.05	100.05	100.05	240,360	240,360

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	14.70	6.60	6.60	0.00	100.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.387683	0.079726	0.215247	0.164897	0.068487	0.012960	0.007924	0.003946	0.000868	0.000352	0.045070	0.003731	0.009111

5.0 Energy Detail

5.1 Mitigation Measures Energy

[illegible]

Happy Goat Ecperience - Mariposa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

[illegible]

Mitigated

[illegible]

Happy Goat Experience - Mariposa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Happy Goat Experience - Mariposa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0119	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.2000e-004	5.2000e-004	0.0000	0.0000	5.5000e-004
Unmitigated	0.0119	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.2000e-004	5.2000e-004	0.0000	0.0000	5.5000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0119					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.2000e-004	5.2000e-004	0.0000	0.0000	5.5000e-004
Total	0.0119	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.2000e-004	5.2000e-004	0.0000	0.0000	5.5000e-004

Happy Goat Experience - Mariposa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0119					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.2000e-004	5.2000e-004	0.0000	0.0000	5.5000e-004
Total	0.0119	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.2000e-004	5.2000e-004	0.0000	0.0000	5.5000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

Happy Goat Experience - Mariposa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	11.1894	1.8100e-003	2.2000e-004	11.3000
Unmitigated	11.1894	1.8100e-003	2.2000e-004	11.3000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 34,553	11.1894	1.8100e-003	2.2000e-004	11.3000
Total		11.1894	1.8100e-003	2.2000e-004	11.3000

Happy Goat Experience - Mariposa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 34.553	11.1894	1.8100e-003	2.2000e-004	11.3000
Total		11.1894	1.8100e-003	2.2000e-004	11.3000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.5055	0.0299	0.0000	1.2522
Unmitigated	0.5055	0.0299	0.0000	1.2522

Happy Goat Experience - Mariposa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	2.49	0.5055	0.0299	0.0000	1.2522
Total		0.5055	0.0299	0.0000	1.2522

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	2.49	0.5055	0.0299	0.0000	1.2522
Total		0.5055	0.0299	0.0000	1.2522

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

Happy Goat Experience - Mariposa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

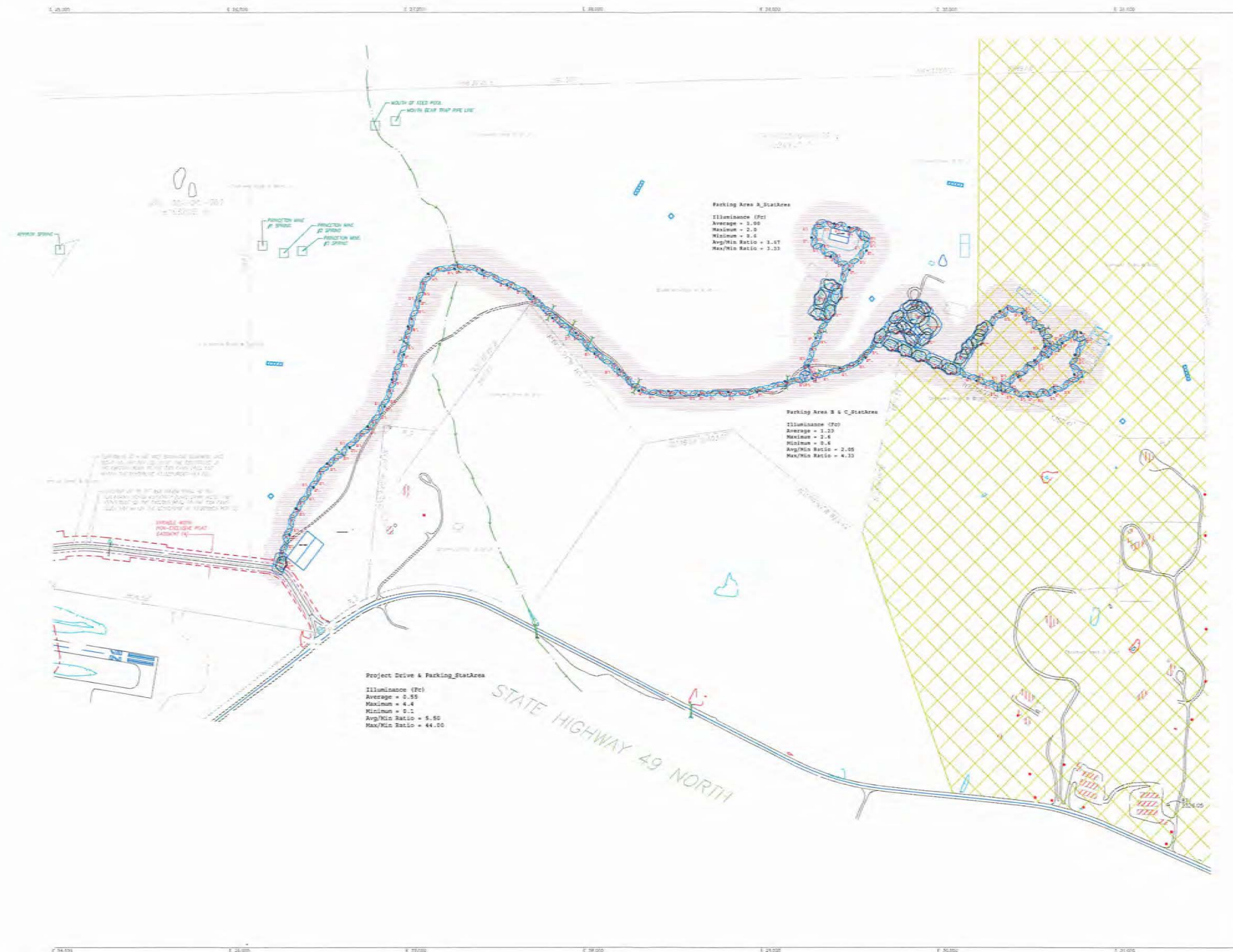
Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

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Luminaire Schedule												
Symbol	Qty	Label	Arrangement	Lum. Lumens	Lum. Watts	L2D	L2D	BF	LLF	IES Rating	[MANUFACT]	Description
	147	MS-60	GROUP	N.A.	N.A.	N.A.	N.A.	N.A.	0.900	N.A.	California Accent Lighting	MS2000-CAS-27W-DSFS-3W 60FT length 5 foot spacing
	52	PA18	Single	430	7.7	1.000	1.000	0.452	0.452	B0-TL-G0	RE Lighting Group	OSL-PL-4_5_2_5_50 in. Bar 45-degree tilt
	2	P9V-LA-SMQ-2E	Back-Back	7132	54	1.000	0.900	1.000	0.900	B1-DO-G0	COOPER LIGHTING SOLUTIONS - LONGER (FORMERLY EATON)	P9V-PA1A-710-C-SMQ 34180
	5	P9V-LA-T3	Single	6899	54	1.000	0.900	1.000	0.900	B1-DO-G0	COOPER LIGHTING SOLUTIONS - LONGER (FORMERLY EATON)	P9V-PA1A-710-C-T3
	18	P9V-LA-T4M	Single	6816	54	1.000	0.900	1.000	0.900	B1-DO-G0	COOPER LIGHTING SOLUTIONS - LONGER (FORMERLY EATON)	P9V-PA1A-710-C-T4M

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Parking Area A_StatArea	Illuminance	Fc	1.00	2.0	0.6	1.67	3.33
Parking Area B & C_StatArea	Illuminance	Fc	1.23	2.6	0.6	2.05	4.33
Project Drive & Parking_StatArea	Illuminance	Fc	0.55	4.4	0.1	5.50	44.00

HAPPY GOAT

Solid Waste Management Plan

- Happy Goat Inc.

5030 CYA Rd.

Mariposa, CA 95338

- 10/01/2023
- Project type: Farm Experience
- Size: 250 acres
- Responsible Parties:

Co-Founder

Jesse Fouch

PO BOX 834

Mariposa, CA 95338

Cell: 209-769-7180

Compost Manager

Chris Hart

5030 CYA RD

Mariposa, CA 95338

Cell: 530-598-4925

- Type of permit or project: Daily farm experience.
- List of materials and estimate of amounts to be generated for each material type weekly:
 - Food Waste - 16gal
 - Plastic Waste -32gal
 - Glass Waste -32gal
 - Metal Waste -32gal

- Animal Manure/straw - 32gal
 - Cardboard Waste -32gal
- Estimate of amount diverted (can separate into reuse & recycling categories) vs. amount to be landfilled.* 100% of food waste, animal manure/straw, and cardboard will be composted onsite. Plastic, glass, and metal will be separated and recycled.
- Recycling facilities receiving materials:
 - Mariposa Landfill Compost and Recycling Center
5593 Hwy 49N
Mariposa, CA 95338
 - Universal Recycling Service
450 N Tower Rd
Merced, CA 95341
- Disposal facilities:
 - Mariposa Landfill Compost and Recycling Center
5593 Hwy 49N
Mariposa, CA 95338
- Current Disposal Contractor:
 - Recology
4705 Hwy 49N
Mariposa, CA 95338

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FEB 28 2024



Mariposa County Planning Department

Memorandum

WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME

To: John Cahalin
Happy Goat, Inc.
110 SE 6th Street, 15th Floor
Ft. Lauderdale, FL 33301

From: Maio Tambellini, PE, TE
Nicole Scappaticci, PE

Date: December 8, 2023

Subject: Trip Generation Memorandum for the Happy Goat Farm Project

INTRODUCTION

This memorandum has been prepared to present a trip generation estimate and access evaluation for the proposed Happy Goat Farm Project (Project), located in Mariposa County (County) in support of the Project's Conditional Use Permit application. The Project is located northeast of the SR 49 & CYA Road intersection on an approximately 250-acre parcel designated as Assessor's Parcel Number (APN) 012-041-002. A portion of the Project site contains existing farming operations which would be separate from and unaffected by the proposed Project. The Project would develop a "Happy Goat Experience" that would cover approximately 29-acres of the site and involve guest tours, educational field trips, and occasional special events. Primary access to the Project would be provided via an improved Project Access Road connection to CYA Road approximately 470 feet north of SR 49. The County's General Plan Land Use Diagram designates the site as NR/Planning Study Area Mariposa TPA. The site is zoned MGZ (Mountain General Zone) and MTZ (Mountain Transition Zone). A Project site plan is included in **Attachment A**.

The Happy Goat Experience would operate seven days a week between 9:00am and 10:00pm. The Project site currently has 12 existing farm employees, and the proposed Happy Goat Experience would add up to 5 new employees. Typical operations would consist of up to approximately 175 visitors a day attending educational tours (for example, school field trips). Up to approximately once a month a special event may be held with a maximum guest count of 300 people.

This memorandum provides a daily and peak hour trip generation estimate for the Project based on proposed typical day-to-day operations and compares the Project against VMT screening criteria. Additionally, this memorandum includes corner sight distance and truck turn analyses at the CYA Road and SR 49 intersection.

PROJECT TRIP GENERATION

TYPICAL OPERATIONS

This memorandum conservatively assumed all Project employees would arrive in the morning during the AM peak hour and leave during the PM peak hour, resulting in 2 trips per employee per day. The Project's primary anticipated use is group tours/field trips, which would result in up to 175 visitors per day. Due to the high level of carpooling that occurs for these types of trips, group tours and field trips are anticipated to have an occupancy of 4 persons per vehicle. This would result in a total of approximately 44 visitor vehicles per day, or approximately 88 daily visitor trips. The visitors would primarily arrive in the mornings or afternoon and would stay several hours during the experience. This memorandum conservatively assumed all visitors would arrive during the AM peak hour and depart during the PM peak hour.

Table 1 provides a summary of the typical daily and peak hour trip generation for the Project. As shown in **Table 1**, the Project is estimated to generate a total of 98 daily weekday trips, with 49 AM peak hour trips (49 inbound and 0 outbound), and 49 PM peak hour trips (0 inbound and 49 outbound).

Table 1. Project Trip Generation

Trip Type	Quantity	Units	Daily Trips			AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total	In	Out	Total
Employees	5	Employees	5	5	10	5	0	5	0	5	5
Visitors	175	Visitors ¹	44	44	88	44	0	44	0	44	44
Total			49	49	98	49	0	49	0	49	49
<i>Notes:</i> ¹ Visitor groups have an expected occupancy of 4 persons per vehicle.											

Since the Project is only estimated to generate up to 49 peak hour trips, the Project traffic is not projected to cause any traffic operational deficiencies at nearby roadway facilities.

SPECIAL EVENTS

The Project site would host up to approximately one special event per month with a maximum allowable guest count of 300. Assuming the same occupancy of 4 persons per vehicle for special event traffic, the maximum daily traffic generated by the Project during a special event would be 80 vehicles (5 employee vehicles and 75 guest vehicles), which would result in up to 160 daily trips. Timing of special event traffic would vary and could occur on weekdays or weekends, inside or outside of peak commute hours.

VEHICLE MILES TRAVELED CONSIDERATIONS

Senate Bill 743 (SB 743), signed in 2013, required changes to CEQA guidelines on the measurement and identification of transportation impacts due to new projects in California. Revised CEQA Guidelines were adopted in 2018 which identified vehicle miles traveled (VMT) as the most appropriate metric to evaluate transportation impacts. Statewide implementation of assessment of VMT as a metric of transportation impact occurred for all jurisdictions on July 1, 2020. The Governor's Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA* (OPR Technical Advisory) (December 2018), contains technical recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures. As the County has not currently adopted guidelines for the analysis of VMT due to new developments, VMT analysis for the proposed Project has been performed in accordance with guidance from the OPR Technical Advisory.

The OPR Technical Advisory states that "Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact." As shown in **Table 1**, the Project is estimated to generate fewer than 110 daily trips on an annualized average basis. Note that VMT analysis typically considers annual average daily trips. Therefore, daily trips generated by special events would not be considered for VMT evaluation, as the special events would occur infrequently enough that they would not significantly affect annual average daily Project trips.

Based upon the above screening analysis, the VMT impact due to the Project is assumed to be less-than-significant. No further VMT analysis would be required.

ACCESS EVALUATION

This section includes an evaluation of corner sight distance and truck turns at the CYA Road & SR 49 intersection, as requested by Caltrans staff in a meeting on November 9, 2023.

CORNER SIGHT DISTANCE

Corner sight distance (CSD) was evaluated for the CYA Road & SR 49 intersection based on Chapter 400 of the Caltrans Highway Design Manual (HDM). Within the intersection's vicinity, SR 49 has a posted speed limit of 55 mph. The design speed was conservatively assumed to be 60 mph, which is 5 mph higher than the posted speed limit. Based on requirements for roadways with a design speed of 60 mph, the minimum CSD for vehicles making a right-turn from stop is 574 feet and the minimum CSD for vehicles making a left-turn from stop is 662 feet. The exhibit contained in **Attachment B** illustrates actual and minimum required CSD for the intersection. As shown in **Attachment B**, actual CSD at the CYA Road & SR 49 intersection meets or exceeds Caltrans requirements.

TRUCK TURNS

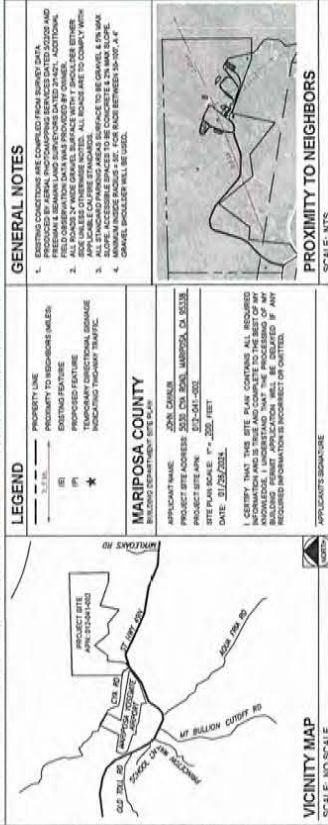
Inbound and outbound truck turns were evaluated for the CYA Road & SR 49 intersection using a 40-foot Single Unit (SU-40) Truck design vehicle. An SU-40 design vehicle is the largest design vehicle anticipated to visit the Project site. Exhibits contained in **Attachment C** illustrate ingress and egress turn templates for the intersection. As shown in **Attachment C**, the CYA Road & SR 49 intersection would accommodate the largest design vehicle anticipated to visit the Project site.

CONCLUSION

On a typical weekday, the Project is estimated to generate a total of up to 98 daily trips, with up to 49 AM peak hour trips, and 49 PM peak hour trips. Since the Project is only estimated to generate up to 49 peak hour trips, the Project traffic is not projected to cause any traffic operational deficiencies at nearby roadway facilities. Additionally, the 98 Project daily trips are below the OPR Technical Advisory screening criteria of 110 daily trips. Therefore, the VMT impact due to the Project is assumed to be less-than-significant and no further VMT analysis would be required.

The CYA Road & SR 49 intersection was found to meet or exceed Caltrans requirements for corner sight distance. A 40-foot Single Unit (SU-40) Truck design vehicle was used to evaluate inbound and outbound turns at the intersection. The CYA Road & SR 49 intersection would accommodate the largest design vehicle anticipated to visit the Project site.

ATTACHMENT A
PROJECT SITE PLAN



ATTACHMENT B
CORNER SIGHT DISTANCE – CYA ROAD & SR 49



HAPPY GOAT FARM

CORNER SIGHT DISTANCE - CYA ROAD AT SR 49

MARIPOSA COUNTY, CALIFORNIA

DECEMBER, 2023



150' 75' 0 150'



SCALE: 1" = 150'

LEGEND

VISIBLE AREA



LINE OF SIGHT



DESIGN SPEED = 60 MPH



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BUILDING RELATIONSHIPS ONE PROJECT AT A TIME

3301 O ST, BLDG. 100-B TEL 916.341.7760
SACRAMENTO, CA 95816 FAX 916.341.7767

ATTACHMENT C
TRUCK TURN ANALYSIS – CYA ROAD & SR 49

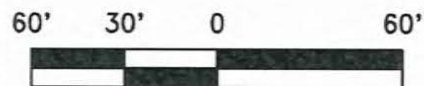
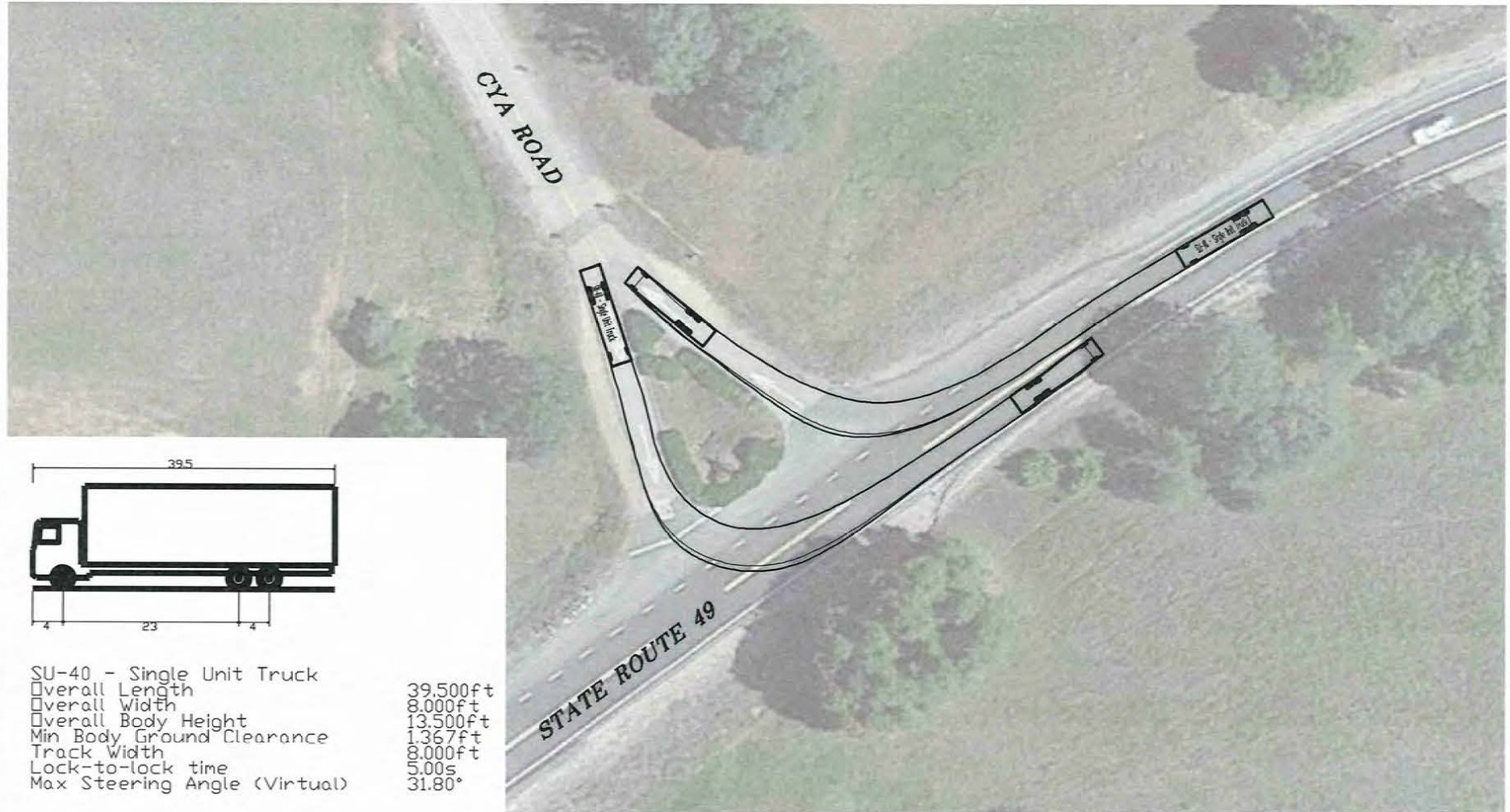


HAPPY GOAT FARM

TRUCK TURNS - RIGHT-TURN IN & LEFT-TURN OUT

MARIPOSA COUNTY, CALIFORNIA

DECEMBER, 2023



SCALE: 1" = 60'



WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME

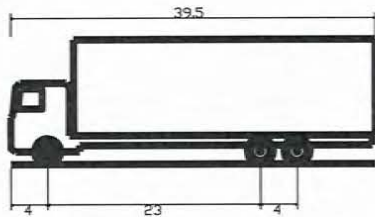
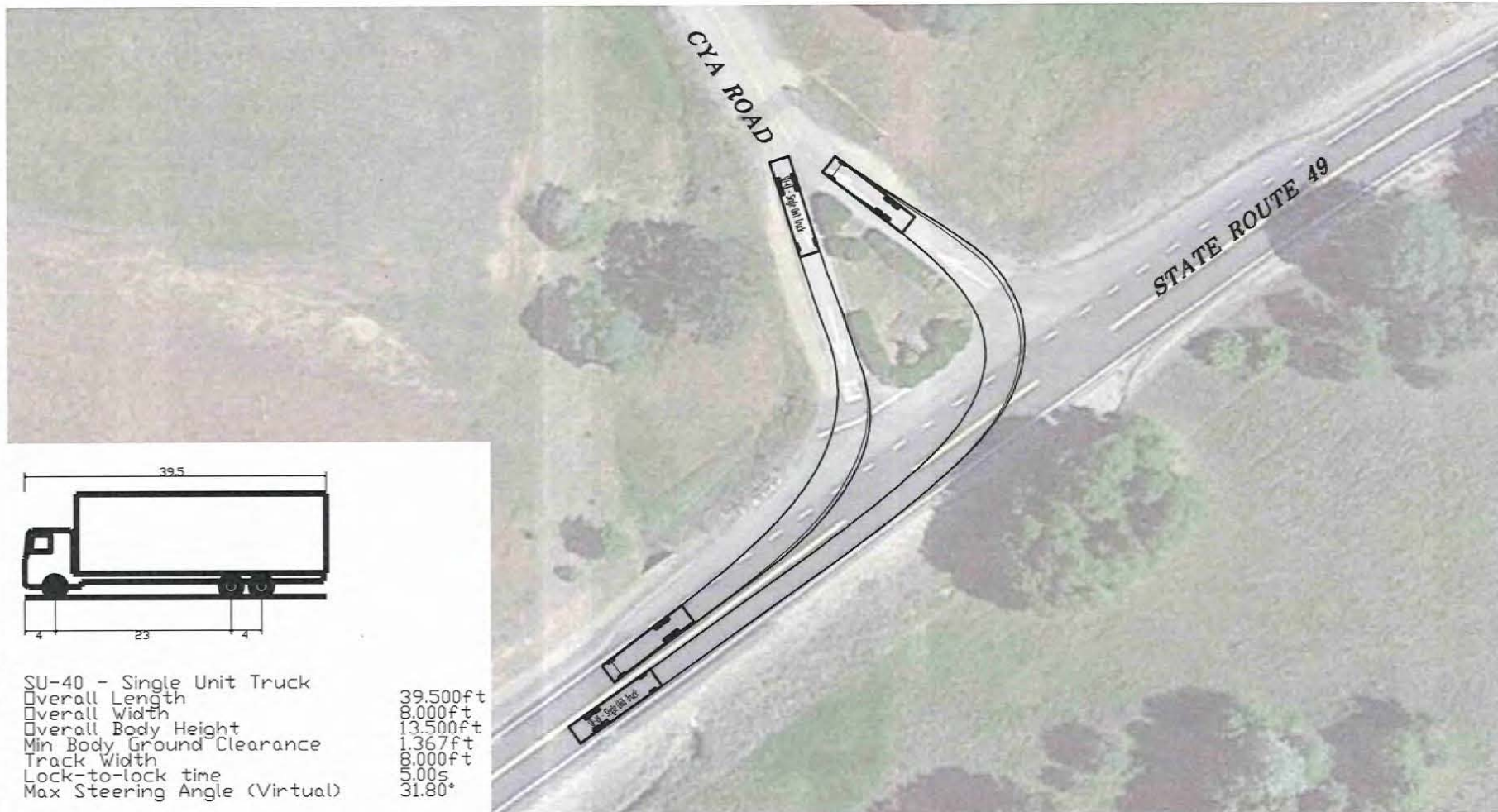
3301 O St, Bldg. 100-B TEL 916.341.7760
SACRAMENTO, CA 95816 FAX 916.341.7767



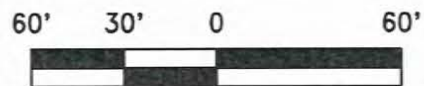
HAPPY GOAT FARM

TRUCK TURNS - LEFT-TURN IN & RIGHT-TURN OUT

MARIPOSA COUNTY, CALIFORNIA
DECEMBER, 2023



SU-40 - Single Unit Truck
Overall Length 39.500ft
Overall Width 8.000ft
Overall Body Height 13.500ft
Min Body Ground Clearance 1.367ft
Track Width 60.000ft
Lock-to-lock time 5.00s
Max Steering Angle (Virtual) 31.80°



SCALE: 1" = 60'


WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
3301 C St, Bldg. 100-B TEL 916.341.7760
SACRAMENTO, CA 95816 FAX 916.341.7767

David Niskanen

From: jesse@happygoat.co <jesse@visithappygoat.com> on behalf of jesse@happygoat.co
Sent: Thursday, January 9, 2025 12:59 PM
To: Mary Laux; John Cahalin; Steve Engfer
Cc: David Niskanen; Kaitlyn Casner; Brian Hodge; Carolyn Coder
Subject: Re: Request for info
Attachments: Happy Goat Water.pages

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Steve-

Here is the requested water info. Let me know if you need any additional information.

Happy Goat Water

Production -

There are 4 wells on site that produce 120 gpm, 15 gpm, 45 gpm, and 12 gpm. Each well has a tank pad of five 5,000 gal tanks. This is 25,000 gal of storage for each well, a total of 100,000 gal for the farm. The wells can produce 276,480 gal per day.

Existing Site Use-

We currently use no water for uses regarding the CUP.

Agricultural water use - Average 19,338 gal per day

Proposed CUP Demand -

At maximum use there would be 300 guests and 15 employees, with the average daily use of water for restrooms and handwashing at 15gal per person.

315 people X 15 gal = 4725 gal
Fire flow demand = 30,000 gal
Total Demand for CUP = 34,725 gal

Agricultural water use = 19,338 gal
CUP water use = 34,725 gal
Total daily water use = 54,063 gal

In Conclusion -

Happy Goat has 100,000 gal of water in storage and can produce 276,480 gal per day, for a total of 376,480 gal available water per day. It should be noted, Happy Goat has not even used any water from the 15 gpm well to date. It should also be noted that Happy Goat is a regenerative, permaculture designed farm utilizing key line design and many other of the most advanced water saving techniques.

Thank You

Jesse Fouch

[Happy Goat Inc.](#) - Co-Founder

[Savory Institute](#) - Associate Educator / EOVS Monitor

[Fouch Farms Inc.](#) - CFO

State of California
Well Completion Report
 Form DWR 188 Submitted 12/9/2021
 WCR2021-015662

Owner's Well Number _____ Date Work Began 11/02/2021 Date Work Ended 11/03/2021
 Local Permit Agency Mariposa County Health Department
 Secondary Permit Agency _____ Permit Number 1427 Permit Date 09/09/2021

Well Owner (must remain confidential pursuant to Water Code 13752)	Planned Use and Activity
Name <u>ECO EXTREME LLC, HAPPY GOAT,</u>	Activity <u>New Well</u>
Mailing Address <u>110 SE6 th Street</u>	Planned Use <u>Water Supply Domestic</u>
<u>15th Floor</u>	
City <u>ft</u> State <u>FL</u> Zip <u>33301</u>	

Well Location			
Address <u>0 N Hwy 49</u>		APN <u>012-040-099</u>	
City <u>Mariposa</u>	Zip <u>95338</u>	County <u>Mariposa</u>	Township <u>07 S</u>
Latitude <u>37</u> <u>17</u> <u>28.32</u> <u>N</u>	Longitude <u>-119</u> <u>34</u> <u>50.8799</u> <u>W</u>	Range <u>22 E</u>	Section <u>28</u>
Deg. Min. Sec.	Deg. Min. Sec.	Baseline Meridian <u>Mount Diablo</u>	
Dec. Lat. <u>37.2912</u>	Dec. Long. <u>-119.5808</u>	Ground Surface Elevation _____	
Vertical Datum _____	Horizontal Datum <u>WGS84</u>	Elevation Accuracy _____	
Location Accuracy _____	Location Determination Method _____	Elevation Determination Method _____	

Borehole Information	Water Level and Yield of Completed Well
Orientation <u>Vertical</u> Specify _____	Depth to first water <u>151</u> (Feet below surface)
Drilling Method <u>Downhole Rotary Hammer</u> Drilling Fluid <u>Water</u>	Depth to Static _____
	Water Level <u>80</u> (Feet) Date Measured <u>11/03/2021</u>
Total Depth of Boring <u>450</u> Feet	Estimated Yield* <u>12</u> (GPM) Test Type <u>Air Lift</u>
Total Depth of Completed Well <u>450</u> Feet	Test Length <u>6</u> (Hours) Total Drawdown _____ (feet)
	*May not be representative of a well's long term yield.

Geologic Log - Free Form		
Depth from Surface Feet to Feet		Description
0	42	Dirt & casing
42	150	Granite
150	151	Quartz- 3 GPM
151	250	Granite
250	251	Quartz - 5 GPM
251	400	Granite
400	401	Quartz - 4 GPM
401	450	Granite

Casings										
Casing #	Depth from Surface Feet to Feet		Casing Type	Material	Casings Specifications	Wall Thickness (inches)	Outside Diameter (inches)	Screen Type	Slot Size if any (inches)	Description
1	0	42	Blank	PVC	OD: 6.900 in. SDR: 17 Thickness: 0.405 in.	0.405	6.9			
1	42	450	Screen	PVC	OD: 4.500 in. SDR: SCH 40 Thickness: 0.237 in.	0.237	4.5	Milled Slots	0.32	

Annular Material				
Depth from Surface Feet to Feet		Fill	Fill Type Details	Filter Pack Size
0	42	Bentonite	High Solids	
42	450	Other Fill	See description.	No Fill

Other Observations:

Borehole Specifications		
Depth from Surface Feet to Feet		Borehole Diameter (inches)
0	42	12
42	450	6

Certification Statement			
I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief			
Name <u>YOSEMITE FALLS INC</u>			
Person, Firm or Corporation			
<u>P O BOX 1808</u>	<u>MARIPOSA</u>	<u>CA</u>	<u>95338</u>
Address	City	State	Zip
Signed <u>electronic signature received</u>	<u>12/09/2021</u>	<u>691117</u>	
C-57 Licensed Water Well Contractor	Date Signed	C-57 License Number	

DWR Use Only											
CSG #	State Well Number				Site Code				Local Well Number		
					N						W
Latitude Deg/Min/Sec						Longitude Deg/Min/Sec					
TRS:											
APN:											

State of California
Well Completion Report
Form DWR 188 Submitted 8/6/2021
WCR2021-009942

Owner's Well Number 2 Date Work Began 07/02/2021 Date Work Ended 07/07/2021
Local Permit Agency Mariposa County Health Department
Secondary Permit Agency _____ Permit Number 1377-B Permit Date 06/30/2021

Well Owner (must remain confidential pursuant to Water Code 13752)				Planned Use and Activity	
Name <u>ECO EXTREME LLC, HAPPY GOAT,</u>				Activity <u>New Well</u>	
Mailing Address <u>110 SE6 th Street</u>				Planned Use <u>Water Supply Domestic</u>	
<u>15th Floor</u>					
City <u>Ft. Lauderdale</u>		State <u>FL</u>		Zip <u>33301</u>	

Well Location					
Address <u>0 N State Highway 49</u>			APN <u>012-040-099</u>		
City <u>Mariposa</u>		Zip <u>95338</u>		County <u>Mariposa</u>	
Latitude <u>37</u> <u>18</u> <u>19.7999</u> <u>N</u>		Longitude <u>-120</u> <u>0</u> <u>41.3999</u> <u>W</u>		Township <u>07 S</u>	
Deg. Min. Sec.		Deg. Min. Sec.		Range <u>18 E</u>	
Dec. Lat. <u>37.3055</u>		Dec. Long. <u>-120.0115</u>		Section <u>21</u>	
Vertical Datum _____		Horizontal Datum <u>WGS84</u>		Baseline Meridian <u>Mount Diablo</u>	
Location Accuracy _____		Location Determination Method _____		Ground Surface Elevation _____	
				Elevation Accuracy _____	
				Elevation Determination Method _____	

Borehole Information			Water Level and Yield of Completed Well		
Orientation <u>Vertical</u>		Specify _____		Depth to first water <u>100</u> (Feet below surface)	
Drilling Method <u>Downhole Rotary Hammer</u>		Drilling Fluid <u>Water</u>		Depth to Static _____	
Total Depth of Boring <u>600</u> Feet		Water Level <u>50</u> (Feet)		Date Measured <u>07/07/2021</u>	
Total Depth of Completed Well <u>600</u> Feet		Estimated Yield* <u>45</u> (GPM)		Test Type <u>Air Lift</u>	
		Test Length <u>15</u> (Hours)		Total Drawdown _____ (feet)	
*May not be representative of a well's long term yield.					

Geologic Log - Free Form		
Depth from Surface Feet to Feet		Description
0	43	Dirt & Casing
43	100	Granite
100	101	Quartz - 15 GPM
101	450	Granite
450	451	Quartz - 20 GPM
451	550	Granite
550	551	Quartz - 10 GPM
551	600	Granite

Casings										
Casing #	Depth from Surface Feet to Feet		Casing Type	Material	Casings Specificatons	Wall Thickness (inches)	Outside Diameter (inches)	Screen Type	Slot Size if any (inches)	Description
1	0	43	No Casing Installed	PVC	OD: 6.900 in. SDR: 17 Thickness: 0.405 in.	0.405	6.9			
1	43	600	Screen	PVC	OD: 4.500 in. SDR: SCH 40 Thickness: 0.237 in.	0.237	4.5	Milled Slots	0.32	

Annular Material					
Depth from Surface Feet to Feet		Fill	Fill Type Details	Filter Pack Size	Description
0	43	Bentonite	High Solids		
43	600	Other Fill	See description.		No Fill

Other Observations:

Borehole Specifications			
Depth from Surface Feet to Feet		Borehole Diameter (inches)	
0	43	12	
43	600	6	

Certification Statement				
I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief				
Name	YOSEMITE FALLS INC			
	Person, Firm or Corporation			
P O BOX 1808	MARIPOSA	CA	95338	
Address	City	State	Zip	
Signed	electronic signature received	08/06/2021	691117	
	C-57 Licensed Water Well Contractor	Date Signed	C-57 License Number	

DWR Use Only														
CSG #	State Well Number					Site Code	Local Well Number							
					N									W
Latitude Deg/Min/Sec						Longitude Deg/Min/Sec								
TRS:														
APN:														

State of California
Well Completion Report
 Form DWR 188 Submitted 8/6/2021
 WCR2021-009943

Owner's Well Number 3 Date Work Began 07/07/2021 Date Work Ended 07/09/2021
 Local Permit Agency Mariposa County Health Department
 Secondary Permit Agency _____ Permit Number 1377 C Permit Date 06/30/2021

Well Owner (must remain confidential pursuant to Water Code 13752)		Planned Use and Activity	
Name <u>ECO EXTREME LLC, HAPPY GOAT,</u>	Activity <u>New Well</u>	Mailing Address <u>110 SE6 th Street</u>	Planned Use <u>Water Supply Domestic</u>
<u>15th Floor</u>			
City <u>Ft. Lauderdale</u> State <u>FL</u> Zip <u>33301</u>			

Well Location			
Address <u>0 N State Highway 49</u>		APN <u>012-040-099</u>	
City <u>Mariposa</u> Zip <u>95338</u> County <u>Mariposa</u>	Township <u>07 S</u>		
Latitude <u>37</u> <u>18</u> <u>21.5999</u> N Longitude <u>-120</u> <u>0</u> <u>45.7199</u> W	Range <u>18 E</u>		
Deg. Min. Sec.	Section <u>21</u>		
Dec. Lat. <u>37.306</u> Dec. Long. <u>-120.0127</u>	Baseline Meridian <u>Mount Diablo</u>		
Vertical Datum _____ Horizontal Datum <u>WGS84</u>	Ground Surface Elevation _____		
Location Accuracy _____ Location Determination Method _____	Elevation Accuracy _____		
	Elevation Determination Method _____		

Borehole Information	Water Level and Yield of Completed Well
Orientation <u>Vertical</u> Specify _____	Depth to first water <u>275</u> (Feet below surface)
Drilling Method <u>Downhole Rotary Hammer</u> Drilling Fluid <u>Water</u>	Depth to Static _____
	Water Level <u>120</u> (Feet) Date Measured <u>07/09/2021</u>
Total Depth of Boring <u>525</u> Feet	Estimated Yield* <u>15</u> (GPM) Test Type <u>Air Lift</u>
Total Depth of Completed Well <u>525</u> Feet	Test Length <u>12</u> (Hours) Total Drawdown _____ (feet)
	*May not be representative of a well's long term yield.

Geologic Log - Free Form		
Depth from Surface Feet to Feet		Description
0	45	Dirt & Casing
45	275	Granite
275	276	Quartz- 10.GPM
276	400	Granite
400	401	Quartz- 5 GPM
401	525	Granite

Casings										
Casing #	Depth from Surface Feet to Feet		Casing Type	Material	Casings Specificatons	Wall Thickness (inches)	Outside Diameter (inches)	Screen Type	Slot Size if any (inches)	Description
1	0	45	Blank	PVC	OD: 6.900 in. SDR: 17 Thickness: 0.405 in.	0.405	6.9			
1	45	525	No Casing Installed	Other	N/A					No Casing

Annular Material				
Depth from Surface Feet to Feet		Fill	Fill Type Details	Filter Pack Size
0	45	Bentonite	High Solids	
45	525	Other Fill	See description.	No Fill

Other Observations:

Borehole Specifications		
Depth from Surface Feet to Feet		Borehole Diameter (inches)
0	45	12
45	525	6

Certification Statement				
I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief				
Name <u>YOSEMITE FALLS INC</u>				
Person, Firm or Corporation				
<u>P O BOX 1808</u>		<u>MARIPOSA</u>	<u>CA</u>	<u>95338</u>
Address		City	State	Zip
Signed	<u>electronic signature received</u>	<u>08/06/2021</u>	<u>691117</u>	
	C-57 Licensed Water Well Contractor	Date Signed	C-57 License Number	

DWR Use Only												
CSG #	State Well Number				Site Code			Local Well Number				
					N						W	
					Latitude Deg/Min/Sec			Longitude Deg/Min/Sec				
TRS:												
APN:												

State of California
Well Completion Report
 Form DWR 188 Submitted 8/6/2021
 WCR2021-009941

Owner's Well Number _____ Date Work Began 07/01/2021 Date Work Ended 07/02/2021
 Local Permit Agency Mariposa County Health Department
 Secondary Permit Agency _____ Permit Number 1377 Permit Date 06/30/2021

Well Owner (must remain confidential pursuant to Water Code 13752)		Planned Use and Activity
Name <u>ECO EXTREME LLC, HAPPY GOAT,</u>	Activity <u>New Well</u>	
Mailing Address <u>110 SE6 th Street</u>	Planned Use <u>Water Supply Domestic</u>	
<u>15th Floor</u>		
City <u>Ft. Lauderdale</u> State <u>FL</u> Zip <u>33301</u>		

Well Location	
Address <u>0 N State Highway 49</u>	APN <u>012-040-099</u>
City <u>Mariposa</u> Zip <u>95338</u> County <u>Mariposa</u>	Township <u>08 S</u>
Latitude <u>37</u> <u>14</u> <u>39.8399</u> <u>N</u> Longitude <u>-119</u> <u>30</u> <u>47.8799</u> <u>W</u>	Range <u>22 E</u>
Deg. Min. Sec. Deg. Min. Sec.	Section <u>12</u>
Dec. Lat. <u>37.2444</u> Dec. Long. <u>-119.5133</u>	Baseline Meridian <u>Mount Diablo</u>
Vertical Datum _____ Horizontal Datum <u>WGS84</u>	Ground Surface Elevation _____
Location Accuracy _____ Location Determination Method _____	Elevation Accuracy _____
	Elevation Determination Method _____

Borehole Information	Water Level and Yield of Completed Well
Orientation <u>Vertical</u> Specify _____	Depth to first water <u>90</u> (Feet below surface)
Drilling Method <u>Downhole Rotary Hammer</u> Drilling Fluid <u>Water</u>	Depth to Static _____
Total Depth of Boring <u>150</u> Feet	Water Level <u>25</u> (Feet) Date Measured <u>07/02/2021</u>
Total Depth of Completed Well <u>150</u> Feet	Estimated Yield* <u>120</u> (GPM) Test Type <u>Air Lift</u>
	Test Length <u>4</u> (Hours) Total Drawdown _____ (feet)
	*May not be representative of a well's long term yield.

Geologic Log - Free Form		
Depth from Surface Feet to Feet		Description
0	36	Dirt & Casing
36	95	Granite
95	96	Quartz - 90 GPM
96	125	Granite
125	126	Quartz - 30GPM
126	150	Granite

Casings										
Casing #	Depth from Surface Feet to Feet		Casing Type	Material	Casings Specificatons	Wall Thickness (inches)	Outside Diameter (inches)	Screen Type	Slot Size if any (inches)	Description
1	0	36	Blank	PVC	OD: 6.900 in. SDR: 17 Thickness: 0.405 in.	0.405	6.9			
1	36	150	No Casing Installed	Other	N/A					No Casing

Annular Material					
Depth from Surface Feet to Feet		Fill	Fill Type Details	Filter Pack Size	Description
0	36	Bentonite	High Solids		
36	150	Other Fill	See description.		No Fill

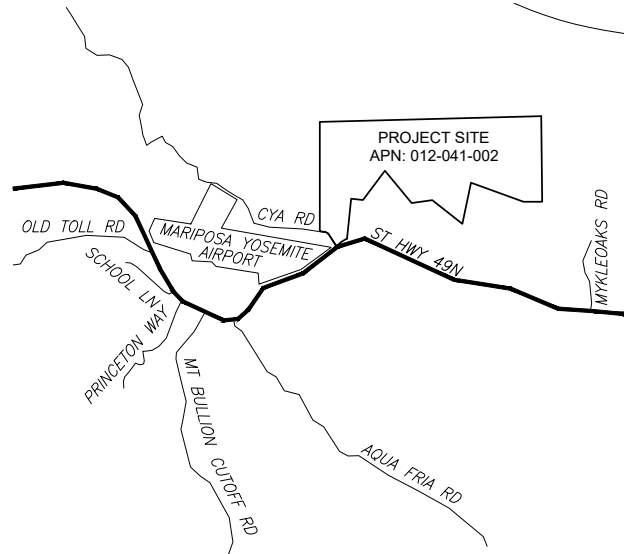
Other Observations:

Borehole Specifications		
Depth from Surface Feet to Feet		Borehole Diameter (inches)
0	36	12
36	150	6

Certification Statement				
I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief				
Name <u>YOSEMITE FALLS INC</u>				
Person, Firm or Corporation				
P O BOX 1808		MARIPOSA	CA	95338
Address		City	State	Zip
Signed	<u>electronic signature received</u>	08/06/2021	691117	
	C-57 Licensed Water Well Contractor	Date Signed	C-57 License Number	

DWR Use Only											
CSG #	State Well Number				Site Code			Local Well Number			
					N						W
Latitude Deg/Min/Sec						Longitude Deg/Min/Sec					
TRS:											
APN:											

C1_SITE PLAN - 20221146.DWG February 12, 2025



VICINITY MAP
SCALE: NO SCALE



MARIPOSA COUNTY

BUILDING DEPARTMENT SITE PLAN

APPLICANT NAME: JOHN CAHALIN
PROJECT SITE ADDRESS: 5030 CYA ROAD, MARIPOSA, CA 95338
PROJECT SITE APN: 012-041-002
SITE PLAN SCALE: 1" = 300 FEET
DATE: 07/18/2024

I CERTIFY THAT THIS SITE PLAN CONTAINS ALL REQUIRED INFORMATION AND IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE. I UNDERSTAND THAT THE PROCESSING OF MY BUILDING PERMIT APPLICATION WILL BE DELAYED IF ANY REQUIRED INFORMATION IS INCORRECT OR OMITTED.

APPLICANT'S SIGNATURE

LEGEND

---	PROPERTY LINE	---	EXISTING CULVERT
XX Mi.	PROXIMITY TO NEIGHBORS (MILES)	▲	ADDRESS/ EMERGENCY SIGNAGE
(E)	EXISTING FEATURE		
(P)	PROPOSED FEATURE		
★	TEMPORARY DIRECTIONAL SIGNAGE INDICATING TWO-WAY TRAFFIC.		

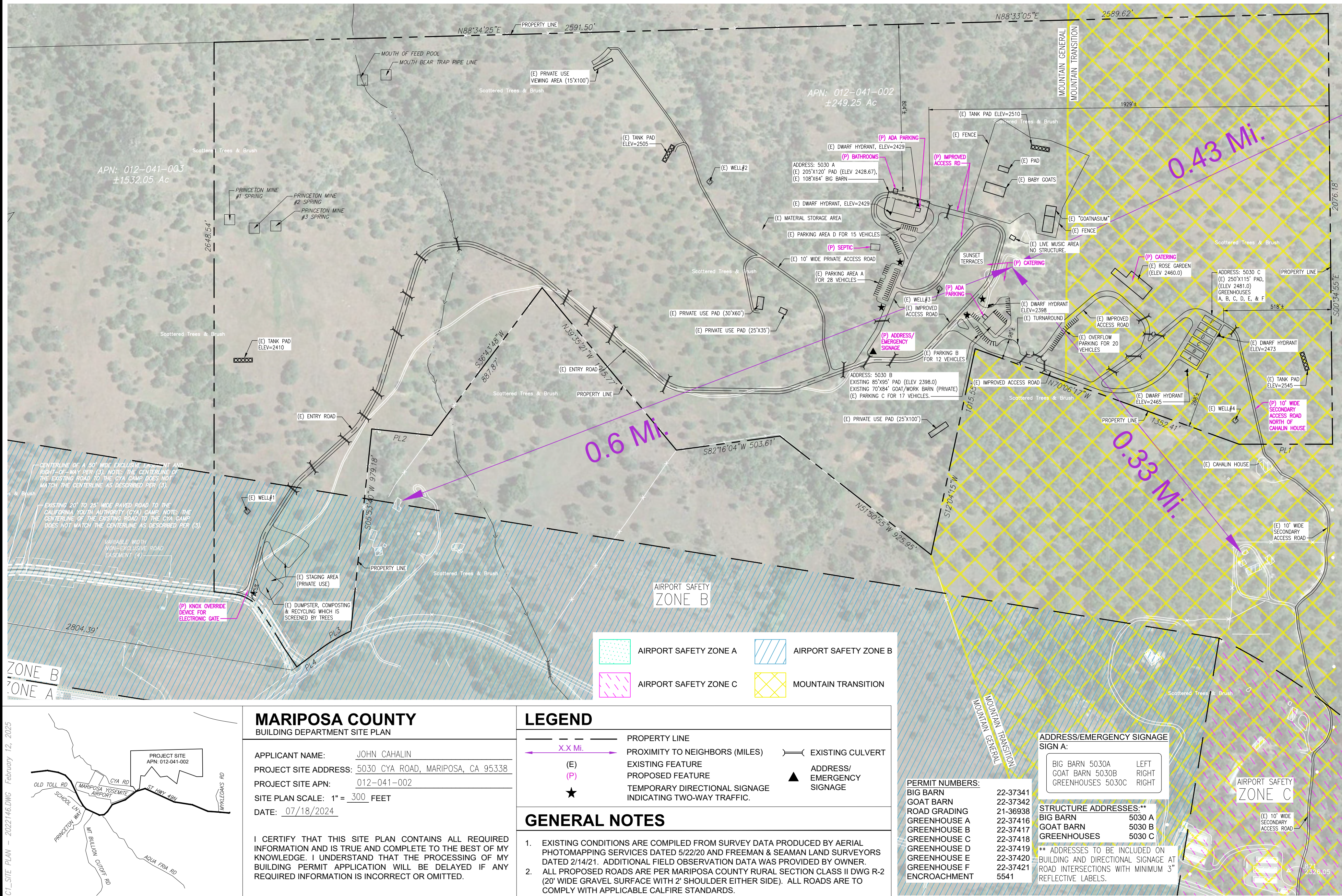
GENERAL NOTES

- EXISTING CONDITIONS ARE COMPILED FROM SURVEY DATA PRODUCED BY AERIAL PHOTOMAPPING SERVICES DATED 5/22/20 AND FREEMAN & SEAMAN LAND SURVEYORS DATED 2/14/21. ADDITIONAL FIELD OBSERVATION DATA WAS PROVIDED BY OWNER.
- ALL PROPOSED ROADS ARE PER MARIPOSA COUNTY RURAL SECTION CLASS II DWG R-2 (20' WIDE GRAVEL SURFACE WITH 2' SHOULDER EITHER SIDE). ALL ROADS ARE TO COMPLY WITH APPLICABLE CALFIRE STANDARDS.
- ALL PROPOSED STANDARD PARKING AREA SURFACE TO BE GRAVEL, ACCESSIBLE SPACES TO BE CONCRETE.
- MINIMUM INSIDE RADIUS = 50'. FOR RADII BETWEEN 50-100', A 4' GRAVEL SHOULDER WILL BE USED.

1

SITE PLAN

SCALE: 1" = 300'



DAX CONSULTING, INC.
4500 PARK GRANADA, SUITE 202
CALABAS, CALIFORNIA 91302
PHONE: (818) 806-8329

REVISIONS		BY	DATE
NO.	DESCRIPTION		
1	COUNTY REVISIONS		
2	SEPTIC REVISION		

PROJECT: **HAPPY GOAT FARM**
PROJECT ADDRESS: 5030 CYA ROAD
MARIPOSA, CA 95338

SITE PLAN

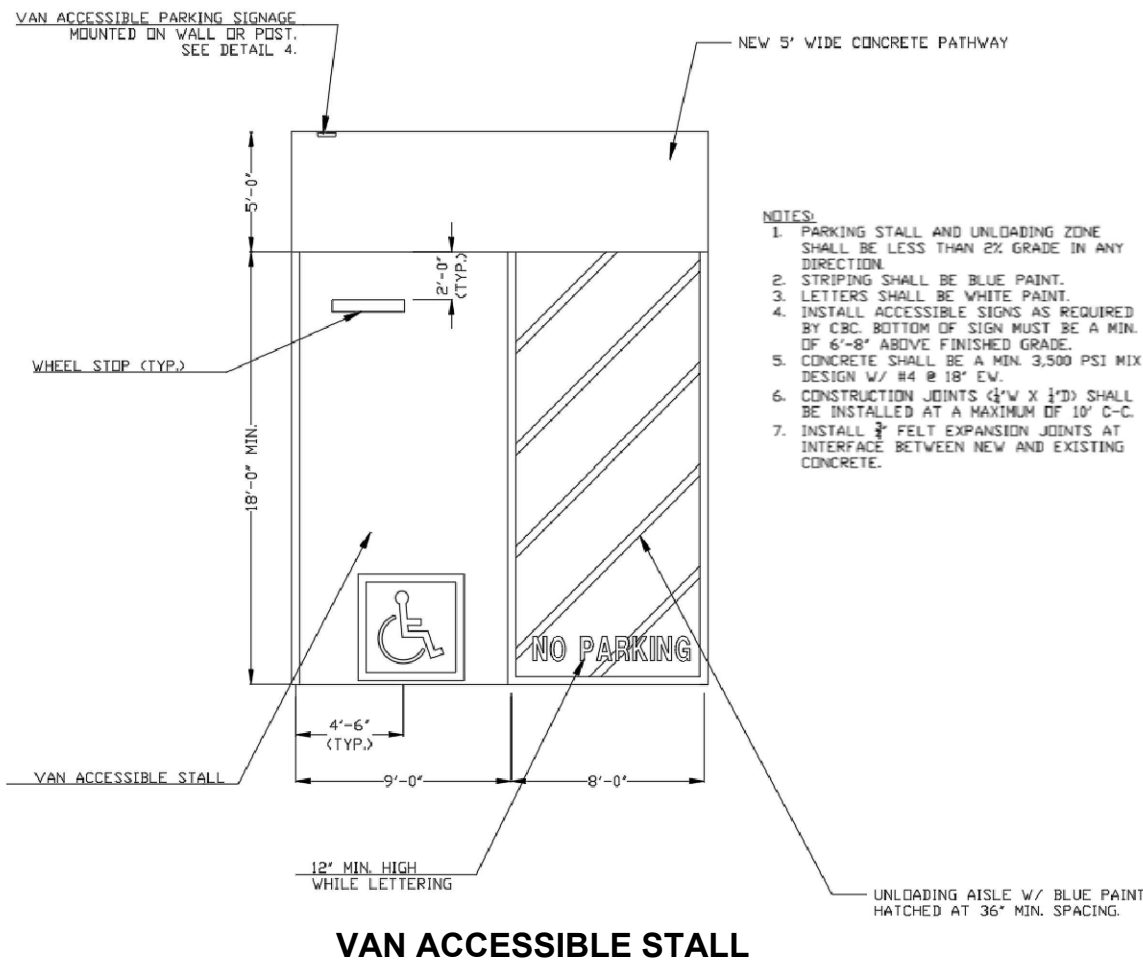
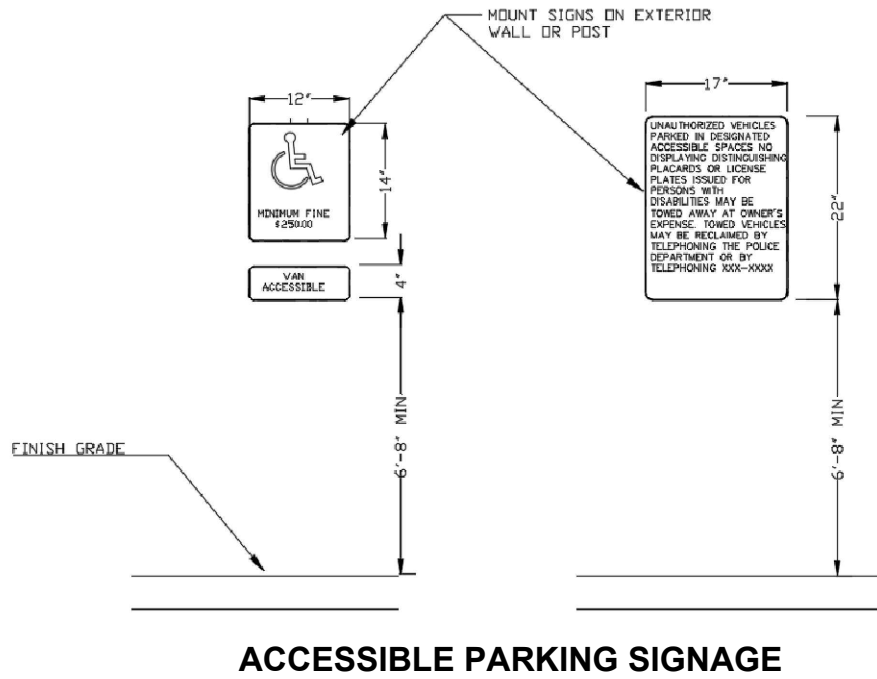
DESIGN: MJP	REVIEWED: DAX
DRAWN: MJP	
SCALE: AS SHOWN	DATE: 07/18/2024

C1.0

PROJECT NUMBER
2022-146



C1_SITE PLAN - 2022146.DWG February 11, 2025



4 ACCESSIBLE PARKING DETAILS
SCALE: NOT TO SCALE



5 OVERFLOW PARKING AREA
SCALE: 1" = 40'
0 20 40 80 U.S. SURVEY FEET



3 PARKING AREA D
SCALE: 1" = 40'
0 20 40 80 U.S. SURVEY FEET



2 PARKING AREA A
SCALE: 1" = 40'
0 20 40 80 U.S. SURVEY FEET



1 PARKING AREA B & C
SCALE: 1" = 40'
0 20 40 80 U.S. SURVEY FEET

DAX CONSULTING, INC.
4500 PARK GRANADA, SUITE 202
CALABAS, CALIFORNIA 91302
PHONE: (818) 806-8329

REVISIONS		NO.	DESCRIPTION	BY	DATE

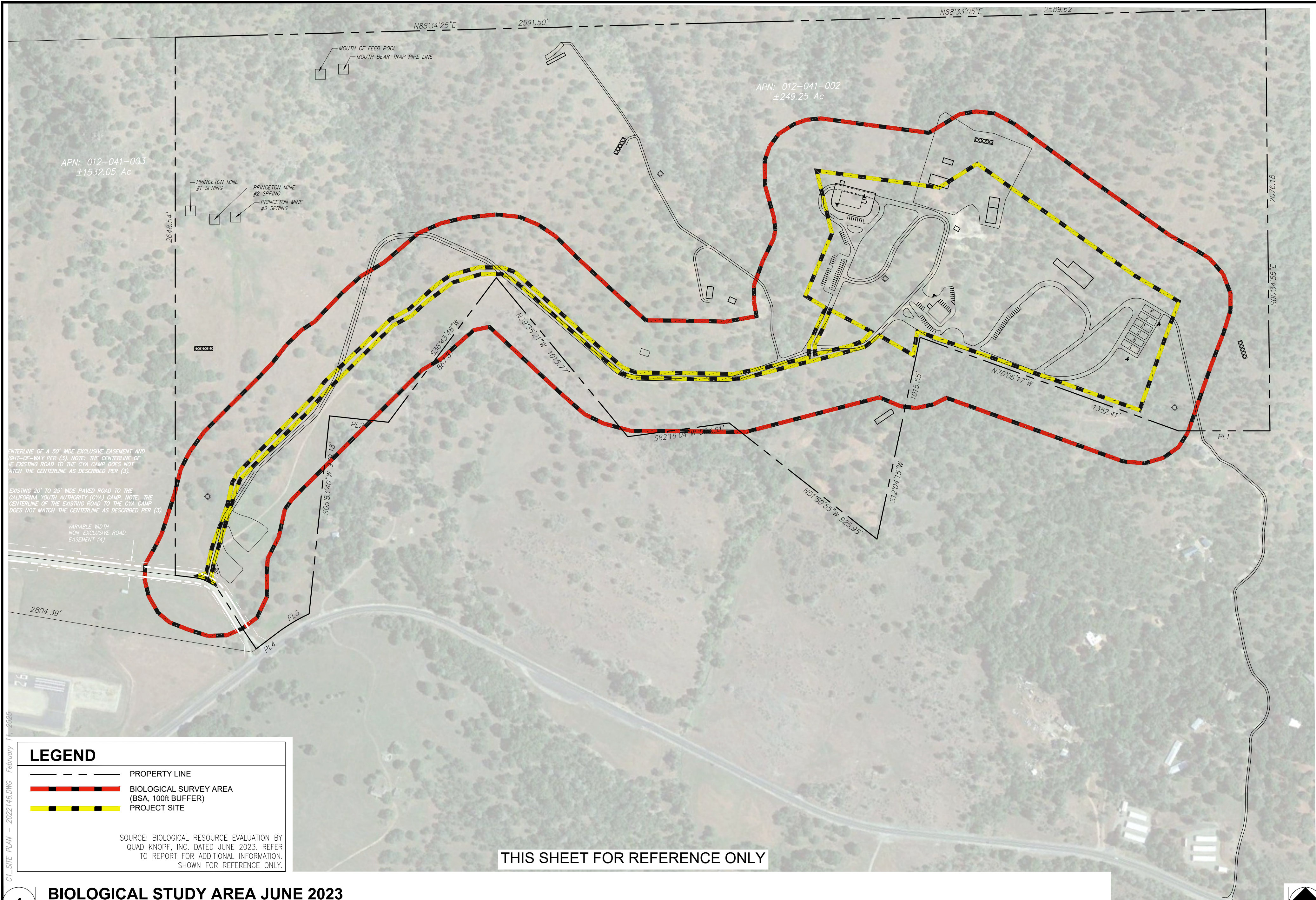
PROJECT:
HAPPY GOAT FARM
PROJECT ADDRESS:
5030 CYA ROAD
MARIPOSA, CA 95338

SHEET TITLE
PARKING AREA DETAIL

DESIGN: MJP	REVIEWED: DAX
DRAWN: MJP	
SCALE: AS SHOWN	DATE: 07/18/2024

C3.0
PROJECT NUMBER
2022-146

C1 SITE PLAN - 2022146.DWG February 11, 2025



LEGEND

- PROPERTY LINE
- BIOLOGICAL SURVEY AREA (BSA, 100ft BUFFER)
- PROJECT SITE

SOURCE: BIOLOGICAL RESOURCE EVALUATION BY QUAD KNOFF, INC. DATED JUNE 2023. REFER TO REPORT FOR ADDITIONAL INFORMATION. SHOWN FOR REFERENCE ONLY.

THIS SHEET FOR REFERENCE ONLY

1

BIOLOGICAL STUDY AREA JUNE 2023

SCALE: 1" = 300'

DAX CONSULTING, INC.
4500 PARK GRANADA, SUITE 202
CALABAS, CALIFORNIA 91302
PHONE: (818) 806-8329

REVISIONS

No.	DESCRIPTION	BY	DATE

PROJECT:
HAPPY GOAT FARM
PROJECT ADDRESS:
5030 CVA ROAD
MARIPOSA, CA 95338

SHEET TITLE
BIOLOGICAL STUDY AREA
JUNE 2023

DESIGN: MJP
DRAWN: MJP
SCALE: AS SHOWN
REVIEWED: DAX
DATE: 07/18/2024

C4.0

PROJECT NUMBER
2022-146

PERMIT NUMBERS:	
BIG BARN	22-37341
GOAT BARN	22-37342
ROAD GRADING	21-36938
GREENHOUSE A	22-37416
GREENHOUSE B	22-37417
GREENHOUSE C	22-37418
GREENHOUSE D	22-37419
GREENHOUSE E	22-37420
GREENHOUSE F	22-37421
ENCROACHMENT	5541



Existing Pad for
Mobile Catering

Existing Live Music Area (no structure, simply a designated area)

Proposed ADA
Parking

Proposed
Improved
Access Road

Proposed Container Bathrooms

Existing
"Goatnasium"

Existing Big Barn

Existing
Parking Area
"D" for 15
vehicles

Proposed Mobile Catering Areas
(no structures)

Existing
Parking Area
"A" for 28
vehicles

Existing Rose Garden

Existing Terraces

Existing Parking
Area "C" for 17
vehicles & 2
Proposed ADA
parking spaces

To Highway 49

HAPPY GOAT

LEGEND

2 Porta-potty
(approximate location)

Directional signage

Note: Everything shown in
this illustrative diagram is
for use by the public under
the CUP unless otherwise
noted.

Existing
Overflow
Parking for 20
vehicles

Existing Goat/Work Barn
* Private, not for visitors

Existing Parking
Area "B" for 12
vehicles

Existing Greenhouses