

**ARCHAEOLOGICAL RESOURCE ASSESSMENT
FOR
GLACIER FED FARMS
INYO COUNTY, CALIFORNIA
APN: 018-280-27**



PREPARED FOR

GLACIER FED FARMS
AND
INYO COUNTY PLANNING DEPARTMENT

PREPARED BY

TEAM

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Bishop, California

FINAL REPORT
December 6, 2021

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EXECUTIVE SUMMARY

Glacier Fed Farms are seeking a Conditional Use Permit to cultivate Commercial Cannabis at a property adjacent to Big Pine Creek in Inyo County (Figure 1). To assist the Inyo County Planning department with project permitting, TEAM Engineering & Management, Inc. (TEAM) has been retained to conduct an archaeological resource assessment of the subject parcel. The archaeological work was requested to determine if the proposed project would impact cultural resources eligible for the California Register of Historical Resources or the National Register of Historic Places, in support of California Environmental Quality Act (CEQA) compliance by the lead agency, the Inyo County Planning Department.

The archaeological field survey of the proposed project area was conducted on November 12, 2021, by TEAM's senior archaeologist, Mary Farrell. The project area is located on an artificial terrace created with earth-moving equipment approximately fifteen years ago; parts of the terrace have been graded recently. No cultural resource sites were encountered. A single obsidian flake was found on the artificial terrace, outside the proposed project area in a previously disturbed area. Its presence is not unexpected, given the long history of Indigenous occupation in the region and the well-documented use of the Fish Springs obsidian source, less than 10 miles away, for tool stone. Because the isolated flake does not meet the criteria for listing on either the State or National Registers, the proposed project would not affect any significant archaeological site.

1.0 INTRODUCTION

The proposed project location is about six miles west of the town of Big Pine, California, in Inyo County (Figure 1). Glacier Fed Farms is seeking a Conditional Use Permit (CUP) from Inyo County to cultivate commercial cannabis on private land, designated Assessor Parcel Number (APN 018-280-27). To meet Inyo County requirements, the cannabis cultivation area would be surrounded by an 8-foot-high chain link fence. Additional security would be provided by cameras and downward-facing motion sensor lights. Two “high tunnels” (one already on site) would be used for the cultivation. High tunnels function as greenhouses but require less ground disturbance: instead of a concrete foundation and a permanent superstructure, a high tunnel (also called a hoop greenhouse), has a series of hoops driven into the ground covered with flexible translucent material. It can be deconstructed and moved to a new location if needed. The cultivation would be conducted in accordance with organic agricultural standards would be located in an area that has already been disturbed by previous grading. New ground disturbance in the approximately one-acre project area is expected to be minimal but would include excavation of post holes for the chain link fence and to secure the high tunnels’ hoops to the ground. No changes are proposed to the existing water supply system or access road.

Jennifer Weston and Glacier Fed Farms requested that TEAM conduct an archaeological resource assessment to assist the Inyo County Planning department with its evaluation of the project. This archaeological assessment report is organized to be consistent with TEAM’s Biological Resource Assessment dated October 12, 2021, to facilitate the County’s review. It is anticipated that this information will be used by the Inyo County Planning Department to assist with California Environmental Quality Act (CEQA) compliance.

1.1 LOCATION AND ENVIRONMENTAL BACKGROUND

The proposed project area is located within a 12.03-acre parcel of private land along Big Pine Creek and south of Glacier Lodge Road (Figure 2). Within Inyo County Assessor Parcel Number APN 018-280-27, the physical address on record is 3086 Glacier Lodge Road, Big Pine, California. Cadastral location is T9S, R33E, SW¼ of the NE¼ of Section 32, MDBM. The parcel straddles the boundary between the Split Mountain 7.5-minute USGS quadrangle map and the Coyote Flat quadrangle, but the project area itself is completely within the Split Mountain quad.

Located on the east slope of the Sierra Nevada, Big Pine Creek flows west to east through a steep V-shaped valley for most of its length. The Glacier Fed Farms parcel, along with other private land, is located in Sage Flat, a relatively gently sloping area along the creek about 300 meters wide and about 1800 meters long with slopes generally 15 to 20 percent (~8 to 12 degrees). Elevation at the project location is approximately 6,890 feet above mean sea level (2,100 meters), and dominant vegetation consists of disturbed sagebrush-bitterbrush scrub. Species identified in the Biological Assessment Report include tumbleweed (*Salsola tragus*), big sagebrush (*Artemisia tridentata*), and antelope bitterbrush (*Purshia tridentata*). No trees occur at the proposed project location, but Jeffrey pines occur to the north of the project area starting approximately 30 meters from the proposed project location. The riparian area along Big Pine Creek, approximately 85 meters to the north, includes water birch (*Betula occidentalis*), arroyo willow (*Salix lasiolepis*), and black cottonwood (*Populus balsamifera*), among other riparian vegetation.

1.2 CULTURAL AND HISTORICAL CONTEXT

The region is the traditional home of the Nüümü and Newe, also called Owens Valley Paiute and Western Shoshone, whose oral histories place them in Owens Valley (Payahuunadü) and the surrounding mountains since the beginning of time (Bancroft et al. n.d.). The economy of the Indigenous People of the region focused on seed, nut, and plant gathering, horticulture, hunting, fishing, and trade. Community-constructed ditch systems irrigated important native plants. Although long-term settlements were located on the valley floor, people made use of the area from the top of the Sierra Nevada to the top of the Inyo and White Mountains and beyond. Trails along Big Pine Creek and through other canyons of the east slope provided access to the west slope of the Sierra Nevada. Obsidian available at several volcanic flows east of the Sierra Nevada crest was traded extensively, and the important Fish Springs obsidian source is located less than 10 miles from the project area. Archaeologists have suggested that obsidian tool production and trade reached its peak between 3800 and 1000 years ago (Hildebrandt et al. 2019), but trans-Sierran trade routes were important well into the twentieth century.

The Indigenous People shifted settlement patterns and resource use to adapt to changes in climate and weather throughout their history, but the greatest shifts in the settlement of the region began with the incursion of Euroamericans in the nineteenth century. In the 1850s representatives of the U.S. government told the Nüümü and Newe that Owens Valley (Payahuunadü) would be set aside for their continued use, but mineral discoveries in the 1860s spurred Euroamerican mining and ranching in the valley. The cattle grazed in the Indigenous fields and plant-collecting areas, which, along with the cutting of pinyon for lumber and firewood by the miners and ranchers, reduced the Paiute-Shoshone people to the brink of starvation by the winter of 1862. Descriptions of the ensuing battles and massacres are given in numerous accounts (e.g., Chalfant 1922, Wright 1879; for the Indigenous perspective, see Bancroft et al. n.d.). The army established Camp Independence near the present-day town of Independence in 1862, and, in 1863, forcibly removed nearly a thousand Paiute and Shoshone to Fort Tejon in the mountains south of Bakersfield.

Most of the Paiute-Shoshone eventually left Fort Tejon and returned to the Owens Valley, but found many of their habitation, food-growing, and resource-gathering areas occupied by Euroamerican ranchers and farmers. Deprived of their original means of subsistence, the Indigenous People camped in various areas to work on farms, ranches, and towns and integrated wage labor with traditional food gathering. In 1912 the Department of the Interior set aside nearly 69,000 acres of land in scattered parcels for Indian reservations (Kahrl 1982:352-353); in the 1930s most of these lands were transferred to the Los Angeles Department of Water and Power and the current, smaller reservations established at Big Pine, Bishop, and Lone Pine.

The export of water to Los Angeles that began in the twentieth century greatly reduced ranching and farming in the Owens Valley. Recreation and tourism have become the dominant industry in the region. Glacier Lodge, a mountain resort located about 2½ mile west of the project area, was founded in 1917 (Glacier Lodge 2013).

1.3 BACKGROUND RESEARCH

On October 26, 2021, a records search was initiated with the regional office of the California Historical Resources Inventory System (CHRIS) at the Eastern Information Center (EIC), University of California, Riverside. As the designated information center for Inyo, Mono, and Riverside counties, the Eastern Information Center maintains copies of archaeological reports and site records for the area. Due to a backlog at EIC, a preliminary version of this report, without the records search results, was provided to the Inyo County Planning Department on November 17, 2021. EIC was able to complete the records search on December 3, 2021. No archaeological surveys had been completed, nor any cultural resources recorded, in the proposed project area. A summary of the EIC records search results is included as an appendix.

A review of historic maps and Google Earth imagery provides additional information. The 1913 USGS Bishop quadrangle map shows an unnamed road along Big Pine Creek; near the project area, the road is on the south side of the creek. The 1913 map also depicts a structure a little less than 2 miles to the east along the creek. Government Land Office records indicate that the 120 acres of private land at Sage Flat was patented by Annie L. Steward in 1922 under the authority of the 1877 Desert Land Act. The private land is surrounded by public land managed by the Inyo National Forest, established in 1907. The Blue Star Mine (including a tunnel and open pit) is less than a mile to west-southwest of the project area; the mine first appears on the 1958 USGS Big Pine map, suggesting it was begun in the mid-twentieth century. Google Earth historical satellite images indicate the grading at the project area occurred between 2005 and 2009. Dustin Moore of Glacier Fed Farms noted that other grading on the parcel may date to the 1980s.

2.0 METHODS AND RESULTS

The archaeological field work was conducted on November 12, 2021. The project area is an artificial terrace created on a former hill slope. Originally the project area probably had a 15 percent slope, as does the surrounding hill side: the cut on the upper (southwest) edge of the graded area is up to 8 feet high and fill from the cut was pushed to the downhill (northeast) edge. As noted in the Biological Assessment, most of the project area is bare ground, but there are small shrubs of *Salsola tragus* (tumbleweed), *Purshia tridentata* (antelope bitterbrush), *Artemisia tridentata* (big sagebrush), and *Prunus andersonii* (desert peach).

For this archaeological assessment, the project area was examined with pedestrian transects approximately 5 meters apart. Noted were an old *International* truck, a loader, a backhoe bucket, cable, pipe segments and fittings, and the high tunnel (portable greenhouse) frame. With the possible exception of the still-operable truck, none of these materials would be considered historic.

One piece of obsidian debitage was observed. Found on the graded terrace, the interior flake of Fish Springs obsidian measures about 2 cm by 1.5 cm. Because of the disturbed context, the areas around the artificial terrace were examined to gauge the possibility that the flake was part of, or related to, an archaeological site in the vicinity. No additional cultural material was observed. The project area and area surveyed are shown in Figure 3.

3.0 RECOMMENDATIONS

Given the long history of Indigenous occupation in the region, the presence of an obsidian flake in the project area is not surprising. Isolated artifacts do not meet archaeological site criteria, and do not meet the criteria for listing on the California Register of Historical Resources or the National Register of Historic Places. The flake requires no further consideration in the CEQA analysis. No other archaeological resources were encountered.

It should be noted that this archaeological report does not address Tribal Cultural Resources. Tribal Cultural Resources often include archaeological sites, but they can also include places, objects, sites, or landscapes that are not discernible to, or adequately evaluated by, archaeologists. The Inyo County Planning Department is meeting the CEQA requirement to consider Tribal Cultural Resources through its compliance with Public Resources Code section 21080.3.2.

4.0 REFERENCES

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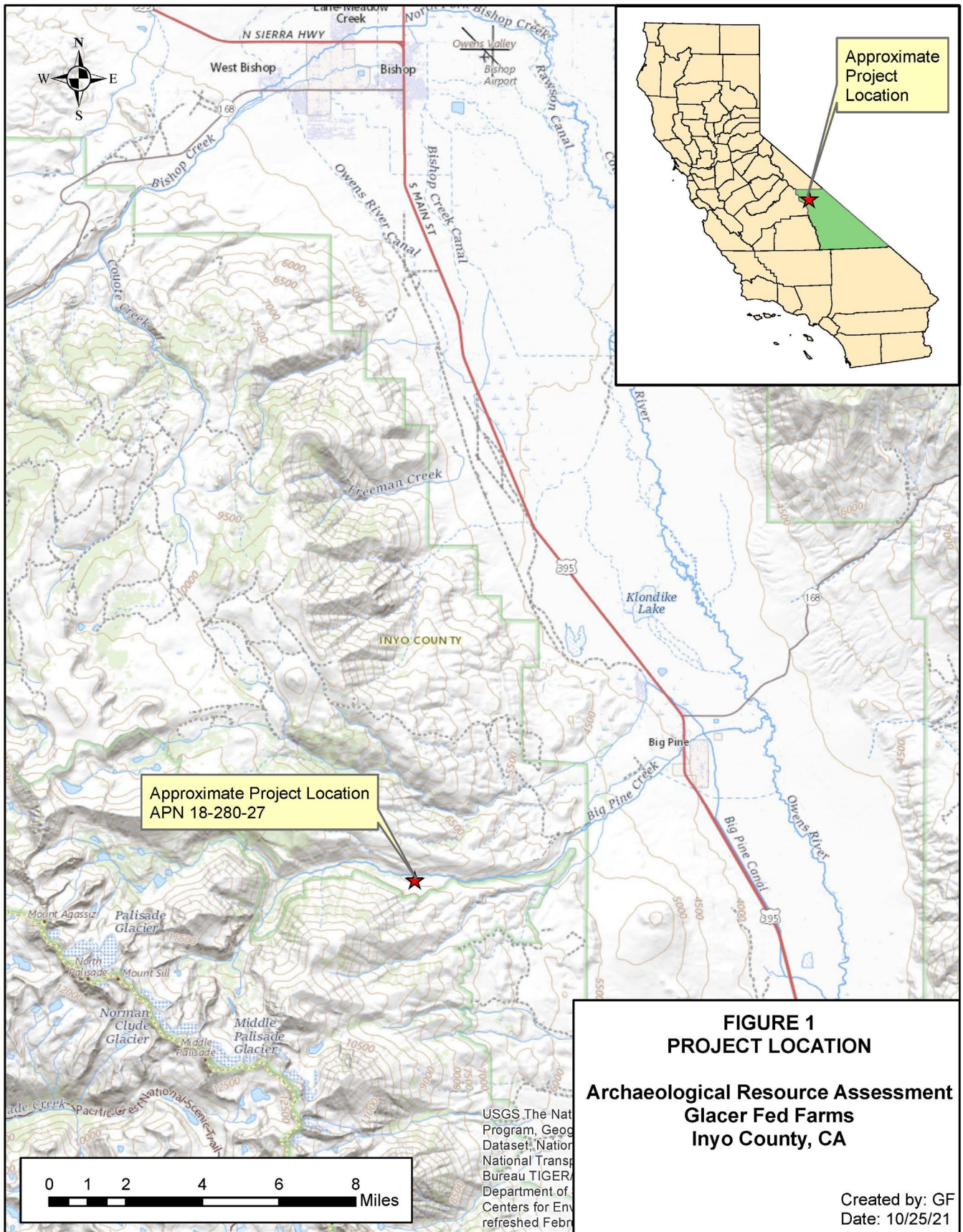
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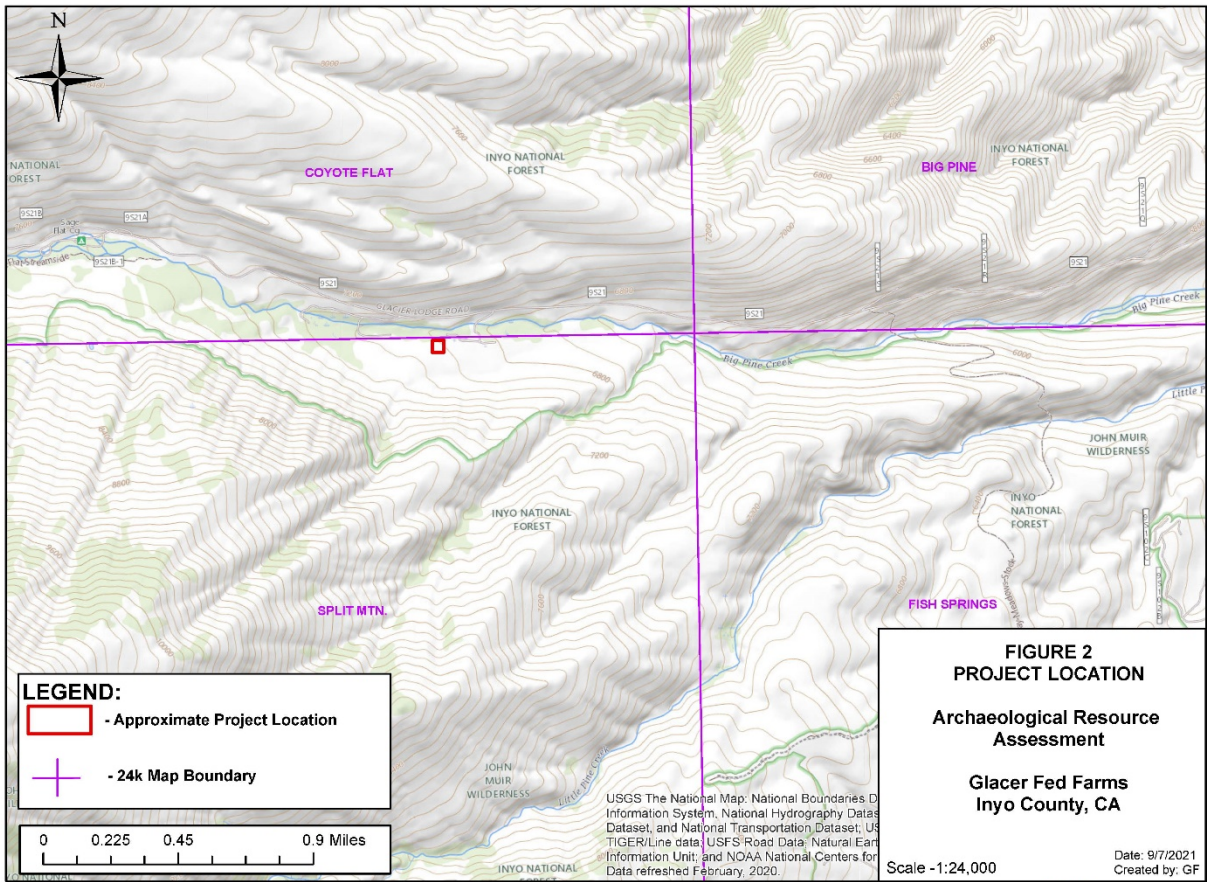
Approximate Project Location
APN 18-280-27

Approximate Project Location

**FIGURE 1
PROJECT LOCATION**
**Archaeological Resource Assessment
Glacier Fed Farms
Inyo County, CA**
USGS The Nat
Program, Geog
Dataset, Nation
National Transp
Bureau TIGER
Department of
Centers for Env
refreshed Febr

Created by: GF
Date: 10/25/21

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Figure 3, Glacier Fed Farms. Project area outlined in yellow, survey area outlined in green.

APPENDIX

RESULTS OF RECORDS SEARCH CONDUCTED BY THE CALIFORNIA HISTORICAL RESOURCES INFORMATION CENTER, EASTERN INFORMATION CENTER (EIC), UC RIVERSIDE December 3, 2021

The Eastern Information Center (EIC) at the University of California, Riverside, completed a records search for the Glacier Fed Farms project on December 3, 2021. As the designated regional office of the California Historical Resources Inventory System (CHRIS), EIC maintains copies of archaeological reports and site records for Inyo, Mono, and Riverside counties.

EIC records indicate that no archaeological surveys had been conducted within the Glacier Fed Farms project area, nor had any cultural resources been recorded there. Two surveys had been conducted in the vicinity, one by Robert Bettinger (1975) as part of his dissertation research, and one as part of an environmental review for a proposed water pipeline (Swenson and Wilke 1982). Two of Bettinger's sample survey quadrats were located within a mile of the Glacier Fed Farms project area; no cultural resources were recorded in either quadrat. During the pipeline survey, an archaeological site, designated CA-Iny-2233, was recorded as including 20 obsidian flakes and a biface fragment. Located approximately a half-mile from the project area, this site would not be impacted by the proposed Glacier Fed Farms project.

References:

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1975 The Surface Archaeology of Owens Valley, Eastern California: Prehistoric Man-Land Relationships in the Great Basin. CHRIS report number IN-00353.

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1982 An Archaeological Assessment of the Big Pine Creek Hydroelectric Project, Inyo County, California. CHRIS report number IN-00166.