

RESOLUTION NO. 68,734-N.S.

ADOPTING THE MITIGATED NEGATIVE DECLARATION (MND) AND MITIGATION MONITORING AND REPORTING PLAN (MMRP) FOR THE BERKELEY TUOLUMNE CAMP PERMIT (46690) PROJECT

WHEREAS, the City operated the Berkeley Tuolumne Camp, a residential family camp, since 1922 on United States Forest Service land pursuant to a special use permit; and

WHEREAS, in August 2013, the Berkeley Tuolumne Camp was destroyed by the California Rim Fire; and

WHEREAS, in accordance with the California Environmental Quality Act (CEQA), the City retained 2M Associates to prepare an Initial Study / Mitigated Negative Declaration environmental documents and associated Mitigation Monitoring and Reporting Plan to assess the environmental impacts of the proposed reconstruction and operation of Berkeley Tuolumne Camp Project Permit (No. 46690); and

WHEREAS, the MND determined that the Project will have less than significant environmental impacts if specific mitigations measures are implemented; and

WHEREAS, the City has received and responded to comments from the public and regulatory agencies and revised the Draft Initial Study / Mitigated Negative Declaration where appropriate; and

WHEREAS, there are no direct fiscal impacts associated with the process to adopt mitigated negative declaration and environmental documents.

NOW THEREFORE, BE IT RESOLVED that the Council of the City of Berkeley adopts the Berkeley Tuolumne Camp Project Permit (No. 46690) Final Initial Study / Mitigated Negative Declaration and the Mitigation Monitoring and Reporting Plan (Exhibit A) in accordance with the California Environmental Quality Act (CEQA).

The foregoing Resolution was adopted by the Berkeley City Council on January 22, 2019 by the following vote:

Ayes: Bartlett, Davila, Droste, Hahn, Harrison, Kesarwani, Robinson, Wengraf, and Arreguin.

Noes: None.

Absent: None.

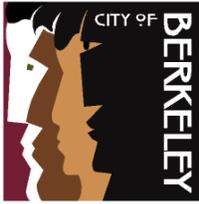


Jesse Arreguin, Mayor

Attest:



Mark Numainville, City Clerk



Parks, Recreation &
Waterfront Department

**NOTICE OF AVAILABILITY AND RELEASE OF RESPONSE TO COMMENTS AND FINAL MITIGATED
NEGATIVE DECLARATION/INITIAL STUDY (MND/IS) FOR THE
BERKELEY TUOLUMNE CAMP (46690) PERMIT PROJECT**

TO: All Interested Parties

PROJECT NAME: Berkeley Tuolumne Camp Permit (466690) Project

PROJECT LOCATION: 331585 Hardin Flat Road, Groveland, Tuolumne County, CA

PROJECT SPONSOR: City of Berkeley

PROJECT DESCRIPTION: The proposed Project would obtain a 30-year term Special Use Permit (SUP) from the Forest Service that will allow the City of Berkeley to reconstruct BTC facilities to current code and operate BTC much as it was prior to the Rim Fire. The new SUP would be expanded to approximately 30 acres (from its currently permitted 14 acres) and would include the Small Falls and Sugar Pine Trails that extend away from the main camp. About 14.5 acres of the permit area is proposed to be developed for parking, the main camp area, staff camp area, all support facilities and the Sugar Pine and Small Falls Trails. BTC would be designed to operate at a capacity that matches, but does not exceed, the pre-fire overnight staff and camper capacity of 360 individuals. The SUP would be issued for a term period of 30 years and may be renewed upon review and approval by the Forest Service. Because of the expanded 30-acre SUP area, a Forest Plan Direction amendment would be completed to accommodate the Camp.

ENVIRONMENTAL REVIEW – DRAFT MND/IS: The City of Berkeley issued a Draft Mitigated Negative Declaration/Initial Study (Draft MND/IS) for the Project on September 1, 2018 for a 30-day review period which concluded on October 1, 2018. The Draft MND/IS was sent to responsible agencies, organizations and individuals; and was posted on the City's website.

ENVIRONMENTAL REVIEW OF FINAL MND/IS: The review period for the Final MND/IS starts on December 11, 2018 and ends on December 21, 2018. All comments must be received by 5 pm on December 21, 2018 and sent to:

Liza McNulty, Program Manager
City of Berkeley
Parks, Recreation & Waterfront
2180 Milvia Street, Third Floor
Berkeley, CA 94704

Preparation of the Responses to Comments has been overseen by the City's Parks, Recreation & Waterfront Department and the conclusions and recommendations made in the document represent the independent views and recommendations of the City. The Response to Comments and Final MND/IS is available on the City's website at:

https://www.cityofberkeley.info/Parks_Rec_Waterfront/Recreation/Tuolumne_Camp.aspx.

ADOPTION OF FINAL MND/IS: The Berkeley City Council will consider adopting the Berkeley Tuolumne Camp Permit (46690) Mitigated Negative Declaration and Mitigation Monitoring and Reporting Plan on January 22, 2019 at its regular City Council Meeting held at 1231 Addison Street, Berkeley, CA 94702.



City of Berkeley
Parks Recreation & Waterfront

CITY OF BERKELY TUOLUMNE CAMP (46690) PERMIT PROJECT

RESPONSE TO COMMENTS

December 2018

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OF
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CAMP (46690) PERMIT PROJECT
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CHAPTER

1

INTRODUCTION

This Response to Comments document contains the public and agency comments received during the public review period for the *Berkeley Tuolumne Camp Permit (46690) Draft MND/IS* (MND/IS) and responses to each of those comments.

The MND/IS is an informational document intended to disclose to responsible agencies and the public the environmental consequences of approving and implementing the Berkeley Tuolumne Camp Permit (46690) (Project). All written comments received during the public review period (September 1, 2018 through October 1, 2018) on the Draft MND/IS are addressed in this Response to Comments document. A public hearing was held on the Project on September 12, 2018. Oral comments received during the public hearing are also addressed in this Response to Comments document.

The responses addressing public comments on the Draft MND/IS correct, clarify and supplement text in the Draft MND/IS as appropriate. Also included are text changes made at the initiative of the City of Berkeley (City), the Lead Agency. These changes (summarized in Chapter 2) do not alter the conclusions of the Draft MND/IS. Rather, they expand on or clarify those initial conclusions. This document has been prepared in conformance with the California Environmental Quality Act (Public Resources Code 21000, et seq. and California Code of Regulations, Title 14, Chapter 3, Section 15000, et seq.).

The City must file a Notice of Determination (NOD) within five working days after deciding to approve the Project with the Tuolumne County Clerk. The Tuolumne County Clerk will post the NOD which starts a 30-day statute of limitations on court challenges to the approval of the Project under CEQA (California Code of Regulations, Title 14, Chapter 3, Section 15075).

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2.1 INTRODUCTION

This chapter presents corrections, additions and revisions made to the Draft MND/IS initiated by the City, reviewing agencies, and the public. New text is indicated in underline and text to be deleted is reflected by ~~strike through~~. Text changes are presented in the section and page order in which they appear in the Draft MND/IS.

The changes made to this Draft MND/IS represent clarifications/amplifications of the analysis contained in the Draft MND/IS based on on-going review by City staff and consultants and do not constitute significant new information that, in accordance with Section 15088.5 of the *CEQA Guidelines* would trigger the need to recirculate portions or all of the Draft MND/IS.

2.1.1 TEXT CHANGES

Since publication of the Draft MND/IS, City staff working with the Project design team have refined elements of the BTC design. None of the changes to the Project Description alter any of the significance findings in the Draft Initial Study. Additionally, text changes address typographical errors, new information collected since publication of the Draft MND/IS and points of clarification in response to public comments.

Page MND-3: Mitigation Measure AIR-1 is clarified:

- AIR-1** A construction-phase Dust Control Plan (DCP) shall be prepared prior to the start of any Project construction activity. The DCP shall include, at a minimum, all basic emission control measures (listed below) ~~and any additional measures applicable to the project and necessary to reduce off-site migration of fugitive dust:~~

Page MND-4: Mitigation Measure AIR-2 is clarified:

- AIR-2** Acquire burn permits from the Tuolumne County Air Pollution Control District. The California Air Resources Board provides daily information on “burn” or “no burn” conditions. Burning shall be prohibited on “no burn” days. Design and implement burn plans to minimize particulate emissions. Notify the Groveland District Wildlife Biologist prior to pile burning to minimize disturbance to protected or sensitive species.

Page MND-5: Mitigation Measures BIO-5, BIO-6 and BIO-8 are clarified:

- BIO-5** Conduct a pre-construction plant survey the spring prior to Project construction. Flag and avoid new occurrences of sensitive plants. Notify the Groveland Ranger District Botanist to determine ~~course of action~~ any additional measures.
- BIO-6** ~~During breeding season (February 15 to September 15), c~~Conduct pre-construction nest surveys for migratory birds, California spotted owls, and northern goshawks within ¼ mile of construction activities ~~implemented during the breeding season (February 15 to September 15)~~. If active nests are discovered, protective measures such as nest buffers or limited operations would be implemented in consultation with a USFS biologist.
- BIO-8** If any Forest Service Sensitive (FSS) or Federal-listed terrestrial wildlife species are discovered within the BTC project site area prior to or during ground disturbance and construction activities, such activities shall cease and not restart until USFS biologist certifies that continued construction would not cause any harm to listed species ~~a USFS biologist shall be contacted for recommendations as to how to proceed~~.

Page MND-10: Mitigation Measure LUP-1 is clarified:

- LUP-1** ~~Submit all plans to~~Obtain confirmation from the Forest Service ~~for consistency review that the Project is consistent with the Forest Plan Direction and~~ prior to Camp construction.

Page IS-2: The Project Background of the Draft Initial Study is revised to provide a more detailed description of the pre-fire BTC facilities and operations:

Founded in 1922, the BTC was used as a family institution since its inception. Though not the first public municipal camp established in the Stanislaus National Forest, it is the only camp dating to the 1920s that remained in continuous use by a single municipality until the Rim Fire. Recreational structures at BTC prior to the Rim Fire included 78 Tent Cabins, 25 staff housing structures, Restroom / Shower Buildings, a Dining Hall, Recreation Hall, Nature Center, Stage and Amphitheater, Office, Store, Sports Courts, Archery Range, Seasonal Weir and Swimming Hole, Kiddie Kamp and Sauna. The pre-fire BTC facilities are shown in Figure 2 (refer to Map Package). Infrastructure on site included pedestrian bridges, driveway and parking, electric and phone service, multiple propane tanks, water intake and treatment facilities, and wastewater collection and treatment systems. BTC generally operated at its full capacity of 300 campers and 60 staff from late May through early September (set up and close down activities by staff typically began in April and were completed by November). The primary program at BTC for over 90 years prior to the Rim Fire was 'Family Camp', a multigenerational program that included arts and crafts and guided nature exploration, weekly campfires and talent shows, sports and swimming, and a weekly show performed by staff for Campers. In addition to Family Camp, BTC also operated

~~youth, teen leadership, and adult 50+ programs. For 91 years it has been enjoyed by thousands and has become a generational tradition for many Berkeley families.~~

Page IS-5: Section 3.3 Proposed Project Program of the Draft Initial Study is revised to correct typographical errors, and to clearly indicate the Special Use Permit area, requirements, and the proposed operating period of the reconstructed BTC:

~~The proposed Project would obtain a 30-year term Special Use Permit (SUP) from the Forest Service that will allow the City to reconstruct Camp facilities to current code and operate the Camp much as it was prior to the Rim Fire. The new SUP would be expanded to approximately 30 acres and would include two trails known as the Small Falls and Sugar Pine Trails that extend away from the main camp. About 14.5 acres of the permit area is proposed to be developed for parking, the main camp area, staff camp area, all support facilities and the Sugar Pine and Small Falls Trails. In order to support all Camp facilities and program operations, including protection of cultural resources, incorporation of the Sugar Pine and Small Falls Trails, and all infrastructure requirements, the new Permit Area will be approximately 30 acres. However, not all of that 30 acres will involve facility development. About 14.5 acres of the permit area is proposed to be developed for access from Hardin Flat Road, the main camp area south of the river, parking and the staff camp area north of Hardin Flat Road, accessible paths of travel, trails and the leach field area. The remainder of the area will consist of undeveloped forest lands that serve as the setting for the Camp.~~

~~Prior to the Rim Fire, BTC typically operated at capacity. BTC would be designed to operate at a capacity that matches, but does not exceed, the pre-fire overnight staff and camper capacity/occupancy of 360 individuals. BTC would operate during the same period as it did before the fire, generally between April and November inclusive of Camp set-up and take-down. BTC would be closed during the winter months. The SUP would be issued for a term period of 30 years and may be renewed upon review and approval by the Forest Service. Figure 3 (map package) illustrates the BTC permit areas. Because of the expanded 30-acre SUP area, a Forest Plan Direction amendment would be completed to accommodate the Camp.~~

~~The City's reconstruction of BTC is consistent with Forest Service policy encouraging organization camp facilities and programs that promote environmental education, hiking, fishing and similar forest-related activities (FSH 2709.14, Policy 13.2). The reconstruction is also aligned with Forest Service objectives to provide, under special use authorization, sufficient suitable facilities and services that supplement or complement those provided by the private sector, state and local government on private land, and the Forest Service on NFS land to meet public needs to facilitate the use, enjoyment, understanding and appreciation of natural resource settings in National Forests (FSM 2340.2).~~

~~Working in partnership, the Forest Service and the City developed the following project understandings: 1) the Project will result in no increase in camper capacity/occupancy over~~

pre-fire capacity/occupancy; 2) the Project will be consistent with current laws and regulations including E.O. 11988, Floodplain Management (FEMA 1977a) and consistency with the Forest Plan; and 3) the Project will provide for the protection of all cultural resources. In addition the Camp Special Use Permit will require the City to comply with applicable laws, codes, and ordinances. Tuolumne County will review and issue permits for the project. The new Dining Hall foundation would be constructed outside the existing 100-year floodplain and the finished floor elevation of the hall and associated decking, while perhaps cantilevered, would be above the 100-year floodplain.

Figure 4 (map package) illustrates the overall Facility Concept and Figure 5 illustrates the Central Camp Facilities Concept Plan.

Page IS-9: Table 1 under Project Description is revised to present the green building features incorporated into the Project:

Revegetation and erosion control (Map Package; Figure 2.01-5)	<ul style="list-style-type: none"> Erosion control mulching; liner and container planting; plant protection and hand weeding; temporary irrigation or hand watering for establishment period 	6 acres
Green Building Features		
<u>Operating Energy</u>	<ul style="list-style-type: none"> <u>Installation of infrastructure for seven future electrical vehicle charging stations.</u> <u>Installation of infrastructure for future roof-mounted photovoltaic panels at Dining Hall and Recreation Hall</u> <u>Lighting systems incorporate high efficiency LED fixtures. Exterior lighting will be minimal. Lighting controls turn lights off when not in use</u> <u>Windows and screen openings located to allow illumination of interior spaces with minimal use of electrical lighting</u> <u>All buildings designed for passive cooling and heating. No mechanical cooling systems. Mechanical heating systems installed only at the Dining Hall and Manager’s Cabin, minimized or eliminated elsewhere to the maximum extent accepted by jurisdiction having authority.</u> 	<u>Most of the tent cabins will not have lights, walls, roofing, windows, mechanical heating/cooling or insulation.</u>
<u>Passive Cooling</u>	<ul style="list-style-type: none"> <u>Buildings and porches oriented to reduce solar heat gain at walls, windows and screen openings</u> <u>Slider/double hung windows and large screened openings located to allow maximum natural ventilation</u> <u>Large louvers located on the highest point of Dining Hall and Recreation Hall ceilings will exhaust hot air. Movement of air will be assisted by ceiling fans</u> <u>Corrugated metal roofing installed to allow heat to be exhausted through corrugation channels and ridge vent to reduce radiant transfer to roofing assembly and building interior</u> <u>Walls and roof insulated to reduce heat gain and continuous insulation is used at roof to reduce thermal bridging through framing members</u> <u>All windows and glass doors have dual pane insulated glazing</u> <u>Concrete slab-on-grade buildings partially dug into grade to reduce temperature swing during hot days</u> 	
<u>Passive Heating</u>	<ul style="list-style-type: none"> <u>Joints and junctures sealed to reduce heat loss.</u> <u>Walls, roof and floor insulated and dual pane insulated glazing to reduce heat loss</u> 	

<p><u>Embodied Carbon</u></p>	<ul style="list-style-type: none"> • <u>Structural framing wood dimensional and engineered lumber</u> • <u>All redwood dimensional lumber, siding and trim certified as sustainably harvested from a well-managed forest</u> • <u>Use of concrete kept to minimum: building retaining walls integrate slab-on-grade to reduce large footings; site retaining walls built from dry-stacked boulders in lieu of concrete with a maximum height of 8 feet</u> • <u>Plastic foam roof insulation specified with pentane or CO2 blowing agents</u> 	
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Page IS-21: To avoid confusion regarding the regulatory setting and jurisdictions having authority, text is edited under Section 7, Agriculture and Forestry Resources, Section 2a:

a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps and prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

The proposed BTC permit area is designated Public under the Tuolumne County General Plan (County of Tuolumne 1996) and Public under the Tuolumne County Ordinance Code (County of Tuolumne). ~~The “Public” designation is assigned to lands owned by public agencies, such as USFS, and are exempt from Tuolumne County land use regulations.~~ The BTC permit area is within the SNF and contains no farmlands. As a result, the Project would not convert any Farmland.

Page IS-25: Section 3 Air Quality, Impact Discussion, third sentence on page 25 is deleted for clarity:

~~With Project completion, BTC would have air pollutant emissions less than the Camp’s pre-Rim Fire emissions because the new facilities would be built according to the requirements of current more energy-efficient building codes.~~

Pages IS-28-29: For clarity, Mitigation Measure AIR-1 and AIR-2 are revised:

AIR-1 A construction-phase Dust Control Plan (DCP) shall be prepared prior to the start of any Project construction activity. The DCP shall include, at a minimum, all basic emission control measures (listed below) ~~and any additional measures applicable to the project and necessary to reduce off-site migration of fugitive dust.~~

AIR-2 Acquire burn permits from the Tuolumne County Air pollution Control District. The California Air Resources Board provides daily information on "burn" or "no burn" conditions. Burning shall be prohibited on “no burn” days. Design and implement burn plans to minimize particulate emissions. Notify the Groveland District Wildlife Biologist prior to pile burning to minimize disturbance to protected or sensitive species.

Page IS-33: The breeding season of the California Spotted Owl contains a typographical error and is corrected:

The breeding cycle of the California spotted owl is sensitive to disturbance extends from mid-February to mid or late-~~August~~. ~~September~~.

Page IS-43: For clarity, Mitigation Measures BIO-5, BIO-6 and BIO-8 are revised:

- BIO-5** Conduct a pre-construction plant survey the spring prior to Project construction. Flag and avoid new occurrences of sensitive plants. Notify the Groveland Ranger District Botanist to determine ~~course of action~~ any additional measures.
- BIO-6** ~~During the breeding season (February 15 to September 15),~~ conduct pre-construction nest surveys for migratory birds, California spotted owls, and northern goshawks within ¼ mile of construction activities ~~implemented during the breeding season (February 15 to September 15)~~. If active nests are discovered, protective measures such as nest buffers or limited operations would be implemented in consultation with a USFS biologist.
- BIO-8** If any Forest Service Sensitive (FSS) or Federal-listed terrestrial wildlife species are discovered within the BTC project site area prior to or during ground disturbance and construction activities, such activities shall cease and not restart until USFS biologist is consulted, recommended measures are implemented, and USFS biologist certifies that continued construction would not cause any harm to listed species. ~~a USFS biologist shall be contacted for recommendations as to how to proceed.~~

Pages IS 52-53: To clarify Project GHG emissions would be less than significant, text is added to Section 7 Greenhouse Gas Emissions Subsections 7a and 7b of the Draft Initial Study:

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The California Emissions Estimator Model (CalEEMod, Version 2016.3.2) was used to quantify the proposed Project's GHG emissions ~~associated with Project construction activities and Project operation~~.

For Project construction, GHG emission rates for state-average construction equipment (as included in the CalEEMod database) were applied to Project-specific construction activities and equipment (as listed in Chapter 2 Project Description Table 3). Applying this model to the Total Project construction GHG emissions would be 314.7 metric tons of CO_{2e} and its annual emissions in the first year of operation would be 82.6 metric tons of CO_{2e} (assuming that all construction activity would occur in the year 2019, a worst-case scenario because the state-average construction fleet will emit less GHG emissions in subsequent future years). No California air district has set a CEQA significance threshold for construction GHG emissions. Neither the Tuolumne County Air Pollution Control District nor the San Joaquin Valley Air Pollution Control District have quantitative significance thresholds for operational GHG emissions

For Project operation, CalEEMod was initialized according to its land use type/size (i.e., number of family/staff tent cabins to be built with provision for electricity) and with Project-specific motor vehicle trips (see Section 16 Transportation and Circulation) and Project-specific water use data (see Section 18 Utilities and Service Systems). The model's interim total GHG emissions were adjusted further in proportion to the Project's planned operation only during the summer season (15 weeks, rather than a full year's 52 weeks). The adjusted total Project annual operational GHG emissions as shown in Table A would be 82.6 metric tons of CO_{2e}. Both Project construction and operational GHG emissions are well below the quantitative thresholds adopted by other California Air Districts and would comply with adopted GHG reduction plans, as discussed in Subsection 7b below), thus, Project GHG emissions impacts are less than significant.

**TABLE A: PROJECT ANNUAL OPERATIONAL GREENHOUSE GAS EMISSIONS
(metric tons/year)**

Project GHG Source	CO₂	CH₄	N₂O	CO_{2e}
<u>Area</u>	<u>< 0.1</u>	<u>0</u>	<u>0</u>	<u>< 0.1</u>
<u>Energy Use</u>	<u>41.7</u>	<u>< 0.1</u>	<u>< 0.1</u>	<u>41.9</u>
<u>Motor Vehicles</u>	<u>32.8</u>	<u>< 0.1</u>	<u>< 0.1</u>	<u>32.9</u>
<u>Solid Waste Disposal</u>	<u>1.2</u>	<u>0.1</u>	<u>0</u>	<u>2.9</u>
<u>Water Use</u>	<u>3.2</u>	<u>0.1</u>	<u>< 0.1</u>	<u>5.0</u>
Total	78.9	0.1	< 0.1	82.6
Significance Thresholds				1,100
Significant Impact?				No

Source: CalEEMod (Version 20163.2) initialized with Project-specific parameters relating to its land use type/size, motor vehicle trip generation, water use and its planned operation only during summer months.

Note: Quantitative thresholds adopted by other California air districts range from 1,100 – 3,000 MT CO_{2e} per year. The minimum quantitative threshold of 1,100 MT is used for this analysis.

b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

GHG emissions from the reconstructed BTC would not exceed its pre-Rim Fire level. The Project would reconstruct BTC utilizing green building measures (see Table 1 in the Project Description). As presented in Table A, Project annual operational GHG emissions would be below the lowest established California air district significance threshold. Thus, the Project would not conflict with the goals of AB 32 or any other State climate change prevention or adaptation strategies, a less than significant impact.

Pages IS 64-65: For clarity regarding Stormwater drainage systems, text is edited under Section 2, Hydrology and Water Quality, Section 9e:

Storms that exceed the rainfall intensities of the ten-year design storm return frequency would exceed the capacity of the storm drain system. ~~Major storm flow patterns would be investigated to ensure that storms that exceed the~~ Project grading would ensure that flows in excess of the design capacity of the storm drainage facilities are safely channeled directed to disposal in the South Fork Tuolumne River.

Page IS 74: Mitigation Measure LUP-1 is clarified:

LUP-1 ~~Submit all plans to~~ Obtain confirmation from the Forest Service for consistency review that the Project is consistent with the *Forest Plan Direction* and prior to Camp construction.

Page IS 75: Text is added to clarify mineral resources on the site.

a) Would the project 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?

The proposed BTC SUP area is within the SNF and the *Forest Plan Direction* (USDA 2017) does not identify the Project site as an area containing mineral resources. The Project would not prevent the reasonable access to the South Fork Tuolumne River for valid mining claimants to conduct authorized mining activities. The Project would not materially interfere with any current or reasonably foreseeable mining operations.

CHAPTER

3

COMMENTS AND RESPONSES

This chapter contains the comment letters received in response to the Draft MND/IS during the public review period (September 1, 2018 through October 1, 2018). Each comment letter is numbered, each comment is further identified by sub-number and responses are provided for each comment. The responses amplify or clarify information provided in the Draft MND/IS and/or refer the reader to the appropriate places in the document where the requested information can be found. Comments that are not directly related to environmental issues (e.g., opinions on the merits of the project unrelated to its environmental impacts) may either be discussed or noted for the record. Where text changes in the Draft MND/IS are warranted based on comments received, updated project information, or information provided by agencies, those changes are included in the response to comment, and are also listed in Chapter 2 of this Response to Comments document.

The changes to the analysis contained in the Draft MND/IS represent clarifications/amplifications and do not constitute significant new information. In accordance with Section 15088.5 of the *CEQA Guidelines*, recirculation of the Draft MND/IS is not required.

Table 1 presents a list of state and local agencies and individuals providing written comments on the Draft MND/IS and oral comments heard during the public hearing for the proposed Project.

TABLE 1: LIST OF COMMENTERS

Letter Number	Date of Letter	Commenter
State and Local Agencies		
1	September 24, 2018	Department of Transportation
2	October 2, 2018	Central Valley Regional Water Quality Control Board
Organizations		
3	September 10, 2018	Central Sierra Environmental Resource Center
4	September 25, 2018	Friends of Berkeley Tuolumne Camp
Individuals		
5	September 11, 2018	Mariko H. Roberts
6	September 12, 2018	Cameron Woo
7	September 17, 2018	Lucinda Chipponeri & family
8	September 18, 2018	Carol Hart
9	October 1, 2018	Claudia Kawczynska, Member of Parks and Waterfront Commission
10	October 1, 2018	Peggy O'Day
11	October 1, 2018	Cameron Woo
Public Hearing Oral Comments – September 12, 2018		
		Phil Coffin
		Richard Thomison
		Cameron Woo
		Kathy Brown

3.1 STATE AND LOCAL AGENCIES

DEPARTMENT OF TRANSPORTATION

DISTRICT 10 PLANNING DIVISION

P.O. BOX 2048, STOCKTON, CA 95201

(1976 E. DR. MARTIN LUTHER KING JR. BOULEVARD 95205)

PHONE (209) 948-7325

FAX (209) 948-7165

TTY 711

www.dot.ca.gov

*Making Conservation
a California Way of Life.*

September 24, 2018

**10-TUO-120-Post Mile (PM) R50.350
City of Berkeley Tuolumne Camp
Permit 46690 Project
Initial Study (IS) and Mitigated Negative
Declaration (MND)
State Clearing House (SCH#) 2018082070**

Ms. Liza McNulty, PE
Capital Improvement Program Manager
City of Berkeley
Parks, Recreation & Waterfront Department
2180 Milvia Street, Third Floor
Berkeley, CA 94704

Dear Ms. McNulty:

The California Department of Transportation (Caltrans) appreciates the opportunity to review the Initial Study (IS) and Mitigated Negative Declaration (MND), State Clearing House (SCH#) 2018082070 for the City of Berkeley Tuolumne Camp Permit (46690) Project. The proposed project is the reconstruction of the Berkeley Tuolumne Camp which was destroyed during the 2013 Rim Fire. The project would maintain capacity of Camp facilities at pre-Rim Fire condition, that is 360 campers and staff, and would provide new facilities meeting current building codes and environmental standards. The project is located at the Stanislaus National Forest, Groveland Ranger District, 331585 Hardin Flat Road, Groveland, Tuolumne County, California.

Caltrans has reviewed the IS/MND and has the following comments:

1-1

The proposed site plan Initial Study states that the proposed project will only have access on Hardin Flat Road. The address of the campground has a closer proximity and more probability of using Golden Arrow Road to its access. Will it be signed to indicate the camp users will only use Hardin Flat Road as its access? Any proposed directional signs that may need to be installed by the applicant must be outside of the State highway right of way (R/W) and in accordance with State Outdoor Advertising Program regulations and Federal laws.

Ms. Liza McNulty
September 24, 2018
Page 2

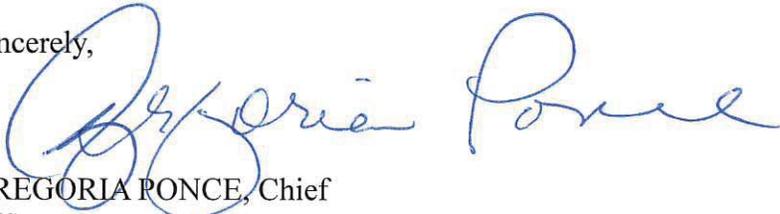
1-2 If work is to occur within Caltrans R/W and during bird nesting season (Feb 15 – September 1), the project proponent will be required to complete a pre-construction bird survey. Rare plants have been previously identified near the project area (slender-stemmed monkeyflower and Small's southern clarkia), thus, if work will occur in Caltrans R/W, a pre-construction botanical survey will need to be completed and survey results will need to be submitted to a Caltrans biologist for review.

1-3 If any project construction or temporary traffic control activities will encroach into Caltrans R/W, the project proponent must submit an application for an Encroachment Permit to the Caltrans Permit Office. Appropriate environmental studies must be submitted with this application. These studies will include an analysis of potential impacts to any cultural sites, biological resources, hazardous waste locations, and/or other resources within Caltrans R/W at the project site(s). CEQA documentation with supporting technical studies required when submitting the Encroachment Permit.

1-4 Caltrans recommends that traffic impact fees be collected for future multimodal improvements to reduce vehicle miles traveled (VMT) and to mitigate cumulative impacts to the State Highway System

If you have any questions or would like to discuss these comments, please contact me at (209) 948-7325 (e-mail: gregoria.ponce@dot.ca.gov).

Sincerely,



GREGORIA PONCE, Chief
Office of Rural Planning

c: David Gonzalves, Director, Tuolumne County Community Resources Agency
Darin Grossi, Executive Director Tuolumne County Transportation Council
Office of Planning and Research - State Clearing House

Letter #1 Response: Department of Transportation

- 1-1 As stated on page 4 of the Draft Initial Study, vehicle access to Berkeley Tuolumne Camp (BTC) is from Hardin Flat Road. Campers would generally be traveling east on State Highway 120 from the Bay Area. Hardin Flat Road is closer and provides direct access to BTC. No signs are proposed on Highway 120 or within the State highway right of way. Two signs are proposed within the Hardin Flat Road right-of-way going both directions to announce entrance into the BTC permit area, and other signs will face Hardin Flat Road at each of the Camp entry drives.
- 1-2 The Project is not anticipated to result in any construction or temporary traffic control activities within the right-of-way of State Highway 120. However, if it becomes necessary for construction activity within the Caltrans right-of-way, the Initial Study identifies mitigation measures to reduce potential impacts to nesting birds (Initial Study page 41 and page 43) and sensitive plants (Draft Initial Study page 38 and page 43).
- 1-3 As stated in Response 1-2 above, it is not anticipated the Project will require any construction activity within the Caltrans right-of-way. However if it becomes necessary for Project-related construction activities within the Caltrans right-of-way, the City will submit an Encroachment Permit application with required supporting documentation to Caltrans.
- 1-4 In response to Senate Bill 743 (SB 743) the Office of Planning & Research (OPR) has updated the California Environmental Quality Act (CEQA) Guidelines to include new transportation-related evaluation metrics. Draft guidelines were developed in August 2014, and updated in January 2016 based on public comments. OPR released final proposed CEQA Guidelines and a Technical Advisory on Evaluating Transportation Impacts on November 27, 2017. The final proposed CEQA Guidelines include a new Section 15064.3 on Vehicle Miles Travelled (VMT) addressing criteria for analyzing transportation impacts. Section 15064.3 states the application of the criteria do not take effect until January 1, 2020 unless the lead agency adopts them earlier. Neither Tuolumne County nor the Tuolumne County Transportation Council (TCTC), the state-designated Regional Transportation Planning Agency, has established any standards, thresholds or impact fees for VMT. No determination on the significance of VMT impacts was made for the Project since none is legally required.



clear

10-1-18
E



EDMUND G. BROWN JR.
GOVERNOR



MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

Governor's Office of Planning & Research

SEP 28 2018

STATE CLEARINGHOUSE

24 September 2018

Liza McNulty
City of Berkeley, Parks Recreation and Waterfront
2180 Milvia Street, Third Floor
Berkeley, CA 94704

CERTIFIED MAIL
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COMMENTS TO REQUEST FOR REVIEW FOR THE MITIGATED NEGATIVE DECLARATION, CITY OF BERKELEY TUOLUMNE CAMP PERMIT (46690) PROJECT, SCH# 2018082070, TUOLUMNE COUNTY

Pursuant to the State Clearinghouse's 31 August 2018 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Mitigated Negative Declaration* for the City of Berkeley Tuolumne Camp Permit (46690) Project, located in Tuolumne County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

2-1

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases,

KARL E. LONGLEY ScD, P.E., CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

11020 Sun Center Drive #200, Rancho Cordova, CA 95670 | www.waterboards.ca.gov/centralvalley

the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues.

For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website:
http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/.

Antidegradation Considerations

2-2

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Policy is available on page IV-15.01 at:
http://www.waterboards.ca.gov/centralvalleywater_issues/basin_plans/sacsjr.pdf

In part it states:

Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.

This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

2-3

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan

(SWPPP).

For more information on the Construction General Permit, visit the State Water Resources Control Board website at:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml.

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits¹

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/.

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml

2-4

Industrial Storm Water General Permit

Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ.

For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml.

2-5

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACOE). If a Section 404 permit is required by the USACOE, the Central Valley Water Board will review the permit application to ensure

¹ Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements.

If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACOE at (916) 557-5250.

2-6

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACOE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications.

2-7

Waste Discharge Requirements – Discharges to Waters of the State

If USACOE determines that only non-jurisdictional waters of the State (i.e., “non-federal” waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation.

For more information on the Water Quality Certification and WDR processes, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/help/business_help/permit2.shtml.

2-8

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Risk General Order) 2003-0003 or the Central Valley Water Board’s Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Risk Waiver) R5-2013-0145. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Risk General Order and the application process, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Risk Waiver and the application process, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2013-0145_res.pdf

2-9

Regulatory Compliance for Commercially Irrigated Agriculture

If the property will be used for commercial irrigated agricultural, the discharger will be required to obtain regulatory coverage under the Irrigated Lands Regulatory Program. There are two options to comply:

1. **Obtain Coverage Under a Coalition Group.** Join the local Coalition Group that supports land owners with the implementation of the Irrigated Lands Regulatory Program. The Coalition Group conducts water quality monitoring and reporting to the Central Valley Water Board on behalf of its growers. The Coalition Groups charge an annual membership fee, which varies by Coalition Group. To find the Coalition Group in your area, visit the Central Valley Water Board's website at: http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/for_growers/apply_coalition_group/index.shtml or contact water board staff at (916) 464-4611 or via email at IrrLands@waterboards.ca.gov.
2. **Obtain Coverage Under the General Waste Discharge Requirements for Individual Growers, General Order R5-2013-0100.** Dischargers not participating in a third-party group (Coalition) are regulated individually. Depending on the specific site conditions, growers may be required to monitor runoff from their property, install monitoring wells, and submit a notice of intent, farm plan, and other action plans regarding their actions to comply with their General Order. Yearly costs would include State administrative fees (for example, annual fees for farm sizes from 10-100 acres are currently \$1,084 + \$6.70/Acre); the cost to prepare annual monitoring reports; and water quality monitoring costs. To enroll as an Individual Discharger under the Irrigated Lands Regulatory Program, call the Central Valley Water Board phone line at (916) 464-4611 or e-mail board staff at IrrLands@waterboards.ca.gov.

Low or Limited Threat General NPDES Permit

2-10

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Dewatering and Other Low Threat Discharges to Surface Waters* (Low Threat General Order) or the General Order for *Limited Threat Discharges of Treated/Untreated Groundwater from Cleanup Sites, Wastewater from Superchlorination Projects, and Other Limited Threat Wastewaters to Surface Water*

(Limited Threat General Order). A complete application must be submitted to the Central Valley Water Board to obtain coverage under these General NPDES permits.

For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2013-0074.pdf

For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2013-0073.pdf

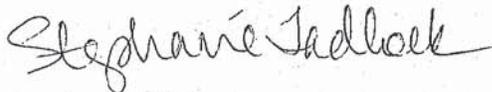
NPDES Permit

2-11

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit.

For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/help/business_help/permit3.shtml

If you have questions regarding these comments, please contact me at (916) 464-4644 or Stephanie.Tadlock@waterboards.ca.gov.



Stephanie Tadlock
Senior Environmental Scientist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento

Letter #2 Response: Central Valley Regional Water Quality Control Board

- 2-1 Comment noted. The Project is located in the South Fork Tuolumne Hydrologic Unit (Unit 536.80 of the San Joaquin Hydrologic Basin Planning Area). The goals and policies of the Water Quality Control Plan for the San Joaquin River Basin (CVRWQCB Resolution No. R5-2013-0098) and other applicable Basin Plan policies will be addressed in all permit applications to the Board.
- 2-2 Comment noted. The Project is being planned and designed to assure that existing water quality will be maintained to not affect present and anticipated beneficial use of the waters of the South Fork Tuolumne River and will not result in water quality less than that prescribed in the Board's policies as referenced in State Water Board Resolution 68-16. This includes a Project design and operations where no waste or increased volume or concentration of waste will be discharged into the South Fork Tuolumne River. The Project will meet waste discharge requirements of Tuolumne County in terms of the best practicable treatment or control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained.
- 2-3 The City of Berkeley is required by the US Forest Service as part of the City's Special Use Permit to obtain all necessary regulatory permits for the reconstruction of the Camp, including a Construction General Permit. The hydrology section of the Draft MND/IS and Appendix A Tables A-1 and A-2 review the steps, criteria and best management practices that will be followed to manage water during construction and operations of the Camp to protect the water quality of the South Fork Tuolumne River.
- As noted in the Draft MND/IS, at a minimum this will involve Water Quality Certification and coverage under the National Pollutant Discharge Elimination System (NPDES) construction general permit for storm water discharge under Section 401(A)(1) of the Clean Water Act and the Porter-Cologne Water Quality Control Act of 1975. The City will work with Central Valley Regional Water Quality Board staff to determine if additional permits are required and will submit the appropriate applications once detailed design is underway
- 2-4 Not applicable. The Camp is located in the Stanislaus National Forest, not a municipality, and is not an industrial use.
- 2-5 As noted in the Draft MND/IS, a Section 404 permit from the USACOE will be obtained.
- 2-6 As noted in the Draft MND/IS, a Water Quality Certification will be obtained from the Board. The City will work with Central Valley Regional Water Quality Board staff to obtain the Certification and determine if additional permits are required and will submit the appropriate applications once detailed design is underway
- 2-7 Not applicable. The Project includes jurisdictional waters of the United States.

- 2-8 It is not known at this time if during construction there will be any dewatering to be discharged to the land. If during detailed design that is found to be the case, then a Low-risk General Order application will be made.
- 2-9 Not applicable. The Project is not commercial irrigated agriculture.
- 2-10 The City of Berkeley is required by the US Forest Service as part of the City's Special Use Permit to obtain all necessary regulatory permits for the reconstruction of the Camp. As noted in the Draft MND/IS, at a minimum this will involve Water Quality Certification and coverage under the National Pollutant Discharge Elimination System (NPDES) construction general permit for storm water discharge under Section 401(A)(1) of the Clean Water Act and the Porter-Cologne Water Quality Control Act of 1975. The City will work with Central Valley Regional Water Quality Board staff to identify what type of NPDES permit is needed and if additional permits are required and will submit the appropriate applications once detailed design is underway.
- 2-11 Refer to Response 2-10.

3.2 ORGANIZATIONS



Central Sierra Environmental Resource Center
Box 396, Twain Harte, CA 95383 • (209) 586-7440 • fax (209) 586-4986
Visit our website at: www.cserc.org or contact us at: johnb@cserc.org

September 10, 2018

Liza McNulty, Program Manager
City of Berkeley
Parks Recreation & Waterfront
2180 Milvia Street, Third Floor
Berkeley, CA 94704

**Comments on the IS/MND for the Reconstruction of the Berkeley Tuolumne Camp
and a 30-year Permit for the City of Berkeley Tuolumne Camp**

The following comments are submitted in response to the Berkeley Tuolumne Camp Initial Study/Mitigated Negative Declaration and the associated request for comments by the Stanislaus National Forest concerning the 30-year permit to the City of Berkeley to reconstruct and operate the Camp. While our staff has reviewed the entire Initial Study and Mitigated Neg Dec, our purpose with these comments is not to critique insignificant points or to take up agency staff time on points that don't really matter. Accordingly, we are focusing on a few main points.

BACKGROUND FOR COMMENTS

Our staff emphasizes that we support the reconstruction of the Berkeley Tuolumne Camp and the wide range of recreational, social, and educational opportunities that the Camp provided when it was functioning. Many thousands of visitors have had enjoyable vacations and social interactions with other families and individuals staying at the Camp prior to its near total destruction by the Rim Fire. CSERC accepts the reality that while the river corridor area and adjacent habitat will inarguably lose some wildlife, watershed, and scenic value if a major camp development is allowed to be reconstructed on the site, we understand that the magnitude of visitors served and the quality of the experience provided by the Camp likely justify the diminishment of wildlife, watershed, and scenic values.

THE EXTENT OF PRIOR FACILITIES DOES NOT MINIMIZE NEED FOR PROJECT CONSIDERATION

CSERC agrees that, in general, much of what is proposed as this project is primarily replacement of what was there prior to the Rim Fire. For purposes of planning to meet the requirements of both CEQA and NEPA, it is important to analyze what is actually in need of environmental review. In this instance, based strictly upon a review of the IS/MND, it appears that the City of Berkeley proposes to gain approval for restoring/re-operating the previous Camp and to allow everything to be "replaced" more or less consistent with past policies and planning requirements. With these comments, CSERC asserts that as part of the CEQA process as well as the Forest Service permit analysis, there should be a clear assessment of which of the previous sited facilities would not likely be allowed in their current location if this was a new development application. It is necessary to assess whether this overall site is even the right location for a Camp serving 360 visitors. When reviewing the Forest Service EA for this same project through NEPA analysis, it is very apparent that key comparison assessments and considerations were carefully

made. As a result, **the EA spells out that all tent cabins, staff cabins, the Dining Hall, and sanitary facilities and potable water treatment and distribution utilities that were located previously within the 100-year floodplain will now be relocated out of the floodplain. It is not readily apparent from reading the IS/MND if those same requirements are mandated.** If they are, then the IS/MND is responsive to the environmental risks and the potential significant impacts. It will be compliant with current federal policies and requirements. However, **if the IS/MND does not contain those same requirements (such as relocating facilities and infrastructure out of the 100-year floodplain), then the IS/MND is deficient and needs to incorporate the proposed action adjustments to facilities and their location as is required by the EA's Alternative 1 (the Proposed Action) - pg 100.**

3-2

With its high fire risk, its risk of flood events, and its lack of public water or sewer, the BTC site would be unlikely to be approved for a new Berkeley Tuolumne Camp large-scale development if there was not already the prior, historic use at this location. At the least, current Forest Service or other applicable regulatory requirements should be adhered to if approval is to be gained for a replacement BTC.

As the IS/MND is currently written, however, CSERC asserts that the question of whether to allow (or not allow) all of the previous facilities and uses previously established on the pre-fire site is not adequately addressed in this Initial Study/Mitigated Neg Dec, whereas it appears to be adequately addressed in the Forest Service EA document.

3-3

The consultants who have prepared the Initial Study/Mitigated Neg Dec appear to assert that due to the BTC facilities covering the site prior to the Rim Fire, those pre-fire conditions are the "baseline", so there would be no new significant impact from reconstruction of the Camp or re-operation of the Camp, despite the many new adjusted facilities and a much broader footprint of permitted operations on what would otherwise be national forest lands open to all members of the public. On that point alone, **it is clear that this project is not simply replacement of the existing camp. The previous BTC permit was for 14 acres,** (although the IS on page 5 admits that the actual area used by the Camp was roughly 25 acres when the leach field and "programmed use areas" were counted).

Now, however, the City of Berkeley is requesting a new permit for 30 acres, despite the IS/MND stating that 14.5 acres contain the parking, the main camp area, staff camp area, all support facilities, and the Sugar Pine and Small Falls Trails. (Note that in the project's EA document, the statement is made that all of those are contained within 13.5 acres.). It is not made clear in the IS/MND as to what justifies the expansion of the permit for the other 15.5 acres of the permit area. It appears from maps in the IS/MND that in addition to the leach field area, the majority of the permit expansion area is primarily intended to provide for new staff housing, a significant parking area, and an archery range. While those may be desirable in the eyes of BTC officials, it is noteworthy that an expanded permit area for Berkeley reduces public forest access and uses that would otherwise be available for the general public.

3-4

The new proposal is more than double the acreage contained in the previous permit. We assert that there should have been more analysis in the IS/MND of what would or would not be "grandfathered" in if this was not judged to be a renewal of the previous BTC facility. And accordingly, there should have been more sufficient rationale to explain whether there may or may not be impacts from adding 15.5 acres to the permit.

3-5

IS/MND APPEARS TO PROVIDE INADEQUATE PROTECTION FOR RESOURCES ALONG RIVER

In our previous CSERC comments concerning this project, our staff emphasized two key resource issues of significance. The first was that **we identified the problem of Camp facilities impinging closely adjacent to or directly out into the river corridor and potentially blocking normal wildlife movement along the river.** Our second key concern was potential contamination from Camp activities that would blow, leach, or wash into the River due to being so close to the river. We identified both of those concerns as issues needing careful consideration.

In the IS/MND, the consultants allege that the project will have no significant effect on riparian habitat, except possibly for the western pond turtle, and most of that risk would be from construction. We could not find any detailed discussion in the IS/MND concerning the impingement of the Dining Hall and its foundation/structural support intruding into the river corridor and affecting a broad suite of wildlife. We could not find any discussion in the IS/MND as to how mitigation would eliminate the Dining Hall and its support structure from constraining wildlife movement along the south edge of the river corridor. Furthermore, we could not find any river corridor wildlife movement considerations except for Special Status wildlife species – when in fact river corridor movement zones are important for nearly the full suite of terrestrial (and some aquatic) wildlife species.

As I communicated for our Center at the Open House, our biologists supported pulling back any infrastructure from the river area to the fullest extent feasible. As noted previously in these comments, in the Forest EA (which apparently is intended to mirror this CEQA analysis), the Forest Service document spells out clearly the mandate for the City to relocate most facilities out of the 100-year floodplain. Again, as mentioned previously, a review of the IS/MND does not appear to echo those pivotal requirements, or perhaps our staff has missed that analysis in our review. We emphasize with these comments that whichever legal analysis may prevail, it is our strong request that all facilities to the extent feasible be relocated outside of the river buffer area.

3-6

GHG EMISSIONS AND THE LACK OF APPROPRIATE MITIGATION

Tying back to a previous point raised in these comments, the project applicants and the document's consultant authors appear to suggest that there is no need for mitigation for GHG emissions created by the operations of this very large lodging, food service, recreational destination camp facility. CSERC believes this is not a valid conclusion. This project proposes to construct over 100 structures so that the Camp can operate as a destination that will draw large numbers of visitors arriving in vehicles, traveling from hours away to come to this Camp. Compared to the actual, current baseline -- which is no camp in operation at this time and no facilities at this time providing showers, food, and other amenities for 360 users -- the newly constructed Camp will produce high levels of GHG emissions over time once it is operating.

But page 53 of the IS/MND claims that the new BTC would not produce more GHG emissions than pre-Rim Fire, so the project would not conflict with the goals of AB 32 and the impact is Less Than Significant. Under that assumption, no mitigation is required. CSERC strongly disputes that claim. When significant development (even for reconstruction purposes) is planned under CEQA, then feasible and realistic mitigation measures should be mandated to reduce GHG emissions for both the construction and the ongoing operations that will generate GHG emissions. New technologies are fully available for utilizing solar panels (no forest canopy exists at all in many sites on the project areas) or for utilizing a suite of other mitigation options to reduce emissions.

CSERC urges that the Initial Study/Mitigated Neg Dec be revised to acknowledge the responsibility of the project applicant to reduce GHG emissions to be consistent with AB 32 and to also be consistent with an obligation to do all possible to provide feasible and cost-effective public benefits when applying for permitted use of public lands. Appropriate mitigation requirements to reduce GHG emissions should be incorporated into the approval process.

3-7

THE CUMULATIVE IMPACTS OF THE PROJECT ARE NOT CORRECTLY OR ADEQUATELY ANALYZED

If this project had been brought forward for consideration two years ago, there could be grounds for suggesting (as is done on page 92 of the IS/MND) that there are no cumulatively considerable impacts:

“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.)

The proposed Project would not result in cumulatively considerable impacts.”

However, the current situation is much different, and there ARE cumulative impacts that must be considered in determining whether or not to require mitigation for cumulative effects. First and foremost, the neighboring **Thousand Trails Yosemite Lakes Hardin Flat project is currently going through Tuolumne County’s Community Resources Agency for review and potential approval by the County. That project includes the addition of 150 RV sites, recreation cabins, and mobile-home sites. It also includes bridge abutment repairs and culvert repairs.**

Second, Hardin Flat LLC “Yosemite Under Canvas” is proposing a 99-unit luxury tent (glamping) campground site, a mobile kitchen, dining and reception tent, laundry facility, and restrooms/showers, etc. This second major development proposal is planned for a site just to the northwest of the Thousand Trails Yosemite Lakes project (which lies just to the west of the BTC site).

Third, Tuolumne County has received a pre-application inquiry for a major lodge facility directly across the highway from the glamping campground facility. While our Center has not received an advisory notice detailing the specifics of the new lodge facility proposal for the north side of the highway, area residents observed project consultants meeting with Cal Trans representatives to determine the extent of needed turn lanes, etc. for this lodge facility project. It obviously is not just speculation, since the proponents of the lodge facility have also held a meeting with local cabin owners to discuss the project, well water supplies, wastewater treatment, etc.

The combination of just the projects identified above totals 700-900 guests all bringing vehicles, noise, pollution, disturbance of wildlife, night-time lighting, and other impacts to an area within 2 miles of the BTC site. **To suggest that there is no cumulative impact of the BTC project when combined with other current or proposed projects would be disingenuous.**

CSERC urges that the final Mitigated Neg Dec include acknowledgment that there IS a significant cumulative impact of this project when combined with currently proposed nearby development.

In closing, in order for a project to qualify for reliance upon a Mitigated Neg Dec, it is necessary for there to be no potentially significant impacts that would be generated by the project.

3-8

For that to be the case with the Berkeley Tuolumne Camp project, CSERC urges that the project as described in the final IS/MND (1) require the relocation of facilities out of the 100-year floodplain, consistent with what is described in the Forest Service EA document, (2) that realistic GHG emissions analysis identify how cost-effective, feasible GHG mitigation measures can reduce the project's GHG emissions – and that feasible mitigation measures be mandated, and (3) that there be admission that the project will potentially create significant cumulative effects, and that in response that realistic mitigation measures are identified to reduce to some degree the significance of those cumulative impacts.



CSERC Executive Director

Letter #3 Response: Central Sierra Environmental Resource Center

- 3-1 The purpose of the BTC Project is to continue as an organization camp consistent with current laws, regulations, and the Forest Plan Direction (March 2017) management emphasis for developed recreation sites. The need for the Camp is to continue at the same level of service as prior to the Rim fire to support the City of Berkeley's provision of broad, quality camp programs that provide outdoor recreation and experiences benefiting all Berkeley residents. Income from a fiscally sustainable Camps Fund supports all camp programming and staffing at BTC, Echo Lake Camp, and Day Camp in the City of Berkeley. In addition, the funding generated from BTC supports annual maintenance and long-term capital improvements at BTC, Echo Lake Camp, and Cazadero Camp.

The BTC Project is consistent with Forest Service policy encouraging organization camp facilities and programs that promote environmental education, hiking, fishing, and similar forest-related activities (FSH 2709.14, Policy 13.2). The Project is also aligned with Forest Service objectives to provide, under special use authorization, sufficient suitable facilities and services that supplement or complement those provided by the private sector, state, and local government on private land and the Forest Service on NFS land to meet public needs to facilitate the use, enjoyment, understanding, and appreciation of natural resource settings in National Forests (FSM 2340.2).

Reconstructed tent cabins, staff cabins, the Dining Hall and all utilities will be located outside of, or elevated above, the 100-year floodplain. Refer to page 67 and Figure 5 of the Draft Initial Study.

- 3-2 Current Forest Service and other applicable regulatory agency requirements will be adhered to for the replacement of BTC. Because the initial study concluded that the Project would have no significant and unavoidable environmental impacts, an analysis of Project alternatives is not required (CEQA Guidelines § 15063(d)).
- 3-3 The Project impact analysis for each environmental factor included in the Draft Initial Study is based on existing conditions at BTC; i.e. post Rim Fire conditions. This is a conservative approach, since it would be appropriate to utilize historic operational levels to establish existing environmental conditions baseline for CEQA purposes (*North County Advocates v. City of Carlsbad* (2015)—Cal.App.4th—Case No. D066488). For clarity Section 3 Air Quality, Impact Discussion, third sentence on page 25 is deleted:

~~With Project completion, BTC would have air pollutant emissions less than the Camp's pre-Rim Fire emissions because the new facilities would be built according to the requirements of current more-energy-efficient building codes.~~

The statement in the Project Description that about 14.5 acres of the permit area is proposed to be developed for parking, the main camp area, staff camp area, all support facilities and the

Sugar Pine and Small Falls Trails was made to provide a general understanding of the lands that may actually be disturbed by construction. (Refer to Chapter 2 for clarity). Thus, although the area covered by the Special Use Permit will be 30 acres (rather than the previous 14), the actual developed area will be approximately the same.

The difference between the Draft MND/IS and the EA statements for the majority of BTC developments occurring in 14.5 acres (vs. 13.5 acres on page 7 of the EA) is because the Draft MND/IS included the Small Falls and Sugar Pine Trails in the acreage estimate.

An expanded Special Use Permit area for BTC does not reduce public forest access and uses that could otherwise be available for the general public. The Special Use Permit for BTC does not provide for exclusive use of the Permit area. The general public and individual BTC campers have in the past, and likely will in the future, use federal lands in and around the BTC Special Use Permit area and along the South Fork Tuolumne River for a wide variety of dispersed recreation activities.

- 3-4 The expansion of the BTC Special Use Permit area by 15.5 acres is to incorporate all facilities, including the leach field area, and program areas into the Permit area. As shown on Figure 3 of the Draft Initial Study, this was not the case in the past. Other technical site considerations for the expansion of the Permit area include, but are not limited to: provision of parking off of Hardin Flat Road as required by Tuolumne County code; avoidance of cultural resources; and relocation of reconstructed structures out of the floodplain. The entire Special Use Permit area was surveyed for natural and cultural constraints that might be impacted by development to avoid potential impacts where possible or to identify the mitigation measures included in the MND/IS. The analysis of potential environmental impacts within the Special Use Permit area is contained in the technical reports that support the MND/IS.
- 3-5 Berkeley Tuolumne Camp is a river camp. Access to and use of the South Fork Tuolumne River corridor is fundamental to the BTC purpose and its programs. In the larger context of the region, the BTC location along the South Fork Tuolumne River is recognized as a developed recreation site in the Stanislaus National Forest's Forest Plan Direction (March, 2017). That designation balances river corridor use with multiple-use values, other goals and objectives, management prescriptions, and the associated standards and guidelines for attaining them. These include Riparian Conservation Areas (RCAs). Mitigation Measure HYDRO-8 and the referenced Tables A-1 and A-2 included in the Draft Initial Study outline mitigation parameters within which BTC must be designed and managed to accommodate the RCA goals and objectives.

The following technical reports in support of the MND/IS are available on the City of Berkeley web page for download. They address the full suite of terrestrial and aquatic wildlife species in the project area and potential impacts that may occur with the development and operation of BTC:

- Aquatics Biological Assessment / Biological Evaluation
- Terrestrial Wildlife Biological Assessment / Biological Evaluation
- Botany Report
- Potential Waters of the United States Report
- Migratory Landbird Conservation Report
- Management Indicator Species Report
- Noxious Weed Risk Assessment Report
- Biological Evaluation for Sensitive Plants
- Watershed Management Report

The implementation of the BTC revegetation plan (refer to the Draft Initial Study Figure 5) emphasizes riparian habitat and wildlife movement along the South Fork Tuolumne River, Thimbleberry Creek, and related drainages.

In terms of pulling facilities back from the river floodplain, all reconstructed buildings would be relocated outside of the 100-year floodplain, as clarified in Chapter 2, including the Dining Hall, Tent Cabins, and Staff Cabins. Construction within the floodplain would be limited to accessible paths of travel required by state and local law, a pier supporting the reconstructed pedestrian bridge, below ground water intake facilities, and in-kind repair or replacement of existing wall or weir structures if required. Refer to page 67 and Figure 5 of the Draft Initial Study. As communicated by CSERC at the Open House conducted in May, 2015 as part of the scoping process, the wildlife species specifically mentioned in relation to a suggestion to include larger buffers around the river, was raccoons. Since raccoons, and most other terrestrial wildlife species (with the exception of most birds) that migrate along the river corridor are generally nocturnal, an impediment to migration would be from human activity and BTC programs. These programs generally occur in the early evening hours only, before 10 pm. There are no facilities proposed that would block nighttime migration up or down the stream zone. Existing and proposed revegetation of riparian vegetation will benefit bird migration. Additionally, riparian revegetation and wildlife friendly bridges and/or culverts will facilitate wildlife migration along Thimbleberry Creek and related drainages.

- 3-6 Section 7 Greenhouse Gas Emissions of the Draft Initial Study concluded greenhouse gas (GHG) emissions of the proposed Project would be less than significant based on Project-specific GHG emission estimates from its construction and operational sources. Since neither the Tuolumne County Air Pollution Control District (TCAPCD) nor the San Joaquin Valley Air Pollution Control District (SJVAPCD) have quantitative significance thresholds for GHG emission, the Draft Initial Study GHG emissions significance determination was based on a review of the quantitative criteria adopted by other California air districts as summarized in the table below.

CALIFORNIA AIR DISTRICT CEQA GHG SIGNIFICANCE THRESHOLDS

Air District	Status	Thresholds	
		Stationary Sources	Land Use Projects
Bay Area AQMD	Adopted 2011; suspended by court order; re-adopted 2017	10,000 MT CO ₂ e/year	1,100 MT CO ₂ e/year; or 4.6 MT CO ₂ e/year/Service Population; or Compliance with a Qualified GHG Reduction Plan
Mendocino County AQMD	Adopted Bay Area thresholds; rescinded 2013	None currently recommended pending adoption/CEQA review of GHG reduction plan	
San Joaquin Valley APCD	Adopted 2009	No quantitative GHG emission standards. Implement Best Performance Standards (BPS) for GHG reduction; or demonstrate 29% reduction from business-as-usual (BAU) GHG emissions	
San Luis Obispo County APCD	Adopted 2012	10,000 MT CO ₂ e/year	1,150 MT CO ₂ e/year; or 4.9 MT CO ₂ e/year/Service Population; or Compliance with a Qualified GHG Reduction Plan
Ventura County APCD	Proposed 2011	Options reviewed, but none currently recommended	
South Coast AQMD	Stationary - Adopted 2008; Land Use - Proposed 2009 (no action to date)	10,000 MT CO ₂ e/year	3,000 MT CO ₂ e/year
Sacramento Metropolitan AQMD	Adopted 2009 (Revised 2014-2015)	10,000 MT CO ₂ e/year	1,100 MT CO ₂ e/year

Source: APCD/AQMD websites.

No California air district has adopted a quantitative threshold for project operation GHG emissions of less than 1,100 metric tons (MT) per year. Project annual GHG emissions from the BTC construction and operational sources combined would be well below this lower-limit threshold of 1,100 MT (i.e., at 314.7 MT from construction and 82.6 MT from operation), therefore, mitigation measures are not required under CEQA. To clarify Project GHG emissions would be less than significant, text is added to pages 52-53, Section 7 Greenhouse Gas Emissions Subsections 7a and 7b of the Draft Initial Study:

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The California Emissions Estimator Model (CalEEMod, Version 2016.3.2) was used to quantify the proposed Project's GHG emissions ~~associated with Project construction activities and Project operation.~~

For Project construction, GHG emission rates for state-average construction equipment (as included in the CalEEMod database) were applied to Project-specific construction activities and equipment (as listed in Chapter 2 Project Description Table 3). Applying this model to the Total Project construction GHG emissions would be 314.7 metric tons of CO_{2e} and its annual emissions in the first year of operation would be 82.6 metric tons of CO_{2e} (assuming that all construction activity would occur in the year 2019, a worst-case scenario because the state-average construction fleet will emit less GHG emissions in subsequent future years). No California air district has set a CEQA significance threshold for construction GHG emissions. Neither the Tuolumne County Air Pollution Control District nor the San Joaquin Valley Air Pollution Control District have quantitative significance thresholds for operational GHG emissions

For Project operation, CalEEMod was initialized according to its land use type/size (i.e., number of family/staff tent cabins to be built with provision for electricity) and with Project-specific motor vehicle trips (see Section 16 Transportation and Circulation) and Project-specific water use data (see Section 18 Utilities and Service Systems). The model's interim total GHG emissions were adjusted further in proportion to the Project's planned operation only during the summer season (15 weeks, rather than a full year's 52 weeks). The adjusted total Project annual operational GHG emissions as shown in Table A would be 82.6 metric tons of CO_{2e}. Both Project construction and operational GHG emissions are well below the quantitative thresholds adopted by other California Air Districts and would comply with adopted GHG reduction plans, as discussed in Subsection 7b below), thus, Project GHG emissions impacts are less than significant.

TABLE A: PROJECT ANNUAL OPERATIONAL GREENHOUSE GAS EMISSIONS (metric tons/year)

Project GHG Source	CO₂	CH₄	N₂O	CO_{2e}
<u>Area</u>	<u>< 0.1</u>	<u>0</u>	<u>0</u>	<u>< 0.1</u>
<u>Energy Use</u>	<u>41.7</u>	<u>< 0.1</u>	<u>< 0.1</u>	<u>41.9</u>
<u>Motor Vehicles</u>	<u>32.8</u>	<u>< 0.1</u>	<u>< 0.1</u>	<u>32.9</u>
<u>Solid Waste Disposal</u>	<u>1.2</u>	<u>0.1</u>	<u>0</u>	<u>2.9</u>
<u>Water Use</u>	<u>3.2</u>	<u>0.1</u>	<u>< 0.1</u>	<u>5.0</u>
Total	78.9	0.1	< 0.1	82.6
Significance Thresholds				1,100
Significant Impact?				No

Source: CalEEMod (Version 20163.2) initialized with Project-specific parameters relating to its land use type/size, motor vehicle trip generation, water use and its planned operation only during summer months.

Note: Quantitative thresholds adopted by other California air districts range from 1,100 – 3,000 MT CO_{2e} per year. The minimum quantitative threshold of 1,100 MT is used for this analysis.

b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

~~GHG emissions from the reconstructed BTC would not exceed its pre-Rim Fire level. The Project would reconstruct BTC utilizing green building measures (see Table 1 in the Project Description). As presented in Table A, Project annual operational GHG emissions would be below the lowest established California air district significance threshold.~~ Thus, the Project would not conflict with the goals of AB 32 or any other State climate change prevention or adaptation strategies, a less than significant impact.

- 3-7 According to the Tuolumne County Planning Department, of the three projects identified by the Commenter, only one of the projects has submitted an application: Yosemite Under Canvas (YUC). The YUC project is currently under environmental review. It is unknown if the other two projects identified by the Commenter will submit applications to Tuolumne County and it is unknown what the ultimate projects will propose as part of their permit application. Therefore, the Thousand Trails project and the major lodge project are not addressed in our response as they are considered too speculative to be reasonably foreseeable (CEQA Guidelines Section 15064).

According to Tuolumne County Planning Department, the YUC project proposes 99 tent sites. The Initial Study for YUC is currently under preparation consequently there is no information available regarding transportation, air quality and GHG emissions for the YUC project. Assuming 99 average daily trips (ADT) for YUC, in combination with 132 ADT for the BTC project, would result in a total increase of 231 ADT on Highway 120. As demonstrated below, this would represent a minor increase in ADT on the Big Oak Flat segment of Highway 120.

The most recent Caltrans data for ADT on the Big Oak Flat segment of Highway 120 shows a peak hour ADT of 1,050 (<http://www.dot.ca.gov/trafficops/census/volumes2016/Route118-133.html>). The Big Flat segment of Highway 120 is considered a Mountainous Major Collector under the Tuolumne General Plan, which has a Level of Service (LOS) 'A' threshold of 3,190 ADT for very good operations with little congestion (Tuolumne County General Plan Draft Environmental Impact Report, Appendix D, Traffic Study). The combined BTC and YUC projects represent an increase of 231 ADT on the Big Oak Flat segment of Highway 120 which would not impact the existing LOS 'A' rating. The increased ADT is far below the maximum two way ADT of 13,520 (corresponding to a minimum LOS 'D') identified by the Tuolumne County General Plan (Policy 4.1.A), and is therefore considered a less than significant transportation impact.

The Tuolumne County Air Pollution Control District (TCAPCD) emission thresholds are 1,000 lbs/day or 100 tons/year for all pollutants. The highest BTC emissions for NO_x are about 20 lbs/day and about one ton/year. Conservatively applying comparable emissions

from the YUC project, the total emissions would be considerably well below the TCAPCD threshold.

- 3-8 To summarize, (1) the Project would relocate reconstructed BTC buildings out of the 100-year floodplain consistent with the Draft Environmental Assessment prepared for the Project; (2) the Project GHG emissions would be below established thresholds and thus less than significant; and (3) the Project would not have impacts that are cumulatively considerable.

September 25, 2018

Liza McNulty
Program Manager
City of Berkeley Parks Recreation & Waterfront
2180 Milvia Street, Third Floor
Berkeley, CA 94704

Dear Ms. McNulty,

I am writing on behalf of Friends of Berkeley Tuolumne Camp (FOBTC) to express our support for the Initial Study of the potential environmental impacts of the City of Berkeley Tuolumne Camp Permit (46690) Project. The Initial Study appropriately finds that the project (as proposed with mitigations) will not have a significant effect on the environment. We support the findings of the Mitigated Negative Declaration (MND) and urge the City Council to adopt the MND.

The Initial Study's supporting documents show that the Berkeley Tuolumne Camp project will help revegetate forest habitat and restore and improve stream habitats, including in the Tuolumne River. City staff have thoughtfully and sensitively designed the project to rebuild camp in ways that will create a delightful and restorative environment for campers and staff and bring back a vital and healthy forest.

FOBTC represents thousands of campers and staff, including hundreds of Berkeley households, spanning many generations of involvement over the 100-year history of camp. We are united in one goal – to help rebuild camp so that future generations of Berkeley families from all neighborhoods and backgrounds can have the same life-changing experiences at camp that ours did.

We are pleased to see the reconstruction process continue to move forward. We ask the City Council to adopt the MND so that the permitting and rebuilding process can continue to make rapid progress.

Sincerely,

Christine Chilcott
President - Board of Directors
Friends of Berkeley Tuolumne Camp

Friends of Berkeley Tuolumne Camp (FOBTC) is dedicated to preserving and enhancing the Camp experience for present and future generations through education, volunteer efforts, and financial support

contactus@fobtc.com (510) 236 - 7469
<http://www.fobtc.com>
PO Box 7931, Berkeley, CA 94707

Letter #4 Response: Friends of Berkeley Tuolumne Camp

4-1 Comment noted, no response necessary.

3.3 INDIVIDUALS

McNulty, Liza

From: Mariko Roberts <marikoroberts48@gmail.com>
Sent: Tuesday, September 11, 2018 7:39 AM
To: comments-pacificsouthwest-stanislaus@fs.fed.us
Cc: McNulty, Liza
Subject: BTC

As a member of volunteer planner and designer for the rebuilding of the Berkeley Tuolumne Camp, as well as a writer and reviewer of numerous environmental documents from mid 1970's until retirement in 2011, I believe that the proposal reflects sensitively to environment settings and social/archeological concerns.

I often reflect on my family's annual and continuous visits to the camp since the summer of 1968 with great fondness; and disappointed that my grand children (now 10 and 7 years old) have not had this opportunity.

I believe that the rebuilt BTC would be even better (environmentally and socially) than the previous.

Sincerely,

Mariko H. Roberts
(Continuous Berkeley resident since 1959).

Letter #5 Response: Mariko H. Roberts

5-1 Comment noted, no response necessary.

Camp-Tuolumne-Parks-Rec-Waterfront-Public-Comment: CEQA Neg Dec
09.12.18

I have a special interest in the rebuilding of Berkeley's Tuolumne Camp and making sure that it is a resource that is shared and open to all residents of the city. My concern is that it is only serving a small sector of the community, and one that is not very representative of Berkeley's diverse population.

Reading through the City of Berkeley Tuolumne Camp Permit (46690) SPECIALIST REPORT brought to my attention what seems to be the mission of BTC (Berkeley Tuolumne Camp). On page 12 of the report, it describes the priorities listed under the permit granted by the Forest Service as amended in 1976 that — "establishes priorities for campers served." It lists three classifications:

- Priority 1 — 'at-risk', disabled or low-income/scholarship campers
- Priority 2 — youth and educational programs
- Priority 3 — family campers

Table 1.01-9 in the report (p 13) shows the typical usage by these groups for the years 2005–2013:

- #1 Priority (At-Risk, Low-Income, Disabled) 196 campers / 4.85% of BTC / 27% of ALL CAMPS
- #2 Priority (Youth Educational) 182 campers / 4.5% of BTC / 8.1% of ALL CAMPS
- #3 Priority (Family Campers) 3.367 campers / 90.6% of BTC / 64.7% of ALL CAMPS

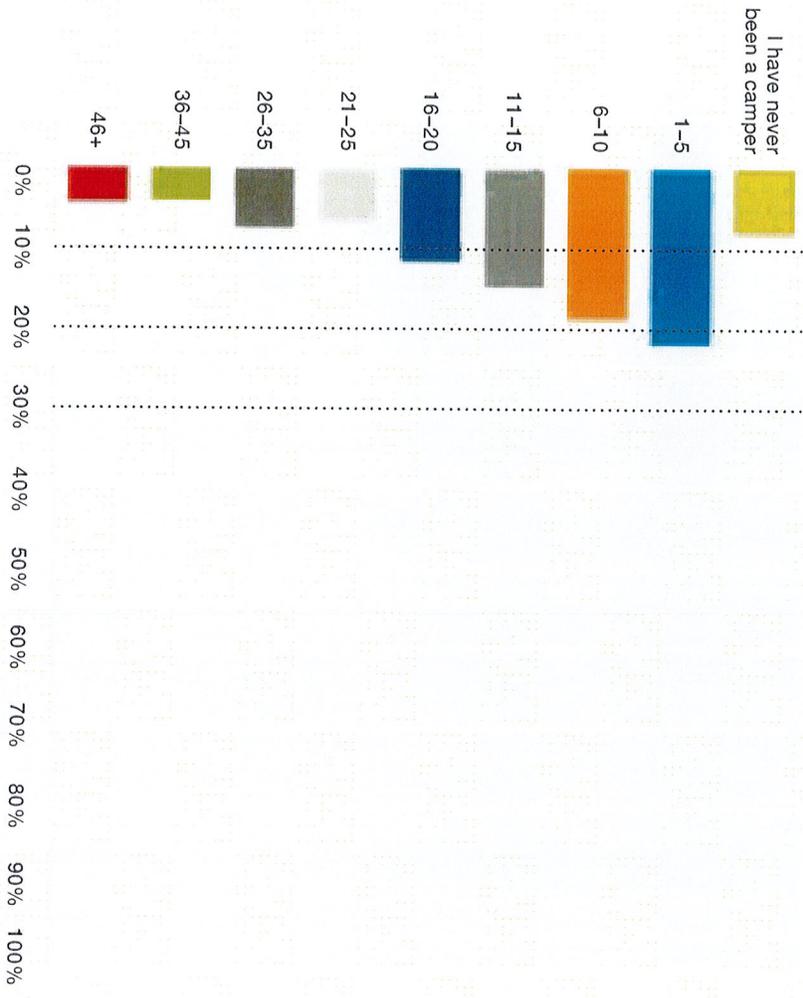
These numbers point out that the majority of visitors to BTC are family campers and not the number 1 priority group of low-income or at-risk youth. I can understand the report's premise that the BTC family camp is used as an income generating enterprise that provides annual surplus of \$564,000 but where does that money go? Is it funding outdoor and educational experiences for the priority groups 1 and 2? It doesn't appear so.

I would ask that the City and the Commission do better at meeting Tuolumne Camp's mission and make it more inclusive and open to all residents of Berkeley. And to responsibly use the half-million dollars in annual revenue towards outdoor experiences and education for the two priority groups identified — at-risk/low-income youth and youth education in general.

The survey results below conducted by the Berkeley Parks, Recreation & Waterfront Department in Spring 2015, show that a significant number of campers attend Tuolumne Camp year after year, thus limiting the number of new participants. 59% of campers polled have attended the camp for 11 or more years. 15% have attended Tuolumne Camp for 21–35 years. This data shows that even a smaller number of (unique) individuals have access to the camp than the yearly attendance suggests. Conclusion: a significant portion of campers are the same people year after year, and many of those people are non-Berkeley residents. —CAMERON WOO

Q5: Which of the following categories best represents your total years as a camper at Tuolumne Camp?

Answered: 432 Skipped: 8



Those polled: 234 Berkeley residents
198 Non-Berkeley residents

Opinion submission to Berkeleyside 04.07.17
730 words

Tuolumne Funding Approved ... But Who Are Berkeley's Happy Campers?

By Cameron Woo

Cameron Woo is a longtime Berkeley resident, business owner and outdoor enthusiast

On Tuesday of this week, the Berkeley City Council voted to appropriate \$3.3M to help reconstruct Tuolumne Camp which was destroyed in the 2013 Rim Fire. In the question whether to rebuild, Tuolumne Camp has a lot going in its favor—a beloved tradition as Berkeley's family camp since 1922, a committed and vocal group of supporters lobbying for its resurrection, and the idea of a resource that has aided generations of Berkeley families to commune with nature. What's not to support?

I agree that summer camp is a positive, often transformative, experience. Particularly for city dwellers, the week long retreat is a time for fellowship, discovery and relaxation. Tuolumne Camp appears to offer all of this and more. Unfortunately, it is serving only about 2,400 Berkeley residents each season (based on a 4,000 yearly attendance, 60% of whom currently live in Berkeley). That is slightly less than 2% of the Berkeley population. In addition, 80% of the campers have attended for 6+ years, many for generations.* With this high level of legacy attendees, the pool of participants grows smaller still. One has to ask if this is a good use of \$3.3M of taxpayer funds. (Cost estimates by the city show that figure could rise to \$5.3M)

Who attends Tuolumne Camp? A review of the Friends of Tuolumne Camp Facebook page revealed an extremely homogeneous group of campers. All the photos depicted white families enjoying camp life. I found one African American individual among the gallery of images posted. These photos seem not to reflect the racial diversity of Berkeley—they neither represent the economic or social makeup of our city. The visual evidence suggests that Tuolumne Camp is a very segregated experience.

As a Berkeley homeowner and taxpayer, I became curious to learn what programs and financial assistance the city offers to low-income Berkeley families to attend Tuolumne Camp. I was especially interested to learn about the city's outreach efforts to publicize this great resource and its many benefits. Did they spread the word via schools? Through churches or neighborhood groups? From our council members? For many, the camp appears to be among Berkeley's best kept secrets.

I am still waiting to hear back from the Parks, Recreation and Waterfront Department on specific outreach programs and support for low-income families to attend the camp. Unlike the other two facilities that fall under Berkeley auspices—Cazadero Camp and Echo Lake Camp—each of whom presented the City Council with specific programs they've established to serve at-risk youth and families in need—Tuolumne Camp has made no such claims.

On Tuesday, council member Worthington acknowledged the legitimate questions of inclusivity and access to Tuolumne Camp, but summed up his belief that the relatively small contribution from the city of \$3.3M could leverage upwards to \$54M in insurance and FEMA funding—and described it as “a good investment.” The question to ask is ... who will reap the rewards?

The Council unanimously approved the expenditure. With this green light, Berkeley's Parks, Recreation & Waterfront Department appears committed to reconstruct Tuolumne Camp to its former glory. The Friends of Tuolumne Camp, an impassioned group of citizens, is lending its support. As the camp is

rebuilt over the next few years, it is an opportunity to envision what a city camp can be—a respite from urban life, a place for learning and a way to engage with community. These formative experiences should be made more available to all Berkeley residents. Nowhere is this needed more than in the city's underserved neighborhoods. One only need to look to the city of Richmond to find an innovative, socially relevant program called "YES Nature to Neighborhoods" that provides low-income youth and families access to the natural environment. Berkeley would do well to follow their lead. The investment Kriss Worthington spoke of should be applied to fostering the next generation of environmental stewards. How will people fight to save our forests if they have never had the good fortune to live among them?

Let's hope that Tuolumne Camp is reconstructed to better serve today's Berkeley and the rich diversity of its citizens. After all, each of us is paying for it.

*Data sourced from survey conducted of 440 Tuolumne Camp participants by Berkeley Parks, Recreation and Waterfront Department in Spring 2015.

Link from YES Nature to Neighborhoods: <http://www.yesfamilies.org>

Letter #6 Response: Cameron Woo

- 6-1 This comment refers to a social effect of the Project, not a potentially significant effect on the environment (Section 15131 of the *CEQA Guidelines*). However, a response to Mr. Woo's comment is provided to present social information pertaining to the Project to clarify the social and economic benefits of the Project.

The comment states that the majority of visitors to BTC are family campers and that these campers are not the Forest Service's Number 1 priority group of low-income or at-risk youth and expresses an understanding, as cited in the Society, Culture and Economy Specialist Report (Specialist Report) referenced by Mr. Woo. The comment also states that the BTC family camp is used as an income-generating enterprise, but questions where that funding goes.

BTC is one of four camp facilities and/or programs of the City of Berkeley that operate as a single economic entity known as the Camps Fund. The Camps Fund is required to be self-sustaining and does not receive any operating revenue from the City's General Fund. Income to the Camps Fund provides for all camp programming and staffing at BTC, Echo Lake Camp, and the Berkeley Day Camp conducted in Berkeley. In addition, the Camps Fund is responsible for annual maintenance and long-term capital improvements at BTC, Echo Lake Camp, and Cazadero Camp.

As stated in the Specialist Report,

“The needs for the restoration of BTC are larger than what can be observed on-site, because the BTC has for decades been an integral fiscal enabler of other service delivery programs of the City of Berkeley including the Youth Camp programs housed at Echo Lake Camp, the Day Camps programs housed in Alameda County, and the Cazadero Camp located in Sonoma County. All of these facilities depend on the surplus revenue that can be earned by BTC Family Camp programs, and restoration of the full comprehensive Camps Program will require the camper-serving capacity of the new BTC to be equal to what existed before the Rim Fire. Anything less than full visitor-serving capacity at BTC will diminish the City's ability to offer programs to at-risk youth and individuals with disabilities, both at the two residential camps on NFS lands in the Sierras and at Berkeley Day Camp in and around the City of Berkeley.”

- 6-2 This comment refers to a social effect of the Project, not a potentially significant effect on the environment (Section 15131 of the *CEQA Guidelines*). However, a response to Mr. Woo's comment is provided to present social information pertaining to the Project to clarify the social and economic benefits of the Project.

As noted, Table 1.01-9 in the Specialist Report cites that while 4.85 percent of historical use at BTC was by at-risk, low-income, or campers with disabilities, the overall percentage for all City of Berkeley camps (including Echo Lake Camp and Berkeley Day Camp) is 27 percent.

This well documents the success of BTC in supporting the overall goals of the City. The reconstructed BTC would be accessible which should encourage more use by individuals with disabilities and their families. It is agreed that as the BTC is reopened there will be an opportunity to reevaluate the BTC Camp fee structure and supplemental fiscal support opportunities to increase use by low-income families who reside in the City of Berkeley.

2396 Rubicon Lane
Lincoln, CA 95648

Mr. Jason Kuiken
Forest Supervisor
Stanislaus National Forest
Attn: BTC
19777 Greenley Road
Sonora, CA 95370

September 17, 2018

Subject: Comments regarding proposed Mitigated Negative Declaration & Berkeley Tuolumne Camp Permit (46690) Project

Dear Mr. Kuiken:

I hereby submit comments regarding the proposed Mitigated Negative Declaration & Berkeley Tuolumne Camp permit project.

- 7-1 My family owns the first privately owned home immediately west of and adjacent to United States Forestry Service (Stanislaus National Forest) property leased by the City of Berkeley. In 2015, our original five subjects of concern regarding the proposed permit project were identified in written comments & forwarded to the USFS (SNF) Sonora Office. This month we reviewed the proposed Mitigated Negative Declaration & proposed permit project report. Our concerns are mostly resolved regarding the following subjects: 1) flood protection/mud-slide risk; 2) planned fuel modification of existing forest; 3) recreational land use; 4) surface water and groundwater quality; & 5) high-risk campfire use. *Our concerns regarding increased fire risk, water quality protection notice, noise & trespass are unresolved; in addition, the placement of future road signs & Hardin Flat Road logging & construction barriers are of new concern.*
- 7-2 Please make sure all campfires at BTC's central location are banned permanently due to high risk of forest fire; in addition, eliminating the use of campfires will help improve Hardin Flat community's poor air quality caused by increased campfire smoke during summer months. For those of us with allergies and asthma, campfire smoke and prescribed burning pose severe health challenges that must be avoided.
- 7-3 Regarding protection of water quality, please make sure any installed sewer system and leach field do not result in degradation to river (surface) water and groundwater; in addition, please make sure these systems do not threaten human health and/or contaminate riparian habitat. My family and pets play in or near Tuolumne River South Fork all four seasons. How will local residents or private property owners be notified in case of accidental spills or contamination?
- 7-4 My family recommends plans for an outdoor stage in the central camp be eliminated. As you probably know, sounds carry loud and clear in the mountains. In the past, amplified noise from the stage was clearly heard at our home and, for those of us who truly enjoy Mother Nature's solitude, unwarranted noise from this stage was not welcome. We recommend the proposed indoor River Hall replace the outdoor stage so amplified noise is not heard by neighbors.

7-5 My family's experiences with people who visit BTC have been negative occasionally. Some BTC visitors have "day camped" on our private property along the Tuolumne River South Fork. These visitors have subjected my family to unwarranted noise; trash left on the riverbank for us to clean, including human feces; and literally stopped my family from trout fishing and/or relaxing on our property along TRSF. Other visitors walk west & east across the meadow immediately behind our home or take shortcuts down our driveway & path to the river. My family members have been threatened and our pets attacked on our property by unleashed dogs. We want to avoid all of these situations in the future.

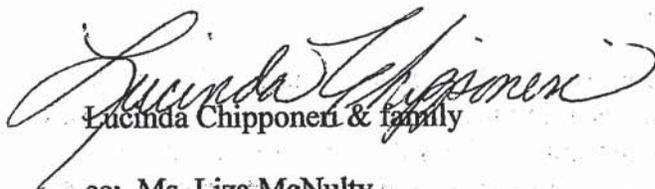
7-6 We recommend Hardin Flat Road construction barriers be placed at least 200-yards east of the west side boundary of Stanislaus National Forest before & during logging & construction. If the road barriers are closer to the construction site, Hardin Flat residents will hear less traffic noise, & experience less wear & tear to their property (driveways) when vehicles, including construction traffic (trucks) & recreational vehicles, need to turn around.

7-7 We recommend no temporary or permanent BTC or USFS signs be posted within 100-yards of the Hardin Flat Road west side boundary of Stanislaus National Forest. Even if well intended, unsightly signs (such as the large red & white "no campfire" sign recently installed) mar the view of natural forest that escaped Rim Fire devastation.

7-8 And lastly, we truly appreciate BTC is seasonal (summer only), limited to no more than 350 visitors & Teepee Village or the tent overflow area west of BTC's central location is eliminated. One of the objectives of USFS's Forest Plan Direction after the Rim Fire is to enhance deer habitat. My family agrees with USFS's proposal, and we recommend that deer enhancement be done at BTC in and west of the former overflow area where an established deer route is already located. Here the natural habitat & thermal cover were not completely burned by the Rim Fire so deer are able to forage and hide. In the past five years, we have witnessed an increase of deer behind our home and our neighbors' homes to the west because riparian habitat was not burned. USFS and Berkeley have an opportunity to provide better deer enhancement in BTC's former overflow area. This enhancement would further protect community deer populations, which are enjoyed by local residents and visitors.

We appreciate the opportunity to provide comments; thank you. If you have any questions, please do not hesitate to contact me.

Sincerely,


Lucinda Chipponeri & family

cc: Ms. Liza McNulty
Program Manager
City of Berkeley

Letter #7 Response: Lucinda Chipponeri & family

7-1 Comment noted. Lucinda Chipponeri's comments pertaining to fire risk, water quality protection notice, noise, trespass and signage/construction barriers are addressed in Responses 7-2 thru 7-8.

7-2 Campfires would be limited to 8 pm to 9:45 pm Friday nights during the operating period. BTC is required to obtain a burn permit on an annual basis for campfires and brush removal. Mitigation Measure AIR-2 has been clarified to prohibit burning in the Camp on no burn days. Refer to Chapter 2.

There would be a fireplace associated with the Dining Hall. The reconstructed Camp would include an approximately 240,000-gallon water supply for fire prevention storage and a system of hydrants and standpipes throughout the Camp as approved by the Tuolumne County Fire Marshall.

BTC would implement a Noxious Weed Management Program to reduce fuel sources within the Camp, and hazard trees would be removed. On-site staff would reside at the Camp full time during BTC operations. While there remains a risk of human caused fire outbreaks at the site, the presence of staff on site full time significantly reduces the risk of unauthorized and unsafe campfires in the area compared to the existing condition.

Management requirements of the Forest Service include that the Camp acquire burn permits from the appropriate County Air Pollution Control District that would determine when burning of burn piles is allowed. Burn plans would be designed and implemented to minimize particulate emissions. In addition the Groveland District Wildlife Biologist would be notified prior to pile burning to minimize disturbance to protected or sensitive species.

7-3 All BTC wastewater system features will be designed and constructed to be outside the 100-year floodplain of the South Fork Tuolumne River, which was not the case prior to the Rim fire. The leach field design will include percolation tests and soil profiles, system design plans and specifications (plot plan, grading plan, description of groundwater and soils, description of monitoring devices, system operation and function), and site evaluation and testing necessary to obtain certification of an on-site sewage treatment and disposal system pursuant to Tuolumne County Code Section 13.08.270A.

A Water Quality Emergency Notification Plan is required by Tuolumne County and the State of California – Health and Human Services Agency, California Department of Public Health prior to the start of Camp operations. Among other requirements, this plan would include the means and methods for notifying neighbors should there be any wastewater system failure.

7-4 Comment noted. The outdoor stage and amphitheater are integral components of the Camp and support a variety of BTC programs and activities. Stage use with amplified sound is

- typically limited to Thursday and Saturday nights, 8 pm – 9:30 pm during the operating period. The stage is oriented to the north, not downstream to nearby residences. Mitigation Measure NOISE-1 specifies the speaker system must be designed to meet noise levels of 50 Leq, dB, which is consistent with the Noise Element of the Tuolumne County General Plan for stationary noise sources. The speaker system for the BTC stage will not exceed noise levels of 50 Leq, dB at the downstream boundary of the Permit Area. This will be ensured by setting maximum volume levels via monitoring with a handheld SPL meter (sound pressure level) at the Special Use Permit area boundary.
- 7-5 If any of the nuisance factors mentioned in the comment have occurred in the past five years, they were unrelated to BTC as it has not been operational. Dogs are not permitted at BTC. While BTC operates under a Special Use Permit from the Stanislaus National Forest, that permit is not for exclusive use. BTC operates a full set of programmed “day camp” activities, none of which take place adjacent to or on downstream private properties. The general public and individual BTC campers have in the past, and likely will in the future, use federal lands in and around the Camp Special Use Permit area and along the South Fork Tuolumne River for a wide variety of dispersed recreation activities. If BTC campers are trespassing or causing a nuisance, City staff should be notified. If members of the general public are trespassing or causing a nuisance to private property the Groveland Ranger District of the Stanislaus National Forest should be notified.
- 7-6 BTC has not been operational since the Rim fire. All emergency and hazard tree logging at the Camp has been conducted by others under a permit from the Stanislaus National Forest. Currently Hardin Flat Road has been closed by Tuolumne County for the reconstruction of the Hardin Flat Road bridge across the South Fork Tuolumne River. Barriers have been placed along Hardin Flat Road for that construction. During the reconstruction of BTC, Hardin Flat Road should remain open. No barriers are anticipated. One-way traffic controls or temporary road closure may be in place during some period of construction; such controls and closures would be only at the Camp itself, and limited in duration/occurrence. It is not anticipated that through traffic will be diverted requiring vehicles to turn around because of BTC construction.
- 7-7 Two signs are proposed within the Hardin Flat Road right-of-way going both directions to announce entrance into the Camp permit area. Other signs will face Hardin Flat Road at each of the BTC entry drives. These signs will be constructed of natural materials based on the design guidelines contained in the Design Narrative Built Environmental Image Guidelines as referenced in the aesthetics section of the MND/IS and thus will not have any significant aesthetic or other environmental impacts.
- 7-8 The reconstruction of BTC includes a revegetation plan that emphasizes dense riparian plantings and conifers shading the South Fork Tuolumne River, Thimbleberry Creek, and related drainages. These will enhance wildlife corridors (refer to the Draft Initial Study, pages 9 – 10 and Figure 6). The BTC Special Use Permit Area does not include the

“overflow area” referenced by the comment. Any habitat enhancement in this area would be under the auspices of the Forest Service.

Liza McNulty, Program Manager
City of Berkeley
Parks Recreation & Waterfront
2180 Milvia Street, 3rd Floor
Berkeley, CA 94704

Dear Ms. McNulty:

I am writing to express my wholehearted support of the City of Berkeley Tuolumne Camp Permit (BTC) project's 30-year permit to reconstruct the camp, much as it was before the 2013 Rim Fire, and to operate Camp throughout the life of the permit. I also hope that after its' 30 year term, that this permit may be extended for generations to come.

My family began its' BTC camping traditions in 1977 and is hoping to have the opportunity for our fourth generation of campers return when camp reopens in the near future. The South Fork of the Tuolumne just upstream of Hardin Flat is to our family what it is to countless others: a mountain home. There is no other place on the planet that substitutes for this respite away from the Bay Area.

As a biologist, I am relieved to see written documentation that "Based on the results of the IS prepared according to CEQA Guidelines, it has been determined the Project will not have a significant effect on the environment and a Mitigated Negative Declaration (MND) has been prepared." Regarding re-vegetation of the site, I am reassured to read that "planting program design documents (90 percent completion) will be submitted to the Forest Service for review and comment for consistency Forest Service standards." Furthermore, all endangered, threatened, and non-threatened species are protected and accounted for in this plan.

Also, as a dark-sky enthusiast, I am glad to see in the Mitigated Negative Declaration the that:

- All outdoor lighting shall be dark sky-compliant and consistent with California Green Building Standards Code Section 5.106.8 Light Pollution Reduction
- All light fixtures shall include shrouds (either fixed or adjustable), other shielding, or be directed in such a way as to block direct light as seen from Hardin Flat Road.
- Lighting that is not required during nighttime hours shall be controlled by the use of timed switches and/or motion detector activation controls so lights are only on when necessary.

Thank you for your consideration of my support for this very important place and rebuild for the future,



Carol A. Hart
5599 Bear Creek Dr.
Catheys Valley, CA 95306
209-374-3324 Home
928-814-2404 Cell

Letter #8 Response: Carol Hart

8-1 Comment noted, no response necessary.

CEQA

Negative Declaration

Berkeley Tuolumne Camp Permit (46690)

October 1, 2018

As a Berkeley Parks and Waterfront Commissioner, I have had the opportunity to follow the project planning and re-development of Berkeley Tuolumne Camp since its unfortunate destruction in the 2013 Rim Fire. Tuolumne Camp is a treasured resource and I applaud the efforts to rebuild the facility. In reviewing the CEQA, I took notice of significant impacts regarding the cultural resources detailed in the report, specifically pages 12–13 that list the “Campers served in the Berkeley camps program by priority” — the data shows unequal usage (90%) by BTC Priority #3 (family campers, private groups) over the BTC Priority #1 (at-risk, low-income, disabled) and BTC Priority #2 (youth and educational programs) that make up the remaining 10% of camp usage.

These figures are not in keeping with the mission of Berkeley Tuolumne Camp and I would demand that we do better. I will be supporting programs and efforts in the future to increase the participation of the priority groups identified in the CEQA, and this insure that BTC is open to all Berkeley residents.

Sincerely,

A handwritten signature in black ink, appearing to read "Claudia Kawczynska". The signature is fluid and cursive, with a large initial 'C' and a long, sweeping underline.

Claudia Kawczynska

Member of Parks and Waterfront Commission

Letter #9 Response: Claudia Kawczynska, Member of Parks and Waterfront Commission

9-1 Comment noted. See Letter 6, Responses 6-1 and 6-2.

Liza McNulty, Program Manager
City of Berkeley
Parks Recreation & Waterfront
2180 Milvia Street, Third Floor
Berkeley, CA 94704
Email: lmcnulty@cityofberkeley.info

Date: October 1, 2018

RE: Comment on the proposed City of Berkeley Tuolumne Camp Permit (BTC) project:
Mitigated Negative Declaration (MND) and Initial Study (IS)

Dear Ms. McNulty,

Thank you for the opportunity to provide comments on the draft Mitigated Negative Declaration (MND) and Initial Study (IS) for the City of Berkeley Tuolumne Camp (BTC) project.

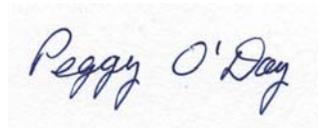
I am opposed to the proposed plan as described in the MND and IS for the following reasons:

- 10-1 1. The proposed plan requests a significant expansion of the Special Use Permit (SUP) from the Forest Service from the prior approximately 14 acres to 30 acres, more than doubling the area of use by up to 360 people per day during the months of operation. This intensive use will have significant impacts on biological and cultural resources and on water quality as noted in the IS.
- 10-2 2. The expansion includes new permanent buildings and a parking lot on the north side of Hardin Flat Road. This area was not part of the prior BTC developed area. It is a significant expansion of the camp's built footprint that will negatively impact a previously undeveloped area. As noted in the IS, this expansion has the potential for substantial adverse effects on sensitive and endangered plant and animal species directly from development and by habitat modification, particularly for the California Spotted Owl, Western Pond Turtle, and Slender-Stemmed Monkey Flower. The proposed mitigation measures consisting of new surveys, avoidance, or relocation of sensitive species is inadequate to address habitat loss and modification that will result from rebuilding, new expansion of permanent structures, and intensive use.
- 10-3 3. The proposed project has the potential to cause a substantial adverse change in archaeological resources, as indicated in the IS. This area contains a large number of Native American cultural artifacts, including bedrock mortars within the BTC permit area. The proposed mitigation does not address adequately preservation of known cultural sites or potential impacts on new sites that may be uncovered by development.
- 10-4 4. The BTC project site occupies both banks of a sensitive Riparian Conservation Area along an undeveloped reach of the S. Fork of the Tuolumne River. Although the new plan moves buildings out of the 100 year floodplain, a number of structures would be built within the floodplain, including a pedestrian bridge, footpaths, ramps, walls, and weirs with the potential to impact water quality and alter surface drainage patterns, as noted in the IS. In addition, steep banks along the river corridor are susceptible to significant soil erosion with potential large impacts on water quality.

10-5 When the Berkeley Tuolumne Camp was established in 1922, development and use were encouraged on public lands, and little thought was given to long-term human impacts on forest and riparian areas. In the 21st century, we are acutely aware of the degradation to our natural and cultural resources from concentrated development in sensitive areas. I am surprised and disappointed that the City of Berkeley has not put forth plan that minimizes, rather than expands, their environmental impact.

10-6 I encourage the City of Berkeley to consider a plan that reduces, rather than increases, their built footprint and is consistent with modern concepts of sustainability and limited development. If the economic model for the City requires a facility of this size and scope in order to be financially viable, the City and Forest Service should consider an alternate location for such a camp. This sensitive Riparian Conservation Area is just beginning to recover from the devastation of the Rim Fire. Restoration of this habitat, rather than re-development and expansion, would have long-term, lasting benefits for this unique ecological and cultural area.

Sincerely,

A handwritten signature in blue ink that reads "Peggy O'Day". The signature is written in a cursive style and is centered within a light gray rectangular box.

Peggy O'Day
2265 E. North Bear Creek Dr.
Merced, CA 95340
email: poday55@comcast.net

Letter #10 Response: Peggy O'Day

- 10-1 The Draft MND/IS identifies potentially significant impacts to Biological Resources (refer to pages 31-34 of the Draft Initial Study); Cultural Resources (refer to pages 45-46 of the Draft Initial Study); and Hydrology and Water Quality (refer to pages 57-71 of the Draft Initial Study). As stated in the referenced sections of the Draft Initial Study, all potentially significant impacts to Biological Resources, Cultural Resources and Water Quality would be reduced to a less-than-significant level. Refer to comment responses 3-3 and 3-4 regarding the the Special Use Permit area acreage.
- 10-2 The expansion of the BTC Special Use Area footprint to accommodate parking and staff cabins on the north side of Hardin Flat Road is the result of three conditions: avoidance of cultural resources within the existing Use Permit Area; relocation of structures out of the 100-year floodplain of the South Fork Tuolumne River; and the Tuolumne County code requirement to remove all on-street parking from Hardin Flat Road. Buildings and parking on the north side of Hardin Flat Road are needed to comply with these conditions. As described in the MND/IS and summarized below, the potential environmental impacts of the new location have been analyzed and these studies indicate that the Project will not result in any significant, adverse impacts.

Technical assessments and evaluations were conducted by professional biologists and botanists in cooperation with the Forest Service and the Federal Emergency Management Agency. Resources evaluated include, but were not limited to, aquatic wildlife, terrestrial wildlife, and rare plants. These are analyzed in detail in technical reports that support the MND/IS conclusions and the proposed mitigation measures.

The early- to mid-seral Sierran mixed conifer forest of the BTC site does not represent suitable nesting habitat for the California spotted owl owing to its relatively open canopy and shortage of very large trees. Spotted owls would be expected to forage in forested areas of the BTC site from time to time. The fire resulted in an increased concentration of snags and down woody material favoring owl prey, particularly north of Hardin Flat Road. Individual owls foraging on the site during construction or operation of the Camp may be subjected to periodic noise disturbance, but are highly unlikely to be injured or killed by activities owing to the mobile nature of the species. If a spotted owl were observed on-site during construction, activities would be halted and assessed, limiting the severity of disturbance. Because the BTC site does not offer suitable nesting habitat for the California spotted owl the proposed Project will produce no indirect effects for this species related to reduction in quantity or quality of nesting habitat. With implementation of Mitigation Measures BIO 6 and BIO 8 there would be no adverse effect on California spotted owl.

During 2007 surveys of the South Fork Tuolumne River, four adult Western pond turtles were found about two miles east of the BTC area. There were no turtles observed at the Project site. However it is recognized that the section of the South Fork Tuolumne River that flows

through the BTC site provides suitable aquatic habitat for the western pond turtle. BTC activities with the greatest potential to impact terrestrial habitats include construction of new structures, paths, and parking lots. If the western pond turtle uses habitats of the BTC site, a reduction in quantity and quality of terrestrial habitats would produce, at most, moderate negative effects for this species due to the many other similarly suitable areas of terrestrial habitat in and near the Camp. With implementation of Mitigation Measure BIO-4 there would be no significant adverse effect on the western pond turtle. For the western pond turtle, implementation of the BTC may affect individuals and upland habitats over time, but effects would be negligible and would not lead to a trend toward Federal listing or a loss of viability.

As noted in the rare plant technical report, the presence of the slender-stemmed monkey flower within the Special Use Permit Area has been intermittent. In 2009 seven slender-stemmed monkey flower plants were found occupying a 16-square-foot area along a drainage of Hardin Flat Road. Surveys conducted in 2011 did not observe any slender-stemmed monkey flower plants. Seven subpopulations of slender-stemmed monkey flower were identified within the boundaries of the BTC analysis area during 2015 botanical surveys. Slender-stemmed monkey flower is an annual herb that reproduces by seed and is relatively short-lived and subject to annual changes in moisture regime. Its presence is not limited to the BTC site. Known occurrences of slender-stemmed monkey flower on the Groveland Ranger District range in size from five to several thousand individuals and are well distributed through the southeastern half of the District and sporadically distributed through the southwestern half of the District.

The combination of effects from all of the proposed BTC activities associated with the Project are not expected to cause long-ranging adverse cumulative effects to slender-stemmed monkey flower. Assuming the subpopulations observed on the site remain, any loss of individuals could adversely affect the continued existence of this small population. However as evidenced by the presence of the population pre-Rim fire, this population has persisted in this location under nearly identical circumstances as proposed with the reconstruction of BTC. In the unlikely event that the population is extirpated, it is not anticipated that it would result in a trend toward federal listing, since at least 38 occurrences would remain, many of which are much more robust populations. With implementation of Mitigation Measure BIO-5 there would be no adverse effect on slender-stemmed monkey flower.

The intensity of use related to BTC has been recognized historically and is consistent with the Developed Recreation Area designation for BTC in the Stanislaus National Forest's Forest Plan Direction (March, 2017). The Forest Plan Direction provides, as defined in the National Forest Management Act, management direction for multiple use goals and objectives on the Stanislaus National Forest, management prescriptions, and their associated standards and guidelines for attaining them. The expansion of the BTC Special Use Area has been analyzed in the context of the Forest Plan Direction (March, 2017).

- 10-3 The entire Special Use Permit Area has been surveyed for the existence of cultural resources. In working with Tribal representatives, the site planning for the reconstruction of BTC avoids

- all cultural resources in the Special Use Permit Area that do exist. In addition, Mitigation Measure CUL 1 will further protect the integrity of cultural resources by removing selected camp facilities that did not burn during the Rim fire without any ground disturbance. Installation of buck-and-pole fencing called for in Mitigation Measure CUL-3 will further protect those resources. Mitigation Measure CUL-2 will assure that should any new cultural resources be found during construction, the proper protocol is established to protect them.
- 10-4 Comments noted. Mitigation Measures HYDRO-5, HYDRO-6, HYDRO-7, and HYDRO-8 address how the reconstruction and operations of BTC will protect water quality and meet the Riparian Conservation Area goals and objectives established by the Stanislaus National Forest in the Forest Plan Direction (March, 2017). The Draft Initial Study Appendix A, Table A-1 outlines more specifically the related management strategy requirements for BTC to implement that reflect the Riparian Conservation Area Goals and Objectives of the Forest. In Appendix A, Table A-2 lists the BMPs applicable to protecting water quality of the South Fork Tuolumne River.
- The Rim Fire resulted in a dramatic change to the vegetation mosaic in and around BTC and the South Fork Tuolumne River. Working in partnership, the Forest Service and City of Berkeley developed the project with the following baseline considerations: 1) no increase in camper capacity/occupancy; 2) consistency with current laws and regulations including E.O. 11988, Floodplain Management (FEMA 1977a); 3) consistency with the policies, standards, and guidelines of the Forest Plan Direction (March 2017); and 4) provision for the protection of all cultural resources. It should be noted that, as presented in Figure 5 included in the Draft Initial Study, the proposed BTC revegetation plan emphasizes, among other goals, dense riparian vegetation and conifers shading the river, Thimbleberry Creek, and related drainages.
- 10-5 Opinion noted. As was historically the case, development and use of recreation facilities such as BTC continues to be, by policy, encouraged on public lands by the Forest Service. The BTC Project is consistent with Forest Service policy encouraging organization camp facilities and programs that promote environmental education, hiking, fishing, and similar forest-related activities (FSH 2709.14, Policy 13.2). The Project is also consistent with Forest Service objectives to provide, under special use authorization, sufficient suitable facilities and services that supplement or complement those provided by the private sector, State, and local government on private land and the Forest Service on NFS land to meet public needs to facilitate the use, enjoyment, understanding, and appreciation of natural resource settings in National Forests (FSM 2340.2). Reconstruction of BTC in combination with the implementation of revegetation actions (see Figure 5) and the mitigation measures outlined will balance recreation and outdoor education use with habitat protection and enhancement.
- 10-6 Comment noted. While alternative relocation sites were discussed with Stanislaus National Forest immediately after the Rim Fire, no such equivalent sites exist on the Forest that would

be suitable for BTC and that would meet the City's purpose and need for BTC. The Forest Plan Direction (March, 2017) does not preclude developed recreation areas being located within Riparian Conservation Areas. Recognition of the BTC setting within a Riparian Conservation Area already exists within the Forest Plan Direction (March, 2017). Riparian Conservation Area goals and objectives have been integrated into the management requirements and mitigation measures for the reconstruction of BTC and in its long-term operations.

Berkeley Tuolumne Camp Permit (46690) CEQA
Negative Declaration

October 1, 2018

11-1 The decision to rebuild Berkeley's Tuolumne Camp is an important one but I would suggest that the City take this opportunity to evaluate the mission of this resource and the people it serves.

I agree that summer camp is a positive, often transformative, experience. Particularly for city dwellers, the week long retreat is a time for fellowship, discovery and relaxation. Tuolumne Camp appears to offer all of this and more. Unfortunately, it is serving only about 2,460 Berkeley residents each season (based on a 4,100 yearly attendance, 60% of whom live in Berkeley). That is slightly more than 2% of the Berkeley population. Yet, all Berkeley residents contribute to the camp's rebuilding and maintenance via city taxes.

11-2 Who attends Tuolumne Camp? I visited the Friends of Tuolumne Camp Facebook page, and was surprised to see an extremely homogeneous group of campers. All the photos I found depicted white families enjoying camp life. I think I found one African American individual in the gallery of photos posted. These photos of campers did not reflect the racial diversity of Berkeley. I imagine that they neither represent the economic or social diversity of our city.

The following data is compiled from information provide by the City of Berkeley on the 2015 attendance of Tuolumne Family Camp:

Estimated yearly usage: 4,000
60% Berkeley residents / 40% non-residents
Estimated yearly usage by Berkeley residents: 2,400 (2.033%)
The median income for a family was \$102,976
59.5% White
19.3% Asian American
10% African American
10% Hispanic
.4% Native American

Berkeley's Parks, Recreation & Waterfront Department appears committed to rebuilding Tuolumne Camp to its former glory. The Friends of Tuolumne Camp is a vital community organization lending its passion and support. I would ask that they reconstruct the camp to serve today's Berkeley and *all* of its residents. The following pages demonstrate how Tuolumne Camp is missing that mark.

Sincerely,
Cameron Woo
Berkeley resident
cameron@thebark.com

11-3

IN RESPONSE TO
Berkeley Tuolumne Camp Permit (46690) CEQA
Negative Declaration
10.1.18

I have a special interest in the rebuilding of Berkeley's Tuolumne Camp and making sure that it is a resource that is shared and open to all residents of the city.

Reading through the City of Berkeley Tuolumne Camp Permit (46690) Society, Culture and Economy SPECIALIST REPORT brought to my attention what seems to be the mission of BTC (Berkeley Tuolumne Camp).

On page 12 of the report, it describes the priorities listed under the permit granted by the Forest Service as amended in 1976 that — “establishes priorities for campers served.” It lists three classifications:

Priority 1 — ‘at-risk’, disabled or low-income/scholarship campers

Priority 2 — youth and educational programs

Priority 3 — family campers

Table (1.01-9) shows the typical usage by these groups for the years 2005–2013:

#1 Priority (At-Risk, Low-Income, Disabled) 196 campers / 4.85% of BTC

#2 Priority (Youth Educational) 182 campers / 4.5% of BTC

#3 Priority (Family Campers) 3,367 campers / 90.6% of BTC

These numbers point out that the majority of visitors to Berkeley Tuolumne Camp (BTC) are family campers and not the number 1 priority group of low-income or at-risk residents. I can understand the report's premise that the BTC family camp is used as an income generating enterprise that provides an annual surplus of \$564,000 but where does that money go? Is it funding outdoor and educational experiences for the priority groups 1 and 2? It doesn't appear so.

I question the effort put forth by the City of Berkeley in advertising BTC's services and availability, and, in particular, promoting its use by those community members who are categorized in priority groups 1 and 2. I understand that there have been individual and family scholarships available that have gone unused in years past — that should not be the case.

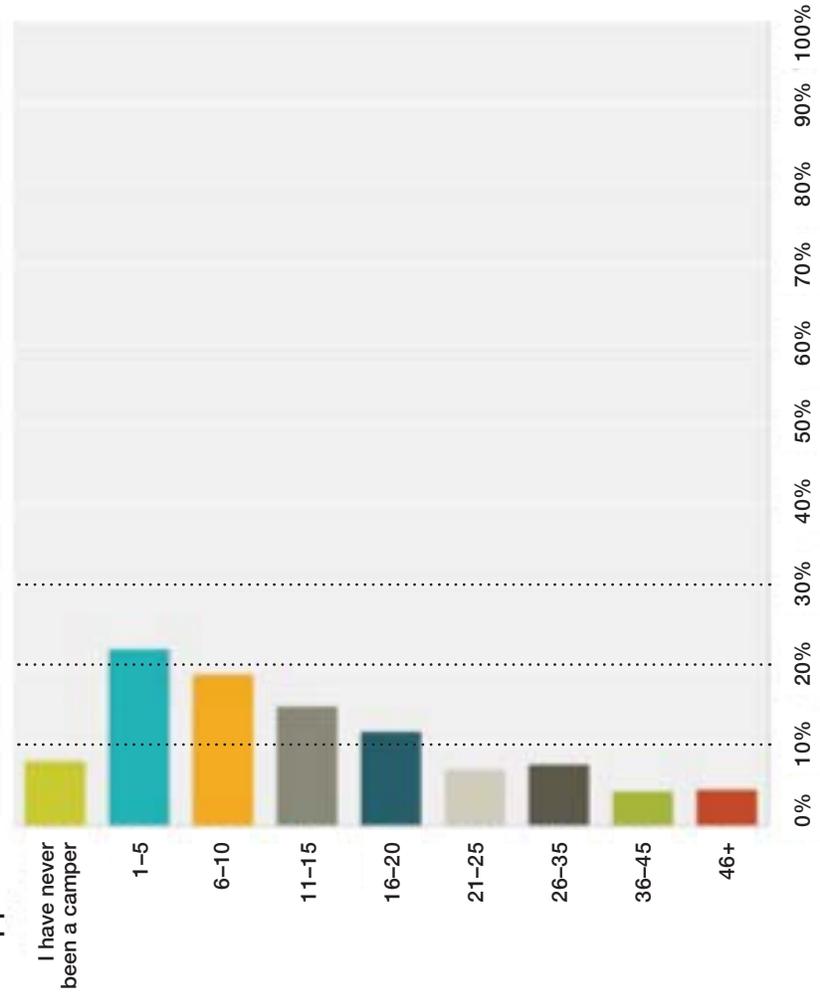
I would ask that the City of Berkeley do better at meeting Tuolumne Camp's mission and make it more inclusive and open to all residents of Berkeley. And to responsibly use the half-million dollars in annual revenue towards outdoor experiences and education for the two priority groups identified — at-risk/low-income residents and youth education in general.

The survey results below conducted by the Berkeley Parks, Recreation & Waterfront Department in Spring 2015, show that a significant number of campers attend Tuolumne Camp year after year, thus limiting the number of new participants. 59% of campers polled have attended the camp for 11 or more years. 15% have attended Tuolumne Camp for 21–35 years. This data shows that even a smaller number of (unique) individuals have access to the camp than the yearly attendance suggests. Conclusion: a significant portion of campers are the same people year after year, and many of those people are non-Berkeley residents.
 –CAMERON WOO

Q5: Which of the following categories best represents your total years as a camper at Tuolumne Camp?

Answered: 432 Skipped: 8

Those polled: 234 Berkeley residents
 198 Non-Berkeley residents



Letter #11 Response: Cameron Woo

- 11-1 Commented noted. See Comment Letter #6, Responses 6-1 and 6-2.
- 11-2 Commented noted. See Comment Letter #6, Responses 6-1 and 6-2.
- 11-3 Commented noted. See Comment Letter #6, Responses 6-1 and 6-2.

3.4 PUBLIC HEARING ORAL COMMENTS – SEPTEMBER 12, 2018

1/2

BTC CEQA Public Hearing 9/12/18

Public Hearing

#1 Phil Coffin 1993-2001, employee,
Echo Lake Camp Manager
→ Well researched, complete document.
FOBTC Supports Project.

- Forest Restoration

pg. 113 - BMPs

- water during summer - protection
of existing trees.

- Buffering around re-sprouted
oaks, dogwoods, etc.

- Dust Mitigation watering → can ^{they} be
expanded to water new/protected
areas? (yes, during construction)

#2 Richard Thomison, FOBTC.

→ Support adoption of MND

#3 Cameron Woo

use after completion. P.12 → Priority levels

⊕ w/i USFS ⊕ Table summary -

5% priority 1, 96% family campers.

Where does profit go?

#4 Kathy Brown, in favor of ND of BTC
mostly construction related MND
p. 81 water tank 240,000
p. 90 water tank 280,000 Gallons.

CLOSE

~~Question~~

Public Hearing Oral Comments Response: Phil Coffin

PH-1 Comments noted.

Public Hearing Oral Comments Response: Richard Thomison

PH-2 Comments noted.

Public Hearing Oral Comments Response: Cameron Woo

PH-3 Comments noted. See Comment Letter 6, Responses 6-5 and 6-2.

Public Hearing Oral Comments Response: Kathy Brown

PH-4 The approximately 240,000 gallon water availability is a requirement specifically for fire protection and does not include potable water storage for daily BTC operations. The total water storage is estimated to be 280,000 gallons.

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**City of Berkeley
Parks Recreation & Waterfront**

**NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION
FOR THE CITY OF BERKELEY TUOLUMNE CAMP PERMIT (46690) PROJECT**

PROJECT TITLE:	City of Berkeley Tuolumne Camp Permit (46690) Project
PROJECT LOCATION;	Stanislaus National Forest, Groveland Ranger District 331585 Hardin Flat Road, Groveland, Tuolumne County, CA
PROJECT SPONSOR:	City of Berkeley (City)
DATE OF PUBLIC NOTICE:	September 1, 2018
PUBLIC REVIEW PERIOD:	September 1, 2018 to October 1, 2018
DATE OF PUBLIC HEARING:	September 12, 2018, 7:00 p.m.
LOCATION OF PUBLIC HEARING:	Frances Albrier Community Center 2800 Park Street, Berkeley, CA 94702

Project Description: The Berkeley Tuolumne Camp (“Camp”) is a family camp that was operated by the City of Berkeley from 1922 until August 25, 2013, when it was largely destroyed by the Rim Fire. Of the 138 structures at the Camp, 19 survived the fire. Additionally, the forest canopy that once existed over much of the central camp area was destroyed by the Rim Fire and will take 20 years or more to provide the natural shading it once did. The Camp is operated under a Special Use Permit from the Stanislaus National Forest, Groveland Ranger District. The current permit is for approximately 14 acres located on the southerly side of Hardin Flat Road.

The proposed Project would obtain a 30-year term Special Use Permit (SUP) from the Forest Service that will allow the City to reconstruct Camp facilities to current code and operate the Camp much as it was prior to the Rim Fire. The new SUP would be expanded to approximately 30 acres and would include two trails known as the Small Falls and Sugar Pine Trails that extend away from the main camp. About 14.5 acres of the permit area is proposed to be developed for parking, the main camp area, staff camp area, all support facilities and the Sugar Pine and Small Falls Trails. BTC would be designed to operate at a capacity that matches, but does not exceed, the pre-fire overnight staff and camper capacity of 360 individuals. The SUP would be issued for a term period of 30 years and may be renewed upon review and approval by the Forest Service.

Environmental Review: An Initial Study (IS) has been prepared under the requirements of the California Environmental Quality Act (CEQA) for review and action by the City. The IS evaluates the potential environmental impacts of the proposed Project. Based on the results of the IS prepared according to CEQA Guidelines, it has been determined the Project will not have a significant effect on the environment and a Mitigated Negative Declaration (MND) has been prepared. The Project has been modified to incorporate mitigation measures identified in the IS that will reduce any potentially significant impacts to a less-than-significant level.

Public Review: The Draft MND/IS is available for public review at the City office at 2180 Milvia Street, 3rd Floor , Berkeley, CA 94704. The MND/IS is also available on the City website at:

https://www.cityofberkeley.info/Parks_Rec_Waterfront/Recreation/Tuolumne_Camp.aspx

Any interested party may comment on the proposed MND/IS. All comments received will be considered by the City prior to finalizing the MND/IS and making a decision on the Project. Written comments must be received no later than 4:00 pm on **October 1, 2018** and sent to:

Liza McNulty, Program Manager
City of Berkeley
Parks Recreation & Waterfront
2180 Milvia Street, Third Floor
Berkeley, CA 94704
Email: lmcnulty@cityofberkeley.info

MITIGATED NEGATIVE DECLARATION

PROJECT DESCRIPTION

The Berkeley Tuolumne Camp (“Camp”) is a family camp that was operated by the City of Berkeley from 1922 until August 25, 2013, when it was largely destroyed by the Rim Fire. Of the 138 structures at the Camp, 19 survived the fire. Additionally, the forest canopy that once existed over much of the central camp area was destroyed by the Rim Fire and will take 20 years or more to provide the natural shading it once did. The Camp is operated under a Special Use Permit from the Stanislaus National Forest, Groveland Ranger District. The current permit is for approximately 14 acres located on the southerly side of Hardin Flat Road.

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PROJECT LOCATION

Berkeley Tuolumne Camp
Stanislaus National Forest
Groveland Ranger District
331585 Hardin Flat Road
Groveland, Tuolumne County, CA

PROJECT SPONSOR

City of Berkeley
Department of Parks, Recreation and Waterfront
2180 Milvia Street
Berkeley, California 94704

FINDING

The Project will not have a significant effect on the environment based on the Initial Study prepared according to CEQA Guidelines. Mitigations have been incorporated into the Project to reduce the identified potentially significant impacts to a less-than-significant level.

POTENTIALLY SIGNIFICANT IMPACT

The attached Initial Study indicates that the Project could adversely affect the environment. Potentially significant impacts were identified and are presented below.

MITIGATION MEASURES

In the interest of reducing the potential impact to the point where the net effect of the Project is insignificant, mitigation measures are recommended. A discussion of the potential impacts of interest and the associated mitigation measures is provided below.

AESTHETICS

Impact: Without specific material controls for structures and screening measures, the character of the BTC development would not meet the Visual Quality Objectives (VQO) of the Stanislaus National Forest's *Forest Plan Direction 2017*.

Mitigation Measures:

AES-1 In order to meet a near-term Visual Quality Objective of Modification the BTC Facilities shall be designed to follow the *Design Narrative / Built Environmental Image Guidelines* (2M Associates 2017) for the project. Design documents (90 percent completion) will be submitted to the Forest Service for review and comment for consistency with the guidelines.

AES-2 In order to screen project facilities and meet a Visual Quality Objective of Partial Retention a revegetation plan for the Hardin Flat road corridor, burned areas, and areas disturbed by construction will be prepared and implemented emphasizing:

- Feathered screening between Hardin Flat Road and BTC facilities.
- Dense riparian vegetation and conifers shading of the river, Thimbleberry Creek, and related drainages.

Planting program design documents (90 percent completion) will be submitted to the Forest Service for review and comment for consistency Forest Service standards.

Residual Impact: Less than significant with implementation of the recommended mitigation measures.

Impact: Unshielded, cobra-type overhead area lighting existed at the main sports courts. Installing this type of lighting with the proposed Project could create light and glare along Hardin Flat Road which is a potentially significant impact.

Mitigation Measures:

AES-3 To minimize visibility and to reduce the potential impacts of lighting as seen from Hardin Flat Road:

- All outdoor lighting shall be dark sky-compliant and consistent with California Green Building Standards Code Section 5.106.8 Light Pollution Reduction
- All light fixtures shall include shrouds (either fixed or adjustable), other shielding, or be directed in such a way as to block direct light as seen from Hardin Flat Road.
- Lighting that is not required during nighttime hours shall be controlled by the use of timed switches and/or motion detector activation controls so lights are only on when necessary.

AES-4 To minimize visibility and to reduce the potential impacts of glare as seen from Hardin Flat Road:

- Structures, including roofs, shall use non-reflective, earth-toned materials that match the soil and vegetation colors of the backdrop characteristic landscape.
- All structure windows and doors shall use non-reflective glass.

Residual Impact: Less than significant with implementation of the recommended mitigation measures.

AIR QUALITY

Impact: Construction of Berkeley Tuolumne Camp would result in short-term air pollution emissions as a result of construction activities during each development activity.

Mitigation Measure:

AIR-1 A construction-phase Dust Control Plan (DCP) shall be prepared prior to the start of any Project construction activity. The DCP shall include all basic emission control measures (listed below) and any additional measures applicable to the project and necessary to reduce off-site migration of fugitive dust:

Basic Control Measures

- All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover.
- All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.
- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut & fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.
- With the demolition of buildings, all exterior surfaces of the building shall be wetted during demolition.
- When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.

- All operations shall limit or expeditiously remove the accumulation of mud or dirt from Hardin Flat Road at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions; use of blower devices is expressly forbidden.)
- Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.
- Any site with 150 or more vehicle trips per day shall prevent carryout and track-out.

Enhanced Control Measures (as necessary and appropriate)

- Limit traffic speeds on unpaved roads to 15 mph.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from areas with a slope greater than one percent.

Additional Control Measures (as necessary and appropriate)

- Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site.
- Install wind breaks at windward side(s) of construction areas.
- Suspend excavation and grading activity when winds exceed 20 mph, or when fugitive dust exiting the site exceeds the 20 percent opacity limit, regardless of wind speed.
- Limit area subject to excavation, grading, and other construction activity at any one time.

Residual Impact: Less than significant with implementation of the recommended mitigation measure.

Impact: There may be occasional open burning associated with either construction or ongoing vegetation management activities on the Project site.

Mitigation Measure:

AIR-2 Acquire burn permits from the Tuolumne County Air Pollution Control District. The California Air Resources Board provides daily information on "burn" or "no burn" conditions. Design and implement burn plans to minimize particulate emissions. Notify the Groveland District Wildlife Biologist prior to pile burning to minimize disturbance to protected or sensitive species.

Residual Impact: Less than significant with implementation of the recommended mitigation measure.

BIOLOGICAL RESOURCES

Impact: The Project could adversely affect the western pond turtle.

Mitigation Measures:

BIO-1 Conduct a pre-construction survey to identify if the western pond turtle are present within the construction areas.

BIO-2 BTC project construction workers shall be trained regarding the western pond turtle, including identification, habitat requirements, and the importance of minimizing physical disturbance to individuals during construction.

BIO-3 Major site grading and underground utility construction activities shall be completed during the dry season to minimize risk of harming or displacing overwintering turtles.

BIO-4 If western pond turtles are discovered in the immediate vicinity of construction activity, construction activity shall cease and a qualified biologist will relocate the turtle to suitable habitat outside of the BTC Project area.

Residual Impact: Less than significant with implementation of the recommended mitigation measures.

Impact: The slender-stemmed monkey flower may be impacted during construction activities.

Mitigation Measure:

BIO-5 Conduct a pre-construction plant survey the spring prior to Project construction. Flag and avoid new occurrences of sensitive plants. Notify the Groveland Ranger District Botanist to determine course of action.

Residual Impact: Less than significant with implementation of the recommended mitigation measure.

Impact: Construction and/or operation of BTC could adversely affect terrestrial wildlife

Mitigation Measures:

BIO-6 Conduct pre-construction nest surveys for migratory birds, California spotted owls, and northern goshawks within ¼ mile of construction activities implemented during the breeding season (February 15 to September 15). If active nests are discovered, protective measures would be implemented in consultation with a USFS biologist.

BIO-7 Pre-activity surveys roosting bats would be conducted at all suitable roost trees or structures to be removed by project activities. If any FSS bat species are discovered during the surveys, nest and roost trees would be protected unless the trees pose an eminent safety concern.

BIO-8 If any Forest Service Sensitive (FSS) or Federal-listed terrestrial wildlife species are discovered within the BTC project site area prior to or during ground disturbance and construction activities, such activities shall cease and a USFS biologist shall be contacted for recommendations as to how to proceed.

Residual Impact: Less than significant with implementation of the recommended mitigation measures.

Impact: Construction activities could introduce invasive plants to BTC.

Mitigation Measure:

BIO-9 Follow applicable FSM Manual 2080 Noxious Weed Management related to construction activities to include, but not be limited to:

- All vehicles and equipment that go off road must be free of non-native soil, mud (wet or dried), seeds, vegetative matter or other debris that could contain seeds in order to prevent new infestations of noxious weeds in the project area. Dust or very light dirt, which would not contain weed seed, is not a concern.

- Flag and avoid noxious weed populations if present. In places where noxious weeds cover large areas, mechanical treatments can be done within sites, but equipment must be cleaned before leaving the area.
- Do not stage equipment, material or personnel in areas with noxious weed infestations.
- After using equipment in infested areas, clean equipment so that it is free of soil, seeds, vegetative matter or other debris prior to being moved off site.
- Use certified weed-free mulches where available, mulches with low risk of weed introduction where certified weed-free is not available, and certified weed-free seed mixes. Seed mixes must conform to the Region 5 Policy on the Use of Native Plant Material in Restoration or Revegetation Projects.
- Where soil stabilization is needed, use crushed rock, drain rock, riprap and soil fill obtained from weed-free sources.
- Treat invasive plants and other weeds using manual (hand or mechanical) methods only.

Residual Impact: Less than significant with implementation of the recommended mitigation measure.

CULTURAL RESOURCES AND TRIBAL CULTURAL RESOURCES

Impact: There is the potential to impact cultural resources.

Mitigation Measures:

CUL-1 Remove specific existing structures to protect sensitive resources.

CUL-2 Cultural resources shall be protected through application of Standard Protection Measures as determined by Programmatic Agreement Among the USDA, Forest Service, Pacific Southwest Region (Region 5), California State Historic Preservation Officer, Nevada State Historic Preservation Officer and the Advisor Council on Historic Preservation Regarding the Process for Compliance with Section 106 of the National Historic Preservation Act for Management of Historic Properties by the National Forests of the Pacific Southwest Region (Regional PA), signed February 2013. In addition:

- Natural plant succession will be allowed to occur within cultural resource site boundaries.
- Notify the Forest Service cultural resource specialist if a new cultural resource site is discovered during project implementation and cease all activities within 150 feet of the resource until consultations are completed.

CUL-3 Buck and pole fencing shall be installed to protect cultural resources. Fencing shall be constructed by hand with no excavation.

Residual Impact: Less than significant with implementation of the recommended mitigation measures.

GEOLOGY AND SOILS

Impact: There is the potential for seismic activity which could cause human injury or damage to structures and infrastructure facilities at BTC.

Mitigation Measure:

GEO-1 Detailed geotechnical investigations shall be performed prior to the design of all buildings and the pedestrian/utility bridge. Buildings and bridges shall be designed to withstand seismic and soil loads consistent with California Building Code.

Residual Impact: Less than significant with implementation of the recommended mitigation measure.

Impact: There is the potential for soil erosion during construction activities.

Mitigation Measure:

GEO-2 To minimize soil erosion during construction activities, follow FSM 2550 Soil Management R5 Supplement (USDA 2012) and Soil Management Practices identified in the Forest Plan Direction (USDA 2017, p. 57-58).

Residual Impact: Less than significant with implementation of the recommended mitigation measure.

HYDROLOGY AND WATER QUALITY

Impact: Construction activities have the potential to increase levels of pollution in runoff that can create violations in water quality standards.

Impact: Camp operations have the potential to increase levels of pollution in runoff as well as produce pollutants due to trash, food wastes, spills of maintenance fluids, waste products from maintenance operations and leaks from parked vehicles.

Mitigation Measures:

HYDRO-1 During detail design of BTC facilities and related site improvements, submit the US Army Corps of Engineers Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act permit applications and associated documentation to the Forest Service for review and comment.

HYDRO-2 Prior to construction, update the floodplain map to reflect updated base mapping, base flood elevations, final structure placement, and finished floor elevations and submit to the Forest Service and FEMA for review and acceptance.

HYDRO-3 During detail design of BTC facilities to be constructed and related site improvements, submit permit applications and associated documentation for the following to Forest Service for review and comment:

- a. California Department of Fish and Wildlife (CDFW): Application, plans, and specifications for work to obtain a Stream Alteration Agreement pursuant to Fish and Game Code sections 1600 *et seq.*

- HYDRO-4** Prior to BTC operations, provide a Camp Evacuation Plan for approval by the Forest Service that incorporates protocols and procedures for evacuation in response to summer season storm and/or winter and spring season rain-on-snow or sudden snowmelt events that may lead to high water flows.
- HYDRO-5** During detail design of BTC facilities and related site improvements, submit permit applications and associated documentation for the following to Forest Service for review and comment:
- a. California Water Quality Control Board, Division of Drinking Water: Application, plans, and specifications for permit for surface water appropriation and treatment for drinking water under the Porter-Cologne Water Quality Control Act of 1975 and Safe Drinking Water Act (Pub. L. 93-523).
 - b. Tuolumne County On-site Sewage Treatment and Disposal System Certification including percolation tests and soil profiles, system design plans and specifications (plot plan; grading plan; description of groundwater and soils; description of monitoring devices, system operation and function; and site evaluation and testing) necessary to obtain Certification of an on-site sewage treatment and disposal system pursuant to Tuolumne County Code Section 13.08.
- HYDRO-6** Prior to the beginning (April) and after each BTC summer operating period (October), test the water quality of the South Fork Tuolumne River both at the Hardin Flat Road bridge and at the downstream boundary of the permit area. File results with the Groveland Ranger District.
- HYDRO-7** Protect beneficial uses of water through implementation of Best Management Practices (BMPs) in accordance with Regional Water Quality Management Plan (USDA 2011), the National BMPs for Water Quality Management on National Forest System Lands (USDA 2012), and the Forest Plan Direction (USDA, 2017).
- HYDRO-8:** Follow Forest Plan Direction (USDA, 2017) for protection of Riparian Conservation Areas (RCAs) through compliance with the Riparian Conservation Objectives (RCOs). The project shall:
- a. Prepare an Erosion Control Plan / Stormwater Pollution Prevention Control Plan and BMP checklist as part of the construction documentation for Forest Supervisor approval prior to ground-disturbing activities. Reference Appendix A actions.
 - b. Prior to construction activities, delineate riparian zones around all streams and special aquatic features within the permit area to be retained. Exclude ground-disturbing mechanized equipment from operating within riparian zones to be retained.
 - c. Clean equipment used for instream work prior to entering the water body. Remove external oil, grease, dirt and mud from the equipment and repair leaks prior to arriving at the project site. Inspect all equipment before unloading at site. Inspect equipment daily for leaks or accumulations of grease, and correct identified problems before entering streams or areas that drain directly to water bodies. Remove all dirt and plant parts to ensure that noxious weeds and aquatic invasive species are not brought to the site.
 - Locate construction access perpendicular to the channel and minimize the number of channel crossings and channel damage. Upon completion of use, repair damage to the stream course, including banks and channels, to maintain a hydrologic ally stable channel.

- Remove all project debris from the stream in a manner that will cause the least disturbance.
 - Minimize streambank and riparian area excavation during construction: stabilize adjacent areas disturbed during construction using surface cover (mulch), retaining structures, and/or mechanical stabilization materials.
 - Keep excavated materials out of channels, floodplains, and wetlands. Install silt fences or other sediment- and debris-retention barriers between the water body and construction material stockpiles and wastes. Dispose of unsuitable material in approved waste areas outside of the RCA.
 - Conduct operations during the least critical periods for water and aquatic resources: when streams are dry or during low-water conditions.
- d. Locate equipment staging and mitigate by use of erosion prevention measures to avoid sedimentation effects and delivery to a watercourse.
- e. Implement erosion control measures as needed on all lands disturbed by construction following completion of construction. Reference Appendix A actions.
- f. Conduct watering during construction for dust abatement using approved existing water source locations. Treat construction approaches and staging areas to prevent sediment production and delivery to a watercourse.
- Check all water-drafting vehicles daily and repair as necessary to prevent leaks of petroleum products from entering RCAs. Water-drafting vehicles will contain petroleum-absorbent pads, which are placed under vehicles before drafting. Water-drafting vehicles will contain petroleum spill kits. Dispose of absorbent pads according to the Hazardous Response Plan.
 - Use screening devices for water drafting pumps. Use pumps with low entry velocity to minimize removal of aquatic species, including juvenile fish, amphibian egg masses and tadpoles, from aquatic habitats. Pump intake screening specification will be provided and put in the project file.
 - Prohibit water drafting by more than one truck at a time.
- g. Allow temporary refueling and servicing only at approved construction staging sites. Rehabilitate temporary staging, parking, and refueling/servicing areas immediately following use.
- Prepare a Spill Prevention and Containment and Counter Measures (SPCC) plan where total oil products on site in above-ground storage tanks exceed 1320 gallons. Review spill plans to ensure they are up-to-date.
 - Install contour berms and trenches around vehicle service and refueling areas, chemical storage and use areas, and waste dumps to fully contain spills. Use liners as needed to prevent seepage to groundwater.
 - Report spills and initiate appropriate clean-up action in accordance with applicable state and Federal laws, rules and regulations. The hazardous materials coordinator's name and phone number will be available to Forest Service personnel who administer or manage activities utilizing petroleum-powered equipment.
 - Remove contaminated soil and other material from Forest Service lands and dispose of this material in a manner according to controlling regulations.
- h. Place burn piles a minimum of 50 feet away from the South Fork Tuolumne River, Thimbleberry Creek, or intermittent streams and 25 feet away from ephemeral drainages unless otherwise approved by a hydrologist and/or soil scientist. Locate

piles outside of areas that may receive runoff from roads. Burn piles in the fall or winter.

- i. Conduct implementation and effectiveness monitoring using the Best Management Practices Evaluation Program and the National Core Monitoring Protocols (FS - 990b) as a supplement.

Residual Impact: Less than significant with implementation of the recommended mitigation measure.

LAND USE PLANNING

Impact: Reconstruction of BTC could cause conflicts with conservation of habitat.

Mitigation Measure:

LUP-1 Submit all plans to the Forest Service for consistency review with the *Forest Plan Direction* and prior to Camp construction.

Residual Impact: Less than significant with implementation of the recommended mitigation measure.

NOISE

Impact: The amplified noise emissions from the BTC stage speaker system could result in the exceedance of the Tuolumne County General Plan Noise Element standard for maximum allowable noise exposure for stationary noise sources which could adversely affect nearby residences.

Mitigation Measure:

NOISE-1 The speaker system for the BTC stage shall be designed to ensure it does not exceed noise levels of 50 L_{eq} , dB.

Residual Impact: Less than significant with implementation of the recommended mitigation measure.

INITIAL STUDY AND ENVIRONMENTAL REVIEW CHECKLIST

1.0 PROJECT INFORMATION

Project Title: City of Berkeley Tuolumne Camp Permit (46690)
Project

Lead Agency Name and Address: City of Berkeley
Department of Parks, Recreation and Waterfront
2180 Milvia Street
Berkeley, California 94704

Contact Person and Phone Number: Liza McNulty
Phone: 510-981-6437
Email: lmcnulty@ci.berkeley.ca.us

Project Location: Berkeley Tuolumne Camp
Stanislaus National Forest
Groveland Ranger District
331585 Hardin Flat Road
Groveland, Tuolumne County, CA
See Figure 1

Project Sponsor's Name and Address: City of Berkeley
Department of Parks, Recreation and Waterfront
2180 Milvia Street
Berkeley, California 94704

Responsible Agencies: Stanislaus National Forest
Groveland Ranger District
331585 Hardin Flat Road
Groveland, Tuolumne County, CA

Department of Homeland Security
Federal Emergency Management Agency
Region IX
1111 Broadway, Suite 1200
Oakland, CA 94706-4052

General Plan Designation: Public

Zoning Designation: Public

2.0 PROJECT BACKGROUND

The Berkeley Tuolumne Camp (BTC or ‘Camp’) was in continuous operation for 91 years before being substantially destroyed in August 2013 by the Rim Fire. Only 19 of the previously existing 128 structures in the Camp survived the fire.

Founded in 1922, the BTC was used as a family institution since its inception. Though not the first public municipal camp established in the Stanislaus National Forest, it is the only camp dating to the 1920s that remained in continuous use by a single municipality until the Rim Fire. For 91 years it has been enjoyed by thousands and has become a generational tradition for many Berkeley families.

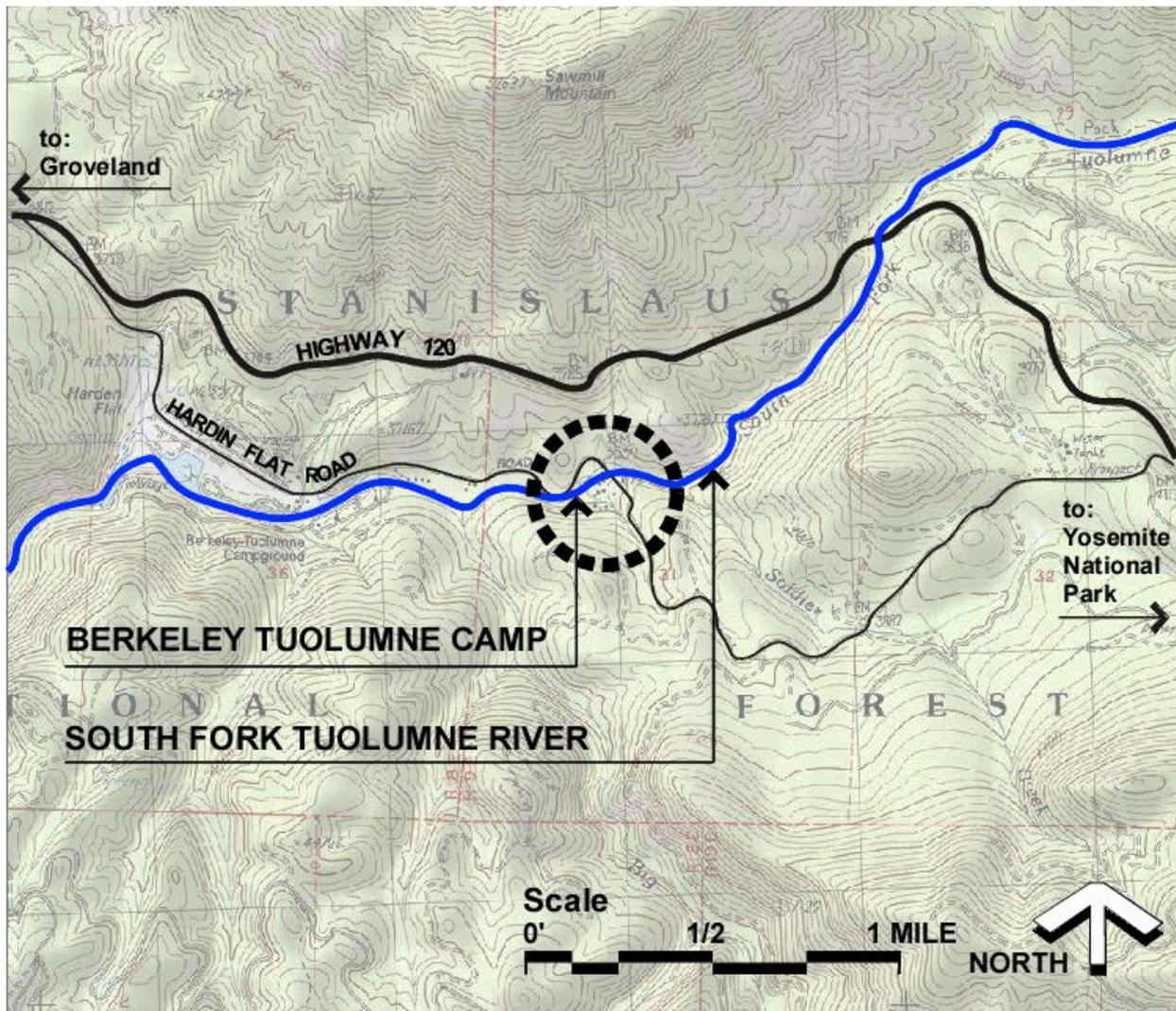


Figure 1: Berkeley Tuolumne Camp Vicinity Map

Congress found that organization camps provide a valuable service to families, young people, and individuals with disabilities by promoting physical, mental, and spiritual health through activities conducted in a natural environment (16 U.S.C. Chapter 81A). The Forest Service Handbook (FSH) provides national policies encouraging organization camp facilities and programs that promote environmental education, hiking, fishing, and similar forest-related activities (FSH 2709.14, Policy 13.2). Also, the Forest Service Manual (FSM) provides direction to issue special use authorizations for state, county, or municipal agencies to develop or manage recreational improvements on National Forest System lands (FSM 2340.3, Policy 1a). Furthermore, when considering competing uses for organizational sites, the Forest Service will prioritize programs that include activities involving people with disabilities or children at risk that are offered either free of charge or for a nominal fee (FSH 2709.14, Policy 13.4).

The City of Berkeley has a strong commitment to service children at risk and individuals with disabilities, as evidenced in its participation in the *2020 Vision* (City of Berkeley), a citywide movement to ensure academic success and well-being for all children and youth growing up in Berkeley, by closing the achievement gap in Berkeley's public schools by the year 2020. The Parks Recreation & Waterfront Department is responsible for furthering the goals of the *2020 Vision* and offers an array of low cost programs that serve a very diverse population of Berkeley families. The Camps Program makes a significant contribution to the department's service to children at risk and individuals with disabilities through the following programs:

- a. **Berkeley Tuolumne Camp** that traditionally functioned as a family camp for much of the summer season, but which also served as a youth camp part of the time with specific outreach programs for at-risk children and youth with disabilities.
- b. **Echo Lake Camp** that traditionally functioned entirely as a residential youth camp operated under permit on NFS lands within the Lake Tahoe Basin Management Unit, and that included specific outreach programs for at-risk children.
- c. **Berkeley Day Camp** conducted in Berkeley City Parks and other state and regional park facilities in the immediate vicinity for children ages 5-12, and that include programming for at-risk children and youth with disabilities.
- d. **Cazadero Performing Arts Camp** (located in Sonoma County) that is owned by the City and leased to a non-profit group and offers summer music programs for young musicians, including at-risk youth, through a robust scholarship program.

The reconstruction of BTC will restore a core element of the City's Camp Programming and help to ensure continuation of the City's commitment to providing its youth and residents access to remote natural environments.

2.1 U. S. Forest Service Jurisdiction

The BTC is located on federal land within the Stanislaus National Forest. Under the jurisdiction of the United States Forest Service (Forest Service) the BTC is subject to the *Stanislaus National Forest Land and Resource Management Plan* (USDA Forest Service 1991). The Forest Service completed the Stanislaus National Forest Land and Resource Management Plan (Forest Plan) on October 28, 1991. The Stanislaus

National Forest “Forest Plan Direction” (USDA Forest Service 2017) presents the current Forest Plan management direction, based on the original Forest Plan, as amended. The Forest Plan Direction includes Goals, Strategies and Objectives relevant to this Project (p. 3-5 and 11-14). Presented below are the key goals and objectives guiding project development.

Aquatic, Riparian, and Meadow Ecosystems and Associated Species: Maintain and restore habitat to support viable populations, spatial and temporal connectivity for aquatic and riparian species, water quality and desired physical structures and conditions of streams.

Economic: Manage the Forest in an economically efficient and cost-effective manner while responding to economic and social needs of the public and local communities.

Lands: Consider special uses of the National Forest where public needs cannot be met on private lands and where such uses conform to management direction for the area.

Recreation: Provide a wide range of recreation opportunities directed at various experience levels to meet current and projected demand, including campgrounds, hiking trails, picnic areas, trails, etc.

Water: Maintain or improve water quality and watershed condition to meet applicable state and federal requirements.

The Forest Plan also includes forest-wide standards and guidelines (p. 31-69) and management area direction that apply within or directly adjacent to this project including: Scenic Corridor with Retention Visual Quality Objective (p. 149); and, Developed Recreation Sites with Roaded Natural Recreation Opportunity Spectrum Class (p. 167-171). Land Allocations with associated management intent and objectives that also apply within or directly adjacent to this project include: CA Spotted Owl Protected Activity Centers (p. 179-182); CA Spotted Owl Home Range Core Area (p. 184-185); Wildland Urban Intermix (p. 185-187); General Forest (p. 186-187); Riparian Conservation Areas (p. 187-191); and, Wildlife Urban Intermix Defense Zone (p. 185).

3.0 PROJECT DESCRIPTION

3.1 Project Location

The Project site is located within the Stanislaus National Forest on the Groveland Ranger District at 31585 Hardin Flat Road in Tuolumne County, California. It is located at the southern end of the Forest and approximately eight miles from the northern entrance to Yosemite National Park. Access to BTC is from Hardin Flat Road via State Highway 120.

3.2 Existing Conditions

BTC is located on both sides of the South Fork Tuolumne River, its central feature, where the river transitions from a canyon form to the wide alluvial Hardin Flat, about 0.5 mile downstream from the Camp. The central camp area is located on a gentle to steep north-facing slope. BTC was substantially destroyed in August, 2013 by the Rim Fire. Of the 128 structures in the Camp, 19 survived the fire.

Additionally, the forest canopy that once existed over much of the central camp area was destroyed by the Rim Fire and will take 20 years or more to provide the natural shading it once did. Figure 2 (map package) shows pre Rim Fire conditions.

BTC is operated under a Special Use Permit from the Stanislaus National Forest (SNF), Groveland Ranger District. The current permit is for approximately 14 acres located on the southerly side of Hardin Flat Road. However, the actual area used by the Camp was approximately 25 acres when the Camp's programmed use areas and the Camp's waste water disposal system and leach field are included.



Dining Hall after fire (10/30/13)



Amphitheater after fire (10/30/13)



Central Camp area after hazard logging (11/5/14)

3.3 Proposed Project Program

The proposed Project would obtain a 30-year term Special Use Permit (SUP) from the Forest Service that will allow the City of Berkeley to reconstruct BTC facilities to current code and operate BTC much as it was prior to the Rim Fire. The new SUP would be expanded to approximately 30 acres (from its currently permitted 14 acres) and would include the Small Falls and Sugar Pine Trails that extend away from the main camp. About 14.5 acres of the permit area is proposed to be developed for parking, the main camp area, staff camp area, all support facilities and the Sugar Pine and Small Falls Trails. BTC would be designed to operate at a capacity that matches, but does not exceed, the pre-fire overnight staff and camper capacity of 360 individuals. The SUP would be issued for a term period of 30 years and may be renewed upon review and approval by the Forest Service. Figure 3 (map package) illustrates the BTC permit areas. Because of the expanded 30-acre SUP area, a Forest Plan Direction amendment would be completed to accommodate the Camp.

Figure (map package) illustrates the overall Facility Concept and Figure 5 illustrates the Central Camp Facilities Concept Plan.

Table 1 presents a summary of the site features and building facilities that would be constructed within the Camp, including preliminary and approximate sizes of those facilities.

TABLE 1: GENERAL SITE AND FACILITY CONSTRUCTION ACTIVITIES

Feature	Characteristics	Preliminary Quantity / Approximate Size
Circulation and Infrastructure		
Hardin Flat Road	• Camp gateway signs	3
	• Vehicular and pedestrian safety signs	various
	• Crosswalks	4
	• Underground utilities within road right-of-way	1,100 linear feet
General drives and parking	• Permeable paving or paving with related water quality management features: Entrance turn-around and emergency access route to Dining Hall	9,000 square feet
	• Compacted gravel with concrete wheel stops: all parking areas and entrances • Compacted gravel with surface markings for accessible spaces	55,000 square feet
	• Camp entry signs (east lot; north lot / staff camp; main camp)	3
Parking	• Total spaces (located either along main entrance, near Staff camp, or opposite Camp north of Hardin Flat Road)	133 spaces
	• Accessible spaces	7 spaces (3 van accessible)
Accessible routes of travel	• Varies from 5 to 8 feet wide; compacted soil (firm and stable) with water quality management (water bars/trench drains and vegetated shoulder areas); wood boardwalks in selected locations	2,150 linear feet
Foot paths to family tent camps	• 4 to 6 feet wide; compacted soil and duff, water bars, and water quality management; wood boardwalks or concrete/stone retaining walls if steep cross-slope; wood stairs on steep grades	3,900 linear feet
Nature Trails	• 3 to 4 feet wide, natural surface	1,600 linear feet
Small Falls Trail	• 3 to 4 feet wide, natural surface	2,200 linear feet
Sugar Pines Trail	• 3 to 4 feet wide, natural surface	1,400 linear feet
Circulation and Infrastructure (cont.)		
Electrical Supply	• Overhead from PG&E to water treatment package plant	175 linear feet
	• Overhead from PG&E to restroom in Staff camp	75 linear feet
	• Combination of overhead and underground within remainder of camp.	3,450 linear feet
Water Supply	• In-stream pump, SF Tuolumne River with standpipe and underground line to storage tank	1
	• Back-up well (existing)	1
	• Flocculation tank and water treatment package plant with concrete foundation, wood framing and metal roof structure	1
	• Water storage tank(s) with colors to match landscape backdrop	280,000 gallon capacity
	• Fire pump house	1
	• Pneumatic tank with pump	1
	• Underground water lines	5,100 linear feet
Wastewater Treatment	• Main camp: buried septic tanks	1 (13,000 gallon capacity)
	• Staff camp: buried septic tanks	1 (2,000 gallon capacity)
	• Buried wastewater lines within central Camp and Hardin Flat Road	2,820 linear feet

TABLE 1: GENERAL SITE AND FACILITY CONSTRUCTION ACTIVITIES

Feature	Characteristics	Preliminary Quantity / Approximate Size
	<ul style="list-style-type: none"> Lift station in hard-sided wood with metal roof structure 	3
	<ul style="list-style-type: none"> Leach field 	2,000 linear feet (over 60,000 square foot-area)
Pedestrian / Utility Bridge on South Fork Tuolumne River	<ul style="list-style-type: none"> Shoreline abutments with pier and overlook point; utilities and deck above 100-year floodplain; pedestrian load; movable steps to island 	1 (6 feet x 200 feet)
Pedestrian bridges or wildlife friendly culverts	<ul style="list-style-type: none"> 3 to 6 feet wide; spanning Creek or drainage swales; pedestrian load 	5 on Thimbleberry Creek; 5 on drainage swales
Administrative and Staff Facilities		
Staff Cabins	<ul style="list-style-type: none"> Typical staff cabin: concrete piers and wood framing; hard-sided wood with metal roof structure; electricity; sleeps 4 per cabin structure 	13 (350 square feet each)
	<ul style="list-style-type: none"> Accessible staff cabin; concrete piers and wood framing; hard-sided wood with metal roof structure; electricity; sleeps 2 per cabin structure 	2 (200 square feet each)
	<ul style="list-style-type: none"> One deck per 2 cabins 	14 (280 square feet each)
Counselor-in-Training Tent Cabins	<ul style="list-style-type: none"> Concrete piers and wood framing; deck platform, canvas, and wood shade structure features; sleeps 1 in Coordinator tent cabin, sleeps 8 per tent Counselor-in-Training cabins 	3 structures (350 square feet total) 1 common deck (280 square feet)
Nurse's Tent Cabin and First Aid Station	<ul style="list-style-type: none"> First Aid Station: Concrete piers and wood framing; hard-sided wood with metal roof structure for clinic area; electricity; water/restroom; accessible Nurse's Cabin: Concrete piers and wood framing; deck platform and canvas tent; electricity; accessible 	1 First Aid Station (280 square feet) 1 Nurse's Cabin (250 square feet) 1 Common connecting deck (100 square feet)
Camp Manager's Cabin	<ul style="list-style-type: none"> Year-round residence; concrete foundation; hard-sided wood with metal roof structure; all-weather with propane, water, and electricity; accessible 	1 structure (850 square feet) 1 deck (325 square feet)
Maintenance Shop/Storage	<ul style="list-style-type: none"> Concrete foundation; hard-sided wood with metal roof structure; electricity; outdoor fenced storage area 	1 structure (1,000 square feet) 1 storage area (1,430 square feet)
Office/Store	<ul style="list-style-type: none"> Concrete foundation; hard-sided wood with metal roof structure; electricity 	1 structure (642 square feet) 1 deck (320 square feet)
Camper Facilities		
Family Tent Cabins	<ul style="list-style-type: none"> Concrete piers and wood framing; deck platform and canvas tent; wood shade structure; 22 with electricity; 5 accessible 	77 (includes existing tent cabins remaining after the Rim Fire from 425 to 625 square feet including decks)
Dining Hall and Kitchen	<ul style="list-style-type: none"> 1-story structure (group dining area, commercial kitchen, and storage); concrete foundation; wood and metal framing; hard-sided wood, metal, and metal roof structure; stone fireplace; restroom 	1 structure (9,000 square feet) 1 deck (770 square feet)
Recycling Center	<ul style="list-style-type: none"> Concrete with stone or wood fascia; metal framing 	1 structure (535 square feet)
Recreation Hall / Arts and Crafts	<ul style="list-style-type: none"> Multi-use recreation and social gathering room; storage; concrete foundation; wood and metal framing; hard-sided wood, metal, stone, and metal roof structure; restroom 	1 structure (2,760 square feet) 1 deck (1,700 square feet)
Camp Restrooms	<ul style="list-style-type: none"> Concrete floors; hard-sided wood or concrete with stone, and metal roof structure; electricity; hot and cold water; maintenance closet 	3 structures (545 square feet) note: 1 existing in to remain
Camp Accessible Restroom	<ul style="list-style-type: none"> Concrete floors; hard-sided wood or concrete with stone, and metal roof structure; electricity; hot and cold water; maintenance closet 	1 structure (300 square feet)

TABLE 1: GENERAL SITE AND FACILITY CONSTRUCTION ACTIVITIES

Feature	Characteristics	Preliminary Quantity / Approximate Size
Camp Showers	<ul style="list-style-type: none"> Concrete floors; concrete/stone wall enclosures; hot and cold water; maintenance closet; open-air ceiling 	3 structures (318 square feet each) note: 1 existing in to remain
Camp Laundries	<ul style="list-style-type: none"> Concrete floors; hard-sided wood and metal roof structure; electricity; hot and cold water; maintenance closet 	3 structures (164 square feet each)
Staff Camp combined restrooms/showers/laundry	<ul style="list-style-type: none"> Concrete floors; hard-sided wood and metal roof structure; electricity; hot and cold water; maintenance closet 	1 (1,226 square feet each)
Social, Recreation, and Education Structures/Use Areas		
Weirs (existing)	<ul style="list-style-type: none"> Retrofit existing concrete foundation and wood weir slats as needed 	2
Swimming area retaining walls	<ul style="list-style-type: none"> Reinforced concrete with stone fascia 	4 walls (total 275 linear feet)
Chair circle	<ul style="list-style-type: none"> Wood or canvas shade arbors; compacted native soil and duff with erosion control and water quality management 	1
Nature Center	<ul style="list-style-type: none"> Wood framing on concrete slab; hard-sided wood and metal roof structure; outdoor deck overlooking river 	1 structure (700 square feet) 1 deck (200 square feet)
Stage and Amphitheater	<ul style="list-style-type: none"> Stage with steel and wood framing, water, electricity; amphitheater with concrete and wood seating Lighting booth on concrete piers, hard-sided, wood framing, metal roof, and electricity 	1 (3,200 square feet total)
Kiddie Camp	<ul style="list-style-type: none"> Fenced area; contained sand; 2 storage sheds; deck; shade structures 	1 area (2,100 square feet including 1,000 square-foot day use deck)
Children's Discovery Area	<ul style="list-style-type: none"> Open use area; discovery features; contained sand 	1 (1,000 square feet)
Sports Courts	<ul style="list-style-type: none"> Permeable paving or paving with related water quality management features; spectator seating 	3 (3,600 square feet total)
Common use decks	<ul style="list-style-type: none"> Wood framing; decking and shade structure 	4 (max. 900 square feet each)
Sauna	<ul style="list-style-type: none"> Hard-sided stone and metal roof structure 	1 (224 square feet)
Social, Recreation, and Education Structures/Use Areas (cont.)		
Kiddie Beach	<ul style="list-style-type: none"> Concrete/stone retaining walls (above); contained granite fines 	1 use area (2,250 square feet)
Adult Beach	<ul style="list-style-type: none"> Concrete/stone retaining walls (above); contained granite fines; level concrete deck areas 	1 use area (1,350 square feet)
Archery Range	<ul style="list-style-type: none"> Shade/arbor structure waiting area: shooting line and targets 	1 structure (720 square feet) 1 use area (9000 square feet)
Miscellaneous storage sheds	<ul style="list-style-type: none"> Wood frame decks or concrete foundations; wood framing and siding; metal roof 	6 (120 square feet each)
Future Facilities (date not determined within Permit period)		
Outdoor recreation / challenge features in Permit Area	<ul style="list-style-type: none"> Ropes course; disk golf course; temporary horse corral (at archery range); geocaching course; location within permit area to be determined 	To be determined
Other Site Activities		
Grading and erosion control	<ul style="list-style-type: none"> General contouring and fine grading for parking areas, drainage control, and stream restoration; BMPs for erosion control 	4-5 acres

TABLE 1: GENERAL SITE AND FACILITY CONSTRUCTION ACTIVITIES

Feature	Characteristics	Preliminary Quantity / Approximate Size
Revegetation and erosion control (Map Package; Figure 6)	<ul style="list-style-type: none"> Erosion control mulching; liner and container planting; plant protection and hand weeding; temporary irrigation or hand watering for establishment period 	6 acres

Future facilities identified above (ropes course; disk golf course; temporary horse corral at archery range; geocaching course) would not be part of the initial BTC reconstruction. These facilities involve minimal improvements and/or the multiple use of developed spaces described elsewhere in the site construction activities. The future uses identified are consistent with the Camp's Developed Recreation Site designation in the Forest Plan. Any future facility improvements will be subject to a separate CEQA review process as deemed necessary.

Camp Revegetation

The immediate BTC permit area burned to differing degrees in the Rim Fire. The most severely burned was the core of the BTC where the majority of group use facilities existed and where hazard tree removal has left the area treeless. In other burned areas hazard tree removals continue and some trees remain alive but may not survive over time and may need to be removed. Some areas generally did not burn and their forest canopy remains somewhat intact.

Consistent with overall Forest Plan goals and the riparian setting of the central BTC on the north-facing slope of the South Fork Tuolumne River, revegetation will emphasize dense riparian vegetation and conifers shading the river, Thimbleberry Creek, and related drainages. High to moderate stand densities and canopy cover will be targeted for mid-slope areas of the BTC. Within that framework, along the Hardin Flat Road corridor, revegetation will accomplish dual goals of a shaded fuel break and screening of BTC facilities and parking areas. The south-facing leach field area, that was entirely burned, will be managed into an open hillside meadow. The remaining south-facing areas will be managed as an open forest.

Those portions of the Permit Area that did not burn or were only partially burned, such as around the staff camp area and the downstream portions of the central BTC will be managed consistent with safety and the above goals. A general goal for all areas of BTC is to prevent new infestations of noxious weeds and the spread of existing weeds as the result of project activities. Within the BTC area, weed-free mulch, mechanical, and hand methods will be used to remove and discourage noxious weeds.

Figure 6 (map package) presents a conceptual area mosaic of revegetation of burned areas within the central BTC and the broad objectives for each mosaic unit. Table 2 provides a general listing of species keyed to that mosaic.

All plants used in revegetation will be native to the immediate region surrounding the BTC. It is anticipated that the majority of planting will be conducted in the fall using small contract-grown container plants (liners) although in select locations more mature trees may be transplanted or planted from larger

containers. All revegetation will be consistent with Forest Service goals and objectives for revegetation (FHS 2609.2).

TABLE 2: GENERALIZED SPECIES LIST FOR REVEGETATION

Botanical Name	Common Name	Planting Zone (Figure 6)								
		1	2	3	4	5	6	7	8	9
Trees										
<i>Acer macrophyllum</i>	Big Leaf Maple	Yes	Yes	Yes						
<i>Alnus rhombifolia</i>	White Alder	Yes	Yes	Yes						
<i>Calocedrus decurrens</i>	Incense Cedar				Yes			Yes		Yes
<i>Cornus nuttallii</i>	Western Dogwood		Yes	Yes	Yes	Yes	Yes			
<i>Corylus cornuta californica</i>	Hazelnut			Yes	Yes					
<i>Pinus lambertiana</i>	Sugar Pine									Yes
<i>Pinus ponderosa</i>	Ponderosa Pine						Yes			Yes
<i>Pseudotsuga menziesii</i>	Douglas Fir					Yes	Yes	Yes		Yes
<i>Quercus kelloggii</i>	Black Oak					Yes	Yes	Yes		Yes
<i>Salix spp.</i>	Willow	Yes	Yes	Yes	Yes					
<i>Sequoiadendron giganteum</i>	Giant Sequoia					Yes	Yes	Yes		
Shrubs and Ground Covers										
<i>Arctostaphylos spp.</i>	Manzanita							Yes		
<i>Amelanchier alnifolia</i>	Western Serviceberry						Yes			Yes
<i>Chamaebatia foliolosa</i>	Mountain Misery					Yes	Yes	Yes		Yes
<i>Heteromeles arbutifolia</i>	Toyon					Yes	Yes	Yes	Yes	Yes
<i>Lilium pardalinum</i>	Leopard Lily		Yes	Yes						
<i>Philadelphus lewisii</i>	Mock Orange		Yes	Yes	Yes					
<i>Rubus parviflorus</i>	Thimbleberry			Yes	Yes					

Project Operations

BTC would be in operation, as defined in the Special Use Permit with USFS, generally between April and November inclusive of Camp set-up and take-down. BTC is closed in the winter months.

Project Construction Activities and Schedule

Project implementation would begin in the early 2020 with initial construction to rebuild the majority of the Camp infrastructure and facilities. Overall construction of initial facilities is anticipated to last for approximately two years. Minor construction and/or facility renovation activities may occur throughout the remainder of the permit period. The Project does not include reconstruction of the Hardin Flat Road Bridge across the South Fork Tuolumne River, which is being undertaken by Tuolumne County.

Table 3 presents anticipated construction activities and specialized construction equipment beyond that needed for delivery of materials to the site and for the transportation of construction workers.

TABLE 3: ANTICIPATED CONSTRUCTION ACTIVITIES AND EQUIPMENT

Construction Activities	Equipment	Number/Days	Hours/Days	Days
Demolition / Grading	Tracked excavator	1	8	180
	Backhoe loader	1		180
	Dozer	1		180
	Grader	1		180
Paving	Dump Trucks	2	8	40
	Paver	1		20
	Compactor	1		20
Electrical Supply	Trencher	1	8	48
	Backhoe loader	1		48
Water Supply	Excavator	1	8	60
	Trencher	1		60
	Cement mixer	5		15
	Concrete pump	1		15
Wastewater Treatment	Excavator	1	8	30
	Trencher	1		90
	Backhoe loader	1		90
	Dozer	1		32
Utility and Pedestrian Bridge	Pile-driver	1	8	30
	Excavator	1		30
	Backhoe loader	2		60
	Cement mixer	5		10
	Concrete pump	1		10
	Telescoping crane	1		75
	Forklift	1		75
Administrative and Staff Facilities	Excavator	1	8	180
	Backhoe loader	1		240
	Cement mixer	1		60
	Concrete pump	1		60
	Forklift			240
Camper Facilities	Excavator	1	8	180
	Backhoe loader	1		240
	Cement mixer	1		60
	Concrete pump	1		60
	Forklift			240
Social, Recreation, Education Structures/Use Areas	Excavator	1	8	180
	Backhoe loader	1		240
	Cement mixer	1		60
	Concrete pump	1		60
	Forklift	1		24

Source: 2M Associates; City of Berkeley

Project Approvals

The following permits and approvals will be obtained prior to the commencement of any ground disturbing activities and to assure detail design and construction plans incorporate all mitigation requirements:

1. **US Army Corps of Engineers (COE):** Application, plans, and specifications for issuance of a Nationwide permit under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act.
2. **Central Valley Regional Water Quality Control Board (RWQCB):** Application, plans, and specifications for Water Quality Certification and coverage under the National Pollutant Discharge Elimination System (NPDES) construction general permit for storm water discharge under Section 401(A)(1) of the Clean Water Act and the Porter-Cologne Water Quality Control Act of 1975.
3. **California Water Quality Control Board, Division of Drinking Water:** Application, plans, and specifications for permit for surface water appropriation and treatment of drinking water under the Porter-Cologne Water Quality Control Act of 1975 and Safe Drinking Water Act (Pub. L. 93-523).
4. **California Department of Fish and Wildlife (CDFW):** Application, plans, and specifications for work to obtain a Stream Alteration Agreement pursuant to Fish and Game Code sections 1600 *et seq.*
5. **California Department of Toxic Substances Control (DTSC):** Approval and oversight of hazardous material remediation if required.
6. **Pacific Gas & Electric Company:** Review and approval of site plans and construction documents for any work within a 20-foot easement.
7. **Tuolumne County:**
 - a. Application, plans, and specifications to obtain an encroachment permit for any work within Tuolumne County's Hardin Flat Road right-of-way.
 - b. Floodplain encroachment review by the County floodplain Administrator and Floodplain Development Permit pursuant to Tuolumne County Code Section 5.24.145.
 - c. Percolation tests and soil profiles, system design plans and specifications (plot plan, grading plan, description of groundwater and soils, description of monitoring devices, system operation and function), and site evaluation and testing necessary to obtain Certification of an on-site sewage treatment and disposal system pursuant to Tuolumne County Code Section 13.08.270A.
 - d. Application, plans, and specifications for food concession Certification.
 - e. Application, plans, and specifications to obtain a demolition permit.
 - f. Application, plans, and specifications to obtain a grading permit.
 - g. Application, plans, and specifications to obtain building permits.
 - h. Permits under California Fire Code as adopted by Tuolumne County, Fires Safe Standards, and Fire Safe Permit review.
8. **Forest Service:**
 - a. All construction documents and specifications for Camp reconstruction will be submitted by the City of Berkeley to the Forest Service for review, comment, and approval of selected features prior to the commencement of any ground-disturbing activities. Forest Service approval of construction documents will be required for the pedestrian and utility bridges.

References

- City of Berkeley. 2020 *Vision*. https://www.cityofberkeley.info/.../2020/2020_vision_web.pdf.
- City of Berkeley. 2015. *City of Berkeley Tuolumne Camp Permit 46690 Built Environment Image Guidelines Administrative Review Draft*. Prepared by 2M Associates. July 2015.
- USDA, Forest Service, FS-710. *The Built Environment Image Guide for National Forests and Grasslands*. September, 2001.
- Stanislaus National Forest Groveland Ranger District Tuolumne County, California. *City of Berkeley Tuolumne Camp Permit (46690) Scoping Package*. October 21, 2015) <http://www.fs.usda.gov/project/?project=46690>.
- USDA, Forest Service, FS-710. *The Built Environment Image Guide for National Forests and Grasslands*. September, 2001.
- United States Department of Agriculture, Stanislaus National Forest. 2017. *Forest Plan Direction - Stanislaus National Forest, Sonora, CA*.
- USDA, Forest Service, Stanislaus National Forest. 1991. *Stanislaus National Forest Land Resource Management Plan*. October 28, 1991.

4.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

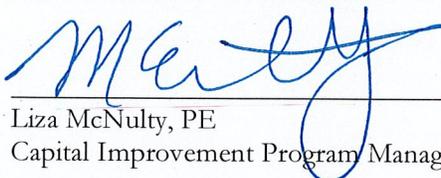
The environmental factors checked below would be potentially affected by the project, involving at least one impact that is a potentially significant impact as indicated by the checklist on the following pages.

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> Aesthetics | <input type="checkbox"/> Agricultural/Forestry Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Geology and Soils |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards/Hazardous Materials | <input checked="" type="checkbox"/> Hydrology/Water Quality |
| <input checked="" type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Noise |
| <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Transportation/Circulation | <input checked="" type="checkbox"/> Tribal Cultural Resources | <input type="checkbox"/> Utilities/Service Systems |
| <input checked="" type="checkbox"/> Mandatory Findings of Significance | | |

5.0 DETERMINATION:

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- 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 the revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" 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.
- 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.



 Liza McNulty, PE
 Capital Improvement Program Manager

8-30-2018

 Date

6.0 EVALUATION OF ENVIRONMENTAL IMPACTS

A brief explanation is required for all answers except “No Impact” answers if these answers are adequately supported by the information sources listed in the References section for each environmental issue. The Environmental Issues presented in Section 7.0 identify all of the Environmental Factors listed in the CEQA Appendix G Environmental Checklist Form.

7.0 ENVIRONMENTAL ISSUES

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
1. AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

The majority of BTC structures were destroyed due to the Rim Fire and most of the vegetation growing within the central camp area was lost. While vegetation is re-establishing itself at BTC since the Rim Fire, the Camp appears as a burned out area with unsightly remains of structures and barren terrain.

BTC is located about eight miles from the northern entrance to Yosemite National Park which is accessed via Hardin Flat Road off of State Highway 120. The segment of State Highway 120 within the vicinity of BTC is not a designated State Scenic Highway (Caltrans)¹.

Impact Discussion

With mitigation, the Project will not adversely affect any scenic views or vistas, damage scenic resources or introduce new light or glare sources. The Project would improve the visual appearance of the existing BTC site. A brief discussion of each environmental issue included under Section 1 is presented below.

a) Would the project have a substantial adverse effect on a scenic vista?

There are no designated Federal, State, or local scenic vistas in the region that include views to the BTC site.

¹ The segment of Highway 120 within Yosemite National Park is designated as a connecting freeway and National Scenic Byway.

b) Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a scenic highway?

There are no designated State Scenic Highways in Tuolumne County. Highways 49 and 108 are eligible State Scenic Highways, neither of which are within view of BTC.

The Tuolumne County General Plan Conservation and Open Space Element identifies Scenic Highway routes. The closest designated County Scenic Highway Route is Highway 49, approximately 30 miles west of BTC. Views from the route do not include BTC.

State Highway 120 east of BTC is a designated National Scenic Byway beginning at the Big Oak Flat Yosemite National Park entrance, approximately eight miles away from the BTC site, and ends at Tioga Pass. Views from the route do not include BTC.

The Stanislaus National Forest Management Area Allocations include State Highway 120 from the Forest boundary near Groveland to the entrance of Yosemite National Park as a Scenic Corridor (USDA 2017, p. 149). The BTC SUP area is within the general delineation of the Scenic Corridor. The proposed water tank location with a forest hillside backdrop is visible from Highway 120 for motorists traveling east or stopping at an unmarked highway pulloff. The Scenic Corridor includes Hardin Flat Road where the BTC SUP area is visible in foreground views.

There are no historic structures at BTC (see Section 5 Cultural Resources). Existing trees, unless deemed hazard trees, will be retained. Rock outcrops will be preserved. The most significant scenic resource of the area is the South Fork Tuolumne River with significant boulders and white-water conditions. Existing flashboard weirs will be maintained and used for traditional summer ponding and recreation use. The ponding visually enhances the variety of water conditions in the river.

c) Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

The Stanislaus National Forest's *Forest Plan Direction 2017* establishes general objectives for the management of visual character. These include a Visual Quality Objective (VQO) of Partial Retention for designated Developed Recreation Areas such as BTC. A Partial Retention VQO (USDA, 1979, AHN 701) is one where the landscape would appear slightly altered with management activities remaining visually subordinate to the characteristic landscape. However, the *Forest Plan Direction* indicates that a VQO of Modification is acceptable for developed recreation sites. With a modification VQO the landscape appears moderately altered where management activities may visually dominate the original characteristic landscape. Vegetation and landform alteration must appear as natural occurrences. Roads and structures would ultimately remain visually subordinate.

The effects of the Rim Fire on the visibility of the BTC SUP area present a visually disturbed characteristic landscape in the immediate foreground of Hardin Flat Road with the presence of remnant BTC facilities openly visible. Given the effects of the Rim Fire on the visibility of the BTC SUP area as seen from Hardin Flat Road, existing conditions do not meet VQO objectives. New development would

also be openly visible and, depending on the design and choice of materials, significantly contrast with the characteristic landscape resulting in a low to moderate level of scenic integrity.

Related to VQOs, Forest Service Management Standards and Guidelines for the BTC SUP area include Recreation Opportunity Spectrum (ROS) Class of Roaded Natural for Scenic Corridors (USDA 2017, p. 150). Forest Service guidelines for a Roaded Natural ROS designation (USDA, 1979, PNW 98) typically involve resource modifications and utilization practices that are visually evident but are harmonious with the surrounding characteristic landscape environment. These involve:

- A rustic design usually based on use of native materials.
- Synthetic materials should not be evident.
- Moderate site modifications.

A higher degree of visible development would be either “Inconsistent” or “Unacceptable” for Roaded Natural ROS.

Without specific material controls for structures and screening measures, the character of the BTC development would not meet VQO Objectives in the short or long term. This is considered a potentially significant impact.

Key actions that will positively impact the scenic integrity of the SUP area and result in meeting VQO Objectives include:

- The application of guidelines to Camp structures and facilities contained in the *Design Narrative / Built Environmental Image Guidelines* (project file) developed pursuant to policies contained in FSM 2300, Recreation, Wilderness, and Related Resource Management for Privately Provided Recreation Facilities (2014) would direct structure’s character (bulk, line, plane, form, color, texture) to create a rustic, unified scenic integrity. These guidelines were specifically developed to be applied to Camp in order to reflect a ROS designation of Roaded Natural and attain a VQO of Partial Retention as seen from Hardin Flat Road. The guidelines outline design elements and materials to be used in the Project that will create a camp with a rustic, unified appearance with respect to the context of the surrounding natural systems, and in particular the scenic integrity of the South Fork Tuolumne River corridor.
- The design and implementation of a revegetation / reforestation program in previously burned areas (**Figure 6** of the map package) is consistent with Forest Service guidelines (FSH 2509.22, 12.51 Exhibit 04, BMP 5.4 - Revegetation of Surface-disturbed Areas). Revegetation would emphasize dense riparian plantings and conifers shading the South Fork Tuolumne River, Thimbleberry Creek, and related drainages. Along the Hardin Flat Road corridor revegetation will emphasize the creation of a shaded fuel break and screening of BTC facilities and parking areas. Within approximately 10 years of the 30-year time frame of the SUP, it is anticipated that most of the BTC facilities will be screened from direct view as seen from Hardin Flat Road consistent with a Roaded Natural ROS designation and a Retention VQO.

With implementation of Mitigation Measures AES 1 and AES 2, potential impacts to the scenic integrity of the BTC SUP area would be less than significant.

d) Would the project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

Because of lack of screening vegetation caused by the Rim Fire, much of the Camp will be directly visible from Hardin Flat Road and from within many areas of the Camp.

Prior to the Rim fire, outside shielded and unshielded wall lighting was provided on selected common use facilities (Office, Dining Hall, Recreation Hall, First Aid Station, etc.). Unshielded, cobra-type overhead area lighting existed at the main sports courts. Installing this type of lighting with the proposed Project could create light and glare along Hardin Flat Road which is a potentially significant impact. However, with implementation of Mitigation Measure AES 3 and AES 4, potential light and glare impacts would be less than significant.

The type of wall and roofing materials, and glass used in structures has the potential to create daytime glare attracting the attention of motorists along Hardin Flat Road and contrasting with the natural setting inconsistent with the Visual Quality Objectives designated for the Camp. With implementation of Mitigation Measure AES 4, potential glare impacts would be less than significant.

Mitigation Measures

AES-1 In order to meet a near-term Visual Quality Objective of Modification the BTC Facilities shall be designed to follow the *Design Narrative / Built Environmental Image Guidelines* (2M Associates 2017) for the project. Design documents (90 percent completion) will be submitted to the Forest Service for review and comment for consistency with the guidelines.

AES-2 In order to screen project facilities and meet a Visual Quality Objective of Partial Retention a revegetation plan for the Hardin Flat road corridor, burned areas, and areas disturbed by construction will be prepared and implemented emphasizing:

- Feathered screening between Hardin Flat Road and BTC facilities.
- Dense riparian vegetation and conifers shading of the river, Thimbleberry Creek, and related drainages.

Planting program design documents (90 percent completion) will be submitted to the Forest Service for review and comment for consistency Forest Service standards.

AES-3 To minimize visibility and to reduce the potential impacts of lighting as seen from Hardin Flat Road:

- All outdoor lighting shall be dark sky-compliant and consistent with California Green Building Standards Code Section 5.106.8 Light Pollution Reduction
- All light fixtures shall include shrouds (either fixed or adjustable), other shielding, or be directed in such a way as to block direct light as seen from Hardin Flat Road.
- Lighting that is not required during nighttime hours shall be controlled by the use of timed switches and/or motion detector activation controls so lights are only on when necessary.

AES-4 To minimize visibility and to reduce the potential impacts of glare as seen from Hardin Flat Road:

- Structures, including roofs, shall use non-reflective, earth-toned materials that match the soil and vegetation colors of the backdrop characteristic landscape.
- All structure windows and doors shall use non-reflective glass.

References

2M Associates. 2017. City of Berkeley Tuolumne Camp Permit (46690) - Design Narrative / Built Environmental Image Guidelines.

Caltrans. *California Scenic Mapping System*. Available on the Caltrans website at: www.dot.ca.gov/hq/LandArch/16_liveability/Scenic_highways/.

United States Department of Agriculture, Stanislaus National Forest. 2017. Forest Plan Direction - Stanislaus National Forest, Sonora, CA.

United States Department of Agriculture, Forest Service. December, 1979. Landscape Aesthetics - A Handbook for Scenery Management. Agricultural Handbook Number 701.

United States Department of Agriculture, Forest Service. December, 1979. The Recreation Opportunity Spectrum: A Framework for Planning, Management, and Research. General technical report PNW 98. https://www.fs.fed.us/cdt/carrying_capacity/rosfieldguide/ros_primer_and_field_guide.htm

	<u>Potentially Significant Impact</u>	<u>Potentially Significant Unless Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
2. AGRICULTURE AND FORESTRY RESOURCES.				
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest protocols adopted by the California Air Resources Board. Would the project:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	<u>Potentially Significant Impact</u>	<u>Potentially Significant Unless Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
2. AGRICULTURE AND FORESTRY RESOURCES (cont.)				
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

The Rim Fire resulted in a vast amount of forest vegetation loss with high vegetation burn severity on 43 percent of the Rim Fire area and the remaining 57 percent burned at a mixed severity. Where the fire burned with high intensity nearly all woody materials, litter and duff located on the ground were fully burned. In some stands, fire did not burn through the tree canopy, but heat from the fire killed most or all of the needles of the canopy. The Forest Service initiated a hazard tree abatement program to remove dead and dying trees for safety reasons and to reduce the amount of available fuels (USDA 2014a; USDA 2014b).

BTC experienced extensive devastation due to the Rim Fire. Only 19 of the 128 Camp structures survived the fire. Most of the infrastructure was damaged or destroyed. Additionally, the forest canopy that once existed over much of the central camp area was destroyed and will take 20 years or more to provide the natural shading it once did. In other burned areas of the BTC permit area, some trees remain alive but may not survive over time and may need to be removed. In areas within the BTC permit area that generally did not burn, the forest canopy remains somewhat intact. The BTC permit area is under the jurisdiction of USFS and is subject to the guidelines and requirements of the *Forest Plan Direction* (USDA 2017).

Impact Discussion

There would be less than significant impacts to forest resources due to the proposed Project and no impacts to agricultural resources. A brief discussion of each environmental issue included under Section 2 is presented below.

a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps and prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

The proposed BTC permit area is designated Public under the Tuolumne County General Plan (County of Tuolumne 1996) and Public under the Tuolumne County Ordinance Code (County of Tuolumne). The “Public” designation is assigned to lands owned by public agencies, such as USFS, and exempt from Tuolumne County land use regulations. The BTC permit area is within the SNF and contains no farmlands.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

As discussed under Subsection 2a above, the BTC permit area is located within SNF and is zoned Public. The Project site is not under a Williamson Act contract. The lands surrounding the BTC permit area are within SNF and zoned Public. There would be no conflict with any agricultural lands.

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

As discussed under **Subsection 2a** and **2b** above, the proposed BTC permit area is located in SNF and under the jurisdiction of the federal government. The proposed Project would obtain a 30-year Special Use Permit from USFS for the reconstruction of BTC. The proposed Project would not conflict with the Public zoning for SNF.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

The BTC permit area is located in SNF. The proposed Project will not result in the loss of forest land nor its conversion to non-forest use. The proposed Project is consistent with the FSH and FSM and will not convert any forest land located within the BTC permit area to non-forest use.

- e) **Would the project 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?**

The Project will not result in conversion of any farmland to non-agricultural use or forest land to non-forest use. Refer to Subsections 2a - 2d above.

Mitigation Measures

None required.

References

County of Tuolumne. 1996. *Tuolumne County General Plan, Chapter 01 – Land Use*. Available on the County website at: <https://www.tuolumnecounty.ca.gov/185/General-Plan-Policy>.

County of Tuolumne. *Tuolumne County Ordinance Code, Title 17 Zoning*. Available on the County website at: <https://www.tuolumnecounty.ca.gov/165/Tuolumne-County-Ordinance-Code>.

USDA. 2017. Forest Plan Direction - Stanislaus National Forest, Sonora, CA.

USDA 2014a. Rim Fire Hazard Trees Environmental Assessment. April 2014. USDA Forest Service, Stanislaus National Forest, Sonora, CA. 93 pp.

USDA 2014b. Rim Fire Hazard Trees Decision Notice and Finding of No Significant Impact. April 25, 2014. Stanislaus National Forest, Sonora, CA. 5 pp.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) 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 (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

The BTC Project site straddles the South Fork Tuolumne River about 15 miles east of Groveland in southern Tuolumne County, which is part of California’s Mountain Counties Air Basin (MCAB) (California Air Resources Board, Air Basins). Air quality in the western reaches of the MCAB is affected by its proximity to California’s San Joaquin Valley (SJV). The air pollution potential of the SJV is very high because its surrounding mountains, light winds and high summer temperatures are ideal for trapping air pollutants emitted from local sources (i.e., many industrial, commercial, and agricultural sources of diverse types and sizes, and from all its on-road motor vehicles, trains and aircraft). Frequent high summer ozone levels result from the photochemical reaction of nitrogen oxides (NO_x) and reactive organic gases (ROG) emitted from sources within the SJV. Winter time atmospheric temperature inversions (i.e., colder air nearer the ground rather than farther aloft, which is contrary to the more usual pattern) occur often in the SJV and in foothill areas of the MCAB. Such inversions trap emissions of small-diameter particulate matter, which are of particular concern because of the adverse health impacts associated with their high ambient levels.

The California Air Resources Board (CARB) and the Tuolumne County Air Pollution Control District (TCAPCD) have jurisdiction over stationary sources within Tuolumne County (County). CARB maintains numerous air quality monitoring stations located throughout the state that continually measure the ambient concentrations of major air pollutants. The coverage afforded by such stations in Tuolumne County is rather sparse. There is only one monitoring stations in Tuolumne County: an ozone monitoring station in Sonora (about 25 miles northwest of the Project site), which records frequent violations of the federal and state ambient ozone standards, as shown in Table 4.

TABLE 4: TUOLUMNE COUNTY AMBIENT AIR QUALITY MONITORING SUMMARY

Pollutant	Ambient Standard	Number of Days Standard was Exceeded and Maximum Concentration Measured		
		2014	2015	2016
Ozone – Sonora (Barretta Street)				
Maximum 8-hour concentration (ppm)		0.080	0.078	0.091
# Days federal (2015) standard exceeded	0.070 ppm	16	11	45
# Days federal (2008) standard exceeded	0.075 ppm	2	4	25
# Days state standard equaled/ exceeded	0.070 ppm	20	11	46

Notes:

ppm = parts per million.

Source: CARB, iADAM: Air Quality Data Statistics <https://www.arb.ca.gov/adam/>

Many other chemical compounds, generally termed toxic air contaminants (TACs), pose a present or potential hazard to human health through airborne exposure. A wide variety of sources, both stationary (e.g., dry cleaning facilities, gasoline stations, emergency diesel-powered generators, etc.) and mobile (e.g.,

motor vehicles, construction equipment, etc.), emit TACs, which can cause long-term health effects (e.g., cancer, birth defects, neurological damage, asthma, bronchitis, or genetic damage) and/or short-term acute effects (e.g., eye watering, respiratory irritation, running nose, throat pain, and headaches). In California, the majority of the estimated carcinogenic/chronic health risk can be attributed to relatively few airborne compounds, the most important being particulate matter from diesel-fueled engines (DPM). The CARB has identified DPM as being responsible for about 70 percent of the cumulative cancer risk from all airborne TAC exposures (CARB, Overview: Diesel Exhaust and Health).

Regulatory Setting

Ambient air quality standards for major air pollutants (termed “criteria” pollutants) have been established nationally and in California to protect the public from their adverse health effects. The standards specify a maximum concentration over time for each pollutant to avoid adverse health effects from exposure. The standards are designed to protect those segments of the population most susceptible to adverse health impacts (i.e., sensitive receptors), including children, the elderly, people weak from illness or disease, and people engaged in strenuous work or exercise. The most important criteria air pollutants nationally and statewide are: ozone, particulate matter less than ten microns in diameter (PM₁₀), particulate matter less than 2.5 microns diameter (PM_{2.5}), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and lead (Pb).

Based on regional monitoring data, the US Environmental Protection Agency (EPA) has designated the SJV an “extreme” nonattainment area for the federal ozone standard and a “moderate” nonattainment area for the federal PM_{2.5} standard; the SJV attains all state and federal ambient air quality standards for the other major criteria pollutants. Because of the relative sparsity of monitoring stations/data in the MCAB, many of its counties (including Tuolumne) are “unclassified” with respect to federal standards for ozone (although Calaveras County to the north and Mariposa County to the south of Tuolumne County are designated “marginal” nonattainment and “moderate” nonattainment, respectively, for ozone), and for federal PM₁₀ and PM_{2.5} standards. The MCAB is in attainment for all state and federal ambient air quality standards for the other major criteria pollutants (EPA, Nonattainment Areas for Criteria Pollutants).

The larger California Air Districts have established their own analytical methodologies and significance thresholds for CEQA air quality analysis within their jurisdictions. This includes the eight-county San Joaquin Valley Air Pollution Control District (SJVAPCD), adjacent to and west of Tuolumne County, which has issued its *Guide for Assessing and Mitigating Air Quality Impacts* (GAMAQI; March 2015). There are no CEQA methodological guidelines from the TCAPCD for projects in Tuolumne County, though TCAPCD has adopted the following CEQA significance thresholds for development-related criteria pollutant emissions:

- ROG: 1000 lbs./day or 100 tons/year
- NO_x: 1000 lbs./day or 100 tons/year
- PM₁₀: 1000 lbs./day or 100 tons/year
- CO: 1000 lbs./day or 100 tons/year

There are also no TCAPCD CEQA significance thresholds for development-related construction fugitive dust emissions or for health risks from construction/operational TAC emissions. Thus, potential Project impacts from fugitive dust were evaluated based on SJVAPCD dust control requirements (SJVAPCD, Regulation VIII - Fugitive PM10 Prohibitions). And potential TAC health impacts were evaluated by the following criteria (which have been widely adopted by many other Air Districts):

- Project TAC emissions increase cancer risk for a maximally exposed individual by 10 chances in one million during the exposure period.
- Project TAC emissions increase the non-cancer Hazard Index for a maximally exposed individual above 1.0 during the exposure period.

Additionally, the SJVAPCD requires that TAC risk/hazard be determined quantitatively by pollutant dispersion modeling in cases where TAC emissions would exceed 100 lbs. /day.

Impact Discussion

The proposed reconstruction of BTC could result in temporary significant air quality impacts during Project construction. However, with implementation of Mitigation Measure AIR-1, fugitive dust emissions from construction activities would be reduced to less-than-significant levels. With Project completion, BTC would have air pollutant emissions less than the Camp's pre-Rim Fire emissions because the new facilities would be built according to the requirements of current more-energy-efficient building codes. With implementation of Mitigation Measure AIR-2, any open burning would only occur on permissible burn days as established by the SJVAPCD. There would be no Project-related increases to operational air pollutant emissions or local TAC health impacts. A discussion of each environmental issue included under Section 3 is presented below.

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

By providing an equivalent replacement for BTC facilities destroyed by the Rim Fire, the Project would not have the potential to substantially affect regional housing, employment, population or transportation projections, which are the bases of the emission inventories and control strategies of the attainment plans. Thus, the Project would not significantly impede attainment of the regional air quality goals of the MCAB or of the adjacent San Joaquin Valley Air Basin (SJVAB). Temporary emissions generated during Project construction would be less than the TCAPCD emission thresholds (see discussion in Subsection 3b below) and, therefore, would not be a significant cumulative air pollutant source within the MCAB (see further discussion in Item c below). Thus, the Project would not conflict with or obstruct implementation of applicable air quality plans in the MCAB or SJVAB.

The Project would comply with the federal Clean Air Act requirements that federal agencies ensure that their actions do not cause or contribute to a violation of federal ambient air quality standards and are consistent with the State Implementation Plan attainment strategies/goals. As indicators of compliance, the EPA's General Conformity Rule (EPA General Conformity), specifies specific de minimis thresholds (EPA, General Conformity De Minimis Tables) for ozone and its precursors (i.e., volatile organic

compounds [VOC] and nitrogen oxides [NO_x]) and the other major criteria pollutants. As shown in Table 5, Project construction and operational emissions are less than the de minimis thresholds for all major criteria pollutants. Thus, the Project would be in conformance with California's State Implementation Plan (SIP) for attainment of federal air quality standards.

b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Construction of the BTC facilities is expected to begin in 2020 and to take about two years. It would generate temporary emissions of air pollutants in equipment exhaust and fugitive dust from equipment and material movement. Equipment emissions were estimated by the California Emissions Estimator Model (CalEEMod, Version 2016.3.2) and compared with the TCAPCD significance thresholds.

Table 6 and Table 7 present the following emission estimates: daily average by phase, total by construction activity, and average annual. All Project construction-related emissions would be well below the TCAPCD thresholds.

In order to limit the generation of fugitive dust, which together with particulate emissions from construction equipment exhaust could expose nearby residences (local sensitive receptors) located west of the BTC Project to elevated PM₁₀ and PM_{2.5} levels during project construction, construction best management practices must be implemented as specified in Mitigation Measure AIR-1.

In addition, there may be occasional open burning associated with either construction or ongoing vegetation management activities. Mitigation Measure AIR-2 would assure that such burning would only occur on permissible burn days and not impact state and federal ambient air quality standards.

After Project construction is complete, the operational air pollutant emissions associated with the rebuilt BTC would be less than significant as shown in Table 5.

TABLE 5: PROJECT EMISSIONS AND COMPARISONS WITH EPA DE MINIMIS THRESHOLDS (TONS/YEAR)

Pollutant	Tuolumne County Federal Attainment Status ^a	Tuolumne County De Minimis Threshold ^b	Project Construction Emissions ^c	Project Operational Emissions ^d
Ozone (O ₃) ^e	Unclassified	100	2.6	0.20
Oxides of Nitrogen (NO _x)	Attainment	100	2.4	0.07
Reactive Organic Gases (ROG)	----	50	0.2	0.13
Volatile Organics (VOCs) ^f	----	50	0.2	0.13
Particulate Matter (PM _{2.5})	Unclassified	100	0.1	0.01
Particulate Matter (PM ₁₀)	Unclassified	100	0.1	0.03
Carbon Monoxide (CO)	Attainment	100	2.1	0.26
Sulfur Dioxide (SO ₂)	Attainment	100	< 0.1	0.01
Lead (Pb)	Attainment	25	0	0

Emission estimates assume project construction equipment with California-average emitting engines during the 2019-2020 construction phases.

- ^a Source: EPA, Nonattainment Areas for Criteria Pollutants (Green Book) <https://www.epa.gov/green-book>
- ^b Source: EPA, General Conformity De Minimis Tables <https://www.epa.gov/general-conformity/de-minimis-tables>
- ^c Emissions were calculated using the CalEEMod Model, Version 2016.3.2 and include emissions from construction equipment and construction worker trips.
- ^d The City of Berkeley's Tuolumne Camp (BTC) was in continuous operation for 91 years before being substantially destroyed in August 2013 by the Rim Fire. The proposed Project would reconstruct BTC facilities to current code and operate BTC much as it was prior to the Rim Fire. Operationa emissions were calculated using the CalEEMod model initialized with Project building specifications, daily motor vehicle trips identified in the Transportation and Circulation section of this Initial Study and utility data from operations of the previous BTC provided by the City of Berkeley.
- ^e Ozone is not directly emitted but is formed from its precursors, NOx and ROG. Thus, ozone emissions were taken to be the sum of the two precursors.
- ^f VOCs are similar to ROGs but are not directly calculated by CalEEMod. However, for their effect on ozone formation, VOC emissions were assumed to be equivalent to ROG emissions.

TABLE 6: PROJECT CONSTRUCTION AIR POLLUTANT EMISSIONS - AVERAGE DAILY (LBS. PER WORKDAY)

Construction Activity (Duration)	ROG	NOx	PM₁₀	CO
Demolition / Grading (90 workdays)	1.8	18.8	0.9	15.9
Paving (20 workdays)	1.5	15.0	0.7	10.2
Electrical Supply (48 workdays)	0.7	6.5	0.5	5.1
Water Supply (60 workdays)	0.9	8.2	0.5	6.9
Wastewater Treatment (90 workdays)	1.2	11.4	0.7	9.3
Utility /Pedestrian Bridge (75 workdays)	0.9	9.8	0.7	6.7
Administrative /Staff Facilities (240 workdays)	0.7	6.9	0.4	6.6
Camper Facilities (240 workdays)	0.7	6.9	0.4	6.6
Social, Recreation, Education Structures/Use Areas (240 workdays)	0.7	6.9	0.4	6.6
TCAPCD Significance Thresholds	1000	1000	1000	1000
Significant Impact?	No	No	No	No

TABLE 7: PROJECT CONSTRUCTION AIR POLLUTANT EMISSIONS – TOTALS BY PHASE AND ANNUAL AVERAGE (TONS)

Construction Activity (Duration)	ROG	NOx	PM₁₀	CO
Demolition / Grading (90 workdays)	0.1	0.8	< 0.1	0.7
Paving (20 workdays)	< 0.1	0.2	< 0.1	0.1
Electrical Supply (48 workdays)	< 0.1	0.2	< 0.1	0.1
Water Supply (60 workdays)	< 0.1	0.2	< 0.1	0.2
Wastewater Treatment (90 workdays)	0.1	0.5	< 0.1	0.4
Utility /Pedestrian Bridge (75 workdays)	< 0.1	0.4	< 0.1	0.2
Administrative /Staff Facilities (240 workdays)	0.1	0.8	0.1	0.8
Camper Facilities (240 workdays)	0.1	0.8	0.1	0.8

Social, Recreation, Education Structures/Use Areas (240 workdays)	0.1	0.8	0.1	0.8
Average Annual Emissions from All Construction Phases	0.2	2.4	0.1	2.1
TCAPCD Significance Thresholds	100	100	100	100
Significant Impact?	No	No	No	No

c) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?

As discussed in Subsection 3b above, Project-related construction and operational emissions would be well below the CEQA significance thresholds. Also, Project-specific TAC emissions (largely DPM, a form of PM_{2.5}, in equipment exhaust) would be well below the level requiring a quantitative health risk assessment, as discussed further in Subsection 3d below. Therefore, the Project would not make cumulatively considerable contributions to the MCAB or SJVAB problems with ozone, particulate matter or TAC health risks. Thus, cumulative emission impacts would be less than significant.

d) Would the project expose sensitive receptors to substantial pollutant concentrations?

The greatest potential for adverse ambient pollutant impacts would be from the exposure of nearby sensitive receptors to the DPM emitted by the diesel-powered equipment during Project construction. As shown in Table 6 above, the emissions of DPM (in PM₁₀) would fall far short of the 100 lbs./day level that would trigger the need for dispersion modeling. Additional factors weighing against the potential for significant health impacts from project DPM emissions are the relatively large Project site area over which the DPM emissions would be spread and the relatively long distance (more than 1,000 feet to the closest residence) over which the DPM would disperse during transport to the sensitive receptors. Thus, no significant adverse health impacts would be expected from project construction DPM.

e) Would the project create objectionable odors affecting a substantial number of people?

The Project construction fleet would operate over a relatively large Project site area and be relatively distant from odor sensitive receptors (more than 1,000 feet to the closest residence). Thus, any perceptible odor impacts from construction equipment exhaust to the local residents would be transitory as the locus of construction activity moves around the Project site during construction. Therefore, odor impacts associated with Project construction would be less than significant.

Mitigation Measures

AIR-1 A construction-phase Dust Control Plan (DCP) shall be prepared prior to the start of any Project construction activity. The DCP shall include all basic emission control measures (listed below) and any additional measures applicable to the project and necessary to reduce off-site migration of fugitive dust:

Basic Control Measures

- All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover.
- All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.
- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut & fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.
- With the demolition of buildings, all exterior surfaces of the building shall be wetted during demolition.
- When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.
- All operations shall limit or expeditiously remove the accumulation of mud or dirt from Hardin Flat Road at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions; use of blower devices is expressly forbidden.)
- Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.
- Any site with 150 or more vehicle trips per day shall prevent carryout and track-out.

Enhanced Control Measures (as necessary and appropriate)

- Limit traffic speeds on unpaved roads to 15 mph.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from areas with a slope greater than one percent.

Additional Control Measures (as necessary and appropriate)

- Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site.
- Install wind breaks at windward side(s) of construction areas.
- Suspend excavation and grading activity when winds exceed 20 mph, or when fugitive dust exiting the site exceeds the 20 percent opacity limit, regardless of wind speed.
- Limit area subject to excavation, grading, and other construction activity at any one time.

AIR-2 Acquire burn permits from the Tuolumne County Air pollution Control District. The California Air Resources Board provides daily information on "burn" or "no burn" conditions. Design and implement burn plans to minimize particulate emissions. Notify the

Groveland District Wildlife Biologist prior to pile burning to minimize disturbance to protected or sensitive species.

References

- CAPCOA (California Air Pollution Control Officers Association). California Emissions Estimator Model [CalEEMod]. Available on website: <http://www.caleemod.com>
- CARB (California Air Resources Board). California Air Basins. Available on website: <https://www.arb.ca.gov/desig/airbasins/airbasins.htm>
- CARB. iADAM: Air Quality Data Statistics. Available on website: <http://www.arb.ca.gov/adam/>
- CARB. Overview: Diesel Exhaust and Health, Available on website: <https://www.arb.ca.gov/research/diesel/diesel-health.htm>
- EPA (Environmental Protection Agency). Nonattainment Areas for Criteria Pollutants. Available on website: <https://www.epa.gov/green-book>
- EPA. General Conformity. Available on website: <https://www.epa.gov/general-conformity/what-general-conformity>
- EPA. General Conformity De Minimis Tables. Available on website: <https://www.epa.gov/general-conformity/de-minimis-tables>
- SJVAPCD (San Joaquin Valley Air Pollution Control District). 2015. *Guide for Assessing and Mitigating Air Quality Impacts*. Available on website: http://www.valleyair.org/transportation/GAMAQI_3-19-15.pdf
- SJVAPCD. Current District Rules and Regulations - Regulation VIII - Fugitive PM10 Prohibitions – Rule 8021, Construction, Demolition, Excavation, Extraction, and other Earthmoving Activities. Available on website: <http://www.valleyair.org/rules/currnrules/r8021.pdf>
- United States Department of Agriculture, Stanislaus National Forest. 2017. Forest Plan Direction - Stanislaus National Forest, Sonora, CA.

	Potentially Significant Impact	Potentially Unless Mitigation Incorporated	Significant Less Than Significant Impact	No Impact
4. BIOLOGICAL RESOURCES. Would the project:				
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Aquatic Wildlife

California Red-legged Frog. The BTC SUP area contains non-breeding aquatic habitat, upland habitat and dispersal habitat suitable for use by the California red-legged frog, but does not contain suitable breeding habitat. The nearest suitable breeding habitat historically occurred in two ponds on the South Fork Tuolumne River located on private property in the vicinity of Hardin Flat, about one mile west of the Project area. One of these ponds was created by a weir structure operated by the Yosemite Lakes RV Resort. Staff at the Yosemite Lakes RV Resort stated that the weir boards have not been installed in at least eight years, which means this pond has not been present for at least the last eight years. The second pond was created by a weir structure located downstream of the Yosemite Lakes RV Resort. Staff at the Yosemite Lakes RV Resort indicated that this second weir has not been operated in several years as well, and that sediment has filled in this pond area. Breeding habitat quality in this area is low to unsuitable due to the prolonged absence of ponded water, presence of a self-sustaining population of the non-native, predatory bullfrog (*Rana catesbeiana*) and moderate levels of residential development adjacent to the ponds.

Foothill Yellow-legged Frog. The foothill yellow-legged frog frequents rocky streams and rivers with open, sunny banks, in forests, woodlands, and chaparral. It is rarely found far from water. The South Fork Tuolumne River provides good quality and quantity of habitat for the foothill yellow-legged frog. The river is low to moderate in gradient (less than four percent) with ample cobble bar habitat for breeding. The riparian canopies provide an adequate mix of shading conditions ranging from very dense (greater than 80 percent) to open (less than 25 percent) areas ideal for basking. However, almost all known populations of this species occur at elevations below 3,000 feet. The portion of the river in the BTC SUP area is near the upper elevational limit of the species on the Stanislaus National Forest and several hundred feet higher than the highest known local population of foothill yellow-legged frog (3,200 feet, Bull Meadow Creek). Given their typical elevation range and a lack of detections in the Project vicinity, it is very unlikely that the foothill yellow-legged frog would occur on the Project site.

Western Pond Turtle. The western pond turtle is most often associated with rivers and streams, but may also use ponds and lakes. It requires basking structures such as rocks and logs, as well as underwater refugia such as submerged rocks and woody debris. It nests during the summer in open, sunny areas up to 0.25 mile from water, and overwinters up to 0.3 mile from water at sites with a deep layer of duff or litter beneath shrubs or trees. The section of the South Fork Tuolumne River that flows through the BTC Project site provides suitable aquatic habitat for the western pond turtle. There is ample deep pool habitat in combination with basking habitat provided by bedrock and large woody debris. Unburned areas of the BTC SUP area with dense shrub or tree canopy cover provide suitable terrestrial refuge for overwintering. Turtles prefer to nest in areas of low slope dominated by herbaceous vegetation. Those portions of the Camp that burned at the greatest intensity during the Rim Fire have reverted to seedling-stage mixed conifer forest in which herbaceous vegetation dominates. Some of these areas are relatively flat and therefore suitable for nesting by the western pond turtle.

The reach of Thimbleberry Creek that flows through the Project site provides poor quality aquatic habitat. This stream has a high gradient, low water temperatures, a lack of basking sites, and lacks the pool development needed by turtles in small streams.

Terrestrial Wildlife

Great Gray Owl. In addition to being a Forest Service Sensitive (FSS) species, the great gray owl is listed by the state of California as Endangered. Great gray owls are regarded as locally rare throughout their range in USFS Region 5, with a recent population estimate of 200-300 individuals in California. The majority of consistently occupied great gray owl territories in California are located in the Groveland Ranger District and adjacent Yosemite National Park. Recent genetic studies suggest this Sierran population is genetically distinct from other populations in Oregon, Washington, and Canada.

A post-fire Protected Activity Center (PAC) evaluation conducted by Stanislaus National Forest found that there are 13 great gray owl sites located within the Rim Fire perimeter on USFS lands. This represents half of all great gray owl sites on the Stanislaus National Forest and a significant proportion of the estimated population size of 80 to 100 individuals for this species. All of the great gray owl PACs in the Rim Fire burned at mixed severities. Overall, about half of all PAC acres burned at high severity, and

at least two nest trees were lost in the fire. However, because great gray owls may nest in burned forest, and because post-fire conditions may provide preferred foraging habitat in the short-term, great gray owls may still occupy their historic PACs.

One great gray owl territory occurs about two miles east of the BTC SUP area. The PAC is centered on a network of meadows, the largest of which is Crocker Meadow. Great gray owls were detected in the Crocker Meadow area during USFS surveys in 2005, 2006, 2007, and 2008. In 2007 a great gray owl was found nesting in a white fir snag, but the tree fell before any young had fledged. Nesting was not observed during the other survey years, and has not been observed since. Past studies of great gray owls from Yosemite suggest birds moving to lower elevations in winter regularly visit the Crocker Meadow area.

The Project site does not offer suitable habitat for the great gray owl. Onsite trees lack the size and structural characteristics favored by nesting owls, and open areas at the Camp are too small and/or too disturbed to be used for foraging. However, there is suitable great grey owl habitat in the Project vicinity. Several openings on private lands and drainages and associated small “stringer” meadows in the Project vicinity provide foraging habitat, while canopy cover in the surrounding area is relatively dense and contains large trees suitable for nesting. The Crocker Meadow PAC, about two miles from the BTC SUP area, contains high-quality nest habitat adjacent to a complex of meadows.

California Spotted Owl. Three PACs for California spotted owl occur within two miles of the BTC SUP area. The post-fire PAC evaluation found all three PACs suitable for occupancy following the Rim Fire. The first, TUO-0010, is a 458-acre area centered on the Soldier Creek drainage and Hardin Flat Road that formerly overlapped the Project site, but has recently been redrawn to exclude the Project site. This PAC has been consistently occupied by spotted owl individuals or pairs during annual U.S. Forest Service (USFS) surveys since 2003, including nesting in 2015 about 0.6 mile from BTC SUP boundaries confirmed by the USFS. The second, TUO-0011, is a 492-acre area located about 1.5 miles south of the Project site along upper Big Creek. It was occupied by spotted owl individuals or pairs during survey years 2005-2008 and 2014. The third, TUO-0026, is a 384-acre area located about 1.5 miles east of the Project site between Soldier and Rush Creeks. A pair was present in this PAC in 2014, but no nesting was confirmed.

The breeding cycle of the California spotted owl extends from mid-February to mid or late-September. Disturbance during the egg-laying stage through the incubation stage, a period extending from early April through mid-May, may result in nest abandonment or failure. Young owls typically fledge from the nest in mid- to late June. For the first several weeks they are very weak flyers and do not move far from the nest tree. Thus, nesting birds and their young are sensitive to disturbance from mid-February to mid-August.

Recent research indicates that California spotted owls will occupy landscapes that experience low-to-moderate-severity wildfire, as well as areas with mixed-severity wildfire that include some proportion of high-severity fire. Spotted owls with burned forest in their home range appear to utilize a variety of prey,

including gophers, flying squirrels, wood rats, sciurid squirrels, and deer mice. The time elapsed since a fire is closely correlated with habitat elements and composition of prey species. For example, post-fire habitats are typically rich in gophers and deer mice in the first decade following a fire, followed by wood rats when understory conditions are well developed in the first and following decades, and finally by sciurid squirrels and flying squirrels when trees reach maturity.

The spotted owl PAC adjacent to the Project site, TUC-0010, contains late-seral, closed-canopy habitat consistently occupied by spotted owls. However, this PAC and high-quality areas elsewhere on the SNF are not contiguous, having been affected by the Rim Fire and earlier fires in 1944 and 1987, as well as past and ongoing salvage logging, hazard tree removal, and the recent Crush timber sale. The PAC also partially overlaps with a designated wildland-urban interface (WUI) area that encompasses the area around Hardin Flat development.

The early- to mid-seral Sierran mixed conifer forest of the BTC SUP area does not represent suitable nesting habitat for the California spotted owl owing to its relatively open canopy and shortage of very large trees. However, owls would be expected to forage in this habitat from time to time. In fact, forested areas of the project site may be more suitable for spotted owl foraging under present conditions than before the Rim Fire, as the fire resulted in an increased concentration of snags and downed woody material favoring owl prey, particularly north of Hardin Flat Road. The Project site may also be used as a movement corridor for owls traveling between different portions of the adjacent PAC, or traveling from the PAC to other areas on the Stanislaus National Forest.

Northern Goshawk. In addition to being a FSS species, the northern goshawk is a California Species of Special Concern. The northern goshawk occurs throughout the northern hemisphere in coniferous forests. The status and trend of goshawks in the Sierra Nevada and the Stanislaus National Forest is difficult to assess, due to inconsistent breeding success and survey efforts.

A post-fire PAC evaluation conducted by Stanislaus National Forest in collaboration with the USFS Pacific Southwest Research Station found that 22 northern goshawk sites are contained within the Rim Fire perimeter. Of these, four are located in areas that burned at high severity and have small amounts of remaining suitable habitat, such that there is low to no probability of continued occupancy. Fifteen sites are located in areas that burned at lower severity and have high amounts of remaining suitable habitat, suggesting likely continued occupancy. The remaining three sites have intermediate values, and occupancy probabilities are uncertain.

There are no goshawk PACs overlapping the BTC SUP area. However, two PACs, identified as PAC 54-43 and PAC 54-07, are located within a mile of the site. The post-fire PAC evaluation found that both PACs remained suitable for occupancy by northern goshawks after the Rim Fire. PAC 54-43 is a 336-acre area in the Soldier Creek area about 0.5 mile east of the Project site. It was occupied in USFS surveys conducted in 2011, but has not had confirmed nesting since that time. PAC 54-07 is a 258-acre area located in the Big Creek Basin about 0.8 mile south of the project site. Although it has historically

been a successful territory, it has not been consistently surveyed for several years. An adult goshawk was detected in this PAC in 2014, but nesting was not confirmed.

The early- to mid-seral Sierran mixed conifer forest of the BTC SUP area does not represent suitable nesting habitat for the northern goshawk owing to its relatively open canopy and shortage of very large trees, nor is it typical of habitats in which goshawks usually forage. However, the Project site may also be used as a movement corridor for goshawks traveling between the nearby PACs to other areas on the Stanislaus National Forest.

Townsend's Big-eared Bat. Although there are no known natal roosts for this species in the BTC SUP area, there is likely suitable foraging habitat in the site's riparian areas and edge habitats. Potentially suitable roosting habitat occurs in the few Camp buildings that were not destroyed by the Rim Fire, as well as in abandoned mines in the surrounding landscape. Individual foraging bats likely move through the Project site occasionally.

Pallid Bat. The status of the species is not well researched, but North American pallid bat populations have declined over the past 50 years and data from California suggest population declines associated with desert and oak woodland habitat loss due to urban expansion. Prior to the Rim Fire, USFS biologists documented pallid bats roosting at a bridge and in cabins on the Project site, and detected pallid bats calling while foraging on adjacent lands. USFS surveys also detected pallid bats roosting at two bridges on the South Fork Tuolumne River near the Project site. The CNDDDB lists several occurrences of pallid bat within a ten-mile radius of the Project site.

As described above, pallid bats were known to roost in BTC cabins prior to the Rim Fire, and may continue to roost in the remaining structures. Individuals of the species may also roost on the Hardin Flat Road bridge over the South Fork Tuolumne River, in snags or oak trees in the forested area north of Hardin Flat Road, or in trees or human-built structures on surrounding lands. Pallid bats likely forage regularly in the area, particularly near openings and roads.

Fringed Myotis. The fringed myotis occurs from southern British Columbia south through the western United States and most of Mexico. The fringed myotis is a widely distributed species, but it is considered rare. Population estimates and trends for the fringed myotis are unavailable, but the limited data that is available suggests the population is declining. Not only have historic maternity colonies disappeared, but those remaining appear to contain fewer individuals. Bat surveys conducted by the SNF have documented individuals of this species near the BTC Project site on a bridge over the South Fork Tuolumne River, and at various other locations on the SNF including Fahey Pond and the Hetch Hetchy adit at the end of Road 1N45.

Potential roosting habitat for the fringed myotis occurs in the remaining buildings on the Project site, as well as the Hardin Flat Road bridge over the South Fork Tuolumne River. The larger snags in the forested area north of Hardin Flat Road also have the potential to be used for roosting by this species. The fringed myotis may forage in the site's remaining forested areas, edge habitats, and secondary streams.

Sensitive Plants

Slender-Stemmed Monkey Flower. Seven subpopulations of slender-stemmed monkey flower (about 45 plants) were identified within the BTC Project area during 2015 botanical surveys. The availability of adequate sunlight and water, coupled with low levels of competition from weedy annuals or encroaching brush or tree canopies are the factors allowing this species to perpetuate.

As evidenced by review of historic Google aerial photography, during non-drought conditions, most of the locations where slender-stemmed monkey flower was found in 2015 would normally be under water. The subpopulations along the rivers' edge are typically under water all year round during years of normal rainfall. The drought conditions of the last few years combined with the post-fire soil erosion and deposition allowed the seed to be deposited in locations not previously observed by USFS biologists in 2009 which was located about 100 – 200 feet upstream and downstream, respectively, of the observed subpopulations in 2015. The subpopulation from 2009 was not observed in 2015. Fluctuating water levels associated with weather patterns indirectly effect the subpopulations of slender-stemmed monkey flower, regardless of which alternative is chosen. There appears to be much flux in distribution and abundance of this annual small-seeded plant.

Regulatory Setting

BTC is located in SNF and under the jurisdiction of the USFS and subject to the requirements of the *Forest Plan Direction* (USDA 2017).

Impact Discussion

The proposed Project could result in potentially significant impacts to slender-stemmed monkey flower, western pond turtle, great gray owl, California spotted owl, Townsend's big-eared bat, pallid bat and fringed myotis. However, with implementation of Mitigation Measures BIO-1 – 8, potentially significant impacts would be less than significant. A brief discussion of each environmental issue included under Section 4 is presented below.

- a) **Would the project 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?**

Aquatic Wildlife

California Red-legged Frog. The BTC SUP area does not contain the full range of habitat elements required by the California red-legged frog. Specifically, suitable breeding habitat is absent from the Project site and a one-mile vicinity. Because the Project site lacks the four primary constituent elements (PCEs) essential for the California red-legged frog, and because the species is considered extirpated from the Tuolumne River watershed, occupancy of the Project site is considered unlikely, and the proposed Project is not expected to affect individual California red-legged frogs or their habitats.

Foothill Yellow-legged Frog. Suitable habitat for the foothill yellow-legged frog exists on the BTC SUP area, but is assumed to be unoccupied. Multiple surveys in the project vicinity have not detected the

frog and the project site is outside of the local elevation range of this species. The Project would make improvements to streams of the site through restoration and erosion control projects. Important habitat elements such as stream shading and near-stream cover would be enhanced through proposed riparian revegetation efforts. The Project is not expected to affect individual foothill yellow-legged frogs or their habitats.

Western Pond Turtle. Construction activities of limited concern include revegetation, stream restoration and erosion control within stream corridors and represent potential significant impacts to the western pond turtle including: physical disturbance, injury, and mortality of individuals and/or destruction of nests during should turtles occupy the BTC SUP area.

The western pond turtle requires prolonged uninterrupted periods to facilitate basking and nesting. Construction-related noise and the physical presence of workers associated with the BTC project might disturb turtles, potentially affecting the frequency and duration of basking or foraging, thwarting attempts by female turtles to nest, or even promoting dispersal away from the area. However, it is important to note that any western pond turtles occupying this reach of the South Fork Tuolumne River tolerate a “baseline” moderate to high level of disturbance, depending on the season, under existing conditions. BTC was in operation for over 90 years prior to the Rim Fire. Human disturbance within Camp boundaries has occurred via dispersed camping for the four years since the fire and recreational and residential use of surrounding lands has continued. Development associated with the Yosemite Lakes RV Resort lines the river for about 0.6 mile, beginning 0.4 mile downstream of the BTC project site. Between the Camp and the Yosemite Lakes RV Resort are a number of residences and vacation homes. For about one mile downstream of the Camp, Hardin Flat Road closely parallels the river to the north, ultimately crossing the river in the southeastern portion of the Project site. Camp activities would result in an increase in disturbance beyond this baseline level; however, these activities would be relatively short-term, and are expected to have only a minor effect on this species.

Although unlikely, construction-related injury/mortality of western pond turtles or their eggs could occur as a result of construction activities. For example, equipment could crush turtles or eggs hidden in streamside vegetation or sandy soils, should they be present. Because such an event is unlikely to occur, injury/mortality of western pond turtles or eggs related to project activities of limited concern would constitute a minor project-related risk for this species.

Construction activities of limited concern would produce no indirect negative effects for the western pond turtle because the quality of aquatic and riparian habitat would increase following these activities. The turtle would be expected to benefit from decreased sedimentation of the river resulting from erosion control measures and increased riparian cover resulting from revegetation.

The majority of ground disturbance construction would take place in upland habitats and represents construction activities of greatest concern to the western pond turtle. Ground disturbing activities have the potential to directly affect nesting female turtles and their eggs resulting in physical disturbance, injury, and mortality of individuals and/or destruction of nests and a reduction in quantity and quality of

terrestrial habitats, such as dense shrub or tree canopy cover that could be used by turtle for overwintering, as well as open sites suitable for nesting.

The proposed Project includes construction of new structures, roads, and parking lots. The construction of buildings and roads within forested habitats on the Project site would reduce the amount of overwintering habitat that is available to western pond turtles. The two parking lots proposed for construction are to be located in previously burned and cleared areas that are now in seedling-stage mixed conifer forest. One of the parking lots is to be constructed either within the main camp area or east of Hardin Flat Road, where slopes are too steep to be suitable as western pond turtle nesting habitat. The other parking lot is to be constructed beneath the PG&E power lines north of Hardin Flat Road, in a relatively flat area suitable for turtle nesting.

Mitigation Measures BIO-1 through BIO-4 would reduce potentially significant impacts to aquatic wildlife to less than significant.

Sensitive Plants

BTC reconstruction and Camp operation could have direct effects on all subpopulations of the slender-stemmed monkey flower consisting of about 45 plants as surveyed in 2015. Reconstruction of rock walls proposed around beach areas, and manual deposition and extraction of granite fines annually could directly impact the majority of the subpopulation and suitable habitat for this species at the beach area location. Approximately 30-35 plants were found in this subpopulation, which equates to about 75 percent of the population in the permit area. However, as an annual, seed germination from this subpopulation like others along the river's edge will fluctuate greatly from year to year and/or seed might be transported downstream depending on annual river flows.

The Camp would have designated pathways and trails located away from the population not on the South Fork Tuolumne River, however, there would still be a potential risk of impacts to the population from campers that might wander off trails. Any type of ground disturbance during the growing season could cause mortality to individuals prior to fruit being set. Disturbance during the non-growing season would likely do less harm to this annual population than disturbance during the growing season, since there would be no plants affected.

Parking lots would be "permeable", allowing petroleum pollutants and moisture to permeate through the surface and infiltrate through the soil profile. This would alleviate adverse indirect effects to the population from pollutants generated at the parking lot by parked vehicles and increased surface runoff.

Mitigation Measure BIO-5 would reduce potentially significant impacts to the slender-stemmed monkey flower to less than significant.

Terrestrial Wildlife

Spotted Owl. The California spotted owl is not expected to nest on the BTC project site owing to the relatively open canopy of the site's early- to mid-seral Sierran mixed conifer forest, shortage of very large

trees, and large numbers of trees damaged or removed as a result of the Rim Fire. However, the spotted owl PAC adjacent to the project site, TUC-0010, has consistently been occupied by owl individuals or pairs since 2003, with an active nest identified about 0.6 mile from permit area boundaries in 2015. If an active nest is discovered within the BTC SUP area, protective measures will be implemented in consultation with a USFS biologist. Hand construction of the proposed Small Falls Trail would cross the adjacent spotted owl PAC, and would not be subject to limited operating periods (LOPs) as no trees would be removed. For these reasons, it is highly unlikely that the project would result in injury or mortality of spotted owls, nor disturb owls such that they would abandon their nests.

Spotted owls would be expected to forage in forested areas of the BTC Project site from time to time. The fire resulted in an increased concentration of snags and down woody material favoring owl prey, particularly north of Hardin Flat Road. Individual owls foraging on the Project site during construction or operation of the Camp may be subjected to periodic noise disturbance, but are highly unlikely to be injured or killed by Project activities owing to the mobile nature of the species. If a spotted owl were observed on-site during construction, activities would be halted and assessed, limiting the severity of disturbance.

The BTC Project site does not offer suitable nesting habitat for the California spotted owl; hence, the proposed Project will produce no indirect effects for this species related to reduction in quantity or quality of nesting habitat.

Spotted owls could potentially use forested portions of the BTC Project site for foraging. Most project construction will occur in areas that burned during the Rim Fire and were subsequently logged under the Rim Fire Hazard Trees project. However, forested areas north of Hardin Flat Road are proposed for construction of parking, staff housing and expansion of an existing leach field. An undetermined number of live and dead trees may be removed from a 1.4-acre area to meet code requirements for the leach field. Although no live tree removal is anticipated for construction of staff housing, the level of human disturbance in this area would increase, consequently reducing its suitability as spotted owl foraging habitat. The areas in question consist of early- to mid-seral Sierran mixed conifer forest bisected by a power line corridor producing “edge” habitat along its margins. Although these forested areas are somewhat more suitable as spotted owl foraging habitat post-fire owing to increased concentrations of snags and down logs, they are still considerably less suitable than the neighboring spotted owl PAC, which consists of late-seral, closed-canopy forest. Loss of potential foraging habitat for the spotted owl in the forested areas north of Hardin Flat Road would produce, at most, minor negative effects for this species because the area is only of modest foraging value to the owl, and the Camp is surrounded by more suitable habitats contained in the adjacent PAC.

Great Gray Owl / Northern Goshawk. The BTC Project site does not offer suitable nesting habitat for the great gray owl or northern goshawk. The trees of the site are generally too small to be used for nesting by these species, lack the structural characteristics favored by great gray owls, and are located in relatively open-canopy forests not favored by northern goshawks. In the unlikely event that an active great gray owl or northern goshawk nest were identified on or within one-quarter mile of the site during

surveys for nesting FSS raptors, protective measures would be implemented in consultation with a USFS biologist. For these reasons, the project is not expected to disturb nesting great gray owls or northern goshawks.

The BTC Project site is not expected to be used for foraging by these FSS raptors. Open areas at the Camp are too small and/or too disturbed to be used by foraging great gray owls, and the site lacks mature forests typical of northern goshawk foraging habitat. Therefore, the project is not expected to affect foraging great gray owls or northern goshawks.

Both species may pass over the site when moving between more suitable habitats. If a FSS raptor were observed on-site during project implementation, activities would be halted and be re-assessed, limiting the severity of disturbance.

The BTC Project site does not offer suitable nesting habitat for the great gray owl or northern goshawk; hence, the proposed project will produce no indirect effects for these species related to reduction in quantity or quality of nesting habitat. Moreover, the site offers neither mature forest for foraging by the northern goshawk, nor suitable meadow habitat for foraging by the great gray owl. Therefore, the BTC Project will produce no indirect effects for the northern goshawk or great gray owl related to reduction in quantity or quality of foraging habitat.

Townsend's Big-Eared Bat, Pallid Bat and Fringed Myotis. The BTC Project site contains suitable roosting habitat for FSS bat species in the remaining buildings, on the bridge over the South Fork Tuolumne River, and in the forested area north of Hardin Flat Road. Additionally, the site offers suitable foraging habitat for the Townsend's big-eared bat along streams and edges, for the pallid bat in open areas, and for the fringed myotis in these habitats or the site's remaining forested areas. Project-related disturbance has the potential to disrupt foraging activity and result in the abandonment of active roosts, and physical disturbance to, or removal of, roost sites may result in injury or mortality of individual bats. Installation of new leach lines and expansion of an existing leach field north of Hardin Flat Road would require removal of live and dead trees within an area of up to 1.4 acres to meet code requirements. Some trees in this area might be suitable for roosting by the pallid bat and/or fringed myotis. A survey for roosting FSS bats will be conducted at all suitable roost trees to be removed by the project. If an active FSS bat roost is discovered, a USFS biologist will be consulted, and appropriate protective measures implemented. For these reasons, it is unlikely that the Project will result in the injury or mortality of any FSS bats.

Proposed Project activities could reduce the quantity or quality of roosting or foraging habitats for FSS bat species. In particular, removal of trees might eliminate roosting habitat, and construction of camp facilities within previously undisturbed areas may decrease the quality of roosting and foraging habitat. As discussed, installation of new leach lines and expansion of an existing leach field north of Hardin Flat Road would require removal of live and dead trees within an area of up to 1.4 acres. This activity, along with removal of hazard snags throughout the 30-year permit term, may reduce potential roosting habitat for the pallid bat and fringed myotis. No tree removal is proposed for construction of staff housing in

the forested area north of Hardin Flat Road; therefore, no roosting habitat will be lost as a result of this project component. However, because the level of human disturbance within this forested area will increase, the suitability of this area as roosting and foraging habitat for FSS bat species may decrease. Because similar or higher quality foraging and roosting habitat for FSS bat species occurs in abundance on surrounding lands, slight reductions in the quantity and quality of foraging and roosting habitat on the BTC Project site would be expected to produce only minor negative effects for these species.

Proposed BTC Project activities also include habitat improvement projects that would enhance roosting and foraging habitats. For example, the eradication of weed species may benefit the Townsend's big-eared bat, which forages preferentially in association with native plants. Both the Townsend's big-eared bat and fringed myotis may benefit from riparian revegetation projects.

Because the BTC Project is not expected to greatly affect densities of arthropods, nor significantly affect the availability of foraging and roosting habitat, the Project is not expected to result in substantial adverse indirect effects to FSS bat species in the BTC SUP area.

Migratory Birds: The Migratory Bird Treaty Act of 1918 (MBTA; 16 U.S.C. §§703-712) makes it illegal for anyone to take any migratory bird, or their parts, nests, or eggs, without a valid permit issued by the USFWS. Within the National Forests, conservation of migratory birds focuses on providing a diversity of habitat conditions at multiple spatial scales and ensuring that bird conservation is addressed when planning for land management activities

Project-related activities could result in disturbance to migratory birds, particularly during the nesting season. Pre-construction surveys for nesting migratory birds and FSS raptors will be conducted within ¼ mile of construction activities initiated during the breeding season throughout the life of the Special Use Permit, and protective measures consistent with the Forest Plan Direction (USDS, 2017) will be implemented for any active FSS raptor or migratory bird nests identified. Construction of the Small Falls Trail through the California spotted owl PAC located immediately adjacent to the project site will not be subject to LOPs during the spotted owl nesting season, March 1 to August 31, unless nest surveys find that the PAC is being used for nesting by migratory bird, spotted owls or other FSS raptors. With the implementation of nest surveys and protective measures, construction activities related to the project have the potential to disturb migratory birds, but migratory birds would not be at risk of injury or mortality.

Mitigation Measures BIO-6 through BIO-8 would reduce potentially significant terrestrial wildlife impacts to less than significant.

b) Would the project 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 U.S. Fish and Wildlife Service?

See Subsection 4a above.

c) Would the project have a substantial adverse effect on 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?

A delineation of potential jurisdictional waters was prepared for the SUP area (Live Oak Associates, 2018). Areas mapped within the South Fork Tuolumne River (1.2 acres) and the perennial wetland channel of Thimbleberry Creek (0.05 acre) using the ordinary high water mark would be considered Tributary Waters (1.25 acres total)

Two seasonal wetland channels totaling approximately 0.15 acre were identified within the study area that met the three technical criteria of jurisdictional wetlands. These two channels were:

- a drainage north of Hardin Flat Road crossing through a culvert toward the Camp; and
- a drainage north of Hardin Flat Road starting near the archery range and running west of the leach field.

The potential jurisdictional waters mapped on the site are either part of the South Fork Tuolumne River itself, or Thimbleberry Creek that is directly connected to the river. The Tuolumne River is a tributary of the San Joaquin River, which is considered a traditional navigable water. Because all the delineated waters of the SUP area eventually drain into a traditional navigable water, they appear to meet the criteria of a water of the United States.

The project would be required to obtain Section 404 Nationwide Permit from the U.S. Army Corps of Engineers prior to the construction of the proposed pedestrian/utility bridge. The Project does not include any direct removal, filling, hydrological interruption or other measures that would have a substantial adverse effect on federally protected wetlands.

d) Would the project 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?

Hatchery rainbow and brown trout are known to be present within the South Fork Tuolumne River, however hatchery rainbow trout would have interbred with any native trout that may have once been present, and brown trout are a non-native species. Natural barrier downstream in the form of waterfalls, particularly in the Rainbow Pools area, would prevent any spawning migrations from the main stem Tuolumne River from reaching Camp. Therefore, the Project does not substantially interfere with the movement of any native resident or migratory fish. See **Subsection 4a** above regarding other wildlife species.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

BTC is located in SNF and subject to Forest Service requirements regarding wildlife and sensitive plants. The Forest Plan Direction includes goals and strategies for addressing invasive plants (p. 48). Mitigation Measures BIO-9 would reduce potentially significant impact from invasive plants to less than significant.

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

BTC is within the SNF and the site is not within the boundaries of any local, regional or State conservation plans See subsections 4a – 4e above.

Mitigation Measures

Aquatic Wildlife

- BIO-1** Conduct a pre-construction survey to identify if the western pond turtle are present within the construction areas.
- BIO-2** BTC project construction workers shall be trained regarding the western pond turtle, including identification, habitat requirements, and the importance of minimizing physical disturbance to individuals during construction.
- BIO-3** Major site grading and underground utility construction activities shall be completed during the dry season to minimize risk of harming or displacing overwintering turtles.
- BIO-4** If western pond turtles are discovered in the immediate vicinity of construction activity, construction activity shall cease and a qualified biologist will relocate the turtle to suitable habitat outside of the BTC Project area.

Sensitive Plants

- BIO-5** Conduct a pre-construction plant survey the spring prior to Project construction. Flag and avoid new occurrences of sensitive plants. Notify the Groveland Ranger District Botanist to determine course of action.

Terrestrial Wildlife

- BIO-6** Conduct pre-construction nest surveys for migratory birds, California spotted owls, and northern goshawks within ¼ mile of construction activities implemented during the breeding season (February 15 to September 15). If active nests are discovered, protective measures would be implemented in consultation with a USFS biologist.
- BIO-7** Pre-activity surveys roosting bats would be conducted at all suitable roost trees or structures to be removed by project activities. If any FSS bat species are discovered during the surveys, nest and roost trees would be protected unless the trees pose an eminent safety concern.
- BIO-8** If any Forest Service Sensitive (FSS) or Federal-listed terrestrial wildlife species are discovered within the BTC project site area prior to or during ground disturbance and construction activities, such activities shall cease and a USFS biologist shall be contacted for recommendations as to how to proceed.

Invasive Plants

- BIO-9** Follow applicable FSM Manual 2080 Noxious Weed Management related to construction activities to include, but not be limited to:
- All vehicles and equipment that go off road must be free of non-native soil, mud (wet or dried), seeds, vegetative matter or other debris that could contain seeds in order to prevent new infestations of noxious weeds in the project area. Dust or very light dirt, which would not contain weed seed, is not a concern.

- Flag and avoid noxious weed populations if present. In places where noxious weeds cover large areas, mechanical treatments can be done within sites, but equipment must be cleaned before leaving the area.
- Do not stage equipment, material or personnel in areas with noxious weed infestations.
- After using equipment in infested areas, clean equipment so that it is free of soil, seeds, vegetative matter or other debris prior to being moved off site.
- Use certified weed-free mulches where available, mulches with low risk of weed introduction where certified weed-free is not available, and certified weed-free seed mixes. Seed mixes must conform to the Region 5 Policy on the Use of Native Plant Material in Restoration or Revegetation Projects.
- Where soil stabilization is needed, use crushed rock, drain rock, riprap and soil fill obtained from weed-free sources.
- Treat invasive plants and other weeds using manual (hand or mechanical) methods only.

References

Live Oak Associates. 2018. Aquatics: Biological Assessment/Biological Evaluation. City of Berkeley Tuolumne Camp Permit (46690) Groveland Ranger District, Stanislaus National Forest.

Live Oak Associates. 2018. Terrestrial Wildlife: Biological Assessment/Biological Evaluation. City of Berkeley Tuolumne Camp Permit (46690) Groveland Ranger District, Stanislaus National Forest.

Live Oak Associates. 2018. Biological Evaluation For Sensitive Plants. City of Berkeley Tuolumne Camp Permit (46690) Groveland Ranger District, Stanislaus National Forest.

Live Oak Associates. 2018. BOTANY REPORT. City of Berkeley Tuolumne Camp Permit (46690) Groveland Ranger District, Stanislaus National Forest.

Live Oak Associates. 2018. Management Indicator Species Report. City of Berkeley Tuolumne Camp Permit (46690) Groveland Ranger District, Stanislaus National Forest.

Live Oak Associates. 2018. Migratory Landbird Conservation on the Stanislaus National Forest. City of Berkeley Tuolumne Camp Permit (46690) Groveland Ranger District, Stanislaus National Forest.

Live Oak Associates. 2018. Potential Waters of the United States. City of Berkeley Tuolumne Camp Permit (46690) Groveland Ranger District, Stanislaus National Forest.

Live Oak Associates. 2018. Noxious Weed Risk Assessment. City of Berkeley Tuolumne Camp Permit (46690) Groveland Ranger District, Stanislaus National Forest.

United States Department of Agriculture, Stanislaus National Forest. 2017. Forest Plan Direction - Stanislaus National Forest, Sonora, CA.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
5. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

Prior to the Rim Fire, BTC had been in continuous operation for 90 years. In 2007, an evaluation of the Camp for eligibility in the National Register of Historic Places was conducted (*Groveland Ranger District, Stanislaus National Forest* 2007). The Stanislaus National Forest determined BTC was not eligible for inclusion in the National Register because it lacks integrity to its period of significance (USDA 2001). The California State Historic Preservation Officer, following the established protocol concurred with that determination (State of California 2015).

The Hardin Flat area is representative of a deep and rich record of traditional cultural heritage. Pre-Rim fire, the entire BTC permit area was surveyed to current standards (personal communication, Kathy Strain, 2011). In 2014, the area was again surveyed for the Forest Service to update site records for sites impacted by the Rim Fire and include documentation of additional areas around BTC. After tribal consultation (Tuolumne Me-Wuk Tribal Council 2015), the Stanislaus National Forest Supervisor issued a directive that avoidance and protection of archaeological sites would be required and that any existing BTC facilities within identified archaeological areas would be removed by hand thus avoiding any ground disturbance.

Impact Discussion

A brief discussion of each environmental issue included under Section 5 is presented below.

a) **Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?**

The Office of Historic Preservation determined Berkeley Tuolumne Camp was not eligible for inclusion on the National Register of Historic Places. Consequently the removal of some buildings damaged due to the Rim Fire and the repair of other damaged buildings does not represent a significant impact (State of California 2007). Mitigation Measure CUL-1 is recommended to avoid impacts to cultural resources.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Three recorded archaeological resource sites are located within the BTC SUP area. With implementation of Mitigation Measure CUL-2 and Mitigation Measure CUL-3, impacts to these archaeological resources would be avoided as determined by the Office of Historic Preservation (State of California 2015).

c) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic formation?

There are no paleontological resources known to be present on the BTC Project site.

d) Would the project disturb any human remains, including those interred outside of formal cemeteries?

There are no human remains known to be present on the BTC Project site.

Mitigation Measures

CUL-1 Remove specific existing structures to protect sensitive resources.

CUL-2 Cultural resources shall be protected through application of Standard Protection Measures as determined by Programmatic Agreement Among the USDA, Forest Service, Pacific Southwest Region (Region 5), California State Historic Preservation Officer, Nevada State Historic Preservation Officer and the Advisor Council on Historic Preservation Regarding the Process for Compliance with Section 106 of the National Historic Preservation Act for Management of Historic Properties by the National Forests of the Pacific Southwest Region (Regional PA), signed February 2013. In addition:

- Natural plant succession will be allowed to occur within cultural resource site boundaries.
- Notify the Forest Service cultural resource specialist if a new cultural resource site is discovered during project implementation and cease all activities within 150 feet of the resource until consultations are completed.

CUL-3 Buck and pole fencing shall be installed to protect cultural resources. Fencing shall be constructed by hand with no excavation.

References

State of California. 2007. *Inadvertent Effect to Berkeley Tuolumne Camp, Groveland Ranger District, Stanislaus National Forest, California*. Letter dated October 1, 2007.

State of California. 2015. *Determination of Eligibility for FS-05-16-51-1894, FS-05-16-54-1896 and FS-05-16-54-1895*. Letter dated September 21, 2015.

Groveland Ranger District, Stanislaus National Forest. 2007. *Historic Structure Report and National Register Evaluation for Berkeley Tuolumne Camp, Tuolumne County, California, Cultural Resource Management Report No. 05-16-4276*. Prepared for City of Berkeley. Prepared by Foothill Resources, Ltd. July 2007.

Sierra Valley Cultural Planning, 2018. *Heritage Resource Memorandum. City of Berkeley Tuolumne Camp Permit (46690)*

Strain, Kathy. 2017. Email dated November 20, 2017.

Tuolumne Me-Wuk Tribal Council. Letter dated October 28, 2015.

USDA. 2001. *Programmatic Agreement among the U.S.D.A. Forest Service, Pacific Southwest Region, California State Historic Preservation Officer, and Advisory Council on Historic Preservation Regarding the Identification, Evaluation, and Treatment of Historic Properties Managed by the National Forests of the Sierra Nevada, California* (Sierra PA). August 24, 2001.

United States Department of Agriculture, Stanislaus National Forest. 2017. Forest Plan Direction - Stanislaus National Forest, Sonora, CA.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
6. GEOLOGY AND SOILS. Would the project:				
a) Expose people or structures to 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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit of 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

Tuolumne County is located primarily within the Sierra Nevada geomorphic province, with less than ten percent of the western boundary creeping into the Great Valley province. The Sierra is a tilted fault block nearly 400 miles long. Its east face is a high rugged multiple scarp, contrasting with the gentle western slope that disappears under the sediments of the Great Valley to the west. The topography displays a wide range of landforms ranging from vertical cliffs to gently undulating plains. The County is located to the east of the Foothills fault system – a complex, braided system of individual fault segments that extends for approximately 200 miles from Mariposa in the south to Lake Alamanor in the north. The BTC SUP area is located in the southeastern part of Tuolumne County. Historically, earthquake activity in Tuolumne County is substantially below the California State average (Tuolumne County 2013)

Impact Discussion

With implementation of Mitigation Measure GEO-1, potential seismic hazards and unstable soils would be reduced to less than significant. A brief discussion of each environmental issue included under Section 6 is presented below.

- a) **Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: i) fault rupture, ii) strong shaking, iii) seismic-related ground failure or iv) landslides.**

While the potential for earthquake activity at the BTC site is probably low, there is the potential for seismic activity which could cause human injury or damage to structures and infrastructure facilities at the Camp. This is a potentially significant impact, but with implementation of Mitigation Measure GEO-1, potential impacts would be less than significant.

- b) **Would the project result in substantial soil erosion or the loss of topsoil?**

There is the potential for soil erosion during construction activities, but with implementation of **Mitigation Measure GEO-2**, in combination with Mitigation Measures HYDRO-5 – 8, soil erosion would be less than significant.

- c) **Would the project be located on a geologic unit of 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?**

The soils of the entire BTC permit area have been identified by the USDA Natural Resources Conservation Service as Holland family, deep/moderately deep complex. This soil type occurs on slopes between five percent and 35 percent gradients. While the soil is well drained, its runoff classification is considered high. Some mass instability would exist, especially on slopes of over 50 percent (Blair, Church and Flynn 2017). The possibility of soil instability at the Project site is considered a significant impact, but with implementation of Mitigation Measure GEO-1, potential soil instability impacts would be less than significant.

- d) **Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?**

See **Subsection 6c** above. With implementation of Mitigation Measure GEO-1, potential risks associated with expansive soil, if present, would be less than significant.

- 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?**

The soils within the Camp leach field have effectively supported the Camp operations in the past. Reconstruction of the Project would require certification of an on-site sewage treatment and disposal system pursuant to Tuolumne County Code Section 13.08.270A, which would demonstrate that the soils are capable of adequately supporting the proposed use of septic tanks and leach field via new percolation tests and soil profiles, system design plans and specifications (plot plan, grading plan, description of

groundwater and soils, description of monitoring devices, system operation and function), and site evaluation and testing.

Mitigation Measures

- GEO-1** Detailed geotechnical investigations shall be performed prior to the design of all buildings and the pedestrian/utility bridge. Buildings and bridges shall be designed to withstand seismic and soil loads consistent with California Building Code.
- GEO-2** To minimize soil erosion during construction activities, follow FSM 2550 Soil Management R5 Supplement (USDA 2012) and Soil Management Practices identified in the Forest Plan Direction (USDA 2017, p. 57-58).

References

- Blair Church and Flynn, Consulting Engineers and 2M Associates. 2017. *Watershed Management Report, Berkeley Tuolumne Camp (Permit 46690) Groveland Ranger District, Stanislaus National Forest*. October 7, 2017.
- Tuolumne County. 2013. *General Plan Update EIR, Safety Element*. Available on the County website at: <https://www.tuolumnecounty.ca.gov/889/General-Plan-Update>.
- Tuolumne County. 2009. Guidelines for Design and Evaluation of Special Design On-Site Sewage Treatment and Disposal Systems. Available on the County website at: <https://www.tuolumnecounty.ca.gov/DocumentCenter/View/934>
- United States Department of Agriculture, Stanislaus National Forest. 2017. Forest Plan Direction - Stanislaus National Forest, Sonora, CA.
- United States Department of Agriculture. Forest Service Manual Pacific Southwest Region (R5) Vallejo, California. FSM 2500 - Watershed And Air Management, Chapter 2550 - Soil Management.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
7. GREENHOUSE GAS EMISSIONS. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Greenhouse gases (GHGs) are atmospheric gases that capture and retain a portion of the heat radiated from the earth after it has been heated by the sun. The primary GHGs are carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O), ozone, and water vapor. While GHGs are natural components of the atmosphere, CO₂, CH₄, and N₂O are also emitted from human activities and their accumulation in the atmosphere over the past 200 years has substantially increased their concentrations. This accumulation of GHGs has been implicated as the driving force behind global climate change.

Human emissions of CO₂ are largely by-products of fossil fuel combustion, whereas CH₄ results from off-gassing associated with organic decay processes in agriculture, landfills, etc. Other GHGs, including hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, are generated by certain industrial processes. The global warming potential of GHGs are typically reported in comparison to that of CO₂, the most common and influential GHG, in units of “carbon dioxide-equivalents” (CO₂e).

There is international scientific consensus that human-caused increases in GHGs have and will continue to contribute to global warming. Potential global warming impacts in California may include, but are not limited to, loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years. Secondary effects are likely to include a global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity. (CCCC, 2012)

The California Air Resources Board (CARB) estimated that in 2011 California produced 448 million gross metric tons of CO₂e, or about 535 million U.S. tons. CARB found that transportation is the source of 37.6 percent of the state’s GHG emissions, followed by industrial sources at 20.8 percent and electricity generation (both in-state and out-of-state) at 19.3 percent. Commercial and residential fuel use (primarily for heating) accounted for 10.1 percent of GHG emissions. (CARB, 2014a)

Regulatory Setting

Assembly Bill 32 (AB 32 - Núñez, Chapter 488, Statutes of 2006), the California Global Warming Solutions Act, requires the CARB to lower State GHG emissions to 1990 levels by 2020—a 25 percent reduction statewide with mandatory caps for significant GHG emission sources. AB 32 directed CARB to develop discrete early actions to reduce GHG while preparing the Climate Change Scoping Plan to identify how best to reach the 2020 goal. (CARB, Assembly Bill 32 Overview)

Statewide strategies to reduce GHG emissions to attain the 2020 goal include the Low Carbon Fuel Standard (LCFS), the California Appliance Energy Efficiency regulations, the California Renewable Energy Portfolio standard, changes in the motor vehicle corporate average fuel economy (CAFE) standards, and other early action measures that would ensure the state is on target to achieve the GHG emissions reduction goals of AB 32.

In an effort to make further progress in attaining the longer-range GHG emissions reductions required by AB 32, Governor Brown identified in his January 2015 inaugural address an additional goal (reducing GHG emissions to 40 percent below 1990 levels by 2030) to be attained by implementing several key climate change strategy “pillars:” (1) reducing present petroleum use in cars and trucks by up to 50 percent; (2) increasing from one-third to 50 percent the share of California’s electricity derived from renewable sources; (3) doubling the energy efficiency savings achieved at existing buildings and making heating fuels cleaner; (4) reducing the release of methane, black carbon, and other short-lived GHGs; (5) managing farm and rangelands, forests and wetlands to more efficiently store carbon; and (6) periodically updating the State's climate adaptation strategy.

The Tuolumne County Air Pollution Control District has no CEQA analysis methodology nor significance criteria for assessing development project GHG impacts. Other California Air Districts recommend quantification of GHG from project source and then rely either on set limits to project operational GHG emissions (e.g., the Sacramento Metropolitan Air Quality Management District has set its significance threshold at 1,100 metric tons for construction and operation; the Bay Area Air Quality Management District has set the same threshold for operational emissions only) or require minimum quantitative reductions of project GHG emissions from baseline levels (e.g., the San Joaquin Valley Air Pollution Control District requires at least a 29 percent reduction in operational emissions).

Impact Discussion

The proposed reconstruction of BTC much as it was prior to the Rim Fire would have no significant temporary or permanent impacts to GHG emissions nor conflict with any GHG reduction plans. A brief discussion of each environmental issue included under Section 7 is presented below.

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The California Emissions Estimator Model (CalEEMod, Version 2016.3.2) was used to quantify GHG emissions associated with Project construction activities and Project operation. Applying this model to the Project, its total construction GHG emissions would be 314.7 metric tons of CO_{2e} and its annual emissions in the first year of operation would be 82.6 metric tons of CO_{2e}. Both Project construction and operational GHG emissions are well below thresholds adopted by other Air Districts, thus, Project GHG emissions impacts are less than significant.

b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

GHG emissions from the reconstructed BTC would not exceed its pre-Rim Fire level. Thus, the Project would not conflict with the goals of AB 32 or any other State climate change prevention or adaptation strategies, a less than significant impact.

Mitigation Measures

None required.

References

CCCC (California Climate Change Center). 2012. *Our Changing Climate 2012 Vulnerability & Adaptation to the Increasing Risks from Climate Change in California, A Summary Report on the Third Assessment from the California Climate Change Center*. <http://uc-cicc.org/downloads/Our%20Changing%20Climate%202012.pdf>

CAPCOA (California Air Pollution Control Officers Association). 2013. California Emissions Estimator Model [CalEEMod], Version 2016.3.2. <http://www.calemod.com/>

CARB (California Air Resources Board). 2014a. *California Greenhouse Gas Emission Inventory: 2000-2012*. Available online at: http://www.arb.ca.gov/cc/inventory/pubs/reports/ghg_inventory_00-12_report.pdf

CARB. Assembly Bill 32 Overview <http://www.arb.ca.gov/cc/ab32/ab32.htm>

CARB. 2014b. *First Update to the Climate Change Scoping Plan* http://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
8. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

In 1986 a 500-gallon underground storage tank (UST) was removed from BTC. The Central Valley Regional Water Quality Control Board (CVRWQCB) issued a letter requesting further delineation and groundwater sampling in response to hydrocarbon impacted soil left in place during UST removal. Residual soil in the footprint of the UST was excavated in November, 2013 and water samples were collected from the Tuolumne River and an on-site upgradient well. The results from these analyses indicated no impacts to soil or surface water and the detection of benzene at a concentration of 0.92 µg/l in the groundwater sample from the upgradient well. CVRWQCB requested re-sampling of groundwater before issuing closure for the BTC site. In response, additional groundwater sampling was undertaken and the results indicated all constituents are below laboratory reporting limits (Geosyntec consultants 2014). The CVRWQCB issued a No Further Action Required for BTC on September 11, 2015 (CVRWQCB 2015).

Regulatory Setting

The California Division of Occupational Safety (Cal/OSHA) regulates workplace safety. The California Department of Toxic Substances Control (DTSC) regulates hazardous material remediation if required.

Impact Discussion

The BTC project would not present a risk regarding the exposure of hazards or hazardous materials to BTC camp staff, visitors, or the environment. To comply with Cal/OSHA standards for hazard material training/information, a supplementary training program is conducted at the beginning of each Camp season for all staff that may use hazardous chemicals specific to the Camp. Hazardous materials are stored in designated locations that are signed and lockable. A brief discussion of each environmental issue included under Section 8 is presented below.

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

All transport, use, or disposal of hazardous materials associated with the Camp operations will be conform to Cal/OSHA regulations. The Project will not include the installation of any underground fuel storage tanks. Above-ground propane (liquid petroleum gas) tanks would support Camp operations (kitchen, restrooms, laundries, hot water, etc). These would be installed per County regulations.

b) Would the project 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?

The Project will install above-ground propane tanks. These tanks will be constructed and inspected by Tuolumne County Environmental Health as the Certified Unified Program Agency (CUPA) for all areas of Tuolumne County.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No. BTC is more than one-quarter mile from the nearest school.

d) Would the project 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?

The Project site is not included on the Department of Toxic Substance Control's site cleanup list as per Government Code Section 65962.5 (Department of Toxic Substance Control 2018) and is not a significant hazard to public health or the environment.

e) Would the project be 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?

BTC is not located within two miles of a public airport (Google Earth 2018).

f) Would the project be within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

BTC is not located within two miles of a private airstrip (Google Earth 2018).

g) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The City of Berkeley prepared the *Berkeley Tuolumne Camp Operating Plan* (City of Berkeley 2013) to address emergency response and evacuation. It was successfully applied during the Rim Fire. This plan will be updated to reflect any changes in Camp layout and facilities for the proposed Project. This plan identifies emergency information and an action plan outlining Camp evacuation in the event of floods or wildfire.

h) Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

The proposed Project is located in the SNF and could be exposed to wildland fires as was evident during the 2013 Rim Fire when most of the Camp and the surrounding forest burned. The reconstructed BTC will incorporate upgraded facilities reflecting current State code. Additionally, the Camp will implement an updated evacuation plan. See Subsection 8g above.

Mitigation Measures

None required.

References

City of Berkeley. 2013. *Berkeley Tuolumne Camp Operating Plan*.

California Department of Toxic Substance Control. 2015. *DTSC's Hazardous Waste and Substances Site List (Cortese List)*. www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm.

Google Earth. 2018. Viewed on January 26, 2018.

9. HYDROLOGY AND WATER QUALITY.

Would the project:

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted?)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The Environmental Setting presented below represents a summary of the *Watershed Management Report, Berkeley Tuolumne Camp (Permit 46690) Groveland Ranger District, Stanislaus National Forest* (Blair Church and Flynn, and 2M Associates 2017).

Berkeley Tuolumne Camp

Post Rim Fire, remaining camp facilities included the following:

- 18 permanent structures;

- two concrete weirs, concrete foundations and walls associated with the Dining Hall that define a portion of the 100-year flood plain
- concrete foundations for two bridge structures that crossed from each river shoreline to the island in the river along the South Fork Tuolumne River;
- drainage culverts under Hardin Flat Road and the Camp driveway; and
- a culvert under the main Camp access route for Thimbleberry Creek.

After the Rim Fire, vegetation clearance commenced including:

- In 2013, PG&E cleared trees along their distribution line within the vicinity of the Camp;
- In 2014 a hazard logging operation was conducted removing all trees within an approximately four-acre zone around what was the Central Camp area along the south side of the river.

Since the Rim Fire, vegetation has been recovering naturally. By spring 2015 there was essentially complete herbaceous ground cover with naturally regenerating black oak, Douglas fir, white alder and willows.

Watershed

The South Fork Tuolumne River watershed above BTC is the principal watershed of interest and is defined as a spatial hierarchy of eight nesting watershed size classes ranging from very large (greater than 250,000 acres) to very small (less than 2,000 acres). The South Fork Tuolumne River comprises 57,855 acres, classifying it as a Hydrologic Unit Code (HUC) Level 6. The South Fork Tuolumne watershed starts in the high country of Yosemite National Park above elevation 8,500 feet and terminates at the confluence of the South Fork with the Middlefork Tuolumne River approximately 6.1 miles downstream of BTC. Given the large scale of the Rim Fire, the SNF hydrologists identified HUC Level 6 as the most appropriate scale for watershed description and analysis of the effects of the Rim Fire Recovery Project.

The United States Geological Survey (USGS) has maintained a stream flow gauge near Rainbow Pool on the South Fork Tuolumne River just upstream of its confluence with the Middlefork beginning in 1923 until 1996 when the gauging was discontinued. Beginning in 1997, the City of San Francisco has maintained the gauge. The statistical analysis of the stream flow gauging for the South Fork Tuolumne River indicates that the mean annual flow for the river is 96.1 cubic feet per second (cfs). Daily mean flow rates range from a high of 6,960 cfs to a low of 0.4 cfs. Stream gauge information indicates that the South Fork Tuolumne River conveys water all year long.

There are two small local watersheds that drain into the South Fork Tuolumne River at the BTC site:

1. Thimbleberry Creek, a perennial, spring-fed stream from the south. The watershed area is approximately 92 acres. The calculated 100-year discharge rate from the watershed is 60 cfs.
2. An unnamed intermittent drainage starting from Sawmill Mountain, herein referred to as “the Northside Drainage”. The watershed area is approximately 136 acres. The calculated 100-year discharge rate from the watershed is 77 cfs.

The South Fork Tuolumne River and the BTC SUP area are within the Mediterranean climate belt. The primary tree types consist of sugar and ponderosa pines mixed with black oak and alder. The slopes of the South Fork Tuolumne River in the vicinity of the camp average 0.03 vertical feet per horizontal foot. BTC is located upstream from the USGS stream gauge, but is sufficiently close to the gauge such that the flow rates measured at the gauge station are highly indicative of the flow rates at BTC. The average annual precipitation at BTC is estimated to be 48 inches however the watershed has extensive areas above snowline, meaning that rainfall is not the principal generator of runoff from the watershed.

Regulatory Setting

As a Federal agency, the Forest Service is bound by Federal laws, Executive orders, and Department of Agriculture directives, which are the basis for Forest Service programs and operations. The Stanislaus National Forest expresses these regulations, orders and directives in the Forest Plan Direction (USDA, 2017). The BTC project must adhere and implement the Forest Plan Direction (FPD) as well as State laws, regulations, and codes governing development activities. The FPD includes a general framework or understanding for managing the forest resources. To meet the goals and achieve the objectives set forth in the FPD, 'Management Practices' and 'Forest Wide Standards and Guidelines' are established.

Protection of water quantity and quality is an important part of the mission of the Forest Service (USDA 2007). Management activities on national forest lands must be planned and implemented to protect the hydrologic functions of forest watersheds, including the volume, timing, and quality of stream flow.

Below are the relevant regulations for BTC from both Federal and State requirements as well as the standards and guidelines outlined in the FPD pertaining to the camp:

Federal

Forest Plan Direction

Forest Plan Direction (USDA, 2017, p. 61) provides standards and guidelines for managing water quality and quantity forest-wide. Standards and guidelines applicable to BTC are listed in Table 8.

TABLE 8: FOREST PLAN DIRECTION (USDA, 2017)

Practices (p. 61)	General Direction	Standards and Guidelines (Desired Conditions)
Water Quality Management (18-A)	<ol style="list-style-type: none"> 1. Comply with all applicable Federal and State water quality standards. Prevent or minimize as much as possible any water quality impacts which may be caused by Forest management activities. Achieve the goals for preventing or minimizing water pollution as stated in the Federal Clean Water Act. Implement water quality Best Management Practices (BMPs) as specified in the Management Agency Agreement with the California Water Resources Control Board for protection of non-point water pollution sources. 2. Comply with applicable provisions of the Water Quality Control Plan (Basin Plan) of the California Central Valley Regional Water Control Board 	<ol style="list-style-type: none"> 1. Implement water quality Best Management Practices (BMPs) as needed for all Forest management activities. BMPs are a system of nearly 100 practices designed to minimize or prevent water pollution from Forest management activities. Reference Appendix A Table A-2 for a discussion and listing of the water quality BMPs applicable to the project alternatives. 2. Monitor the implementation and effectiveness of BMPs in selected areas to determine if they are being carried out and if they are accomplishing their objectives.

Water Quantity Management (18-B)	Support all valid uses of water from the National Forest. Insure that such uses are carried out commensurate with Federal and State laws and regulations	Follow all Federal and State regulatory practices required in responding to proposals to develop the water resource
Watershed Maintenance and Improvement (18-D)	Maintain or improve watershed condition to provide stewardship of water and soil resources. Survey Forest watersheds and restore degraded areas to improve watershed condition.	Implement the following watershed recovery practices following major wildfires: <ol style="list-style-type: none"> 1. Restore ground cover as soon as possible when necessary to reduce flood flows to protect life and property, to maintain soil productivity and/or to minimize stream sedimentation and cumulative watershed effects. 2. Conduct reforestation activities in a manner which reduces the potential for cumulative watershed effects, such as dispersing site preparation adequately over time and space and/or using techniques which minimize land disturbance.

Riparian Conservation Areas

Riparian Conservation Areas (RCAs) are corridors along stream channels and surrounding meadows, springs and other wetland areas that provide habitat for plants that thrive on a high water table. RCA's are defined in the Forest Plan Direction (USDA, 2017) as follows:

- Perennial Streams. 300 feet on each side of the stream, measured from the bank full edge of the stream.
- Seasonally Flowing Streams (includes intermittent and ephemeral streams): 150 feet on each side

The majority of proposed facilities and use areas related to the construction and operations of BTC are within the RCA of either the South Fork Tuolumne River, Thimbleberry Creek, or the Northside Drainage. Therefore it is assumed for the purposes of this analysis that all of the BTC permit area is within a RCA.

Management Areas

The Forest Plan Direction (USDA, 2017) identifies the existing BTC permit area as a Developed Recreation Site. Other forest-wide standards and guidelines (pp. 31-61) and management area direction that apply within or directly adjacent to this project include: Scenic Corridor with Retention Visual Quality Objective (p. 149); and, Developed Recreation Sites with Roaded Natural Recreation Opportunity Spectrum Class (pp. 159-174). Land Allocations with associated management intent and objectives that also apply within or directly adjacent to this project include: CA Spotted Owl Protected Activity Centers (pp. 179-182); CA Spotted Owl Home Range Core Area (p. 184); Wildland Urban Intermix (pp. 185-186); General Forest (p. 191); Riparian Conservation Areas (pp. 187-191); and, Wildlife Urban Intermix Defense Zone (pp. 185).

Federal Law

- The Clean Water Act of 1948 (as amended in 1972 and 1987) establishes as Federal policy the control of point and non-point source pollution, and assigns the states the primary responsibility for control of water pollution. Compliance with the Clean Water Act by National Forest in California is achieved under state law.
- The Regional Water Quality Management Handbook (USDA 2011) manages non-point source pollution on National Forests and relies upon implementation of prescribed regional BMPs as well as national BMPs (USDA 2012).
- Organic Administration Act of 1897 (16 U.S.C. 475) defines original National Forest purposes to improve and protect the forests; to secure favorable conditions of water flows; and to furnish a continuous supply of timber for the use and necessities of the citizens of the United States.
- Multiple Use Sustained-Yield Act of 1960 (16 U.S.C. 528) expands National Forest purposes to include watershed, wildlife and fish, outdoor recreation, range, and timber. Renewable surface resources are to be managed for multiple use and sustained yield of the several products and services that they provide. The principles of multiple use and sustained yield include the provision that the productivity of the land shall not be impaired.
- Wild and Scenic Rivers Act of 1968 (16 U.S. C. 1271.1287; PL 90-452) requires that the Forest Service manager for nondegradation and enhancement of water quality in designated rivers on national forests.
- National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321, 4331.4335, 4341.4346, 4346a-b, 4347) establishes a national policy encouraging a “productive and enjoyable harmony between humans and their environment.” All Federal agencies, including the Forest Service, are required to use a systematic interdisciplinary approach to planning and decision-making. In addition, Federal agencies are to prepare detailed statements assessing the environmental impact of and alternatives to major Federal actions significantly affecting the environment.
- Environmental Quality Improvement Act of 1970 (42 U.S.C. 4371.4374) establishes a national policy for the environment, which provides for the enhancement of environmental quality.
- Forest and Rangeland Renewable Resources Planning Act of 1974 (16 U.S.C. 1600-1614) provides for systematic, long-range planning in managing renewable resources. The plans are based on a national assessment conducted every 10 years. The plans are updated every 5 years and submitted to Congress.
- National Forest Management Act of 1976 (16 U.S.C. 1600-1602, 1604, 1606, 1608.1614) amends the Forest and Rangeland Renewable Resources Planning Act, emphasizing interdisciplinary involvement in the preparation of land and resource management plans. The law reinforced the concept of multiple use management of Forest Service lands and added requirements for resource protection.
- The Antideficiency Act (31 U.S.C. §1341) prohibits Federal agency officials from obligating funds in advance or in excess of Congressional appropriations. As a result, a Federal agency official cannot agree to commit the federal agency to future, indefinite, or potentially unlimited financial obligations

or expenditures of funds for which there is no Congressional appropriation. All actions by the Forest Service as a Federal agency are covered by this act. However, under this handbook, implementation and monitoring of BMPs are required for funded Forest Service projects.

Executive Orders

- Executive Order 11988 Floodplain Management requires Federal agencies to avoid, to the extent possible, long- and short-term adverse impacts associated with the occupancy and modification of floodplains.
- Executive Order 11990 Protection of Wetlands to preserve and enhance natural and beneficial values of wetlands
- Executive Order 13693 Planning for Federal Sustainability in the Next Decade to manage stormwater and preserve and/or restore natural site hydrology.
- Executive Order 12088 of October 13, 1978 requires Federal agencies to comply with environmental laws to be consistent with requirements that apply to a private person. Compliance will be in line with authorities and responsibilities of other Federal agencies, State, interstate, and local authorities as specified and granted in each of the various environmental laws.

State and Local

- The Porter-Cologne Water Quality Control Act, as amended in 2006, is included in the California Water Code and provides for the protection of water quality by the State Water Resources Control Board and the Regional Water Quality Control Boards, which are authorized by the U.S. Environmental Protection Agency to enforce the Clean Water Act in California.
- State of California Department of Fish and Wildlife under Fish and Game Code Section 1602 for lake and stream bed alteration agreement states “an entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream or lake...” without meeting requirements as per the California Fish and Game Code Section 1600 et. seq. The Legislature finds and declares that the protection and conservation of the fish and wildlife resource of this state are of the utmost public interest.
- The California Water Code consists of a comprehensive body of law that incorporates all State laws related to water, including water rights, water developments, and water quality. The laws related to water quality (section 13000 to 13485) apply to waters on the National Forests and are directed at protecting the beneficial uses of water.
- Tuolumne County Division of Environmental Health Code Section 13.08.270A for Certification of an on-site sewage treatment and disposal system pursuant to Tuolumne County Code Section 13.08.
- Tuolumne County Floodplain Code Section 15.24 that governs the types of facilities, means, and methods for construction with a floodplain.

Impact Discussion

The impact assessment presented below represents a summary of the *Watershed Management Report, Berkeley Tuolumne Camp (Permit 46690) Groveland Ranger District, Stanislaus National Forest* (Blair Church and Flynn, and 2M Associates 2017).

The proposed Project may violate water quality standards, alter surface drainage patterns and place some structures within the 100-year floodplain, but with implementation of Mitigation Measures HYDRO-1 through HYDRO-8, potentially significant impacts would be less than significant. A brief discussion of each environmental issue included under Section 9 is presented below.

a) **Would the project violate any water quality standards or waste discharge requirements?**

Construction activities have the potential to increase levels of pollution in runoff that can create violations in water quality standards, and camp operations have the potential to increase levels of pollution in runoff. Camp operations also have the potential to produce pollutants due to trash, food wastes, spills of maintenance fluids, waste products from maintenance operations, and leaks from parked vehicles.

Camp operations would employ an on-site sewage treatment system that has the potential to affect water quality of the South Fork Tuolumne River. This could be from breaks in effluent lines or from underground migration of effluent from the leach field area to the South Fork Tuolumne River. Waste water lines would be buried within Camp. All waste-water treatment facilities would be relocated above the 100-year base flood elevation (BFE) of the South Fork Tuolumne River. Effluent lines crossing the river would be attached to the proposed pedestrian bridge above the 100-year BFE of the river. The lift station servicing the leach field area would also be sited outside the 100-year BFE of the river.

Construction of the BTC would require the City to obtain coverage under the National Pollution Discharge Elimination System (NPDES) State of California General Construction Permit to discharge stormwater. In conformance with that permit, a stormwater pollution prevention plan (SWPPP) would be in place prior to the start of construction and would be implemented during construction.

Prior to operations beginning at BTC, the design and testing of the Camp's waste water disposal system will require certification from Tuolumne County.

With implementation of Mitigation Measures HYDRO 1 – 8 the Project will not violate water quality standards and waste charge requirements.

b) **Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted?)**

There is no municipal water service at BTC. Groundwater resources outside the floodplain are inadequate to meet water demands for the Camp. BTC has traditionally drawn water directly from the South Fork Tuolumne River for its operations and would continue to do so. Consumptive water use

would be consistent with or less than (due to new more efficient water fixtures) historic water use at BTC. No reported incidents of downstream water shortages occurred during the 91-year history of BTC operations prior to the Rim Fire. Therefore it is anticipated that consumptive water use would have no direct or indirect adverse impacts on water supply.

There are no wells associated with the proposed Camp's water supply. There would be no impact on groundwater resources.

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?

Construction of the BTC would not substantially alter existing surface drainage patterns. Minor drainages that previously flowed toward the Dining Hall foundation would be redirected into Thimbleberry Creek and the South Fork Tuolumne River. With implementation of Mitigation Measures HYDRO-5 – 8 to minimize erosion or siltation on or off the BTC SUP area the Project would not result in substantial erosion or siltation on or off-site.

d) Would the project substantially alter the existing drainage pattern of the site area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?

The Project would not substantially alter existing drainage patterns. See **Subsection 9c** above.

All camper and staff parking areas would be gravel. The BTC entrance, turn-around, and service access to the Dining Hall would be pervious asphalt. The result is that construction of BTC would increase the amount of pervious surfacing over that which existed before the Rim Fire thus reducing potential of erosion or siltation on- or off-site. The reconstruction of Camp structures, in particular the Dining Hall and Recreation Hall, will restore pre-fire impervious surface to the area. Drainage from metal roofed structures will employ low-impact development principles to disperse stormwater runoff. Runoff will be direct (no gutters or collection systems) to surface/ground catchment areas individually designed for each structure.

Given the overall watershed size of the South Fork Tuolumne River, any increase in runoff due to the reconstructed buildings would not substantially increase the rate or amount of surface runoff in the River in a manner that would result in flooding on or off site.

e) Would the project 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?

Storm drainage facilities utilized to control, convey, and dispose of runoff from the camp would be designed for the ten-year design storm return frequency. Storms that exceed the rainfall intensities of the ten-year design storm return frequency would exceed the capacity of the storm drain system. Major

storm flow patterns would be investigated to ensure that storms that exceed the design capacity of the storm drainage facilities are safely channeled to disposal in the South Fork Tuolumne River.

Construction

Construction activity can be a major source of sediment, dust, and trash when rainfall occurs on a construction site or runoff drains through a construction site.

The Clean Water Act and associated regulations created the National Pollution Discharge Elimination Permit System to control the quality of runoff from construction sites. The State of California Water Resources Control Board issues coverage under a General Construction Permit for the discharge or runoff from construction sites that disturb one acre or more of soil to waters of the United States. The South Fork Tuolumne River meets the definition of waters of the United States. The permit requires the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) and Best Management Practices (BMPs) to control the quality of the runoff by eliminating sources of pollution and/or treating runoff. BMPs, principally those from the California Water Quality Association Best Management Practices Web Portal (CASQA, web page), would be implemented during construction to reduce or eliminate the contact of these sources of pollution with runoff. The General Construction Permit requires that the Risk Level be determined for the construction project and the BMPs and runoff monitoring prescribed in the Stormwater Pollution Prevention Plan be consistent with Risk Level. The footprint of construction of the new camp would disturb soil to varying degrees. Graded areas (contouring for surface drainage, leach field, new parking areas, water tanks, etc, would disturb approximately 4 to 5 acres of soil. Localized ground disturbance from construction of other Camp facilities (footings, routes of travel, trails, etc.) would total approximately an additional 3 acres. Therefore the construction site would require coverage under the General Construction Permit to discharge runoff from the site and the preparation and implementation of a SWPPP to control the quality of the runoff from the site. Due to the slopes, soil type, direct connection of the runoff to the South Fork Tuolumne River, and the cold spawn migratory nature of the river, it is probable that the site would be classified as Risk Level 2 or 3.

Materials and Storm Drain Systems

Parking areas would be composed of permeable asphalt paving or gravel. Permeable asphalt paving would be used where feasible for the BTC entrance, turn-around, and service drive to the Dining Hall. Runoff reduction BMPs would be implemented to reduce runoff rates and volumes and to reduce potential for flooding within the project. These BMPs include, but are not limited to use of:

- Permeable pavements, where soil conditions are conducive to infiltration, to reduce runoff from paved areas. The use of these pavement types will be made on a case-by-case basis based on types of traffic use (light duty vehicles vs. heavier trucks and equipment), subsoil conditions, and downstream drainage facilities.
- Gravel on a geotextile fabric for parking areas.
- Infiltration trenches in lieu of drainage ditches where needed to avoid concentration of runoff and reduce erosive velocities.

- Stabilized surfaces in ditches where infiltration trenches will be ineffective.
- Slopes that distribute extreme stormwater runoff from camp drives as soon as possible to reduce the amount of concentrated runoff within infiltration ditches.

Revegetation

All ground areas disturbed by construction would be hydromulched. Additionally, the proposed camp revegetation plan (described on pages 9 -10 of the Project Description) covering approximately five acres of the SUP area would moderate surface runoff conditions.

Operations & Pedestrian Circulation

Operation of the camp has the potential to increase the sources of pollution in runoff due to parked vehicles, trash, and degradation of forest ground cover and understory plants in heavy traffic areas.

Erosion would occur when ground is left bare and unprotected from the erosive forces of rainfall and runoff. The cause of the unprotected ground is generally attributed to lack of vegetative cover and forest duff in those areas that experience heavy pedestrian and vehicle use to access cabins.

Delineation of travel paths with a stabilized or natural material with water bars and re-vegetation of the areas outside of the paths with native plants is proposed. Education programs for the campers were implemented prior to the Rim Fire, and would continue to be conducted to encourage use of the paths and discourage creating volunteer paths that contributes to loss of vegetation and further erosion.

Paths for cabin access and for general foot traffic throughout the camp would be clearly delineated and stabilized with a permeable material. Trail drainage would be implemented in conformance with the Forest Service trail design standards to reduce concentrating runoff in trails, which increases erosion. Water bars draining into vegetated areas would be used as a typical method for controlling runoff that concentrates in trails. Crowning trails and reconstructing trails with frequent dips and switchbacks are other means for controlling drainage on trails.

f) Would the project otherwise substantially degrade water quality?

Uses in and over creeks can be sources of pollution in creek channels. Potential pollution sources include non-naturally occurring compounds and their residues, suspended solids, and trash. The presence of these compounds and particularly their residues and trash unfortunately increases with increased human contact.

Site drainage would be directed away from facilities where activities generate trash or the use of products that could be spilled or drained such as trash bin areas, bathhouse restroom area, food preparation areas, etc Solid waste storage areas may be a significant source of pollution due to trash, residues from wet trash, and hydraulic fluid and lubricant drips from solid waste hauling vehicles. The recycling facility would include trash and other container bins that would be water tight and covered at all times. The use of bear-resistant lids on camp solid waste bins would be an effective means to ensure that lids remain closed at all times. The recycling facilities pad would be checked periodically for stains, which indicate leaking residue from wet trash, accumulated trash, or vehicle fluid leaks. Residues would be cleaned

from the slab and if discovered leaking hydraulic fluid or lubricants would be cleaned from the concrete pad and the leaking vehicle repaired. Trash would not be allowed to accumulate, but would be deposited in the solid waste bins with lids down and fastened.

Camp equipment, dry goods, furnishings, and other articles from the camping experience would not be stored within the delineated floodplain of the river or within creek channels during the winter season.

With implementation of Mitigation Measures HYDRO 1-3 and HYDRO 5-8, potential water pollution impacts associated with BTC operations will be less than significant.

g) Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No housing would be placed in a 100-year flood hazard area.

h) Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?

The Project would place some structures within a 100-year floodplain, however these improvements are not expected to significantly impede or redirect flood flows. Existing weirs in the South Fork Tuolumne River would be renovated to pre-Rim Fire conditions. Otherwise, their seasonal summer ponding function that has been in effect for over 50 years will remain unchanged.

Permanent facilities to be retained or constructed within the 100-year floodplain of the South Fork Tuolumne Rivers include: (1) the repair and/or replacement of existing walls / weirs, (2) structural elements of the pedestrian bridge, (3) grading and/or new walls at the Dining Hall remnant foundation wall, (4) water intake elements, and (5) grading/ramps associated with accessible routes of travel. Structural elements of the pedestrian bridges spanning Thimbleberry Creek may be placed within the boundaries of the 100-year floodplain of Thimbleberry Creek.

Of these facilities, only structural bridge elements have the potential to impede flood flows, as all other facilities will be constructed at or very near existing grade. Post Project hydraulic modeling has determined that these facilities do not result in significant impacts to 100-year water surface elevation (Blair Church and Flynn, and 2M Associates 2017).

i) Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

Based on the County Ordinance requirements, fundamental engineering design principles to be used for all structures developed within the South Fork Tuolumne River floodplain include:

- Design for structures within the floodplain would comply with Tuolumne County Floodplain ordinance standards of construction (15.24.150).
- Bridge soffits would be elevated above the water surface elevation of the 100-Year return frequency flood event. Stairs would be constructed to be removed and stored out of the floodplain during periods when the camp is not in use.

- Accessibility ramps and paths of travel would be constructed of firm and stable natural materials that can be easily replaced if washed out by a flood event.

Pedestrian bridges across Thimbleberry Creek would be designed to accommodate passage of the 100-year peak flow. Given these design criteria, the risk of loss of structures due to flooding is less than significant.

Significant flooding on the South Fork Tuolumne River is the result of rain-on-snow events during winter or spring or sudden snowmelt events from extremely warm spring weather. Generally, these events do not happen when the camp is operational. Summer rain events, when the camp is occupied, do not generate sufficiently saturated soils to produce significant flood flows. It is estimated that maximum daily mean flow during camp operations would be 900 cfs (or 2,700 cfs assuming a three times increase in discharge due to burned watershed conditions) as compared to the 100-year event peak flow rate of 11,700 cfs. The Camp operators would be trained regarding the connection of summer rainfall to rising water levels in the river and creeks and would inform campers and staff of the dangers associated with rising water levels. Implementation of Mitigation Measure HYDRO- 4 would reduce potential safety risks associated with flooding to less than significant.

There are no significant dams along South Fork Tuolumne River upstream of the site and no levees along the river near the site. Therefore, risk of loss, injury, or death as the result of flooding due to a dam or levee failure is considered less than significant.

j) Would the project expose the site to inundation by seiche, tsunami, or mudflow?

Risk of seiche or tsunami is nil as there are no water bodies subject to seiche and tsunami near the BTC SUP area. The general area around BTC does not have a history of mudflows.

Mitigation Measures

HYDRO-1 During detail design of BTC facilities and related site improvements, submit the US Army Corps of Engineers Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act permit applications and associated documentation to the Forest Service for review and comment.

HYDRO-2 Prior to construction, update the floodplain map to reflect updated base mapping, base flood elevations, final structure placement, and finished floor elevations and submit to the Forest Service and FEMA for review and acceptance.

HYDRO-3 During detail design of BTC facilities to be constructed and related site improvements, submit permit applications and associated documentation for the following to Forest Service for review and comment:

- a. California Department of Fish and Wildlife (CDFW): Application, plans, and specifications for work to obtain a Stream Alteration Agreement pursuant to Fish and Game Code sections 1600 *et seq.*

- HYDRO-4** Prior to BTC operations, provide a Camp Evacuation Plan for approval by the Forest Service that incorporates protocols and procedures for evacuation in response to summer season storm and/or winter and spring season rain-on-snow or sudden snowmelt events that may lead to high water flows.
- HYDRO-5** During detail design of BTC facilities and related site improvements, submit permit applications and associated documentation for the following to Forest Service for review and comment:
- a. California Water Quality Control Board, Division of Drinking Water: Application, plans, and specifications for permit for surface water appropriation and treatment for drinking water under the Porter-Cologne Water Quality Control Act of 1975 and Safe Drinking Water Act (Pub. L. 93-523).
 - b. Tuolumne County On-site Sewage Treatment and Disposal System Certification including percolation tests and soil profiles, system design plans and specifications (plot plan; grading plan; description of groundwater and soils; description of monitoring devices, system operation and function; and site evaluation and testing) necessary to obtain Certification of an on-site sewage treatment and disposal system pursuant to Tuolumne County Code Section 13.08.
- HYDRO-6** Prior to the beginning (April) and after each BTC summer operating period (October), test the water quality of the South Fork Tuolumne River both at the Hardin Flat Road bridge and at the downstream boundary of the permit area. File results with the Groveland Ranger District.
- HYDRO-7** Protect beneficial uses of water through implementation of Best Management Practices (BMPs) in accordance with Regional Water Quality Management Plan (USDA 2011), the National BMPs for Water Quality Management on National Forest System Lands (USDA 2012), and the Forest Plan Direction (USDA, 2017).
- HYDRO-8:** Follow Forest Plan Direction (USDA, 2017) for protection of Riparian Conservation Areas (RCAs) through compliance with the Riparian Conservation Objectives (RCOs). The project shall:
- a. Prepare an Erosion Control Plan / Stormwater Pollution Prevention Control Plan and BMP checklist as part of the construction documentation for Forest Supervisor approval prior to ground-disturbing activities. Reference Appendix A actions.
 - b. Prior to construction activities, delineate riparian zones around all streams and special aquatic features within the permit area to be retained. Exclude ground-disturbing mechanized equipment from operating within riparian zones to be retained.
 - c. Clean equipment used for instream work prior to entering the water body. Remove external oil, grease, dirt and mud from the equipment and repair leaks prior to arriving at the project site. Inspect all equipment before unloading at site. Inspect equipment daily for leaks or accumulations of grease, and correct identified problems before entering streams or areas that drain directly to water bodies. Remove all dirt and plant parts to ensure that noxious weeds and aquatic invasive species are not brought to the site.
 - Locate construction access perpendicular to the channel and minimize the number of channel crossings and channel damage. Upon completion of use,

-
- repair damage to the stream course, including banks and channels, to maintain a hydrologically stable channel.
 - Remove all project debris from the stream in a manner that will cause the least disturbance.
 - Minimize streambank and riparian area excavation during construction: stabilize adjacent areas disturbed during construction using surface cover (mulch), retaining structures, and/or mechanical stabilization materials.
 - Keep excavated materials out of channels, floodplains, and wetlands. Install silt fences or other sediment- and debris-retention barriers between the water body and construction material stockpiles and wastes. Dispose of unsuitable material in approved waste areas outside of the RCA.
 - Conduct operations during the least critical periods for water and aquatic resources: when streams are dry or during low-water conditions.
 - d. Locate equipment staging and mitigate by use of erosion prevention measures to avoid sedimentation effects and delivery to a watercourse.
 - e. Implement erosion control measures as needed on all lands disturbed by construction following completion of construction. Reference Appendix A actions.
 - f. Conduct watering during construction for dust abatement using approved existing water source locations. Treat construction approaches and staging areas to prevent sediment production and delivery to a watercourse.
 - Check all water-drafting vehicles daily and repair as necessary to prevent leaks of petroleum products from entering RCAs. Water-drafting vehicles will contain petroleum-absorbent pads, which are placed under vehicles before drafting. Water-drafting vehicles will contain petroleum spill kits. Dispose of absorbent pads according to the Hazardous Response Plan.
 - Use screening devices for water drafting pumps. Use pumps with low entry velocity to minimize removal of aquatic species, including juvenile fish, amphibian egg masses and tadpoles, from aquatic habitats. Pump intake screening specification will be provided and put in the project file.
 - Prohibit water drafting by more than one truck at a time.
 - g. Allow temporary refueling and servicing only at approved construction staging sites. Rehabilitate temporary staging, parking, and refueling/servicing areas immediately following use.
 - Prepare a Spill Prevention and Containment and Counter Measures (SPCC) plan where total oil products on site in above-ground storage tanks exceed 1320 gallons. Review spill plans to ensure they are up-to-date.
 - Install contour berms and trenches around vehicle service and refueling areas, chemical storage and use areas, and waste dumps to fully contain spills. Use liners as needed to prevent seepage to groundwater.
 - Report spills and initiate appropriate clean-up action in accordance with applicable state and Federal laws, rules and regulations. The hazardous materials coordinator's name and phone number will be available to Forest Service personnel who administer or manage activities utilizing petroleum-powered equipment.
 - Remove contaminated soil and other material from Forest Service lands and dispose of this material in a manner according to controlling regulations.

- h. Place burn piles a minimum of 50 feet away from the South Fork Tuolumne River, Thimbleberry Creek, or intermittent streams and 25 feet away from ephemeral drainages unless otherwise approved by a hydrologist and/or soil scientist. Locate piles outside of areas that may receive runoff from roads. Burn piles in the fall or winter.
- i. Conduct implementation and effectiveness monitoring using the Best Management Practices Evaluation Program and the National Core Monitoring Protocols (FS - 990b) as a supplement.

References

Blair Church and Flynn, Consulting Engineers and 2M Associates. 2017. Watershed Management Report, Berkeley Tuolumne Camp (Permit 46690) Groveland Ranger District, Stanislaus National Forest. October 7, 2017.

United States Department of Agriculture, Stanislaus National Forest. 2017. Forest Plan Direction - Stanislaus National Forest, Sonora, CA.

	<u>Potentially Significant Impact</u>	<u>Potentially Significant Unless Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
10. LAND USE PLANNING. Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

BTC currently has a SUP to operate Camp facilities on approximately 14 acres at its present location. BTC has been closed since the 2013 Rim Fire which burned the majority of Camp facilities and much of the forest and vegetation contained within existing BTC permit boundaries.

Regulatory Setting

The BTC site is Federal land under the jurisdiction of the SNF. The City of Berkeley is applying for a new SUP that will expand the BTC area from its currently SUP of 14 acres to an expanded area of approximately 30 acres. The SUP must be consistent with the policies and standards contained in the *Forest Plan Direction - Stanislaus National Forest* (Forest Plan). Because of the expanded 30-acre SUP area, a Forest Plan Direction amendment is needed to accommodate the Camp.

Impact Discussion

The Project will not impact land use planning and will not conflict with the Forest Plan. A brief discussion of each environmental issue included under Section 10 is presented below.

a) Would the project physically divide an established community?

The proposed Project would expand the SUP area by approximately sixteen acres into open forest lands. BTC would continue to be an integrated camp facility accessible to all Camp guests, staff, and the visiting public. Approximately 1-mile downstream from the Camp is the community of Hardin Flat, consisting of predominantly of residences, recreation cabins, and private campgrounds. The expansion of the SUP will be away from the Hardin Flat area and will not impact the community.

b) Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

BTC is located within the SNF and is designated Public in *the Tuolumne County General Plan* and the *Tuolumne County Zoning Ordinance*. The Public land use designation applies to all lands owned by public agencies and recognizes that these lands are exempt from County land use regulations (Tuolumne

County). The proposed Project is subject to the *Forest Plan Direction* (USDA 2017) and will be reviewed by the Forest Service for compliance prior to approval of the SUP. Implementation of Mitigation Measure LUP-1 would assure consistency with the policies of the *Forest Plan Direction*.

c) Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

The *Forest Plan Direction* addresses habitat conservation issues. Forest Service approval of the Project as called for in LUP-1 would confirm there are no habitat conservation conflicts.

Mitigation Measures

LUP-1 Submit all plans to the Forest Service for consistency review with the *Forest Plan Direction* and prior to Camp construction.

References

Tuolumne County. *Tuolumne County General Plan*. Available on the County website at:
<https://www.tuolumnecounty.ca.gov/185/General-Plan-Policy>.

USDAe, Stanislaus National Forest. 2017. *Forest Plan Direction - Stanislaus National Forest, Sonora, CA*.

	<u>Potentially Significant Impact</u>	<u>Potentially Significant Unless Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
11. MINERAL RESOURCES. Would the project:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

BTC is located in SNF. There are no known mineral resources located within the existing BTC SUP area.

Impact Discussion

The proposed Project will not affect any known mineral resources. A brief discussion of each environmental issue included under Section 11 is presented below.

a) Would the project 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?

The proposed BTC SUP area is within the SNF and the *Forest Plan Direction* (USDA 2017) does not identify the Project site as an area containing mineral resources.

b) Would the project 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?

No impact. See **Subsection 11a** above.

Mitigation Measures

None required.

References

United States Department of Agriculture, Stanislaus National Forest. 2017. *Forest Plan Direction - Stanislaus National Forest, Sonora, CA.*

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
12. NOISE. Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan, specific plan, noise ordinance or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

BTCe is in rural southern Tuolumne County surrounded by forest lands. The nearest sensitive receptors are permanent and seasonal residences located along the South Fork of the Tuolumne River downstream and west of the Camp, none closer than about 1,200 feet. The closest town is Groveland, about 16 miles east along State Highway 120. Highway 120 is located about 1,000 feet north of the Project site at its closest boundary. There are two small airports/airstrips about 14 miles northwest of the site: Pine Mountain Lake Airport and the Hermitage airstrip. At these distances, motor vehicle and aircraft noise would have only a minor influence on ambient noise levels on-site and in the vicinity.

There is currently no noise generated from BTC camp activities as the Camp has not been in operation since the Rim Fire in 2013. Existing noise within the Project site is from the sounds of the cascading South Fork Tuolumne River waters, which bisects the Camp and traffic along Hardin Flat Road which is adjacent to the north and west boundaries of BTC.

Impact Discussion

Sound is created when vibrating objects produce pressure variations that move rapidly outward into the surrounding air. The more powerful the pressure variations, the louder the sound perceived by a listener. The decibel (dB) is the standard measure of loudness relative to the human threshold of perception. Noise

is a sound or series of sounds that are intrusive, objectionable or disruptive to daily life. Many factors influence how a sound is perceived and whether it is considered disturbing to a listener; these include the physical characteristics of sound (e.g., loudness, pitch, duration, etc.) and other factors relating to the situation of the listener (e.g., the time of day when it occurs, the acuity of a listener's hearing, the activity of the listener during exposure – is s/he sleeping, working, talking? etc.). Environmental noise has many documented undesirable effects on human health and welfare, either psychological (e.g., annoyance and speech interference) or physiological (e.g., hearing impairment and sleep disturbance).

The uses of the reconstructed BTC will be compatible with the site's current noise exposure (mostly from distant motor vehicle and aircraft noise sources). Construction noise and vibration will not significantly impact the closest existing residences. Camp operations would generate noise associated with transportation, staff housing located north of Hardin Flat Road and camp activities, including amplified sound used during stage programs. Noise associated with BTC activities would be less than significant, with the exception of the amplified sound emissions from the stage which could result in potentially significant noise impacts to the closest existing residences. However, with implementation of Mitigation Measure NOISE-1, noise impacts associated with the amplified sound system would be less than significant. A brief discussion of each environmental issue included under Section 12 is presented below.

a) Would the project expose persons to or generate noise levels in excess of standards established in the local general plan, specific plan, noise ordinance or applicable standards of other agencies?

The BTC site is surrounded by rural forestlands and is not closely exposed to strong transportation noise sources (i.e., the closest major road, SR-120, comes no closer than 1,000 feet and the closest airport is more than ten miles northwest). The nearest residence is approximately 1,200 feet from the west-most family tent cabin, approximately 1,500 feet from the staff housing (high activity area), approximately 1,500 feet from the stage and approximately 1,200 feet from the center of Camp (high activity area). BTC is located on Forest Service land and therefore is not subject to the *Tuolumne County General Plan Noise Element (Noise Element)* (County of Tuolumne). However, the noise analysis applied the maximum allowable noise exposure standards presented in the *Noise Element* to identify potential noise impacts associated with the Project. The reconstructed BTC would be compatible with the site's low ambient noise levels (i.e., substantially lower than the standards set for residential in the *Noise Element*), just as the former BTC was before the Rim Fire. However, the amplified noise emissions from the stage speaker system could result in exceedance of the *Noise Element* standard for maximum allowable noise exposure for stationary noise sources, which could adversely affect nearby residences and represents a potentially significant noise impact. With implementation of Mitigation Measure NOISE-1, the stage speaker system would meet the *Noise Element's* noise exposure standard for stationary noise sources and would be a less than significant noise impact.

b) Would the project expose persons to or generate excessive ground-borne vibration or ground-borne noise levels?

Just as vibrating objects radiate sound through the air, if they are in contact with the ground they also radiate acoustical energy through the ground. If such an object is massive enough and/or close enough

to an observer, the ground vibrations can be perceptible and, if the vibrations are strong enough (as measured in vibration decibels, abbreviated VdB), they can cause annoyance to the observer and/or damage to buildings. Background ground vibration levels in most inhabited areas are usually 50 VdB or lower, well below the threshold of perception (i.e., typically about 65 VdB).

There are no policies or standards in the *Noise Element* for avoiding/reducing structural damage or annoyance from vibration impacts. However, it is most common for government agencies to rely on assessment methodologies, impact standards and vibration-reduction strategies developed by the Federal Transit Agency (FTA 2006). According to the FTA, limiting vibration levels to 94 VdB or less would avoid structural damage to wood and masonry buildings (which are typical of most residential structures), while limiting vibration levels to 80 VdB or less at residential locations would avoid significant annoyance to the occupants.

The most vibration-intensive piece of construction equipment associated with Project construction is a pile driver, which would be used for about a month during the bridge-building phase of Project construction. Sensitive receptors closer than 500 – 1,000 feet could be subject to vibration annoyance during pile driving. Other types of construction equipment are less vibration-intensive. Tracked earth-moving machinery could cause annoyance if they often come within 100 feet of a sensitive receptor during construction. But the closest residence from the Project site is approximately 1,200 feet west of the site. Thus, the Project's construction vibration impacts would be less than significant.

c) Would the project cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Upon completion of Project construction, noise sources that could permanently change the noise exposure circumstance of nearby residences during Camp operations are noise from outdoor leisure activities, amplified sound emissions from the Camp stage speakers and motor vehicle traffic on local roadways (see Section 16 Transportation and Circulation) As discussed under Subsection 12a above, the Project would be compatible with the Noise Element with the exception of the amplified noise emissions from the stage speakers. But with implementation of Mitigation Measure NOISE-1, potentially significant noise impacts associated with the stage speakers would be less than significant.

Camp operations would add about 126 daily/10.5 average hourly motor vehicle trips to the local roads (which is about the same number added by motor vehicle trips added by BTC before the Rim fire). Such relatively small increments to existing local traffic volumes would not substantially change the noise levels at noise sensitive uses near SR 120 or Hardin Flat Road and is considered a less than significant impact.

d) Would the project cause a substantial temporary or periodic increase in ambient noise levels?

Construction activities would result in a temporary increase in noise emissions during the two-year construction period, but due to intervening topography, sound generated by the waters of the South Fork Tuolumne River, distance, and implementation of best manage practices to reduce noise emissions

from construction equipment, temporary noise emissions affecting the nearest residence would be within acceptable levels.

The Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM) was used to estimate the maximum and average outdoor noise levels during Project construction that the closest residence would experience. As presented in Table 9, average construction noise levels at the closest residence during most Project construction phases (except during the one-month period when piles are being driven for the bridge) would exceed current background levels, but not by so much as to cause substantial disruption to speech and tranquility to people outdoors. Peak noise levels at the closest residence during pile driving for the bridge foundations could be disruptive to speech and tranquility during the short periods of time when each pile is being driven, but only for one month of the two-year total Project construction period, and only during weekday, daytime hours to which all Project construction would be limited. Thus, Project construction noise impacts would be less than significant.

TABLE 9: MODELED CONSTRUCTION NOISE LEVELS AT THE CLOSEST RESIDENTIAL USES DURING ALL PROJECT CONSTRUCTION PHASES

Receptor	Distance from Construction Activity (feet)	Maximum Construction Daytime Noise Level (dB)	Average Construction Daytime Noise Level (dB)
Closest Residential to Project site during Demolition	1200	57.4	55.1
Closest Residential to Project site during Paving	1200	55.6	50.2
Closest Residential to Project site during Electrical	1200	53.1	50.8
Closest Residential to Project site during Water	1200	53.1	50.8
Closest Residential to Project site during Wastewater	1200	54.1	52.6
Closest Residential to Project site during Bridge (Pile Driving)	1200	67.4	60.4
Closest Residential to Project site during Administrative/Staff	1200	53.8	51.1
Closest Residential to Project site during Camper	1200	53.8	51.1
Closest Residential to Project site during Social/Recreation	1200	53.8	51.1

Source: Federal Highway Administration, Roadway Construction Noise Model (RCNM).

- 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 expose people residing or working in the project area to excessive noise levels?**

The Project site is about 14 miles southeast of the Pine Mountain Lake Airport. Thus, its aircraft noise impacts at the Project site are less than significant.

- f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?**

The Project site is about 14 miles southeast of the Hermitage airstrip. Thus, its aircraft noise impacts at the Project site are less than significant.

Mitigation Measures

NOISE-1 The speaker system for the BTC stage shall be designed to ensure it does not exceed noise levels of 50 L_{eq} , dB.

References

County of Tuolumne. *Tuolumne County General Plan* Noise Element.

<https://www.tuolumnecounty.ca.gov/DocumentCenter/View/1131/Chapter-5---Noise?bidld=>

FTA (Federal Transit Administration). 2006. *Transit Noise and Vibration Impact Assessment*.

http://www.fta.dot.gov/documents/FTA_Noise_and_Vibration_Manual.pdf

FHWA (Federal Highway Administration). 2006. *Roadway Construction Noise Model User's Guide*.

https://www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/rcnm.pdf

	<u>Potentially Significant Impact</u>	<u>Potentially Significant Unless Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
13. POPULATION AND HOUSING. Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and business) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

Prior to the 2013 Rim Fire, BTC accommodated 360 campers and staff during the summer season. Currently there is no formal use of the Camp.

Impact Discussion

The proposed Project would not increase Camp capacity from the pre-fire condition. BTC would accommodate 360 campers and staff. The Camp Manager cabin is proposed to be constructed to support all-year habitation, useful for Camp security and maintenance. A brief discussion of each environmental issue included under Section 13 is presented below.

a) Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and business) or indirectly (for example, through extension of roads or other infrastructure)?

The reconstruction of BTC would not increase historic summer camper capacity. The all year Camp Manager cabin would potentially add one-two full-time residents to the local population. This is not considered a substantial inducement to population growth in the area..

b) Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

BTC would be operated as a seasonal recreational facility and would contain one new permanent housing feature in the form of the Camp Manager’s cabin. No housing would be displaced due to the proposed Project.

c) Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

See Subsection 13b above.

Mitigation Measures

None required.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
14. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

BTC is located within Direct Protection Area of the Stanislaus National Forest that responds to wildfire with the State of California operating under the *2012-2018 California Master Cooperative Wildland Fire Management And Stafford Act Response Agreement*. The California Department of Forestry and Fire Protection (CalFire) provides first response for medical aids. Police protection is provided by the Tuolumne Sheriff's Office.

Impact Discussion

The BTC project will not adversely affect public services. A brief discussion of each environmental issue included under Section 14 is presented below.

a) Fire protection

The reconstruction of BTC will include an emergency water supply in the form of an approximately 240,000 gallon water tank for fire-fighting purposes per state code. BTC will manage brush control within the Camp developed areas to minimize fire risk. All Camp facilities will meet state fire code regulations. The City maintains a BTC Operating Plan outlining emergency evacuation procedures in the event of a flood or fire, and safety guidelines for campers and staff to follow.

b) Police protection

The Tuolumne County Sheriff's office has historically provided police protection services to BTC. Operating the Camp at the same capacity and for the same periods of time as prior to the fire would not present an undue burden to police services and would not adversely impact County police protection services.

c) Schools

The Project will not impact schools in Tuolumne County.

d) Parks

The Project will not impact parks in Tuolumne County.

e) Other public facilities

The Project will not impact other public facilities in Tuolumne County

Mitigation Measures

None required.

	<u>Potentially Significant Impact</u>	<u>Potentially Significant Unless Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
15. RECREATION. Would the project:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

BTC is a private recreational facility located within the SNF. It is not within the jurisdiction of Tuolumne County parks.

Impact Discussion

The proposed Project will not impact Tuolumne County parks. A brief discussion of each environmental issue included under Section 15 is presented below.

- 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?**

The proposed Project will not impact neighborhood or regional parks within the vicinity of the proposed Project.

- b) Would the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?**

The Project proposes reconstruction of a recreational facility destroyed during the 2013 Rim Fire. This document identifies a number of mitigation measures in other sections to reduce Project impacts. No additional mitigation measures are required to reduce adverse physical effects on the environment to less than significant levels.

Mitigation Measures

None required.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
16. TRANSPORTATION AND CIRCULATION.				
Would the proposal result in:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The BTC site is accessed via Hardin Flat Road, a rural local road operated and maintained by Tuolumne County. The most recent average daily traffic (ADT) count estimate by Tuolumne County is from 1991 with a 130 ADT count estimated at the Hardin Flat Road bridge of 130 vehicles (Allen, Tanya)source:. At that time, much of that traffic was related to BTC, the Yosemite lakes RV resort and recreation residences along the South Fork Tuolumne River.

In 2017, when BTC was not operational, Caltrans estimated 170 ADT at the bridge site (Scott-Heim, Blossom 2018). Much of that use would have been related to the Yosemite Lake RV resort (located northwest of BTC) which provides 254 full hook-ups, 130 tent sites and a variety of cabin and yurt rental accommodations; and some incidental use is generated by the residences located between BTC and Yosemite Lakes RV resort.

Tuolumne County Ordinance Code 17.60 establishes on-site parking standards for BTC. The BTC project is required to provide 133 parking spaces on site.

Impact Discussion

The proposed Project will provide adequate parking spaces on-site based on Tuolumne County code requirements. Vehicle trips generated by the Project would be less than significant. . A brief discussion of each environmental issue included under Section 16 is presented below.

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

The reconstruction of BTC would maintain the number of campers and staff at the pre-Rim Fire occupancy level of 360 individuals. A typical family stay at BTC is approximately for four days (three nights) involving arrival, departure, and one trip outside of Camp per stay typically to visit Yosemite National Park (Veramay, Craig). The results in a typically weekly turnover factor of families at the Camp of two. With an average of four trips per family visit at full capacity (arrival, departure, and one round trip outside of camp) this would equate to an approximately 88 ADT count. Assuming a 50 percent use factor for estimated vehicle trips generated by staff and service deliveries, the total traffic volume along Hardin Flat Road generated by BTC would be approximately 132 ADT. This level of use will not conflict with any transportation plans and represents a less than significant impact..

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

There are no conflicts created by the Project with any congestion management programs.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

The Project would not affect air traffic patterns. The nearest airport is Pine Mountain Lake Airport which is about 14 miles southeast of BTC.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The proposed Project will improve safety conditions historically experienced along Hardin Flat Road. Before the Rim Fire, many BTC campers parked along Hardin Flat Road and walked on the road to access the Camp. Reconstruction of the BTC site will provide adequate off-street parking spaces per County ordinance for all campers and staff. Paths will direct staff and campers to pedestrian crosswalks installed to County standards on Hardin Flat Road.

e) Result in inadequate emergency access?

Proposed signage and driveway improvements into the Camp will meet County emergency access standards.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

The proposed BTC would improve safety conditions on Hardin Flat Road. See **Subsection 16d** above.

Mitigation Measures

None required.

References

Allen, Tanya PE, Supervising Engineer, Tuolumne County Community Resources Agency. Personal communication.

Scott-Heim, Blossom, P.E, Associate Engineer, Caltrans. Email communication dated August 14, 2018.

Veramay, Craig, [title?] [date?]

17. Tribal Cultural Resources.

Would the project:

- a) 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:
 - i) 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
 - ii) 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 Resources Code Section 5025.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

<u>Potentially Significant Impact</u>	<u>Potentially Significant Unless Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

See Section 5 Cultural Resources for a discussion regarding the presence of cultural resources at the BTC site.

Impact Discussion

There are no historic buildings located within the BTC SUP area. Selected buildings damaged or destroyed would be removed but there is concern demolition and removal of these buildings may damage the recorded archaeological resource sites. Mitigation Measure CUL-1 requires selected structures be removed by hand to prevent damage to the archaeological resource sites. Mitigation Measure CUL-2 and Mitigation Measure CUL-3 will protect the archaeological resource sites when BTC is reopened.

Mitigation Measures

- CUL-1** Existing structures identified for removal shall be removed by hand to protect cultural resources.
- CUL-2** Cultural resources shall be protected through application of Standard Protection Measures as determined by Programmatic Agreement Among the USDA, Forest Service, Pacific Southwest Region (Region 5), California State Historic Preservation Officer, Nevada State Historic Preservation Officer and the Advisor Council on Historic Preservation Regarding the Process for Compliance with Section 106 of the National Historic Preservation Act for Management of Historic Properties by the National Forests of the Pacific Southwest Region (Regional PA), signed February 2013. In addition:

- Natural plant succession will be allowed to occur within cultural resource site boundaries.
- Notify the Forest Service cultural resource specialist if a new cultural resource site is discovered during project implementation and all activities within 150 feet of the resource will cease until consultations are completed.

CUL-3 Buck and pole fencing shall be installed to protect cultural resources. Fencing shall be constructed by hand with no excavation.

References

State of California. 2007. *Inadvertent Effect to Berkeley Tuolumne Camp, Groveland Ranger District, Stanislaus National Forest, California*. Letter dated October 1, 2007.

State of California. 2015. *Determination of Eligibility for FS-05-16-51-1894, FS-05-16-54-1896 and FS-05-16-54-1895*. Letter dated September 21, 2015.

Groveland Ranger District, Stanislaus National Forest. 2007. *Historic Structure Report and National Register Evaluation for Berkeley Tuolumne Camp, Tuolumne County, California, Cultural Resource Management Report No. 05-16-4276*. Prepared for City of Berkeley. Prepared by Foothill Resources, Ltd. July 2007.

Strain, Kathy. 2017. Email dated November 20, 2017.

Tuolumne Me-Wuk Tribal Council. Letter dated October 28, 2015.

USDA. 2001. *Programmatic Agreement among the U.S.D.A. Forest Service, Pacific Southwest Region, California State Historic Preservation Officer, and Advisory Council on Historic Preservation Regarding the Identification, Evaluation, and Treatment of Historic Properties Managed by the National Forests of the Sierra Nevada, California* (Sierra PA). August 24, 2001.

United States Department of Agriculture, Stanislaus National Forest. 2017. Forest Plan Direction - Stanislaus National Forest, Sonora, CA.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
18. UTILITIES AND SERVICE SYSTEMS.				
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

Water supply and wastewater treatment are provided within the SUP area. BTC does not rely on municipal utilities systems.

Impact Discussion

The proposed BTC Project would install new onsite water and wastewater facilities to serve the Camp. A discussion of each environmental issue included under Section 17 is presented below.

a) Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

The Project would construct wastewater treatment facilities sized to accommodate all Camp generated wastewater and designed and installed in compliance with Tuolumne County requirements.

b) Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

There is no municipal water service at BTC. Groundwater resources outside the floodplain are inadequate to meet water demands for the Camp. BTC has traditionally drawn its drinking water from

South Fork Tuolumne River. A system composed of water intakes, pumps and an above-ground water storage tank(s) will be installed for both consumptive and fire suppression purposes. All existing underground water lines that did not burn during the rim Fire will be upgraded to current standards. The construction of these facilities would be in coordination with the entire Camp's construction and would not cause significant adverse environmental effects.

c) Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

A series of both structural and non-structural storm-water management facilities would be implemented by the Project with chief purpose of maintaining water quality within Thimbleberry Creek and the South Fork Tuolumne River. An unnamed seasonal drainage would be redirected into Thimbleberry Creek. Both this drainage and Thimbleberry Creek would be vegetated as riparian corridors. All entrance drives and parking areas would be constructed of permeable materials. All pedestrian routes of travel would include water bars that direct stormwater runoff to vegetated areas. As called for in Mitigation Measures HYDRO-1 through HYDRO-8, a series of storm-water runoff best management practices will be used during construction. There would be no significant adverse environmental effects from these actions.

d) Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Camp water supply would be provided from South Fork Tuolumne River. Water consumption would be less than pre-Fire conditions because the number of campers and staff would be the same, however new water efficient fixtures would be installed.

The combination of effects from all of the proposed BTC activities and other past, present or reasonably foreseeable projects are not expected to create long-ranging adverse effects to downstream water supplies, either municipal (New Don Pedro Reservoir) or of uses in Hardin Flat. The one-time draw of approximately 280,000 gallons (0.86 acre feet) of water from the South Fork Tuolumne River for fire prevention storage purposes would occur in the springtime immediately prior to opening BTC. The daily water use of BTC would be the same (or less due to water efficient fixtures) as prior to the Rim Fire. No reported incidents of downstream water shortages have occurred during the 91-year history of BTC operations prior to the Rim Fire.

e) Would the project 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?

Waste-water treatment would be processed onsite. The wastewater treatment system proposes two buried septic tanks: one 13,000 gallon capacity for the main camp, and one 2,000 gallon capacity for the staff camp. Wastewater lines would be buried within central camp and Hardin Flat Road. A 60,000 square-foot leach field would process waste. Certification of an on-site sewage treatment and disposal system pursuant to Tuolumne County Code Section 13.08.270A would include percolation tests and soil profiles, review of system design plans and specifications (plot plan, grading plan, description of groundwater and soils, description of monitoring devices, system operation and function), and site system evaluation and operational testing prior to Camp reopening.

f) Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

The City would contract with a County-approved waste management service for disposal of recyclable materials and other solid wastes. Project-related construction waste will be transported off-site to a certified waste management location.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

The Project would comply with all applicable solid waste requirements.

Mitigation Measures

None required.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
18. MANDATORY FINDINGS OF SIGNIFICANCE.				
a) 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, 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) 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.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Impact Discussion

- a) 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, 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?**

The proposed BTC Project could adversely affect the western pond turtle, but with implementation of Mitigation Measures BIO-1 through BIO-4, significant impacts would be reduced to a less-than-significant level. The slender-stemmed monkey flower may be impacted during construction activities, but with implementation of Mitigation Measure BIO-5, impacts would be less than significant. Construction and/or operation of BTC could adversely affect terrestrial wildlife, however, with implementation of Mitigation Measures BIO-6 through BIO-8 and LUP-1, potential impacts would be less than significant.

Project construction and Camp operation could adversely affect archaeological resources however implementation of Mitigation Measures CUL-1 through CUL-3 and LUP-1, potential archaeological resources impacts would avoided and be less than significant.

- b) 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.)**

The proposed Project would not result in cumulatively considerable impacts.

c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?

There is the potential for light and glare impacts and visual quality impacts, but with implementation of Mitigation Measures AES-1 through AES 4, impacts would be less than significant. The proposed Project could result in potentially significant temporary air quality impacts during construction activities, but with implementation of Mitigation Measure AIR-1, temporary air quality impacts would be less than significant. The potential for unstable soils within the BTC SUP area could adversely affect site grading activities and building stability, which is a significant impact, however, with implementation of Mitigation Measures GEO-1 and GEO-2, potential adverse impacts would be less than significant. There is the potential for significant water quality impacts, but with implementation of Mitigation Measures HYDRO-1 through HYDRO-8 and and LUP-1, potentially significant impacts would be less than significant. The potential for significant increases in operational noise at the Camp due to amplified noise emissions from the Camp stage speaker system could adversely affect nearby residences, With implementation of Mitigation Measure NOISE-1, noise emissions from the stage speaker system would be compatible with the *Tuolumne County Noise Element*.

AGENCY DISTRIBUTION LIST

Quincy Yaley
Planning Division
Community Resources Agency
2 S. Green Street
Sonora, CA 95370

Douglas Oliver
Chief Building Official
Community Resources Agency
2 S. Green Street
Sonora, CA 95370

Tuolumne County Air Pollution
Control District
22365 S. Airport Road
Sonora, CA 95370

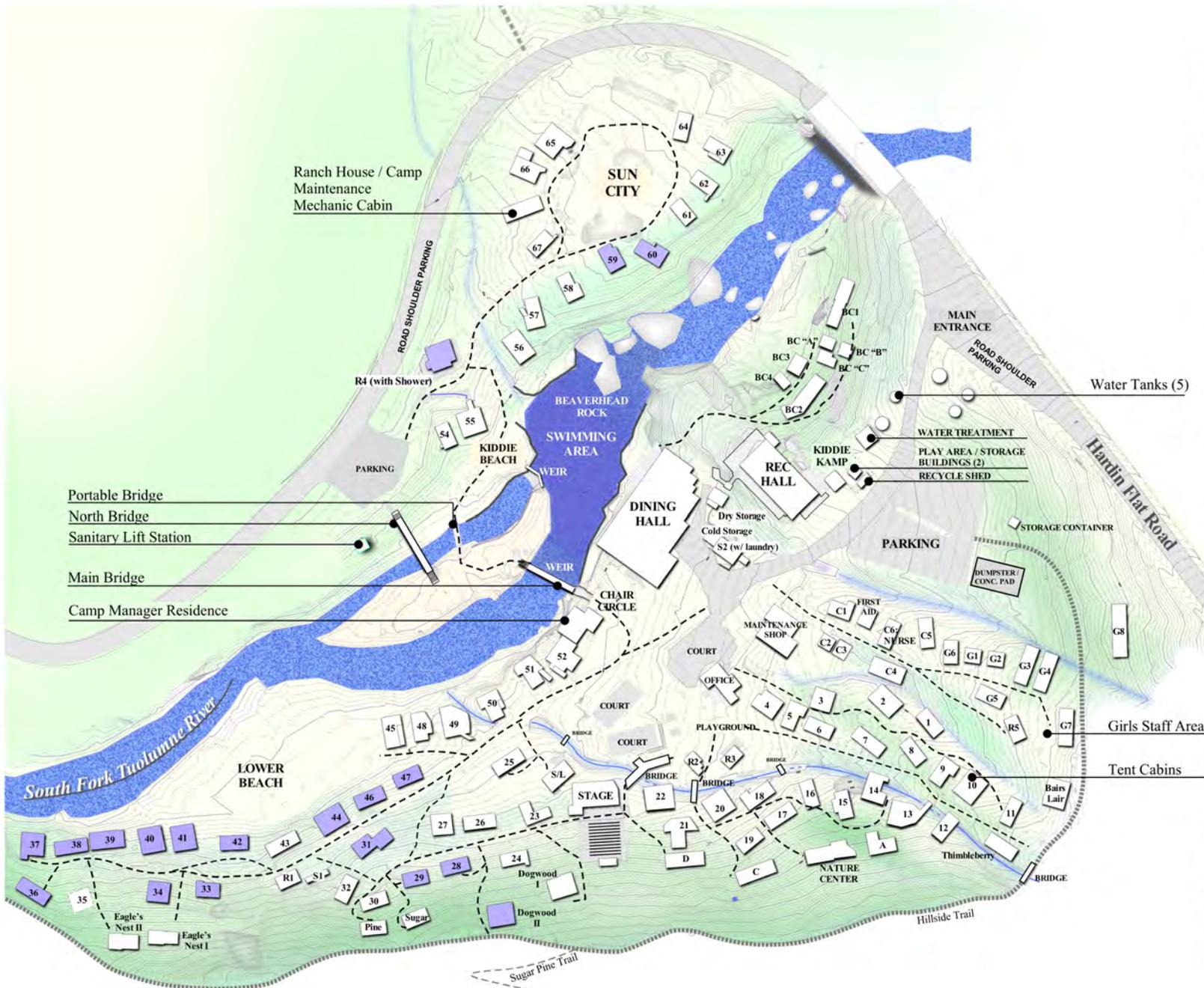
State Clearinghouse
1400 Tenth Street
Sacramento, CA 95814

INITIAL STUDY AND
ENVIRONMENTAL REVIEW CHECKLIST

Map Package Figures

City of Berkeley Tuolumne Camp Permit (46690)

Figure 2
**Pre-Rim Fire
Conditions**



LEGEND (see text for explanation)

- | | |
|----|-------------------------------------|
| | Structure |
| R | = Restroom |
| S | = Showers |
| L | = Laundry |
| C | = Girl Staff Cabins |
| G | = Girl Staff Cabins |
| B | = Boy Staff Cabins |
| 12 | = Family Tent Cabin |
| | Structure Not Destroyed by Rim Fire |

Scale
0' 50' 100'



This drawing is conceptual and for planning processing purposes only. Program information, scale, location of areas, and other information shown are subject to field evaluation and modification.

City of Berkeley Tuolumne Camp Permit (46690)

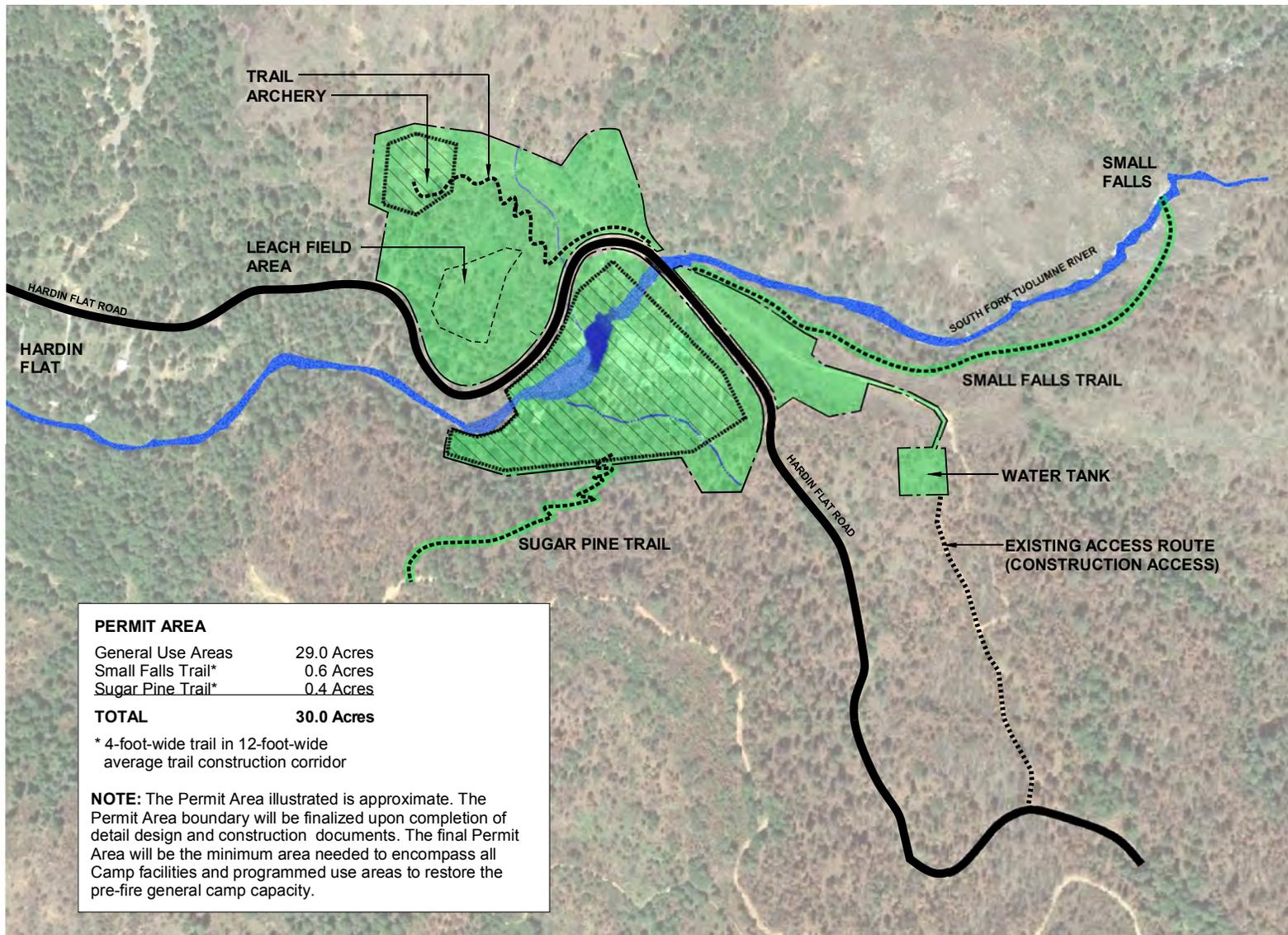


Figure 3
Camp Permit Areas

Proposed Permit Area boundary based on Conceptual Plans presented in Figure 2.01-3 and 2.01-4

LEGEND (see text for explanation)

-  Proposed Permit General Use Area
-  Existing Permit Area
-  Existing Permit Trails

NOTE: Existing permit boundary based on survey by F.M. Sweeney dated August 1941 as shown on map dated May 21, 1942 and titled:
U.S. Department of Agriculture
Forest Service, Stanislaus National Forest
Big Oak Flat Road Recreation Area Berkeley
Municipal Camp

PERMIT AREA

General Use Areas	29.0 Acres
Small Falls Trail*	0.6 Acres
Sugar Pine Trail*	0.4 Acres

TOTAL 30.0 Acres

* 4-foot-wide trail in 12-foot-wide average trail construction corridor

NOTE: The Permit Area illustrated is approximate. The Permit Area boundary will be finalized upon completion of detail design and construction documents. The final Permit Area will be the minimum area needed to encompass all Camp facilities and programmed use areas to restore the pre-fire general camp capacity.

Scale
0' 200' 400'



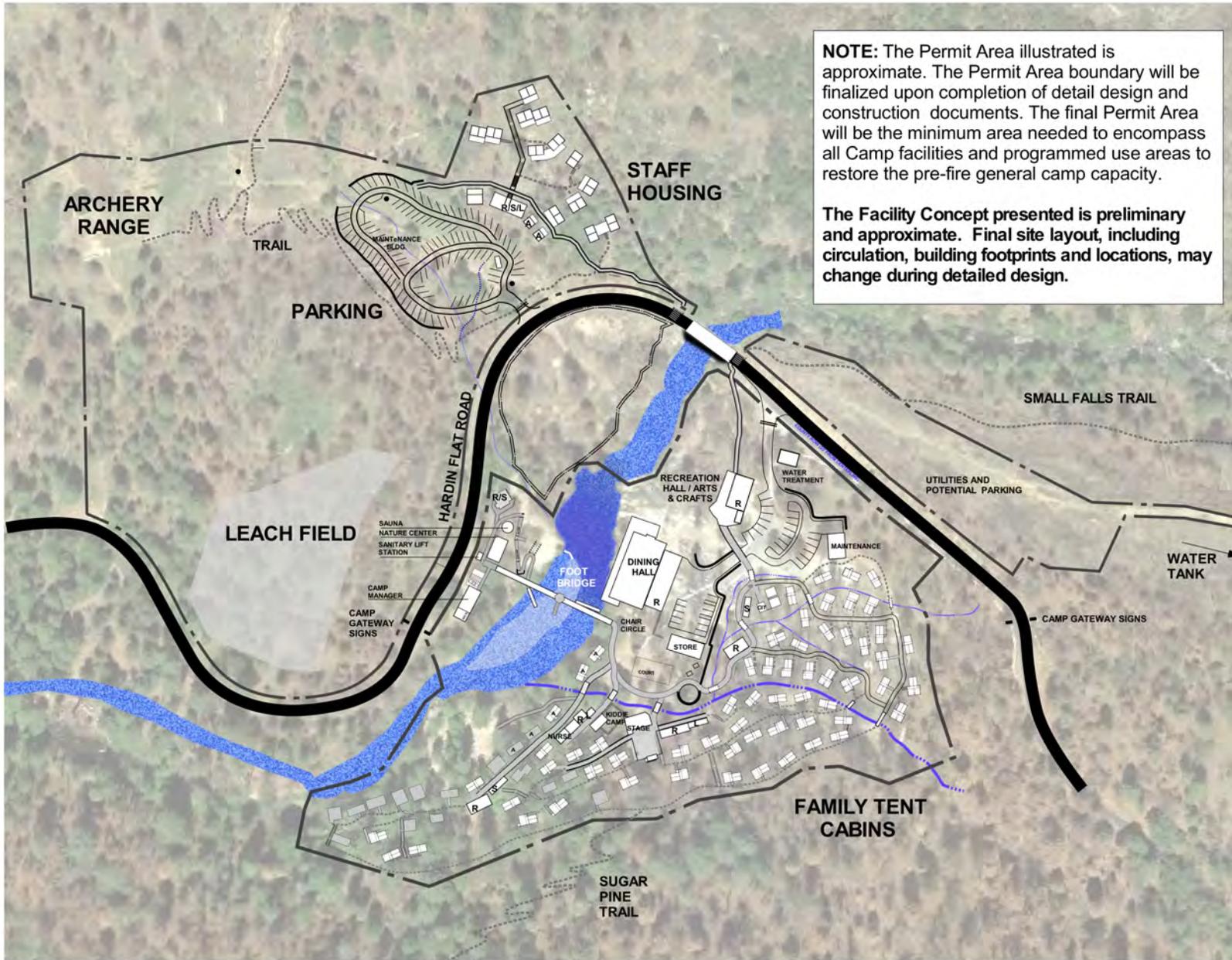
This drawing is conceptual and for planning and permit processing purposes only. Program information, scale, location of areas, and other information shown are subject to field evaluation and modification.

City of Berkeley Tuolumne Camp Permit (46690)

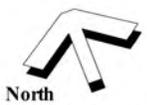
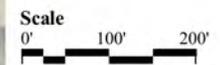
NOTE: The Permit Area illustrated is approximate. The Permit Area boundary will be finalized upon completion of detail design and construction documents. The final Permit Area will be the minimum area needed to encompass all Camp facilities and programmed use areas to restore the pre-fire general camp capacity.

The Facility Concept presented is preliminary and approximate. Final site layout, including circulation, building footprints and locations, may change during detailed design.

Figure 4
Facility Concept
(see also Figure 2.01-4 for detail of Central Camp area)



- LEGEND** (see text for explanation)
- Camp Permit Area
 - Existing Structures to Remain
 - New / Replacement Structures
 - Drainage and Stream Restoration
 - Camping Units with Mobility Features
 - R = Restroom
 - L = Laundry
 - S = Shower
 - Pedestrian Access Routes
 - 5 to 8 Feet Wide; Accessible
 - - - 5 to 8 Feet Wide
 - · · 4 Feet Wide
 - ⚡ Stairs



This drawing is conceptual and for planning purposes only. Program information, scale, location of areas, and other information shown are subject to field evaluation and modification.

City of Berkeley Tuolumne Camp Permit (46690)

Figure 5
**Central Camp
Facilities
Concept Plan**

NOTE: The Concept Plan presented is preliminary and approximate. Final site layout, including circulation, building footprints and locations, may change during detailed design.

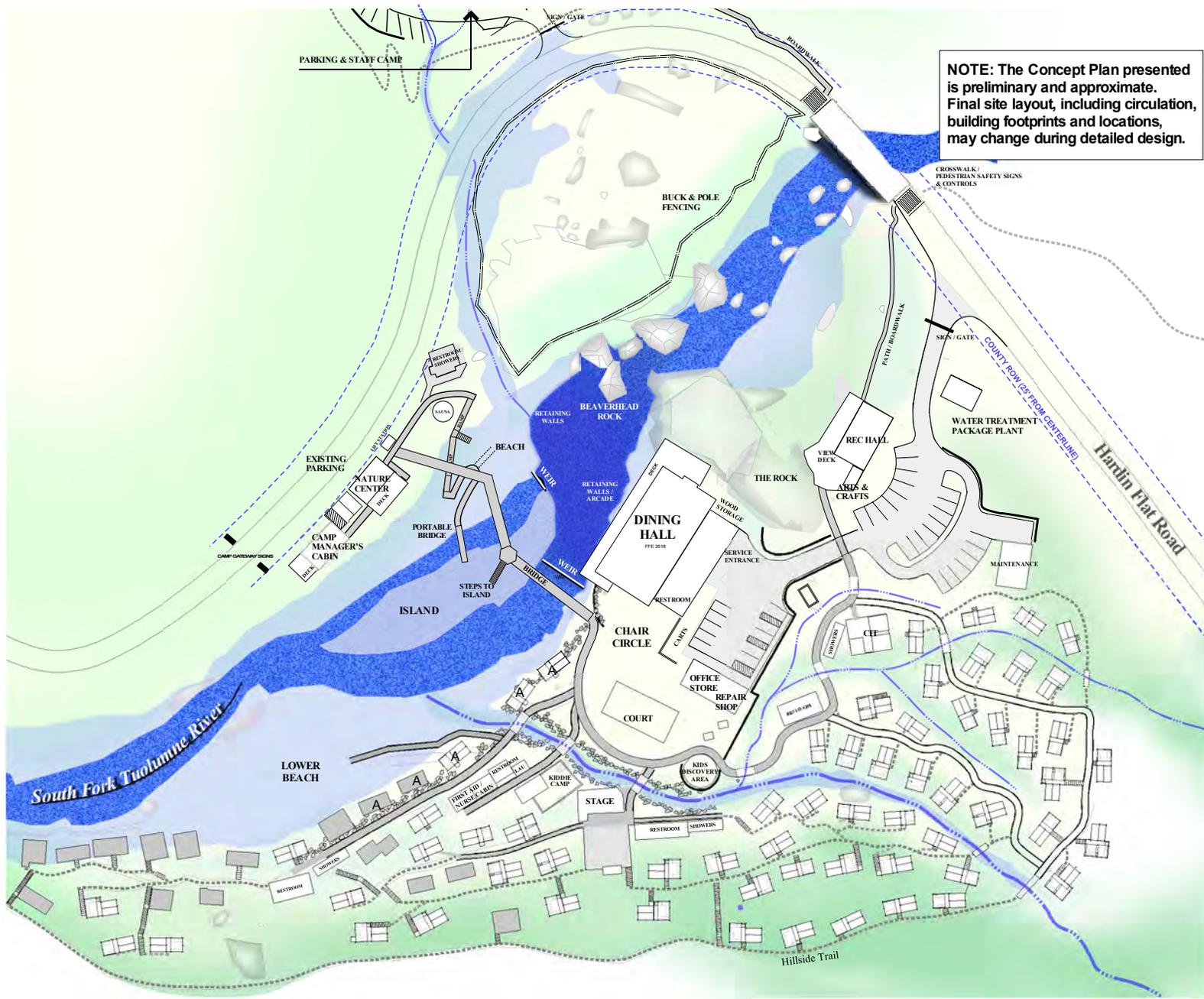
LEGEND (see text for explanation)

- Structures**
 - A= Accessible Tent Cabin
 - Existing
 - New
- Camp Paths**
 - Natural Surfaced Accessible Path: 5' to 8' wide
 - Natural Surfaced Path: 4' to 6' wide
 - Natural Surfaced Trail: 4' to 5' wide
 - Granite or Wood Stairs: 4' to 5' wide
 - Bridge
 - Bridge / Wildlife-friendly Culvert
- Creek / Drainage Channel
- 100-Year Floodplain

Scale
0' 50' 100'



This drawing is conceptual and for planning purposes only. Program information, scale, location of areas, and other information shown are subject to review, field evaluation, and modification.



NOTE: The Concept Plan presented is preliminary and approximate. Final site layout, including circulation, building footprints and locations, may change during detailed design.

Scale
0' 50' 100'



NOTE: HAZARD TREE REMOVAL IN ALL CAMP AREAS ON AN ANNUAL OR AS-NEEDED BASIS

City of Berkeley Tuolumne Camp Permit (46690)

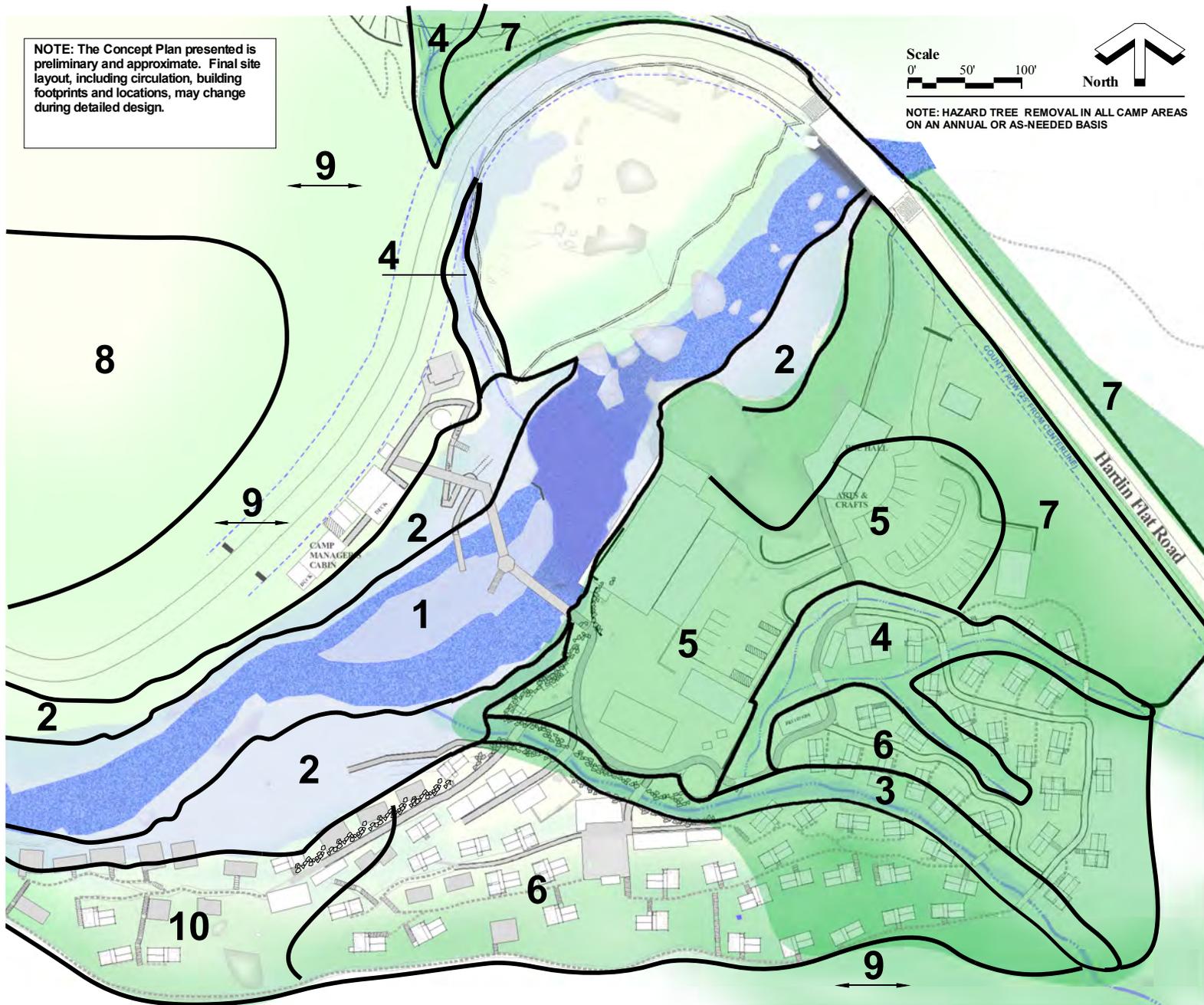
Figure 6 Vegetation Zone Concept

LEGEND (see text for explanation)

- Zone 1: South Fork Tuolumne River, Island and Edge**
 - Provide shade to river, its fishery, and day use areas (island and beaches)
 - Enhance riparian wildlife corridor functions
- Zone 2: Riparian/Floodplain**
 - Enhance riparian wildlife corridor functions
 - Shade the river and its fisheries
- Zone 3: Riparian/Thimbleberry Creek**
 - Enhance riparian wildlife corridor functions
 - Provide a focal amenity and shade for family tent structures and central BTC use areas
 - Provide for groundcover to manage stormwater and enhance of water quality
- Zone 4: Intermittent Drainages**
 - Enhance wildlife corridor functions
 - Provide a focal amenity and shade for family tent structures
 - Provide groundcover to manage stormwater and enhance water quality of runoff from Hardin Flat Road culvert and internal camp pathway system
- Zone 5: Mixed Forest/Common Use Areas**
 - Provide relatively fast-growing open forest shade canopy for BTC
 - Provide for groundcover to manage stormwater and enhance water quality of runoff from internal BTC pathway system
 - Consider selective use of transplanted or large container trees for shade
- Zone 6: Mixed Forest, Shade and Erosion Control**
 - Provide relatively fast-growing open to moderately dense shade canopy for BTC
 - Provide for groundcover to manage stormwater runoff and enhance water quality
- Zone 7: Mixed Forest**
 - Provide visual screening between central BTC and Hardin Flat Road
 - Provide relatively fast-growing open to moderately dense shade canopy for BTC
- Zone 8: Hillside Meadow**
 - Develop meadow suitable for maintenance of leach field functions
 - Provide raptor foraging habitat
- Zone 9: General Upland/Mixed Forest**
 - Allow natural succession
- Zone 10: Fuel Modification of Existing Forest**
 - Allow natural succession
 - Provide for groundcover to manage stormwater runoff and enhance water quality

Priority Revegetation Program Area

This drawing is conceptual and for planning purposes only. Program information, scale, location of areas, and other information shown are subject to review, field evaluation, and modification.



APPENDIX A: WATERSHED MANAGEMENT REQUIREMENTS

Table A-1 lists Riparian Conservation Area (RCA) Goals and Objectives and project-related management strategy requirements to implement the goals and objectives for Alternative 1 (Proposed Action).

Management requirements, designed to protect water quality and watershed conditions, are derived from Regional (USDA 2011) and National Best Management Practices (BMPs) (USDA 2012) and Riparian Conservation Objectives (RCOs) (USDA 2017, p. 189-191).

Riparian resources within Riparian Conservation Areas (RCAs) would be protected through compliance with the RCOs outlined in the Forest Plan (USDA 2017, p. 189-191). Best Management Practices (BMPs) protect beneficial uses of water by preventing or minimizing the threat of discharge of pollutants of concern.

Table A-2 lists the BMPs applicable to the alternatives with site-specific requirements and comments. The City of Berkeley would be responsible for consulting with a hydrologist and/or soil scientist prior to or during project implementation for interpretation, clarification, or adjustment of watershed management requirements as needed.

TABLE A-1 RIPARIAN CONSERVATION OBJECTIVES AND MANAGEMENT REQUIREMENTS FOR PLANNING AND CONSTRUCTION

Standards and Guidelines	Alternative 1 (Proposed Action) Management Requirements and References
<p>Riparian Conservation Objective 1: Ensure that identified beneficial uses for the water body are adequately protected. Identify the specific beneficial uses for the project area, water quality goals from the Regional Basin Plan, and the manner in which the standards and guidelines will protect the beneficial uses.</p>	
<p>Ensure that management activities do not adversely affect water temperatures necessary for local aquatic- and riparian-dependent species assemblages.</p>	<ul style="list-style-type: none"> • Based on soil and hydrologic conditions, shade the waters of the South Fork Tuolumne River and Thimbleberry Creek and create wildlife corridors by planting, where feasible, riparian vegetation • Design wastewater collection systems to elevated above the 100-year water surface elevation of the South Fork Tuolumne River and not discharge any water directly into the South Fork Tuolumne River and Thimbleberry Creek. <p>Law, code, or ordinance reference:</p> <ul style="list-style-type: none"> • Section 25249.5-25249.13, California Health and Safety Code • Section 1602, California Fish and Game Code • Sections 5650-5656 of California Fish and Game Code <p>Other references:</p> <ul style="list-style-type: none"> • Best Management Practices (BMPs) in accordance with the <i>Regional Water Quality Management Plan</i> (USDA 2011) • National Best Management Practices for Water Quality Management on National Forest System Lands Volume 1: National Core BMP Technical Guide (USDA 2012). • FSH 2509.22, 12.51 Exhibit 04, BMP 5.4 - Revegetation of Surface-disturbed Areas • Clean Water Act: 33 U.S.C. §1251 et seq. (1972)
<p>Limit pesticide applications to cases where project level analysis indicates that pesticide applications are consistent with riparian conservation objectives.</p>	<ul style="list-style-type: none"> • Use integrated pest management techniques

TABLE A-1 RIPARIAN CONSERVATION OBJECTIVES AND MANAGEMENT REQUIREMENTS FOR PLANNING AND CONSTRUCTION

Standards and Guidelines	Alternative 1 (Proposed Action) Management Requirements and References
Riparian Conservation Objective 1 (cont.)	
<p>Within 500 feet of known occupied sites for the California red-legged frog, Cascades frog, Yosemite toad, foothill yellow-legged frog, mountain yellow-legged frog, and northern leopard frog, design pesticide applications to avoid adverse effects to individuals and their habitats.</p>	<ul style="list-style-type: none"> • Prepare Aquatic and Terrestrial Wildlife Biological Assessments (BAs) for federal threatened and endangered species. <p>Law, code, or ordinance reference:</p> <ul style="list-style-type: none"> • Endangered Species Act (6 U.S. Code Chapter 35) • California Endangered Species Act (Fish and Game Code Section 2050-2069)
Riparian Conservation Objective 2: Maintain or restore: (1) the geomorphic and biological characteristics of special aquatic features, including lakes, meadows, bogs, fens, wetlands, vernal pools, springs; (2) streams, including in stream flows; and (3) hydrologic connectivity both within and between watersheds to provide for the habitat needs of aquatic-dependent species.	
<p>Maintain and restore the hydrologic connectivity of streams, meadows, wetlands, and other special aquatic features by identifying roads and trails that intercept, divert, or disrupt natural surface and subsurface water flow paths. Implement corrective actions where necessary to restore connectivity.</p>	<ul style="list-style-type: none"> • Prepare Hydrology Report. • Delineate the 2-year and 100-year floodplain limits of the South Fork Tuolumne River and Thimbleberry Creek. • Prepare wetland delineation. Avoid any wetland impacts where possible. • With the exception of weirs, accessibility features and related shoreline retaining walls, construct no new permanent facilities within 2-year water surface line of the South Fork Tuolumne River. • Design repair of existing BTC structures to accommodate the 100-year water surface elevation as supported by Hydrology Report analysis. • Revegetate and/or reinforce channels to manage surface runoff from within the BTC. • Annually remove flashboards in the South Fork Tuolumne River. <p>Law, code, or ordinance reference:</p> <ul style="list-style-type: none"> • Clean Water Act: 33 U.S.C. §1251 et seq. (1972) • Section 1602 of California Fish and Game Code •
<p>Ensure that culverts or other stream crossings do not create barriers to upstream or downstream passage for aquatic-dependent species. Locate water sites to avoid adverse effects to in stream flows and depletion of pool habitat. Where possible, maintain and restore the timing, variability, and duration of floodplain inundation and water table elevation in meadows, wetlands, and other special aquatic features.</p>	<ul style="list-style-type: none"> • Culverts will be designed to ensure that they do not create barriers to upstream or downstream passage for aquatic dependent species. • Annually remove flashboards in the South Fork Tuolumne River. <p>Law, code, or ordinance reference:</p> <ul style="list-style-type: none"> • Clean Water Act: 33 U.S.C. §1251 et seq. (1972) • Section 1602 of California Fish and Game Code
<p>Prior to activities that could adversely affect streams, determine if relevant stream characteristics are within the range of natural variability. If characteristics are outside the range of natural variability, implement mitigation measures and short-term restoration actions needed to prevent further declines or cause an upward trend in conditions. Evaluate required long-term restoration actions and implement them according to their status among other restoration needs.</p>	<ul style="list-style-type: none"> • Prepare Hydrology Report. • Delineate the 2-year and 100-year floodplain limits of the South Fork Tuolumne River and Thimbleberry Creek. • With the exception of weirs, water intake, accessibility features, and related shoreline retaining walls, construct no new permanent facilities within 2-year floodplain limits of the South Fork Tuolumne River. • Design repair of existing BTC structures to accommodate the 100-year floodplain limits as supported by Hydrology Report analysis • Based on soil conditions, shade the waters of the South Fork Tuolumne River and Thimbleberry Creek and create wildlife corridors by planting, where feasible, riparian vegetation within the permit area. <p>Law, code, or ordinance reference:</p> <ul style="list-style-type: none"> • Clean Water Act: 33 U.S.C. §1251 et seq. (1972) • Section 1602 of California Fish and Game Code

TABLE A-1 RIPARIAN CONSERVATION OBJECTIVES AND MANAGEMENT REQUIREMENTS FOR PLANNING AND CONSTRUCTION

Standards and Guidelines	Alternative 1 (Proposed Action) Management Requirements and References
Riparian Conservation Objective 2 (cont.)	
<p>Prevent disturbance to stream banks and natural lake and pond shorelines caused by resource activities (for example, livestock, off-highway vehicles, and dispersed recreation) from exceeding 20 percent of stream reach or 20 percent of natural lake and pond shorelines. Disturbance includes bank sloughing, chiseling, trampling, and other means of exposing bare soil or cutting plant roots. This standard does not apply to developed recreation sites and sites authorized under Special Use Permits.</p>	<ul style="list-style-type: none"> • Although this does not apply to developed recreation sites or Special Use Permit sites, employ comprehensive best management construction standards to avoid or minimize disturbance to stream banks during construction periods including: <ul style="list-style-type: none"> – Delineation or an erection of construction exclusion fencing – Preparation and implementation of an Erosion Control Plan Erosion Control Plan (USDA 2011) / Storm Water Pollution Plan (SWPPP). The SWPPP shall be prepared by a Qualified SWPPP Developer (QSD) and managed on-site by a Qualified SWPPP Practitioner (QSP) to ensure implementation of appropriate Best Management Practices for minimizing potential erosion and sedimentation within the project area during ground disturbing construction. These measures include, as appropriate to the site conditions: conducting major site grading and underground utility construction activities during the dry season (April 15 - October 31); using dikes, basins, ditches, straw, erosion control fabric and other temporary measures (e.g., water bars, fiber rolls) as catchments for source pollutants. • Reconstruct/install permanent engineered stone containment walls along the edge of Kiddie Beach, Swimming Area and Island to replace existing unreinforced stone and rubble walls to minimize decomposed granite and silt runoff into the river from river access and related beach activities. • Seasonally remove decomposed granite beach material to a designated upland area, cover, and stabilize from winter snow and rains to avoid material migrating into the river. • Obtain Section 404 permit from COE. • Obtain stream alteration permits from CDFW. <p>Law, code, or ordinance reference:</p> <ul style="list-style-type: none"> • Clean Water Act: 33 U.S.C. §1251 et seq. (1972) • California Safe Drinking Water Act. Health And Safety Code, Section 116270-116293 • Section 1602 of California Fish and Game Code • Sections 5650-5656 of California Fish and Game Code
<p>Cooperate with State and Federal agencies to develop streambank disturbance standards for threatened, endangered, and sensitive species. Use the regional stream bank assessment protocol. Implement corrective action where disturbance limits have been exceeded.</p>	<ul style="list-style-type: none"> • Determine presence of threatened, endangered and sensitive species through: <ul style="list-style-type: none"> – Aquatic and terrestrial wildlife biological evaluations (BEs) – Aquatic and terrestrial wildlife biological assessments (BAs) for federal threatened and endangered species – Plant biological evaluations – Statement regarding migratory bird species <p>Law, code, or ordinance reference:</p> <ul style="list-style-type: none"> • Clean Water Act: 33 U.S.C. §1251 et seq. (1972) • Section 1602 of California Fish and Game Code • 6 U.S. Code Chapter 35: Endangered Species Act • State of California, Fish and Game Code, Section 2080-2085. Endangered Species Act.
<p>At either the landscape or project-scale, determine if the age class, structural diversity, composition, and cover of riparian vegetation are within the range of natural variability for the vegetative community. If conditions are outside the range of natural variability, consider implementing mitigation and/or restoration actions that will result in an</p>	<ul style="list-style-type: none"> • Determine age class, structural diversity, composition, and cover of riparian vegetation through plant biological evaluations. • Identify parameters for riparian revegetation program. • Prepare and implement a riparian / revegetation design. <p>Other references</p> <ul style="list-style-type: none"> • FSH 2509.22, 12.51 Exhibit 04, BMP 5.4 - Revegetation of Surface-disturbed Areas

TABLE A-1 RIPARIAN CONSERVATION OBJECTIVES AND MANAGEMENT REQUIREMENTS FOR PLANNING AND CONSTRUCTION

Standards and Guidelines	Alternative 1 (Proposed Action) Management Requirements and References
Riparian Conservation Objective 2 (cont.)	
upward trend. Actions could include restoration of aspen or other riparian vegetation where conifer encroachment is identified as a problem.	
Cooperate with Federal, Tribal, State and local governments to secure in stream flows needed to maintain, recover, and restore riparian resources, channel conditions, and aquatic habitat. Maintain in stream flows to protect aquatic systems to which species are uniquely adapted. Minimize the effects of stream diversions or other flow modifications from hydroelectric projects on threatened, endangered, and sensitive species.	<ul style="list-style-type: none"> • Obtain stream alteration permits from CDFW. • Report annual water use. Law, code, or ordinance reference: <ul style="list-style-type: none"> • Section 1602, California Fish and Game Code • State of California, California Code of Regulations State Water Resources Control Board
Riparian Conservation Objective 3: Ensure a renewable supply of large down logs that: (1) can reach the stream channel and (2) provide suitable habitat within and adjacent to the RCA.	
Determine if the level of coarse large woody debris (CWD) is within the range of natural variability in terms of frequency and distribution and is sufficient to sustain stream channel physical complexity and stability. Ensure proposed management activities move conditions toward the range of natural variability.	<ul style="list-style-type: none"> • Consult with Forest Service about allowing downed logs in the stream channel downstream from weirs to remain. Law, code, or ordinance reference: <ul style="list-style-type: none"> • Section 1602, California Fish and Game Code
Riparian Conservation Objective 4: Ensure that management activities, including fuels reduction actions, within RCAs and CARs enhance or maintain physical and biological characteristics associated with aquatic- and riparian-dependent species.	
Use screening devices for water drafting pumps. (Fire suppression activities are exempt during initial attack.) Use pumps with low entry velocity to minimize removal of aquatic species, including juvenile fish, amphibian egg masses and tadpoles, from aquatic habitats.	<ul style="list-style-type: none"> • Based on results of Aquatic Technical Report, include screens on BTC water supply pump as necessary.
Design prescribed fire treatments to minimize disturbance of ground cover and riparian vegetation in RCAs. In burn plans for project areas that include, or are adjacent to RCAs, identify mitigation measures to minimize the spread of fire into riparian vegetation. In determining which mitigation measures to adopt, weigh the potential harm of mitigation measures, for example fire lines, against the risks and benefits of prescribed fire entering riparian vegetation. Strategies should recognize the role of fire in ecosystem function and identify those instances where fire suppression or fuel Management Requirement could be damaging to habitat or long-term function of the riparian community.	<ul style="list-style-type: none"> • Prepare a long-term fuel management program to include, but not be limited to: <ul style="list-style-type: none"> – Development and maintenance of upland fuel breaks around perimeter of the BTC – Staff and camper education. • Maintain or provide ground cover (e.g., maintain post-fire conifer needle cast; provide straw, wood chips, felled or masticated small burned trees within 100 feet of perennial and intermittent streams and SAFs to the maximum extent. Law, code, or ordinance reference: <ul style="list-style-type: none"> • Section 4291-4299, California Public Resources Code

TABLE A-1 RIPARIAN CONSERVATION OBJECTIVES AND MANAGEMENT REQUIREMENTS FOR PLANNING AND CONSTRUCTION

Standards and Guidelines	Alternative 1 (Proposed Action) Management Requirements and References
Riparian Conservation Objective 4 (cont.)	
<p>Post-wildfire management activities in RCAs and CARs should emphasize enhancing native vegetation cover, stabilizing channels by non-structural means, minimizing adverse effects from the existing road network, and carrying out activities identified in landscape analyses. Post-wildfire operations shall minimize the exposure of bare soil.</p>	<ul style="list-style-type: none"> • Prepare revegetation plan emphasizing riparian corridor vegetation and upland vegetation for erosion and sediment transport control, channel stabilization, habitat corridor and other purposes to include: <ul style="list-style-type: none"> – Restoration and enhancement emphasis of a white alder riparian forest along the South Fork Tuolumne River. – General riparian and nearby upland revegetation up to 100 feet from channel banks to stabilize banks and enhance shade canopy along the South Fork Tuolumne River, Thimbleberry Creek and selected drainage channels. – Early to mid-seral Sierran mixed conifer forest in upland areas of the BTC. • Stabilize slopes using non-structural controls to reduce erosion to terminate head cuts and side cuts along the river, Thimbleberry Creek and drainage channels • Restrict pedestrian access to designated access routes with bridges across all drainage channel crossings and access control barriers. • Use permeable materials for vehicular and pedestrian access routes and construct infiltration trench stabilizing drainage ditches to limit stormwater runoff and encourage nearby vegetation growth. • Repair/replace undercut or failing walls with engineered stone retaining walls (above). • Perform major site grading and underground utility construction activities during dry periods, stabilize all disturbed soils as soon as possible, develop, and implement an Erosion Control / Stormwater Pollution Prevention Plan (SWPPP). <p>Law, code, or ordinance reference:</p> <ul style="list-style-type: none"> • Clean Water Act: 33 U.S.C. §1251 et seq. (1972) • Section 1602, California Fish and Game Code. • Division 7, Chapter 7, California Water Code <p>Other references:</p> <ul style="list-style-type: none"> • Best Management Practices (BMPs) in accordance with the Regional Water Quality Management Plan (USDA 2011) and the National BMPs for Water Quality Management on National Forest System Lands (USDA 2012) • FSH 2509.22,12.51 Exhibit 04, BMP 5.4 - Revegetation of Surface-Disturbed Areas
<p>Allow hazard tree removal within RCAs or CARs. Allow mechanical ground disturbing fuels treatments; salvage harvest or commercial fuel wood cutting within RCAs or CARs when the activity is consistent with RCOs. Utilize low ground pressure equipment, helicopters, over the snow logging, or other non-ground disturbing actions to operate off of existing roads when needed to achieve RCOs. Ensure that existing roads, landings, and skid trails meet Best Management Practices. Minimize the construction of new skid trails or roads for access into RCAs for fuel treatments, salvage harvest, commercial fuel wood cutting, or hazard tree removal.</p>	<ul style="list-style-type: none"> • Evaluate standing trees prior to camp reconstruction activities. • Follow Forest Plan S&Gs while removing any standing hazard trees during implementation.
Riparian Conservation Objective 4 (cont.)	
<p>As appropriate, assess and document aquatic conditions following the Regional</p>	<ul style="list-style-type: none"> • Prepare Aquatic Assessment Report.

TABLE A-1 RIPARIAN CONSERVATION OBJECTIVES AND MANAGEMENT REQUIREMENTS FOR PLANNING AND CONSTRUCTION

Standards and Guidelines	Alternative 1 (Proposed Action) Management Requirements and References
Stream Condition Inventory protocol prior to implementing ground disturbing activities within suitable habitat for California red-legged frog, foothill yellow-legged frog, western pond turtle, and trout.	
At the project level, evaluate and consider actions to ensure consistency with standards and guidelines or desired conditions.	<ul style="list-style-type: none"> • Prepare Aquatic Assessment Report. • Prepare Hydrology Report. • Prepare a Post-Fire Landscape Analysis and Revegetation report identifying: <ul style="list-style-type: none"> – Existing conditions that degrade water quality or habitat for aquatic and riparian-dependent species. – Reconstruction standards, guidelines, and desired conditions.
<p>Riparian Conservation Objective 5: Preserve, restore, or enhance special aquatic features, such as meadows, lakes, ponds, bogs, fens, and wetlands, to provide the ecological conditions and processes needed to recover or enhance the viability of species that rely on these areas.</p>	
Prohibit or mitigate ground-disturbing activities that adversely affect hydrologic processes that maintain water flow, water quality, or water temperature critical to sustaining bog and fen ecosystems and plant species that depend on these ecosystems. During project analysis, survey, map, and develop measures to protect bogs and fens from such activities as trampling by livestock, pack stock, humans, and wheeled vehicles. Criteria for defining bogs and fens include, but are not limited to, presence of: (1) sphagnum moss (<i>Sphagnum</i> spp.), (2) mosses belonging to the genus <i>Meesia</i> , and (3) sundew (<i>Drosera</i> spp.) Complete initial plant inventories of bogs and fens within active grazing allotments prior to re-issuing permits.	<ul style="list-style-type: none"> • Use permeable pavement and materials for all circulation systems where feasible. • Reevaluate based on plant biological evaluations.
<p>Riparian Conservation Objective 6: Identify and implement restoration actions to maintain, restore or enhance water quality and maintain, restore, or enhance habitat for riparian and aquatic species.</p>	
Recommend restoration practices in: (1) areas with compaction in excess of soil quality standards, (2) areas with lowered water tables, or (3) areas that are either actively down cutting or that have historic gullies. Identify other management practices, for example, road building, recreational use, grazing, and timber harvests that may be contributing to the observed degradation.	<ul style="list-style-type: none"> • Install erosion control measures such as straw wattles on 10 foot intervals to reduce runoff velocities in riparian areas; re-vegetate riparian corridor (channel banks and areas within 100 feet of channel banks) • Develop and implement a revegetation plan within riparian conservation area to stabilize banks and enhance shade canopy along the river, Thimbleberry Creek and drainage channels. • Emphasize restoration and enhancement of a white alder riparian forest. • Restrict pedestrian access to designated paths (with channel crossings) to limit damage to vegetation. • Use permeable surface materials where feasible for all vehicular and pedestrian routes of travel in all BTC areas. • Develop and implement a revegetation plan within the burned areas of the Camp and outside riparian corridors for erosion control, channel stabilization, habitat corridor and other purposes. Emphasize uneven age mid-seral Sierran mixed conifer forest.
<p>Riparian Conservation Objective 6 (cont.)</p>	
	<ul style="list-style-type: none"> • Stabilize slopes to reduce erosion to terminate head cuts and side cuts along the River, Thimbleberry Creek and drainage channels.

TABLE A-1 RIPARIAN CONSERVATION OBJECTIVES AND MANAGEMENT REQUIREMENTS FOR PLANNING AND CONSTRUCTION

Standards and Guidelines	Alternative 1 (Proposed Action) Management Requirements and References
	<ul style="list-style-type: none"> • Seasonally remove decomposed granite to a designated upland area, cover, and stabilize from winter snow and rains to avoid beach-related decomposed granite that may migrate into the river. • Where consistent with the Hydrology Analysis, repair/replace undercut or failing walls with engineered stone retaining walls. • Reconstruct/install permanent engineered stone containment walls along the edge of Kiddie Beach, Swimming Area and Island to reduce erosion. • Perform rough grading and mainline utility trenching construction activities during dry periods, stabilize all disturbed soils as soon as possible, develop and implement an Erosion Control / Stormwater Pollution Prevention Plan (SWPPP). • Develop and implement a revegetation plan within riparian corridor and up to 100 feet from channel banks to stabilize banks and enhance shade canopy along the River, Thimbleberry Creek and drainage channels <p>Other references:</p> <ul style="list-style-type: none"> • Best Management Practices (BMPs) in accordance with the Regional Water Quality Management Plan (USDA 2011) and the National BMPs for Water Quality Management on National Forest System Lands (USDA 2012) • FSH 2509.22, 12.51 Exhibit 04, BMP 5.4 - Revegetation of Surface-disturbed Areas

TABLE A-2 BEST MANAGEMENT PRACTICES

Management Requirements	BMPs/Forest Plan ² /Locations	
	Alternative 1 (Proposed Action)	Alternative 2 (Abandonment)
<p>Erosion Control Plan The following applies to the overall construction program.</p> <ul style="list-style-type: none"> - Prepare and implement a project area Erosion Control Plan (USDA 2011) and Storm Water Pollution Plan (SWPPP) approved by the Forest Supervisor and Regional Water Quality Control Board prior to the commencement of any ground-disturbing project activities. - Prepare a BMP checklist before implementation. Identified BMPs to apply to all construction activities. - The Erosion Control Plan / SWPPP shall be prepared by a Qualified SWPPP Developer (QSD) and managed on-site by a Qualified SWPPP Practitioner (QSP) to ensure implementation of appropriate Best Management Practices for minimizing potential erosion and sedimentation within the project area during construction. 	<p>Regional BMPs 1-13 Erosion Prevention and Control Measures During Operations 2.13 Erosion Control Plans (construction activities)</p> <p>National Core BMPs Veg-2 Erosion Prevention and Control</p> <p>Forest Plan S&Gs 60 Water Quality Management (18-A) 190 (RCO 4)</p> <p>Locations: Applicable to all areas where construction-related ground-disturbing activities occur and ground areas affected by operations.</p>	<p>Regional BMPs 1.13 Erosion Prevention and Control Measures During Operations 2.13 Erosion Control Plans (construction activities)</p> <p>National Core BMPs Veg-2 Erosion Prevention and Control</p> <p>Forest Plan S&Gs 60 Water Quality Management (18-A) 190 (RCO 4)</p> <p>Locations: Applicable to all areas where ground-disturbing activities are related to facility removal.</p>
<p>Facilities within a Floodplains</p> <ul style="list-style-type: none"> - Conduct a separate floodplain hazard analysis and evaluation. - Allow repair of existing overnight camping facilities within the 100-year floodplain of the South Fork Tuolumne River only if finished floor elevations are above the floodplain. - Prepare a Camp Evacuation Plan that incorporates protocols and procedures for evacuation in response to storm and snowmelt events that may lead to high water flows. 	<p>Regional BMPs 1.8 Streamside Zone Designation 1.19 Stream Course and Aquatic Protection 7.2 Conduct Floodplain Hazard Analysis and Evaluation</p>	
<p>Construction and Operations in Riparian Conservation Areas Refer to Table A-2. Camp facilities are within the South Fork Tuolumne River RCA. Identified BMPs apply to all construction and operation activities including: Utility and infrastructure improvements; vehicular access and parking area development; pedestrian circulation, sports courts, day use areas, and structures.</p>	<p>Regional BMPs 1-8 Streamside Zone Designation 1-19 Stream Course and Aquatic Protection 2.2 General Guidelines for the Location and Design of Roads 2.3 Road Construction and Reconstruction 2.10 Parking and Staging Areas 2.11 Equipment Refueling and Servicing 4.9 Protecting Water Quality within Developed Recreation Sites 5.1 Soil-disturbing Treatments on the Contour</p>	<p>Regional BMPs 1-8 Streamside Zone Designation 1-19 Stream Course and Aquatic Protection 2.3 Road Construction and Reconstruction 2.10 Parking and Staging Areas 2.11 Equipment Refueling and Servicing 4.9 Protecting Water Quality within Developed Recreation Sites 5.1 Soil-disturbing Treatments on the Contour 5.4 Revegetation of Surface-disturbed Areas</p>

² Forest Plan S&Gs indicate page number from Forest Plan Direction (USDA 2017).

TABLE A-2 BEST MANAGEMENT PRACTICES

Management Requirements	BMPs/Forest Plan ² /Locations	
	Alternative 1 (Proposed Action)	Alternative 2 (Abandonment)
	5.4 Revegetation of Surface-disturbed Areas 5-5 Disposal of Organic Debris 5.6 Soil Moisture Limitations for Tractor Operations 7-3 Protection of Wetlands 7.5 Control of Activities under Special Use Permit National Core BMPs Aq Eco-2 Operations in Aquatic Ecosystems AqEco-4 Stream Channels and Shorelines Plan-3 Aquatic Management Zone Planning Veg-1 Vegetation Management Planning Veg-2 Erosion Prevention and Control Veg-3 Aquatic Management Zones WatUses-5 Dams and Impoundments Forest Plan S&Gs 60 Water Quality Management (18-A) 189 (RCO 1) 189 (RCO 2) 190 (RCO 3) 190 (RCO 4) 191 (RCO 5) 191 (RCO 6) Locations: All Camp areas including stream and drainage restoration areas.	5-5 Disposal of Organic Debris 5.6 Soil Moisture Limitations for Tractor Operations 7-3 Protection of Wetlands 7.5 Control of Activities under Special Use Permit National Core BMPs Aq Eco-2 Operations in Aquatic Ecosystems AqEco-4 Stream Channels and Shorelines Plan-3 Aquatic Management Zone Planning Veg-1 Vegetation Management Planning Veg-2 Erosion Prevention and Control Veg-3 Aquatic Management Zones Forest Plan S&Gs 60 Water Quality Management (18-A) 189 (RCO 1) 189 (RCO 2) 190 (RCO 3) 190 (RCO 4) 191 (RCO 5) 191 (RCO 6) Locations: All Camp areas where facilities will be removed and contoured.
Stream Crossings Design of New or Reconstructed Crossings <ul style="list-style-type: none"> - Design permanent stream crossings (pedestrian and utility bridge; Camp access routes of travel and paths) to pass the 100-year flood flow; armor to withstand design flows and provide desired passage of fish and other aquatic organisms. - Locate and design crossings to minimize disturbance to the water body. Use structures appropriate to the site conditions and traffic. Favor armored fords for streams where pedestrian traffic is seasonal or temporary, and where the ford design maintains the channel pattern, profile and dimension. - Gradually remove any temporary dams or water diversion features needed to constructed bridge footings when construction is complete so that released 	Regional BMPs 2.8 Stream Crossings 2.13 Erosion Control Plans (roads and other activities) National Core BMPs AqEco-2 Operations in Aquatic Ecosystems Road-7 Stream Crossings Veg-2 Erosion Prevention and Control Forest Plan S&Gs 60 Water Quality Management (18-A) 189 (RCO 2) 190 (RCO 4) Locations: South Fork Tuolumne River and all stream crossings on constructed, reconstructed and maintained Camp drives, accessible paths of travel, and trails.	

TABLE A-2 BEST MANAGEMENT PRACTICES

Management Requirements	BMPs/Forest Plan ² /Locations	
	Alternative 1 (Proposed Action)	Alternative 2 (Abandonment)
<p>impoundments do not discharge sediment into the stream flow.</p> <ul style="list-style-type: none"> - Install stream crossings according to project specifications and drawings. Design should sustain streambed and bank resiliency. - Construct diversion prevention dips to accommodate overtopping of runoff if diversion potential exists. Locate diversion prevention dips down slope of the crossing rather than directly over crossing fill; armor diversion prevention dips based on soil characteristics and risk. Install cross drains (e.g., rolling dips; water bars) to hydrologically disconnect the drive or path above the crossing and to dissipate concentrated flows. 		
<p>Construction, Reconstruction and Maintenance Operations</p> <ul style="list-style-type: none"> - Do not store materials in stream channels - Keep excavated materials out of channels, floodplains, and wetland areas. Install silt fences or other sediment- and debris-retention barriers between the water body and construction material stockpiles and wastes. Dispose unsuitable material in approved waste areas outside of the RCA. - Inspect and clean equipment; remove external oil, grease, dirt and mud and repair leaks prior to unloading at site. Inspect equipment daily and correct identified problems before entering streams or areas that drain directly to water bodies. Remove all dirt and plant parts to ensure that noxious weeds and aquatic invasive species are not brought to the site. - Remove all project debris from the stream in a manner that will cause the least disturbance. - Minimize streambank and riparian area excavation during construction. Stabilize adjacent disturbed areas using mulch, retaining structures, and or mechanical stabilization materials. - Ensure imported fill materials meet specifications, and are free of toxins and invasive species. - Divert or dewater stream flow for all live streams or standing water bodies during crossing installation and invasive maintenance. - Seasonally remove decomposed granite to a designated upland area, manage material that may migrate into the swimming area with seasonal installation/removal. - Prepare a solid waste management-facility 	<p>Regional BMPs</p> <p>2.8 Stream Crossings 2.13 Erosion Control Plans 4.4 Control of Sanitation Facilities 4.5 Control of Solid Waste Disposal 4.6 Assuring that Organizational Camps Have Proper Sanitation and Water Supply Facilities 4.9 Protecting Water Quality within Developed and Dispersed Recreation Areas</p> <p>National Core BMPs</p> <p>AqEco-2 Operations in Aquatic Ecosystems Road-7 Stream Crossings Veg-2 Erosion Prevention and Control</p> <p>Forest Plan S&Gs</p> <p>59 Interpretive Services Planning (10-L) 59 Interpretive Services Management (10-M) 60 Water Quality Management (18-A) 189 (RCO 2) 191 (RCO 5)</p> <p>Locations: South Fork Tuolumne River and all stream crossings on constructed, reconstructed and maintained Camp drives, accessible paths of travel, and trails.</p>	<p>Regional BMPs</p> <p>2-8 Stream Crossings 2-13 Erosion Control Plans</p> <p>National Core BMPs</p> <p>AqEco-2 Operations in Aquatic Ecosystems Veg-2 Erosion Prevention and Control</p> <p>Forest Plan S&Gs</p> <p>60 Water Quality Management (18-A) 189 (RCO 2) 190 (RCO 4) 191 (RCO 5)</p> <p>Locations: South Fork Tuolumne River and all stream crossings in area where facilities will be removed.</p>

TABLE A-2 BEST MANAGEMENT PRACTICES

Management Requirements	BMPs/Forest Plan ² /Locations	
	Alternative 1 (Proposed Action)	Alternative 2 (Abandonment)
and recycling program.		
<p>Water Source</p> <ul style="list-style-type: none"> - For water drafting on fish-bearing streams: do not exceed 350 gallons per minute for stream flow greater than or equal to 4.0 cubic feet per second (cfs); do not exceed 20% of surface flows below 4.0 cfs; and, cease drafting when bypass surface flow drops below 1.5 cfs. - Do not allow water drafting from streams by more than one truck at a time. - Gradually remove temporary dams when operations are complete so that released impoundments do not discharge sediment into the stream flow. - When diverting water from streams, maintain bypass flows that ensure continuous surface flow in downstream reaches, and keep habitat in downstream reaches in good condition. - Locate approaches as close to perpendicular as possible to prevent stream bank excavation. - Treat approaches and drafting pads to prevent sediment production and delivery to a watercourse or waterhole. Armor approaches as necessary from the end of the approach nearest a stream for a minimum of 50 feet, or to the nearest drainage structure (e.g., waterbar or rolling dip) or point where road drainage does not drain toward the stream. - Armor areas subject to high floods to prevent erosion and sediment delivery to water courses. - Install effective erosion control devices (e.g., gravel berms or water bars) where overflow runoff from water trucks or storage tanks may enter the stream, - During construction, check all water-drafting vehicles daily and repair as necessary to prevent leaks of petroleum products from entering RCAs. Water-drafting vehicles shall contain petroleum-absorbent pads, which are placed under vehicles before drafting. Water-drafting vehicles shall contain petroleum spill kits. Dispose of absorbent pads according to the Hazardous Response Plan. 	<p>Regional BMPs</p> <p>2.5 Water Source Development and Utilization</p> <p>2.13 Erosion Control Plans</p> <p>National Core BMPs</p> <p>WatUses-3 Administrative Water Developments</p> <p>AqEco-2 Operations in Aquatic Ecosystems</p> <p>Forest Plan S&Gs</p> <p>189 (RCO 2)</p> <p>190 (RCO 4)</p> <p>190 (RCO 4)</p> <p>Locations: all water drafting sites for construction and Camp operations</p>	<p>Regional BMPs</p> <p>2.5 Water Source Development and Utilization</p> <p>2.13 Erosion Control Plans</p> <p>National Core BMPs</p> <p>WatUses-3 Administrative Water Developments</p> <p>AqEco-2 Operations in Aquatic Ecosystems</p> <p>Forest Plan S&Gs</p> <p>189 (RCO 2)</p> <p>190 (RCO 4)</p> <p>190 (RCO 4)</p> <p>Locations: all water drafting sites.</p>
<p>Servicing, Refueling, and Cleaning Equipment and Parking/Staging Areas</p> <ul style="list-style-type: none"> - Allow temporary refueling and servicing only at approved sites. - Rehabilitate temporary staging, parking, and refueling/servicing areas immediately following use. 	<p>Regional BMPs</p> <p>2.10 Parking and Staging Areas</p> <p>2.11 Equipment Refueling and Servicing</p> <p>National Core BMPs</p> <p>Road-9 Parking and Staging Areas</p>	<p>Regional BMPs</p> <p>2-10 Parking and Staging Areas</p> <p>2-11 Equipment Refueling and Servicing</p> <p>National Core BMPs</p> <p>Road-9 Parking and Staging Areas</p>

TABLE A-2 BEST MANAGEMENT PRACTICES

Management Requirements	BMPs/Forest Plan ² /Locations	
	Alternative 1 (Proposed Action)	Alternative 2 (Abandonment)
<ul style="list-style-type: none"> - A Spill Prevention and Containment and Counter Measures (SPCC) plan is required where total oil products on site in above-ground storage tanks exceed 1320 gallons or where a single container exceeds 660 gallons. Review and ensure spill plans are up-to-date. - Report spills and initiate appropriate clean-up action in accordance with applicable State and Federal laws, rules and regulations. The Forest hazardous materials coordinator's name and phone number shall be available to Forest Service personnel who administer or manage activities utilizing petroleum-powered equipment. - Remove contaminated soil and other material from NFS lands and dispose of this material in a manner according to controlling regulations. - Install temporary wash sites only in areas where the water and residue can be adequately collected and either filtered on site or conveyed to an appropriate wastewater treatment facility. 	<p>Road-10 Equipment Refueling and Servicing Fac-7 Vehicle and Equipment Wash Water</p> <p>Forest Plan S&Gs 189 (RCO 1)</p> <p>Locations: designated temporary construction refueling, servicing and cleaning sites and parking/staging areas</p>	<p>Road-10 Equipment Refueling and Servicing Fac-7 Vehicle and Equipment Wash Water</p> <p>Forest Plan S&Gs 189 (RCO 1)</p> <p>Locations: designated temporary construction refueling, servicing and cleaning sites and parking/staging areas</p>
<p>Slope and Soil Moisture Limitations</p> <ul style="list-style-type: none"> - Avoid all ground disturbing construction activities during wet winter months. 	<p>Regional BMPs 5.6 Soil Moisture Limitations for Mechanical Equipment Operations</p> <p>National Core BMPs Veg-2 Erosion Prevention and Control</p> <p>Locations: Throughout Camp construction area.</p>	<p>Regional BMPs 5-6 Soil Moisture Limitations for Mechanical Equipment Operations</p> <p>National Core BMPs Veg-2 Erosion Prevention and Control</p> <p>Locations: Throughout Camp construction area.</p>
<p>Vegetation</p> <ul style="list-style-type: none"> - Hydromulch all disturbed lands and install other erosion control measures such as straw wattles at 10 foot on center. - Implement a revegetation plan for all areas disturbed by Camp construction and burned areas sufficient to achieve ROS and VQOs - Stabilize uphill side slopes to reduce erosion - Provide inlets, and energy dissipation at discharge points. 	<p>Regional BMPs 1-13 Erosion Prevention and Control Measures During Operations 5.1 Soil-disturbing Treatments on the Contour 5.4 Revegetation of Surface-disturbed Areas 5.5 Disposal of Organic Debris</p> <p>National Core BMPs Veg-1 Vegetation Management Planning Veg-2 Erosion Prevention and Control Veg-3 Aquatic Management Zones</p> <p>Forest Plan S&Gs 57 Soil Support Services (13-A) 57 Soil Hydrologic Functions Soil Environmental Health (13-C) 189 (RCO 1)</p> <p>Locations: all graded and disturbed areas.</p>	<p>Regional BMPs 1-13 Erosion Prevention and Control Measures During Operations 5.1 Soil-disturbing Treatments on the Contour 5.4 Revegetation of Surface-disturbed Areas 5.5 Disposal of Organic Debris</p> <p>National Core BMPs Veg-1 Vegetation Management Planning Veg-2 Erosion Prevention and Control Veg-3 Aquatic Management Zones</p> <p>Forest Plan S&Gs 57 Soil Support Services (13-A) 57 Soil Hydrologic Functions Soil Environmental Health (13-C) 189 (RCO 1)</p> <p>Locations: all graded and disturbed areas.</p>

TABLE A-2 BEST MANAGEMENT PRACTICES

Management Requirements	BMPs/Forest Plan ² /Locations	
	Alternative 1 (Proposed Action)	Alternative 2 (Abandonment)
<p>Water Quality Monitoring</p> <ul style="list-style-type: none"> - Conduct implementation and effectiveness monitoring using the Best Management Practices Evaluation Program (BMPEP) (USDA 2002) and the National Core Monitoring Protocols (FS-990b) (USDA 2012). - Conduct project-level in-channel monitoring as required in the Water Quality Management Handbook (USDA 2011). 	<p>Regional BMPs</p> <p>7.6 Water Quality Monitoring</p> <p>Locations: Monitoring locations at water draw location upstream from Camp use areas and downstream from Camp.</p>	
<p>Employee Training and Visitor Education</p> <ul style="list-style-type: none"> - Encourage staff and campers through the use of signs, pamphlets, and program contact to conduct their activities in a manner that will not degrade water quality. 	<p>Regional BMPs</p> <p>7.6 Water Quality Monitoring</p>	
<p>Cumulative Watershed Effects (CWE) Analysis</p> <ul style="list-style-type: none"> - Conduct CWE analysis for the project. 	<p>Regional BMPs</p> <p>7.8 Cumulative Off-Site Watershed Effects</p> <p>Locations: All activities within the Camp area.</p>	<p>Regional BMPs</p> <p>7-8 Cumulative Off-Site Watershed Effects</p> <p>Locations: All activities within areas where facilities will be removed.</p>

**MITIGATION MONITORING AND REPORTING PROGRAM
CITY OF BERKELEY TUOLUMNE CAMP PERMIT (46690) PROJECT**

**Parks, Recreation & Waterfront Department
City of Berkeley**

December 2018

MITIGATION MONITORING AND REPORTING PROGRAM CITY OF BERKELEY TUOLUMNE CAMP PERMIT (46690) PROJECT

1.0 INTRODUCTION

1.1 Background

When adopting a Mitigated Negative Declaration, Public Resources Code section 21081.6(a) requires a Lead Agency adopt a monitoring or reporting program. The Lead Agency must adopt the monitoring or reporting program as a condition of project approval to mitigate significant effects on the environment. The monitoring program must be designed to ensure compliance during project implementation to mitigate or avoid significant environmental effects.

1.2 Purpose

This Mitigation Monitoring and Reporting Program (MMRP) is designed to serve as a tool to manage the evaluation of project compliance with mitigation measures identified in the *Mitigated Negative Declaration/Initial Study for the City of Berkeley Tuolumne Camp Permit (46690) Project* (MND/IS). This MMRP will be used by the City of Berkeley (City) to verify inclusion of required project design features and implementation of mitigation measures. The MMRP provides a summary of mitigation implementation for the City, other public agencies and the community to determine compliance with the implementation of the mitigation measures identified in the MND/IS.

2.0 MITIGATION MONITORING AND REPORTING PROGRAM

The MMRP identifies Project mitigation measures and their implementation to document compliance. The City shall implement the MMRP as follows:

- City is responsible for coordination of the MMRP with all responsible parties.
- City will include all appropriate construction-related mitigation requirements in construction documents (plans and specifications).
- City has overall responsibility for confirming compliance with all mitigation measures identified in the MMRP. Agencies and consultants assigned responsibility for implementing specific mitigation measures shall provide mitigation confirmation, including copies of specified documents, and submit to Liza McNulty, Program Manager. Email: lmcnulty@cityofberkeley.info.
- The MMRP will be available for public review at the Parks Recreation & Waterfront: 2180 Milvia Street, Third floor, Berkeley, CA 94704 and on the City website: <https://www.cityofberkeley.info>.

**CITY OF BERKELEY TUOLUMNE CAMP PERMIT (46690) PROJECT
MITIGATION MONITORING AND REPORTING PROGRAM**

MITIGATION MEASURE	One-time or On-going	Responsible for Implementation	Responsible for Verification	Form of Verification	Comments/ Special instructions	Initials	Date
Prior to Final Design/Preparation of Construction Drawings							
<p>AES-1: In order to meet a near-term Visual Quality Objective of Modification, the BTC Facilities shall be designed to follow the <i>Design Narrative/Built Environmental Image Guidelines</i> (2M Associates 2017) for the project. Design documents (90 percent completion) will be submitted to the Forest Service for review and comment for consistency with the guidelines.</p>	One-time for each structure, revegetation area, and above-ground infrastructure facilities.	Architect	Forest Service City of Berkeley	Construction drawings			
<p>AES-2: In order to screen project facilities and meet a Visual Quality Objective of Partial Retention a revegetation plan for the Hardin Flat road corridor, burned areas, and areas disturbed by construction will be prepared and implemented emphasizing:</p> <ul style="list-style-type: none"> • Feathered screening between Hardin Flat Road and BTC facilities. • Dense riparian vegetation and conifers shading of the river, Thimbleberry Creek, and related drainages. <p>Planting program design documents (90 percent completion) will be submitted to the Forest Service for review and comment for consistency Forest standards.</p>	On-going until all planting areas identified in the revegetation plan are completed.	Landscape Architect	Forest Service City of Berkeley	Revegetation Plan Planting program design documents			
<p>AES-3: To minimize visibility and to reduce the potential impacts of lighting as seen from Hardin Flat Road:</p> <ul style="list-style-type: none"> • All outdoor lighting shall be dark sky-compliant and consistent with California Green Building Standards Code Section 5.106.8 Light Pollution Reduction. 	One-time	Architect	Forest Service Tuolumne County City of Berkeley	Construction drawings			

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MITIGATION MEASURE	One-time or On-going	Responsible for Implementation	Responsible for Verification	Form of Verification	Comments/ Special instructions	Initials	Date
Prior to Final Design/Preparation of Construction Drawings – continued							
AES-3 (cont.) <ul style="list-style-type: none"> • All light fixtures shall include shrouds (either fixed or adjustable), other shielding, or be directed in such a way as to block direct light as seen from Hardin Flat Road. • Lighting that is not required during nighttime hours shall be controlled by the use of timed switches and/or motion detector activation controls so lights are only on when necessary. 							
AES-4: To minimize visibility and to reduce the potential impacts of glare as seen from Hardin Flat Road: <ul style="list-style-type: none"> • Structures, including roofs, shall use non-reflective, earth-toned materials that match the soil and vegetation colors of the backdrop characteristic landscape. • All structure windows and doors shall use non-reflective glass. 	One-time	Architect	Forest Service City of Berkeley	Construction drawings			
GEO-1: Detailed geotechnical investigations shall be performed prior to the design of all buildings and the pedestrian/utility bridge. Buildings and bridges shall be designed to withstand seismic and soil loads consistent with California Building Code.	One-time for each building and the bridge	Geo-technical Engineer	Forest Service Tuolumne County City of Berkeley	Geotechnical Investigation Reports			
HYDRO-1: During detail design of BTC facilities and related site improvements, submit the US Army Corps of Engineers Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act permit applications and associated documentation to the Forest Service for review and comment.	One-time	City of Berkeley	Forest Service	Completed Section 404 application and Section 10 application and support reports and documentation			

**CITY OF BERKELEY TUOLUMNE CAMP PERMIT (46690) PROJECT
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MITIGATION MEASURE	One-time or On-going	Responsible for Implementation	Responsible for Verification	Form of Verification	Comments/ Special instructions	Initials	Date
Prior to Final Design/Preparation of Construction Drawings – continued							
<p>HYDRO-3: During detail design of BTC facilities and related site improvements, submit permit applications and associated documentation for the following to Forest Service for review and comment:</p> <p>a. California Department of Fish and Wildlife (CDFW): Application, plans, and specifications for work to obtain a Stream Alteration Agreement pursuant to Fish and Game Code sections 1600 <i>et seq.</i></p>	One-time	City of Berkeley	Forest Service	Completed California Fish and Game Code Section 1600 application, plans and specifications			
<p>HYDRO-5: During detail design of BTC facilities and related site improvements, submit permit applications and associated documentation for the following to Forest Service for review and comment:</p> <p>a. California Water Quality Control Board, Division of Drinking Water: Application, plans, and specifications for permit for surface water appropriation and treatment for drinking water under the Porter-Cologne Water Quality Control Act of 1975 and Safe Drinking Water Act (Pub. L. 93-523).</p> <p>b. Tuolumne County On-site Sewage Treatment and Disposal System Certification including percolation tests and soil profiles, system design plans and specifications (plot plan; grading plan; description of groundwater and soils; description of monitoring devices, system operation and function; and site evaluation and testing) necessary to obtain Certification of an on-site sewage treatment and disposal system pursuant to Tuolumne County Code Section 13.08.</p>	One-time	City of Berkeley	Forest Service Tuolumne County California Water Quality Control Board Region 5	<p>Completed Drinking Water Quality application</p> <p>Completed Tuolumne County On-site Sewage Treatment and Disposal System Certification application</p> <p>Completed percolation tests, soil profiles and other required support documents</p>			

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MITIGATION MEASURE	One-time or On-going	Responsible for Implementation	Responsible for Verification	Form of Verification	Comments/ Special instructions	Initials	Date
Prior to Final Design/Preparation of Construction Drawings – continued							
LUP-1: Obtain confirmation from the Forest Service that the Project is consistent with the <i>Forest Plan Direction</i> prior to Camp construction.	One-time	City of Berkeley	Forest Service	Design documents Construction Drawings Grading Plan Revegetation Plan			
Prior to Demolition and Construction							
<p>AIR-1: A construction-phase Dust Control Plan (DCP) shall be prepared prior to the start of any Project construction activity. The DCP shall include, at a minimum, all basic emission control measures listed below:</p> <p><i>Basic Control Measures</i></p> <ul style="list-style-type: none"> • All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover. • All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant. • All land clearing, grubbing, scraping, excavation, land leveling, grading, cut & fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking. 	On-going throughout construction activities.	General Contractor	Tuolumne County Air Pollution Control District (TCAPCD)	Dust Control Plan			

**CITY OF BERKELEY TUOLUMNE CAMP PERMIT (46690) PROJECT
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MITIGATION MEASURE	One-time or On-going	Responsible for Implementation	Responsible for Verification	Form of Verification	Comments/ Special instructions	Initials	Date
Prior to Demolition and Construction - continued							
<p>AIR-1 (cont.)</p> <ul style="list-style-type: none"> • With the demolition of buildings, all exterior surfaces of the building shall be wetted during demolition. • When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained. • All operations shall limit or expeditiously remove the accumulation of mud or dirt from Hardin Flat Road at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions; use of blower devices is expressly forbidden.) • Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant. • Any site with 150 or more vehicle trips per day shall prevent carryout and track-out. <p><i>Enhanced Control Measures (as deemed necessary and appropriate by USFS)</i></p> <ul style="list-style-type: none"> • Limit traffic speeds on unpaved roads to 15 mph. 							

**CITY OF BERKELEY TUOLUMNE CAMP PERMIT (46690) PROJECT
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MITIGATION MEASURE	One-time or On-going	Responsible for Implementation	Responsible for Verification	Form of Verification	Comments/ Special instructions	Initials	Date
Prior to Demolition and Construction - continued							
AIR-1 (cont.) <ul style="list-style-type: none"> Install sandbags or other erosion control measures to prevent silt runoff to public roadways from areas with a slope greater than one percent. 							
<i>Additional Control Measures (as deemed necessary and appropriate by USFS)</i> <ul style="list-style-type: none"> Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site. Install wind breaks at windward side(s) of construction areas. Suspend excavation and grading activity when winds exceed 20 mph, or when fugitive dust exiting the site exceeds the 20 percent opacity limit, regardless of wind speed. Limit area subject to excavation, grading, and other construction activity at any one time. 							
AIR-2: Acquire burn permits from the Tuolumne County Air Pollution Control District. The California Air Resources Board provides daily information on "burn" or "no burn" conditions. Burning shall be prohibited on "no burn" days. Design and implement burn plans to minimize particulate emissions. Notify the Groveland District Wildlife Biologist prior to pile burning to minimize disturbance to protected or sensitive species.	On-going	City of Berkeley	TCAPCD Groveland District Wildlife Biologist	Burn Permit Burn Plan			

**CITY OF BERKELEY TUOLUMNE CAMP PERMIT (46690) PROJECT
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MITIGATION MEASURE	One-time or On-going	Responsible for Implementation	Responsible for Verification	Form of Verification	Comments/ Special instructions	Initials	Date
Prior to Demolition and Construction - continued							
BIO-1: Conduct a pre-construction survey to identify if the western pond turtle are present within the construction areas.	One-time	Qualified Biologist	Forest Service Biologist	Pre-construction survey report prepared by Qualified Biologist	Construction specifications shall incorporate pre-construction survey requirement		
BIO-2: BTC project construction workers shall be trained regarding the western pond turtle, including identification, habitat requirements, and the importance of minimizing physical disturbance to individuals during construction.	One-time	Qualified Biologist	Forest Service City of Berkeley	Training Class			
BIO-5: Conduct a pre-construction plant survey the spring prior to Project construction. Flag and avoid new occurrences of sensitive plants. Notify the Groveland Ranger District Botanist to determine any additional measures.	One-time	Qualified Biologist	Groveland Ranger District Botanist	Pre-construction survey report prepared by Qualified Biologist	Construction specifications shall incorporate pre-construction survey requirement and mitigation		
BIO-6: During breeding season (February 15 to September 15) conduct pre-construction nest surveys for migratory birds, California spotted owls, and northern goshawks within ¼ mile of construction activities. If active nests are discovered, protective measures such as nest buffers or limited operations would be implemented in consultation with a USFS biologist.	One-time	Qualified Biologist	Forest Service Biologist	Pre-construction survey report prepared by Qualified Biologist	Construction specifications shall incorporate pre-construction survey requirement and mitigation		
BIO-7: Pre-activity surveys for roosting bats would be conducted at all suitable roost trees or structures to be removed by project activities. If any FSS bat species are discovered during the surveys, nest and roost trees would be protected unless the trees pose an imminent safety concern.	One-time	Qualified Biologist	Forest Service Biologist	Pre-construction survey report prepared by Qualified Biologist	Construction specifications shall incorporate pre-construction survey requirement and mitigation		

**CITY OF BERKELEY TUOLUMNE CAMP PERMIT (46690) PROJECT
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MITIGATION MEASURE	One-time or On-going	Responsible for Implementation	Responsible for Verification	Form of Verification	Comments/ Special instructions	Initials	Date
Prior to Demolition and Construction – continued							
BIO-8: If any Forest Service Sensitive (FSS) or Federal-listed terrestrial wildlife species are discovered within the BTC project site area prior to or during ground disturbance and construction activities, such activities shall cease and not restart until USFS biologist is consulted, recommended measures are implemented and USFS biologist certifies that continued construction would not cause any harm to listed species.	On-going through completion of construction activities	Qualified Biologist	Forest Service Biologist	Forest Service Biologist recommendations			
CUL-3: Buck and pole fencing shall be installed to protect cultural resources. Fencing shall be constructed by hand with no excavation.	One-time	Fencing Contractor	Forest Service City of Berkeley	Fence Design Drawings and Specifications	Repairs to fencing over time shall be completed as necessary		
HYDRO-2: Prior to construction, update the floodplain map to reflect updated base mapping, base flood elevations, final structure placement, and finished floor elevations and submit to the Forest Service and FEMA for review and acceptance.	One-time	Architect	Forest Service FEMA	Floodplain Map Site Plan Construction Drawings			
During Construction							
BIO-3: Major site grading and underground utility construction activities shall be completed during the dry season to minimize risk of harming or displacing overwintering turtles.	On-going through completion of construction activities	General Contractor	Forest Service Tuolumne County	Construction Schedule			
BIO-4: If western pond turtles are discovered in the immediate vicinity of construction activity, construction activity shall cease and a qualified biologist will relocate the turtle to suitable habitat outside of the BTC Project area.	On-going through completion of construction activities	Qualified Biologist	Forest Service Biologist	Relocation Report prepared by Qualified Biologist			

**CITY OF BERKELEY TUOLUMNE CAMP PERMIT (46690) PROJECT
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MITIGATION MEASURE	One-time or On-going	Responsible for Implementation	Responsible for Verification	Form of Verification	Comments/ Special instructions	Initials	Date
During Construction – continued							
<p>BIO-9: Follow applicable Forest Service Manual (FSM) 2080 Noxious Weed Management related to construction activities to include, but not be limited to:</p> <ul style="list-style-type: none"> • All vehicles and equipment that go off road must be free of non-native soil, mud (wet or dried), seeds, vegetative matter or other debris that could contain seeds in order to prevent new infestations of noxious weeds in the project area. Dust or very light dirt, which would not contain weed seed, is not a concern. • Flag and avoid noxious weed populations if present. In places where noxious weeds cover large areas, mechanical treatments can be done within sites, but equipment must be cleaned before leaving the area. • Do not stage equipment, material or personnel in areas with noxious weed infestations. • After using equipment in infested areas, clean equipment so that it is free of soil, seeds, vegetative matter or other debris prior to being moved off site. • Use certified weed-free mulches where available, mulches with low risk of weed introduction where certified weed-free is not available, and certified weed-free seed mixes. Seed mixes must conform to the Region 5 Policy on the Use of Native Plant Material in Restoration or Revegetation Projects. • Where soil stabilization is needed, use crushed rock, drain rock, riprap and soil fill obtained from weed-free sources. • Treat invasive plants and other weeds using manual (hand or mechanical) methods only. 	On-going through completion of construction activities	General Contractor	Forest Service City of Berkeley	List of applicable Noxious Weed Management measures identified in FSM 2080	Construction specifications shall incorporate applicable Noxious Weed Management measures from FSM 2080		

**CITY OF BERKELEY TUOLUMNE CAMP PERMIT (46690) PROJECT
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MITIGATION MEASURE	One-time or On-going	Responsible for Implementation	Responsible for Verification	Form of Verification	Comments/ Special instructions	Initials	Date
During Construction – continued							
CUL-1: Remove specific existing structures to protect sensitive resources.	On-going throughout removal of designated structures	City of Berkeley	Forest Service	Construction plans and specifications that incorporate measures to protect cultural resources during removal of structures			
<p>CUL-2: Cultural resources shall be protected through application of Standard Protection Measures as determined by Programmatic Agreement Among the USDA, Forest Service, Pacific Southwest Region (Region 5), California State Historic Preservation Officer, Nevada State Historic Preservation Officer and the Advisor Council on Historic Preservation Regarding the Process for Compliance with Section 106 of the National Historic Preservation Act for Management of Historic Properties by the National Forests of the Pacific Southwest Region (Regional PA), signed February 2013. In addition:</p> <ul style="list-style-type: none"> • Natural plant succession will be allowed to occur within cultural resource site boundaries. • Notify the Forest Service cultural resource specialist if a new cultural resource site is discovered during project implementation and cease all activities within 150 feet of the resource until consultations are completed. 	On-going throughout construction activities	City of Berkeley	Forest Service	Construction plans and specifications that incorporate measures to protect cultural resources during construction activities			
GEO-2: To minimize soil erosion during construction activities, follow FSM 2550 Soil Management R5 Supplement (USDA 2012) and Soil Management Direction identified in the Forest Plan Direction (USDA 2017, p. 57-58).	On-going through completion of construction activities	General Contractor	Forest Service	Compliance with applicable FSM 2550 Soil Management and Forest Plan Direction Soil Management Practices	Construction specifications shall incorporate applicable measures		

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MITIGATION MEASURE	One-time or On-going	Responsible for Implementation	Responsible for Verification	Form of Verification	Comments/ Special instructions	Initials	Date
During Construction – continued							
<p>HYDRO-8: Follow Forest Plan Direction (USDA, 2017, pp. 187-191) for protection of Riparian Conservation Areas (RCAs) through compliance with the Riparian Conservation Objectives (RCOs). The project shall:</p> <p>a. Prepare an Erosion Control Plan / Stormwater Pollution Prevention Control Plan and BMP checklist as part of the construction documentation for Forest Supervisor approval prior to ground-disturbing activities. Reference Appendix A actions.</p> <p>b. Prior to construction activities, delineate riparian zones around all streams and special aquatic features within the permit area to be retained. Exclude ground-disturbing mechanized equipment from operating within riparian zones to be retained.</p> <p>c. Clean equipment used for instream work prior to entering the water body. Remove external oil, grease, dirt and mud from the equipment and repair leaks prior to arriving at the project site. Inspect all equipment before unloading at site. Inspect equipment daily for leaks or accumulations of grease, and correct identified problems before entering streams or areas that drain directly to water bodies. Remove all dirt and plant parts to ensure that noxious weeds and aquatic invasive species are not brought to the site.</p> <p>– Locate construction access perpendicular to the channel and minimize the number of channel crossings and channel damage. Upon completion of use, repair damage to the stream course, including banks and</p>	On-going throughout construction activities	City of Berkeley	Forest Service Tuolumne County	Erosion Control Plan Stormwater Pollution Prevention Control Plan BMP Checklist Delineation of riparian zones around streams located within permit area. SPCC Plan	Construction specifications shall incorporate Forest Plan Direction measures for protection of Riparian Conservation Areas		

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MITIGATION MEASURE	One-time or On-going	Responsible for Implementation	Responsible for Verification	Form of Verification	Comments/ Special instructions	Initials	Date
During Construction – continued							
<p>HYDRO-8 (cont.)</p> <p>channels, to maintain a hydrologic ally stable channel.</p> <ul style="list-style-type: none"> – Remove all project debris from the stream in a manner that will cause the least disturbance. – Minimize streambank and riparian area excavation during construction: stabilize adjacent areas disturbed during construction using surface cover (mulch), retaining structures, and/or mechanical stabilization materials. – Keep excavated materials out of channels, floodplains, and wetlands. Install silt fences or other sediment- and debris-retention barriers between the water body and construction material stockpiles and wastes. Dispose of unsuitable material in approved waste areas outside of the RCA. – Conduct operations during the least critical periods for water and aquatic resources: when streams are dry or during low-water conditions. <p>d. Locate equipment staging and mitigate by use of erosion prevention measures to avoid sedimentation effects and delivery to a watercourse.</p> <p>e. Implement erosion control measures as needed on all lands disturbed by construction following completion of construction. Reference Appendix A actions.</p>							

**CITY OF BERKELEY TUOLUMNE CAMP PERMIT (46690) PROJECT
MITIGATION MONITORING AND REPORTING PROGRAM**

MITIGATION MEASURE	One-time or On-going	Responsible for Implementation	Responsible for Verification	Form of Verification	Comments/ Special instructions	Initials	Date
During Construction – continued							
<p>HYDRO-8 (cont.)</p> <p>f. Conduct watering during construction for dust abatement using approved existing water source locations. Treat construction approaches and staging areas to prevent sediment production and delivery to a watercourse.</p> <ul style="list-style-type: none"> – Check all water-drafting vehicles daily and repair as necessary to prevent leaks of petroleum products from entering RCAs. Water-drafting vehicles will contain petroleum-absorbent pads, which are placed under vehicles before drafting. Water-drafting vehicles will contain petroleum spill kits. Dispose of absorbent pads according to the Hazardous Response Plan. – Use screening devices for water drafting pumps. Use pumps with low entry velocity to minimize removal of aquatic species, including juvenile fish, amphibian egg masses and tadpoles, from aquatic habitats. Pump intake screening specification will be provided and put in the project file. – Prohibit water drafting by more than one truck at a time. <p>g. Allow temporary refueling and servicing only at approved construction staging sites. Rehabilitate temporary staging, parking, and refueling/ servicing areas immediately following use.</p> <ul style="list-style-type: none"> – Prepare a Spill Prevention and Containment and Counter Measures (SPCC) plan where total oil products on site in above-ground storage tanks exceed 1320 gallons. Review spill plans to ensure they are up-to-date. 							

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MITIGATION MEASURE	One-time or On-going	Responsible for Implementation	Responsible for Verification	Form of Verification	Comments/ Special instructions	Initials	Date
During Construction – continued							
<p>HYDRO-8 (cont.)</p> <ul style="list-style-type: none"> – Install contour berms and trenches around vehicle service and refueling areas, chemical storage and use areas, and waste dumps to fully contain spills. Use liners as needed to prevent seepage to groundwater. – Report spills and initiate appropriate clean-up action in accordance with applicable state and Federal laws, rules and regulations. The hazardous materials coordinator's name and phone number will be available to Forest Service personnel who administer or manage activities utilizing petroleum-powered equipment. – Remove contaminated soil and other material from Forest Service lands and dispose of this material in a manner according to controlling regulations. <p>h. Place burn piles a minimum of 50 feet away from the South Fork Tuolumne River, Thimbleberry Creek, or intermittent streams and 25 feet away from ephemeral drainages unless otherwise approved by a hydrologist and/or soil scientist. Locate piles outside of areas that may receive runoff from roads. Burn piles in the fall or winter.</p> <p>i. Conduct implementation and effectiveness monitoring using the Best Management Practices Evaluation Program and the National Core BMP Monitoring Technical Guide (Volume 2, FS-990b, in prep) as a supplement.</p>							

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MITIGATION MONITORING AND REPORTING PROGRAM**

MITIGATION MEASURE	One-time or On-going	Responsible for Implementation	Responsible for Verification	Form of Verification	Comments/ Special instructions	Initials	Date
During Project Operation							
AIR-2: Acquire burn permits from the Tuolumne County Air Pollution Control District. The California Air Resources Board provides daily information on "burn" or "no burn" conditions. Design and implement burn plans to minimize particulate emissions. Notify the Groveland District Wildlife Biologist prior to pile burning to minimize disturbance to protected or sensitive species.	On-going	City of Berkeley	TCAPCD Groveland District Wildlife Biologist	Annual Burn Permit Burn Plan	Burn Plan shall be updated as needed to account for modification to facilities and operations at BTC		
HYDRO-4: Prior to BTC operations, provide a Camp Evacuation Plan for approval by the Forest Service that incorporates protocols and procedures for evacuation in response to summer season storm and/or winter and spring season rain-on-snow or sudden snowmelt events that may lead to high water flows.	One-time	City of Berkeley	Forest Service	Camp Evacuation Plan	Camp Evacuation Plan shall be updated as needed to account for modification to facilities and operations at BTC		
HYDRO-6: Prior to the beginning (April) and after each BTC summer operating period (October), test the water quality of the South Fork Tuolumne River both at the Hardin Flat Road bridge and at the downstream boundary of the permit area. File results with the Groveland Ranger District.	On-going	City of Berkeley	Groveland Ranger District	Annual water quality testing report for the period of April - October			
HYDRO-7: Protect beneficial uses of water through implementation of Best Management Practices (BMPs) in accordance with Regional Water Quality Management Plan (USDA 2011), the National BMPs for Water Quality Management on National Forest System Lands (USDA 2012), and the Forest Plan Direction (USDA, 2017).	On-going	City of Berkeley	Forest Service	BMP Guidelines Binder identifying management and monitoring of water quality within the permit area	Update the BMP Binder as needed in response to changing water quality conditions and revisions to Fed and State standards		
NOISE-1: The speaker system for the BTC stage shall be designed to ensure it does not exceed noise levels of 50 L _{eq} dB.	On-going	City of Berkeley	Forest Service City of Berkeley	Annual establishment of maximum speaker setting	At boundary of the Permit Area via handheld SPL meter		