FINAL
MITIGATED NEGATIVE DECLARATION

CROWLEY LAKE FISH CAMP PROJECT

California State Clearinghouse No. 2018022009

LEAD AGENCY:

County of Mono Community Development Department
437 Old Mammoth Road, Suite 220 ♦ P.O. Box 347 ♦ Mammoth Lakes, California 93546
Contact: Gerry Le Francois (760) 924-1810

PROJECT APPLICANT:

John R. Frederickson
1149 S. Landing Road ♦ Crowley Lake, California 93546
Contact: Abbie Thomason, Fish Camp Manager (760) 935-4099

MND PREPARER:

Bauer Planning & Environmental Services, Inc.
525 Manzanita, Unit #7, Mammoth Lakes, CA 93546 ♦ 1271 Tropicana Lane, Santa Ana, California 92705
Contact: Sandra Bauer (714) 397-3301 (cell) ♦ (714) 508.2522 (office)

5 APRIL 2018

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Contact: Gerry Le Francois (760) 924-1810 ♦ glefrancois@mono.ca.gov

5 APRIL 2018

Consistent with requirements of the California Environmental Quality Act (CEQA), the above-referenced Initial Study and Mitigated Negative Declaration (IS/MND) was prepared by Mono County Community Development Department (CDD) as Lead Agency for the project. The document was distributed on 2 February 2018 for a 30-day public review by various agencies, groups and the general public. The review period for the MND closed on 15 March 2018. The Draft MND is provided in its entirety as Attachment C to this Final MND.

No comment letters were received on the Initial Study and Proposed Mitigated Negative Declaration, and thus no responses have been prepared. Additionally, no new or revised information has been developed concerning the project proposal. There are no changes to the information provided in the Draft IS/MND, or to the conclusion that all project impacts will be less than significant with implementation of the mitigation measures provided in Attachment A.

The findings contained in the Initial Study and associated record of information support approval of the Mitigated Negative Declaration by the Mono County Planning Commission. The following attachments are provided:

ATTACHMENT A: **Final Mitigation Implementation & Monitoring Program**

ATTACHMENT B: **Notice of Determination**

ATTACHMENT C: **Draft Mitigated Negative Declaration**

FINAL MITIGATED NEGATIVE DECLARATION
CROWLEY LAKE FISH CAMP PROJECT

ATTACHMENT A

Final Mitigation Implementation & Monitoring Program

CROWLEY LAKE FISH CAMP MND

MITIGATION IMPLEMENTATION & MONITORING PROGRAM

State Clearinghouse No. 2018022009

PURPOSE: This section lists the mitigation measures recommended in the Mitigated Negative Declaration (MND) for the proposed Crowley Lake Fish Camp project. In compliance with California Public Resources Code §21081.6 and 21081.7 (which require public agencies to monitor, report, and ensure satisfactory completion of mitigation measures adopted to mitigate or avoid potentially significant environmental effects of a project), the mitigation measures are provided in the form of a Comprehensive Mitigation Monitoring and Reporting Plan.

ADOPTION OF MITIGATION MEASURES: As part of deliberations concerning the proposed Crowley Lake Fish Camp project approvals, the Mono County Planning Commission will be required to consider adoption of the mitigation measures recommended herein.

MONITORING AND REPORTING PROCEDURES: The Mono County Planning Commission is responsible for ensuring that all adopted mitigation measures are implemented in the manner outlined in this Program. County staff is responsible for ensuring that mitigation measures are satisfactorily monitored, and for reporting to the Planning Commission regarding progress in fulfilling the mitigation obligations. The Planning Commission, acting on behalf of the residents of Mono County, is responsible for considering the information submitted, and determining whether the measures are being implemented and enforced as intended in this Mitigation Monitoring and Reporting Program. It is the responsibility of the Planning Commission to amend these mitigation measures if necessary to achieve the environmental protections outlined herein.

REGULATORY AND CODE COMPLIANCE STANDARDS: The project is subject to a number of uniform code requirements and standard conditions of approval. Many of these requirements have been established to safeguard environmental resources, and/or to promulgate environmental goals and objectives. If the proposed Crowley Lake Fish Camp project is approved, compliance with these uniform regulations will be mandatory (not discretionary). Such regulations do not conform to the strict definition of mitigation. Although regulatory standards and codes are not necessarily incorporated into this mitigation program, the project will of course be required to comply fully with all relevant regulatory and code compliance standards.

COMPILATION OF MITIGATION MEASURES

The Mitigation Implementation and Monitoring Program and Form presents the full set of mitigation measures outlined in the Final Crowley Lake Fish Camp MND. Implementation of the mitigation measures herein would reduce all of the potentially significant impacts of the proposed Crowley Lake Fish Camp project to less than significant levels. Note that three of the measures (AQ-1, AQ-2, and N-1) are advisory recommendations that would further minimize impacts found to be less than significant.

CROWLEY LAKE FISH CAMP FINAL MITIGATED NEGATIVE DECLARATION

MITIGATION IMPLEMENTATION AND MONITORING PROGRAM AND FORM

Project Approval Date: _____ **Project File Number**: _____

The following mitigation measures have been adopted and amended by the County of Mono Planning Commission for the Crowley Lake Fish Camp project. As such, these measures represent formal conditions of approval that shall govern implementation of the Fish Camp project as approved by the Planning Commission in April 2018. The County shall be responsible for monitoring and reporting progress on these measures until all measures are fulfilled in accordance with their original purpose and intent, as determined by the Mono County Community Development Department. This monitoring form shall be available for public review and inspection, and final project clearance shall require that all verifications included in this form have been satisfactorily completed.

MITIGATION MEASURES		TIMING	VERIFICATION OF COMPLIANCE		
			AGENCY	SIGNATURE	DATE
AESTHETICS					
AES-1	**LANDSCAPE PLAN:** A formal landscape plan shall be prepared to guide revegetation of the Fish Camp site following all new project improvements that disturb topsoil and vegetation. The plan shall include maps, a list of plant and seed materials to be used and proposed locations, identification of plant and seed sources, irrigation protocols for initial establishment, and identification of long-term maintenance requirements (if any). All plant materials and seed stock used in revegetation and any mulch applications shall be native to the eastern Sierra bioregion (which extends from Lake Tahoe on the north to Bishop on the south and east to Fallon, Nevada). Plant materials suitable for deer forage shall be used to the maximum possible extent. No long-term irrigation shall be permitted. The landscape plan shall be certified as complete by the County of Mono, Community Development Dept., prior to the start of ground-disturbing project improvements, and may subsequently be modified as appropriate if agreed upon by the project proponent and the County of Mono. All biological mitigation requirements (Measures BIO-1 through BIO-7) will be detailed in the landscape plan required by Mitigation AES-1.	Prior to issuance of any applicable County permits.			
AES-2	**LIGHTING:** All onsite exterior lighting (including existing and proposed exterior light sources) shall comply fully with requirements of the Mono County Scenic Combining Element (General Plan *Land Use Element* Chapter 8) and with requirements of the Mono County Dark Sky Regulations (General Plan Chapter 23). All required	Prior to issuance of any applicable County permits.			

	elements shall be outlined in an outdoor lighting plan to be submitted prior to formal approval of any discretionary permits or actions under review by Mono County.				
AIR QUALITY AND GREENHOUSE GASES					
AQ-1	**DUST CONTROLS: a)** Apply soil stabilizers or moisten inactive areas; b) Prepare a high wind dust control plan; c) Address previously disturbed areas if subsequent construction is delayed; d) Water exposed surfaces as needed (2-3 times each day) to avoid visible dust leaving the construction site; e) Cover all stockpiles with tarps at the end of each day or as needed; f) Provide water spray during loading and unloading of earthen materials; g) Minimize in-out traffic from construction zone; h) Cover trucks hauling dirt, sand or loose material and require trucks to maintain at least two feet of freeboard; i) Sweep streets daily if visible soil material is carried out from the construction site.	Prior to issuance of any applicable County permits. [[Note: this is an advisory mitigation measure.]]			
AQ-2	**EMISSIONS**: a) off-road construction equipment shall be well-maintained; b) a contracting preference shall be given to contractors using Tier 3 or better heavy equipment; c) 5-minute idling limits shall be enforced for on-road and off-road trucks & equipment.	Prior to issuance of any applicable County permits. [[Note: this is an advisory mitigation measure.]]			
BIOLOGICAL RESOURCES					
BIO-1	**BITTERBRUSH:** Bitterbrush shall be seeded into all areas within the likely mule deer migration corridor where it intersects the Crowley Fish Camp approach road and entry gate. Seed of locally derived (Mono County or Eastern Sierra Nevada south of Lake Tahoe) shall be applied at the rate of four pounds per acre treated. This measure will reduce to less than significant levels the potentially significant loss of a crucial resource for migrating mule deer that pass through the project site.	Prior to issuance of any applicable County permits.			
BIO-2	**25 MPH SPEED LIMIT:** To reduce the potential for vehicle-sage grouse collisions near the entry gate, vehicle speeds on the Fish Camp property (except as specified in Measure BIO-3 below) shall be set at or below 25 miles per hour, with strict enforcement. Signs shall be posted to ensure that drivers are aware of the risk of collision if speeds exceed the posted limits greater.	Ongoing.			
BIO-3	**15 MPH SPEED LIMIT:** A 15 mph speed limit and signage indicating "Wildlife Crossing – 15 mph" shall be posted and strictly enforced between the entry gate and existing campground facilities. This speed will allow drivers to avoid wildlife and minimize mortality rates. Drivers shall be informed of the potential presence of wildlife on the roadway when arriving at the entry gate.	Ongoing.			

BIO-4	**NO BARRIERS:** To reduce potential impacts on deer migration to less than significant levels, no barriers (such as fences) shall be permitted in the southern, less developed portion of the Crowley Fish Camp site. All onsite exterior lighting shall comply fully with requirements of General Plan Chapter 8 (Scenic Combining Element) and Chapter 23 (Dark Sky Regulations), as detailed in the Outdoor Lighting Plan required by Measure AES-2.	Ongoing.			
BIO-5	**DOG LEASHING REQUIRED:** To reduce potentially significant impacts associated with unleashed dogs, all Fish Camp visitors and staff shall be required to comply with full-time leashing of dogs as an advertised and enforced condition of use.	Ongoing.			
BIO-6	**TRASH STORAGE:** To reduce the potentially significant impacts associated with a potential increase in predators of locally occurring sensitive wildlife, all onsite food and trash shall be secured in a manner that prevents access by bears and ravens.	Ongoing.			
BIO-7	**FIRE HAZARD:** To reduce fire hazards associated with cheat grass and other non-native invasive species, control measures (mowing and/or tillage) will be performed in the occupied campground area every two weeks during the months of April through June (or as per the approved Landscape Plan); mowing shall be sufficient to maintain total non-native grasses standing crop below 5% absolute cover.	Ongoing.			
CULTURAL RESOURCES					
CR-1	**FUTURE SITE ASSESSMENTS:** If future development plans include any of the identified historic and/or prehistoric site areas (CLFC #1-5), a formal evaluation of the sites, including subsurface testing, shall be performed by a qualified individual, and recommendations followed.	Upon submittal of future development applications.			
CR-2	**NOTIFICATION:** Mono County (as Lead Agency) shall be notified in the event that archaeological, paleontological, or historical features are uncovered during construction of proposed project elements.	Ongoing.			
CR-3	**HUMAN REMAINS:** If human remains or burial sites are encountered during project earthwork, work in that area shall be terminated, the immediate area secured, and the Community Development Department (CDD) notified; the CDD shall then contact the County coroner and (if appropriate) interested Tribes and the Native American Heritage Commission.	Ongoing.			
HAZARDS AND HAZARDOUS MATERIALS					
HAZ-1	**PROPANE TANKS IN CUPA PERMIT:** Following county review of the current project, the Crowley Lake Fish Camp CUPA shall be updated to describe onsite propane tanks	Prior to issuance of first use permit.			

	(including the 7th tank, if approved, as well as motor oil facilities if subject to CUPA regulation) and provide information about applicable prevention, mitigation and abatement programs used onsite.				
HYDROLOGY AND WATER QUALITY					
WQ-1	**EROSION CONTROLS:** Erosion controls (including erosion control blankets, fiber rolls, filter barriers and/or settling structures) shall be used during the construction of any project elements that require ground disturbance, and shall remain in place until the disturbed surfaces have fully stabilized	Prior to issuance of applicable County permits.			
WQ-2	**RESEEDING OF DISTURBED AREAS:** Directly following construction, disturbed areas shall be reseeded with a certified weed-free seed mix comprised of locally sourced native plant materials. Seeded areas shall be watered as needed until fully established.	Prior to issuance of applicable County permits.			
WQ-3	**STABILIZATION OF FILL MOUNDS:** All existing fill mounds (including those comprised of dirt, asphalt or other materials) shall be removed or stabilized or covered within 6 months of project approval, and no new fill mounds shall be created unless they are stabilized or covered from the outset.	Prior to issuance of applicable County permits.			
NOISE					
N-1	**CONSTRUCTION TIMING:** It is recommended that construction activities be conducted during daytime hours when noise sensitivity is lower	Ongoing. [[Note: this is an advisory mitigation measure.]]			

FINAL MITIGATED NEGATIVE DECLARATION
CROWLEY LAKE FISH CAMP PROJECT

ATTACHMENT B

Notice of Determination

NOTICE OF DETERMINATION

Crowley Lake Fish Camp Project

State Clearinghouse No. 2018022009

From: Mono County Community Development Department
Post Office Box 347
Mammoth Lakes, CA 93546

To: Mono County Clerk
Post Office Box 237
Bridgeport, CA 93517

To: OPR-State Clearinghouse
Post Office Box 3044
Sacramento, CA 95812-3044

Subject: Filing of Notice of Determination in compliance with § 21152 of the Public Resources Code.

Project Title: Crowley Lake Fish Camp Project

Contact Person: Gerry Le Francois ***Phone:*** **(760) 924-1810**

Project Location: The project is located in Mono County on the western shoreline of Crowley Lake Reservoir in the community of Lake Crowley.

Project Description: Crowley Lake Fish Camp has been used as a recreational facility for over 70 years, during which time numerous uses and improvements have been made. A number of improvements predate the county's permitting process; other uses have been undertaken informally and lack necessary permits and approvals; still other improvements were undertaken pursuant to county permits and approvals. The project purposes are to ensure that all required approvals and permits are identified and obtained as needed for existing and future uses that are under the jurisdiction of Mono County, and to transfer jurisdiction over mobile home park uses on the site to the Dept. of Housing and Community Development (HCD).

This Notice is to advise that the Mono County Planning Commission has approved the above-described project on 5 April 2018 and has made the following determinations regarding the project:

1. The project *will not* have a significant effect on the environment.
2. A Mitigated Negative Declaration (MND) was prepared for this project pursuant to CEQA.
3. Mitigation measures were made a condition of the project.
4. A Statement of Overriding Considerations was not adopted for this project.
5. The MND was adopted pursuant to the provisions of CEQA.

This is to certify that the Final MND, with a record of the project approval, is available to the General Public at the Mono County Community Development Department located at 437 Old Mammoth Road, Suite 220, in the Town of Mammoth Lakes, California.

Signature: _____

Name & Title: _____

Date Received for Filing and Posting by the County Clerk: _____

FINAL MITIGATED NEGATIVE DECLARATION
CROWLEY LAKE FISH CAMP PROJECT

ATTACHMENT C

DRAFT MND

2 February 2018

DRAFT
MITIGATED NEGATIVE DECLARATION

CROWLEY LAKE FISH CAMP PROJECT

LEAD AGENCY:

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Contact: Gerry le Francois (760) 924-1810

PROJECT APPLICANT:

John R. Frederickson
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Contact: Abbie Thomason, Fish Camp Manager (760) 935-4099

MND PREPARER:

Bauer Planning & Environmental Services, Inc.
525 Manzanita, Unit #7, Mammoth Lakes, CA 93546 ♦ 1271 Tropicana Lane, Santa Ana, California 92705
Contact: Sandra Bauer (714) 397-3301 (cell) ♦ (714) 508.2522 (office)

MND REVIEW & COMMENT PERIOD:

2 February 2018 through 15 March 2018

DRAFT MITIGATED NEGATIVE DECLARATION

CROWLEY LAKE FISH CAMP PROJECT

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MND PREPARED BY:
Bauer Planning & Environmental Services, Inc.
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Contact: Sandra Bauer (714) 397-3301 (cell) ♦ (714) 508.2522 (office)

MND ISSUED: 2 FEBRUARY 2018 COMMENTS DUE BY: 15 MARCH 2018

A. INTRODUCTION

The Crowley Lake Fish Camp and Marina has been in use as a recreational facility for over 70 years, beginning shortly after Crowley Lake was created. The Los Angeles Department of Water and Power (LADWP) created Crowley Lake in 1941 as part of the construction of the Long Valley Dam for flood control and water storage. The lake is popular for trout fishing, drawing anglers from a large area for a season that begins in April and ends in October each year. The Fish Camp is run in cooperation with LADWP, and access points at the main camp in Lake Crowley and outposts in Beaver Cove and North Landing are the primary ways to access the lake.

Numerous uses and improvements have been made on the site over the past decades. Some improvements were undertaken pursuant to various county permits and approvals. A number of improvements predate the county's permitting process; other uses have been undertaken informally and lack necessary permits and approvals. On-site uses include a tackle shop and office, a grill and dining deck, employee housing, a maintenance shed, fishing docks, a large storage/warehouse building, public bathrooms, a boat marina with fueling station, dry camping spaces, living quarters for two managers who live on-site year round, and other related and ancillary uses.

B. PROJECT PURPOSE, PROJECT BASELINE AND PROJECT DESCRIPTION

The purposes of the proposed project are twofold:

(1) Ensure that all required approvals and permits are identified and obtained as needed for existing uses that are currently under the jurisdiction of Mono County, or proposed for modification or new construction (please see MND Section "C" for a detailed discussion of required permits and approvals); and
(2) Transfer jurisdiction over mobile home park uses to the Dept. of Housing and Community Development (HCD).[1]

[1] California law governing mobilehome parks is entitled the "Mobilehome Parks Act" (see Div. 13, Part 2.1 of the Calif. Health & Safety Code, §18200. State Law governing Special Occupancy parks is entitled the "Special Occupancy Parks Act" (Div. 13, Part 2.3, §18860).

Table 1 identifies the full range of onsite uses and the known status of each use. Exhibits 1a (for the southern half of site) and 1b (for the northern half of site) show the locations of existing and proposed onsite uses. Each of the uses listed in Table 1 is numbered and keyed to the numbers shown in Exhibits 1a and 1b.

Table 1. LAND USE & ENTITLEMENT STATUS OF EXISTING AND PROPOSED USES ON CROWLEY FISH CAMP SITE

MAP NO.	FACILITIES DESCRIPTION	TYPE OF CONSTRUCTION	DESCRIPTIVE COMMENTS	PREVIOUSLY APPROVED PROJECTS (LADWP)	CURRENT PROJECT REVIEW	
					MONO COUNTY APPROVES, ENFORCES	COUNTY & HCD APPROVE; HCD ENFORCES
#1	**Gatehouse and Camp Host Trailer**	Wood-frame portable structure	Includes one 12'x6' deck		✓	
#2	**Entry Gates and Fencing**	12' wide tire spike strip at exit.	Main gates were replaced with steel swing gates in 2015		✓	
#3	**Tackle Shop and Offices**	Wood-frame, 2 stories, with deck	3,750 sf with 5 bedrooms, 2 baths and a kitchen		✓	
#4	**Pelican Point Grill building and deck**	Food concession in trailer-mounted RV	Recently refurbished with a permanent foundation		✓	
#5	**Park Model Cabin Trailer #1**	Modular construction steel frame with axles	Modular rental with 2 decks, added in 2012		✓	✓
#6	**Park Model Cabin Trailer #2**	Modular construction; steel frame with axles	10'x16' screened-in porch with 2 decks, built in 2012		✓	✓
#7	**Park Model Cabin Trailer #3**	DMV-registered Trailer Home	384 sf, no permanent foundation, relocated in 2013		✓	✓
#8	**Ramadas (2)**	Concrete columns with log canopies	Canopies are in poor condition; ramadas are not in active use	✓		
#9	**Managers' Home**	Wood-frame, 1 story with 2 decks	1,433 sf with 3 bedrooms, 2 baths, and a fence		✓	✓
#10	**Existing Water Storage Tank**	Galvanized Steel with coat-tar lining	Several plugs show erosion, will be replaced in 5-7 years		✓	
#11	**PROPOSED: New Water Storage Tank**	To be constructed of plastic materials	Construction anticipated 2022-2024		✓	
#12	**Domestic Well House**	Masonry block and wood-roof framing	Pump was replaced in 2006; 182' deep, static water at 42'	✓		
#13	**Existing RV Camp Sites with hook-ups (19 total)**	Well-graded level pad with hook-ups	15 guest sites and 4 staff sites; most are pull-thru design		✓	✓
#14	**PROPOSED: New RV Camp Sites with hook-ups (2)**	Well-graded level pad with hook-ups	To be used as guest sites, bringing the total number of guest RV sites to 21		✓	✓
#15	**Existing Dry Camp Sites**	Well-graded level pad overlooks marina	12 dry camp RV/tent camp-sites; old water lines not in use		✓	✓
#16	**PROPOSED: New Water Line & Spigot to Serve Dry Camp Sites**	1" PVC line extending ±880' from water storage tank to new spigot; 20 gpm flow. Sites now use Tackle Shop (#3) spigot	Old lines would be left in place; new water line and spigot would provide dry camp sites with easier access to water		✓	✓
#17	**Fuel Facility and Fuel Tanks**	8" CMU with 2 1,000-gal tanks and booster pump	684 cu. ft. total fluid containment volume		✓	
#18	**Existing Propane Gas Service Tanks (6 tanks)**	Steel tanks; Fish Camp owns, Amerigas maintains	Four 125-gallon and two 500-gallon tanks.		✓	
#19	**PROPOSED: New Propane Tank (1 tank)**	Same ownership & maintenance as existing tanks.	New tank would be 125-gal, to serve shower trailer (#32)		✓	
#20	**Electrical Service Upgrade**	18K electrical service upgrade in 2013 replaced older 12 KV system.	New 18 KV system serves 4 onsite panels (3 in RV park, 1 in warehouse)		✓	
#21	**Boathouse (storage)**	Wood-framed 1-story on wood piers	588 sf storage & meeting room with 140 sf deck	✓		
	Boat and Trailer	Expanded storage area	Refurbished in 2012		✓	

Table 1. LAND USE & ENTITLEMENT STATUS OF EXISTING AND PROPOSED USES ON CROWLEY FISH CAMP SITE

MAP NO.	FACILITIES DESCRIPTION	TYPE OF CONSTRUCTION	DESCRIPTIVE COMMENTS	PREVIOUSLY APPROVED PROJECTS (LADWP)	CURRENT PROJECT REVIEW	
					MONO COUNTY APPROVES, ENFORCES	COUNTY & HCD APPROVE; HCD ENFORCES
#22	**Storage Area**	north of the RV sites				
#23	**Maintenance Yard**	Level area has screening berm, trees on 3 sides	Used for materials, storage, trailers etc.; refurbished 2012		✓	
#24	**Boat Ramp and Launch Facility**	Cast-in-place reinforced concrete pad	290 CY of concrete	✓		
#25	**Boat and Marine Building**	Nine 20'-wide bays in a rigid frame metal building	3 doors sized to load boats; 2 walk-thru doors. Elec. & Fire permits after CEQA review	✓		
#26	**South Boat Docks**	Steel & wood composite with floats		✓		
#27	**North Boat Docks**	Steel & wood composite with floats		✓		
#28	**Landscape Pond**	Adjacent to Pelican Grill; pond was added in 2013	All water recirculates (no drainage to lake; no fish)		✓	
#29	**Fish Cleaning Station**	Steel-framed with cast metal roof canopy	Conditional Use by Mono Co. Health and CDFW	✓		
#30	**Main Public Restroom Facility**	Cast metal with wood-frame roof	Women-3 sinks/3 toilets; Men-4 sinks/4 toilets	✓		
#31	**Fixed Vault Latrines (3)**	Modular concrete vaults (pumpable)	Mono County Health Dept. inspects the latrines annually	✓		
#32	**PROPOSED: New Bathrooms & showers (up to 3 total)**	Unisex units; all ADA[2] compliant; for use by Fish Camp guests only	To be installed by main public restroom (#29); permit pending MND completion		✓	
#33	**Floating Restrooms (up to 5)**	Modular wood/PVC/ fiberglass construction	Conditional Use by permit only; routine inspections by LADWP	✓		
#34	**Septic System Areas (2 existing)**	Buried, pumpable tanks & county permits	Clean, covered, no visible leaks and well-maintained		✓	
#35	**PROPOSED: New Septic System**	The third system would serve the new bathroom/ shower facility (#32)			✓	

As shown in Table 1, many of the onsite uses were developed under the approval authority of the City of Los Angeles Department of Water and Power (LADWP). Correspondence received from LADWP in April 2016 indicates that many of the land uses have been existence since the 1940s; in 1992, LADWP entered into a lease with Crowley Lake Fish Camp for operation of the Camp.[3] Following legal clarification for the 1993 Mono County General Plan, it was determined that uses not directly related to LADWP's water conveyance and public utility activities are under the jurisdiction of Mono County. Therefore, the review and approval of water and power utility projects continues to be the sole purview of the City of Los Angeles, but Mono County exercises approval authority over recreational and other uses (such as the Crowley Lake Fish Camp) that are not part of the City's utility programs.

Status of Land Uses on Fish Camp Site. The identification of land use status and entitlements for onsite uses will facilitate the review of approvals and permits for existing uses as well as the planning process to be followed for future land use modifications proposed on this site. Eleven of the site uses shown in Table 1 (the 'Previously Approved Projects') were approved by LADWP; all were developed prior to the 1993 General Plan, when Mono County clarified its

[2] Americans with Disabilities Act.
[3] Correspondence from James Yannotta, LADWP Aqueduct Manager, to John Frederickson, CLFC leaseholder; dated 15 April 2016.

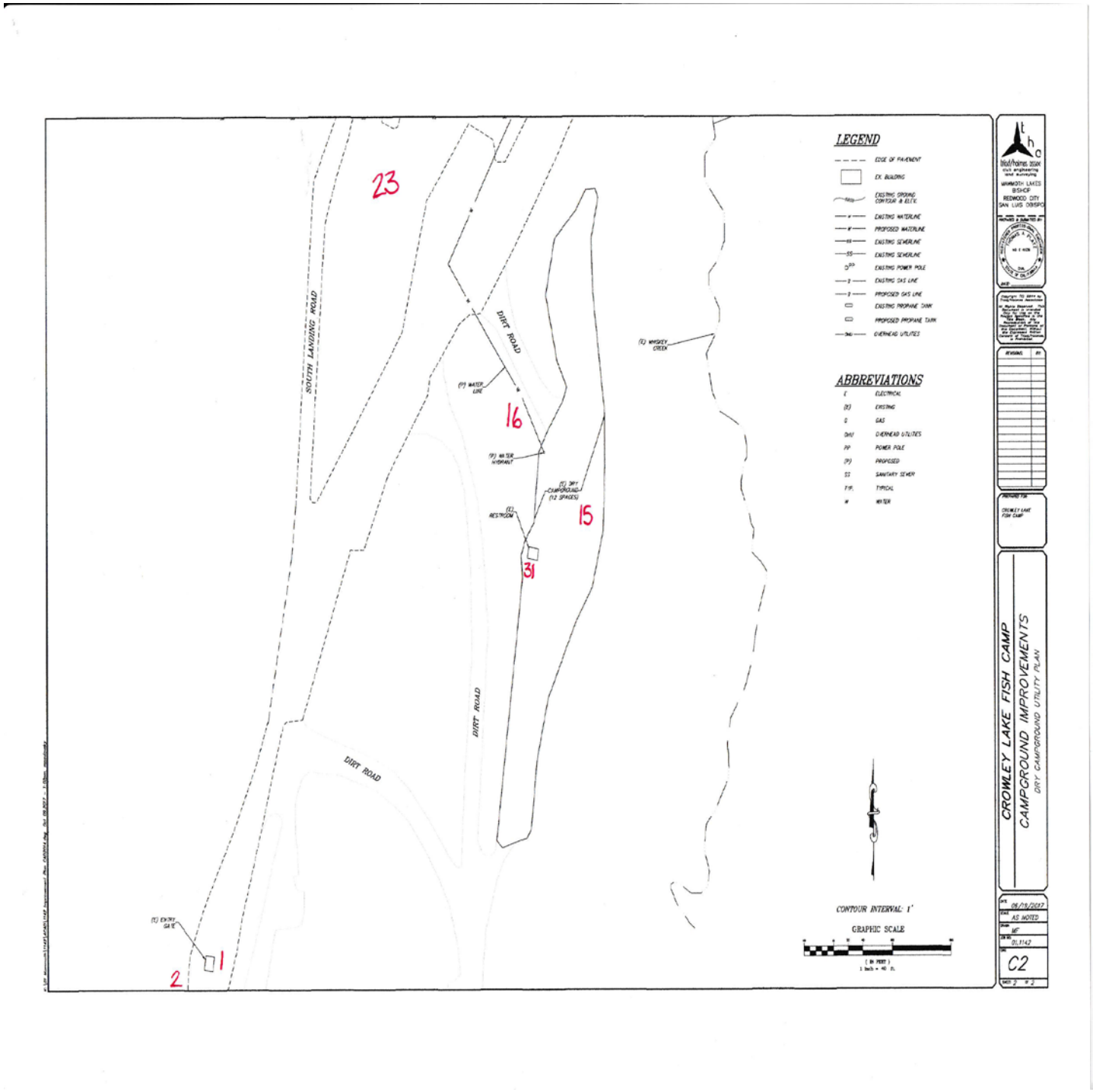

EXHIBIT 1a. Numbered Site Map for Crowley Fish Camp Existing & Proposed Uses, Southern Section

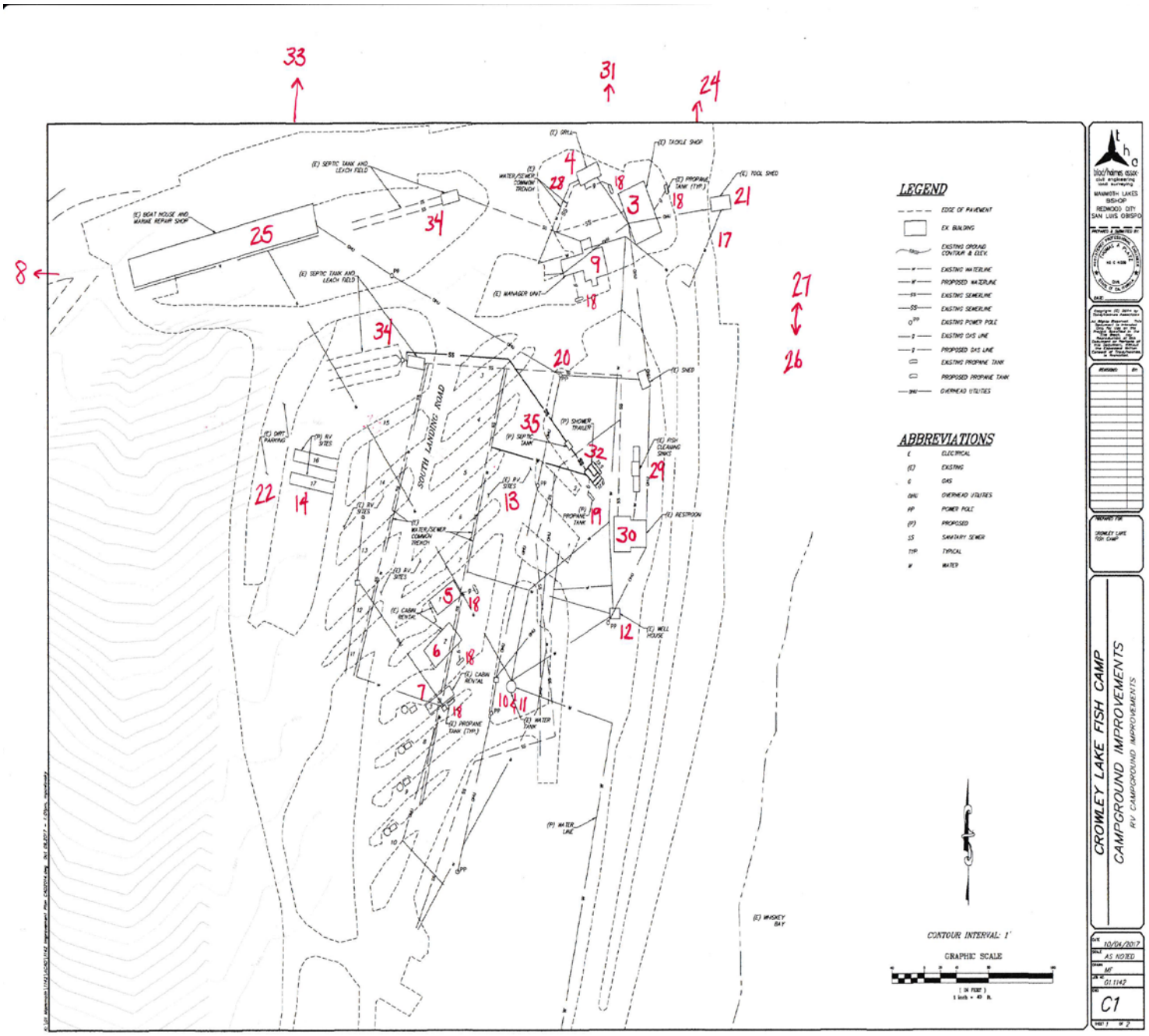

EXHIBIT 1b. Numbered Site Map for Crowley Fish Camp Existing & Proposed Uses, Northern Section

jurisdiction. These eleven uses (including use nos. 8, 12, 21, 24, 25, 26, 27, 29, 30, 31 and 33) do not require further review, approvals or permits.

The remaining twenty-four land uses all now require permits and/or approvals. These twenty-four uses (the 'Current Projects') include six uses that are proposed for new construction or modifications (use nos. 11, 14, 16, 19, 32 and 35), and eighteen uses (use nos. 1, 2, 3, 4, 5, 6, 7, 9, 10, 13, 15, 17, 18, 19, 22, 23, 28 and 34) that currently exist and for which no changes are proposed, but which now require permits and approvals as a result of the jurisdictional clarification noted above. The California Department of Housing and Community Development will assume co-jurisdiction over eight of the uses (use nos. 5, 6, 7, 9, 13, 14, 15, and 16) for the components related to mobile home park uses and facilities. All twenty-four of these uses are a part of the project proposal and evaluated in this environmental review. The project baseline comprises the environmental conditions and land uses present on the site when the Crowley Fish Camp application was filed in April of 2016.

C. AGENCY JURISDICTION & APPROVALS

Three agencies have authority over land uses (approved and now requiring approval) that are located on the project site. The three agencies are identified below along with their jurisdictional roles:

City of Los Angeles: The City of Los Angeles, operating through the Department of Water and Power, owns the land and water resources associated with the Crowley Lake Fish Camp. The City is the responsible agency and the sole operator of the fish camp and facilities. The City leases the facility to the Fish Camp operators.

Mono County Community Development Department (CDD): Mono County is Lead Agency for this project. Mono County has primary lead agency responsibilities for land use permits and approvals on the Crowley Lake Fish Camp site, with the exception of decisions pertaining to LADWP's water conveyance and utility operations. Mono County permits and approvals for the Fish Camp project include adoption of this Mitigated Negative Declaration (MND), approval of proposed project elements, issuance of Conditional Use Permits (CUPs), and other approvals such as building permits and/or environmental health permits.

California Department of Housing and Community Development: HCD has approval authority over the existing and proposed RV campsites on the project site through the Mobile Home Parks Act and the Special Occupancy Parks Act, which are governed under the Mobile Home and Special Occupancy Parks Program. The program includes procedures for the development, administration and enforcement (through the HCD Division of Codes and Standards) of uniform statewide standards designed to protect park owners, residents, and users from risks to health and safety. HCD permits and approvals for the Fish Camp project include permits to construct and permits to operate the project elements under their jurisdiction. Under California Code of Regulations [CCR] §1004 (Local Enforcement),[4] local agencies have the right to assume enforcement responsibility for these regulations by adopting an ordinance with the required enforcement guidelines. Mono County has intentionally not adopted such an ordinance, and thus HCD retains all enforcement responsibilities.

Table 2 lists the 24 existing and proposed land uses that now require permits and approvals, identifies the agencies with authority over each approval and permit process, and notes whether the use is a proposed modification/new use or an existing use that requires approvals. Land uses under LADWP's historic approval authority are not included on this table.

[4] §1004. Local Enforcement. 25 CA ADC CCR; Title 25. HCD; Division 1, Chapter 2, Mobilehome Parks and Installations; Article 1. Administration and Enforcement, 25 CCR §1004. Local Enforcement.

TABLE 2. Uses Now Requiring Approval, Permits Required, and Responsible Agencies			
FACILITY AND MAP NUMBER	**APPROVAL REQUIRED**	**AGENCY WITH APPROVAL/ ENFORCEMENT AUTHORITY**	**EXISTING USE or PROPOSED NEW USE**
Entry Building and Gatehouse (#1)	CUP	Mono County	Existing
Entry Gates and Fencing (#2)	CUP	Mono County	Existing
Tackle Shop and Offices (#3)	CUP	Mono County	Existing
Pelican Point Grill building & deck (#4)	Env. Health CUP	Mono County	Existing
Park Cabin #1 (#5)	Permit to Construct, and Permit to Operate	HCD[5]	Existing
	CUP	Mono County	
Park Cabin #2 (#6)	Permit to Construct, and Permit to Operate	HCD	Existing
	CUP	Mono County	
Park Cabin #3 (#7)	Permit to Construct, and Permit to Operate	HCD	Existing
	CUP	Mono County	
Managers' Home (#9)	Permit to Construct & Permit to Operate	HCD	Existing
	CUP	Mono County	
Existing Water Storage Tank (#10)	Env. Health CUP	Mono County	Existing
Proposed Water Storage Tank (#11)	Env. Health CUP	Mono County	Proposed
Existing 19 RV Camp Sites with hook-ups (#13)	Permit to Construct, and Permit to Operate	HCD	Existing
	CUP	Mono County[6]	
Proposed 2 new RV Camp Sites with hook-ups (#14)	Permit to Construct, and Permit to Operate	HCD	Proposed
	CUP	Mono County	
Existing Dry Camp Sites (#15)	CUP	Mono County	Existing
Proposed Water Service to Dry Camp Sites (#16)	Permit to Construct, and Permit to Operate	HCD	Proposed
	Env. Health CUP	Mono County	
Fuel Facility and Fuel Tanks (#17)	Env. Health CUP	Mono County	Existing
Propane Gas Service Tanks (#18)	Env. Health CUP	Mono County	Existing
Proposed Propane Tank (#19)	CUPA Permit & CUP	Mono County	Proposed
Electrical Service Upgrade (#20)	Env. Health CUP	Mono County	Existing
Boat & Trailer Storage Area (#22)	CUP	Mono County	Existing
Maintenance Yard (#23)	CUP	Mono County	Existing
Landscape Pond (#28)	CUP	Mono County	Existing
Proposed bathrooms/showers (#32)	CUP	Mono County	Proposed
Septic System Areas (#34)	Env. Health CUP	Mono County	Existing
Proposed New Septic System (#35)	Env. Health CUP	Mono County	Proposed

[5] Note that Mono County will recognize the HCD approvals as part of the County's CUP process.
[6] Mono County will recognize all HCD approvals as part of the CUP process.

D. MND CONTENTS

This MND contains 15 sections and 5 attachments addressing the proposed project, as identified in Table 3 below.

Table 3. INITIAL STUDY TABLE OF CONTENTS

E. COMMENT PROCEDURES

Mono County, as Lead Agency, has completed this Initial Study and Environmental Checklist to examine potential environmental effects of the project proposal. Findings of the Initial Study indicate that no significant and unavoidable adverse impacts would result, provided mitigation measures are implemented. A Mitigated Negative Declaration (MND) is proposed for this project. The County invites you to review and comment on the scope and adequacy of environmental information herein including the project description, discussion of potential project impacts, recommended mitigations, and proposed approval of this MND. The County also seeks to know of any applicable permit and review requirements of your agency for the project. Due to time limits mandated by state law, **your comments on this MND must be returned at the earliest possible date, and no later than 15 March 2018.** Comments may be submitted by mail, fax, hand-delivery or e-mail to the addresses shown below. Please provide the name, telephone number and address of a contact person, and do not hesitate to call if you have any questions.

Send Comments by: **15 March 2018**

Send Comments to: **Gerry LeFrancois**
437 Old Mammoth Road, Suite 220
P.O. Box 347 ♦ Mammoth Lakes, California 93546
(760) 924-1810 ♦glefrancois@mono.ca.gov

F. PROJECT SCHEDULE

The Mono County Planning Commission is anticipated to consider the approvals required of Mono County during the spring of 2018, and HCD is anticipated to consider approvals required of the State of California thereafter. The project applicant plans to implement the new project elements following necessary approvals.

EXHIBIT 2: Crowley Lake Fish Camp Location within Mono County (not to scale)

G. PROJECT LOCATION & SURROUNDING LAND USES

All project elements are located on and around Crowley Lake Reservoir in the community of Crowley Lake. The project site is in the County of Mono, about 10 miles southeast of the Town of Mammoth Lakes, and directly northeast of U.S. 395 off South Landing Road. Exhibit 1 depicts the Regional Location of the project area. The project site, Crowley Lake, and lands surrounding the Fish Camp are owned by LADWP. The Assessor's Parcels Numbers (APN) of properties involved in this project include 060-110-004-000 and 060-100-010-000.

H. INCORPORATION BY REFERENCE AND RELATED ACTIONS

The Mono County RTP and General Plan, the associated RTP/General Plan EIR, and all supporting technical documents, are incorporated by reference into this MND. No other applicable documents have been identified for incorporation by reference in this MND, and no related actions have been identified other than the actions that are under consideration in this MND.

The Mono County General Plan EIR concluded that implementation of the General Plan may potentially result in a wide range of significant and unavoidable adverse environmental effects including:

- *Impacts to Candidate, Sensitive & Special Status Species*
- *Impacts to Riparian Habitat*
- *Impacts to Federally Protected §404 Wetlands*
- *Interference with Fish or Wildlife Movement or Migration*
- *Conflict with Local Biological Protection Ordinances*
- *Exposure to Seismic Effects and Unstable Geology*
- *Substantial Soil Erosion*
- *Loss of Mineral Resources*
- *Potential for Release of Hazardous Materials*
- *Inadequate Emergency Response*
- *Exposure to Wildland Fire Risks*
- *Exposure to avalanche, rockfall, storms, volcanism*
- *Impacts to Prehistoric or Historic Resources*
- *Impacts to Paleontological Resources*
- *Impacts to Sacred Lands*
- *Violation of Water Quality Objectives*
- *Violation of Waste Discharge Requirements*
- *Uncertain Availability of Adequate Water Supplies*
- *Erosion and Siltation from Altered Drainage*
- *Impacts on Recreational Facilities*
- *Impacts to Scenic Resources in a State Scenic Highway*
- *Degraded Visual Character or Quality*
- *Create new sources of Light and Glare*
- *Impacts on public fire and utility services*

To minimize or avoid these significant impacts, the *General Plan* contain numerous goals, objectives, policies and actions that will be monitored by the county. The mitigations address a range of issues including air quality/greenhouse gases, biological resources, hydrology/water quality, and geologic conditions. Applicable policies and policy recommendations are identified and discussed throughout the CEQA Checklist analyses.

I. CHECKLIST OVERVIEW

Project Title: Proposed Improvements to Crowley Lake Fish Camp

Lead Agency Name & Address: Mono County Community Development Dept., P.O. Box 347, Mammoth Lakes, CA 93546

Contact Persons/Numbers: Gerry le Francois, County Staff, 760.924.1810; Sandra Bauer, Environmental Analyst 714.508.2522

Project Location: Community of Crowley Lake, California

Project Sponsor's Name and Address: John Frederickson, 1149 S. Landing Road, Crowley Lake, CA 93546

General Plan/Zoning Designation: OS (Open Space)

Project Description: (1) Identify the land use and entitlement status of all site improvements; (2) obtain approvals and permits as needed for existing uses that are under Mono County jurisdiction or proposed for new construction or modification; (3) transfer jurisdiction over mobile home park uses to HCD (Housing & Community Development Dept.)

Surrounding Land Uses and Setting: Please refer to MND Section G, Project Location and Surrounding Uses.

Other Agencies with Approval Authority: Please refer to MND Section C, Agency Jurisdiction and Approvals.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: The environmental factors checked below would be potentially affected by this project, involving at least one impact that is "Potentially Significant" or "Less than Significant with Mitigation".					
☐	Aesthetics	☐	Agriculture Resources	☐	Air Quality
☒	Biological Resources	☒	Cultural Resources	☐	Geology/Soils
☐	Greenhouse Gas Emissions	☒	Hazards & Hazardous Materials	☒	Hydrology / Water Quality
☒	Land Use / Planning	☐	Mineral Resources	☒	Noise
☐	Population / Housing	☐	Public Services	☐	Recreation
☒	Transportation / Traffic	☒	Utilities / Service Systems	☒	Mandatory Significance Findings

LEAD AGENCY 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 (ND) will be prepared.
☒	I find that although the project could have a significant effect on the environment, there will not be a significant effect in this case because revisions have been made by the proponent. An MND will be prepared.
☐	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT (EIR) is required.
☐	I find that the proposed project MAY have a "potentially significant" 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, & 2) has been addressed by mitigations based on the earlier analysis. An EIR is required but it must analyze only 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.

LEAD AGENCY SIGNATURE	DATE
LEAD AGENCY SIGNATURE	DATE

J. ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?	❒	■	❒	❒
b) Substantially damage scenic resources?	❒	❒	■	❒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	❒	❒	■	❒
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views?	❒	■	❒	❒
II. AGRICULTURE AND FORESTRY -- Would the project:				
a) Convert Prime or Unique Farmland, or Farmland of Statewide Importance to non-agricultural use?	❒	❒	❒	■
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	❒	❒	❒	■
c) Conflict with zoning of forest land, timberland or timberland production area?	❒	❒	❒	■
d) Result in loss or conversion of forest land to non-forest use?	❒	❒	❒	■
e) Involve other changes that could result in conversion of Farmland, to non-agricultural use?	❒	❒	❒	■
III. AIR QUALITY -- Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	❒	❒	■	❒
b) Violate an air quality standard or contribute to an existing or projected air quality violation?	❒	❒	■	❒
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment?	❒	❒	■	❒
d) Expose sensitive receptors to pollutants?	❒	❒	■	❒
e) Create objectionable odors affecting a substantial number of people?	❒	❒	■	❒
IV. BIOLOGICAL RESOURCES -- Would the project:				
a) Have a substantial adverse effect directly or through habitat changes on a candidate, sensitive, or special status species?	❒	■	❒	❒
b) Have a substantial adverse effect on a riparian habitat or other sensitive natural community?	❒	■	❒	❒
c) Have a substantial adverse effect on federally protected wetlands through direct removal, filling, hydrological interruption, or other means?	❒	❒	❒	■
d) Interfere substantially with the movement of a native resident or migratory fish or wildlife species, or impede the use of native wildlife nursery sites?	❒	■	❒	❒

e) Conflict with local policies or ordinances protecting biological resources?	❒	❒	❒	■
f) Conflict with provisions of an adopted Habitat or Natural Community Conservation Plan?	❒	❒	❒	■
V. CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource?	❒	■	❒	❒
b) Cause a substantial adverse change in the significance of an archaeological resource?	❒	■	❒	❒
c) Destroy a unique paleontological resource or site or unique geologic feature?	❒	■	❒	❒
d) Disturb any human remains, including those interred outside of formal cemeteries?	❒	■	❒	❒
VI. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects involving:				
i) Rupture of a known earthquake fault?	❒	❒	■	❒
ii) Strong seismic ground shaking?	❒	❒	■	❒
iii) Seismic-related ground failure or liquefaction?	❒	❒	■	❒
iv) Landslides?	❒	❒	■	❒
b) Result in substantial soil erosion or loss of topsoil?	❒	❒	■	❒
c) Be located on an unstable geologic unit or soil or have potential to cause a landslide, lateral spreading, subsidence, liquefaction or collapse?	❒	❒	■	❒
d) Be located on expansive soil?	❒	❒	■	❒
e) Have soils incapable of supporting septic tanks or alternative waste water disposal systems where sewers are not available?	❒	❒	■	❒
VII. GREENHOUSE GAS EMISSIONS -- Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	❒	❒	■	❒
b) Conflict with an applicable plan, policy or regulation adopted to reduce greenhouse gases emissions?	❒	❒	■	❒
VIII. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:				
a) Create a significant hazard through the transport, use, or disposal of hazardous materials?	❒	■	❒	❒
b) Create a significant hazard through reasonably foreseeable upset & accident conditions involving the release of hazardous materials into the environment?	❒	■	❒	❒
c) Cause hazardous emissions within 1/4 mile of an existing or proposed school?	❒	❒	❒	■
d) Be located on a listed hazardous materials site or (per Code §65962.5) and create a significant hazard to the public or the environment?	❒	❒	❒	■
e) For sites in an airport land use plan or within two miles of a public or private airport, would the project pose a safety hazard to residents or workers?	❒	❒	■	❒

f) For a project in the vicinity of a private airstrip, would the project pose a safety hazard for people residing or working in the project area?	❒	❒	■	❒
g) Impair implementation of an adopted emergency response plan or emergency evacuation plan?	❒	❒	❒	■
h) Expose people or structures to a significant risk of wild land fires?	❒	■	❒	❒
IX. HYDROLOGY/WATER QUALITY - Would the project:				
a) Violate water quality standards or waste discharge requirements?	❒	❒	■	❒
b) Substantially deplete groundwater supplies or interfere with groundwater recharge?	❒	❒	■	❒
c) Alter existing drainage patterns in a manner that would result in substantial erosion or siltation?	❒	❒	■	❒
d) Alter existing drainage in a manner that would result in flooding on- or off-site?	❒	❒	■	❒
e) Contribute runoff that would exceed the capacity of stormwater drainage systems or pollute runoff?	❒	❒	■	❒
f) Otherwise substantially degrade water quality?	❒	❒	■	❒
g) Place housing in a 100-year flood hazard area?	❒	❒	❒	■
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	❒	❒	❒	■
i) Expose people or structures to a significant risk of flooding or failure of a levee or dam?	❒	❒	❒	■
j) Inundation by seiche, tsunami, or mudflow?	❒	❒	❒	■
X. LAND USE AND PLANNING -- Would the project:				
a) Physically divide an established community?	❒	❒	❒	■
b) Conflict with a land use plan, policy, or regulation of an agency with jurisdiction over the project?	❒	❒	■	❒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	❒	❒	❒	■
XI. MINERAL RESOURCES -- Would the project:				
a) Reduce availability of a valuable mineral resource?	❒	❒	■	❒
b) Reduce the availability of a locally-important mineral resource recovery site?	❒	❒	❒	❒
XII. NOISE -- Would the project:				
a) Expose people to or generate noise levels in excess of adopted standards?	❒	❒	❒	❒
b) Expose people to or generate excessive ground-borne vibration or ground-borne noise levels?	❒	❒	❒	❒
c) Substantially increase ambient noise levels?	❒	❒	❒	❒
d) Substantial temporary or periodic increases in ambient noise levels?	❒	❒	❒	❒
e) If in an airport land use plan or within two miles of a public airport or private airport, would the project expose residents or workers to excessive noise levels?	❒	❒	❒	■

f) For a project near a private airstrip, expose residents or workers to excessive noise levels?	❒	❒	❒	■
XIII. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth?	❒	❒	■	❒
b) Displace substantial numbers of housing units?	❒	❒	■	❒
c) Displace substantial numbers of people?	❒	❒	■	❒
XIV. PUBLIC SERVICES -- Would the project cause impacts associated with the provision of new or modified governmental facilities needed to maintain acceptable service levels for:				
a) Fire protection?	❒	❒	■	❒
b) Police protection?	❒	❒	■	❒
c) Schools?	❒	❒	■	❒
d) Other public facilities?	❒	❒	■	❒
XV. RECREATION – Would the project:				
a) Increase the use of existing parks or recreational facilities?	❒	❒	■	❒
b) Include or require construction or expansion of recreational facilities that could adversely impact the environment?	❒	❒	■	❒
XVI. TRANSPORTATION/TRAFFIC -- Would the project:				
a) Conflict with a plan to measure circulation performance, or cause a substantial increase in traffic?	❒	❒	■	❒
b) Exceed a level of service standard?	❒	❒	■	❒
c) Change air traffic patterns?	❒	❒	■	❒
d) Increase hazards due to a design feature or incompatible uses?	❒	❒	■	❒
e) Result in inadequate emergency access?	❒	❒	❒	■
f) Conflict with adopted policies or plans supporting alternative transportation?	❒	❒	❒	■
XVII. UTILITIES/SERVICE SYSTEMS -- Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	❒	❒	■	❒
b) Require new or expanded water or wastewater treatment facilities?	❒	❒	■	❒
c) Require new or expanded stormwater drainage facilities?	❒	❒	■	❒
d) Have sufficient water supplies to serve the project from existing entitlements and resources?	❒	❒	■	❒
e) Have sufficient wastewater treatment capacity to serve the project in addition to existing commitments?	❒	❒	❒	❒
f) Be served by a landfill with sufficient permitted capacity to accommodate solid waste disposal needs?	❒	❒	❒	❒
g) Comply with federal, state, and local statutes and regulations related to solid	❒	❒	■	❒

waste?				
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have potential to degrade the quality of the environment, substantially reduce the habitat of fish or wildlife, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or range of a rare or endangered plant or animal or eliminate important examples of California history or prehistory?	❒	■	❒	❒
b) Does the project have impacts that are individually limited, but cumulatively considerable?	❒	❒	■	❒
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	❒	■	❒	❒

K. DISCUSSION OF RESPONSES TO CHECKLIST ITEMS

I. AESTHETICS. Would the project:

a-c*) Have a substantial effect on a scenic vista? Damage scenic resources? Degrade the visual character of the surroundings?*

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION. Existing land uses comprise 29 of the 35 land uses evaluated in this MND. Of the 29 existing uses, 13 are subject to the planning authority of LADWP, have been approved by LADWP, and are not a part of the current environmental impact analysis.

Sixteen (16) of the 29 existing uses are subject to retroactive discretionary approval by the County of Mono as part of the current review. The 16 existing uses that now require discretionary approvals include:

- Entry Building and Gatehouse (#1)
- Entry Gates and Fencing (#2)
- Tackle Shop and Offices (#3)
- Pelican Point Grill building and deck (#4)
- Three Park Model Cabins (map #5, #6, #7)
- Managers' Home (map #9)
- Water Storage Tank (#10)

- Domestic Well House (#12)
- 19 Existing RV campsites with hook-ups (#13)
- Dry Camp Sites (#15)
- Boat and Trailer Storage Area (#22)
- Maintenance Yard (#23)
- Landscape Pond (#28)
- The north and south Septic System Areas (#34)

While most of the sixteen existing uses listed above have been present on the Fish Camp site for many years, several have been recently constructed or upgraded. Two of the three Park Model Cabins (map #5 and #6) were built in 2012, and the older cabin shown as map #7 was relocated to its current site in 2013. The domestic well house (map #12) was upgraded with a new pump in 2006, and the electrical service upgrade (#20) occurred in 2013. The boat and trailer storage area (#22) was refurbished in 2012, and received an occupancy certificate from Mono County in 2016. The maintenance yard (#23) was refurbished in 2012, and the landscape pond (shown as map #28) was newly added in 2013.

Though the Camp is clearly visible from portions of US 395, onsite uses are not prominent visual elements along this designated Scenic Highway. Factors that minimize the visual profile of structures at Crowley Fish Camp include low profile (the tallest structure on the Camp is the two-story tackle shop, about 34' high), distance from the highway (the gatehouse, closest of all structures to US 395, is about 350' away from the highway at the closest point); and topography that slopes downward from US 395 to the lake (the elevation of US 395 at South Landing Road is about 6,890'; the lake elevation is about 6,780').

Based on Caltrans and County criteria (described in greater detail below), all 29 of the existing uses would be considered to have a MINOR level of impact on visual resources: (1) the structures on this site are widely dispersed; (2) the visual field is dominated by the larger landscape (including the White Mountains, Casa Diablo Mountain, and the broad expanse of Long Valley); (3) buildings are well set back from the highway, and largely screened by topographic conditions; and (4) the Crowley Fish Camp is itself a feature of recognized historical significance (see discussion in MND Checklist Section V, Cultural Resources). Moreover, all 29 of the existing uses are part of the baseline setting for this project, as outlined in MND Section B (Project Description). Based on all of the considerations above, the 29 existing uses are considered to have a less than significant impact on the scenic vistas and resources and visual character of the surrounding area. The discussion below focuses on visual and scenic impacts associated with the new uses proposed for development as part of the current review.

Six of the 35 land uses evaluated herein do not currently exist on the Fish Camp site, and are now proposed for development approvals. The six uses proposed for future development include:

- Two (2) New RV Camp Sites with hook-ups (map #14)
- Water Storage Tank (map #11)
- Propane Tank (#9)
- Portable bathrooms and showers (#32)
- Water Line and Spigot to serve the dry camp sites (#16)
- New 750-gallon Septic System (#35) to serve the three proposed bathroom and shower facilities (#32)

Construction of five of the six newly proposed uses (including the 2 RV camp sites, the water storage tank, the propane tank, the new water line and spigot for the dry camp sites, and the three new bathroom and shower facilities) would have potential to alter the aesthetic environment; the new septic system would be a subsurface feature with no substantive impact on aesthetic values. Relevant characteristics of the six newly proposed uses are summarized below, followed by a consideration of potential impacts on scenic resources based on guidelines established by Caltrans and by Mono County.

- **RV Camp Sites:** The Crowley Lake Fish Camp fishing season lasts from late April through October each year; the camp is closed to the public the rest of the year. The highest use occurs from late April through July, and the months of August through October are comparatively slow months. During the fishing season, the RV Camp Sites are occupied by RVs that are transported to the site by their owners. The mix of RVs varies from year to year, but most of the Fish Camp sites are able to accommodate RVs of all classes (Class A, B and C).[7] Only 2 of the existing 19 camp sites are limited in space to Class A and B RVs and unable to accommodate the Class C vehicles. Both of the 2 new RV sites would be sized to accommodate Class B RVs. Class B is the smallest class of RVs, comprised of camper van-type vehicles. The 2 new pads would be located directly adjacent to and west of the existing RV sites.

- **Water Storage Tank (#11):** The new water storage tank is proposed to replace the existing water storage tank. The existing tank, made of galvanized steel with a coal-tar lining, has been on the site for many years. Several of its plugs show signs of erosion. The existing tank is about 7-feet tall with a 12-foot diameter and a capacity of 10,000 gallons. It will be replaced by a new plastic tank with the same capacity (diameter and width are not yet known, but the tank is expected to be no higher than the existing tank). The new tank is scheduled for installation between 2022-2024.

- **Propane Tank (#19):** Fish Camp propane needs are currently met through 6 steel propane tanks (owned by the Camp and maintained by AmeriGas) including four 125-gallon tanks and two 500-gallon tanks that provide a combined capacity for 1,500 gallons of propane. The proposal is to add one additional propane tank (same ownership and maintenance) with a capacity of 230-gallons. The new tank would be located by and serve propane to the proposed new portable bathrooms and showers. The new tank would increase overall propane capacity on the Fish Camp site by about 15%. AmeriGas indicates that a 250-gallon

[7] Class A RVs are largest, with heights up to 10-feet, lengths that average 32-feet but can be as long as 45-feet, and expandable slideouts that can create widths exceeding 14-feet. Class C RVs are the second largest, with heights up to 10-feet and lengths up to 35-feet; slideouts (relatively uncommon in Class C) can extend widths to 14-feet. Class B RVs are smallest, generally camper vans with lengths up to 23-feet, heights up to 10-feet, and widths up to 8-feet (sources include rvnetlinx.com/wprvtypes.php?cat=ca; https://rv-roadtrips. thefuntimesguide.com/rv_class/; and Abbie Thomason of Crowley Lake Fish Camp).

tank is about 7'10" in length and about 30" in diameter (compared to a length of about 10' and diameter of about 37" for a 500-gallon tank).[8]

- **Portable bathrooms & showers (#32):** The applicant proposes to provide up to 3 new bathroom and shower facilities in a location near the fish cleaning station (#29) and the main public restroom (#30). All 3 facilities would be ADA compliant, with a unisex design. The Fish Camp plans to seek permits for this facility directly following the MND review, if approved.

- **Water Spigot for the Dry Camp Sites (#16):** The dry camp sites that overlook Whiskey Bay were at one time connected to a series of potable water lines that served each site. Over time, the water lines deteriorated to a point where water service was terminated, and the camp sites were converted to fully dry status; campers in this location are required to bring their own water or use a spigot located next to the Tackle Shop (about 0.3 mile away). If approved, the new spigot would likely be installed at the same time as the new water tank. The spigot would be above-grade, while the new water lines would be below ground. The spigot would be a narrow, linear feature with a low vertical profile and no substantive impact on scenic views.

- **New Septic System (#35):** The Camp is currently served by north and south septic systems. Although both systems are operating under capacity at present, they will not have sufficient capacity to serve the proposed new bathroom and shower facilities. To accommodate the new uses, Crowley Fish Camp proposes to install a third septic system, with an estimated treatment capacity of 750 gallons per day. The third septic system would be dedicated for exclusive use by the new bathroom and shower facilities. The two new RV spaces would be served by the existing southern septic system, which also serves the existing RV spaces. All elements of the new septic system would be below grade, as is true for the existing north and south septic systems.

Caltrans Visual Assessment Guidelines: Caltrans has developed criteria to be used when assessing impacts to the aesthetic value of scenic highways. Impacts are characterized as minor, moderate, or major, based on definitions provided in Table 4.

TABLE 4. Caltrans Visual Assessment Criteria for Scenic Highways

COLOR	LEVEL OF IMPACT	IMPACT DEFINITION
	Minor	Minor intrusions are those that are somewhat but not entirely compatible with the landscape or are of recognized cultural or historical significance.
	Moderate	Moderate intrusions are those that are not well integrated into the landscape and yet do not dominate the landscape or obstruct scenic views.
	Major	Major intrusions are those that dominate the landscape, degrade or obstruct scenic views.

Caltrans identifies three terms to be used when describing impacts on visual quality:

- Vividness - The extent to which the landscape is memorable, associated with the distinctiveness, diversity and contrast of visual elements. A vivid landscape makes an immediate and lasting impression on the viewer.™
- Intactness - The integrity of visual order in the landscape and the extent to which the natural landscape is free from visual intrusions.™
- Unity - The extent to which visual intrusions are sensitive to and in visual harmony with the natural landscape.

Additionally, Caltrans provides specific examples to illustrate minor, moderate and major impacts for various types of land uses. Table 5 below shows the impact examples provided by Caltrans for commercial, residential and industrial uses, the category most applicable to Crowley Fish Camp.

TABLE 5. Characteristics of Minor, Moderate and Major Impacts to Scenic Highways

IMPACT	DESCRIPTIVE CHARACTERISTICS
Minor	Widely dispersed buildings. Natural landscape dominates. Wide setbacks and buildings screened from roadway. Forms, exterior colors and materials are compatible with landscape. Buildings have cultural or historical significance.
Moderate	Increased numbers of buildings, not well integrated into the landscape. Smaller setbacks and lack of roadway screening. Buildings do not dominate the landscape or obstruct scenic view.
Major	Dense and continuous development. Highly reflective surfaces. Buildings poorly maintained. Visible blight. Development along ridgelines. Buildings dominate the landscape or obstruct scenic view.

Structures on the Crowley Fish Camp site have a low profile, are widely dispersed, and well set back from US 395 (US 395 passes to the south and west of Crowley Lake). There are no readily accessible locations to the east from which the site can be seen, and topography and elevation screen views of the site from most locations to the north. The overall visual field is dominated by the dramatic backdrop

[8]Source: https://www.amerigas.com/amerigas-blog/2016/april/tanks-101-propane-tank-sizes

of the White Mountains, the expansive breadth of 5,300-acre Crowley Lake and the Long Valley, and intervening natural features such as Casa Diablo Mountain.

Most of the existing and proposed camp features are incompatible with the landscape due to contrasting materials, colors and/or forms. All are fabricated of non-native materials and feature rectilinear forms that contrast with the undulant character of the natural setting. However, most of these incompatible elements are visible solely or primarily inside the camp, with only limited offsite views. Moreover, as noted above, the Fish Camp itself and many of the onsite structures have recognized cultural and historical significance. Based on these criteria, the Crowley Fish Camp project (as a whole, as well as the proposed new elements) has a minor impact on scenic and Scenic Highway values based on Caltrans' criteria.

Mono County Scenic Combining Element Guidelines: To protect scenic resources, Mono County has created a 'Scenic Combining Element'[9] that regulates development activity in scenic areas outside of established communities, with an added layer of requirements for areas (such as the Fish Camp) that are visible from State Scenic Highway 395.

The basic Scenic Combining Element Guidelines require:

(1) Screening of visually offensive land uses through landscaping, fencing or contour grading;
(2) Minimizing earthwork, grading and vegetation removal;
(3) Revegetation of disturbed areas with compatible landscaping based on a formal landscape plan as approved by the county;
(4) Use of existing access roads where possible;
(5) Strict limits on the number, type, size, height and design of on-site signs;
(6) Use of design, colors and materials for buildings, fences and accessory structures that are compatible with the natural setting;
(7) Placement of all new utilities underground; and
(8) Use of exterior lighting that is shielded and indirect and minimized to that necessary for security and safety.

The additional restrictions for areas visible from the Scenic Highway include:

(1) Preservation of natural topography to the maximum possible extent;
(2) Siting of structures in areas least visible from the scenic highway;
(3) Avoidance of ridgeline development;
(4) Use of dull finish and muted dark colors on rooftops visible from the Scenic Highway;
(5) Design of vertical building surfaces to minimize contrast, and use of dark or neutral colors found in the immediate surroundings;
(6) Use of exterior light fixtures that are shielded, down-directed and not visible from the Scenic Highway;
(7) Fencing and screening (color, shape and materials) that do not contrast with the natural surroundings; and
(8) Signs that are small, compatible in color and shape with the natural surroundings, and placed in a manner that does not silhouette against the sky above the ridgeline or block a scenic viewshed.

All of the requirements above will apply to the proposed Fish Camp improvements. Most are already reflected in the proposed plan elements (including topographic screening, minimal earthwork, use of existing roads, limited signage, avoidance of ridgeline development and siting in areas least visible from US 395). Provided below is a mitigation measure requiring preparation of a formal landscape plan to guide site revegetation following development improvements.

MITIGATION MEASURES FOR AESTHETIC RESOURCES

Mitigation AES-1: A formal landscape plan shall be prepared to guide revegetation of the Fish Camp site following all new project improvements that disturb topsoil and vegetation. The plan shall include maps, a list of plant and seed materials to be used and proposed locations, identification of plant and seed sources, irrigation protocols for initial establishment, and identification of long-term maintenance requirements (if any). All plant materials and seed stock used in revegetation and any mulch applications shall be native to the eastern Sierra bioregion (which extends from Lake Tahoe on the north to Bishop on the south and east to Fallon, Nevada). Plant materials suitable for deer forage shall be used to the maximum possible extent. No long-term irrigation shall be permitted. The landscape plan shall be certified as complete by the County of Mono, Community Development Dept., prior to the start of ground-disturbing project improvements, and may subsequently be modified as appropriate if agreed upon by the project proponent and the County of Mono. All biological mitigation requirements (Measures BIO-1 through BIO-7) will be detailed in the landscape plan required by Mitigation AES-1.

d) Create new light sources or glare that would affect views?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION. Lighting on the Fish Camp site consists of LED lights on each side of the front gate, and one LED light on the gatehouse building; all are covered or down-focused. Personal lighting (including camp lights, headlamps, lanterns etc.) is limited to that provided by individual guests and by resident staff. There are no street lights, no floodlights, and no tower lights on the Camp site at present, and none are proposed for future use.

[9] Mono County *General Plan Land Use Element*, Chapter 8 – Scenic Combining District & State Scenic Highway. 2015.

Existing onsite lighting, as described above, will not fully comply with the stringent requirements of the Scenic Combining District (described above), or with the detailed and exacting requirements of Mono County General Plan (Chapter 23) Dark Sky Regulations, which are briefly summarized below.

Mono County Dark Sky Ordinance Requirements: The provisions of Mono County General Plan Chapter 23 are intended to protect night-sky views, provide a pleasant nighttime environment, improve safe travel, and prevent nuisance lighting. The requirements of Chapter 23 are briefly summarized below:

1. Nuisance prevention. Lighting design shall prevent glare, light trespass, and light pollution.
2. Maintenance. Lighting shall be maintained in good working order.
3. Lighting Levels. Harsh lighting contrasts between the project site and adjacent properties shall be avoided.
4. Lamp Types. Metal halide or high-pressure sodium lamps are preferred for all street lights and new commercial and industrial area lights (parking lot and yard lights; LEDs are preferred for energy efficiency. Low-pressure sodium lamps and mercury vapor lamps are not permitted.
5. Fixture Types. New outdoor lighting shall use full cutoff luminaires, fully shielded and with downcast light source, with the following exceptions:
   - Fixtures with a maximum output of 100 lumens or less may be left unshielded provided the bulb surfaces are obscured from off-site visibility;
   - Fixtures with a maximum output of 600 lumens or less shall be partially or totally shielded using a solid or semi-translucent barrier, provided that the lamp is not visible from off site, no direct glare is produced, and the fixture has an opaque top to keep light from shining directly up;
   - Floodlights that do not meet the definition of "full cutoff" may be used if permanently directed downward, if no light is projected above the horizontal plane, and if fitted with external shielding to prevent glare and off-site light trespass. Unshielded floodlights are prohibited.
5. Accent Lighting. Residential accent lighting shall be limited.
6. An outdoor lighting plan shall be submitted with applications for design review approval; a CUP or building permit or new or modified exterior light fixtures (and other application types), including at least the following:
   - Manufacturer specification sheets, cut-sheets, or other manufacturer-provided information for all proposed outdoor lighting fixtures to show fixture diagrams and light output levels;
   - The proposed location, mounting height, and aiming point of all outdoor lighting fixtures; and
   - If building elevations are proposed for illumination, drawings for all relevant elevations showing the fixtures, elevations to be illuminated, illuminance levels, and the aiming point for any remote lights.

MITIGATION MEASURE FOR LIGHT AND GLARE

Mitigation AES-2: All onsite exterior lighting (including existing and proposed exterior light sources) shall comply fully with requirements of the Mono County Scenic Combining Element (General Plan *Land Use Element* Chapter 8) and with requirements of the Mono County Dark Sky Regulations (General Plan Chapter 23). All required elements shall be outlined in an outdoor lighting plan to be submitted prior to formal approval of any discretionary permits or actions under review by Mono County.

II. AGRICULTURAL AND FORESTRY RESOURCES. Would the project:

a-c) Convert Farmland? Conflict with existing agricultural zoning or a Williamson Act contract? Conflict with zoning of forest or timberland? Involve other changes to the environment that could result in the loss or conversion of forest or farmland?

NO IMPACT. The Mono County General Plan Land Use Element states that agriculture is a permitted use within Open Space (the land use designation applied to the Crowley Lake Fish Camp site).[10] However, none of the project acreage is currently used for agriculture or intended for future agricultural purposes, and no part of the project site is subject to a Williamson Act contract.

On-site vegetation consists of fragmented patches of Great Basin Mixed Scrub and Big Sagebrush Scrub. There is no forest cover on the site. Due to the absence of these uses, the project would not result in conversion of farmland or forest land to other uses. No impact would occur, and no mitigation is required.

III. AIR QUALITY. Would the project:

[10] Mono County General Plan, *Land Use Element*, 2015. http://www.monocounty.ca.gov/sites/default/files/fileattachments/planning_division/page/812/2015_land_use_final.08.15_0.pdf

a-d) Conflict with or obstruct implementation of an air quality plan? Violate any air quality standard or contribute to an existing or projected air quality violation? Result in a cumulatively considerable increase of any criteria pollutant? Expose sensitive receptors to pollutants? Create objectionable odors?

This section is based on findings of a detailed air quality and greenhouse gas assessment prepared by Giroux & Associates for the Crowley Fish Camp project. The full report is provided as Attachment 4, and key results are summarized herein.

LESS THAN SIGNIFICANT IMPACT. The project is located in the Great Basin Unified Air Pollution Control District (GBUAPCD), which has not developed numerical thresholds to define a "substantial" increase in air pollution emissions. In such instances, CEQA allows the use of standards or thresholds promulgated by other agencies; this assessment is based on the significance thresholds used by South Coast Air Quality Management District (SCAQMD). Projects with daily emissions that exceed any of the following emission thresholds are considered significant:

TABLE 6: Representative Emissions Significance Thresholds (pounds/day)		
Pollutant	**Construction**	**Operations**
ROG (reactive organic gases)	75	55
NOx (nitrogen oxides)	100	55
CO (carbon monoxide)	550	550
PM-10 (large particulates)	150	150
PM-2.5 (small particulates)	55	55
Sox (sulfur oxides)	150	150
Lead	3	3

Construction Emissions: Although exhaust emissions will result from on and off-site construction equipment, the exact types and numbers of equipment will vary among contractors such that such emissions cannot be quantified with certainty. However, estimated construction emissions were modeled using CalEEMod2016.3.1 to identify maximum daily emissions for each pollutant during project construction using equipment fleets for typical project activities. The resulting peak daily construction activity emissions estimates are well below SCAQMD CEQA thresholds, without the need for added mitigation even if all activities occurred simultaneously. No additional adjustments were used or required.

Construction equipment exhaust contains carcinogenic compounds within the diesel exhaust particulates. The toxicity of diesel exhaust is evaluated relative to a 24-hour per day, 365 days per year, 70-year lifetime exposure. Air pollution agencies do not generally require the analysis of construction-related diesel emissions relative to health risk due to the short period for which the majority of diesel exhaust would occur. Health risk analyses are typically assessed over a 9-, 30-, or 70-year timeframe and not over a relatively brief construction period due to the lack of health risk associated with such a brief exposure.

Operational Emissions: Operational emissions are primarily attributed to mobile sources. The proposed new RV spaces will increase use of electricity and water, but the increase will be minimal. Based on an earlier proposal to add 7 new RV spaces, it was estimated that peak season (April thru mid-July) the new spaces would generate about 100 additional vehicle trips per day as a result of this project; low season (mid-July thru October) would increase about 30 trips per day as a result of project implementation. The increased operational trips were associated with the RV uses in the CalEEMod modeling. A one-way distance of 50 miles was used, or 100 miles round trip. The results are provided in Table 7.

TABLE 7. Daily Operational Emissions (pounds per day)[11]						
Source	**ROG**	**NOx**	**CO**	**SO_2**	**PM-10**	**PM-2.5**
Mobile	1.7	12.0	33.2	0.0	7.9	2.2
Significance Threshold	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Source: CalEEMod2016.3.1 Output in Appendix

The project would not cause operational emissions to exceed their respective adopted CEQA significance thresholds. Operational emission impacts are judged to be less than significant. No impact mitigation for operational activity emissions is considered necessary to support this finding. None of the existing and proposed project elements are associated with noxious or objectionable odors. Although mitigation measures are not required for air quality (due to the absence of potentially significant impacts), the measures below are recommended to enhance dust control measures and minimize vehicle emissions. Compliance with landscape plan requirements

[11] Note: following preparation of the air quality report, the number of proposed new RV spaces was reduced from seven (7) to two (2), which would further minimize emissions associated with added vehicle trips from the new RV spaces.

(see Mitigation Measure AES-1 above), and with mandatory GBUAPCD permits and regulations, will reduce long-term dust on the project site to less than significant levels.

MITIGATION RECOMMENDATIONS FOR AIR QUALITY (Optional)

Mitigation AQ-1: Fugitive Dust Control

- Apply soil stabilizers or moisten inactive areas.
- Prepare a high wind dust control plan.
- Address previously disturbed areas if subsequent construction is delayed.
- Water exposed surfaces as needed (2-3 times/day) to avoid visible dust leaving the construction site.
- Cover all stockpiles with tarps at the end of each day or as needed.
- Provide water spray during loading and unloading of earthen materials.
- Minimize in-out traffic from construction zone
- Cover all trucks hauling dirt, sand, or loose material and require all trucks to maintain at least two feet of freeboard
- Sweep streets daily if visible soil material is carried out from the construction site

Mitigation AQ-2: Exhaust Emission Controls

- Utilize well-tuned off-road construction equipment.
- Establish a preference for contractors using Tier 3 or better heavy equipment.
- Enforce 5-minute idling limits for both on-road trucks and off-road equipment.

IV. BIOLOGICAL RESOURCES. Would the project:

a,b) Have a substantial effect on any candidate, sensitive or special status species or their habitats (plants, fish, insects, animals, birds)? Have an adverse effect on any riparian habitat or other sensitive community?

A detailed biological assessment was prepared for the Crowley Lake Fish Camp project by James Paulus, Ph.D. The report is provided in its entirety as MND Attachment 3. Key findings are summarized herein.

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION. Three sensitive wildlife species were identified as potentially occurring on this property, including the greater sage grouse, the western white-tailed jackrabbit and the Sierra Nevada red fox. The nearest known sage grouse lek is 3.9 miles to the northwest. Although onsite habitat is not suitable for nesting or breeding, it is possible that grouse enter the project site to access sagebrush habitat south of Whiskey Creek and for winter foraging. Proposed site improvements will create at least some increased risk of potentially significant vehicle-grouse collisions near the entry gate during the April through October season, and may have other impacts include increased numbers of avian and mammalian sage grouse predators, and unleashed dogs. Mitigation measures provided at the end of this section would reduce these potential impacts to less than significant levels. The project-related loss of up to 0.5 acres of Great Basin Mixed Scrub and Big Sagebrush Scrub habitat would not significantly affect the availability of sagebrush for sage grouse foraging in the region.

Western white-tailed jackrabbits are thought to inhabit a variety of habitats in the Eastern Sierra, and are mainly nocturnal when foraging. Sightings regionally appear to be very uncommon, but their presence can be detected during winter months by searching for forms in the snow. No evidence of western white-tailed jackrabbit use was found during the May-June 2017 survey. As with the greater sage grouse, the project would increase the risk of vehicle-hare collisions due to increased traffic volume, and may create new attractants for avian and mammalian predators of small mammals including jackrabbits. The loss of up to 0.5 acres of this scrub habitat would not have a significant effect on highly mobile hares that may travel through the area.

Like western white-tailed jackrabbit, Sierra Nevada red fox are very elusive and highly mobile. No dens attributable to fox or any other mammal larger than California ground squirrel were seen during the May-June 2017 survey. Small rodent burrows, which were sparsely occupied within scrub fragments throughout the study area, had not been recently excavated by predators. It is unlikely that project activities will impact the Sierra Nevada red fox, and very unlikely that the removal of up to 0.5 acres of potential foraging habitat will significantly affect any Sierra Nevada red fox.

Twelve sensitive plant species were identified as potentially occurring on this property. However, none of the twelve species was found in subsequent literature searches or during onsite field surveys conducted in May and June of 2017. Only common plant species occur in areas that would be disturbed by new construction. Findings indicate that it is unlikely the project will have a significant adverse impact on any riparian habitat, sensitive plant populations, special status species or other sensitive communities.

c) Have a substantial adverse effect on federally protected wetlands through direct removal, filling, hydrological interruption, or other means?

NO IMPACT. No indications of wetland habitats or vegetation shifts indicating locally elevated water tables were found within the 28.8 acre study area. Rather, shrub canopies are uniformly distributed in the fragmented patches where Great Basin Mixed Scrub or Big Sagebrush Scrub remain unaffected by recent mechanical disturbance. No other potentially flooded or seasonally mesic habitats (e.g., wetland swales, ephemeral streambeds) were found within the study area.

d) Interfere with movement of any native resident or migratory species or established wildlife migration corridors?

LESS THAN SIGNIFICANT WITH MITIGATION. Mule deer are considered an important harvest species by the CDFW. Scrub habitats in Mono County, especially those supporting browse habitat, provide crucial resources for adult and fawn survival in late spring through early fall. Migrating does in early spring rely on the availability of high quality bitterbrush to maintain good health and reproductive success. Crowley Fish Camp is partly within or at the northern margin of the corridor that is used for the annual migration of the Round Valley herd. The Round Valley Herd size has decreased in recent years, and is now at about 1200 deer. Great Basin Mixed Scrub and Big Sagebrush Scrub vegetation in the study area seasonally meet habitat requirements for mule deer. Bitterbrush is dominant or co-dominant in the shrub layer, and deer may enter the study area to forage, migrate, or suspend migration during late October to late April (when the Fish Camp is closed). Up to 0.5 acres of bitterbrush will be displaced by project-related construction; however, this bitterbrush is isolated from the extensive off-site scrub that is most widely used for foraging, migrating and holding. There was no evidence of mule deer use in recent months, and none of the nearby vegetated areas would be suitable for substantial deer use during the fishing season due to the constant presence of humans, domestic dogs, noise, and night lighting.

Migrating mule deer may however enter the southernmost, least developed part of the study area during the fishing season: spring migration (east to west across the study area) generally occurs from early April through late May, and fall migration (west to east) begins in late September and extends into late November. Thus the latter part of the spring migration (when Camp activity levels are highest), as well as the early part of the fall migration, occur when the Fish Camp facility is operating. The roadway that is used for all Fish Camp vehicular entry and exit passes through a relatively open corridor that likely is also used by migrating mule deer; the unpaved campsite group near Whisky Creek also encroaches slightly into this corridor. Migratory deer movements may be significantly impacted if this access corridor is compromised by new barriers to movement and/or unleashed dogs (both of which could direct deer onto US395, and/or by night lighting (which reduces deer concealment and increases predator access). Any of these impacts would potentially reduce deer access to crucial resources, further compromising an already encumbered migration corridor. Mitigations are provided herein to reduce potential impacts to less than significant levels.

e,f) Conflict with local policies concerning tree preservation? Conflict with an adopted Habitat Conservation Plan?

NO IMPACT. There are no applicable local policies concerning tree preservation, and there are no adopted Habitat Conservation Plans in the project region or in Mono County as a whole.

However, the Mono County General Plan identifies non-native species as a significant impact to environmental resources and the biological assessment included a review of weeds on the project site. Six non-native species were identified onsite including the annual cheat grass, which was found throughout the entire project area. An invasive noxious weed, cheat grass is considered to be among the most invasive of pest plants, and it is thought to increase the risk and frequency of wildfire. Other nonnative species on this site include Russian thistle, tansy mustard, and tumble mustard (all of which have invaded into relatively undisturbed stands of Great Basin Mixed Scrub and Big Sagebrush Scrub), and smaller on-site populations of knotweed and redstem filaree that appear to be currently limited to roadside and maintenance yard areas.

Further disturbances to project area plant communities may encourage the local spread of all nonnative plants on the site. Spread of Russian thistle, tansy mustard, tumble mustard, knotweed, and redstem filaree is considered negative but not significant in the context of the larger historically disturbed lake access area. Cheat grass is of greater concern. The USDA identifies cheatgrass as an aggressive invader of rangeland and forest communities that alters normal fire patterns, out-competes native species during fire succession, diminishes recreational opportunities, reduces forage, degrades wildlife diversity and decreases land values. Although the likelihood of eradication is very low, mitigation is recommended in this section to slow the spread of non-native species.[12] All biological mitigation requirements, as listed in Measures BIO-1 through BIO-7, will be detailed in the landscape plan required by Mitigation AES-1.

MITIGATION MEASURES FOR BIOLOGICAL RESOURCES

Mitigation BIO-1: Bitterbrush shall be seeded into all areas within the likely mule deer migration corridor where it intersects the Crowley Fish Camp approach road and entry gate. Seed of locally derived (Mono County or Eastern Sierra Nevada south of Lake Tahoe) shall be applied at the rate of four pounds per acre treated. This measure will reduce to less than significant levels the potentially significant loss of a crucial resource for migrating mule deer that pass through the project site.

→ **Significance Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

[12] U.S. Department of Agriculture, Field Guide for Managing Cheatgrass in the Southwest, Sept. 2014: https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5410110.pdf

Mitigation BIO-2: To reduce the potential for vehicle-sage grouse collisions near the entry gate, vehicle speeds on the Fish Camp property shall be set at or below 25 miles per hour, with strict enforcement. Signs shall be posted to ensure that drivers are aware of the risk of collision if speeds exceed the posted limits greater.

→ **Significance Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

Mitigation BIO-3*:* A 15 mph speed limit and signage indicating "Wildlife Crossing – 15 mph" shall be posted and strictly enforced between the entry gate and existing campground facilities. This speed will allow drivers to avoid wildlife and minimize mortality rates. Drivers shall be informed of the potential presence of wildlife on the roadway when arriving at the entry gate.

→ **Significance Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

Mitigation BIO-4: To reduce potential impacts on deer migration to less than significant levels, no barriers (such as fences) shall be permitted in the southern, less developed portion of the Crowley Fish Camp site. All onsite exterior lighting shall comply fully with requirements of General Plan Chapter 8 (Scenic Combining Element) and Chapter 23 (Dark Sky Regulations), as detailed in the Outdoor Lighting Plan required by Mitigation Measure AES-2.

→ **Significance Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

Mitigation BIO-5: To reduce potentially significant impacts associated with unleashed dogs, all Fish Camp visitors and staff shall be required to comply with full-time leashing of dogs as an advertised and enforced condition of use.

→ **Significance Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

Mitigation BIO-6: To reduce the potentially significant impacts associated with a potential increase in predators of locally occurring sensitive wildlife, all onsite food and trash shall be secured in a manner that prevents access by bears and ravens.

→ **Significance Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

Mitigation Recommendation BIO-7: To reduce fire hazards associated with cheat grass and other non-native invasive species, control measures (including mowing and/or tillage) will be performed in the occupied campground area every two weeks during the months of April through June (or as outlined in the approved Landscape Plan); mowing shall be sufficient to maintain total non-native grasses standing crop below 5% absolute cover.

→ **Significance Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

V. CULTURAL RESOURCES. Would the project:

Trans-Sierran Archaeological Resources prepared a detailed cultural resources report for the Crowley Fish Camp project. The report is provided in its entirety as MND Attachment 5. Key findings are summarized herein.

a-d) Impact the significance of a historical resource? Cause substantial change in the significance of an archaeological resource? Destroy a paleontological resource or unique geological feature? Disturb human remains?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION. At the time of the California gold rush in the late 1840s, a number of ethnic Paiute tribes were using Long Valley where they had access to varied food sources and materials. The tribal food sources were sharply reduced in the 1860s, when cattle herds were brought in to supply the mining camps. Battles ensued, and most of the Paiute were removed to a reservation at Fort Tejon. By 1866, hostilities had largely ended and most of the Paiute had returned to Long Valley.

Mining declined and by 1881 only a few prospectors were left in the area. The City of Los Angeles soon recognized the value of Long Valley for water storage and by 1905 had begun plans for construction of a reservoir. The Long Valley Dam was completed in 1941, but the current name (Crowley Lake) was not shown on official California road maps until 2005.

Two historic sites (CLFC#1 and CLFC #5) and two prehistoric sites (CLFC #2 and CLFC #3) have been recorded in the lease area, and a third prehistoric site (CLFC #4) was noted just west of the lease area boundary. One of the historic sites (CLFC #5) is thought to consist of the remains of an abandoned segment of a road that was built and used for reservoir construction. Additionally, three prehistoric isolates and 17 historic isolates were noted and plotted.

Because it has been in use for over 70 years, the Crowley Lake Fish Camp itself merits evaluation as a potential historic property, both as a whole (as a district or site), and in part (individual buildings). Several of the structures evaluated in this MND were present when the current operator acquired the lease in 1992; these structures were assessed to determine if they were close to 50 years old or older and, if so, whether they meet the criteria for listing on the California Register of Historical Resources: two ramadas (Site map #8); the domestic well house (#12); the fuel facility and fuel tanks (#17), the boathouse and storage (#21), and the main public restroom facility

(#30). Two small adjacent storage sheds are located near the public restroom (#30): one is used by CLFC to store trash cans during winter; the other is not used at all; both are owned by LADWP and both were installed under LADWP jurisdiction.

CEQA requires consideration of 3 cultural resource categories: properties listed on (or eligible for listing on) the California Register of Historical Resources; unique archaeological resources; and Tribal cultural resources. The three prehistoric archaeological sites (CLFC-2, -3, and -4) were found to have the potential to yield information important in the prehistory of Long Valley and the eastern Sierra. All three sites contain flaked obsidian (which can provide data about when the site was created and occupied and help define trade and travel routes, and tool manufacturing trends). CLFC-4 also includes ground stone, and may therefore provide information about food gathering and subsistence. However, all three sites are small and sparse, and it is unknown whether they contain additional cultural material subsurface. Archaeological testing would be necessary to determine whether they have sufficient data potential to meet listing criteria, but guidelines allow for potentially eligible sites to be treated as eligible for the purposes of CEQA compliance.

One of the historic sites, CLFC-1, may also be eligible for the California Register of Historical resources under criterion 4. CLFC-5, the abandoned road, does not appear to be eligible under any of the criteria.

After analysis, it was determined that the Fish Camp as a whole does not have sufficient integrity to convey the period of significance, which covers the 1940s and 1950s (when it was converted from a construction site to an area repurposed for recreational fishing). Similarly, it was determined that most of the structures that may be 50 or more years old (the public restroom, the boathouse, the DWP buildings, the ramadas, and the storage garages) would not be considered eligible as historic structures under the CEQA criterion. The only building that may embody the distinctive characteristics of a type or method of construction (criterion 3) is the larger LADWP shed; however, further research would be needed to determine the original function and "type" of that building, and to determine whether it has potential to yield information important in history. None of the archaeological sites or other cultural resources at the Crowley Lake Fish Camp was found to meet the criteria established for unique archaeological resources.

The definition of Tribal cultural resources overlaps with the definitions of cultural resources eligible for the state or national historic registers and with the definition of unique archaeological resources, but differs in that Tribal resources are identified by the lead agency in consultation with Tribes. Assembly Bill 52 requires that Tribal cultural resources be considered in CEQA analyses, where requested. The County has not received an AB 52 request from any Tribe that covers the geographic area of which the Crowley Fish Camp is a part. As a result, the AB 52 Tribal consultation requirements do not apply to this project.

The report concludes that 4 of the 5 archaeological sites (CLFC-1 through CLFC-4) should be treated as eligible for the California Register of Historical Resources. However, none of the 4 sites would be impacted by the proposed project: CLFC-1, -3, -4, and -5 are well away from the areas of proposed development, and away from existing uses that are being reviewed by Mono County for proper permitting. CLFC-2 is located close to the boat and trailer storage area, but no ground disturbance or modifications are proposed for that area. The archaeological sites therefore require no further consideration under CEQA for this MND, but all four sites should be considered in future planning.

Likewise, the proposed project would have no effect on historic buildings. The only building potentially eligible for the California Register is the larger of the two cabins owned by LADWP, which is not subject to Mono County approval unless modified, and thus not included in the project. Because of previous disturbance, it is not likely that archaeological, paleontological, or historical features would be encountered during trenching for the new water lines or grading for the new RV camp sites. The mitigation measures provided below will reduce potential impacts to cultural resources to less than significant levels.

MITIGATION MEASURES FOR CULTURAL RESOURCES

Mitigation CR-1: If future development plans include any of the identified historic and/or prehistoric site areas (CLFC #1-5), a formal evaluation of the sites, including subsurface testing, shall be performed by a qualified individual and recommendations followed.

→ **Significance Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

Mitigation CR-2: Mono County (as Lead Agency) shall be notified in the event that archaeological, paleontological, or historical features are uncovered during construction of proposed project elements.

→ **Significance Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

Mitigation CR-3: If human remains or burial sites are encountered during project earthwork, work in that area shall be terminated, the immediate area secured, and the Community Development Department (CDD) notified; the CDD shall then contact the County coroner and (if appropriate) interested Tribes and the Native American Heritage Commission.

→ **Significance Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

VI. GEOLOGY AND SOILS. Would the project expose people to potential impacts involving:

a-d) Rupture of a known earthquake fault? Strong seismic ground shaking? Seismic related ground failure or liquefaction? Landslides? Substantial soil erosion? Location on an unstable geologic unit, or expansive soils?

LESS THAN SIGNIFICANT IMPACT. Virtually all of Mono County is subject to seismic ground shaking from earthquakes and volcanoes, due to its location at a tectonic stress point. The Mono County *Safety Element* indicates that strong to severe ground shaking is the primary seismic hazard.[13]

Probabilistic Seismic Hazard Assessment (PSHA) maps prepared by the California Geological Survey (CGS) and the US Geological Survey (USGS) show that the Long Valley Caldera is one of the areas with the greatest earthquake shaking hazard (the caldera boundary encompasses roughly the northwestern half of Crowley Lake). The caldera region has experienced numerous earthquakes caused by the subsurface movement of magma. The Crowley Lake Fish Camp site is not located within a fault rupture hazard zone as shown on the most recent Alquist-Priolo maps, but the "Tom's Place/Casa Diablo Mountain" fault hazard zone runs northwest-southeast about one-half mile south of the lake.[14]

Earthquake-induced ground failure (including liquefaction, lateral spreading, lurching and differential settlement) is another hazard observed in the project region, particularly along the northwest margins of Lake Crowley as well as Little Antelope Valley and the upper Long Valley. Mono County is designated as Seismic Zone D, which is the zone of greatest hazard defined by the California Building Code. Engineering and construction requirements are stringent, and include compulsory compliance with requirements of the unreinforced masonry building law (Government Code §8875).

Seiches are earthquake-generated waves within closed bodies of water; the resulting waves can overtop dams and threaten nearby property and structures. Although Crowley Lake is an enclosed and dammed reservoir, the Mono County *Safety Element* states that there is no available evidence of seiching in any Mono County lakes or reservoirs.[15] The project area does not have any designated landslide zones.[16]

Soils in the project area are mixed. The US Department of Agriculture (USDA) in 1996 compiled the *Soil Survey of Benton-Owens Valley Area, California, Parts of Inyo and Mono Counties.*[17] According to that report, Long Valley (including the area of Crowley Lake) is thought to have contained a large freshwater lake during the Pleistocene era. Geophysical studies indicate that the valley is a structural graben (i.e., a valley bounded by displaced slopes indicating tensional forces and crustal stretching) in which volcanic and alluvial materials have accumulated to a depth of more than 10,000 feet. Surface soils consist of rhyolitic ash (high in silica), glacial outwash, and stream alluvium. These soil types are not highly silty, and thus not expected to be highly erosive. However, site improvements (to accommodate the new RV sites, the water storage and propane tanks, the portable bathrooms and showers, and the new water spigot) will expose soil in these areas with a resulting potential for erosion. Additionally, fill mounds are evident in some areas of the Camp; these mounds may be highly erosive unless stabilized or covered. A more detailed discussion of soil erosion is provided, along with mitigation recommendations, in MND Checklist Section IX (Hydrology and Water Quality).

Compliance with mandatory building code regulations will reduce to less than significant levels the potentially significant impacts associated with regional geology and seismicity. No additional mitigation measures are required.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste disposal systems?

LESS THAN SIGNIFICANT IMPACT. The Crowley Fish Camp site is served by two sewage disposal systems that are fully permitted by the Lahontan Regional Water Quality Control Board (LRWQCB). A third system is now proposed, to serve the three new ADA-compliant Shower and Bathroom facilities. The existing and proposed septic systems are discussed in detail as part of MND Checklist Section XVII (Utilities and Service Systems).

VII. GREENHOUSE GAS EMISSIONS. Would the project:

a-b) Generate greenhouse gas emissions, directly or indirectly, that may have a significant impact on the environment? Conflict with an applicable plan, policy or regulation adopted to reduce the emissions of greenhouse gases?

This section is based on findings of a detailed air quality and greenhouse gas assessment that was conducted by Giroux & Associates for the Crowley Fish Camp project. The full report is provided as MND Attachment 4, and key results are summarized herein.

LESS THAN SIGNIFICANT IMPACT. The GBUAPCD has no thresholds for GHG emissions. However, CEQA allows reliance on thresholds adopted by other qualifying agencies. The analysis herein is based on an Interim quantitative GHG Significance

[13] Source: www.monocounty.ca.gov/sites/default/files/fileattachments/planning_division/page/812/safety_element_final_12.08.15.pdf
[14] Source: http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/CASADIABLOMTN_SW.PDF
[15] Source: www.monocounty.ca.gov/sites/default/files/fileattachments/planning_division/page/812/safety_element_final_12.08.15.pdf
[16] Source: http://maps.conservation.ca.gov/cgs/informationwarehouse/
[17] Source: https://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/california/CA802/0/Benton_OwensValley_CA.pdf

Threshold of 3,000 Metric Tons (MT) of CO_2 equivalent per year (for industrial projects), that was adopted by SCAQMD in September 2010. Project related GHG emissions are presumed to trigger a mitigation requirement if they exceed the threshold of 3,000 MT CO_2e.

Construction: This assessment assumes that proposed project elements will be built within one year. As a worst case, all construction was assumed to occur within the same calendar year. During project construction, the CalEEMod2016.3.1 computer model predicts that the construction activities will generate the annual CO_2e emissions identified in Table 8.

TABLE 8. 2018 Construction Emissions (Metric Tons CO_2e)	
EMISSION SOURCE	**CO_2e**
New Water Tank	**3.8**
New Propane Tank	**3.8**
RV Campsites	**7.0**
Water Service to Dry Camp	**1.5**
Portable Bathrooms	**2.1**
Septic System	**5.9**
Total 2018	**24.1**

Air quality agencies typically recommend that construction activity GHG emissions be amortized over the useful life of a project. Assuming a 30-year life for the proposed improvements, the annual average GHG emissions would be less than 1.0 MT/year. Such emissions would have a less-than-significant local, national or global GHG emissions impact, and no mitigation is required.

Operations: Table 9 identifies total operational and annualized operational and construction emissions for the project.

TABLE 9. Annual Operational Emissions	
Consumption Source	**MT(CO2e)**
Mobile Source	820.4
Annualized Construction	0.8
Total	**821.2**
Guideline Threshold	3,000
Exceeds Threshold?	No

As shown, total project operational GHG emissions are estimated at 832.2 MT(CO2e), which is well below the significance threshold of 3,000 MT(CO2e). GHG Impacts would thus be less than significant, and no mitigation measures are required.

VIII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:

a,b,h) Create a significant health hazard through the transportation of hazardous materials? Create a significant hazard due to accidental release of hazardous materials? Expose people or structures to risk of wildland fires?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION. The Fish Camp has an approved Certified Unified Program Agency (CUPA) permit issued by the Mono County Environmental Health Department during March of 2014. All facilities that handle hazardous materials or generate hazardous wastes require a CUPA permit; the Crowley Lake Fish Camp CUPA is provided as MND Attachment 1. CUPA is a statewide program designed to protect public health and safety, protect the environment and sustain economic diversity through the consolidation and uniform administration of permits, inspections and enforcement activities involving hazardous materials. The Fish Camp CUPA indicates that management and employees have specific procedures outlined in writing and on-site training programs for Hazard Assessment Control. Inspections and reporting are regularly required to monitor and correct safety concerns. The business has an Emergency Action Plan in place should a release of hazardous materials occur.

Hazardous materials used on the Fish Camp site include regular unleaded gasoline, motor oil and propane. The gasoline is stored onsite (see Site Map #17) in two 1,000-gallon tanks with a total 684 cubic feet fluid containment volume. The fuel vendor (Thomas Petroleum) delivers fuel to the site once or twice monthly during the regular season. The CUPA notes that fuel is dispensed at Crowley Lake Fish Camp only by trained employees.

Motor oil is stored on the site only when removed from boat engines; the oil is stored temporarily in an approved drum and periodically taken to the dump for disposal.

Propane is currently stored onsite in six tanks, including four 125-gallon and two 500-gallon tanks (see Site Map #18). As part of the proposed project, one new propane tank would be provided onsite (Site Map #19), bringing the total to seven tanks. The new tank would have a capacity of 230-gallons, and would be used for the proposed new shower trailer (Map #23). The propane tanks are not

included in the current CUPA; mitigation is provided in this section to incorporate specific CUPA measures for the six existing and proposed seventh propane tank.

The Town of Mammoth Lakes holds a community fireworks show on the Crowley Fish Camp site every Fourth of July. The show is a special event that requires a burn permit from Long Valley Fire Department, and a use permit from Mono County with approvals from LADWP and LADWP lessees (including the Crowley Lake Fish Camp and a rancher that leases adjacent property). The Fish Camp serves as host and provides courtesy staff for this event; the Town is responsible for obtaining all permits and coordinating with the professional fireworks display company (Pyrospectaculars). Meetings are held with law enforcement prior to the event to coordinate public safety and event management.

e) Result in a safety hazard result for people working with two miles of a public or private airport?

LESS THAN SIGNIFICANT IMPACT. The easternmost terminus of the Mammoth/Yosemite Airport runway is located a little more than 2 miles west-northwest of the Fish Camp. However, it is noted that the Mammoth/Yosemite Airport *Layout Plan Update*[18] identifies a number of airport obstructions based on Federal Aviation Regulation (FAR) Part 77. The major obstructions identified therein include the mountains to the south, west, and northwest, all of which penetrate the horizontal surface and the conical surface and pose flight hazards, various power and lighting poles, and several of the east hangars. To address obstructions on the south, the *Plan* recommends installation of a row of obstruction lights at the top of the power and telephone poles located south of the runway. Both Crowley Lake and the Fish Camp are sited at elevations below the obstruction surfaces identified in the *Airport Layout Plan Update,* and no potential impacts to airport safety or to Fish Camp guest are foreseen. No mitigation measures are required.

c,d,f) Emit hazardous emissions within a quarter mile of a school? For a project in the vicinity of a private airstrip, would the project pose a safety hazard for people residing or working in the project area? Be located on a site that is listed as a hazardous materials site?

NO IMPACT. The project area is not located within a quarter mile of any school or private airport. The California Department of Toxic Substances Control maintains a list (the 'Cortese List') of identified hazardous waste and substances sites throughout the state. The Cortese List includes no sites in Mono County.[19]

g) Impair implementation of an adopted emergency response plan or emergency evacuation plan?

NO IMPACT. Uninterrupted access between the Fish Camp and US 395 is now and will continue to be maintained at all times. No adverse effects are foreseen and no mitigation is required.

MITIGATION MEASURES FOR HAZARDS

Mitigation HAZ-1: Following county review of the current project, the Crowley Lake Fish Camp CUPA shall be updated to describe onsite propane tanks (including the seventh tank, if approved, as well as motor oil facilities if subject to CUPA regulation) and provide information about applicable prevention, mitigation and abatement programs used onsite.

→ **Significance Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

IX. HYDROLOGY AND WATER QUALITY. Would the project:

a,b,d-f) Violate water quality standards or waste discharge requirements? Substantially deplete groundwater supplies or interfere with groundwater recharge? Substantially alter existing drainage patterns causing substantial erosion, siltation or flooding? Create or contribute runoff that would exceed the capacity of existing or planned stormwater drainage systems? Otherwise substantially impair or degrade water quality?

LESS THAN SIGNIFICANT IMPACT. According to the State Water Resources Control Board-Lahontan Region *Basin Plan,*[20] Crowley Lake Fish Camp is located in the 380-square mile Long Valley Hydrologic Area, which comprises the upper reaches of the larger Owens River watershed. Within the Long Hydrologic Area, the project is part of the Crowley Lake watershed (hydrologic unit HUC8 18090102). As a whole, the Owens River watershed is designated as a 'Category 1' priority watershed (and the Long Hydrologic Area as a target subwatershed) because of the high resource value of its waters. These designations allow the LRWQCB to apply special watershed management strategies.

[18] Town of Mammoth Lakes, *Mammoth Yosemite Airport Layout Plan Update Airport Layout Plan Update Narrative,* prepared by Reinard Brandley, May 2012: http://www.ci.mammoth-lakes.ca.us/DocumentCenter/Home/View/2890.

[19] Source: Dept. of Toxic Substances Control website: www.envirostor.dtsc.ca.gov/.

[20] Source: http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/references.shtml.

Crowley Reservoir (which is owned and managed by LADWP) is the natural low point for the entire Long Hydrologic Area.[21] LADWP has implemented a number of management strategies intended to address Crowley Lake water quality issues, including riparian setback fencing projects and the installation of equipment to increase dissolved oxygen levels in the hydroelectric power plants that release water from Crowley Reservoir into Pleasant Valley Reservoir. Water quality issues have also been identified at Hilton Creek, which flows into Crowley Lake, including potential exceedances for total dissolved solids, low levels of dissolved oxygen and fecal coliform.[22]

The US Forest Service (USFS) designates the watershed as a non-priority Class 1 properly functioning watershed in the *Forest Service Watershed Condition Framework* (USFS 2013). Watershed management prescriptions are outlined in the *Inyo National Forest Land and Resource Management Plan* (USFS 1988). Named surface waters along or near the project corridor include Convict Creek and Convict Lake.

Project implementation has potential to impact water quality in Crowley Lake. Site grading and ground cover removal will create potential for a short-term increase in runoff sediment levels, which can contribute to increased total dissolved solids and reduced levels of dissolved oxygen (both are identified issues in the lake). New paving for the proposed project improvements will increase total impervious surface area and thus reduce groundwater recharge; however, most of the Fish Camp site will continue to provide pervious ground surfaces, as at present, and the loss of surface area is estimated to be less than one-half acre. These impacts would be reduced to less than significant levels through implementation of the mitigations recommended below.

Since the area of direct earthwork disturbance will be less than 1 acre, the project will not be subject to NPDES requirements for construction projects (NPDES requirements focus on identification of Best Management Practices (BMPs) to reduce potential erosion and sedimentation to less than significant levels). However, the mitigations recommended herein incorporate many of the practices that comprise a BMP program, and focus primarily on protecting receiving waters and water sources in areas of construction activity.

c) Alter drainage patterns in a manner that would result in substantial erosion or siltation?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION. As noted in MND Checklist Section VI (Geology and Soils), surface soils consist of rhyolitic ash (high in silica), glacial outwash, and stream alluvium. These soil types are not highly silty, and thus not expected to be highly erosive. However, site improvements (to accommodate the new RV sites, the water storage and propane tanks, the portable bathrooms and showers, and the new water line and spigot to serve the dry camp) will expose soil in all of these areas, with a resulting potential for erosion and siltation. Additionally, fill mounds are evident in some areas of the Camp; these mounds may be highly erosive unless stabilized or covered. Mitigation measures provided at the end of this section will reduce the potential for erosion and siltation to less than significant levels.

g-i) Place housing within a 100-year flood hazard area? Place within a 100-year flood hazard area structures, which would impede or redirect flood flows? Expose people or property to risk of loss, injury or death involving dam failure or flooding?

NO IMPACT. The Crowley Lake project area is not located within a 100-year flood zone as identified on the Mono County General Plan map.[23] Project implementation would therefore not impede or redirect flood flows or expose people or property to significant flood risk. The Fish Camp site is located upgradient of the Crowley Lake Dam and thus not subject to risk or injury or death from dam failure.

j) Result in inundation by seiche, tsunami or mudflow?

NO IMPACT. As noted in MND Checklist Section VI (Geology and Soils), the Mono County *Safety Element* states that there is no known evidence of seiching in Mono County lakes or reservoirs.[24]

MITIGATION MEASURES FOR WATER QUALITY

Mitigation measures for erosion control and water quality (as listed below in Measures WQ-1 through WQ-3), will be detailed in the landscape plan required by Mitigation AES-1.

Mitigation WQ-1: Erosion controls (including erosion control blankets, fiber rolls, filter barriers and/or settling structures) shall be used during the construction of any project elements that require ground disturbance, and shall remain in place until the disturbed surfaces have fully stabilized.

→ **Significance Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

[21] Source: Surface Water Ambient Monitoring Program (SWAMP) at the Lahontan Region: Summary of Results for Years 2000–2005, July 2007: http://www.waterboards.ca.gov/lahontan/water_issues/programs/watershed_management/docs/final_02_or24.pdf.
[22] http://www.waterboards.ca.gov/lahontan/water_issues/programs/swamp/docs/report2000_05_final.pdf.
[23] Mono County maps: http://monomammoth.maps.arcgis.com/apps/Viewer/index.html?appid=867oc63cda0540b39c3ae388cdd7db78
[24] Mono County *Safety Element*: www.monocounty.ca.gov/sites/default/files/fileattachments/planning_division/page/812/safety_element_final_12.08.15.pdf

Mitigation WQ-2: Directly following construction, disturbed areas shall be reseeded as outlined in Mitigation Measure AES-1.

→ **Significance Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

Mitigation WQ-3: All existing fill mounds (including those comprised of dirt, asphalt or other materials) shall be removed or stabilized or covered within 6 months of project approval, and no new fill mounds shall be created unless they are stabilized or covered from the outset.

→ **Significance Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

X. LAND USE AND PLANNING. Would the project:

a,c) Physically divide an established community? Conflict with a habitat conservation plan or a natural community conservation plan?

NO IMPACT. Although the Crowley Fish Camp is located less than 1 mile from the community of Crowley Lake, the Camp and community areas are physically separated from one another by US395. US 395 off- and on-ramps to the south serve the Crowley community, while off- and on-ramps to the north serve the Fish Camp. Neither the existing uses nor the proposed uses on Crowley Fish Camp will divide the established Crowley community. No habitat conservation plan or natural community conservation plan has been adopted for lands within the project area, and the project has no potential to conflict with such a plan.

b) Conflict with an applicable land use plan, policy, or regulation of any agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect?

LESS THAN SIGNIFICANT IMPACT. The Mono County General Plan designates the Crowley Fish Camp for Open Space (OS) uses. Uses and standards for the OS designation are summarized in Table 10 below.

TABLE 10. Land Uses and Development Standards for the Open Space (OS) Land Use Designation

INTENT: The "OS" designation is intended to protect and retain open space for future generations. These lands may be valuable for resource preservation (e.g., visual open space, botanical habitat, stream environment zones, etc.), low-intensity recreational uses, mineral resources, or other reasons.	
PERMITTED USES	• Crop and Tree Farming • Bikeway, pedestrian ways, equestrian trails, cross-country ski touring, ski back trails • Wildlife preserves, botanical preserves and similar uses • Single-family dwelling
USES PERMITTED SUBJECT TO DIRECTOR REVIEW	None stated
USES PERMITTED SUBJECT TO USE PERMIT	• Recreation areas requiring significant modification of natural landscape (e.g., golf courses, tennis courts, commercial stables, alpine ski runs) • Accessory buildings and uses, including barns, stables and farm buildings • Water storage tanks • Mineral exploration activities (including geothermal exploration activities)
DEVELOPMENT STANDARDS	**Minimum Parcel Size:** None **Minimum District Area:** None **Maximum Site Disturbance:** 10% (includes lot coverage) **Density:** 1 dwelling unit/80 acres & a secondary unit. No unit allowed if parcel is <80 acres. **Population Density:** Approximately 0.6 persons per acre.
NOTES	Uses may have been omitted from the list of those specified, hence the Commission may find other uses to be similar and not more obnoxious or detrimental to the public health, safety and welfare. (See the explanation of 'uses not listed as permitted,' directly below)
Uses not listed as permitted (Land Use Element §04.030): A. It is recognized that in the development of comprehensive land use development standards that: 1. Not all uses can be listed nor can future uses be anticipated; and 2. Uses may have been omitted from the list of those specified as permissible in each of the various Land Use Designations described in this Land Use Element, hence the phrase, "plus such other uses as the Commission finds to be similar and not more obnoxious or detrimental to the public health, safety and welfare." B. Interpretation of "similar uses." Where the term "and such other uses as the Director or Commission finds to be similar and not more obnoxious ... " is mentioned, it shall be deemed to mean other uses that, in the judgment of the Director or the Planning Commission, as evidenced by a written decision, are similar to and not more obnoxious to the general welfare than the uses listed for the same designation. If a use is found similar to a permitted use or similar to a use requiring a Director Review or Use Permit, it shall also be permitted subject to the same requirements as its most similar listed use. The Director shall make the interpretation concerning uses permitted or uses permitted subject to director review; the Planning Commission shall make the interpretation for uses permitted subject to	

use permit. For interpretation of uses of a potentially controversial or sensitive nature, the Director may submit the matter to the Commission for an interpretation.

The General Plan *Land Use Element* identifies several policy and planning goals with potential to impact and by impacted by the Fish Camp. The discussion of 'Countywide Issues/Opportunities/Constraints' addresses lands owned by LADWP, noting that the County has planning authority over LADWP lands and that development on those lands must comply with CEQA. Development on LADWP lands is identified as a key issue due to the environmentally sensitive nature of much of the LADWP-owned land, particularly with regard to wetlands and critical wildlife habitat.

The discussion of 'Issues/Opportunities/Constraints for Community Areas' notes that there is interest in establishing a regional trail network, including a multi-use trail that would extend from Long Valley to Mammoth Lakes and around Crowley Lake. The goal of an enhanced trail system is also addressed in the discussion of objectives for community areas. Objective 23.E calls for the provision of recreational and open-space uses in and around the Long Valley planning area, as supported by Policy 23.E.2 (discourage the extension of public and private facilities, especially roads, into open space or agricultural land). Two relevant actions under this policy include (i) Action 23.E.3.b (to consider the feasibility and desirability of a regional trail network, including a multi-use trail from Long Valley to Mammoth Lakes and around Crowley Lake), and (ii) Action 23.E.3.d (in cooperation with the LADWP, encourage recreational development at Crowley Lake, including development of winter use ski trails, a winter campground/trailer park, water-skiing, sailing, and concessions).

County goals for LADWP-owned lands are also addressed in Objective 1.G (protect open space and agricultural lands from conversion to and encroachment of developed community uses), as supported by Policy 1.G.2 (preserve and protect open space in order to protect natural and cultural resources and to provide for a variety of recreational opportunities), and Action 1.G.2.b (designate undeveloped lands owned by out-of-county agencies such as the LADWP, and the Walker River Irrigation District (WRID), or by utility entities such as Sierra Pacific Power Company, and Southern California Edison (SCE) as "Open Space" ("OS") or "Agriculture" ("AG") in this Element. Exceptions to this policy may include lands adjacent to community areas needed for community uses, or lands outside community areas needed for public purposes).

Scenic resources in the project area are addressed in General Plan Chapter 8 (Scenic Combining District) and Chapter 23 (Dark Sky Ordinance), as discussed previously in MND Checklist Section 1 (Aesthetics). Additional relevant guidelines are provided in Mammoth Vicinity Goal 21 and Objective 21.A (to maintain and enhance the scenic, recreational, and environmental integrity of the Mammoth vicinity), as supported by Policy 21.A.2 (future development shall be sited and designed in a manner that preserves the scenic vistas presently viewed from US 395) and Action 21.A.2.b (continue to enforce the designation of "Open Space" for LADWP lands in order to protect the scenic resources on those lands).

The *Land Use Element* discussion of objectives for community areas also identifies a broad goal to preserve and enhance natural resources in the Mammoth vicinity (Objective 21.C), supported by a policy to preserve, maintain and enhance surface and groundwater resources (Policy 21.C.3) and an action to work with the appropriate agencies to develop and implement a comprehensive management plan for Crowley Lake and areas downstream. This broad goal is also evident in Objective 22.B (to protect the water resources of the Upper Owens Area), as supported by Policy 22.B.2 (to preserve the Upper Owens River water resources and riparian corridor) and by Action 22.B.2.a (to work with local landowners to develop coordinated strategies for preserving the Upper Owens River corridor, including the riparian corridor, downstream to Crowley Lake).

Natural resources in the project area are also addressed in Long Valley Goal 23 (maintain the rural residential character of the Long Valley communities (i.e., Long Valley, McGee Creek, Crowley Lake/Hilton Creek, Aspen Springs, and Sunny Slopes) in a manner that provides for commercial uses to serve community needs, and that protects the area's visual, recreational, and natural resources). Goal 23 is supported by Objective 23.E, to provide for recreational and open-space uses in and around the Long Valley planning area, is supported by Policy 23.E.1 (to ensure the preservation of open space in the planning area), and Action 23.E.1.b, which seeks to designate lands owned by the LADWP for open space or public facilities use (the Fish Camp is designated for Open Space land uses). Goal 23 is also supported by two relevant actions mentioned above, including Action 23.E.3.b (regarding the regional trail network), and Action 23.E.3.d (to expand the range of recreational uses).

Implementation of the planning goals and policies described in this section would be the responsibility of Mono County, and many would require the cooperation of LADWP as well.[25] It is noted herein that several of the above policies (particularly those calling for an expanded trail network and winter activities) would be in conflict with environmental concerns raised in MND Checklist Section IV (Biological Resources) pertaining to potential impacts on sensitive wildlife resources. However, no significant land use impacts have been identified that are directly associated with the current project proposal.

XI. MINERAL RESOURCES. Would the project:

[25] Communication with Gerry le Francois, Mono County Community Development Department, July 2017.

a,b) Reduce the availability of a known mineral resource? Reduce the availability of a locally important mineral resource recovery site?

LESS THAN SIGNIFICANT IMPACT. The *Mono County Conservation Element* indicates that significant mineral resources are present in Mono County. In accordance with the Surface Mining and Reclamation Act of 1975 (SMARA), the *Conservation Element* provides for the conservation and development of identified significant mineral resource deposits, and for the reclamation of mined lands. SMARA identifies a number of mineral resource classifications: MRZ-1 (areas with little likelihood for the presence of resources), MRZ-2a (areas with significant resources, MRZ-2b (areas where geologic information indicates that significant resources are present, MRZ-3a (areas likely to contain deposits similar to other known deposits in the area, MRZ-3v (areas favorable for mineral resources but where discoveries have not been made), and MRZ-4 (areas where geologic information neither confirms nor disproves the presence of resources).[26]

According to a 1949 report prepared by the California Division of Mines,[27] mineral production in Mono County since 1880 includes both metals and nonmetals. Gold and silver represented more than 75% of recorded production over that time, primarily in the Bodie and Masonic districts, but also in areas west of Mono Lake, in Mammoth Lakes, and in the southern part of the Benton Range. Other minerals found and/or mined in Mono County include complex lead, copper, deposits of argentite, cerargyrite (a silver ore), pyrite and gold, zinc, molybdenum, tungsten, andalusite, and pyrophyllite. Extensive beds of pumice have been mined, along with perlite and vermiculite, quicksilver, barite, clay, travertine, tuff, sand and gravel, and medicinal salts obtained from springs in Mono Lake. Water is also bottled in Mono County locations. There are presently 6 active surface mining operations in the county (mostly sand and gravel); one active mine is located in Long Valley near Mammoth-Yosemite Airport.[28] The stone columns located on the east side of Crowley Lake (and not a part of the Fish Camp) are believed to have been created by cold water percolating down into (and steam rising up out of) hot volcanic ash that was spewed out of the long valley during the massive caldera volcanic event about 760,000 years ago.[29]

As indicated previously in Table 10 (OS land use standards), mineral exploration activities are permitted on open space lands, subject to a use permit. Although allowed with a use permit, there are no resource extraction operations on or adjacent to the Fish Camp site and no mineral extraction operations are planned or proposed herein. The County has received a complaint that the onsite maintenance yard may have been used to store aggregate for offsite commercial use, but has not been able to confirm any illegal activity on the site.[30] Commercial aggregate activities would not be allowed on this site without a Use Permit; the County has received no Use Permit applications from the Crowley Lake Fish Camp for this purpose. Based on the foregoing considerations, no impacts are foreseen and no mitigation measures are required.

XII. NOISE. Would the project:

This section is based on findings of a detailed noise assessment that was conducted by Giroux & Associates for the Crowley Fish Camp project. The full report is provided as MND Attachment 2, and key results are summarized herein.

a-d) Exposure of people to noise levels in excess of local standards or ordinances? Excessive ground borne vibration or ground borne noise levels? Substantial permanent or temporary increases in existing ambient noise levels? Substantial increases in temporary or periodic noise levels?

LESS THAN SIGNIFICANT IMPACT. Ambient noise levels in the project vicinity are low, as indicated by the baseline measurements taken in October 2016. In order to establish an ambient noise level, short-term area noise measurements were conducted on Tuesday October 18, 2016 from 3:00 p.m. – 4:30 p.m. at three locations. Measurement locations are shown in Attachment 2 and the monitoring results are summarized in Table 11.

TABLE 11. Baseline Noise Levels in the Project Area.

	Leq	Lmax	Lmin	L10	L33	L50	L90
Meter 1	45	56	39	45	42	41	40
Meter 2	47	49	40	45	43	42	41

[26] Calif. Dept. of Conservation, Division of Mines & Geology, *Mineral Land Classification of the Eureka-Saline Valley Area, Inyo and Mono Counties*. 1993. Special Report 166. Accessed at https://archive.org/stream/minerallandclass166tayl/minerallandclass166tayl_djvu.txt.

[27] Calif. Dept. of Natural Resources, Division of Mines, *Mineral Resources and Mineral Production during 1947*, Bulletin 142, 1949 (from http://archive.org/stream/countiesofca1947oocalirich/countiesofca1947oocalirich_djvu.txt).

[28] Source: Nick Criss, Mono County Enforcement.

[29] Los Angeles Times, http://www.latimes.com/science/la-me-adv-volcanic-columns-mystery-20151115-story.html.

[30] Communication with Wendy Sugimura, Mono County Community Development Dept., January 2018.

Meter 3	48	55	43	50	48	46	44

Meter 1 was located adjacent to Dry Camp, just north of the gate. Meter 2 was placed about half way into the site and Meter 3 was placed in the RV lot close to the marina (meter locations are shown in Attachment 2). Readings are lowest on the southern portion of the site. They increase slightly traveling north on South Landing Rd. However, these readings demonstrate that existing ambient noise levels in the project vicinity are low. The low baseline levels suggest that the proposed project area is sensitive to even a moderate increase in noise that could result from project implementation.

Noise impacts are significant if they create a substantial temporary or permanent increase in noise levels, or if they cause a violation of adopted noise/land use compatibility standards in general plans or noise ordinances. The following noise limits, contained in §0.16.060 of the Mono County Code, establish the threshold levels for determining whether noise impacts are significant.

TABLE 12. Maximum Allowable Exterior Noise Levels		
Land Use Category	**Allowable Time**	**Noise Level (dBA)**
Residential Single Family	Daytime (7 a.m.-10 p.m.)	55
	Nighttime (10 p.m.-7 a.m.)	50
Residential Multi-Family	Daytime (7 a.m.-10 p.m.)	55
	Nighttime (10 p.m.-7 a.m.)	50
Public Uses-Schools, Libraries, Hospitals	Daytime (7 a.m.-10 p.m.)	55
	Nighttime (10 p.m.-7 a.m.)	50
Passive Recreational Areas	Daytime (7 a.m.-10 p.m.)	55
	Nighttime (10 p.m.-7 a.m.)	50
Community Parks and Athletic Fields	Daytime (7 a.m.-10 p.m.)	55
	Nighttime (10 p.m.-7 a.m.)	50

Construction Noise: Based on calculations provided in Attachment 2, it was determined that noise thresholds will not be exceeded for any construction activity on the project site; the less-than-significant noise levels are a result of the distance between the noise sources and the closest receptors. The more stringent thresholds for stationary source equipment will also be met because no stationary equipment is anticipated for use. As required by the Mono County Code, all construction work shall be conducted during daytime construction hours. Although no mitigation is required, a measure is recommended below to conduct noise-generating activities during times of reduced noise sensitivity.

Traffic Noise: During peak-season weekends, project-related activities are expected to generate 100 additional vehicular trips over current levels (lower project-related traffic is anticipated on weekdays). Vehicles access the site via US 395 and then travel north on South Landing Road. South Landing Road into the Fish Camp is north of US 395, and traffic from the highway would dominate the noise environment. Traffic volumes along US 395 in the project area as of 2015 were approximately 6,900 vehicles per day (Caltrans District 9, Average Annual Daily Traffic Count Data for US 395, 2015). The difference between the noise level associated with 6,900 vehicles (baseline) and 7,000 vehicles (with future project traffic) is +0.1 dB. Therefore, the additional vehicles would not alter the traffic noise environment and would not create a perceptible change in noise levels.

Boat Dock Operational Noise. Noise will also be generated by additional boat movements in the area of the boat dock. Because the dock area is a "no wake" zone, boat travel speeds will be less than 5 mph. The number of arrivals or departures in any given hour for either of the two boat launch areas will be very low. There are no adopted thresholds of significance for boating noise except that moving boats may not create pass-by noise exceeding 55 dB, as measured at the closest sensitive use (this value is under full power). Within the harbor boats will be near idle maneuvering, the onshore noise level will be much lower. The closest home outside the main harbor area is 0.8 miles away. Given that only a few boats will arrive or depart per hour, the hourly Leq will be far below any Mono Country residential standards at homes south of US 395.

The public docks will include boat launching in addition to arrival/departure activities. The launch or retrieval process is somewhat time-consuming (i.e., to back the trailer into the water, fasten or unfasten the boat and perform other tasks). The number of boats launched or retrieved per hour is limited. Noise measurements made at a ski boat launch in Plaster City, California, found a noise level of 53 dB Leq for a launch sequence at 30 feet from the ramp. Ramp activity noise levels at the homes closest to the marina will be imperceptible (less than 15 dB Leq) due to distance-spreading losses.

Based on experience around public docks and launch areas, the potential for nuisance noise is more related to onshore social activities than to boating. The proposed RV park spaces will include camping and will likely have ongoing social activities (sometimes well after dark). The potential for excessive noise will increase if these activities are fueled by alcohol consumption, boisterous behavior and/or loud music.

e,f) If within two miles of an airport, expose residents or workers to excessive noise levels? If within two miles of a private airstrip, expose residents or workers to excessive noise levels?

LESS THAN SIGNIFICANT IMPACT. The easternmost terminus of the Mammoth/Yosemite Airport runway is located a little more than 2 miles west-northwest of the Fish Camp, and thus outside the limits associated with this checklist question. It is noted, however, that a March 2001 Environmental Assessment and Finding of No Significant Effect prepared by the Federal Aviation Administration for the Mammoth Yosemite Airport Expansion Project[31] determined that the cumulative noise level about 1 mile east of the easternmost terminus would be CNEL 38 by the year 2022; the assessment also calculated worst-case conditions (Lmax) for single aircraft overflights and found that the highest exposure (overflight by a Lear 35 business jet) would result in a maximum 74 decibel sound event. Since the decay rate of noise due to spreading sound waves is 6 dB per doubling of distance, the worst case single-event noise level at Fish Camp would be 68 db, while the cumulative noise level would be about CNEL 32. These noise levels would be within acceptable outdoor exposure limits for recreational uses, as set forth in the Mono County Noise Element.[32]

MITIGATION RECOMMENDATION FOR NOISE

Mitigation N-1: It is recommended that construction activities be conducted during daytime hours when noise sensitivity is lower.

→ **Significance Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

XIII. POPULATION AND HOUSING. Would the project:

a-c) Induce substantial growth either directly or indirectly? Displace existing housing, especially affordable housing, or substantial populations?

LESS THAN SIGNIFICANT IMPACT. There are two full-time managers on the Crowley Fish Camp site; the managers live in onsite housing (see Site Plan #9), and are responsible for planning and management of all camp facilities, operations and maintenance. Up to eight additional employees live onsite during the operating season (April to October). These seasonal employees live in a portion of the existing RV sites (see Site Map #13). The remaining RV sites, and all 12 of the dry camp TV/tent campsites (see Site Map #15) are for guest rental during the operating season. All of the existing and proposed RV and tent campsites are vacant of guests and structures (tents and RVs) during the off-season.

The 2015 Mono County *Regional Transportation Plan* provides population projections by 'Census Designated Place' (CDP).[33] The RTP projections for Crowley Lake show a 2010 population of 875, increasing to 926 by 2020, to 1001 residents by 2030, and to 1085 residents by 2040 (a total increase of 126 over the 30-year timeframe studied). The projections do not include seasonal visitation.

As part of the current project, the Fish Camp is proposing to add 2 additional RV sites with hookups that would be located adjacent to and northwest of the 19 existing guest RV campsites with hookups. This would result in a total of 21 guest RV/tent spaces. Guest occupancy rates vary through each season; assuming six people per site, the current guest population would be about 114 during the peak season; the proposed two additional RV sites would increase the peak-season guest population by roughly 12, for a future peak-season guest population up to 126 people. Full time year-round occupancy would continue to be limited to the 2 full-time camp managers; all other resident employees (including 1 employee living in each of the three park model cabins (#5, #6 and #7), and two employees living at the Gatehouse Camp Host Trailer (#1)), live onsite only during the operating season.

Based on the foregoing considerations, it is concluded that the project would not have potential to induce substantial growth, or to displace any housing or resident populations. As part of the CUP for this project, the County intends to note the existing provisions for onsite employee housing, with a requirement that housing be provided for two permanent onsite managers in the future, as is done at present.[34] No impacts are foreseen, and no mitigation is required.

XIV. PUBLIC SERVICES. Would the project impact or create need for new services:

a) Fire protection? Police Protection? Schools? Other public facilities?

LESS THAN SIGNIFICANT IMPACT. The Fish Camp site is served by a full range of public services, as outlined below:

- Fire Protection: Fire protection services are provided by the Long Valley Fire Protection District. The district has 4 full-time paid firefighters, and 29 volunteer firefighters operating out of two stations. The firefighters are supported by one

[31] FAA, *Environmental Assessment and Finding of No Significant Effect*, prepared by the Town of Mammoth Lakes for the proposed Mammoth Yosemite Airport Expansion Project, March 2001.

[32] Mono County *Noise Element*, https://www.monocounty.ca.gov/sites/default/files/fileattachments/planning_division/page/812/noise_element_final_12.08.15.pdf

[33] CDP is a Census designation meaning Census Designated Place and defined as a populated area that lacks separate municipal government but physically resembles incorporated places.

[34] Note: though only one managers' residence is currently provided, the two managers are married and require only one residence. In the future, the two managers mar

paid support staff member. The District's main station is located at 3605 Crowley Lake Drive in the community of Crowley Lake, which is about 1 mile by road from the Crowley Fish Camp.[35] Correspondence received from ISO in May 2017 indicates that as of September 2017, the District's Public Protection Classification will be 04/4Y (where a 10 indicates the worst and a 1 the best protection).[36]

- Police Protection: Police protection services are provided by the Mono County Sheriff's Department. The project site is located in the south county section of the department service area, and patrolled by deputies that are stationed out of the Crowley Lake substation located at 3605 Crowley Lake Drive. The Department provides a wide range of services including an AFN registry (for residents with special access and function need requirements in an emergency), online crime reporting tools, a code-red emergency alert service and many others.[37]
- Schools: Mono County is served by 21 school facilities ranging from Early Start through continuing education programs. Public schools serving Crowley Lake include Mammoth Elementary School and Mammoth High Schools (there are no public schools in Crowley proper). One private school is located in Crowley Lake: the Eastern Sierra Christian Academy, operated by Church on the Mountain, provides K-8 classes for an estimated 20 students.[38]
- Power: SCE maintains facilities on the Fish Camp site including an 18K electrical service upgrade and electric panel that were added in 2013 (see Site Map #20), with a second transformer near the Park Model Cabins (Site Plan #5, 6, 7). Overhead and underground power lines provide electricity to the boat house/repair shop and to the several of the RV pads; most of the RV pads are served though underground power lines.
- Propane: Fish Camp propane needs are currently met through 6 steel propane tanks (owned by the Camp and maintained by AmeriGas) including four 125-gallon tanks and two 500-gallon tanks that provide a combined capacity for 1,500 gallons of propane. The proposal is to add one additional propane tank (same ownership and maintenance) with a capacity of 230-gallons. The new tank would be located by and serve propane to the proposed new portable bathrooms and showers. The new tank would increase overall propane capacity on the Fish Camp site by about 15%. AmeriGas indicates that a 250-gallon tank is about 7'10" in length and about 30" in diameter (compared to a length of about 10' and diameter of about 37" for a 500-gallon tank).[39]
- Water: Water supply is obtained through an onsite transient non-community well (transient non-community public water systems are public water facilities that provide water where people do not remain for long periods). Non-community facilities are required to provide a safe and adequate supply of water under the federal Safe Drinking Water Act.[40] Onsite supplies are routinely tested with no evidence to date of contamination.[41]
- Sanitation: Please see the discussion provided in MND Checklist Section XVII(a) (Utilities and Service Systems) for a detailed review of the existing and proposed on-site sanitation facilities.

No deficiencies have been identified with respect to existing or proposed public systems serving the existing or proposed land uses on the Crowley Lake Fish Camp site. No adverse impacts on service systems are foreseen in conjunction with approval of the land uses now proposed for development. Four of the proposed improvements (the new water storage tank, the new propane tank, the new water line and spigot, and the new septic system) would have a beneficial impact on service delivery within the project. No mitigation is required.

XV. RECREATION. Would the project:

a,b) Increase the use of parks or recreational facilities? Require construction or expansion of recreational facilities?

LESS THAN SIGNIFICANT IMPACT. LADWP identifies Crowley Lake Fish Camp as a leased recreational area. The Long Valley Reservoir was dedicated as Crowley Lake and opened during the 1940s for recreational uses including public fishing and other water sports with LADWP providing administrative oversight. The Camp has been in continuous operation as a public fishing area since that time and the current leaseholder, John Frederickson, has been operating the site since 1992.

Crowley Lake is considered to be among the finest fishing areas in the Eastern Sierra, noted for the size of its rainbow and brown trout population, the number of bays, the broad stretches of water, and the narrow inlet and outlet of the Owens River.[42] The Lake is also recognized by fishing enthusiasts for the 'Crowley Steelhead' that migrate upstream from Crowley Lake in the fall to the

[35] Long Valley Fire Protection District: http://www.firefightingnews.com.wehostwebsites.com/fdDetails-US.cfm?fdd_id=12693

[36] Long Valley Fire Protection District: http://www.longvalleyfire.com/~lvf/wp/wp-content/uploads/2014/04/ISO-Letter-Long-Valley-Fire-Protection-District-1.pdf

[37] Mono County Sheriffs Department: http://www.monocounty.ca.gov/sheriff/page/about-sheriffs-department

[38] Eastern Sierra Christian Academy: https://www.greatschools.org/california/crowley-lake/9655-Eastern-Sierra-Christian-Academy/; https://www.redfin.com/school/ 193173/CA/Crowley-Lake/Eastern-Sierra-Christian-Academy/.

[39] AmeriGas: https://www.amerigas.com/amerigas-blog/2016/april/tanks-101-propane-tank-sizes

[40] https://www.epa.gov/dwreginfo/information-about-public-water-systems

[41] Communication with Abbie Thompson, Fish Camp Manager, July 2017.

[42] *2014 Eastern Sierra Fishing Guide 2014*, A publication of The Inyo Register, https://www.theothersideofcalifornia.com/wp-content/uploads/pdfs/inyoFishingGuide2014.pdf

Upper Owens where these rainbow trout can reach 18-26" in length.[43] To prevent invasive species, all motorized vessels are inspected prior to launch into Crowley Lake.[44]

The Mono County General Plan *Open Space/Conservation Element* identifies one issue/opportunity and several objectives that apply to this project. With respect to area issues and opportunities, the Element states (under Water Resources and Water Quality): "*Water is a highly valued resource in Mono County. Rivers, streams, lakes, and aquifers supply water for domestic, agricultural and recreational uses, support abundant wildlife and fisheries, and are an important aesthetic component of the local landscape. As an example, Crowley Lake serves as a reservoir for the city of Los Angeles, provides habitat for fish and wildlife, and provides a variety of recreational opportunities. Water resources in Mono County have been heavily impacted over the years by the export of large volumes of water for use outside the county, a practice that has been detrimental to local water users and the natural environment within the county. The potential for future export, particularly of groundwater, is a continuing concern.*" This issue/opportunity is reflected in Water Resources and Water Quality Goal 3: "*Ensure the availability of adequate surface and groundwater resources to meet existing and future domestic, agricultural, recreational, and natural resource needs in Mono County.*" In turn, Goal 3 is supported by three objectives, each of which is to be achieved through implementation of specific policy and action items as listed below. None of the project elements is in conflict with the Open Space/Conservation Element goals and objectives.

- "*Objective 3.F. Promote the restoration and maintenance of Mono Lake, tributary streams, and downstream areas of the aqueduct system in Mono County, including Grant Lake, the Upper Owens River, Crowley Lake, and the Owens River Gorge.*
    - *Policy 3.F.1. Work with the appropriate agencies to develop and implement a comprehensive water management plan for Mono Basin and the downstream areas of the aqueduct system. The water management plan should ensure that Mono Lake and the local aqueduct system are managed in a manner that protects the ecological and fisheries values of the Mono Basin and downstream areas of the aqueduct system.*
        - *Action 3.F.1.a. Support the State Water Resources Control Board Decision 1631 requiring minimum flows to Mono Lake to maintain the lake level over 6,391 feet above mean sea level.*
        - *Action 3.F.1.b. Support management of the aqueduct system that avoids drastic fluctuations in stream flows.*
        - *Action 3.F.1.c. Ensure that any comprehensive water management plan developed as per Policy 1, above, is consistent with the USFS's existing Comprehensive Management Plan for the Mono Basin National Forest Scenic Area.*
        - *Action 3.F.1.d. Manage Crowley Reservoir to protect its fishery and recreational opportunities.*
        - *Action 3.F.1.e. Manage the Upper Owens River to protect the quality of the fishery.*
- *Objective 3.G. Reestablish streams impacted by diversions in the Mono Basin and Long Valley hydrologic units with flows adequate to support fish populations, riparian habitat, and associated recreational and scenic values.*
    - *Policy 3.G.1. Support minimum flows in all streams impacted by water diversions.*
        - *Action 3.G.1.a. Review technical documents prepared for the Mono Basin, Upper Owens, and Crowley Lake areas in order to provide input to the LADWP's water management plan on a periodic basis.*
    - *Policy 3.G.2. Provide land use controls that facilitate the restoration of impacted stream channels and adjacent areas.*
- *Objective 5.C. Promote sound management practices to preserve and enhance the economic and open-space values of the land, as well as natural resources, water resources and other public trust values, and sequester carbon.*
    - *Policy 5.C.1. Determine the environmental impacts associated with grazing activities in the Long Valley Caldera and on other private lands and LADWP lands in the county.*
        - *Action 5.C.1.a. Provide input to the Lahontan Regional Water Quality Control Board's investigation of grazing impacts on Crowley Lake."*

The improvements proposed at Crowley Lake Fish Camp will increase the capacity for guests and thereby increase the use of onsite recreational facilities; increased use at the Fish Camp may indirectly increase use of other area recreational facilities. Increased recreational use at Crowley would be consistent with the broad discussion of issues, opportunities and constraints identified in the Mono County *General Plan Land Use Element.* The project would not adversely impact the use of recreational facilities, and no mitigation is required.

XVI. TRANSPORTATION/TRAFFIC. Would the project:

a-c) Conflict with a plan to measure circulation system performance or cause a substantial increase in traffic relative to existing traffic load and street system capacity? Exceed a level of service established for designated roads? Cause a change in air traffic patterns?

LESS THAN SIGNIFICANT IMPACT. The Mono County Regional Transportation Plan (RTP) identifies several transportation issues in the project vicinity. One pertains to the separation between jobs and housing, which is forecast to continue in the future and contribute to increased traffic volumes, particularly on US 395 in the communities of June Lake, Mammoth Lakes, Crowley Lake, and Swall Meadows. As discussed in MND §XIII (Population) and in MND §XVII (Utilities), the Fish Camp employs 2 full time managers, both of whom live on the site year-round. Up to 8 additional employees live onsite during the operating season (April to October),

[43] Sierra Drifters Guide Service, http://sierradrifters.com/upper-owens-river/
[44] Caltrout, Crowley Lake Archives 2011, http://caltrout.org/tag/crowley-lake/.

including 2wo employees who live in a camp host trailer located by the main entry gate, and employee housing that is provided in the RV camp spaces. The availability of onsite employee housing during the operating season indicates that the project is not adversely impacting the separation between jobs and housing.

Additional concerns pertain to congested traffic patterns associated with recreational events during the summer, safety concerns associated with slow-moving recreational vehicles, and wildlife collisions. Though wildlife collisions occur along much of US 395 in Mono County, the RTP notes clear evidence of high collision rates in South County between SR 203 and Crowley Lake Drive, and notes the County's interest in future projects to reduce these collisions and associated animal mortality rates. Caltrans completed a feasibility study of wildlife crossings for the area between SR 203 and McGee Creek Maintenance Station (located just north of the project site), which has been a primary focus for mitigating wildlife collisions. It is anticipated that Caltrans, working in concert with the Local Transportation Commission and the multiagency Collaborative Planning Team, will propose solutions for this critical zone and that the solutions may include one or more wildlife crossings.[45]

The Fish Camp estimates that onsite vehicle trips are as high as 100 trips per day during the peak season, dropping to 30 trips per day during the fall season. Traffic volumes will increase as a result of proposed project improvements, particularly new trips associated with the 2 new RV-with-hookup sites (a 10% increase over the current number of rental spaces). The RTP provides traffic demand projections for Long Valley, showing an estimated 4.9% increase (forecast year not specified) over current average daily traffic (ADT). The RTP uses a 1% housing growth rate (6 trips per unit and 63 projected new units) over the 5-year period from 2009-2014 to estimate future trips. The RTP concludes that the estimated increases over current Average Daily Traffic figures (including trips from existing Fish Camp uses) are not significant. The six newly proposed uses include 2 new RV camp sites, a water storage tank, a propane tank, a new water line and spigot for the dry camp sites, and 3 new bathroom and shower facilities. Of these proposed uses, only the new RV camp sites will increase onsite capacity (by 10% compared with the 19 existing RV spaces).

A 10% increase in peak daily traffic at the Fish Camp (i.e., from 100 to 110 trips per day) would exceed on a proportional basis the overall 4.9% increase RTP forecast for Long Valley as a whole. However, peak traffic levels at the Fish Camp occur for limited periods of time (primarily during the Season Opener in April). Traffic during the remaining fishing season months will continue to be substantially lower, and traffic outside of the fishing season is limited to trips associated with the two resident managers. Additionally, the peak traffic levels associated with the April Fishing Season Opener (considered a 'shoulder season') do not coincide with peak traffic levels on US 395, which occur during the summer and winter seasons. Based on these considerations, it is concluded that the forecast increase in peak daily onsite trips (limited to April each year) would not conflict with the RTP projections for Long Valley as a whole.

Mono County does not have Level of Service data for South Landing Road. However, the RTP does not raise concerns over traffic on this road, nor does it point to existing or potential future congestion, or improvements that would be needed to enhance traffic flow. Given the projection that the Crowley Fish Camp project would add 10 trips to South Landing Road during the peak fishing season (which again does not coincide with peak traffic from other sources), it is concluded that this project will not result in traffic congestion or other substantive impacts to South Landing Road.

The RTP points to the unique safety concerns associated with recreational travel, noting that recreational vehicles (RVs) travel slowly and disrupt traffic flow on the many steep routes in the area, particularly where the road is only two lanes. In community areas, RVs often have difficulty parking or use more than their share of limited parking spaces. The RTP notes that RVs accounted for 3.2% of 2000 traffic in Mono County on US 395, a decline from a high of 13.4% in 1989.

Section 4.2 of the General Plan EIR (RTP and Circulation) notes that the RTP recommends use of the current adopted State Transportation Improvement Program (STIP) to guide short-range highway improvements and maximize funding opportunities in Mono County, and indicates that the regional funding can be applied to a wide range of projects including peak-season recreational travel demands (such as highway safety concerns from slow-moving vehicles). In Mono County, 75% of STIP funding is set aside to fund regional transportation improvements. Implementation of the RTP-recommended actions will allow Mono County to implement plans and programs that minimize congestion and meet future demands. The RTP anticipates that these programs will ultimately reduce congestion in Mono County, and concludes that the impacts of added growth and recreational demand will be less than significant.

The foregoing considerations indicate that project approval would not significantly impact circulation system performance, or cause a substantial increase in traffic relative to existing traffic, or exceed the level of service along South Landing Road. The project will have no impact on air traffic patterns nor will it conflict with any plan for measuring system performance. The proposed improvements (particularly the 7 new RV sites) would increase the number of slow-moving vehicles, but the increase in slow-moving

[45] Communication with Wendy Sugimura, Mono County Community Development Department, January 2018.

traffic was considered in the RTP and the General Plan EIR and found to be less than significant given implementation of adopted goals, policies and objectives.

d) Increase hazards due to design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION. A primary hazard in the project vicinity pertains to wildlife collisions. The 2015 Mono County General Plan EIR states (in §4.4, Biology) that "*Concentrated deer use and the inflexibility of their migratory behavior in these areas* [i.e., Paradise, Swall Meadows, Tom's Place, Little Round Valley, Crowley Lake, McGee Creek, and Long Valley] *can combine to exacerbate browse depletion to below what is needed to sustain the current population and maintain doe health for successful fawning. US 395 and many other roads intersect these high use areas, leading to a substantial number of collisions.*" In the discussion of impacts in the Crowley Lake area, the General Plan EIR states "*Due to increased noise, night lighting, presence of domestic dogs, fencing, collisions with vehicles, and loss of browse and cover for movement, future development could cumulatively impair mule deer use of the available browse, or their access to surface water or fawning habitat. Such development could block the local migration route that passes through and around Crowley Lake, or redirect animals onto US 395, or limit greater sage grouse access to sagebrush resources and available chick-rearing habitat.*" The General Plan EIR concludes that General Plan implementation will have significant unavoidable impacts on wildlife.

These conclusions are evident in the Crowley Lake Fish Camp Biological Assessment (see the discussion in MND Checklist Section IV and Attachment 3), which identifies the increased risk of vehicle-wildlife collisions and threats posed by unleashed dogs and unsecured trash contained as potentially significant project impacts on mule-deer as well as greater sage grouse, western white-tailed jackrabbit, and Sierra Red Fox. Mitigation measures provided in Checklist Section IV, Biological Resources (see measures BIO-1 through BIO-6) would reduce potential for wildlife collisions within the boundaries of the project site to less than significant levels. No supplemental mitigation measures are required herein.

e) Result in inadequate emergency access or access to nearby uses?

NO IMPACT. Uninterrupted access (including emergency access) between the Fish Camp and US 395 is now and will continue to be maintained at all times. No adverse effects are foreseen and no mitigation is required.

f) Conflict with adopted policies or programs supporting alternative transportation or result in inadequate parking?

NO IMPACT. The RTP sets forth one formal policy relevant to the project site: "*Policy 8.R. Provide community bike paths in Crowley Lake as follows: 1. Widen shoulders along Crowley Lake Drive from Tom's Place to Long Valley, to provide for bicycle safety (tie to resurfacing of Crowley Lake Drive); (Note: Sections of this route should be prioritized) 2. Widen shoulders along South Landing Road, from Crowley Lake Drive to Crowley Lake, to provide for bicycle safety (this requires acquiring the right-of-way from Lakeview Subdivision north).*" The 2-mile segment along South Landing Road (from Crowley Lake Drive to Crowley Lake) would be a class II trail. The project purpose is to increase public safety, and improvements would include expanded shoulders, addition of shoulder stripes or bike lanes, signage, and a crosswalk. The RTP assigns this trail a "High" priority for implementation. The RTP also identifies interest in the creation of a multi-use trail circumnavigating Crowley Lake, with access points at South Landing (near the Fish Camp) as well as Layton Springs and North Landing. Development of such a trail would require an agreement with LADWP.[46]

XVII. UTILITIES AND SERVICE SYSTEMS. Would the project:

a,b,e) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? Require construction of new water or wastewater treatment facilities? Have adequate wastewater treatment capacity available to serve the project?

LESS THAN SIGNIFICANT IMPACT. The Crowley Fish Camp site is currently served by two sewage disposal systems. The south system was permitted by LRWQCB in 1986; new permits were issued by the Mono County Health Department for both the north and the south system in June of 2016. The north disposal system is sized to receive up to 750 gallons per day, and currently receives about 470 gallons of effluent per day from the managers' residence (#9) and the tackle shop (#3) and the Pelican Point Grill (#4). None of the proposed project elements would flow into the northern septic system, and thus flows will remain at about 470 gallons per day.

The south system is sized to receive up to 2,250 gallons per day (gpd). This system currently receives a daily total of about 2,070 gallons from the employee-occupied Park Model Cabins (#5, #6, #7), the 15 existing guest RV spaces and 4 existing employee RV spaces (all RV spaces are shown as map #13), the Fish Cleaning Station (#29), and the main Public Restroom (#30). The addition of 2 new RV spaces, as proposed, would increase flows into the south system by about 100 gallons per day, to a total of 2,170 gallons per day, which is within the 2,250-gallon design capacity.

[46] Mono County, *Regional Transportation Plan 2015 Update:* http://www.monocounty.ca.gov/sites/default/files/fileattachments/planning_division/page/812/rtp_w-appdx_2015_final.pdf

The north and south septic systems, the pit toilets, the floating restrooms and the portable bathrooms are all serviced by Preferred Septic on a regular basis. In addition, 2 employees live in a camp host trailer located by the main entry gate. Sewage from the camp host trailer is pumped weekly by Preferred Septic, and disposed offsite; Preferred Septic also services the fixed-vault latrines and the floating restrooms.

The proposal to provide up to 3 new ADA-compliant bathroom and shower stalls would increase guest-related flows into the southern system by an estimated 225 gallons per day, which would exceed the capacity of the southern system. To gain added capacity, the project applicant is proposing construction of a third septic system, with a capacity of 750 gallons per day. If approved, the third system will be devoted to exclusive use by the new bathroom and shower facility, leaving an estimated 525 gallons of excess system capacity. The new system would be serviced and pumped by Preferred Septic, in the same manner as the existing septic systems.

Table 13 lists daily flow rates for all onsite uses that generate septic wastes (existing and proposed), and indicates the septic system that provides treatment for each applicable use. Uses that do not generate wastes are denoted by "NA."

TABLE 13. Septic Waste Flows into the existing North Septic System, the existing South Septic System, and the Proposed New 3rd Septic System

MAP #	FACILITIES DESCRIPTION	FLOW RATES TO 750-GALLON NORTH SEPTIC SYSTEM	FLOW RATES TO 2,250-GALLON SOUTH SEPTIC SYSTEM	FLOW RATES INTO PROPOSED 3rd SEPTIC SYSTEM	OTHER NOTES
#1	Gatehouse & Camp Host Trailer (home to 2 Camp employees)	NA (Preferred Septic pumps weekly, disposes offsite)			
#2	Entry Gates and Fencing	NA			
#3	Tackle Shop and Offices	150 gpd			
#4	Pelican Pt Grill bldg. & deck	20 gpd			
#5	Park Model Cabin Trailer #1 (employee residence)		50 gpd		
#6	Park Model Cabin Trailer #2 (employee residence)		50 gpd		
#7	Park Model Cabin Trailer #3 (employee residence)		50 gpd		
#	Ramadas (2)	NA			
#9	Managers' Home	300 gpd			
#10	Existing Water Storage Tank	NA			
#11	New Water Storage Tank	NA			
#12	Domestic Well House	NA			
#13	Existing 19 RV Sites w/ hookups		950 gpd		
#14	2 New RV Camp Sites/Hookups		100 gpd		
#15	Existing Dry Camp Sites	NA			
#16	New Water Line for Dry Camp	NA			
#17	Fuel Facility and Fuel Tanks	NA			
#18	Existing Propane Tanks (6)	NA			
#19	New Propane Tank	NA			
#20	Electrical Service Upgrade	NA			
#21	Boathouse (storage)	NA			
#22	Boat & Trailer Storage Area	NA			
#23	Maintenance Yard	NA			
#24	Boat Ramp/Launch Facility	NA			
#25	Boat and Marine Building	NA			
#26	South Boat Docks	NA			
#27	North Boat Docks	NA			
#28	Landscape Pond	NA			
#29	Fish Cleaning Station		720 gpd		
#30	Main Public Restroom Facility		250 gpd		
#31	Fixed Vault Latrines (3)	NA			

#32	3 New bathrooms & showers			225 gpd	
#33	Floating Restrooms (up to 5)	NA			
TOTAL FLOWS		470 gpd daily	2,170 gpd daily	225 gpd daily total	
IS DISPOSAL SYSTEM ADEQUATE?		YES	YES	YES	NA

There is no history of failure in any of the onsite waste systems, and correspondence from Triad/Holmes Associates to the County found that the existing systems are in good working order.[47] No adverse impacts involving the septic system tanks or alternative waste disposal systems would occur, and no mitigation is required.

c) Require construction of new storm water drainage facilities?

LESS THAN SIGNIFICANT IMPACT. The Fish Camp property slopes downhill into Crowley Lake from all directions. Flows from onsite project activities (including all sanitary flows and flows from the fish cleaning sinks) are currently directed into one of two onsite septic systems as described above. All precipitation flows directly into Crowley Lake, or into Whiskey Creek (which flows through the Fish Camp site roughly parallel to and east of South Landing Road) and thence into Crowley Lake. None of the onsite flows enter onto adjacent lands, and there are no drainage easements on the project site. Project improvements will not impact runoff volumes or alter the Whiskey Creek drainage. No new storm drain facilities are required, and no mitigation measures are required to address storm water drainage other than those proposed above in MND Checklist Section IX, Hydrology and Water Quality, for containment of construction-related erosion.

d) Are there sufficient water supplies available to serve the project?

LESS THAN SIGNIFICANT IMPACT. Fish Camp water supplies are drawn from on an onsite non-community well (owned by LADWP). The well is 182 feet deep; the static water level as of June 2012 was at 42 feet. Well water is drawn with use of a 3 horsepower pump (30 amps) with a pumping capacity of 25-40 gallons per minute. Well water is delivered to site uses in water lines that vary from ½" to 1" diameter.

CLFC is defined as a Transient Non-community (TNC) Water System. Water quality requirements for this type of water system include the collection of a bacteriological water quality sample (presence/absence) on a quarterly basis during the operating period. Samples are submitted to the Mono County Health Department. The County indicates that the Fish Camp is current with its water quality sampling requirements.[48] Fish Camp personnel indicate that water supplies from the well will be adequate to serve the proposed new uses. No adverse effects are foreseen, and no mitigation measures are proposed.

f,g) Be served by a landfill with sufficient capacity to accommodate the project's solid waste disposal needs? Comply with federal, state and local statutes related to solid waste?

LESS THAN SIGNIFICANT IMPACT. Landfill facilities that serve the southern region of Mono County include Benton Crossing Landfill and Pumice Valley Landfill. As of 2015 the County estimated the combined remaining capacity of these facilities to be about 1,050,000 cubic yards, and Benton Crossing is scheduled for closure in 2023. The county has outlined a process for future planning that prioritizes a reduction in waste loads through increased diversion and recycling; these efforts have potential to extend permitted capacity beyond the estimated 15 years (as of 2015). The County is also considering long-haul waste transfer options, as well as expansion of existing landfills. The County has established criteria (environmental, socio-economic and legal) to guide the review of potential options, which is still in progress at this time.[49]

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.

(a) Does the project have 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 major periods of state history or prehistory?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION. Although the project has potential to cause significant adverse impact to biological resources; the impacts would be reduced to less than significant levels with adoption and implementation of Mitigation Measures BIO-1 through Bio-6.

(b) Does the project have impacts that are individually limited but cumulatively considerable?

[47] Triad/Holmes Associates, Correspondence to Mono County Dept. of Environmental Health dated 12 February 2016 and 15 March 2016.
[48] Communication with Louis Molina, Environmental Health Director, Mono County Health Dept., January 2018.
[49] Mono County, *Countywide Siting Element of the Integrated Waste Management Plan,* January 2015; https://monocounty.ca.gov/sites/default/files/fileattachments/planning_division/page/4265/integrated_waste_management_plan_pc_11.12.15.pdf

LESS THAN SIGNIFICANT IMPACT. A number of past, present, and reasonably foreseeable actions within Mono County, the Mammoth vicinity and the upper Owens Valley, have impacted or have the potential to impact affect natural and cultural resources to varying degrees. Adverse impacts of the Crowley Lake Fish Camp project are primarily limited to the temporary and short-term effects of construction, with long-term effects thereafter including less-than-significant impacts on biological resources and increases in demands for utilities, traffic volumes, noise levels and air emissions, as well as long-term benefits pertaining to recreation. The proposed changes are consistent with long-established historic uses, and consistent with county land use designations and regional goals for the property and planning area, as set forth in the 2015 General Plan and evaluated in the associated 2015 General Plan EIR The proposed action would not result in impacts that are individually limited but cumulatively considerable.

(c) Does the project have environmental impacts that will cause substantial adverse effects on human beings, either directly or indirectly?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION. None of the existing uses or proposed project improvements has potential to cause significant adverse impacts, directly or indirectly, on human beings. All potential impacts have been found to be less than significant, provided the recommended mitigations are implemented as outlined herein.

DETERMINATION. On the basis of this initial evaluation, the following determination has been made:

- ☐ The proposed project COULD NOT have a significant effect on the environment, a NEGATIVE DECLARATION will be prepared.
- ☐ Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ The proposed project MAY have a significant effect on the environment; an ENVIRONMENTAL IMPACT REPORT is required
- ☐ The project MAY have a significant effect on the environment, but at least one effect has been adequately analyzed in an earlier document pursuant to applicable legal standards, and has been addressed by mitigations for effects identified as "potentially significant impact" or "potentially significant unless mitigated." An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ Although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because all potentially significant effects have been analyzed adequately in an earlier EIR pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project.

Mono County Community Development Dept. _____ _____

Lead Agency Name Date

_____ _____

Signature Title

L. REFERENCE MATERIALS

AmeriGas website: https://www.amerigas.com/amerigas-blog/2016/april/tanks-101-propane-tank-sizes

California Department of Natural Resources, Division of Mines, *Mineral Resources and Mineral Production during 1947,* Bulletin 142, 1949 (from http://archive.org/stream/countiesofca1947oocalirich/countiesofca1947oocalirich_djvu.txt).

California Dept. of Toxic Substances Control website: www.envirostor.dtsc.ca.gov/.

California Resources Agency, Department of Conservation website: http://gmw.conservation.ca.gov/SHP/EZRIM/_Maps/CASADIABLOMTN_SW.PDF.

California Resources Agency, Dept. of Conservation website: http://maps.conservation.ca.gov/cgs/information warehouse/.

California Resources Agency, Department of Conservation, *Mineral Land Classification of the Eureka-Saline Valley Area, Inyo and Mono Counties*. 1993. Special Report 166. Accessed at https://archive.org/stream/minerallandclass166tayl/minerallandclass166tayl_djvu.txt.

Caltrout, Crowley Lake Archives 2011: http://caltrout.org/tag/crowley-lake/.

Eastern Sierra Christian Academy website: https://www.greatschools.org/california/crowley-lake/9655-Eastern-Sierra-Christian-Academy/;https://www.redfin.com/school/ 193173/CA/Crowley-Lake/Eastern-Sierra-Christian-Academy/.

Federal Aviation Administration, *Environmental Assessment and Finding of No Significant Effect,* prepared by the Town of Mammoth Lakes for the proposed Mammoth Yosemite Airport Expansion Project, March 2001.

Inyo Register, *2014 Eastern Sierra Fishing Guide 2014*, https://www.theothersideofcalifornia.com/wp-content/uploads/pdfs/inyoFishingGuide2014.pdf

Lahontan Regional Water Quality Control Board, *Basin Plan:* http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/references.shtml.

Lahontan Regional Water Quality Control Board, Surface Water Ambient Monitoring Program (SWAMP), Summary of Results for Years 2000–2005, July 2007: http://www.waterboards.ca.gov/lahontan/water_issues/programs/watershed_management/docs/final_02_or24.pdf, and http://www.waterboards.ca.gov/lahontan/water_issues/programs/swamp/ docs/report2000_05_final.pdf.

Long Valley Firefighting Protection District, website: http://www.firefightingnews.com.wehostwebsites.com/fdDetails-US.cfm?fdd_id=12693; and http://www.longvalleyfire.com/~lvf/wp/wp-content/uploads/2014/04/ISO-Letter-Long-Valley-Fire-Protection-District-1.pdf

Los Angeles Times, http://www.latimes.com/science/la-me-adv-volcanic-columns-mystery-20151115-story.html.

Mobilehome Parks Act (California Health and Safety Code, §18200 et seq., Division 13, Part 2.0.

Mono County, *Countywide Siting Element of the Integrated Waste Management Plan,* January 2015: https://monocounty.ca.gov/sites/default/files/fileattachments/planning_division/page/4265/integrated_waste management_plan_pc_11.12.15.pdf

Mono County General Plan Map, http://monomammoth.maps.arcgis.com/apps/Viewer/index.html?appid=8670c63cda0540b39c3ae388cdd7db78

Mono County General Plan, *Land Use Element,* 2015. http://www.monocounty.ca.gov/sites/default/files/ fileattachments/planning_division/page/812/2015_land_use_final.08.15_0.pdf.

Mono County *Noise Element*, https://www.monocounty.ca.gov/sites/default/files/fileattachments/planning_division/page/812/noise_element_final_12.08.15.pdf

Mono County, *Regional Transportation Plan 2015 Update:* http://www.monocounty.ca.gov/sites/_default/files/fileattachments/planning_division/page/812/rtp_w-appdx_2015_final.pdf

Mono County Sheriff's Department website: http://www.monocounty.ca.gov/sheriff/page/about-sheriffs-department

Special Occupancy Parks Act (California Health and Safety Code, §18860 et seq., Division 13, Part 2.3.

Sierra Drifters Guide Service website: http://sierradrifters.com/upper-owens-river/

Town of Mammoth Lakes, *Mammoth Yosemite Airport Layout Plan Update Airport Layout Plan Update Narrative,* prepared by Reinard Brandley, May 2012: http://www.ci.mammoth-lakes.ca.us/DocumentCenter/Home/View/2890.

Triad/Holmes Associates, Correspondence to Mono County Dept. of Environmental Health dated 12 February 2016 and 15 March 2016.

U.S. Department of Agriculture, Natural Resources Conservation Service, Soil Survey of Benton-Owens Valley Area, California, Parts of Inyo and Mono Counties: https://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/california/CA802/0/Benton_OwensValley_CA.pdf

U.S. Department of Agriculture, Field Guide for Managing Cheatgrass in the Southwest, September 2014: https://www.fs.usda.gov/ Internet/FSE_DOCUMENTS/stelprdb5410110.pdf

United States Environmental Protection Agency website: https://www.epa.gov/dwreginfo/information-about-public-water-systems

Yannotta, James, LADWP Aqueduct Manager, correspondence to John Frederickson, CLFC leaseholder. Correspondence dated 15 April 2016.

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M. MND CONTRIBUTORS

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- Project Manager ..... Hans Giroux
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- Environmental Review ..... Sandra Bauer

N. ACRONYMS, TERMS AND CONVERSION FACTORS

A number of abbreviations and acronyms are used throughout this MND. To facilitate understanding of these terms, a glossary of definitions is provided below along with a table of conversion factors to relate volumetric data.

ADT A measurement of 'average daily traffic' levels.

BMP Best Management Practices, designed to avoid erosion and eliminate discharges of sediments, trash and other pollutants associated with construction and urban land uses.

CDFG California Department of Fish and Game, a state agency responsible for management and protection of biological resources in California

CDP Census Designated Place, a statistical counterpart to incorporated towns and cities that provides data for populated communities that are identifiable by name but are not legally incorporated.

CEQA California Environmental Quality Act of 1970. CEQA established the requirement for environmental review of project proposals in California

cfs Cubic feet per second, a measure of flow (see conversion chart below)

CGS California Geological Survey, a scientific agency of the state of California.

CLFC Crowley Lake Fish Camp

CNEL Community Noise Equivalent Level, a weighted average of noise level over time, used to compare the noisiness of differing land uses.

CO_2e Carbon Dioxide and equivalents (greenhouse gases)

CUP Conditional Use Permit.

CUPA Certified Unified Program Agencies, California agencies responsible for coordinated standards, review, protection and surveillance of hazardous materials and wastes.

cy Cubic Yards

dB Decibels, a measure of sound. Decibels are measured according to various scales, including the (A) scale referred to in this report.

EDU Equivalent Dwelling Unit, a way to compare service demands for different types of customers

GBUAPCD Great Basin Unified Air Pollution Control District, the air management district responsible for Mono County and the larger Great Basin planning area.

GHG Green House Gases

gpd/gpm Gallons per day and gallons per minute, rates of flow (see conversion chart below)

HCD California Department of Housing and Community Development, an agency with permit authority over some elements of the Crowley Fish Camp project.

LADWP City of Los Angeles Department of Water and Power (also referred to as 'DWP'), owner of Crowley Lake and the Fish Camp property.

LED Light-Emitting Diode, a 2-lead semiconductor light source that emits light when activated; LED is currently the most energy-efficient lighting technology according to the U.S Department of Energy.

LRWQCB Lahontan Regional Water Quality Control Board (the project is in the southern region of LRWQCB, which is managed out of the Victorville office)

mg Million Gallons

MND Mitigated Negative Declaration, a CEQA document for projects where all environmental impacts can be mitigated to less than significant levels

MRZ Mineral Resource Zone, as defined by the State Mining and Geology Board

MT Metric Tons, used in regard to greenhouse gas emissions

NPDES National Pollution Discharge Elimination System, a program administered by the California Water Quality Control Board to regulate point sources that discharge pollutants to waters of the United States; LRWQCB manages NPDES permits in Mono County.

OS Open Space, the land use designation applied to the project site in the Mono County General Plan.

PSHA Probabilistic Seismic Hazard Assessments, prepared by CGS to show earthquake shaking hazards.

RV Recreational Vehicle

RTP Regional Transportation Plan, a long-term blueprint for regional transportation planning.

SCAQMD South Coast Air Quality Management District, which sets and enforces air quality standards & regulations in the South Coast Air Basin (SCAB).

sf Square Feet, a measure of area.

SMARA Surface Mining and Reclamation Act, which regulates surface mining operations to ensure that environmental impacts are minimized and mined lands are reclaimed to usable condition.

TDH Total dynamic head, a measure of pressure in a pipeline

TT Tentative Tract Map 31896, the proposed land use plan for the lift station site.

USDA United States Department of Agriculture, responsible for overseeing farming operations.

USFS United States Forest Service, responsible for administration of US national forests and grasslands.

USGS United States Geological Survey, a scientific agency of the U.S. government.

WWTP Wastewater Treatment Plant

CONVERSION FACTORS

1 million gallons per day (mgd) = 1.547 cubic feet per second (cfs)
1 mgd = 3.07 Acre-Feet per Year (AFY)
1 acre-foot (AF) = 43,560 cubic feet = 324,900 gallons
1 cfs = 450 gallons per minute = 1.983 AF per 24 hours = .646 mgd
AF ~ the amount of water needed to supply a family of 4 for 1 year

O. MITIGATION MONITORING AND REPORTING PLAN

REGULATORY AND CODE COMPLIANCE STANDARDS. If approved, the Crowley Lake Fish Camp project will be subject to a wide range of California Building Standards, Code requirements, and other standard conditions of approval. These requirements would be imposed by the County and by other agencies that have jurisdiction by law over activities conducted on the Fish Camp property, or over the resources that may be affected by those activities. Many of these standards have been established to safeguard environmental resources, and/or to promulgate environmental goals and objectives.

If the project is approved, compliance with these regulatory and code compliance requirements will be mandatory. As such, the measures do not conform to the CEQA definition of mitigation measures, and they are not listed here.[50] Although regulatory standards and codes are not incorporated into this mitigation program, the applicant would be required to comply fully with all relevant requirements before the necessary permits and approvals are obtained.

ADOPTION OF MITIGATION MEASURES. During deliberations concerning the Crowley Lake Fish Camp MND, the Mono County Planning Commission will be required to consider the adoption of mitigation measures. Thirteen mitigation measures are proposed to reduce potentially significant impacts, and 3 additional measures are recommended to minimize impacts that are less than significant but can benefit from the added measures. The measures cover a variety of subjects ranging from biological resources to water quality. If the project is approved, it will be necessary for the County to specify which of these measures have been adopted and formally incorporated into the project as conditions of approval.

MONITORING AND REPORTING. Upon project approval, the County would become responsible for ensuring that the mitigation measures adopted and incorporated into the project are in fact implemented during subsequent project design, construction, operation and maintenance. County staff would be responsible for ensuring that mitigation measures are satisfactorily monitored. County staff would also be responsible for reporting to the Planning Commission, as needed, regarding progress in implementing the measures.

The Planning Commission will in turn be responsible for considering whether the measures are being implemented as intended in this mitigation program, and for determining whether modifications are required to assure that project impacts remain below a level of environmental significance.

MITIGATION MEASURES. Presented below is the full set of mitigation measures outlined in this MND. Implementation of the mitigation measures herein would reduce all of the potentially significant impacts of the proposed Crowley Lake Fish Camp project to less than significant levels. Note that three of the measures (AQ-1, AQ-2, and LU-1) are advisory recommendations that would further minimize impacts found to be less than significant.

I. AESTHETIC AND VISUAL RESOURCES: No mitigation measures are required or proposed.

Mitigation AES-1: A formal landscape plan shall be prepared to guide revegetation of the Fish Camp site following all new project improvements that disturb topsoil and vegetation. The plan shall include maps, a list of plant and seed materials to be used and proposed locations, identification of plant and seed sources, irrigation protocols for initial establishment, and identification of long-term maintenance requirements (if any). All plant materials and seed stock used in revegetation and any mulch applications shall be native to the eastern Sierra bioregion (which extends from Lake Tahoe on the north to Bishop on the south and east to Fallon, Nevada). Plant materials suitable for deer forage shall be used to the maximum possible extent. No long-term irrigation shall be permitted. The landscape plan shall be certified as complete by the County of Mono, Community Development Dept., prior to the start of ground-disturbing project improvements, and may subsequently be modified as appropriate if agreed upon by the project proponent and the County of Mono. All biological mitigation requirements (Measures BIO-1 through BIO-7) will be detailed in the landscape plan required by Mitigation AES-1.

→ **Significance Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

Mitigation AES-2: All onsite exterior lighting (including existing and proposed exterior light sources) shall comply fully with requirements of the Mono County Scenic Combining Element (General Plan *Land Use Element* Chapter 8) and with requirements of the Mono County Dark Sky Regulations (General Plan Chapter 23). All required elements shall be outlined in

[50] CEQA defines mitigation as the avoidance, reduction, or rectification of adverse impacts by not taking an action, limiting the magnitude of an action, repairing an impacted environment, undertaking enhanced preservation operations, and/or replacing or providing substitute resources or environments.

an outdoor lighting plan to be submitted prior to formal approval of any discretionary permits or actions under review by Mono County.

→ **Significance Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

II. AGRICULTURE AND FORESTRY: No mitigation measures are required or proposed.

III. AIR QUALITY: No mitigation measures are required. However, the following mitigations are recommended to further reduce dust and vehicle exhaust emissions during the construction of proposed new project elements.

Recommended Mitigation AQ-1, Fugitive Dust Control:

- Apply soil stabilizers or moisten inactive areas.
- Prepare a high wind dust control plan.
- Address previously disturbed areas if subsequent construction is delayed.
- Water exposed surfaces as needed (2-3 times each day) to avoid visible dust leaving the construction site.
- Cover all stockpiles with tarps at the end of each day or as needed.
- Provide water spray during loading and unloading of earthen materials.
- Minimize in-out traffic from construction zone
- Cover trucks hauling dirt, sand or loose material and require trucks to maintain at least two feet of freeboard
- Sweep streets daily if visible soil material is carried out from the construction site

→ **Significance Before and Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

Recommended Mitigation AQ-2, Exhaust Emission Controls:

- Utilize well-tuned off-road construction equipment.
- Establish a preference for contractors using Tier 3 or better heavy equipment.
- Enforce 5-minute idling limits for both on-road trucks and off-road equipment.

→ **Significance Before and Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

IV. BIOLOGICAL RESOURCES: The measures provided below would mitigate biological impacts to less than significant levels.

Mitigation BIO-1: Bitterbrush shall be seeded into all areas within the likely mule deer migration corridor where it intersects the Crowley Fish Camp approach road and entry gate. Seed of locally derived (Mono County or Eastern Sierra Nevada south of Lake Tahoe) shall be applied at the rate of four pounds per acre treated. This measure will reduce to less than significant levels the potentially significant loss of a crucial resource for migrating mule deer that pass through the project site.

→ **Significance Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

Mitigation BIO-2: To reduce the potential for vehicle-sage grouse collisions near the entry gate, vehicle speeds on the Fish Camp property (except as specified in Measure BIO-3 below) shall be set at or below 25 miles per hour, with strict enforcement. Signs shall be posted to ensure that drivers are aware of the risk of collision if speeds exceed the posted limits greater.

→ **Significance Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

Mitigation BIO-3*:* A 15 mph speed limit and signage indicating "Wildlife Crossing – 15 mph" shall be posted and strictly enforced between the entry gate and existing campground facilities. This speed will allow drivers to avoid wildlife and minimize mortality rates. Drivers shall be informed of the potential presence of wildlife on the roadway when arriving at the entry gate.

→ **Significance Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

Mitigation BIO-4: To reduce potential impacts on deer migration to less than significant levels, no barriers (such as fences) shall be permitted in the southern, less developed portion of the Crowley Fish Camp site. All onsite exterior lighting shall comply fully with requirements of General Plan Chapter 8 (Scenic Combining Element) and Chapter 23 (Dark Sky Regulations), as detailed in the Outdoor Lighting Plan required by Measure AES-2.

→ **Significance Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

Mitigation BIO-5: To reduce potentially significant impacts associated with unleashed dogs, all Fish Camp visitors and staff shall be required to comply with full-time leashing of dogs as an advertised and enforced condition of use.

→ **Significance Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

Mitigation BIO-6: To reduce the potentially significant impacts associated with a potential increase in predators of locally occurring sensitive wildlife, all onsite food and trash shall be secured in a manner that prevents access by bears and ravens.

→ **Significance Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

Mitigation Recommendation BIO-7: To reduce fire hazards associated with cheat grass and other non-native invasive species, control measures (mowing and/or tillage) will be performed in the occupied campground area every two weeks during the months of April through June (or as outlined in the approved Landscape Plan); mowing shall be sufficient to maintain total non-native grasses standing crop below 5% absolute cover.

→ **Significance Before and Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

V. CULTURAL RESOURCES: The measures below would mitigate cultural resource impacts to less than significant levels.

Mitigation CR-1, Site Evaluation of Historic Sites: If future development plans include any of the identified historic and/or prehistoric site areas (CLFC #1-5), a formal evaluation of the sites, including subsurface testing, shall be performed by a qualified individual, and recommendations followed.

→ **Significance Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

Mitigation CR-2, Notification if Resources are Uncovered: Mono County (as Lead Agency) shall be notified in the event that archaeological, paleontological, or historical features are uncovered during construction of proposed project elements.

→ **Significance Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

Mitigation CR-3, Stop Work if Human Remains Encountered: If human remains or burial sites are encountered during project earthwork, work in that area shall be terminated, the immediate area secured, and the Community Development Department (CDD) notified; the CDD shall then contact the County coroner and (if appropriate) interested Tribes and the Native American Heritage Commission.

→ **Significance Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

VI. GEOLOGY AND SOILS. No mitigation measures are required or proposed.

VII. GREENHOUSE GAS EMISSIONS. No mitigation measures are required or proposed.

VIII. HAZARDS AND HAZARDOUS MATERIALS. The measure below would mitigate potential hazards to less than significant levels.

Mitigation HAZ-1, CUPA to include Propane Tanks: Following county review of the current project, the Crowley Lake Fish Camp CUPA shall be updated to describe onsite propane tanks (including the 7th tank, if approved, as well as motor oil facilities if subject to CUPA regulation) and provide information about applicable prevention, mitigation and abatement programs used onsite.

→ **Significance Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

IX. HYDROLOGY AND WATER QUALITY. The measures below would mitigate water quality impacts to less than significant levels.

Mitigation WQ-1, Erosion Controls: Erosion controls (including erosion control blankets, fiber rolls, filter barriers and/or settling structures) shall be used during the construction of any project elements that require ground disturbance, and shall remain in place until the disturbed surfaces have fully stabilized.

→ **Significance Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

Mitigation WQ-2, Reseeding of Disturbed Areas: Directly following construction, disturbed areas shall be reseeded with a certified weed-free seed mix comprised of locally sourced native plant materials. Seeded areas shall be watered as needed until fully established.

→ **Significance Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

Mitigation WQ-3, Stabilization of Fill Mounds: All existing fill mounds (including those comprised of dirt, asphalt or other materials) shall be removed or stabilized or covered within 6 months of project approval, and no new fill mounds shall be created unless they are stabilized or covered from the outset.

→ **Significance Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

X. LAND USE & PLANNING. No mitigation measures are required or proposed.

XI. MINERAL RESOURCES. No mitigation measures are required or proposed.

XII. NOISE. No mitigation is required; the measure below is recommended further reduce construction noise.

Mitigation Recommendation N-1, Construction: It is recommended that construction activities be conducted during daytime hours when noise sensitivity is lower.

→ **Significance Before and Following Mitigation: LESS THAN SIGNIFICANT IMPACT**

XIII. POPULATION AND HOUSING. No mitigation measures are required or proposed.

XIV. PUBLIC SERVICES. No mitigation measures are required or proposed.

XV. RECREATION. No mitigation measures are required or proposed.

XVI. TRANSPORTATION AND TRAFFIC. No mitigation measures are required or proposed.

XVII. UTILITIES AND SERVICES. No mitigation measures are required or proposed.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE. Based on analyses contained in this MND, it has been determined that the project does have potential to degrade the quality of the environment, and does have potential for environmental effects that will cause substantial effects on human beings. However, all potentially significant impacts would be reduced to less than significant levels through the adoption and implementation of the mitigation measures provided in MND Section O.

CROWLEY LAKE FISH CAMP PROJECT
IS/MND ATTACHMENTS

ATTACHMENT 1:	**CUPA Procedures for Crowley Lake Fish Camp**
ATTACHMENT 2:	**Noise Assessment**
ATTACHMENT 3:	**Assessment of Biological Resources**
ATTACHMENT 4:	**Air Quality and Greenhouse Gases**
ATTACHMENT 5:	**Cultural Resource Analysis**

ATTACHMENT 1

CUPA Procedures for Crowley Lake Fish Camp

MONO COUNTY CUPA

Mono County Health Department
P.O. Box 3329, Mammoth Lakes, CA 93546 * PHONE: (760) 924-1830 * FAX: (760) 924-1831

BUSINESS NAME (same as Facility Name of DBA-Doing Business As)		3
Crowley Lake Fish Camp		
FACILITY ADDRESS	103	CITY
1149 South Landing Road		*Crowley Lake*

EMERGENCY RESPONSE PLANS & PROCEDURES – AGENCY NOTIFICATION
POST BY PHONE

Agency Notification: A handler of hazardous materials is required to immediately report any release or threatened release of a hazardous material to the administering agency and the Office of Emergency Services. Note that there is no reportable quantity under California statute. Spills exceeding federal reportable quantities require notification to the National Response Center. If a situation is an emergency, call 911 first.

* indicates mandatory notification

Agency	Phone Number
1. * Local Emergency Response Agency (if an emergency)	**911**
2. * Mono County Health Department	**(760) 924-1830** or **(760) 924-1847**
3. * State of California, Office of Emergency Services	**(800) 852-7550** or **(916) 262-1621**
4. National Response Center	**(800) 424-8802**
5. Other Agencies (*Cal OSHA, Regional Board, Air Quality, as applicable*)	

Name	( ) Phone Number
Name	( ) Phone Number
Name	( ) Phone Number
Name	( ) Phone Number

EMERGENCY INFORMATION REQUIRED:

- Name and phone number of person reporting
- Name and street address of the business
- Location of the incident or threatened release
- Type of incident or threatened release
- Hazardous materials involved and physical state
- Hazards to human health and/or environment
- Estimate of the quantity released
- Media (soil, water, air) into which release occurred
- Precautions to take (if known)
- Time and duration of the release
- Is the chemical an extremely hazardous substance?
- Extent of injuries, if any

Release reporting citations:

§ 25501. Definitions:
(r) "Release" means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment, unless permitted or authorized by a regulatory agency.
(u) "Threatened release" means a condition creating a substantial probability of harm, when the probability and potential extent of harm make it reasonably necessary to take immediate action to prevent, reduce, or mitigate damages to persons, property, or the environment.

§ 25507. (a) . . . the handler or any employee, authorized representative, agent, or designee of a handler shall, upon discovery, immediately report any release or threatened release of a hazardous material to the administering agency, and to the office, in accordance with the regulations adopted pursuant to Section 25503. Each handler and any employee, authorized representative, agent, or designee of a handler shall provide all state, city, or county fire or public health or safety personnel and emergency rescue personnel with access to the handler's facilities.

§ 25515. Any person or business who violates Section 25507 shall, upon conviction, be punished by a fine of not more than twenty-five thousand dollars ($25,000) for each day of violation, or by imprisonment in the county jail for not more than one year, or by both the fine and imprisonment. . . . Furthermore, if the violation results in, or significantly contributes to, an emergency, including a fire, to which the county or city is required to respond, the person shall also be assessed the full cost of the county or city emergency response, as well as the cost of cleaning up and disposing of the hazardous materials.

Date: *3/26/2014*

MONO COUNTY CUPA

Mono County Health Department
P.O. Box 3329, Mammoth Lakes, CA 93546 * PHONE: (760) 924-1830 * FAX: (760) 924-1831

BUSINESS NAME (same as Facility Name of DBA-Doing Business As)		3
Crowley Lake Fish Camp		
FACILITY ADDRESS 103	CITY	
1149 South Landing Road	*Crowley Lake*	

EMERGENCY RESPONSE PLANS & PROCEDURES – PAGE 1

State law requires your business to complete all sections of the Emergency Response Procedure listed below:
For each of the following, **briefly** describe your business standard operating procedures relating to the release or threatened release of hazardous materials located at your facility. You may attach additional pages if necessary, but do not include copies of facility manuals unless requested to do so by this Department. You may reference manuals that are used by your facility for these procedures, but you must still give a brief description of policy.

EVACUATION/NOTIFICATION: Indicate location(s) where employees, customers, visitors, or others on-site are to evacuate in an emergency. Describe how your business will immediately notify people and evacuate the facility in the event of a release or threatened release of hazardous materials. Include the route and meeting place.

Crowley Lake Fish Camp is an outdoor Marina, our only enclosed spaces for customers being restrooms and a tackle shop. During business hours, employees and management are stationed at several locations on the property in order to help direct people to safety. Maps depicting exit strategies are posted in all buildings and areas located at the Marina. Employees and management use radio communication to relay information and verify safety procedures are being followed and executed. Employees are trained regularly to ensure they are aware of evacuation routes should they be necessary. In addition, we have all materials needed (signage and barriers) to prevent entry to an area when necessary.

PREVENTION/MITIGATION/ABATEMENT: Describe what policies and procedures your business will follow to prevent, reduce, and/or remove the hazard to persons, property, or the environment caused by a release or threatened release of hazardous materials and/or hazardous wastes.

- ☐ Reduction of containers on-site if not used or needed.
- ☐ Containers are properly labeled and closed when not in use.
- ☐ Compressed gas cylinders are properly secured.
- ☒ Use of monitoring system. Type:
- ☐ Other:

Fuel is only dispensed at Crowley Lake Fish Camp by employees who have been trained to do so. Management and employees have specific procedures outlined in writing and on-site training programs for Hazard Assessment Control. Inspections and reporting are regularly required to monitor and correct and safety concerns. The business has an Emergency Action Plan in place should a release of hazardous materials occur.

Date: *3/26/2014*

MONO COUNTY CUPA

Mono County Health Department
P.O. Box 3329, Mammoth Lakes, CA 93546 * PHONE: (760) 924-1830 * FAX: (760) 924-1831

BUSINESS NAME (same as Facility Name of DBA-Doing Business As)		3
Crowley Lake Fish Camp		
FACILITY ADDRESS	103	CITY
1149 South Landing Road		*Crowley Lake*

EMERGENCY RESPONSE PLANS & PROCEDURES – PAGE 2

FACILITY TRAINING PLAN: Describe employee and operator training, including local emergency response coordination, use of facility emergency equipment, and provisions for initial and refresher training. In addition, describe training for hazardous materials/waste handling as required by OSHA. (Check those items that apply and write additional information in the space provided.)

☒ New employee training.

☒ Annual training and periodic refresher courses.

☒ Familiarization with the Emergency Response Plans and Procedures of this Business Plan.

☐ Other:

Explanation of Requirement: Employee training is required for all employees handling hazardous materials and hazardous wastes in day-to-day or clean-up operations including volunteers and/or contractors.

Training must be:

- Provided within 6 months for new hires;
- Amended as necessary prior to change in process or work assignment;
- Given upon modification to the Emergency Response / Contingency Plan, and updated/refreshed annually for all employees.

Required content includes all of the following:

Material Safety Data Sheets; Hazard communication related to health and safety; Methods for safe handling of hazardous substances; Fire hazards of materials / processes; Conditions likely to worsen emergencies; Coordination of emergency response; Notification procedures; Applicable laws and regulations; Communication and alarm systems; Personal protective equipment; Use of emergency response equipment (e.g. Fire extinguishers, respirators, etc.); Decontamination procedures; Evacuation procedures; Control and containment procedures; UST/AST monitoring system equipment and procedures (if applicable).

EMERGENCY PROCEDURES: Give duties of the Emergency Coordinator and how implementation of Facility Emergency Response will be accomplished (e.g., notification, evacuation, emergency coordination). (Check those items that apply and write additional information in the space provided.)

Emergency Coordinator will:

☒ Identify potential hazards and determine whether a release has occurred.

☒ Activate local emergency systems (e.g., manual shutoff devices) and take appropriate immediate actions based on level of training and the ability to act safely.

☒ Coordinate the notification and evacuation of employees and customers from the facility.

☒ Make required agency notifications and request needed assistance.

☒ Assist responding agencies by providing access to the facility and information about the facility.

☐ Other:

Date: *3/26/2014*

MONO COUNTY CUPA

Mono County Health Department
P.O. Box 3329, Mammoth Lakes, CA 93546 * PHONE: (760) 924-1830 * FAX: (760) 924-1831

BUSINESS NAME (same as Facility Name of DBA-Doing Business As)		3
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EMERGENCY RESPONSE PLANS & PROCEDURES – PAGE 3

FACILITY EMERGENCY EQUIPMENT: List facility emergency equipment on-site (fire extinguisher, fire alarms, spill control equipment, SCBA, first aid kits, etc.); include test/maintenance plan. (Check those items that apply and write additional information in the space provided.)

EQUIPMENT	QUANTITY/TYPE	MAINTENANCE SCHEDULE/FREQUENCY
☒ Fire Extinguisher(s)	*25*	*Annually*
☒ First Aid Kit(s)	*5*	*As needed*
☐ Fire Alarm(s)		
☒ Spill Control Equipment	*1*	*As needed*
☒ Monitoring System	*3*	*As needed*
☒ Personal Protective Equipment		*As needed*
☐ Other:		
☐ Other:		

FACILITY EARTHQUAKE RESPONSE: Identify areas of the facility and mechanical or other systems that require immediate inspection because of their vulnerability to earthquake-related ground motion (e.g., hazardous materials or waste storage locations, vessels, piping, pipe and tank supports, valves, gauges, etc.). (Check those items that apply and write additional information in the space provided.)

☒ Chemical Storage Locations – Product and Waste
☐ Process Vessels
☒ Above-ground Storage Tanks
☒ Emergency Shutoff Systems
☒ Piping and Pipe Supports
☒ Utility Connections
☐ Other: _____
☐ Other: _____

ARRANGEMENTS/AGREEMENTS: Describe any arrangements or agreements that you have with private emergency response teams, waste haulers, disposal companies, recyclers, local hospitals, police, or fire. If you have no arrangements or agreements, state that fact in the space provided. (Check those items that apply and write additional information in the space provided.)

☐ Hazardous Waste Hauler _____
☐ Emergency Response Team _____

☒ Local Hospitals	*Mammoth Hospital – 760-934-3311*
☐ Other:	
☒ No arrangements or agreements at this time	

Date: *3/26/2014*

ATTACHMENT 2

Noise Assessment

NOISE IMPACT ANALYSIS

CROWLEY LAKE FISHCAMP EXPANSION PROJECT

MONO COUNTY, CALIFORNIA

Prepared for:

Bauer Environmental & Planning Services
Attn: Sandra Bauer
1271 Tropicana Lane
Santa Ana, CA 92705

Date:

September 18, 2017

Project No.: P16-066 AQ

BACKGROUND

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air. Noise is unwanted sound. Sound is characterized by various parameters that describe the rate of oscillation of sound waves, the distance between successive troughs or crests, the speed of propagation, and the pressure level or energy content of a given sound. In particular, the sound pressure level has become the most common descriptor used to characterize the loudness of an ambient sound level. The decibel (dB) scale is used to quantify sound intensity. Zero on the decibel scale is the faintest sound detectable by a person with good auditory acuity. The decibel scale is a logarithmic progression designed to allow for comparisons of widely varying sound pressure within an easily manageable range.

Humans perceive each increase of ten decibels to be a doubling of apparent loudness. The perceived loudness between a rural setting at 30 dB versus near a rock concert at 100 dB is a 100+-fold increase. Since the human ear is not equally sensitive to all sound frequencies within the entire spectrum, human response is factored into sound descriptions by weighting sounds within the range of human sensitivity more heavily (middle A and its higher harmonics) in a process called "A-weighting" written as dB(A). Any further reference to "dB" in this report should be understood to be A-weighted.

Time variations in noise exposure are typically expressed in terms of a steady-state energy level equal to the energy content of the time varying period (called Leq), or alternately, as a statistical description of the sound level that is exceeded over some stated fraction of a given observation period. Finally, because community receptors are more sensitive to unwanted noise intrusion during the evening and at night, state law requires that, for planning purposes, an artificial dB increment be added to quiet time noise levels in a 24-hour noise metric called the Community Noise Equivalent Level (CNEL).

An interior CNEL of 45 dB is mandated by the State of California Noise Insulation Standards (CCR, Title 24, Part 6, Section T25-28) for multiple family dwellings and hotel and motel rooms. In 1988, the State Building Standards Commission recommended that the 45 dB CNEL standard be expanded to include all habitable rooms in residential use, included single-family dwelling units. Since normal noise attenuation within residential structures with closed windows is about 20 dB, an exterior noise exposure of 65 dB CNEL allows the interior standard to be met without any specialized structural attenuation (dual paned windows, etc.). A noise level of 65 dB is also the level at which ambient noise begins to intrude into the ability to have a quiet conversation. Exterior levels of 65 dB CNEL is therefore the most common noise standard for usable outdoor space in California.

While a moderately loud 65 dB CNEL level might be acceptable in urbanized areas of California, a 65 dB CNEL noise exposure would likely be considered unacceptable in a semi-rural environment such as the community near Crowley Lake. The desirable maximum exterior noise level in rural areas of the state is generally 60 dB CNEL. Traffic noise increases of more than +3 dB CNEL are typically considered a significant impact.

BASELINE NOISE LEVELS

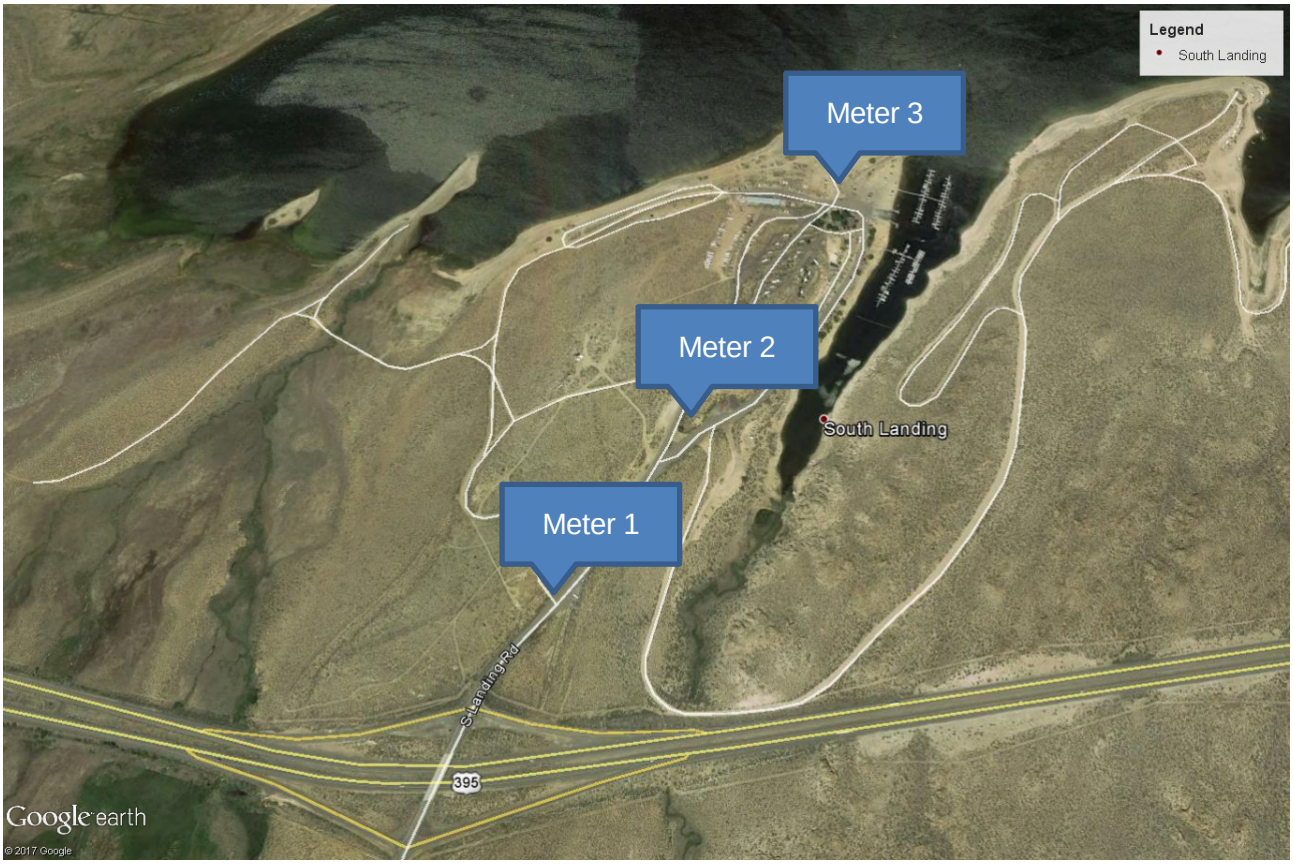
In order to establish an ambient noise level, short term area noise measurements were conducted on Tuesday October 18, 2016 from 3:00 p.m. – 4:30 p.m. at three locations. Measurement locations are shown in **Figure 1** and the monitoring results are summarized below.

Measured Noise Levels (dBA)

	Leq	Lmax	Lmin	L10	L33	L50	L90
Meter 1	45	56	39	45	42	41	40
Meter 2	47	49	40	45	43	42	41
Meter 3	48	55	43	50	48	46	44

Meter 1 was located adjacent to Dry Camp, just north of the gate. Meter 2 was placed about half way into the site and Meter 3 was placed in the RV lot close to the marina. Readings are lowest on the southern portion of the site. They increase slightly traveling north on South Landing Rd. However, these readings demonstrate that existing ambient noise levels in the project vicinity are low. The low baseline levels do suggest that the proposed project area is sensitive to even a moderate increase in noise that could result from project implementation.

Figure 1
Noise Monitoring Locations



NOISE IMPACTS

Sensitive uses will be subject to incremental increase noise levels from site related traffic and operations. Short-term construction activities may be audible. Because construction is more likely to be performed during warmer months rather than in winter, people are more likely to be outside or to have their windows open when construction is in progress.

THRESHOLDS OF SIGNIFICANCE

Noise impacts are significant if they create a substantial temporary or permanent increase in noise levels, or if they cause a violation of adopted noise/land use compatibility standards in general plans or noise ordinances. The following noise limits are contained in Section 0.16.060 of the Mono County Code.

Maximum Allowable Exterior Noise Levels

Land Use	Allowable Time	Noise Level (dBA)
Residential Single Family	Daytime (7 a.m.-10 p.m.)	55
	Nighttime (10 p.m.-7 a.m.)	50
Residential Multi-Family	Daytime (7 a.m.-10 p.m.)	55
	Nighttime (10 p.m.-7 a.m.)	50
Public Uses-Schools, Libraries, Hospitals	Daytime (7 a.m.-10 p.m.)	55
	Nighttime (10 p.m.-7 a.m.)	50
Passive Recreational Areas	Daytime (7 a.m.-10 p.m.)	55
	Nighttime (10 p.m.-7 a.m.)	50
Community Parks and Athletic Fields	Daytime (7 a.m.-10 p.m.)	55
	Nighttime (10 p.m.-7 a.m.)	50

CONSTRUCTION NOISE SIGNIFICANCE

Mono County limits construction noise to daytime hours of lesser noise sensitivity. In addition, the County Code calls out maximum noise levels that are not to be exceeded at the nearest residence. Construction may not exceed the noise levels in the following schedule (Section 10.16.060 Mono County Code):

a. Mobile Equipment. Maximum noise levels from non-scheduled, intermittent, and short-term operation (less than 10 days) of mobile equipment:

	Single-family Residential (dBA)	**Multi-family Residential (dBA)**	**Semi-residential/ Commercial (dBA)**
Daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m.	75	80	85
Daily, 8:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays.	60	65	70

b. Stationary Equipment Maximum noise level for repetitively scheduled and relatively long-term operation (period of 10 days or more) of stationary equipment:

	Single-family Residential (dBA)	**Multi-family Residential (dBA)**	**Semi-residential/ Commercial (dBA)**
Daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m.	60	65	70
Daily, 8:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays.	50	55	60

Construction activities are limited by conditions on grading permits to daytime hours of lesser noise sensitivity. Construction noise generation is temporary, and is prohibited when people are sleeping or most likely to be recreating outside. However, an inability to meet the construction noise standards at the closest sensitive use could create a significant noise impact.

CONSTRUCTION ANALYSIS

Noise levels of construction equipment anticipated for use in this project was obtained. In 2006, the Federal Highway Administration (FHWA) published the Roadway Construction Noise Model that includes a national database of construction equipment reference noise emissions levels. In addition, the database provides an acoustical usage factor to estimate the fraction of time each piece of construction equipment is operating at full power during a construction phase. The usage factor is a key input variable that is used to calculate the average Leq noise levels.

Table 1 identifies highest (L_{max}) noise levels associated with each type of equipment identified for use, then adjusts this noise level for distance to the closest sensitive receptor and the extent of equipment usage (usage factor), which is represented as L_{eq}. The table is organized by activity and associated equipment.

Quantitatively, the primary noise prediction equation is expressed as follows for the hourly average noise level (Leq) at distance D between the source and receiver (dBA):

Leq = Lmax @ 50' – 20 log (D/50') + 10log (U.F%/100) – I.L.(bar)

Where:

Lmax @ 50' is the published reference noise level at 50 feet
U.F.% is the usage factor for full power operation per hour
I.L.(bar) is the insertion loss for intervening barriers

For the proposed project, the construction fleet could include equipment such as shown in **Table 1** which describes the noise level for each individual piece of equipment.

Table 1
Noise Levels at 50 foot reference

Activity/Equipment		**Usage Factor[1]**	**Hours of Operation[2]**	**Published Noise @ 50 feet (dB)**	**Actual Measured Noise @ 50 feet (dB)**	**Cumulative Noise Level @ 50 feet (dB))**
Water Tank						
Excavate	Bobcat	40%	3.2	80	79	75
	Loader/Backhoe	37%	3.0	80	78	74
Pour Concrete Pad	Mixer	40%	3.2	80	80	76
	Pump	20%	1.6	82	81	74
	Roller	38%	3.0	85	80	76
Install Tank	Crane	16%	1.3	85	81	73
	Forklift	20%	1.6	75	75	68
	Welder	46%	3.7	73	74	71
Propane Tank						
Excavate	Bobcat	40%	3.2	80	79	75
	Loader/Backhoe	37%	3.0	80	78	74
Pour Concrete Pad	Mixer	40%	3.2	80	80	76
	Pump	20%	1.6	82	81	74
	Roller	38%	3.0	85	80	76
Install Tank	Crane	16%	1.3	85	81	73
	Forklift	20%	1.6	75	75	68
	Welder	46%	3.7	73	74	71
RV Campsites						
Grade and Trench	Bobcat	40%	3.2	80	79	75
	Trencher	20%	1.6	85	81	74
	Loader/Backhoe	37%	3.0	80	78	74
Concrete Pads and Pave	Mixer	40%	3.2	80	80	
	Roller	38%	3.0	85	80	76
	Pump	20%	1.6	82	81	74
Water Service to Dry Camp						
Trench Utilities	Bobcat	40%	3.2	80	79	75

	Trenchers	20%	1.6	85	81	74
Bathroom						
Excavate	Bobcat	40%	3.2	80	79	75
	Loader/Backhoe	37%	3.0	80	78	74
Construct	Mixer	40%	3.2	80	80	76
	Roller	38%	3.0	85	80	76
	Pump	20%	1.6	82	81	74
Construction	Forklift	20%	1.6	75	75	68
	Loader/Backhoe	37%	3.0	80	78	74
Septic Systems						
Excavate	Bobcat	40%	3.2	80	79	75
	Loader/Backhoe	37%	3.0	80	78	74
Install	Crane	16%	1.3	85	81	73
	Loader/Backhoe	37%	3.0	80	78	74
	Welder	46%	3.7	73	74	71
	Forklift	20%	1.6	75	75	68

Source: FHWA's Roadway Construction Noise Model, 2006

1. Estimates the fraction of time each piece of equipment is operating at full power during a construction operation
2. Represents the actual hours of peak construction equipment activity out of a typical 8 hour day

Construction generated noise levels drop off at a rate of about 6 dBA per doubling of distance between the source and receptor. **Table 2** shows the distance from each project component to the nearest residential use across Highway 395 and the associated distance attenuation.

Table 2

Distances to Construction Activity and Associated Noise Attenuation

Element	Distance (miles)	Distance Attenuation (dB)
New Water Tank	0.62	-36
New Propane Tank	0.65	-37
RV Campsites	0.60	-36
Water Service to Dry Camp	0.40	-33
Bathrooms	0.35	-31
Septic Systems	0.60	-36

Table 3 shows the attenuated construction equipment noise level that would be experienced at the closest residence.

Table 3

Construction Equipment Noise Level at Closest Residence

Activity/Equipment	Cumulative Noise Level @	Cumulative Noise Level @ Closest

		50 feet (dB)	Home (dB)
Water Tank			
Excavate 1 week	Bobcat	75	39
	Loader/Backhoe	74	38
Pour Concrete Pad 1 week	Mixer	76	40
	Pump	74	38
	Roller	76	40
Install Tank 2 days	Crane	73	37
	Forklift	68	32
	Welder	71	35
Propane Tank			
Excavate 1 week	Bobcat	75	38
	Loader/Backhoe	74	37
Pour Concrete Pad 1 week	Mixer	76	39
	Pump	74	37
	Roller	76	39
Install Tank 2 days	Crane	73	36
	Forklift	68	31
	Welder	71	34
RV Campsites			
Grade and Trench 2 weeks	Bobcat	75	39
	Trencher	74	38
	Loader/Backhoe	74	38
Concrete Pads and Pave 2 weeks	Mixer	76	40
	Roller	76	40
	Pump	74	38
Water Service to Dry Camp			
Trench Utilities 2 weeks	Bobcat	75	42
	Trenchers	74	41
Bathroom			
Excavate 1 week	Bobcat	75	44
	Loader/Backhoe	74	43
Pour Pad 2 weeks	Mixer	76	45
	Roller	76	45
	Pump	74	43
Construct 2 weeks	Forklift		37
	Loader/Backhoe	74	43
Septic Systems			
Excavate 3 weeks	Bobcat	75	39
	Loader/Backhoe	74	38
Install 1 week	Crane	73	37
	Loader/Backhoe	74	38
	Welder	71	35
	Forklift	68	32

The anticipated construction fleet is mobile and not stationary and will move about the construction area. The construction noise standard for mobile equipment near an affected residence between 7 a.m. and 8 p.m., Monday through Saturday, is 75 dBA. Although no stationary source equipment is expected to be utilized, the standard is noise 60 dBA during the same hours and would similarly not be exceeded. Noise thresholds will not be exceeded for any construction activity because of distance between the noise source and the closest receptor. The more stringent thresholds for stationary source equipment will be met, although no stationary equipment is anticipated for use.

TRAFFIC NOISE IMPACTS

On a weekend, the project is expected to generate 100 additional vehicular trips. Less project related traffic is anticipated on week-days. If the impact associated with 100 trips per day is not significant, then the weekday impact due to 30 additional trips will meet thresholds with a greater margin of safety.

Vehicles access the site via Highway 395 and then travel north on S Landing Road. S Landing Road is north of Highway 395, and the traffic from the highway would dominate the noise environment. Current traffic volumes along Highway 395 were obtained. In 2015 there were approximately 6,900 vehicles per day on Highway 395 in the project vicinity (Caltrans District 9, Average Annual Daily Traffic (AADT) Count Data for US 395, 2015).

The difference between the noise level associated with 6,900 vehicles and 7,000 vehicles is +0.1 dB. Therefore, the additional vehicles would not alter the traffic noise environment and will not create a perceptible change.

BOAT DOCK OPERATIONAL NOISE

The increase of visitors would presumably lead to extended operation of the boat dock. Noise will be generated from the boats entering or departing the dock. Because the dock area is a “no wake” zone, boat travel speeds will be less than 5 mph. The number of arrivals or departures in any hour for either of the 2 launch areas will be very low. There are no adopted thresholds of significance for boating noise except that moving boats may not create pass-by noise exceeding 55 dB measured at the closest sensitive use. This value is under full power. Within the harbor boats will be near idle maneuvering, the onshore noise level will be much lower. The closest homes, even to the South Landing, is almost 0.5 miles away. The closest home outside the main harbor area is 0.8 miles away. Given that only a few boats will arrive or depart per hour, the hourly Leq will be far below any Mono Country residential standards at homes south of Highway 395.

The public docks will include a boat launch in addition to any arrival/departure activities. The launch or retrieval process is somewhat time-consuming to back the trailer into the water, fasten or unfasten the boat and perform other tasks. The number of boats launched or retrieved per hour is limited. Noise measurements made at a ski boat launch in Plaster City, California, found a noise level of 53 dB Leq for a launch sequence at 30 feet from the ramp. With distance spreading losses, ramp activity noise levels at the closest homes to the marina will be imperceptible at less than 15 dB Leq.

Experience around public docks and launch areas is that possible noise nuisance is more related to onshore social activities than to boating. The proposed park will include camping and will likely have

ongoing social activities long after dark. If these activities are fueled by alcohol consumption, boisterous behavior and loud music issues may ensue. The County has restrictions on nuisance noise from parties, but this could be an enforcement issue. The placement of adequate signage and possible time restrictions on some activities is presumed to minimize social activity noise nuisance potential. Because not everybody may obey all restrictions, surrounding residents should be given information on how to contact law enforcement in that case.

SUMMARY AND MITIGATION

Noise impact mitigation recommendations include:

- Performing construction activities during times of lesser noise sensitivity regulated by ordinance.

Project-related traffic noise changes on existing roadways are less than significant.

Noise associated with increased boating activity will not be perceptible at the closest sensitive use.

ATTACHMENT 3

Assessment of Biological Resources

Crowley Fish Camp
Assessment of Biological Resources

Jim Paulus, Ph.D.

Introduction

A review of biological resources that occur or may potentially occur at Crowley Fish Camp near the town of Crowley Lake, Mono County, California was conducted in May-June 2017. This project includes existing recreational, boat and vehicle storage, and management facilities near the shoreline of Crowley Reservoir (Figure 1). The project also includes proposed new additions to improve and expand the existing facility operations. These existing project-related uses, and construction and operation of the proposed new uses, will occupy up to 17.0 acres within the larger Crowley Fish Camp site. To date, these improvements (Table 1) have displaced vegetation and disturbed the soil profile in an area totaling 16.5 acres (Figure 2). All areas that could be potentially affected by either the construction or by routine operations were included in the assessment of biological resources.

Table 1. List of existing and proposed facilities included in the study of biological resources.[51]

FACILITIES DESCRIPTION	CURRENT PROJECT REVIEW	
	MONO COUNTY	MONO COUNTY and HCD
Existing Facilities and Uses		
Entry Building & Gatehouse	✓	
Entry Gates and Fencing	✓	
Tackle Shop and Offices	✓	
Pelican Point Grill building and deck	✓	
Park Model Cabin Trailer #1	✓	✓
Park Model Cabin Trailer #2	✓	✓
Park Model Cabin Trailer #3	✓	✓
Manager Home	✓	✓
Existing Water Storage Tank	✓	
Domestic Well House	✓	
Existing RV Camp Sites with hook-ups (24 total)	✓	✓
Existing Dry Camp Sites	✓	✓
Boat and Trailer Storage Area	✓	
Maintenance Yard	✓	
Landscape Pond	✓	
Septic System Areas (2 total)	✓	
Proposed Facilities and Uses		
New Water Storage Tank	✓	
New RV Camp Sites with hook-ups (7)	✓	✓
New Water Spigot to Serve Dry Camp Sites	✓	✓
New Propane Tank (1 tank)	✓	
New Portable bathrooms & showers (up to 3 total)	✓	
New Septic System Connection	✓	

[51] Note that this table addresses only those facilities directly analyzed in the biological report, and excludes project elements (such as the floating toilets) that lacked potential biological significance.

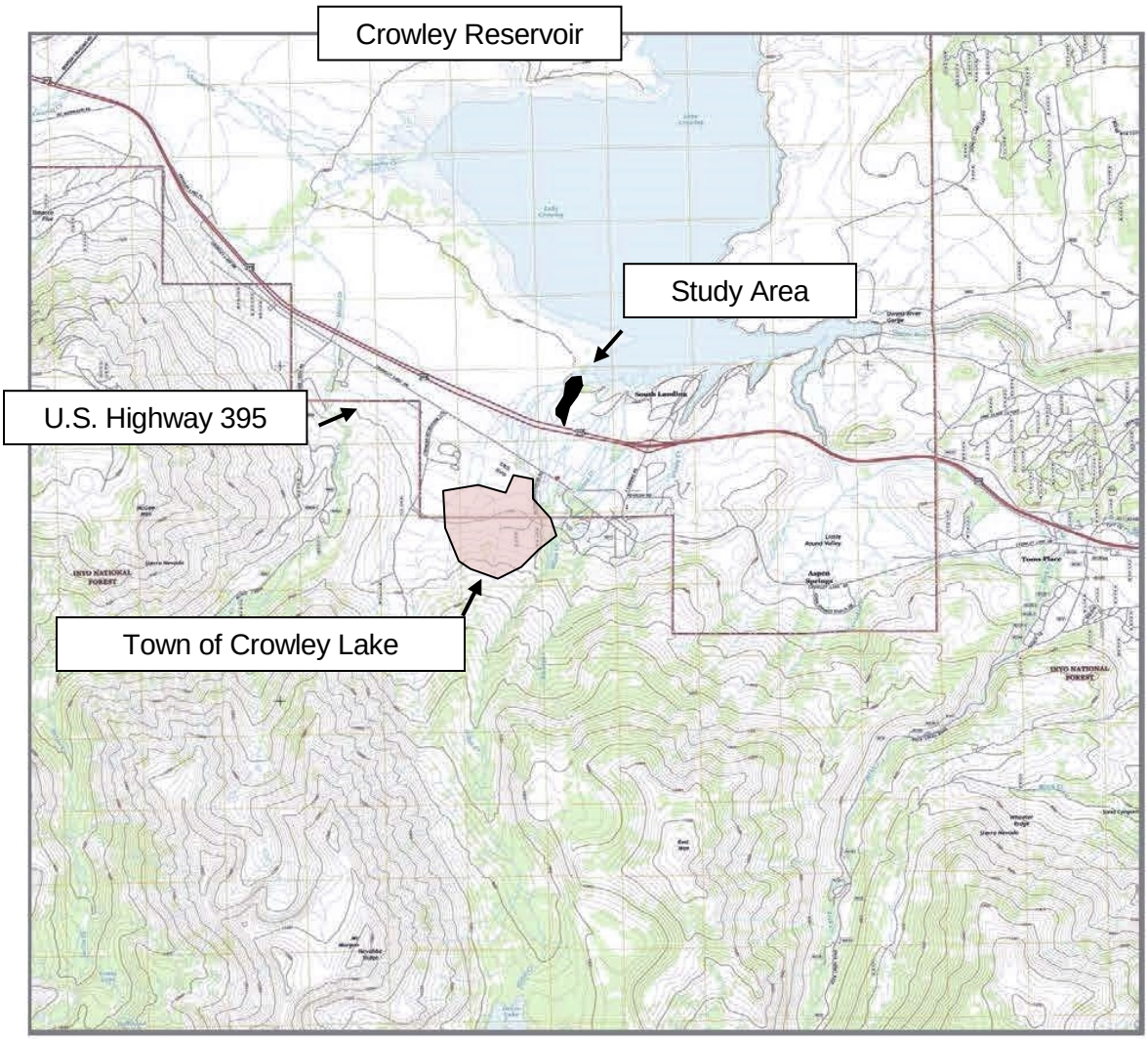


Figure 1. Location of the 28.8 acre Crowley Fish Camp study area near the Town of Crowley Lake, Mono County, California.

Study Area

The study area for assessment of biological resource presence and potential project impacts (Figure 2) was defined as the entire area where project elements (Table 1) occur or will occur, the paved and unpaved approach roads as they now exist between the entry gate and boat ramp, and an additional 50 feet of buffer area in all directions. Total area of the study area is 28.8 acres. The buffer is entirely outside the area of project direct effect, but may be affected indirectly by project operation. Vegetative conditions that were documented within the buffer in 2017 also may be the best available representation or reference to the plant community as it would have existed prior to the construction of the existing project elements.

The average elevation of the project area is 6815 ft (2078 m). Crowley Fish Camp is situated lakeside within extensive unforested shrublands immediately north of the four-lane U.S. Highway 395, and north of the Town of Crowley Lake. The Highway and town occupy terrain at the base of the steeply sloping eastern flank of the central Sierra Nevada Range, where the vegetation transitions to coniferous forest. The climate is montane; the average winter temperature is 32^{o} F, and the frost-free growing season is about 150 days. The average summer air temperature is 70^{o} F (Natural Resource Conservation Service, 1996). The growing season (May to October) is normally xeric, and is characterized by moderate daytime temperatures and low humidity, but thunderstorms can irregularly interrupt this pattern. Snowfall may begin in September, but is most likely to accumulate in this area during the period November to April.

Plant communities

The study area for this review totals 28.8 acres. When the project has been fully implemented, the fraction of the study area that will retain native vegetation will be reduced from 12.3 acres to 11.8 acres (less than 20%, excluding the buffers). Much of this remaining area now supports the plant community type Great Basin Mixed Scrub (Table 2). The buffer area is patchily devegetated, otherwise retaining a relatively undisturbed cover classified as Big Sagebrush Scrub (Figure 3). Both of these plant community types are common and widespread on the eastern slopes of the Sierra Nevada and throughout the Great Basin Floristic Province (Sawyer, et al, 2009). Both are typical of xeric habitats in uplands settings, such as the habitat observed within the study area.

No indications of wetland habitats or shifts in the vegetation indicating locally elevated water tables were found within the 28.8 acre study area. Rather, shrub canopies are uniformly distributed in the fragmented patches where Great Basin Mixed Scrub or Big Sagebrush Scrub remains unaffected by recent mechanical disturbance. No other potentially flooded or seasonally mesic habitats (e.g., wetland swales, ephemeral stream beds) were found within the study area.

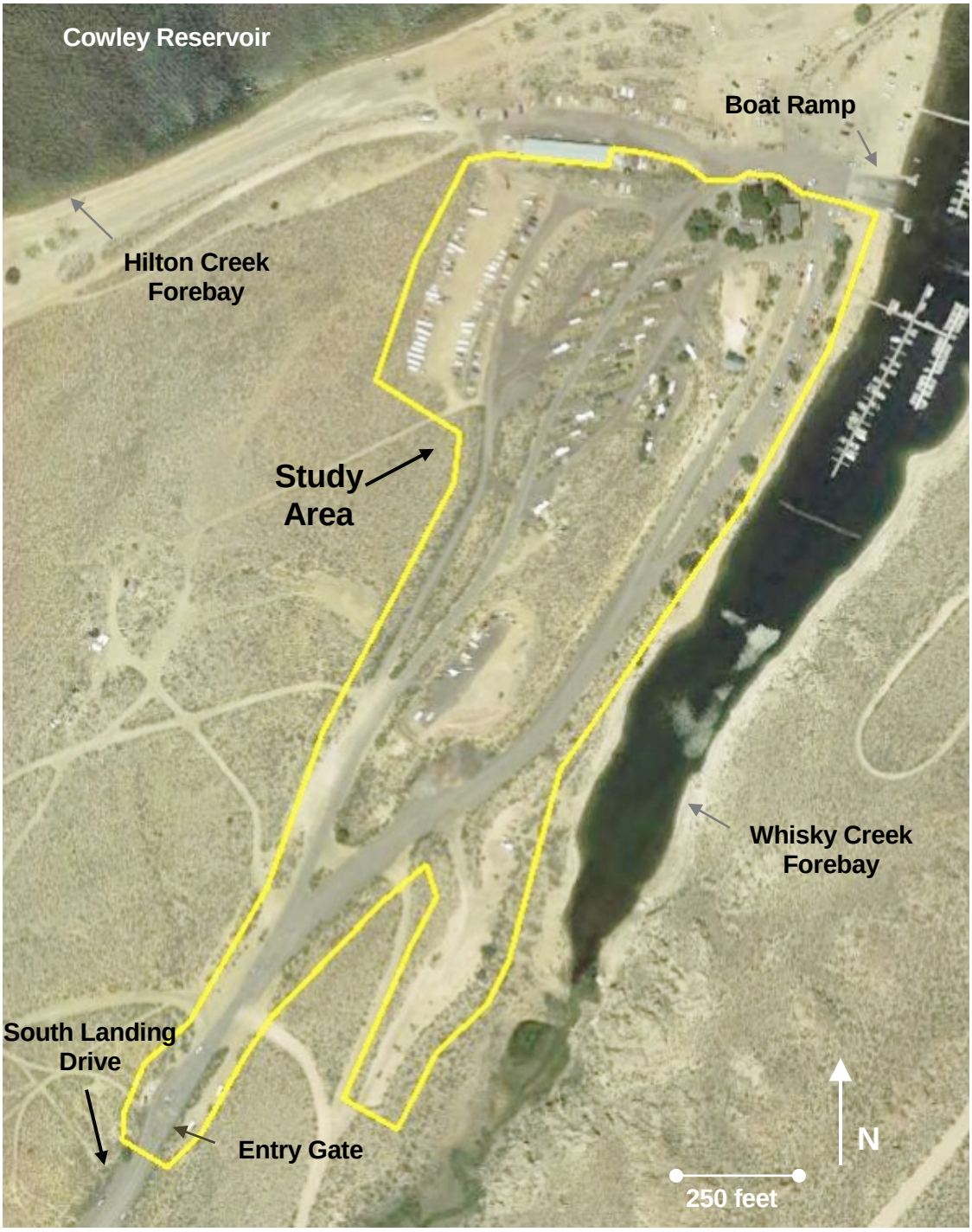


Figure 2. Crowley Fish Camp study area for biological resources. Surveys to inventory plant and wildlife resources and search for sensitive species were conducted in May and June 2017. The study area is 28.8 acres. The base image date is June 2016.

Table 2. Plant communities that were mapped within the 28.8 acre Crowley Fish Camp study area in 2017. The study area currently includes 16.5 acres that have been converted to roads, buildings, camp sites, and other impervious or devegetated surfaces. Community names (after Holland, 1986) are cross-referenced to the California Department of Fish and Wildlife classification (CDFG, 2010), and the Sawyer, *et al.* (2009) Alliance classification. * are designated "sensitive" by CDFW (CDFG, 2010).

Holland name and CDFW classification number	Alliance and primary association names	acreage in study area
upland communities		
Great Basin Mixed Scrub 35.200.02*	Bitterbrush Shrubland *Purshia tridentata-Artemisia tridentata*	2.5
Big Sagebrush Scrub 35.110.02	Big Sagebrush Shrubland *Artemisia tridentata*	9.8

Great Basin Mixed Scrub

Great Basin Mixed Scrub, which is California Department of Fish and Wildlife (CDFW) plant community code 35.110.07 (CDFG, 2010), occurs within the study area as an isolated bitterbrush-big sagebrush (*Purshia tridentata – Artemisia tridentata*) alliance. The native shrub canopy averages 2 ft in height and provides a uniform 20-30% living cover with at least 50% of this cover contributed by bitterbrush. This community type is considered to be sensitive by CDFW. It has been documented in recent decline in the Eastern Sierra Nevada region, especially southern Mono County, due mainly to wildfire (Sawyer, *et al.*, 2009). When the project has been fully implemented, the current extent of this plant community will be reduced from 2.5 acres to 2.1 acres.

Local sensitivity of the occurring alliance must also be considered within the context of the project's location near a known migratory mule deer movement corridor (see Wildlife, below), because the migrating deer are known to rely primarily on bitterbrush for sustenance (Monteith, *et al.*, 2009). However, mapped occurrences at the Crowley Fish Camp study area (Figure 3) have each become ecologically isolated within the already developed extents of the project. Remnant Great Basin Mixed Scrub occurs now only as patches of 0.8 acres to less than 0.1 acres amid existing camping and water recreation developments.

Dominants bitterbrush and sagebrush are joined at about 10% relative frequency by curl-leaf rabbitbrush (*Chrysothamnus viscidiflorus*), and at very low frequencies by spineless horsebrush (*Tetradymia canescens*), rubber rabbitbrush (*Ericameria nauseosa*), and patches of desert peach (*Prunus andersonii*). Native perennials such as silvery lupine (*Lupinus argenteus* var. *heteranthus*) and annuals especially summer snow (*Gayophytum* spp.) were generally abundant in 2017 (full species list is given in Appendix A). Native perennial grasses, however, were infrequent and scattered in Great Basin Mixed Scrub.

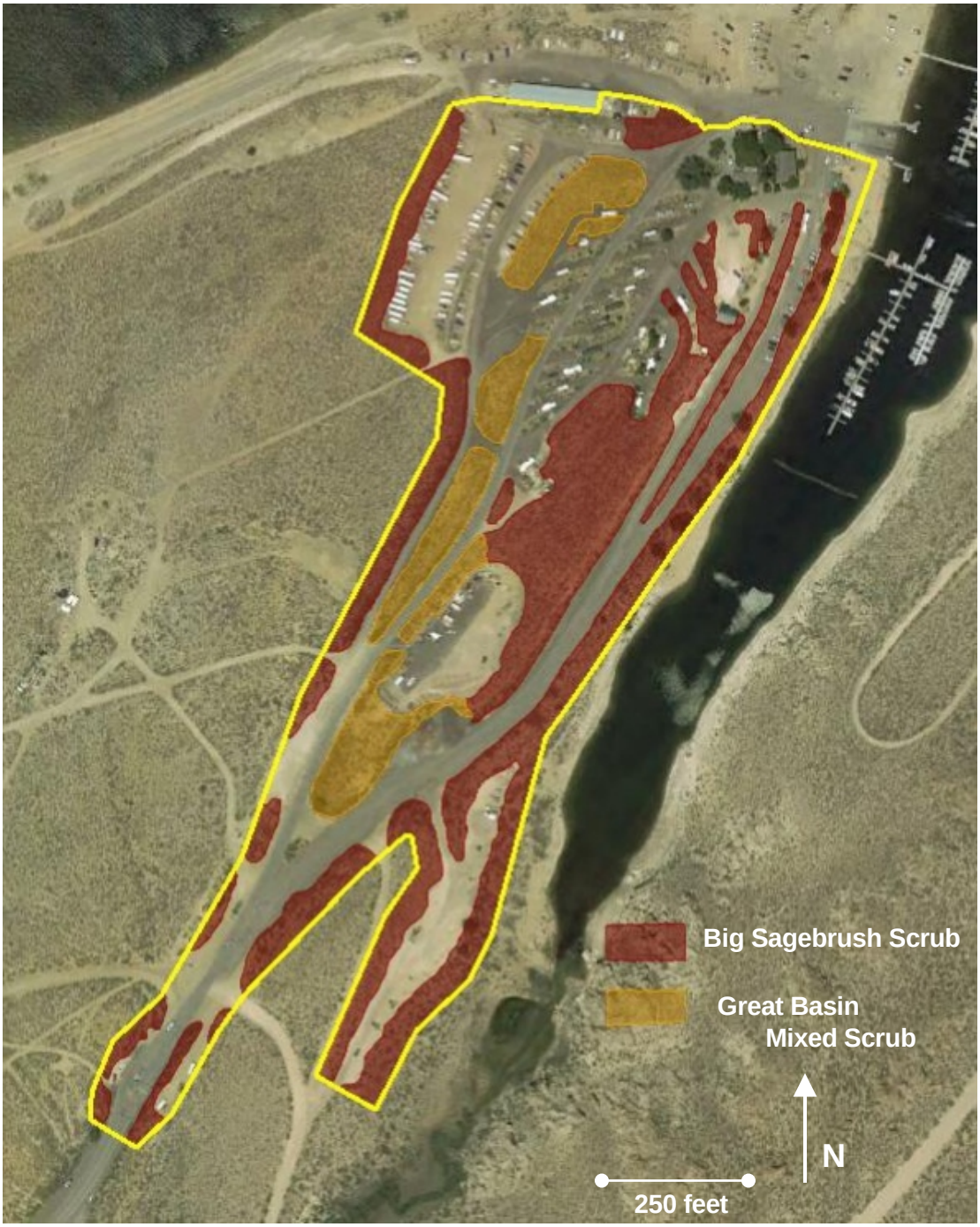


Figure 3. Plant communities present within the 28.8 acre Crowley Fish Camp study area in June 2017. Disturbed and devegetated areas (unshaded) currently total 16.5 acres, and will total up to 17.0 acres when project implementation is completed.

Big Sagebrush Scrub

Maturing big sagebrush (*Artemisia tridentata*) clearly dominate in Big Sagebrush Scrub, comprising on average 80% of the shrub layer. The canopy also regularly includes bitterbrush and curl-leaf rabbitbrush. Bitterbrush contributes a relatively minor (5-10%) fraction of the total shrub layer living cover, but it has achieved noticeably denser stands near the edges of paved surfaces. As in Great Basin Mixed Scrub, trees are normally absent. However, native black poplars (*Populus trichocarpus*) have been introduced near the lake shore, around the buildings, and near the maintenance yard. Unlike the occurring isolated Great Basin Mixed Scrub, Big Sagebrush Scrub within the study area (Figure 3) is generally well connected to off-site areas that are less frequently or intensely disturbed.

The total living shrub canopy cover attained in Big Sagebrush Scrub averages 20%, and average height is two feet. The overall diversity of plant species is higher in comparison with Great Basin Mixed Scrub (Appendix A). But there is little structural variation between the two community types. Because of this, ecotones appear to be very broad and the only visual indication of plant community boundaries is the shift in shrub canopy dominance between bitterbrush and big sagebrush. When the project has been fully implemented, the current extent of this plant community will be reduced from 9.9 acres to 9.8 acres.

Non-Native Plants

A total of six non-native species (Table 3) were found growing within the study area. The annual cheat grass (*Bromus tectorum*) was found throughout the entire project area. This species has become widespread in Mono County scrub habitats, and nearly all in close proximity to U.S. Highway 395 are either currently supporting populations or in high danger of being invaded by this noxious weed. Cheat grass, which is the most abundant non-native plant occurring within the project area assemblage in 2017, is an invasive noxious weed as defined by the California Exotic Pest Plant Council (CalEPPC code A-1: “are the most invasive pest plants, and are already widespread”). High density cheat grass stands are thought to increase the risk and frequency of wildfire (CalEPPC, 1999).

Russian thistle (*Salsola tragus*), tansy mustard (*Descurainia sophia*), and tumble mustard (*Sisymbrium altissimum*) have established populations that extend beyond the immediate areas of frequent and intensive recreation-related and facilities maintenance-related disturbance. All three species have invaded into relatively undisturbed stands of Great Basin Mixed Scrub and Big Sagebrush Scrub. The smaller on-site populations of knotweed (*Polygonum aviculare*) and redstem filaree (*Erodium cicutarium*) meanwhile appear to be currently limited to roadside and maintenance yard areas.

Further disturbances to the project area’s plant communities may encourage the local spread of Russian thistle, tansy mustard, tumble mustard, knotweed, and redstem filaree; however, spread of these pre-existing species within the study area is considered negative but not significant in the context of the larger historically disturbed lake access area. Cheat grass currently occurs at < 1% absolute cover, and it generally provides < 5% of the total plant community living cover throughout the project area. Weed control that is applied following any new disturbance will be effective if treatment robustly covers the entire study area, but the likelihood that eradication of cheat grass can be achieved is very low. Cheat grass control to maintain low abundance between the native shrub canopies may nevertheless be desirable in camping areas because dense,

senescent swards created annually by this species can significantly increase the potential for ignition in an area that naturally (in the absence of disturbance) would be free of annual grasses.

Table 3. Non-native plant species that were found within the 28.8 acre Crowley Fish Camp study area in 2017. CDFA and Cal-IPC weed ratings are given.

Species	CDFA	Cal-IPC
cheat grass (*Bromus tectorum*)	-	High
common knotweed (*Polygonum aviculare*)	-	-
redstem filaree (*Erodium cicutarium*)	-	limited
Russian thistle (*Salsola tragus*)	C	limited
tansy mustard (*Descurainia sophia*)	-	limited
tumble mustard (*Sisymbrium altissimum*)	-	-

Notes:

CDFA Noxious Weeds List (California Department of Food and Agriculture, 2017):

List C – A pest of known economic or environmental detriment and, if present in California, it is usually widespread. C-rated organisms are eligible to enter the state as long as the commodities with which they are associated conform to pest cleanliness standards when found in nursery stock shipments. If found in the state, they are subject to regulations designed to retard spread or to suppress at the discretion of the individual county agricultural commissioner. There is no state enforced action other than providing for pest cleanliness.

Cal-IPC Invasiveness Ratings (California Invasive Plant Council, 2017):

High – These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.

Limited – These species are invasive but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic.

Sensitive plant species

A list of sensitive plant species that could have some potential to occur within the habitats currently available at the project site was compiled (Table 4), based upon a review of regional data (U.S. Fish and Wildlife Service, 2017, California Native Plant Society (CNPS), 2017, CalFlora, 2017, California Department of Fish and Wildlife (CDFW), 2017a, 2017b), environmental documentation prepared for nearby projects (Paulus, 2011, 2015a, 2015b), published regional floras (Baldwin, et al., 2012, Jepson Herbarium, 2017), and a June 2017 search of the California Natural Diversity Database (CNDDB) records for the USGS Tom's Place, Watterson Canyon, Whitmore Hot Springs, Convict Lake, Mt. Abbot, Mt. Morgan, Rovana, Casa Diablo Mountain, and Banner Ridge quadrangles (CDFW, 2017c).

Table 4. Sensitive plant species that potentially could occur at the Crowley Fish Camp project. Flowering period data is from CNPS (2001). None of these species are federally listed. A key to the rank or status symbols follows the table. NL = not listed.

Scientific Name Common Name Life Form	Rank or Status				Habitat	Flowering Period
	USFS BLM	CDFW	CNPS	NDDB		
Astragalus johannis-howellii Long Valley milkvetch herbaceous perennial	S S	R	1B.2	S1	sagebrush scrub, often sandy	June-August
Astragalus monoensis[1] Mono milkvetch herbaceous perennial	S S	R	1B.2	S2	open pumice soils, roadsides	June-August
Boechera cobrensis Masonic rock cress herbaceous perennial	NL	NL	2B.3	S2	sagebrush scrub	June-July
Boechera dispar pinyon rock cress herbaceous perennial	NL	NL	2B.3	S3	xeric scrub, woodland	March-June
Eremothera boothii ssp. *boothii* Booth evening primrose herbaceous annual	NL	NL	2B.3	S2	sagebrush scrub	April-May
Eremothera boothii ssp. *intermedia* Booth hairy evening primrose herbaceous annual	NL	NL	2B.3	S3	sagebrush scrub, fire scars	June
Hulsea vestita ssp. *inyoensis* Inyo hulsea herbaceous perennial	NL	NL	2B.2	S2	sagebrush scrub, talus, sometimes Bishop tuff	April-June
Mentzelia torreyi Torrey's blazing star herbaceous perennial	NL	NL	2B.2	S2	sandy or alkaline scrub	June-August
Micromonolepis pusilla dwarf monolepis herbaceous annual	NL	NL	2B.3	S3?	low areas in sagebrush scrub	May-August

Scientific Name Common Name Life Form	Rank or Status				Habitat	Flowering Period
	USFS BLM	CDFW	CNPS	NDDB		
Phacelia gymnoclada naked-stem phacelia herbaceous annual	NL	NL	2B.3	S2	sagebrush scrub, gravelly, usually clay	May-June
Thelypodium integrifolium ssp. *complanatum* foxtail thelypodium herbaceous perennial	NL	NL	2B.2	S2	sagebrush scrub, mesic	June-October
Viola purpurea ssp. *aurea* golden violet herbaceous perennial	NL	NL	2B.2	S2	sagebrush scrub, often sandy	April-June

Rank or status, by agency:

BLM and USFS = US Forest Service, Inyo National Forest, Bishop Office (USFS, 2013a, 2013b) and Bureau of Land Management, Bishop Office (BLM, 2015)
S = Sensitive List

CDFW = California Department of Fish and Game listings under the Native Plant Protection Act and the California Endangered Species Act (CDFW, 2017a).
R = Rare

CNPS = California Native Plant Society listings (CNPS, 2001, 2017)
1B = rare and endangered in California and elsewhere
2B = rare, threatened or endangered in California, but more common elsewhere
Threat Code extensions:
.1 is Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 is Fairly endangered in California (20-80% of occurrences threatened)
.3 is Not very endangered in California (< 20% of occ's threatened or no current threats known.

CNDDB = California Natural Diversity Data Base rankings by the CDFG (CDFW, 2017b)
S1 = Critically imperiled in California due to extreme rarity (often 5 or fewer populations) or because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the state.
S2 = Imperiled in California because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from state.
S3 = Vulnerable in California due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation from the state.

Literature Review Results

Potentially occurring plant species were considered to be "sensitive" if they have current state or federal status as Rare, Threatened, Endangered, or Candidate (CDFW, 2017a), or are listed in the CNDDB list of special plants (CDFW, 2017b), or are listed by CNPS in their inventory of sensitive California plants (CNPS, 2017), or are included in the most recent sensitive plant or watch

lists prepared by Inyo National Forest (U.S. Forest Service, 2013a, 2013b) or Bureau of Land Management, Bishop office (BLM, 2015). No previously documented on-site occurrences of rare plant species appear in CNDDB records (Appendix B). This information, however, must be interpreted in the general context that the absence of CNDDB records concerning the project area does not signify that rare plants are absent, rather that none have been reported.

The CNDDB records and literature search results indicate that 12 sensitive plant species occur within 15 miles of the project and in montane scrub settings that bear some resemblance to habitats available within the study area. The milkvetches *Astragalus johannis-howellii* and *A. monoensis* (syn. *A. monoensis* var. *monoensis*) are state listed Rare species. None are federal listed or candidate species. One sensitive species not found in CNDDB records, Masonic rock cress (*Boechera cobrensis*), is included because it was recently observed 5.5 miles north in vegetation resembling the project area's Big Sagebrush Scrub (Paulus, 2010).

The two Booth's evening primrose subspecies (*Camissonia boothii* ssps.), dwarf monolepis (*Micromonolepis pusilla*), and naked-stem phacelia (*Phacelia gymnoclada*) are annual species. Members of the annual species assemblage that were present at the time of survey represented a diverse set of species, furthermore populations of annuals were relatively abundant in response to above-average precipitation in the area during the late spring. It therefore appears very likely that sensitive annuals, if present, would have been detected. All potentially occurring sensitive plants would be expected to exhibit leaves, flowers, and maturing or mature fruit during the May and June survey period (Table 4). Visits to nearby known populations of *Lupinus duranii*, *Astragalus monoensis*, and *Arabis cobrensis* during the period May 19 to July 2, 2017, confirm that diagnostic characters would have been available, even for relatively early-blooming perennials.

Sensitive plants known to occur in nearby alkaline meadow or scrub habitats (*Atriplex pusilla*, *Calochortus excavatus*, *Crepis runcinata* ssp. *hallii*, *Ivesia kingii* var. *kingii*, *Phacelia inyoensis*, *Sidalcea covillei*, and *Sphaeromeria potentilloides* var. *nitrophila*) may be excluded as very unlikely to occur, because their relatively moist habitat and alkaline or saline soil habitats are not present within the study area. Similarly, locally occurring sensitive species that are restricted to freshwater streamside habitats (e.g., *Astragalus lemmonii*, *Botrichium* spp., *Carex scirpoidea* ssp. *pseudoscirpoidea*, *Epilobium howellii*, *Helodium blandowii*, *Ivesia unguiculata*, *Kobresia myosuroides*, *Parnassia parviflora*, *Pedicularis crenulata*, *Salix* spp., *Stuckenia filiformis*, and *Triglochin palustris*) may be excluded because the scrub vegetation present across the entire study area is uniformly xeric. Suitably wet habitat for these species does not occur.

Field Survey Results

Searches for rare plant populations were conducted (per CDFG, 2009) on May 18 and June 3-5, 2017. Any species that were not recognized at once were keyed by the consulting botanist using The Jepson Manual (Baldwin, *et al.*, 2012). All populations encountered were identified to a level of taxa that was sufficient to determine sensitive species presence or absence. Transect spacing was 10-25 feet in scrub-covered areas.

Sensitive plant populations were not found during the field survey. Only common plant species (Appendix A) occur in areas that would be disturbed by new construction. No members of the distinctive genera *Boechera*, *Eremothera*, *Hulsea*, *Micromonolepis*, *Thelypodium*, or *Viola* occur in the project area. The widely occurring *Camissonia pusilla* does not bear typical ovate leaves or white corollas that would be expected if *Eremothera boothii* were present. The occurring *Astragalus* exhibited ovoid, either densely woolly or bladdery-inflated fruits, not the narrowly half-elipsoid,

sparsely hairy fruits expected of *A. johannis-howelli* or *A. monoensis*. The only occurring *Mentzelia*, white-stemmed blazing star (*M. albicaulis*), is an annual that is overall diminutive in comparison to the robust perennial *M. torreyi*, so confident separation was possible. The common annual species *Phacelia bicolor* was separated from potentially occurring *P. gymnoclada* based upon degree of leaf lobing. Occurring *P. bicolor* exhibited cauline leaves with lobes that reach the midrib, in contrast to the shallowly lobed to entire (unlobed) cauline leaves that are typical of *P. gymnoclada*. Based upon these findings, it is unlikely the project will affect any sensitive plant populations.

Habitat for Wildlife

A review of wildlife that may potentially occupy or use the Great Basin Mixed Scrub, Big Sagebrush Scrub, and disturbed habitats that are available at the Crowley Fish Camp site was conducted in May 2017. New construction will affect undeveloped but historically disturbed fragments of native scrub that are embedded within or abutting the already developed and operational portions of the camping and water recreation facility (Figure 3). Ongoing facility operations have altered the available habitats due to intense human activity, including substantial vehicular ingress/egress and uses by domestic pets. These uses are seasonal, peaking during summer recreation and falling off to near absence (caretaker staffing only) during the winter period of late October through mid-April.

Existing developments that are nearby and may influence wildlife usage of the project site include a line of power poles that bisect the study area in the north-south direction, the four-lane U.S. Highway 395 less than 1000 feet to the south of the project's entry gate facility, and the Town of Crowley Lake extending southward from the south edge of the highway (Figure 4). Historically long-standing water-spreading operations using open ditches maintain a productive mixed meadow and scrub habitat above the confluence of Hilton Creek and Crowley Reservoir. The relatively wet, grass and sedge-dominated meadows created along Hilton Creek (Figure 4) approach from the west to within 1500 feet of the study area. Existing developments at Crowley Fish Camp, meanwhile, occupy a peninsula-like area of slightly elevated terrain between the Hilton Creek and Whisky Creek drainages. This undulation in the former alluvial plain was not inundated upon the creation of Crowley Reservoir in 1941, and the location has been an important lake access point ever since.

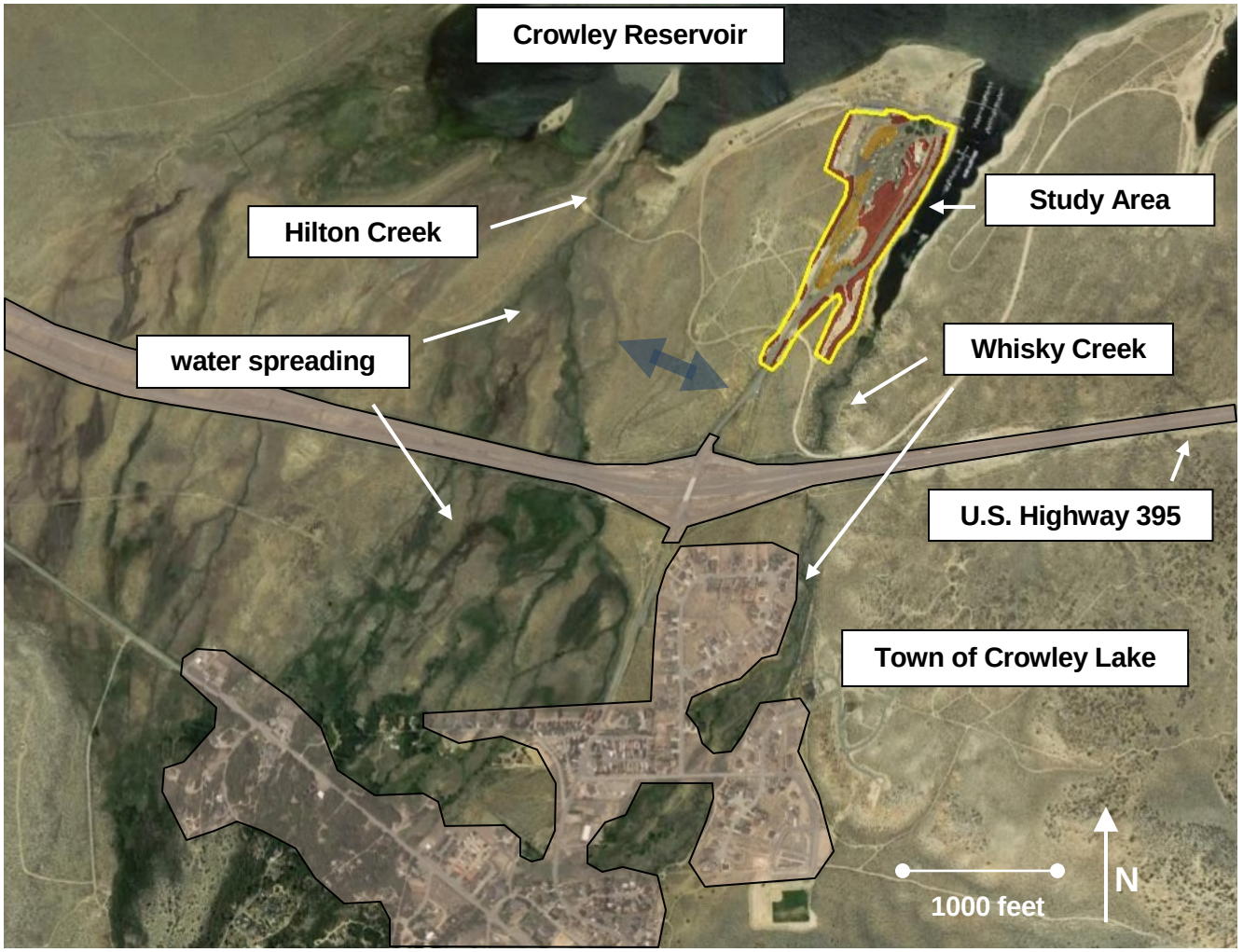


Figure 4. Landscape features and a likely movement corridor (blue arrow) that may influence wildlife usage of the project area.

Sensitive Wildlife Species

Based upon a review of available regional data regional data (U.S. Fish and Wildlife Service, 2017, California Department of Fish and Wildlife (CDFW), 2017d, 2017e), environmental documentation prepared for nearby projects (Paulus, 2011, 2015b), and a May 2017 search of the California Natural Diversity Database (CNDDB) records for the USGS Tom's Place, Watterson Canyon, Whitmore Hot Springs, Convict Lake, Mt. Abbot, Mt. Morgan, Rovana, Casa Diablo Mountain, and Banner Ridge quadrangles (CDFW, 2017c), three sensitive wildlife species were identified as having some potential to occur within the study area (Table 5). It is possible that these species use the available habitats for foraging or pass through the study area during annual migrations. No critical habitat designations currently intersect the study area.

"Sensitive wildlife species", as used in this report, meet the definitions of rare or endangered species under the California Environmental Quality Act (Section 15380 CEQA Guidelines), or are considered candidates for state or federal listing as threatened or endangered, or are listed by CDFW as Species of Special Concern, or are listed by local agencies as locally rare. Mule deer are considered important harvest species by the CDFW and in this analysis will be treated as sensitive. Deer herds in Mono County are defined by their winter holding ranges, the lower elevation Eastern Sierra locations that provide pine forest, pinyon-juniper woodland, and sagebrush scrub habitats suitable for overwintering. The Crowley Fish Camp location is marginally within the migration corridor that is predictably used by deer of the Round Valley Herd to approach and later depart their winter range (Monteith, *et al.*, 2009).

The May 2017 CNDDB records review did not uncover previously documented occurrences of sensitive wildlife species within the study area. This result, however, must be interpreted in the general context that the absence of CNDDB records concerning the study area does not signify that sensitive wildlife species are absent, rather that none have been reported. The absence of aquatic habitat within the existing facilities, the areas that may be disturbed by new construction, and the 50 ft buffers outside the project excludes sensitive mollusk, amphibian, and fish presence. Any surface ponding and runoff that occurs within the study area's habitats for wildlife is ephemeral in duration, as indicated by the uniformly xerophyllic vegetation. The 6815 ft (2078 m) average elevation of the study area is outside the normal range of Sierra Nevada bighorn sheep (*Ovis canadensis sierrae*), whose preferred year-round habitats are on steep mountain slopes at elevations greater than 9000-10000 ft (2750-3050 m). The absence of tall trees and cliffs makes nesting by sensitive raptors and swallows that are known to use the area very unlikely.

Despite development as a campground and water recreation facility during recent decades, there currently remains some possibility of use by greater sage grouse (*Centrocercus urophasianus*), western white-tailed jackrabbit (*Lepus townsendii townsendii*), and Sierra Nevada red fox (*Vulpes vulpes necator*). All are relatively mobile species that could enter the study area while foraging or migrating, as the habitats they are known to use at least seasonally include xeric scrub that is dominated by sagebrush (Table 5).

Table 5. Sensitive wildlife species that potentially could use the disturbed habitats available at the Crowley Fish Camp study area. Key to status codes are given below, NL = not listed.

species	Rank or Status USFWS	CDFW	CNDDB	habitat
birds				
Centrocercus urophasianus greater sage grouse (foraging or migrating only)	USFS Sensitive	SSC	S3	sagebrush scrub
mammals				
Lepus townsendii townsendii western white-tailed jackrabbit	-	SSC	S3?	coniferous forest, sagebrush scrub
Vulpes vulpes necator Sierra Nevada red fox	USFS Sensitive	Threatened	S1	coniferous forest, sagebrush scrub

Rank or status, by agency:

USFS = US Forest Service, Inyo National Forest, Bishop Office (USFS, 2013c).

CDFW = State of California under the California Endangered Species Act (CDFW, 2017c)
SSC = Species of Special Concern (CDFW, 2017d).

State ranking = CNDDB State Conservation Ranking as reported by CDFW (2017d)
S1 is Critically Imperiled: often 5 or fewer populations, or steep rate of decline,
S2 is Imperiled: often 20 or fewer populations, steep decline, or very restricted range,
S3 is Vulnerable: often 80 or fewer populations, declining or restricted range,
S4 is Apparently Secure: uncommon but not rare in California,
? indicates CNDDB uncertainty in assigning rank.

Buildings and trees were searched closely for nesting birds and roosting bats during the May-June 2017 survey, finding no animals and no guano accumulations. Mines and caves that could be used by potentially occurring sensitive bats for day roosting, breeding and hibernation do not occur within the study area. While suitable foraging habitat may be present nearby, the absence of inhabited roosting structures makes it unlikely that any bats will be affected by project construction. There are no trees or structures suitable for nesting by passerine birds within 200 ft of the area where new project-related construction would occur. The only wildlife seen within the study area during the surveys in May and June 2017 are common species of the region (Table 6).

Table 6. Wildlife observed within the 28.8 acre Crowley Fish Camp study area in May and June 2017.

sagebrush lizard	Sceloporus graciosus
red-tailed hawk	Buteo jamaicensis
California gull	*Callipepla californica*
Eurasian collared dove	*Streptopelia decaocto*
green-tailed towhee	*Pipilo chlorurus*
raven	*Corvus corax*
ground squirrel	*Spermophilus beecheyi*
deermouse	*Peromyscus* sp.

Greater Sage Grouse

Greater sage grouse are specialist species that generally occupy open (treeless) sagebrush scrub (Bi-State Technical Advisory Committee, 2012). Seasonally, adults with (or without) chicks may expand their habitat use to include meadows. Greater sage grouse are threatened by development that disturbs these habitats and disrupts breeding. Their habitats have been fragmented by linear barriers such as fencing and degraded by new perches and human-provided subsidies for the predators of sage grouse adults, chicks and nests (Bi-State TAC, 2012). Documented uses of sagebrush scrub habitat by members of the South Mono Basin Population Management Unit (PMU) near Crowley Reservoir include foraging, nesting, and breeding (Federal Aviation Administration, 2007). The nearest known lek (breeding) site and associated nesting and brooding area is located in an expansive and relatively undisturbed stand of sagebrush scrub 3.9 miles to the northwest of the study area.

It is typical for females to disperse into scrub cover seeking relative isolation during nesting, choosing cover that averages near 50% (Casazza, *et al.*, 2005), or roughly twice the 20-30% cover density present near the project. The available cover is relatively short and widely spaced, and so would be insufficient for nesting. Openings in the shrub canopy resembling local leks do not occur in the study area. It is therefore very unlikely that the project will have any impact upon the breeding capacity or success of the local PMU, unless the project creates new subsidies or attractants to predators of sage grouse chicks that may be using the available habitat adjoining the project area for foraging, or creates substantial risk of mortality from increased collisions with vehicles. These impacts could occur during the annual operational period of late April through the end of October, which is the period when greater sage grouse typically would be completing breeding, dispersing, nesting, and raising chicks.

It is very unlikely that foraging sage grouse would use the sparsely covered and intensely disturbed sagebrush scrub margins that are embedded within or adjoin the study area during normal project operations, as these operations include continuous human and dog presence, noise, and recreational activity. It is possible that grouse would enter the relatively unencumbered corridor between the entry gate and camping facilities, to access sagebrush habitat south of Whisky Creek. Given the project's proposed addition of new camping spaces, water service for the existing dry camp site, and other improvements , the resulting increase in motorized traffic will create at least some increased risk of vehicle-grouse collisions near the entry gate during the annual period late April through the end of October, unless vehicular speed is enforceably controlled at below the level where grouse can be avoided. The proposed increase in camping use furthermore has the potential to create additional new attractants for typical avian and mammalian predators of greater sage grouse, unless effective measures to prevent predator access are implemented.

It is conceivable that sage grouse enter the study area during winter foraging. Exposed sagebrush can become scarce during the snowy winter months, and the slightly raised and open, windier topography may become exposed to offer sagebrush foraging resources more frequently than surrounding areas. While this use has not been observed, adults were observed to use meadows that are maintained by water spreading operations along Hilton Creek to the west during May-June 2013, 2014, and 2017 (personal obs.), and this habitat extends to within 1500 ft of the study area's west edge (Figure 4). All project operations are ceased during the potential period of winter foraging use, so there is no increased risk of mortality due to vehicle collisions. The proposed new construction will not increase the local availability of high perches that impart advantage to typical predators of overwintering greater sage grouse. Furthermore, during this season there will be no operations-based creation of trash and other potential attractants and subsidies for predators. It is

therefore unlikely that the project will have any impact upon sage grouse resource use or mortality during winter months.

Sagebrush scrub within the project area has been marginalized historically and currently occurs as isolated fragments amid the array of project camping and water recreation-related elements (Figure 3). Loss of up to 0.5 acres of Great Basin Mixed Scrub and Big Sagebrush Scrub habitat due to new project-related construction will not significantly affect the availability of sagebrush for greater sage grouse foraging in the Southern Long Valley region.

Western White-tailed Jackrabbit

Western white-tailed jackrabbits are thought to inhabit a variety of montane habitats in the Eastern Sierra Nevada, including Big Sagebrush Scrub that provides a substantial shrub cover. Individuals do not congregate, and are mainly nocturnal when foraging. Sightings regionally appear to be very uncommon, and may be restricted to individuals that are migrating to lower elevation scrub during summer months (C.A. Joseph and Assoc., 2007). Highly mobile hares could conceivably enter the study area during the normal operational period of the project.

Presence of this species within the project area could be detected during winter months by searching for forms in the snow. In other season, they would be more difficult to detect. No hare-sized burrows that could be appropriated by western white-tailed jackrabbit were found during the May-June 2017 survey, however pellets attributable to a larger rabbit or hare species were found. As discussed above for greater sage grouse, the project would increase the risk of vehicle-hare collisions due to increased traffic volume, unless vehicular speed is enforceably controlled at below the level where hares can be avoided. The proposed increase in camping use furthermore has the potential to create additional new attractants for typical avian and mammalian predators of small mammals including jackrabbits, unless effective measures to prevent predator access to new subsidies are implemented.

Remaining scrub habitat within the project area has been marginalized historically and currently occurs as isolated fragments (Figure 3). Loss of up to 0.5 acres of this scrub habitat would not have a significant effect on highly mobile hares that may travel through the area.

Sierra Nevada Red Fox

Like western white-tailed jackrabbit, Sierra Nevada red fox are very elusive due primarily to rarity and are highly mobile within large montane ranges that are thought to include migration movements to lower elevations. Reproducing and resident foxes adopt relatively large and conspicuous burrow-like holes. No dens attributable to fox or any other mammal larger than California ground squirrel (*Spermophilus beecheyi*) were seen during the May-June 2017 survey. Small rodent burrows, which were sparsely occupied within scrub fragments throughout the study area, had not been recently excavated by predators.

It is unlikely that new construction will affect any den or directly impact highly mobile Sierra Nevada red fox. The area that will be devegetated by the project represents a very small fraction of the regionally available foraging habitat for this species. As no records of recent and nearby sightings were uncovered, and no evidence of recent use of the study area was detected, it is very unlikely that the removal of up to 0.5 acres of Great Basin Mixed Scrub and Big Sagebrush Scrub potential foraging habitat due to project-related construction will significantly affect any Sierra Nevada red fox.

Mule Deer

Mule deer are considered important harvest species by the CDFW. Scrub habitats in Mono County, especially those supporting a highly palatable browse component such as bitterbrush (*Purshia tridentata*), provide crucial resources for adult reconditioning and fawn survival in late spring through early fall months. Migrating does in early spring are notably reliant upon the availability of high quality bitterbrush to maintain good health and reproductive success (Monteith, *et al.*, 2009). Radio-collar tracking of migrating deer of the Round Valley Herd has shown that the location of Crowley Fish Camp (Figure 4) is partly within or at the northern margin of the corridor that is traditionally used for their annual migration movement (Figure 5). The Round Valley Herd size has decreased in recent years, and is now at about 1200 deer (T. Taylor, personal comm., July 2017).

Great Basin Mixed Scrub and Big Sagebrush Scrub vegetation within the study area seasonally meet the habitat requirements for mule deer. Bitterbrush is dominant or co-dominant in the shrub layer. Deer may enter the study area to forage, migrate, or hold (suspend migration) during the late October to late April annual period of Crowley Fish Camp non-operation. Up to 0.5 acres of this seasonally available resource for deer will be displaced by proposed project-related construction. The local abundance of bitterbrush will be reduced; however, the bitterbrush available within the project area is isolated from the extensive off-site scrub that comprises the bulk of the available habitat for foraging, migrating and holding. During intensive botanical survey and wildlife survey transecting of these isolated patches, there were no evidences of mule deer use in recent months. The only tracks observed in bitterbrush-dominated Great Basin Mixed Scrub were those of domestic dogs and possibly coyote, and no mule deer fecal pellet groups were seen. No vegetated areas near the established or proposed recreational facilities would be suitable for substantial deer use for foraging or holding during the seasonal operational period of Crowley Fish Camp (late April through late October), due to constant human presence, domestic dog presence, noise, and night lighting.

It is possible that mule deer may enter the southernmost, least developed part of the study area within the normal period of Crowley Fish Camp operations, during annual migration. Spring migration (east to west across the study area and South Landing Drive) occurs in the study area during the period early April through late May (later into June in snowy years). Fall migration (west to east) begins in late September and extends into late November. Thus the latter portion of the normal spring migration period, as well as the early portion of normal fall migration, occurs during annual facility operations. Human activity during the intersected spring migration period is much higher than activity during the intersected fall migration period. For example, up to 100 vehicle trips (mainly during daytime hours) are expected each day on the road between the entry gate and area of operations during May, but only about 30 trips are expected on average days during fall operations. In contrast to the peninsular landscape position of the developed, northern part of the study area, the roadway in the southern study area that is used for all Crowley Fish Camp vehicular entry and exit passes through a relatively open corridor that likely is also used by mule deer migrating to the north of U.S. Highway 395 (Figure 4). The unpaved campsite group near Whisky Creek also encroaches slightly into this corridor. In early June 2017, evidence of deer use in this area included sparse pellet groups, and one set of tracks crossing through the unpaved campsite group that was observed during the botanical survey. No systematic survey to quantify deer use was performed.

If this corridor, which is indicated by published radio-collar data (Figure 5), by landscape position (Figure 4), and by sign of deer use in 2017, is compromised by new linear barriers to movement, unleashed dogs, or night lighting created by the proposed project, then it is likely that migratory deer movements will be significantly affected. Linear barriers that are oriented in the north-south direction and dogs that are unleashed by campers could direct migrating or resident deer onto U.S. Hwy 395. Deer movements that are associated with migration, as well as potentially occurring

daily movements to water (e.g., at Whisky Creek) by resident deer, are mainly nocturnal. New lighting that reduces concealment or increases the advantage of nocturnal predators would thwart such movements, may cause loss of access to crucial resources associated with Hilton Creek riparian communities and adjacent high-quality bitterbrush stands, and in effect would partially close an already encumbered migration corridor. New barriers or lighting that is confined to the northern, more densely developed and occupied portion of the study area (Figure 3), meanwhile, would have no substantial effect on mule deer seasonal use or upon the function of the likely migration corridor.

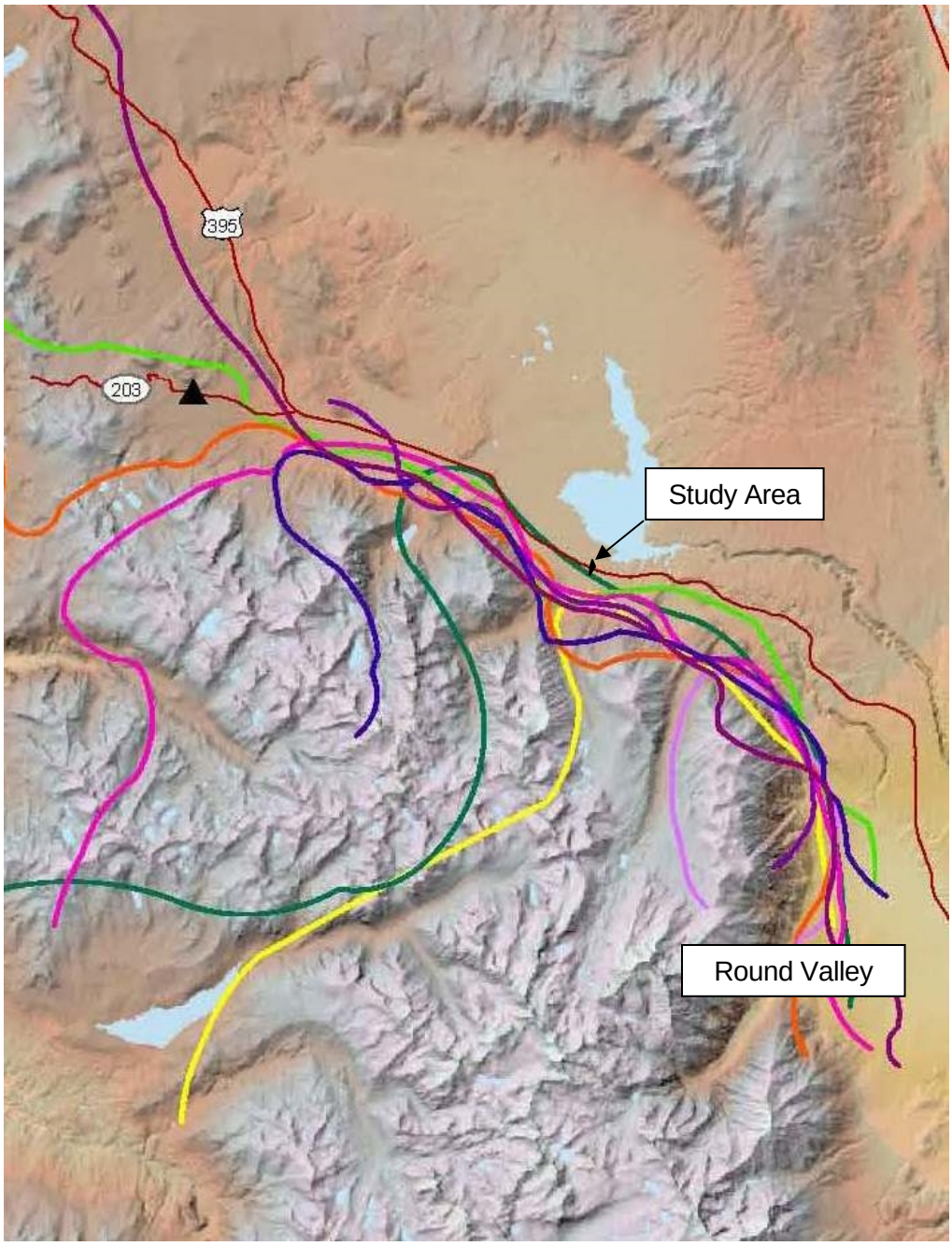


Figure 5. Radio-collar tracking data documenting normal migration routes used by mule deer of the Round Valley Herd.

The project includes the proposal to add improved campsites and provide water for other campsites, which will lead to increased vehicular traffic across the likely deer migration corridor. The “main” road within the study area extends from South Landing Drive at the existing entry gate, and all traffic approaching the site’s facilities and other roads must use this route. The approach route crosses the direction of migrational travel in a direct, perpendicular fashion, with very good

visibility should animals move onto the pavement. While the proposed increase in vehicular traffic on this road increases the risk of collisions with migrating mule deer, it should be possible to enforceably control the speed of all vehicles at below the level where deer can be avoided. Considering the need to similarly avoid potential new collisions with greater sage grouse, western white-tailed jackrabbit, and Sierra Nevada red fox, sensitive wildlife including migrating mule deer reasonably can be avoided by drivers traveling at speeds less than 20-25 mph. Potentially occurring sensitive wildlife are relatively large and mobile, and all would be most likely to be present nocturnally during the period when project-related traffic is at a minimum.

Summary of Potential Impacts

1. Loss of Bitterbrush-Dominated Shrublands

New construction proposed within the study area will displace up to 0.5 acres of historically disturbed and fragmented Great Basin Mixed Scrub and Big Sagebrush Scrub vegetation. Great Basin Mixed Scrub is considered a sensitive plant community type by the State of California, and the dominant shrub bitterbrush is known to provide crucial forage for resident and migrating mule deer. The loss of fragmented shrubland remnants that are embedded within long-standing recreational developments is not considered to be a significant impact. The displacement by new campground sites and facilities of up to 0.4 acres of bitterbrush-dominated scrub, as well as up to 0.1 acres of scrub where bitterbrush is present but not dominant, can be reduced to below the level of significance if bitterbrush is seeded into disturbed areas and sparse sagebrush scrub totaling at least one acre within the likely mule deer migration corridor where it intersects the Crowley Fish Camp approach road and entry gate area.

2. Increased Risk of Vehicle-Wildlife Collisions

Due to increased vehicular traffic in the relatively undeveloped area near the entry gate, there exists some increased likelihood of collision between vehicles using the road to enter or exit Crowley Fish Camp and wildlife including greater sage grouse, western white-tailed jackrabbit, and Sierra Nevada red fox, and migrating mule deer, unless all vehicle speeds are controlled below 20-25 miles per hour and drivers are made aware of the risk of collision if speeds are greater. A limit of "Wildlife Crossing – 15 mph" that is posted and also enforced between the entry gate and existing campground facilities would slow vehicles to a speed that allows drivers to wildlife. Drivers should be informed of the potential presence of wildlife on the roadway as a routine at first contact when arriving at the entry gate.

3. Partial Closure of a Migratory Corridor

New construction and ongoing operations in the southern, less developed portion of the Crowley Fish Camp site must not include the emplacement of linear barriers to migration, such as fences, which could redirect migrating deer onto U.S. Highway 395. Similarly, safety lighting in the area of the likely migration corridor should be minimal and shielded so that the darkened width of the corridor is not substantially reduced. This includes lighting at the entry gate, along the approach road, and at the semi-developed campground near Whisky Creek. This latter area, where increased camper occupancy is expected as a result of the project, must as an advertised condition of occupancy require full-time leashing of dogs to avoid increased incidence of mule deer being chased into U.S. Highway 395 traffic.

4. Increased Subsidies for Potential Predators of Sensitive Wildlife

The increase in use by campers will create additional trash, which can become a dependable food source for potential predators of sensitive wildlife that may use Crowley Fish

Camp's remaining shrublands fragments, if access to this food source is allowed. All food and trash should be secured such that bears and ravens cannot gain access to it. This standard should be sufficient for all potential predators whose locally subsidized increase in presence would add predatory pressure upon wildlife including greater sage grouse and western white-tailed jackrabbit.

References

Baldwin, BG, Goldman, DH, Keil, DJ, Patterson, R, Rosatti, TJ, and DH Wilken, (eds.), 2012. The Jepson Manual: Vascular Plants of California, 2nd Ed. University of California Press, Berkeley.

Bi-State Technical Advisory Committee, 2012. Bi-State Action Plan: Past, Present and Future Actions for Conservation of the Greater Sage-Grouse Bi-State Distinct Population Segment. Bi-State Executive Oversight Committee for Conservation of Greater Sage-Grouse. Report date March 15, 2012.

Bureau of Land Management, 2015. California Special Status Plants. Listed by District, updated May 28, 2015. https://BLM.gov/programs/natural-resources/

Calflora, 2017. The Calflora database: Information of California plants for education, research, and conservation. www.calflora.org, Berkeley.

California Department of Fish and Game, 2010. List of Vegetation Alliances and Associations. Vegetation Classification and Mapping Program, California Department of Fish and Game. Sacramento, CA. September 2010

California Department of Fish and Game, 2009. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. The Resources Agency, State of California, Sacramento.

California Department of Fish and Game, Natural Diversity Database, 2017a. State and Federally Listed Endangered, Threatened, and Rare Plants of California (revised April 2017). Resource Management and Planning Division, Biogeographic Data Branch, Sacramento.

California Department of Fish and Game, Natural Diversity Database, 2017b. Special Vascular Plants, Bryophytes and Lichens List (revised April 2017). The Resources Agency, State of California, Sacramento.

California Department of Fish and Game, 2017c. Search results for the Convict Lake, Old Mammoth, Whitmore Hot Springs, Watterson Canyon, Bloody Mtn, Tom's Place, Graveyard Peak, Mt Abbott, and Mt Morgan quadrangles. CDFG Natural Heritage Division, Plant Conservation Program, Sacramento, May 18, Rarefind 5.

California Department of Fish and Game, Natural Diversity Database, 2017d. State and Federally Listed Endangered, Threatened, and Rare Animals of California (revised Aapril 2017). Resource Management and Planning Division, Biogeographic Data Branch, Sacramento.

California Department of Fish and Game, 2017e. California Natural Diversity Database: Special Animals List (revised April 2017). The Resources Agency, State of California, Sacramento.

California Department of Food and Agriculture, 2017. Pest Ratings of Noxious Weed Species and Noxious Weed Seed, May 2017. Division of Plant Health & Pest Prevention Services, Sacramento.

California Exotic Pest Plant Council, 1999. Exotic Pest Plant List. California Exotic Pest Plant Council, Sacramento.

California Invasive Plant Council, 2017. California Invasive Plant Inventory Database. Accessed July 15, 2017. Cal-IPC, Berkeley.

California Native Plant Society, 2001. Inventory of Rare and Endangered Plants of California, 6th Edition. Special Publ. 1, California Native Plant Society, Sacramento.

California Native Plant Society, 2017. Inventory of Rare and Endangered Plants (online edition, v7-13mar). California Native Plant Society. Sacramento, CA. http://www.cnps.org/inventory

Casazza, ML, Overton, CT, and Torregrosa, A, 2005. Ecology of greater sage grouse in the Bi-State Planning Area. USGS, Western Ecological Research Center, Menlo Park.

Christopher A. Joseph and Associates, 2007. Snowcreek VIII, Snowcreek Master Plan Update – 2007 Draft Environmental Impact Report SCH #2006112015. August, 2007. Prepared for Town of Mammoth Lakes.

Federal Aviation Administration, 2007. Draft Environmental Impact Statement: Request for operations specifications amendment by Horizon Air to provide scheduled air service to Mammoth Yosemite Airport, Mammoth Lakes, Mono County, California. Northwest Mountain Region, Renton, Washington.

Holland, RF, 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Non-game Heritage Program, The Resources Agency, California Department of Fish and Game, Sacramento.

Jepson Herbarium, 2008. Index to California Plant Names. Jepson Online Interchange for California Floristics (revised February 8, 2008). University of California, Berkeley.

Jones & Stokes, 2017. Biological assessment for the Mammoth-Yosemite Airport Expansion Project, Mono County, California. Draft report dated March 2001, prepared for U.S. Forest Service, Mammoth Ranger District, Mammoth Lakes, California.

Monteith, KL, Bleich, BC, Stephenson, TR, and BK Pierce, 2009. Population dynamics of mule deer in the Eastern Sierra Nevada: Implication of nutritional condition. Report prepared for California Department of Fish and Game, Bishop, CA.

Natural Resource Conservation Service, 1996. Draft Soil Survey for Mono County, California. Bishop NRCS.

Paulus, J, 2010. Botanical survey for the Proposed Mammoth-Yosemite Airport Access Road. Report dated July 25, 2010, prepared for the Town of Mammoth Lakes, California.

Paulus, J, 2011. Assessment of biological resources: Vista Towers Wireless Telecommunications Facility at Crowley Lake, Mono County, California. Report dated September 6, 2011, prepared for County of Mono Community Development Department, Mammoth Lakes, California.

Paulus, J, 2015a. Pre-Construction Survey for Sensitive Plants at the Convict Lake Road Improvement Project. Report dated May 22, 2015, prepared for Mono County Public Works Dept., Bridgeport.

Paulus, J, 2015b. Biological Assessment: Unincorporated Communities of Mono County. Report dated July 15, 2015, prepared for Mono County Community Development Dept., Mammoth Lakes.

Sawyer, JO, Keeler-Wolf, T, and Evens, JM, 2009. A Manual of California Vegetation, 2nd Ed. California Native Plant Society, Sacramento.

U.S. Fish and Wildlife Service, 2017. Online query results for Mono County, accessed May 15, 2017. https://ecos.fws.gov/ecp()/reports/

U.S. Forest Service, 2013a. Region 5 Regional Forester's 2013 Sensitive Plant Species List. Revised September 9, 2013. Inyo National Forest, Bishop.

U.S. Forest Service, 2013b. Inyo National Forest Sensitive Plants List, July 2013. Inyo National Forest, Bishop.

U.S. Forest Service, 2013c. Inyo National Forest Species of Special Concern, in: Draft Inyo National Forest Plan Revision. http://www.fs.fed.us/nepa/fs-usda-pop.php/?project=40601.) Inyo National Forest, Bishop.

ATTACHMENT 4

Air Quality and Greenhouse Gases

AIR QUALITY and GHG IMPACT ANALYSES

CROWLEY LAKE FISH CAMP IMPROVEMENTS

MONO COUNTY, CALIFORNIA

Prepared for:

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Date:

August 15, 2017

Project No.: P16-066 AQ

AIR QUALITY IMPACT

Standards of Significance

Air quality impacts are considered "significant" if they cause clean air standards to be violated where they are currently met, or if they "substantially" contribute to an existing violation of standards. Any substantial emissions of air contaminants for which there is no safe exposure, or nuisance emissions such as dust or odors, would also be considered a significant impact.

Appendix G of the California CEQA Guidelines offers the following five tests of air quality impact significance. A project would have a potentially significant impact if it:

a. Conflicts with or obstructs implementation of the applicable air quality plan.

b. Violates any air quality standard or contributes substantially to an existing or projected air quality violation.

c. Results in a cumulatively considerable net increase of any criteria pollutants 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).

d. Exposes sensitive receptors to substantial pollutant concentrations.

e. Creates objectionable odors affecting a substantial number of people.

Primary Pollutants

Air quality impacts generally occur on two scales of motion. Near an individual source of emissions or a collection of sources such as a crowded intersection or parking lot, levels of those pollutants that are emitted in their already unhealthful form will be highest. Carbon monoxide (CO) is an example of such a pollutant. Primary pollutant impacts can generally be evaluated directly in comparison to appropriate clean air standards. Violations of these standards where they are currently met, or a measurable worsening of an existing or future violation, would be considered a significant impact. Many particulates, especially fugitive dust emissions, are also primary pollutants. Because of the non-attainment status of the South Coast Air Basin (SCAB) for PM-10, an aggressive dust control program is required to control fugitive dust during project construction.

Secondary Pollutants

Many pollutants, however, require time to transform from a more benign form to a more unhealthful contaminant. Their impact occurs regionally far from the source. Their incremental regional impact is minute on an individual basis and cannot be quantified except through complex photochemical computer models. Analysis of significance of such emissions is based upon a specified amount of emissions (pounds, tons, etc.) even though there is no way to translate those emissions directly into a corresponding ambient air quality impact.

The project is located within the Great Basin Unified Air Pollution Control District (GBUAPCD). However, the GBUAPCD has not developed numerical thresholds that define a "substantial"

increase in air pollution emissions. However, CEQA procedure will allow reliance on standards or thresholds promulgated by other agencies. For purpose of this project, the CEQA significance thresholds used by the South Coast Air Quality Management District (SCAQMD) have been adopted as representative significance thresholds for this project. Projects with daily emissions that exceed any of the following emission thresholds are considered significant:

Table 1
Adopted Emissions Significance Thresholds (lbs/day)

Pollutant	Construction	Operations
ROG	75	55
NOx	100	55
CO	550	550
PM-10	150	150
PM-2.5	55	55
SOx	150	150
Lead	3	3

Construction Activity Impacts

CalEEMod was developed by the SCAQMD to provide a computer model by which to calculate both construction emissions and operational emissions from a variety of land use projects. It calculates both the daily maximum and annual average emissions for criteria pollutants as well as total or annual greenhouse gas (GHG) emissions. It has been adopted for use by most air pollution control districts in California.

Although exhaust emissions will result from on and off-site construction equipment, the exact types and numbers of equipment will vary among contractors such that such emissions cannot be quantified with certainty. However, estimated construction emissions were modeled using CalEEMod2016.3.1 to identify maximum daily emissions for each pollutant during project construction using equipment fleets for typical project activities.

The project involves six proposed construction related activities as shown in Table 2. Each activity was modeled in CalEEMod with the following time frame and equipment fleets for each indicated project component:

Table 2
CalEEMod Construction Activity Equipment Fleet
New Water Tank

Excavate 1 week	1 Bobcat
	1 Loader/Backhoe
Pour Concrete Pad 1 week	1 Mixer
	1 Pump
	1 Roller
Install Tank 2 days	1 Crane
	1 Forklift
	1 Welder

CalEEMod Construction Activity Equipment Fleet
New Propane Tank

Excavate 1 week	1 Bobcat
	1 Loader/Backhoe
Pour Concrete Pad 1 week	1 Mixer
	1 Pump
	1 Roller
Install Tank 2 days	1 Crane
	1 Forklift
	1 Welder

CalEEMod Construction Activity Equipment Fleet
RV Campsites

Grade and Trench 2 weeks	1 Bobcat
	1 Trencher
	1 Loader/Backhoe
Concrete Pads and Pave 2 weeks	1 Mixer
	1 Roller
	1 Pump

CalEEMod Construction Activity Equipment Fleet
Water Service to Dry Camp

Trench Utilities 2 weeks	1 Bobcat
	2 Trenchers

CalEEMod Construction Activity Equipment Fleet
Portable Bathrooms

Excavate 1 week	1 Bobcat
	1 Loader/Backhoe
Construct Pad and Install 1 week	1 Mixer
	1 Roller
	1 Pump

CalEEMod Construction Activity Equipment Fleet
Install Septic System

Excavate 3 weeks	1 Bobcat
	1 Loader/Backhoe
Install 1 week	1 Crane
	1 Loader/Backhoe
	1 Welder
	1 Forklift

Utilizing this equipment fleet and durations shown in Table 2, the following worst case daily construction emissions are calculated by CalEEMod:

Table 3
Construction Activity Emissions
Maximum Daily Emissions (pounds/day) 2018

Maximal Construction Emissions	**ROG**	**NOx**	**CO**	**SO_2**	**PM-10**	**PM-2.5**
New Water Tank	1.0	8.0	5.4	0.0	5.0	2.7
New Propane Tank	1.0	8.0	5.4	0.0	5.0	2.7
RV Campsites	0.7	6.4	5.7	0	1.5	0.9
Water Service to Dry Camp	0.4	3.1	2.4	0.0	0.4	0.2
Portable Bathrooms	0.1	3.4	3.6	0.0	2.2	1.2
Septic System	0.8	5.7	4.5	0.0	1.0	0.6
Total 2018	**4.0**	**34.6**	**27.0**	**0.0**	**15.1**	**8.3**
Significance Thresholds	75	100	550	150	150	55

Peak daily construction activity emissions are estimated to be well below SCAQMD CEQA thresholds without the need for added mitigation even if all activities occurred simultaneously. No additional adjustments were used.

Construction equipment exhaust contains carcinogenic compounds within the diesel exhaust particulates. The toxicity of diesel exhaust is evaluated relative to a 24-hour per day, 365 days per year, 70-year lifetime exposure. Air pollution agencies do not generally require the analysis of construction-related diesel emissions relative to health risk due to the short period for which the majority of diesel exhaust would occur. Health risk analyses are typically assessed over a 9-, 30-, or 70-year timeframe and not over a relatively brief construction period due to the lack of health risk associated with such a brief exposure.

Operational Impacts

Operational emissions are primarily attributed to mobile sources. The increased RV spaces will increase use of electricity and water, but it will be minimal. The Fish Camp staff estimate that peak season (April thru mid-July) would generate about 100 additional trips per day as a result of this project; low season (mid-July thru October) would increase about 30 trips per day as a result of project implementation.

The increased operational trips were associated with the RV uses in the CalEEMod modeling. A one-way distance of 50 miles was used, or 100 miles round trip. The results are provided in Table 4.

Table 4
Daily Operational Impacts

	Operational Emissions (lbs/day)					
Source	**ROG**	**NOx**	**CO**	**SO_2**	**PM-10**	**PM-2.5**
Mobile	1.7	12.0	33.2	0.0	7.9	2.2
Significance Threshold	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Source: CalEEMod2016.3.1 Output in Appendix

The project would not cause operational emissions to exceed their respective adopted CEQA significance thresholds. Operational emission impacts are judged to be less than significant. No impact mitigation for operational activity emissions is considered necessary to support this finding.

Construction Emissions Minimization

Construction activities are not anticipated to cause dust emissions to exceed the adopted CEQA significance thresholds. Nevertheless, emissions minimization through enhanced dust control measures is recommended. Recommended measures include:

Fugitive Dust Control

- Apply soil stabilizers or moisten inactive areas.
- Prepare a high wind dust control plan.
- Address previously disturbed areas if subsequent construction is delayed.
- Water exposed surfaces as needed to avoid visible dust leaving the construction site (typically 2-3 times/day).
- Cover all stock piles with tarps at the end of each day or as needed.
- Provide water spray during loading and unloading of earthen materials.
- Minimize in-out traffic from construction zone
- Cover all trucks hauling dirt, sand, or loose material and require all trucks to maintain at least two feet of freeboard
- Sweep streets daily if visible soil material is carried out from the construction site

Similarly, ozone precursor emissions (ROG and NOx) are calculated to be below adopted CEQA thresholds. However, because of the regional non-attainment for photochemical smog[WS1], the use of reasonably available control measures for diesel exhaust is recommended. Combustion emissions control options include:

Exhaust Emissions Control

- Utilize well-tuned off-road construction equipment.
- Establish a preference for contractors using Tier 3 or better heavy equipment.
- Enforce 5-minute idling limits for both on-road trucks and off-road equipment.

Thresholds of Significance

The GBUAPCD has no thresholds for GHG emissions. However, if the lead agency does not have sufficient expertise in evaluating GHG impacts, it may rely on thresholds adopted by an agency with greater expertise.

On December 5, 2008 the SCAQMD Governing Board adopted an Interim quantitative GHG Significance Threshold for industrial projects where the SCAQMD is the lead agency (e.g., stationary source permit projects, rules, plans, etc.) of 10,000 Metric Tons (MT) CO_2 equivalent/year. In September 2010, the SCAQMD CEQA Significance Thresholds GHG Working Group released revisions which recommended a threshold of 3,000 MT CO_2e for all land use projects. This 3,000 MT/year recommendation has been used as a guideline for this analysis. In the absence of an adopted numerical threshold of significance, project related GHG emissions in excess of the guideline level are presumed to trigger a requirement for enhanced GHG reduction at the project level.

Construction Activity GHG Emissions

The project is assumed to be built in less than one year. As a worst case, all construction was assumed to occur within the same calendar year. During project construction, the CalEEMod2016.3.1 computer model predicts that the construction activities will generate the annual CO_2e emissions identified in Table 5.

Table 5
2018 Construction Emissions (Metric Tons CO_2e)

	CO_2e
New Water Tank	**3.8**
New Propane Tank	**3.8**
RV Campsites	**7.0**
Water Service to Dry Camp	**1.5**
Portable Bathrooms	**2.1**
Septic System	**5.9**
Total 2018	**24.1**

CalEEMod Output provided in appendix

Air quality agencies typically recommend that construction activity GHG emissions be amortized over the useful life of a project. Assuming a 30-year life for the proposed improvements, the annual average GHG emissions would be less than 1.0 MT/year. Such emissions would have a less-than-significant local, national or global GHG emissions impact.

Project Operational GHG Emissions

The total operational and annualized operational and construction emissions for the proposed project are identified in Table 6.

Table 6
Annual Operational Emissions

Consumption Source	**MT(CO2e)**
Mobile Source	820.4
Annualized Construction	0.8
Total	**821.2**
Guideline Threshold	3,000
Exceeds Threshold?	No

Total project GHG emissions would be substantially below the proposed significance threshold of 3,000 MT suggested by the SCAQMD. Hence, the project would not result in generation of a significant level of greenhouse gases.

ATTACHMENT 5

Cultural Resource Analysis

An Archaeological Survey and Historic Buildings Assessment of the Crowley Lake Fish Camp, Crowley Lake, California

Prepared by Mary Farrell, Trans-Sierran Archaeological Research, with
Bauer Planning and Environmental Services, Inc., for
Mono County Community Development Department

Redacted version for Mitigated Negative Declaration
September 30, 2017

Management Summary

In cooperation with Bauer Planning and Environmental Services, Inc., Trans-Sierran Archaeological Research (TSAR) has conducted a records review, archaeological survey, and historic buildings assessment of the Crowley Lake Fish Camp, in Mono County, California. This work was initiated for the Mono County Community Development Department as part of environmental reviews conducted to meet the requirements of the California Environmental Quality Act (CEQA). The Crowley Lake Fish Camp Project currently under CEQA review includes obtaining approvals and permits, as needed, for existing uses and proposed modifications that are under the jurisdiction of Mono County. Historical resources (buildings, structures, or archeological resources) are considered part of the environment and are subject to review under CEQA.

The Crowley Lake Fish Camp is located on land owned by the City of Los Angeles and managed by the Los Angeles Department of Water and Power (LADWP). It has been in use as a recreational facility for over 70 years, beginning shortly after Crowley Lake was created in 1941. Although existing and proposed uses are largely confined to the eastern third of the lease area, the entire 188-acre lease area was surveyed for cultural resources to facilitate project planning.

During the survey, five sites were identified and recorded: three Native American archaeological sites, and two historic-period archaeological sites. Site records and locational information, which are confidential and for administrative use only, have been removed from this report, but will be on file with the Mono County Community Development Department and with the Eastern Information Center of the California Historical Resources Inventory System. Four of the five archaeological sites should be treated as eligible for the California Register of Historical Resources; one site and 24 isolates are considered not eligible for the Register. However, none of the sites lie within areas currently developed or proposed for development, and none would be affected by the project.

Eight structures at Crowley Lake Fish Camp are over 25 years old: the public restroom, two ramadas, the boathouse, the flammable storage facility, the well house, and two small wooden buildings owned by LADWP. Of these, the only structure recommended as potentially eligible for the California Register of Historical Resources is one of the LADWP buildings. This building, labeled “shed” on the project map, is not included in the proposed project and will not be affected.

Therefore, the proposed Crowley Lake Fish Camp Project would have no adverse effect on historical resources.

Title page photo: Whisky Creek, at the east boundary of the project area, view toward south.

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Introduction

In cooperation with Bauer Planning and Environmental Services, Inc., Trans-Sierran Archaeological Research (TSAR) has conducted a records review, archaeological survey, and historic buildings assessment of the Crowley Lake Fish Camp, in Mono County, California. This work was initiated for the Mono County Community Development Department, as part of a proposed project which includes updating approvals and permits, as needed, for existing and proposed uses that are currently under the jurisdiction of Mono County. The Crowley Lake Fish Camp, located on land owned by the City of Los Angeles and managed by the Los Angeles Department of Water and Power (LADWP), has been in use as a recreational facility for over 70 years, since Crowley Lake was created in 1941.

Some of the facilities and infrastructure were constructed under the authority of Mono County permits and approvals, but several improvements predate the county's permitting process; other uses have been undertaken informally or with LADWP permission, and lack necessary county permits and approvals. The Mono County Community Development Department has contracted with Bauer Planning and Environmental Services, Inc., to prepare a Mitigated Negative Declaration that examines the potential effects of authorizing the current and proposed uses.

Under the California Environmental Quality Act (CEQA), environmental reviews must consider a project's potential effects on cultural resources eligible for inclusion on the California Register of Historical Resources, and on unique archaeological resources. Under California's Assembly Bill 52, any Tribe that is traditionally and culturally affiliated to the geographic area where a project is located can request that the lead agency provide notification to the tribe of proposed projects in the Tribe's area of traditional and cultural affiliation; any "tribal cultural resources" identified during this consultation are also considered in environmental reviews. However, AB 52 requires that Tribes notify lead agencies, in writing, of their wish to be notified and consulted about projects in any given geographical area. No Tribe has requested notification of proposed projects in the Long Valley area to date.

Therefore, this report is intended to satisfy the requirements of CEQA for the consideration of cultural resources by determining if any of the existing or proposed uses and developments at the Crowley Lake Fish Camp could have an adverse effect on cultural resources eligible for inclusion on the California Register of Historical Resources (CRHR), or on unique archaeological resources. As described below, methods included a records search, archaeological survey, archival research, and a historic buildings assessment. Cultural resources documented were then evaluated to determine if they met the definition of a unique archaeological resource, or if they should be considered eligible for the CRHR. Project plans were examined to assess potential effects.

Figure 1. Overview of project area. View from ridge above Whisky Bay.

Project Description and Location

Crowley Lake Fish Camp (CLFC) is in southern Mono County about 10 miles southeast of the Town of Mammoth Lakes, and less than a mile northeast of the community of Crowley Lake. The Fish Camp entrance gate is on South Landing Road less than a quarter-mile north of U.S. Highway 395, the main north-south transportation route in the eastern Sierra. Address is 1149 South Landing Road, Crowley Lake, California 93546, and includes portions of Mono County Assessor Parcel Numbers 060-100-010 and 060-110-004. Cadastral location is Township 4 South, Range 29 East, portions of sections 23, 24, 25, and 26, Mount Diablo Baseline and Meridian (See Figures 1, 2, and 3).

Situated on the south shore of Crowley Lake, the lease for CLFC includes approximately 188 acres, although most of the existing and proposed development is in the eastern third of the parcel. Current developments include a tackle shop and office, a maintenance shed, fishing docks, a large storage/warehouse building, public bathrooms, a boat marina with fueling station, dry camping spaces, and living quarters for the managers, who live on-site year-round. One area is used to store materials and equipment necessary for the Fish Camp operations, and other graded areas provide storage spaces for visitors' boats and boat trailers. There are currently 24 RV camp sites that consist of well-graded level pads with hook-ups; 18 are for guests and 6 are for staff. Improvements under consideration include installation of up to three new portable bathrooms and showers, a new water storage tank and propane tank, the addition of seven more RV camp sites with hook-ups, and installation of a water line and new water spigot to serve the dry camp sites.

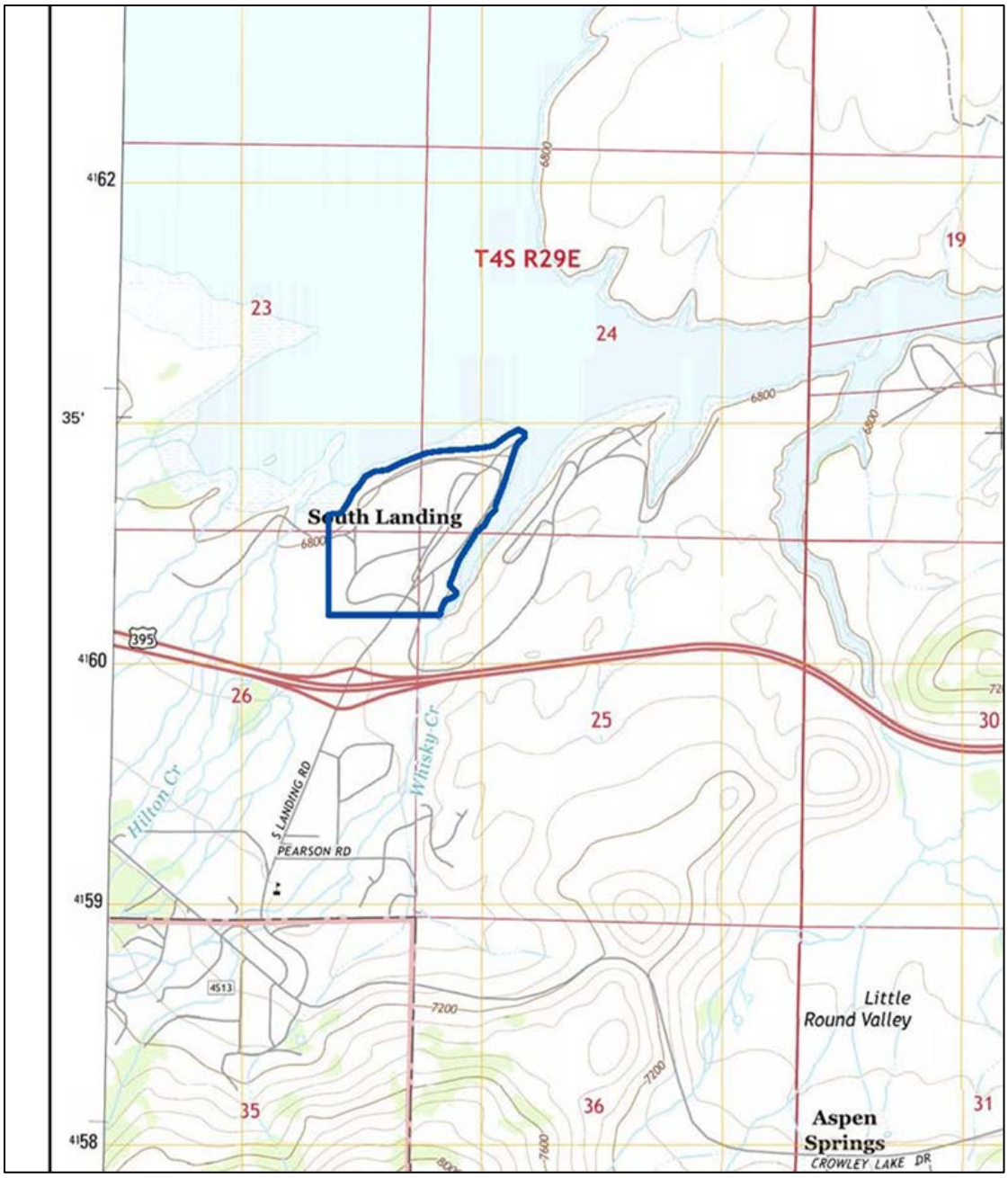

Figure 2, Crowley Lake Fish Camp lease area, outlined in blue. Map adapted from USGS Mt Tom 7.5' quadrangle, 2015.

Figure 3, LADWP map of the lease area, outlined in black.

Environmental Setting

Crowley Lake is on the southeastern edge of Long Valley, an ancient caldera measuring about 20 miles east-west by 10 miles north-south. The Sierra Nevada rises dramatically to the west, with the crest less than 10 miles from the project area. The project area is located on a gently sloping ridge bounded by Whisky Creek on the east and the low-lying alluvial flood plain of Hilton Creek on the west. Elevation ranges from approximately 6780 feet above mean sea level near the lake to 6880 feet at the south end of the lease area, close to U.S. Highway 395. The spillway of the lake, at the dam, is 6781 feet elevation.

The town of Crowley Lake, a mile south, receives an average of 15 inches of precipitation annually, with most of it falling as snow. Mean maximum and minimum temperatures range from 40 to 26 degrees in January to 82 to 54 degrees in July. One hundred years ago, the southern part of Long Valley was a meadow with many marshy areas watered by several creeks, springs, and the Owens River. The City of Los Angeles completed the reservoir in 1941 to provide flood control as well as water and power to Los Angeles. The approximately 650-acre Crowley Lake is now a world-class trout fishery, attracting thousands of visitors each year. Vegetation within the Fish Camp boundary includes sagebrush (*Artemisia tridentata*), bitterbrush (*Purshia tridentata*), rabbitbrush (*Chrysothamnus nauseosus*), Indian paintbrush, phlox, wallflower, lupine, and various grasses, with willows and irises near the creeks. Cottonwoods have been planted to provide shade, and there are grass lawns near the caretakers' residence and the tackle shop.

Natural soils are composed of sands, silts, and gravels, derived from granitic and volcanic rocks. There are abundant granitic boulders and water-worn cobbles to the west of the project area near Hilton Creek, and volcanic tuff cliffs to the east, above Whisky Creek. Fauna of the area include mule deer (*Odocoileus hemionus*), numerous small rodents and migratory waterfowl, and other birds. More details of the environmental setting will be available in other specialist reports prepared for the Mitigated Negative Declaration.

Historical Background

Ethnographic accounts and early histories indicate that when Euroamericans entered the region, Long Valley was being used by several ethnic groups. Under today's tribal designations, these groups include the Mono Lake *Kuzedika'a* Paiute based to the north, the Owens Valley and Round Valley Paiute to the south (Bishop Paiute Tribe, Big Pine Paiute Tribe, Fort Independence Indian Community, and Lone Pine Paiute-Shoshone Reservation), Benton *Utu Utu Gwaitu* Paiute to the east, Monache to the west, and Southern Sierra Miwok to the northwest. Long Valley offered a variety of food resources. In the spring, Tui chub, speckled dace, and Owens sucker may have been fished from the creeks, while roots and greens along creeks and meadows could replenish dwindling winter stores. Small game, deer, and antelope could have been hunted in the area. In the summer, grass seeds may have been collected from meadows and drier upland areas. Fall subsistence activities included the collection of pinyon pine nuts. In addition, volcanism in the Long Valley area has produced outcrops of obsidian, a fine-quality tool stone that was mined and traded for millennia.

Hall (1983:49) cited evidence that Paiute generally regarded their borders as fluid, which may have precluded exclusive use of Long Valley by a single group. However, Hall cited Steward as mentioning two or three Paiute whose home village was on Hot Creek (Hall 1983:49), and a Native American named Joaquin Jim lived in Long Valley near Deadman Creek and North Obsidian Mountain during the "Indian wars" of the 1860s (Wright 1879).

Although Spain and then Mexico had claimed the territory they called Alta California until 1848, the first non-Natives in the area were likely trappers and immigrants passing through. With California part of the territories ceded to the United States as a result of the controversial Mexican-American war, immigration exploded following the discovery of gold on the other side of the Sierra Nevada in 1849. In 1855, Von Schmidt was commissioned by the U.S. Government to map lands east of the Sierra Nevada, which included Long Valley. The 1857 plat of Township 4 South Range 29 East shows "Von Schmidt's Trail" going east-west through the south half of section 23 and northwest-southeast in the south half of section 24 (Figures 4 and 5).

The first permanent herds of cattle were brought into Owens Valley in the 1860s to supply the growing mining camps of the Inyo-Mono region. The grazing, along with the cutting of pinyon for lumber and firewood by the miners and ranchers, reduced the Paiute's food supply greatly by the winter of 1862. Descriptions of the ensuing battles between the Paiute and the new settlers are given in numerous accounts (e.g., Chalfant 1933, Wright 1879). The main fighting was over

by 1863 and most of the Paiute in the region were removed to a reservation at Fort Tejon, south of Owens Valley. Over the next few years most of the displaced Paiute returned; however, they were then largely dependent on the Anglo economy. Paiute like Joaquin Jim who remained after the forced removal continued fighting for their homeland, but after Joaquin Jim was killed at Casa Diablo Hot Springs in the winter of 1865-1866, hostilities were largely over.

From that point, Euroamerican settlement of the region continued unabated. Mining activity in the Mammoth Lakes area itself dates from 1877 when gold and silver were discovered near Lake Mary by four prospectors trying to relocate the Lost Cement Mine, purportedly discovered twenty years earlier. The Mammoth Mining Company was organized and four townsites were subsequently built. But, a decline in productivity, severe winter weather, discontent of the stockholders, and a fire that destroyed half of Mammoth City led to the closing of the mill and the eventual abandonment of the towns. By 1881 only a few prospectors worked in the area (Doyle 1934:108-194).

The agricultural potential of Long Valley did not go unnoticed. Land west of the project area was patented by Charles Hicks Parsons in 1889, and Richard Hilton patented 440 acres in the vicinity in 1891, including 40 acres that extend into the Crowley Lake Fish Camp project area (the E½ of the SE¼ of Section 23). However, Long Valley's potential as a water reservoir eventually superseded ranching and farming. The City of Los Angeles had begun acquiring water rights in Inyo County, to the south, early in the twentieth century. The city began plans to build a reservoir in Long Valley as early as 1905 (Nadeau 1950), and the majority of the land in the vicinity of the Crowley Lake Fish Camp, totaling over 5,200 acres and including the rest of the current Fish Camp, was patented by the City of Los Angeles in 1912.[1] In addition, Fred Eaton, one-time agent for Los Angeles, had acquired ranch land that he intended to sell to Los Angeles for the reservoir. However, the project was delayed in the multi-faceted struggle to control the region's water until the 1930s, when Los Angeles began buying water rights on streams in Mono County. Work began on the Long Valley Dam in 1935, and the dam was completed in 1941 (Nadeau 1950).

California road maps appear to reflect the on-again, off-again reservoir plans. From 1918 to 1926, state road maps depict "Long Valley Reservoir" within a large bounded area (possibly City of Los Angeles land). From 1932 to 1957, no reservoir is depicted, even though road work is shown as progressing. "Lake Crowley" shows up on the 1958 road map, and is not labeled "Crowley Lake" on the California road maps until 2005. Although the main construction activity to create the reservoir would have occurred near the dam site, there may be potential for evidence of work camps or related features in the project area. A work camp archaeological site could be particularly significant: a Los Angeles aqueduct work camp near the Alabama Gates north of Lone Pine occupied in 1912 and 1913 yielded important information about the

[1] https://glorecords.blm.gov/details/patent/

development of capitalism and class relations (Van Bueren 2002). Work camps would predate 1941, when the dam was completed, and presumably could be distinguished from later fishing camps by artifacts or features reflecting more "industrial" activities or more substantial occupation.

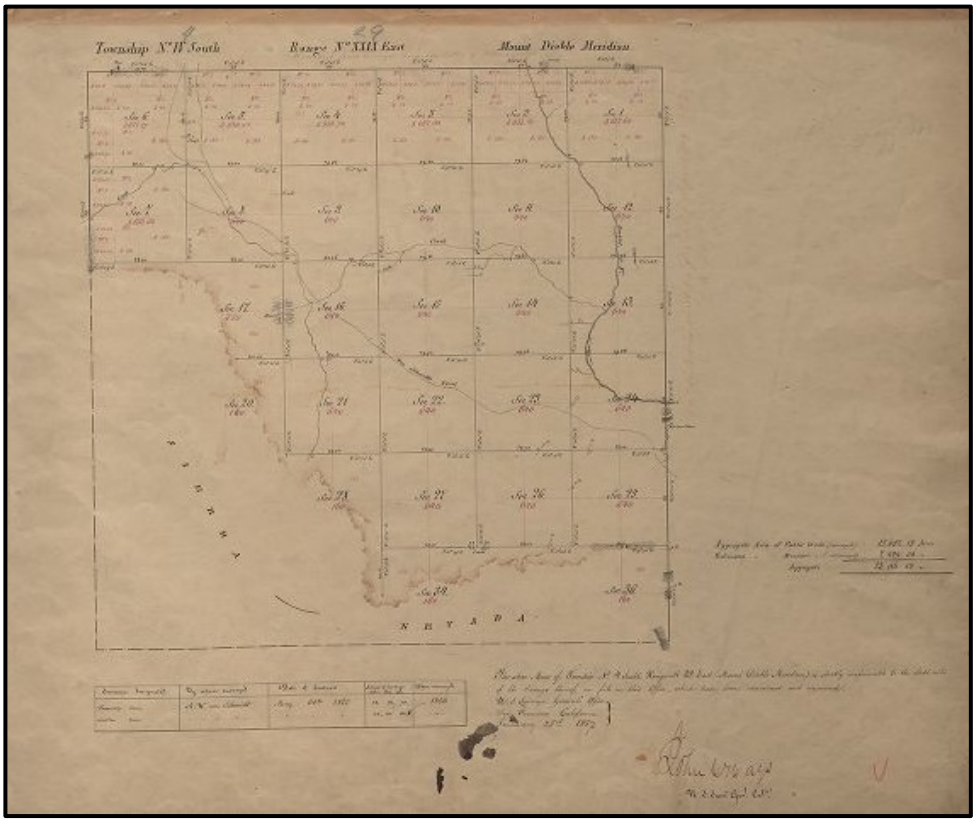

Figure 4. Von Schmidt's plat of Township 4 South, Range 29 East, approved in 1857.

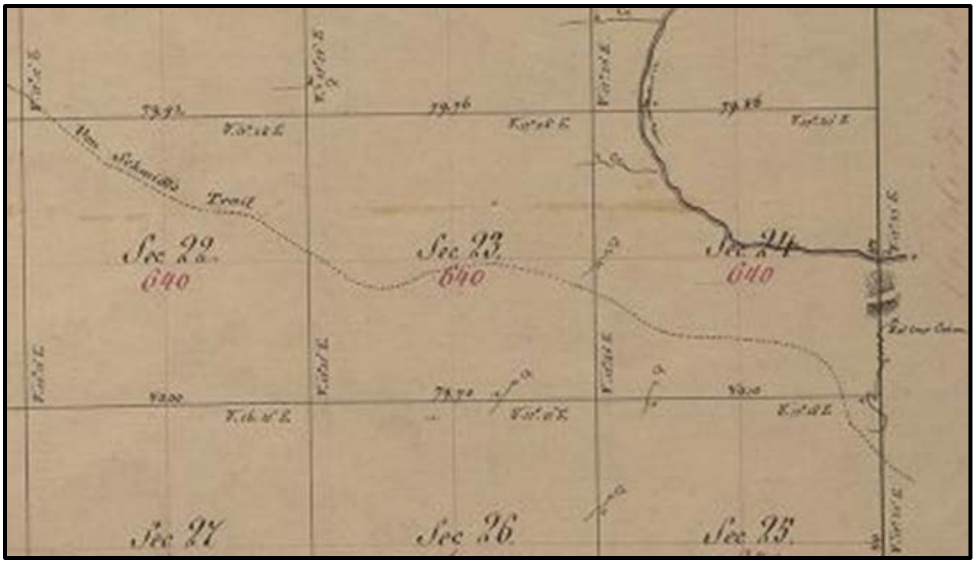

Figure 5. Detail of plat showing "Von Schmidt's Trail" through sections 23 and 24, skirting the north edge of the project area.

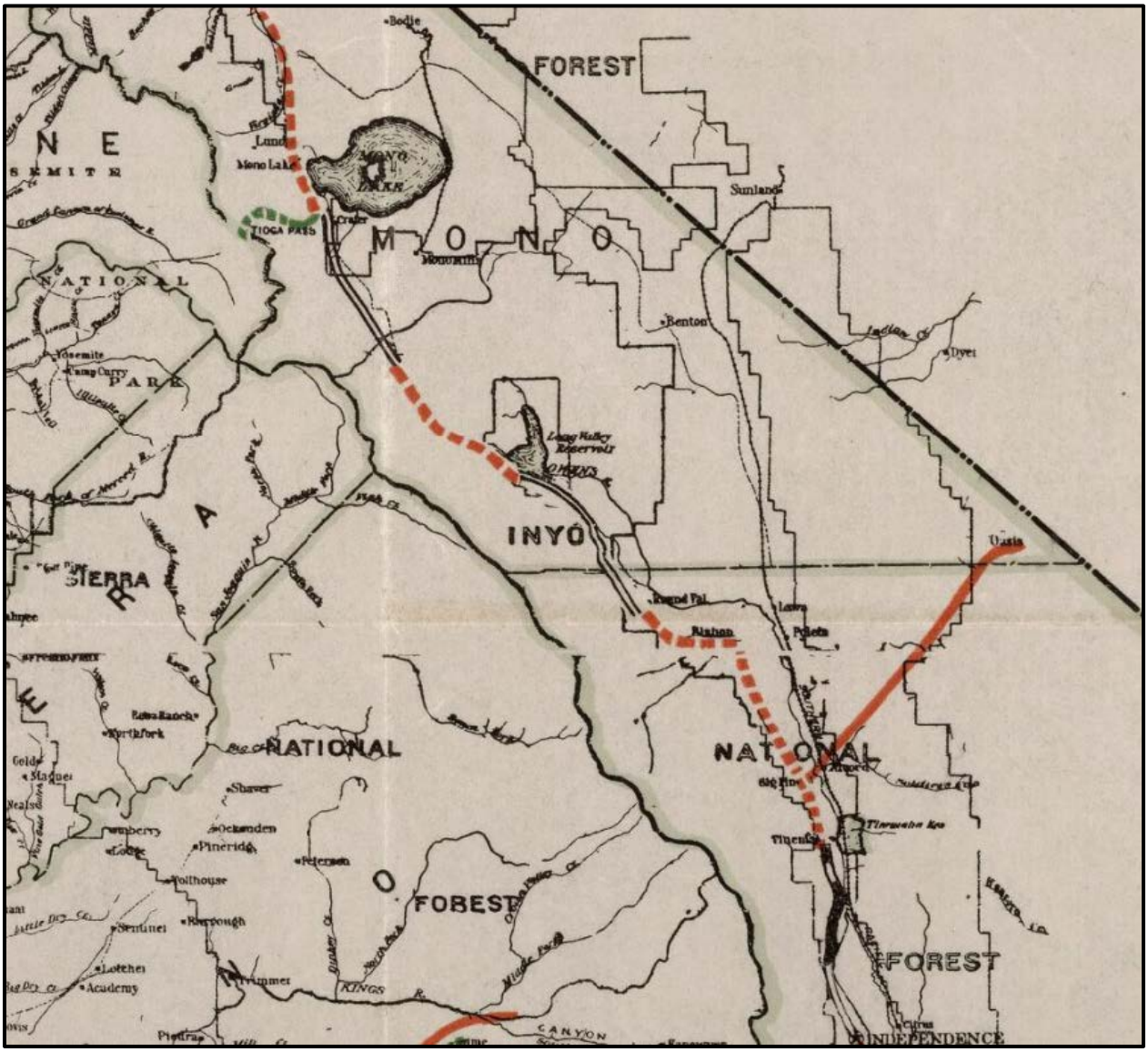

Figure 6. Portion of the Road Map of the State of California, 1920, showing the planned Long Valley Reservoir. The dotted red line indicates roads that have been authorized but not constructed; two parallel black lines indicate a road segment that has been graded or is under contract. Both segments in Long Valley are within the road system authorized by State Highway Acts of 1909 and 1915. From the David Rumsey Historical Map Collection, at http://davidrumsey.georeferencer.com/maps/117336987709/ .

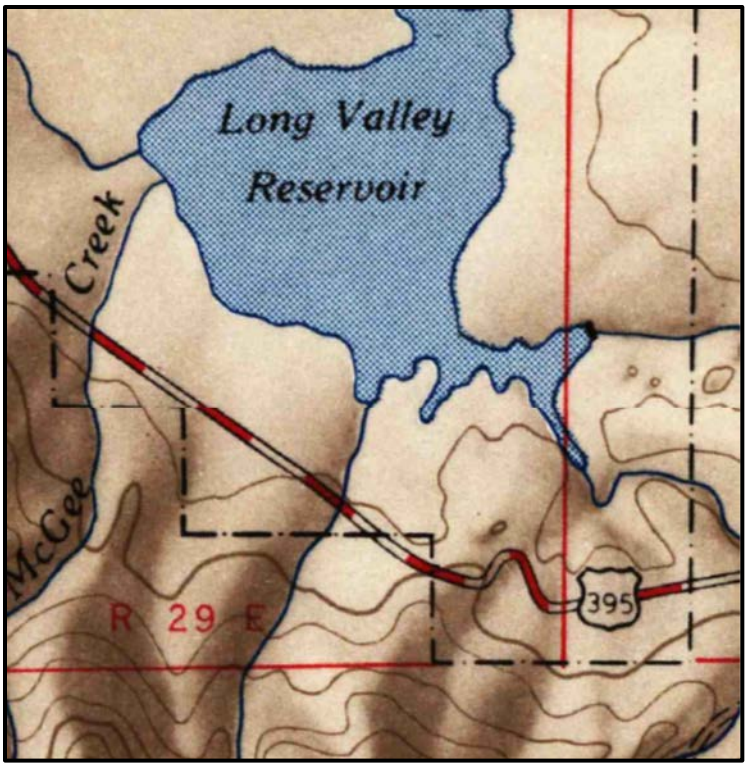

Figure 7. Detail of USGS Mariposa map, 1:250,000, 1947. At this scale, no buildings are shown, but the dam is indicated.

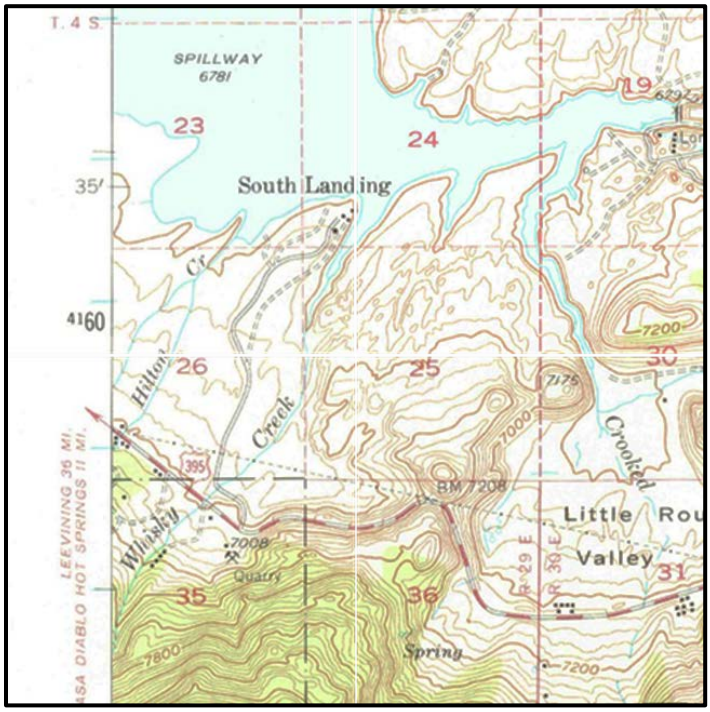

Figure 8. Detail of 1953 USGS Casa Diablo topographic map, showing the old alignment of U.S. Highway 395 (current Crowley Lake Drive) and four buildings at South Landing. Original map scale is 1:62,500.

On the 1953 USGS Casa Diablo topographic map, U.S. Highway 395 follows the alignment of the current Crowley Lake Drive. Four structures are depicted at South Landing, one large building adjacent to the main entry road, and three small buildings closer to the water. The primary entry road followed the current South Landing Road from the old highway to about where the current U.S. Highway 395 alignment is, but then veered north-northwest before curving back to the east and the current Fish Camp.

Previous Investigations

In December 2016, a records search was conducted through the regional office of the California Historical Resources Inventory System (CHRIS) at the Eastern Information Center, University of California, Riverside. As the designated information center for Inyo, Mono, and Riverside counties, the Eastern Information Center has copies of all archaeological reports and site records for the area. CHRIS records indicate that two cultural resources studies have been conducted and three cultural resources properties have been recorded within a half-mile radius of the project area. None of the surveys or sites involved the Crowley Lake Fish Camp area, but the sites indicate what types of sites have been found in the vicinity. One large campsite was recorded along Hilton Creek, with projectile point fragments, debitage, and grinding stone, and a smaller campsite was recorded in and around a rockshelter above Whisky Creek. Both sites are located to the southwest, close to the community of Crowley Lake.

Data recovery conducted at another Whisky Creek rockshelter before the construction of a subdivision indicated that it was used as a temporary camp as early as 500 BC for obsidian tool production, but with the most intensive use after AD 1300 (Burton and Farrell 1991). A wide variety of activities were indicated by projectile points, stone tools, debitage, an edge abrader/smoother, a cupped stone, ceramics, hammer stone, glass beads, and fire-cracked and altered rock. Flaked stone included Casa Diablo, Mono Glass Mountain, and Queen obsidian, as well as chert and basalt.

With the Casa Diablo and Mono Glass Mountain obsidian sources nearby, it is not surprising that many of the archaeological sites in Long Valley have abundant debitage created by working obsidian for trade or use. Evidence suggests that creating obsidian bifaces for trade was an important economic activity, especially between 1200 BC and AD 1000. However, some temporary camps have evidence that food collection and processing were more important than stone tool production (see, for example, Bettinger 1979), and some sites were occupied long before the peak in obsidian production and trade (e.g., CA-Mno-2179). Although most sites excavated in Long Valley postdate 3500 BC, some work has been conducted at a site dating to the early Holocene, considered among the first evidence of humans in the region (Basgall 1988). It is important to note that even small sites can have deep cultural deposits: small lithic scatters in Long Valley often have deposits over a half-meter deep, and a site excavated along Rock Creek near Sherwin Grade had a cultural deposit almost two meters deep (Garfinkel and Cook 1979, 1980).

Survey Methods

Survey was conducted by the author on June 8, 9, and 21, 2017. The project area was inspected with parallel pedestrian traverses approximately 30 meters apart. Special attention was paid to areas of proposed ground disturbance, such as the new RV pads, water tank, shower trailer, and water lines. Visibility of the ground surface was generally good, but dense grasses and willows obscured the ground surface adjacent to Whisky Creek. In the eastern third of the lease area, there has been extensive cut and fill associated with the construction of roads, RV pads, camping areas, parking areas, and buildings, and the lake shoreline has been plated with cobbles. Although little original ground surface is visible in this area, it was also considered to have fair potential for cultural resources. Because Crowley Lake Fish Camp has been used for over 70 years, some of the land modifications themselves could be historic features. In addition, ground disturbance can uncover buried cultural materials, and as discussed above, several sites in the vicinity have been proven to have buried cultural deposits.

When historic or prehistoric artifact were encountered, the surrounding area was closely examined to determine if the find was isolated or part of a site. Concentrations of artifacts, that is, more than 5 prehistoric or 10 historic items in a 10-by-10-meter area, were recorded as sites, and were plotted with a Trimble Juno GPS receiver and photographed. Isolated prehistoric artifacts were also plotted with the GPS receiver. Isolated twentieth-century artifacts were not plotted unless they were likely over 50 years old. There is scattered trash throughout the undeveloped parts of the lease area, attesting to the area's popularity for recreation.

Figure 9. Dense vegetation and marsh along Whisky Creek.

Figure 10. Sparse sagebrush scrub on ridges.

Survey Results

Two historic sites (given field numbers CLFC-1 and CLFC-5) and two prehistoric sites (CLFC-2 and -3) were recorded in the lease area, and a third prehistoric site (CLFC-4) was noted just west of the lease area boundary (see location map, Figure 11, and aerial photo, Figure 12).

CLFC-1

This trash scatter covers an area of about 160 by 175 feet. The artifacts include clay stove pipe, bed springs and frames, sheet metal, roofing, fragments of mason jars, ceramics, and bottles, bricks, window screen, water pipe, a wood-stove door, a door hinge, a strap hinge, a metal desk lamp shade, miscellaneous small hardware, and nails. With structural artifacts and furnishings as well as food storage and serving artifacts, the trash is more substantial than what would be expected for camping debris: it would seem more likely to be related to workers' housing, perhaps for dam construction. On the 1944 aerial photograph (see discussion below under CLFC-5), there appears to be a feature at about this location. The feature isn't clear enough to identify, but it is too substantial to be the trash dump, and may be a structure.

Figure 11, above. Overview of Historic Trash Scatter, Site CLFC-1. View to east.

Figure 12, left. Metal shade for a desk lamp.

Figure 13. Upper left, bed frame and springs, stove door, and other trash. Upper right, a closeup of part of the trash scatter. Ceramic fragments include blue willow patterns, both hand-painted and transfer-print. Above, beer bottle base. The diamond O-I mark indicates manufacture by the Owens-Illinois Glass Company. The "20" to the left of the mark indicates it was made at the Oakland, CA, plant, and the "44" to the right indicates the year of manufacture, 1944. Left, fragment of "hotel ware" cup. The maker's mark on the base indicates it was made by the Buffalo China Company. This style of lettering was common between 1915 and the 1940s (Conroy 1999:57). The "Ko..." may indicate a particular pattern, but sometimes letters under the manufacturer's name identify the hotel or restaurant for whom the pottery was made (Lehner 1988).

CLFC-2

This prehistoric site is a sparse artifact scatter with two loci, one with about a dozen flakes of obsidian, some with cortex. Weathered obsidian pebbles occur naturally in the area, and may have provided the source for at least some of the flakes. The other locus includes an obsidian biface fragment and a triangular point, as well as a few flakes of obsidian. Overall, the site measures about 100 by 40 meters. Although no artifacts were observed between the two loci, they were combined into one site to facilitate appropriate management: loose sandy soils such as occur in the area are susceptible to pedoturbation, and additional cultural material may be buried.

CLFC-3

This prehistoric site is a small, sparse flake scatter with at least six obsidian flakes. It includes a biface retouch flake as well as obsidian with different visual characteristics (translucent, opaque, black, and mottled red and brown) which may indicate different obsidian source material. The flakes were observed in an area approximately 55 by 35 meters in size.

CLFC-4

In addition, a sparse artifact scatter was noted outside the lease boundary. Although outside the project area, a preliminary site form was completed for the CHRIS records. The site includes a few obsidian flakes, a mano, and some potentially fire-cracked rock in an area about 60m by 25m in size. One broken cobble appears to be similar to a “cupped stone” found in the Whisky Creek Rockshelter (Burton and Farrell 1991) and one dark flat stone has a straight, short incision, possibly human-made.

CLFC-5

This site, visible on Google Earth, consists of the remains of an abandoned road segment depicted on the 1953 USGS Casa Diablo topographic map. The south end of the road extends out of the project area and was cut by the construction of the current U.S. Highway 395 alignment; the north end blends into the current Crowley Lake Fish Camp road system. The intact abandoned section of the road is about 1,200 feet long north of the highway; south of the highway it is discernible for about 600 feet, until it merges with the current South Landing Road.

A portion of the northern part of the 1953 main road has been incorporated into the Crowley Lake Fish Camp road system, and the southern part is now South Landing Road in the community of Crowley Lake. One secondary road entered South Landing through what is now the Boat and Trailer Storage Area, #22; another secondary road’s alignment partially overlaps the road to the boat launch. The center part of the 1953 road has been abandoned.

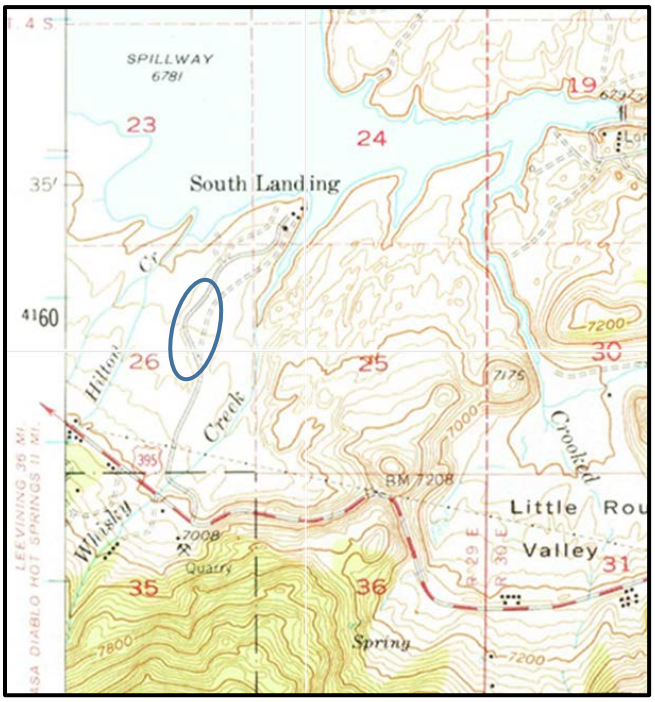

Figure 14, left. Portion of the 1953 USGS topo map for Casa Diablo; old road (site CLFC-5) is depicted as the main road to South Landing. Blue oval approximately outlines the portion of the road that can be seen on Google Earth (minus the part obliterated by the current U.S. Highway 395).

Figure 15, right. The alignment of the old road can still be discerned on the 2016 Google Earth image: it heads southwest from a current dirt road (in the photo, to the right of the north arrow), is crossed by the current U.S. Highway 395, and then heads south-southeast to join South Landing Road in the Crowley Lake residential area.

In the abandoned section, the roadbed is a flat area about 20 feet wide between two small berms, about 1 to 2 feet higher than the road surface. However, the road is unusual in that instead of following the natural ground surface, it appears to be atop a large berm, 10 to 20 feet above ground level on its southeast side, although the northwest edge of the road is not more than a foot or two above the adjacent ground surface. The construction, more substantial than what would be needed for fishing camp access, suggests the road was built as part of the reservoir construction.

Figure 16. The original entry road, with the 1953 USGS topo map for Casa Diablo as an overlay on Google Earth.

To test the validity of this idea, a digital image of a 1944 aerial photograph was obtained from the Map and Image Library of the University of California, Santa Barbara. This image shows a large cleared area, approximately 2,500 feet long by up to 1,000 feet wide, that stretches from the old road to the east-southeast. The area appears devoid of vegetation, and shadows on the clearing's southern edge suggest there was a deep cut there, now obliterated by the highway. Instead of being built atop a berm, the old main road was on the edge of a large excavated area. Some small features in the northern part of the clearing could be buildings or other structures, but the photo resolution isn't fine enough to tell for certain. Still, the 1944 aerial photograph does illustrate large-scale ground disturbance, most likely associated with the creation of the reservoir. The southern part of the Crowley Lake Fish Camp lease area may have been a borrow site for fill for dam construction.

The current irregularly rolling terrain indicates the cleared area was not completely flat. For some time after the lake was created in 1941, the southern part of the Crowley Lake Fish Camp lease area probably looked like a construction zone or quarry site, rather than the recreation area it is today.

Figure 17. Historic site CLFC-5, abandoned road segment, view to southwest.

Figure 18. Historic Site CLFC-5, abandoned road segment, view to northeast.

Figure 19. Portion of the 1944 aerial photograph. Note the clearing on the east edge of the road, indicated by large light-colored area. The shadow at the clearing's southern end indicates a cut deep enough to be discernible even at this resolution.

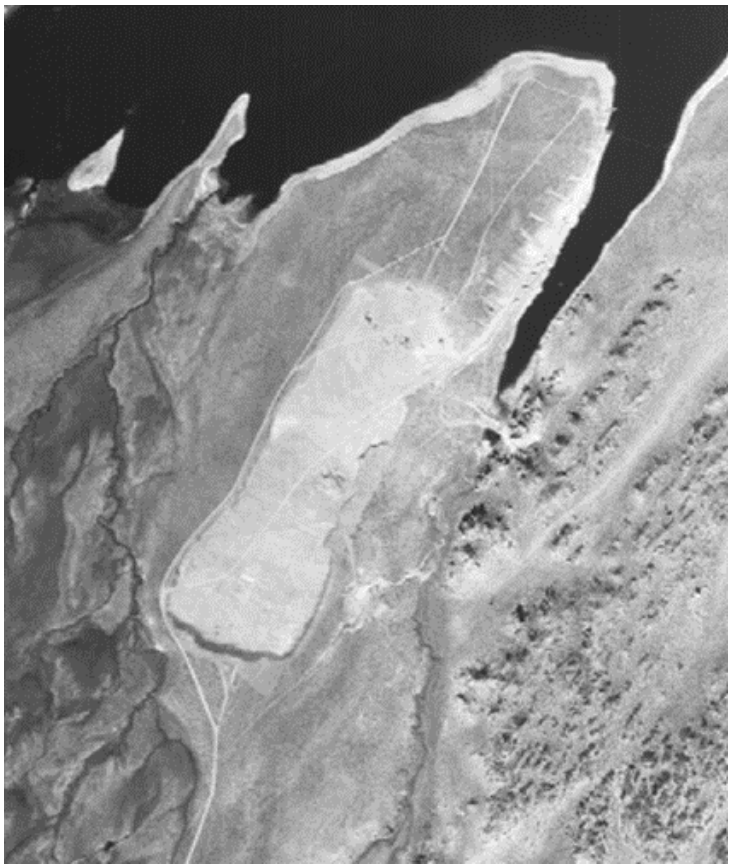

Figure 20. The 1944 aerial photograph superimposed on the 2016 Google Earth image. The northern end of the cleared area corresponds to a landform visible today as a swale, or low area with grass, shown in Figure 28, below.

Figure 21. View south from what would have been the northern end of the cleared area shown in the 1944 aerial photo. The irregular terrain here and continuing south indicates that the cleared area was not completely leveled during dam construction activities.

Isolates

Three prehistoric isolates and 17 historic isolates were noted and plotted. As mentioned under Survey Methods, above, there is scattered trash throughout the undeveloped parts of the lease area, attesting to the area's popularity for recreation. Isolated twentieth-century artifacts were not plotted, unless they were likely over 50 years old, but twentieth-century features such as mounds or in-place pipe were recorded as isolates. The mounds are likely remnants of the earth-moving that occurred when the dam was being constructed. Isolates of heavy-gauge cable or structural materials are also likely related to reservoir construction. Some of the mounds have a few nearby artifacts. Isolate "S," a wooden fishing bobber, is clearly related to Fish Camp activities.

Table 1. Isolates.

Gray shading indicates Native American artifact.

Map #	Description
A	Obsidian flake (opaque dark gray, with inclusions) on rim of pit that contains the dump.
B	2 burnt fence posts with numerous nails
C	Biface, of weathered fine-grained rock, measuring 4 cm long by 2 cm wide by ½ cm thick, found about 10 m NW of road to dump/boneyard
D	Bulldozed mound, about 20' x 10' by 2' high, no artifacts
E	Obsidian flake (opaque grey biface retouch flake) at fire ring
F	Mound, ca. 20'x10' by 3' high, with trash, and adjacent hole-in-cap tin can with lap seams. Can is about 6" in diameter and 8" high, knife-opened. Mound is about 30m south of the south end of the beach parking area.
G	Mound (about 5'x6') and pit (about 4'x5'), no trash (prospect?)
H	Cross on hill, marked “Jesse Lorenz”
I	Sheet metal, 1 piece flat (ca. 30"x40"), 1 formed (see photo)
J	Small dump (~30' diameter) of concrete scraps (clinkers?), some brown ceramic insulator fragments, 1 “Coke” bottle fragment (warped), and a few clear glass fragments. About 20' from road., and 150' southeast of CLFC-1
K	Water pipe pounded into the ground, ~30 inches visible. Small segment of cable.
L	Mound, about 15'x20'x2' high, with cable, pipe, other metal, white electrical porcelain, and applied-color label bottle
M	Mound, about 25' diameter and up to 5' high, with trash including big cable, pipe, heavy metal strapping, a meat can, a "Mission" brand soda bottle base, a metal lid, and glass
N	Homemade pail made from a can (sanitary seal, roller-opened) 6" tall by 5.5" diameter, with wire looped through holes punched in either side near the top
O	Weathered lumber (some with curved cuts) in the northeast and east edges of the green swale at the northern end of the cut visible on the 1944 aerial photo
P	Semi-buried rusted water pipe, about 3" OD, about 2' exposed
Q	Mound (5' tall, 40'x20') with trash: cable, corrugated roofing, other big pieces of sheet metal
R	Trash scatter, with pipe fragments, tin can, asbestos (?) pipe fragments, corrugated metal, heavy-duty machine part, sheet metal with nails
S	Wooden fishing bobber
T	Loose concrete corner fragment inscribed “5” (or “S”)

Figure 22, left. Hole-in-cap can at mound, Isolate F.

Figure 23, right. Isolate N, homemade pail.

Figure 24, left. Isolate M artifacts: meat can and "Mission" brand soda bottle base

Figure 25, right. Isolate S, wooden bobber. Trimble, for scale, is 5 x 3 inches.

Figure 26, Isolate O, lumber at the edge of the green swale.

Figure 28. Isolate K, water pipe pounded into the ground and small piece of cable.

Figure 27. Isolate H, "Jesse Lorenz" cross.

Figure 29. Isolate G, mound.

Building Descriptions

Because it has been in use for over 70 years, the Crowley Lake Fish Camp itself merits evaluation as a potential historic property, either as a whole (as a district or site), or in part, as individual buildings. The Mitigated Negative Declaration's Table 1 lists 35 facilities at Crowley Lake Fish Camp, including 29 existing and 6 proposed uses. The list is comprehensive, and includes gates, fencing, and water tanks as well as buildings. Some of the 29 existing facilities have multiple units: for example, #18, Existing Propane Gas Service Tanks, includes six tanks; #33, Floating Restrooms, includes up to five units. Of the existing facilities, most were added after the current owner acquired the lease in 1992, and thus are less than 25 years old.

Figure 30. Examples of some of the facilities added since 1992, clockwise from upper left: Tackle Shop; Boat and Marine Building; Pelican Point Grill; Park Model Cabin #2; Manager Home; Park Model Cabin #1.

Six cabins and one small “first aid” shack owned by LADWP were burned down from 1992 to 1995 because of Hantavirus contamination (Abbie Grooms Thomason, Fish Camp manager, personal communication 2017). The buildings added since 1992 are not old enough to be considered eligible for the California Register of Historical Resources, and they are not included in this evaluation.

In addition, two other wooden structures with wooden siding are located near the Boat and Marine Building. Each serves as a shade or cover for a metal shipping container used as a storage unit, and measures approximately 20 feet long by 8¼ feet wide, and about 8 feet high to the eaves. The vertical wood siding is composed of 1-by-12-inch boards which have the appearance of old wood. However, the tight build around the storage units and the shallow-pitched roofs with new metal sheathing indicate that the structures were custom-fit to the storage units, using wood recycled from other structures. Crowley Lake Fish Camp personnel consider the storage units to be temporary, movable storage. Although the recycled boards are likely more than 50 years old, the structures themselves are not, and they are not eligible for the California Register.

Figure 31. Metal shipping containers within old-wood shelters. Left: front, view toward southeast. Right, back, view toward northeast. Note how tightly the covering sheds fit the containers.

On the other hand, some of the structures were present when the current owner acquired the lease in 1992, and these were assessed to determine if they were close to 50 years old or older, and if so, whether they meet the criteria for listing on the California Register of Historical Resources. As identified in the draft Mitigated Negative Declaration and keyed to the site plan, these include:

#8, Ramadas (2)
#12, Domestic Well House
#17, Fuel Facility and Fuel Tanks
#21, Boathouse (storage)
#30, Main Public Restroom Facility

Each is described below; age, integrity, and significance are considered in the following section. In addition, there are two small wooden cabins on the lease property that are not included in Table 1 of the Mitigated Negative Declaration because they are owned by LADWP, and are not part of the Crowley Lake Fish Camp lease. These are also described in this report, even though they are not included in, and would not be affected by, the proposed project.

#8, Ramadas

Two ramadas are located about 200 feet south of the lake shoreline, and about 300 feet and 400 feet west of the Boat and Marine Building. Each is constructed of six pillars of concrete formed in tubes, and a roof of peeled but unshaped logs. In plan, they measure 22 feet by almost 13 feet. Each pillar is 24 inches in diameter and extends approximately 7½ feet high, giving the ramadas a massive and somewhat industrial appearance. Logs of various sizes, up to 16 inches in diameter, form the roof. No evidence of recent use was noted.

Figure 32. Ramadas, view toward northeast.

#12, Domestic Well House

The well house, of concrete block, measures 7 feet 4 inches in plan, with an overhanging shallow gable roof framed in wood and covered in corrugated metal. The door, on the downhill side, is plywood.

Figure 33. Well House, view toward northeast.

Figure 34. Well House, view toward south.

#17, Fuel Facility and Fuel Tanks

The fuel facility, measuring 16 feet by 15¼ feet in plan, is a partially buried concrete block building with an overhanging gable roof. The roof peak is 5½ feet above ground level in the front, and more in the back, on the downslope side. The shallow-pitch gable roof is covered in asphalt shingles. The entryway is a wood frame door, measuring 4 feet high and 2½ feet wide, with hardware screen, and there are vents in both gable ends.

Figure 35. Fuel Facility, toward northwest.

Figure 36. Fuel Facility, view toward southeast.

#21, Boathouse/Storage Building

In the Mitigated Negative Declaration, the Boathouse/Storage building is described as a wood-framed one-story building on wood piers, with 588 square feet of interior space and a 140-square-foot deck. It is L-shaped in plan. Overall size is approximately 32 feet by 24 feet, with the north-south section 32 feet by 12 feet, and the east-west "wing" approximately 12 feet by 16 feet. The cross-gable shallow-pitched roof is covered in standing-seam metal roofing. Siding is horizontal tongue-in-groove boards, each 7 inches wide total, with 6½ inches exposed. Windows are aluminum sliders; doors include a multi-pane glass door and flush doors with a plywood veneer face. The wooden deck is about 12 feet by 12 feet, exterior dimensions, with a railing on three sides. Concrete steps lead to the back door. Although the windows, deck, roofing, and doors are new, the tongue-in-groove wood siding and the post-and-pier foundation could be characteristic of a 1950s or older building.

Figure 37. Boathouse/Storage Building, view toward south.

Figure 38. Boathouse/Storage Building, view toward northwest.

Figure 39. Boathouse/Storage Building, view toward northeast.

#30, Public Restroom

The public restroom is composed of concrete blocks, and has a shallow-pitched gable roof and both fixed windows and louvered vents. It is 36 feet long and 32 feet wide overall, and 8 feet high at its gable peak; "wings" on each side form entryways. The roof is wood-framed and covered with metal standing-seam roofing.

Figure 40. Public restroom, view toward northwest.

Figure 41. Public restroom, view toward southwest.

Figure 42. Public restroom, view toward south.

LADWP Buildings

Two structures owned by LADWP are within the lease area, but not part of the current project. They are described because their construction indicates they are clearly the oldest buildings in the lease area, although they both sit on what appear to be relatively new concrete foundations.

One is a small cabin, measuring about 13¼ feet by 11¼ feet, with a steep-pitched gable roof covered with wooden shingles. The cabin has vertical board-and-batten siding, with the boards 1 by 12 inches and the battens only 1½ inches by ¼ inch, more like lath or moulding than lumber. The boards are cut into V-shaped ends along the bottom above the foundation, and at the bottom of the gable ends, an unusual decorative touch on such a small building. There are triangular-shaped louvered vents at each gable peak.

There are a door and window on the front façade and windows on each end. Windows are 2-light, hopper windows (hinged at the bottom, opening inward). They have a chain to keep them from falling completely open, and a latch at the top to close. The windows have exterior operative shutters, and the door is paneled, with screen divided by a vertical mullion in the upper 3/5, and a solid (but deteriorated) wooden panel below.

Figure 43, above. LADWP cabin/shed, view to southeast. Figure 44, below right. Interior of cabin, showing scabbed ceiling joist and one of two chimney-type openings in the roof.

The building is framed with vertical studs augmented by horizontal cross pieces; some of the ceiling joists are scabbed together. The building is wired for electricity, with a light bulb at the center of its interior peak. The building now has a concrete floor and sits on a poured concrete foundation, up to three feet high on the back, downhill side. While the electricity, floor, and foundation are undoubtedly newer than the rest of the cabin, one unusual feature of the building appears to be original: there are two holes in the roof, one at either end, with short sections of pipe still extending above the roofline.

Directly to the south is the smaller LADWP building, which measures 9 feet by 7 feet in plan. It, too, is perched on the slope and supported by a concrete foundation, but its foundation is shorter and set back on the slope. Its roof is medium-pitched, and covered only with boards. It has a double door made of plywood on the south façade, and wooden window openings cut into the siding of the east and west gable ends. Like the larger structure, siding is board and batten, but without the V-shaped ends. It, too, is wired for electricity, with the power pole at its southwest corner.

Figure 45, right. Smaller LADWP building, view toward east. The end of the larger LADWP building is visible at the left edge of the photograph.

Figure 46, below. Smaller LADWP building center left, view toward northwest. Larger LADWP to right.

History of the Buildings

Although official records regarding the construction, modification, relocation, and removal of the various buildings and other facilities at Crowley Lake Fish Camp were not available for this report, a fair estimate of the history can be made using historic maps, aerial photographs, and photographs.

First, the 1944 aerial photograph shows an area cleared of vegetation in the southern part of the current lease area. As discussed above in the CLFC-5 site description, the depth of the cut visible along the edge of the cleared area indicates it was a borrow site for a substantial amount of fill, likely used in dam construction. There are also a few dark areas within the cleared area: these may be small buildings, other structures, or equipment. One or two of these possible structures are located near the scatter of structural debris and domestic trash recorded as CLFC-1. If indeed the cut is related to dam construction, it seems likely there would have been some structures or facilities present. However, none of dark areas match the locations of current buildings.

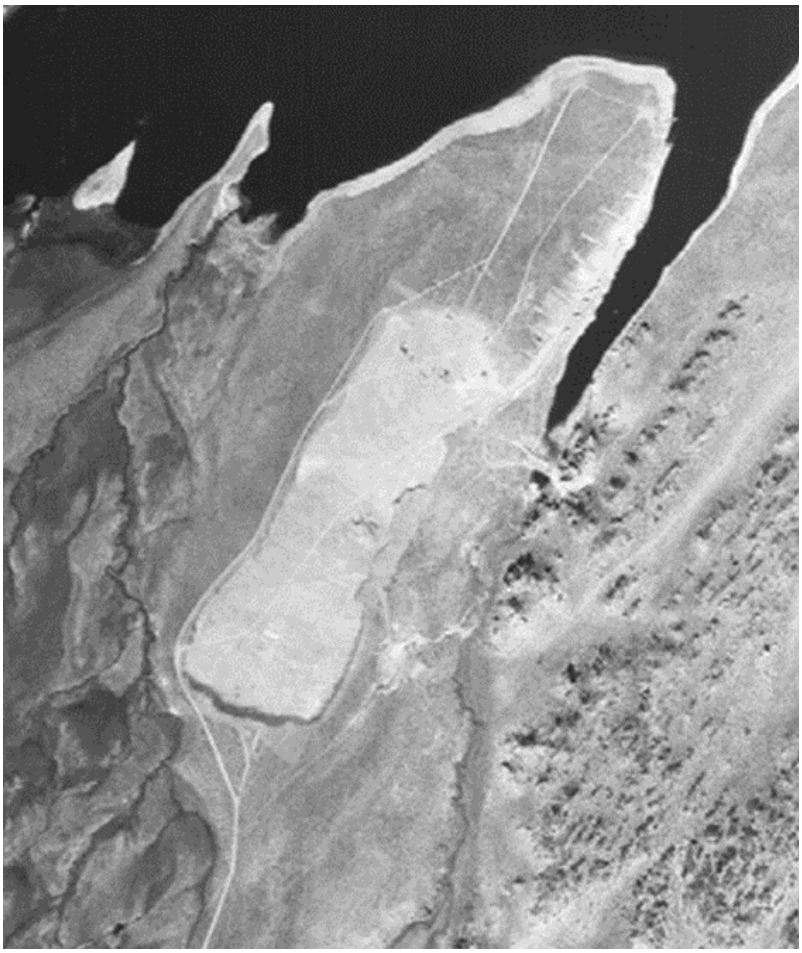

Figure 47. Detail of 1944 aerial photograph. The light area near the center of the frame is a large clearing and excavated area presumed to be related to dam construction. Dark areas within the clearing could be structures, but no structures are visible near current Crowley Lake Fish Camp buildings.

However, the 1953 USGS topographic map (at 1:62,500 scale) does depict four structures within the current Crowley Lake Fish Camp, one large and three small. We can approximate how the structure locations would fit today's terrain by overlaying the topo map with the Google Earth satellite photograph and aligning features known to be present in both images. That is, once we have fit the 1953 topo over the 2016 satellite photo so that Crowley Lake dam, Whisky and Hilton Creeks, the lake shoreline, and Crowley Lake Drive (former U.S. Highway 395) match up, we can see how close the 1953 buildings are to the current structures. Results need to be interpreted somewhat liberally, to account for the different original scales of the two images, potentially different lake levels, and possible errors and distortions in the overlay. However, the 1:62,500 USGS topographic maps accurately depicted buildings where there was sufficient room on the map.

Of the four buildings on the 1953 topo map, one (the largest) is approximately at the current location of Park Model Cabin Trailers 1 and 2 (facilities #5 and #6 in Table 1 of the Mitigated Negative Declaration). One building is shown between the current locations of the managers' residence and RV-trailer spaces 3 and 4. Therefore, both of these 1953-era buildings have been removed, possibly during the Hantavirus cleanup in the early 1990s. The third building shown on the 1953 map, however, is very close to the LADWP buildings ("shed" depicted on the Mitigated Negative Declaration plan map, but not listed in Table 1). The fourth building is located close to #21, the boathouse/storage building.

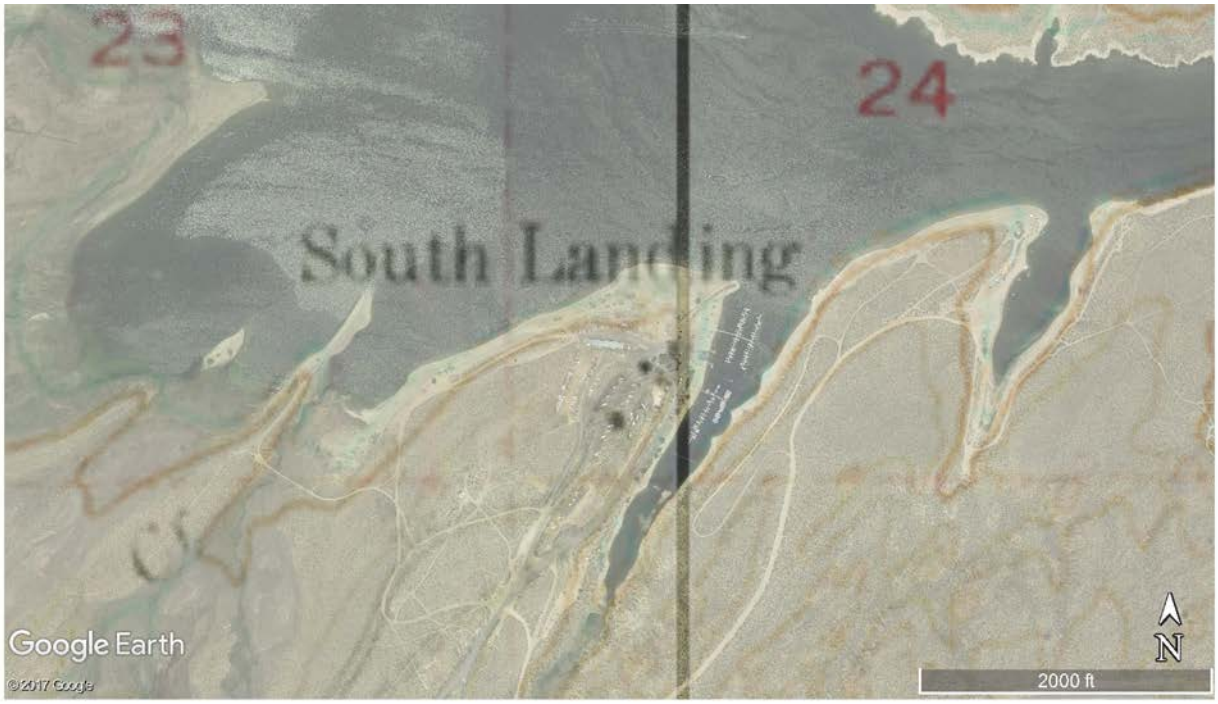

Figure 48. 1953 USGS 15-minute topographic map over the 2016 Google Earth satellite image.

To determine if the two buildings depicted on the 1953 topo map are the same as one of the LADWP sheds or the boathouse/storage building, we can examine two historic photographs on display at the Crowley Lake Fish Camp tackle shop. Neither photograph is dated, but their dates can be roughly estimated. In one, there are numerous cars, most of which appear to be models from the 1940s and early1950s, suggesting the photo was taken early in the 1950s. Five buildings are visible, including the larger of the two LADWP cabins, complete with double chimneys. In the distance on the hill behind the LADWP cabin is a tall structure with no windows visible. Although the resolution is unclear, it looks like a grain silo or a water tank, or even an industrial facility related to the dam creation.

The 1950s photograph gives us an idea of what the early Fish Camp was like, with plenty of parking and five cabins with medium- to steep-pitched gable roofs (one with a cross gable), the shed-roofed boat house, and the tall silo-type structure on the hill. No docks are visible, but some boats appear to be launching directly from the shore. The photograph also shows one structure very close to the location of the current boathouse/storage building. However, that building does not match the current structure: the main part of the building in the photo has a shed roof, rather than a gable or cross-gable roof. A small gable-roof extension extends from the southern part of the building, but that extension does not appear to be equivalent to either part of the current boathouse.

Figure 49. Historic-period photograph of Crowley Lake Fish Camp, likely dating to the 1950s.

Figure 50. Similar view, June 2017.

Figure 51. Detail of Figure 60, shed-roofed boathouse near center of frame, one LADWP cabin immediately to right.

Figure 52. Detail of Figure 61, cross-gable-roofed boathouse near center of frame.

In the second historic photo, there are not many vehicles to suggest a date, but the vegetation has matured and the photo is in color, suggesting it was taken later, likely sometime in the 1970s. There is a building at the boathouse/storage building location with window spacing similar to that in the current boathouse, but the 1970s building is the same shape as the shed-roofed structure in the earlier photo. In addition, the 1970s building can be distinguished from the current structure by the location of the windows, which are lower in the façade facing Whisky Bay.

However, the public restroom, the well house, the ramadas, and both little LADWP cabins are visible in the second historic photo. The fuel facility, although it is of similar masonry block construction as the public restroom, is not present. Instead, there are seven other structures in the 1970s photo which have since been removed. One appears to be the tall structure visible in the earlier photo, but in this view, a medium-pitched gable-roofed building can be seen next to it. The location appears to be close to the current location of Park Model Cabin Trailers 1 and 2 (facilities #5 and #6 in Table 1 of the Mitigated Negative Declaration), and it may have been the large building depicted on the 1953 topo map.

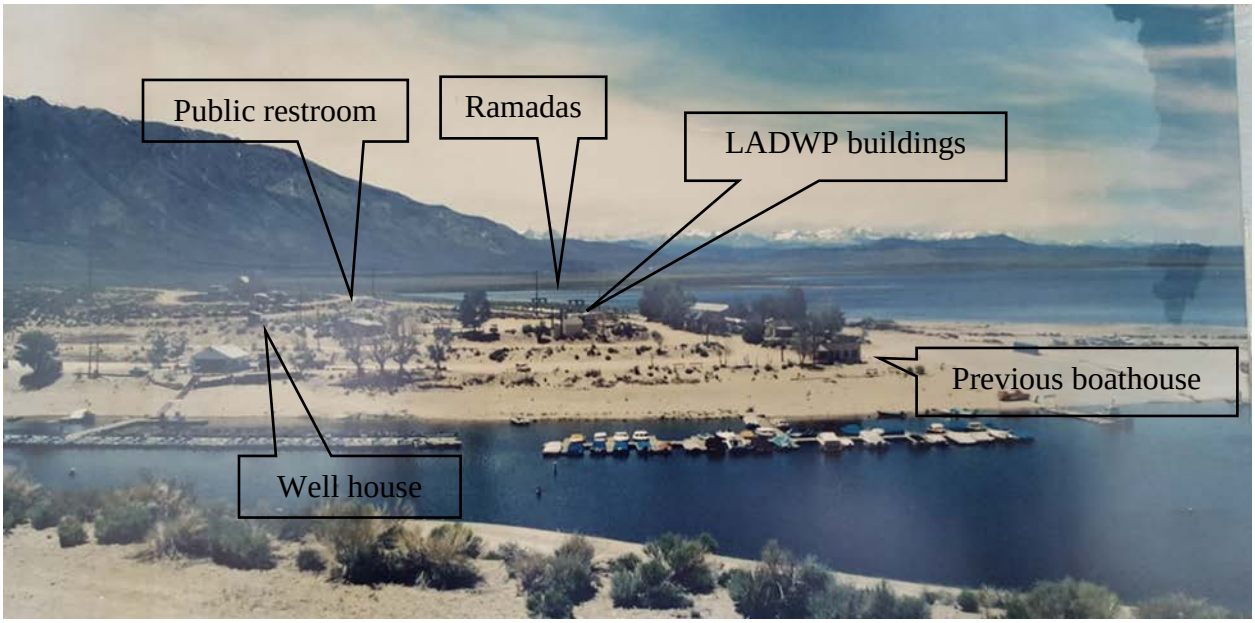

Figure 53. Photograph of Crowley Lake Fish Camp presumed to date to the 1970s.Tall structure with adjacent building with medium-pitched gable roof is located on the hill, behind the well house. Note that the well house has a shed roof. Large structure with light-colored roof to the right of the LADWP buildings is a warehouse that burned down in the 1990s. Several other structures, no long present, are also depicted.

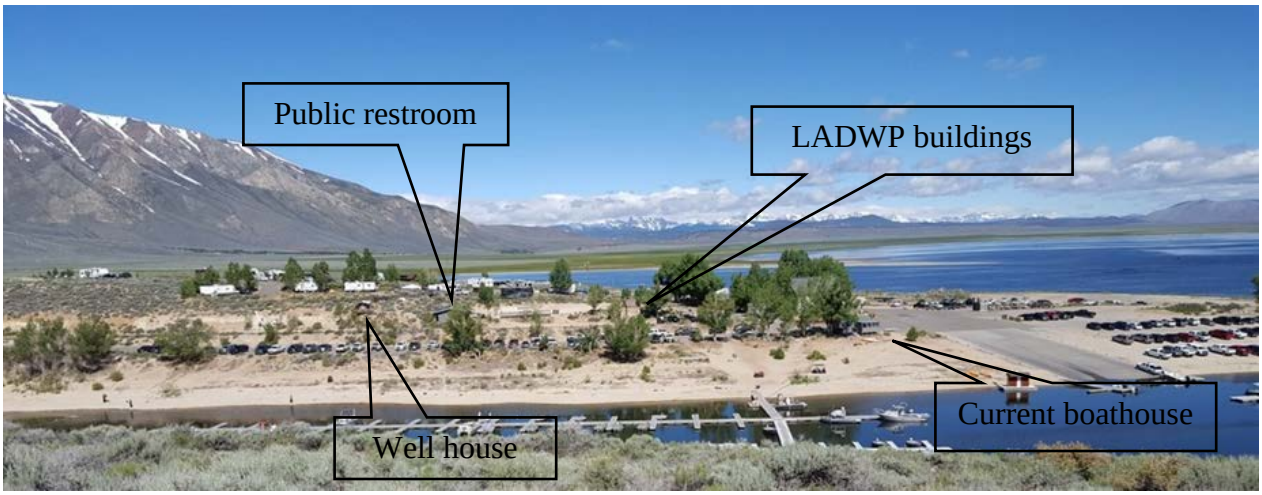

Figure 54. Similar view in June 2017. Several of the buildings visible in the earlier photograph are no longer present. The ramadas are present, but hidden by the trees.

The photographs indicate that the Crowley Lake Fish Camp has undergone numerous changes over the years. Based on construction details, the two small LADWP buildings are the oldest structures at the Fish Camp, likely built in the 1930s or even earlier. If they were part of the dam construction, however, they are not in their original locations, as indicated by the 1944 aerial photograph. The larger structure had been moved to its present location by the time of the 1950s photograph.

By the time the second photograph was taken, assumed to be in the 1970s, the fish-cleaning station, the public restroom, a well house, and the ramadas had been built, and the second LADWP shed had been moved to its current location. Three docks provide boat access and the current parking area is delineated. However, several structures in the 1970s photo are no longer present: three medium- to steep-gabled structures, the shed-roofed boathouse/storage building, a large warehouse-type structure, a new boathouse to the southeast of the restroom, and the "silo" with a gable-roofed structure adjacent. In addition, the well house of the 1970s has a shed roof that slopes down to the north, rather than the current gable roof, suggesting that the 1970s structure was replaced or rebuilt in the last 50 years.

The fuel storage facility was added sometime after the second photograph was taken. As mentioned above, six cabins and a first-aid shed were burned in the early 1990s because of Hantavirus contamination. The Fish Camp has continued to evolve, especially since 1992, when current owner John Fredrickson acquired the property. Most of the current structures date to the last 25 years. Vegetation has matured, and shrubs have filled in on the slopes.

Evaluation of Significance

Under the California Environmental Quality Act, environmental reviews must consider potential effects on at least two categories of cultural resources: properties listed on, or eligible for listing on, the California Register of Historical Resources; and unique archaeological resources. Under Assembly Bill 52, Tribal cultural resources are also considered during the CEQA review, if identified by a Tribe that has requested consultation on projects in the project area. Because no Tribe has requested consultation on Mono County's projects in Long Valley, this third category of cultural resource does not apply to the Crowley Lake Fish Camp project. The other two categories are discussed below.

California Register of Historical Resources

The California Register of Historical Resources includes buildings, sites, structures, objects, and historic districts (California Code of Regulations Title 14, Section 4852). Cultural resources may be eligible for listing on the California Register if they meet one or more of the following criteria:

1. Are associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.
2. Are associated with the lives of persons important to local, California or national history.
3. Embody the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values.
4. Have yielded, or have the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

Resources eligible for the California Register must also possess integrity:

> Integrity is the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. … Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association. It must also be judged with reference to the particular criteria under which a resource is proposed for eligibility. (California Office of Historic Preservation 2011)

Because the California Register can include sites, buildings, and districts, eligibility needs to be considered at those three different scales. First, do the individual sites (CLFC-1 through CLFC-5) meet the criteria and integrity guidelines?

Archaeologists usually evaluate "prehistoric" or Native American archaeological sites against criterion 4. All three prehistoric sites (CLFC-2, -3, and -4) have the potential to yield information important in the prehistory of Long Valley and the eastern Sierra. All three sites contain flaked obsidian, which can provide chronometric data about when the site was created and occupied. Further, determining where the obsidian came from, through source analysis, can help define trade and travel routes, or tool manufacturing trends. One of the sites also includes

ground stone, and may therefore provide additional information about food gathering and subsistence. However, all three sites are small and sparse, and it is unknown whether they contain additional cultural material subsurface. Archaeological testing could more definitively determine whether they have sufficient data potential to meet criterion 4, or characteristics that would indicate eligibility under the other criteria. However, CEQA guidelines allow for potentially eligible sites to be treated as eligible during environmental reviews, so archaeological sites CLFC-2, -3, and -4 are considered eligible for the purposes of CEQA compliance for the Crowley Lake Fish Camp Project.

CLFC-1 is also potentially eligible for the California Register of Historical resources under criterion 4. If the trash scatter is associated with a dam-construction work camp and was once associated with a building, it could have potential to provide information about the organization of labor and workers' lives, especially as compared to other LADWP camps (Van Bueren 2002). Evidence of a structure foundation and additional artifacts may be buried.

CLFC-5, the abandoned road, does not appear to be eligible under any of the criteria. It was likely constructed as part of the Long Valley dam work, which was an important event in regional history (criterion 1). However, its association with the dam is peripheral, as an access route not to the dam, but to a separate construction zone. Other features, such as the dam and the lake itself, are more representative and more clearly associated with the reservoir. There is no known association of the abandoned road segment with the lives of persons important in California history (criterion 2), nor does it embody the distinctive characteristics of a type, period, region, or method of construction, represent the work of a master, or possess high artistic values (criterion 3). Without associated features or artifacts, the road does not appear to have potential to yield information important in history, beyond that already recorded (criterion 4).

Second, at a slightly larger geographic scale, does the Crowley Lake Fish Camp meet the California Register criteria, as a site or district? The Fish Camp as a whole has been in use for over 70 years, so it meets the 50-year minimum age criterion. It is associated with an event important in regional history: the creation of Crowley Lake, which facilitates the transfer of water from the eastern Sierra to Los Angeles, and the resulting shift in Long Valley's economy from ranching and farming to recreation. The period of significance, therefore, would be the Fish Camp at its initial stages, in the 1940s and 1950s, when it was converted from a construction site to an area repurposed for recreational fishing.

However, the Fish Camp as a whole does not retain sufficient integrity to convey that period of significance. It has undergone several transformations in the past 50 years, including the burning and removal of most of the original cabins. Most of the buildings now present are less than 25 years old; buildings and other features that could be 50 years old, such as the boathouse, ramadas, and the public restroom, are dispersed throughout the site and do not convey the sense of a historic fishing camp. There is no known association with an important person in California history (criterion 2), nor does the Fish Camp embody the distinctive characteristics of a type,

period, region or method of construction, or represent the work of a master, or possess high artistic values (criterion 3). It does not have the potential to yield information important in history (criterion 4).

Third, do any of the buildings at Crowley Lake Fish Camp meet the California Register criteria, as individual buildings? The buildings that may be 50 or more years old include the public restroom, the boathouse, the two LADWP buildings, and the two ramadas.. Although the individual buildings are, of course, associated with the Fishing Camp, none conveys the sense of a historical fishing camp individually, and are not considered eligible under criterion 1. There is no known association between a building and an important person in California history (criterion 2). Although the boathouse/storage building's siding is likely more than 50 years old, the building was moved to its current location sometime after the 1970s. Further, the aluminum slider windows and modern doors diminish its historical integrity. Likewise, the smaller DWP building was moved to its current location less than 50 years ago. The only building that may embody the distinctive characteristics of a type or method of construction (criterion 3) is the larger LADWP shed. Although it appears to have been moved to its current location to serve the Fish Camp, the move itself was over 50 years ago, as evidenced by its presence in the 1950s photograph. However, further research would be needed to determine the original function and "type" of that building. Further research would also be needed to determine whether it has potential to yield information important in history (criterion 4).

Unique Archaeological Resources

The California Public Resources Code 21083.2(g) provides the definition for a "unique archaeological resource" as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

(1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
(2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.
(3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

None of the archaeological sites or other cultural resources at the Crowley Lake Fish Camp meets any of these criteria.

Conclusions and Recommendations

Four of the five archaeological sites (CLFC-1 through CLFC-4) should be treated as eligible for the California Register of Historical Resources. However, none would be affected by the proposed project: CLFC-1, -3, -4, and -5 are well away from the areas of proposed development, and away from existing uses that are being reviewed by Mono County. CLFC-2 is located close to the boat and trailer storage area, but no ground disturbance or modifications are proposed for that area. The four archaeological sites that are potentially eligible for the California Register of Historical Resources (CLFC-1, -2, -3, and -4) require no further consideration under CEQA for the Mitigated Negative Declaration, but should be considered in future planning. The on-site presence of Crowley Lake Fish Camp personnel is considered a beneficial condition, discouraging unauthorized artifact collection or looting. If future development plans include the site areas, a more formal evaluation of the sites, including subsurface testing, would be necessary.

Likewise, the proposed project would have no effect on historic buildings. The only building potentially eligible for the California Register is the larger of the two cabins owned by LADWP, which is not included in the project.

Because of previous disturbance, it is not likely that archaeological, paleontological, or historical features would be encountered during any of the ground disturbance associated with the proposed project. As always, if any human burials are encountered, work in that area must cease and the immediate area secured, so that the lead agency can contact the county coroner and, if appropriate, interested Tribes and the Native American Heritage Commission.

References

Basgall, Mark E.
1988 Archaeology of the Komodo Site, an Early Holocene Occupation in Central-Eastern California (The Archaeology CA-MNO-679: A Pre-Archaic Site in Long Valley Caldera, Mono County, California). In Early Human Occupation in Far Western North America: the Clovis Archaic Interface, edited by J.A. Willig, C.M. Akins, and J.L. Fagan, pp.103-119. *Nevada State Museum Anthropological Papers* no. 21:103-120. Carson City, Nevada.

Bettinger, Robert L.
1979 Archaeology East of the Range of Light: Aboriginal Human Ecology of the Inyo/Mono Region of California. Manuscript on file at the Inyo National Forest, Bishop, California.

Burton, Jeffery F. and Mary M. Farrell
1991 The Archaeology of Whisky Creek Rockshelter: A Late Prehistoric Site in Long Valley, California. Trans-Sierran Archaeological Research. Contributions to Trans-sierran Archaeology No. 26.

California Department of Transportation
1918 The Road Map of the State of California, 1918, published by the California Department of Transportation, Sacramento, Atlas obtained from the Institute of Transportation Studies Library (Harmer E. Davis Transportation Library) at the University of California, Berkeley.

1920 The Road Map of the State of California, 1920, created by the California Highway Commission.

California Office of Historic Preservation, Department of Parks and Recreation
2011 Technical Assistance Series #6, California Register and National Register: A Comparison (for purposes of determining eligibility for the California Register). Accessed June 29, 2017, at ohp.parks.ca.gov.

California Governor's Office of Planning and Research
2015 Discussion Draft Technical Advisory: AB 52 and Tribal Cultural Resources in CEQA. https://www.opr.ca.gov/docs/DRAFT_AB_52_Technical_Advisory.pdf, accessed July 5, 2017.

Chalfant, W.A.
1933 *The Story of Inyo.* Chalfant Press, Inc., Bishop, CA.

Chou, Christopher
2014 AB 52 Amends CEQA by Creating a New Category of Cultural Resources and New Requirements for Consultation with Native American Tribes. Posted in CEQA, Perkins Coie's California Land Use & Development Law Report. Accessed online December 21, 2016, at: https://www.californialandusedevelopmentlaw.com/2014/09/30/ab-52-amends-ceqa-by-creating-a-new-category-of-cultural-resources-and-new-requirements-for-consultation-with-native-american-tribes/

Conroy, Barbara J.
1999 *Restaurant China, Volume 2: Identification and Value Guide for Restaurant, Airline, Ship, and Railroad Dinnerware.* Collector Books, Paducah, KY.

Doyle, Helen
1934 *A Child Went Forth*. Gotham House, New York.

Eastern Information Center
2016 Crowley Lake Fish Camp Cultural Resources Records Search. Compiled by the Eastern Information Center, California Historical Resources Information System, Department of Anthropology, University of California, Riverside.

Ewan, Rebecca Fish
2000 *A Land Between: Owens Valley, California*. Johns Hopkins University Press, Baltimore.

Faigin, Daniel
2015 California Highways. http://www.cahighways.org/index.html

Garfinkel, Alan P., and Roger A. Cook
1979 Prehistoric Change in Central Eastern California: the Sherwin Grade Site. *California Department of Transportation Occasional Paper 1*. Sacramento, CA.

1980 Radiocarbon Dating of Pinyo Pine Nut Exploitation in Eastern California. *Journal of California and Great Basin Anthropology* 2(2):283-286.

Hall, Matthew C.
1983 Late Holocene Hunter-Gatherers and Volcanism in the Long Valley-Mono Basin Region: Prehistoric Culture Change in the Eastern Sierra Nevada. Ph.D. dissertation, Department of Anthropology, University of California, Riverside.

Kovels' Antiques, Inc.
2016 Kovels.com, accessed December 27, 2016, at https://www.kovels.com/price-guide/pottery-porcelain-price-guide/metlox.html

Lehner, Lois
1988 *Lehner's Encyclopedia of U.S. Marks on Pottery, Porcelain and Clay.* Collector Books, Paducah, Kentucky.

Nadeau, Remi A.
1950 *The Water Seekers.* Chalfant Press, Bishop, CA.

Society for Historical Archaeology
Historic Glass Bottle Identification & Information Website, at https://sha.org/bottle/index.htm. Accessed December 27, 2016.

Van Bueren, Thad M.
2002 Struggling with Class Relations at a Los Angeles Aqueduct Construction Camp. *Historical Archaeology* 36(3):28-43.

Wright, J. W. A.
1879 The Owens River War and the Cement Hunters. In *San Francisco Daily Evening Post,* November 8 and 22.