

BUSINESS UNIT: 3540 COBCP NO. 1 PRIORITY: 1 PROJECT ID: 0000680
 DEPARTMENT: Department of Forestry and Fire Protection
 PROJECT TITLE: Ishi Conservation Camp: Domestic Drinking Water System
 TOTAL REQUEST (DOLLARS IN THOUSANDS): \$871 MAJOR/MINOR: Minor
 PHASE(S) TO BE FUNDED: PWC PROJ CAT: CRI CCCI/EPI: 6069

SUMMARY OF PROPOSAL:

Replace current drinking water system that is supplied from a spring with a new well(s). This project will include: a study to determine the location of wells and number of wells required to produce a minimum of 15,000 gallons per day, develop infrastructure to support new wells which includes new water distribution valves and piping, new power and controls for well pumps, construct new pump house for distribution pumps, water treatment systems and control panels and upgraded and increased domestic water storage to 150,000 gallons. Site work includes construction of storage tank slabs, trenching, sidewalks, paving, fencing and other appurtenances.

HAS A BUDGET PACKAGE BEEN COMPLETED? (Existing, Needed, Not Needed): Not Needed

REQUIRES LEGISLATION (Y/N): N IF YES, LIST CODE SECTIONS: _____

REQUIRES PROVISIONAL LANGUAGE (Y/N) N

IMPACT ON SUPPORT BUDGET: ONE-TIME COSTS (Y/N): N FUTURE COSTS (Y/N): N

FUTURE SAVINGS (Y/N): N REVENUE (Y/N): N

DOES THE PROPOSAL AFFECT ANOTHER DEPARTMENT (Y/N): N IF YES, ATTACH
 COMMENTS OF AFFECTED DEPARTMENT SIGNED BY ITS DIRECTOR OR DESIGNEE.

SIGNATURE APPROVALS:

Stephen Benson 12-30-2015
 PREPARED BY DATE
Stephen Benson 1/7/16
 DEPARTMENT DIRECTOR DATE

Paula Kalin 1/4/16
 REVIEWED BY DATE
Paula Kalin 1/7/16
 AGENCY SECRETARY DATE

DOF ANALYST USE

DOF ISSUE # _____ PROGRAM CAT: _____ PROJECT CAT: _____ BUDG PACK STATUS: _____
 ADDED REVIEW: SUPPORT: _____ OCIO: _____ FSCU/ITCU: _____ OSAE: _____ CALSTARS: _____

PPBA: Original Signed by:
Stephen Benson

DATE SUBMITTED TO LEGISLATURE: 1/7/16

A. PURPOSE OF THE PROJECT:

Background/History:

Ishi Conservation Camp is a year-round 100-person camp located on an 80 acre state-owned site at 2000-foot elevation in Eastern Tehama County. The site has wet winters with periodic snow. Summers are hot and dry. The community of Paynes Creek is located 3 miles north, Red Bluff City is 25 miles to the west and the community of Mineral and Lassen National Park are 20 miles to the east. The Lassen National Forest, Sierra Pacific Industries and Tehama Wildlife Area lands surround the Camp.

The Camp was constructed in 1959. The original design was a 60-person camp and was operated by CDF and CDC until 1972 when the Tehama Ecology Corps administered the facility to house Vietnam War Draft Resistors. In 1975 the Camp was then Administered by the California Conservation Corp until 1982 when the Camp was reopened by CDF and CDC as an 80-person Camp, and increased in 1991 to a 100-person Camp.

Presently, Ishi Conservation Camp has an inmate population of 110 and a combined staff from CAL FIRE and CDCR of 24. Assigned to the Camp are 5 Fire Crews, 1 Fire Dozer, 1 Fire Engine and 9 utility vehicles (3 Cal Fire, 6 CDCR), 1 Motor Grader and a Stake side. The Camp operates 24 hours a day, 365 days a year. The Camp is routinely used as a Crew Staging area during high fire activity in the Region and is used as an Incident Base during large emergency incidents. Ishi Camp provides Fire Crews for direct protection of over 850,000 acres of CAL FIRE State Responsibility Area (SRA). The surrounding area has a history of large and damaging fires: 2013 Deer Fire 12,000 acres, 2012 Ponderosa Fire 28,000 acres, 2008 Mill Fire 13,600 acres. Vegetation in the area consists of light grass and oak woodland through the mid-elevation brush, then transition to upper elevation commercial timber lands. Much of the area is rugged with inaccessible canyons including the Ishi Wilderness on the Lassen National Forest. The Camp routinely provides fire crews to the Lassen National Park and Lassen National Forest.

In 2014, the fire crews were committed to fire control operations for approximately 14,000 person days and spent approximately 23,000 person days completing conservation and community project work. The Ishi Kitchen served approximately 40,000 fire meals.

Problem: Ishi Conservation Camp has one water source, a spring located above Plum Creek approximately 1 mile from Camp. The State Water Resources Control Board issued Ishi Camp a Compliance Order (21-14-R-003) stating the Camp was in violation of Health and Safety code 116555 (a) (3)., meaning as a post 1914 water user, the Camp was to seek out an additional water Supply.

The compliance order issued is based on current and expected rainfall. During wet periods, the order will be rescinded but during dry times could be re-implemented. On November 12, 2014 the State Water Resources Control Board sent a letter to clarify the compliance order and to also inform the Department that no matter if the compliance order is lifted, the Department will not be allowed to expand Ishi Camp until an alternative water source is developed.

B. RELATIONSHIP TO THE STRATEGIC PLAN:

This project relates to the following goals in the California Department of Forestry and Fire Protection 2012 Strategic Plan:

Goal: Seek to improve operational efficiency and effectiveness by shaping, enhancing, and adapting to changing circumstances.

Objective: Develop and implement a strategy to reduce CAL FIRE's \$2.4 billion Capital Outlay replacement backlog of facilities that have an average age in excess of 45 years by 40% by 2022.

To meet this objective:

- CAL FIRE's Technical Services Unit continues to coordinate facility tours to educate the decision makers in the Legislature, Administration, and Legislative Analyst's Office on the Department's infrastructure program.
- CAL FIRE's Capital Outlay Command (CAPCOM) and the Technical Services Unit continue to pursue more efficient project delivery methods and alternative funding strategies.

C. ALTERNATIVES:

1. Develop new well(s)

Advantages:

- It will meet the requirements set forth by the Compliance order.

Disadvantages:

- Unknown water quality and quantity from well(s)

2. Continue to use existing spring

Advantages:

- No cost is associated

Disadvantages:

- During curtailment period, would be in violation of H&S code
- At any time CAL FIRE is not able to expand the facility.

D. RECOMMENDED SOLUTION:

1. WHICH ALTERNATIVE AND WHY:

The recommended solution is Alternative #1. Developing new wells and water storage will alleviate any future curtailments or issues from compliance orders. A new ground water source is not regulated by the Division of Water Rights and therefore would not be shut off during a drought year.

2. DETAILED SCOPE DESCRIPTION:

A Source Capacity study will need to be completed prior to any work. Once completed, the following will need to be purchased or upgraded.

The new water system will include:

Site Development

Earthwork

Drainage

Concrete paving, walks, parking, curbs & gutters

Security site lighting

Fencing with gates

Utilities

Water Tanks (120,000 gallons)

Domestic water well w/treatment & storage tanks

Electrical Power

Pump Control Panels, conductors and conduits

LPG/Natural Gas w/tank for buildings

Buildings

Pump/Storage/Treatment Building (650 SF)

3. BASIS FOR COST INFORMATION:

The attached estimate, prepared by CAL FIRE Technical Services, is based on facility planning cost per square foot information.

4. FACTORS/BENEFITS FOR RECOMMENDED OTHER THAN THE LEAST EXPENSIVE ALTERNATIVE:

Failure to implement the facility improvements outlined in this submittal will impact the operation of this mission-critical facility.

5. COMPLETE DESCRIPTION OF IMPACT ON SUPPORT BUDGET:

Maintenance and repair costs for the new facility will be relatively low at the beginning of its 50-year lifespan.

6. IDENTIFY AND EXPLAIN ANY PROJECT RISKS:

There are no risks associated with completion of this project.

7. LIST REQUIRED INTERDEPARTMENTAL COORDINATION AND/OR SPECIAL PROJECT APPROVAL (INCLUDING MANDATORY REVIEWS AND APPROVALS, E.G. TECHNOLOGY PROPOSALS):

This project will require a CEQA compliant environmental review.

E. CONSISTENCY WITH CHAPTER 1016, STATUTES OF 2002 – AB 857:

1. Does the recommended solution (project) promote infill development by rehabilitating existing infrastructure and how?

The recommended solution promotes infill development by rehabilitating existing infrastructure and facilities.

2. Does the project improve the protection of environmental and agricultural resources by protecting and preserving the state's most valuable natural resources? Explain.

Yes. The site selection process includes environmental considerations. A state environmental planner inspects potential sites for relocation and provides generalized input and recommendations to the acquisition team to avoid acquiring a parcel for facility construction which would result in significant environmental effects or loss of prime agricultural resources. During the acquisition phase of the project, the Department completes intensive environmental review of the project pursuant to the California Environmental Quality Act (CEQA). This process could include changes to the project to avoid impacts and/or incorporating mitigation measures to eliminate or reduce the severity of environmental impacts.

3. Does the project encourage efficient development patterns by ensuring that infrastructure associated with development, other than infill, support efficient use of land and is appropriately planned for growth? Explain.

Yes. CAL FIRE facilities are strategically located to meet the Department's mission. To the maximum extent possible, CAL FIRE prefers to develop close to existing roads, water, sewer, and other utilities to promote efficient development in the area and to mitigate future support costs for facility maintenance.

Attachment

1. Project Cost Estimate



**DEPARTMENT OF FORESTRY AND FIRE PROTECTION
CAL FIRE - TECHNICAL SERVICES
ONE-PAGE ESTIMATE**



PROJECT:	Ishi Conservation Camp - Domestic Drinking Water System	CAL FIRE EST. #:	16/17 MII
LOCATION:	TEHAMA COUNTY	EST. / PROJ. CCCI:	6077
DESIGNED BY:	TBD	ESTIMATE DATE:	2/1/2015
MANAGED BY:	TBD	EST. PREPARED BY:	SR/MS
PROJECT DIRECTOR:	TBD	DOF PROJ. ID NO.:	30.80.000

DESCRIPTION

Replace current drinking water system that is supplied from a spring to drinking water supplied by a well. This project will include; a study to determine location of wells and number of wells required to produce a minimum of 15,000 gallons per day; develop infrastructure to support new wells which includes, new water distribution valves and piping, new power and controls for well pumps, construct new pump house for distribution pumps, water treatment systems and control panels, upgrade and increase domestic water storage to 150,000 gallons. Site work will include construction of storage tank slabs, trenching, sidewalks, paving, fencing and other appurtenances.

ESTIMATE SUMMARY

DIRECT COST

Site work		\$567,000
Storage/Pump/Treatment Bldg	7,164 sf	\$130,000

ESTIMATED TOTAL CURRENT COSTS: \$697,000

Adjust CCCI from 6069 to 6069 \$0

ESTIMATED TOTAL CURRENT COSTS June 2015: \$697,000

Escalation to start of construction 12 Months @ 0.42%/month: \$35,000

Escalation to midpoint of construction 0 Months @ 0.42%/month: \$0

ESTIMATED TOTAL CONTRACTS \$732,000

Contingency at 5% \$37,000

ESTIMATED TOTAL CONSTRUCTION COST \$769,000

Acquisition Phase \$0

Preliminary Plan Phase Indirect Costs (4% of Estimated Total Contracts): \$29,000

Working Drawing Phase Indirect Costs (4% of Estimated Total Contracts): \$29,000

Construction Phase Indirect Costs (6% of Estimated Total Contracts): \$44,000

ESTIMATED INDIRECT COSTS: \$102,000

TOTAL ESTIMATED PROJECT COST \$871,000