

STATE OF CALIFORNIA  
CAPITAL OUTLAY  
BUDGET CHANGE PROPOSAL (COBCP)  
COVER PAGE (REV 06/15)

DEPARTMENT OF FINANCE  
915 L Street  
Sacramento, CA 95814  
IMS Mail Code: A15

BUDGET YEAR 2016-17

BUSINESS UNIT: 3540 COBCP NO. 2 PRIORITY: 2 PROJECT ID: 0000680

DEPARTMENT: Department of Forestry and Fire Protection

PROJECT TITLE: Fenner Canyon Conservation Camp: Replace Water Boilers

TOTAL REQUEST (DOLLARS IN THOUSANDS): \$376 MAJOR/MINOR: Minor

PHASE(S) TO BE FUNDED: PWC PROJ CAT: CRI CCCI/EPI: 6069

SUMMARY OF PROPOSAL:

The project will replace the two existing aged and non-compliant water boilers which provide heat and hot water to the inmate dormitory. The project includes replacement of boilers, heat exchange radiators, water softener and a building to house equipment and related appurtenances with California Air Resources Board compliant fixtures.

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

Paula... 1/4/16  
REVIEWED BY DATE

Stephen Benson 1/7/16  
DEPARTMENT DIRECTOR DATE

Paula... 1/7/16  
AGENCY SECRETARY DATE

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DOF ANALYST USE

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

Original Signed by:  
Stephen Benson

PPBA \_\_\_\_\_ DATE SUBMITTED TO LEGISLATURE: 1/7/16

A. PURPOSE OF THE PROJECT:

*Background/History:* Fenner Canyon Conservation Camp (FCCC) is located in northeastern Los Angeles County, approximately 12 miles south and 15 miles east of the City of Palmdale. The camp is located on 43.75 acres owned by the United States Forest Service (USFS) under a Special Use Permit. The current permit term is valid through 12/31/2030.

FCCC was first developed and inhabited in 1902 in support of Big Horn Mine Company mining operations. In 1964, as mine activity ended, the Job Corp opened a center at the current location of FCCC. Job Corp vacated the facility in 1968. The camp remained vacant until 1970 when it was reopened as a Youth Camp for Los Angeles County. In 1979 the facility was transferred to the California Youth Authority and a partnership formed with CAL FIRE to operate the facility. In 1990 the Youth Authority withdrew from Fenner Canyon Youth Conservation Camp. In the early spring of 1991, Fenner Canyon reopened as FCCC, with 100 inmates in partnership with Department of Corrections and Rehabilitation (CDCR).

*Problem:* The FCCC gas-fired boilers and related heat exchange system issue is a function of two major problems: South Coast Air Quality Management District (SCAQMD) compliance and threat of boiler failure leaving the inmate population without heat to the dormitory and hot water for hygiene.

*SCAQMD Compliance* – SCAQMD Rule 1146.2 applies to the FCCC boiler units. Per Rule 1146.2: "On or after January 1, 2006, no person shall operate in the District any unit more than 15 years old, based on the original date of manufacture as specified in paragraph (c)(6), with a rated heat input capacity greater than 400,000 Btu per hour but less than or equal to 1,000,000 Btu per hour manufactured prior to January 1, 2000, which does not meet the emissions limits required by paragraph (c)(1)." The existing boilers are over 25 years old and do not meet the emissions standards outlined by Rule 1146.2. Additionally, because of the unavailability of appropriate parts and/or cost to manufacture specialized parts, the existing boilers are unlikely candidates to be retrofitted to meet the emissions standards outlined by Rule 1146.2.

Unit personnel have found it increasingly difficult and expensive to make repairs to the existing boiler units as a result of the lack of replacement parts compliant with Rule 1146.2. Annual cost to maintain the boiler units has varied, during the last five years, between \$5,000 and \$18,000. Boiler fire tubes are typically replaced every two years as a result of mineral clogging and damage to copper tubing due to hard water.

*Threat of Boiler Failure* – FCCC is in a very remote area of Los Angeles County which can be difficult to access during winter months. The boiler units provide heat and hot water to the inmate dormitory. In the event of a boiler failure during winter months the inmate dormitory would be left without heat and/or hot water for an extended period of time. The loss of heat and/or hot water is problematic as CAL FIRE is required to provide utilities to the facility and CDCR has legal obligations with respect to minimum hygiene and comfort standards for their inmate population.

This threat is compounded by the possibility that roads to the camp may not be traversable during severe rain or snow events, or long periods of freezing temperatures, essentially stranding the inmate population without heat or hot water in subfreezing temperatures. The two remote access

roads are not among the first to be maintained (plowed) by Cal Trans, Los Angeles County, or Federal personnel in large snow events.

**B. RELATIONSHIP TO THE STRATEGIC PLAN:**

This project relates to the following goals in the California Department of Forestry and Fire Protection's 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.

**C. ALTERNATIVES:**

1. Replacement of the two water boilers and related appurtenances. Advantages:

Replacement of the two existing boilers will significantly reduce the frequency and risk of heater and hot water distribution system failures. Additionally, threats of shutdown and/or repair time of the heater and hot water system for the 100 inmates housed will be reduced. SCAQMD compliance will be achieved; potential violations and fines will be avoided.

Disadvantages:

This alternative has no disadvantages.

2. Repair and/or replace internal parts of the existing boilers to meet SCAQMD standards.

Advantages:

Repair and/or replacement of internal components to the existing boilers will bring the boilers into compliance with SCAQMD Rule 1146.2 and may reduce the frequency of failures and downtime for repairs in the short-term.

Disadvantages:

This alternative would require a substantial investment, similar to that of replacing the existing boilers and related heat exchange system while providing only a short-term solution. Updating components to meet SCAQMD requirements will not address the boiler age. Existing boilers will continue to require a significant annual investment to operate and threat of failure will not be reduced in the long-term.

3. Defer this project.

Advantages:

This alternative has no advantages.

Disadvantages:

This alternative does not correct the deficiencies and threat of boiler failure at Fenner Canyon CC. Deficiencies and failure will likely impede the ability of CAL FIRE personnel to provide emergency response and a healthy environment for inmates and staff. The threat of potential fines and citations resulting from non-compliance to SCAQMD Rule 1146.2 would remain.

This alternative adds to CAL FIRE's backlog of critical capital improvements. The project cost will increase when undertaken in the future.

D. RECOMMENDED SOLUTION:

1. WHICH ALTERNATIVE AND WHY:

The recommended solution is Alternative #1. Replacement of the existing boilers, heat exchange radiators, related appurtenances, and installation of a pre-boiler water softener system will provide Fenner Canyon CC inmates and staff a long-term reliable heater and hot water system that will not require frequent upkeep and downtime that risks functionality of the Camp.

2. DETAILED SCOPE DESCRIPTION:

The replacement of the existing boilers with a new water boiler and a new heater boiler, modifications to boiler room which will include the following:

Site Development

Demolition  
Earthwork  
Drainage  
Roads, Curbs and Paving  
Gutters and Walks  
Site Lighting  
Miscellaneous (Permits)

Utilities

Boilers & Heat Exchange  
Water Softener System  
Water System  
Electrical Power  
LPG/Natural Gas  
Miscellaneous

Buildings

Updates to the Existing Boiler Room  
New Water Softener Equipment Building

3. BASIS FOR COST INFORMATION:

The estimated costs are based on the actual costs of other CAL FIRE projects, with similar scope elements, that were recently completed or are currently underway, and costs estimates from local vendors.

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

Assuring the immediate and long-term operational efficiency of this facility, its ability to meet the mission needs of the department, the safety of state personnel and inmates, and protection of the local environment by reducing the probability of a debilitating boiler failure are the most important factors influencing recommended solution. The least expensive alternative is to defer the project, which results in no cost to the state's General Fund. However, failure to implement the facility improvements outlined in this submittal will impact the operation of this mission critical facility. The recommended solution is driven by the need to effectively deliver reliable critical emergency response resources to the state and provide for the safety of state personnel and inmates located at the 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 30-year lifespan.

6. IDENTIFY AND EXPLAIN ANY PROJECT RISKS:

There are no risks associated with the completion of this project at this time; however, the risk of deferring this project includes failure of mission critical facility infrastructure and the potential hazard to the safety of inmates.

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

Replacement of the existing boilers with new equipment must be approved by USFS (Property Owner) and must comply with CEQA/NEPA. All proposed work must be coordinated with CDCR for security and inmate requirements compliance.

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.

The project helps protect and preserve the State's most valuable natural resources by ensuring Fenner Canyon CC remains able to meet peak demand emergency incident workload and response times.

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:	Fenner Canyon CC – CARB Compliance	CAL FIRE EST. #:	16/17 MI2
LOCATION:	LOS ANGELES COUNTY	EST. / PROJ. CCCI:	6077
DESIGNED BY:	TBD	ESTIMATE DATE:	2/1/2015
MANAGED BY:	TBD	EST. PREPARED BY:	SR/MM
PROJECT DIRECTOR:	TBD	DOF PROJ. ID NO.:	30.80.000

**DESCRIPTION**

The project will replace the two existing aged and non-compliant water boilers, heat exchange radiators, water softener and building to house equipment, and related appurtenances with CARB compliant fixtures. The two existing boilers provide heat and hot water to in the inmate dormitory.

**ESTIMATE SUMMARY**

**DIRECT COST**

Site work	1 ls	\$114,000
Boilers & Heat Exchange	1 ls	\$130,000
Water Softener System	1 ls	\$25,000
Updates to Existing Boiler Room	1 ls	\$10,000
Water Softener Equip. Building	150 sf	\$15,000

**ESTIMATED TOTAL CURRENT COSTS:** \$294,000

Adjust CCCI from 6069 to 6069 \$0

**ESTIMATED TOTAL CURRENT COSTS June 2015:** \$294,000

Escalation to start of construction 12 Months @ 0.42%/month: \$15,000  
Escalation to midpoint of construction 0 Months @ 0.42%/month: \$0

**ESTIMATED TOTAL CONTRACTS** \$309,000

Contingency at 5% \$15,000

**ESTIMATED TOTAL CONSTRUCTION COST** \$324,000

Preliminary Plan Phase Indirect Costs (4% of Estimated Total Contracts): \$12,000  
Working Drawing Phase Indirect Costs (4% of Estimated Total Contracts): \$12,000  
Construction Phase Indirect Costs (6% of Estimated Total Contracts): \$19,000  
CEQA/NEPA \$9,000

**ESTIMATED INDIRECT COSTS:** \$52,000

**TOTAL ESTIMATED PROJECT COST** \$376,000





<b>STATE OF CALIFORNIA</b>		<b>Budget Year 2016-17</b>	
<b>CAPITAL OUTLAY BUDGET CHANGE PROPOSAL (COBCP)</b>		Proj ID:	0000680
<b>SCOPE/ASSUMPTIONS WORKSHEET</b>			
Department Title:	Department of Forestry and Fire Protection	BU/Entity:	3540
Project Title:	Minor Capital Outlay	Program ID	2485
Program Category:	Critical Infrastructure Deficiency	COBCP #:	1 & 2
Program Subcategory:		Priority:	1 & 2
		MAMI:	MI
<p>Two minor capital outlay projects as reflected in the attached COBCPs.</p>			