State of California - The Resources Agency DEPARTMENT OF PARKS AND RECREATION PRIMARY RECORD	Primary #47-004015 (Klamath River Hydroelectric Project) HRI # Trinomial NRHP Status Code
Other Listings Review Code	Reviewer Date

 Resource Name or #: Copco No. 2 Hydroelectric Development Historic District

P1. Other Identifier: Copco No. 2 Hydroelectric Development Historic District

***P2. Location:** ☒ **Unrestricted**

***a. County** Siskiyou

***b.** USGS 7.5' Quad Copco, CA Date 2018 T 48N; R 4W; SW 1/4 of SW 1/4 of Sec 29; Mount Diablo B.M. See Continuation Sheet.

c. Address _____ City _____ Zip _____

d. UTM: Zone 10 T, 554669mE/4647646mN See Continuation Sheet.

e. Other Locational Data: N/A

***P3a. Description:**

The Copco No. 2 Historic District is part of the larger, discontiguous Klamath Hydroelectric Project (RHP) Historic District. The KHP is a previously documented Historic District within Southern Oregon and Northern California. It consists of seven hydroelectric developments. Discrete Historic Districts within the KHP include Copco No. 1 (California), Copco No. 2 (California), J.C. Boyle (Oregon), and Iron Gate (California). A detailed description of Copco No. 2 is provided in the DPR 523D (District Record) form.

Copco No. 2 is a hydroelectric power-generating development was built by the California-Oregon Power Company (Copco) between 1924 and1925. In addition to generating hydropower, the Copco No. 2 Dam furnishes tailwater, the water at the dam's downstream side, for the upstream Copco No. 1 Powerhouse. Situated in a remote area of the Upper Klamath River basin in Siskiyou County, California, Copco No. 2 extends between River Mile (RM) 201.8 and RM 200.0. The development encompasses a concrete diversion dam, small reservoir, water conveyance system, powerhouse, as well as administration, operations, and support facilities (AECOM 2017:2-14).

Copco No. 2 is comprised of a dam, water conveyance system, powerhouse, former cookhouse/bunkhouse, Bungalow 1121, Fall Creek School, modern bunkhouse, ranch houses, and radio station [See **Site Map** and separate DPR 523A (primary record) forms and 523B (building, structure, object record) forms for each resource].

***P3b. Resource Attributes:** (HP21) Dam; (HP22) Lake/river/reservoir; (HP11) Engineering structure (powerhouse, water conveyance system; (HP19) Bridge (Daggett Road Bridge); (HP2) Single-family property (bungalow, ranch houses, modular residences); (HP3) Multiple-family property (former cookhouse/bunkhouse, bunkhouse); (HP4) Ancillary building (oil and gas storage house, maintenance building, garages, fuel service station); (HP13/HP15) Community center/social hall & Education building (Fall Creek School); (HP39) Other (radio station, control center).

***P4. Resources Present:** ☒ District ☒ Buildings ☒ Structures

P5a. Photograph:

P5b. Description of Photo: Copco No. 2 Dam, facing west (June 11, 2018).

***P6. Date Constructed/Age and Source:** ☒ Historic, 1924-1925

***P7. Owner and Address:**
PacifiCorp
825 NE Multnomah, Suite 1500
Portland, OR 97232

***P8. Recorded by:**
Shoshana Jones, AECOM
111 SW Columbia Street, Suite 1500
Portland, OR 97201

***P9. Date Recorded:** June 11, 2018

***P10.Survey Type:** Intensive Level

***P11. Report Citation**: Klamath River Renewal Corporation. 2021. Lower Klamath Project Built Environment Technical Report.

***Attachments:** ☒Location Map ☒Continuation Sheet ☒Building, Structure, and Object Record ☒District Record

P2b. Location/Township, Range, and Section (continued):

USGS 7.5' Quad Copco, CA Date 2018 Mount Diablo B.M.

Resource	Township	Range	Section
Dam	48N	4W	SW 1/4 of SW 1/4 of Sec. 29
Concrete-Lined Tunnel (Water Conveyance System)	48N	4W	SE 1/4 of SE 1/4 of Sec. 30
Wood Stave Pipe (Water Conveyance System)	48N	4W	SW 1/4 of SE 1/4 of Sec. 30
Concrete Tunnel (Water Conveyance System)	48N	4W	NW 1/4 of NW 1/4 of Sec. 31
Penstock (Water Conveyance System)	48N	4W	NE 1/4 of NW 1/4 of Sec. 31
Powerhouse	48N	4W	NE 1/4 of NW 1/4 of Sec. 31
Radio Station	48N	4W	NW 1/4 of NE 1/4 of Sec. 31
Former Cookhouse/Bunkhouse	48N	4W	L2 of Sec. 31
Bungalow 1121	48N	4W	L2 of Sec. 31
Fall Creek School	48N	4W	L2 of Sec. 31
Modern Bunkhouse	48N	4W	L2 of Sec. 31
Ranch House No. 1	48N	4W	L1 of Sec. 31
Ranch House No. 2	48N	4W	L1 of Sec. 31
Ranch House No. 3	48N	4W	L2 of Sec. 31
Ranch House No. 4	48N	4W	L2 of Sec. 31
Daggett Road Bridge	48N	5W	NE 1/4 of NE 1/4 of Sec. 36
Control Center	48N	4W	NE 1/4 of NE 1/4 of Sec. 31

P2d. Location/UTM (continued):

Resource	Zone	UTM
Dam	10 T	554669mE/4647646mN
Concrete-Lined Tunnel (Water Conveyance System)	10 T	553980mE/4647514mN
Wood Stave Pipe (Water Conveyance System)	10 T	553590mE/4647478mN
Concrete Tunnel (Water Conveyance System)	10 T	553289mE/4647326mN
Penstock	10 T	553198mE/4647279mN
Powerhouse	10 T	553185mE/4647280mN
Radio Station	10 T	553579mE/4647210mN
Former Cookhouse/Bunkhouse	10 T	553098mE/4646913mN
Bungalow 1121	10 T	552990mE/4646958mN
Fall Creek School	10 T	552860mE/4646776mN
Modern Bunkhouse	10 T	553099mE/4646943mN
Ranch House No. 1	10 T	553080mE/4647018mN
Ranch House No. 2	10 T	553051mE/4647017mN
Ranch House No. 3	10 T	552964mE/4646936mN
Ranch House No. 4	10 T	552948mE/4646913mN
Daggett Road Bridge	10 T	552669mE/4646955mN
Control Center	10 T	553185mE/4647280mN

***Resource Name or #:** Copco No. 2 Hydroelectric Development Historic District
D1. Historic Name: Klamath River Plant No. 2 D2. Common Name: Copco No. 2
D3. Detailed Description:

Copco No. 2 is a hydroelectric development built by the California-Oregon Power Company (Copco) in 1924-1925. In addition to generating hydropower, the Copco No. 2 dam furnishes tailwater, the water at the dam's downstream side, for the upstream Copco No. 1 Powerhouse. Situated in a remote area of the Klamath River Canyon in Siskiyou County, California, Copco No. 2 extends between approximately River Mile (RM) 201.8 and RM 200.0. The development encompasses a concrete diversion dam, small reservoir, water conveyance system, powerhouse, and administrative and operations facilities (AECOM 2017:2-14).

See Continuation Sheets.

D4. Boundary Description: The Historic District boundary is the Federal Energy Regulatory Commission (FERC) boundary for the Klamath Hydroelectric Project (see Klamath Hydroelectric Project location map). (See Location Map and Sketch Map)

D5. Boundary Justification: The boundary is consistent with the FERC boundary for the Klamath Hydroelectric Project.

D6. Significance:

Theme: hydroelectric development

Area: Southern Oregon and Northern California

Period of Significance: Copco No. 2 Historic District: 1925 – 1970; Klamath Hydroelectric Project Historic District: 1903 – 1970

Applicable Criteria: National Register of Historic Places (NRHP) Criterion A and Criterion C

See Continuation Sheets.

D7. References:

AECOM. 2017. Klamath River Renewal Project. California Environmental Quality Act (CEQA) and California and Oregon 401 Water Quality Certifications Technical Support Document. AECOM Technical Services, Inc.: Oakland, CA.

Boyle, John C. 1976. *50 Years On The Klamath*. Klocker Printery, Medford, Oregon. First printing 1976, second printing 1982.

Durio, Lori. 2003. Klamath River Hydroelectric Project District. State of California Department of Parks and Recreation. Primary Record #47-004015. Recorded July 2003 by L. Durio, CH2M Hill, New Orleans, LA. September.

Evening Herald [Klamath Falls, Oregon]. 1924. "Material Arrives For Copco Plant." January 15.

FERC (Federal Energy Regulatory Commission). 2007. Final Environmental Impact Statement for Hydropower License Volume I. Klamath Hydroelectric Project FERC Project No. 2082-027. FERC: Washington, DC.

HistoricAerials.com. 2018. https://www.historicaerials.com/ (accessed December 27, 2018).

See Continuation Sheets.

D8. Evaluator: Shoshana Jones

Date: June 11, 2018

Affiliation and Address: AECOM, 111 SW Columbia Street, Suite 1500, Portland, Oregon 97201

D3. Detailed Description (continued):

Copco No. 1 and Copco No. 2 operate together as load factoring facilities. Load factoring is a process whereby a facility pumps water during off-peak hours when electricity is inexpensive, and then releases the water during on peak hours when the value of electricity is very high. Copco No. 2 has a minimal storage reservoir; therefore, its operation is coordinated with Copco No. 1 releases (PacifiCorp 2004:6-2). Hydroelectric power at Copco No. 2 is generated by the force of water flowing through a water conveyance system between the dam and the powerhouse. The Copco No. 2 Dam at RM 201.5 lies approximately 0.3 mile downstream from the Copco No. 1 Dam. The Copco No. 2 Powerhouse is at RM 200.0, about 1.5 miles downstream from the Copco No. 2 Dam. California's border with Oregon and the Cascade-Siskiyou National Monument lies about 2 miles northwest of the dam, while Daggett Mountain's 1,075-foot peak lies about 1.7 miles to the south. Interstate 5 runs north/south about 13 miles to the west. The landscape surrounding the Copco No. 2 Dam is characterized by the narrow river canyon, basalt rock formations, pine trees, and other vegetation. Timber cribbing, perched in the canyon wall above the dam, is a remnant of the dam's construction. The dam is accessed from Copco Road, and a steep and narrow access road. About 1 mile downstream, the powerhouse and Copco Village, a residential area, are accessed from Copco Road and the Daggett Road Bridge over the Klamath River. Ager-Beswick Road, an extension of the Topsy Grade Road in Oregon, also provides powerhouse and village access from the south (USBR 2012:20-21; AECOM 2017:2-14).

The small, unnamed reservoir impounded by the Copco No. 2 Dam is approximately 0.3-mile-long and extends upstream to the Copco No. 1 Dam. The reservoir's total storage capacity is approximately 70 acre-feet at the normal operating river water system (RWS) elevation of 2,486.5 which ensures the minimum tailwater surface necessary for power generation at the Copco No. 1 Powerhouse (AECOM 2017:2-14). The narrow reservoir has steep slopes. The northern slope is developed with access roads from Copco No. 2 dam to the Copco No. 1 dam and powerhouse. This slope contains yellow star thistle, non-native grasses, and scattered native forbs. Exposed basalt outcrops form cliff faces on the northern slope; the southern slope is forested with willows, oaks, and conifers (AECOM 2017:3-23).

Copco No. 2 Village

Copco No. 2 Village is an area in the Copco No. 2 hydroelectric development near the Copco No. 2 Powerhouse. It contains buildings and structures for workers that date between circa 1925 and circa 2015. Located just southwest of the powerhouse, Copco No. 2 Village contains a bungalow (1925) and former cookhouse/bunkhouse (1941) associated with Copco No. 2's early years and other resources associated with the Pacific Power expansion phase (1961-1970): a modern bunkhouse (1964), a school (1965), and four ranch houses (1967-1968). There are additional modern buildings and structures.

During the original construction of the Copco No. 2 hydroelectric development, Copco established several camps to accommodate up to 1,200 laborers, including "mess shacks, sleeping quarters, [and] homes for the construction engineers and their families" (*News-Review* 1925). Historical photographs depict construction camps named Lower Camp/Camp 2, Middle Camp, Railroad Camp, and Camp 4 (PacifiCorp archive images CO2-11, CO2-77, CO2-102, and CO2-110). Lower Camp/Camp 2 was adjacent to the powerhouse site, while Middle Camp was uphill from the powerhouse. Railroad Camp, across the Klamath River and just northeast of the Daggett Road Bridge, was a grouping of tents and Camp 4 appeared to be downstream from Copco No. 1. Another likely camp is visible in 1925 images of the wood stave pipe construction site (PacifiCorp archive images CO2-95 and CO2-96).

Daggett Road is the primary circulation route through Copco No. 2 Village. The road is a PacifiCorp-owned private gravel access road with a roadway width of 12 to 14 feet. The road has a dirt segment with a width of 10 to 12 feet. A former Klamath Lake Railroad spur, the road helped convey construction equipment and materials used to build Copco No. 2 (PacifiCorp archive image CO2-22). The Daggett Road Bridge, a section of Daggett Road, was built circa 1924 as a trestle for the rail spur. The bridge crosses the Klamath River to provide access from Copco Road to the Copco No. 2 Powerhouse area. The road was likely converted to automobile use in the 1940s, when truck transportation became more widespread and Copco began removing its spur tracks. In the early 1960s, to accommodate higher river levels caused by the newly built Iron Gate dam, Pacific Power elevated the bridge by removing the deck, topping the river stone piers with board-form concrete, and installing a replacement deck. PacifiCorp rebuilt the bridge in 1983 using much of the existing bridge materials (PacifiCorp 2004:6-2; PacifiCorp archive image CO2-82). The reconstructed bridge was designed for an HS20 truck load (KRRC 2017:5-35). Copco No. 2's internal roads include Village Road, Powerhouse Road, and Schoolhouse Road (FERC 2007:3-496).

Copco No. 2 contains nearly all the buildings erected during the Pacific Power expansion phase (1961-1970). After acquiring Copco in 1961, Pacific Power initiated a decade-long construction program to interconnect its system with Copco transmission facilities, and improve overall service. Pacific Power's largest project during this period was the Iron Gate hydroelectric development (1962), about 7 miles downstream from Copco No. 2. During the expansion phase, Pacific Power built a modern bunkhouse, four ranch-style houses, and a new schoolhouse. There are also three modular residences from the mid-1980s and ancillary buildings from the 2000s.

D3. Detailed Description (continued):

Other features of Copco No. 2 include a water treatment shed tucked against the hillside along Daggett Road, just east of the intersection with Copco/Iron Gate Lake Road. Built circa 1924, the small, wood-frame shed, with corrugated metal roofing and siding, exposed rafter tails, and infilled windows, abuts the rocky hillside. The shed does not appear in its current location on any U.S. Geological Survey (USGS) maps, and is not mentioned in previous documentation. Although research did not uncover a specific built date, the shed's exposed wooden rafter tails and window trim are consistent with 1920s construction. A circa-2015 water tank is situated in a clearing off Daggett Road, about 300 feet uphill from the main part of Copco No. 2 Village. The cylindrical structure, mounted on a concrete foundation, has a conical top and is wrapped in corrugated metal siding. The tank measures approximately 12 feet high and 12 feet in diameter, and has a 10,000-gallon capacity. A water tank, noted as "WT," is depicted at the same location on the 1954 USGS map (another tank noted on the 1954 map was not observed during field work) (USGS 1954). Two "Water Tanks" are also noted (in handwriting) on the 1984 USGS map (USGS 1984). Although the USGS maps depict a water tank at this location since at least 1954, the current structure appears to be a recent replacement of an earlier tank. The concrete pad with smooth-finish coat exhibits little evidence of weathering or anchors and appears to be only a few years old.

Separate DPR 523A and 523B forms have been completed for the dam, water conveyance system, powerhouse, control center, bungalow, former cookhouse/bunkhouse, modern bunkhouse, Fall Creek School, ranch houses, and radio station. The resources described below are demolished or were built after the period of significance and are not documented in DPR 523A and 523B forms.

Oil and Gas Storage House (1925, demolished)

The oil and gas storage house, built circa 1925, was recorded in 2003 by Durio and Kramer, but has since been removed or demolished. Located northeast of the 1991 maintenance building (Durio 2003:85), the oil and gas storage was previously assigned a built date of circa 1925 (Kramer 2003b:11). The building was documented on site in a 2012 USBR report, but was no longer present during December 2017 fieldwork by AECOM (USBR 2012:20).

Garage (1971)

The garage, constructed in 1971, is a two-car garage designed for use by residents of buildings 1119 and 1120. Buildings 1119 and 1120 were operator bungalows constructed (without garages) in 1935 and demolished in 1985 due to their deteriorated condition (Pacific Power 1971). Constructed on a concrete foundation, the one-story, two-bay building measures 25 x 26 feet with 650 square feet. The low-pitched front-gable roof is clad with asphalt shingles and displays exposed rafter tails. Façade signage indicates the building's presents functions as a waste storage area and wood shop. Siding is composite wood lap. The eastern (primary) elevation contains two modern paneled overhead garage doors and a small louvered vent centered in the gable apex. A white sign with black lettering above the façade's south-side garage door reads "WASTE STORAGE AREA," and an adjacent sign indicates hazardous materials present. A wooden sign with the carved words "WOOD SHOP" is mounted above the façade's north-side garage door. A pedestrian door with a single inset pane is on the northern and southern elevations, and an open storage area with shed roof shelters lumber stacked adjacent to the northern elevation. Two aluminum slider windows are symmetrically spaced along the western (rear) elevation. A large metal storage container is adjacent to the southern elevation. Previous photographs indicate that the original garage doors and siding were replaced after 2003.

The garage was built after the period of significance and is recommended as not eligible/not contributing.

Modular Residence Nos. 1, 2 and 3 (circa 1985)

Modular Residence No. 1 is immediately west of the schoolhouse and oriented facing northeast. The worker residence is the only modular residence visible on a 1984 USGS map, indicating a slightly earlier construction date than Modular Residence Nos. 2 and 3 (USGS 1984). Kramer (2003b:17) identifies circa 1985 as the construction date for all three modular residences. The address for Modular Residence No. 1 is 19038 Daggett Road (same as the Fall Creek school), as indicated by metal numbers mounted on the exterior wall adjacent to the front door. The prefabricated one-story, ranch-style house has a rectangular plan, front porch, low-pitched side-gable roof with moderately overhanging eaves, and attached two-car garage. The roofing is corrugated metal, and the siding is wood sheet with simulated board-and-batten. Fenestration consists of the original wood front door and aluminum slider windows. The fenced yard has a concrete masonry unit (CMU) structure that contains water system tanks.

PacifiCorp (2004) notes that, in 1985, the company "replaced both operators' cottages," but does not indicate which ones. Based on research and field survey, it appears that Modular Residence Nos. 2 and 3, built simultaneously at the end of a private drive, are the "operators' cottages" referenced in the PacifiCorp report.

Modular Residence No. 2 is at the end of a private drive off Daggett Road, approximately 500 feet south of the Klamath River and 180 feet west of Modular Residence No. 1. The street address is 19028, as indicated by metal numbers mounted to the western elevation. The one-story, ranch-style house faces southeast and has an L-shaped plan, cross-gable roof, detached garage, and

D3. Detailed Description (continued):

CMU foundation. The roofing is standing-seam sheet metal with a metal chimney, and the siding is T-111 sheets. Windows are primarily large vinyl frame sliding.

Modular Residence No. 3 is at the end of a private drive off Daggett Road, approximately 500 feet south of the Klamath River and 35 feet west of Modular Residence No. 2. The street address is 19030, as indicated by metal numbers mounted to the southern elevation. As a virtual mirror image of Modular Residence No. 2, the one-story, ranch-style house faces east and has an L-shaped plan, cross-gable roof, and attached garage. Windows are primarily vinyl sliders and a metal slider.

The modular residences were constructed after the period of significance and are recommended as not eligible/not contributing.

Maintenance Building (1991)

The Maintenance Building, built in 1991, is near the southwestern side of the substation, and is oriented facing southeast (PacifiCorp 2004:6-2). The large, five-bay building has a low-pitched side-gable roof, standing-seam sheet-metal roofing, corrugated metal siding, and concrete foundation. The fenestration, including overhead garage doors, pedestrian doors, and windows, is metal. The building was constructed after the period of significance and is recommended as not eligible/not contributing.

Substation (circa 2000)

The substation was substantially expanded in 1964 with a new switchyard; however, a destructive fire in the early 2000s required substation reconstruction and installation of new equipment.

Modern Garage (circa 2009)

The modern garage, built circa 2009, is situated in Copco Village near Ranch House Nos. 1 and 2, but does not appear to be associated with a particular residence. The one-story, one-car garage has a low-pitched front-gable roof with asphalt shingles, and rests on a concrete foundation. Oriented facing west, the garage is characterized by the modern metal panel overhead garage door centered along the primary (western) elevation. Siding is T-111, and the only other fenestration is a modern metal pedestrian door along the northern elevation. A large metal storage container is adjacent to the southern elevation. The estimated construction date for the modern garage is based on the fact that it was not mentioned by Durio or Kramer in 2003; is absent from a 2005 aerial photograph of the site; and appears in a 2009 aerial photograph (historicaerials.com).

The modern garage, constructed after the period of significance, is recommended as not eligible/not contributing.

Fuel Service Station (circa 2010)

The fuel service station consists of two ConVault brand tanks: a 500-gallon diesel fuel tank with pump, and a 1,000-gallon unleaded fuel tank with pump. The station first appears in a 2010 aerial photograph of Copco Village, and was likely installed around that time.

The station was constructed after the period of significance and is recommended as not eligible/not contributing.

D6. Significance (continued):

[This form incorporates by reference the Klamath Hydroelectric Project Historic Context Statement by George Kramer, which provides a detailed corporate history of the California Oregon Power Company (Copco) and the region's economic and industrial development (Kramer 2003a).]

As a part of its FERC relicensing application in 2003, PacifiCorp, the current owners and operators of the Klamath Hydroelectric Project,[1] recognized the KHP as an NRHP-eligible historic district for its significant association with the industrial and economic development of Southern Oregon and Northern California (Kramer 2003a, 2003b). To support this recognition, PacifiCorp completed a historic context statement for the KHP that provided background information as a prelude to conducting a review of potential historic significance under NHPA Section 106 and as well as a Request for Determination of Eligibility report for the KHP (Kramer 2003a; Kramer 2003b). PacifiCorp offered recommendations as to whether these "complexes" and their resources were eligible for the NRHP and defined the period of historic significance for the KHP as 1903–1958 and hired CH2M Hill in September 2003 to complete California and Oregon survey inventory forms that documented the overall KHP District and the seven hydroelectric developments using the numbering the numbering convention and evaluation established in the Request for

[1] The Link River Dam is owned by the USBR and is not included in the Klamath project license. However, Kramer identifies the dam as part of the Klamath hydroelectric system (Kramer 2003a:36).

Determination of Eligibility (Durio 2003a; Durio 2003b) (see attached Oregon Inventory of Historic Properties Section 106 Documentation Form and State of California Department of Parks and Recreation [DPR] 523 form). On March 16, 2004, the Oregon SHPO agreed with PacifiCorp's determinations of eligibility within the State of Oregon for resources that would be affected by the proposed FERC relicensing (OR SHPO 2004). The SHPO concurrence, therefore, solely included the Link River Complex, Keno Dam Complex, and the J.C. Boyle Complex. The CA SHPO never provided comments on the eligibility of resources in California, but the KHP historic district, as well as the four historic districts within its boundaries in California and their contributing resources, are presently identified by the KHP's DPR primary number (47-004015), which was assigned by the California SHPO in 2003. In addition, the California SHPO has assigned individual primary numbers to the Copco No. 1 Powerhouse (47-002267), Copco No. 1 guest house remains (CA-SIS-2824), and Copco No. 2 Powerhouse (47-002266).

With respect to the current Project the Copco No. 1, Copco No. 2, and J.C. Boyle complexes, along with most of their primary components, were identified as contributing to the eligible KHP historic district. In contrast, Iron Gate Complex and its constituent resources (1962) and the Iron Gate fish hatchery (1966) were recommended as non-historic and non-contributing. The Oregon SHPO concurred with the eligibility determinations related to J.C. Boyle complex (OR SHPO 2004). The California SHPO did not provide concurrence for the eligibility determinations related to Copco No. 1, Copco No. 2, and the Iron Gate complexes, or for the Fall Creek hatchery, which was included in the evaluations of Fall Creek hydroelectric development. As part of a separate project to alter the crest of the Iron Gate Dam in 2003, PacifiCorp determined that the Iron Gate Complex was not eligible for the NRHP as it had yet to attain 50 years of age and was not of exceptional importance. The California SHPO agreed with that determination on May 28, 2003 (CA SHPO 2003).

Period of Significance

The previously proposed period of significance ends in 1958. Kramer reasoned that, based on the National Park Service's "50-year rule" for historic-era properties, the 2006 FERC license renewal for the Klamath Hydroelectric Project would typically invoke 1956 as the period's closing date. The 1956 date would encompass "all the main generation resources built prior to World War II [Copco No. 1 and Copco No. 2] and defin[e] both the J.C. Boyle and Iron Gate developments, dated from 1958 and 1962, respectively, as non-historic" (Kramer 2003a:57). Consequently, Kramer proposed extending the period of significance end date two years beyond the "50-year rule" to encompass construction of the J.C. Boyle hydroelectric development and reflect important post-war project development (Kramer 2003a:57-58). Although the 1958 end date included J.C. Boyle within the period of significance, it excluded the Iron Gate hydroelectric development, completed in 1962.

Now that 17 years have elapsed since the 2003 surveys, AECOM recommends extending the KHP's period of significance end date to 1970. This would encompass significant system evolution that occurred during the decade following Copco's 1961 acquisition by Pacific Power and Light Company. Significant projects of this period include the Iron Gate hydroelectric development (1962), which was part of the original Klamath hydroelectric project survey in the early twentieth century, and the Iron Gate fish hatchery (1966). The year 1970 also marks completion of the construction program that Pacific Power undertook after acquiring Copco to modernize its power transmission facilities and integrate them with the existing Copco system (1961-1970). This system evolution reflects how the long-term vision of the Klamath Hydroelectric Project's original engineers had finally come to fruition.

Additionally, PacifiCorp's 2003 studies were based on a survey of the hydroelectric development resources that had the potential to be affected by the FERC relicensing at that time and excluded non-hydroelectric resources, such as bridges and residences outside of the KHP development but within the current Project Area of Direct Impact (ADI). The study also omitted transmission lines originating within the hydroelectric developments and some of the associated power substations within this project's Area of Direct Impact (ADI).

Klamath River Renewal Corporation (KRRC) proposes to remove four hydroelectric developments: Copco No. 1, Copco No. 2, Iron Gate, and J.C. Boyle. Because more than five years has elapsed since these hydroelectric developments were recorded, this form updates the descriptions and photographs of the hydroelectric resources at the three California hydroelectric developments (Copco No.1, Copco No. 2, and Iron Gate) and evaluates each as an individual historic district, reevaluates each as a contributor to the larger KHP Historic District, as well as reevaluate the NRHP eligibility evaluation of the Iron Gate hydroelectric development since it is now over 50-years of age and falls with AECOM's expanded period of significance for the KHP Historic District (1903-1970).

D6. Significance (continued):

Historic Context

The Klamath Hydroelectric Project

Copco No. 2 is part of the Klamath Hydroelectric Project (KHP). The KHP consists of seven hydroelectric generation developments and their associated resources along the Klamath River and its tributaries in Klamath County, Oregon and Siskiyou County, California: (1) J.C. Boyle (1958), (2) Copco No. 1 (1912-1918, 1922), (3) Copco No. 2 (1924-1925), and (4) Iron Gate (1960-1962); as well as (5) Link River dam (1921), East Side Powerhouse No. 3 (1924), West Side Powerhouse (1907-1908, 1920s), (6) Keno dam (1966), and (7) Fall Creek powerhouse (1903). [The Link River dam is owned by the U.S. Bureau of Reclamation (USBR), and is not in the Klamath project license. However, Kramer identifies the dam as part of the Klamath hydroelectric system (Kramer 2003b:36)]. The project integrated large groupings of industrial elements—dams, powerhouses, water conveyance systems—into a landscape already layered with pre-contact and historic sites and activities. These sites and activities were associated with Native American customs and culture, subsistence and recreational fishing, as well as early industries such as ranching, mining, and logging. Project construction geographically and temporally overlapped with these sites and activities, causing significant impacts to the land and its peoples.

Origins of the Klamath Hydroelectric Project

The USBR originally designed the Klamath Project, authorized in 1905, to irrigate agricultural lands in the Upper Klamath Basin. Upper Klamath Lake and storage impounded by Link River Dam became the principal water sources enabling the Klamath Project to deliver water upriver of the hydroelectric developments (Kramer 2003a:21). Hydroelectric development in the Klamath Basin began in 1891 to furnish Yreka, California—the Siskiyou County seat—with electricity. Four years later, the Klamath Falls Light and Water Company built the East Side Power Plant No. 1 in a wooden building. The power plant was on the Link River's eastern bank, within the Klamath Falls, Oregon city limits. The plant supplied the city with its first electric power on November 1, 1895 (Boyle 1976:27). These ventures soon attracted competitors. The California Oregon Power Company (Copco) formed in 1912 through the merger of the Siskiyou Electric Power and Light Company (SEP&L), Klamath Falls Light and Water Company, and Rogue River Electric Company. The newly created company acquired the assets of the predecessor companies, including the hydroelectric facilities at Fall Creek. SEP&L had operated Fall Creek since its completion in 1903 (Kramer 2003a:12). In 1920, eight years after Copco formed, the company acquired the Keno Power Company, which operated the Keno hydroelectric development, built in 1911, and rebuilt in 1931 and 1966 (Kramer 2003a:5).

Copco Through World War II (1912-1945)

Copco's first project was the Copco No. 1 hydroelectric development, previously surveyed by the SEP&L, and known initially as the Ward's Canyon Dam Project. As construction progressed on Copco No. 1, the company's existing facilities were already powering major regional industries, including nearly all the large Northern California lumber mills and several large mining dredgers (*Sacramento Bee* 1917a). Copco completed the first phase of Copco No. 1 in 1918, including the dam, water conveyance system, and powerhouse. In 1920, the company reorganized, becoming the California – Oregon Power Company (with hyphen), and moved its headquarters from San Francisco to Medford. In 1922, the company completed Copco No. 1 by raising the dam, expanding the powerhouse, and adding a new generating unit. Three years later, in 1925, the company completed the Copco No. 2 hydroelectric development, downstream from Copco No. 1.

Between 1926 and 1947, the company was owned and operated by Standard Gas and Electric Company. Ownership was acquired through purchase of Copco's outstanding common stock. In 1947, to comply with provisions of the Public Utility Act of 1935, Standard Gas and Electric sold its Copco interests to an investment banking group, which in turn made a public offering of the acquired shares (*Mail Tribune* 1960). During the late 1920s and 1930s, after completion of Copco No. 1 and Copco No. 2, Copco continued investigating the regional power potential of the Klamath, Rogue, and Umpqua River basins (Boyle 1962). Throughout that period, Copco made progress on the Prospect hydroelectric project, located along the Rogue River in Jackson County, Oregon. Prospect's fourth and final powerhouse was completed in 1944 (Gauntt 2012).

The Post-World War II Era Through the Pacific Power Acquisition (1946-1960)

In the years following World War II, growth in population and expansion in industry spiked the regional demand for electricity. In response, Copco completed its first post-war project, the North Umpqua project, between 1947 and 1957. Led by chief engineer John C. Boyle, Copco doubled the company's capacity by building eight interconnected plants along the North Umpqua River east of Roseburg, Oregon: Clearwater No. 1 and No. 2, Fish Creek, Lemolo No. 1 and No. 2, Slide Creek, Soda Springs, and Toketee (McCready 1950). Meanwhile, the number of Copco customers jumped from about 40,000 to about 90,000 (*Mail Tribune* 1959). By 1950, well before completion of the project, Boyle and other Copco officials recognized that increased regional population and power demand would outpace the power supply, requiring new projects for future Copco customers (McCready 1950).

D6. Significance (continued):

Seeking to develop additional power facilities, Copco began to reassess the Klamath River's power generation potential, reigniting conflict over Klamath Basin water rights and irrigation, as well as fishing and recreation interests (Kramer 2003a:30-31). Despite strong regional opposition to additional Klamath River dams, Copco officials still regarded the Klamath as the best location for power development. In *50 Years on the Klamath*, Boyle wrote that, "Klamath Canyon was most attractive, being near the Copco load center where construction cost and transmission lines would be minimum [*sic*]" (Boyle 1976:53). Copco therefore advanced a 10-year, $70 million power development plan in the Klamath Basin. In addition to Big Bend No. 1 and No. 2 hydroelectric developments, the plan included Iron Gate, completed by Pacific Power in 1962. The other planned facilities at Salt Caves, Aspen Lake, Keno, Big Bend No. 3, Warm Springs, and Round Lake were never built (Guernsey 1957; Wynne 1957). Big Bend No. 1 and No. 2 were the first of these proposed projects (Wynne 1958).

The Big Bend development (renamed in 1962 after John C. Boyle) was part of the original Klamath hydroelectric project survey in 1911; however, plans for constructing Big Bend did not emerge until the 1950s, as power demands soared (Kramer 2003a:30-31). In 1958, when Big Bend began operations, Copco's residential customers had the highest average annual usage of any private utility nationwide. At that time, the Copco service area contained about 50,000 square miles and a population approaching 250,000. The service area included 72 communities and adjacent rural areas in Klamath, Jackson, Josephine, Lake, and Douglas Counties in Oregon, and in Siskiyou, Modoc, Del Norte, Trinity, and Shasta Counties in California. At that time, the regional economy was still based on logging, farming, ranching, and mining; industries with a long local history (*Mail Tribune* 1959).

Pacific Power Expansion Phase (1961-1970)

Pacific Power's June 1961 acquisition of Copco led to significant changes in regional hydroelectric power generation and transmission. (Most of the historic documentation refers to the joining of Pacific Power and Copco as a merger; however, the consolidation was technically an acquisition). After the acquisition, Pacific Power initiated a $500 million construction program, designed to last from 1961 to 1970. The program's goal was to integrate the two companies' systems, enhance power delivery to service areas, and accommodate workers involved in the expanded operations (Pacific Power 1961a:1).

When Pacific Power acquired Copco, the two companies were supplying power to a total of 415,000 customers. Pacific Power earned about 60 percent of its revenue in Oregon, and the rest in Washington, Idaho, Western Montana, and Wyoming. Copco earned about 80 percent of its revenue in Southern Oregon (71,000 customers), including Medford, Grants Pass, Roseburg, Klamath Falls, and Lakeview. Copco did the remaining 20 percent of its business in Northern California (21,000 customers), including Tulelake, Yreka, Weed, Dunsmuir, Alturas, and Crescent City (*San Mateo Times* 1960; *Bend Bulletin* 1960).

Pacific Power and Copco deemed consolidation necessary to generate sufficient funds for the expensive construction program, as evidenced by newspaper reports and Pacific Power documents. According to *The Bend Bulletin*, both companies had spent $243 million on new construction between 1955 and 1960, and "estimated they will be required to do more than $500 million between 1961 and 1970 to meet power needs" (*Bend Bulletin* 1960). In addition, Pacific Power advised its shareholders in a pamphlet dated January 10, 1961 that the consolidated system with Copco would create an "enlarged operating and financial base" to enable future construction (Pacific Power 1961a:2). When Copco president A.S. Cummins and Pacific Power board chairman Paul B. McKee jointly announced the merger, they stated that "directors of the companies have reached the conclusion that it is in the best interest of all concerned to join together the two neighboring systems and integrate their power resources and development programs" (*Bend Bulletin* 1960).

As part of Pacific Power's 1961-1970 construction program, the company built new, or improved existing, power facilities such as transmission lines and substations, some at former Copco sites. Certain work was related to construction of the Iron Gate Development, which was well under way by 1961 (Pacific Power 1961b:2). For instance, to power construction at Iron Gate, Pacific Power erected a temporary switchyard at the Copco No. 2 substation. Iron Gate received power transmitted from the Copco No. 2 powerhouse through the temporary switchyard and (transmission) Line No. 62.

By 1962, Pacific Power had energized its largest substation in Albany, Oregon. The substation was part of a 230-kV circuit to "provide a larger capacity interconnection" between Pacific Power and the former Copco system. A new line in the 230-kV system between Medford, Roseburg, and Albany would "permit fully integrated operation of the hydroelectric generating plants located in the Copco Division with the Company's other power sources, particularly on the Lewis River [in Washington] and the middle reaches of the Columbia River" (Pacific Power 1962:3).

In 1962, Pacific Power also completed Iron Gate as the final hydroelectric development along the Klamath River. Iron Gate was constructed to regulate downstream flows. In addition to fish catching and spawning facilities at the dam site, an associated fish hatchery complex – Iron Gate fish hatchery – was completed in 1966 about 0.25 mile downstream. Fish eggs collected at the dam site are transported to the complex, where they are hatched, and then moved into a series of raceways. The fish remain in the

D6. Significance (continued):

raceways until they are ready for release into the river.

As Pacific Power's construction program proceeded, officials monitored developments and continued planning for future improvements. Progress was interrupted by historic flooding along the Klamath River in December 1964 caused severe damage to the Copco No. 1 and Iron Gate facilities. The Copco No. 1 powerhouse and Iron Gate spillway channel had to be rebuilt. Soon thereafter, in 1966, Pacific Power completed construction of a new control house at Copco No. 2 to modernize operations by enabling supervisory (remote) control of the Copco No. 1 and Copco No. 2 power facilities.

In September 1967, company officials, including the Copco division manager, met in Yreka to evaluate system operations, review 1967 construction progress, and plan projects for 1968. Construction work in 1967 was estimated at over $500,000 and was implemented to build new power facilities and expand services (*Sacramento Bee* 1967). Projects in 1968 included $50,000 worth of upgrades at Copco No. 2 substation, including three new 69-kV transformers and a new circuit breaker to increase the available power in anticipation of local growth and increased power requirements at the Copco No. 2 development (*Sacramento Bee* 1968a). In 1970, Pacific Power budgeted around $926,000 for planned expansions and improvements in the Yreka District. One of the primary projects was a 10-mile, $297,000 transmission line between Ager and Copco No. 2. At Iron Gate, Pacific Power budgeted $45,000 to improve recreation facilities such as construction of a public boat ramp below Iron Gate dam, as well as installation of electric and water service at Camp Creek (*Sacramento Bee* 1970). During the 1960s, Pacific Power also built new single- and multi-family housing and a school to accommodate workers and their families based at Copco No. 2 (*Sacramento Bee* 1968b).

The reservoirs created by the Copco No. 1, J.C. Boyle, and Iron Gate developments are used by the public for outdoor recreation, such as fishing, camping, birdwatching, and hiking. Campgrounds and boat docks are scattered along the reservoir shorelines.

Copco No. 2 Construction Phase (1924-1925)

The Copco No. 2 Hydroelectric Development in Siskiyou County was completed in 1925, three years after the 1922 expansion of Copco No. 1. Preliminary survey, prospect, and foundation work for Copco No. 2 was completed while Copco No. 1 was under construction. Engineering reports indicated that Copco No. 1 would produce more power than the company's system could integrate. Consequently, Copco divided the development into Copco No. 1 and Copco No. 2. In 1911-1912, Copco No. 2 was planned as a hydroelectric development with a dam, open canal, tunnel, and four-unit powerhouse. Copco ultimately reduced the Copco No. 2 powerhouse from four to two generation units to handle the flow through the Copco No. 1 powerhouse (Boyle 1976:10,16).

Construction for Copco No. 2 began in January 1924, with R.R. Kermack as construction supervisor (*Evening Herald* 1924; *Mail Tribune* 1924a). In promoting the project, Copco vice president and general manager Paul B. McKee emphasized benefits that construction and operations would bestow on the regional economy: "In labor, freight, hauling, materials and equipment the new plant will bring a very substantial activity to this whole territory while the plant is being built" (*Mail Tribune* 1924b). Additionally, at the peak of construction, the project employed up to 1,200 workers, most of whom were local residents (*Mail Tribune* 1925b).

In May 1924, work began on the dam, camp, and railroad, and a temporary road to the dam site (PacifiCorp 2004:6-2). The dam construction site encompassed a quarry, concrete-mixing plant, bypass flume, and tramway for transporting concrete (New-Review 1925). Construction began on the powerhouse in June 1924 (*Mail Tribune* 1924b). At the powerhouse site was a concrete-mixing plant, tower for placing concrete, penstock excavation area, and construction camp areas (Roseburg New-Review 1925). By April 1925, Copco No. 2 project activity was nearing its peak, with about 1,000 workers on site (*Mail Tribune* 1925a). Copco generated interest and enthusiasm for the project by guiding local residents on tours of the work site. In keeping with Vice President McKee's promise to bring "very substantial activity to this whole territory," Copco purchased local materials such as lumber and cement whenever possible (*Mail Tribune* 1925a; *Mail Tribune* 1925b). The company used an estimated 200 to 300 carloads of cement, over 200 carloads of lumber, and about 30 carloads of reinforcing steel (*News-Review* 1925). The Beaver Portland Cement Company from Gold Hill, Oregon, furnished the cement; while local logging operations supplied the lumber (*Mail Tribune* 1925b). Copco's decision to order 5,000 barrels of cement from Gold Hill, about 13 miles northwest of Medford, drew praise from the *Mail Tribune* as promoting local economic growth: "This action on the part of the power company in buying a local product in preference to all other competitive products is to be commended and might well be cited as a striking example of what 'trading at home' really means" (*Mail Tribune* 1924c).

D6. Significance (continued):

The $3 million Copco No. 2 project was regarded as an important new power development that would assure "an abundance of electric power for this whole territory for every industrial and domestic need" (*Mail Tribune* 1925b). At that time, at least 70 percent of rural households in the Copco service area used electricity (*News-Review* 1926). As the project neared completion, local residents and businesses expressed interest and anticipation about this new source of electricity. In July 1925, a window display at Paul's Electric Store in Medford, Oregon, designed by People's Electric and Power Company, featured new electric ranges adjacent to "an exact model of the new Copco No. 2 power house, representing the production, and the two ranges representing the consumption, of power" (*Mail Tribune* 1925c). The exhibit highlighted how Copco No. 2 would meet increasing regional electricity demands. Copco also roused enthusiasm over the new hydro-development through company-produced motion pictures, such as "A Trip to Copco." The film depicted the construction of the Copco No. 1 and No. 2 plants, and screenings were in high demand at school and civic organizations throughout the Copco service area (*Mail Tribune* 1925d).

Completion of Copco No. 2 made additional power available not only for domestic and farm use, but for local lumber operations, which nearly all relied on electricity. Copco No. 2 also helped power the pumps used in irrigation systems (*News-Review* 1926). In 1925, Pacific Gas and Electric Company (PG&E) in California obtained a long-term lease for the Copco No. 2 plant's entire output (*News-Review* 1925). On completion of Copco No. 2, Copco boasted operation of 11 power plants along the Klamath, Rogue, and Umpqua Rivers (*Mail Tribune* 1925b).

The Copco No. 2 powerhouse was dedicated on July 5, 1925. Over 2,000 persons attended; mostly local power customers and shareholders from Oregon and California. The day's events included local music bands, a flag-raising, a dramatic dedication ceremony, and a cafeteria-style lunch consisting of "six thousand sandwiches" plus side-dishes and desserts. Tour guides walked visitors from the powerhouse site to the surge tank, where they descended into the newly built water conveyance system (*Mail Tribune* 1925e):

> Walking through huge cement and wooden pipes in the bowels of the earth is a novel experience and old and young, women and children formed a line and started the journey. As one walked along the tunnel you could not help but marvel at man's skill in producing such a masterful piece of engineering. Each foot of the way represented hard toil. Emerging from the upper end of the tunnel you find yourself at the bottom of the mammoth diversion dam, constructed of cement (*News-Review* 1925).

Visitors returned from the dam site to the powerhouse area on the "Copco-Thrall railroad," a section of the former Klamath Lake Railroad (*Mail Tribune* 1925e). A *News-Review* reporter who attended the dedication wrote that, "[I]t is a stupendous task to attempt to describe a three-million-dollar job on a thirty-dollar typewriter," and encouraged everyone to visit the new plant to see "what mere men have accomplished in order that we may all be able to push a button and have light" (*News-Review* 1925).

Evaluation: Eligible Historic District/Contributes to Klamath Hydroelectric Project Historic District

Period of Significance (Copco No. 1 Historic District): 1925 – 1970

Copco No. 2's period of significance begins in 1925, when its construction was completed, and ends in 1970, when Pacific Power finished the construction program designed to modernize its power transmission facilities and integrate them with the existing Copco system.

Criteria Analysis

NRHP Criterion A
Copco No. 2, the second hydroelectric development completed by the California Oregon Power Company, contributes to the Klamath Hydroelectric Project (KHP) Historic District. The KHP is locally (regionally) significant under NRHP Criterion A in the area of Commerce, for its role in the development of electrical generation and transmission services in the Southern Oregon – Northern California region, and in the area of Industry, for the role that development played in the region's economic expansion (Kramer 2003b).

As a component of the KHP, Copco No. 2 played a significant role in regional commerce for virtually doubling the output of the Copco system to meet growing regional demands for electricity. Copco No. 2 also significantly contributed to the development of regional industry in two ways. First, Copco No. 2 was a major development of a "regionally significant, locally owned and operated, private utility" (Kramer 2003a:58). Second, as part of the Copco system, Copco No. 2 supplied power that contributed to the early-twentieth-century growth of regional industries, such as timber, mining, and agriculture (Kramer 2003a:58).

NRHP Criterion B
Research does not indicate that Copco No. 2 is associated with any historically significant individuals under NRHP Criterion B.

D6. Significance (continued):

NRHP Criterion C
Two Copco No. 2 resources—the powerhouse and the Fall Creek School—are individually significant under NRHP Criterion C (Architecture). The powerhouse embodies the distinctive characteristics of an early-twentieth-century hydroelectric powerhouse, while the Fall Creek School is a rare example of a rural mid-century schoolhouse built in the contemporary architectural style.

The dam, powerhouse, and water conveyance system are collectively significant under NRHP Criterion C (Engineering) for embodying the distinctive characteristics of an early-twentieth-century hydroelectric development that implemented technological advances in its conception, design, and construction.

NRHP Criterion D
Copco No. 2 is not significant as a source (or likely source) of important information regarding history or prehistory. It does not appear likely to yield important information about historic construction materials or technologies and is not significant under NRHP Criterion D.

Integrity Analysis

The Copco No. 2 hydroelectric development retains integrity of location, design, setting, materials, workmanship, feeling, and association; and continues to convey its historic identity as an early-twentieth-century hydroelectric development. According to the Klamath Hydroelectric Project Historic Context, "Minor alterations, particularly to support facilities or improvements to generation facilities that enable their continued function within the system do not seriously reduce the ability to convey original character or association with historic events and themes under [the] context" (Kramer 2003a:57).

Location *is the place where the historic property was constructed or the place where the historic event took place.* Copco No. 2 retains integrity of location, because primary district components, such as the dam, water conveyance system, and powerhouse, remain in their original locations.

Design *is the composition of elements that constitute the form, plan, space, structure, and style of a property.* Copco No. 2 generally retains integrity of design. Certain alterations, which have occurred over time, do not substantially diminish integrity of design, such as replacement of the dam head gate in 1996. (See DPR 523A and 523B forms for Copco No. 2 dam. Alterations to the powerhouse building and equipment are also documented in the DPR 523B form for the Copco No. 2 powerhouse.) The alterations to the dam and powerhouse do not substantially diminish the overall integrity of design.

Setting *is the physical environment of a historic property that illustrates the character of the place.* The development retains integrity of setting. The Copco No. 2 dam was constructed 0.25 mile downstream from Copco No. 1 dam in a remote, undeveloped area of the Klamath River basin in Siskiyou County, California. The Copco No. 1 dam was completed in 1918 and expanded in 1922, three years before the completion of the Copco No. 2 Dam. The setting is characterized by the Klamath River, Copco Lake (impounded by Copco No. 1 dam), a small, unnamed reservoir between the Copco No. 1 and Copco No. 2 dams, the canyon's basalt rock formations, and the largely undeveloped landscape. The unimproved road providing access to the dam follows the alignment of the former Klamath Lake Railroad spur; originally used for Copco No. 1 construction, and later used for Copco No. 2 dam construction. Further downriver, the Copco No. 2 powerhouse and Copco Village setting are characterized by the Klamath River Canyon, the head of Iron Gate Reservoir, and the remote landscape.

Materials *are the physical elements combined in a particular pattern or configuration to form the historic property.* Copco No. 2 retains integrity of materials; particularly, the concrete elements in the dam, the wood staves in the water conveyance pipe, and the steel penstock sections.

Workmanship *is the physical evidence of the crafts of a particular culture or people during any given period of history.* Copco No. 2 retains integrity of workmanship, demonstrated by the wood stave pipe construction, the concrete powerhouse structure, and the functional interconnections between the dam, water conveyance system, and powerhouse.

Feeling *is the quality that a historic property has in evoking the aesthetic or historic sense of a past period of time.* The hydroelectric features—the dam, water conveyance system, and powerhouse—as well as the remote setting and intensive use of natural wood and industrial construction materials, convey the historic character of an early-twentieth-century hydroelectric development, thereby retaining integrity of feeling.

Association *is the direct link between a property and the event or person for which the property is significant.* The presence of the intact, historic physical features at this location directly links the property with early power development in the region, contributing to integrity of association.

D6. Significance (continued):

Copco No. 2 is an eligible Historic District that is locally (regionally) significant in the areas of Commerce and Industry and retains integrity. The Copco No. 2 Historic District also contributes to the larger KHP Historic District.

Copco No. 2 Historic District Resources	Function	Construction/ Alterations	Previous NRHP Recommendations and Criteria: A, B, C, D [by Kramer 2003a and Durio 2003]	AECOM NRHP Recommendations and Criteria: A, B, C, D
Copco No. 2	Work in conjunction with Copco No. 2 to generate hydropower for regional consumers.	1925	Contributing to KHP Historic District: Criterion A	Eligible Historic District: Criteria A and C. Contributes to larger KHP Historic District: Criteria A and C.
Dam	Impound small unnamed reservoir to enable generation of hydropower.	1925/1996 (head gate rebuilt)	Contributing: Criterion A	Contributes to Copco No. 2 Historic District: Criterion A. Dam, water conveyance system, and powerhouse collectively contribute to Copco No. 2 Historic District: Criterion C.
Water Conveyance System [Primary #47-002823: wood stave pipe]	Convey water impounded by Copco Lake and small unnamed reservoir through the dam and into the powerhouse.	1925	Contributing: Criterion A	Contributes to Copco No. 2 Historic District: Criterion A. Dam, water conveyance system, and powerhouse collectively contribute to Copco No. 2 Historic District: Criterion C.
Powerhouse [Primary # 47-002266]	House the massive machinery that generates the facility's power.	1925	Contributing: Criterion A	Contributes to Copco No. 2 Historic District: Criterion A. Dam, water conveyance system, and powerhouse collectively contribute to Copco No. 2 Historic District: Criterion C. Individually eligible: Criterion C.
Substation	Transform voltage for transmission and distribution of electrical power generated at powerhouse.	Rebuilt c.2000	Non-historic, non-contributing	Not eligible: Out of Period
Oil and Gas Storage House	Fuel storage facility.	circa 1925	Historic/Contributing (Kramer 2003a); Non-contributing (Durio 2003)	Demolished
Bungalow 1121	Worker residence.	1925	Contributing: Criterion A	Contributes to Copco No. 2 Historic District: Criterion A.
Former Cookhouse/Bunkhouse	Multi-worker residence and mess hall.	1941	Contributing: Criterion A	Not eligible: lacks integrity.

Copco No. 2 Historic District Resources	Function	Construction/ Alterations	Previous NRHP Recommendations and Criteria: A, B, C, D [by Kramer 2003a and Durio 2003]	AECOM NRHP Recommendations and Criteria: A, B, C, D
Radio Station	Microwave radio communication station building and radio tower operated by PacifiCorp.	circa 1950	Not previously documented.	Contributes to KHP Historic District: Criterion A.
Modern Bunkhouse	12-person worker residence.	1964	Non-historic, non-contributing	Contributes to Copco No. 2 Historic District: Criterion A.
Fall Creek School	Former school and community center. Present PacifiCorp training facility.	1965	Non-historic, non-contributing	Contributes to Copco No. 2 Historic District: Criterion A. Individually eligible: Criterion C.
Control Center	Automated control center for Copco No. 1 and Copco No. 2.	1966	Non-historic, non-contributing	Contributes to Copco No. 2 Historic District and KHP Historic District: Criterion A.
Ranch House Nos. 1, 2, 3 and 4	Worker residences.	1967 – 1968	Non-historic, non-contributing	Contribute to Copco No. 2 Historic District: Criterion A.
Garage	Vehicle storage.	1971	Non-historic, non-contributing	Not eligible: Out of Period
Daggett Road Bridge	Bridge over Klamath River between Copco Road and Copco No. 2 powerhouse area.	circa 1924, circa 1960 (raised), 1983 (rebuilt)	Not previously documented.	Not eligible: lacks integrity.
Modular Residence Nos. 1, 2, and 3	Worker residences.	circa 1985	Non-historic, non-contributing	Not eligible: Out of Period
Maintenance building	Vehicle/equipment maintenance and storage.	1991	Non-historic, non-contributing	Not eligible: Out of Period
Modern Garage	Vehicle storage.	circa 2009	Not previously documented.	Not eligible: Out of Period
Fuel Service Station	Fuel station.	circa 2010	Not previously documented	Not eligible: Out of Period

D7. References (continued):

Kramer, George
2003a. Klamath Hydroelectric Project. FERC No. 2082. Historic Context Statement. Prepared for PacifiCorp, Portland, Oregon. June.

2003b. Klamath Hydroelectric Project. FERC No. 2082. Request For Determination of Eligibility. Prepared for PacifiCorp, Portland, Oregon. October.

KRRC (Klamath River Renewal Corporation). 2017. Klamath River Renewal Project. California Environmental Quality Act (CEQA) and California and Oregon 401 Water Quality Certifications Technical Support Document. Submitted to: California State Water Resources Control Board and Oregon Department of Environmental Quality. September.

Mail Tribune [Medford, Oregon]
1924a. "Local and Personal." September 27.
1924b. "New Copco Plant Cost 4 Millions [*sic*]." June 2.

1924c. "Copco Helps Keep Home Fires Burning." April 1.
1925a. "Local Business Men [*sic*] Will Visit Copco Tomorrow." April 4.
1925b. "Good Program Announced For Copco Dedication." July 2.
1925c. "Range Displays By Local Shops." July 15.
1925d. "Local Briefs." May 20.
1925e. "Copco No. 2 Dedication a Unique Event, Will Be Shown in Movies." July 7.

News-Review [Roseburg, Oregon]
1925. "New 3 Million Dollar Plant California Oregon Power Co. Dedicated Sunday at Copco." July 6.

1926. "California Oregon Power Company Serves Entire Southern Oregon With Electric Energy, Giving Fine Service." January 1.

PacifiCorp. 2004. Klamath Hydroelectric Project. FERC No. 2082. Cultural Resources Final Technical Report and Associated Confidential Documents. Exhibit C. Construction History and Proposed Construction. February.

Pacific Power (Pacific Power & Light Company)
1962. Stockholder Pamphlet. July 10 (University of Oregon, Knight Library, HD9685.U7 P33 1962 July).

1971. PacifiCorp Archives, PDX.026971 (box), CA-655-A-9, Klamath River Projects (CA) – Copco #2 and Fall Creek Plants – New Garages – 1971 (folder), Pacific Power & Light Company Property Department Expenditure Requisition: Copco #2 Replace Deteriorated Garage, dated 5/20/71.

USBR (United States Bureau of Reclamation). 2012. Reclamation: Managing Water in the West. Detailed Plan for Dam Removal – Klamath River Dams. Klamath Hydroelectric Project. FERC License No. 2082, Oregon – California. USBR, U.S. Department of the Interior. Technical Service Center, Denver, Colorado. July.

USGS (United States Department of the Interior Geological Survey)
1954. Copco Quadrangle, California – Siskiyou Co. 15 Minute Series (Topographic).

1984. Copco Quadrangle, California – Siskiyou Co. 7.5 Minute Series (Topographic). Provisional Edition 1984.

Photographs:

Photograph 1. Copco No. 2 Dam, showing head gate and intake at left; facing downstream, 2018.

Photograph 2. The eastern end of the wood-stave pipe, where the water conveyance system transitions from the concrete-lined tunnel to the wood stave pipe; view facing southeast, 2018.

Photographs (continued):

Photograph 3. The water conveyance system transitions from the concrete tunnel to the double steel penstock; view facing northeast from powerhouse towards tunnel outlet in hillside, 2018.

Photograph 4. Powerhouse, eastern elevation, and penstocks; view facing southwest, 2020.

Photographs (continued):

Photograph 5. Copco No. 2 Substation, showing control house at left, large transformers in center, and powerhouse in right background; view facing north, 2018. The substation was rebuilt in the early 2000s.

Photograph 6. 1966 control center; view facing west, 2018. Substation switchyard at left and equipment spill shed at right.

Photographs (continued):

Photograph 7. 1971 garage, eastern (façade) and northern elevations; view facing southwest, 2018. Fuel Service Station at right.

Photograph 8. 1971 garage in 2003, before original garage doors were replaced and roof was extended to accommodate exterior wood storage (Durio 2003).

Photographs (continued):

Photograph 9. Maintenance Building (1991); view facing northwest, 2018. The Substation fence is visible at the right.

Photograph 10. Copco Village, with Powerhouse at right; view facing southwest towards Iron Gate Reservoir, 2020.

Photographs (continued):

Photograph 11. Copco Village; view facing west from water tank site, 2018. From left to right: 1971 garage; circa-2009 modern garage; and 1967 – 1968 Ranch Houses Nos. 2 and 1.

Photograph 12. Copco Village, showing from left to right: 1925 bungalow, southern end of the 1964 modern bunkhouse, roof of the 1941 former cookhouse/bunkhouse, 1967 Ranch Houses Nos. 3 and 4; view facing northeast, 2018.

Photographs (continued):

Photograph 13. Modular Residence No. 1 (circa 1984); view facing east, 2018.

Photograph 14. Modular Residence No. 2 (circa 1985); view facing west, 2018.

Photographs (continued):

Photograph 15. Modular Residence No. 3 (circa 1985); view facing north, 2018.

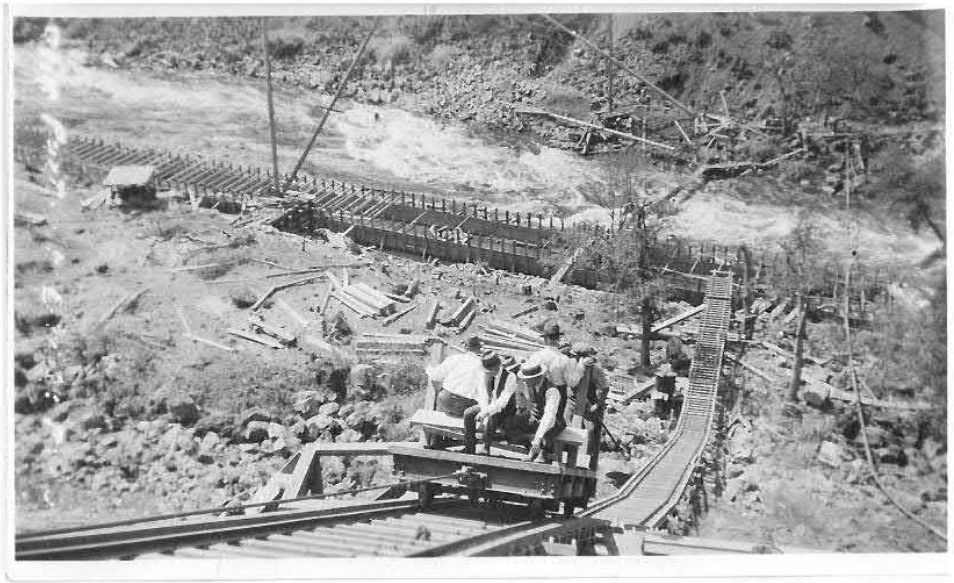
Photograph 16. Modern Garage (circa 2009); view facing northeast. Ranch House No. 1 is visible in left background, 2018.

Photographs (continued):

Photograph 17. Modern bunkhouse built in 1964 (left), and former cookhouse/bunkhouse built in 1941 (right); view facing northeast, 2020.

Photograph 18. Copco No. 2 Village, showing Daggett Road Bridge in foreground and from left to right in background: 1925 bungalow; 1967 Ranch Houses Nos. 3 and 4; 1965 schoolhouse; and circa 1985 Modular Residence No. 1, 2018.

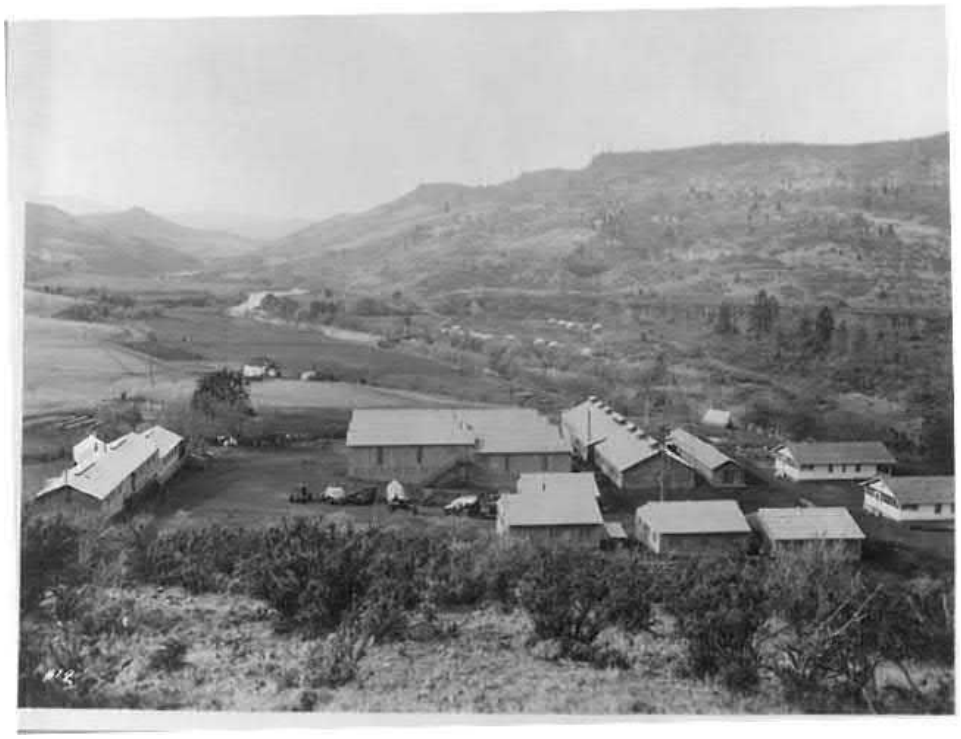
Photographs (continued):



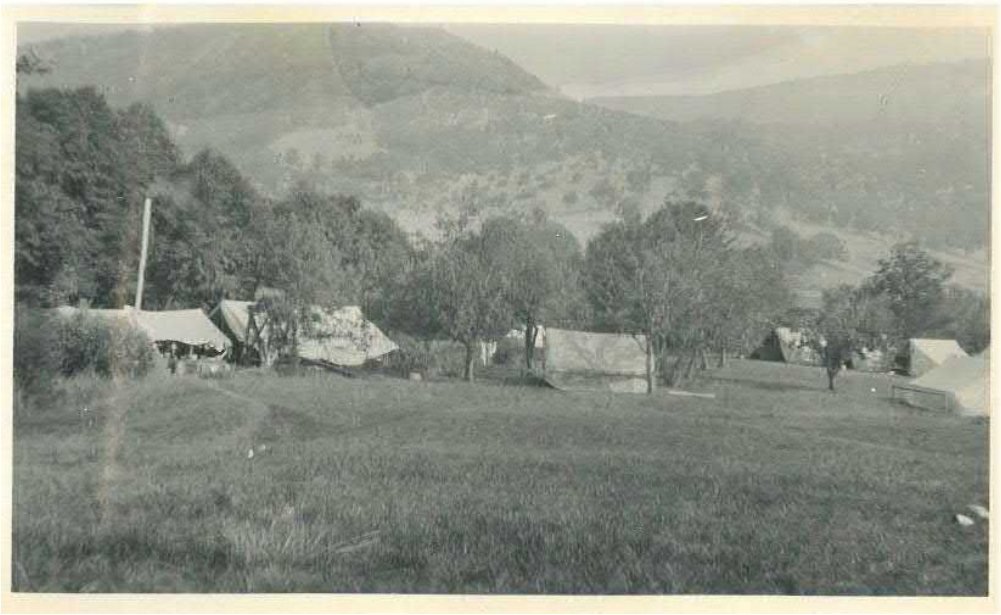
Photograph 19. Tramway for delivery of construction materials to Copco No. 2 Dam site, showing Paul McKee (Copco chief executive officer) and Mr. Kemmach, August 15, 1924 (PacifiCorp archive image CO2-111).

Photograph 20. Copco No. 2 dedication, showing completed powerhouse at right, July 5, 1925 (PacifiCorp archive image CO2-42).

Photographs (continued):



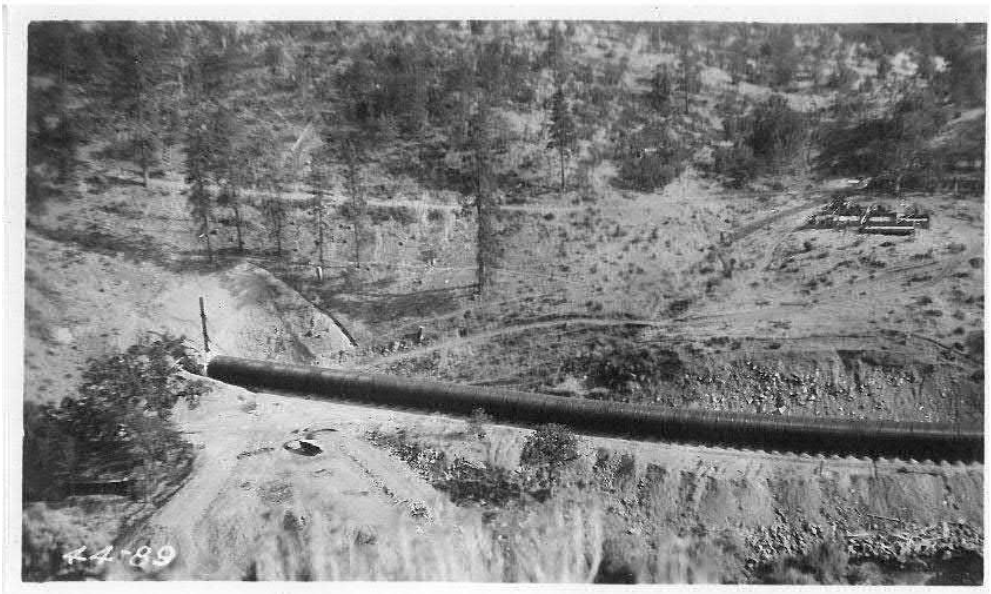
Photograph 21. Lower Camp/Camp 2; view facing southwest, showing present Daggett Road Bridge extending across the Klamath River to Railroad Camp, circa 1925 (PacifiCorp archive image CO2-11).



Photograph 22. Railroad Camp, near the confluence of Fall Creek and the Klamath River, about 0.3 mile downstream from the Copco No. 2 Powerhouse (PacifiCorp archive image CO2-102).

Photographs (continued):

Photograph 23. Camp 4, showing Copco No. 1 in background, view facing east; likely located between Copco No. 2 Dam and the wood stave pipe (PacifiCorp archive image CO2-110).



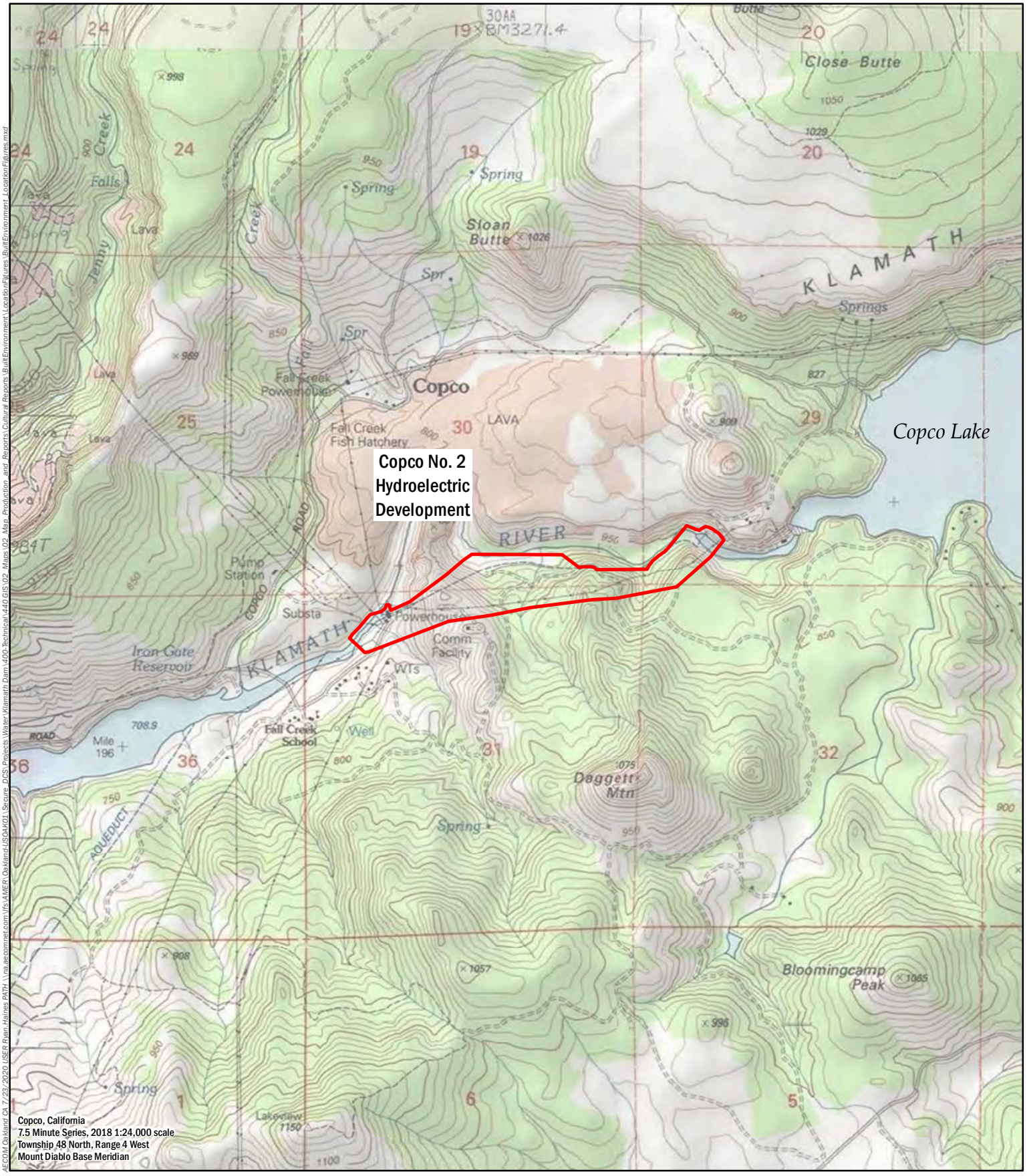
Photograph 24. Wood stave pipe, showing another likely construction camp in right background; view facing south, July 18, 1925 (PacifiCorp archive image CO2-95).

LOCATION MAP

Property Name: Copco No. 2 Historic District

***Map Name:** _____ ***Scale:** _____ ***Date of map:** _____

See Location Map on next page.



Copco, California
7.5 Minute Series, 2018 1:24,000 scale
Township 48 North, Range 4 West
Mount Diablo Base Meridian

AECOM Oakland CA 7/23/2020 USER Ryan.Haines PATH \\na.aecomnet.com\Vfs\AMER\Oakland-USOAK01\Secure_DCS\Projects\Water\Klamath Dam\400-Technical\449 GIS\02_Maps\02_Map_Production_and_Reports\Cultural Reports\BuiltEnvironment\LocationFigures\BuiltEnvironment_LocationFigures.mxd

Copco No. 2 Hydroelectric Development

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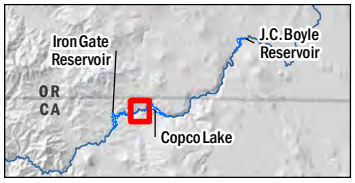
1:24,000



Copco No. 2 Hydroelectric Development

Klamath River Dam Removal
Daggett Road
Copco, Siskiyou County, California

AECOM
July 2020

SKETCH MAP

Property Name: Copco No. 2 Historic District

***Drawn by:** _____ ***Date of map:** _____

See Sketch/Site Maps on next pages.

Copco No. 2 Hydroelectric Development

Copco No. 2 Hydroelectric Development

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0 50 Meters

1:2,400

Klamath River Dam Removal
Copco Road
Copco, Siskiyou County, California

AECOM

July 2020

Copco No. 2 Hydroelectric Development

Copco No. 2 Hydroelectric Development

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0 50 Meters

1:2,400

Klamath River Dam Removal
Copco Road
Copco, Siskiyou County, California

AECOM
July 2020

AECOM Oakland CA 7/29/2020 USER Ryan.Haines PATH: \\na.aecomnet.com\fs\AMER\Oakland-USOAK01\Secure_DCS\Projects\Water\Klamath Dam\400-Technical\440 GIS\02_Maps\02_Map_Production_and_Reports\Cultural Reports\BuiltEnvironment\LocationFigures\BuiltEnvironment_SiteFigures.mxd

Copco No. 2 Hydroelectric Development

Copco No. 2 Hydroelectric Development

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1:2,400

Klamath River Dam Removal
Copco Road
Copco, Siskiyou County, California

AECOM

July 2020

AECOM Oakland CA 7/29/2020 USERRyan.Haines PATH: \\na.aecomnet.com\fs\AMER\Oakland-USOAK01\Secure_DCS\Projects\Water\Klamath Dam\400-Technical\440 GIS\02_Maps\02_Map_Production_and_Reports\Cultural Reports\BuiltEnvironment\LocationFigures\BuiltEnvironment_SiteFigures.mxd

Copco No. 2 Hydroelectric Development

Copco No. 2 Hydroelectric Development

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1:2,400

Klamath River Dam Removal
Copco Road
Copco, Siskiyou County, California

AECOM

July 2020

AECOM Oakland CA 7/29/2020 USERRyan.Haines PATH: \\na.aecomnet.com\fs\AMER\Oakland-USOAK01\Secure_DCS\Projects\Water\Klamath Dam\400-Technical\440 GIS\02_Maps\02_Map_Production_and_Reports\Cultural Reports\BuiltEnvironment\LocationFigures\BuiltEnvironment_SiteFigures.mxd

Copco No. 2 Hydroelectric Development

Copco No. 2 Hydroelectric Development

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0 50 Meters

1:2,400

Klamath River Dam Removal
Copco Road
Copco, Siskiyou County, California

AECOM

July 2020

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #47-004015
HRI #
Trinomial
NRHP Status Code 3D

Other Listings
Review Code | Reviewer | Date

Page 1 **of** 1 **Resource Name or #:** Copco No. 2 Dam

P1. Other Identifier: Copco No. 2 Dam
*P2. Location: ☒ Unrestricted
*a. County Siskiyou
***b.** USGS 7.5' Quad Copco, CA Date 2018 T 48N; R 4W; SW 1/4 of SW 1/4 of Sec 29; Mount Diablo B.M**.**
c. Address _____ City _____ Zip _____
d. UTM: Zone 10 T, 554669mE/4647646mN
e. Other Locational Data: N/A

***P3a. Description:**

Copco No. 2 Dam was completed in 1925 as a primary component of the Copco No. 2 hydroelectric development. The concrete gravity structure is 33 feet high, with a crest measuring approximately 305 feet long and 9 feet wide. A gated intake to a concrete-lined tunnel is at the left (southwestern) abutment. At the right (northeastern) abutment, a central 145-foot-long spillway section with five 26-foot by 11-foot radial (Tainter) gates, and a 132-foot-long earthen embankment with a gunite cutoff wall (AECOM 2017:2-15). A manually operated slide gate controlled a small sluiceway is adjacent to the intake, but no longer appears operational. A small corrugated metal flume delivers flow to the bypass reach below the dam. The concrete gravity spillway crest is between two concrete retaining walls. The remnant of a cofferdam is upstream of the dam below the normal waterline. Rock-filled timber cribbing from the dam construction era is situated high above the dam's left abutment. The intake structure incorporates a large trashrack and a 20-foot by 20-foot roller-mounted (caterpillar) gate. The trash rack is 36.5 feet by 48 feet, with a 4-inch bar spacing. A new headgate was installed in 1996 (USBR 2012:20-21).

***P3b. Resource Attributes:** (HP21) Dam (concrete gravity dam)
***P4. Resources Present:** ☒ Structure ☒ Element of District
P5a. Photograph:

P5b. Description of Photo: Copco No. 2 Dam, viewing west (June 11, 2018).

***P6. Date Constructed/Age and Source:**
☒ Historic, 1925 (Pacific Power 1956:4)

***P7. Owner and Address:**
PacifiCorp
825 NE Multnomah, Suite 1500
Portland, OR 97232

***P8. Recorded by:**
Shoshana Jones, AECOM
111 SW Columbia Street, Suite 1500
Portland, OR 97201

***P9. Date Recorded:** June 11, 2018

***P10. Survey Type:** Intensive Level

***P11. Report Citation**: Klamath River Renewal Corporation. 2021. Lower Klamath Project Historic Built Environment Technical Report

***Attachments:** ☒Location Map ☒Continuation Sheet ☒Building, Structure, and Object Record

BUILDING, STRUCTURE, AND OBJECT RECORD

*Resource Name or #: Copco No. 2 Dam
*NRHP Status Code: 3D

B1. Historic Name: Klamath River Dam No. 2
B2. Common Name: Copco No. 2 Dam
B3. Original Use: generate hydropower
B4. Present Use: generate hydropower
B5. Architectural Style: concrete gravity dam
B6. Construction History:

The Copco No. 2 Dam was constructed in 1924-1925 as a major component of the Copco No. 2 hydroelectric development. The only substantial alteration to the dam has been the installation of a new headgate in 1996.

B7. Moved? No

B8. Related Features: The dam is a contributing resource to the Copco No. 2 Historic District, which is within the larger Klamath Hydroelectric Project (KHP) Historic District. The KHP Historic District consists of seven hydroelectric developments, including Copco No. 2, in Southern Oregon and Northern California.

B9a. Architect: unknown **b. Builder:** California Oregon Power Company (Copco)

B10. Significance:
Theme: Hydroelectric development
Area: Southern Oregon and Northern California
Period of Significance: 1925-1970 (Copco No. 2 Historic District)
Property Type: Dam
Applicable Criteria: National Register of Historic Places (NRHP) Criterion A (contributing) and Criterion C (contributing)

See Continuation Sheet.

B11. Additional Resource Attributes:

B12. References:

AECOM. 2017. Klamath River Renewal Project. California Environmental Quality Act (CEQA) and California and Oregon 401 Water Quality Certifications Technical Support Document. AECOM Technical Services, Inc.: Oakland, CA.

Evening Herald [Klamath Falls, Oregon]. 1925. "Rotarians Guests of Copco Officers." April 27.

Kramer, George. 2003. Klamath Hydroelectric Project. FERC No. 2082. Historic Context Statement. Prepared for PacifiCorp, Portland, Oregon. June.

See Continuation Sheet.

B13. Remarks: None
B14. Evaluator: Shoshana Jones, AECOM
111 SW Columbia Street, Suite 1500
Portland, OR 97201
Date of Evaluation: June 11, 2018

(This space reserved for official comments.)

B10. Significance (continued):

Historic Context

Construction of Copco No. 2 Dam received considerably less press attention than the construction of Copco No. 1 Dam, which was a substantially larger dam with a more distinctive design. Copco work crews met the challenges that the dam site posed to construction. For instance, to address loose material along the river floor, crews dewatered the foundation by building a diversion flume over the dam site from a cofferdam upstream. Leakage was allowed to accumulate in an auxiliary flume during dam excavation. A downstream cofferdam prevented backwater from entering the excavation. Crews excavated 20,000 cubic yards from the river bottom and sides and blasted any boulders encountered. Two gunite cut-off walls were built along the dam axis from the two ends of the primary structure. Workers carefully placed backfill along the gunite walls by hand and by sluicing material for the hillside for infill. Workers grouted the dam foundation through drill holes spaced to a depth of up to 15 feet. Grouting was also done over the intake structure and cut-off walls where seepage was possible (Pacific Power 1956:2).

A January 1925 photograph published in the *News-Review* depicted the Copco No. 2 Dam site and the construction facilities such as the quarry, concrete-mixing plant, bypass flume, and tramway for delivering concrete (News-Review 1925). As work progressed, Copco officials conducted community outreach by hosting local civic organizations at the dam construction site. In April 1925, members of the Rotarians of Southern Oregon arrived at Copco No. 2 to view the dam and powerhouse (Evening Herald 1925).

Evaluation (Contributes to Copco No. 2 Historic District)

Criteria Analysis

NRHP Criterion A
The Copco No. 2 Historic District contributes to the larger KHP Historic District, both of which are significant under NRHP Criterion A in the areas of Commerce and Industry. The Copco No. 2 Dam adds to the significance of the Copco No. 2 Historic District by impounding a small, unnamed reservoir and operating synchronously with Copco No. 1, which enables the generation of hydroelectric power.

NRHP Criterion B
The dam is not associated with a significant individual under NRHP Criterion B.

NRHP Criterion C
The dam, water conveyance system, and powerhouse are collectively significant under NRHP Criterion C in the area of Engineering for embodying the distinctive characteristics of an early-twentieth-century hydroelectric development that implemented technological advances in its conception, design, and construction.

NRHP Criterion D
The dam is not significant as a source (or likely source) of important information regarding history or prehistory. It does do not appear likely to yield important information about historic construction materials or technologies and is not significant under NRHP Criterion D.

Integrity Analysis

The dam retains integrity of location, design, setting, materials, workmanship, feeling, and association; and continues to convey its historic identity as an early-twentieth-century hydroelectric dam.

Location *is the place where the historic property was constructed or the place where the historic event took place.* The dam retains integrity of location, because it remains in its original location and maintains its spatial relationship with the powerhouse and other major development components.

Design *is the composition of elements that constitute the form, plan, space, structure, and style of a property.* The dam retains integrity of design, demonstrated through the retention of key characteristics, such as the overall dimensions, concrete construction, and designed functional elements. Certain alterations to the dam, such as rebuilding of the headgate in 1996, do not substantially diminish the integrity of design.

Setting *is the physical environment of a historic property that illustrates the character of the place.* The dam retains integrity of setting. The dam was constructed in Ward's Canyon, a remote, undeveloped area of the Klamath River basin in Siskiyou County, California. The dam's setting is characterized by the canyon's basalt formations, the Klamath River, and the largely undeveloped landscape. Copco No. 2 Dam operates in conjunction with the Copco No. 1 Dam and Powerhouse, about 0.3 mile upriver.

Materials *are the physical elements combined in a particular pattern or configuration to form the aid during a period in the past.* The dam retains integrity of materials, particularly its concrete construction and associated structural elements.

B10. Significance (continued):

Workmanship *is the physical evidence of the crafts of a particular culture or people during any given period of history.* The dam retains integrity of workmanship, as demonstrated by the excavation of the canyon walls, the alignment of the dam, as well as the functional interconnection between the dam, water conveyance system, and powerhouse.

Feeling *is the quality that a historic property has in evoking the aesthetic or historic sense of a past period of time.* The dam's remote setting and intensive use of industrial construction materials collectively convey the historic character of an early-twentieth-century hydroelectric dam, thereby retaining integrity of feeling.

Association *is the direct link between a property and the event or person for which the property is significant.* The presence of the dam's intact, historic physical features at this location directly links the property with early power development in the region, contributing to integrity of association.

Copco No. 2 Dam retains integrity and is eligible as a contributing resource to the Copco No. 2 Historic District.

Resource(s)	Date	Applicable NRHP Criteria	Area(s) of Significance	Contributing/ Individually Eligible
Dam	1925	A	Commerce and Industry	Contributing
Dam, powerhouse, and water conveyance system (collectively)	1925	C	Engineering	Contributing

B12. References (continued):

Los Angeles Public Library (LAPL). n.d.. LAPL00009700 [digital photograph archives]. http://photos.lapl.org/carlweb/jsp/DoSearch?index=z&databaseID=968&terms=0000011535 (accessed June 10, 2018).

News-Review [Roseburg, Oregon]. 1925. "New 3 Million Dollar Plant California Oregon Power Co. Dedicated Sunday at Copco." July 6.

PacifiCorp

1995 Construction Document For Rehabilitation of Intake Gate: Copco No. 2 Hydroelectric Project. March. PacifiCorp Archive, PDX.037414 (box), Copco 2 Betterment Projects, Rebuild Diversion Dam Facilities 1996, 208.8, #16265, Brochures/Photos (folder).

1996 Photograph of Copco No. 2 dam. PacifiCorp Archive, PDX.037414 (box), Copco 2 Betterment Projects, Rebuild Diversion Dam Facilities 1996, 208.8, #16265, Brochures/Photos (folder).

2004 Klamath Hydroelectric Project. FERC No. 2082. Cultural Resources Final Technical Report and Associated Confidential Documents. Exhibit C. Construction History and Proposed Construction. February.

Pacific Power. 1956. Initial Statement of The California Oregon Power Company to the Federal Power Commission showing Actual Legitimate Original Cost and Estimated Accrued Depreciation of Project No. 2082 (Klamath Basin – Copco No. 2 Plant) Located in the State of California as of March 1, 1956. PacifiCorp Archive, PDX.014908 (box).

United States Bureau of Reclamation (USBR). 2012. Reclamation: Managing Water in the West. Detailed Plan for Dam Removal – Klamath River Dams. Klamath Hydroelectric Project. FERC License No. 2082, Oregon – California. USBR, U.S. Department of the Interior. Technical Service Center, Denver, Colorado. July.

Photographs:

Photograph 1. Copco No. 2 Dam, showing head gate and intake at left; view facing downstream, 2018.

Photograph 2. Copco No. 2 Dam, showing the 1996 headgate and tunnel intake; view facing southwest, 2018.

Photographs (continued):

Photograph 3. Copco No. 2 Dam, upstream face; view facing northwest, 2018.

Photograph 4. Copco No. 2 Dam, showing downstream face and gates; view facing south, 2018.

Photographs (continued):

Photograph 5. Copco No. 2 Dam, showing crest and hoist system; view facing northeast, 2018.

Photograph 6. Timber cribbing; view facing southwest, above Copco No. 2 Dam site, 2018.

Photographs (continued):

Photograph 7. Timber cribbing, Klamath River and Copco No. 2 Dam below; view facing southwest, 2018.

Photograph 8. Dam excavation, 1924 (PacifiCorp archive image CO2-33).

Photographs (continued):

Photograph 9. Dumping of rock from dam excavation, 1924 (PacifiCorp archive image CO2-35).

Photograph 10. Copco No. 2 Dam; view facing upstream, July 8, 1925 (PacifiCorp archive image CO2-91).

Photographs (continued):

Photograph 11. Copco No. 2 Dam, showing original headgate and intake (LAPL n.d.). Timber cribbing visible on hillside.

Photograph 12. Coffer dam used during construction, September 6, 1924 (PacifiCorp Archive image CO2-78).

Photographs (continued):

Photograph 13. Dam in 1996 before original headgate replaced (PacifiCorp 1996).

Plates:

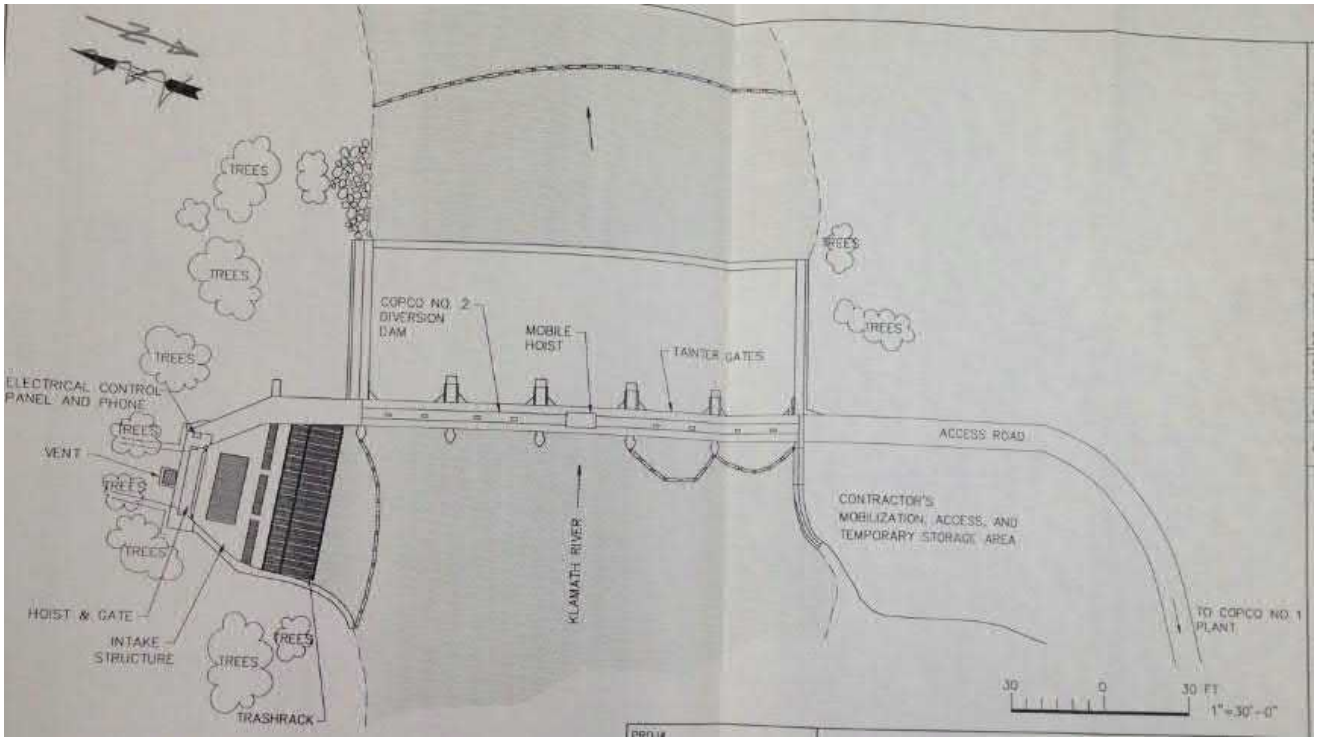


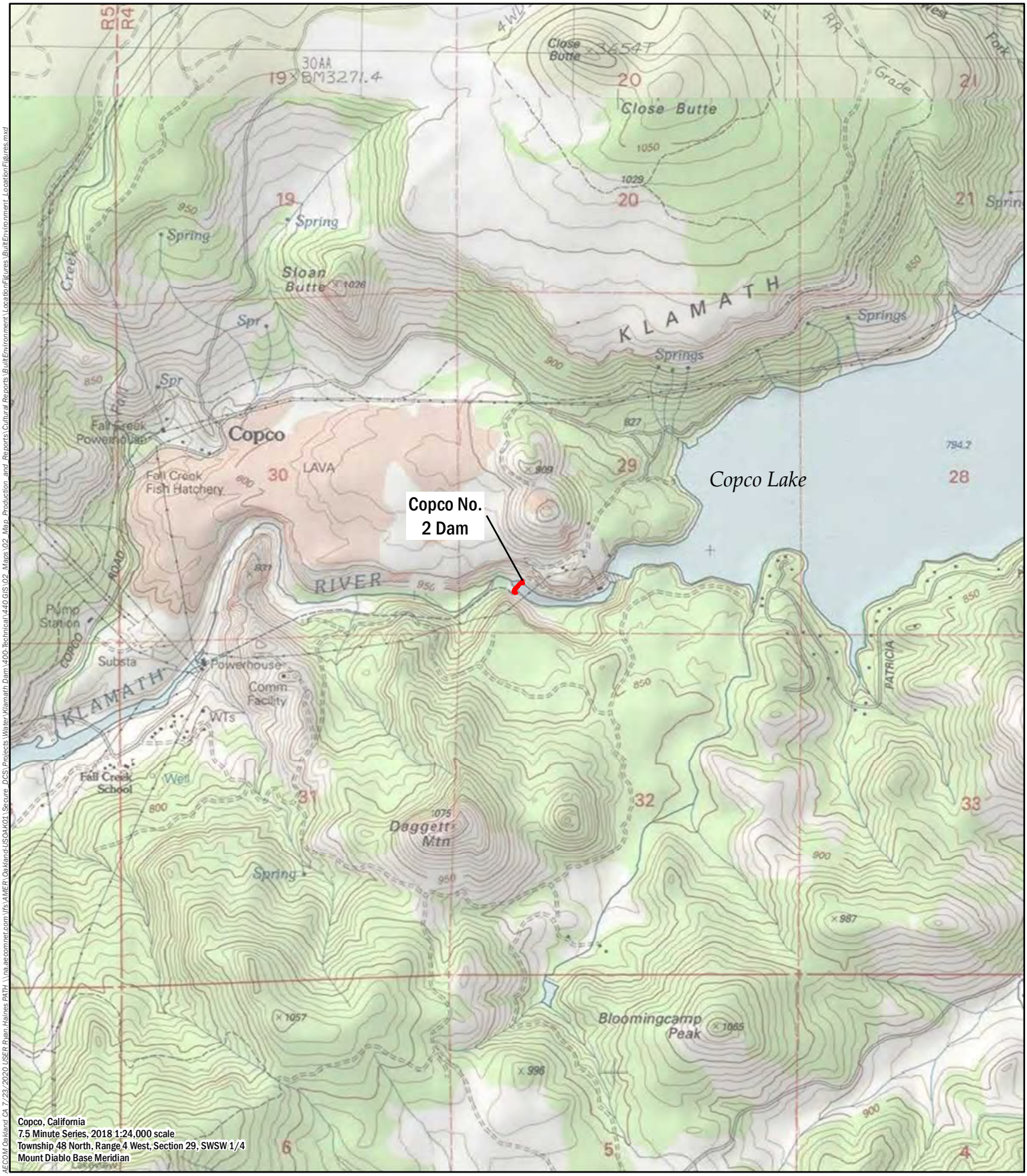
Figure 1. Plan of Copco No. 2 Dam (PacifiCorp 1995).

LOCATION MAP

Property Name: Copco No. 2 Historic District

***Map Name:** _____ ***Scale:** _____ ***Date of map:** _____

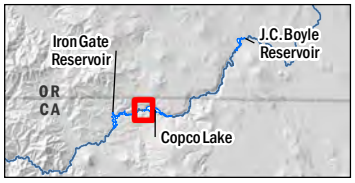
See Location Map on next page.



Copco, California
7.5 Minute Series, 2018 1:24,000 scale
Township 48 North, Range 4 West, Section 29, SWSW 1/4
Mount Diablo Base Meridian

AECOM Oakland CA 7/23/2020 USER Ryan.Haines PATH \\na.aecomnet.com\fs\AMER\Oakland-USOAK01\Secure_DCS\Projects\Water\Klamath Dam\400-Technical\449 GIS\02_Maps\02_Map_Production_and_Reports\Cultural Reports\BuiltEnvironment\LocationFigures\BuiltEnvironment_LocationFigures.mxd

Copco No. 2 Dam



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Copco No. 2 Dam

Klamath River Dam Removal
Copco Road
Copco, Siskiyou County, California

AECOM
July 2020

SKETCH MAP

Property Name: Copco No. 2 Historic District

***Drawn by:** _____ ***Date of map:** _____

See Sketch/Site Map on next page.

Copco No. 2 Dam

Copco No. 2 Dam

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0 20 Meters

1:600

Klamath River Dam Removal
Copco Road
Copco, Siskiyou County, California

AECOM
July 2020

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #47-004015; #47-002266
HRI #
Trinomial
NRHP Status Code 3B

Other Listings _____
Review Code _____ Reviewer _____ Date _____

 Resource Name or #: Copco No. 2 Powerhouse

P1. Other Identifier: Copco No. 2 Powerhouse
***P2. Location:** ☒ **Unrestricted**
***a. County:** Siskiyou
***b.** USGS 7.5' Quad Copco, CA Date 2018 T 48N; R 4W; NE 1/4 of NW 1/4 of Sec 31; Mount Diablo B.M.
c. Address _____ City _____ Zip _____
d. UTM: Zone 10 T, 553185mE/4647280mN
e. Other Locational Data: N/A

***P3a. Description:**

Copco No. 2 Powerhouse is one of the hydroelectric development's main components and was built and placed into operation in 1925. The Copco No. 2 Powerhouse was previously recorded in 2003 as part of the Klamath Hydroelectric Project (KHP) Historic District and was submitted to the California State Historic Preservation Officer (SHPO) (Durio 2003). Although the California SHPO never provided comments on eligibility, the KHP Historic District was assigned Primary Number 47-004015 and Copco No. 2 Powerhouse was assigned an individual Primary Number, 47-002266.

Located 1.6 miles downstream from Copco No. 2 Dam, the large rectangular structure is monumental in appearance and incorporates classically inspired features, such as its simplified, full-height pilasters, pediment, and cornice. The reinforced-concrete substructure supports a steel superstructure with a large open volume that includes a mezzanine level. A 65-foot-long monitor is centered along the 105-foot-long front-gable roof. A reporter who attended the powerhouse dedication in July 1925 described "the stately new power house [sic] of white, with its roof of copper shingles" (*Mail Tribune* 1925). Based on recent aerial images, most of the original copper roof shingles have been removed.

See Continuation Sheets.

***P3b. Resource Attributes:** (HP11) Engineering structure (powerhouse)
***P4. Resources Present:** ☒ Structure ☒ Element of District
P5a. Photograph:

P5b. Description of Photo: Copco No. 2 Powerhouse, viewing north (June 11, 2018).

***P6. Date Constructed/Age and Source:**
☒ Historic, 1924-1925 (*Mail Tribune* 1925)

***P7. Owner and Address:**
PacifiCorp
825 NE Multnomah, Suite 1500
Portland, OR 97232

***P8. Recorded by:**
Shoshana Jones, AECOM
111 SW Columbia Street, Suite 1500
Portland, OR 97201

***P9. Date Recorded:** June 11, 2018

***P10. Survey Type:** Intensive Level

***P11. Report Citation**: Klamath River Renewal Corporation. 2021. Lower Klamath Project Historic Built Environment Technical Report.

***Attachments:** ☒Location Map ☒Continuation Sheet ☒Building, Structure, and Object Record

P3a. Description (continued):

The powerhouse's three-bay width and five-bay long design is delineated by simplified pilasters. Except for the eastern elevation, where the penstocks enter the powerhouse, stylized metal light-fixture brackets are mounted on the pilasters, but lack their original shade or globe. A Classical inspired cornice extends along the western and eastern elevations (the cornice has been removed from the northern and southern elevations). The slightly recessed window openings contain multi-pane industrial steel sash windows with operable pivot sections. A 1925 newspaper account described the powerhouse as a "structural steel building with a concrete substructure and curtain walls. The windows of the building are of wired glass in steel sashes" (*News-Review* 1925). The southern (primary) and northern (rear) elevations feature large metal roll-up doors, centered below the gable ends.

The southern (primary) elevation is characterized by its symmetrical design and the large metal roll-up door. A band of three 15-pane windows is centered above the roll-up door and flanked by additional sets of 15-pane windows with pivot sections. The southern elevation's original design included identical vertical window arrangements—a 30-pane window between two 15-pane windows—flanking the roll-up door. The gable face is articulated by three recessed panels above a wide, flat band across which the cornice originally extended.

The northern (rear) elevation resembles the southern elevation; however, the northern elevation's center bay contains a shorter and narrower roll-up door and additional windows. The doorway and the large recessed panel above are flanked by identical vertical window arrangements—an 18-pane window between two 9-pane windows. The column of windows on the elevation's eastern side consists of only the top, 15-light window. Below that is a recessed panel with two small metal vents. Like the southern elevation, the gable face is articulated by three recessed panels above a wide, flat band across which the cornice originally extended. Alterations to the northern elevation consist of the removal of the cornice, partial infill of two awning windows with sheet metal, and new light fixtures. The doorway retains its original opening, but has been infilled with a metal pedestrian door, a plywood sheet, and a section of metal wire mesh.

The Copco No. 2 Powerhouse is similar in design and architectural style to the East Side Plant No. 2. Part of the Klamath Hydroelectric Project, the East Side Plant No. 2 was built in 1924 along the Link River in Klamath Falls, Oregon. The powerhouses display similar concrete construction, full-height pilasters, multi-pane industrial-steel sash windows with operable pivot sections, classically inspired cornices, and adjacent mortared stone wall.

According to John C. Boyle, the powerhouse superstructure "was designed to support two 40-ton Niles travelling cranes of sufficient height to unload the powerhouse equipment directly from railroad cars which were brought into the building on a spur track from the main line" (Boyle 1976:17). Inside, the generators are located on the main level and the turbines in the basement. A mezzanine extends along the eastern wall with two offices and a control room situated beneath the mezzanine. The double door to the control room is original multi-panel wood with 6 panes in each leaf. General Electric manufactured the synchronous generators, which are each rated at 15,000 kilovolt-amperes (kVA) with a 0.9 power factor (13.5 megawatts) (USBR 2012:21). An internal concrete staircase leads to the basement, where screened, metal-louvered windows provide a view of the concrete tailrace apron. Building materials below deck include the board-form concrete ceilings, concrete floors, and square concrete posts with chamfered edges.

The generator deck has removable floor sections to facilitate lowering equipment into the basement. The Unit No. 1 turbine was overhauled, and the runner replaced in 2000. Originally an Allis-Chalmers unit, it is now an American Hydro unit. Unit No. 2 retains its original Allis-Chalmers turbine. The two turbines are vertical-shaft, Francis-type units with a total rated discharge capacity of 2,786 cubic feet per second. Unit 1 has a rated output of 26, 285 horsepower, with a net head of 145 feet. Unit 2 has a rated output of 20,000 with a net head of 140 feet (USBR 2012:21; AECOM 2017:2-17). Other mechanical and electrical equipment includes two turbine governor hydraulic control systems with oil storage reservoir and pressure tank; two turbine runner spiral casings and head covers/operating rings; four turbine gate hydraulic servomotors; two vertical turbine shafts; two turbine draft tubes; draft tube bulkhead gate(s); vertical sump pump(s); bearing oil storage tank(s); two 40-ton overhead traveling cranes and structural members, and other miscellaneous mechanical equipment, piping, and valves; distribution equipment; unit breaker; two generators; conduit and cable; plant control equipment; and other miscellaneous electrical equipment (USBR 2012:59-60).

There are three outdoor, single-phase 10/20-megavolt ampere (MVA), 6,600/72,000-volt (V) transformers for each generator to step up the voltage. There are also three outdoor, single-phase 10/20-MVA, 73,800/230,000-V step-up transformers for interconnection to the transmission system. A 69-kilovolt (kV) transmission line (Line No. 15) is about 1.25 miles long, and connects the Copco No. 2 powerhouse to the Copco No. 1 switchyard. A second 69-kV transmission line (also Line No. 15) is 0.14 mile long, and connects the Copco No. 2 powerhouse to the Copco No. 2 switchyard. Line No. 62 runs along the northern side of Iron Gate Reservoir for about 6.5 miles, to the Copco No. 2 switchyard (USBR 2012:21). During the early 1990s, powerhouse modifications involved upgrades to the battery rack, installation of electric governors and static excitation on both generating units, and design modifications for acoustics (PacifiCorp 2004:6-2).

The substation at Copco No. 2 works in conjunction with the powerhouse for transmission and distribution of power generated at Copco No. 2. The original substation, built adjacent to the powerhouse in 1925, no longer exists. A new substation was built between the control center and maintenance building circa 1962, with major upgrades completed in 1968. Operating at 115 kV, the substation occupies a fenced area between the Klamath River and Daggett Road with gravel surface measuring approximately 350 feet by 150 feet. A sign that reads Pacific Power "Copco 2/115 Substation" lists the address as 19356 Daggett Road, Hornbrook, CA 96044.

P3a. Description (continued):

The substation control house at the switchyard's southwestern corner is a small, one-story building with a rectangular plan, low-pitched front-gable roof, standing-seam sheet-metal roofing, and corrugated metal siding. Along the southern (façade) elevation, a metal pedestrian door is located beneath a modern light fixture. A single fixed metal window is at the western elevation, as well as a number of metal utility and control boxes. There is a metal vent and mounted storage container along the northern elevation, and a fixed vinyl frame window along the eastern elevation. The long, narrow power distribution control building extends along the switchyard's eastern side. This newer metal panel building with concrete foundation contains 11 voltage cabinets. Major switchyard equipment includes two 115-kV/MV power transformers, five medium voltage circuit breakers, one 12 kV transformer, associated equipment, and steel buswork.

The original substation at Copco No. 2 was completed in 1924-1925 at the control center's current location (PacifiCorp archive image CO2-36). The original substation linked the powerhouse to Copco's 66-kV system, and to the 130-kV transmission line between Copco and the Pacific Gas and Electric Company (PG&E) system (Boyle 1976:17). A reporter who attended the July 1925 dedication described the substation as an "outdoor substation with its intricate switching apparatus, feeding the current out over the high tension transmission lines" (*Mail Tribune* 1925). A 1924 photograph of the powerhouse depicts an adjacent substation, immediately southwest of the powerhouse, as well as a row of associated circuit breakers in front of the powerhouse façade. Recent photographs indicate that those circuit breakers were moved between 2003 and 2017 (the structures are shown in Durio 2003, documentation but were not present during 2017 and 2018 AECOM fieldwork).

A photograph from a 1962 Pacific Power booklet depicts the substation in its current location, indicating that substation equipment was relocated there at some point between 1925 and 1962 (Pacific Power 1962). In October 1968, Pacific Power completed a $50,000 substation upgrade, including three 69-kV power transformers, a circuit breaker, and other electrical equipment. The upgrade would, according to Pacific Power's Yreka district manager Russell Poff, "make additional electrical energy available for anticipated growth in the area," as well as supply additional power to Copco No. 2 and area residences (*Sacramento Bee* 1968). The substation's existing equipment varies greatly from the equipment shown in the 1962 photograph (Pacific Power 1962). According to Kramer, the built date for the substation is unknown, but is presumably a circa-1970 replacement or substantial augmentation/alteration of an earlier feature (Kramer 2003a:11). This presumption is consistent with reports of the 1968 substation upgrades.

Transmission Lines

The substation is integral to PacifiCorp's power grid, and ties to several transmission lines, as well as the Daggett Road distribution feeder. Through the feeder, the substation powers a subdivision east of Copco No. 1. The substation is also connected via existing transmission lines with a larger, newer substation less than 750 feet northwest across the Klamath River. This switchyard north of Copco No. 2, on the northern side of the river, is 230 kV, and is a transmission system independent of the hydropower project.

Transmission lines associated with the Copco No. 2 substation include Line Nos. 1, 2, 14, 15, and 62. Drawings provided by PacifiCorp also indicate a Line No. 4 and a Line No. 67 (possibly a misspelling of "Line No. 62"); however, no additional information on these two lines has been located (AECOM 2017:2-18).

There is little information available about Line No. 1, except that it is depicted as a 66-kv transmission line on a 1960 sketch map. The map was published in the Mail Tribune as part of a report on the Iron Gate project, and is shown extending southward from Copco No. 2 substation (*Mail Tribune* 1960).

Line No. 2 was originally a 66-kV line that may have been converted to 115-kV line. Line No. 2 connects the Copco No. 2 Substation to PG&E's Cascade/Lassen substation near Lake Shasta California, with other intervening substations, such as Weed Junction and Mt. Shasta (Power Engineers, Inc. 2015:7). This line is also depicted on the 1960 sketch map, extending southward from the Copco No. 2 substation (*Mail Tribune* 1960).

Line No. 14, rebuilt in 1970, is a 115-kV line that connects Copco No. 2 Substation to PG&E's Cascade/Lassen Substation near Lake Shasta, California (Power Engineers, Inc. 2015:7). The 10-mile transmission line was built for $297,000 to "alleviate a technical transmission condition that sometimes arises during a scheduled or non-scheduled outage to the existing line," according to J.V. Durbin, Pacific Power district manager (*Sacramento Bee* 1970). The original line was a 77-mile wood-pole transmission line constructed in 1924 between Copco and Delta, California, and was Copco's first 110-kV line. The line traversed the western slope of Mount Shasta (*Mail Tribune* 1924; *News-Review* 1929). The *Mail Tribune* reported in 1924 that one "main camp" and six other construction camps for workers building the line accommodated between 280 and 376 persons at any given time (*Mail Tribune* 1924). Based on the 1960 sketch map, the original line had a voltage of 125 kV, and is shown extending southward from the Copco No. 2 substation (*Mail Tribune* 1960).

Line No. 15 is a 69-kV line that runs approximately 1.25 miles west from the Copco No. 1 switchyard to the Copco No. 2 Powerhouse (BLM 2012:Appendix A). The built date is unknown, and it is not depicted on the 1960 sketch map (*Mail Tribune* 1960).

Line No. 19, known as the Copco 2- Prospect line, is a 115-kV line (BLM 2012:Appendix A). Copco built the original Line No. 19 in 1927 as a 130-kV transmission line extending 36 miles from the company's new Prospect power plant on the Rogue River to an area 6 miles east of Medford. From that point east of Medford, Copco installed a 66-kV tap line to Medford that connected the new Prospect plant with the existing transmission system (*News-Review* 1927). The line is depicted on the 1960 sketch map as 125-kV (*Mail Tribune* 1960).

P3a. Description (continued):

Line No. 62, built circa 1962, is 69-kV line that runs along north side of Iron Gate reservoir for about 6.5 miles to the Copco No. 2 switchyard. The standard wood pole transmission line was erected to power construction at the Iron Gate Dam site (Iron Gate circa 1962). This line is Iron Gate Substation's only power transmission line.

Another feature associated with the powerhouse is a mortared and coursed stone retaining wall, "gang operated switch," and emergency spill equipment shed. The retaining wall, situated immediately south of the powerhouse, was extended in 1996, and now measures approximately 50 feet long. The "gang operated switch," also known as the "station service breaker and transformers," is located in a fenced area about 50 feet west of the powerhouse entrance. The steel structure has porcelain insulators. The emergency spill equipment shed is a small wood-frame structure on concrete blocks with composite wood-sheet siding. The shed was installed adjacent to the control center in 2003 or later, based on Durio (2003) site photographs that show the shed was not yet in its current location.

The powerhouse and associated features appear to be in good condition.

BUILDING, STRUCTURE, AND OBJECT RECORD

*Resource Name or #: Copco No. 2 Powerhouse *NRHP Status Code: 3B

B1. Historic Name: N/A
B2. Common Name: Copco No. 2 Powerhouse
B3. Original Use: generate hydropower
B4. Present Use: generate hydropower
B5. Architectural Style: Classical Revival/Industrial
B6. Construction History:
The Copco No. 2 Powerhouse was constructed in 1924-1925 as a major component of the Copco No. 2 hydroelectric development. Alterations since the original construction include upgrades to the battery rack, installation of electric governors and static excitation on both generating units, and design modifications for acoustics during the early 1990s, as well as the Unit No. 1 turbine overhaul and runner replacement in 2000. The stone retaining wall was extended in 1996. Roll-up doors have been installed in the original doorways.

B7. Moved? No

B8. Related Features: The powerhouse is a contributing resource to the Copco No. 2 Historic District, which is within the larger Klamath Hydroelectric Project (KHP) Historic District. The KHP Historic District consists of seven hydroelectric developments, including Copco No. 2, in Southern Oregon and Northern California.

B9a. Architect: Unknown **b. Builder:** California Oregon Power Company (Copco)

B10. Significance:
Theme: Hydroelectric development
Area: Southern Oregon and Northern California
Period of Significance: 1925-1970 (Copco No. 2 Historic District)
Property Type: Powerhouse
Applicable Criteria: National Register of Historic Places (NRHP) Criterion A (contributing) and Criterion C (contributing and individually eligible)

See continuation sheets.

B11. Additional Resource Attributes: (HP11)—powerhouse, substation, transmission lines

B12. References:

AECOM. 2017. Klamath River Renewal Project. California Environmental Quality Act (CEQA) and California and Oregon 401 Water Quality Certifications Technical Support Document. AECOM Technical Services, Oakland, CA.

United States Bureau of Land Management (BLM). 2012. Decision Record & Categorical Exclusion Review. PacifiCorp Electrical Distribution Line (Line 59) Right-of-Way Grant OR 24416 (OR-M040-2014-002-CX). Prepared by Leslie Voelkel and Kathy Minor. Ashland R.A., Medford District.

Boyle, John C. 1976. *50 Years On The Klamath*. Klocker Printery, Medford, Oregon. First printing 1976, second printing 1982.

Copco. 1926. *The Volt* 7(4). December (J.C. Boyle Collection, Southern Oregon Historical Society).

See Continuation Sheet.

B13. Remarks: None
B14. Evaluator: Shoshana Jones, AECOM
111 SW Columbia Street, Suite 1500
Portland, OR 97201
Date of Evaluation: June 11, 2018

(This space reserved for official comments.)

B10. Significance (continued):

Historic Context

The powerhouse was constructed with a reinforced concrete substructure and steel superstructure. The superstructure supported two 40-ton Niles traveling cranes tall enough to unload the powerhouse equipment directly from railroad cars. The cars entered the powerhouse via a spur track from the Klamath Lake Railroad mainline (Pacific Power 1956:4). The hydro-development's original transformers and substation were originally installed adjacent to the powerhouse façade. In 1961, Pacific Power & Light Company (Pacific Power) acquired Copco and its holdings. Following the acquisition, and as part of a $500 million plan to integrate the Pacific Power and Copco systems, Pacific Power developed plans to transfer Copco No. 2 system control from the powerhouse to a proposed control center. In 1964, Pacific Power engineers began transitioning Copco No. 1 to remote control from Copco No. 2, a process that took approximately two years. In 1965, as part of the process, Pacific Power issued an order for installation of the new control house and its relays and meter panels at Copco No. 2, adjacent to the powerhouse. The new control center was completed in 1966 and implemented advances in automation and supervisory (remote) control of both Copco No. 1 and Copco No. 2 (Pacific Power 1966).

The Copco No. 2 Powerhouse is a large concrete structure marked a distinct evolution from the region's earlier wooden powerhouses, such as the East Side Power Plants No. 1 (1895) and 2 (1906) in Klamath County, Oregon. The Copco No. 2 powerhouse design also contrasted with that of the Fall Creek Power Plant (1903), a wood-frame building clad in galvanized iron sheeting (Photograph 14). Built at the same time as the East Side Power Plant No. 3 (1924) in Klamath Falls, Oregon (Photograph 15), the Copco No. 2 powerhouse exhibited similar classically-inspired details. The Copco No. 2 powerhouse also served as a model for Copco's Prospect No. 2 Powerhouse, completed in 1927 (Photograph 16), which contemporaneous accounts describe as "an attractive and substantial structure of steel and concrete of a somewhat similar design as the building now in use as the new 'Copco No. 2' plant" (*Evening Herald* 1927).

Evaluation (Contributes to Copco No. 2 Historic District and Individually Eligible)

Criteria Analysis

NRHP Criterion A
The Copco No. 2 Historic District contributes to the larger KHP Historic District, both of which are significant under NRHP Criterion A in the areas of Commerce and Industry. The Copco No. 2 Powerhouse adds to the significance of the Copco No. 2 Historic District by housing the massive machinery that generates the facility's power.

NRHP Criterion B
Research does not indicate that the powerhouse is associated with any historically significant individuals under NRHP Criterion B.

NRHP Criterion C
The dam, water conveyance system, and powerhouse are collectively significant under NRHP Criterion C in the area of Engineering for embodying the distinctive characteristics of an early-twentieth-century hydroelectric development that implemented technological advances in its conception, design, and construction.

The powerhouse is also individually significant under NRHP Criterion C in the area of Architecture for exemplifying the large Classical inspired powerhouses built during the 1920s. The Copco No. 2 Powerhouse, a large concrete structure, marked a distinct evolution from the region's earlier wooden powerhouses and represented the advent of large concrete powerhouses with classical elements within the region.

NRHP Criterion D
The powerhouse is not significant as a source (or likely source) of important information regarding history or prehistory. It does not appear likely to yield important information about historic construction materials or technologies and is not significant under NRHP Criterion D.

B10. Significance (continued):

Integrity Analysis

The powerhouse retains integrity of location, setting, design, materials, workmanship, feeling, and association; and continues to convey its historic identity as an early-twentieth-century hydroelectric powerhouse.

Location *is the place where the historic property was constructed or the place where the historic event took place.* The powerhouse retains integrity of location, because it remains in its original location and maintains its original interrelationship with the dam and other major development components.

Design *is the composition of elements that constitute the form, plan, space, structure, and style of a property.* The powerhouse is a tall concrete structure with an immense interior volume that retains its monumental appearance. Retention of the original rectangular plan, gable roof form with monitor, windows, and door openings further support integrity of design.

Setting *is the physical environment of a historic property that illustrates the character of the place.* The powerhouse retains integrity of setting in the remote, undeveloped area of the Klamath River basin in Siskiyou County, California. The setting is characterized by the Klamath River, the nearby Iron Gate Reservoir, and the largely undeveloped landscape. The road that provides access to the powerhouse follows the alignment of the former Klamath Lake Railroad spur, which Copco used for powerhouse construction. The powerhouse's immediate setting contains the steel double penstock, the adjacent control center and substation, and the nearby Copco Village buildings.

Materials *are the physical elements combined in a particular pattern or configuration to form the historic property* and ***Workmanship*** *is the physical evidence of the crafts of a particular culture or people during any given period of history.* The powerhouse retains integrity of materials and workmanship despite alterations that include removal of the cornice from the façade and rear elevation, loss of the original copper roof shingles, and installation of newer doors in existing doorways. Certain operating equipment in the powerhouse has been overhauled or replaced; however, the KHP historic context states that, "[I]mprovements to generation facilities that enable their continued function within the system do not seriously reduce the ability to convey original character or association with historic events and themes under [the] context" (Kramer 2003b:57). In assessing integrity, it is important to note that the powerhouse retains one of its original, historic-era generating units.

Feeling *is the quality that a historic property has in evoking the aesthetic or historic sense of a past period of time.* The powerhouse's remote setting and intensive use of industrial construction materials collectively convey the historic character of an early-twentieth-century hydroelectric powerhouse, thereby retaining integrity of feeling.

Association *is the direct link between a property and the event or person for which the property is significant.* The presence of the powerhouse's intact, historic physical features at this location directly links the property with early power development in the region, contributing to integrity of association.

The Copco No. 2 Powerhouse retains a high level of integrity and is eligible as a contributing resource to the Copco No. 2 Historic District. The powerhouse is also individually eligible.

Resource(s)	Construction/ Major Alterations	Applicable NRHP Criteria	Area(s) of Significance	Contributing/ Individually Eligible
Powerhouse	1925	A	Commerce and Industry	Contributing
		C	Architecture	Individually Eligible
Dam, powerhouse, and water conveyance system (collectively)	1925	C	Engineering	Contributing

B12. References (continued):

Durio, Lori. 2003. Klamath River Hydroelectric Project District. State of California Department of Parks and Recreation. Primary Record #47-004015. Recorded July 2003 by L. Durio, CH2M Hill, New Orleans, LA. September.

Evening Herald. 1927. "Copco Officials Give Minute Description of Large Power Plant on Crater Lake Highway." December 7.

HRA (Historical Research Associates). 2011. Prospect Nos. 1, 2, and 4 Hydroelectric Project. March. http://www.pacificorp.com/content/dam/pacificorp/doc/Energy_Sources/Hydro/Hydro_Licensing/Rogue%20River/Prospect_History_Web_Content_Final.pdf (accessed April 16, 2019).

Iron Gate. circa 1962. Iron Gate Development (Iron Gate – Data Sheet, Folder 11.2.5.246, Box 5/16, John C. Boyle Collection, Southern Oregon Historical Society).

Kramer, George
2003a. Klamath Hydroelectric Project. FERC No. 2082. Request For Determination of Eligibility. Prepared for PacifiCorp, Portland, Oregon. October.

2003b. Klamath Hydroelectric Project. FERC No. 2082. Historic Context Statement. Prepared for PacifiCorp, Portland, Oregon. June.

Mail Tribune [Medford, Oregon]
1924. "Copco Makes Record In New KL. River Unit." November 19.

1925. "Copco No. 2 Dedication a Unique Event, Will Be Shown in Movies." July 7.

1960. "Preliminary Work on Iron Gate Dam Starts." April 10.

News-Review [Roseburg, Oregon]
1925. "New 3 Million Dollar Plant California Oregon Power Co. Dedicated Sunday at Copco." July 6.
1927. "Copco To Make Big Improvements During This Year." February 28.
1929. "Big Strides Made In Power Development In Southern Oregon Since Copco Started." April 22.

Oregonian [Portland, Oregon]. 1925. "Huge California Oregon Company Plant to Furnish Power for Large Territory" [photograph caption]. July 12.

PacifiCorp. 2004. Klamath Hydroelectric Project. FERC No. 2082. Cultural Resources Final Technical Report and Associated Confidential Documents. Exhibit C. Construction History and Proposed Construction. February.

Pacific Power & Light Company (Pacific Power)
1956 Initial Statement of The California Oregon Power Company to the Federal Power Commission showing Actual Legitimate Original Cost and Estimated Accrued Depreciation of Project No. 2082 (Klamath Basin – Copco No. 2 Plant) Located in the State of California as of March 1, 1956. PacifiCorp Archive, PDX.014908 (box).

1962 Iron Gate: An Important Unit in the Klamath River Project [booklet] (Box 5/16. John C. Boyle Collection. Southern Oregon Historical Society).

1966 Expenditure Requisition No. 31-17754-685, Copco #2 – New Control House. Authorized 9/16/66. PacifiCorp archives, PDX.037414 (box), Copco 2 Plant, 1962-1979 (folder).

Power Engineers, Inc. 2015. Proponent's Environmental Assessment for the Application of PacifiCorp (U 901 E) for a Permit to Construct the Lassen Substation Project. Prepared for PacifiCorp Portland, OR.

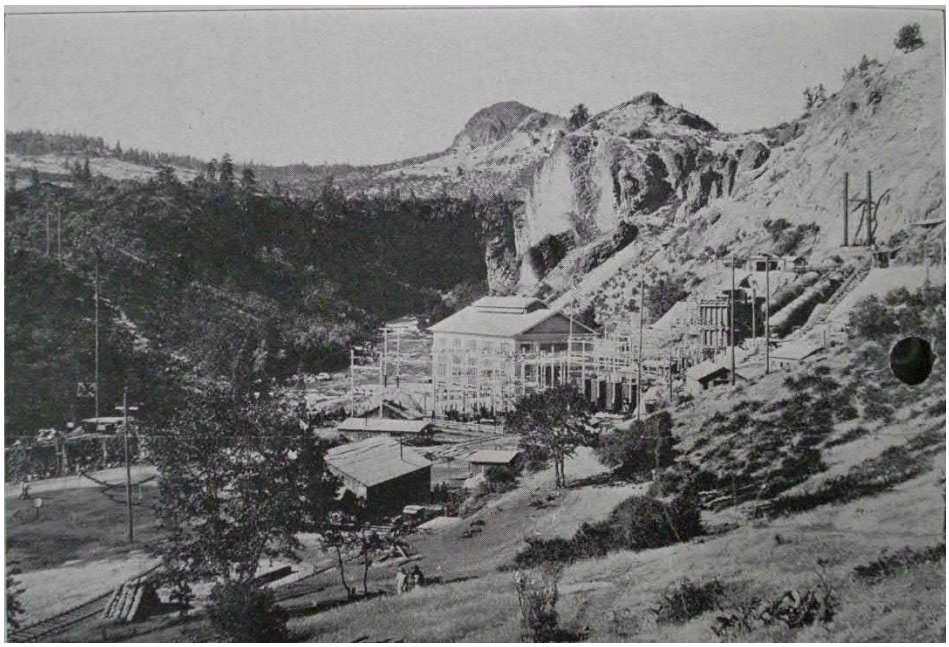
Sacramento Bee [Sacramento, California]
1968. "Pacific Power Installs Copco Unit Equipment." October 9.

1970. "Pacific Power Sets Budget For Additions." January 19.

USBR (United State Bureau of Reclamation). 2012. Reclamation: Managing Water in the West. Detailed Plan for Dam Removal – Klamath River Dams. Klamath Hydroelectric Project. FERC License No. 2082, Oregon – California. USBR, U.S. Department of the Interior. Technical Service Center, Denver, Colorado. July.

Photographs:

Photograph 1. Powerhouse, substation switchyard (left), and Klamath River (behind switchyard); view facing north, 2018.



Photograph 2. Powerhouse (Copco 1926).

Photographs (continued):

Photograph 3. Powerhouse, southern (façade) elevation, showing penstock and mortared stone wall (right); view facing north, 2018.

Photograph 4. Powerhouse, eastern elevation, showing control center (left) and penstock (right); view facing west, 2018.

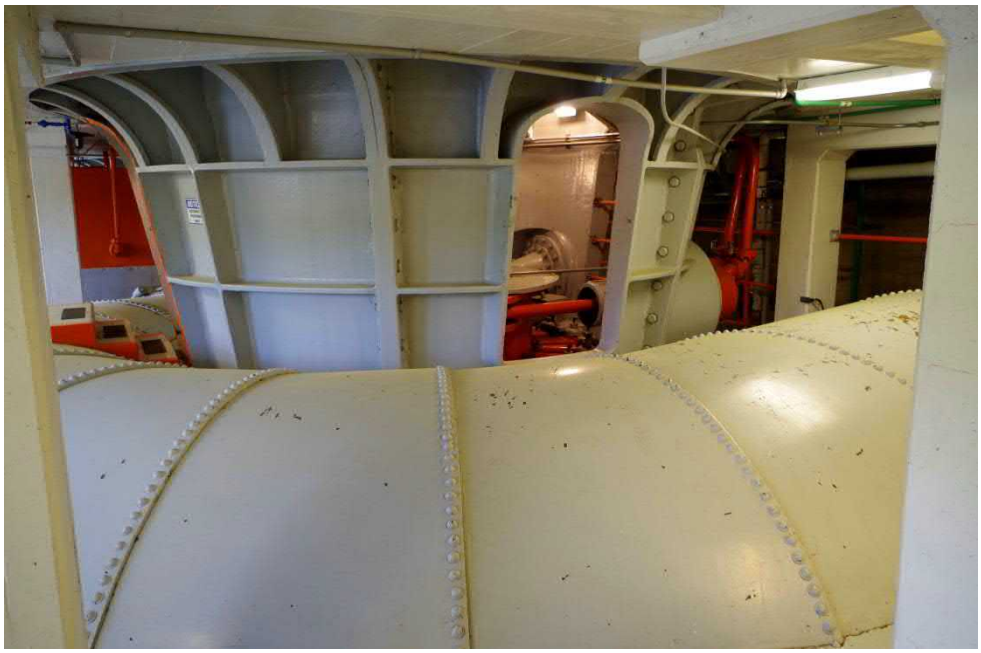
Photographs (continued):

Photograph 5. Powerhouse, northern (rear) elevation, showing control center (right background); view facing southeast, 2018.

Photograph 6. Powerhouse, western elevation, showing control center (right); view facing northeast, 2018.

Photographs (continued):

Photograph 7. Generators; view facing northeast, 2018.



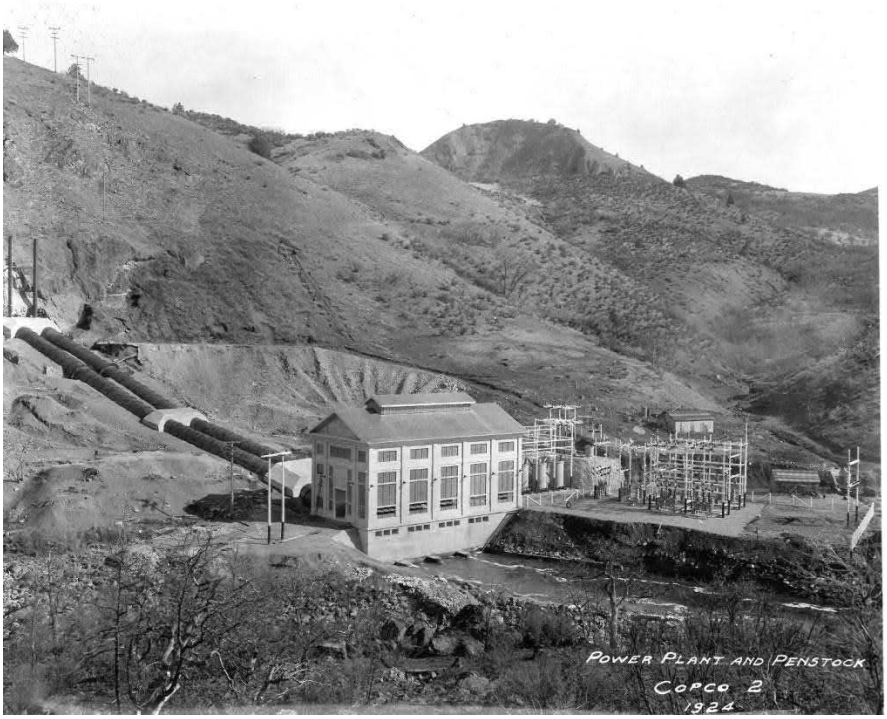
Photograph 8. Turbine in basement; view facing north, 2018.

Photographs (continued):

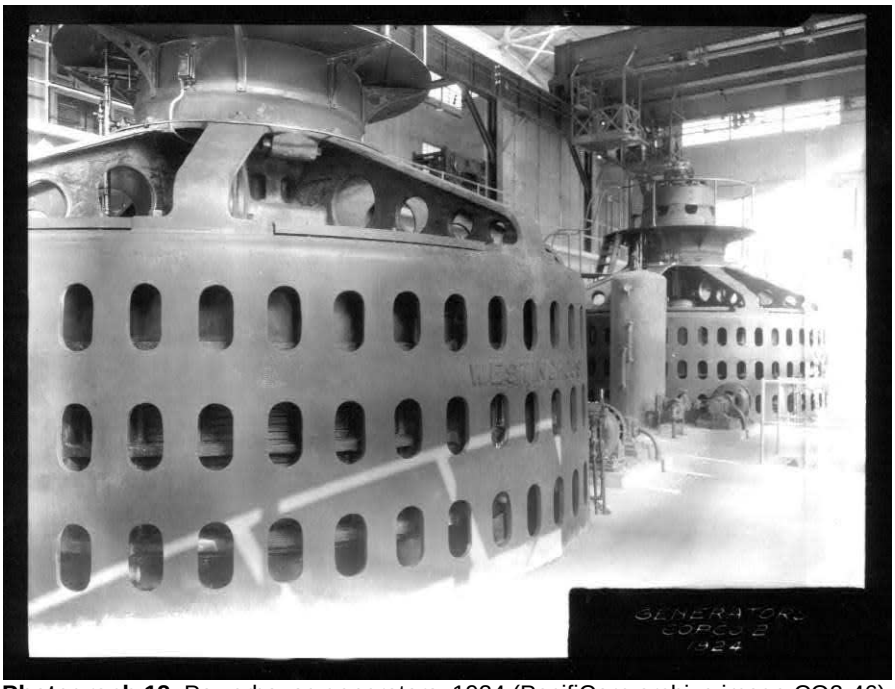
Photograph 9. Copco No. 2 Substation, showing control center and powerhouse in background; view facing northeast, 2018.

Photograph 10. Construction at Powerhouse site, showing Klamath River, Lower Camp/Camp 2, Klamath Lake Railroad spur, tall rock-crushing plant, and concrete tunnel outlet (PacifiCorp archive image CO2-19).

Photographs (continued):

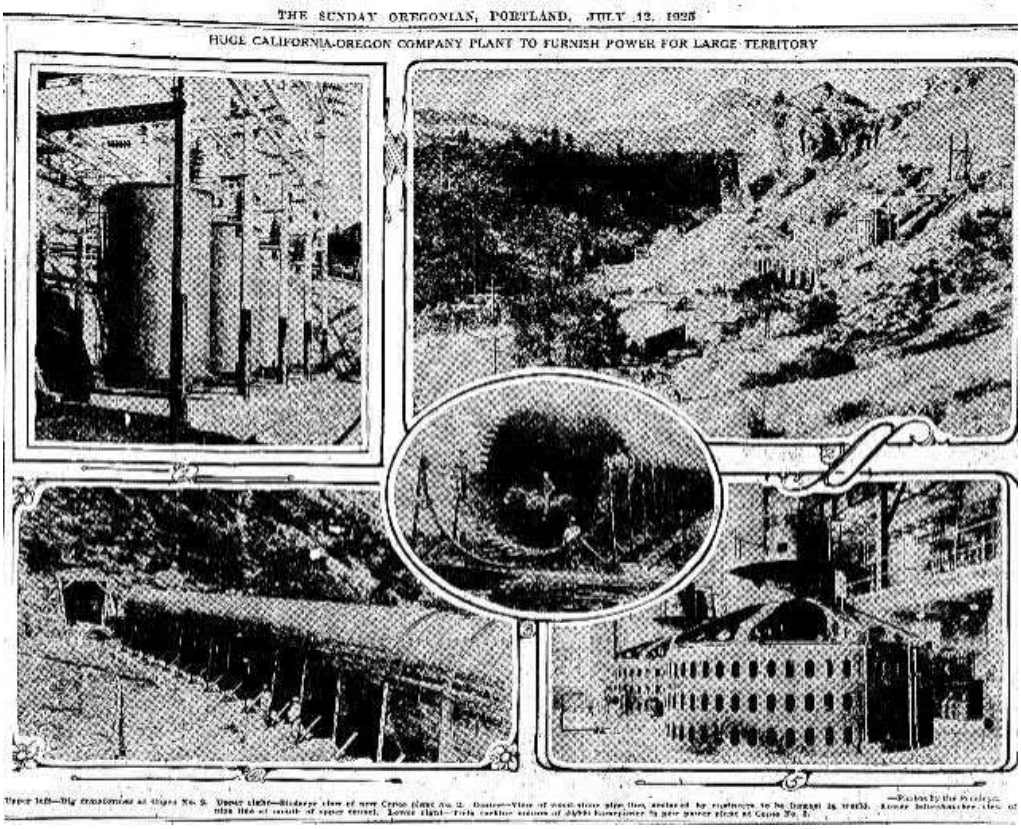


Photograph 11. Powerhouse, double penstock, and original substation, circa 1924 (PacifiCorp archive image CO2-36).



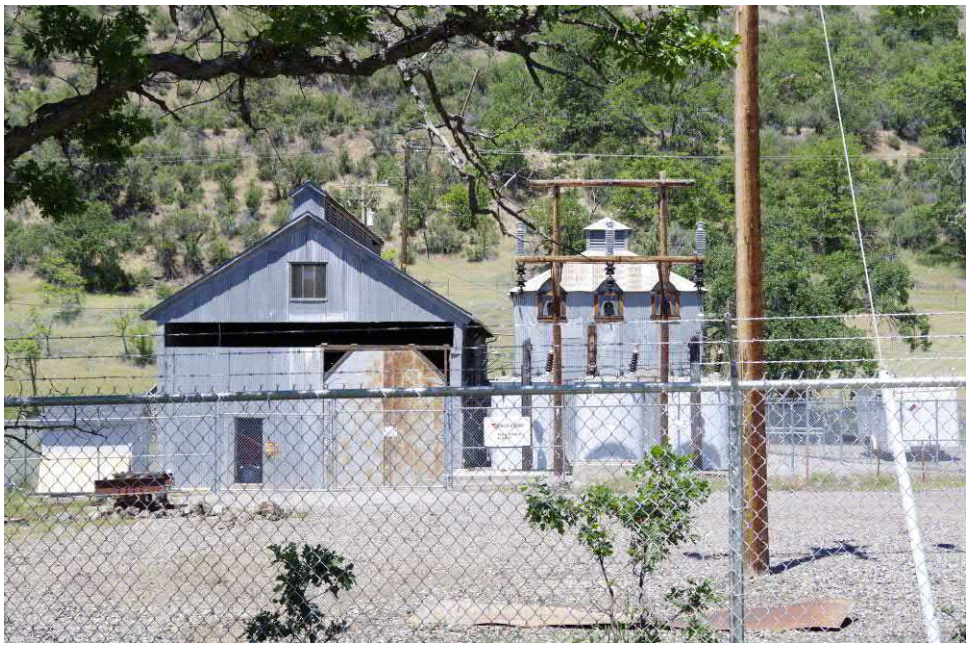
Photograph 12. Powerhouse generators, 1924 (PacifiCorp archive image CO2-46).

Photographs (continued):


THE SUNDAY OREGONIAN, PORTLAND, JULY 12, 1925

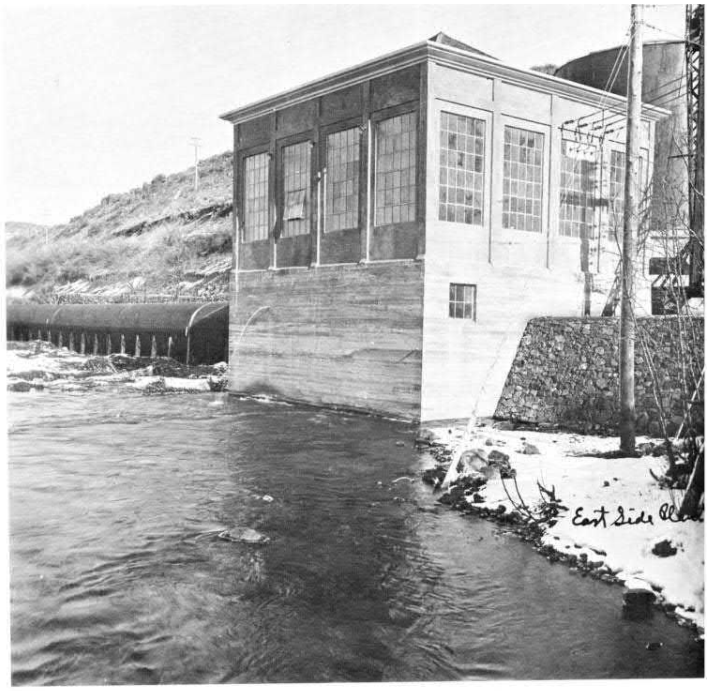
HUGE CALIFORNIA-OREGON COMPANY PLANT TO FURNISH POWER FOR LARGE TERRITORY

Photograph 13. *Oregonian* photographic collage showing construction of powerhouse (upper right) and placement of adjacent transformers (upper left). Construction of the wood stave pipe is shown at bottom left and in the center, which depicts a man sitting on a horse inside the unfinished wood stave pipe. The powerhouse's interior generating units are shown at bottom right (*Oregonian* 1925).



Photograph 14. Fall Creek Power Plant, 2018.

Photographs (continued):



East Side Plant No. 3 with woodstave pipeline from Link River Dam. Built in 1924.

Photograph 15. Copco completed the East Side Power Plant No. 3 in Klamath Falls, Oregon, in 1924, with similar design and style elements to the Copco No. 2 Powerhouse. Wooden buildings housed the earlier East Side Power Plants No. 1 (1895) and 2 (1906).

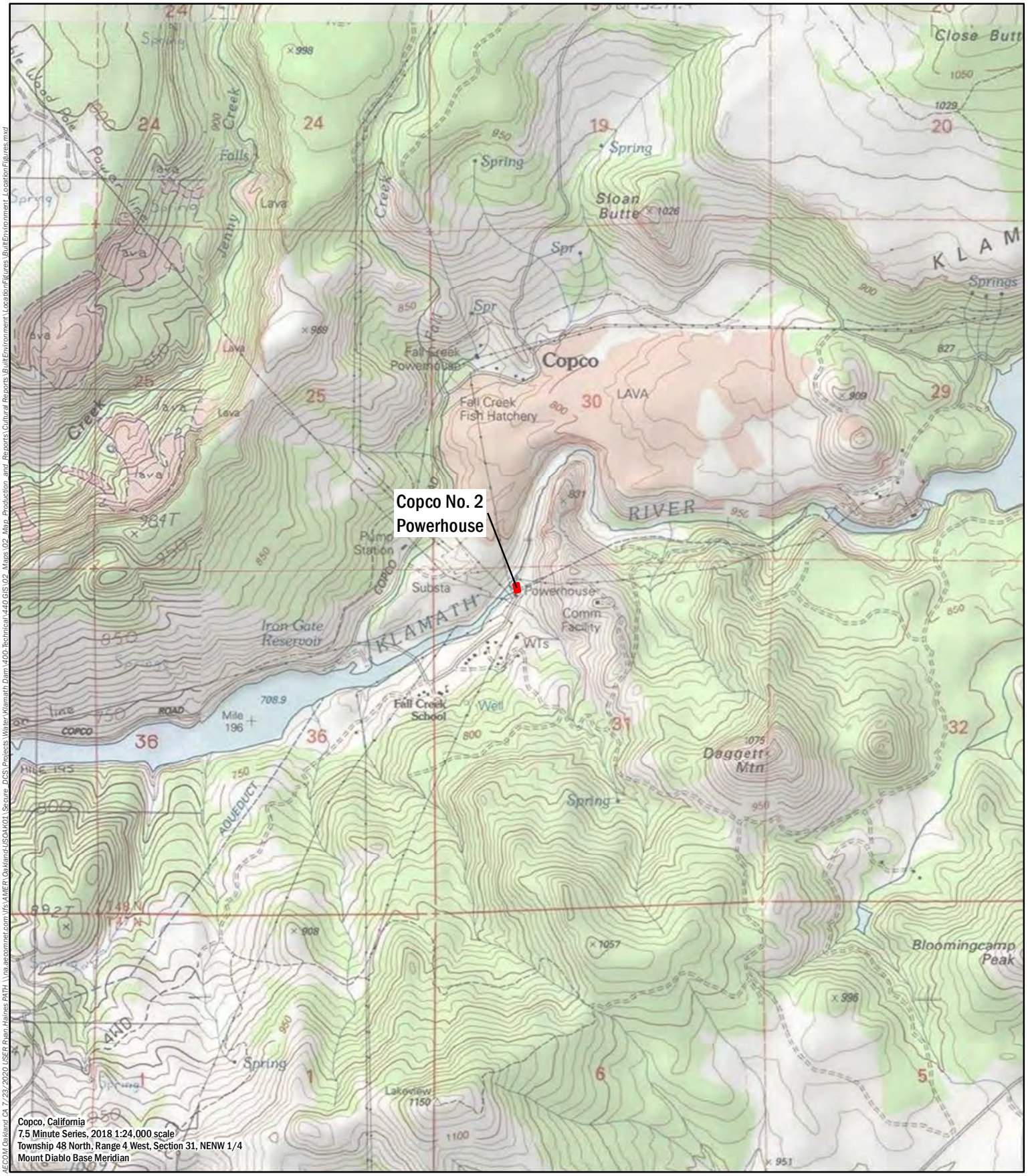
Photograph 16. Prospect No. 2 Powerhouse, completed by Copco in 1927 (photograph courtesy of HRA 2009).

LOCATION MAP

Property Name: Copco No. 2 Historic District

***Map Name:** _____ ***Scale:** _____ ***Date of map:** _____

See Location Map on next page.



Copco No. 2 Powerhouse

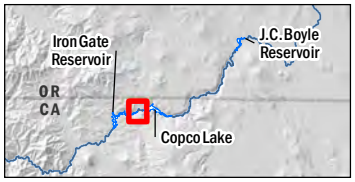
Copco No. 2 Powerhouse

N

0 2,000 Feet

0 600 Meters

1:24,000



Klamath River Dam Removal
Daggett Road
Copco, Siskiyou County, California

AECOM
July 2020

SKETCH MAP

Property Name: Copco No. 2 Historic District

***Drawn by:** _____ ***Date of map:** _____

See Sketch/Site Map on next page.

Copco No. 2 Powerhouse

N

0 100 Feet

0 20 Meters

1:1,200

Klamath River Dam Removal
Daggett Road
Copco, Siskiyou County, California

AECOM
July 2020

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #47-004015
HRI #
Trinomial
NRHP Status Code 3B

Other Listings
Review Code | Reviewer | Date

 Resource Name or #: Copco No. 2 Water Conveyance System

P1. Other Identifier: Copco No. 2 Water Conveyance System
***P2. Location:** ☒ **Unrestricted**
***a. County** Siskiyou
***b.** USGS 7.5' Quad Copco, CA Date 2018 T 48N; R 4W; SW 1/4 of SW 1/4 of Sec 29; Mount Diablo B.M. See Continuation Sheet.
c. Address _____ City _____ Zip _____
d. UTM: Zone 10 T, 554654mE/4647623mN See Continuation Sheet.
e. Other Locational Data: N/A

***P3a. Description:**

The Copco No. 2 water conveyance system is a major component of the Copco No. 2 hydroelectric development. The system is comprised of a tunnel intake, concrete-lined tunnel, wood stave pipe, concrete tunnel, and double steel penstock. The system originates at the Copco No. 2 Dam's upstream side, near the eastern abutment. There, the headgate of the dam, rebuilt in 1996, controls water flow from the river into the tunnel intake. The headgate structure includes trash racks and a roller-mounted (caterpillar) gate with an electric motor-driven wire rope hoist (Durio 2003:84). The intake base length is 53 feet, the gate width is 20 feet, and the trash rack is 48 feet wide and 36 feet tall (GEC 2006:73). The concrete-lined tunnel, measuring 2,440 feet long with a 16-foot diameter, begins at the tunnel intake and emerges as a 1,313-foot-long wood stave pipe (Kramer 2003:10,84).

Downstream from the Copco No. 2 Dam, the Klamath River winds through a horseshoe-shaped canyon with a steep exposed cliff face along the northern slope. A wood stave pipe is on a terrace above the river's southern shore. The setting contains vegetation such as willow and white alder along the southern shore, with Himalayan blackberry and poison oak in the understory (AECOM 2017:3-24).

See Continuation Sheet.

***P3b. Resource Attributes:** (HP11) Engineering structure (Hydropower water conveyance system structure)
***P4. Resources Present:** ☒ Structure ☒ Element of District
P5a. Photograph:

P5b. Description of Photo: Copco No. 2 Water Conveyance System (Wood Stave Pipe), facing northeast (June 11, 2018).

***P6. Date Constructed/Age and Source:**
☒ Historic, 1925 (Pacific Power 1956:4)

***P7. Owner and Address:**
PacifiCorp
825 NE Multnomah, Suite 1500
Portland, OR 97232

***P8. Recorded by:**
Shoshana Jones, AECOM
111 SW Columbia Street, Suite 1500
Portland, OR 97201

***P9. Date Recorded:** June 11, 2018

***P10. Survey Type:** Intensive Level

***P11. Report Citation**: Klamath River Renewal Corporation. 2021. Lower Klamath Project Historic Built Environment Technical Report

***Attachments:** ☒Location Map ☒Continuation Sheet ☒Building, Structure, and Object Record

P2b. Location/Township, Range, and Section (continued):

USGS 7.5' Quad Copco, CA Date 2018 Mount Diablo B.M.

Contributing Resource or Feature	Township	Range	Section
Tunnel Intake	48N	4W	SW 1/4 of SW 1/4 of Sec. 29
Concrete-Lined Tunnel (Water Conveyance System)	48N	4W	SE 1/4 of SE 1/4 of Sec. 30
Wood Stave Pipe (Water Conveyance System)	48N	4W	SW 1/4 of SE 1/4 of Sec. 30
Concrete Tunnel (Water Conveyance System)	48N	4W	NW 1/4 of NW 1/4 of Sec. 31
Penstock	48N	4W	NE 1/4 of NW 1/4 of Sec. 31

P2d. Location/UTM (continued):

Contributing Resource or Feature	Zone	UTM
Dam	10 T	554669mE/4647646mN
Concrete Tunnel (Water Conveyance System)	10 T	553289mE/4647326mN
Wood Stave Pipe (Water Conveyance System)	10 T	553590mE/4647478mN
Concrete-Lined Tunnel (Water Conveyance System)	10 T	553980mE/4647514mN
Penstock	10 T	553198mE/4647279mN

P3a. Description (continued):

The concrete-lined tunnel measures approximately 2400 feet and contains “one adit about midway between the upper end and the lower end, making four headings, with one ventilating shaft (Pacific Power 1956:2). Natural formations at the tunnel site required varying methods to line the tunnel with concrete. Where crews encountered “sound rock,” they installed reinforcing steel inside the concrete tunnel structure. In some timbered sections, reinforcing steel was used at 12-inch intervals, while critical sections required reinforcing steel at four-inch intervals. Workers poured the invert then placed the arch with a concrete gun, using Blaw-Knox moveable steel forms for the arch, and some hand-filling to fill the arch crown intervals (Pacific Power 1956:3).

The wood stave pipe is a distinctive component of the Copco No. 2 hydroelectric project water conveyance system. The 1,313 foot-long, 16-foot-diameter wood stave pipeline extends across the canyon floor, immediately south of, and running parallel to, the Klamath River. The steel cradles, which secure the pipeline, are spaced at 8-foot intervals. The cradles are mounted on concrete bases measuring 2 feet high and 14 inches wide. The steel cradles were numbered, beginning with “1” at the pipeline’s eastern end, where it emerges from the hillside. The numbering system is no longer visible as the pipeline extends west along the canyon floor. A metal access panel is on the pipeline’s underside between the steel cradles numbered 11 and 12. Another metal access panel is near the pipeline’s western end. The Douglas Fir wood staves measure approximately 14 feet long and 6 inches wide and are bound by steel bands at every 3 to 5 inches. The steel bands measure 1 inch wide. The wood stave pipeline emerges from the eastern hillside and curves as it extends along the canyon floor. It then reenters the hillside through a concrete thrust block topped by a steel vent pipe. Guy wires at both ends of the wood stave pipeline anchor the steel vent pipes to the ground. Water leaking from the wood stave pipe supports wetland vegetation in several locations, including broadleaf cattail, water smartweed, and beggarstick. Culverts drain these ponded areas into the river (AECOM 2017:3-24).

The west end of the wood stave pipe connects to a 1,110-foot-long concrete tunnel with a 16-foot interior diameter. The concrete lining of the tunnel measures nine inches in rock and 21 inches in timbered sections. The surge chamber is constructed in rock above the tunnel. The vertical vent at the top of the chamber and an overflow spillway carry excess water back to the river channel. The tapering portion of the tunnel is concrete and the lower portion is gunite. The tunnel outlet is connected to a bifurcated steel penstock that extends into the powerhouse turbines (Pacific Power 1956:3-4).

While the tunnels and wood stave pipeline measure 16 feet in diameter, the penstocks measure 16 feet at the tunnel portal, and decrease to 8 feet in diameter at the powerhouse’s turbine spiral cases (Durio 2003:84; GEC 2006:72). The double penstock legs measure 405.5 feet and 410.6 feet long and pass through concrete thrust blocks before entering the powerhouse (GEC 2006:72). Two steel vent pipes emerge vertically from the thrust block closest to the tunnel.

The water conveyance system components appear to be in good condition, except for the wood stave pipe, which appears to be in fair condition.

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary #47-004015
HRI #

BUILDING, STRUCTURE, AND OBJECT RECORD

*Resource Name or #: Copco No. 2 Water Conveyance System *NRHP Status Code: 3B

B1. Historic Name: N/A
B2. Common Name: Copco No. 2 Water Conveyance System
B3. Original Use: water conveyance
B4. Present Use: water conveyance
B5. Architectural Style: N/A
B6. Construction History:

The Copco No. 2 water conveyance system was constructed in 1924-1925 as a major component of the Copco No. 2 hydroelectric development. The system appears to have undergone no substantial alterations since its original construction. Patching of leaky areas was visible during fieldwork.

B7. Moved? No
B8. Related Features: The water conveyance system is a contributing resource to the Copco No. 2 Historic District, which is within the larger Klamath Hydroelectric Project (KHP) Historic District. The KHP Historic District consists of seven hydroelectric developments, including Copco No. 2, in Southern Oregon and Northern California.

B9a. Architect: N/A

b. Builder: California Oregon Power Company (Copco); Continental Pipe Manufacturing Company (CPMC), Seattle, Washington (wood stave pipe).

B10. Significance:
Theme: hydroelectric development
Area: Southern Oregon and Northern California
Period of Significance: 1925-1970 (Copco No. 2 Historic District)
Property Type: Water Conveyance System
Applicable Criteria: National Register of Historic Places (NRHP) Criterion A (contributing) and Criterion C (contributing and individually eligible)

See continuation sheets.

B11. Additional Resource Attributes:

B12. References:

AECOM. 2017. Klamath River Renewal Project. California Environmental Quality Act (CEQA) and California and Oregon 401 Water Quality Certifications Technical Support Document. Submitted to: California State Water Resource Control Board and Oregon Department of Environmental Quality. Submitted by Klamath River Renewal Corporation. September.

Boyle, John C. 1976. *50 Years On The Klamath*. Klocker Printery, Medford, Oregon. First printing 1976, second printing 1982.

Copco (California Oregon Power Company). 1926. "The White Man Comes." *The Volt* 7, No. 3. Photograph caption. November (folder "Volt 1920-1926, box 15/16, John C. Boyle Collection, Southern Oregon Historical Society).

CPMC (Continental Pipe Manufacturing Company). 1918. *Electrical World* 71, No. 25 [advertisement].

See Continuation Sheet.

B13. Remarks: None
B14. Evaluator: Shoshana Jones, AECOM
111 SW Columbia Street, Suite 1500
Portland, OR 97201
Date of Evaluation: June 11, 2018

(This space reserved for official comments.)

B10. Significance (continued):

Historic Context

The most distinctive feature of the Copco No. 2 water conveyance system is the wood stave pipe section. Woods stave pipes were commonly built during the late nineteenth and early twentieth centuries for irrigation and hydropower purposes. At the time of its construction, the wood stave pipe at Copco No. 2 was reportedly the largest in the world, reflecting what was then an advanced design using expert workmanship. Modern pipelines built with materials such as concrete and steel have since rendered wood stave construction obsolete.

The Use of Wood Pipe in North America

The use of wood pipe has a long history in North America. American colonists brought the practice of wood pipe manufacturing from England. America's first public water supply system, built in Boston in 1652, employed wood pipe. Beginning around 1900, the use of wood pipe for water conveyance had become common for irrigation and power development. Wood pipelines were previously constructed with bored logs which had limited flow capacity. Flow capacity greatly increased with the innovative use of wood staves, narrow strips of wood placed edge to edge to form the sides, covering, or lining of a vessel. The stave design allowed the creation of larger pipes and greatly increased capacity. The design included implementation of "yokes or cradles" that braced the pipe and helped prevent collapse. By 1916, the largest wood stave pipe measured 13.5 feet in diameter (Scobey 1916:1-2). Irrigation engineer Fred Scobey described the wood stave as follows:

> Being well adapted to low heads and large diameters, such pipe has proved one of the best and cheapest means of conducting large volumes of water under low or medium heads from the sources of supply to the places of use, regardless whether the latter be a power plant, a storage reservoir, the highest portion of an irrigation tract, or the distributing reservoir of a municipality (Scobey 1916:2).

Wood stave pipes adapted well to diverse uses and landscapes, offered a wide range of capacities, and were relatively inexpensive (Scobey 1916:2). They were also less susceptible to corrosion than metal pipes (Pacific Tank & Pipe Co. 1926:7). Uses included urban water systems, irrigation, mining and power plants, hydraulic mining and dredging, sewers, and electrical conduits (*The Mining Catalogue* 1921:376). Wood stave pipes became popular at hydropower developments nationwide. Their staves and other constituent parts could be transported to sites that were difficult to access, did not require expansion joints, and were less prone to freezing than steel (Hay 1991:57).

Continental Pipe Manufacturing Company (CPMC), which fabricated the Copco No. 2 wood stave pipe, was a Seattle, Washington–based company and premier producer of wood stave pipe in the western United States. By 1918, the company had acquired Pacific Coast Pipe Co. of Seattle, Washington Pipe & Foundry Co. of Tacoma, Portland Wood Pipe Co. of Portland, Oregon, and National Tank & Pipe Co. (pipe department only) of Portland, Oregon (CPMC 1918:19). CPMC consolidated these concerns into the Continental Wood Stave Pipe production sector. CPMC used Douglas fir for all wood stave pipes, touting the material as "marvelously durable and all-around serviceable" (CPMC 1918:19). CPCM advertised as using only select Douglas fir, which was "straight and clear – free from knots and imperfections" (CPMC 1918:377). The company also used steel bands "made from especially specified mill rolled steel of very high tensile strength" (CPMC 1921:377).

Construction of the Copco No. 2 Wood Stave Pipe

At the time of its construction by CPMC, the 16-foot-diameter wood stave pipeline at Copco No. 2 was the nation's largest. In addition to supplying the wood staves, CPMC designed and furnished the concrete cradles and steel stiffener rings (Boyle 1976:17). A historic photograph published in the November 1926 issue of Copco's newsletter, *The Volt*, depicts a railroad running parallel to the wood stave pipeline during the construction phase and touts the pipeline as "probably the largest in the world" (Copco 1926). In 1925, the *Mail Tribune* reproduced a Funk & Wagnalls Literary Digest article about Copco No. 2's construction that described the wood stave pipe as "The Largest Wooden Pipe in the World" (*Mail Tribune* 1925). According to the article, the Copco No. 2 wood stave pipe was:

> [S]ixteen feet in inside diameter, or two feet larger than the line that formerly held the record [of world's largest]. It is 1316 feet in length, and made of Douglas fir staves four inches thick, treated with eighty pounds of creosote per cubic foot. The pipe-line is supported in steel cradles and is entirely open to the air. The maximum head of the line is sixty feet. It discharges 2000 cubic feet of water per second, or more than 100 gallons of water per day for each of 12,000,000 persons. It is interesting to note that the use of creosote for wood-pipe staves is far exceeding original expectations . . . This pipe-line is considered practically a permanent installation, provided the steel cradles and bands are painted from time to time (*Mail Tribune* 1925).

The article also noted that most wood-stave pipes, even those built for irrigation purposes, were constructed of creosote-treated wood, and that "no objectionable taste remains after the creosote has been flushed out" (*Mail Tribune* 1925). A description of the wood stave pipe in the *News-Review* mentioned the 148 steel cradles and staves bound together by steel bands, set 4 inches apart (*News-Review* 1925).

B10. Significance (continued):

Link River Complex's Wood Stave Pipe: A Comparison

In 1924, Copco built both the Copco No. 2 wood stave pipe and the East Side water conveyance system's wood stave pipe. The East Side water conveyance system is part of the Link River complex in Oregon, and its wood stave pipe was built to convey water from Upper Klamath Lake, upstream of the Link River Dam, to the company's East Side Powerhouse No. 3. The original diameter of the pipe was 14 feet 2 inches on the exterior and 13 feet 8 inches on the interior (Jarrell 2014). By 1956, a substantial portion of the wood stave pipe was damaged and was leaking water. That summer, Copco drained the wood stave pipe and replaced the damaged section with steel pipe:

> A quarter of a million dollar replacement project on the old wooden-stave, steel-banded penstock, is under way on the line that carries water from Upper Klamath Lake, above the Link River dam to the turbine in the east side of the California-Oregon Power Company power plant at the end of Conger Avenue. One fourth mile of the original line, damaged by time, is to be replaced with 12-foot in diameter steel pipe by the American Pipe and Construction Company . . . The wooden pipe will be cut in sections with power saws and bulldozed aside to make way for the pouring of the concrete cradles on which the new line will rest. A trainload of the steel tube will arrive July 13 to be followed later by a second shipment (*Herald and News* 1956).

The East Side water conveyance system's wood stave pipe now measures 12 feet in diameter and 1,729 feet long. The wood stave portion connects to a replacement steel penstock measuring 1,361 feet long. Durio (2003) estimates a built date of 1970-1980 for the pipe's steel section; however, the *Herald and News* article cited above indicates a 1956 built date (*Herald and News* 1956). Using the East Side water conveyance system for comparison, the Copco No. 2 wood stave pipe remains the world's largest (in diameter) wood stave pipe at the time of construction in the mid-1920s. Furthermore, as compared to the East Side system, the Copco No. 2 wood stave pipe remains notably unaltered.

Evaluation (Contributes to Copco No. 2 Historic District and Individually Eligible)

Criteria Analysis

NRHP Criterion A
The Copco No. 2 Historic District contributes to the larger KHP Historic District, both of which are significant under NRHP Criterion A in the areas of Commerce and Industry. The Copco No. 2 water conveyance system adds to the significance of the Copco No. 2 Historic District by conveying water nearly a mile between the dam and the powerhouse, where hydroelectric power is generated.

NRHP Criterion B
Research does not indicate that the water conveyance system is associated with any historically significant individuals under NRHP Criterion B.

NRHP Criterion C
The dam, water conveyance system, and powerhouse are collectively significant under NRHP Criterion C in the area of Engineering for embodying the distinctive characteristics of an early-twentieth-century hydroelectric development that implemented technological advances in its conception, design, and construction.

The water conveyance system is also individually significant under NRHP Criterion C in the area of Engineering for its wood stave pipe, which represents early–twentieth-century innovations in wood pipes, and the use of wood stave pipes for hydropower systems. The Copco No. 2 wood stave pipe was constructed during an era when the incorporation of wood staves and concrete cradles into wood pipelines enabled construction of much larger pipes with greater flow capacity. When completed, the wood stave pipe was reportedly the largest in the world (*Mail Tribune* 1925).

NRHP Criterion D
The water conveyance system is not significant as a source (or likely source) of important information regarding history or prehistory. It does not appear likely to yield important information about historic construction materials or technologies and is not significant under NRHP Criterion D.

Integrity Analysis
The water conveyance system retains integrity of location, design, setting, materials, workmanship, feeling, and association; and continues to convey its historic identity as an early-twentieth-century hydroelectric water conveyance system.

Location *is the place where the historic property was constructed or the place where the historic event took place.* The system retains integrity of location, because it maintains its original alignment and location.

B10. Significance (continued):

Design *is the composition of elements that constitute the form, plan, space, structure, and style of a property.* The system retains integrity of design, because it has maintained its original structure, alignment, and functional interconnections with the Copco No. 2 dam and powerhouse.

Setting *is the physical environment of a historic property that illustrates the character of the place.* The system retains integrity of setting in the remote, undeveloped area of the Klamath River basin between the dam and powerhouse.

Materials *are the physical elements combined in a particular pattern or configuration to form the historic property.* The system's original materials are primarily the concrete tunnels, steel penstock, and wood stave pipe. Aside from some leak patches, the wood stave pipe appears to maintain virtually all of its original materials; notably, the numerous wood staves, steel bands, and concrete cradles.

Workmanship *is the physical evidence of the crafts of a particular culture or people during any given period of history.* The overall water conveyance system retains integrity of workmanship, as exemplified by the system's engineering and the skill used to assemble the massive, interconnected water conveyance features.

Feeling *is the quality that a historic property has in evoking the aesthetic or historic sense of a past period of time.* The system's remote setting and retention of original design and materials collectively convey the historic character of an early-twentieth-century water conveyance system, thereby retaining integrity of feeling.

Association *is the direct link between a property and the event or person for which the property is significant.* The system's intact physical features and extension between the Copco No. 2 dam and powerhouse directly link this linear resource with the historic construction and operations at Copco No. 2, contributing to integrity of association.

The water conveyance system retains a high level of integrity and is eligible as a contributing resource to the Copco No. 2 Historic District. The water conveyance system is also individually eligible.

Resource(s)	Date	Applicable NRHP Criteria	Area(s) of Significance	Contributing/ Individually Eligible
Water conveyance system	1925	A	Commerce and Industry	Contributing
		C	Engineering	Individually Eligible
Dam, powerhouse, water conveyance system (collectively)	1925	C	Engineering	Contributing

B12. References (continued):

Durio, Lori. 2003. Klamath River Hydroelectric Project District. State of California Department of Parks and Recreation. Primary Record #47-004015. Recorded July 2003 by L. Durio, CH2M Hill, New Orleans, LA. September.

GEC (Gathard Engineering Consulting). 2006. Klamath River Dam and Sediment Investigation, Final Report. Seattle, Washington. November.

Hay, Duncan. 1991. Hydroelectric Development in the United States, 1880-1940. Prepared for the Task Force on Cultural Resource Management, Edison Electric Institute, Washington D.C.

Herald and News [Klamath Falls, Oregon]. 1956. "New Copco Project Set." June 7.

Jarrell, Lacey. 2014. "Object Lessons: The East Side Power Plant." *Herald and News*. March 28.

Kramer, George. 2003. Klamath Hydroelectric Project. FERC No. 2082. Request For Determination of Eligibility. Prepared for PacifiCorp, Portland, Oregon. October.

Mail Tribune [Medford, Oregon]. 1925. "Copco Breaks Into Literary Digest Columns." November 19.

The Mining Catalogue. 1921. Metal and Quarry Edition. Keystone Consolidated Publishing Co., Inc. Pittsburgh, PA. [advertisement for American Wood Pipe Company].

News-Review [Roseburg, Oregon]. 1925. "New 3 Million Dollar Plant California Oregon Power Co. Dedicated Sunday at Copco." July 6.

Pacific Power. 1956. Initial Statement of The California Oregon Power Company to the Federal Power Commission showing Actual Legitimate Original Cost and Estimated Accrued Depreciation of Project No. 2082 (Klamath Basin – Copco No. 2 Plant) Located in the State of California as of March 1, 1956. PacifiCorp Archive, PDX.014908 (box).

Pacific Tank & Pipe Co. 1926. Pacific Wood Stave Pipe. Catalogue Number Seventeen. Department of Tilden Lumber & Mill Co. San Francisco, California. https://archive.org/details/PacificWoodStavePipe (accessed April 27, 2018).

Scobey, Fred C. 1916. "The Flow of Water in Wood-Stave Pipe." Bulletin No. 376. United States Department of Agriculture. Washington D.C. November 25.

Photographs:

Photograph 1. The water conveyance system begins at the intake for the concrete-lined tunnel at the Copco No. 2 Dam. This 2018 image shows the intake, with head gate in background; view facing south. Water that flows through the intake flows from the small, unnamed reservoir extending 0.3 mile between the Copco No. 1 and Copco No. 2 Dams.

Photograph 2. The eastern end of the wood stave pipe, where the water conveyance system transitions from the concrete-lined tunnel to the wood stave pipe; view facing southeast, 2018.

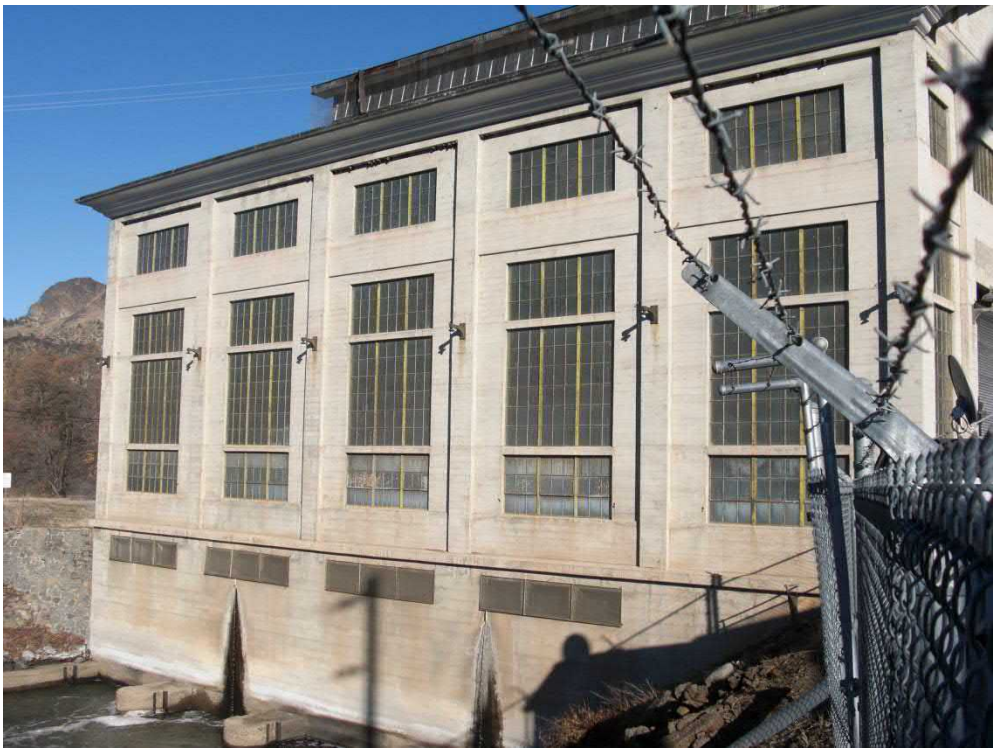
Photographs (continued):

Photograph 3. Western end of the wood stave pipe, where the water conveyance system transitions from the wood stave pipe to the concrete tunnel; view facing northeast, 2018.

Photograph 4. Point where the water conveyance system transitions from the concrete tunnel to the double steel penstock; view facing northeast from powerhouse towards tunnel outlet in hillside, 2018.

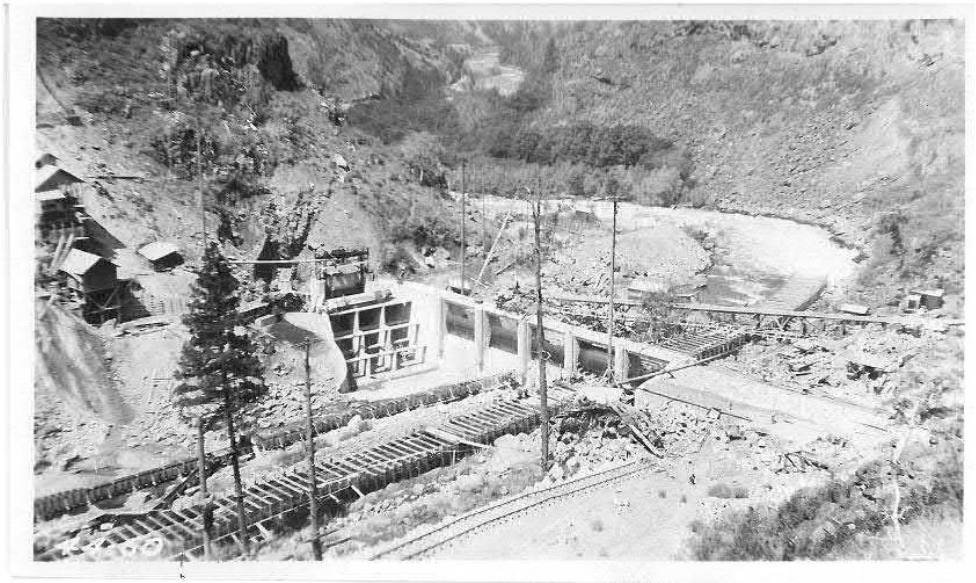
Photographs (continued):

Photograph 5. Point where penstock enters the powerhouse at its eastern end; view facing west, 2018.



Photograph 6. Flow through the powerhouse's generator units exits from the western elevation of the powerhouse and flows into the Klamath River, 2018.

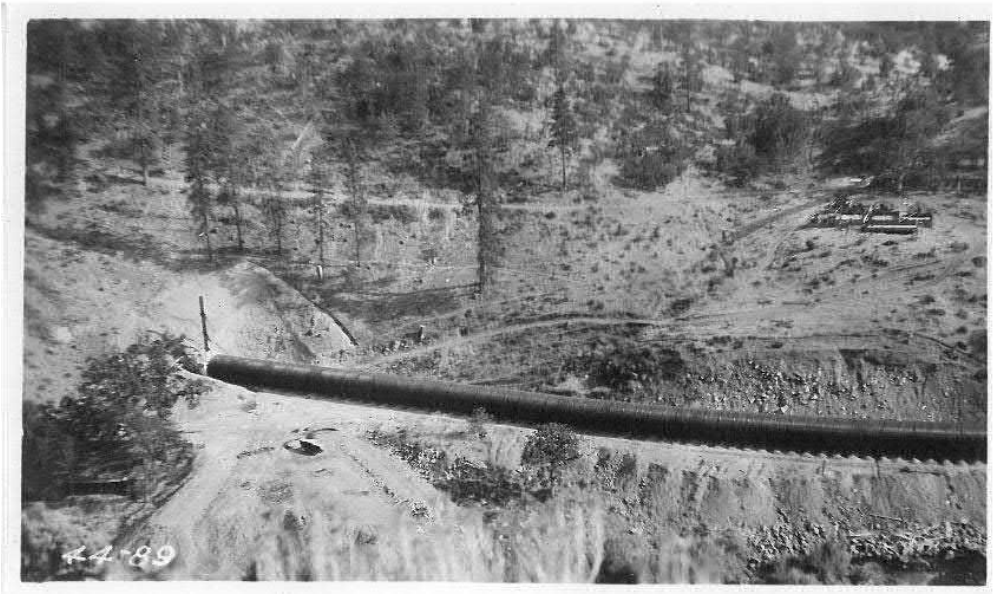
Photographs (continued):



Photograph 7. Copco No. 2 Dam, intake (left of dam), and railroad spur (foreground); view facing downstream, June 30, 1925 (PacifiCorp archive image CO2-90). The intake is the beginning of the water conveyance system.

Photograph 8. Concrete-lined tunnel, June 15, 1925 (PacifiCorp archive image CO2-84). The intake supplies flow to the subterranean concrete-lined tunnel. The concrete tunnel emerges and transitions to wood stave pipe.

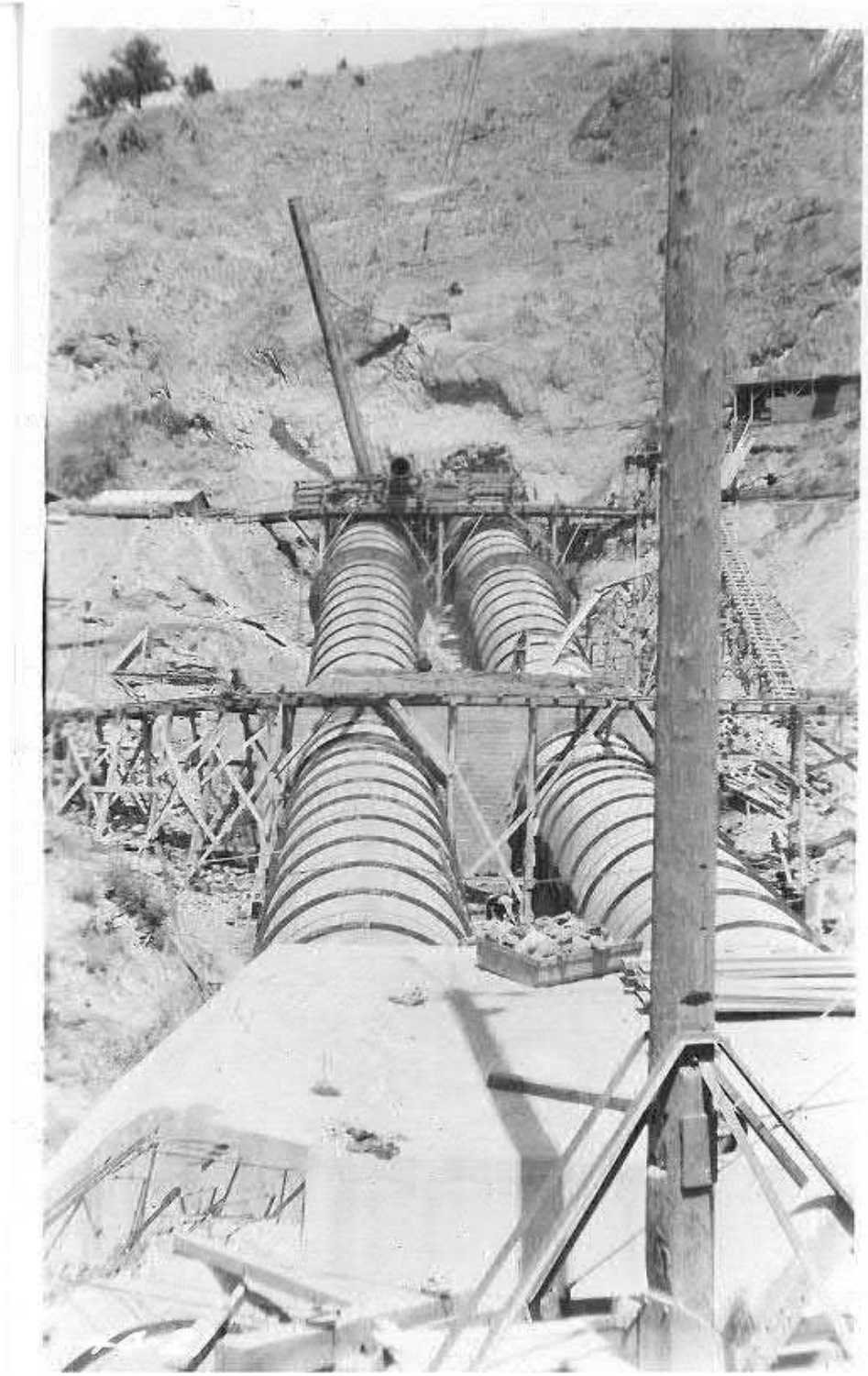
Photographs (continued):



Photograph 9. Eastern half of the completed wood stave pipe, showing what appears to be a construction camp in right background, August 1, 1925 (PacifiCorp archive image CO2-95). At left, the wood stave pipe transitions to the concrete tunnel.

Photograph 10. Interior view of transition from concrete tunnel to double-steel penstock, July 18, 1925 (PacifiCorp archive image CO2-93).

Photographs (continued):



Photograph 11. Double-steel penstock, view from powerhouse, raising vent pipe on penstock leg #1, June 24, 1925 (PacifiCorp archive image CO2-87).

Photographs (continued):

Photograph 12. Wood stave pipe, eastern end; view facing southeast, 2018.

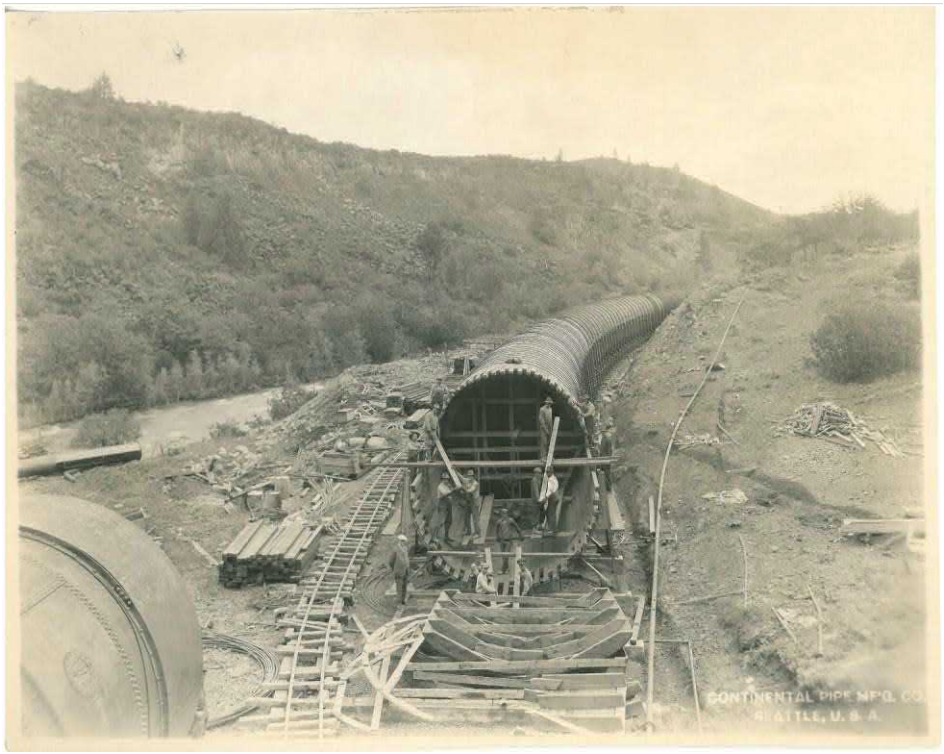
Photograph 13. Wood stave pipe, western end; view facing northwest, 2018.

Photographs (continued):

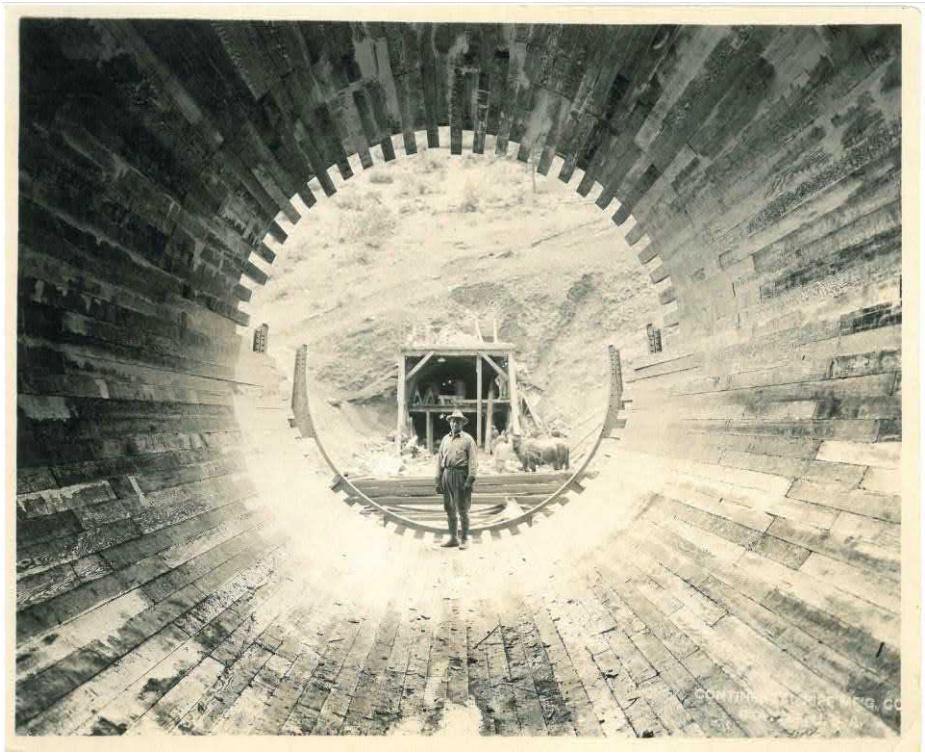
Photograph 14. Wood stave pipe, showing detail of concrete footing, 2018.

Photograph 15. Wood stave pipe, detail of wood staves and steel bands, 2018.

Photographs (continued):



Photograph 16. Wood stave pipe under construction, showing Klamath River at left, circa 1924 (PacifiCorp archive image CO2-40).



Photograph 17. Wood stave pipe under construction, with inlet to concrete tunnel in background, circa 1924 (PacifiCorp archive image CO2-37).

Photographs (continued):

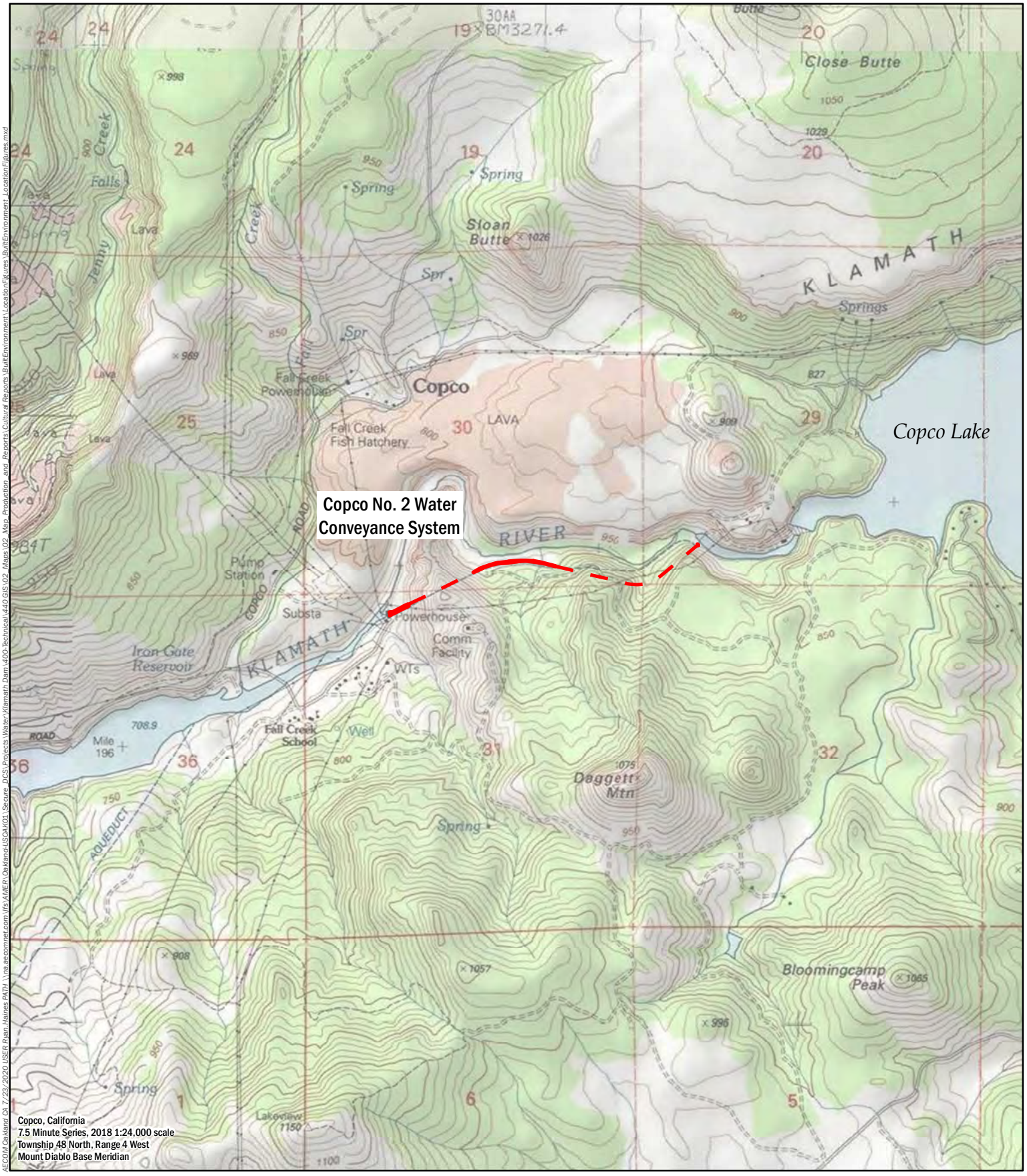
Photograph 18. Western half of the completed pipeline, August 1, 1925 (PacifiCorp archive image CO2-96).

LOCATION MAP

Property Name: Copco No. 2 Historic District

***Map Name:** _____ ***Scale:** _____ ***Date of map:** _____

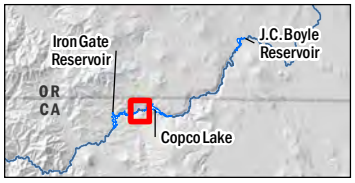
See Location Map on next page.



AECOM Oakland CA 7/23/2020 USER Ryan.Haines PATH \\na.aecomnet.com\Vfs\AMER\Oakland-USOAK01\Secure_DCS\Projects\Water\Klamath Dam\400-Technical\449 GIS\02_Maps\02_Map_Production_and_Reports\Cultural Reports\BuiltEnvironment\LocationFigures\BuiltEnvironment_LocationFigures.mxd

Copco No. 2 Water Conveyance System

Copco No. 2 Water Conveyance System



N

0 2,000 Feet

0 600 Meters

1:24,000

Klamath River Dam Removal
Daggett Road
Copco, Siskiyou County, California

AECOM

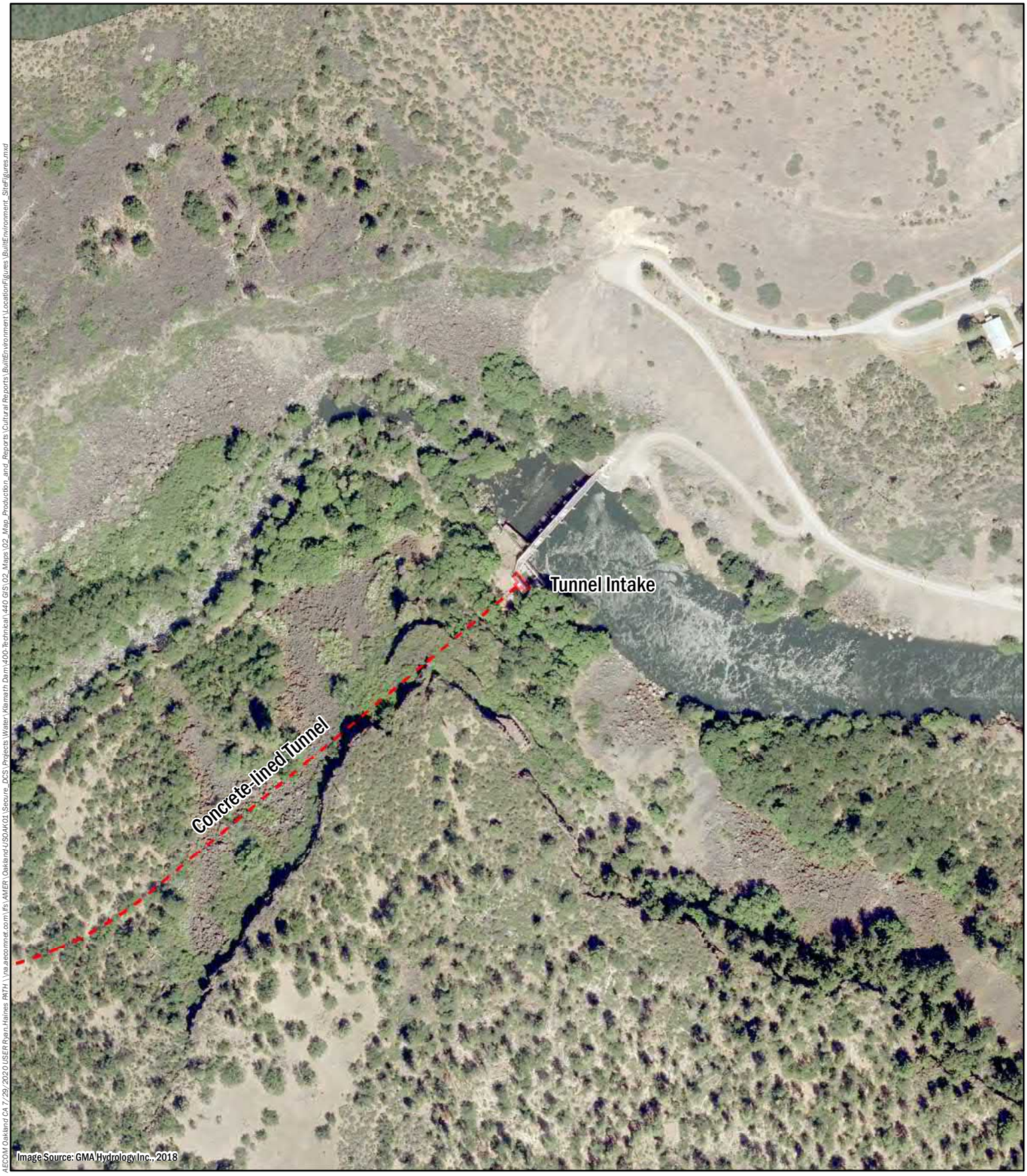
July 2020

SKETCH MAP

Property Name: Copco No. 2 Historic District

***Drawn by:** _____ ***Date of map:** _____

See Sketch/Site Maps on next pages.



Copco No. 2 Water Conveyance System

0 200 Feet
0 50 Meters
1:2,400

Klamath River Dam Removal
Copco Road
Copco, Siskiyou County, California

AECOM
July 2020

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Copco No. 2 Water Conveyance System

Copco No. 2 Water Conveyance System

N

0 200 Feet

0 50 Meters

1:2,400

Klamath River Dam Removal
Copco Road
Copco, Siskiyou County, California

AECOM

July 2020

AECOM Oakland CA 7/29/2020 USER Ryan.Haines PATH: \\na.aecomnet.com\fs\AMER\Oakland-USOAK01\Secure_DCS\Projects\Water\Klamath Dam\400-Technical\440 GIS\02_Maps\02_Map_Production_and_Reports\Cultural Reports\BuiltEnvironment\LocationFigures\BuiltEnvironment_SiteFigures.mxd

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Copco Road
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AECOM
July 2020

State of California ☐ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #47-004015; #47-002266
HRI #
Trinomial
NRHP Status Code 3D

Other Listings _____
Review Code _____ Reviewer _____ Date _____

 Resource Name or #: Control Center

P1. Other Identifier: Control Center
***P2. Location:** ☒ **Unrestricted**
- ***a. County:** Siskiyou
- ***b.** USGS 7.5' Quad Copco, CA Date 2018 T 48N; R 4W; NE 1/4 of NW 1/4 of Sec 31; Mount Diablo B.M.
- c. Address _____ City _____ Zip _____
- d. UTM: Zone 10 T, 553185mE/4647280mN
- e. Other Locational Data: N/A

***P3a. Description:**

The control center, completed in 1966, is sited between the Copco No. 2 powerhouse and substation, and contains system operations equipment, office space, and a restroom. The control center occupies the site of the original Copco No. 2 switchyard, which was built in 1924-1925 adjacent to the powerhouse (PacifiCorp archive image IG-18). The control house measures 34 x 48 feet with steel frame construction on a concrete slab foundation. The pre-fabricated building has a rectangular plan, except for the small projecting entry vestibule at the southern (primary) elevation. The low-pitched side-gable roof is clad in standing-seam sheet metal, and the siding is insulated metal panel. The windows are mostly one-over-one or hopper operation vinyl frame with some two-part aluminum frame sliding windows. The doors are metal. The small entry vestibule, off-center along the southern elevation, has a shed roof and east-facing metal door with aluminum inset window. A PacifiCorp sign on the front of the entry vestibule reads "COPCO HEADQUARTERS." The roof eaves were replaced in 1997 (PacifiCorp 2004:6-2). The original aluminum frame sliding windows are typical of the original 1960s construction, while the vinyl replacement windows indicate later alterations, likely circa 1990. An interior plaque attributes the building's construction to Ray Arbecker; however, research did not uncover further information about this individual.

The control center appears to be in good condition.

See Continuation Sheets.

***P3b. Resource Attributes:** (HP39) Other (control center)
***P4. Resources Present:** ☒ Building ☒ Element of District
P5a. Photograph:

P5b. Description of Photo: Control Center, facing north (June 11, 2018).

***P6. Date Constructed/Age and Source:**
☒ Historic, 1966 (Pacific Power 1966)

***P7. Owner and Address:**
PacifiCorp
825 NE Multnomah, Suite 1500
Portland, OR 97232

***P8. Recorded by:**
Shoshana Jones, AECOM
111 SW Columbia Street,
Suite 1500
Portland, OR 97201

***P9. Date Recorded:** June 11, 2018

***P10. Survey Type:** Intensive Level

***P11. Report Citation**: Klamath River Renewal Corporation. 2021. Lower Klamath Project Built Environment Technical Report.

***Attachments:** ☒Location Map ☒Continuation Sheet ☒Building, Structure, and Object Record

BUILDING, STRUCTURE, AND OBJECT RECORD

*Resource Name or #: Control Center
*NRHP Status Code: 3D

B1. Historic Name: N/A
B2. Common Name: Control Center
B3. Original Use: control hydroelectric operations for Copco No. 1 and Copco No. 2
B4. Present Use: control hydroelectric operations for Copco No. 1 and Copco No. 2
B5. Architectural Style: Utilitarian
B6. Construction History:
The control center was completed in 1966 as a component of the Copco No. 2 hydroelectric development. Alterations include some vinyl replacement windows circa 1990 and replacement of roof eaves in 1997.

B7. Moved? No

B8. Related Features: The control center is a contributing resource to the Copco No. 2 Historic District and to the larger Klamath Hydroelectric Project (KHP) Historic District. The KHP Historic District consists of seven hydroelectric developments, including Copco No. 2, in Southern Oregon and Northern California.

B9a. Architect: Unknown **b. Builder:** Ray Arbecker/Pacific Power and Light Company

B10. Significance:
Theme: Hydroelectric development
Area: Southern Oregon and Northern California
Period of Significance: 1925-1970 (Copco No. 2 Historic District)
Property Type: control center
Applicable Criteria: National Register of Historic Places (NRHP) Criterion A (contributing)

See Continuation Sheets.

B11. Additional Resource Attributes:

B12. References:

Pacific Power (Pacific Power & Light Company). 1966. Expenditure Requisition No. 31-17754-685, Copco #2 – New Control House. Authorized 9/16/66. PacifiCorp archives, PDX.037414 (box), Copco 2 Plant, 1962-1979 (folder).

B13. Remarks: None
B14. Evaluator: Shoshana Jones, AECOM
111 SW Columbia Street, Suite 1500
Portland, OR 97201
Date of Evaluation: June 11, 2018

(This space reserved for official comments.)

B10. Significance (continued):

The control center at Copco No. 2, completed in 1966, implemented advances in automation and supervisory (remote) control of Copco No. 1 and Copco No. 2 following Pacific Power's acquisition of Copco. In 1964, Pacific Power engineers began transitioning Copco No. 1 to remote control from Copco No. 2, a process that took approximately two years. In 1965, as part of the process, Pacific Power issued an order for installation of the new control house and its relays and meter panels at Copco No. 2, adjacent to the powerhouse. The final cost of the control center totaled $65,124, including $18,000 for labor, $16,000 for materials, and $31,000 for other expenses (Pacific Power 1966). Completion of the control center was part of Pacific Power's construction program to integrate the Copco system and upgrade the combined system facilities.

Evaluation (Contributes to Copco No. 2 and KRHP Historic Districts)

Criteria Analysis

NRHP Criterion A
The Copco No. 2 and larger KRHP Historic Districts are significant under NRHP Criterion A in the areas of Commerce and Industry. The control center adds to the significance of both Historic Districts by housing the equipment that controls operations at Copco No. 1 and Copco No. 2.

NRHP Criterion B
Research does not indicate that the control center is associated with any historically significant individuals under NRHP Criterion B. A plaque inside the control center attributes the building's construction to Ray Arbecker; however, research did not uncover any further information about this individual.

NRHP Criterion C
The control center does not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, and is therefore not significant under NRHP Criterion C.

NRHP Criterion D
The control center is not significant as a source (or likely source) of important information regarding history or prehistory. It does not appear likely to yield important information about historic construction materials or technologies and is not significant under NRHP Criterion D.

Integrity Analysis
The control center retains integrity of location, setting, design, workmanship, feeling, and association; and continues to convey its historic identity as a mid-century, utilitarian control center.

Location *is the place where the historic property was constructed or the place where the historic event took place.* The control center retains integrity of location, because it remains in its original location between the powerhouse and substation.

Design *is the composition of elements that constitute the form, plan, space, structure, and style of a property.* The control center is a modest one-story building that retains integrity of design, reflected primarily by its rectangular plan and low pitch side gable roof.

Setting *is the physical environment of a historic property that illustrates the character of the place.* The control center retains integrity of setting in the remote, undeveloped area of the Klamath River basin in Siskiyou County, California. The setting is characterized by the Klamath River, the nearby Iron Gate Reservoir, and the largely undeveloped landscape. The control center's immediate setting includes the adjacent control center and substation.

Materials *are the physical elements combined in a particular pattern or configuration to form the historic property* and ***Workmanship*** *is the physical evidence of the crafts of a particular culture or people during any given period of history.* The control center retains overall integrity of materials and workmanship despite the installation of replacement windows circa 1990.

Feeling *is the quality that a historic property has in evoking the aesthetic or historic sense of a past period of time.* The control center's historic setting and utilitarian construction design and materials contribute to the integrity of feeling.

Association *is the direct link between a property and the event or person for which the property is significant.* The presence of the control center's intact, historic physical features at this location directly links the property with mid-century power development in the region, contributing to integrity of association.

The control center retains integrity and is eligible as a contributing resource to the Copco No. 2 and KRHP Historic Districts.

Photographs:

Photograph 1. Control center; view facing northwest, 2018.

Photograph 2. Control center with powerhouse in left background; view facing east, 2018.

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #47-004015
HRI #
Trinomial
NRHP Status Code 3D

Other Listings
Review Code | Reviewer | Date

Page 1 of 1 | Resource Name or #: Copco Radio Station

P1. Other Identifier: Copco Radio Station

***P2. Location:** ☐ **Unrestricted**

***a. County** Siskiyou

***b.** USGS 7.5' Quad Copco, CA Date 2018 T 48N; R 4W; NW 1/4 of NE 1/4 of Sec 31; Mount Diablo B.M.

c. Address _____ City _____ Zip _____

d. UTM: Zone 10 T, 553579mE/4647210mN

e. Other Locational Data: N/A

***P3a. Description:**

The radio station building, constructed circa 1950, sits on a peak in the Daggett Mountain foothills. The station consists of a small station building and adjacent antenna tower that are centered within in an unpaved circular driveway. The site is located at the terminus of a road spur that diverges from the unpaved road between Copco No. 2 Village and the Copco No. 2 wood stave pipe. Built with concrete masonry units (CMU) and set on a concrete foundation, the station building has a side-gable roof covered in corrugated metal sheeting and exposed wood rafter tails. The gable ends are clad in sheet metal, and metal vents are centered below the apex at both gable ends. A small metal chimney emerges from the southern roof slope. A single metal door, the only fenestration, faces north. The metal door has a small black sign with white numbers that read "1149." The antenna is mounted on a wood pole adjacent to the building's eastern elevation.

The only apparent exterior alteration is the addition of a modern heating, ventilation, and air conditioning unit with a concrete foundation on the building's southern elevation. The radio station appears to be in good condition.

***P3b. Resource Attributes:** (HP39) Other (Radio Station)

***P4. Resources Present:** ☒ Structure ☒ Element of District

P5a: Photograph:

P5b. Description of Photo: Radio Station, viewing southwest (June 11, 2018).

***P6. Date Constructed/Age and Source:**
☒ Historic, circa 1950 (AECOM field survey; USGS 1954)

***P7. Owner and Address:**
PacifiCorp
825 NE Multnomah, Suite 1500
Portland, OR 97232

***P8. Recorded by:**
Shoshana Jones, AECOM
111 SW Columbia Street, Suite 1500
Portland, OR 97201

***P9. Date Recorded:** June 11, 2018

***P10. Survey Type:** Intensive Level

***P11. Report Citation**: Klamath River Renewal Corporation. 2021. Lower Klamath Project Historic Built Environment Technical Report

***Attachments:** ☒Location Map ☒Continuation Sheet ☒Building, Structure, and Object Record

BUILDING, STRUCTURE, AND OBJECT RECORD

*Resource Name or #: Copco Radio Station
*NRHP Status Code: 3D

B1. Historic Name: Radio Station
B2. Common Name: Radio Station
B3. Original Use: communications
B4. Present Use: communications
B5. Architectural Style: Utilitarian
B6. Construction History:

Based on historic building materials and placement of the site at a high elevation, the radio station was likely erected circa 1950 as part of Copco's microwave radio communication system. There are no evident alterations to the building; however, some of the present communications equipment appears to be modern.

B7. Moved? No.
B8. Related Features: The radio station is a contributing resource in the Klamath Hydroelectric Project (KHP) Historic District. The district consists of seven hydroelectric developments in Southern Oregon and Northern California. These developments contain dams, powerhouses, water conveyance systems, and other resources related to administration and operations.

B9a. Architect: N/A **b. Builder:** California Oregon Power Company (Copco)

B10. Significance:
Theme: hydroelectric development
Area: Southern Oregon and Northern California
Period of Significance: 1925-1970 (Copco No. 2 Historic District)
Property Type: communications facility
Applicable Criteria: National Register of Historic Places (NRHP) Criterion A (contributing)

B11. Additional Resource Attributes:

B12. References:

Cantelon, Philip L. 1995. "The Origins of Microwave Telephony – Waves of Change." Technology and Culture 36(3):560-582. Published by The Johns Hopkins University Press and the Society for the History of Technology. July.

Metsker Map. 1957. Siskiyou County, California. Page 80. Township 48N Range 4W. March.

NASEM (The National Academies of Sciences, Engineering, Medicine). 1994. Microwave Processing of Materials. The National Academies Press. https://www.nap.edu/read/2266/chapter/4#10 (accessed January 31, 2019).

USGS (United States Department of the Interior Geological Survey)
1954 Copco Quadrangle, California – Siskiyou Co. 15 Minute Series (Topographic).
1984 Copco Quadrangle, California – Siskiyou Co. 7.5 Minute Series (Topographic). Provisional Edition 1984.
2001 Copco Quadrangle, California – Siskiyou Co. 7.5 Minute Series (Topographic).

B13. Remarks: None
B14. Evaluator: Shoshana Jones, AECOM
111 SW Columbia Street, Suite 1500
Portland, OR 97201
Date of Evaluation: June 11, 2018

(This space reserved for official comments.)

B.10 Significance (continued):

Historic Context

The Copco radio station was built circa 1950, when microwave technology was becoming widespread in advanced communication systems, particularly those used by utility companies. Scientists first began experimenting with microwave-based communication technologies during the early 1930s (Cantelon 1995:563). As World War II approached, intensive efforts in radar technology led to a surge in new microwave-related uses and heightened awareness of microwave properties (NASEM 1994). After the war, companies that manufactured radar devices for the military used their knowledge and experience to advance commercial microwave-based networks for telephone, television, and utilities (Cantelon 1995:564). The Copco radio station used microwave communication technology and functions as a "repeater," which is a combined receiver/ transmitter facility enabling two-way microwave signals to cover longer distances, thus enhancing system operability. A microwave is a specific type of radio wave that is short, travels in a straight line at the speed of light, and does not follow the curvature of the earth. For these reasons, radio stations are generally located on high ground, enabling microwave links between end locations and with mobile field crews that are beyond "line of sight" propagation range. Microwave radio station components generally consists of a station building, which houses microwave equipment, and an antenna tower, which receives and transmits the microwave signals.

The Copco Radio Station facilitated communications within the Copco system during the period of significance, although its has been upgraded with modern communications equipment. The site is noted as "Radio Sta" on a 1954 USGS map (Figure 1) and 1957 Metsker map; "Radio Facility" on a 1984 USGS map (Figure 2); and "Comm Facility" on a 2001 USGS map (Figure 3) (USGS 1954; USGS 1984; USGS 2001). The radio station may now provide emergency backup for the Copco No. 2 control center, which handles intra- and inter-facility communication.

Evaluation (Contributes to Copco No. 2 Historic District)

Criteria Analysis

NRHP Criterion A
The Copco No. 2 Historic District contributes to the larger KHP Historic District, both of which are significant under NRHP Criterion A in the areas of Commerce and Industry. The radio station, built circa 1950, adds to the significance of the Copco No. 2 Historic District by enabling communications between Copco No. 2 and associated Copco/Pacific Power facilities.

NRHP Criterion B
Research does not indicate that the radio station is associated with any historically significant individuals under NRHP Criterion B.

NRHP Criterion C
The radio station does not appear to embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, and is therefore not significant under NRHP Criterion C.

NRHP Criterion D
The radio station is not significant as a source (or likely source) of important information regarding history or prehistory. It does not appear likely to yield important information about historic construction materials or technologies and is not significant under NRHP Criterion D.

Integrity Analysis

The radio station retains integrity of location, design, setting, materials, workmanship, feeling, and association.

Location *is the place where the historic property was constructed or the place where the historic event took place.* Microwave transmission requires a clear line-of-sight to associated facilities; therefore, the radio station's location is a critical aspect of integrity. The Copco radio station remains at its original elevated site, and thereby retains integrity of location.

Design *is the composition of elements that constitute the form, plan, space, structure, and style of a property.* The radio station building retains integrity of design as a small, utilitarian structure built to facilitate communication between Copco facilities. The retention of the historic station building and antenna tower conveys the site's historic spatial organization.

Setting *is the physical environment of a historic property that illustrates the character of the place.* Radio station settings are generally remote areas at high elevations that facilitate clear line-of-sight. The radio station retains integrity of setting in the remote, undeveloped area of the Klamath River basin, with expansive views of the surrounding landscape.

Materials *are the physical elements combined in a particular pattern or configuration to form the historic property* and ***Workmanship*** *is the physical evidence of the crafts of a particular culture or people during any given period of history.* The radio station, with its original concrete masonry unit construction, generally retains integrity of materials and workmanship.

B.10 Significance (continued):

Feeling *is the quality that a historic property has in evoking the aesthetic or historic sense of a past period of time.* The radio station's integrity of feeling is supported by the remote and elevated location, and proximity to the Klamath River and powerhouse.

Association *is the direct link between a property and the event or person for which the property is significant.* The radio station's intact physical features and elevated location above Copco Village contribute to integrity of association.

The Copco Radio Station retains integrity and is eligible as a contributing resource to the Copco No. 2 Historic District.

Photographs:

Photograph 1. Radio station; view facing southwest. Klamath River is visible in right background, 2018.

Photograph 2. Radio station; view facing northeast, 2018.

Figures:

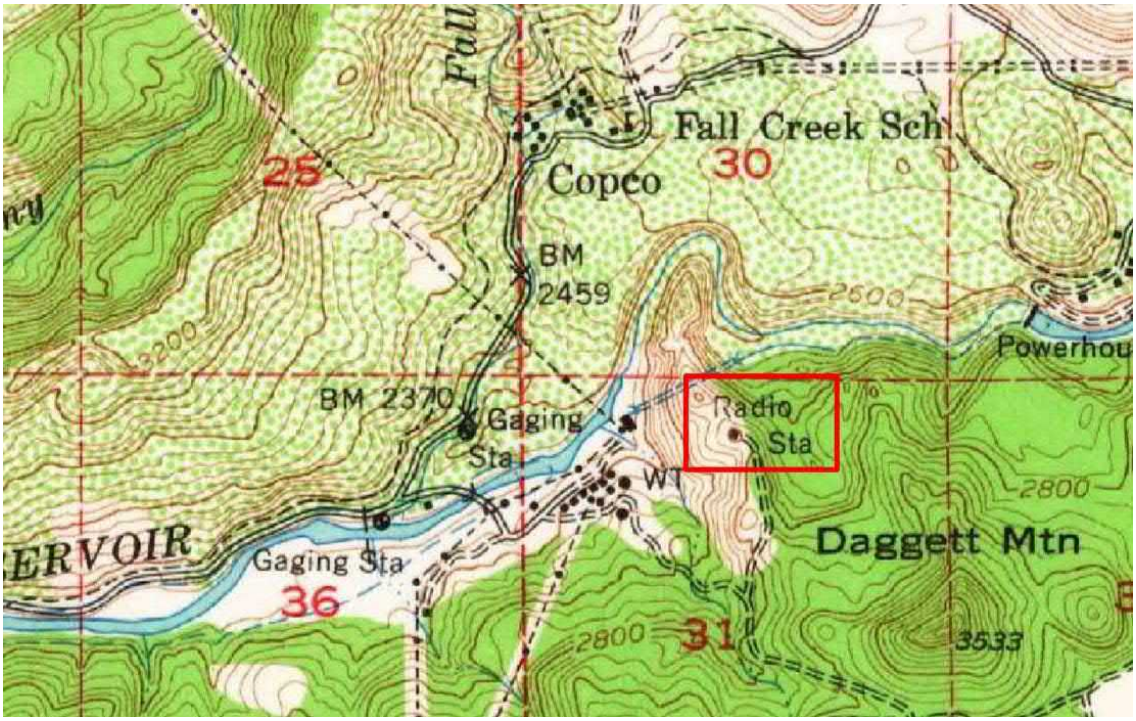


Figure 1. Portion of 1954 USGS map showing Copco Radio Station east of Copco No. 2 Powerhouse and northeast of Copco Village (USGS 1954).

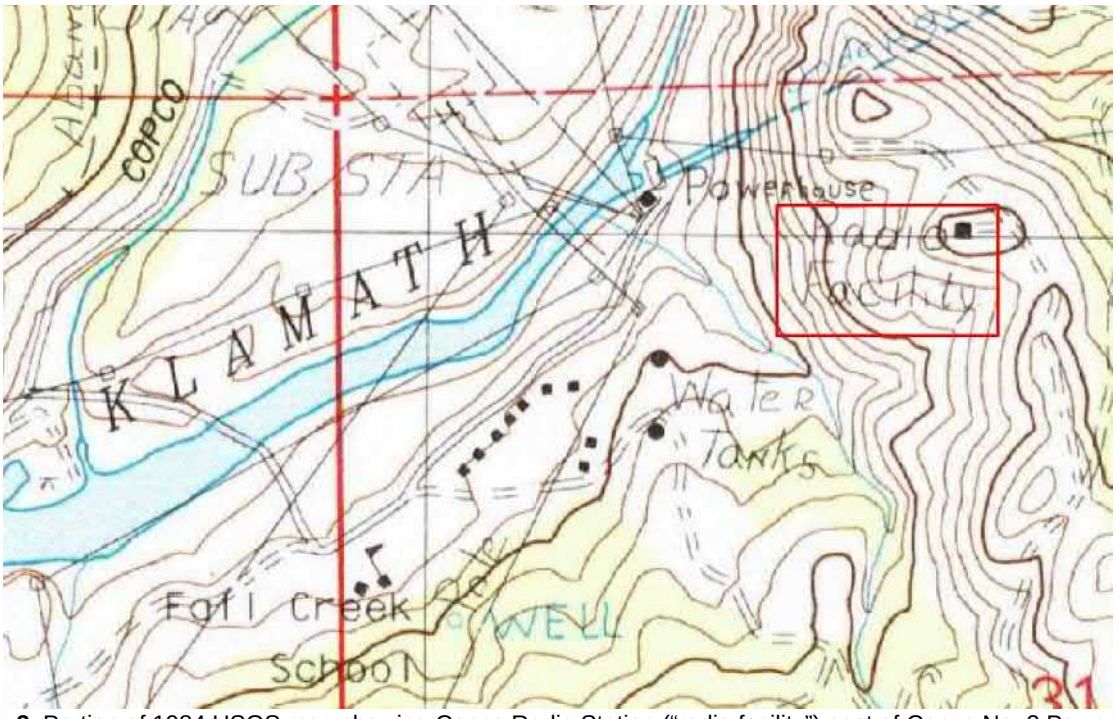


Figure 2. Portion of 1984 USGS map showing Copco Radio Station ("radio facility") east of Copco No. 2 Powerhouse and northeast of Copco Village (USGS 1984).

Figures (continued):

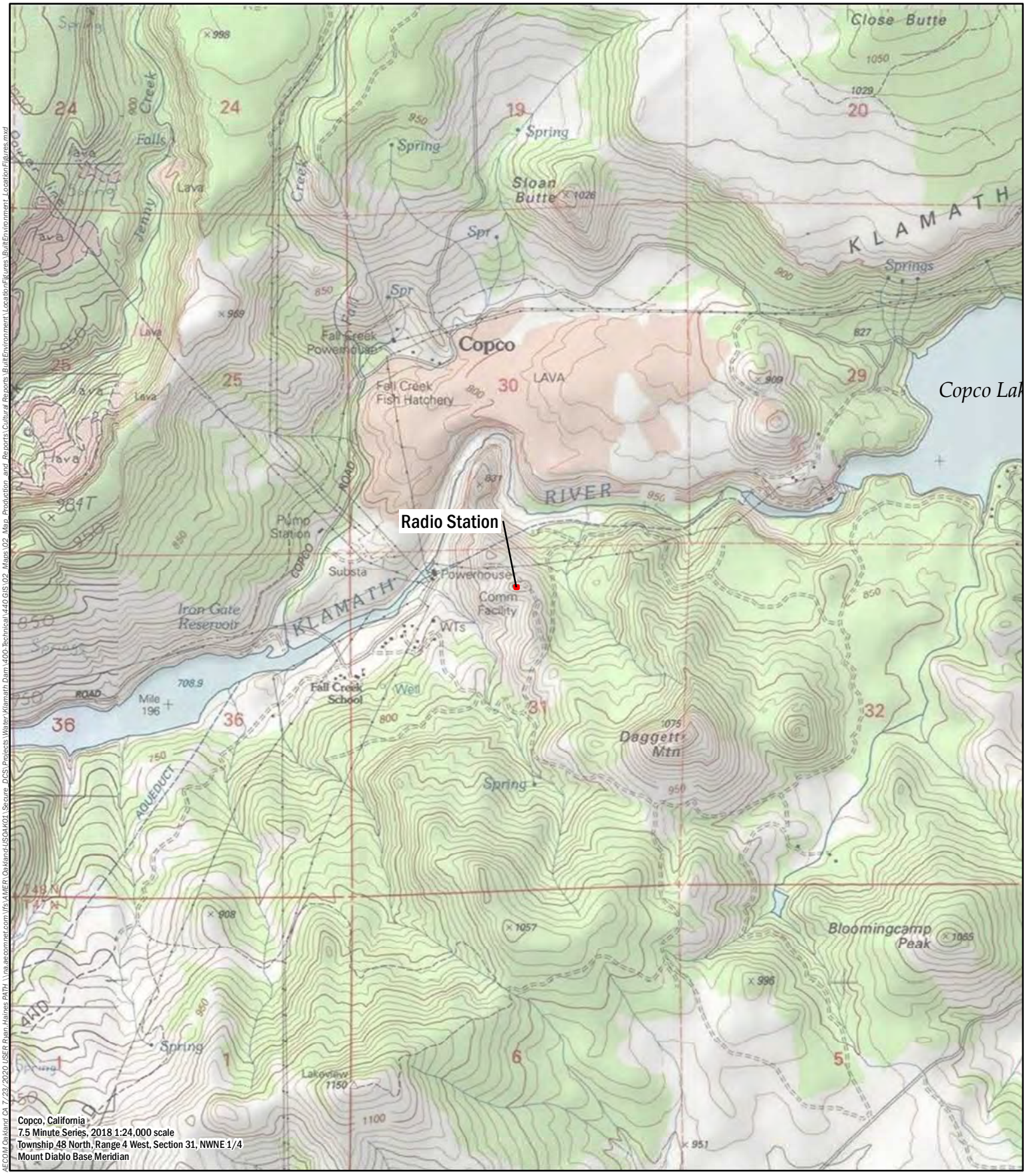
Figure 3. Portion of 2001 USGS map showing Copco Radio Station ("Comm Facility") east of Copco No. 2 Powerhouse and northeast of Copco Village (USGS 2001).

LOCATION MAP

Property Name: Copco No. 2 Historic District

***Map Name:** _____ ***Scale:** _____ ***Date of map:** _____

See Location Map on next page.



AECOM Oakland CA 7/23/2020 USER Ryan.Haines PATH \\na.aecomnet.com\Vfs\AMER\Oakland-USOAK01\Secure_DCS\Projects\Water\Klamath Dam\400-Technical\449 GIS\02_Maps\02_Map_Production_and_Reports\Cultural Reports\BuiltEnvironment\LocationFigures\BuiltEnvironment_LocationFigures.mxd

Radio Station

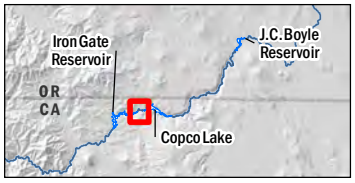
Radio Station

N

0 2,000 Feet

0 600 Meters

1:24,000



Klamath River Dam Removal
Daggett Road
Copco, Siskiyou County, California

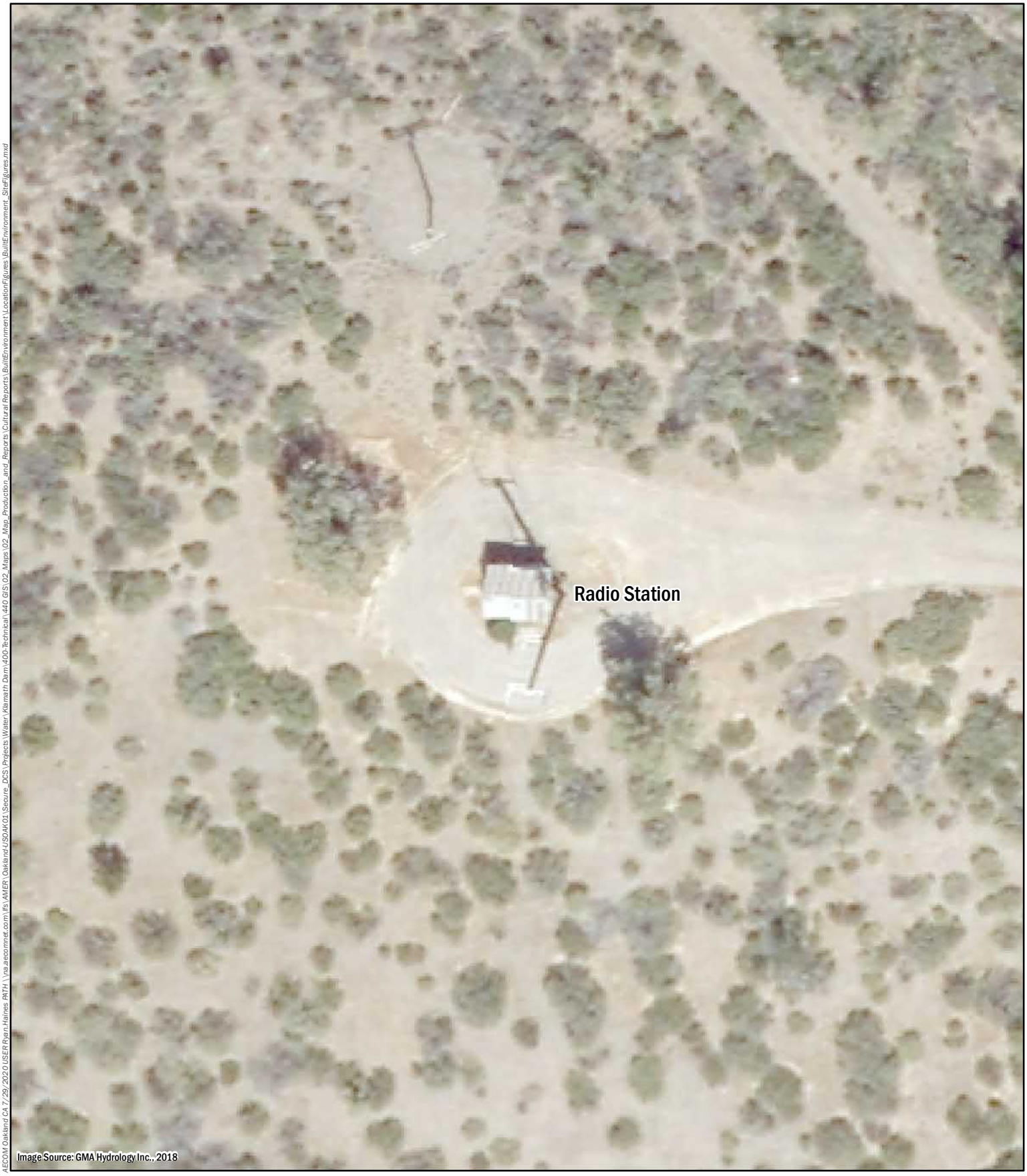
AECOM
July 2020

SKETCH MAP

Property Name: Copco No. 2 Historic District

***Drawn by:** _____ ***Date of map:** _____

See Sketch/Site Map on next page.



Radio Station

Radio Station

N

0 50 Feet

0 10 Meters

1:300

Klamath River Dam Removal
Daggett Road
Copco, Siskiyou County, California

AECOM
July 2020

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #47-004015
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code | Reviewer | Date

 Resource Name or #: Ranch Houses

P1. Other Identifier: Copco No. 2 Ranch Houses

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**

***a. County** Siskiyou

***b.** USGS 7.5' Quad Copco, CA Date 2018 T 48N; R 4W; L1 of Sec 31; Mount Diablo B.M. See continuation sheet.

c. Address _____ City _____ Zip _____

d. UTM: Zone 10 T, 553080mE/4647018mN See Continuation Sheet.

e. Other Locational Data: N/A

***P3a. Description:**

In 1967 and 1968, Pacific Power built a total of four modern ranch houses as "residences for company personnel" at the Copco No. 2 hydroelectric development (*Sacramento Bee* 1968). Their broad, one-story forms, rectangular plans, and attached garages reflect characteristic elements of the Ranch style, popular from circa 1935 to 1975. Although many Ranch-style buildings have hipped roofs, the side-gable roof found on these homes is prevalent in rural areas (McAlester 2014:597).

Ranch House No. 1

Ranch House No. 1, built in 1968, is in the Copco No. 2 residential area, and has an address of 19030 Daggett Road. Situated immediately east of Ranch House No. 2, Ranch House No. 1 is virtually identical in design to the other three ranch houses (Nos. 2, 3, and 4). Constructed on a concrete slab foundation, Ranch House No. 1 has a predominantly rectangular plan with an attached one-car garage. The house is oriented facing south, with a projecting central block at the northern (rear) elevation. The medium-pitched, side-gable roof is clad in standing-seam sheet metal and has moderately overhanging eaves and a red-brick chimney along the northern (rear) slope. The central block's front-gable roof intersects with the main roof. Siding consists of replacement aluminum panels.

See Continuation Sheets.

***P3b. Resource Attributes:** (HP2) Single-family property (worker housing)

***P4. Resources Present:** ☒ Building ☒ Element of District

P5a. Photograph:

P5b. Description of Photo: Ranch House No. 4, viewing west (June 11, 2018).

***P6. Date Constructed/Age and Source:**
☒ Historic, 1967-1968 (*Sacramento Bee* 1968, PacifiCorp archives)

***P7. Owner and Address:**
PacifiCorp
825 NE Multnomah, Suite 1500
Portland, OR 9723

***P8. Recorded by:**
Shoshana Jones, AECOM
111 SW Columbia Street, Suite 1500
Portland, OR 97201

***P9. Date Recorded:** June 11, 2018

***P10. Survey Type:** Intensive Level

***P11. Report Citation**: Klamath River Renewal Corporation. 2021. Lower Klamath Project Historic Built Environment Technical Report

***Attachments:** ☒Location Map ☒Continuation Sheet ☒Building, Structure, and Object Record

P2b. Location/Township, Range, and Section (continued):

USGS 7.5' Quad Copco, CA Date 2018 Mount Diablo B.M.

Contributing Resource or Feature	Township	Range	Section
Ranch House No. 1	48N	4W	L1 of Sec. 31
Ranch House No. 2	48N	4W	L1 of Sec. 31
Ranch House No. 3	48N	4W	L2 of Sec. 31
Ranch House No. 4	48N	4W	L2 of Sec. 31

P2d. Location/UTM (continued):

Contributing Resource or Feature	Zone	UTM
Ranch House No. 1	10 T	553080mE/4647018mN
Ranch House No. 2	10 T	553051mE/4647017mN
Ranch House No. 3	10 T	552964mE/4646936mN
Ranch House No. 4	10 T	552948mE/4646913mN

P3a. Description (continued):

Ranch House No. 1 (continued)

The windows are replacement two-and three-part vinyl frame sliding and picture windows with sidelights. The primary entrance is centered along the southern elevation, and recessed beneath the main roof. The primary elevation contains a secondary entrance adjacent to the garage. Both entry doors are replacement wood panel with inset vinyl-sash windows and have aluminum screen doors. The garage door is a modern metal overhead. The rear projecting block is characterized by a large vinyl frame picture window flanked by sliding panes and a west-facing door accessed by two concrete steps. The front lawn is partially enclosed by a wooden fence, and the backyard is enclosed by metal fencing. The house appears to be in good condition.

Ranch House No. 2

Ranch House No. 2, built in 1967, is in the Copco No. 2 residential area, and has an address of 19311 Daggett Road. Situated immediately west of Ranch House No. 1, Ranch House No. 2 is virtually identical in design to the other three ranch houses (Nos. 1, 3, and 4). Constructed on a concrete foundation, Ranch House No. 2 has a predominantly rectangular plan with an attached one-car garage. The house is oriented facing south, with a projecting central block at the northern (rear) elevation. The medium-pitched side-gable roof is clad in standing-seam sheet metal, and has moderately overhanging eaves and a red-brick chimney along the northern (rear) slope. The central block's front-gable roof intersects with the main roof. Siding consists of horizontal wood board. The windows are aluminum frame sliding and picture windows with sidelights. The primary entrance is centered along the southern (primary) elevation and recessed beneath the main roof. The primary elevation contains a secondary entrance adjacent to the garage. Both entry doors are original wood with inset pane and have aluminum screen doors. The garage door is a modern metal overhead. The rear projecting block is characterized by a large aluminum picture window with sliders and a west-facing door accessed by two concrete steps. The house appears to be in good condition.

Ranch House No. 3

Ranch House No. 3, built in 1967, is in the Copco No. 2 residential area, and has an address of 19140 Daggett Road. Situated immediately north of Ranch House No. 4, Ranch House No. 3 is virtually identical in design to the other three ranch houses (Nos. 1, 2, and 4). Constructed on a concrete foundation, Ranch House No. 3 has a predominantly rectangular plan and an attached one-car garage. Ranch House No. 3 is oriented facing southeast, with a projecting central block at the northwestern (rear) elevation. The medium-pitched, side-gable roof is clad in asphalt shingles, and has moderately overhanging eaves and a red-brick chimney along the northwestern (rear) slope. The central block's front-gable roof intersects with the main roof. The siding is composite wood board. The windows are aluminum frame sliding and picture windows with sidelights. The primary entrance is centered along the southeastern (primary) elevation and recessed beneath the main roof. The primary elevation contains a secondary entrance adjacent to the garage. Both entry doors are original wood with inset pane and covered by aluminum screen doors. The garage door is a modern metal overhead. The rear projecting block is characterized by a large aluminum picture window with sliders and a southwest-facing door accessed by two concrete steps. The house appears to be in fair condition, due to a damaged window on the southwestern elevation, deterioration on the entry door adjacent to the garage, and failed siding.

P3a. Description (continued):

Ranch House No. 4

Ranch House No. 4, built in 1967, is in the Copco No. 2 residential area, and has an address of 19138 Daggett Road. Situated immediately south of Ranch House No. 3, Ranch House No. 4 is distinguished by its design, which is a mirror image of the other three residences (Nos. 1, 2, and 3). Constructed on a concrete foundation, Ranch House No. 4 has a predominantly rectangular plan and an attached one-car garage. Ranch House No. 4 is oriented facing east, with a projecting central block at the western (rear) elevation. The medium-pitched side-gable roof is clad in asphalt shingles and has moderately overhanging eaves and a red-brick chimney along the western (rear) roof slope. The central block's front-gable roof intersects with the main roof. The house retains its original horizontal wood siding. The windows are aluminum frame sliding and picture windows with sidelights. The primary entrance is centered along the eastern (primary) elevation and recessed beneath the main roof. The primary façade contains a secondary entrance adjacent to the garage. The primary entry door is original wood with inset pane and an aluminum screen door, while the secondary entry has a simple replacement wood door and no screen. The garage door is original wood panel with a band of three inset panes. The rear projecting block is characterized by a large aluminum picture window with sliders, and a north-facing door accessed by four concrete steps with metal railing. The house appears to be in fair condition, due to a broken rain gutter, damaged garage door, deterioration on entry doors, and failed siding.

BUILDING, STRUCTURE, AND OBJECT RECORD

*Resource Name or #: Ranch Houses
*NRHP Status Code: 3D

B1. Historic Name: unknown
B2. Common Name: Ranch Houses
B3. Original Use: worker housing
B4. Present Use: worker housing
B5. Architectural Style: Minimal Ranch

B6. Construction History:

Ranch House No. 1 was built in 1968, soon after the construction of Ranch House Nos. 2, 3, and 4 in 1967 (Pacific Power 1967). Alterations to Ranch House No. 1 include standing-seam sheet-metal roofing and replacement vinyl windows, pedestrian doors, and garage door. Alterations to Ranch House No. 2 include standing-seam sheet-metal roofing. Ranch House No. 3 has a replacement garage door, and Ranch House No. 4 has a replacement secondary pedestrian door.

B7. Moved? No
B8. Related Features: The Ranch Houses are contributing resources to the Copco No. 2 Historic District, which is within the larger Klamath Hydroelectric Project (KHP) Historic District. The KHP Historic District consists of seven hydroelectric developments, including Copco No. 2, in Southern Oregon and Northern California.

B9a. Architect: Myron E. Corcoran and William J. Wood (partnership), Central Point, Oregon **b. Builder:** Same

B10. Significance:
Theme: Hydroelectric development
Area: Southern Oregon and Northern California
Period of Significance: 1925-1970 (Copco No. 2 Historic District)
Property Type: worker/operator housing
Applicable Criteria: National Register of Historic Places (NRHP) Criterion A (contributing)

See Continuation Sheet.

B11. Additional Resource Attributes: (HP2) worker housing

B12. References:

Kramer, George. 2003. Klamath Hydroelectric Project. FERC No. 2082. Historic Context Statement. Prepared for PacifiCorp, Portland, Oregon. June.

McAlester, Virginia Savage. 2014. *A Field Guide to American Houses*. New York: Alfred A. Knopf.

Pacific Power. 1967. Progress Plan – Copco Housing [drawing]. PacifiCorp Archives, PDX.026971 (box), CA-655-A-3, Klamath River Projects (CA) – Copco #2 Plant – Construct Three New Houses (folder).

Sacramento Bee [Sacramento, California]
1967. "Pacific Power Aides Hold Meeting In Yreka." September 29.
1968. "$41,000 Job." April 5.

B13. Remarks: None
B14. Evaluator: Shoshana Jones, AECOM
111 SW Columbia Street, Suite 1500
Portland, OR 97201
Date of Evaluation: June 11, 2018

(This space reserved for official comments.)

B.10 Significance (continued):

Historic Context

The four modern Ranch houses were constructed between 1967 and 1968 by Myron E. Corcoran and William J. Wood. Pacific Power contracted with Corcoran and Wood for construction of the final house in April 1968 as part of a $41,400 contract to build worker housing at Copco No. 2 and Fall Creek (Sacramento Bee 1968). At that time, Pacific Power's 1961-1970, $500,000 construction program was under way. Pacific Power initiated the construction program, following its 1961 acquisition of Copco, to improve and expand service (Sacramento Bee 1967). The newly built facilities during that expansion period included worker housing, such as the four ranch houses Copco Village. The new Ranch houses replaced deteriorated bungalows.

Evaluation (Contribute to Copco No. 2 Historic District)

Criteria Analysis

NRHP Criterion A
The Copco No. 2 Historic District contributes to the larger KHP Historic District, both of which are significant under NRHP Criterion A in the areas of Commerce and Industry. The four ranch houses, built in 1967 and 1968, add to the significance of the Copco No. 2 Historic District as representative worker housing erected during the Pacific Power expansion phase (1961-1970).

NRHP Criterion B
Research did not indicate that the ranch houses are associated with any significant individuals under NRHP Criterion B.

NRHP Criterion C
The ranch houses do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, and are therefore not significant under NRHP Criterion C.

NRHP Criterion D
The ranch houses are not significant as sources (or likely sources) of important information regarding history or prehistory. They do not appear likely to yield important information about historic construction materials or technologies and are not significant under NRHP Criterion D.

Integrity Analysis

The ranch houses retain sufficient integrity of location, design, setting, materials, workmanship, feeling, and association to convey their historic identity as modern, on-site worker housing built during the Pacific Power expansion phase (1961-1970).

Location *is the place where the historic property was constructed or the place where the historic event took place.* The four ranch houses remain at their original building sites, loosely clustered within Copco No. 2's residential area, and thereby retain integrity of location.

Design *is the composition of elements that constitute the form, plan, space, structure, and style of a property.* The houses retain integrity of design as ranch residences with the characteristic one-story, rectangular plan, and attached garage.

Setting *is the physical environment of a historic property that illustrates the character of the place.* The houses retain overall integrity of setting within the Copco No. 2 hydroelectric development, characterized by the Klamath River, the remote undeveloped landscape, and the nearby facilities such as the powerhouse and substation.

Materials *are the physical elements combined in a particular pattern or configuration to form the historic property* and ***Workmanship*** *is the physical evidence of the crafts of a particular culture or people during any given period of history.* Although Ranch House No. 1, and to a lesser extent, Ranch House No. 2, have diminished integrity of materials and workmanship due to non-historic alterations, Ranch House Nos. 3 and 4 retain nearly all of their original materials, including siding and windows.

Feeling *is the quality that a historic property has in evoking the aesthetic or historic sense of a past period of time.* The integrity of feeling is supported by the remaining historic building materials, remote setting, and proximity to the Copco No. 2 Powerhouse, the Klamath River, and other worker-related facilities in Copco Village, such as the former cookhouse/bunkhouse, the modern bunkhouse, and the Fall Creek School.

Association *is the direct link between a property and the event or person for which the property is significant.* The houses' intact physical features and location within the Copco No. 2 residential area directly link the buildings with the 1960s Pacific Power expansion phase, contributing to integrity of association.

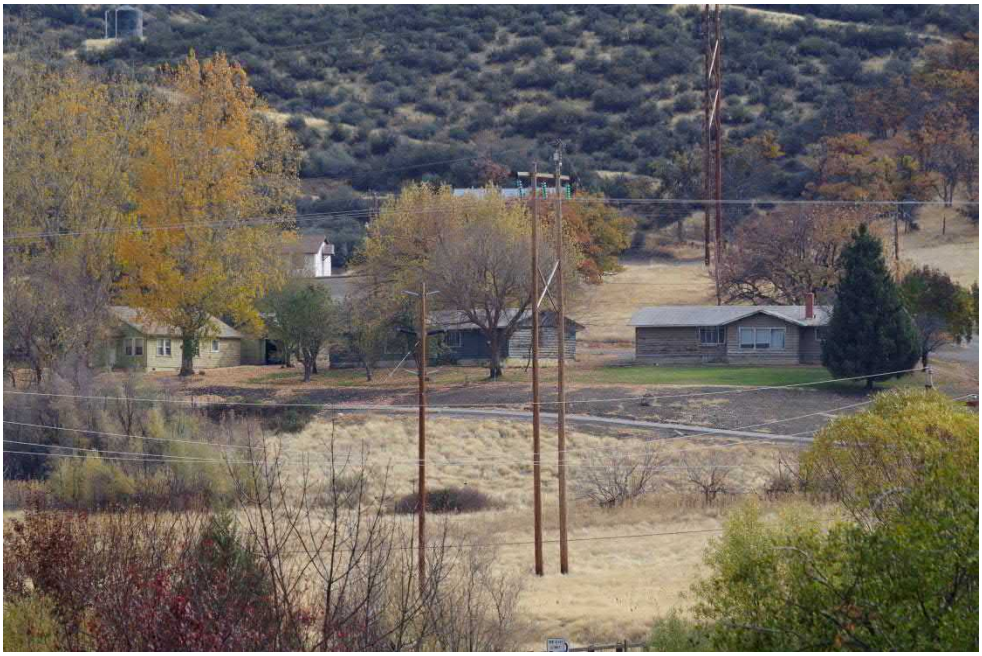
B.10 Significance (continued):

The Ranch Houses retain integrity and are eligible as contributing resources to the Copco No. 2 Historic District.

Resource(s)	Construction/ Major Alterations	Applicable NRHP Criteria	Area(s) of Significance	Contributing/ Individually Eligible
Ranch House No. 1	1968	A	Commerce and Industry	Contributing
Ranch House No. 2	1967	A	Commerce and Industry	Contributing
Ranch House No. 3	1967	A	Commerce and Industry	Contributing
Ranch House No. 4	1967	A	Commerce and Industry	Contributing

Photographs:

Photograph 1. View of Copco Village, with Ranch House Nos. 1 and 2 at right (Ranch House No. 1 in foreground); view facing west, 2018.



Photograph 2. View of Copco Village, with Ranch House Nos. 3 (center) and 4 (right), 2018. The bungalow is visible at the left, and the modern bunkhouse is visible in the left background. The water tank is visible in the upper left in the hillside.

Photographs (continued):

Photograph 3. Ranch House No. 1; view facing north, 2018.

Photograph 4. Ranch House No. 1, showing rear elevation; view facing southwest. Ranch House No. 2 is visible in right background, 2018.

Photographs (continued):

Photograph 5. Ranch House No. 2; view facing northeast, 2018.

Photograph 6. Ranch House No. 2, showing rear elevation; view facing southwest, 2018.

Photographs (continued):

Photograph 7. Ranch House No. 3; view facing north. Bungalow is visible in right background, 2018.

Photograph 8. Ranch House No. 3, showing rear elevation; view facing south, 2018.

Photographs (continued):

Photograph 9. Ranch House No. 4; view facing north. Ranch House No. 2 is visible in right background, 2018.

Photograph 10. Ranch House No. 4, showing rear elevation; view facing south, 2018.

Photographs (continued):

Photograph 11. Buildings 1114, 1115 and 1116, constructed in 1925 and shown here, were demolished to make room for Ranch House Nos. 1 and 2. "View from new bunkhouse" (courtesy of PacifiCorp archives, PDX.026971 (box), CA-Power, Klamath River Projects – Copco #2 Power Plant (folder)).

Plates:

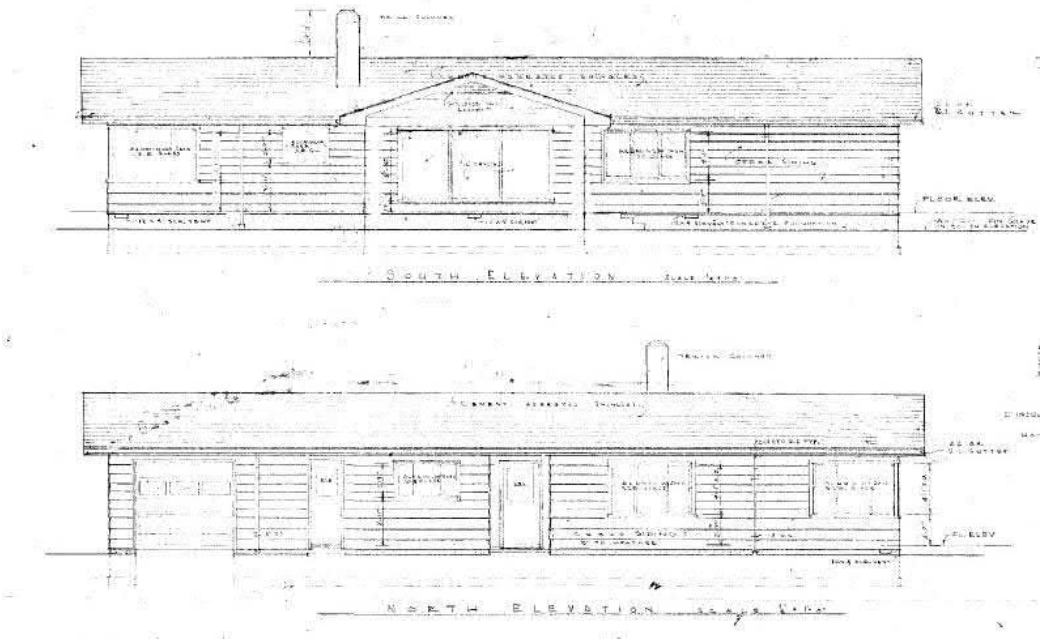


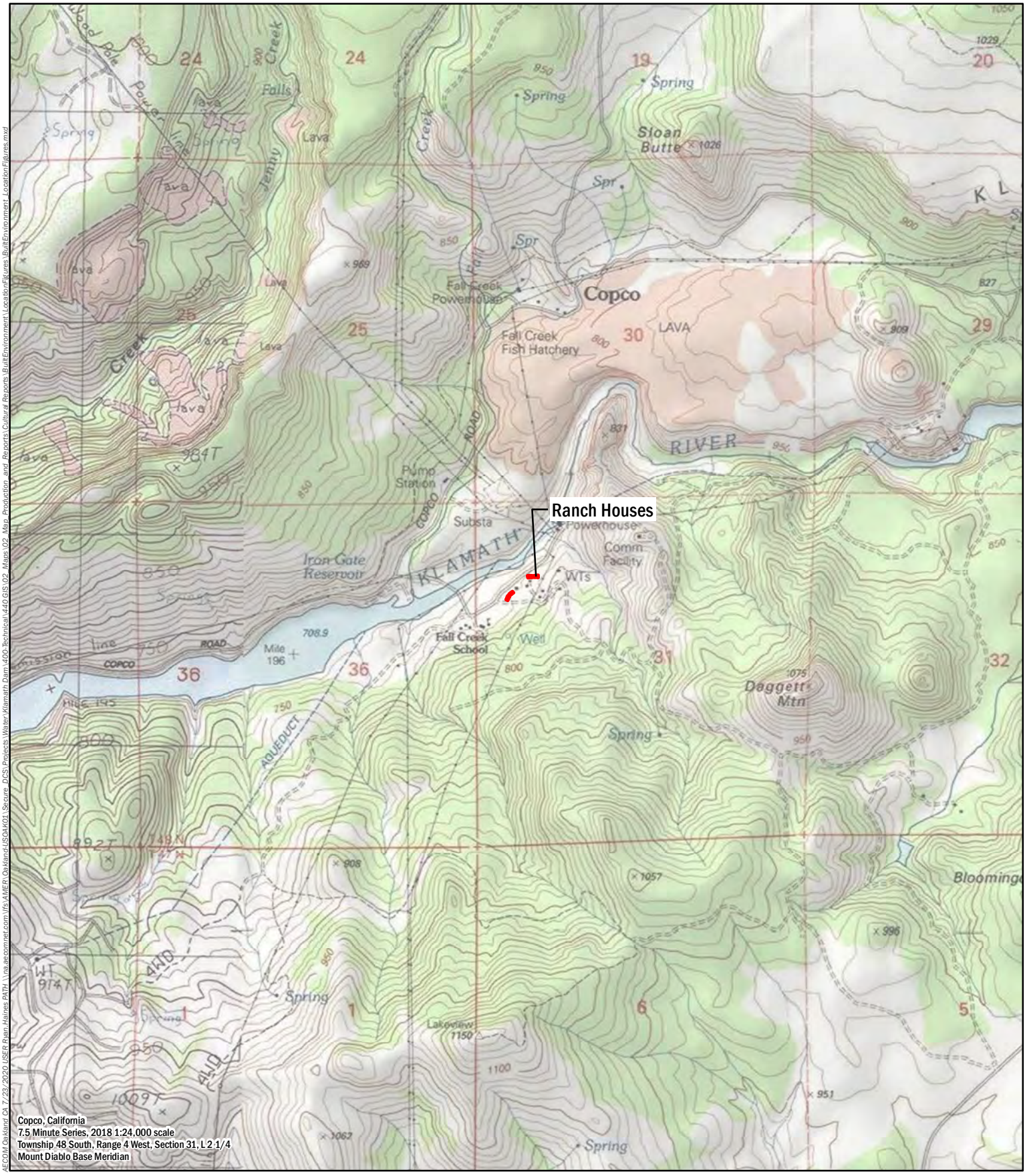
Plate 1. Elevation of ranch houses (courtesy of PacifiCorp archives).

LOCATION MAP

Property Name: Copco No. 2 Historic District

***Map Name:** _____ ***Scale:** _____ ***Date of map:** _____

See Location Map on next page.



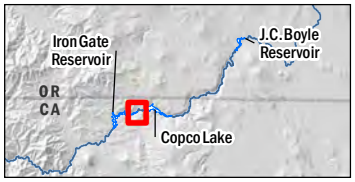
Ranch Houses

N

0 2,000 Feet

0 600 Meters

1:24,000



Ranch Houses

Klamath River Dam Removal
Daggett Road
Copco, Siskiyou County, California

AECOM

July 2020

SKETCH MAP

Property Name: Copco No. 2 Historic District

***Drawn by:** _____ ***Date of map:** _____

See Sketch/Site Map on next page.

Ranch Houses

Ranch Houses

0 100 Feet
0 20 Meters
1:1,200

Klamath River Dam Removal
Daggett Road
Copco, Siskiyou County, California

AECOM
July 2020

State of California ♁ The Resources Agency DEPARTMENT OF PARKS AND RECREATION **PRIMARY RECORD**	Primary # HRI # Trinomial	
Other Listings Review Code	Reviewer	Date

 Resource Name or #: Bungalow 1121

P1. Other Identifier: Bungalow 1121
***P2. Location:** ☒ **Unrestricted**
***a. County** Siskiyou
***b. USGS 7.5' Quad** Copco, CA **Date** 2018 **T** 48N; **R** 4W; L2 **of Sec** 31; Mount Diablo B.M.
c. Address _____ City _____ Zip _____
d. UTM: Zone 10 T, 552990mE/4646958mN
e. Other Locational Data: N/A

***P3a. Description:**

Bungalow 1121, built circa 1925, is located along Daggett Road and was constructed circa 1935. Bungalow 1121 is similar in design and construction to Bungalows 1117 and 1118, the two surviving circa-1925 bungalows situated in the former town of Copco, above the Copco No. 1 dam. Bungalow 1121 represents Copco No. 2 Village's early single-family worker dwellings, the rest of which were removed or replaced by 1960s Ranch style houses. Bungalow 1121, with an address of 19130 Daggett Road, is a one-story, wood-frame building with a rectangular plan, symmetrical façade, and board-form concrete foundation with a crawlspace. The medium-pitched front-gable roof has a minimal eave overhang and is clad with asphalt shingles. The exposed rafter tails are mostly obscured by metal gutters. A louvered wooden vent is centered in the front and rear gable apices and a metal chimney pipe, which replaced the original brick chimney, is centered along the ridgeline. The siding is original wood channel drop. The centered front entry consists of two concrete steps and a wooden porch covered by a gable roof with two battered wood columns. The entry, an original wood-panel door, is flanked by two pairs of one-over-one aluminum-sash windows.

See Continuation Sheet.

***P3b. Resource Attributes:** (HP2) Single-family property
***P4. Resources Present:** ☒ Building ☒ Element of District
P5a. Photograph:

P5b. Description of Photo: Bungalow 1121, facing east (June 11, 2018).

***P6. Date Constructed/Age and Source:**
☒ Historic, circa 1925 (Pacific Power n.d.; PacifiCorp Archive)

***P7. Owner and Address:**
PacifiCorp
825 NE Multnomah, Suite 1500
Portland, OR 97232

***P8. Recorded by:**
Shoshana Jones, AECOM
111 SW Columbia Street, Suite 1500
Portland, OR 97201

***P9. Date Recorded:** June 11, 2018

***P10. Survey Type:** Intensive Level

***P11. Report Citation**: Klamath River Renewal Corporation. 2021. Lower Klamath Project Built Environment Technical Report.

***Attachments:** ☒Location Map ☒Continuation Sheet ☒Building, Structure, and Object Record

P3a. Description (continued):

The eastern elevation has three one-over-one aluminum-sash windows and a two-part aluminum-frame sliding window, all with plain wood surrounds. The western elevation has two pairs of one-over-one aluminum-sash windows and a two-part aluminum-frame sliding window, also with wood surrounds. The rear (southern) elevation consists of a shed canopy sheltering the rear entrance, and an original wood-panel door flanked by two sets of aluminum-frame sliding windows.

The detached one-car garage at the bungalow's southwestern (rear) elevation was built on a concrete foundation. It has a front-gable roof, original horizontal wood-board siding, and an off-center garage opening with an original sliding top rail door. The garage door has the same original drop siding as the house and garage exterior walls. Many of the metal strips installed over the original roofing material have fallen away, revealing large swaths of the original shake roof shingles. The western elevation contains one centered wood-sash window. The western elevation has a five-panel wood door and boarded window. The garage's southern (rear) elevation contains the original five-panel wooden pedestrian door and adjacent round window.

The bungalow appears to be in good condition.

BUILDING, STRUCTURE, AND OBJECT RECORD

*Resource Name or #: Bungalow 1121 *NRHP Status Code: 3D

B1. Historic Name: Building 1121
B2. Common Name: Bungalow
B3. Original Use: Single-family worker residence
B4. Present Use: vacant
B5. Architectural Style: Bungalow
B6. Construction History:
Bungalow 1121, constructed circa 1925, appears to have been altered by replacement aluminum windows and a replacement metal chimney pipe. In 1985, Pacific Power rebuilt the roof by replacing the old shake roof with a new composition roof (Pacific Power 1985).

B7. Moved? No
B8. Related Features: The bungalow is a contributing resource to the Copco No. 2 Historic District, which is within the larger Klamath Hydroelectric Project (KHP) Historic District. The KHP Historic District consists of seven hydroelectric developments, including Copco No. 2, in Southern Oregon and Northern California.

B9a. Architect: unknown **b. Builder:** California Oregon Power Company (Copco)
B10. Significance:
Theme: hydroelectric development
Area: Southern Oregon and Northern California
Period of Significance: 1925-1970 (Copco No. 2 Historic District)
Property Type: bungalow
Applicable Criteria: National Register of Historic Places (NRHP) Criterion A (contributing)

B11. Additional Resource Attributes:

B12. References:

Durio, Lori. 2003. Klamath River Hydroelectric Project District. State of California Department of Parks and Recreation. Primary Record #47-004015. Recorded July 2003 by L. Durio, CH2M Hill, New Orleans, LA. September.

Kramer, George

----------2003a. Klamath Hydroelectric Project. FERC No. 2082. Historic Context Statement. Prepared for PacifiCorp, Portland, Oregon. June.

----------2003b. Klamath Hydroelectric Project. FERC No. 2082. Request For Determination of Eligibility. Prepared for PacifiCorp, Portland, Oregon. October.

See Continuation Sheet.

B13. Remarks: None
B14. Evaluator: Shoshana Jones, AECOM
111 SW Columbia Street, Suite 1500
Portland, OR 97201
Date of Evaluation: June 11, 2018

(This space reserved for official comments.)

B10. Significance (continued):

The bungalow was one of the original permanent worker residences constructed at Copco No. 2 and is the only remaining single-family residence from Copco No. 2's early days. Pacific Power-era documents from the 1960s provide varying dates for construction of the early Copco No. 2 bungalows: 1925 and 1935, thus the bungalow has been assigned a construction date of circa 1925. Based on historic drawings and photographs from the PacifiCorp Archive, the bungalow's detached garage was constructed by 1940.

The bungalow was one of six similarly constructed residences in Copco No. 2 Village, near the Copco No. 2 powerhouse. A site drawing from 1936 (**Plate 1**) depicts a total of six single-family residences in a configuration approximating an "L." At that time, the bungalow, known originally as building 1121, was the westernmost residence and sat adjacent to building 1120, which is now demolished. The other residences in the drawing were (from west to east) buildings 1119, 1116, 1115, and 1114, now all demolished. A garage (building 1157, demolished) and a garden plot are also depicted on the drawing. Building 1118 (demolished), a larger employee residence, was located immediately west of the bungalow, near the riverbank (Pacific Power 1967a). Another drawing from 1967 depicts the existing detached garage directly south of the bungalow (Figure 2) (Pacific Power 1967b). The bungalow at Copco No. 2 is virtually identical in appearance to the two surviving worker residences (Bungalows 1107 and 1108) at Copco No. 1.

In the 1960s, Pacific Power demolished all the circa 1925 bungalows at Copco No. 2 Village, except for the bungalow documented herein. The bungalows, which were in poor condition and did not meet modern building codes, made it difficult for Pacific Power to retain employees willing to live and work in the remote Copco area. As part of its plan to modernize worker housing and accommodate transmission line crews, Pacific Power built a 12-person bunkhouse (Modern Bunkhouse) and four modern ranch houses to replace the old residences.

Evaluation (Contributes to Copco No. 2 Historic District)

Criteria Analysis

NRHP Criterion A

The Copco No. 2 Historic District contributes to the larger KHP Historic District, both of which are significant under NRHP Criterion A in the areas of Commerce and Industry. The bungalow, built circa 1925, adds to the significance of the Copco No. 2 Historic District by representing original operator housing built during, or just after, Copco No. 2's original construction phase. The bungalow is the only remaining single-family dwelling from that early period; all similarly-constructed bungalows at Copco No. 2 were removed and replaced with 1960s and 1980s housing.

NRHP Criterion B
Research does not indicate that the bungalow is associated with any historically significant individuals under NRHP Criterion B.

NRHP Criterion C
The bungalow does not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, and is therefore not significant under NRHP Criterion C.

NRHP Criterion D

The bungalow is not significant as a source (or likely source) of important information regarding history or prehistory. It does not appear likely to yield important information about historic construction materials or technologies and is not significant under NRHP Criterion D.

B10. Significance (continued):

Integrity Analysis

The bungalow retains sufficient integrity of location, design, setting, materials, workmanship, feeling, and association; and continues to convey its historic identity as a worker residence associated with construction and operations at Copco No. 2, an early twentieth century hydroelectric development.

Location *is the place where the historic property was constructed or the place where the historic event took place.* The bungalow remains at its original building site and thereby retains integrity of location.

Design *is the composition of elements that constitute the form, plan, space, structure, and style of a property.* The bungalow retains integrity of design as a modest residence with features of the American Colonial Revival–style, particularly the rectangular plan, symmetrical appearance, and gable roof.

Setting *is the physical environment of a historic property that illustrates the character of the place.* Although the other similarly-constructed bungalows at Copco No. 2 have been demolished, the bungalow retains integrity of overall setting in the remote, undeveloped area of the Klamath River basin.

Materials *are the physical elements combined in a particular pattern or configuration to form the historic property* and ***Workmanship*** *is the physical evidence of the crafts of a particular culture or people during any given period of history.* The bungalow has replacement doors, aluminum windows and metal chimney, as well as a rebuilt roof, but retains overall integrity of materials and workmanship.

Feeling *is the quality that a historic property has in evoking the aesthetic or historic sense of a past period of time.* The bungalow's integrity of feeling is supported by the remote setting and proximity to the powerhouse, Klamath River, and other worker-related resources.

Association *is the direct link between a property and the event or person for which the property is significant.* The bungalow's intact physical features and location within the Copco No. 2 Village directly link the building with the historic construction and operations at Copco No. 2, contributing to integrity of association.

Bungalow 1102 retains integrity and is eligible as a contributing resource to the Copco No. 2 Historic District.

B12. References (continued):

Pacific Power and Light Company (Pacific Power)

n.d. Photograph of bungalow/building 1121. PacifiCorp archive, PDX.026971 (box), CA-Power, Klamath River Projects – Copco #2 Power Plant (folder).

1967a Progress Plan – Copco Housing, dated 4-26-67. PacifiCorp archive, PDX.026971 (box), CA-655-A-3 Klamath River Projects (CA) – Copco #2 Plant – Construct Three New Houses (folder).

1967b Topog Residence Area Copco No. Two, dated 7/20/67. PacifiCorp archive, PDX.034289 (box).

1985 Expenditure Requisition: Copco Two – Replace the Roof on Company House No. 1121. File No. 963-3738. Authorized 8/27/85. PacifiCorp archive, PDX.037414 (box), Copco 2 Plant, 1980 – Present (folder).

USGS (United States Department of the Interior Geological Survey). 1962. Copco Quadrangle, California – Siskiyou Co. 15 Minute Series (Topographic). 1954, Minor Revisions Made 1962.

Photographs:

Photograph 1. Bungalow 1121; view facing south.

Photograph 2. Bungalow 1121; view facing west.

Photographs (continued):

Photograph 3. Detached garage; view facing southeast.

Photograph 4. Detached garage; view facing southwest.

Photographs (continued):

Photograph 5. Bungalow and garage, view facing east, 2020.

Photograph 6. Bungalow 1121 and garage (far right), view facing east (circa 1940, courtesy of PacifiCorp Archives).

Plates:

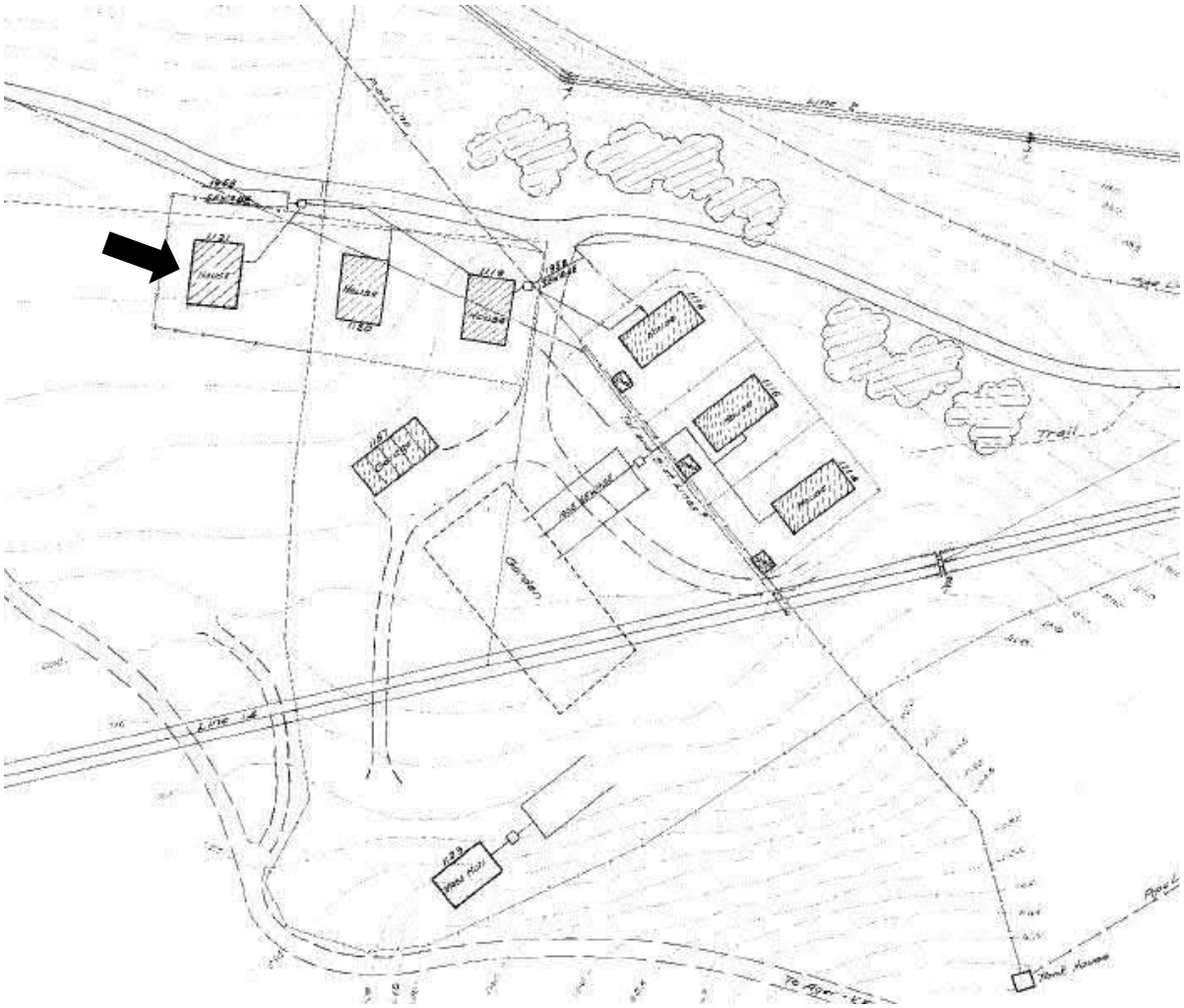


Plate 1. Copco No. 2 Village in 1936 (courtesy of PacifiCorp archive). Bungalow 1121, in the upper left and noted by black arrow, is the only remaining single-family worker residence built at Copco No. 2 during the early twentieth century.

Plates (continued):

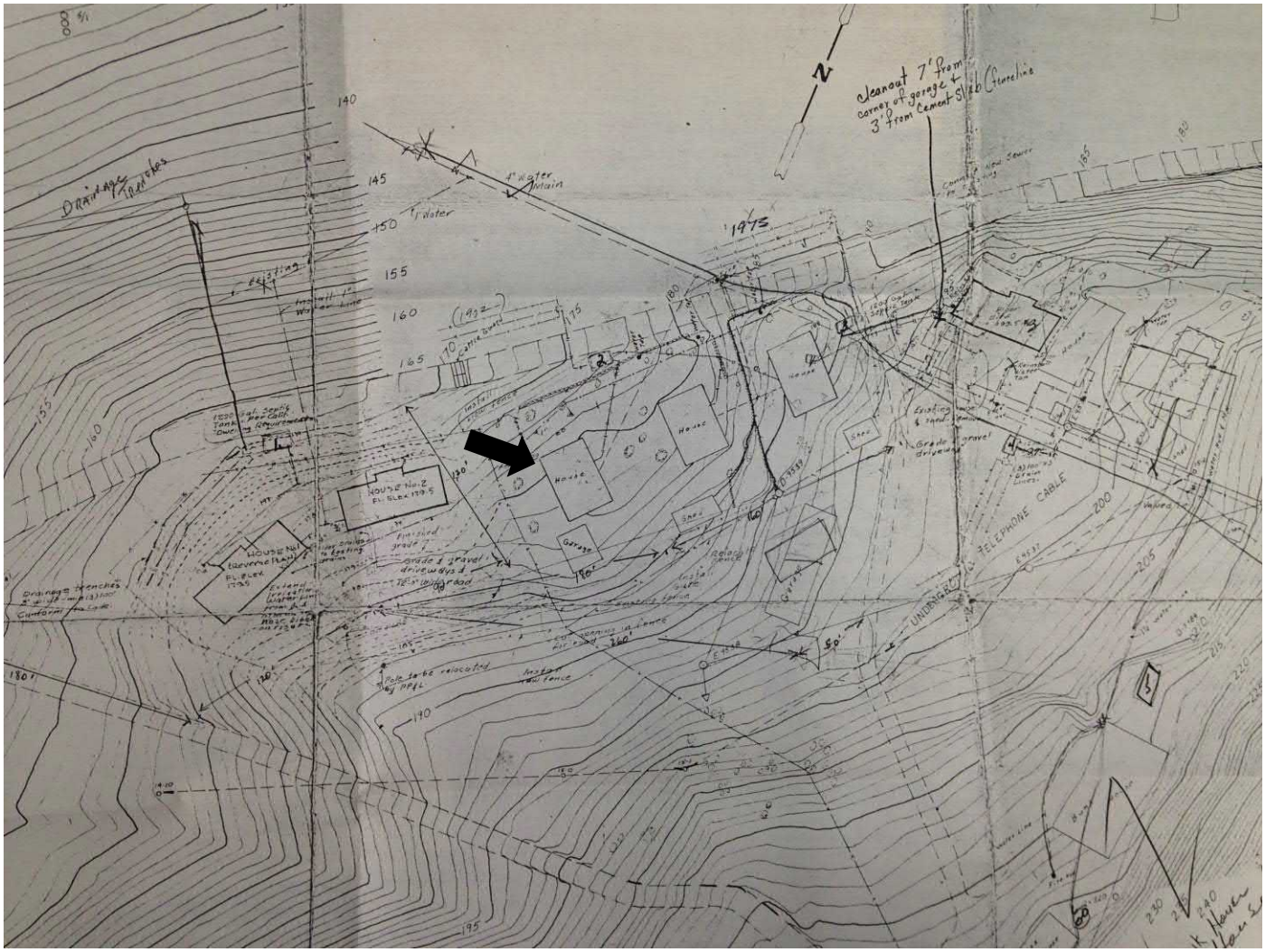


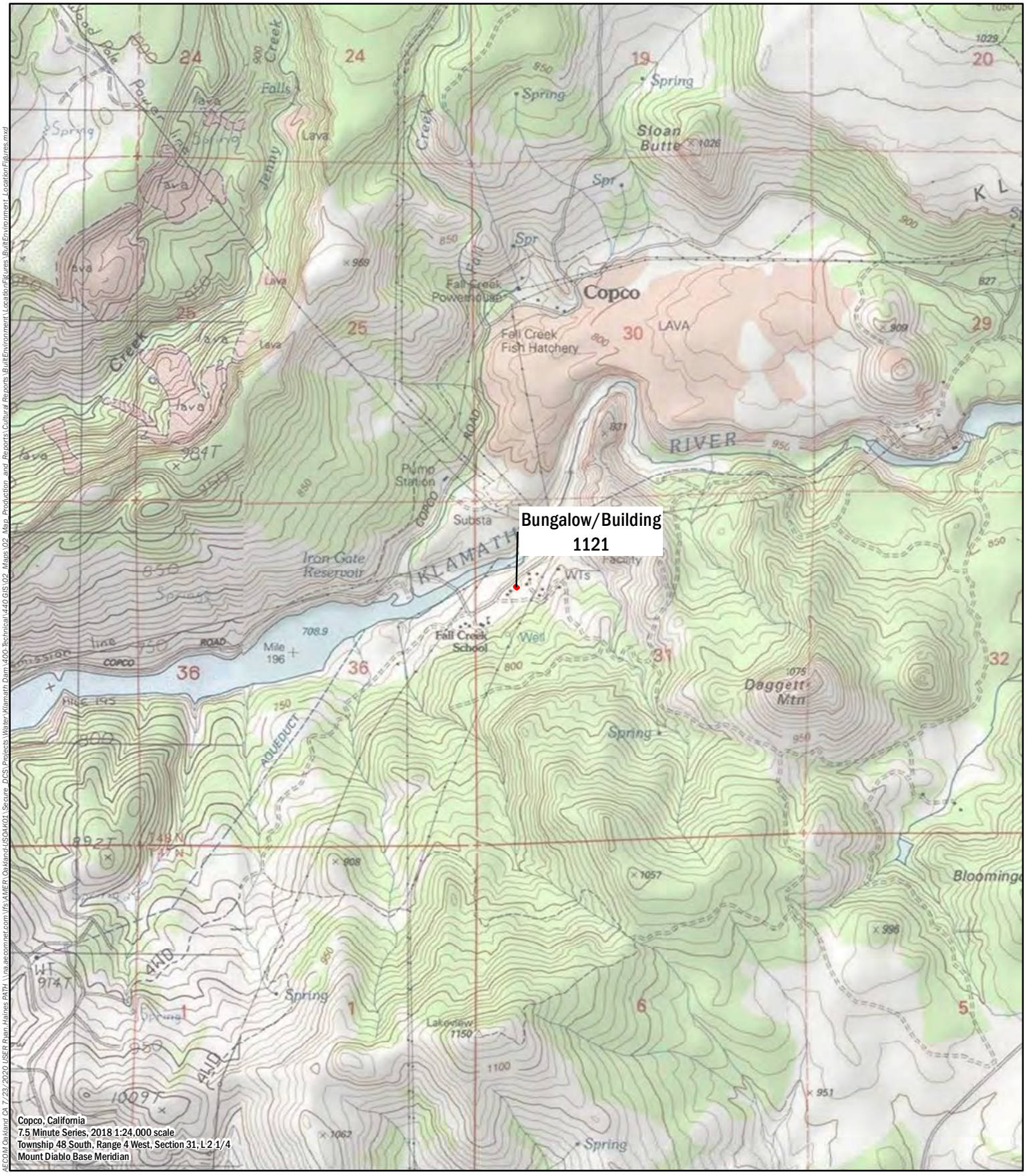
Plate 2. Drawing of Copco No. 2 residence area (Pacific Power 1967). Bungalow 1121 is noted by black arrow.

LOCATION MAP

Property Name: Copco No. 2 Historic District

***Map Name:** _____ ***Scale:** _____ ***Date of map:** _____

See Location Map on next page.



Copco No. 2 Bungalow

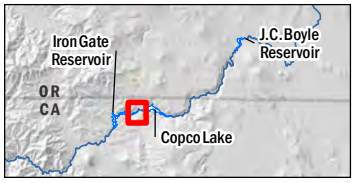
Copco No. 2 Bungalow

N

0 2,000 Feet

0 600 Meters

1:24,000



Klamath River Dam Removal
Copco Road
Copco, Siskiyou County, California

AECOM

July 2020

SKETCH MAP

Property Name: Copco No. 2 Historic District

***Drawn by:** _____ ***Date of map:** _____

See Sketch/Site Map on next page.

Copco No. 2 Bungalow

Copco No. 2 Bungalow

N

0 100 Feet

0 20 Meters

1:600

Klamath River Dam Removal
Copco Road
Copco, Siskiyou County, California

AECOM
July 2020

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #47-004015
HRI #
Trinomial
NRHP Status Code 3D

Other Listings
Review Code | Reviewer | Date

 Resource Name or #: Former Cookhouse/Bunkhouse

P1. Other Identifier: Former Cookhouse/Bunkhouse
***P2. Location:** ☒ Unrestricted
***a. County** Siskiyou
***b.** USGS 7.5' Quad Copco, CA Date 2018 T 48N; R 4W; L2 of Sec 31; Mount Diablo B.M.
c. Address _____ City _____ Zip _____
d. UTM: Zone 10 T, 553098mE/4646913mN
e. Other Locational Data: N/A

***P3a. Description:**

The Former Cookhouse/Bunkhouse was built at Copco No. 2 Village in 1941 as a combination mess hall and multi-worker residence. The two-story building has an address of 19035 Daggett Road, as indicated by metal numbers on the western elevation. Oriented facing north, the building has a rectangular plan and medium-pitched front-gable roof. An original red-brick chimney is visible along the roof's western slope. The wood-frame building is constructed on a sloped concrete foundation and has corrugated metal roofing. The siding is vinyl-clad aluminum installed over the original wood shiplap. Replacement aluminum-sash windows are similar in design to the original wood-sash windows and have simple wood surrounds. Although the original window openings remain, all the original wood-sash windows on the first floor and the multi-pane wood windows on the second floor have been replaced. A 1942 photograph, taken soon after construction, depicts multi-pane wood windows along the second floor and wood-sash windows along the first floor (PacifiCorp archive image).

The northern (primary) and southern (rear) elevations display similar entrances. The northern entry is accessed by four concrete steps that lead to a simple, off-center wooden door that is sheltered by a canopy. Two aluminum-sash windows are on the first floor, and two on the second floor. The southern entry also has a simple wooden door, which is accessed by three concrete steps, but lacks a canopy. At this elevation, three aluminum-sash windows are on the first floor, and two are on the second floor. The western elevation displays two pairs of aluminum-sash windows on the first floor, and two symmetrically spaced aluminum slider windows on the second floor. A small concrete staircase leads from the building's primary entrance approximately 40 feet downslope to the modern bunkhouse.

(See Continuation Sheet)

***P3b. Resource Attributes:** (HP3) Multiple-family property (Former cookhouse/bunkhouse)
***P4. Resources Present:** ☒ Building ☒ Element of District
P5a. Photograph:

P5b. Description of Photo: Former Cookhouse/Bunkhouse, viewing east (June 11, 2018).

***P6. Date Constructed/Age and Source:** ☒ Historic, 1941 (Pacific Power 1956: Schedule No. 6-H, Sheet 2 of 7).

***P7. Owner and Address:**
PacifiCorp
825 NE Multnomah, Suite 1500
Portland, OR 97232

***P8. Recorded by:**
Shoshana Jones, AECOM
111 SW Columbia Street, Suite 1500
Portland, OR 97201

***P9. Date Recorded:** June 11, 2019

***P10. Survey Type:** Intensive Level

***P11. Report Citation**: Klamath River Renewal Corporation. 2021. Lower Klamath Project Historic Built Environment Technical Report.

***Attachments:** ☒Location Map ☒Continuation Sheet ☒Building, Structure, and Object Record

P3a. Description (continued):

The first-floor interior contains a kitchen and common/dining area with 1960s kitchenette, flooring, and light fixtures. The upper floor is an open volume with original wood flooring, and exposed rafters and insulation.

The building underwent a major remodel in 1965. During the remodel, Pacific Power removed the decorative gable bracing at the southern (façade) elevation, the staircase and second floor entrance at the northern elevation, and the original wooden porches. The wood-sash windows on the first floor were replaced with aluminum sash, and the multi-pane wood windows on the second floor were replaced with aluminum sliders. The original wood shiplap siding was covered with vinyl-clad aluminum siding. The original doors were replaced, and new concrete porches and stairs were built. The interior was reconfigured and remodeled. The building is in good condition and currently vacant.

BUILDING, STRUCTURE, AND OBJECT RECORD

*Resource Name or #: Former Cookhouse/Bunkhouse *NRHP Status Code: 6Z

B1. Historic Name: Building 1123
B2. Common Name: Former Cookhouse/Bunkhouse
B3. Original Use: mess hall and multi-worker housing
B4. Present Use: vacant
B5. Architectural Style: Modified Craftsman

B6. Construction History:

The Former Cookhouse/Bunkhouse, constructed in 1941 as a combination cookhouse and bunkhouse, has undergone exterior and interior alterations dating primarily to a major 1965 renovation. Modifications include reconstructing the roof, installing non-original raised seam metal panels, as well as removing the original exposed rafter tails and decorative Craftsman-style gable bracing at the southern (façade) elevation. The northern elevation's original staircase and second-floor entrance were also removed as well as a second-story access door on the southern elevation. The wood-sash windows on the first floor were replaced with aluminum sash, and the multi-pane wood windows on the second floor were replaced with aluminum sliders. The original wood shiplap siding has been covered with vinyl-clad aluminum siding, original doors were replaced, and new concrete porches and stairs were built. The interior was reconfigured and remodeled. The building is currently vacant.

B7. Moved? No
B8. Related Features: The Former Cookhouse/Bunkhouse is a resource of the Copco No. 2 Historic District, which is within the larger Klamath Hydroelectric Project (KHP) Historic District. The KHP Historic District consists of seven hydroelectric developments, including Copco No. 2, in Southern Oregon and Northern California.

B9a. Architect: unknown **b. Builder:** California Oregon Power Company (Copco)

B10. Significance:
Theme: hydroelectric development
Area: Southern Oregon and Northern California
Period of Significance: 1925-1970 (Copco No. 2 Historic District)
Property Type: mess hall/bunkhouse
Applicable Criteria: National Register of Historic Places (NRHP) Criterion A (not contributing)

B11. Additional Resource Attributes:

B12. References:

Durio, Lori. 2003. Klamath River Hydroelectric Project District. State of California Department of Parks and Recreation. Primary Record #47-004015. Recorded July 2003 by L. Durio, CH2M Hill, New Orleans, LA. September.

Kramer, George
2003a. *Klamath Hydroelectric Project*. FERC No. 2082. Request For Determination of Eligibility. Prepared for PacifiCorp, Portland, Oregon. October.

2003b. *Klamath Hydroelectric Project*. FERC No. 2082. Historic Context Statement. Prepared for PacifiCorp, Portland, Oregon. June.

See Continuation Sheet.

B13. Remarks: None
B14. Evaluator: Shoshana Jones, AECOM
111 SW Columbia Street, Suite 1500
Portland, OR 97201
Date of Evaluation: June 11, 2018

(This space reserved for official comments.)

B10. Significance (continued):

Historic Context

The Former Cookhouse/Bunkhouse was constructed in 1941 for $3,179.59 as a combination cookhouse and bunkhouse for Copco employees working at Copco No. 1 and No. 2 hydroelectric developments (Pacific Power 1956: Schedule No. 6-H, Sheet 2 of 7). The remote location made it necessary for Copco, and its successor Pacific Power, to provide workers with room boarding and dining facilities. In 1964-1965, the building was renovated to function as a mess hall and cook's quarters for the newly completed modern bunkhouse next door. The cookhouse/bunkhouse renovation and modern bunkhouse construction were both part of Pacific Power's construction program, which followed its 1961 acquisition of Copco. The acquisition led to significant changes in regional hydroelectric power generation and transmission. In order to integrate the Pacific Power and Copco systems, Pacific Power initiated a $500 million construction program, designed to last from 1961 to 1970. The program's goal was to enhance power delivery to company service areas and accommodate the increased number of workers (Pacific Power 1961a:1).

As part of the construction program, the company built new, or improved existing, power facilities such as transmission lines and substations, some at former Copco sites (Pacific Power 1961b:2). In 1964, Pacific Power initiated a variety of construction projects at Copco No. 2, including a new control center for automated control of Copco No. 1 and Copco No. 2. The control center, scheduled for completion in 1966, would make Copco No. 2 the district hub for company personnel and work crews engaged in operations, maintenance, and system improvements, such as transmission line projects. To accommodate workers and their families at Copco No. 2, Pacific Power built new single- and multi-family housing, as well as a schoolhouse, and removed older housing buildings (*Sacramento Bee* 1968b). The new multi-family housing was intended for use by work crews and the single-family housing was intended for seven on-site employees: one area operator, one senior operator, four operator dispatchers, and one apprentice operator (Pacific Power 1967), and their families.

During the planning phase for the cookhouse/bunkhouse renovation, Pacific Power personnel described the project as necessary to make the building "useable entirely as a mess hall and cooks' quarters." Since completion of the 12-person modern bunkhouse next door, work crews no longer used the older cookhouse/bunkhouse's bedrooms, day room, or bath. Furthermore, the original kitchen and dining areas were inadequate to serve up to 12 workers (the capacity of the modern bunkhouse) at once. The kitchen remodel was designed to create more work space, cabinets, and counters, and to remove outdated appliances, while the dining area would be enlarged. Additionally, a new bath adjoining the cook's room, enabling the cook to use the bath without having to cross through the dining area. The approximate cost for the project was $3,921.80 (Wilson 1964).

Evaluation (Not Eligible due to lack of historic integrity)

Criteria Analysis

NRHP Criterion A
The Copco No. 2 Historic District contributes to the larger KHP Historic District, both of which are significant under NRHP Criterion A in the areas of Commerce and Industry. The cookhouse/bunkhouse, constructed in 1941, adds to the significance of the Copco No. 2 Historic District as the earliest example of a multi-worker housing and the only example of a combined mess hall/bunkhouse.

NRHP Criterion B
Research does not indicate that the building is associated with any historically significant individuals under NRHP Criterion B.

NRHP Criterion C
The cookhouse/bunkhouse is not significant under NRHP Criterion C. The building, constructed using elements of the Craftsman style, has diminished integrity of materials—replacement of original windows, doors, roofing, and siding, and removal of gable bracing and the original exterior staircase and second-story access doors— which impair the building's ability to convey its architectural significance. The cookhouse/bunkhouse does not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values.

NRHP Criterion D
The cookhouse/bunkhouse is not significant as a source (or likely source) of important information regarding history or prehistory. It does not appear likely to yield important information about historic construction materials or technologies and is not significant under NRHP Criterion D.

B10. Significance (continued):

Integrity Analysis

The Former Cookhouse/Bunkhouse does not retain sufficient historic integrity to convey its association with Copco No. 2 as a 1941-constructed worker mess hall and residence.

Location *is the place where the historic property was constructed or the place where the historic event took place.* The building remains at its original site, and thereby retains integrity of location.

Design *is the composition of elements that constitute the form, plan, space, structure, and style of a property.* The 1941-constructed building has been heavily altered with the removal of Craftsman-style gable bracing at the southern (façade) elevation and exposed rafter tails, removal of the original external staircase and second-floor entrance on the southern elevation, replacement windows, replacement siding, replacement doors, a replacement concrete porch from the original wood, and installation of a non-original raised seam metal roof. While these changes occurred during the expanded period of significance of the KHP Historic District, the building no longer retains the design or appearance of the original 1941-constructed building and the changes have not gained significance in their own right.

Setting *is the physical environment of a historic property that illustrates the character of the place.* The building's immediate setting has been altered by the removal of older worker residences. However, the building retains overall integrity of setting in relation to the powerhouse area, and within the remote Klamath River landscape.

Materials *are the physical elements combined in a particular pattern or configuration to form the historic property and* ***Workmanship*** *is the physical evidence of the crafts of a particular culture or people during any given period of history.* Alterations to the windows, doors, siding, roof, eaves, and removal of the original outdoor staircase have diminished the integrity of materials and workmanship. While these changes occurred during the expanded period of significance of the KHP Historic District, the building no longer retains the appearance of the original 1941-constructed building and the changes have not gained significance in their own right.

Feeling *is the quality that a historic property has in evoking the aesthetic or historic sense of a past period of time.* The alterations to the design and materials of the 1941-constructed building have affected integrity of feeling because it no longer conveys the appearance of a Craftsman-style cookhouse/bunkhouse constructed in 1941.

Association *is the direct link between a property and the event or person for which the property is significant.* The building's location within Copco No. 2 Village directly links the building with the historic operations at and around Copco No. 2, contributing to integrity of association. The building's proximity to the modern bunkhouse also reflects its association with Pacific Power's 1961-1970 construction program.

The Former Cookhouse/Bunkhouse lacks integrity and is not eligible as a contributing resource to the Copco No. 2 Historic District.

B12. References (continued):

Pacific Power and Light Company (Pacific Power).

1956. Initial Statement of The California Oregon Power Company to the Federal Power Commission showing Actual Legitimate Original Cost and Estimated Accrued Depreciation of Project No. 2082 (Klamath Basin – Copco No. 2 Plant) Located in the State of California as of March 1, 1956. PacifiCorp Archive, PDX.014908 (box).

1964. Former cookhouse/bunkhouse [photographs]. PacifiCorp Archive, PDX.026971 (box), CA-655-A-2, Klamath River Projects (CA) – Copco #2 Plant – Mess Hall Remodeling (folder).

1967. Progress Plan – Copco Housing. PacifiCorp Archive, PDX.026971 (box), CA-655-A-3, Klamath River Projects (CA) – Copco #2 Plant – Construct Three New Houses (folder).

Wilson, W. 1964. "Remodel Copco 2 Mess Hall." Expenditure Requisition. December 18. PacifiCorp Archive, PDX.026971 (box), CA-655-A-2, Klamath River Projects (CA) – Copco #2 Plant – Mess Hall Remodeling (folder).

Photographs:

Photograph 1. Former cookhouse/bunkhouse; view facing northeast, 2018.

Photograph 2. Former cookhouse/bunkhouse; view facing southeast, 2018.

Photographs (continued):

Photograph 3. Former cookhouse/bunkhouse, showing eastern and northern (rear) elevations; view facing southwest, 2018.

Photograph 4. Former cookhouse/bunkhouse, first-floor interior; view facing northeast, 2018.

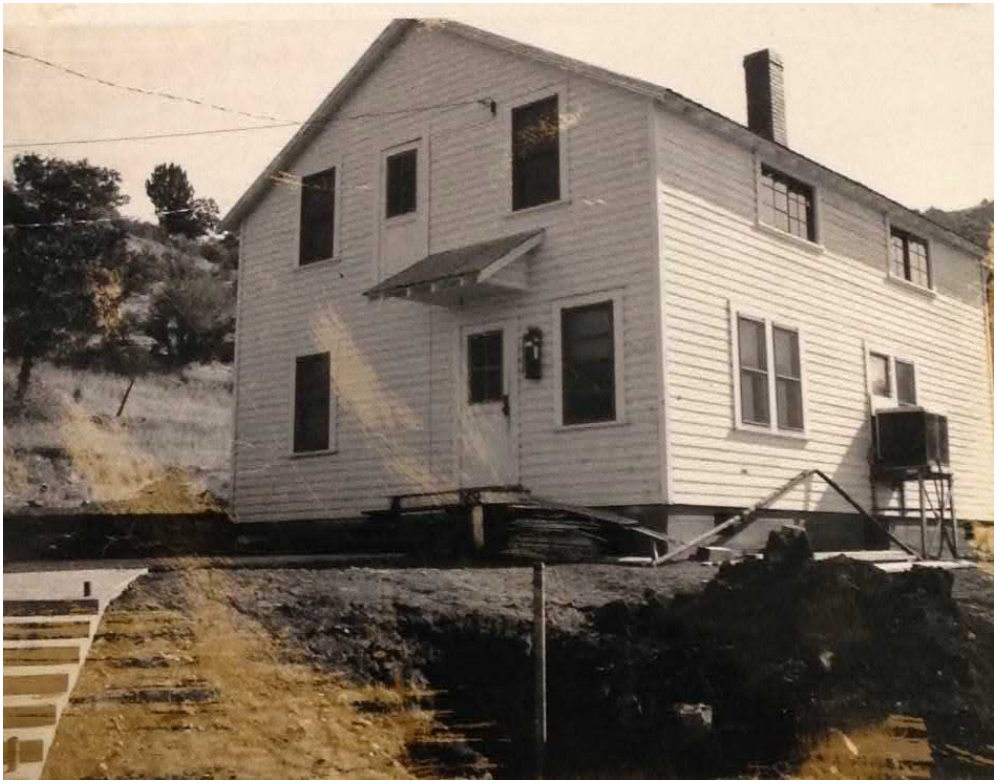
Photographs (continued):

Photograph 5. Former cookhouse/bunkhouse, second-floor interior; view facing northwest, 2018.

Photograph 6. Former cookhouse/bunkhouse, 1942 (PacifiCorp archive image, Box 19593, Bk 62, Neg 28A, from Kramer 2003b:44).

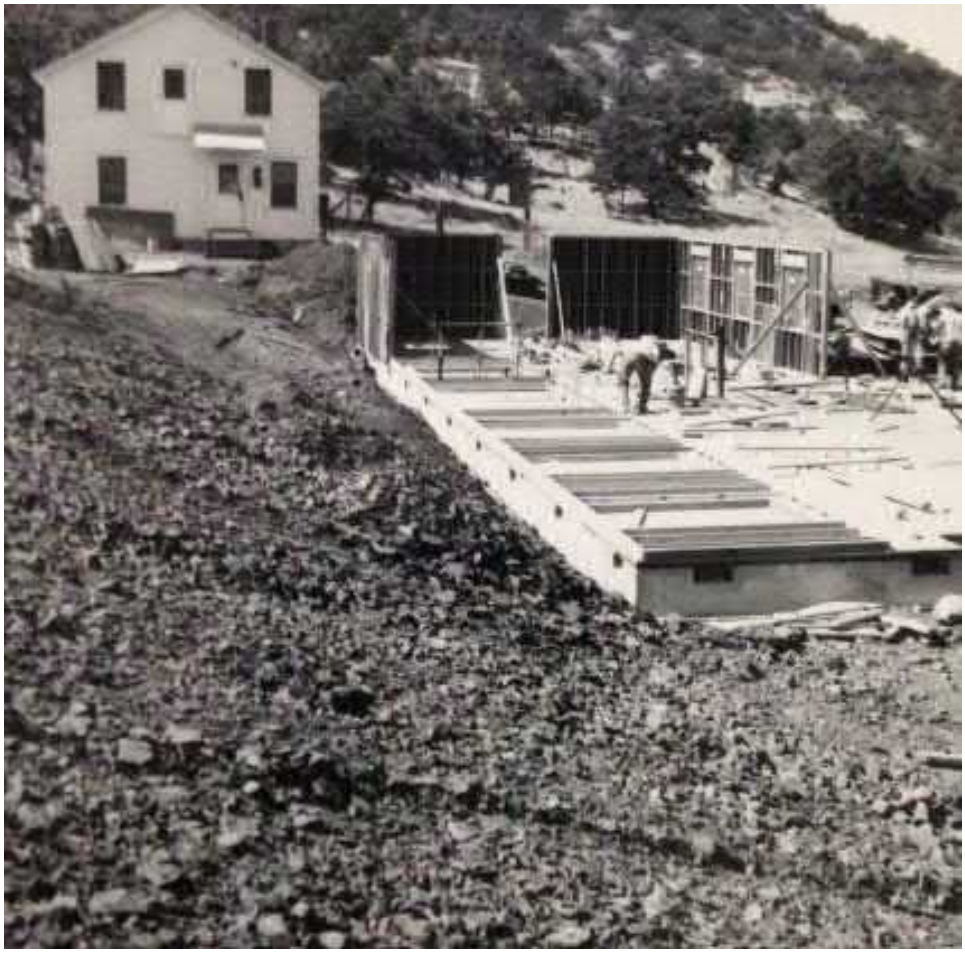
Photographs (continued):

Photograph 7. Former cookhouse/bunkhouse, circa 1964 prior to remodel; view facing northeast (Pacific Power 1964).



Photograph 8. Former cookhouse/bunkhouse, circa 1964 prior to remodel; view facing south (Pacific Power 1964).

Photographs (continued):



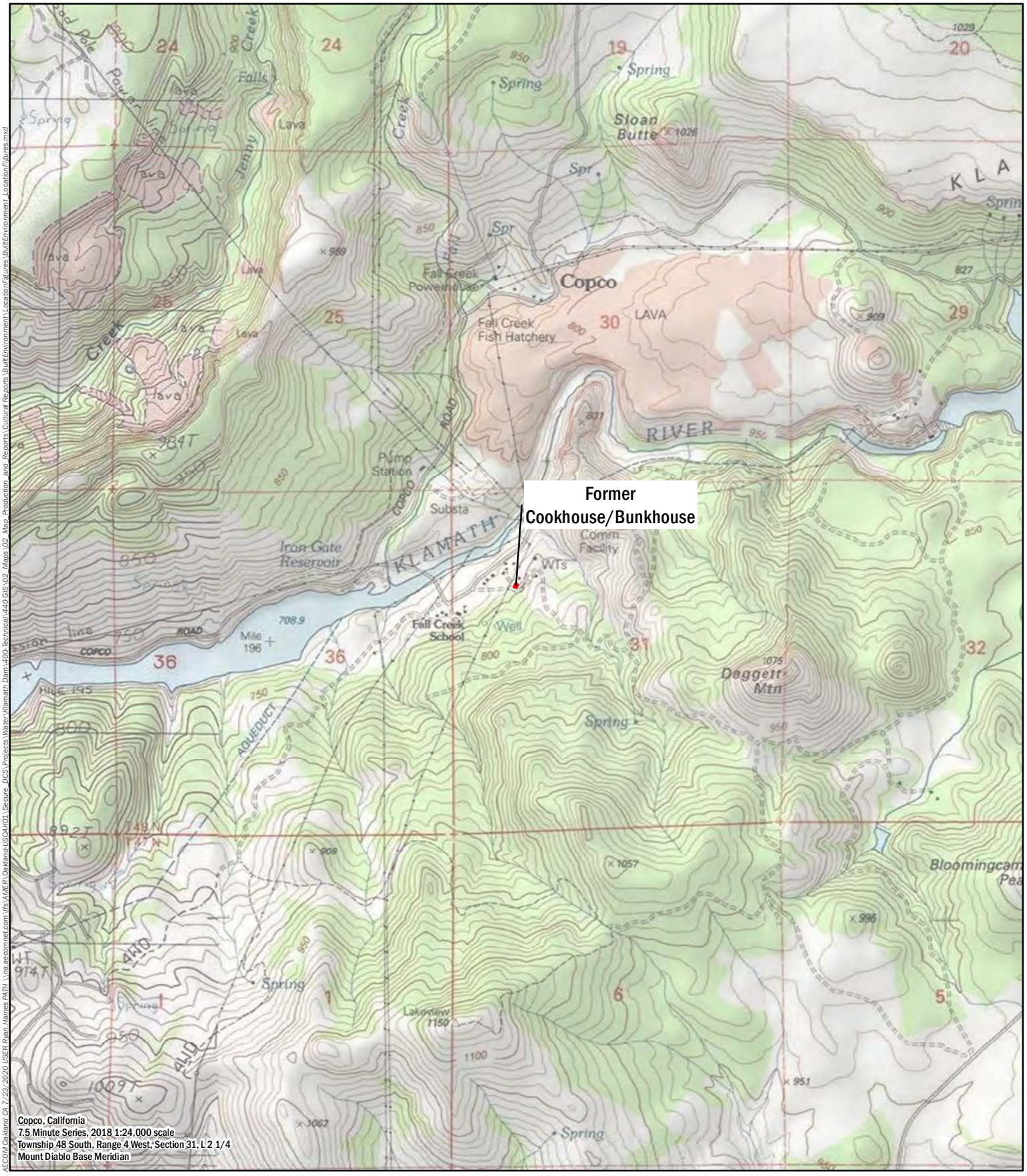
Photograph 9. Former cookhouse/bunkhouse (left background), during 1964 construction of modern bunkhouse; view facing southwest (Pacific Power 1964).

LOCATION MAP

Property Name: Copco No. 2 Historic District

***Map Name:** _____ ***Scale:** _____ ***Date of map:** _____

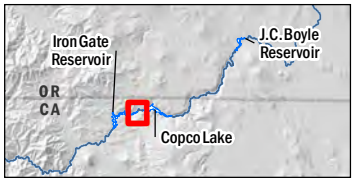
See Location Map on next page.



AECOM Oakland CA 7/23/2020 USER Ryan.Haines PATH \\na.aecomnet.com\Vfs\AMER\Oakland-USOAK01\Secure_DCS\Projects\Water\Klamath Dam\400-Technical\449 GIS\02_Maps\02_Map_Production_and_Reports\Cultural Reports\BuiltEnvironment\LocationFigures\BuiltEnvironment_LocationFigures.mxd

Former Cookhouse and Bunkhouse

Former Cookhouse and Bunkhouse



N

0 2,000 Feet

0 600 Meters

1:24,000

Klamath River Dam Removal
Daggett Road
Copco, Siskiyou County, California

AECOM

July 2020

SKETCH MAP

Property Name: Copco No. 2 Historic District

***Drawn by:** _____ ***Date of map:** _____

See Sketch/Site Map on next page.

Former Cookhouse and Bunkhouse

Former Cookhouse and Bunkhouse

N

0 100 Feet

0 20 Meters

1:600

Klamath River Dam Removal
Daggett Road
Copco, Siskiyou County, California

AECOM
July 2020

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #47-004015
HRI #
Trinomial
NRHP Status Code 3D

Other Listings
Review Code | Reviewer | Date

 Resource Name or #: Modern Bunkhouse

P1. Other Identifier: Modern Bunkhouse
***P2. Location:** ☒ **Unrestricted**
***a. County** Siskiyou
***b.** USGS 7.5' Quad Copco, CA Date 2018 T 48N; R 4W; L2 of Sec 31; Mount Diablo B.M.
c. Address _____ City _____ Zip _____
d. UTM: Zone 10 T, 553099mE/4646943mN
e. Other Locational Data: N/A

***P3a. Description:**

The Modern Bunkhouse was built in 1964 to house Pacific Power maintenance and repair crews. The bunkhouse's broad, one-story form reflects elements of the Ranch-style, a popular building type from circa 1935 to 1975. This "minimal" Ranch displays simple architectural features. Although many Ranch-style buildings have hipped roofs, the bunkhouse's side-gable sub-type is more prevalent in rural areas (McAlester 2014:597). An address of 19308 Daggett Road is indicated by metal numbers adjacent to the front door. Oriented facing west, the 2,000 square foot building has a T-shaped plan with a symmetrical façade and rests on a concrete foundation (Ferguson 1964). The medium-pitched roof, clad in asphalt shingle, displays exposed rafter tails. Primary cladding is vertical grooved plywood panels with cementitious boards and windows are two-part aluminum frame sliding. The western (primary) elevation features a projecting front-gable entry accessed by two concrete steps that lead to a wood-panel door with an inset pane. A pair of aluminum slider windows is adjacent to the offset front door. Two sets of three wood posts mounted in the concrete porch deck support the porch roof.

See Continuation Sheet.

***P3b. Resource Attributes:** (HP3) Multiple-family property (Bunkhouse)
***P4. Resources Present:** ☒ Building ☒ Element of District
P5a. Photograph:

P5b. Description of Photo: Modern Bunkhouse, viewing east (June 11, 2018).

***P6. Date Constructed/Age and Source:**
☒ Historic, 1964 (Pacific Power 1964)

***P7. Owner and Address:**
PacifiCorp
825 NE Multnomah, Suite 1500
Portland, OR 97232

***P8. Recorded by:**
Shoshana Jones, AECOM
111 SW Columbia Street, Suite 1500
Portland, OR 97201

***P9. Date Recorded:** June 11, 2018

***P10. Survey Type:** Intensive Level

***P11. Report Citation**: Klamath River Renewal Corporation. 2021. Lower Klamath Project Historic Built Environment Technical Report

***Attachments:** ☒Location Map ☒Continuation Sheet ☒Building, Structure, and Object Record

P3a. Description (continued):

The projecting entry is flanked by recessed wings, each containing three symmetrically spaced aluminum frame sliding windows. Below each window, the bay contains cementitious board topped by vertical wood board. The eastern elevation is symmetrical in design and contains two sets of three identical aluminum frame sliding windows divided by a pair of two smaller aluminum frame sliding windows. The southern and northern elevations have centered, recessed doors with air conditioning units mounted on wood platforms above the doorways.

The front entry door opens to an interior day room with its original kitchenette. Beyond the kitchenette is a long hallway that bisects the interior lengthwise. Six bedrooms occupy each wing; three in the front and three in the rear, for a total of twelve bedrooms. The small bedrooms have original flush wood doors. A centrally-located bathroom has multiple sinks. Most of the interior finishes appear to be original, including the carpets, wall finishes, light fixtures, acoustic ceiling tiles, bedroom doors, and kitchenette.

Exterior alterations include the addition of air conditioning units on wooden platforms mounted above the side doorways. The building, which is currently vacant, appears to be in good condition.

BUILDING, STRUCTURE, AND OBJECT RECORD

*Resource Name or #: Modern Bunkhouse *NRHP Status Code: 3D

B1. Historic Name: Building 1192
B2. Common Name: Modern Bunkhouse
B3. Original Use: multi-worker housing
B4. Present Use: multi-worker housing
B5. Architectural Style: Ranch

B6. Construction History:

The Modern Bunkhouse, constructed in 1964, has been minimally altered by installation of air conditioning units above the side doors on an unknown date.

B7. Moved? No
B8. Related Features: The Modern Bunkhouse is a contributing resource to the Copco No. 2 Historic District, which is within the larger Klamath Hydroelectric Project (KHP) Historic District. The KHP Historic District consists of seven hydroelectric developments, including Copco No. 2, in Southern Oregon and Northern California.

B9a. Architect: Unknown **b. Builder:** Myron C. Corcoran and William Wood

B10. Significance:
Theme: hydroelectric development
Area: Southern Oregon and Northern California
Period of Significance: 1925-1970 (Copco No. 2 Historic District)
Property Type: worker housing
Applicable Criteria: National Register of Historic Places (NRHP) Criterion A (contributing)

B11. Additional Resource Attributes: (HP3)—bunkhouse

B12. References:

Ferguson, J.H. 1964. Notice of contract to build a new bunkhouse at Copco No. 2. July 1. PacifiCorp Archive, PDX.026971 (box), CA-655-A-1, Klamath River Projects (CA) – Copco #2 Plant – Bunkhouse (folder).

Kramer, George. 2003. Klamath Hydroelectric Project. FERC No. 2082. Historic Context Statement. Prepared for PacifiCorp, Portland, Oregon. June.

Hurlbut, H.A. 1964. Letter to Mr. C.W. Patton regarding Copco 2 Bunkhouse. November 6. PacifiCorp Archive, PDX.026971 (box), CA-655-A-1, Klamath River Projects (CA) – Copco #2 Plant – Bunkhouse (folder).

McAlester, Virginia Savage. 2014. *A Field Guide to American Houses*. New York: Alfred A. Knopf.

Miller, Bill. 1964. Expenditure Requisition – Copco No. 2 Plant: Construct New Twelve Man Bunkhouse. March 27. PacifiCorp Archive, PDX.026971 (box), CA-655-A-1, Klamath River Projects (CA) – Copco #2 Plant – Bunkhouse (folder).

See Continuation Sheet.

B13. Remarks: None
B14. Evaluator: Shoshana Jones, AECOM
111 SW Columbia Street, Suite 1500
Portland, OR 97201
Date of Evaluation: June 11, 2018

(This space reserved for official comments.)

B10. Significance (continued):

Historic Context

The Modern Bunkhouse was constructed in 1964 as living quarters for Pacific Power employees working at Copco No. 1 and No. 2 hydroelectric developments, primarily maintenance and construction crews. The remote location made it necessary for Pacific Power to provide workers with room and board. In 1964-1965, the adjacent cookhouse/bunkhouse was renovated to function as a mess hall and cook's quarters for the Modern Bunkhouse. Construction of the Modern Bunkhouse and renovation of the cookhouse/bunkhouse were both part of Pacific Power's construction program, which followed its 1961 acquisition of Copco. The acquisition led to significant changes in regional hydroelectric power generation and transmission. In order to integrate the Pacific Power and Copco systems, Pacific Power initiated a $500 million construction program, designed to last from 1961 to 1970. The program's goal was to enhance power delivery to company service areas and accommodate the increased number of workers (Pacific Power 1961a:1).

As part of the construction program, the company built new, or improved existing, power facilities such as transmission lines and substations, some at former Copco sites (Pacific Power 1961b:2). In 1964, Pacific Power initiated a variety of construction projects at Copco No. 2, including a new control center for automated control of Copco No. 1 and Copco No. 2. The control center, scheduled for completion in 1966, would make Copco No. 2 the district hub for company personnel and work crews engaged in operations, maintenance, and system improvements, such as transmission line projects. To accommodate workers and their families at Copco No. 2, Pacific Power built new single- and multi-family housing, as well as a schoolhouse, and removed older housing buildings (Sacramento Bee 1968b). The multi-family housing was intended for use by work crews and the single-family housing was intended for seven on-site employees: one area operator, one senior operator, four operator dispatchers, and one apprentice operator and their families (Pacific Power 1967).

Construction began on the Modern Bunkhouse in 1964 after Pacific Power proposed a "12 man bunkhouse separate from the cookhouse to the requirements of the California Division of Housing and to permit use of either a male or female cook" (Miller 1964). In July 1964, Pacific Power contracted with Myron C. Corcoran of Central Point, California, and William Wood of Santa Cruz, California under a joint offer of $23,939 to construct the bunkhouse (Ferguson 1964). The bunkhouse was completed by November 1964 and the final payment issued to contractor Myron Corcoran Construction Company (Hurlbut 1964).

Evaluation (Contributes to Copco No. 2 Historic District)

Criteria Analysis

NRHP Criterion A
The Copco No. 2 Historic District contributes to the larger KHP Historic District, both of which are significant under NRHP Criterion A in the areas of Commerce and Industry. The Modern Bunkhouse, built in 1964, adds to the significance of the Copco No. 2 Historic District as the only multi-worker housing erected during the Pacific Power expansion phase (1961-1970).

NRHP Criterion B
Research does not indicate that the building is associated with any historically significant individuals under NRHP Criterion B.

NRHP Criterion C
The bunkhouse, a minimal ranch building, does not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, and is therefore not significant under NRHP Criterion C.

NRHP Criterion D
The bunkhouse is not significant as a source (or likely source) of important information regarding history or prehistory. It does not appear likely to yield important information about historic construction materials or technologies and is not significant under NRHP Criterion D.

Integrity Analysis

The bunkhouse retains sufficient integrity of location, design, setting, materials, workmanship, feeling, and association to convey its historic identity as modern, on-site multi-worker housing associated with the Pacific Power expansion phase (1961-1970).

Location *is the place where the historic property was constructed or the place where the historic event took place.* The bunkhouse remains at its original building site, and thereby retains integrity of location.

Design *is the composition of elements that constitute the form, plan, space, structure, and style of a property.* The bunkhouse retains integrity of design as a simple ranch, particularly with respect to the broad, one-story form.

B10. Significance (continued):

Setting *is the physical environment of a historic property that illustrates the character of the place.* The bunkhouse retains overall integrity of setting in the Copco No. 2 hydroelectric development, characterized by the nearby powerhouse, substation, facilities, and operations buildings; Klamath River; and the mostly undeveloped landscape. The bunkhouse's original setting is also defined by the adjacent 1941 cookhouse/bunkhouse that was renovated in 1964 to function as a mess hall for workers staying in the new bunkhouse.

Materials *are the physical elements combined in a particular pattern or configuration to form the historic property* and ***Workmanship*** *is the physical evidence of the crafts of a particular culture or people during any given period of history.* The bunkhouse has experienced minimal alterations since its original construction and retains overall integrity of materials and workmanship.

Feeling *is the quality that a historic property has in evoking the aesthetic or historic sense of a past period of time.* The integrity of feeling is supported by the remote setting and proximity to the 1941 former cookhouse/bunkhouse, the Copco No. 2 powerhouse, the Klamath River, and other worker-related facilities in Copco No. 2 Village.

Association *is the direct link between a property and the event or person for which the property is significant.* The Modern Bunkhouse's intact physical features and location within Copco No. 2 Village directly link the building with the 1960s Pacific Power expansion phase, contributing to integrity of association.

The Modern Bunkhouse retains integrity and is eligible as a contributing resource to the Copco No. 2 Historic District.

B12. References (continued):

Pacific Power & Light Company (Pacific Power)

1961a Stockholder Pamphlet. July 10 (University of Oregon, Knight Library, HD9685.U7 P33 1961 July).

1961b Stockholder Pamphlet. January 10 (University of Oregon, Knight Library, HD9685.U7 P33 1961 January).

1961c Stockholder Pamphlet. October 10 (University of Oregon, Knight Library, HD9685.U7 P33 1961 October).

1962 Stockholder Pamphlet. July 10 (University of Oregon, Knight Library, HD9685.U7 P33 1962 July).

1964 Modern Bunkhouse [photographs]. PacifiCorp Archive, PDX.026971 (box), CA-655-A-1, Klamath River Projects (CA) – Copco #2 Plant – Bunkhouse (folder).

1967 Progress Plan – Copco Housing. PacifiCorp Archive, PDX.026971 (box), CA-655-A-3, Klamath River Projects (CA) – Copco #2 Plant – Construct Three New Houses (folder).

Photographs:

Photograph 1. Modern Bunkhouse; view facing east, 2018.

Photograph 2. Modern Bunkhouse; view facing northeast, 2018.

Photographs (continued):

Photograph 3. Modern Bunkhouse; view facing northwest, 2018.

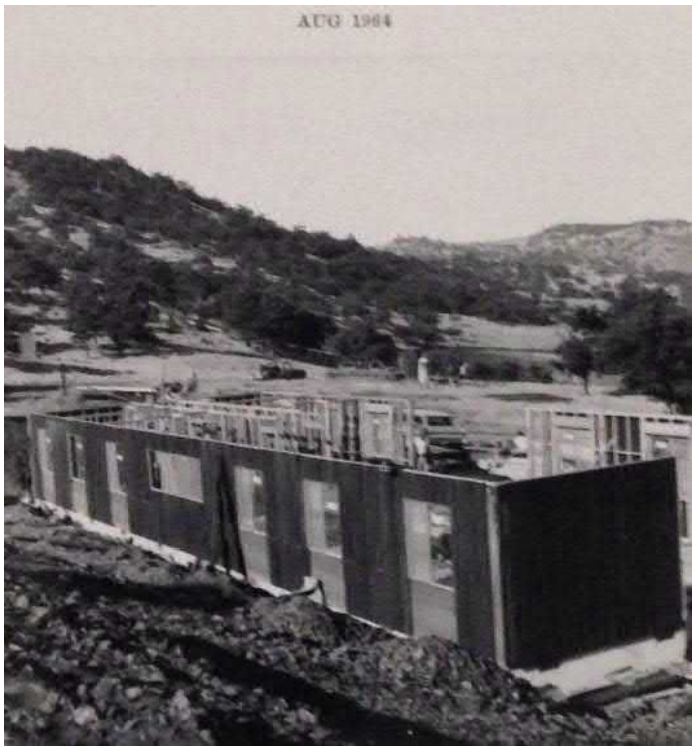
Photograph 4. Modern Bunkhouse; view facing south, 2018.

Photographs (continued):

Photograph 5. Day room with original kitchenette, light fixtures, and hallway door; view facing northeast, 2018.

Photograph 6. Bathroom; view facing northeast, 2018.

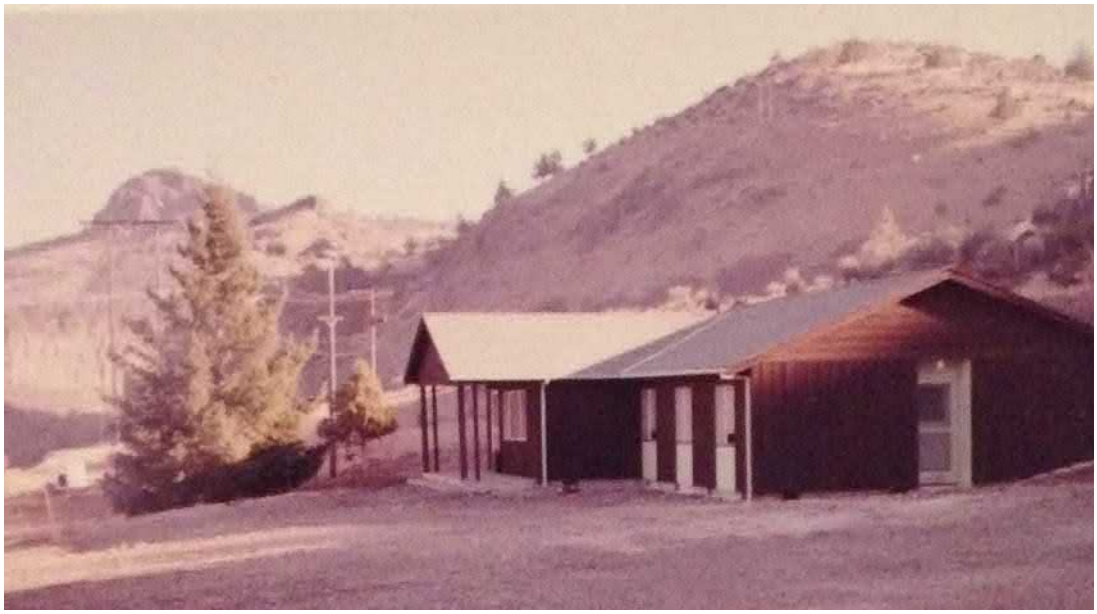
Photographs (continued):



Photograph 7. Modern Bunkhouse wall framing, August 6, 1964 (Pacific Power 1964).

Photograph 8. Modern Bunkhouse after completion, October 12, 1964 (Pacific Power 1964).

Photographs (continued):



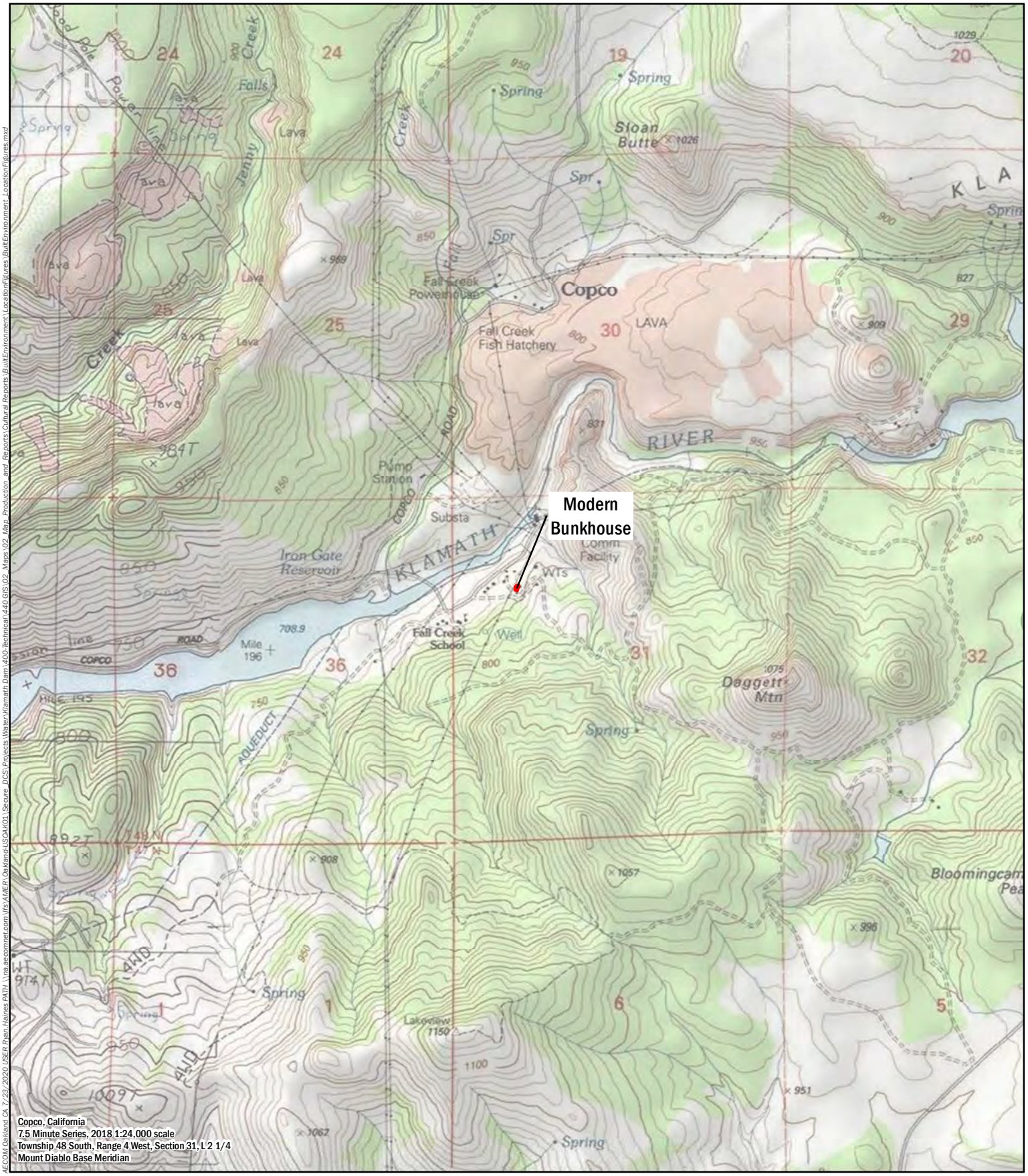
Photograph 9. Modern Bunkhouse after completion, October 12, 1964 (Pacific Power 1964).

LOCATION MAP

Property Name: Copco No. 2 Historic District

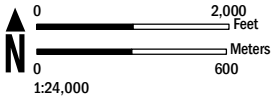
***Map Name:** _____ ***Scale:** _____ ***Date of map:** _____

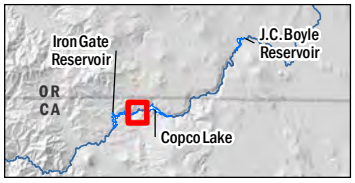
See Location Map on next page.



Modern Bunkhouse

Modern Bunkhouse





Klamath River Dam Removal
Daggett Road
Copco, Siskiyou County, California

AECOM
July 2020

SKETCH MAP

Property Name: Copco No. 2 Historic District

***Drawn by:** _____ ***Date of map:** _____

See Sketch/Site Map on next page.

Modern Bunkhouse

Modern Bunkhouse

0 100 Feet

N

0 20 Meters

1:600

Klamath River Dam Removal
Daggett Road
Copco, Siskiyou County, California

AECOM
July 2020

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #47-004015
HRI #
Trinomial
NRHP Status Code 3B

Other Listings
Review Code | Reviewer | Date

 Resource Name or #: Fall Creek School

P1. Other Identifier: Fall Creek School
***P2. Location:** ☒ **Unrestricted**
- ***a. County** Siskiyou
- ***b.** USGS 7.5' Quad Copco, CA Date 2018 T 48N; R 4W; L2 of Sec 31; Mount Diablo B.M.
- c. Address _____ City _____ Zip _____
- d. UTM: Zone 10 T, 552860mE/4646776mN
- e. Other Locational Data: N/A

***P3a. Description:**

The Fall Creek School was constructed in 1965 at Copco Village to replace a 1923 schoolhouse located near the Fall Creek Powerhouse, about 1 mile away (Kramer 2003:12). The architectural firm of Matson and Nielson from Eureka, California designed the 1965 school as a contemporary version of the rural, one-room schoolhouse. The Contemporary style, popular with American architects between 1945 and 1965, is reflected in the school's single-story construction with low-pitched gable roof, wide overhanging eaves, broad expanses of uninterrupted exterior wall surface, prominent band of façade windows, and recessed entry door. The side-gable roof form is consistent with later examples of contemporary architecture (McAlester 2014:630, 632). The school building now functions as a community center and training facility for PacifiCorp employees (Kramer 2003:12).

See Continuation Sheet.

***P3b. Resource Attributes:** (HP15) Educational building; (HP13) Community center/social hall (Fall Creek School)
***P4. Resources Present:** ☒ Building ☒ Element of District
P5a. Photograph:

P5b. Description of Photo: Fall Creek School, viewing east (June 11, 2018).

***P6. Date Constructed/Age and Source:**
☒ Historic, 1965 (*Sacramento Bee* 1965a)

***P7. Owner and Address:**
PacifiCorp
825 NE Multnomah, Suite 1500
Portland, OR 97232

***P8. Recorded by:**
Shoshana Jones, AECOM
111 SW Columbia Street, Suite 1500
Portland, OR 97201

***P9. Date Recorded:** June 11, 2018

***P10. Survey Type:** Intensive Level

***P11. Report Citation**: Klamath River Renewal Corporation. 2021. Lower Klamath Project Historic Built Environment Technical Report.

***Attachments:** ☒Location Map ☒Continuation Sheet ☒Building, Structure, and Object Record

P3a. Description (continued):

The building has a rectangular plan, sits on a concrete slab foundation, and is oriented facing north. The low-pitched side-gable roof has wide overhanging eaves and is clad in standing-seam sheet metal. Siding consists of Masonite panels, and the exterior light fixtures are original (Durio 2003:86). The northern (primary) façade features a prominent band of five large aluminum windows adjacent to a small, engaged entry porch centered along the elevation. The entrance is recessed behind an exterior wall with a broad expanse of uninterrupted surface.

The building address is 19038 Daggett Road, the same address as Modular Residence No. 1, as indicated by metal numbers mounted near the front entry. The school building has a secondary entrance at the northeastern corner accessed by three concrete steps leading to a wood door with a vertical row of sidelights. Other fenestration along the eastern elevation includes two adjacent aluminum frame sliding windows with lower hopper panes. The southern (rear) elevation has a projecting entrance with an east-facing single door. There is an adjacent south-facing door and a small window above. The western elevation lacks any fenestration or architectural detail.

The building contains one large classroom, an adjoining kitchen, small storage area, and bathrooms. The classroom is an open volume with a vaulted ceiling and wood beam extending along the ceiling peak. There are modern, metal suspended light fixtures. A simple wood door leads to the kitchen, which is separated from the room by an approximately 10-foot-high interior wall. A rectangular wall opening and a counter is located between the kitchen and classroom to facilitate food service. The kitchen's Toastmaster range appears to be original to the building's construction.

A gravel parking area is northwest of the school. An asphalt ball court measuring approximately 100 feet by 50 feet is situated near the building's northeastern side. The court is within a larger, fenced field measuring approximately 170 feet by 210 feet. At the court's southeastern corner, a Pacific Coast Incinerator is mounted to a concrete foundation by metal clamps. The Pacific Coast Incinerator Company was incorporated in 1961, and the incinerator was likely installed when the school was constructed in 1965. The Fall Creek School appears to be in very good condition and remains in use.

BUILDING, STRUCTURE, AND OBJECT RECORD

*Resource Name or #: Fall Creek School
*NRHP Status Code: 3B

B1. Historic Name: Fall Creek School
B2. Common Name: Fall Creek School
B3. Original Use: school, community center
B4. Present Use: community center, training facility
B5. Architectural Style: Contemporary

B6. Construction History:

The Fall Creek School, constructed in 1965, appears to have been minimally altered by the addition of a modern heating, ventilation, and air conditioning unit adjacent to the southern (rear) elevation and the replacement of the original roofing material and gutter system (dates unknown).

B7. Moved? No
B8. Related Features: The Fall Creek School is a contributing resource to the Copco No. 2 Historic District, which is within the larger Klamath Hydroelectric Project (KHP) Historic District. The KHP Historic District consists of seven hydroelectric developments, including Copco No. 2, in Southern Oregon and Northern California.

B9a. Architect: Matson and Nielson (Eureka, California) **b. Builder:** A.P. Giordano (Yreka, California)

B10. Significance:
Theme: hydroelectric development
Area: Southern Oregon and Northern California
Period of Significance: 1925-1970 (Copco No. 2 Historic District)
Property Type: school/community center
Applicable Criteria: National Register of Historic Places (NRHP) Criterion A (contributing) and Criterion C (individually eligible)

See Continuation Sheets.

B11. Additional Resource Attributes: (HP15)—school/training center; (HP13)—Community Center

B12. References:

Adair, Cecile. 1954. "Rural School in Siskiyou Is Wealthy." *Sacramento Bee* [Sacramento, California]. November 27.

Ancestry.com
----------2002. 1930 United States Federal Census [database on-line]. Provo, UT, USA: Ancestry.com Operations Inc.
----------2012. 1940 United States Federal Census [database on-line]. Provo, UT, USA: Ancestry.com Operations, Inc.
----------2014. U.S., Social Security Death Index, 1935-2014 [database on-line]. Provo, UT, USA: Ancestry.com Operations Inc.

Beckham, Stephen Dow. 2006. Historical Landscape Overview of the Upper Klamath River Canyon of Oregon and California. Cultural Resource Series No. 13. Bureau of Land Management, U.S. Department of the Interior.

Christensen, Don. 1970. "One-Room Schools Are Alive, Well." *Sacramento Bee* [Sacramento, California]. October 11.

Durio, Lori. 2003. Klamath River Hydroelectric Project District. State of California Department of Parks and Recreation. Primary Record #47-004015. Recorded July 2003 by L. Durio, CH2M Hill, New Orleans, LA. September.

See Continuation Sheet.

B13. Remarks: None
B14. Evaluator: Shoshana Jones, AECOM
111 SW Columbia Street, Suite 1500
Portland, OR 97201
Date of Evaluation: June 11, 2018

(This space reserved for official comments.)

B10. Significance (continued):

Historic Context

The 1965 Fall Creek School building was the third building in the Klamath hydroelectric project area used as a school/community center for Copco families during the twentieth century. The first two school buildings, located near the Fall Creek Powerhouse, served local ranching families and the children of Copco employees from the 1910s to the 1950s. The current Fall Creek School was built in Copco Village, about 1 linear mile south of the former school site.

When the Copco predecessor Siskiyou Electric Power & Light Company (SEP&L) built the Fall Creek Powerhouse in 1902, the surrounding area was sparsely populated. At that time, local children, mostly from ranching families, attended the Oak Grove, Cleveland, and Lowood school districts (*Oregonian* 1916). The earliest of these pioneer school districts was Oak Grove. The Oak Grove School District was established prior to 1889 when the Bogus School District (established in 1871) was divided. The first school was located along the Klamath River at the east end of what is now Copco Lake. The school was relocated east of Beswick, but was destroyed by fire in 1905. Another school was built in the same approximate location. The district lapsed in 1939 and was divided between the Bogus and Spring School Districts (Siskiyou County Oak Grove School District). The 1957 Metsker map for Siskiyou County notes the Oak Grove School near Beswick as "abandoned" (Metsker 1957a:70). The Cleveland School District was established in 1893 with a schoolhouse along Copco Road, about 10 miles upriver from its junction with the Montague-Klamath River Road in Ager. The school district lapsed in 1911 and was annexed by the Bogus School District (Siskiyou County Cleveland School District). The Lowood School District was also established in 1893. Known locally as the "Camp Creek School," the Lowood School was situated along the Klamath River at the mouth of Camp Creek, about 13 miles east of Hornbrook. In 1941, Lowood School District was annexed by the Hornbrook School District (Siskiyou County Lowood School District). The school building was moved in 1943 and the school's former site was inundated by the Iron Gate Reservoir (Beckham 2006:202). The school's location was noted on the 1957 Metsker Map of Siskiyou County (Metsker Map 1957b:89).

When the Fall Creek Powerhouse was activated, SEP&L employees tasked with operating and maintaining the plant brought their families to the area (Wilson and Wilson 1989:63). These families urged Siskiyou County to create a new school district. On April 4, 1905, the county rejected the initial petition to form a new district, but nearly six years later, the Fall Creek School District was established on January 2, 1911, by merging parts of the Oak Grove, Cleveland, and Lowood school districts (Siskiyou County Fall Creek School District).

The first Fall Creek School was a small one-room building constructed of board and batten. The building was previously used as an "end-of-track saloon" for Klamath Lake Railroad construction workers circa 1901-1903. By the time Siskiyou County established the Fall Creek School District in 1911, students had already been attending classes in the old saloon building. The building was just east of the Fall Creek Powerhouse, at the northern edge of North Bank Wagon Road (Wilson and Wilson 1989:63). During the Copco No. 1 and No. 2 construction era (circa 1916-1925), attendance reportedly increased from 11 students to a record high of 59 students (*Sacramento Bee* 1965a). Before automobiles became ubiquitous, students reached the schoolhouse on foot or by riding the Klamath Lake Railroad spur from the town of Copco. One student rode his horse, which fed on hay stored in a small barn behind the school (Wilson and Wilson 1989:63).

In 1923, a second, larger school building and a teacher's residence were built. Copco funded these improvements to accommodate the additional students that would arrive during the Copco No. 2 expansion project (1924-1925). The original school building was demolished several years later (Wilson and Wilson 1989:63; Beckham 2006:223). Classes were typically held from March through November to minimize student travel during the harsh winter months. In 1935-1936, scarlet fever epidemics led to extended school closures (*Sacramento Bee* 1965a).

Students used the second Fall Creek School building until the 1950s, although enrollment had substantially declined by then (Wilson and Wilson 1989:63). A 1954 *Sacramento Bee* article reported that the school had six students and a teacher living on site. The article noted that the school was "equipped a little better than average . . . It has plenty of hot water, heat and light, for electricity is furnished free" (Adair 1954). A van transported students to and from the school (Wilson and Wilson 1989:66).

The school had a secondary function as a community center for voting, scout meetings, Copco film showings and seminars, potluck dinners, and Copco employee retirement ceremonies (*Mail Tribune* 1958; Wilson and Wilson 1989:66). The second school site currently consists of a concrete slab foundation and small outbuilding. USGS maps from 1954 and 1962 depict the "Fall Creek Sch" at that site, just east of the Fall Creek Powerhouse, however, the USGS map from 1984 shows the present "Fall Creek School" building in its existing location at Copco Village (USGS 1954; USGS 1984).

B10. Significance (continued):

Design and Construction of the 1965 Fall Creek School

The present 1965 Fall Creek School building in Copco Village was designed by Gerald D. Matson (1920 - 2001) and Jack L. Nielson (1934 – 1976) and constructed by A.P. Giordano and Sons (*Sacramento Bee* 1965b). Matson and Nielson were architects based in Eureka, Humboldt County, California (*Times Standard* 1976). Giordano was a builder based in Yreka, Siskiyou County, California (*Sacramento Bee* 1965b).

Gerald Dalbert Matson was born on June 15, 1920 in Eureka, California, as the eldest son of Finnish immigrants (Ancestry.com 2002). Matson attended Eureka High School and graduated from the University of California, Berkeley, with a Bachelor of Arts from the School of Architecture in 1943 (Ancestry.com 2014; University of California 1943:7). Matson was a busy local architect and before partnering with Nielson, he designed, among other buildings, the Eureka City Hall (1958), Cuddeback Elementary School (1958), and the Sequoia Bowl (*Humboldt Standard* 1958a, 1958b; *Humboldt Standard* 1959). Matson also worked in association with Van Bourg and Associates on the Humboldt County Courthouse (1958) (*Humboldt Standard* 1958c).

Jack L. Nielson was born on March 26, 1934 in California to a Danish immigrant father and California-born mother (Ancestry.com 2012). He attended Ferndale High School; and like Matson, graduated from the University of California, Berkeley. He completed graduate studies at the Ecole de Beaux Arts in Fontainebleau, France. Nielson's important projects included designs for College of the Redwoods, a community college in Eureka, and Eureka's fish processing plant (*Times Standard* 1976).

After Matson and Nielson partnered in 1961, their architectural firm designed Seaside Hospital in Crescent City (1962), Daly Bros. shopping center (1964), and St. Bernard's Elementary School (1965) (Riehl 1962; *Humboldt Standard* 1964; *Humboldt Standard* 1965). The firm also designed building additions and expansions, including Dows Prairie School (1961), McKinleyville School (1961), Eureka High School (1963), and Arcata's Church of Jesus Christ of Latter-Day Saints (1969) (*Humboldt Standard* 1961; *Humboldt Standard* 1963; *Humboldt Standard* 1969). Matson and Nielson's collaboration lasted from 1961 until Nielson's death in 1976 (*Times Standard* 1976). The successor firm is Matson and Vallerga, located at 3234 T Street in Eureka, California (Matson and Vallerga 2017).

A.P. Giordano, from Yreka, California, was the sole bidder for the Fall Creek School construction project. Giordano successfully bid $42,267.79, which was within 10 percent of the architect's cost estimate (*Sacramento Bee* 1965b). Little information on Giordano or his business is available; however, the *Sacramento Bee* reported that Giordano received an architect's commendation for his work as hospital inspector and "clerk of the works" on the 1963 Siskiyou County General Hospital project. The newspaper described the general hospital as "one of the most complex buildings ever constructed in Siskiyou County" (*Sacramento Bee* 1963).

The Fall Creek School appears to be a simplified version of Matson's design for Cuddeback Elementary School (1958), particularly with respect to the roof form and window arrangements. On completion, the Fall Creek School continued the school's historic dual function as an education and community center, but without a teacher residence (*Sacramento Bee* 1965a). After the grand opening in December 1965, the *Sacramento Bee* described the completed schoolhouse as an "ultra-modern building [that] contains a work area comparable to a regular classroom-and-a-half plus full kitchen facilities which implement the dual role of the building as a community center" (*Sacramento Bee* 1965a). Built four years after Pacific Power acquired Copco, the Fall Creek School served the children of Pacific Power employees living in Copco Village (Wilson and Wilson 1989:66).

By 1970, Fall Creek School enrollment was 10 students (Christensen 1970). That year, the school was reportedly one of eight surviving one- or two-room schoolhouses still operating in Siskiyou County, and one of five within 25 miles of Yreka, the Siskiyou County seat. The county's other rural schools dated mostly to the late 1800s and early 1900s. An exception was the Sawyers Bar School District, with its newer 1968 building (extant) (Christenson 1970). According to the National Center for Education Statistics, the United States had about 200,000 one-room schoolhouses in the 1910s. Only 335 remained in operation in 2006. The California Teachers Association reported in 2010 that only about a dozen were operating in the state (Posnick-Goodwin 2010). By the mid-1980s, the Fall Creek School's enrollment of 7 students made it California's smallest school district (Stanford 1987). Based on these statistics, the Fall Creek School appears to be a rare example of a rural, one-room California schoolhouse built in the Contemporary architectural style.

Evaluation (Contributes to Copco No. 2 Historic District and individually eligible)

Criteria Analysis

NRHP Criterion A

The Copco No. 2 Historic District contributes to the larger KHP Historic District, both of which are significant under NRHP Criterion A in the areas of Commerce and Industry. The Fall Creek School, built in 1965, adds to the significance of the Copco No. 2 Historic District by representing the last remaining educational facilities built by Pacific Power (successor to Copco) for children of employees. Pacific Power erected the present building to accommodate workers and their families during the company's 1961-1970 expansion phase.

B10. Significance (continued):

NRHP Criterion B
Research does not indicate that the school is associated with any historically significant individuals under NRHP Criterion B.

NRHP Criterion C
The school is individually significant under NRHP Criterion C in the area of Architecture as a rare example of a rural, one-room California school built in the Contemporary architectural style. The building retains its character-defining architectural features, primarily the single-story construction with low-pitched gable roof, wide overhanging eaves, broad expanses of uninterrupted exterior wall surface, the façade's prominent band of five large aluminum windows, and the recessed entrance.

NRHP Criterion D
The school is not significant as a source (or likely source) of important information regarding history or prehistory. It does not appear likely to yield important information about historic construction materials or technologies and is not significant under NRHP Criterion D.

Integrity Analysis

The Fall Creek School retains a high level of integrity with respect to location, design, setting, materials, workmanship, feeling, and association.

Location *is the place where the historic property was constructed or the place where the historic event took place.* The school remains at its original 1965 building site, and thereby retains integrity of location.

Design *is the composition of elements that constitute the form, plan, space, structure, and style of a property.* The school retains integrity of design as a contemporary-style building, with no additions or other alterations impacting plan, space, structure, or style.

Setting *is the physical environment of a historic property that illustrates the character of the place.* The school retains overall integrity of setting in Copco Village. Its immediate setting reflects the 1960s-era construction of worker buildings at Copco No. 2, with nearby single-family modern ranch-style dwellings and a circa-1965 garage/storage building. The adjacent modular residence, built circa 1984, has minimal impact on the school's overall setting.

Materials *are the physical elements combined in a particular pattern or configuration to form the historic property* and ***Workmanship*** *is the physical evidence of the crafts of a particular culture or people during any given period of history.* The school retains excellent integrity of materials and workmanship, reflected primarily by the original siding, doors, and windows.

Feeling *is the quality that a historic property has in evoking the aesthetic or historic sense of a past period of time.* The integrity of feeling is supported by the remote setting and proximity to the Copco No. 2 powerhouse, the Klamath River, and other worker-related facilities in Copco Village. The contemporary architectural design and midcentury materials also evoke a sense of the era in which the school was built.

Association *is the direct link between a property and the event or person for which the property is significant.* The school's intact physical features and location within Copco Village directly link the building with the 1960s Pacific Power expansion phase, contributing to integrity of association.
.
The Fall Creek School retains a high level of integrity and is eligible as a contributing resource to the Copco No. 2 Historic District under Criterion A. The Fall Creek School is also individually eligible under Criterion C.

B12. References (continued):

Humboldt Standard [Eureka, California].
----------1958a. "State Approves Contracts For New City Hall." June 24.
----------1958b. "New Cuddeback School To Be Dedicated Sunday." May 14.
----------1958c. "Ground Breaking Ceremonies Held At New County Courthouse Site." May 21.
----------1959. "Something New In Recreation At Garberville" [advertisement]. May 26.
----------1961. "Eighteen New Classrooms In McKinleyville." October 7.
----------1963. "Trustees Await Senior High Data." July 24.
----------1964. "$400,000 Daly Bros. Development." June 5.
----------1965. "Moving Day At St. Bernard's Elementary School." April 5.
----------1969. "Addition Dedication Scheduled Sunday." May 24.

B12. References (continued):

Kramer, George. 2003. Klamath Hydroelectric Project. FERC No. 2082. Request For Determination of Eligibility. Prepared for PacifiCorp, Portland, Oregon. October.

McAlester, Virginia Savage. 2014. *A Field Guide to American Houses*. New York: Alfred A. Knopf.

Mail Tribune [Medford, Oregon]. 1958. "Dinner Honors Copco Employee On Retirement." October 8.

Matson and Vallerga. 2017. About Us: Firm History. Matson and Vallerga Architects, Inc. http://mv-a.com/history.html (accessed March 4, 2019).

Metsker Map
1957a Siskiyou County, California. Page 70. Township 48N Range 3W. March.
1957b Siskiyou County, California. Page 70. Township 47N Range 5W. March.

Oregonian [Portland, Oregon]. 1916. "New Town Springs Up: Copco, Center of Power System, Has Population of About 560." November 26.

Posnick-Goodwin, Sherry. 2010. "The Last of the One-Room Schoolhouses." California Teachers Association 14, Issue 9, June. https://www.cta.org/en/Professional-Development/Publications/2010/06/Educator-June-10/One-room-schoolhouse-web-exclusive.aspx (accessed August 28, 2018).

Riehl, Julian. 1962. "Novato High Library Job Goes to Olsen Company." *Press Democrat* [Santa Rosa, California]. February 18.

Sacramento Bee [Sacramento, California]
1954 "Rural School In Siskiyou Is Wealthy." November 27.
1963 "Siskiyou Contractors Are Lauded For Work." December 22.
1965a "Copco Community Opens New Fall Creek School." December 12.
1965b "Fall Creek School Job Pact Is Okehed [*sic*]." May 31.

Siskiyou County
Fall Creek School District. Siskiyou County Office of Education. https://www.siskiyoucoe.net/cms/lib/CA01001605/Centricity/domain/106/historic%20elementary%20schools/Fall%20Creek.pdf (accessed June 4, 2018). Siskiyou County Office of Education.
Oak Grove School District. Siskiyou County Office of Education. https://www.siskiyoucoe.net/cms/lib/CA01001605/Centricity/domain/106/historic%20elementary%20schools/Oak%20Grove.pdf (accessed June 26, 2019).
Cleveland School District. Siskiyou County Office of Education. https://www.siskiyoucoe.net/cms/lib/CA01001605/Centricity/Domain/106//Historic%20Elementary%20Schools/Cleveland.pdf (accessed June 26. 2019).
Lowood School District. https://www.siskiyoucoe.net/cms/lib/CA01001605/Centricity/domain/106/historic%20elementary%20schools/Lowood.pdf (accessed June 26, 2019).

Stanford. 1987. The Study of Stanford and the School. Vol. I. Stanford University School of Education. Available at Google Books.

Times Standard [Eureka, California]. 1976. "Jack Nielson Dies." June 6.

University of California. 1943. The Eightieth Commencement. Berkeley. June 6 (available at Google Books).

USGS (United States Department of the Interior Geological Survey)
1954. Copco Quadrangle, California – Siskiyou Co. 15 Minute Series (Topographic).
1984. Copco Quadrangle, California – Siskiyou Co. 7.5 Minute Series (Topographic). Provisional Edition 1984.

Wilson and Wilson (Robert E. Wilson and Ellen M. Wilson). 1989. "Fall Creek School." *The Siskiyou Pioneer* 6(2):63-68. One Room Schools Issue and Yearbook. Siskiyou County Historical Society.

Photographs:

Photograph 1. Fall Creek School, north façade; view facing south, 2020.

Photograph 2. Fall Creek School, east and north (façade) elevations; view facing southwest, 2018.

Photographs (continued):

Photograph 3. Fall Creek School, southern (rear) and eastern elevations; view facing west, 2018.

Photograph 4. Fall Creek School, eastern and northern (façade) elevations, with Modular House No. 1 at right; view facing southwest, 2018.

Photographs (continued):

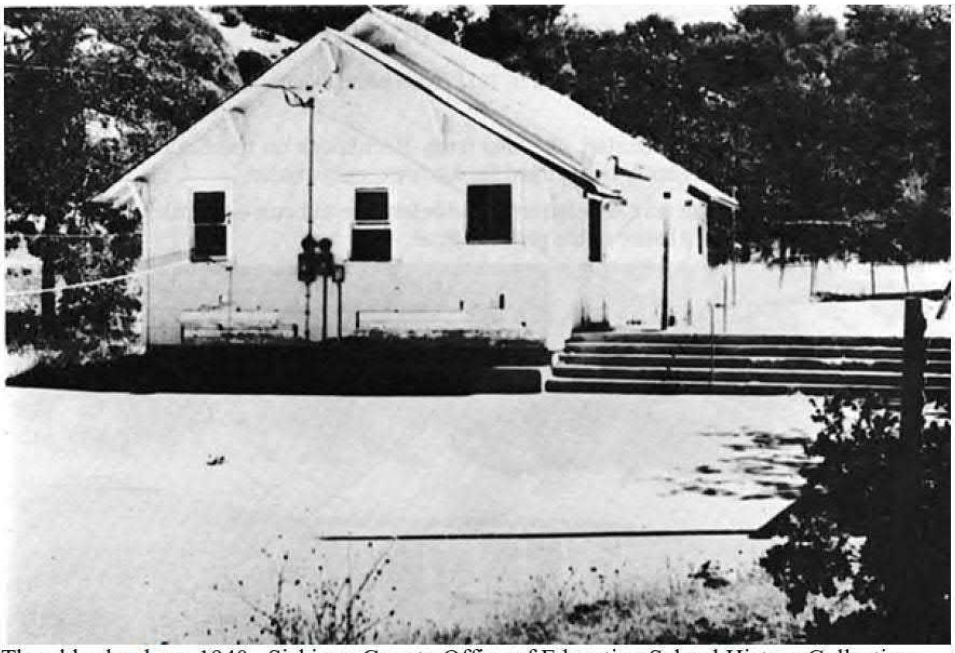
Photograph 5. Classroom; view facing northeast towards kitchen, 2018.

Photograph 6. Kitchen; view facing northwest, 2018.

Photographs (continued):

ca. 1965. Siskiyou County Office of Education School History Collection.

Photograph 7. The present Fall Creek School, now a community center and training facility, built in 1965 at Copco Village, about 1 linear mile south-southwest of the original Fall Creek School site (Siskiyou County Fall Creek School). This photograph was taken soon after the current school was completed.



The old school, ca. 1940. Siskiyou County Office of Education School History Collection.

Photograph 8. The second Fall Creek School built in 1923, just east of the Fall Creek Power Plant (Siskiyou County Fall Creek School).

Photographs (continued):

Photograph 9. The site of the second Fall Creek School; view facing north, 2018. Before it was demolished, the old school building stood left of the concrete staircase.

Plates:

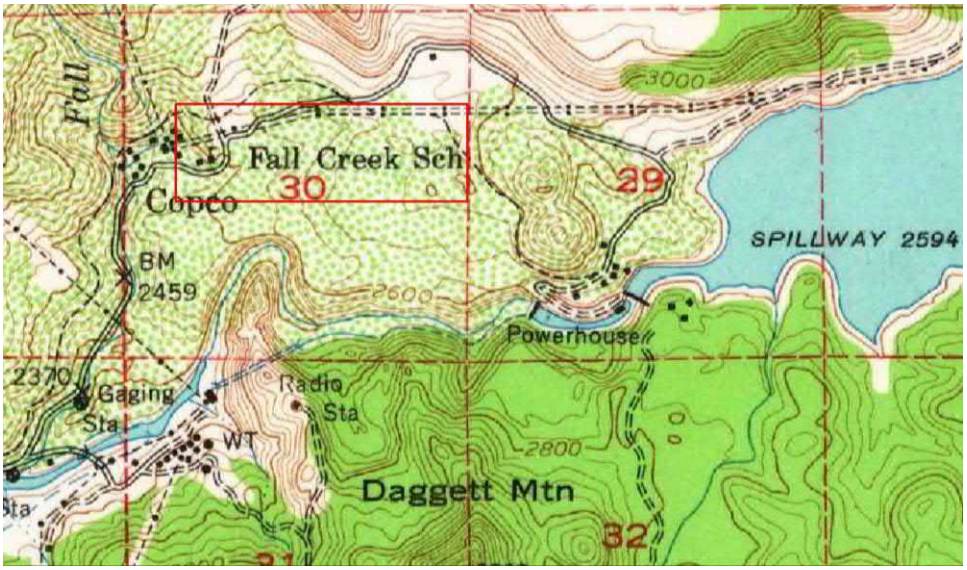


Plate 1. The site of the second Fall Creek School (built in 1923 and now demolished), just east of Fall Creek Powerhouse. The Fall Creek School is demarcated by a small black square with a flag (USGS 1954).

Plates (continued):

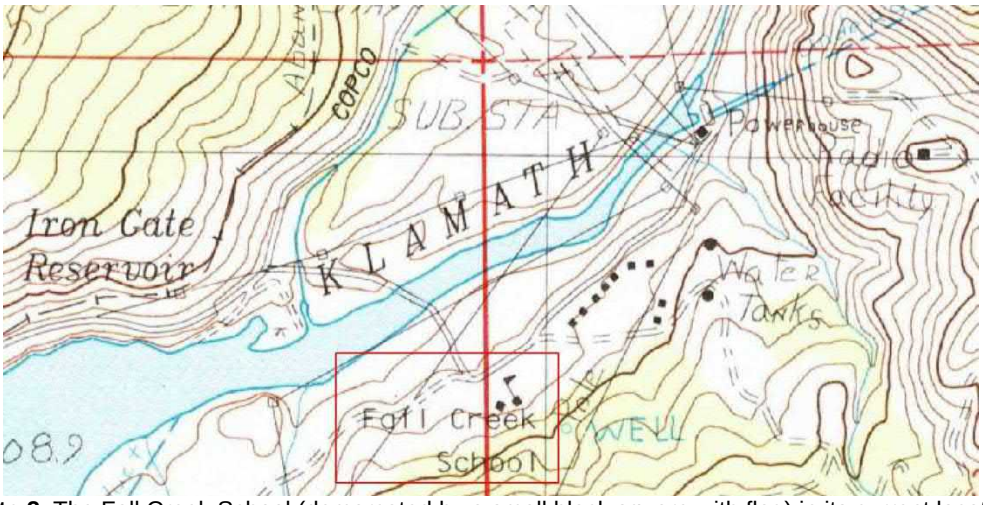


Plate 2. The Fall Creek School (demarcated by a small black square with flag) in its current location at Copco Village (USGS 1984).

LOCATION MAP

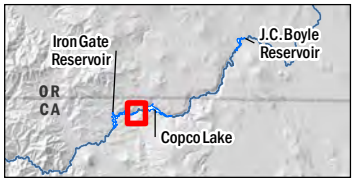
Property Name: Copco No. 2 Historic District

***Map Name:** _____ ***Scale:** _____ ***Date of map:** _____

See Location Map on next page.

Fall Creek School

Fall Creek School



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Klamath River Dam Removal
Daggett Road
Copco, Siskiyou County, California

AECOM
July 2020

SKETCH MAP

Property Name: Copco No. 2 Historic District

***Drawn by:** _____ ***Date of map:** _____

See Sketch/Site Map on next page.

Fall Creek School

Fall Creek School

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Klamath River Dam Removal
Daggett Road
Copco, Siskiyou County, California

AECOM
July 2020

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #47-004015
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code | Reviewer | Date

 Resource Name or #: Daggett Road Bridge

P1. Other Identifier: Daggett Road Bridge

***P2. Location:** ☒ **Unrestricted**

***a. County** Siskiyou

***b.** USGS 7.5' Quad Copco, CA Date 2018 T 48N; R 5W; NE ¼ of NE ¼ of Sec 36; Mount Diablo B.M.

c. Address _____ City _____ Zip _____

d. UTM: Zone 10 T, 552669mE/4646955mN

e. Other Locational Data: N/A

***P3a. Description:**

The Daggett Road Bridge, built circa 1924, crosses the Klamath River near the mouth of Fall Creek and provides access from Copco Road to the Copco No. 2 powerhouse area (Copco Village). The estimated construction date is based on historic photographs of the bridge when it was used as a railroad bridge to access the Klamath Lake Railroad spur that delivered equipment and materials for Copco No. 2 construction (1924-1925) (PacifiCorp archive image CO2-22). The bridge is sited along Daggett Road which forms the primary circulation route through Copco Village. The private gravel access road has a roadway width of 12 to 14 feet and is owned by PacifiCorp. Approximately 0.25 miles from Daggett Road Bridge, the road surface becomes primarily dirt, measuring 10 to 12 feet wide. The bridge, also owned by PacifiCorp, is a four-span continuous steel bridge that utilizes rolled beams in the approach spans and a riveted steel plate girder for the main span. It measures approximately 230 feet long, 14 feet wide, and has a timber deck and railings. Daggett Road and the bridge were likely converted to automobile use in the 1940s, when truck transportation became more widespread and Copco began removing its spur tracks. In the early 1960s, to accommodate higher river levels caused by the newly built Iron Gate dam, Copco successor Pacific Power elevated the bridge by removing the deck, topping the river stone piers with board-form concrete, and installing a replacement deck. Pacific Power successor PacifiCorp rebuilt the bridge in 1983 using much of the existing bridge materials (PacifiCorp 2004:6-2; PacifiCorp archive image CO2-82). The reconstructed bridge was designed for an HS20 truck load (KRRC 2017:5-35). The bridge appears to be in good condition.

***P3b. Resource Attributes:** (HP19) Bridge

***P4. Resources Present:** ☒ Structure ☒ Element of District

P5a. Photograph:

P5b. Description of Photo: Daggett Road Bridge, viewing east (June 11, 2018).

***P6. Date Constructed/Age and Source:**
☒ Historic, circa 1924 (PacifiCorp archive image CO2-22)

***P7. Owner and Address:**
PacifiCorp
825 NE Multnomah, Suite 1500
Portland, OR 97232

***P8. Recorded by:**
Shoshana Jones, AECOM
111 SW Columbia Street,
Suite 1500
Portland, OR 97201

***P9. Date Recorded:** June 11, 2018

***P10. Survey Type:** Intensive Level

***P11. Report Citation**: Klamath River Renewal Corporation. 2021. Lower Klamath Project Historic Built Environment Technical Report

***Attachments:** ☒Location Map ☒Continuation Sheet ☒Building, Structure, and Object Record

BUILDING, STRUCTURE, AND OBJECT RECORD

*Resource Name or #: Daggett Road Bridge *NRHP Status Code: 6Z

B1. Historic Name:
B2. Common Name: Daggett Road Bridge
B3. Original Use: Railroad bridge
B4. Present Use: Automobile bridge
B5. Architectural Style: Four-span continuous steel bridge
B6. Construction History:
Built circa 1924 as a railroad bridge for the Klamath Lake Railroad spur, the Daggett Road Bridge was converted to automobile use circa 1945. At that time, truck transport became more widespread and Copco had pulled up the spur track rails used during construction of Copco No. 1 and Copco No. 2. In the early 1960s, to accommodate higher river levels caused by the new Iron Gate Dam downstream, Copco successor Pacific Power & Light Company (Pacific Power) elevated the bridge by removing the deck, topping the river stone piers with board-formed concrete, and installing a replacement deck. Pacific Power successor PacifiCorp rebuilt the bridge in 1983 by removing the existing timbers, decking, and pilings and installing new steel girders and factory laminated decking with hand rails and curbs (Pacific Power 1981; PacifiCorp 2004:6-2; PacifiCorp archive image CO2-82). The reconstructed bridge was designed for an HS20 truck load (KRRC 2017:5-35)

B7. Moved? No
B8. Related Features: The Daggett Road Bridge is a non-contributing resource within the Copco No. 2 Historic District, which part of the larger Klamath Hydroelectric Project (KHP) Historic District. The KHP district consists of seven hydroelectric developments, including Copco No. 2, in Southern Oregon and Northern California.

B9a. Architect: unknown **b. Builder:** unknown

B10. Significance:
Theme: hydroelectric development
Area: Southern Oregon and Northern California
Period of Significance: 1925-1970 (Copco No. 2 Historic District)
Property Type: bridge
Applicable Criteria: National Register of Historic Places (NRHP) Criterion A

B11. Additional Resource Attributes:

B12. References:

Klamath River Renewal Corporation (KRRC). 2017. Klamath River Renewal Project. California Environmental Quality Act (CEQA) and California and Oregon 401 Water Quality Certifications Technical Support Document. Submitted to: California State Water Resources Control Board and Oregon Department of Environmental Quality. September.

PacifiCorp. 2004. Klamath Hydroelectric Project. FERC No. 2082. Cultural Resources Final Technical Report and Associated Confidential Documents. Exhibit C. Construction History and Proposed Construction. February.

Pacific Power & Light Company (Pacific Power). 1981. Expenditure Requisition: Copco II – Rebuild Bridge to Plant (Revision #1). PacifiCorp Archive, PDX.037414 (box), Copco 2 Plant, 1980-present (folder).

B13. Remarks: None
B14. Evaluator: Shoshana Jones, AECOM
111 SW Columbia Street, Suite 1500
Portland, OR 97201
Date of Evaluation: June 11, 2018

(This space reserved for official comments.)

B10. Significance (continued):

Evaluation (Not Eligible due to lack of historic integrity)

Criteria Analysis

NRHP Criterion A
The Copco No. 2 Historic District contributes to the larger KHP Historic District, both of which are significant under NRHP Criterion A in the areas of Commerce and Industry. Copco built the bridge circa 1924 as part of a railroad spur connecting to the old Klamath Lake Railroad mainline. The bridge enabled Copco to transport materials and equipment across the Klamath River to the Copco No. 2 Powerhouse site for the 1924-1925 construction phase and subsequent operations. The bridge adds to the significance of the Copco No. 2 Historic District as an important part of the infrastructure originally developed for Copco No. 2.

NRHP Criterion B
Research does not indicate that the bridge is associated with any historically significant individuals under NRHP Criterion B.

NRHP Criterion C
The bridge does not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, and is therefore not significant under NRHP Criterion C.

NRHP Criterion D
The bridge is not significant as a source (or likely source) of important information regarding history or prehistory. It does not appear likely to yield important information about historic construction materials or technologies. It is not significant under NRHP Criterion D.

Integrity Analysis

The bridge retains integrity of location and setting, but substantial alterations since its original construction have diminished integrity of design, materials, workmanship, feeling, and association.

Location *is the place where the historic property was constructed or the place where the historic event took place.* The bridge remains at its original building site over the Klamath River, and thereby retains integrity of location.

Design *is the composition of elements that constitute the form, plan, space, structure, and style of a property.* Originally a railroad bridge, the bridge was converted for automobile use circa 1940. In the early 1960s, to accommodate higher river levels caused by the newly built Iron Gate dam, Copco successor Pacific Power elevated the bridge by removing the deck, topping the river stone piers with board-form concrete, and installing a replacement deck. Pacific Power successor PacifiCorp rebuilt the bridge in 1983 using much of the existing bridge materials. These changes have diminished integrity of design.

Setting *is the physical environment of a historic property that illustrates the character of the place.* The bridge retains integrity of overall setting in the remote, undeveloped area of the Klamath River basin.

Materials *are the physical elements combined in a particular pattern or configuration to form the historic property* and ***Workmanship*** *is the physical evidence of the crafts of a particular culture or people during any given period of history.* Major alterations to the bridge since its construction have diminished integrity of materials and workmanship.

Feeling *is the quality that a historic property has in evoking the aesthetic or historic sense of a past period of time.* Rebuilt in 1983, the bridge has lost integrity of feeling.

Association *is the direct link between a property and the event or person for which the property is significant.* Reconstruction of the bridge in the 1960s and early 1980s has diminished the integrity of the structure's association with the historic development and operations at Copco No. 2.

Daggett Road Bridge lacks integrity and is not eligible as a contributing resource to the Copco No. 2 Historic District.

Photographs:

Photograph 1. Bridge; view facing north, 2018.

Photograph 2. Bridge; view facing southeast, 2018.

Photographs (continued):

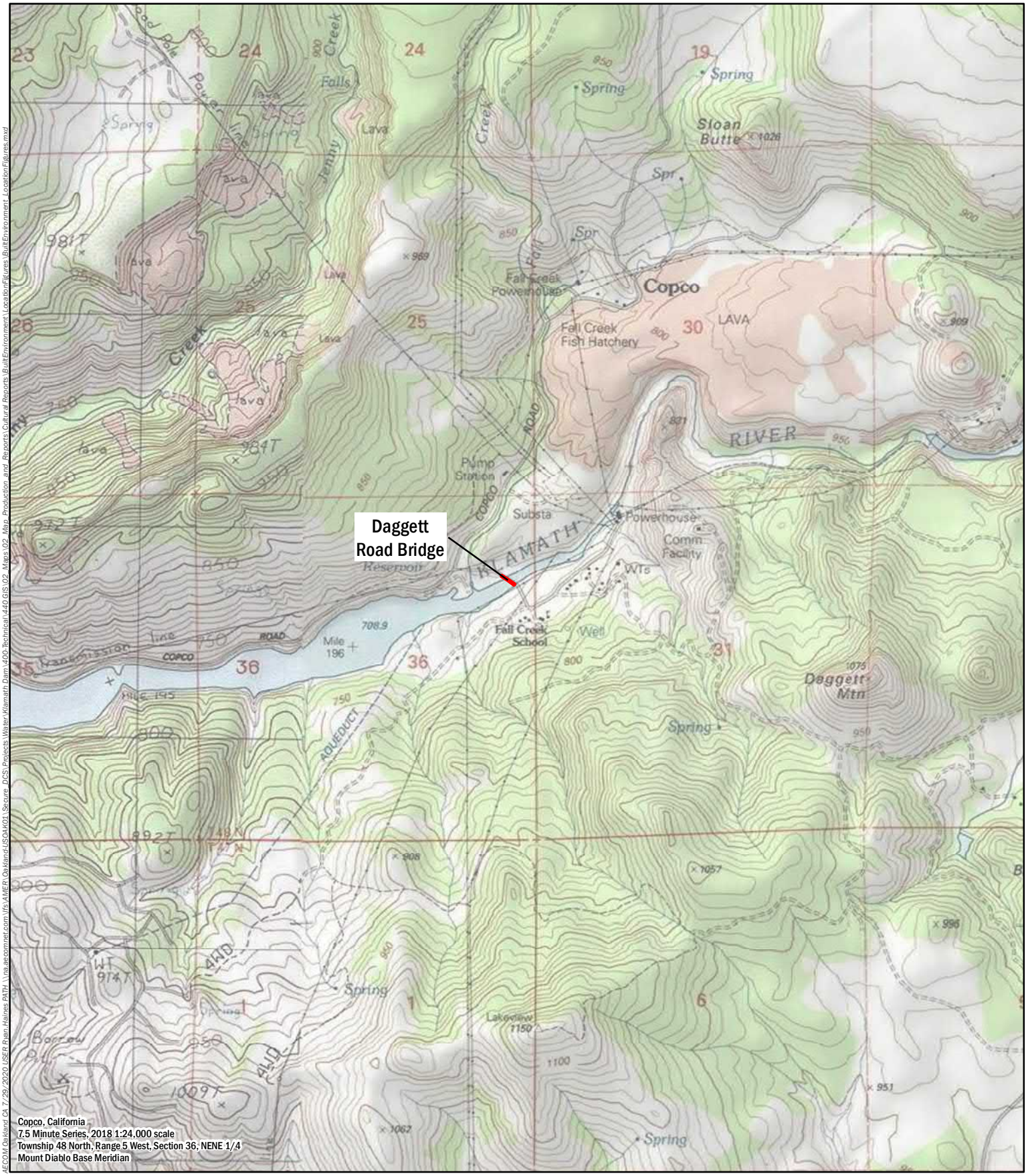
Photograph 3. Originally a railroad trestle across the Klamath River, the Daggett Road Bridge enabled Copco to transport construction materials to the Copco No. 2 Powerhouse area. Photograph dated September 12, 1924 (PacifiCorp archive image CO2-82).

LOCATION MAP

Property Name: Copco No. 2 Historic District

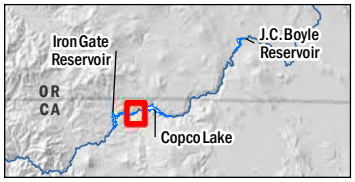
***Map Name:** _____ ***Scale:** _____ ***Date of map:** _____

See Location Map on next page.



Daggett Road Bridge

Daggett Road Bridge



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Klamath River Dam Removal
Daggett Road
Copco, Siskiyou County, California

AECOM
July 2020

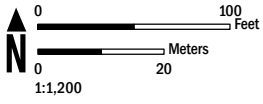
SKETCH MAP

Property Name: Copco No. 2 Historic District

***Drawn by:** _____ ***Date of map:** _____

See Sketch/Site Map on next page.

Daggett Road Bridge



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