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

PRIMARY RECORD

Primary # 47-00415
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code | Reviewer | Date

 Resource Name or #: Fall Creek Hatchery

P1. Other Identifier: Primary #47-004015 (Klamath River Hydroelectric Project)

*P2. Location: ☒ Unrestricted

*a. County: Siskiyou

*b. USGS 7.5' Quad Copco, CA Date 2018 T 48N; R 4W; L2 1/4 and L2 1/4 of Sec 30; Mount Diablo B.M.

c. Address ______ City ______ Zip

d. UTM: Zone 10 T, 552829mE/4648297mN (See Continuation Sheet.)

e. Other Locational Data: N/A

*P3a. Description:

Fall Creek Hatchery is a fish hatchery built by the California Oregon Power Company (Copco) in 1919. The hatchery is adjacent to the Fall Creek power plant, in a remote area of the Klamath River Canyon in Siskiyou County, California. The hatchery boundaries encompass a section of Fall Creek, two sets of raceways (northern and southern), a pipeline, fish feed silo, a footbridge, and two small outbuildings. A detailed description of Fall Creek Hatchery is provided in the DPR 523D (district record) form.

*P3b. Resource Attributes: (HP11) Engineering structure (water conveyance system, raceways); (HP4) Ancillary buildings (sheds); (HP39) Other (fish feed silo)

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

P5a. Photograph:

P5b. Description of Photo: Northern Raceways, view facing west (August 28, 2019).

*P6. Date Constructed/Age and Source:
☒Historic, 1919 (Shebley 1919:151)

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

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

*P9. Date Recorded: August 28, 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 ☒District Record

CONTINUATION SHEET

Property Name: _____Fall Creek Hatchery____

P2b. Location (continued):

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

Resource	Township	Range	Section
Northern Raceways	48N	4W	L2 1/4 of Sec. 30
Southern Raceways	48N	4W	L2 1/4 and L3 1/4 of Sec. 30

P2d. UTM (continued):

Resource	Zone	UTM
Northern Raceways	10 T	552829mE/4648297mN
Southern Raceways	10 T	552862mE/4648164mN

*NRHP Status Code: 6Z

*Resource Name or #: Fall Creek Hatchery
D1. Historic Name: Fall Creek Hatchery
D2. Common Name: Fall Creek Hatchery

D3. Detailed Description:
Fall Creek hatchery was a salmon and trout hatchery built in 1919 along Fall Creek near its confluence with the Klamath River, in Siskiyou County. The California Oregon Power Company (Copco) funded construction of the hatchery after construction of the company's Ward Canyon dam (Copco No. 1 dam) which was completed in 1918. The hatchery was intended to supplement the river's anadromous fish population. The hatchery operated from 1919 to 1948 and officially closed in 1949. Three decades later, in 1979, the hatchery was reopened through 2003, when it closed for the second time. The hatchery encompasses a section of Fall Creek, a City of Yreka intake, two sets of concrete raceways, a concrete diversion channel, a pipeline, a fish feed silo, a bridge, and two small outbuildings. The original hatchery building, worker cottages and fish ponds have been gone for decades.

See continuation sheets.

D4. Boundary Description: Fall Creek hatchery consists of two work areas, separated by Copco Road. On the north side of Copco Road, the boundary encompasses the intake, northern raceways, diversion channel, fish feed silo, shop, and other features such as gates and access roads. Portions of Fall Creek and a section of Copco Road extend through the hatchery. The access road defines the western and northern boundaries. The large grouping of basalt stones defines the eastern boundary. The area south of Copco Road contains the southern raceways and former incubation shed. There, the western, eastern, and southern boundaries are defined by the trees and dense vegetation that surround the raceway area.

D5. Boundary Justification: The boundaries are based on the concentration of historic district activities, such as hatching and rearing. Copco Road and the Fall Creek bridge, although constructed outside the period of significance, are located within the district boundaries, because they extend through the district and provide the primary site access.

D6. Significance:
Theme: Conservation
Area: Upper Klamath Basin
Period of Significance: 1919–1949
Applicable Criteria: National Register of Historic Places (NRHP) Criterion A
See continuation sheets.

D7. References:

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.
See continuation sheets.

D8. Evaluators: Shoshana Jones and Tim Wood

Date: October 17, 2019
Affiliation and Address: AECOM, 111 SW Columbia Street, Suite 1500, Portland, Oregon 97201

Note: The California Board of Fish Commissioners became the California Fish and Game Commission in 1909. The Division of Fish and Game was established in 1927 within the Department of Natural Resources. The Division of Fish and Game was elevated to the Department of Fish and Game in 1951 and became the Department of Fish and Wildlife in 2013.

D3. Detailed Description (continued):

The hatchery was strategically located along Fall Creek, a tributary of the Klamath River. Fall Creek flows southwesterly from southern Oregon. After crossing the state line into California, the creek runs for several miles until reaching its confluence with the Klamath River. At the hatchery site, about a mile upstream of this confluence, the creek descends as a high fall over a bluff. Immediately east of the hatchery is the Fall Creek power plant, completed in 1903 by the Siskiyou Electric Power and Light Company, a Copco predecessor. The power plant is the oldest hydroelectric facility in the Klamath River Hydroelectric Project and contains two small diversion dams, an earthen ditch, a penstock, a powerhouse, and operator housing. When in use, the uppermost diversion on Spring Creek diverts water to Fall Creek. The lowermost diversion on Fall Creek then diverts water into the earthen ditch that supplies the powerhouse. A narrow dirt road extends approximately 500 feet between the hatchery and the power plant. The hatchery lies approximately 1.5 miles west-northwest of Copco No. 1.

Fall Creek hatchery, a small fish management facility adjacent to the Fall Creek power plant, derives its water supply from Fall Creek. While modern hatcheries have used water from natural springs and wells, early hatcheries such as the one at Fall Creek generally relied on streams. Site selection was a key factor in the quality of the hatchery water supply. At the time the Fall Creek hatchery was built, the creek was "a large, perennial stream of clear, cold water with a high fall [*sic*] at a point about a mile above its mouth" (Snyder and Scofield 1924:10). The hatchery was near the foot of the falls where the creek was small and clear enough to view and monitor fish (Snyder and Scofield 1924:10). During the hatchery's inaugural year, the Klamath Falls *Evening Herald* lauded the site's ideal conditions for a hatchery: "on account of the clear and even temperature of the water, a perfect condition is found for hatching and caring for the little fish" (*Evening Herald* 1918). When first constructed, the hatchery implemented rearing ponds simulating natural pools to hold fish before release (Snyder and Scofield 1924:11,13).

Downstream from the hatchery, Fall Creek meanders south-southwest for approximately 1 mile toward its confluence with the Klamath River. For this distance, Fall Creek parallels Copco Road. The creek mouth, where water empties into the Klamath River, skirts the intersection of Copco Road and Daggett Road, across the river from Copco No. 2/Copco Village. The hatchery first appears on the 1934 and 1941 U.S. Geological Survey (USGS) maps as "State Fish Hatchery" (USGS 1934, Figure 1). The hatchery is not designated on the 1954 USGS map, but the map does show a cluster of five built elements at the hatchery's northern area (USGS 1954, Figure 2). On the 1984 USGS map, the "Fall Creek Fish Hatchery" is labeled on the south side of Copco Road, where the southern raceways are located (USGS 1984, Figure 3).

The hatchery's surviving built resources are clustered in two areas separated by Copco Road. For the purpose of this report, the areas are defined as "northern" and "southern" based on their location relative to Copco Road. The northern area (north of Copco Road) encompasses an intake structure, a concrete diversion channel, two concrete raceways, a steel pipeline, a wood-framed shop, a short-beam footbridge, and a steel fish feed silo. The power plant's Dam A and intake are near the diversion channel inlet. Dam B is upstream, closer to the falls. The northern area also contains a fiberglass trough, wooden picnic bench, and concrete picnic bench. The southern area (south of Copco Road) encompasses four concrete raceways and a former incubation shed. The original hatchery building, cottages, and holding ponds once located in the northern area are no longer present.

Northern Area

The entrances to the northern area from Copco Road are a gravel vehicle road near the Fall Creek bridge's west abutment, a pedestrian path near the bridge's east abutment, and an unpaved road from the Fall Creek power plant. The first entrance, a gravel road, initially extends about 100 feet north-northwest from Copco Road to a modern metal swing gate. Past the gate, the gravel road continues north and north-northeast for about 300 feet before reaching the fish feed silo and the clearing where the hatchery building once stood. The second entrance, a pedestrian path, begins on the east side of Fall Creek bridge and leads to the northern raceways. The path is accessed through a single metal

D3. Detailed Description (continued):

swing gate with metal and wooden posts, followed by a pedestrian-scale metal "ranch gate." Numerous basalt stones that have been cleared on the site line the pedestrian path. A third point of access is an unpaved road originating at the power plant.

Intake (unknown built date)

The intake is housed in a small gable-roof building adjacent to Dam A.

Diversion Channel and Pipeline (1937)

The concrete diversion channel and bulkheads divert water near the Fall Creek Dam A and the City of Yreka intake to the northern raceways. The channel structure measures about 3 feet high and 6 feet wide near the raceways, and its concrete walls measure about 7 inches thick. A modern metal screen extends across the channel intake. The channel bends as it approaches the northern raceways. At the channel's terminus is a metal screen that filters debris before the water enters a short pipeline. The pipeline runs along the ground perpendicular to the raceway intakes, feeding the individual polyvinyl chloride pipes that empty into each raceway. Two concrete steps abut the exterior wall near the channel terminus.

The channel also supplies a 16-inch-diameter pipeline, a feature of the hatchery that extends southward to supply the southern raceways south of Copco Road. From the northern raceway area, the pipe runs generally north-south parallel to Fall Creek, on the creek's east side. The pipeline passes through a large, abandoned water intake feature and water gate before reaching Copco Road.

Northern Raceways (1937)

Fall Creek Hatchery's original three ponds, which were built around 1919 and no longer exist, reflected early pond designs: oblong earth-dug trenches lined with wood, concrete, and/or stone (Cobb 1930:636). At least one of Fall Creek's original ponds was lined with concrete, as indicated by W.L. Scofield's 1920 description of the "cement-sided pond at Fall Creek Hatchery" (Scofield 1920:102). Fall Creek's later ponds were six concrete raceways built in 1937.

Raceways are artificial channels with constant flow to simulate natural streams and are used to rear juvenile fish from early fry to fingerling release stage. (A fry is juvenile fish that can feed itself. A fingerling is a juvenile fish with scales and working fins.) Fry are generally transferred from a hatchery building to the raceways. Multiple raceways (or multiple raceway sections) are employed to house fish of different maturation stages.

The northern raceways, labeled A and B, are two of the six hatchery raceways that California Division of Fish and Game (CDFG) constructed in 1937, 18 years after the hatchery first opened. The other four raceways built at that time are located in the southern hatchery area south of Copco Road. All six raceways have similar design and concrete construction. The northern raceways are oriented parallel to Fall Creek, and their outfalls release water back into the creek near the footbridge. They constitute a pair of concrete channels within a single structure situated mostly below grade. Raceways A and B are identified by small wooden signs with yellow lettering at their intakes. Each measures about 45 feet long and 8 feet wide, with 8-inch-thick walls. An approximately 24-inch-wide metal grate extends along the top of the shared concrete wall. The raceways' coarse aggregate includes natural river rocks. They exhibit extensive spalling and deterioration. Overgrown vegetation inside the raceway channels also indicates that the raceways have not recently been used for rearing juvenile fish.

Shop (circa 1946)

The shop is a small wood-frame shed near the northern raceways. The shop's original construction date was likely 1946, when the CDFG reported the construction of new on-site storage facilities. The structure was probably moved and altered around 1979 when the CDFG reopened the hatchery. The shop's footprint measures about 8 by 8 feet, and

D3. Detailed Description (continued):

its covered porch has similar dimensions. The shed roof is covered with corrugated metal, and the walls are wood board. The shop's exposed wood-board beams are visible beneath the eaves. The only fenestration is a Z-brace wooden door. A small wooden "SHOP" sign with yellow lettering is mounted adjacent to the doorway. The shop rests on two distinct concrete foundations that appear to have been poured at different times, suggesting that another structure previously occupied this location. The covered porch consists of two square wooden posts mounted on the newer concrete foundation. A metal work station with a table top and lower rack has been installed on the porch. The shed interior contains a refrigerator, hoses, and other miscellaneous equipment. There is a wooden storage box behind the shed.

Footbridge (circa 1979)

The footbridge is a short, timber-beam bridge that crosses Fall Creek, connecting the northern raceway area with the former hatchery building site. Oriented roughly east-west, the bridge was likely constructed around 1979, when the CDFG reopened the hatchery. The bridge's deck spans about 20 feet and is approximately 7 feet wide. The railings are supported by four posts on each side, spaced about 5 feet apart. The deck consists of narrow wooden boards, and the railings are primarily modern pressure-treated wood boards. The bridge abutments are concrete.

Fish Feed Silo (circa 1979)

The fish feed silo is a large container for storing fish food at the northern end of the hatchery's gravel vehicle road. The silo was likely installed around 1979, when the CDFG reopened the hatchery. The main body of the silo is a large cylindrical steel container with a cone-shaped downspout for releasing food into a receptacle below. The four steel posts that elevate the container are mounted on a poured concrete pad and stabilized by diagonal metal upbraces. The structure, including posts, measures about 30 feet high. A metal ladder with guard is attached to the north side for safety. The silo is adjacent to the original hatchery building site. That site is oriented north-south on the north side of the fish feed silo. There is no remaining evidence of the hatchery building, but the area of ground disturbance north of the silo is consistent with the building's reported dimensions.

Southern Area

On Copco Road's south side, a metal fence and pedestrian swing gate delineate the entrance to the hatchery's southern area, which contains a set of four concrete raceways for rearing juvenile fish and a former incubation shed. These resources are surrounded by a wooded landscape of trees and shrubs. Fall Creek flows southward, near the west side of the raceways. Once inside the gate, a paved concrete path traverses the northeast side of the raceways and leads to the former incubation shed. Basalt formations rise up along the area's southeast side.

Southern Raceways (1937)

The southern raceways are four of the six hatchery raceways constructed in 1937, 18 years after the hatchery originally opened. Their design and construction is similar to that of the northern raceways. A steel pipe, measuring approximately 3 feet in diameter, carries water from the diversion channel to the southern raceways south of Copco Road. The pipe extends alongside Fall Creek and through an abandoned water intake feature and water gate before reaching Copco Road. The raceways, which are oriented northeast-southwest, constitute a single structure divided into four sections that is situated mostly below grade. Constructed primarily of board-form concrete, the structure's coarse aggregate includes natural river rocks. Each raceway is identified at intake by a small wooden sign with yellow lettering that reads "A," "B," or "C" (the "D" sign is missing). Raceway A is closest to Copco Road, while Raceway D is closest to the former incubation shed. The individual raceway sections measure about 70 feet long and about 15 feet wide, with 8-inch-thick walls. A 4-foot-wide metal grate extends along the length of the center concrete raceway wall and functions as a catwalk. The catwalk is accessed via a metal swing gate with a sign posted that reads "EMPLOYEES ONLY" and is guarded by metal pipe railings. Metal pipe railings are also installed along the raceways' northeast end, which faces

D3. Detailed Description (continued):

the entrance. Each raceway has an outfall with a metal grate that expels water back into the creek south of Copco Road. The outfall is sheltered by a wood-board structure that extends along the entire width of the raceways' southwest side. The raceways exhibit extensive spalling and deterioration. Based on the extreme overgrowth of vegetation inside the raceway channels, it appears that the raceways have not recently been used for rearing.

Former Incubation Shed (circa 1946)

The former incubation shed, located adjacent to the southern raceways, is a small, wood-framed structure with a rectangular plan and plywood walls. The shed roof consists of corrugated metal mounted to wooden beams. The foundation's wooden beams are partially encased in metal mounted on concrete footings. The shed has the same Z-brace wood door as the shop in the northern area. Small aluminum slider windows were likely installed at the front and rear circa 1979, when the hatchery reopened. The interior stores stacks of plastic egg trays held in corrugated plastic shelving.

Fall Creek Bridge (1969) and *Copco Road* (circa 1960)

The Fall Creek bridge (Caltrans bridge no. C0198) was constructed in 1969 and is the section of Copco Road that traverses Fall Creek. Copco Road was realigned about 10 years earlier in anticipation of Iron Gate construction, which created Iron Gate reservoir and inundated the existing county road. Although the bridge and road section are more than 50 years old, they were built after the Fall Creek Hatchery's period of significance (1919–1949) and are not associated with historic hatchery operations. Fall Creek bridge is evaluated separately in its own Department of Parks and Recreation form.

D6. Significance (continued):

The Fall Creek hatchery is part of the Klamath Hydroelectric Project. 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 Determination of Eligibility (Durio 2003a; Durio 2003b). 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

[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).

D6. Significance (continued):

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).

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).

Fall Creek Hatchery was previously determined eligible as part of the Fall Creek Complex, a contributing resource to the Klamath Hydroelectric Project (Kramer 2003a). Durio (2003) also evaluated the Fall Creek Complex and

D6. Significance (continued):

recommended the hatchery's southern raceways as eligible/contributing but did not evaluate other historic hatchery resources, such as the northern raceways. The hatchery district's eligibility is reevaluated below.

The Klamath Hydroelectric Project

The Fall Creek Hatchery is historically associated with the Klamath Hydroelectric Project (KHP), proximity to the Fall Creek power plant, and location within the KHP boundaries. The KHP consists of seven hydroelectric generation developments along the Klamath River and its tributaries in Klamath County, Oregon, and Siskiyou County, California: (1) J.C. Boyle (1958); (2) Copco No. 1 (1918, 1922); (3) Copco No. 2 (1925); (4) Iron Gate (1962); (5) Link River dam (1921), East Side Powerhouse No. 3 (1924), West Side Powerhouse (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 KHP 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, and 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.

<u>The Klamath Hydroelectric Project and the California Oregon Power Company</u>

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). 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 operated Fall Creek power plant since its completion in 1903 (Kramer 2003a:12).

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. 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, Oregon. In 1922, the company completed the Copco No. 1 expansion 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 (PacifiCorp 2004:Exhibit E, 6-102).

Copco and its facilities were acquired by the Pacific Power and Light Company (Pacific Power) in 1961. In 1962, Pacific Power (now PacifiCorp) completed Iron Gate as the final hydroelectric development along the Klamath River. Iron Gate was constructed primarily to regulate water flows. In addition to fish catching and spawning facilities built into the Iron Gate dam and powerhouse site, an associated fish hatchery complex was located 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 are reared in the raceways until they are ready for release into the river.

Conservation and Fish Management in the Klamath River Basin

Historic fish conservation along the Pacific coast has historically involved intensive efforts at artificial propagation. Fall Creek Hatchery was built for propagation of salmon, primarily Chinook, and steelhead rainbow trout. Salmon and

D6. Significance (continued):

steelhead are anadromous, returning from the ocean to freshwater for spawning. Successful hatchery operations require extensive knowledge of fish species' life cycle and migration patterns. Knowledge of the Chinook salmon lifecycle, detailed below, was crucial to Fall Creek Hatchery operations.

Chinook salmon begin their lives as eggs laid in a freshwater gravel nest. The eggs remain in the nests through winter and hatch in spring as alevins, tiny fish with a yolk sac attached to their bellies. After a few months, the alevins completely consume the yolk sac and emerge from the nest as fry. The fry spend about 5 months in the stream until smolting begins, meaning the fish turn silvery and begin migratation downstream towards the ocean. Chinook salmon may spend up to 8 years in the ocean before returning to their natal streams to spawn. When adult salmon reach these streams, they build nests in the gravel where eggs are fertilized. During the early twentieth century, salmon eggs used for artificial propagation were obtained from fish on their way upstream to natural spawning grounds. The salmon were caught in racks built across rivers and streams, or in traps (Cobb 1930:634). For many years, standard practice was to plant the fry in natural waterways as soon as they absorbed their yolk sacs, about 30 days after hatching (Cobb 1930:635). Fish experts recognized that planting immature fry, which were weak and slow, made them susceptible to predatory birds and fish. Robert Deniston Hume, a late nineteenth-century pioneer in salmon conservation, built hatcheries along Oregon's Rogue River and became the first to rear salmon beyond the fry stage (Cobb 1930:636). The Fall Creek hatchery was built after Hume's philosophy on rearing fry became standard hatchery practice.

Fish Husbandry and Hatcheries

The Fall Creek hatchery was part of California's early statewide hatchery system, established to increase fishery populations. The hatchery implemented fish husbandry through artificial propagation and fish-rearing practices to further these goals. The ancient practice of fish husbandry was documented as early as the fifth century B.C.E. with carp farming in China. The use of earthen ponds to contain carp eventually spread throughout Europe and the Mediterranean, later adapted for other species. Fish husbandry became prominent in France during the nineteenth century. Drawing from leading research on fish culture in France, *A Complete Treatise of Artificial Fish Breeding* was published in 1854, and the findings and practices it reported were adopted in the United States (Bohner 2018:15).

Scientific study of aquaculture in the United States dates to the early nineteenth century's Conservation Movement. Borrowing from century-old European practices, the first North American fish hatchery was established in Mumford, New York, in 1864, and the first anadromous hatchery was built in Newcastle, Ontario, Canada, in 1866 for rearing Atlantic salmon (Wahle and Smith 1979:2). In the following decades, the development of private hatcheries and public fish commissions increased. Although the growth of industry depleted fish populations, technological advancements in the field of aquaculture supported the illusion of an unlimited fish population. To avoid restricting and regulating fishing practices, governments promoted artificial fish production (Bohner 2018:3-6). Hatcheries along the Pacific coast were initially built to transplant Pacific salmon into East Coast waters and later evolved into a system for increasing salmon runs in Pacific streams by rearing and releasing fish (Wahle and Smith 1979:3).

In 1937, the U.S. Commissioner of Fisheries promoted an "adaptive management" approach to sustain fish populations (Bohner 2018:15). Congress then enacted the Mitchell Act of 1938, which authorized the development of hatcheries, fish ladders, irrigation screens, habitat restoration, and scientific studies. In conjunction with passage of the 1945 Rivers and Harbors Act, a new period of dam construction began, and along with it, new hatcheries. New technologies advanced artificial propagation of fish populations after World War II. Chemicals were applied to treat diseases, artificial food was introduced, modern fish transportation methods were used, and labor-saving devices such as fish loaders, self-graders, and incubators increased the efficiency of operations. Advances in transportation facilitated movement of fish in varying developmental stages and led to expanded stocking and inter-hatchery systemization. The introduction of artificial pelleted food enhanced fish health and growth and negated the need for cold storage and on-site food processing (Bohner 2018:17).

D6. Significance (continued):

Early Fish Management Legislation and Practices in California

Early fish management legislation in the State of California is relevant to the Fall Creek hatchery operations, because the hatchery is located in California, and its eggs were sourced from collecting stations in the California section of the Klamath River. After California was admitted to the Union in 1850, the state promptly implemented legislation to protect fish habitat. In April 1852, the state criminalized instream obstructions to salmon migration in what became known as the 1852 Salmon Act; however, the Act exempted mining, milling, and agricultural dams and did not impose minimum downstream flow requirements (Bork et al. 2012:817). California remained at the vanguard of fish and wildlife conservation by establishing the nation's first wildlife conservation commission through the 1870 Law for the Preservation of Fish Act (*Marin County Journal* 1870). Appointed by the governor, the Board of Commissioners of Fisheries used appropriations to advance the restoration and preservation of California's fish (Leitritz 1970:8-9).

The Klamath Basin's first salmon hatchery operated from 1889 to 1898 at Fort Gaston, California, on the Hoopa Reservation. Hatchery crew members raised Chinook salmon eggs taken from Redwood Creek and the Sacramento River.

Through the 1910s and 1920s, the state and federal governments continued building hatcheries on the Klamath, Sacramento, Eel, Russian, and Mad Rivers in Northern California. Juvenile fish reared at these hatcheries, primarily fall Chinook salmon, were planted throughout the Klamath and Sacramento River drainages and northern coastal streams. In 1914, California state and federal fish facilities instituted the system of Oregon's Robert D. Hume by rearing juvenile salmon to the fingerling stage (Wahle and Smith 1979:22).

During the 1950s, before the construction of Iron Gate dam, the CDFG initiated a program to manage fisheries along the Klamath River. The program involved the removal of abandoned mining dams and log jams to open up 200 miles of "excellent spawning and nursery streams" (Saldana 1969). To prevent fingerlings being diverted to irrigation ditches, the department worked with local ranchers to install fish screens in irrigation diversions. Fish traps were also placed in heavily diverted streams. In 1965, the *Los Angeles Times* reported that an estimated 1.5 million salmon and steelhead were "salvaged by these ingenious devices" (Saldana 1968).

In 1976, California had 13 hatcheries rearing fall Chinook salmon, coho salmon, and winter steelhead trout. One was federal, ten were state, and two were private, with nearly half of them operating along the Sacramento River (Wahle and Smith 1979:22). One of them included Siskiyou County's Iron Gate hatchery built by Copco successor Pacific Power in 1966 (Wahle and Smith 1979:22).

Fish Management Practices on the Klamath River: Fish Ladders, Egg Collecting Stations, and Hatcheries

This section provides historical information regarding historical fish ladders, egg collecting stations, and hatcheries.

<u>Fish Ladders</u>

J.C. Boyle Dam and Fish Ladder (1958)

The J.C. Boyle fish ladder was integrated into construction of the J.C. Boyle dam. The fish ladder permits upstream fish, primarily river trout, to rise approximately 60 feet to pass through the dam, while the dam's four rotating fish screens collect fish and divert them downstream through a fish screen bypass pipe (USBR 2012:16-18). The J.C. Boyle fish ladder does not accommodate salmon, which cannot surmount the other downstream dams. The J.C. Boyle fish ladder has not been modified since its original construction.

D6. Significance (continued):

Egg Collecting Stations

Fall Creek hatchery operated in conjunction with several downstream Klamath River egg collecting stations. During the period of significance, Fall Creek hatchery received salmon and steelhead trout eggs taken at the nearby Cottonwood Creek [Hornbrook] , Klamathon, and Bogus Creek/Camp Creek egg collecting stations. Fall Creek hatchery obtained salmon eggs from the Klamathon station until the station closed in 1940 and received steelhead eggs from the Cottonwood Creek and Bogus Creek/Camp Creek stations (CDFW 2018; CFGC 1921:27).

Fish Hatcheries

Hatcheries were employed where other provisions for fish passage, such as fish ladders, would be inadequate. In addition to the Fall Creek hatchery, three other historic state-run hatcheries have been established along the Upper Klamath River including the Spencer Creek hatchery in Oregon and the Klamath River experimental hatchery and Iron Gate hatchery in California. Only the Iron Gate and Fall Creek hatcheries are discussed below because the other two facilities no longer remain.

There may have been other small, historic hatchery operations along the Upper Klamath that have not been documented by the California Department of Fish and Wildlife (CDFW) or its predecessors. Additionally, some egg collecting stations such as Cottonwood Creek engaged in hatchery activities as a function secondary to egg collection and/or on a temporary basis.

Iron Gate Dam Fish Facilities and Hatchery (1962, 1966-present)

The Iron Gate hatchery and dam fish facilities were constructed to improve the management of water flows. The 17-acre Iron Gate hatchery was completed in 1966 after the Federal Power Commission, the Federal Energy Regulatory Commission's (FERC's) predecessor, directed Pacific Power to design and construct a hatchery to operate in conjunction with existing fish facilities at the base of Iron Gate dam. The hatchery produces Chinook salmon, steelhead trout, and coho salmon by processing eggs collected and spawned at the Iron Gate dam fish facilities. Most of the hatchery's juvenile fish are released directly into the Klamath River. After the hatchery was completed, it became California's most prolific for anadromous fish (Merriman 1974). At capacity, the hatchery could hold 2.8 million Chinook salmon reared to 90 days and 75,000 coho salmon and 200,000 steelhead reared to yearling size (Saldana 1969).

Iron Gate hatchery has been the site of fish science innovations. In 1969, CDFG fish biologists working at Iron Gate developed a new technique for retrieving eggs from spawning steelhead without harming the adult female: after tranquilizing the fish in a tank, a small stream of air discharged from a syringe into the female fish causes eggs to be released into a container (*Sacramento Bee* 1969). Following the implementation of this technique, Pacific Power, the CDFG, and the Oregon State Game Commission (OSGC) embarked on a joint venture to study the feasibility of establishing a steelhead sport fishery above Copco No. 1 dam (*Sacramento Bee* 1970). The three-year study plan involved rearing 100,000 steelhead annually at Iron Gate hatchery, marking and releasing them below the hatchery, and trapping returning adults at Iron Gate (*Sacramento Bee* 1967). After trapping the adult steelhead, the CDFG transported them by customized OSGC tank truck 27 miles to a section of the Klamath River at the California–Oregon border (*Sacramento Bee* 1969). In December 1970, as a result of the study, steelhead appeared above Copco No. 1 (*Sacramento Bee* 1970).

Iron Gate is one of 21 hatcheries that CDFW currently operates and the only CDFW salmon and steelhead hatchery in Siskiyou County. It is also the state's northernmost hatchery, and the only active hatchery along the Klamath River (CDFW 2019).

D6. Significance (continued):

Fall Creek Hatchery (California) (1919-1949, 1979-2003)

From opening season in 1919 to the official closure in 1949, Fall Creek hatchery was central to salmon and trout propagation in the Klamath Basin. Although the CDFG continued egg taking at Fall Creek after the 1949 closure, it discontinued planting Fall Creek fingerlings in the Klamath River (Fortune et al. 1966:26). In 1979, three decades after its original closure, the State of California reopened Fall Creek hatchery. From its second opening in 1979 to the latest closure in 2003, the CDFG regularly raised Chinook salmon in the hatchery's six remaining raceways and released the fingerlings downstream at Iron Gate Hatchery (CDFW 2019).

Fall Creek Hatchery Construction

In 1918, the CFGC proposed building the Fall Creek hatchery as an alternative to the fish ladder originally planned for the new Copco No. 1 dam. California's 1915 Flow Act required dam builders to install fish ladders to enable upstream fish migration for spawning; however, the proposed Copco ladder was designed to be at least 110 feet in height, too steep for salmon and trout passage (*Mail Tribune* 1918). As an alternative, Copco made an agreement with the CFGC to fund construction of a hatchery along Fall Creek near the company's power plant. The purpose of the hatchery was to propagate Chinook salmon and to populate the Upper Klamath River above the dam with steelhead trout.

The *Weekly Colusa Sun* was one of multiple California newspapers that reported the original hatchery plans:

> In accord with the provisions of a Federal statute adopted to preserve the natural fishing in the streams of the United States and her territories, the California-Oregon Power Company [Copco] operating in Northern California and Southern Oregon, has announced to the State Fish and Game Commission a trout hatchery will be built by the company. The hatchery, according to officials of the hydro-electric corporation, will be built at Fall Creek, two miles below the great Copco dam, recently finished in the Klamath River in Siskiyou county (*Weekly Colusa Sun* 1918).

Based on directives from the CFGC, Copco No. 1 construction supervisor John C. Boyle drafted plans for Copco to rebuild fish racks at the Klamathon egg collecting station, then operated by the USBF, and to "survey and build a fish hatchery, with attendant cottages, for the California Fish Commission at Fall Creek" (Boyle 1976:15). The CFGC's Department of Fishculture supplied plans for the proposed Fall Creek hatchery and supervised construction of what it classified as "a large, modern hatchery on Fall Creek" (CFGC 1918:39). Copco funded $20,000 for hatchery construction costs and Klamathon station improvements (CFGC 1921:25; Boyle 1976:21).

When construction was completed, the hatchery encompassed a 125-foot hatchery building, two hatchery cottages, and three fish holding ponds (none of which remain). The hatchery property was deeded to the CFGC on March 27, 1919 (Boyle 1976:22). The CFGC announced the hatchery's completion in its Twenty-Sixth Biennial Report (1921): "A substantially constructed hatchery building, with a capacity of one hundred hatching troughs, a cottage for the foreman and living quarters for the assistants comprise the equipment" (CFGC 1921:26). Photographs from 1919 and 1935 depict the hatchery building from similar vantage points, with the Fall Creek power plant at least partially visible in the background (Figures 4 and 5). A 1918 photograph depicts the Fall Creek power plant, with one of the hatchery cottages visible in the background (Figure 6). State expenditures during the hatchery's first year were nearly $5,000, which included general operating expenses, construction and improvement, and equipment costs (CFGC 1921:144). Soon thereafter, ponds and a fish trap were built (Figures 7, 8, and 9).

The hatchery building, the hatchery's most visually prominent resource and a critical element of hatchery functions, was designed for incubation, hatching, and rearing of juvenile fish. Historic photographs show how the building embodied the era's functional design considerations for hatchery buildings in the region. During the late nineteenth century, fish experts began promoting construction of larger, elongated hatchery buildings that employed expansive

D6. Significance (continued):

interior spaces for work and storage, including room for troughs and an office. Constructed nearly 20 years before the Fall Creek hatchery, the Price Creek (Eel River) hatchery (1897) in Humboldt County is an early example of this design type (Figure 10). Price Creek hatchery closed in 1916, 3 years before Fall Creek hatchery opened (Leitritz 1970:25). Kaweah hatchery (1919), built in Tulare County the same year as Fall Creek hatchery, provides another example of this design (Figure 11). The Kaweah hatchery closed in 1950, the year after Fall Creek hatchery closed (Leitritz 1970:38).

The updated designs for permanent buildings like those at Price, Fall Creek, and Kaweah stood in stark contrast to the small wooden shacks and open-air structures previously used for hatching activities (Bohner 2018:59-60). The newer hatchery buildings had numerous windows for natural illumination and proper ventilation. Large entrances accommodated equipment and supplies, as well as intake of massive amounts of eggs from collecting stations. Following incubation, staff transported the juvenile fish from the hatchery building's interior troughs and through the roomy doorways to rearing ponds outside (Bohner 2018:59-60).

The CFGC adapted the Fall Creek hatchery building plans to reflect modern hatchery designs able to facilitate these important fish-rearing activities. Boyle (1976) contains a copy of an *Evening Herald* or *Herald and News* clipping entitled "Big Hatchery Completed By C.O. Power Co: Work Will Be Finished This Week," describing the large, one-story, gable roof building at Fall Creek hatchery as "125 ft [*sic*] long and about half that wide" for holding over 100 hatching troughs (Boyle 1976.) The historic photographs from 1919 and 1935 indicate expansive interior spaces for work and storage (Figures 4 and 5). On the west elevation and presumably the east elevation, which is not visible in historic photographs, a row of 17 or 18 tall windows extended along the entire wall, allowing plentiful light and ventilation.

By 1921, all three of Fall Creek's original rearing ponds had been completed. Pond No. 1 measured 70 by 20 feet, Pond No. 2 measured 115 by 30 feet (4.5 feet deep), and Pond No. 3 measured 116 by 65 feet (4 feet deep). Figure 7 depicts Pond No. 3 in 1923 and Figure 8 depicts an unidentified original pond. The hatchery also had a fish trap and a large settling tank to remove sediment from the creek water supplying the hatchery (CFGC 1923a:40; Figure 9). The three original ponds and settling tank no longer remain.

The two hatchery cottages were constructed for state fish and game workers whose continuous on-site presence was critical to successfully rearing juvenile hatchery fish. Based on a 1919 photograph, the cottages appear to have been built near the storage shed's present location (Figure 4). The historic photograph depicts the hatchery building in the foreground, a cottage partially obscured by a tree in the middle ground, and the Fall Creek power plant in the background. The composition of these buildings and landscape features indicates that the image was taken with the photographer facing east-northeast from the hatchery building's west side. This view is also consistent with the 1918 photograph caption that identifies the "California Fish & Game Commission cottage" west of the power plant (Figure 6).

Historically, on-site residences were typical hatchery components, particularly in remote areas, because fish rearing required frequent supervision and feeding of juvenile fish, as well as ongoing maintenance of hatchery equipment (Bohner 2018:71-72). The existence of cottages at Fall Creek reflects the historic evolution of western hatchery operations. Earlier hatchery processes involved releasing fry as soon as the fish hatched and absorbed the yolk sac (Wahle and Smith 1979:30). In keeping with newer hatchery processes, Fall Creek hatchery's on-site staff reared the fry in ponds until they reached the more mature fingerling stage, which required a higher level of attention and dedication.

Initial Operations and Expansion

The Fall Creek hatchery opened in 1919 as part of the CFGC hatchery system, which then consisted of 16 hatcheries and six egg collecting stations (Shebley 1920:74). Operated as an "auxiliary station" under the supervision of the Mt. Shasta hatchery, the Fall Creek hatchery received salmon and steelhead trout eggs taken at the nearby Klamathon,

D6. Significance (continued):

Cottonwood Creek [Hornbrook], and Bogus Creek/Camp Creek egg collecting stations (CFGC 1924:34). Mt. Shasta hatchery, the oldest trout hatchery west of the Mississippi River, is 50 miles due south of Fall Creek and received eggs from the same collecting stations. Once eggs arrived at the Fall Creek hatchery building, they were incubated until they hatched into fry and then transferred to the three holding ponds. Hatchery staff reared the fry in the ponds until the fry became mature enough for distribution as fingerlings in lakes, rivers, and creeks in Klamath Basin and other waterways of California and Oregon (CFGC 1921:20; *Evening Herald* 1918).

In the CFGC's biennial report, W.H. Shebley, California Department of Fishculture superintendent, recounted the 1919 season:

> The quinnat [Chinook] salmon eggs received from the Klamathon Station were hatched and reared to a suitable age, when 500,000 were distributed in Fall Creek, a tributary of the Klamath River, during the month of May. The balance of 650,000 were held in the rearing ponds throughout the summer and distributed during the months of September and October. These fish, like the ones retained in the salmon lakes at the Mount Shasta Hatchery, were in excellent condition when planted . . . All of the rainbow trout eggs taken at Bogus and Camp creeks were "eyed" at the Fall Creek Hatchery. Seven hundred thousand were hatched at this station [Bogus] and reared for distribution in tributaries of the Klamath River, both above and below the dam of the California Oregon Power Company at Copco. The balance of the "eyed" eggs were shipped to Mount Shasta Hatchery (Shebley 1920:76).

When the juvenile fish were ready for distribution, the hatchery system relied upon a variety of individuals and organizations to release the fish into the rivers and lakes. This included Fish and Game personnel, anglers, and members of "fish planting" clubs. The system also depended upon free rail transport (Shebley 1932:44). By the end of the 1919 season, the CFGC system had distributed nearly 31 million fish by rail to designated train stations. The "applicants" obtaining the fish conducted the release themselves, unless they needed guidance. In that case, a trained assistant would accompany the fish until their release (Shebley 1920:74).

During the early 1920s, as the quantity of fish reared at Fall Creek hatchery increased, CDFG invested in major facility improvements, which included substantial upgrades at the hatchery building to complete necessary repairs and expand capacity. The CDFG's biennial report for 1922 to 1924 noted that the hatchery troughs provided by Copco in 1918 "were of poor material, being mostly soft pine which has decayed and become spongy to such an extent that we do not consider them any longer safe for the rearing of fish" (CFGC 1924:35). The CDFG recommended installing 116 new troughs "made of a well-seasoned redwood"; painting the hatchery building interior to slow the rapid deterioration of the ceiling and walls; and replacing the original floor, which had rotted "owing to the leakage of these poorly constructed troughs" (CFGC 1924:35).

The new trough system consisted of a concrete settling tank to purify the creek water by using gravity to separate out sediment. A 12-inch iron pipe conveyed the purified water to the troughs, with each trough receiving an independent water supply (CFGC 1924:35; Shebley 1927:40). According to the CFGC, the new system "was especially desirable at this hatchery owing to the large amount of mud and sediment carried in the water during certain periods of the year" (CFGC 1927:40). In 1926, heavy rains and flooding washed out one end of the hatchery building, which was later repaired (Division of Fish and Game 1929:40).

D6. Significance (continued):

Season(s)	Salmon hatched and distributed	Rainbow trout hatched and distributed
1919	1,148,200	670,000
1920-1921	5,986,000	1,184,500
1922-1923	6,881,000	800,000
1924-1926	7,556,000	888,000
1928-1929	6,854,000	1,176,000

Fall Creek Hatchery Output from 1919 to 1929, the first decade of operations.

Source: Division of Fish and Game 1932:47-48

In 1926, the CFGC reorganized and began to reevaluate the efficacy of its entire hatchery system, including the hatchery at Fall Creek. The CFGC was concerned that insufficient fish-holding capacity was causing hatchery staff to prematurely release juvenile fish into streams, resulting in low survival rates. To address this issue, CFGC initiated a system-wide construction program to increase the number and capacity of the state's hatchery rearing ponds. CFGC proposed immediate construction of 15 new rearing ponds at hatcheries throughout the state, including a new pond at Fall Creek with a 100,000 fish capacity (*Healdsburg Tribune* 1926). It is unknown whether such a pond was ever built.

In assessing the Fall Creek hatchery's performance during the late 1920s, the CDFG observed that, "The fish are always in good condition [and] salmon in the ponds here do remarkably well and are all distributed in the Klamath River" (Division of Fish and Game 1929:40). Despite these indications of productivity, John Otterbein Snyder, noted ichthyologist at the California Bureau of Fisheries, expressed concern that artificial production failed to supply sufficient numbers of fish. Snyder lamented that the Shasta River, "even in a degraded condition was producing as many or more fish than artificial propagation at Fall Creek Hatchery, which was the only hatchery in the basin" (KRBFTF 1991). As these threats intensified, the state's response was to increase the number of hatchery fish planted in rivers and streams and thereby increase the net survival rates. Between July 1928 and July 1930, 10.5 million salmon and 62 million trout raised at public hatcheries such as Fall Creek were released, which was the largest number of trout released since the CFGC was established (Shebley 1932:43).

Fall Creek hatchery played its role in increasing state production by raising about 3.6 million of the Chinook salmon released and 580,000 of the trout planted in Klamath River tributaries in 1929 (Shebley 1932:44). In December 1931, over 4 million salmon eggs were delivered to the Fall Creek hatchery from Klamath River egg collecting stations, with the other 9.5 million delivered to the Mt. Shasta hatchery, exceeding the egg takes of the previous 5 years (*Healdsburg Tribune* 1931). The CFGC regarded the biennium (1928-1930) activities as successful, noting that, "The run of trout in the upper reaches of the Klamath was larger last fall [1930] during the salmon run than it has been at any time during the last ten years. The trout ascended the river in larger numbers than usual, evidently not being affected by the condition of the river" (Shebley 1932:44). In 1932, the CFGC reported the largest salmon run on the Klamath River in many years, with overflow at the Fall Creek hatchery: "The racks at Klamathon and Fall Creek have been lifted and the fish are now going up the river and into Fall Creek, where they are spawning naturally" (*Sacramento Bee* 1932). This amounted to over 4 million salmon eggs transferred from the Klamathon racks to the Fall Creek hatchery (*Sacramento Bee* 1932).

During the early 1930s, the hatchery received priority for upgrades as part of President Franklin D. Roosevelt's New Deal. Under the short-lived Civil Works Administration job creation program, California's fish hatcheries, egg-collecting stations, game farms, and refuges received $100,000 for "needed repairs to hatcheries, new roads, new brood ponds, new fences, receiving and aging tanks" (*Healdsburg Tribune* 1933). At hatcheries including Fall Creek, the work would help increase trout output. Susan Jacques of Yreka, California, was supervisor in charge for the unspecified improvements at Fall Creek and Mount Shasta hatcheries (*Healdsburg Tribune* 1933). By fall, the 1935 salmon run far exceeded that of previous years. Seven million eggs had been taken from Klamathon for rearing at the Fall Creek

D6. Significance (continued):

hatchery. Overflow at the Klamathon fish racks, up to two tons of Chinook salmon daily, was given away for smoking and canning (*Healdsburg Tribune* 1935).

The Fall Creek hatchery underwent a major expansion in 1937, when six additional rearing ponds were built to increase holding capacity for fall release of salmon and steelhead (Leitritz 1970:38). Two ponds (raceways) within a single concrete structure were built near the hatchery building and four others within a single structure were built about 400 feet to the south.

In 1940, Fall Creek hatchery assumed Klamathon station's Chinook salmon egg-taking operations, limiting Klamathon's fish management activities to salmon counting (Leitritz 1970:62-63). That year, the Bureau of Indian Affairs also began investigating the feasibility of fish facilities and hatcheries on the Upper Klamath River above Copco No. 1(Fortune et al. 1966:18). The Fall Creek hatchery was slated for additional improvements in 1946 after the State Senate's Fish and Game Committee approved a bill to appropriate $6 million for upgrading fish and game facilities, mostly in northern California. The appropriation was intended for the "protection, propagation and preservation of fish and game in California" (*Sacramento Bee* 1946). The committee earmarked $40,000 for Fall Creek hatchery to "replace foundations and floors, additional pipe line, storage facilities, repair and improve dwellings" (*Sacramento Bee* 1946). The foundation and floor replacement was likely intended for the hatchery building. Based on construction and materials, it appears that the existing shop and former incubation shed may have been constructed around that time as "storage facilities." The shed's aluminum slider windows were likely circa 1979 additions, installed when the hatchery reopened.

Fish Science and Experimentation at Fall Creek Hatchery

Fall Creek hatchery was used as both a fish-rearing facility and a research venue focused on conservation of the Klamath River Chinook salmon. Fall Creek hatchery's opening season in 1919 corresponded with initial coordinated investigations by the Bureau of Commercial Fisheries and California Division of Fish and Game. Data collection for Chinook salmon related to growth, age, migration, and behavior (CFGC 1927:68).

Before 1912, reliable statistics on Chinook salmon were not available. Furthermore, prior to 1919, state-sponsored experiments produced no significant "returns" for lack of reliable observers and insufficient coordination with the commercial fishing industry (Snyder 1930:7,67). One noted experiment in 1916 demonstrated that a salmon introduced into the Klamath River, although originating from another stream, would return to the Klamath. Another experiment in 1918 revealed a more extensive ocean range for Sacramento River salmon than previously thought (Snyder 1930:68).

Much of the research during the following decade was supervised by John Otterbein Snyder through Stanford University, with assistance from Eugene C. Scofield and G.H. Clark (CFGC 1927:69). Snyder (1930) comprehensively reports on Chinook salmon research in the Klamath River, including Fall Creek hatchery, between 1919 and 1930.

As soon as it opened, Fall Creek hatchery became an important research site. During the Fall Creek hatchery's inaugural 1919 season, the CFGC had already begun sponsoring on-site research. One of the first series of experiments based at Fall Creek hatchery was the "stock transfer" studies by Snyder and W.L. Scofield, which introduced Sacramento River Chinook salmon at Fall Creek hatchery. W.L. Scofield, a relative of Eugene C. Scofield, described the experiment's methodology in an article entitled "King Salmon Marking Experiment at Klamath River, 1919." He wrote that an agent from the USBF obtained Chinook salmon eggs from Mill Creek, a tributary of the Sacramento River, in November 1918. A shipment of over 1.1 million eyed eggs was transferred to Fall Creek hatchery, arriving on February 13, 1919. The eggs were hatched at Fall Creek that month and reared in the hatchery building. In July, "25,000 of these small king salmon were placed in the cement-sided pond at Fall Creek hatchery and the others were liberated in Fall Creek" just below the Copco No. 1 dam. L. Phillips and W.L. Scofield marked the fish by removing the adipose and right ventral fins with cuticle scissors between November 3 and 15. By November 15, all marked fish had been released into Fall Creek (Scofield 1920:101-103, see table below).

Primary#47-00415
HRI #
Trinomial

D6. Significance (continued):

104 CALIFORNIA FISH AND GAME.

King Salmon Marked at Fall Creek Hatchery.

Date	Number of fish marked By Scofield	Number of fish marked By Phillips
1919—November 3	243	1,172
November 4	713	
November 5	595	1,046
November 6	760	1,106
November 7	1,050	1,425
November 8	800	750
November 9	925	1,250
November 10	1,100	1,000
November 11	1,100	1,200
November 12	1,350	1,800
November 13	1,550	1,650
November 14	1,110	1,500
November 15	330	325
Totals	11,626	14,224
Total marked		25,850

Control Counted Out from the Total.

Date	From Scofield marking	From Phillips marking
1919—November 6	50	50
November 9	50	50
November 10	100	100
November 12	125	125
November 13	50	50
November 14	25	25
November 15	25	25
Totals	425	425
Total control		850

Number of Marked Fish Liberated in Fall Creek in November, 1919.

Date	Number
1919—November 7	5,535
November 8	1,425
November 9	4,675
November 10	1,900
November 12	5,200
November 13	3,100
November 14	2,560
November 15	605
Total	25,000

Chinook salmon marked and released into Fall Creek during Snyder and Scofield's stock transfer experiment (Scofield 1920:104).

The experiment was well-publicized and included a small monetary reward for data relating to captured fish (Snyder 1930:68). A September 1920 issue of the *Marin Journal* provided an update on the research activities:

> Experiments in marking fish propagated in State fish hatcheries and planted in the streams of the State, as a means of arriving at some estimate of the percentage which grow to maturity, are being conducted at the Fall Creek hatchery at Hornbrook. During November, 1919, approximately 25,000 young king [Chinook] salmon were marked by clipping off the adipose and right ventral fins. Observations are said to have proven that small fish so marked can be identified at any age (*Marin Journal* 1920).

The study revealed that Sacramento River fish returned to the ocean fishery at a rate of 0.04 percent as opposed to 0.73 percent for native Klamath River fish. The Sacramento River fish also returned to the Klamath River at the substantially lower rate of 0.012 percent as opposed to 0.12 percent for native fish (KRBFTF 1991).

D6. Significance (continued):

The next Klamath River experiment was initiated at Fall Creek in 1922 to further examine migration patterns of artificially propagated Chinook salmon. The eggs of Chinook salmon were collected at the Klamathon racks, fertilized, and hatched at Fall Creek. E.V. Cassell, superintendent of Fall Creek hatchery, monitored the fry in the hatchery rearing ponds. Before distribution, the fish were marked to determine whether, upon maturation, they would return to the tributaries where they were reared or introduced. Between 1925 and 1927, about 500 of the 18,500 marked fish were recovered during their return migration from the ocean (CFGC 1927:68-69). A similar experiment in 1923-1924 involved marking 75,000 juvenile salmon raised at the Fall Creek hatchery. The results of both experiments indicated that juvenile fish introduced into the waters of a particular tributary tend to seek out that tributary on their return migration from the ocean (Snyder 1930:76).

After 30 years in operation, Fall Creek hatchery became one of 11 state-operated hatcheries that closed in the late 1940s as part of efforts to "modernize" its hatchery system (*Telegram-Tribune* 1949). The Fall Creek hatchery closure was attributed to high maintenance and operational costs (Merriman 1974). After the closure, fish that would have been reared at Fall Creek were transported to Mt. Shasta (Lane & Lane Associates 1981:157). Fall Creek's 116-trough hatchery building and nine rearing ponds were recorded as part of the hatchery's inventory in 1948, the final year of operations (Division of Fish and Game 1948:55). In fact, the state spent $981 that year on "repairs to the Fall Creek Hatchery building" and $6770.14 on salaries and wages (Division of Fish and Game 1948:101, 80). Research did not reveal the date on which the hatchery building or cottages were removed from the site.

Ongoing Fish Management Activities at Fall Creek

Although the Fall Creek hatchery closed in 1949, the CFGC's 41st Biennial Report (1948-1950) stated that the hatchery would not be immediately dismantled: "Fall Creek Hatchery near Copco, Siskiyou County. One hundred sixteen troughs, nine ponds. Last operated 1948. Officially closed December, 1949. Newspaper accounts, CFGC publications, and scientific reporting confirm that fish management and fish science activities continued at Fall Creek into the 1950s and 1960s. The CDFG summarized one 1949 study as follows:

> [D]ifferent numbers of king salmon will be allowed to enter and spawn in Fall Creek each year. The resulting offspring will then be counted on their downstream migration to the Klamath River. From known numbers of parents and known numbers of offspring we hope to determine the most effective number of king salmon for a spawning tributary such as Fall Creek (Division of Fish and Game 1950:97).

After a three-decade closure, the Fall Creek hatchery reopened in 1979. That year, the State of California adopted a 10-year, $35–60 million program to increase state salmon runs by about 400,000 to support the recreational and commercial salmon fisheries. The program expanded existing fish propagation facilities and invested in improving habitat and survival of naturally reproducing fish stocks. Pursuant to this program, the state restored the Fall Creek hatchery's six 1937 raceways (northern and southern raceways) and reopened the hatchery using California Environmental License Plate funds (CCST 1979:250). That year, the CDFG's salmon restoration activities on the Upper Klamath River produced 125,000 juvenile Chinook salmon at Fall Creek hatchery for winter release (CSRA 1979:7). The report does not mention use of the original hatchery building, which could have already been demolished or in unusable condition. Between 1979 and 2003, the CDFG regularly raised Chinook salmon in the hatchery raceways and released the fingerlings downstream near Iron Gate hatchery. When the state funding ended in May 2004, fish rearing at Fall Creek hatchery ceased (CDFW 2019). The hatchery is still managed as part of Iron Gate hatchery by the CDFW; however, the Fall Creek hatchery facilities are not currently in use.

D6. Significance (continued):

Evaluation (Not Eligible due to lack of historic integrity)

Period of Significance: 1919-1949

The period of significance begins in 1919, when the Fall Creek hatchery opened. The period ends in 1949, when the hatchery was officially closed by the CDFG. The hatchery reopened 30 years later in 1979, which postdates the historic period.

Criteria Analysis

NRHP Criterion A

Fall Creek hatchery has local and statewide significance under NRHP Criterion A in the area of Conservation for its role in artificial salmon and trout propagation during the early twentieth century. From 1919 to 1949, the Fall Creek hatchery was central to Klamath River fish management and an important component of California's state hatchery system. Soon after Fall Creek hatchery opened, the CFGC described the hatchery and associated Klamathon egg collecting station as the "nucleus for most of the salmon cultural operations" in the state (Bryant 1923:20). During the period of significance, the state hatchery system was a functionally interconnected arrangement of egg collecting stations and hatcheries that employed boats, bridges, hikers, and railroads to transport eggs from station to hatchery to release site. Fall Creek hatchery operations relied upon egg stock from collecting stations downriver at Klamathon, Cottonwood Creek, and Bogus Creek/Camp Creek. Although those stations predated Fall Creek hatchery, the opening of the hatchery drove the CFGC to improve the stations and thereby enable them to improve egg stock. The Fall Creek hatchery and its associated stations formed a Klamath River subsystem within the larger state hatchery system, and the hatchery is the only remaining element of that subsystem.

Fall Creek hatchery is also significant in the area of Conservation as the only California state hatchery operating on the Klamath River, and only one of two hatcheries that operated within Siskiyou County, during the period of significance. The only other state-run hatchery in Siskiyou County during that period was Mt. Shasta, a large facility that has been in continuous operation since 1888. Fall Creek hatchery supplemented the native fish populations by annually releasing millions of hatchlings that had been reared on-site into Northern California waterways, an important effort to restore the region's native fish population.

Furthermore, Fall Creek's original hatchery design represents what were then new philosophies in fish management For example, the presence of hatchery cottages reflected the recent shift toward rearing juvenile fish for longer periods of time.

Finally, Fall Creek hatchery is significant as a historic research venue focused on salmon and trout conservation. There, prominent fish experts such as John O. Snyder of Stanford University supervised research activities. These important fish experiments focused on the migration behavior of anadromous fish, and the published studies informed statewide fish management practices.

NRHP Criterion B

Research does not indicate that the Fall Creek Hatchery is associated with any significant individuals under NRHP Criterion B.

NRHP Criterion C

In its present state, absent the original hatchery building, cottages, and ponds, the hatchery 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.

D6. Significance (continued):

NRHP Criterion D

The hatchery 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

Fall Creek hatchery lacks overall historic integrity. The hatchery retains integrity of location and certain aspects of setting. However, the integrity of design, materials, workmanship, feeling, and association has been substantially diminished by removal of the hatchery building, which was the focus of hatchery operations during the period of significance (1919-1949), and removal of the two original cottages. In addition, the three original fish-rearing ponds are no longer present. Research, historic photographs, and field survey indicate that the hatchery building was constructed in a clearing north of the existing fish feed silo, within the northern hatchery area (north of what is now Copco Road) (Figures 4 and 5). According to CDFG publications, the hatchery building remained on-site and in use until the 1949 hatchery closure. The building was subsequently removed on an unknown date. Without the hatchery building, the hatchery does not effectively convey the historically significant role that it played in California's early twentieth-century fish management. The hatchery's overall integrity has been further diminished by the removal of the two original cottages. The cottages represent the intensive fish monitoring required for hatcheries of the era.

Location *is the place where the historic property was constructed or the place where the historic event took place.* The hatchery remains at its original site along Fall Creek and, therefore, retains integrity of location.

Design *is the composition of elements that constitute the form, plan, space, structure, and style of a property.* The hatchery's key surviving resources, the concrete raceways, do support the district's integrity of design. The raceways were constructed in 1937, 18 years after the hatchery originally opened, as part of a major hatchery expansion. The goal of the expansion was to increase holding capacity for fall release salmon and steelhead (Leitritz 1970:38). Nevertheless, the removal of the hatchery building substantially detracts from the hatchery district's integrity of design. Two critical considerations in hatchery design are (1) proximity to a quality water source and (2) the spatial relationship between the hatchery building and other hatchery components. This spatial relationship is no longer evident and neither are the designed interconnections between the hatchery building and the other components. As a result, the district has lost its overall integrity of design.

Setting *is the physical environment of a historic property that illustrates the character of the place.* The hatchery retains certain aspects of its larger historic setting, such as the alignment of Fall Creek, the nearby Fall Creek power plant, and the remote, mostly undeveloped river canyon landscape. However, integrity of the immediate setting has been substantially diminished by removal of the original cottages and hatchery building, the key component of hatchery operations.

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 hatchery has lost integrity of materials and workmanship, particularly with respect to the demolished hatchery building and cottages. The historic one-story, wood-frame hatchery building was characterized by its long rectangular plan, gable roof, ample windows, and expansive interior work spaces (Figures 4 and 5). Research uncovered a historic image of an original hatchery cottage, which appears to depict a one-story, gable roof residence (Figures 4 and 6). The materials and workmanship of the hatchery building and cottages reflected their hatchery functions, as well as the era and region in which they were built. When the buildings were demolished, the integrity of materials and workmanship for the entire hatchery was substantially diminished.

D6. Significance (continued):

Feeling *is the quality that a historic property has in evoking the aesthetic or historic sense of a past period of time.* Without the hatchery building and cottages, the district cannot sufficiently convey the historic hatchery processes from the period of significance, which diminishes integrity of feeling.

Association *is the direct link between a property and the event or person for which the property is significant.* The absence of the hatchery building means that there is no surviving built resource to represent the incubation, hatching, and preliminary rearing phases of juvenile fish at the hatchery. The removal of the hatchery building also impacts the ability of the surviving raceways to accurately represent their original purpose, which was to complete the rearing process of fish hatched in the building. This has obscured the functional interrelationships of key hatchery resources during the period of significance, diminishing the district's integrity of association.

The Fall Creek hatchery is not an eligible historic district. Although the hatchery is significant under NRHP Criterion A in the area of Conservation, there is insufficient integrity for a finding of eligibility.

D7. References (continued):

Black, Michael. 1995. "Tragic Remedies: A Century of Failed Fishery Policy on California's Sacramento River." *Pacific Historical Review* 64(1): 37-71. University of California Press. February.

Bohner, Rodney T. 2018. Reproducing the River: Historic Context and Resource Survey of Oregon's State Fish Hatchery System. Presented at the Society of Architectural Historians Marion Dean Ross Chapter Conference in Astoria, Oregon, May 19, 2018.

Bork, Karrigan S., Joseph F. Krovoza, Jacob V. Katz, and Peter B. Moyle. 2012. The Rebirth of California Fish & Game Code Section 5937: Water for Fish. University of California, Davis Law Review 45: 809-913.

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

Bryant, Harold C. 1923. "Salmon Fishcultural Operations On The Klamath River." Sacramento, California: California Fish and Game 9(1). January.

CDFW (California Department of Fish and Wildlife)

2018. CDFW Fish Hatcheries. Available at https://www.wildlife.ca.gov/fishing/hatcheries (accessed September 10, 2018).

2019. History. The History of Iron Gate Hatchery. Available at https://www.wildlife.ca.gov/Fishing/Hatcheries/Iron-Gate/History (accessed September 3, 2019).

CFGC (California Fish and Game Commission)

1918. Twenty-Fifth Biennial Report For The Years 1916-1918. State of California Fish and Game Commission. Sacramento, California: California State Printing Office. Available at https://babel.hathitrust.org/cgi/pt?id=mdp.39015069648353&view=1up&seq=7 (accessed September 9, 2019).

1921. Twenty-Sixth Biennial Report For The Years 1918-1920. State of California Fish and Game Commission. Sacramento, California: California State Printing Office. Available at https://babel.hathitrust.org/cgi/pt?id=mdp.39015069648353&view=1up&seq=7 (accessed September 9, 2019).

D7. References (continued):

1923a. Twenty-Seventh Biennial Report For The Years 1920-1922. State of California Fish and Game Commission. Sacramento, California: California State Printing Office. Available at https://babel.hathitrust.org/cgi/pt?id=mdp.39015069648353&view=1up&seq=165 (accessed September 9, 2019).

1924. Twenty-Eighth Biennial Report For The Years 1922-1924. State of California Fish and Game Commission. Sacramento, California. Available at https://babel.hathitrust.org/cgi/pt?id=mdp.39015069648353&view=1up&seq=309 (accessed September 9, 2019).

1927. Twenty-Ninth Biennial Report For The Years 1924-1926. State of California Fish and Game Commission. Sacramento, California: California State Printing Office. Available at https://babel.hathitrust.org/cgi/pt?id=mdp.39015069648353&view=1up&seq=309 (accessed September 9, 2019).

CCST (Committee on Commerce, Science, and Transportation). 1979. First Session on Northwest Salmon and Steelhead Resources. Hearing Before the Committee on Commerce, Science, and Transportation. United States Senate. Ninety-Sixth Congress. August 17, 18, and September 4. Serial No. 96-48. Washington: U.S. Government Printing Office. Available at https://babel.hathitrust.org/cgi/pt?id=mdp.39015083086655&view=1up&seq=1 (accessed October 1, 2019).

Cobb, John N. 1930. Pacific Salmon Fisheries. Fisheries Document No. 1092. U.S. Department of Commerce, Bureau of Fisheries. Washington: Government Printing Office. Available at https://babel.hathitrust.org/cgi/pt?id=uiug.30112101925516&view=1up&seq=3 (accessed October 1, 2019).

CSRA (California State Resources Agency). 1979. Klamath – Trinity Watershed: Salmon Restoration, A Summary of Federal, State, Local Agency, and Indian Restoration Activities. June. Available at: https://babel.hathitrust.org/cgi/pt?id=uc1.31210024979005&view=1up&seq=1 (accessed September 9, 2019).

Division of Fish and Game

1932. Thirty-First Biennial Report of the Division of Fish and Game For the Years 1928 – 1930. State of California, Department of Natural Resources.

1948. Fortieth Biennial Report of the Division of Fish and Game For The Years 1946 – 1948. State of California, Department of Natural Resources. Warren T. Hannum, Director.

1950. Forty-First Biennial Report of the Division of Fish and Game For The Years 1948 – 1950. State of California, Department of Natural Resources. Warren T. Hannum, Director.

Doremus, Holly D., and A. Dan Tarlock. 2008. Water War in the Klamath Basin: Macho Law, Combat Biology, and Dirty Politics. Washington D.C.: Island Press.

Durio, Lori

2003a Klamath Hydroelectric Project. Oregon Inventory of Historic Properties Section 106 Documentation Form. July.

2003b 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.

D7. References (continued):

Evening Herald [Klamath Falls, Oregon]

1918. “Hatchery For Streams of Klamath: Fishway over Copco Dam Found to be Impracticable. New Hatchery in California Will Supply Stock for Streams Here.” March 7.

Fortune, John D., Jr., Arthur R. Gerlach, and C.J. Hanel. 1966. A Study to Determine the Feasibility of Establishing Salmon and Steelhead in the Upper Klamath Basin. Oregon State Game Commission and Pacific Power & Light Company. April.

Healdsburg Tribune [Healdsburg, California].

1926. “Fish and Game.” April 3, 1926 [Article Taken From *The Petaluma Argus*].
1931. “Salmon Men Busy.” December 30.
1933. “Fish and Game Projects Get CWA Assistance.” December 21.
1935. “News Notes From Other Sections Of The District.” November 12.

Hill, Carl, and Jack Bell. n. d. Klamath River Experimental Hatchery. Inland Fisheries Branch, California Department of Fish & Game.

ICF Jones & Stokes. 2010. Hatchery and Stocking Program, Environmental Impact Report/Environmental Impact Statement. State Clearinghouse #2008082025. Prepared for California Department of Fish and Game and U.S. Fish and Wildlife Service. Appendix A (Hatchery Operations). January.

KRBFTF (Klamath River Basin Fisheries Task Force). 1991. Long Range Plan for the Klamath River Basin Conservation Area Fishery Restoration Program. Prepared by the Klamath River Basin Fisheries Task Force with assistance from William A. Kier Associates. January. Available at http://www.krisweb.com/biblio/gen_usfws_kierassoc_1991_lrp.pdf (accessed September 3, 2019).

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.

Lane and Lane Associates. 1981. The COPCO Dams and the Fisheries of the Klamath Tribe. Prepared for The Bureau of Indian Affairs, U.S. Department of the Interior, Portland, Oregon. Available at https://www.fws.gov/yreka/HydroDocs/Lane-and-Lane-1981.pdf (accessed December 5, 2018).

Leitritz, Earl. 1970. A History of California’s Fish Hatcheries 1870 – 1960. Fish Bulletin 150. California Department of Fish and Game. Available at http://content.cdlib.org/view?docId=kt5k4004bd&brand=calisphere&doc.view=entire_text (accessed June 18, 2018).

Mail Tribune [Medford, Oregon]. 1918 “Fish Hatchery Built In Lieu Of Copco Fishway.” March 13.

Marin County Journal [San Rafael, California]. 1870. “Law For The Preservation Of Fish.” Vol. X, No. 9. May 14 [California Digital Newspaper Collection].

D7. References (continued):

Marin Journal [San Rafael, California]. 1920. "California News Items In Brief: Paragraphs of Interest to Readers of Golden State." September 2

Merriman, George. 1974. "Better Fishing Goal of Iron Gate Dam Hatchery." *Del Norte Triplicate* [Crescent City, California]. February 6 (Southern Oregon Historical Society, John C. Boyle Collection, Box 15/16, Folder: 11.2.5.199).

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.

Sacramento Bee [Sacramento, California]

1932. "Mount Shasta Hatchery Ends Successful Year In Shipping Many Fish." November 11.
1946. "State Senate Group Approve $6,000,000 Fish, Game Bill." January 29.
1967. "Klamath River Fishing Study Is Under Way." June 25.
1969. "New Technique May Aid In Steelhead Experiment." March 30.
1970. "Steelhead Will Return To Klamath River." December 3.

Saldana, Lupi

1968. "Steelhead Make Comeback at Klamath River." Los Angeles Times [Los Angeles, California]. December 1.
1969. "The Klamath River of Big Return." Los Angeles Times [Los Angeles, California]. January 26.

Scofield, W.L. 1920. "King Salmon Marking Experiment At Klamath River, 1919." *California Fish and Game: Conservation of Wildlife Through Education* 6(3). July.

Shebley, W.H.

1910. Report of the Superintendent of Sisson Hatchery (Appendix). State of California Board of Fish and Game Commissioners. Twenty-First Biennial Report for the Years 1909-1910. Sacramento: California State Printing Office.
1919. "Hatchery Notes." California Fish and Game 5(3). Sacramento, California. July.
1920. Hatchery Notes. California Fish and Game 6(2). Sacramento, California. April. Available at Google Books.
1922. "A History of Fishcultural Operations in California." California Fish and Game 8(2). Sacramento, California. April.
1927. Report of the Department of Fish Culture. State of California Fish and Game Commission. Twenty-Ninth Biennial Report for the Years 1924-1926. Sacramento: California State Printing Office.

1932. Report of the Bureau of Fish Culture. Division of Fish and Game. State of California Department of Natural Resources. Thirty-First Biennial Report For the Years 1928-1930.

Snyder, John O.
1921. "Three California Marked Salmon Recovery." California Fish and Game: Conservation of Wildlife Through Education 7(1). January.
1930. "Salmon of the Klamath River, California." Division of Fish and Game of California. Fish Bulletin No. 34. Available at http://www.krisweb.com/biblio/klamath_cdfg_snyder_1931.pdf (accessed October 8, 2019).

D7. References (continued):

Telegram-Tribune [San Luis Obispo, California]. 1949. "Fish and Game Due for Big Development." March 23.

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.

USGS (United States Geologic Survey)

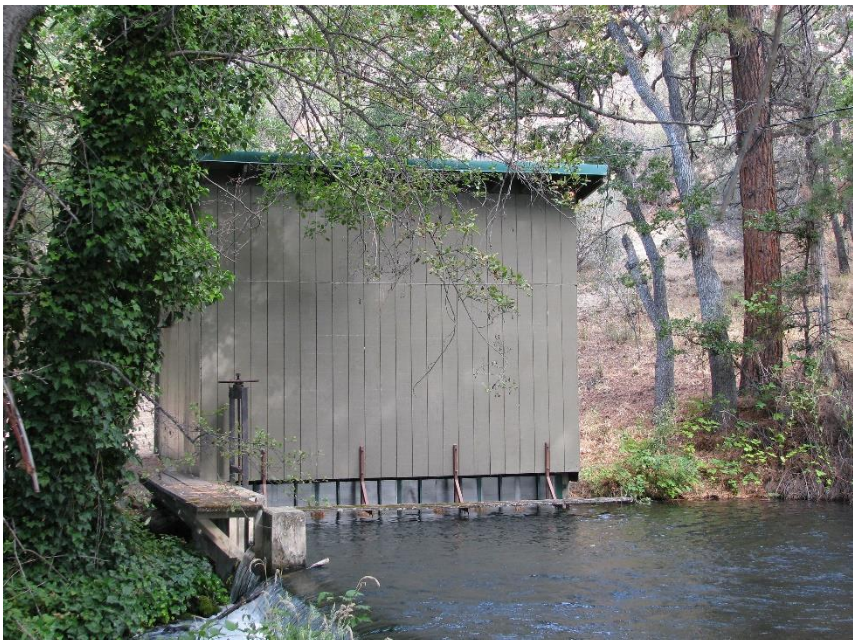
1934. Macdoel Quadrangle, California (Siskiyou County). H.H. Hodgeson. Surveyed 1922, 1932-34.
1954. Copco Quadrangle, California – Siskiyou Co. 15 Minute Series (Topographic).
1984. Copco Quadrangle, California – Siskiyou Co. 7.5 Minute Series (Topographic).

Wahle, Roy J., and Robert Z. Smith. 1979. A Historical and Descriptive Account of Pacific Coast Anadromous Salmonid Rearing Facilities and a Summary of Their Release by Region, 1960-76. NOAA Technical Report NMFS SSRF-736. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. September.

Weekly Colusa Sun [Colusa, California]. 1918. "Power Plant To Build Hatchery For Trout." May 11.

Photographs:

Photograph 1. Diversion channel; view facing west towards northern raceways, 2019.



Photograph 2. Intake; view facing north, 2019.

Photographs (continued):

Photograph 3. Northern raceways; view facing east, 2019.

Photograph 4. Pipeline from diversion channel to southern raceways; view facing southwest, 2019.

Photographs (continued):

Photograph 5. Shop; view facing south, 2019

Photograph 6. Footbridge; view facing west, toward former hatchery building site, 2019

Photographs (continued):

Photograph 7. Fish feed silo; view facing south, 2019

Photograph 8. Southern raceways and former incubation shed (left); view facing south, 2019.

Photographs (continued):

Photograph 9. Former incubation shed; view facing south, 2019.

Photograph 10. Former incubation shed; interior, 2019.

Photographs (continued):

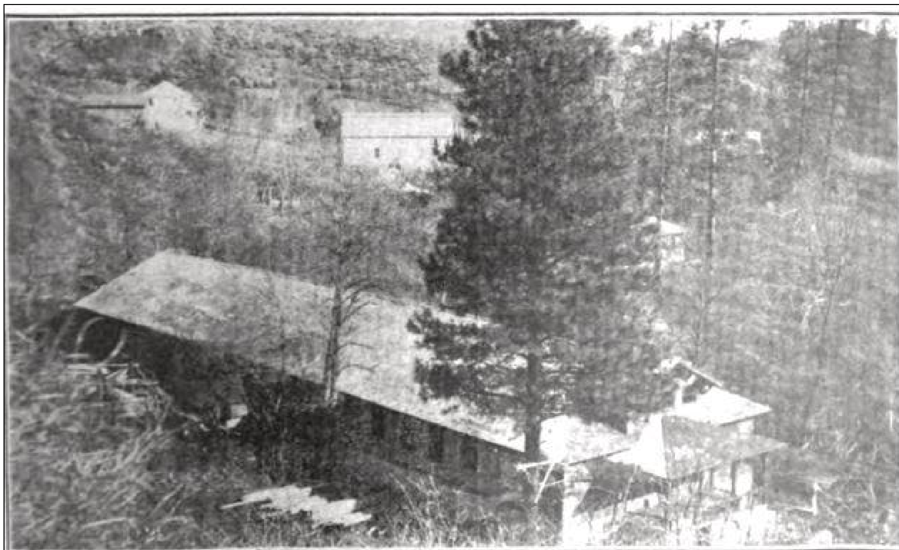


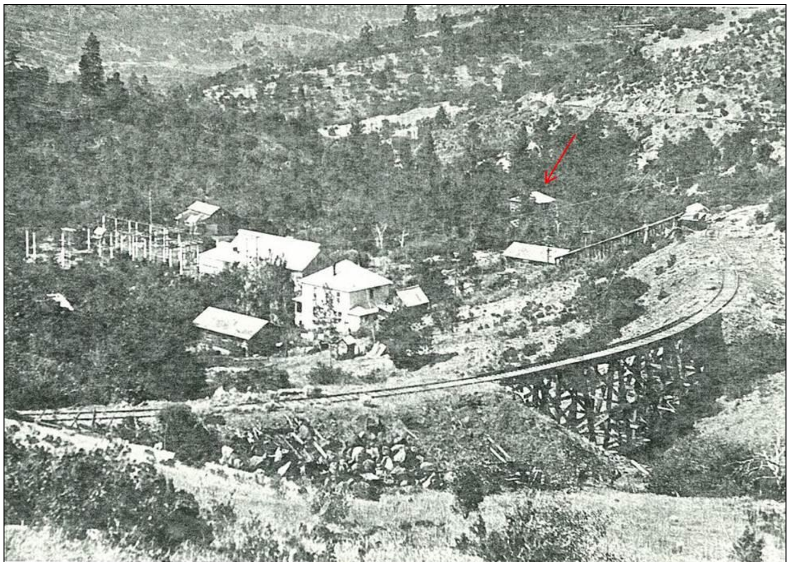
Fig. 50. Fall Creek Hatchery. A fine modern hatchery built by the California-Oregon Power Company in lieu of a fishway over the Copco Dam. Photograph by L. J. Stinnett.

Photograph 11: Fall Creek hatchery building upon completion in 1919; view facing east towards Fall Creek power plant (in background) (Shebley 1919:151). Likely hatchery cottage in right middle ground partially obscured by tree.

FIGURE 14. Fall Creek Hatchery, 1935. *Photograph by J. H. Wales.*

Photograph 12: Fall Creek hatchery building in 1935; view facing east towards Fall Creek power plant, which is partially visible in the background (Leitritz 1970:37).

Photographs (continued):



Fall Creek powerhouse and railroad trestle above the loading platform. California Fish & Game Commission cottage in background *(right)*. 1918. Fall Creek plant, 60 miles of 22,500V line, 500 KW, from No. 1 to Yreka was put into operation in 1903. Second unit (1000 KW) in 1906.

Photograph 13: Fall Creek power plant site in 1918 during construction of the Fall Creek hatchery; view facing west. A hatchery cottage is visible in background. The Klamath Lake railroad trestle in foreground was removed circa 1940.

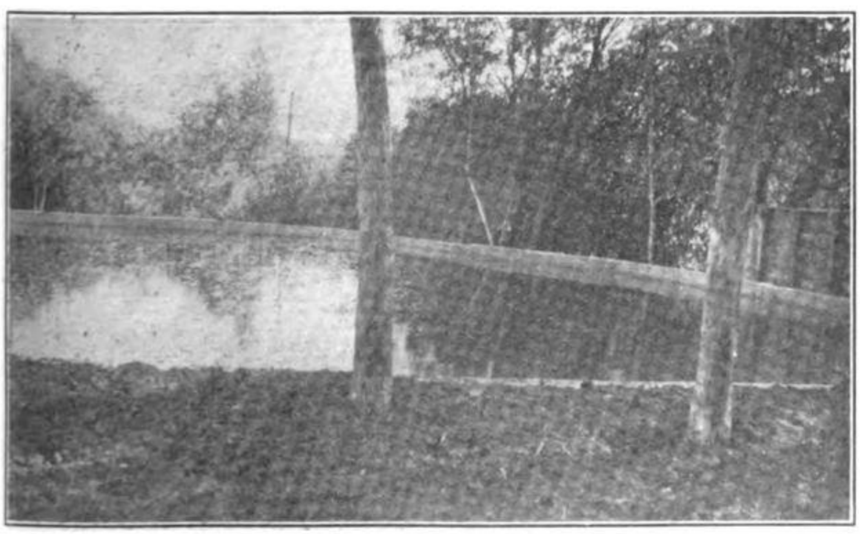


FIG. 13. Fish pond No. 3 at the Fall Creek Hatchery, one of the ponds utilized as a nursery for young salmon.

Photograph 14: Fall Creek hatchery Pond No. 3, shown soon after completion in 1921 (no longer extant) (CDFG 1923:45).

Photographs (continued):

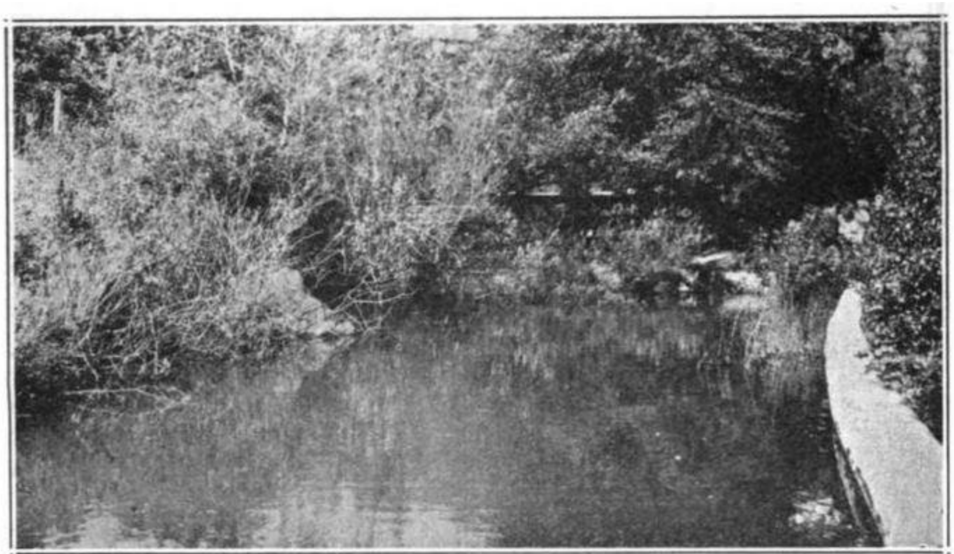


FIG. 4. Pond at Fall Creek Hatchery. The pond closely resembles a natural pool in the river.

Photograph 15: Fall Creek hatchery pond circa 1924 (no longer extant) (Snyder and Scofield 1924:13).

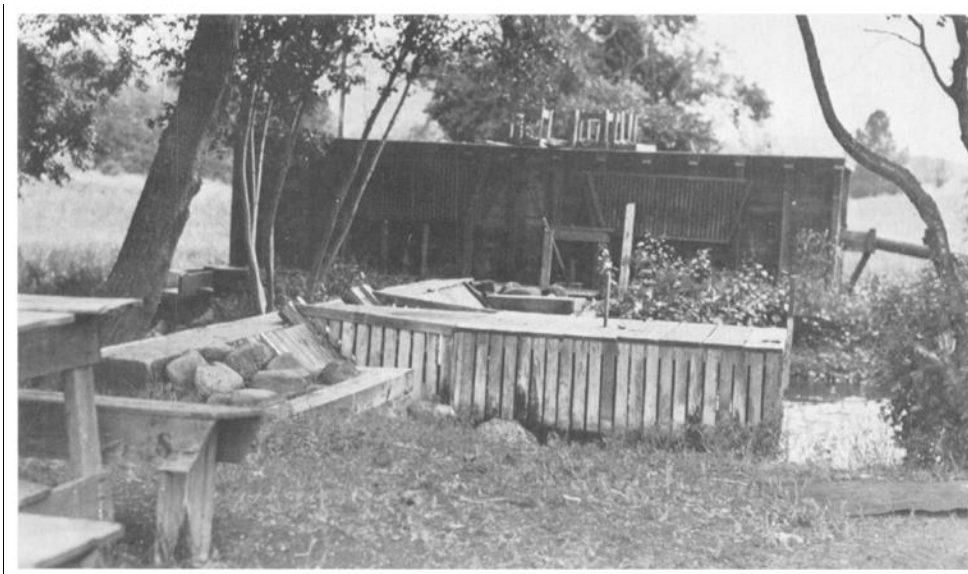


FIGURE 15. Trap and fish holding tank, Fall Creek Egg Collecting Station, 1936.

Photograph 16: Fall Creek hatchery trap and fish holding tank in 1936 (no longer extant) (Leitritz 1970:37).

Photographs (continued):

FIGURE 9. Price Creek Hatchery, about 1906.

Photograph 17: The Price Creek (Eel River) hatchery (1897) was built in Humboldt County nearly 20 years before the Fall Creek hatchery and had a similar hatchery building design (long rectangular plan, numerous windows, gable roof). Price Creek hatchery closed in 1916, 3 years before Fall Creek hatchery opened (Leitritz 1970:25).

Photograph 18: Kaweah hatchery (1919) was built in Tulare County the same year as Fall Creek hatchery and had a similar hatchery building design (long rectangular plan, numerous windows, gable roof). The Kaweah hatchery closed in 1950, the year after Fall Creek hatchery closed (Leitritz 1970:38).

Figures:

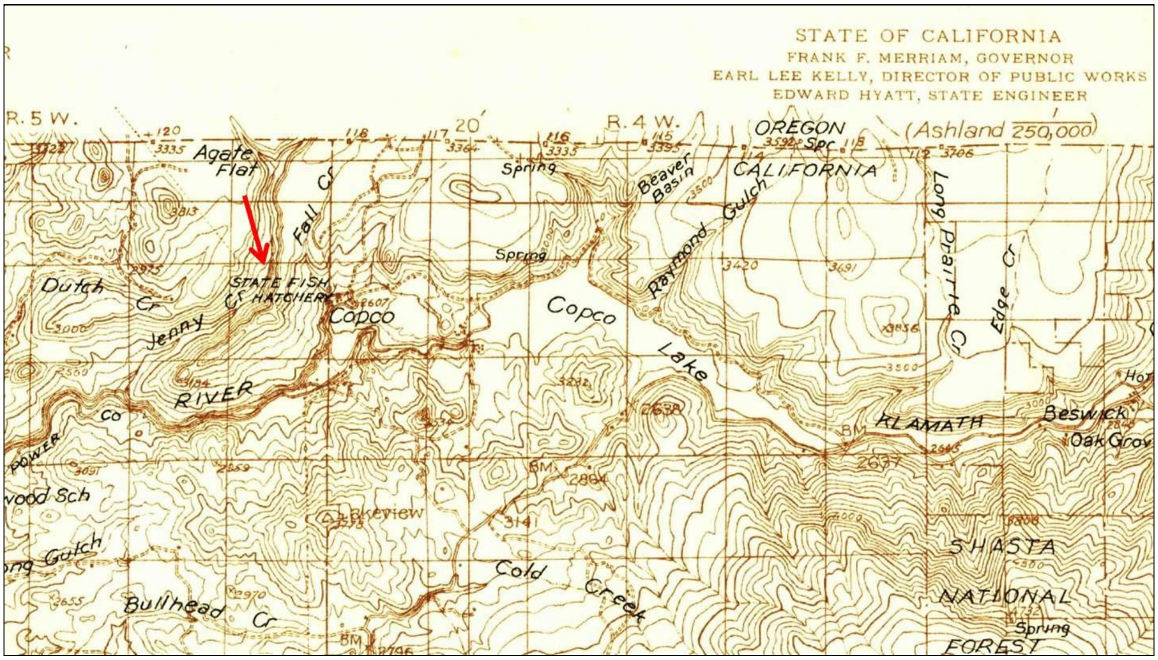


Figure 1. Historic map showing “State Fish Hatchery” at Fall Creek (USGS 1934).

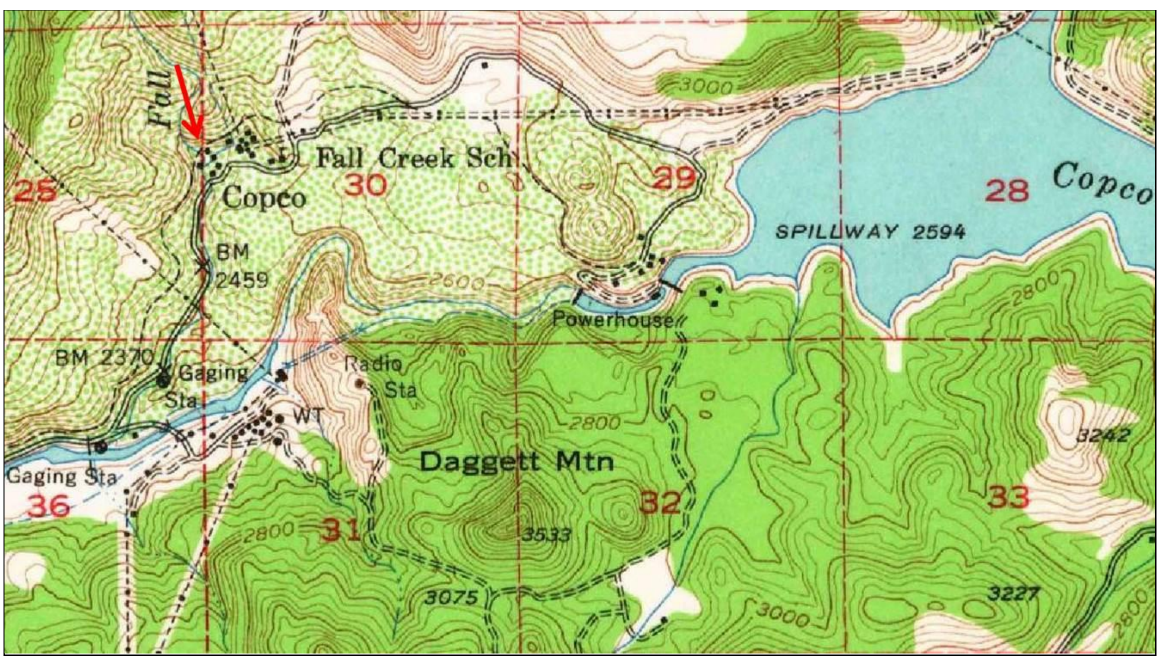


Figure 2. Historic map indicating presence of Fall Creek hatchery resources (USGS 1954).

Figures (continued):

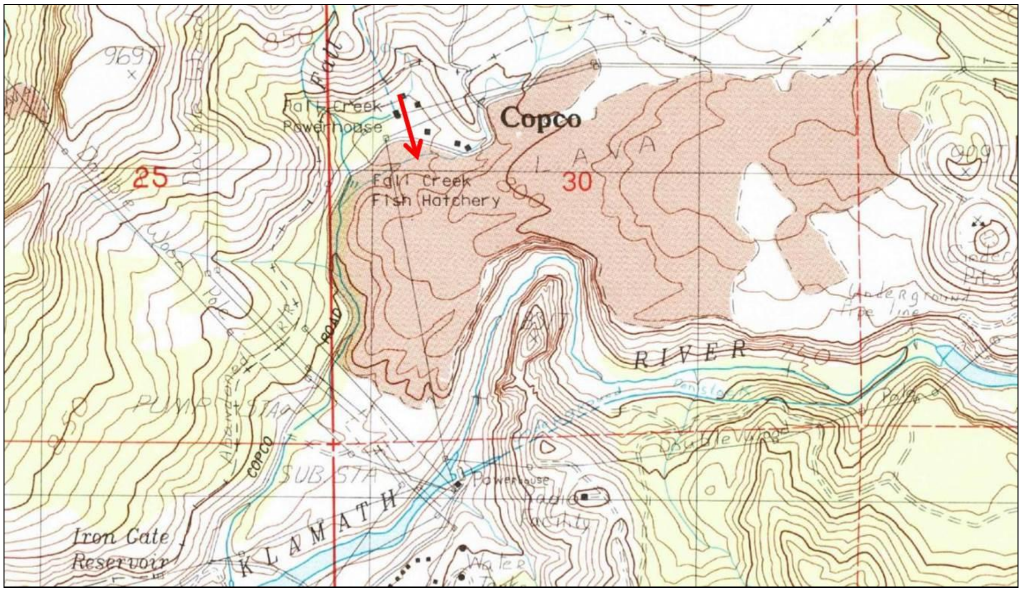


Figure 3. Map showing "Fall Creek Fish Hatchery" (USGS 1984).

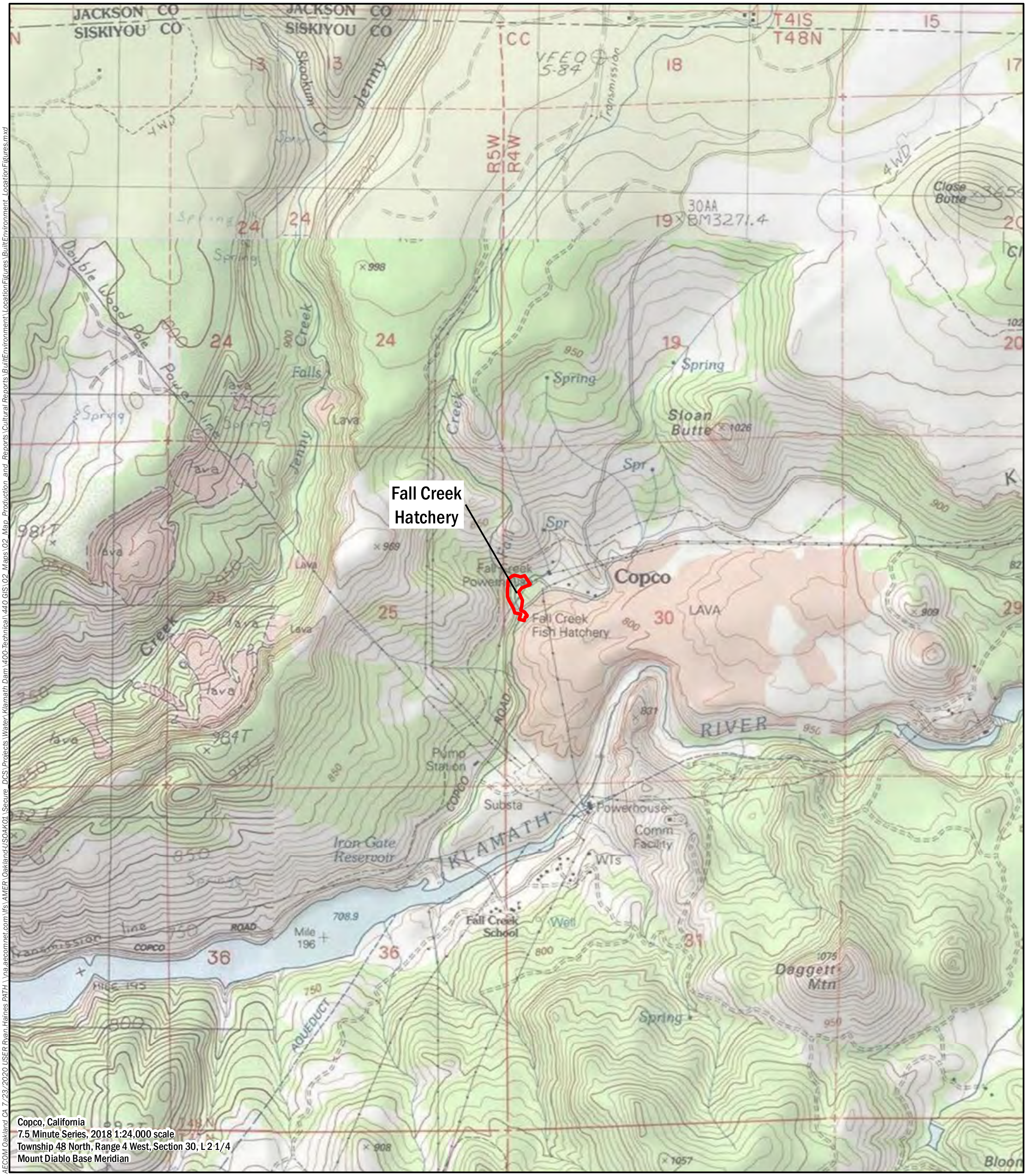
Primary #47-004015
HRI #
Trinomial

LOCATION MAP

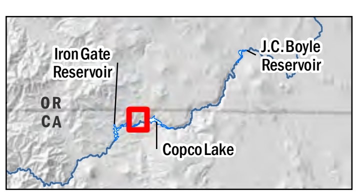
Property Name: Fall Creek Hatchery Historic District

***Map Name:** ______________________________ ***Scale:** __________________ ***Date of map:** ____________

See Location Map on next page.



Fall Creek Hatchery



0 2,000 Feet

0 600 Meters

1:24,000

Fall Creek Hatchery

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

AECOM
July 2020

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

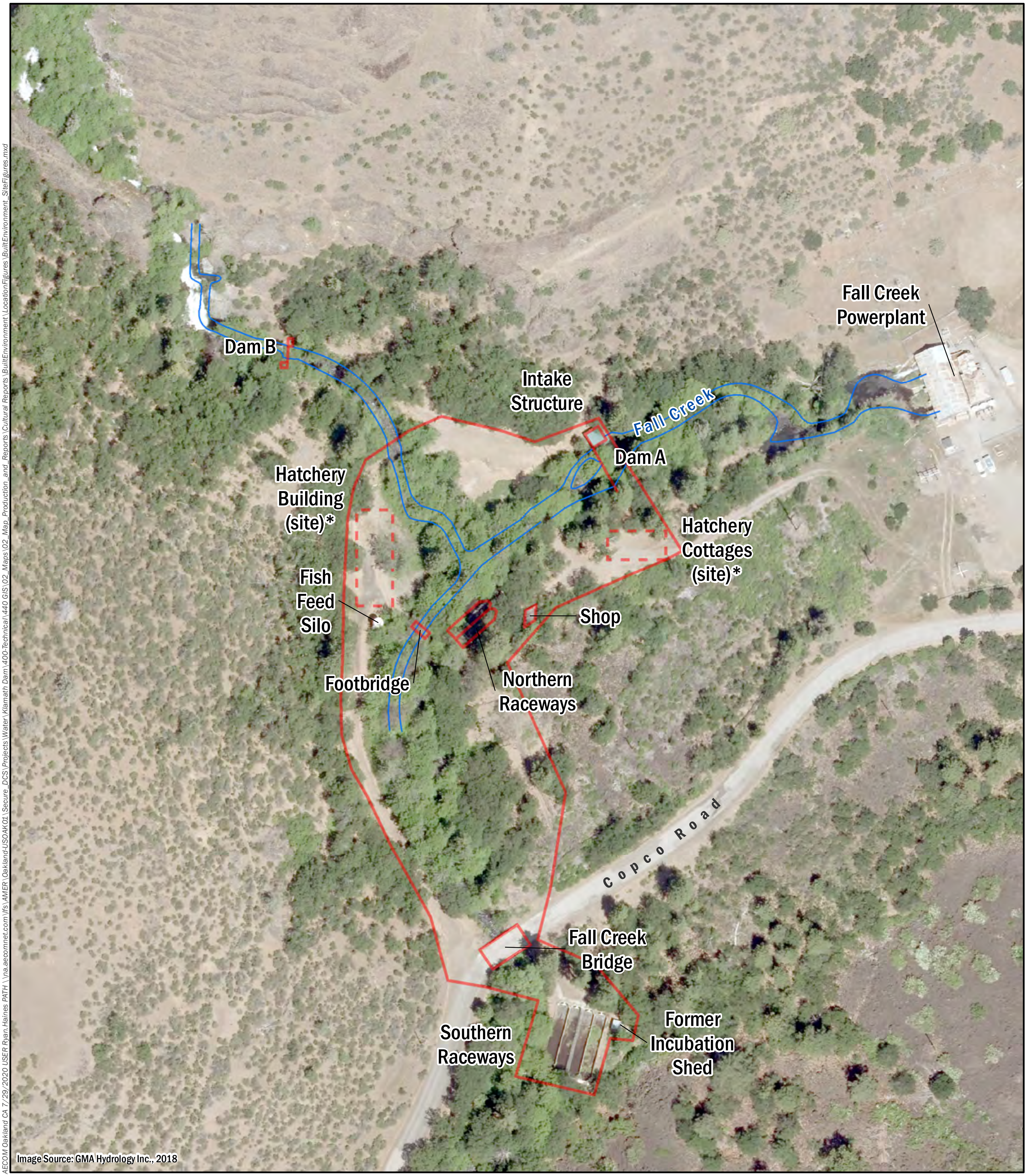
Primary #47-004015
HRI #
Trinomial

SKETCH MAP

Property Name: Fall Creek Hatchery Historic District

***Drawn by:** ______________________ ***Date of map:** ______________________

See Sketch/Site Map on next page.



AECOM Oakland CA 7/29/2020 USER Ryan.Haines PATH \\na.aecomnet.com\lfs\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

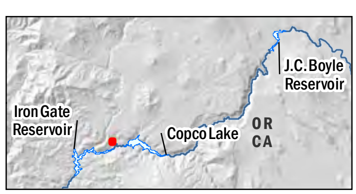
Fall Creek Hatchery Facility

N

0 100 Feet

0 20 Meters

1:1,600



Fall Creek Hatchery Facility

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

AECOM

July 2020

Resource Name or #: Copco Lake Recreational Residences Historic District

P1. Other Identifier:
*P2. Location: ☒ Unrestricted
***a. County** Siskiyou
***b. USGS 7.5' Quad** Copco, CA **Date** 2018 **T** 48N; **R** 4W; **Sec** 21, 26, 27, 28, 29, 33, 34, 35, 36; Mount Diablo B.M. See Continuation Sheet.
c. Address See Continuation Sheet City Montague Zip 96044, 96064
d. UTM: See Continuation Sheet.
e. Other Locational Data: N/A

***P3a. Description:**

The Copco Lake Recreational Residences Historic District is located approximately 3.5 miles south of the California-Oregon border and approximately 20 miles east of Hornbrook, California. It consists of 124 residential properties, two fire stations, and one commercial business with a residential unit. The properties are concentrated on the northeastern side of the lake along Copco Road and the south side of the lake along Ager Beswick Road, Patricia Avenue, and Jacqueline Avenue. The district is bounded by the Copco No. 1 dam to the west, the undeveloped hillsides to the north and south, and the intersection of Klamath View Drive and Ager Beswick Road to the east. A detailed description of Copco Lake Recreational Historic District is provided in the DPR 523D (District Record) form.

The district originated as a planned "sportsman's subdivision" envisioned by southern Californian realtor W.H. Clifford in 1963 (Radke 1965). Although the area once featured several late 19th and early 20th century farms and ranches, most were lost when they were inundated by Copco Lake in 1917 (Beckham 2006; *Evening Herald* 1917). Only one residence, constructed in 1935, predates construction of Clifford's subdivision that began in 1964. Clifford marketed the Copco Lake properties to outdoor enthusiasts with plans for one-acre cabins and 10-acre estates or ranch sites oriented towards Copco Lake (Radke 1965). The residences include a mixture of architectural styles including Ranch, Minimal Traditional, Contemporary, and A-frame cabins. Many of the residences have direct access to the lake and some feature boat ramps or docks. Non-lake front properties either have views of the lake or were designed as part of Clifford's subdivision. Several historic buildings have been modified to increase square footage, which has diminished their integrity of design, materials, and workmanship.

The period of significance for the district is 1964 to 1975, capturing the two primary periods of development associated with Clifford's planned development. The district consists of 50 contributing and 77 non-contributing properties. Sixty four properties were constructed after the period of significance and one was built before it. Twelve properties built during the period of significance lack sufficient integrity to contribute to the district.

***P3b. Resource Attributes:**

(HP2) Single-family property; HP6 (Copco Lake Store); (HP39) Other (Copco Lake fire stations)

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

P5a. Photograph:

P5b. Description of Photo: Copco Lake and residence with boat dock at 26834 Copco Road, viewing southeast.

Resource Name or #: Copco Lake Recreational Residences Historic District

***P6. Date Constructed/Age and Source:** ☒ Historic, 1935-2011

***P7. Owner and Address:**
Various private property owners and Siskiyou County

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

***P9. Date Recorded:** August 2019

***P10.Survey Type:** California Register nomination

***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

CONTINUATION SHEET

Property Name: Copco No. 2 Hydroelectric Development Historic District

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

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

Resource	Township	Range	Section
18604 Ager Beswick Road	48N	4W	33
18635 Ager Beswick Road	48N	4W	33
18825 Ager Beswick Road	48N	4W	34
19001 Ager Beswick Road	48N	4W	34
19003 Ager Beswick Road	48N	4W	34
19125 Ager Beswick Road	48N	4W	34
19225 Ager Beswick Road	48N	4W	34
20202 Ager Beswick Road	48N	4W	34
20204 Ager Beswick Road	48N	4W	34
20231 Ager Beswick Road	48N	4W	35
20238 Ager Beswick Road	48N	4W	35
20333 Ager Beswick Road	48N	4W	35
20421 Ager Beswick Road	48N	4W	35
20439 Ager Beswick Road	48N	4W	35
20638 Ager Beswick Road	48N	4W	35
20701 Ager Beswick Road	48N	4W	35
20709 Ager Beswick Road	48N	4W	35
20738 Ager Beswick Road	48N	4W	35
20805 Ager Beswick Road	48N	4W	35
20815 Ager Beswick Road	48N	4W	35
20820 Ager Beswick Road	48N	4W	35
20841 Ager Beswick Road	48N	4W	35
20900 Ager Beswick Road	48N	4W	35
21000 Ager Beswick Road	48N	4W	35
21036 Ager Beswick Road	48N	4W	35
21115 Ager Beswick Road	48N	4W	35
21116 Ager Beswick Road	48N	4W	35
21118 Ager Beswick Road	48N	4W	35
21204 Ager Beswick Road	48N	4W	35
21205 Ager Beswick Road	48N	4W	35
21235 Ager Beswick Road	48N	4W	35
16000 Klamath View Drive	48N	4W	36
16109 Klamath View Drive	48N	4W	36
16124 Klamath View Drive	48N	4W	36
16204 Klamath View Drive	48N	4W	36
16220 Klamath View Drive	48N	4W	36

15738 Patricia Avenue	48N	4W	33
15830 Patricia Avenue	48N	4W	29
15835 Patricia Avenue	48N	4W	29
15841 Patricia Avenue	48N	4W	29
15935 Patricia Avenue	48N	4W	29
15939 Patricia Avenue	48N	4W	29
16104 Patricia Avenue	48N	4W	29
16139 Patricia Avenue	48N	4W	28
16141 Patricia Avenue	48N	4W	28, 33
16200 Patricia Avenue	48N	4W	28
16338 Patricia Avenue	48N	4W	33
16418 Patricia Avenue	48N	4W	33
16490 Patricia Avenue	48N	4W	33
16500 Patricia Avenue	48N	4W	33
16509 Patricia Avenue	48N	4W	33
16631 Patricia Avenue	48N	4W	33
16635 Patricia Avenue	48N	4W	33
16705 Patricia Avenue	48N	4W	33
16739 Patricia Avenue	48N	4W	33
16801 Patricia Avenue	48N	4W	28
16805 Patricia Avenue	48N	4W	28
16817 Patricia Avenue	48N	4W	28
16900 Patricia Avenue	48N	4W	28
17004 Patricia Avenue	48N	4W	28
17011 Patricia Avenue	48N	4W	28
17025 Patricia Avenue	48N	4W	28
17105 Patricia Avenue	48N	4W	28
17107 Patricia Avenue	48N	4W	28
17125 Patricia Avenue	48N	4W	28
17411 Patricia Avenue	48N	4W	28
17433 Patricia Avenue	48N	4W	28
17501 Patricia Avenue	48N	4W	28
17601 Patricia Avenue	48N	4W	28
17635 Patricia Avenue	48N	4W	28
17700 Patricia Avenue	48N	4W	28
17705 Patricia Avenue	48N	4W	28
18202 Patricia Avenue	48N	4W	34
18205 Patricia Avenue	48N	4W	34
18424 Patricia Avenue	48N	4W	34

19418 Patricia Avenue	48N	4W	33
17114 Janice Avenue	48N	4W	28
17116 Janice Avenue	48N	4W	29
17117 Janice Avenue	48N	4W	29
17130 Janice Avenue	48N	4W	29
17131 Janice Avenue	48N	4W	29
17139 Janice Avenue	48N	4W	29
17143 Janice Avenue	48N	4W	29
17147 Janice Avenue	48N	4W	28, 29
16634 Jacqueline Avenue	48N	4W	34
16720 Jacqueline Avenue	48N	4W	34
16738 Jacqueline Avenue	48N	4W	34
16812 Jacqueline Avenue	48N	4W	34
16838 Jacqueline Avenue	48N	4W	34
16900 Jacqueline Avenue	48N	4W	34
16138 Valerie Road	48N	4W	35
27817 Quail Lane	48N	4W	36
27820 Quail Lane	48N	4W	36
27830 Quail Lane	48N	4W	36
27838 Quail Lane	48N	4W	36
27904 Quail Lane	48N	4W	36
27906 Quail Lane	48N	4W	36
27916 Quail Lane	48N	4W	36
27924 Quail Lane	48N	4W	36
27931 Quail Lane	48N	4W	36
27938 Quail Lane	48N	4W	36
27939 Quail Lane	48N	4W	36
27713 Teal Road	48N	4W	36
27716 Teal Road	48N	4W	36
27801 Teal Road	48N	4W	36
27825 Mallard Road	48N	4W	36
27912 Mallard Road	48N	4W	36
27930 Mallard Road	48N	4W	36
26516 Copco Road	48N	4W	35
26734 Copco Road	48N	4W	35
26834 Copco Road	48N	4W	35
26938 Copco Road	48N	4W	35
27004 Copco Road	48N	4W	35
27008 Copco Road	48N	4W	35

27134 Copco Road	48N	4W	35
27204 Copco Road	48N	4W	35
27320 Copco Road	48N	4W	35
27334 Copco Road	48N	4W	35
27608 Copco Road	48N	4W	35
27700 Copco Road	48N	4W	36
27716 Copco Road	48N	4W	36
27734 Copco Road	48N	4W	36
27738 Copco Road	48N	4W	36
27800 Copco Road	48N	4W	36
27805 Copco Road	48N	4W	36
27813 Copco Road	48N	4W	36
27834 Copco Road	48N	4W	36

P2d. Location/UTM (continued):

Resource	Zone	UTM
18604 Ager Beswick Road	10 T	557506.82mE/4646440.46mN
18635 Ager Beswick Road	10 T	557588.77mE/4646593.35mN
18825 Ager Beswick Road	10 T	557754.23mE/4646728.50mN
19001 Ager Beswick Road	10 T	557912.56mE/4646958.08mN
19003 Ager Beswick Road	10 T	557962.00mE/4646967.03mN
19125 Ager Beswick Road	10 T	557995.39mE/4647028.49mN
19225 Ager Beswick Road	10 T	558171.90mE/4647097.44mN
20202 Ager Beswick Road	10 T	559202.55mE/4646494.04mN
20204 Ager Beswick Road	10 T	559178.75mE/4646416.23mN
20231 Ager Beswick Road	10 T	559326.59mE/4646484.75mN
20238 Ager Beswick Road	10 T	559316.50mE/4646164.65mN
20333 Ager Beswick Road	10 T	559450.29mE/4646487.34mN
20421 Ager Beswick Road	10 T	559568.99mE/4646472.45mN
20439 Ager Beswick Road	10 T	559614.69mE/4646477.17mN
20638 Ager Beswick Road	10 T	559935.21mE/4646359.95mN
20701 Ager Beswick Road	10 T	559955.41mE/4646461.27mN
20709 Ager Beswick Road	10 T	559994.60mE/4646442.06mN
20738 Ager Beswick Road	10 T	560003.94mE/4646327.55mN
20805 Ager Beswick Road	10 T	560073.49mE/4646382.55mN
20815 Ager Beswick Road	10 T	560109.18mE/4646356.42mN
20820 Ager Beswick Road	10 T	559971.36mE/4646112.19mN
20841 Ager Beswick Road	10 T	560189.32mE/4646309.11mN
20900 Ager Beswick Road	10 T	560194.31mE/4646227.01mN

21000 Ager Beswick Road	10 T	560249.14mE/4646103.44mN
21036 Ager Beswick Road	10T	560380.59mE/4645994.19mN
21115 Ager Beswick Road	10 T	560473.98mE/4646092.03mN
21116 Ager Beswick Road	10 T	560466.17mE/4645995.47mN
21118 Ager Beswick Road	10 T	560473.89mE/4645917.70mN
21204 Ager Beswick Road	10 T	560589.16mE/4645966.54mN
21205 Ager Beswick Road	10 T	560583.96mE/4646090.64mN
21235 Ager Beswick Road	10 T	560589.31mE/4646085.35mN
15738 Patricia Avenue	10 T	556097.68mE/4647375.21mN
15830 Patricia Avenue	10 T	555945.22mE/4647555.44mN
15835 Patricia Avenue	10 T	555958.61mE/4647485.82mN
15841 Patricia Avenue	10 T	555893.97mE/4647487.19mN
15935 Patricia Avenue	10 T	555813.84mE/4647593.60mN
15939 Patricia Avenue	10 T	555834.54mE/4647659.50mN
16104 Patricia Avenue	10 T	555942.76mE/4647646.92mN
16139 Patricia Avenue	10 T	556127.59mE/4647500.70mN
16141 Patricia Avenue	10 T	556151.09mE/4647483.45mN
16200 Patricia Avenue	10 T	556039.28mE/4647489.34mN
16338 Patricia Avenue	10 T	556147.62mE/4647221.16mN
16418 Patricia Avenue	10 T	556158.1mE/4647174.38mN
16490 Patricia Avenue	10 T	556254.33mE/4647128.06mN
16500 Patricia Avenue	10 T	556318.57mE/4647072.28mN
16509 Patricia Avenue	10 T	556317.89mE/4647137.34mN
16631 Patricia Avenue	10 T	556338.91mE/4647255.54mN
16635 Patricia Avenue	10 T	556332.30mE/4647304.56mN
16705 Patricia Avenue	10 T	556324.72mE/4647372.12mN
16739 Patricia Avenue	10 T	556368.41mE/4647442.20mN
16801 Patricia Avenue	10 T	556358.26mE/4647531.17mN
16805 Patricia Avenue	10 T	556376.15mE/4647583.83mN
16817 Patricia Avenue	10 T	556437.87mE/4647605.42mN
16900 Patricia Avenue	10 T	556556.12mE/4647519.87mN
17004 Patricia Avenue	10 T	556711.06mE/4647643.58mN
17011 Patricia Avenue	10 T	556597.63mE/4647727.28mN
17025 Patricia Avenue	10 T	556637.88mE/4647770.35mN
17105 Patricia Avenue	10 T	556742.70mE/4647821.15mN
17107 Patricia Avenue	10 T	556791.92mE/4647809.44mN
17125 Patricia Avenue	10 T	556940.25mE/4647784.63mN
17411 Patricia Avenue	10 T	557128.73mE/4647919.52mN
17433 Patricia Avenue	10 T	557229.59mE/4647976.07mN

17501 Patricia Avenue	10 T	557303.52mE/4647952.58mN
17601 Patricia Avenue	10 T	557347.34mE/4647819.69mN
17635 Patricia Avenue	10 T	557404.54mE/4647733.64mN
17700 Patricia Avenue	10 T	557416.53mE/4647665.46mN
17705 Patricia Avenue	10 T	557465.00mE/4647746.91mN
18202 Patricia Avenue	10 T	557684.73mE/4647153.54mN
18205 Patricia Avenue	10 T	557784.96mE/4647198.21mN
18424 Patricia Avenue	10 T	557779.42mE/4646819.86mN
19418 Patricia Avenue	10 T	557615.96mE/4646510.74mN
17114 Janice Avenue	10 T	555974.93mE/4647727.67mN
17116 Janice Avenue	10 T	555982.81mE/4647757.38mN
17117 Janice Avenue	10 T	555856.44mE/4647739.84mN
17130 Janice Avenue	10 T	555964.48mE/4647780.77mN
17131 Janice Avenue	10 T	555891.01mE/4647811.17mN
17139 Janice Avenue	10 T	555929.18mE/4647845.12mN
17143 Janice Avenue	10 T	555940.29mE/4647875.30mN
17147 Janice Avenue	10 T	556012.24mE/4647859.88mN
16634 Jacqueline Avenue	10 T	557780.73mE/4646923.80mN
16720 Jacqueline Avenue	10 T	557819.23mE/4647039.37mN
16738 Jacqueline Avenue	10 T	557831.51mE/4647058.02mN
16812 Jacqueline Avenue	10 T	557831.09mE/4647129.41mN
16838 Jacqueline Avenue	10 T	557883.26mE/4647234.99mN
16900 Jacqueline Avenue	10 T	557907.22mE/4647273.82mN
16138 Valerie Road	10 T	560198.41mE/4646113.78mN
27817 Quail Lane	10 T	561185.96mE/4646221.94mN
27820 Quail Lane	10 T	561211.23mE/4646164.86mN
27830 Quail Lane	10 T	561234.68mE/4646164.95mN
27838 Quail Lane	10 T	561260.29mE/4646183.16mN
27904 Quail Lane	10 T	561284.75mE/4646182.04mN
27906 Quail Lane	10 T	561306.07mE/4646188.66mN
27916 Quail Lane	10 T	561327.15mE/4646204.39mN
27924 Quail Lane	10 T	561375.44mE/4646226.24mN
27931 Quail Lane	10 T	561359.48mE/4646290.06mN
27938 Quail Lane	10 T	561419.31mE/4646251.71mN
27939 Quail Lane	10 T	561362.31mE/4646287.97mN
27713 Teal Road	10 T	560942.78mE/4646323.22mN
27716 Teal Road	10 T	560989.98mE/4646279.10mN
27801 Teal Road	10 T	561009.77mE/4646396.86mN
27825 Mallard Road	10 T	561047.62mE/4646283.37mN

CONTINUATION SHEET

Property Name: Copco No. 2 Hydroelectric Development Historic District

27912 Mallard Road	10 T	561142.21mE/4646259.31mN
27930 Mallard Road	10 T	561201.46mE/4646269.71mN
26516 Copco Road	10 T	559535.06mE/4647465.28mN
26734 Copco Road	10 T	559771.37mE/4647090.41mN
26834 Copco Road	10 T	559997.46mE/4646887.23mN
26938 Copco Road	10 T	560114.63mE/4646770.19mN
27004 Copco Road	10 T	560105.30mE/4646775.33mN
27008 Copco Road	10 T	560194.98mE/4646792.19mN
27134 Copco Road	10 T	560351.82mE/4646648.62mN
27204 Copco Road	10 T	560404.55mE/4646566.68mN
27320 Copco Road	10 T	560575.94mE/4646370.27mN
27334 Copco Road	10 T	560538.03mE/4646374.06mN
27608 Copco Road	10 T	560924.79mE/4646275.65mN
27700 Copco Road	10 T	560971.32mE/4646184.34mN
27716 Copco Road	10 T	561065.75mE/4646131.41mN
27734 Copco Road	10 T	561011.64mE/4646140.82mN
27738 Copco Road	10 T	561122.46mE/4646127.90mN
27800 Copco Road	10 T	561132.33mE/4646136.64mN
27805 Copco Road	10 T	561091.00mE/4646191.69mN
27813 Copco Road	10 T	561182.75mE/4646200.37mN
27834 Copco Road	10 T	561229.53mE/4646147.14mN

***NRHP Status Code:** 3D

***Resource Name or #**: Copco Lake Recreational Residences Historic District
D1. Historic Name: Copco Lake Estates D2. Common Name: Copco Lake Residences
D3. Detailed Description:

Copco Lake Recreational Residences Historic District is comprised of 124 residential properties, two fire stations, and one commercial business with a residential unit. Located approximately 3.5 miles south of the California-Oregon border, the properties surround Copco Lake and are concentrated on the northeastern side of the lake along Copco Road and the south side of the lake along Ager Beswick Road, Patricia Avenue, and Jacqueline Avenue. The oldest residence (21235 Ager Beswick Road) was constructed in 1935 but no other extant buildings were constructed until 1964 when W.H. Clifford began developing his "sportsman's subdivision" of one-acre cabin sites and 10-acre estates or ranch sites (Radke 1965).

See Continuation Sheets.

D4. Boundary Description: The Copco Lake Recreational Residences District is bounded by the Copco No. 1 dam to the west, the undeveloped hillsides to the north and south, and the intersection of Klamath View Drive and Ager Beswick Road to the east. (See Location Map and Sketch Map)

D5. Boundary Justification: The Copco Lake Recreational Residences boundary encompasses all properties constructed on the shore of Copco Lake, properties that likely have views of the lake, and adjacent properties associated with W.H. Clifford's planned residential development.

D6. Significance: The Copco Lake Recreational Residences is significantly associated with the development of recreational properties in northern California during the mid-1960s and 1970s. The historic properties also exhibit the planned recreation-focused subdivision designed and developed by W.H. Clifford.

Theme: Community Planning and Development/Recreation

Area: Northern California

Period of Significance: Copco Lake Recreational Residences Historic District: 1964 – 1975

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

See Continuation Sheets.

D7. References:

AECOM

2020 *Lower Klamath Project Draft Historic Properties Management Plan*. AECOM Technical Services, Oakland, California.

Aschbrenner, Joel

2012 Copco Lake: Homeowners Worry as Property Values Drop. *Herald & News* 14 February. Klamath Falls, Oregon.

Ashland Tidings [Ashland, Oregon]

1916 "Electric Company Rushes Work on Dam." 3 January. Ashland, Oregon.

Beckham, Stephen Dow

2006 Historical Landscape Overview of the Upper Klamath River Canyon of Oregon and California. *Cultural Resource Series No. 13.* Submitted to Klamath Falls Resource Area Bureau of Land Management, Lakeview District, Klamath Falls, Oregon. U.S. Department of the Interior, Washington D.C.
See Continuation Sheets.

D8. Evaluator: Tim Wood

Date: May 10, 2021

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

D3. Detailed Description (continued):

Within two weeks of the completion of the Copco No. 1 Dam in November 1917, a reservoir since named Copco Lake filled behind the dam (*Evening Herald* 1917; *Mail Tribune* 1917). Approximately 972 acres today, the lake is positioned within the coniferous tree-covered Klamath River canyon. The Klamath River enters the lake from the east and flows to the west to power the Copco No. 1 Dam development. Copco Road runs along the lake's northern border and provides access to the Copco No. 1 Dam development, shoreline recreation sites, and several lake front properties. Accessed from Interstate 5, the road includes paved, gravel and dirt segments. Ager-Beswick Road, Patricia Avenue, and Jacqueline Avenue provide access to the south side of the lake. Ager-Beswick Road is an extension of the Topsy Grade Road in Oregon. Recreation facilities located around the lake include Mallard Cove, Keaton Cove, and Copco Cove, each with boat launches and smaller dispersed shoreline recreation sites. Residential and commercial properties are primarily located along Copco Road and Ager Beswick Road with additional properties located on their cross streets including Patricia Avenue, Janice Avenue, Jacqueline Avenue, Valerie Road, Klamath View Drive, Quail Lane, Teal Road, and Mallard Road.

Located approximately 3-4 miles south of the California-Oregon border, the Copco Lake Recreational Residences feature a sparse streetscape, primarily consisting of wood monopole transmission lines and mailboxes. The roads providing access to the properties are constructed of a variety of materials including dirt, gravel, and asphalt. The Copco Bridge crosses the Klamath River near the east end of Copco Lake, providing passage between Copco Road and Ager Beswick Road. Constructed in 1988, this bridge replaced a slightly shorter single-lane bridge (*Democrat & Chronicle* 2020; Siskiyou County Department of Public Works 1986). The previous bridge's construction date is unclear but a bridge in this location was present as early as 1934 in U.S. Geological Survey maps (United States Geological Survey 1934).

Copco Lake Recreational Residences primarily consist of single-family residential houses owned and occupied by retirees (Aschbrenner 2012). The houses reflect a variety of architectural styles including A-frame, Ranch, Minimal Traditional, and Contemporary. Except for 21235 Ager Beswick Road, constructed in 1935, each property was built between 1964 and 2011. Due to the inability to safely access and document each individual property, each architectural style present in the potential historic district is described in the following paragraphs. Photographs representing each of these styles are included in the Continuation Sheets. Not all properties are visible from the public right-of-way or depicted in available photographs so these properties were assigned to the "no style identified" category.

Minimal Traditional Architecture

Characterized by its small size with restrained ornamentation, the Minimal Traditional style gained popularity in the early 1940s as worker housing for newly developed World War II production plants. The de-emphasis on detail and non-essential features made the design quick to build and affordable to the average working-class family. Like the Ranch style, Minimal Traditional was one of few architectural styles approved for Federal Housing Authority (FHA) loans. The Minimal Traditional style was featured in countless pattern books and plans for small houses in the 1930s, 1940s and 1950s (McAlester 2013:587-589).

The FHA's *Principle for Planning Small Houses* recommended simple composition, roof lines, materials and variations. The absence of non-essential features such as dormers, cornices and other ornamental structural elements reinforced the simplistic design aesthetic. The design focused on scale, placement of windows and doors, and using one cladding material or color to create the appearance of a larger building (Photograph 1). The post-World War II housing boom elevated the popularity and numeracy of Minimal Traditional houses. The simple design and relatively low cost helped fulfill the promise of the GI Bill that every returning serviceman could purchase a home. Greater post-war prosperity ultimately led to the construction of larger houses with greater design features, such as the Ranch and Contemporary styles (McAlester 2013:588-589).

Of the 63 properties constructed before 1976, 25 represent the Minimal Traditional architecture style. Twenty one are evaluated as contributing resources to the district. Three residences are evaluated as non-contributing due to extensive alterations that diminished their overall integrity. One property is evaluated as non-contributing for being constructed before the period of significance (1964-1975).

Ranch Architecture

Ranch architecture first developed in southern California in the mid-1930s (Photograph 2). By the 1940s, it became one of the few FHA approved small house types. Following the end of World War II, FHA financial controls were gradually reduced allowing for

D3. Detailed Description (continued):

Ranch houses to expand in size and include greater design features, fueling its growth throughout the country. The Ranch-style's popularity peaked in the 1950s and 1960s and became a common fixture of large post-World War II subdivisions (McAlester 2013:602-603).

Of the 63 properties constructed before 1976, 10 represent the Ranch architecture style. Seven are evaluated as contributing resources to the district. Three residences are evaluated as non-contributing due to extensive alterations that diminished their overall integrity.

A-frame Architecture

A-Frame architecture developed during 1950s and became a popular design for small recreation and vacation homes. Embodying the shape of capital letter A, the style is typified by its symmetrical form with two roof lines converging to form a triangular shape (Photograph 3). The roof lines extend to the ground serving as two walls for the building. The style often features a porch or deck for exterior seating and views of the surrounding landscape. The style's popularity and use as a vacation home grew in the 1960s with the development of the interstate highway system and the Bureau of Reclamation's opening of shorelines for recreation. These developments allowed middle-class families to more easily travel longer distances and access more recreation areas for weekend expeditions (McAlester 2013:660).

Advertised as economic and uniquely modern, A-frame architecture was frequently featured in do-it yourself guidebooks and house kits beginning in the 1950s. The simple design, and often inexpensive materials offered middle-class families the opportunity to construct their own vacation homes at a reduced cost. However, the building's unique design featured awkward unused space, a lack of adequate natural light, and inefficient heating and lighting systems (McAlester 2013:660). These deficiencies led many homeowners to conduct alterations and additions to create more square footage and natural light as is evident in several Copco Lake Recreational Residences (Photograph 4).

Of the 63 properties constructed before 1976, 11 represent the A-frame architecture style. Eight are evaluated as contributing resources to the district. Three residences are evaluated as non-contributing due to extensive alterations that diminished their overall integrity.

Contemporary Architecture

Contemporary architecture gained popularity in the mid-1940s and lasted through the 1960s (McAlester 2013:632). The design was utilized in both single- and multi-story buildings and could be more easily integrated into steep hillsides than Ranch or Minimal Traditional designs. Character defining features include low-pitched gable roofs with wide overhanging eaves, exposed roof beams, broad expanses of uninterrupted wall surfaces, use of natural materials, exterior living spaces, and an emphasis on the relation between the building's interior and larger exterior setting, particularly exterior views (Photograph 5; McAlester 2013:630, 634).

Of the 63 properties constructed before 1976, six represent the Contemporary architecture style. One residence is evaluated as non-contributing due to extensive alterations that diminished its overall integrity.

Utilitarian Architecture

Emphasizing function over design, Utilitarian-style architecture's popularity began in the 1860s and continues today (Photograph 6; National Park Service 2015). The design is commonly applied to factories, warehouses, storage buildings, and other ancillary structures. The simplistic design with limited applied detail and inexpensive materials fueled the design's application to a variety of building types in different settings.

Of the 63 properties constructed before 1976, one represents the Utilitarian architecture style and is evaluated as a contributing resource.

No Style Identified

Ten properties are not visible from the public right-of-way and are not depicted in any online real estate listings. Eight of these properties are evaluated as contributing resources to the district. County building permits indicate two properties have been heavily altered and lack sufficient integrity to be contributing resources.

D3. Detailed Description (continued):

Eligibility

The Copco Lake Recreational Residences Historic District consists of 127 individual properties constructed between 1935 and 2011. Sixty four of the 127 properties were constructed after 1975 and outside the period of significance (1964-1975). One property, 21235 Ager Beswick Road, was constructed in 1935 and is evaluated as non-contributing for being constructed before the period of significance. Of the remaining 62 properties constructed before 1976, 13 are evaluated as non-contributing resources due to significant alterations that substantially diminished the buildings' integrity of design, materials, workmanship, and/or feeling. The remaining 50 historic properties are evaluated as contributing resources based on available online photographs and Siskiyou County building permits. The eight properties not visible from the public right-of-way and undocumented by online real estate listings or county building permits are assumed to retain sufficient integrity to be contributing resources to the historic district. The historic district is comprised of 50 contributing and 77 non-contributing resources.

D6. Significance (continued):

Period of Significance

Copco Lake Recreational Residences' period of significance begins in 1964, when the first house in the development was constructed and ends in 1975 when major development on the north side of Copco Lake concluded.

Historic Context

The arrival of European Americans to the Klamath River region brought about rapid changes within traditional Native American cultures. The earliest non-native individuals to arrive were nineteenth-century European fur trappers and expeditioners, followed by gold prospectors, many of whom eventually settled in the area. Completion of emigrant trails and routes, such as the Applegate Trail, helped establish small communities in the Klamath Lakes area and along the Klamath River corridor. Euro-American settlement was promoted by federal land and water legislation that greatly increased the acreage available for agriculture and ranching. Logging, one of the region's primary industries, substantially expanded as railroads carrying lumber and passengers supplanted the stage lines. Hydroelectric development in the Upper Klamath River canyon area began around the turn of the twentieth century and by 1912, competing regional electricity producers merged into Copco. Hydroelectric development during the twentieth-century created fish management and conservation issues and provided recreation opportunities. A more detailed historic overview is provided in the 2020 Historic Property Management Plan (AECOM 2020). A historic context statement for the Klamath Hydroelectric Project (Kramer 2003a) and a historical landscape overview of the Upper Klamath River Canyon (Beckham 2006) provide additional detail.

Early European American Settlement

Permanent settlement of the Upper Klamath River area by European Americans largely followed the gold rush of the early 1850s. The discovery of placer gold attracted the pioneers of what became Siskiyou County. The influx of miners also provided a market for early agriculture, including livestock ranching. In the Upper Klamath River area where gold was not mined, settlers exploited the natural resources to earn a living. Trapping and hunting provided valuable furs and deer hides, while local streams yielded abundant fish for market. By early 1852, the mining population in the Yreka area and on the neighboring Scott River exploded, leading to the formation of Siskiyou County, which was carved out of Shasta County (Jones 1953:22).

As the early mining population moved into the Klamath River area, there was a rapid need for lumber for the construction of dams, flumes, sluice boxes, and other mining structures, as well as for lumber to construct dwellings and infrastructure. As a result, several small sawmills were established on the Klamath River and its tributaries as early as the 1860s (Beckham 2006:138). The establishment of these and other mills spurred development within the greater Klamath–Siskiyou region (Bowden 2002:5). Early settlers operated small-scale sawmills in the 1860s and 1870s, often to supplement farming and ranching income (Kramer 2003a:6). As regional mining waned, some former miners remained and established ranches and farms, capitalizing on the area's rich soil, flat terrain, and plentiful water (PacifiCorp 2004:Exhibit E 6-64).

In 1867, the Linkville town site (present Klamath Falls) was founded in southern Oregon on the Klamath River near the outlet of Upper Klamath Lake. By 1869, approximately 100 people were living within the present Klamath County boundaries (Western Historical Publishing Company 1905:940). By the 1860s, California communities developed in the present Copco Lake area at

D6. Significance (continued):

Oak Grove and Killebrews Ferry near Wards Bridge. While numerous family ranches eventually developed in the Iron Gate reservoir area, no distinct communities existed during the late nineteenth century.

Federal legislation related to public lands and irrigation shaped settlement patterns in the Upper Klamath Basin. The 1850 Donation Land Law and 1862 Homestead Act enabled settlers to acquire and develop public lands. The absence of patented homesteads recorded in the present J.C. Boyle Reservoir area indicates a lack of historic agricultural and ranching activities (Beckham 2006). The Homestead Act did, however, attract many settlers to the Upper Klamath River canyon area downstream of J.C. Boyle Reservoir to the California–Oregon border.

Between 1882 and 1890, most of the lands surrounding and currently inundated by Copco Lake and Iron Gate Reservoir had been patented, with some additional claims between 1911 and 1919. Many local geographic landmarks (e.g., Lennox Rock, Ward Canyon, Chase Mountain), historic sites (e.g., Beswick), and features (e.g., Miller-DeSoza ditch) within the Project area are named for homestead claimants in the Copco Lake and Iron Gate Reservoir area. Patented land owners in the vicinity of Copco Lake included J. Calkins (1890), A. Keplar (1882), C. Schnackenberg (1888), F. Picard (1882), E. C. Spannaus (1883), H. Sparling (1888), J. Lennox (1884), W. B. Ward (1889), H. Ward (1882), H. F. Keeton (1911), B. Davis (1889), C. T. Clarke (1919), and D. Mains (1917). Other land parcels were patented by the Central Pacific Railroad (1895) and the State of California (1881, 1918). Photograph 13 depicts the Lennox and Ward ranches in 1910, and Photograph 14 illustrates the land patents before the formation of Copco Lake.

In 1905, the United States Bureau of Reclamation approved the Klamath Project, which required the government to purchase water rights from mostly private owners. The Klamath Project area encompassed northern portions of Siskiyou and Modoc Counties, California, and areas of Klamath County, Oregon (Heileman 1908:4-9). Construction projects included “dams, canals, ditches, and other facilities to drain, move and store of Upper Basin water” (Most 2018; Foster 2002:155).

Reclamation in the Klamath Basin coincided with growth and development in the region’s population and industries. In 1910, the U.S. Census reported that Siskiyou County’s population had reached 18,801, up about 2,000 from the previous decade, and that there were 1,114 farms in operation, up about 200 from the previous decade. Most farms averaged about 400 acres and collectively covered about half a million acres (French 1915:15). Reclamation also led to a substantial increase in the percentage of cultivated Klamath Basin lands, and in Klamath County, dairying, farming, and stock-raising remained the principal industries (Klamath County Historical Society [KCHS] 1984:23).

Hydroelectric Development

Hydroelectric development in the Klamath Basin began in 1891 to furnish Yreka, California (Siskiyou County seat) with electricity by placing a waterpower wheel in Shasta River Canyon, below the mouth of Yreka Creek (Kramer 2003a:14). Four years later, the Klamath Falls Light and Water Company built East Side power plant no. 1 on Link River’s east 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; Kramer 2003a:15). These ventures soon attracted competitors. California Oregon Power Company (Copco) formed in 1912 through the merger of Siskiyou Electric Power & Light Company (SEP&L), Klamath Falls Light and Water Company, and Rogue River Electric Company.

In the spring of 1910, SEP&L began surveys in Ward's Canyon and along the Klamath River for a projected dam, power plant, and reservoir, which eventually become the Copco No. 1 dam and Copco Lake (Beckham 2006). John C. Boyle, who later became a prominent Copco officer, was hired as a SEP&L field surveyor (Kramer 2003b:19; *Oregonian* 1917). At that time, the Ward’s Canyon vicinity was a remote setting with nearby agricultural activities. The Klamath River slowly meandered through the area until descending into Ward’s Canyon, where it began to flow rapidly (Boyle 1976:8). While surveying in 1910, Boyle described the area comprising the Klamath River “bottomlands” as “covered with beautiful farms used mostly for cattle raising.” Boyle also observed that “[T]he homes and buildings were old but generally well kept” (Boyle 1976:8).

To realize its dream, the SEP&L purchased the ranches of several families whose holdings once encompassed the broad Copco Valley, including those of William Lennox, Henry Keaton, Kitty Ward, Mary Ward, William Raymond, Stone and Edwards, Henry and Herman Spannaus, George L. Chase, Daniel David Hahn, Erskine Parks, and Manuel Coville (Beckham 2006). This transfer of ownerships enabled construction of Copco No. 1 when Copco took over SEP&L (Beckham 2006; Boyle 1976:8).

D6. Significance (continued):

Dam excavation at the river bottom and shaft drilling began in October 1912 (Boyle 1976:12-13). During Copco No. 1's original construction phase (1912–1918), a "power town" named Copco developed on the bluff above the dam construction site (Boyle 1976:18). By November 1916, 360 men were working on Copco No. 1, and 560 persons were living in the town of Copco (*Oregon Daily Journal* 1916). The town contained numerous buildings and structures related to dam construction and worker accommodations. The *Evening Herald*, a local newspaper, described the new town in a November 1916 article:

> *The town is situated entirely on the [Copco] power company's property, has a population of about five hundred and sixty persons, as a result of the employment of three hundred and sixty men by the company many of whom have located at Copco with their families. The little school house nearby which was formerly occupied by two or three pupils from the ranches along the river, is now filled with the children of the new residents and the genial office-seeker always makes it a point to drop in at the little burg as he realises [sic] that this little new town consists in the most part of a voting population* (*Evening Herald* 1916a).

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* 1917; *Oregonian* 1917).

Copco completed the first phase of Copco No. 1 for $2 million in 1918, including the dam, water conveyance system, and powerhouse. The Copco No. 1 hydroelectric development was designed to provide a major source of electricity to local industry, commerce, and agriculture, as electric engines increasingly replaced steam in operations such as mills and irrigation pumps (*Ashland Tidings* 1916b).

In 1922, the company completed Copco No. 1 by raising the dam, expanding the powerhouse, and adding a new generating unit (Merrick 1918:150). During the Copco No. 1 expansion phase, the town of Copco was reported as occupying both sides of the river with tents and cabins where workers and their families lived (*Sacramento Bee* 1922). At its peak in the early 1920s, the dynamic company town housed hundreds of workers and families and contained buildings, equipment, and operations with interrelated functions dedicated to Copco No. 1 construction. Out of dozens of buildings and structures, only few remnants of the town survive.

Once completed, the new Copco development would meet power demands in the Siskiyou District, which had relied on power transmission from Medford, Oregon, during the peak load. On installation of the first generating unit at Copco No. 1, capacity would exceed peak load demand, allowing the Medford service to be placed on standby (Merrick 1918:150).

Copco Lake

Construction of Copco No. 1 Dam concluded in November 1917, and within 2 weeks, a reservoir named Copco Lake filled behind it, inundating farm and ranchlands that Copco previously acquired as part of the project (*Evening Herald* 1917; *Mail Tribune* 1917). The dam as it appeared in 1917 is shown in Photograph 15. The creation of Copco Lake required relocation of the county road from Ager to Klamath Hot Springs. Copco rebuilt the inundated road at a higher elevation along a stretch of what became the Copco Lake shore. The reservoir also inundated a steel bridge that had to be rebuilt upriver (*Evening Herald* 1916b; *Sacramento Bee* 1917; *Oakland Tribune* 1915).

Recreation

The Klamath River area has long been a gathering place for fishing, hunting, and other forms of recreation. Recreationists still engage in a variety of activities including fishing, hunting, boating, swimming, camping, sightseeing, picnicking, mountain biking, hiking, and off-highway vehicle use.

During the late nineteenth century, fishing and hunting among European American residents of the Upper Klamath River area progressed beyond subsistence-based activities to ones that provided a livelihood for local residents (Beckham 2006:94). The Klamath River and its tributaries began to draw increasing numbers of recreational anglers from throughout California and neighboring states. Successful fishing excursions led many to regard the Klamath River basin as the "steelhead capitol of the world" (Shelby and Stein 1984:83). In 1900, Joseph G. Pierce published a booklet promoting the Klamath region's fishing

D6. Significance (continued):

grounds which, he claimed, “taken altogether, for variety, quality, and abundance… [had] scarcely an equal in America for game and fish” (KCHS 1999).

Recreational boating in the Klamath waterways got a boost at the turn of the twentieth century when steamboat owners began to offer outings. The steamboat *Alma* initiated Sunday excursions in 1901 and the *Winema* followed in 1905, in addition to regular passenger service (PacifiCorp 2004:Exhibit E: 6-68). Soon, boating enthusiasts were organizing their own excursions. In 1934, the Southern Oregon Boat club constructed improvements at Copco Lake, such as a dock, boat launching driveway, and sanitation facilities, to facilitate boating parties. The club also cleared ground by the shore for picnicking and other riverside activities (*Mail Tribune* 1937).

As transportation facilities, including railroad, opened the area to visitors and lodging became available, the river maintained its reputation as being “more plentifully stocked with fish than any in California” (Cumming and Dunn 1911:20). In addition to river-based fishing which continues today, the reservoirs such as Copco Lake have provided fishing opportunities. In May 1961, California fishing authorities touted Copco Lake as “the best fresh-water fishing lake in the state,” and noted that catch included yellow perch, “a scrappy ‘cold water’ fish virtually unknown in other California waters” (*Sunset Magazine* 1961). Throughout the twentieth century, the Klamath River, its reservoirs, and tributaries remained an important source of bank, boat, and fly fishing (Shelby and Stein 1984:83-84; USBR and CDFG 2012:3.20-7). In addition to fishing, the Klamath basin has featured abundant game animal, waterfowl and other birds (Jenkins 1960).

Copco Lake Subdivisions

Beginning in 1952, Copco started selling parcels of land surrounding Copco Lake to Frank L. Lathrop of Yreka, California. By 1958, Lathrop had acquired nearly all of the lakefront properties except for a small parcel owned by the Bureau of Land Management (BLM) at Keaton Cove. Copco retained water rights to the lake and some property for administrative purposes and the continued operation of the Copco No. 1 Dam and powerhouse. The majority of Lathrop’s holdings were acquired in 1954 for $22,000. After acquiring the property, Lathrop worked to develop the area into a wildlife refuge for deer, upland birds and waterfowl (State of California Wildlife Conservation Board [SCWCB] 1958:8-9; University of California Riverside [UC Riverside] n.d.). Lathrop’s holdings blocked nearly all access points to the lake but area residents were still able to reach it via the BLM property and further up the Klamath River. During the 1950s, popular activities on the lake included boating, fishing, swimming, water skiing, camping, picnicking and other leisure activities (*Herald and News* 1959; Jenkins 1960; *Mail Tribune* 1961).

Entering the 1960s, the combination of rising populations, larger incomes, more leisure time, and easier mobility in the western United States led to increasing demand for recreation areas such as parks and picnic grounds (Jenkins 1960). Many public utility companies, including Copco received increasing pressure to permit greater public access to their land and water areas (Kenneth R. Anderson and Company 1960:3-7).

In 1959, California State Senator Randolph Collier of Yreka led an effort to purchase approximately 2,500 acres of Lathrop’s 3,620-acre property around Copco Lake to develop it into Siskiyou County’s first state park. Collier declared “The Klamath River has long been a mecca for sportsmen from all over the state and nation” (Jenkins 1960; SCDNR 1960:21). Collier introduced a resolution in the state legislative session authorizing a survey of the property to evaluate its recreation opportunities and potential as a state park (*Sacramento Bee* 1959). The California State Division of Beaches and Parks conducted the survey and concluded the project area exhibited recreation potential at the local and state level and was worthy of state park status (SCDNR 1960:20). However, additional studies on the lake’s water and algae quality eliminated the property from further consideration. Once the state of California was no longer interested in purchasing the property, Lanthrop pursued other buyers with advertisements in state and national newspapers, including the *Wall Street Journal* (UC Riverside n.d.).

In 1963, W.H. Clifford, a southern Californian realtor acquired more than 2,200 acres of shoreline property surrounding Copco Lake. The property was likely purchased from Lathrop, but research did not identify any sales records. Clifford claimed to have purchased the land from Pacific Power & Light, successor to Copco, but several other resources document Lathrop’s ownership until at least 1960 (SCWCB 1958:8-9; UC Riverside n.d.). Partnering with Los Angeles attorneys Joe Girard and Art Pastel, Clifford planned to subdivide the property into lake front lots catering to fishers and hunters. Clifford envisioned a “sportsman’s subdivision” of one-acre cabin sites and 10-acre estates or ranch sites (Radke 1965).

D6. Significance (continued):

Initial promotional materials for the development advertised exceptional recreational experiences with captions such as "THE BEST fresh-water fishing lake and hunting area in California", "Now Yours for All-Year Hunting Fishing and Leisure Living!" and "California's largest per acre deer herd thrives throughout the rolling hillsides and meadowlands. Copco Lake and region is truly a hunter's paradise" (W.H. Clifford Co. 1963). These claims were echoed by several Californian sports and recreation newspaper columnists who visited Copco Lake in the 1960s with Clifford as their guide. Copco Lake was portrayed as a "hunting and fishing haven", "paradise for the outdoorsman", and a "sportsman's smorgasboard" (Morgensen 1965; Freeman 1967). As a selling feature to the subdivision, Clifford developed a private game preserve to ensure an abundance of wild game for property owners (W.H. Clifford Co. 1963).

Clifford's development around Copco Lake did not commence until circa 1964 when the first houses were constructed on the south side of the lake along Ager Beswick Road, Patricia Avenue, and Jacqueline Avenue. These properties primarily consisted of A-frame cabins and ranch style houses. Clifford's Flying C Ranch was completed by 1965 and included eight A-frame rental cabins. In 1965, Californian newspapers began printing advertisements for the subdivision, touting lake front lots, year-round roads, and excellent hunting and fishing (*Los Angeles Times* 1965). Owning nearly all of the lakefront properties, Clifford limited public access to the lake but granted permission to anyone if they expressed interest in purchasing a lot (Culpepper 1963). No camping or trailer parking was allowed on Clifford's properties to maintain a "certain appearance" (Morgensen 1965; Radke 1965). Throughout the 1960s, the Flying C Ranch acted as the center to Copco Lake recreation activities as it offered rental cabins, boats, motors, fishing tackle and bait to visitors (Morgensen 1967). In 1968, A-Frame cabins were advertised for $125 a week and included use of a fishing boat. By that time, hunting on the development was exclusive to property owners (Freeman 1968).

Copco Lake's second period of development began on the north side of the lake in 1969 with Clifford's opening of a new 127 lot recreational subdivision. Described as the lake's "north shore meadows" the new subdivision included a community center, church, playground, and public swimming pool along Copco Road (*Valley Times* 1969). Alpine chalets also became available to rent and the Copco Lake Store opened that year. Properties were developed along Copco Road, Quail Lane, Teal Road, and Mallard Road, and primarily consisted of ranch and minimal traditional style residences. Coinciding with the north shore meadows development, Clifford opened 7,000 acres of hunting land for exclusive use by Copco Lake property owners. He also imported wild turkeys from Missouri and Pennsylvania to increase hunting activity (Jaffray 1969).

By 1973, the 127 lot subdivision appears to have been renamed the Copco Lake Estates (Neal 1973). Cabin rentals were managed by the Copco Lake Store and available for the general public to rent when owners were not on vacation at the lake (Ford 1973). Development of the lake front lots continued through the 1970s and 1980s but not to the same extent as the initial development in the 1960s. Large sections of Copco Road remain undeveloped today, particularly on the northwest side of the lake.

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

Period of Significance (Copco Lake Recreational Residences): 1964 – 1975

Copco Lake Recreational Residences' period of significance begins in 1964, when the first house in the development was constructed and ends in 1975 when major development on the north side of Copco Lake concluded.

Criteria Analysis

NRHP Criterion A
The Copco Lake Historic District (District) is significant under Criterion A in the areas of Community Planning and Development and Entertainment/Recreation for its association with the recreation-focused residential community developed by W.H. Clifford. The site is significant at the local level as it reflects the growth of leisure activities and vacation homes for middle-class families in the 1960s and 1970s in the Klamath River Basin. The period of significance is 1964-1975, representing the two primary periods of development on each side of the lake.

NRHP Criterion B
The District is significant under Criterion B for its association with W.H. Clifford who lead the development of the lake-side recreation community and lived on site through its two primary periods of development. The site is significant at the local level for **D6.**

Significance (continued):

its association with Clifford and his efforts to develop the community in the 1960s and 1970s. The period of significance is 1964-1975, representing the two primary periods of development on each side of the lake.

NRHP Criterion C
The District is significant under Criterion C in the area of Architecture and Community Planning and Development for reflecting a mid-1960s recreation focused community. The District represents a significant and distinguishable entity whose components lack individual distinction. It is significant at the local level as it reflects the growing popularity of vacation homes and recreation sites in the Klamath River Basin in the 1960s and 1970s as evident by the small scale A-frame cabins and minimal traditional and ranch style residences built around the lake. The period of significance is 1964-1975, representing the two primary periods of development on each side of the lake.

NRHP Criterion D
Development of the District is well documented and its above ground components are unlikely to yield additional important historical information. Therefore, the District is not significant under NRHP Criterion D.

Integrity Analysis

The District retains all seven aspects of historic integrity: location, design, setting, materials, workmanship, feeling, and association. The District remains on its original location around Copco Lake and continues to provide permanent and temporary housing, thus supporting the retention of integrity of location, setting, and association. Construction of 64 residential properties after the period of significance (1964-1975) and substantial alterations to 12 pre-1976 properties has diminished the District's integrity of design, materials, and workmanship. Properties constructed after the period of significance were generally developed on the same roads and feature similar designs as properties built during the period of significance. The majority of the post-1975 properties provided infill to the existing development patterns envisioned by Clifford. Although properties constructed post-1975 reflect similar architectural styles of earlier properties, their construction materials and methods varied, particularly the properties developed in the 21st century. Thus integrity of materials and workmanship has been diminished. The District continues to exhibit the neighborhood's design characteristics envisioned by Clifford in the 1960s and 1970s, including the combination of small cabin sites and larger ranch properties oriented towards the lake. Therefore, the integrity of design and feeling has been retained.

Location *is the place where the historic property was constructed or the place where the historic event took place.* Copco Lake Recreational Residences retains integrity of location, because the historic resources remain in their original locations.

Design *is the composition of elements that constitute the form, plan, space, structure, and style of a property.* Copco Lake Recreational Residences generally retains integrity of design. Construction of 64 residential properties after the period of significance (1964-1975) and substantial alterations to 12 pre-1976 properties has diminished the District's integrity of design. Properties constructed after the period of significance were generally developed on the same roads and feature similar designs as properties built during the period of significance. The majority of the post-1975 properties provided infill to the existing development patterns envisioned by Clifford.

Setting *is the physical environment of a historic property that illustrates the character of the place.* Copco Lake Recreational Residences retains integrity of setting. The District continues to exhibit the neighborhood's design characteristics envisioned by Clifford in the 1960s and 1970s, including the combination of small cabin sites and larger ranch properties oriented towards the lake.

Materials *are the physical elements combined in a particular pattern or configuration to form the historic property.* Copco Lake Recreational Residences retains integrity of materials. Construction of 64 residential properties after the period of significance (1964-1975) and substantial alterations to 12 pre-1976 properties has diminished the District's integrity of materials. Although properties constructed post-1975 reflect similar architectural styles of earlier properties, their construction materials varied, particularly the properties developed in the 21st century.

Workmanship *is the physical evidence of the crafts of a particular culture or people during any given period of history.* Copco Lake Recreational Residences retains integrity of workmanship. Construction of 64 residential properties after the period of significance (1964-1975) and substantial alterations to 12 pre-1976 properties has diminished the District's integrity of workmanship. Although properties constructed post-1975 reflect similar architectural styles of earlier properties, their construction materials and methods varied, particularly the properties developed in the 21st century.

D6. 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 District continues to exhibit the neighborhood's design characteristics envisioned by Clifford in the 1960s and 1970s, including the combination of small cabin sites and larger ranch properties oriented towards the lake. Therefore, the District retains integrity of feeling.

***Association** is the direct link between a property and the event or person for which the property is significant.* The District continues to provide permanent and temporary housing adjacent to Copco Lake and other recreation areas, directly linking the property with its historic use. Therefore the integrity of association is retained.

D6. Significance (continued):

Copco Lake Recreational Residences is locally (regionally) significant in the areas of Community Planning and Development, Entertainment/Recreation, and Architecture and retains integrity. However, due to more non-contributing resources (77) than contributing resources (50) the district is not eligible.

Copco Lake Recreational Residences	**Function**	**Construction/ Alterations**	**AECOM NRHP Recommendations and Criteria: A, B, C, D**
26516 Copco Road	Residence	2002	Non-contributing/out of period
26734 Copco Road	Residence	2002	Non-contributing/out of period
26834 Copco Road	Residence	1983	Non-contributing/out of period
26938 Copco Road	Residence	1984	Non-contributing/out of period
27004 Copco Road	Residence	1971	Non-contributing
27008 Copco Road	Residence	1971	Non-contributing
27134 Copco Road	Residence	1978	Non-contributing/out of period
27204 Copco Road	Residence	1969	Contributing
27320 Copco Road	Residence	1981	Non-contributing/out of period
27334 Copco Road	Store/Residence	1969	Contributing
27608 Copco Road	Residence	1976	Non-contributing/out of period
27700 Copco Road	Residence	1979	Non-contributing/out of period
27716 Copco Road	Residence	c.1979	Non-contributing/out of period
27734 Copco Road	Residence	1969	Contributing
27738 Copco Road	Residence	1983	Non-contributing/out of period
27800 Copco Road	Residence	1978	Non-contributing/out of period
27805 Copco Road	Fire Department	c.1969	Contributing
27813 Copco Road	Residence	2001	Non-contributing/out of period
27834 Copco Road	Residence	1979	Non-contributing/out of period
15738 Patricia Avenue	Residence	1967	Contributing
15830 Patricia Avenue	Residence	1973	Contributing
15835 Patricia Avenue	Residence	1969	Contributing
15841 Patricia Avenue	Residence	2006	Non-contributing/out of period
15935 Patricia Avenue	Residence	1973	Contributing
15939 Patricia Avenue	Residence	1973	Non-contributing
16104 Patricia Avenue	Residence	1973	Non-contributing
16139 Patricia Avenue	Residence	1969	Non-contributing
16141 Patricia Avenue	Residence	1970	Contributing
16200 Patricia Avenue	Residence	1979	Non-contributing/out of period
16338 Patricia Avenue	Residence	1970	Contributing
16418 Patricia Avenue	Residence	2008	Non-contributing/out of period
16490 Patricia Avenue	Fire Department	c.1970	Contributing
16500 Patricia Avenue	Residence	2010	Non-contributing/out of period
16509 Patricia Avenue	Residence	1968	Contributing
16631 Patricia Avenue	Residence	1978	Non-contributing/out of period
16635 Patricia Avenue	Residence	1977	Non-contributing/out of period

Copco Lake Recreational Residences	Function	Construction/ Alterations	AECOM NRHP Recommendations and Criteria: A, B, C, D
16705 Patricia Avenue	Residence	1969	Contributing
16739 Patricia Avenue	Residence	1979	Non-contributing/out of period
16801 Patricia Avenue	Residence	1968	Contributing
16805 Patricia Avenue	Residence	1968	Contributing
16817 Patricia Avenue	Residence	1977	Non-contributing/out of period
16900 Patricia Avenue	Residence	1979	Non-contributing/out of period
17004 Patricia Avenue	Residence	1967	Contributing
17011 Patricia Avenue	Residence	1976	Non-contributing/out of period
17025 Patricia Avenue	Residence	1967	Contributing
17105 Patricia Avenue	Residence	1969	Non-contributing
17107 Patricia Avenue	Residence	1997	Non-contributing/out of period
17125 Patricia Avenue	Residence	1967	Contributing
17411 Patricia Avenue	Residence	1969	Contributing
17433 Patricia Avenue	Residence	2000	Non-contributing/out of period
17501 Patricia Avenue	Residence	1984	Non-contributing/out of period
17601 Patricia Avenue	Residence	1978	Non-contributing/out of period
17635 Patricia Avenue	Residence	1984	Non-contributing/out of period
17700 Patricia Avenue	Residence	1967	Non-contributing
17705 Patricia Avenue	Residence	1977	Non-contributing/out of period
18202 Patricia Avenue	Residence	1988	Non-contributing/out of period
18205 Patricia Avenue	Residence	1969	Contributing
18424 Patricia Avenue	Residence	1986	Non-contributing/out of period
19418 Patricia Avenue	Residence	2008	Non-contributing/out of period
17114 Janice Avenue	Residence	1990	Non-contributing/out of period
17116 Janice Avenue	Residence	1974	Contributing
17117 Janice Avenue	Residence	1970	Contributing
17130 Janice Avenue	Residence	1984	Non-contributing/out of period
17131 Janice Avenue	Residence	2004	Non-contributing/out of period
17139 Janice Avenue	Residence	1969	Contributing
17143 Janice Avenue	Residence	1975	Contributing
17147 Janice Avenue	Residence	1967	Contributing
16634 Jacqueline Avenue	Residence	1965	Contributing
16720 Jacqueline Avenue	Residence	1976	Non-contributing/out of period
16738 Jacqueline Avenue	Residence	1969	Contributing
16812 Jacqueline Avenue	Residence	1975	Contributing
16838 Jacqueline Avenue	Residence	1966	Contributing
16900 Jacqueline Avenue	Residence	1972	Contributing
18604 Ager Beswick Road	Residence	c.1965	Contributing
18635 Ager Beswick Road	Residence	1984	Non-contributing/out of period
18825 Ager Beswick Road	Residence	1967	Non-contributing
19001 Ager Beswick Road	Residence	1966	Contributing
19003 Ager Beswick	Residence	1966	Contributing

Copco Lake Recreational Residences	Function	Construction/ Alterations	AECOM NRHP Recommendations and Criteria: A, B, C, D
Road			
19125 Ager Beswick Road	Residence	1979	Non-contributing/out of period
19225 Ager Beswick Road	Residence	1968	Contributing
20202 Ager Beswick Road	Residence	2004	Non-contributing/out of period
20204 Ager Beswick Road	Residence	1967	Contributing
20231 Ager Beswick Road	Residence	1966	Contributing
20238 Ager Beswick Road	Residence	2011	Non-contributing/out of period
20333 Ager Beswick Road	Residence	2007	Non-contributing/out of period
20421 Ager Beswick Road	Residence	1968	Contributing
20439 Ager Beswick Road	Residence	2009	Non-contributing/out of period
20638 Ager Beswick Road	Residence	1966	Contributing
20701 Ager Beswick Road	Residence	1964	Contributing
20709 Ager Beswick Road	Residence	1965	Contributing
20738 Ager Beswick Road	Residence	1966	Non-contributing
20805 Ager Beswick Road	Residence	1966	Contributing
20815 Ager Beswick Road	Residence	1977	Non-contributing/out of period
20820 Ager Beswick Road	Residence	1965	Contributing
20841 Ager Beswick Road	Residence	1970	Contributing
20900 Ager Beswick Road	Residence	1977	Non-contributing/out of period
21000 Ager Beswick Road	Residence	1964	Contributing
21036 Ager Beswick Road	Residence	2001	Non-contributing/out of period
21115 Ager Beswick Road	Residence	1966	Non-contributing
21116 Ager Beswick Road	Residence	1972	Contributing
21118 Ager Beswick Road	Residence	1977	Non-contributing/out of period
21204 Ager Beswick Road	Residence	2008	Non-contributing/out of period
21205 Ager Beswick Road	Residence	1968	Non-contributing
21235 Ager Beswick Road	Residence	1935	Non-contributing/out of period

Copco Lake Recreational Residences	Function	Construction/ Alterations	AECOM NRHP Recommendations and Criteria: A, B, C, D
16138 Valerie Road	Residence	1969	Contributing
16000 Klamath View Drive	Residence	1999	Non-contributing/out of period
16109 Klamath View Drive	Residence	1994	Non-contributing/out of period
16124 Klamath View Drive	Residence	1985	Non-contributing/out of period
16204 Klamath View Drive	Residence	1993	Non-contributing/out of period
16220 Klamath View Drive	Residence	1979	Non-contributing/out of period
27817 Quail Lane	Residence	1979	Non-contributing/out of period
27820 Quail Lane	Residence	1971	Contributing
27830 Quail Lane	Residence	1978	Non-contributing/out of period
27838 Quail Lane	Residence	1984	Non-contributing/out of period
27904 Quail Lane	Residence	1973	Contributing
27906 Quail Lane	Residence	1970	Non-contributing
27916 Quail Lane	Residence	1978	Non-contributing/out of period
27924 Quail Lane	Residence	1969	Contributing
27931 Quail Lane	Residence	1969	Contributing
27938 Quail Lane	Residence	1977	Non-contributing/out of period
27939 Quail Lane	Residence	1979	Non-contributing/out of period
27713 Teal Road	Residence	1990	Non-contributing/out of period
27716 Teal Road	Residence	1999	Non-contributing/out of period
27801 Teal Road	Residence	1978	Non-contributing/out of period
27825 Mallard Road	Residence	1981	Non-contributing/out of period
27912 Mallard Road	Residence	1989	Non-contributing/out of period
27930 Mallard Road	Residence	1983	Non-contributing/out of period

D7. References (continued):

Bowden, J.

2002 Land, Lumber Companies and Mills in the Klamath Basin – 1864 – 1950. The Timber Industry in the Klamath Basin. *The Journal of the Shaw Historical Library* 16. Archived at Oregon Institute of Technology.

Boyle, John C.

1976 *50 Years on the Klamath*. Klocker Printery, Medford, Oregon. First printing 1976, second printing 1982.

Cumming, A. M., and Allan Dunn

1911 The Klamath Region. In *California for the Sportsman*. Southern Pacific, San Francisco, California.

Democrat & Chronicle

2020 Bridge Inspections: Copco Road Over Klamath River. Electronic document, https://data.democratandchronicle.com/bridge/california/siskiyou/copco-road-klamath-river/06-02C0039/, accessed February 5, 2020.

Evening Herald [Klamath Falls, Oregon]

1916a "Power Plant Makes Town." 21 November. Klamath Falls, Oregon.

1916b "Large Lake Is Formed By Dam." 24 November. Klamath Falls, Oregon.

1917 "Big Copco Dam Is Finally Finished." 14 November. Klamath Falls, Oregon.

D7. References (continued):

Ford, Phil

1973 Steelhead Run Fast. *The Times* 13 December. San Mateo, California.

Foster, D.

2002 Refuges and Reclamation: Conflicts in the Klamath Basin, 1904-1964. *Oregon Historical Quarterly* 103(2):150-187.

French, Eugene H.

1915 *Siskiyou County, California*. Issued by The Board of Supervisors and the Panama-Pacific International Exposition Commission of Siskiyou County, California. Electronic document, http://soda.sou.edu/awdata/060307a1.pdf, accessed July 10, 2018.

Freeman, Jim

1967 Copco Lake Smorgasbord. *The Argus* 20 October. Freemont, California.

1968 Outdoors Dateline: Copco Lake is Hard to Beat. *The Argus* 16 October 16. Freemont, California.

Heileman, W. H.

1908 The Klamath Irrigation Project. US Reclamation Service (Southern Oregon Historical Society, John C. Boyle Collection, Box 3, Vol. 7, Set #2/Klamath River).

Herald and News [Klamath Falls, Oregon]

1959 "Bogus School Holds Picnic." 9 June. Klamath Falls, Oregon.

Jaffray, Frank

1969 Inside on the Outside… *Valley Times* 8 August. Pleasanton, California.

Jenkins, Bill

1960 Copco Lake Proposed as New Park Site. *Herald and News* 10 January. Klamath Falls, Oregon.

Jones, J. Roy

1953 *Saddle Bags in Siskiyou*. News-Journal Print Shop, Yreka, California.

Kenneth R. Anderson and Company

1960 *Recreation Potential Upper Klamath River Basin*. Study on Recreation Potential of Upper Klamath River (Prepared for Copco). Kenneth R. Anderson and Company, Roseville, CA. On file at PacifiCorp Archives, Portland, Oregon.

Klamath County Historical Society (KCHS)

1984 *The History of Klamath Country Oregon*. On file at the University of Washington Special Collections, Seattle, Washington.

Kramer

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

2003b *Request for Determination of Eligibility: Klamath Hydroelectric Project, FERC No. 2082*. Prepared for PacifiCorp in Portland, Oregon.

Los Angeles Times [Los Angeles, California]

1965 "Copco Lake." 25 April. Los Angeles, California.

Mail Tribune [Medford, Oregon]

1917 "Local and Personal." 27 November. Medford, Oregon.

1937 "Forest Affords Fishing, Camping and Scenic Trips." 16 July. Medford, Oregon.

1961 "Copco Lake Subject of Magazine Article." 3 May. Medford, Oregon.

McAlester, Virginia Savage

2013 *A Field Guide to American Houses: The Definitive Guide to Identifying and Understanding America's Domestic Architecture*. Alfred A. Knopf, New York.

Merrick, C.B.

1918 The New Copco Development. *Journal of Electricity* 41(4):150-152. 15 August. Available at Google Books.

Morgensen, Andy

1965 Copco Lake Trout Fry. *Oakland Tribune* 10 May. Oakland, California.

1967 Head Out for Trout. *Oakland Tribune* 21 July. Oakland, California.

Most, S.

2018 Klamath Basin Project (1906). In *The Oregon Encyclopedia*. Electronic document, https://oregonencyclopedia.org/articles/klamath_basin_project_1906_/#.W0Ubf02WzZM, accessed July 10, 2018.

Neal, Ed

1973 Copco: A Fine Lake on Klamath. *San Francisco Examiner* 19 August. San Francisco, California.

Oakland Tribune [Oakland, California]

1915 "Hasten Work on Big Dam at Copco." 31 December. Oakland, California.

Oregon Daily Journal [Portland, Oregon]

1916 "New Power Town Just Over The Line." 23 November. Portland, Oregon.

Oregonian [Portland, Oregon]

1917 "Big Power Plant Near Completion." 8 October. Portland, Oregon.

PacifiCorp

2004 *Cultural Resources Final Technical Report and Associated Confidential Appendices. Klamath Hydroelectric Project FERC No. 2082*. PacifiCorp, Portland, Oregon.

Radke, Walt

1965 Easy Trout Limits from Klamath Near Copco Lake. *San Francisco Examiner* 12 May. San Francisco, California.

Sacramento Bee [Sacramento, California]

1917 "Great Power Project on Klamath near Completion: California-Oregon Power Company Rushes Finishing Touches." 8 November. Sacramento, California.

1922 "Work of Enlarging Copco Power Plant is Rushed." 9 September. Sacramento, California.

1959 "Copco Lake Survey Boosts Park Plan." 15 November. Sacramento, California.

State of California Department of Natural Resources (SCDNR)

1960 *A State Park Proposal at Copco Reservoir at Copco Reservoir, Siskiyou County, California*. An analysis of feasibility as requested by Senate Resolution No. 102, February 1, 1960. Electronic document, https://calisphere.org/item/ark:/86086/n29s1s3x/, accessed February 5, 2020.

Shelby, Bo and Kristen Stein

1984 *Recreational Use and Carrying Capacity for the Klamath River*. Water Resources Research Institute, College of Forestry, Oregon State University, Corvallis, Oregon. July.

Siskiyou County Department of Public Works

1986 *Initial Study: Klamath River Bridge No. 10M1 2C-39 on Copco Road No. 9K02 at Head of Copco Lake.* On file at Siskiyou County Department of Public Works, Yreka, California.

State of California Wildlife Conservation Board (SCWCB)

1958 *Minutes, Meeting of April 30, 1958*. Electronic document, https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=98131, accessed February 5, 2020.

Sunset Magazine

1961 Montague to Redding. *Sunset* Magazine. May edition. Electronic document, https://archive.org/stream/sunset126maysout/sunset126maysout_djvu.txt, accessed July 3, 2018.

University of California Riverside (UC Riverside)

n.d. *Copco Lake: Correspondence, Feasibility Studies, Photographs, etc. Regarding Establishment of a State Park at Copco Reservoir*. Frank L. Lathrop Papers, UC Riverside, Library, Water Resources Collections and Archives. Electronic document, https://calisphere.org/item/ark:/86086/n29s1s3x/?order=1, accessed February 5, 2020.

United States Bureau of Reclamation and California Department of Fish and Game (USBR and CDFG)

2012 *Klamath Facilities Removal Final EIS/EIR*. US Department of Interior, Bureau of Reclamation and California Department of Fish and Game.

United States Geological Survey

1934 Macdoel Quadrangle, Siskiyou County, California. U.S. Geological Survey Topographic Map. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#14/41.9791/-122.2924, accessed August 3, 2020.

Valley Times [North Hollywood, California]

1969 “Copco Trout Angling Shows Big Improvement.” 6 June. North Hollywood, California.

W.H. Clifford Co.

1963 *Exclusive Copco Lake Acreage*. On file at PacifiCorp Archives, Portland, Oregon.

Western Historical Publishing Company

1905 *An Illustrated History of Central Oregon Embracing Wasco, Sherman, Gilliam, Wheeler, Crook, Lake and Klamath Counties*. Western Historical Publishing Company, Spokane, WA.

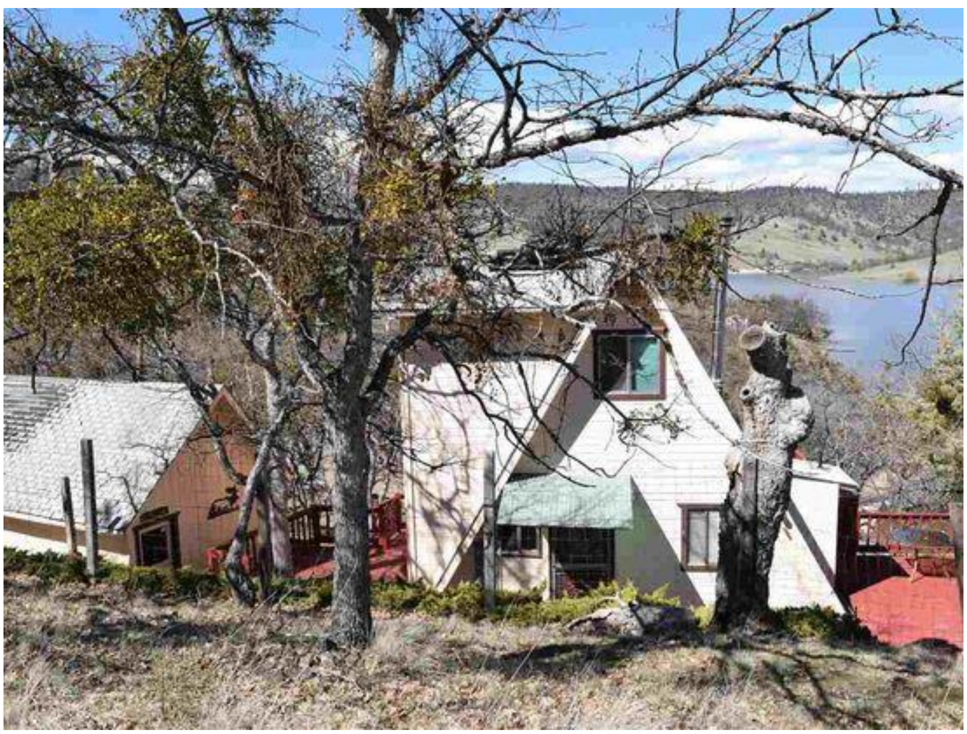
Photographs:

Photograph 1. Minimal Traditional style residence at 17411 Patricia Avenue, viewing north.

Photograph 2. Ranch style residence at 27820 Quail Lane, viewing south.

Photographs (continued):

Photograph 3. A-frame cabin at 15830 Patricia Avenue, viewing north.



Photograph 4. A-frame cabin at 17700 Patricia Avenue with large two-story addition (left) and small one-story addition (right), viewing north.

Photographs (continued):

Photograph 5. Contemporary style residence at 15835 Patricia Avenue, viewing southwest.

Photograph 6. Utilitarian style building at 16490 Patricia Avenue, viewing southwest.

Photographs (continued):

Photograph 7. Copco Lake (left), Keaton Cover (center-right), and residences with boat ramps along Ager Beswick Road (background), viewing east.

Photograph 8. Copco Lake (left) and residences along Ager Beswick Road (middle ground and background), viewing east.

Photographs (continued):

Photograph 9. Copco Lake with Copco Road residences in background, viewing north.

Photograph 10. Copco Lake and residence with boat dock at 26834 Copco Road, viewing southeast.

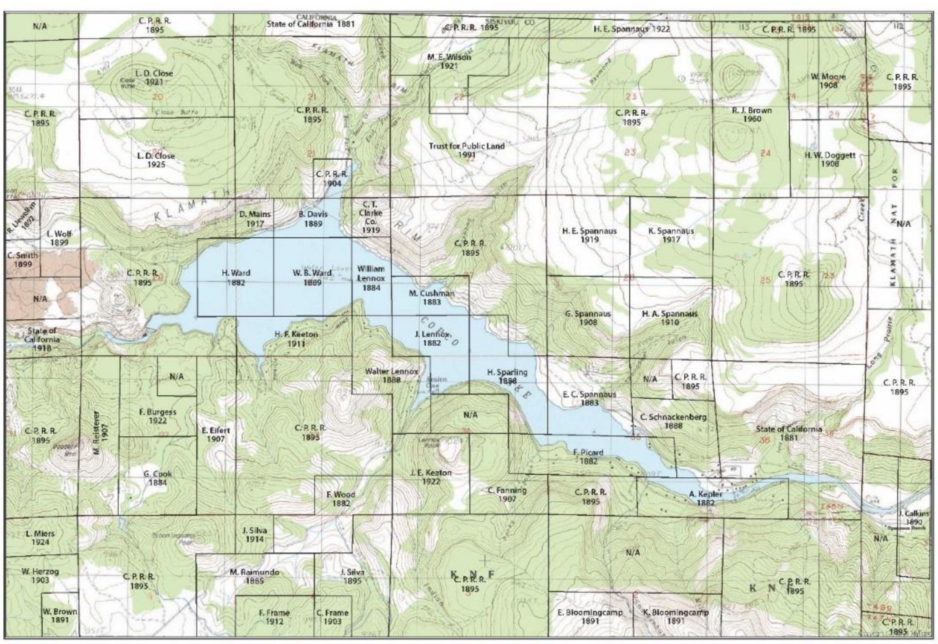
Photographs (continued):

Photograph 11. Copco Road with residences in foreground and background and Copco Lake (right), viewing southeast.

Photograph 12. Copco Bridge crossing Klamath River with residences and boat docks in background, viewing north.

Photographs (continued):

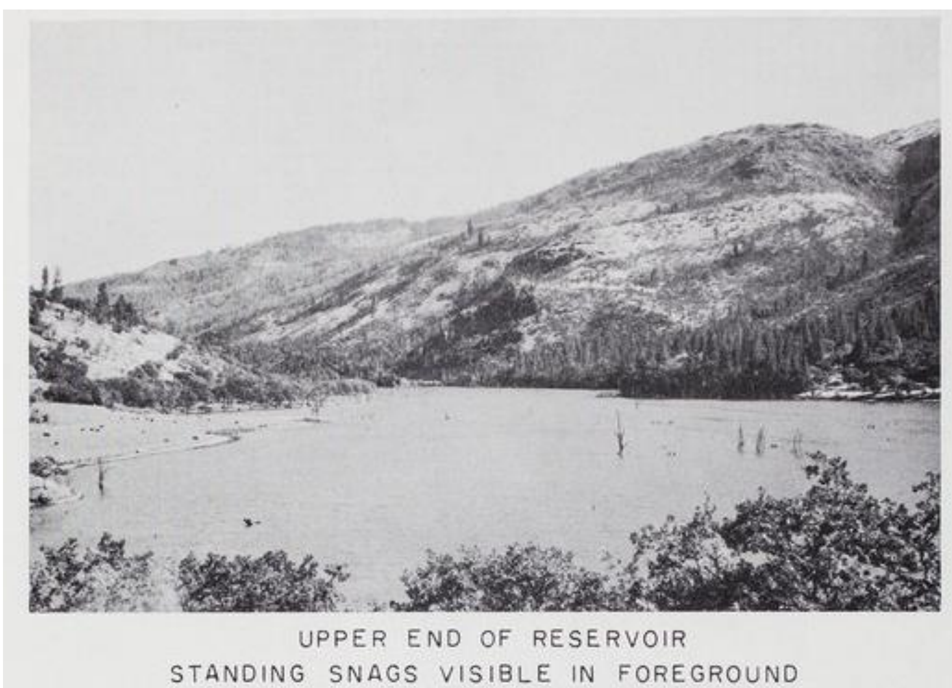
Photograph 13. Overview of Lennox Ranch (foreground) and Raymond and Mary Ward ranches (background). Area is currently inundated by Copco Lake (1910 photograph from John C. Boyle Collection, Southern Oregon Historical Society).



Photograph 14. Copco Lake land patents before inundation.

Photographs (continued):

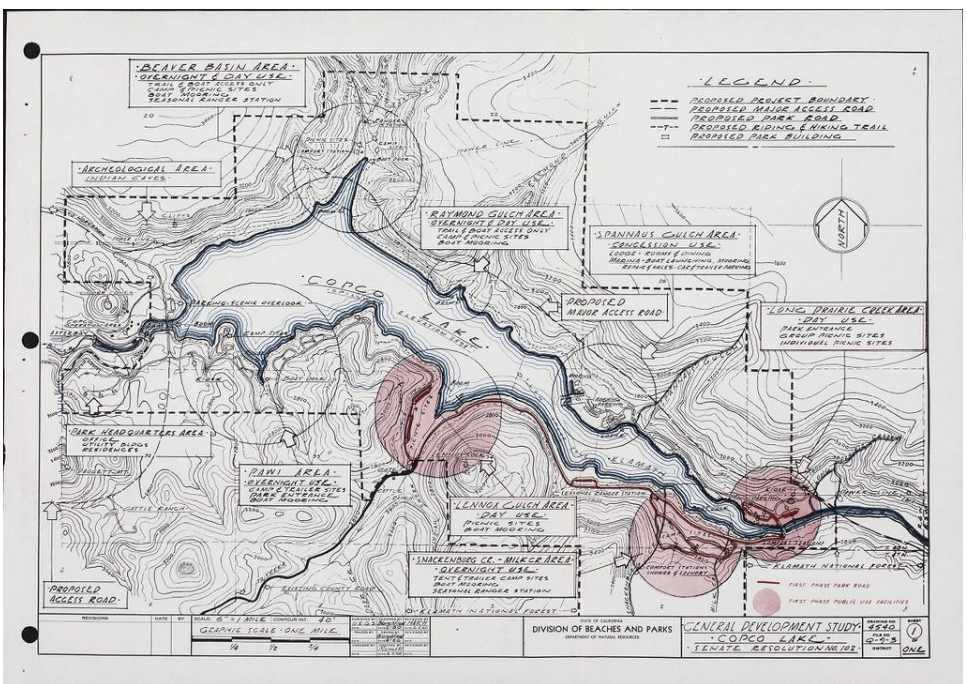
Photograph 15. Copco No. 1 showing Powerhouse, Dam, and Gatehouse No. 1, December 1917 (Courtesy of John C. Boyle Collection, Southern Oregon Historical Society).



Photograph 16. Upper end of Copco Lake with standing snags visible in foreground c. 1958 (State of California Department of Natural Resources 1960).

Photographs (continued):

Photograph 17. Copco Lake circa 1962 (U.C. Riverside n.d.)



Photograph 18. Proposed plan for state park at Copco Lake circa 1959 (SCDNR 1960).

State of California - The Resources Agency DEPARTMENT OF PARKS AND RECREATION **PRIMARY RECORD**	Primary # HRI # Trinomial **NRHP Status Code** 6Z

Other Listings
Review Code Reviewer Date

 Resource Name or #: R-Ranch Klamath River Campground (FS-3)

P1. Other Identifier: R-Ranch Klamath River Campground Old Children's Lodge
***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**

- ***a. County** Siskiyou
- ***b. USGS 7.5' Quad** Iron Gate Reservoir, CA **Date** 2022 **T** 47N; **R** 5W; NE1/4 of SE 1/4 of **Sec** 19; Mount Diablo B.M.
- c. Address 225 Ditch Creek Road City Hornbrook Zip 96044
- 4. UTM: Zone 10 T, 544538mE/ 4639613mN
- e. Other Locational Data: N/A

***P3a. Description:**

The R-Ranch Klamath River Campground (R-Ranch) property is located on Copco Road, Hornbrook, California and consists of the Old Children's Lodge, R-Ranch Lodge, two restrooms, and several campsites with RV electrical hookups. Each of the resources are accessed by a private driveway off Copco Road. The R-Ranch Lodge is located closest to the entrance on the north side of the property and the Old Children's Lodge and campsites are further south. The c. 1971 Old Children's Lodge is a one-story building designed in the Ranch architectural style. It includes a side-gable roof finished with composite shingles. The roof extends out over the rear of the building and is supported by five wood beams to provide cover to a concrete patio. The building appears to include a concrete slab on grade foundation and wood board siding. The gable eaves include vertical wood board siding. The west elevation consists of two symmetrically spaced three-lite windows and the east elevation includes a sliding glass door near the north end. The north elevation appears to include a window with wood framing. The south elevation is not visible. The building is currently used for storage. Changes to the building include a nonhistorical screen door on the east elevation and nonhistorical roofing material. Only the Old Children's Lodge was documented as the other resources on the property would not be affected by the Project.

***P3b. Resource Attributes:** (HP5) Hotel/motel; (HP33) Farm/ranch
***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)
P5a. Photograph:

P5b. Description of Photo: Old Children's Lodge east elevation, viewing west (2019).

***P6. Date Constructed/Age and Source:**
☒ Historic, c.1971

***P7. Owner and Address:**
Everett H. Williams Trust, 225 Ditch Creek Rd, Hornbrook, CA 96044

***P8. Recorded by:**
Tim Wood, AECOM
888 SW 5th Ave, Suite 600
Portland, OR 97204

***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 #:** R-Ranch Klamath River Campground (FS-3) ***NRHP Status Code:** 6Z

B1. Historic Name: R-Ranch Klamath River Campground Old Children's Lodge
B2. Common Name: R-Ranch Klamath River Campground Old Children's Lodge
B3. Original Use: Lodge
B4. Present Use: Storage
B5. Architectural Style: Ranch
B6. Construction History:
United States Geological Survey (USGS) maps depict little development in the surrounding area until 1922 when present-day Copco Road is illustrated with a few properties to the north and southwest (USGS 1922). By 1941 a railroad line is depicted on the south side of the river (USGS 1941). Footbridges to the north and south of the property are identified in a 1954 map (USGS 1954). By 1984, R-Ranch Lodge, Old Children's Lodge, restrooms, and the campground are all depicted as well as several more structures to the north along Copco Road (USGS 1984). The R-Ranch was a subdivision created by Oakland developer Jeff Dennis circa 1971. Dennis initially attempted a typical subdivision development project, but the proposal was rejected by voters in October 1971. In response, Dennis developed a new concept where owners would purchase undivided interests in the property. Dennis advertised 1-2500 interests in R-Ranch, which entitled owners access the property. Each interest initially sold for $4,590. Planned improvements to the property in 1971 included 857 campsites, bunkhouse, stables, tennis courts, swimming pool, teen center (likely now called the Old Children's Lodge), and club house. It appears the R-Ranch was one of the first undivided subdivisions in the state of California (*The Press Democrat* 1971). Advertisements from the mid-1970s describe the R-Ranch as 5,119 acres with onsite activities including riding horses, swimming, camping on the river, hunting, playing tennis, panning gold, riding Hondas, playing bingo, and dancing. Both snow and water skiing are described within proximity to the ranch (*The Times Standard* 1974, 1975).

B7. Moved? No
B8. Related Features: The Old Children's Lodge, R-Ranch Lodge, two restrooms, and several campsites with RV electrical hookups are all part of the campground.

B9a. Architect: Unknown **b. Builder:** Unknown

B10. Significance:
R-Ranch Klamath River Campground, including the Old Children's Lodge, was constructed circa 1971 as a 5,119-acre recreation property with onsite activities including riding horses, swimming, camping by the river, hunting, playing tennis, panning gold, riding ATVs, playing bingo, and dancing. Newspaper research indicates the property was one of the first undivided subdivisions in the state of California. Newspaper and archival research did not identify any additional information about the site's construction or use.
Theme: Entertainment/Recreation
Area: Northern California
Period of Significance: c.1971
Property Type: Campground
Applicable Criteria: N/A

B11. Additional Resource Attributes: N/A

B12. References: See Continuation Sheet

B13. Remarks: None
B14. Evaluator: Tim Wood and Erin Swicegood, AECOM
888 SW 5th Avenue, Suite 600
Portland, OR 97204

Date of Evaluation: April 21, 2022

(This space reserved for official comments.)

Evaluation

Criteria Analysis

NRHP Criterion A
While associated with one of the first large undivided subdivisions in the State of California, the Old Children's Lodge relates to the amenities located in the shared campground portion of the development and could be eligible for its associations with historic events or patterns of events associated with the rural land development in the 1970s.

NRHP Criterion B
The Old Children's Lodge at the R-Ranch Klamath River Campground is associated with developer Jeff Dennis who implemented a relatively unique way of creating affordable undivided subdivisions for the purpose of creating recreational opportunities for a wider economic range of Californians. The Old Children's Lodge, therefore, could be eligible due to its direct associations with the Jeff Dennis and his ideas about inexpensive recreational opportunities for families in the early 1970s and therefore could be significant under NRHP Criterion B.

NRHP Criterion C
The Old Children's Lodge at the R-Ranch Klamath River Campground 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 Old Children's Lodge at the R-Ranch Klamath River Campground is not significant as a source (or likely source) of important information regarding history. 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 Old Children's Lodge at the R-Ranch Klamath River Campground retains integrity of location, setting, materials, workmanship.

Location *is the place where the historic property was constructed or the place where the historic event took place.* The Old Children's Lodge at the R-Ranch Klamath River Campground remains at its original building site adjacent to 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.* The design of the Old Children's Lodge at the R-Ranch Klamath River Campground is minimally intact since its original construction as it does not convey the design of a building used by children at the campground since its conversion into a storage building.

Setting *is the physical environment of a historic property that illustrates the character of the place.* The Old Children's Lodge at the R-Ranch Klamath River Campground retains integrity of setting in the remote, mostly 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 Old Children's Lodge at the R-Ranch Klamath River Campground continues to exhibit a majority of the original materials and the craftsmanship of its builders. Therefore, it retains 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 Old Children's Lodge at the R-Ranch Klamath River Campground does not retain integrity of feeling because it no longer conveys its original function as a building for children's activities and has been modified to accommodate its current use as a storage building.

Association *is the direct link between a property and the event or person for which the property is significant.* The integrity of association for the Old Children's Lodge is not retained because it no longer conveys its association with the amenities originally available at the campground when it was built due to its change in use and appearance.

While potentially significant under NRHP Criterion A and B, the Old Children's Lodge at the R-Ranch Klamath River Campground does not retain sufficient integrity of design, feeling, and association as it has been altered and is no longer used for its historic purpose. It is therefore not eligible for listing in the NRHP.

B12. References

The Press Democrat. 1971. “Undivided Interest: New Concept May Apply to My Ranch.” 8 November.
The Times Standard. 1974. “Notice.” 15 September.
The Times Standard. 1975. “Notice.” 17 August.
United States Geological Survey (USGS). 1922. Shasta Valley Sheet No. 15, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#14/41.9072/-122.4630.
United States Geological Survey (USGS). 1941. Macdoel, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#14/41.9072/-122.4630.
United States Geological Survey (USGS). 1954. Copco, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#14/41.9072/-122.4630.
United States Geological Survey (USGS). Iron Gate Reservoir. Copco, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#14/41.9072/-122.4630.

Photographs:

Photograph 1. Old Children's Lodge east elevation; view facing west

Photograph 2. Old Children's Lodge north elevation; view facing south

LOCATION MAP

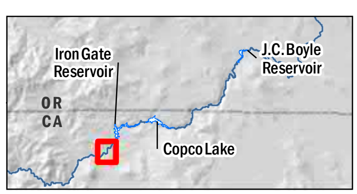
Primary #
HRI#
Trinomial

*Resource Name or #: R-Ranch Klamath River Campground Old Children's Lodge (FS-3)

*Map Name: *Scale: *Date of Map:

See Sketch/Site Map on next page

Resource



0 2,000 Feet
0 600 Meters
1:24,000

R-Ranch Klamath River Campground Old Children's Lodge

225 Ditch Creek Road
FS-3

AECOM
April 2022

Primary #
HRI#

SKETCH MAP

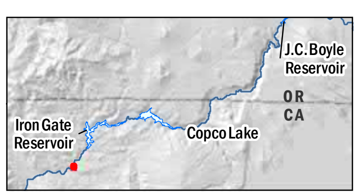
Trinomial

***Resource Name or #:** R-Ranch Klamath River Campground Old Children's Lodge (FS-3)

***Map Name:** ***Scale:** ***Date of Map:**

See Sketch/Site Map on next page

Resource



N

0 300 Feet

0 50 Meters

1:1,800

R-Ranch Klamath River Campground Old Children's Lodge

225 Ditch Creek Road

FS-3

AECOM

April 2022

State of California - The Resources Agency DEPARTMENT OF PARKS AND RECREATION **PRIMARY RECORD**	Primary # HRI # Trinomial **NRHP Status Code** 6Z

Other Listings
Review Code Reviewer Date

 Resource Name or #: Pedestrian Bridge 1 (FS-B-1)

P1. Other Identifier: Pedestrian Bridge 1 (FS-B-1)
***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**
***a. County** Siskiyou
***b. USGS 7.5' Quad** Iron Gate Reservoir, CA **Date** 2021 **T** 47N; **R** 5W; SW1/4 of SW 1/4 **of Sec** 19; Mount Diablo B.M.
c. Address 5230 Copco Road City Hornbrook Zip 96044
d. UTM: Zone 10 T, 543445mE/4639196mN
e. Other Locational Data: N/A

***P3a. Description:**

Located at 5230 Copco Road, Pedestrian Bridge 1 was constructed in circa 1954 to provide pedestrian access over the Klamath River and connect transportation routes on the north and south side of the river. The suspension bridge is approximately 220 feet long and oriented northwest to southeast. The bridge deck is supported by four steel suspension cables hung between two vertical wood structures on each side of the river. The bridge deck rests on two suspension cables and two more cables are positioned above to secure metal grid fencing on each side of the bridge deck. The suspension cables are anchored to each hillside with eyebolts. The bridge deck is approximately 4 feet wide and consists of narrow wood boards that are flanked by short perpendicular wood boards. The wood support structure on the northwest side of the river is constructed of two large vertical square wood columns connected by horizontal wood braces near the top and base. The structure and first few feet of the bridge deck exhibit signs of fire damage. A chain link pedestrian door with a very large metal surround is attached to the bridge approximately 20 feet from the hillside on the northwest side of the river. The southeast end of the bridge is highly obscured from the public right-of-way. A small metal chest with a forward-facing access door rests on top of a suspension cable on the northwest side of the river.

***P3b. Resource Attributes:** (HP19) Bridge
***P4. Resources Present:** ☒ Structure ☐ Element of District
P5a. Photograph:

P5b. Description of Photo: Pedestrian Bridge 1, viewing south (2019).

***P6. Date Constructed/Age and Source:** ☒ Historic, c.1954

***P7. Owner and Address:** Unknown, 5230 Copco Road, Hornbrook, CA 96044

***P8. Recorded by:**
Tim Wood, AECOM
888 SW 5th Ave, Suite 600
Portland, OR 97204

***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 #**: Pedestrian Bridge 1 (FS-B-1) ***NRHP Status Code**: 6Z

B1. Historic Name:
B2. Common Name: Pedestrian Bridge 1 (FS-B-1)
B3. Original Use: Pedestrian bridge
B4. Present Use: Pedestrian bridge
B5. Architectural Style: Suspension bridge
B6. Construction History:
Pedestrian Bridge 1 (FS-B-1) was constructed by 1954 to provide pedestrian passage over the Klamath River. The bridge first appears on United States Geological Survey (USGS) maps in 1954 (USGS 1954). At that time the bridge connected Cedar Gulch and present-day Dry Creek Road to the north and present day Harmony Lane to the south. A field survey indicated the chain link door and large surround were added after the original construction.
B7. Moved? No
B8. Related Features: The bridge appears to be associated with historic trails/roads along Cedar Gulch and present-day Dry Creek Road and Harmony Lane.

B9a. Architect: Unknown **b. Builder:** Unknown

B10. Significance:

Pedestrian Bridge 1 was constructed circa 1954 to connect transportation routes on each side of the Klamath River. USGS maps from 1962 and 1984 identify the bridge but provide no information on additional functions or association with adjacent properties or activities in the region (USGS 1962, 1984). Newspaper and archival research did not identify any additional information about the bridge's construction or use.

Theme: Transportation
Area: Northern California
Period of Significance: c.1954
Property Type: bridge
Applicable Criteria: N/A

B11. Additional Resource Attributes: N/A

B12. References: See continuation sheet

B13. Remarks: None
B14. Evaluator: Tim Wood, AECOM
888 SW 5th Avenue, Suite 600
Portland, OR 97204

Date of Evaluation: April 5, 2022

(This space reserved for official comments.)

Evaluation

Criteria Analysis

NRHP Criterion A
Research does not indicate that the pedestrian bridge is associated with any historic events or patterns of events under NRHP Criterion A.

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

NRHP Criterion C
The pedestrian 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 pedestrian bridge is not significant as a source (or likely source) of important information regarding history. 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 bridge 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.* 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.* The bridge design has remained generally intact since its original construction, except for fire damage and the addition of the chain link door and surround on an unknown date. Therefore, the bridge retains integrity of design.

Setting *is the physical environment of a historic property that illustrates the character of the place.* The bridge retains integrity of setting in the remote, mostly 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.* Despite the addition of the chain link door and surround, the pedestrian bridge continues to exhibit a majority of the original materials and the craftsmanship of its builders. Therefore, it retains 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 pedestrian bridge retains integrity of feeling because it continues to exhibit its historic use of providing pedestrian passage over the Klamath River.

Association *is the direct link between a property and the event or person for which the property is significant.* The integrity of association is retained because the bridge has not undergone any major alterations and has remained at its historic location over the Klamath River.

The bridge retains integrity but is not significant under any NRHP criteria. Therefore, it is not eligible for listing in the NRHP.

B12. References

United States Geological Survey (USGS). 1954. Copco, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8977/-122.4842, accessed April 5, 2022.

United States Geological Survey (USGS). 1962. Copco, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8977/-122.4842, accessed April 5, 2022.

United States Geological Survey (USGS). 1984. Iron Gate Reservoir, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8977/-122.4842, accessed April 5, 2022.

Photographs:

Photograph 1. Pedestrian Bridge 1; view facing south, 2019.

Photograph 2. Pedestrian Bridge 1; view facing south, 2019.

Photographs (continued):

Photograph 3. Pedestrian Bridge 1 with metal chest (right); view facing southeast, 2019.

Photograph 4. Pedestrian Bridge 1 deck with wood planks; view facing south, 2019.

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

Primary #
HRI#
Trinomial

LOCATION MAP

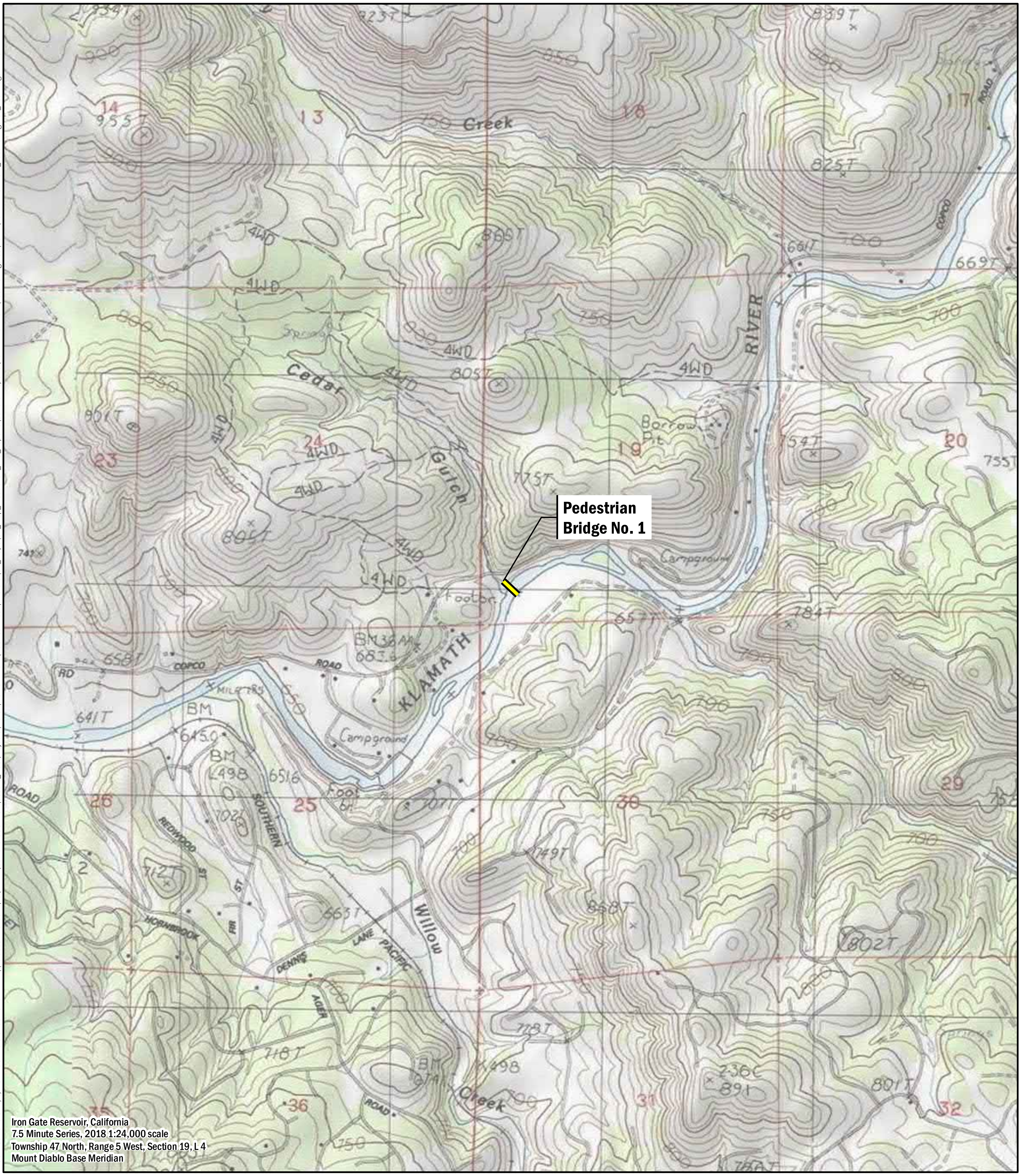
*Resource Name or #: Pedestrian Bridge 2 (FS-B-2)

*Map Name:

*Scale: *Date of Map:

See Sketch/Site Map on next pages.

*Required information

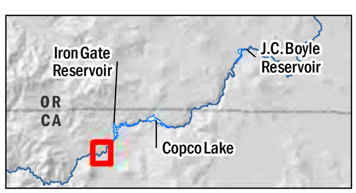


Iron Gate Reservoir, California
7.5 Minute Series, 2018 1:24,000 scale
Township 47 North, Range 5 West, Section 19, L 4
Mount Diablo Base Meridian

AECOM Oakland CA 4/7/2022 USER alexander.remar PATH \\na.aecomnet.com\lfs\AMER\Oakland-USOAK01\Secure_DCS\Projects\Water\Klamath Dam\400-Technical\440 GIS\02_Maps\02_Map_Production_and_Reports\Cultural Reports\BuiltEnvironment\LocationFigures\2022\BuiltEnvironment_LocationFigures_PedBridge1.mxd

Resource

0 2,000 Feet
0 600 Meters
N
1:24,000



Pedestrian Bridge No. 1

Klamath River Dam Removal
Hornbrook, Siskiyou County, California

AECOM
April 2022

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

SKETCH MAP

Primary #
HRI#
Trinomial

***Resource Name or #: Pedestrian Bridge 2 (FS-B-2)**

***Map Name:**

***Scale: *Date of Map:**

See Sketch/Site Map on next pages.

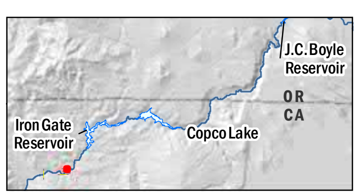
Resource

0 300 Feet

0 50 Meters

N

1:1,800



Pedestrian Bridge No. 1

Klamath River Dam Removal
Hornbrook, Siskiyou County, California

AECOM
April 2022

State of California - The Resources Agency **DEPARTMENT OF PARKS AND RECREATION** **PRIMARY RECORD**	Primary # HRI # Trinomial **NRHP Status Code** 6Z

Other Listings
Review Code　　Reviewer　　Date

 Resource Name or #: Klamath River Country Estates (FS-5, FS-6, FS-7, FS-8)

P1. Other Identifier: Klamath River Country Estates Owner's Association (KRCEOA) Campground Facilities and Office

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

***a. County** Siskiyou

***b. USGS 7.5' Quad** Iron Gate Reservoir, CA **Date** 2022 **T** 47N; **R** 6W; NW1/4 of NE 1/4 **of Sec** 25; Mount Diablo B.M.

c. Address 4701-4799 Whitefish Place City Hornbrook Zip 96044

d. UTM: Zone 10 T, 544538mE/4639613mN

e. Other Locational Data: N/A

***P3a. Description:**

Located at 4701-4799 Whitefish Place, the Klamath River Country Estates Owner's Association Campground Facilities and Office was constructed circa the 1970s. The property is accessed via Copco Road and consists of a storage building (FS-5), lodge (FS-6), office (FS-7), restroom (FS-8), shed, pool equipment shed, propane tank, mobile home, and pedestrian bridge. The property also includes a campground to the west, facing the Klamath River to the south. The campground has at least 15 designated RV and camping sites. The buildings on site reflect the modest American Vernacular Style with simplistic designs and a lack ornamentation. The storage building (FS-5) exhibits an asymmetrical design with one single-lite window on the west façade. The building appears to be clad with horizontal siding and includes an open carport on the southeast elevation. The lodge (FS-6) features a rectangular plan, horizontal siding, , and a side gable roof with overhanging eaves and asphalt shingle cladding. The west elevation includes a three-lite picture window. The office building (FS-7) features a rectangular plan, horizontal siding, and a gable roof clad in asphalt shingles. The south façade has a single pedestrian entrance. The east elevation consists of a pair of pedestrian doors flanked by two square fixed windows. The restroom facility (FS-8) rests on a concrete slab foundation, is clad with horizontal siding, and is topped by a gable roof clad in asphalt shingles. The south façade consists of two pedestrian entrances, two square hopper windows, and a drinking fountain. Two vents are centrally located in the gable on the south façade. Only the Old Storage Building (FS-5), Lodge (FS-6), Office (FS-7), and Restroom (FS-8) were documented as the other resources on the property would not be affected by the Project.

***P3b. Resource Attributes:** (HP13) Community Center/Social Hall; (HP5) Hotel/Motel

***P4. Resources Present:** ☒ Building ☒ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other

P5a. Photograph:

P5b. Description of Photo: View of storage building, lodge, and pool equipment shed (2019).

***P6. Date Constructed/Age and Source:**
☒ Historic, c.1970s

***P7. Owner and Address:**
KRCE, unknown address

***P8. Recorded by:**
Tim Wood, AECOM
888 SW 5th Ave, Suite 600
Portland, OR 97204

***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

***Resource Name or #:** Klamath River Country Estates (FS-5, FS-6, FS-7, FS-8) ***NRHP Status Code:** 6Z

B1. Historic Name: Klamath River Country Estates Campground
B2. Common Name: Klamath River Country Estates Owner's Association (KRCEOA) Campground Facilities and Office
B3. Original Use: Campground
B4. Present Use: Campground
B5. Architectural Style: American Vernacular
B6. Construction History:
The Klamath River Country Estates property was constructed in the c. 1970s. United States Geological Survey (USGS) maps depict minimal development in the surrounding area of the property until 1934 when a single structure is depicted near the east side of the property (USGS 1934). A few properties are also depicted on the south side of the Klamath River and the Klamath City District School and a series of access roads to the northeast. By 1941, more properties are depicted in the surrounding area with larger concentrations on the south side of the Klamath River adjacent to an unidentified railroad (USGS 1941). A historic aerial photograph from 1955 depicts minimal development in the surrounding area (NetrOnline 2022). The pedestrian bridge was constructed by 1954 (USGS 1954). The campground, lodge, pool and playground were all developed by 1974 (KRCE 1974).

B7. Moved? No
B8. Related Features: The property is associated with a shed, pool, pool equipment shed, propane tank, mobile home, and pedestrian bridge.
B9a. Architect: Unknown **b. Builder:** Unknown

B10. Significance:
References to the Klamath River Country Estates first began appearing in advertisements California newspapers in the late 1960s. These advertisements targeted "experienced land salesman" to sell one to twenty-acre parcels along the Klamath River. These advertisements described the parcels near ideal hunting and fishing locations as well as ski resorts and the freeway. The properties were promoted as potential vacation, investment, and retirement opportunities (*San Francisco Examiner* 1968; Los Angeles 1969). The Klamath River Country Estates was associated with a 1973 class action settlement. The defendants, the Boise Cascade companies and other companies and individuals who were engaged in the sale of the described properties were accused of making oral and written representations that were untrue (*Berkeley Daily Gazette* 1973). New advertisements for the Klamath River Country Estates began appearing in Canada in 1976 with offers available to Canadian residents only (*Richmond Review* 1976). Additional advertisements for the Klamath River Country Estates began appearing in the California again in 1979 and the late 1990s and 2000s. The property is associated with the development of recreation facilities along the Klamath River during the 1960s and 1970s.

Theme: Entertainment/Recreation
Area: Northern California
Period of Significance: N/A
Property Type: Campground
Applicable Criteria: N/A

B11. Additional Resource Attributes: N/A

B12. References: See continuation sheet

B13. Remarks: The pedestrian bridge is evaluated in a separate DPR form
B14. Evaluator: Tim Wood and Erin Swicegood,
AECOM
888 SW 5th Avenue, Suite 600
Portland, OR 97204

Date of Evaluation: April 18, 2022

(This space reserved for official comments.)

Evaluation

NRHP Criterion A
The storage building, lodge, office, and restroom at the Klamath River Country Estates Campground relate to the development of recreation facilities along the Klamath River in the late 1960s and 1970s. However, research does not indicate this association justifies significance under NRHP Criterion A.

NRHP Criterion B

Research does not indicate that the property or the four surveyed buildings are associated with any historically significant individuals under NRHP Criterion B.

NRHP Criterion C
The storage building, lodge, office, and restroom at the Klamath River Country Estates Campground 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 is therefore not significant under NRHP Criterion C.

NRHP Criterion D
The storage building, lodge, office, and restroom at the Klamath River Country Estates Campground are not significant as sources (or likely sources) of important information regarding history. 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 storage building, lodge, office, and restroom at the Klamath River Country Estates Campground 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.* The four buildings (FS-5, 6, 7, and 8) at the Klamath River Country Estates Campground remain at their original building site near the Klamath River, 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 design of the four surveyed buildings at Klamath River Country Estates Campground have remained generally intact since their original construction. Therefore, they retain integrity of design.

Setting *is the physical environment of a historic property that illustrates the character of the place.* The four surveyed buildings retain integrity of setting in the remote, mostly 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 four surveyed buildings do not exhibit any major alterations and therefore retain 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 four surveyed buildings at the Klamath River Country Estates Campground retain integrity of feeling because they continue to exhibit their historic use of providing recreational services to visitors to the campground.

Association *is the direct link between a property and the event or person for which the property is significant.* The integrity of association is retained because the four surveyed buildings have not undergone any major alterations and have remained at their historic location at the campground near the Klamath River.

The storage building, lodge, office, and restroom at the Klamath River Country Estates Campground retain integrity but are not significant under any NRHP criteria. Therefore, they are not eligible for listing in the NRHP.

CONTINUATION SHEET

Property Name: Klamath River Country Estates (FS-5, FS-6, FS-7, FS-8)

B12. References

Berkeley Daily Gazette.1973. “Public Notice. Summary of Notice of Proposed Class Action Settlement.” March 29.

Klamath River Country Estates. 1974. Owners Manual. Klamath River Country Estates Owner’s Association, Palo Alto, CA.

Los Angeles Times. 1969. “Experienced Land Salesman!” 23 March.

NetrOnline. 2022. Electronic database, https://www.historicaerials.com/viewer, accessed April 6, 2022.

Richmond Review. 1976. “Canadians can own acreage in Northern California!” July 14.

San Francisco Examiner. 1968. “Wide Open Spaces in Madera County.” 17 September.

United States Geological Survey (USGS). 1934. Copco, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8977/-122.4842, accessed April 5, 2022.

United States Geological Survey (USGS). 1941. Copco, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8977/-122.4842, accessed April 5, 2022.

United States Geological Survey (USGS). 1954. Iron Gate Reservoir, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8977/-122.4842, accessed April 5, 2022.

Photographs:

Photograph 1. Klamath River Country Estates Campground storage building (FS-5), lodge (FS-6), pool, and pool equipment shed, 2019.

Photograph 2. Klamath River Country Estates Campground office (FS-7), 2019.

Photographs (Continued):

Photograph 3. Klamath River Country Estates Campground restroom (FS-8), 2019.

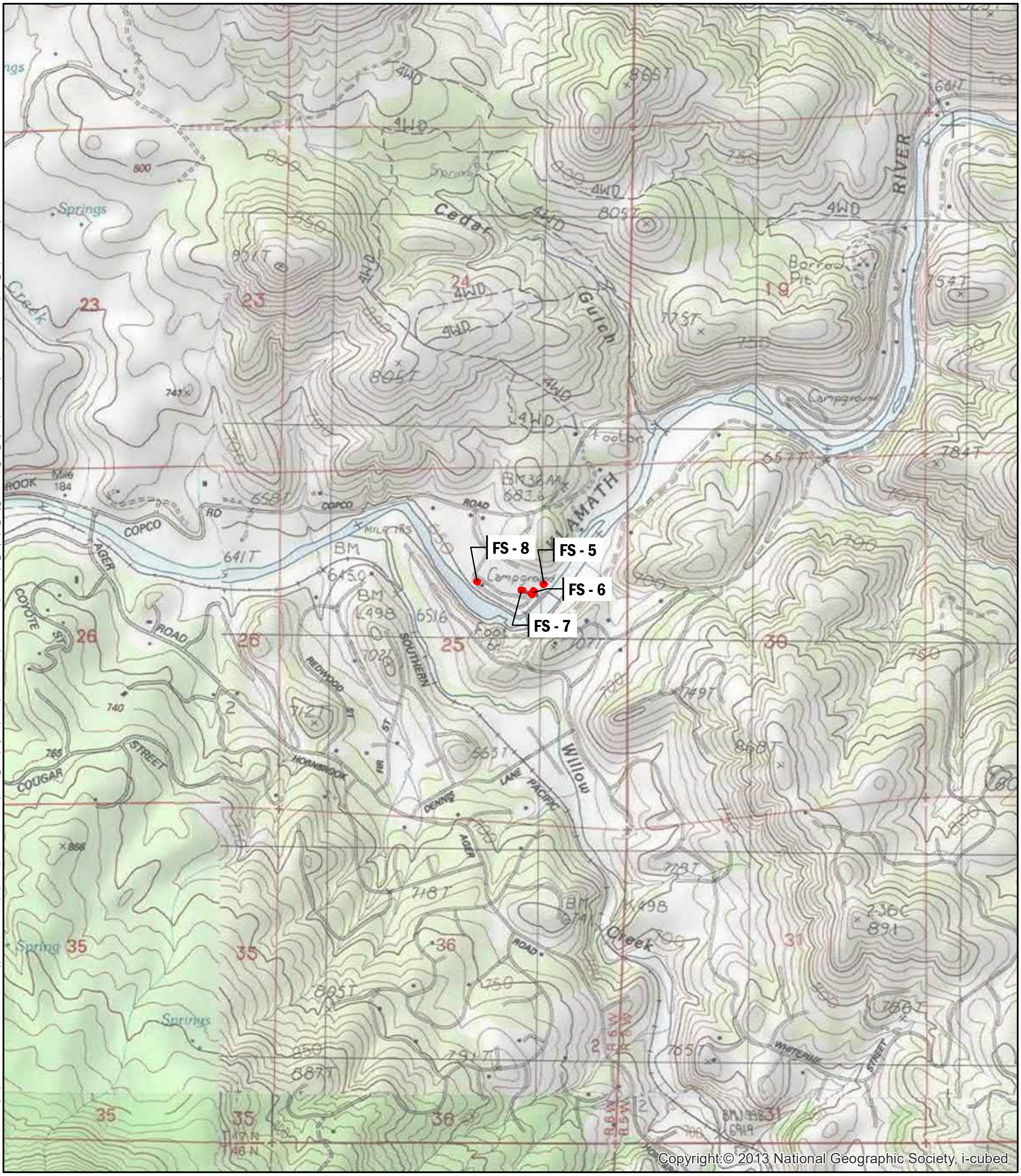
State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary #
HRI#
Trinomial

 ***Resource Name or #:** Klamath River Country Estates (FS-5, FS-6, FS-7, FS-8)

***Map Name:** ***Scale:** ***Date of Map:**

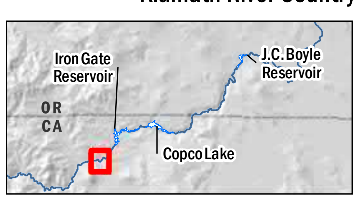
See Sketch/Site Map on next page.



AECOM Oakland CA 4/22/2022 USER alexander.remar PATH \\na.aecomnet.com\lfs\AMER\Oakland-USOAK01\Secure_DCS\Projects\Water\Klamath Dam\400-Technical\440 GIS\02_Maps\02_Map_Production_and_Reports\Cultural Reports\BuiltEnvironment\2022_FS\Location Map - Estates Owners Association.mxd

Klamath River Country Estates Owners' Association Campground Facilities and Office

Resource



4701-4799 Whitefish Place
FS-5,FS-6, FS-7, and FS-8

N

0 2,000 Feet
0 600 Meters
1:24,000

AECOM
April 2022

Primary #
HRI#

SKETCH MAP

Trinomial

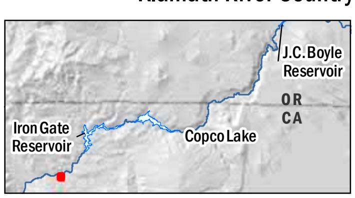
***Resource Name or #:** Klamath River Country Estates (FS-5, FS-6, FS-7, FS-8)

***Map Name:** ***Scale:** ***Date of Map:**

See Sketch/Site Map on next page.

Resource

0
300
Feet
0
50
Meters
1:2,400
N



Klamath River Country Estates Owners' Association Campground Facilities and Office

4701-4799 Whitefish Place
FS-5,FS-6, FS-7, and FS-8

AECOM
April 2022

AECOM Oakland CA 4/22/2022 USER alexander.remar PATH \\na.aecomnet.com\lfs\AMER\Oakland-USOAK01\Secure_DCS\Projects\Water\Klamath Dam\400-Technical\440 GIS\02_Maps\02_Map_Production_and_Reports\Cultural Reports\BuiltEnvironment\2022_FS\Site Map - Estates Owners Association.mxd

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

Primary #
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code   Reviewer   Date

Resource Name or #: Pedestrian Bridge FS-B-2

P1. Other Identifier: Pedestrian Bridge 2 (FS-B-2)

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

***a. County** Siskiyou

***b. USGS 7.5' Quad** Iron Gate Reservoir, CA **Date** 2021 **T** 47N; **R** 6W; SW1/4 of NW 1/4 **of Sec** 25; Mount Diablo B.M.

c. Address 41.89522150521577, -122.4838288100200 City Hornbrook Zip 96044

d. UTM: Zone 10 T, 543445mE/4639196mN

e. Other Locational Data: N/A

***P3a. Description:**

Located on the Klamath River between Harmony Lane and the Klamath River Country Estates campground, Pedestrian Bridge 2 (FS-B-2) was constructed in circa 1954 to provide pedestrian access over the Klamath River. The suspension bridge is approximately 205 feet long and oriented north to south. Four steel suspension cables are hung between two vertical steel structures on each side of the river. Each steel structure consists of two large vertical I-beams with horizontal and X-braces. The bridge deck is supported by two suspension cables and two more cables are positioned above in an inverted arch formation. The suspension cables are anchored to each hillside with eyebolts. Additional cables connect the upper and lower suspensions along the length of the bridge deck. The bridge deck is approximately 3 feet wide and consists of wood boards in a staggered configuration that are supported by crossbeams below of two different sizes. The two types of crossbeams alternate across the length of the bridge and the larger ones are secured to the suspension cables. The bridge deck features wood handrails with metal grate fencing material on each side. Each end of the bridge includes a chain link pedestrian door to restrict access. Both doors appear to have been added when the bridge was reconstructed circa 2016.

***P3b. Resource Attributes:** (HP19) Bridge

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

P5a. Photograph:

P5b. Description of Photo: Pedestrian Bridge 2, viewing north (2019).

***P6. Date Constructed/Age and Source:** ☒ Historic, c.1954

***P7. Owner and Address:** Klamath River Country Estates, 4701-4799 Whitefish Pl, Hornbrook, CA 96044

***P8. Recorded by:**
Tim Wood, AECOM
888 SW 5th Ave, Suite 600
Portland, OR 97204

***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 #:** Pedestrian Bridge 2 (FS-B-2) ***NRHP Status Code:** 6Z

B1. Historic Name:
B2. Common Name: Pedestrian Bridge 2 (FS-B-2)
B3. Original Use: Pedestrian bridge
B4. Present Use: Pedestrian bridge
B5. Architectural Style: Suspension bridge
B6. Construction History:
Pedestrian Bridge 2 was constructed by 1954 to provide pedestrian passage over the Klamath River and connect Copco Road and present-day Harmony Lane. The bridge first appears on United States Geological Survey (USGS) maps in 1954 (USGS 1954). USGS maps reveal minimal development in the area in the preceding years. By 1934, a single structure is depicted to the east as well as a few properties, including the Klamath City District School to the northeast (USGS 1934). By 1941, more properties are depicted in the surrounding area with larger concentrations on the south side of the Klamath River adjacent to an unidentified railroad (USGS 1941). A historic aerial photograph from 1955 depicts minimal development in the surrounding area (NetrOnline 2022). The present day campground on the north side of the pedestrian bridge was developed circa 1974 (KRCE 1974). A review of historic aerial photography and a field survey revealed the bridge deck was rebuilt circa 2016 (Google Earth Pro 2022).

B7. Moved? No
B8. Related Features: N/A
B9a. Architect: Unknown **b. Builder:** Unknown

B10. Significance: Pedestrian Bridge 2 was constructed circa 1954 to provide pedestrian access over the Klamath River and connect transportation routes on each side of the river (USGS 1954). USGS maps from 1962 and 1984 identify the bridge but provide no information on additional functions or association with adjacent properties or activities in the region (USGS 1962, 1984). The bridge was likely used as a transportation route between Klamath River Country Estates and campground when they were developed along the Klamath River circa 1968 and circa 1974, respectively (*San Francisco Examiner* 1968; *Los Angeles Times* 1969; KRCE 1974). Newspaper research did not identify any additional information about the bridge's construction or use.

Theme: Transportation
Area: Northern California
Period of Significance: c.1954
Property Type: bridge
Applicable Criteria: N/A

B11. Additional Resource Attributes: N/A

B12. References: See continuation sheet

B13. Remarks: None
B14. Evaluator: Tim Wood, AECOM
888 SW 5th Avenue, Suite 600
Portland, OR 97204

Date of Evaluation: April 5, 2022

(This space reserved for official comments.)

Evaluation

Criteria Analysis

NRHP Criterion A
Research does not indicate that the pedestrian bridge is associated with any historic events or patterns of events under NRHP Criterion A.

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

NRHP Criterion C
The pedestrian 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 pedestrian bridge is not significant as a source (or likely source) of important information regarding history. 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 bridge retains integrity of location and setting.

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.* Replacement of the bridge deck circa 2016 has substantially diminished the integrity of design.

Setting *is the physical environment of a historic property that illustrates the character of the place.* The bridge retains integrity of setting in the remote, mostly 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.* As a result of the bridge deck replacement circa 2016, the bridge no longer reflects the physical elements and craft of its original period of construction. Therefore, it does not retain 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.* As a result of the replacement bridge deck circa 2016, the bridge no longer evokes the sense of a mid-20th century pedestrian bridge. Therefore, it does not retain integrity of feeling.

Association *is the direct link between a property and the event or person for which the property is significant.* As a result of the replacement bridge deck circa 2016, the bridge no longer expresses a direct link to its mid-20th century construction. Therefore, it does not retain integrity of association.

The bridge retains integrity of location and setting and is not significant under any NRHP criteria. Therefore, it is not eligible for listing in the NRHP.

B12. References

Google Earth Pro. 2022. Pedestrian Bridge 2, Hornbrook CA, 41.89522150521577, -122.48382881002001. Electronic document, https://earth.google.com/web/@41.89533047,-122.48353138,779.15015574a,35.52467159d,35y,358.8126h,0t,0r?utm_source=earth7&utm_campaign=vine&hl=en, accessed April 6, 2022.

Klamath River Country Estates. 1974. Owners Manual. Klamath River Country Estates Owner's Association, Palo Alto, CA.

Los Angeles Times. 1969. "Experienced Land Salesman!" 23 March.

NetrOnline. 2022. Electronic database, https://www.historicaerials.com/viewer, accessed April 6, 2022.

San Francisco Examiner. 1968. "Wide Open Spaces in Madera County." 17 September.

B12. References (continued):

United States Geological Survey (USGS). 1954. Copco, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8977/-122.4842, accessed April 5, 2022.

United States Geological Survey (USGS). 1962. Copco, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8977/-122.4842, accessed April 5, 2022.

United States Geological Survey (USGS). 1984. Iron Gate Reservoir, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8977/-122.4842, accessed April 5, 2022.

Photographs:

Photograph 1. Pedestrian Bridge 2; view facing north, 2019.

Photograph 2. Pedestrian Bridge 2; view facing north, 2019.

Photographs (continued):

Photograph 3. Pedestrian Bridge 2 southern entrance with locked gate; view facing north, 2019.

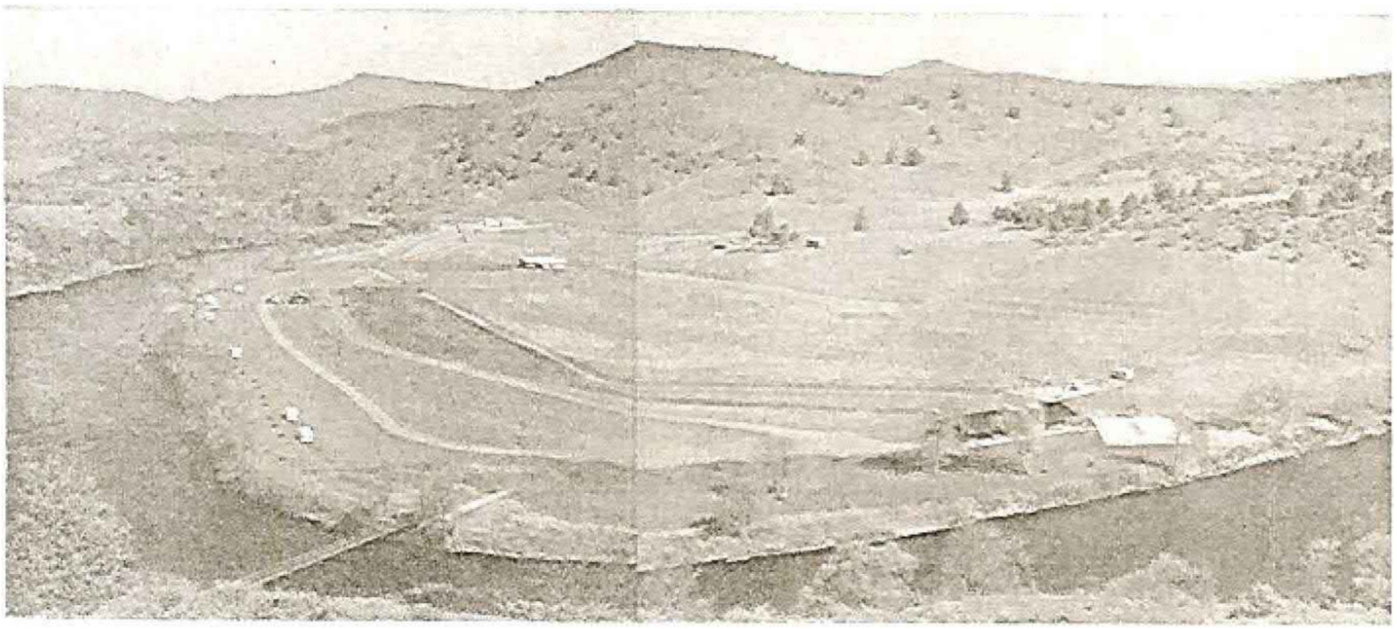
Photograph 4. Pedestrian Bridge 2 deck with wood handrails; view facing north, 2019.

Photographs (continued):

Photograph 5. Pedestrian Bridge 2; view facing west, 2019.

Photograph 6. Pedestrian Bridge 2 with suspension cables; view facing west, 2019.

Photographs (continued):



Photograph 7. Pedestrian Bridge 2 (bottom left) and Klamath River Country Estates Campground circa 1974; view facing northwest (KRCE 1974).

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary #
HRI#
Trinomial

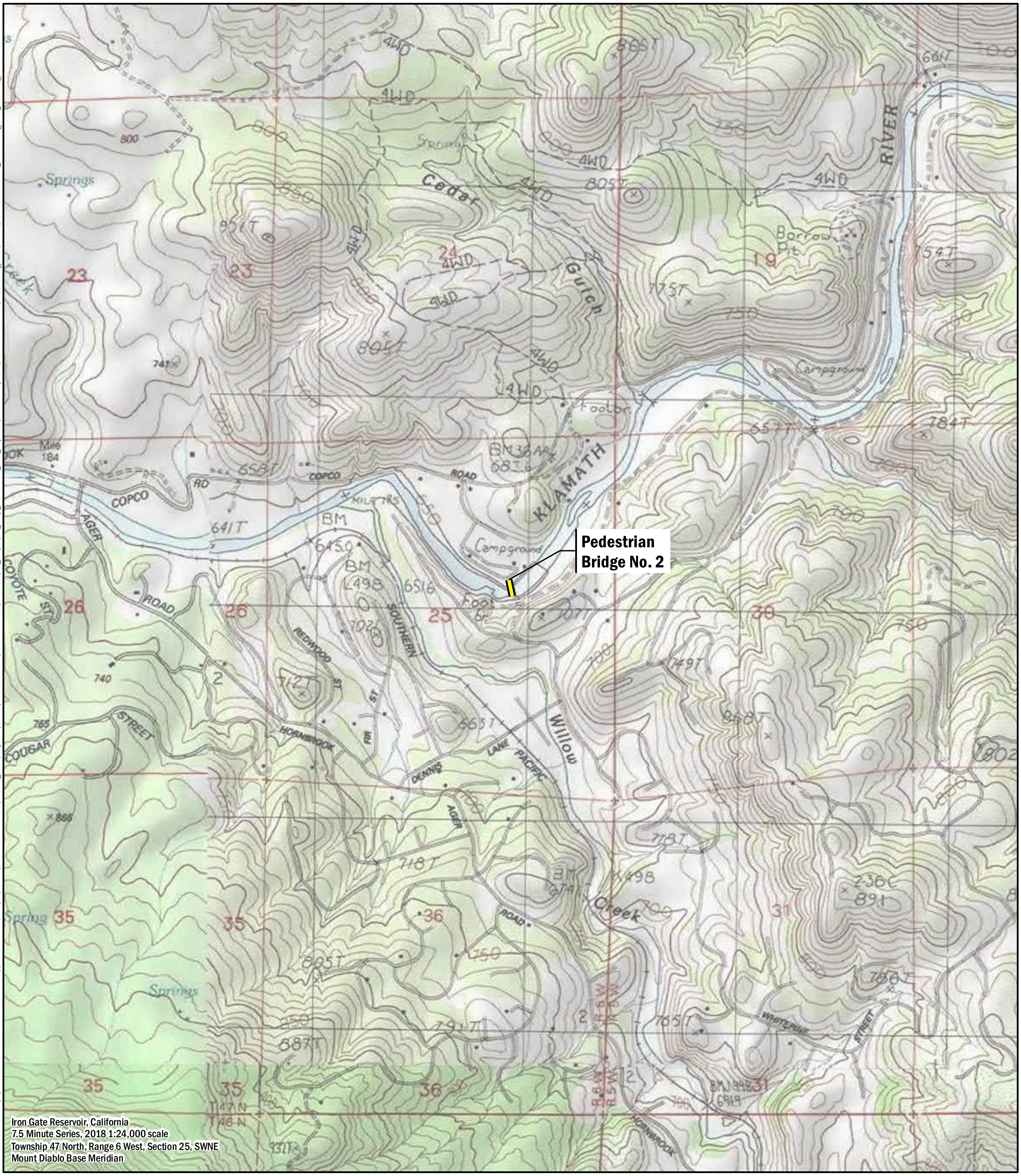
*Resource Name or #: Pedestrian Bridge 2 (FS-B-2)

*Map Name:

*Scale: *Date of Map:

See Sketch/Site Map on next pages.

*Required information



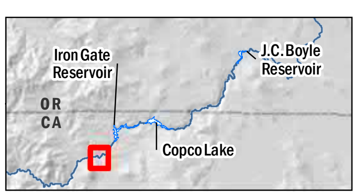
Resource

0 2,000 Feet

0 600 Meters

N

1:24,000



Pedestrian Bridge No. 2

Klamath River Dam Removal
Hornbrook, Siskiyou County, California

AECOM

April 2022

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

SKETCH MAP

Primary #
HRI#
Trinomial

***Resource Name or #:** Pedestrian Bridge 2 (FS-B-2)

***Map Name:**

***Scale:** ***Date of Map:**

See Sketch/Site Map on next pages.

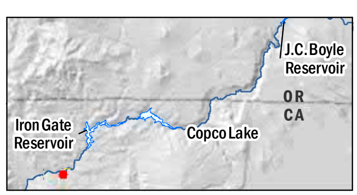
Resource

0 300 Feet

0 50 Meters

N

1:1,800



Pedestrian Bridge No. 2

Klamath River Dam Removal
Hornbrook, Siskiyou County, California

AECOM

April 2022

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

Primary #
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code Reviewer Date

Page 1 **of** 10 **Resource Name or #:** Martin Residence (FS-9)

P1. Other Identifier: Martin Residence, 13624 Hornbrook Road (FS-9)

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

***a. County** Siskiyou

***b. USGS 7.5' Quad** Hornbrook, CA **Date** 2022 **T** 47N; **R** 6W; NE1/4 of NE 1/4 **of Sec** 32; Mount Diablo B.M.

c. Address 13624 Hornbrook Road City Hornbrook Zip 96044

d. UTM: Zone 10 T, 536876.103mE/4637264.745mN

e. Other Locational Data: N/A

***P3a. Description:**

Constructed in 1937, the residence at 13624 Hornbrook Road, Hornbrook, California lies just east of the Interstate 5 corridor, and is situated on the western bank of the Klamath River. The single-family residence and associated detached garage sit in the central clearing of the small parcel, which is framed by mature trees. The property is accessed from Hornbrook Road by a short, paved driveway which connects the house and garage. Built into the riverbank, the front-gabled house is oriented west toward Hornbrook Road. Aerial views suggest the house is divisible into three sections: a three-bay, single-story, front block; a two-story, side-gabled, rear addition; and a single-story, front-gabled middle block, which connects the two. The gabled roof of this central connector rises higher than that of the front block, and its projecting gable end is clad in weatherboards. The remainder of the building is clad in a natural-colored horizontal wood siding, suggesting the center block to be the original portion of the house. The building's complex roof system is finished with standing-seam-metal panels, which appears to be recently installed. A tapered stone chimney rises near the southwestern corner of the house and is the only notable architectural feature, except for a rustic pedimented portico which frames the building's centrally placed main entrance. The portico includes side lights and a single wooden step that leads to the recessed entry with a modern multi-lite wood front door. All of the building's windows appear to be replacement vinyl sliding windows. A large, modern, wooden deck wraps around the building's rear elevation and extends over the river. A description of the property by Zillow states "the vast rear decking is supported by what was a bridge over the River from years gone by and has been built from its old timbers" (Zillow 2022).

A single-story, side-gabled garage is situated to the north of the house and oriented to the west. The garage rests on a continuous concrete masonry block foundation and is primarily clad in vertical wood-panel siding. The eaves are finished with horizontal wood paneling and the roof is topped with composite shingles. The building's west (primary) façade consists of a two-car overhead garage door and a fixed, banded, three-light vinyl window. The southern elevation includes a centrally located multi-lite fixed wood window flanked by a metal utility box to the east and a multi-panel pedestrian door to the west. The east elevation consists of two multi-lite windows near the north and south ends. The north elevation lacks fenestration and architectural detail. The residence has undergone several alterations over time including multiple additions and replacement siding, windows, and roofing material (dates unknown).

***P3b. Resource Attributes:** (HP2) Single Family Residence

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other

P5a. Photograph:

P5b. Description of Photo: Front elevation of FS-9 (2019).

***P6. Date Constructed/Age and Source:**
☒ Historic, c.1937 (Zillow 2022)

***P7. Owner and Address:**
Felipe Martin, address unknown

***P8. Recorded by:**
Tim Wood, AECOM
888 SW 5th Ave, Suite 600
Portland, OR 97204

***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 #:** 13624 Martin Residence (FS-9) ***NRHP Status Code:** 6Z

B1. Historic Name:
B2. Common Name: Martin Property (FS-9)
B3. Original Use: Private residence
B4. Present Use: Private residence
B5. Architectural Style: Minimal Traditional; Contemporary
B6. Construction History:

The residence at 13624 Hornbrook Road was constructed in 1937 (Zillow 2022). A review of United States Geological Survey (USGS) maps reveals minimal development in the surrounding area until the mid-twentieth century. A 1932 USGS map depicts the Jilson Mine to the west and Camp Lowe to the east (USGS 1932). The map also appears to depict a bridge behind the house crossing the Klamath River and connecting to an access road heading east. The bridge is more clearly depicted in the 1939 map (USGS 1939). The 1955 map illustrates eight properties along the east-west road crossing the river as well as three additional properties to the north and northwest (USGS 1955). Many additions have been added to the residence over time. The cladding suggests only the center block of the property dates to the 1937 construction. Other alterations include the installation of a deck, and the addition of replacement vinyl windows, siding, and roofing material.

B7. Moved? No
B8. Related Features: A single-story side-gabled garage is on the property, north of the single-family residence.
B9a. Architect: Unknown **b. Builder:** Unknown
B10. Significance:

The residence was constructed in 1937 (Zillow 2022). USGS maps from 1939 and 1955 identify the property but provide no additional information on it function or association with adjacent properties or activities in the region (USGS 1939, 1955). Newspaper and archival research did not identify any additional information about the property's construction, use, or occupants. The Martin property is associated with early residential development along the Klamath River.

Theme: Community Planning and Development
Area: Northern California
Period of Significance: N/A
Property Type: Private residence
Applicable Criteria: N/A

B11. Additional Resource Attributes: N/A
B12. References: See continuation sheet
B13. Remarks: None
B14. Evaluator: Tim Wood and Erin Swicegood, AECOM
888 SW 5th Avenue, Suite 600
Portland, OR 97204

Date of Evaluation: April 15, 2022

(This space reserved for official comments.)

Evaluation

NRHP Criterion A
Research does not indicate that the residence is associated with any historic events or patterns of events under NRHP Criterion A.

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

NRHP Criterion C
The residence 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. Research did not reveal an architect, builder, or developer. Therefore, the property is not significant under NRHP Criterion C.

NRHP Criterion D
The residence is not significant as a source (or likely source) of important information regarding history. 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 residence retains integrity of location and setting, .

Location *is the place where the historic property was constructed or the place where the historic event took place.* The residence (FS-9) remains at its original building site on the banks of 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.* The design of the residence (FS-9) has undergone several significant alterations since its original construction, including the addition of vinyl windows, multiple additions to the front and back of the original residence, and addition of a deck. These changes have impacted the overall design of the building; therefore, the residence does not retain integrity of design.

Setting *is the physical environment of a historic property that illustrates the character of the place.* The residence (FS-9) retains integrity of setting in the rural area of Siskiyou County on the banks of the Klamath River.

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 residence (FS-9) has undergone substantial alterations including multiple alterations and the replacement of original building materials. Therefore, it does not retain 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.* Substantial alterations to the residence (FS-9) has hindered its ability evoke the sense of a 1930s residence. Therefore, is does not retain integrity of feeling.

Association *is the direct link between a property and the event or person for which the property is significant.* Substantial alterations to the residence (FS-9) has obscured a direct link to its history as a 1930s residence near the Klamath River. Therefore, it does not retain integrity of association

The residence at 13624 Hornbrook Road (FS-9) lacks overall integrity and is not significant under any NRHP criteria. Therefore, it is not eligible for listing in the NRHP.

CONTINUATION SHEET

Property Name: Martin Residence (FS-9)

B12. References

United States Geological Survey (USGS). 1932. Yreka, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8843/-122.5547, accessed April 5, 2022.

United States Geological Survey (USGS). 1939. Yreka, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8843/-122.5547, accessed April 5, 2022.

United States Geological Survey (USGS). 1955. Hornbrook, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8843/-122.5547, accessed April 5, 2022.

Zillow. 2022. 13624 Hornbrook Road, Hornbrook, CA 96044. Electronic document, https://www.zillow.com/homedetails/13624-Hornbrook-Rd-Hornbrook-CA-96044/15975570_zpid/ , accessed April 5, 2022.

Photographs:

Photograph 1. Martin Residence (FS-9) aerial view (Zillow, 2022).

Photograph 2. Martin Residence (FS-9) west facade (Zillow, 2022).

Photograph 3. Martin Residence (FS-9) east elevation, 2019

Photograph 4. Martin Residence (FS-9) dock northeast of residence.

Primary #
HRI#

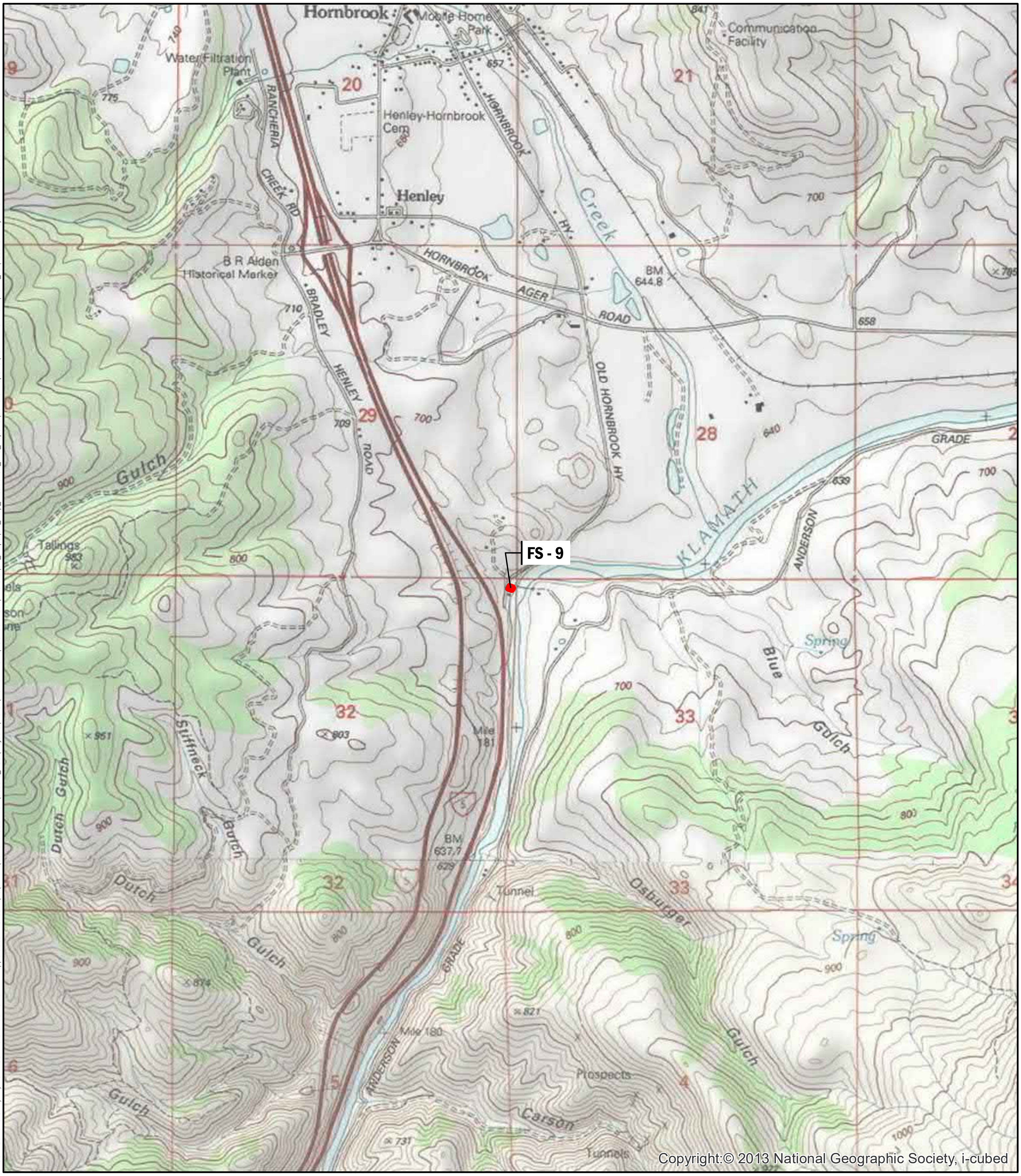
LOCATION MAP

Trinomial

***Resource Name or #:** Martin Residence (FS-9)

***Map Name:** ***Scale:** ***Date of Map:**

See Sketch/Site Map on next page.

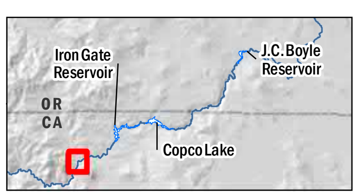


Resource

0 2,000 Feet

0 600 Meters

1:24,000



Martin Residence

13624 Hornbrook Road
FS-9

AECOM

April 2022

Primary #
HRI#
Trinomial

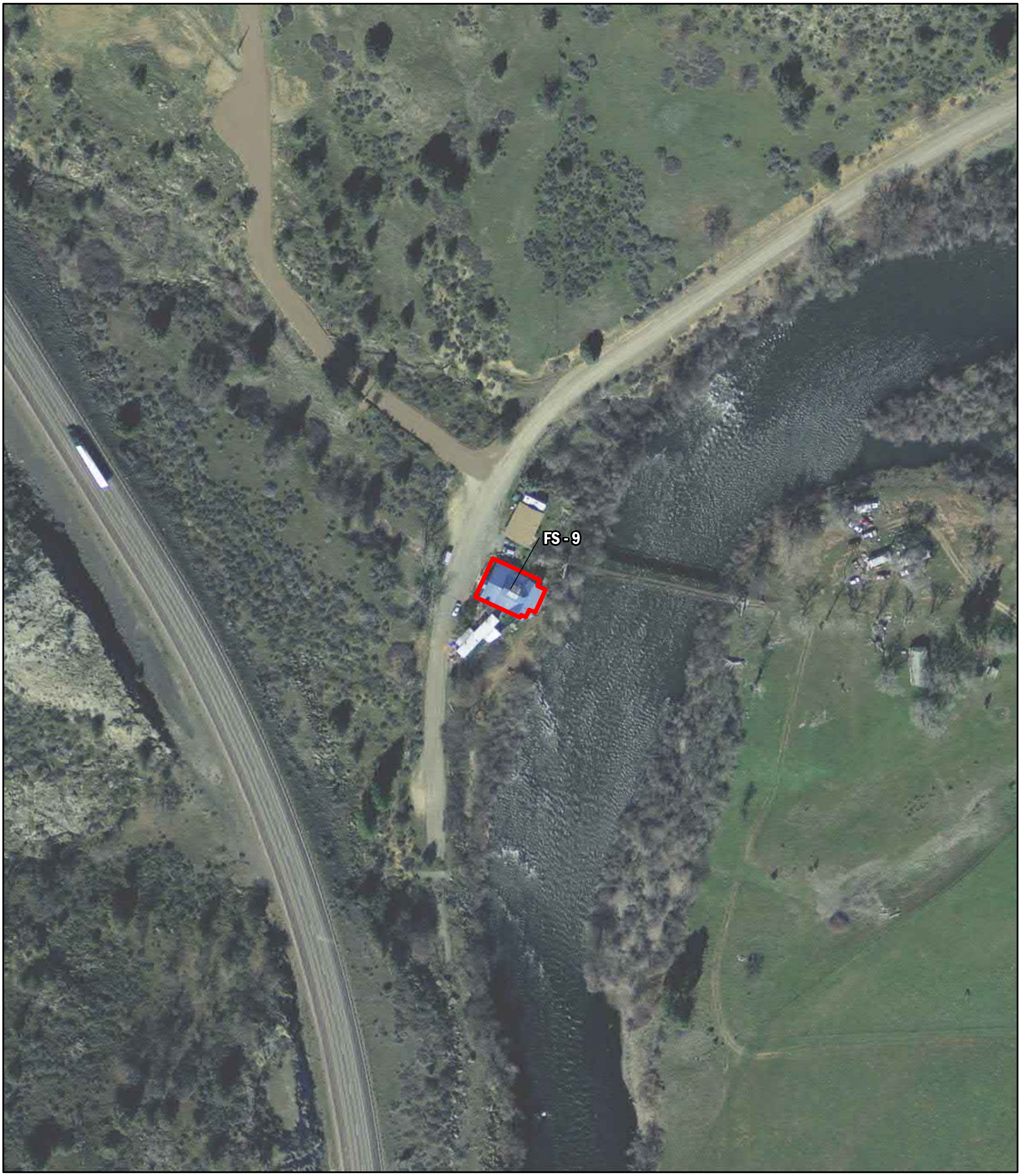
SKETCH MAP

***Resource Name or #:** Martin Residence (FS-9)

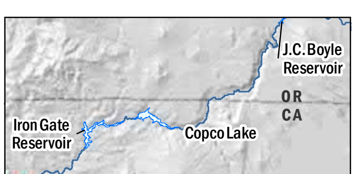
***Map Name:**

***Scale:** ***Date of Map:**

See Sketch/Site Map on next page.



Resource



0 300 Feet

0 50 Meters

N

1:1,800

Martin Residence

13624 Hornbrook Road
FS-9

AECOM

April 2022

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

Primary #
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code Reviewer Date

 Resource Name or #: Leach Property (FS-23)

P1. Other Identifier: Leach Property (FS-23)
***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**
***a. County** Siskiyou
***b. USGS 7.5' Quad** Hawkinsville, CA **Date** 2022 **T** 46N; **R** 6W; NE1/4 of SW 1/4 **of Sec** 18; Mount Diablo B.M.
c. Address 2032 State Route 96 City Yreka Zip 96067
d. UTM: Zone 10 T, 534263.999mE/4631234.477mN
e. Other Locational Data: N/A

***P3a. Description:**

Constructed in 1950, the residence at 2032 State Highway 96 near Yreka, California is situated on a 54-acre parcel on the southern side of State Highway 96 and above the northern bank of the Klamath River. The irregular-shaped single-family residence is composed of two sections. The eastern three-bay front block is two stories in height and features a square plan, front gable roof, and T1-11 siding. To the south is a single-story block with a rectangular plan, cross-gable roof, and a combination of T1-11 and asbestos shingle siding. The house boasts a large variety of window types, featuring various sizes of large, single-lite and sliding windows. The front block's east facade features a centrally located first-floor pedestrian door flanked by windows on each side and a second-story porch supported by square wood posts. The porch is accessed by a centrally located sliding glass door. A metal railing surrounds the perimeter of the porch's second story. A series of small windows descend the north elevation, likely following the path of an interior staircase. The east facade of the rear block includes a pair of sliding windows and what appears to be a pedestrian entrance. The west elevation consists of a single pedestrian door, a bay window, and a large first-floor picture window with two second-floor slider windows above. A concrete wall is located close to the river. County records indicate the front block of the house was constructed as a bedroom addition in 1983. Multiple tiered retaining walls, made of stone and concrete block, extend to the south of the building and lead to the river. These walls have been artistically decorated with stonework and serve as outdoor living space for the residence.

***P3b. Resource Attributes:** (HP2) Single Family Property
***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other

P5a. Photograph:
P5b. Description of Photo: Eastern elevation of residence (FS-23) (2019).

***P6. Date Constructed/Age and Source:**
☒ Historic, 1950 (Zillow 2022)

***P7. Owner and Address:**
James D Leach & Lynda Kae Trust, 2032 Highway 96, Yreka CA 96097

***P8. Recorded by:**
Tim Wood, AECOM
888 SW 5th Ave, Suite 600
Portland, OR 97204

***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 #:** Leach Property (FS-23) ***NRHP Status Code:** 6Z

B1. Historic Name:
B2. Common Name: Leach Property (FS-23)
B3. Original Use: Private residence
B4. Present Use: Private residence
B5. Architectural Style: Manufactured
B6. Construction History:

The single-family residence on the Leach Property was constructed in 1950 (Zillow 2022). A review of United States Geological Survey (USGS) maps reveals minimal development in the surrounding area until the mid-twentieth century. A 1932 USGS map depicts Jims Camp to the east of the property and US 99 running adjacent to it (USGS 1932). By 1955, ten properties appear in the immediate area with two structures to the north of US 99 and eight to the south (USGS 1955). Siskiyou County building permits indicate this is a manufactured home and a bedroom addition was constructed in 1983 (Siskiyou County 1983).

B7. Moved? No
B8. Related Features: N/A
B9a. Architect: Unknown **b. Builder:** Unknown

B10. Significance:

The residence on the Leach Property was constructed in 1950. Newspaper and archival research did not identify any additional information about the property's construction, use or occupants. The Leach Property reflects the general development of residential properties along the Klamath River in Siskiyou County during the mid-twentieth century.

Theme: Community Planning and Development
Area: Northern California
Period of Significance: 1950
Property Type: Private residence
Applicable Criteria: N/A

B11. Additional Resource Attributes: N/A

B12. References: See continuation sheet

B13. Remarks: None
B14. Evaluator: Tim Wood and Erin Swicegood, AECOM
888 SW 5th Avenue, Suite 600
Portland, OR 97204

Date of Evaluation: April 15, 2022

(This space reserved for official comments.)

Evaluation

NRHP Criterion A
Research does not indicate that the residence on the Leach Property is associated with any historic events or patterns of events under NRHP Criterion A.

NRHP Criterion B
Research does not indicate that the residence on the Leach Property is associated with any historically significant individuals under NRHP Criterion B.

NRHP Criterion C
The residence on the Leach Property 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 residence on the Leach Property is not significant as a source (or likely source) of important information regarding history. 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 residence on the Leach Property (FS-23) retains integrity of location, 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 residence remains at its original building site on the banks of 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.* Construction of the bedroom addition in 1983 substantially altered the design of the residence. Therefore, the building does not retain integrity of design.

Setting *is the physical environment of a historic property that illustrates the character of the place.* The residence retains integrity of setting in the rural area of Siskiyou County on the banks of the Klamath River.

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 residence continues to exhibit a majority of the original materials and the craftsmanship of its builders, despite the bedroom addition. The design and materials of the bedroom addition closely resemble those of the original residence. Therefore, the residence retains 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 residence retains integrity of feeling because it continues to exhibit its historic use as a private residence overlooking the Klamath River.

Association *is the direct link between a property and the event or person for which the property is significant.* The integrity of association is retained because the residence has remained at its historic location near the Klamath River.

The residence retains integrity but is not significant under any NRHP criteria. Therefore, it is not eligible for listing in the NRHP.

CONTINUATION SHEET

Property Name: Leach Property (FS-23)

B12. References

Siskiyou County. 1983. 2032 State Route 96 Building Permits. On file with Siskiyou County Building Division, Yreka, CA.

United States Geological Survey (USGS). 1932. Yreka, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8331/-122.5847, accessed April 5, 2022.

United States Geological Survey (USGS). 1955. Hornbrook, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8331/-122.5847, accessed April 5, 2022.

Zillow. 2022. 2032 State Highway 96, Yreka, CA 96097. Electronic document, https://www.zillow.com/homedetails/2032-State-Highway-96-Yreka-CA-96097/15975751_zpid/, accessed April 5, 2022.

Photographs:

Photograph 1. Leach Property residence (FS-23) east elevation; view facing west, 2019.

Photograph 2. Leach Property residence (FS-23) southern elevation; view facing north, 2019.

Photographs (Continued):

Photograph 3. Leach Property residence (FS-23) retaining walls view facing north, 2019.

Primary #
HRI#

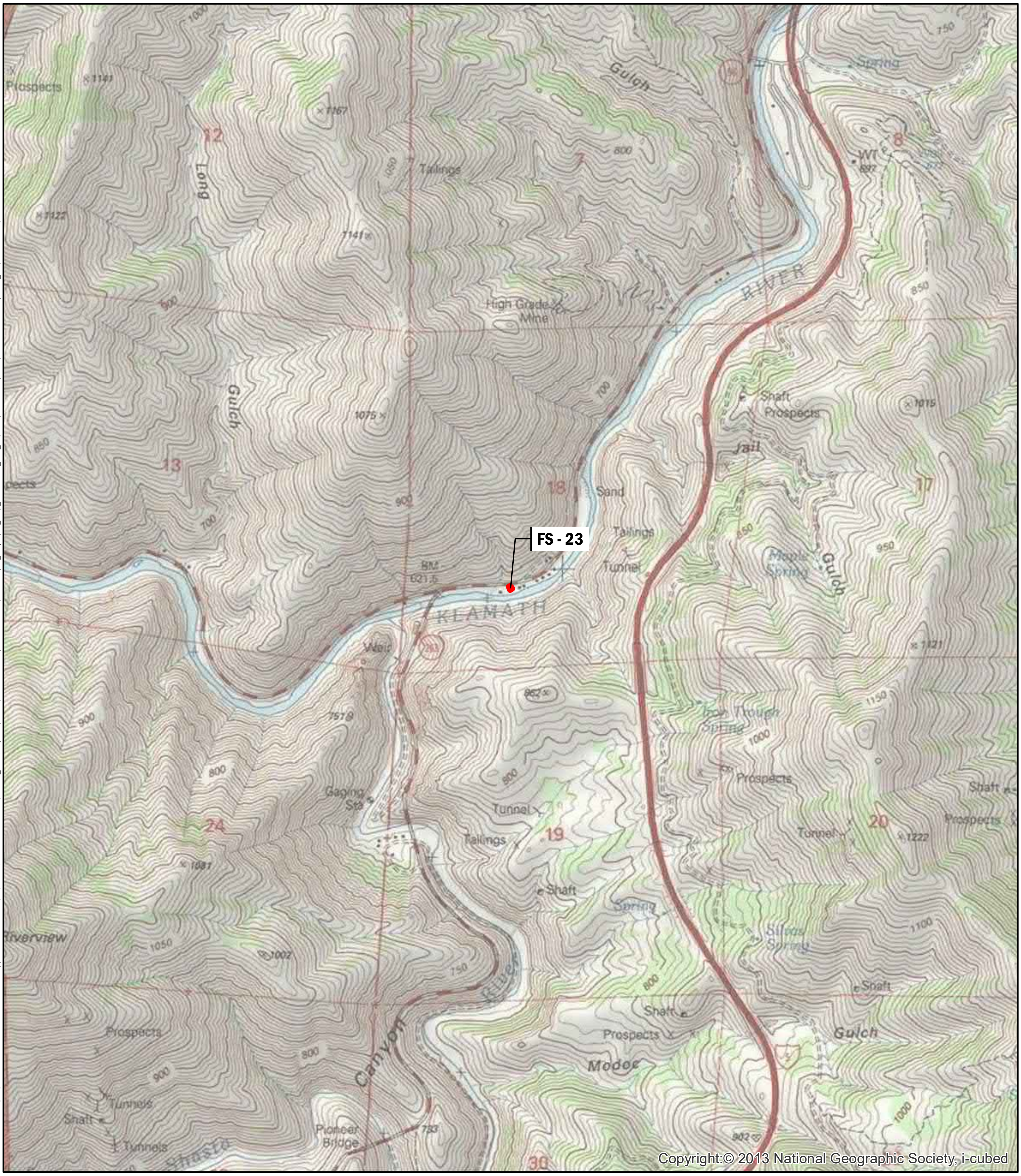
LOCATION MAP

Trinomial

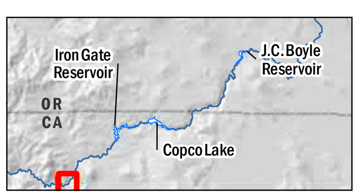
***Resource Name or #:** Leach Property (FS-23)

***Map Name:** ***Scale:** ***Date of Map:**

See Sketch/Site Map on next page.



Resource



N

0 2,000 Feet

0 600 Meters

1:24,000

Leach Residence

2032 State Highway 96
FS-23

AECOM
April 2022

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
Sketch MAP

Primary #
HRI#
Trinomial

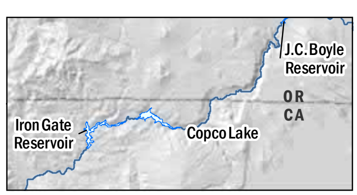
 ***Resource Name or #:** Leach Property (FS-23)

***Map Name:** ***Scale:** ***Date of Map:**

See Sketch/Site Map on next page.

Resource

0 300 Feet
0 50 Meters
N
1:1,800



Leach Residence

2032 State Highway 96
FS-23

AECOM
April 2022

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

Primary #
HRI #
Trinomial
NRHP Status Code 6Z
Other Listings
Review Code Reviewer Date

 Resource Name or #: Gregg/Berkemeyer Property (FS-10 and FS-11)

P1. Other Identifier: Gregg/Berkemeyer Property Residence 2 (FS-11)
***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**
***a. County** Siskiyou
***b. USGS 7.5' Quad** Hawkinsville, CA **Date** 2022 **T** 46N; **R** 6W; SE1/4 of SE 1/4 **of Sec** 7; Mount Diablo B.M.
c. Address 904 Highway 96 City Yreka Zip 96044
d. UTM: Zone 10 T, 535275.296 mE/4632730.413mN
e. Other Locational Data: N/A

***P3a. Description:**

The Gregg/Berkemeyer Property Residence is located at 904 State Route 96 in Yreka, California and consists of at least six buildings, including three residences and three sheds. The long, 1.75-acre narrow parcel is bounded by State Route 96 to the north, the Klamath River to the south, and adjacent parcels to the east and west. The property is accessed from the highway by a gravel driveway, which forks just northwest of two single-family residences, and provides access to the eastern and western ends of the linear parcel. Immediately west of Residence 1 (FS-10), Residence 2 (Resource FS-11) is a single-story house with a basement. Constructed in the American Vernacular style, the c. 1955 building is linear in plan, topped with a side-gabled roof, and rests on a continuous concrete masonry block foundation. The roof is finished with composite shingles and includes a front gable dormer addition near the building's southwest corner. The building is clad in weatherboards and appears to retain multiple original window surrounds, although its windows appear to be replacement vinyl one-over-one sash. The north (primary) façade consists of a pedestrian door flanked by two one-over-one sash windows on each side. An enclosed porch on the east elevation that may be an addition to the property appears to have been infilled. Built into the river bank, the rear elevation of the basement level appears mostly above ground and includes a pedestrian door flanked by a window. The first-floor level features a pedestrian door flanked by windows and a large wood porch overlooking the river. Alterations to the residence include a front gable addition, replacement vinyl windows, and enclosing the porch in the east elevation (dates unknown). FS-11 is the only residence within the post-project floodplain. The other two residences and three sheds would not be affected by the project and were not documented.

***P3b. Resource Attributes:** (HP3) Multiple Family Property
***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other
P5a. Photograph:

P5b. Description of Photo: Southeast elevation of FS-11, viewing west (2019).

***P6. Date Constructed/Age and Source:**
☒ Historic, c.1955-1970

***P7. Owner and Address:**
Gregg Nancy E Trust, 400 Hiram Page Road Space #83, Yreka, CA 96097

***P8. Recorded by:**
Tim Wood, AECOM
888 SW 5th Ave, Suite 600
Portland, OR 97204

***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 #:** Gregg/Berkemeyer Property (FS-10 and FS-11) ***NRHP Status Code:** 6Z

B1. Historic Name:
B2. Common Name: Gregg/Berkemeyer Property Residence 2 (FS-11)
B3. Original Use: Private residence
B4. Present Use: Private residence
B5. Architectural Style: American Vernacular
B6. Construction History:
United States Geological Survey (USGS) maps depicts little development in the area of the property until 1932 when Jims Camp is denoted to the south and Camp Lowe and Jilson Mine to the north. U.S. Route 99 is also depicted running adjacent to the property at that time (USGS 1932). Several structures appear in the immediate vicinity in the 1955 map including two on the subject property (USGS 1955). Other structures are depicted in the surrounding area including to the southwest of the property and on each side of the Klamath River. Three structures appear on the property in 1983 (USGS 1983). Residence 2 (FS-11) appears to have been constructed in the late 1950s or 1960s. A 1993 building permit indicates a single-family residence on the property was remodeled in 1993 and a new foundation was installed. The permit does not specify the residence. Nancy Gregg was listed as the owner (Siskiyou County Assessor 1993).

B7. Moved? No
B8. Related Features: Six buildings are on the parcel, including Residence 1 (FS-10), Residence 2 (FS-11), a third residence, and three sheds.
B9a. Architect: Unknown **b. Builder:** Unknown

B10. Significance:
Residence 1 (FS-10) and Residence 2 FS-11 on the Gregg/Berkmeyer Property was constructed between 1955 and 1983, likely during the late 1950s or 1960s.. The property was initially developed in 1925 with a single-family residence. USGS maps depicts little development in the area of the property until 1932, and additional structures appear on the subject property by 1955. Newspaper and archival research did not identify any additional information about the site's construction or use. Construction of Residence 2 reflects the general development of residential properties along the Klamath River in Siskiyou County during the mid-twentieth century.

Theme: Community Planning and Development
Area: Northern California
Period of Significance: N/A
Property Type: Private residence
Applicable Criteria: N/A

B11. Additional Resource Attributes: N/A

B12. References: See Continuation Sheet

B13. Remarks: None
B14. Evaluator: Tim Wood and Erin Swicegood, AECOM
888 SW 5th Avenue, Suite 600
Portland, OR 97204

Date of Evaluation: April 13, 2022

(This space reserved for official comments.)

Evaluation

Criteria Analysis

NRHP Criterion A
Research does not indicate that Residence 2 (FS-11) at the Gregg/Berkemeyer Property is associated with any historic events or patterns of events under NRHP Criterion A. The other two residences and three sheds are out of the post-project floodplain and were not evaluated.

NRHP Criterion B
Research does not indicate that Residence 2 (FS-11) at the Gregg/Berkemeyer Property is associated with any historically significant individuals under NRHP Criterion B.

NRHP Criterion C
Residence 2 (FS-11) at the Gregg/Berkemeyer Property 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
Residence 2 (FS-11) at the Gregg/Berkemeyer Property is not significant as a source (or likely source) of important information regarding history. 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

Residence 2 (FS-11) at the Gregg/Berkemeyer Property 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.* Residence 2 remains at its original building site on the banks of the Klamath River, and therefore retains integrity of location.

Design *is the composition of elements that constitute the form, plan, space, structure, and style of a property.* The design of Residence 2 has undergone several alterations since its original construction, including the addition of replacement vinyl windows, the addition of a gable dormer, and enclosure of the porch on the east addition at unknown dates. However, these changes have not impacted the overall design of the building and ability to reflect the American Vernacular architectural style. Therefore the residence retains integrity of design.

Setting *is the physical environment of a historic property that illustrates the character of the place.* Residence 2 retains integrity of setting in the rural area of Siskiyou County on the banks of the Klamath River.

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.* Residence 2 at the Gregg/Berkemeyer Property continues to exhibit a majority of the original materials and the craftsmanship of its builders. Therefore, it retains 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.* Residence 2 retains integrity of feeling because it continues to exhibit its historic use as a private residence overlooking the Klamath River.

Association *is the direct link between a property and the event or person for which the property is significant.* The integrity of association is retained because Residence 2 has not undergone any major alterations and has remained at its historic location near the Klamath River.

Residence 2 retains overall integrity but is not significant under any NRHP criteria. Therefore, it is not eligible for listing in the NRHP.

B12. References

Siskiyou County. 1993. 904 State Route 96 Building Permits. On file with Siskiyou County Building Division, Yreka, CA.

United States Geological Survey (USGS). 1932. Yreka, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8459/-122.5751, accessed April 5, 2022.

United States Geological Survey (USGS). 1955. Hornbrook, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8459/-122.5751, accessed April 5, 2022.

United States Geological Survey (USGS). 1983. Hawkinsville, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8459/-122.5751, accessed April 5, 2022.

Photographs:

Photograph 1. Residence 2 north elevation; view facing southwest, 2019.

Photograph 2. Residence 2 south elevation; view facing northwest, 2019.

Primary #
HRI#

LOCATION MAP

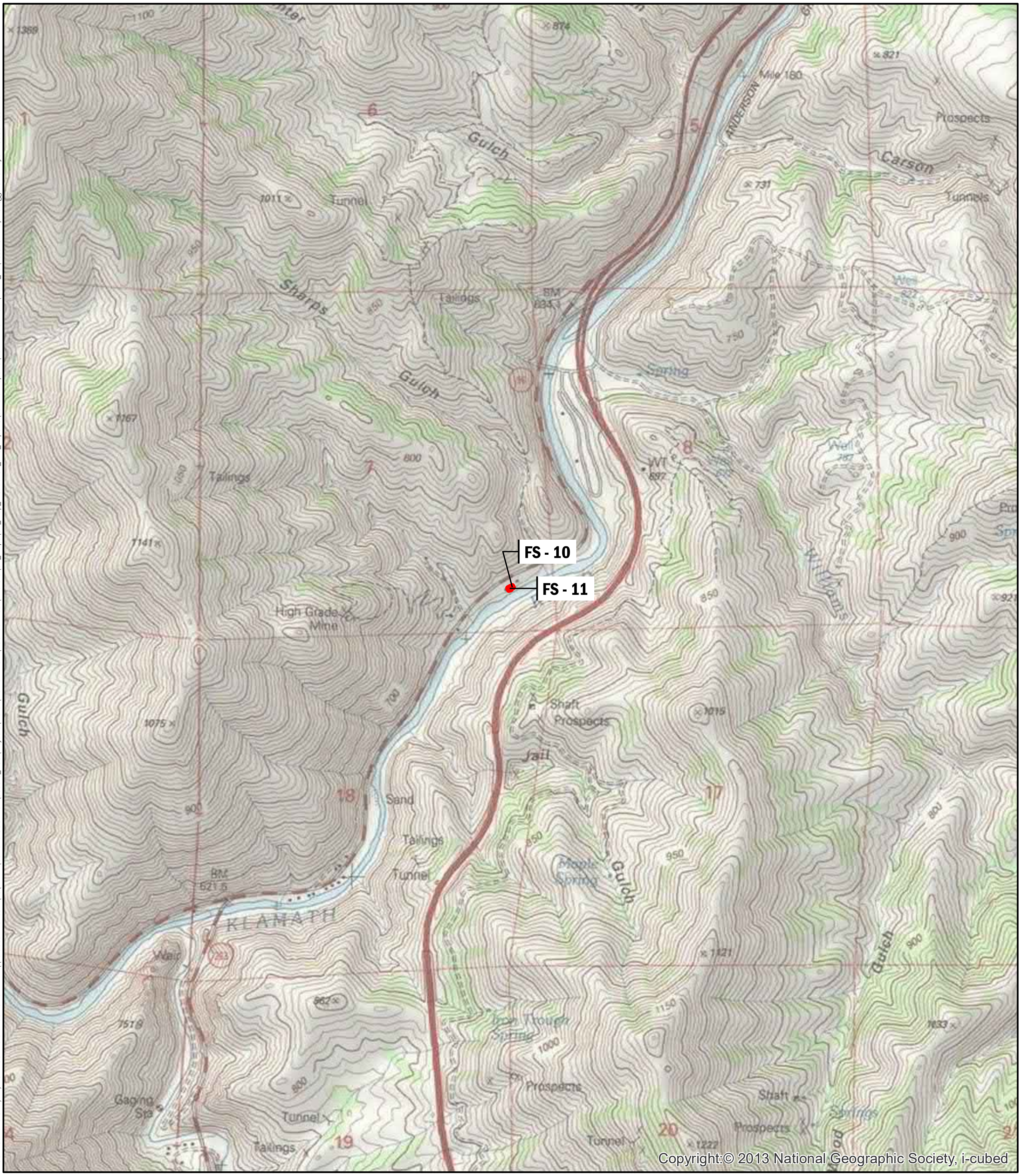
Trinomial

***Resource Name or #:** Gregg/Berkemeyer Property (FS-10 and FS-11)

***Map Name:**

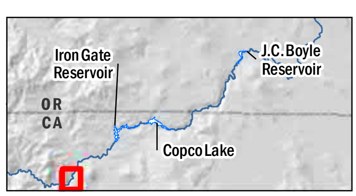
***Scale:** ***Date of Map:**

See Sketch/Site Map on next page.



Resource

0 2,000 Feet
0 600 Meters
1:24,000



Gregg Berkmeyer Property

904 State Highway 96
FS-10 and FS-11

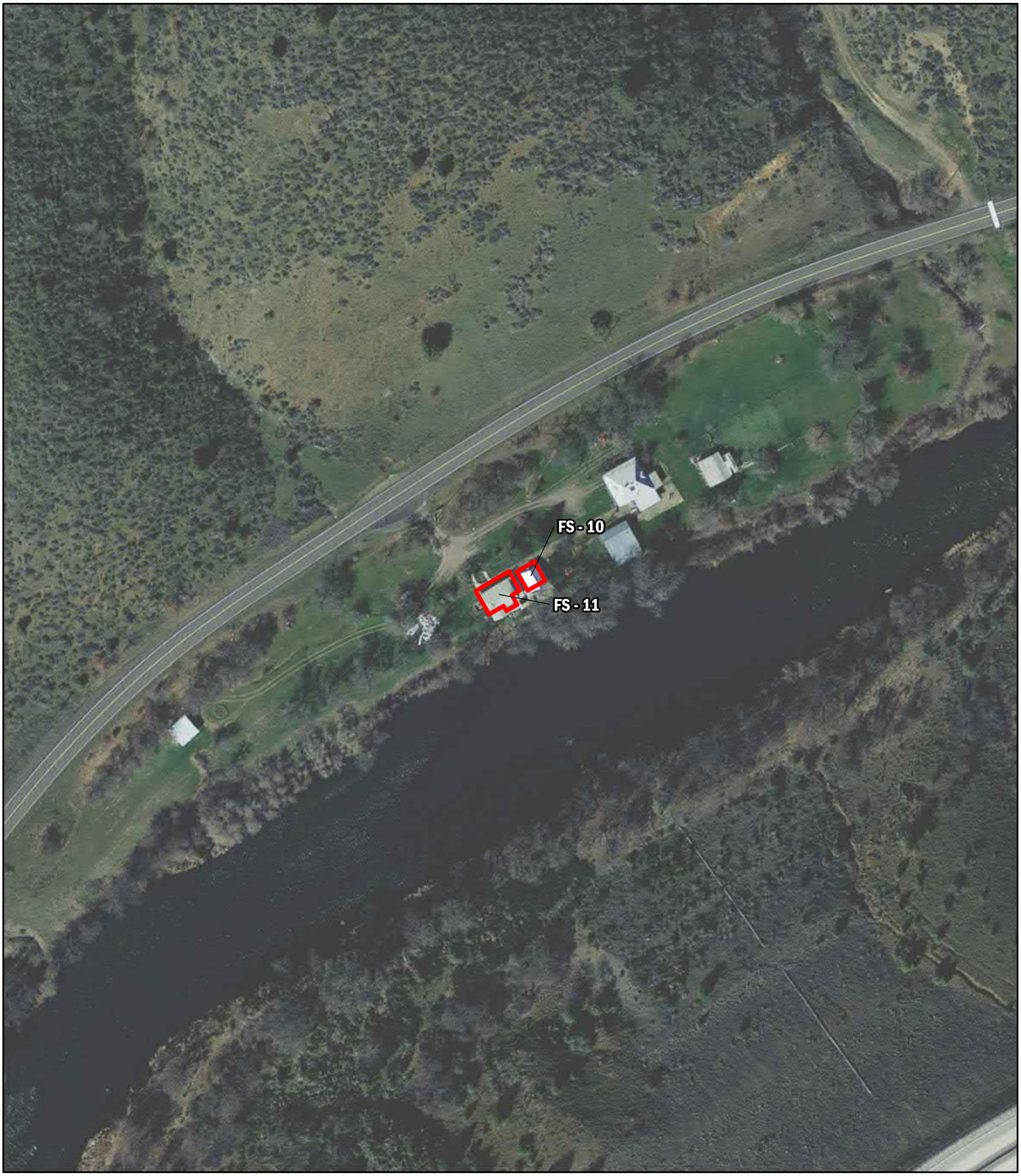
AECOM
April 2022

SKETCH MAP

***Resource Name or #:** Gregg/Berkemeyer Property (FS-10 and FS-11)

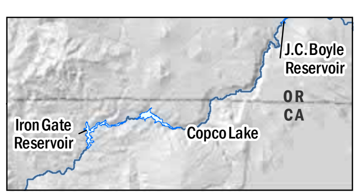
***Map Name:** ***Scale:** ***Date of Map:**

See Sketch/Site Map on next page.



Resource

0 300 Feet
0 50 Meters
1:1,800



Gregg Berkmeyer Property

904 State Highway 96
FS-10 and FS-11

AECOM
April 2022

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

Primary #
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code Reviewer Date

Page 1 **of** 10 **Resource Name or #:** Young Property (FS-12)

P1. Other Identifier: Young Property (FS-12)
***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**
***a. County** Siskiyou
***b. USGS 7.5' Quad** Iron Gate Reservoir, CA **Date** 2021 **T** 46N; **R** 6W; SW1/4 of SE 1/4 **of Sec** 7; Mount Diablo B.M.
c. Address 1131 State Route 96 City Yreka Zip 96097
d. UTM: Zone 10 T, 534979.444mE/4632504.455mN
e. Other Locational Data: N/A

***P3a. Description:**

Located at 1131 State Route 96, in Yreka, California, the Young Property was constructed circa 1955. The property consists of one residence (FS-12), built along the bank of the Klamath River. The one and one-half-story residence features a rectangular plan, broad one-story shape, and side gable roof finished with composite shingles. The building is clad with vertical wood boards on the west (primary) façade, and a combination of horizontal wood board and wood shingles on the south and north elevations. The asymmetrical west elevation consists of two centrally located flush wood pedestrian doors flanked by a fixed wood sash window, a set of multi-lite multi-panel double wood doors, and a one-over-one wood sash window to the north. The north elevation includes a small shed addition and multiple wood sash windows. The south elevation includes a large addition with a wood sash window in the upper story. Alterations to the property include the two additions to the north and south elevations.

***P3b. Resource Attributes:** (HP2) Single Family Property
***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other
P5a. Photograph:
P5b. Description of Photo: Google Earth street view of west (primary) elevation of building (2021).

***P6. Date Constructed/Age and Source:**
☒ Historic, c.1955

***P7. Owner and Address:**
Brian and Angela Young, 512 Discovery St, Yreka, CA 96097-2215

***P8. Recorded by:**
Tim Wood, AECOM
888 SW 5th Ave, Suite 600
Portland, OR 97204

***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 #:** Young Property (FS-12) ***NRHP Status Code:** 6Z

B1. Historic Name:
B2. Common Name: Young Property (FS-12)
B3. Original Use: Private residence
B4. Present Use: Private residence
B5. Architectural Style: American Vernacular
B6. Construction History:

Located at 1131 State Route 96, Yreka, California, the Young Property was constructed circa 1955. A review of United States Geological Survey (USGS) maps reveals minimal development in the surrounding area until the mid-twentieth century. An 1886 USGS map of the property depicts the Empire Mill to the northwest, French Town to the southwest, and ferries to the west and east (USGS 1886). By 1932 Jims Camp and US 99 are depicted to the east (USGS 1932). Multiple structures appear along the Klamath River in the 1955 map including two structures near the subject property. The Indian Girl Mine is also depicted to the east of the property along Ash Creek (USGS 1955). The residence and an associated garage across the road to the southwest are visible in a 1955 historic aerial photograph (NETROnline 2022). Additions to the north and south elevations were constructed at unknown times.

B7. Moved? No
B8. Related Features: n/a
B9a. Architect: Unknown **b. Builder:** Unknown

B10. Significance:

USGS maps depicts little residential development in the surrounding area until the mid-twentieth century when the Young Property was constructed. Newspaper and archival research did not identify any additional information about the site's construction or use, or any of the property's occupants.

Theme: Community Planning and Development
Area: Northern California
Period of Significance: N/A
Property Type: Private residence
Applicable Criteria: N/A

B11. Additional Resource Attributes: N/A

B12. References: See continuation sheet

B13. Remarks: None
B14. Evaluator: Tim Wood and Erin Swicegood, AECOM
888 SW 5th Avenue, Suite 600
Portland, OR 97204

Date of Evaluation: April 14, 2022

(This space reserved for official comments.)

Evaluation

Criteria Analysis

NRHP Criterion A
Research does not indicate that the Young Property is associated with any significant historic events or patterns of events under NRHP Criterion A.

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

NRHP Criterion C
The Young Property 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 Young Property is not significant as a source (or likely source) of important information regarding history. 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 Young Property 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.* The Young Property remains at its original building site on the banks of 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.* The design of the Young Property has undergone several alterations since its original construction, including the addition of nonhistoric wood doors and the construction of two additions. The additions appear to be historic, and the original doors appear to be removed and resting against the side of the residence. These changes have not impacted the overall design of the building, therefore the property retains integrity of design.

Setting *is the physical environment of a historic property that illustrates the character of the place.* The Young Property retains integrity of setting in the rural area of Siskiyou County on the banks of the Klamath River.

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 Young Property continues to exhibit a majority of the original materials and the craftsmanship of its builders. Therefore, it retains 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 Young Property retains integrity of feeling because it continues to exhibit its historic use as a private residence overlooking the Klamath River.

Association *is the direct link between a property and the event or person for which the property is significant.* The integrity of association is retained because the Young Property has not undergone any major alterations outside of the historic period and has remained at its historic location near the Klamath River.

The Young Property retains integrity but is not significant under any NRHP criteria. Therefore, it is not eligible for listing in the NRHP.

B12. References

NETROnline. 2022. 1131 State Route 96, Yreka, CA. Electronic document, https://www.historicaerials.com/viewer, accessed April 20, 2022.

United States Geological Survey (USGS). 1886. Shasta, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8438/-122.5786, accessed April 5, 2022.

United States Geological Survey (USGS). 1932. Yreka, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8438/-122.5786, accessed April 5, 2022.

United States Geological Survey (USGS). 1955. Hornbrook, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8438/-122.5786, accessed April 5, 2022.

Photographs:

Photograph 1. Young Property west (primary) elevation; view facing east, 2021.

Photograph 2. Young Property north and west elevation; view facing southeast, 2021.

Photographs (Continued):

Photograph 3. Young Property south and west elevation; view facing northeast, 2021.

Primary #
HRI#

LOCATION MAP

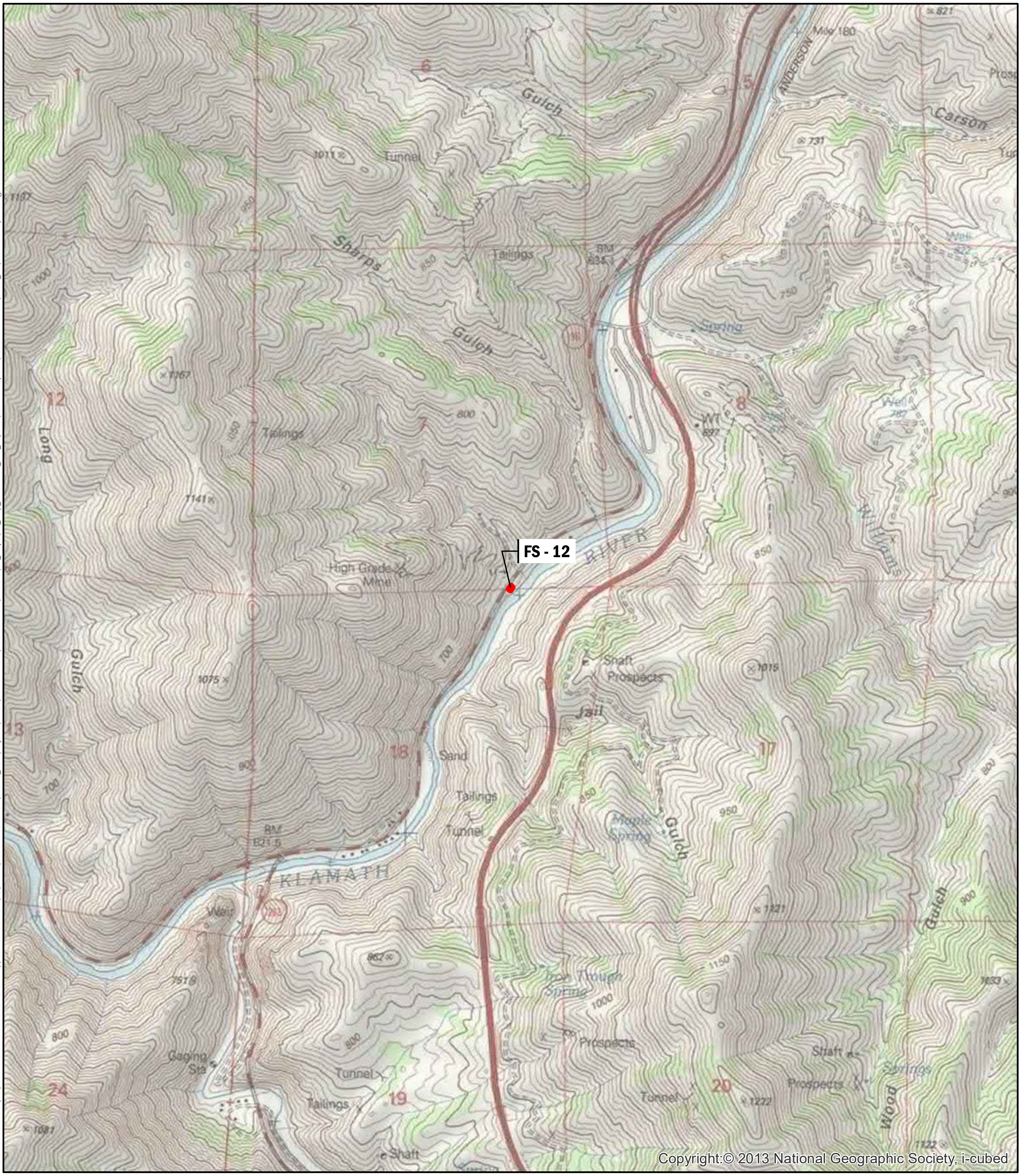
Trinomial

 *Resource Name or #: Young Property (FS-12)

*Map Name: *Scale: *Date of Map:

See Sketch/Site Map on next page.

AECOM Oakland CA 4/22/2022 USER alexander.remar PATH \\na.aecomnet.com\lfs\AMER\Oakland-USOAK01\Secure_DCS\Projects\Water\Klamath Dam\400-Technical\440 GIS\02_Maps\02_Map_Production_and_Reports\Cultural Reports\BuiltEnvironment\2022_FS\Location Map - Young Residence.mxd

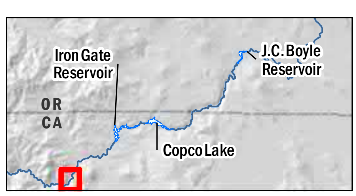


Resource

0 2,000 Feet

0 600 Meters

1:24,000



Young Residence

1131 State Highway 96
FS-12

AECOM

April 2022

State of California — The Resources Agency
Primary # DEPARTMENT
OF PARKS AND RECREATION HRI#

SKETCH MAP

Trinomial

***Resource Name or #:** Young Property (FS-12)

***Map Name:** ***Scale:** ***Date of Map:**

See Sketch/Site Map on next page.

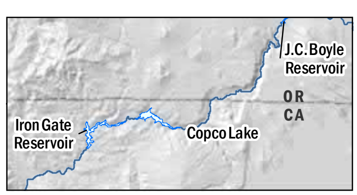
Resource

0 300 Feet

0 50 Meters

N

1:1,800



Young Residence

1131 State Highway 96
FS-12

AECOM
April 2022

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

Primary #
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code Reviewer Date

 Resource Name or #: Neuman Property (FS-13, FS-14, and FS-15)

P1. Other Identifier: Neuman Property (FS-13 and FS-15)
***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**
- ***a. County** Siskiyou
- ***b. USGS 7.5' Quad** Iron Gate Reservoir, CA **Date** 2022 **T** 46N; **R** 6W; NE1/4 of SW 1/4 **of Sec** 18**;** Mount Diablo B.M.
- c. Address 1920 Highway 96 City Yreka Zip 96067
- d. UTM: Zone 10 T, 534458.979mE/4631404.291mN
- e. Other Locational Data: N/A

***P3a. Description:**

Located at 1920 State Route 96 in Yreka, California, the Neuman Property was constructed circa 1950. The property consists of a one-story cabin (FS-13), one-story former restaurant building (FS-14), one-story residence (FS-15), pump house, and shed. The cabin (FS-13) features a rectangular block form, wood shingle cladding, and a front gable roof. The eaves include horizontal wood board siding. The symmetrical northwest (primary) façade consists of a centrally located replacement flush wood composite pedestrian door flanked by rectangular fixed wood sash windows on each side. The northeast elevation appears to include two wood sash windows. The single-story residence (FS-15) features a rectangular block form, a slab on grade concrete foundation, vertical wood board siding, and a front gable roof finished with composite shingles. An addition to the roof extends from the northeast elevation to provide coverage to the side porch. The symmetrical northwest (primary) façade consists of a centrally located pedestrian door flanked by one-over-one sash windows on each side. The northeast elevation includes a centrally located pedestrian door flanked by aluminum slider windows on each side. Only FS-13 and FS-15 are within the post-project floodplain. The other buildings on the property would not be affected by the project and were not documented.

***P3b. Resource Attributes:** (HP3) Multifamily property
***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other
P5a. Photograph:

P5b. Description of Photo: North façade of cabin (FS-13) (2019).

***P6. Date Constructed/Age and Source:**
☒ Historic, c.1950

***P7. Owner and Address:**
Neuman Properties and Development LLC, 951 Emigrant Creek Road, Ashland, OR 97520-9081

***P8. Recorded by:**
Tim Wood, AECOM
888 SW 5th Ave, Suite 600
Portland, OR 97204

***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

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

BUILDING, STRUCTURE, AND OBJECT RECORD

***Resource Name or #:** Neuman Property (FS-13, FS-14, and FS-15) ***NRHP Status Code:** 6Z

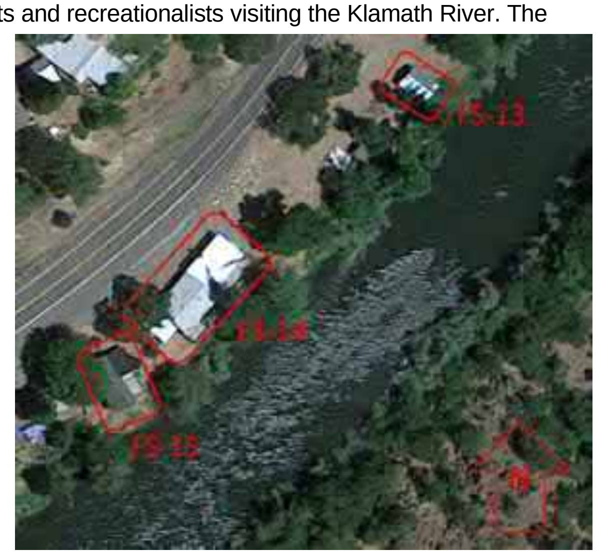
Page 2 **of** 10

B1. Historic Name:
B2. Common Name: Neuman Property (FS-13 and FS-15)
B3. Original Use: Private residence
B4. Present Use: Private residence
B5. Architectural Style: Minimal Traditional
B6. Construction History:

Located at 1920 State Route 96 in Yreka, California, the Neuman Property was constructed circa 1950. A review of United States Geological Survey (USGS) maps reveals minimal development in the surrounding area until the mid-twentieth century. A 1932 USGS map depicts Jims Camp to the east of the property with US Route 99 running adjacent to it (USGS 1932). By 1955, ten buildings appear in the immediate area with two structures to the north of US 99 and eight to the south (USGS 1955). A sign on the restaurant (FS-14), indicates the property is associated with the Swallows Resort and Trailer Park which developed along the Klamath River and US Route 99 in the early 1950s (*Los Angeles Times* 1952). Research has not revealed the exact location of the Swallows Resort but it was advertised in 1959 as 13 miles south of the Oregon border with “2400 ft. hwy. & 5000 ft. river frontage, 6 modern cabins, 10 modern trailer spaces, Store, Chevron Sta. & living quarters” (*Los Angeles Times* 1959). In 1955, several cabins were lost to flooding of the Klamath River, which explains the discrepancy in the number of buildings depicted in the 1955 USGS map and the number of cabins described by the *Los Angeles Times* in 1959 (*Herald and News* 1955). Historic newspapers indicate the property was developed through the 1950s and 1960s as it is also referred to as the Swallows Trailer Park and Swallows Motel. The Swallows property was reportedly sold to an unnamed executive of the Morrison-Knutsen Construction Co. in 1960 (*Mail Tribune* 1960). The Swallows property is not documented in available historic newspapers after 1960. Research did not reveal and additional information about the construction or alterations to FS-13, FS-14 or FS-15.

B7. Moved? No
B8. Related Features: The property consists of a one-story cabin (FS-13), one-story former restaurant building (FS-14), one-story residence (FS-15), pump house, and shed.
B9a. Architect: Unknown **b. Builder:** Unknown

B10. Significance:
The Neuman Property was constructed circa 1950, likely as part of the Swallows Resort property. Newspaper and archival research did not identify any additional information about the construction of the property. Research suggests the property is associated with the Swallows Resort, Trailer Park, and Motel property which catered to tourists and recreationalists visiting the Klamath River. The Swallows property



Theme: Entertainment/Recreation/Community Planning and Development
Area: Northern California
Period of Significance: c.1950
Property Type: Private residence
Applicable Criteria: N/A
B11. Additional Resource Attributes: N/A

B12. References: See continuation sheet

B13. Remarks: None
B14. Evaluator: Tim Wood and Erin Swicegood, AECOM
888 SW 5th Avenue, Suite 600
Portland, OR 97204

Date of Evaluation: April 14, 2022

(This space reserved for official comments.)

Evaluation

Criteria Analysis

NRHP Criterion A
Research indicates the Neuman Property is likely associated with the Swallows Resort, Trailer Park and Motel. However, there is insufficient information to associate either the cabin (FS-13) or the one-story residence (FS-15) on the Neuman Property with any historic events or patterns of events under NRHP Criterion A.

NRHP Criterion B
Research does not indicate that the cabin or the one-story residence are associated with any historically significant individuals under NRHP Criterion B.

NRHP Criterion C
Neither the cabin or the one-story residence 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
Neither the cabin or the one-story residence are significant as a source (or likely source) of important information regarding history. It does not appear likely that either of the properties would yield important information about historic construction materials or technologies and are not significant under NRHP Criterion D.

Integrity Analysis

The cabin and the one-story residence at the Neuman Property retain 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.* The two buildings remain at their original building sites near the Klamath River, 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 design of the cabin has remained largely intact, with only the front door being replaced with a nonhistoric composite door. The single-story residence exhibits several alterations including the roof addition and replacement doors and aluminum slider windows. However, these changes have not impacted the overall designs of the two buildings, therefore the cabin and single-story residence retain integrity of design.

Setting *is the physical environment of a historic property that illustrates the character of the place.* Despite the removal of many of the surrounding cabins from the same period of development, the cabin and the one-story residence retain integrity of setting through its position on the banks of the Klamath River in rural Siskiyou County.

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 cabin and the one-story residence at the Neuman Property continue to exhibit a majority of the original materials and the craftsmanship of its builders. Therefore, they retain 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 cabin and the one-story residence retain integrity of feeling because they both continues to exhibit their historic use as residential buildings overlooking the Klamath River.

Association *is the direct link between a property and the event or person for which the property is significant.* The integrity of association is retained because the cabin and the one-story residence at the Neuman Property have not undergone any major alterations and have remained at their historic location near the Klamath River.

The cabin and the one-story residence both retain integrity but are not significant under any NRHP criteria as individual properties. Therefore, they are not eligible for listing in the NRHP.

B12. References

Herald and News. 1955. “Landslides Wash Out Oregon State Roads.” 22 December.

Los Angeles Times. 1952. “Travelogue.” 12 October.

Los Angeles Times. 1959. “Mountain Property.” 26 July.

Mail Tribune. 1960. “Dam Causes ‘Boom’ in Hornbrook’s Population.” 8 July.

NETROnline. 2022. 1920 State Route 96, Yreka, CA. Electronic document, https://www.historicaerials.com/viewer, accessed April 20, 2022.

United States Geological Survey (USGS). 1932. Yreka, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8331/-122.5847, accessed April 5, 2022.

United States Geological Survey (USGS). 1955. Hornbrook, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8331/-122.5847, accessed April 5, 2022.

Photographs:

Photograph 1. Neuman Property FS-13 northwest (primary) elevation; view facing southeast, 2019.

Photograph 2. Neuman Property FS-15 northwest and northeast elevations; view facing southeast, 2021.

Photographs (Continued):

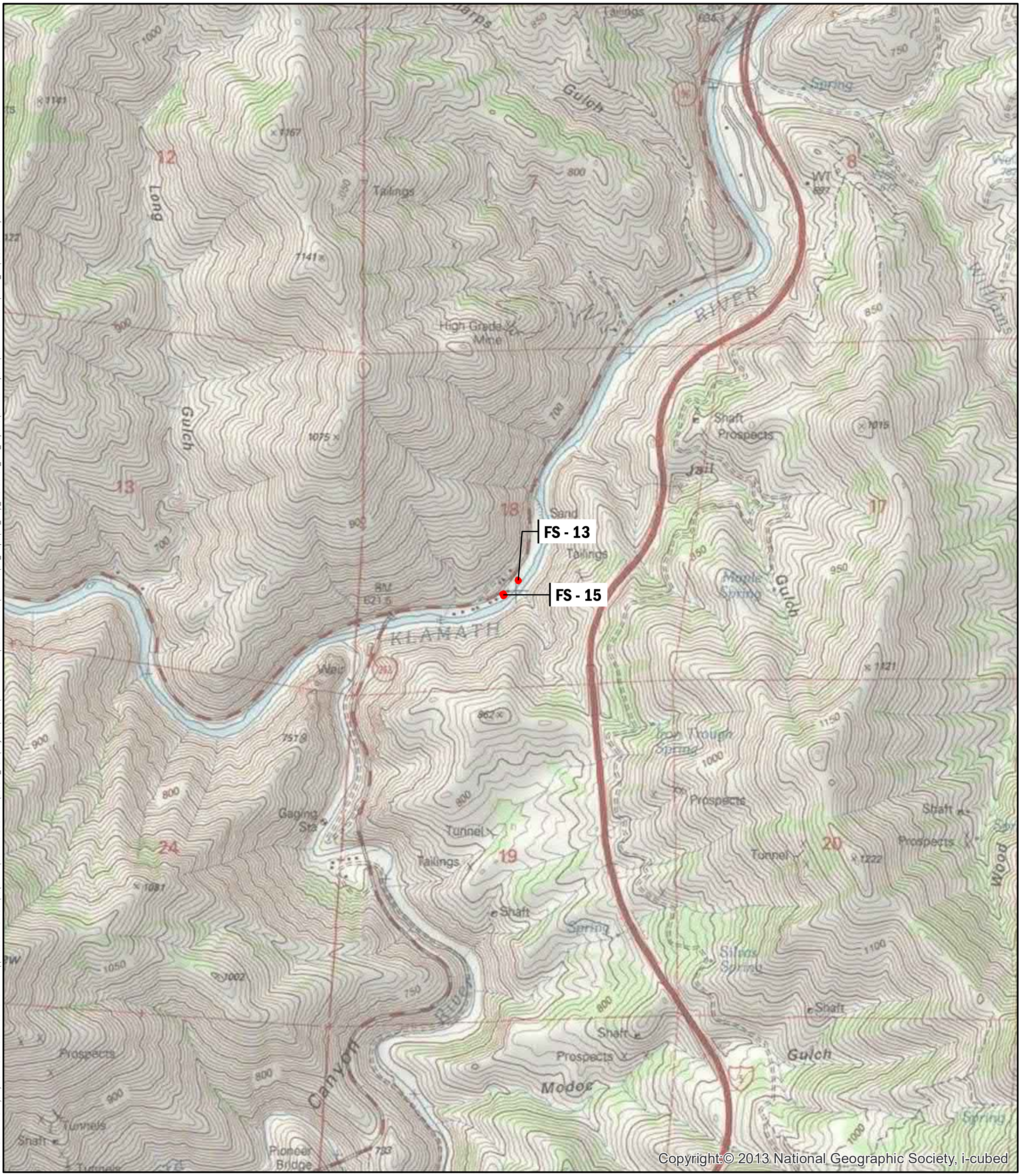
Photograph 3. Neuman Property FS-15 northwest and northeast elevations; view facing southeast, 2019.

LOCATION MAP

Primary #
HRI#
Trinomial

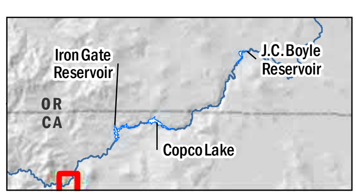
***Resource Name or #:** Neuman Property (FS-13, FS-14, and FS-15)

***Map Name:** ***Scale:** ***Date of Map:**



Resource

0 2,000 Feet
0 600 Meters
1:24,000



Neuman Property

1920 State Highway 96
FS-13 and FS-15

AECOM
April 2022

Primary #
HRI#

Sketch MAP

Trinomial

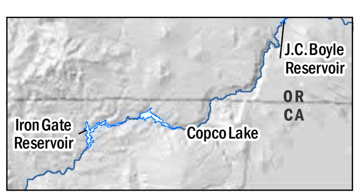
*Resource Name or #: Neuman Property (FS-13, FS-14, and FS-15)

*Map Name:

*Scale:

*Date of Map:

Resource



0 300 Feet
0 50 Meters
N
1:1,800

Neuman Property

1920 State Highway 96
FS-13 and FS-15

AECOM
April 2022

AECOM Oakland CA 4/22/2022 USER alexander.remar PATH \\na.aecomnet.com\lfs\AMER\Oakland-USOAK01\Secure_DCS\Projects\Water\Klamath Dam\400-Technical\440 GIS\02_Maps\02_Map_Production_and_Reports\Cultural Reports\BuiltEnvironment\2022_FS\Site Map - Nueman Cabin Residence.mxd

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

Primary #
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code   Reviewer   Date

    Resource Name or #: Williams Property (FS-16 and FS-17)

P1. Other Identifier: Williams Property (FS-16 and FS-17)
***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**
- ***a. County** Siskiyou
- ***b. USGS 7.5' Quad** Iron Gate Reservoir, CA **Date** 2022 **T** 46N; **R** 6W; NE1/4 of SW1/4 **of Sec** 18; Mount Diablo B.M.
- c. Address 1936 Highway 96 City Yreka Zip 96067
- d. UTM: Zone 10 T, 534406.518mE/4631297.561mN
- e. Other Locational Data: N/A

***P3a. Description:**

Located at 1936 State Route 96 in Yreka, California, the Williams Property was constructed in 1957. The single-family residence with an attached garage (FS-17) sits on a narrow 0.81-acre parcel, positioned between the southern side of Highway 96 and the northern bank of the Klamath River. A small shed (FS-16) borders the western property boundary. The building consists of the original 1957 single-story residence on the west side and a large 2-story addition with an attached garage on the east side that was constructed in 1964. The building includes a concrete slab on grade foundation, is clad in T1-11 siding, and is topped with a side gable roof finished with standing-seam metal panels. A modern brick chimney rises from the western gable end. Windows consist of replacement vinyl one-over-one sash or replacement sliding vinyl. The east elevation consists of two roll-up garage doors beneath a two-lite sliding vinyl window and a fixed vinyl window. A large wooden deck wraps around the rear of the building. To the south of the deck is a large concrete retaining wall, with poured concrete stairs leading to the river. The small shed (FS-16) includes a square base, horizontal wood board cladding, a shed roof, and a single pedestrian door. Alterations to the property include the 1964 addition and the installation of vinyl windows and the chimney.

***P3b. Resource Attributes:** (HP2) Single Family Property
***P4. Resources Present:** ☒ Building ☒ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)
P5a. Photograph:

P5b. Description of Photo: House with attached garage (FS-17) (2019).

***P6. Date Constructed/Age and Source:**
☒ Historic, 1957 (Siskiyou County Assessor)

***P7. Owner and Address:**
Williams Gregory H Jr & Shirley A Trustee, 1936 Hwy 96 Star Rt 3, Yreka, CA 96097-9203

***P8. Recorded by:**
Tim Wood, AECOM
888 SW 5th Ave, Suite 600
Portland, OR 97204

***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 #:** Williams Property (FS-16 and FS-17) ***NRHP Status Code:** 6Z

B1. Historic Name: Verna Roth Property
B2. Common Name: Williams Property (FS-16 and FS-17)
B3. Original Use: Private residence
B4. Present Use: Private residence
B5. Architectural Style: Ranch
B6. Construction History:

A review of United States Geological Survey (USGS) maps reveals minimal development in the surrounding area until the mid-twentieth century. A 1932 USGS map depicts Jims Camp to the east of the property and US 99 running adjacent to it (USGS 1932). By 1955, ten properties appear in the immediate area with two structures to the north of US 99 and eight to the south (USGS 1955). The Williams property at 1936 State Route 96 was constructed in 1957 (Zillow 2022). Siskiyou County building permit records indicate the property was owned by Verna Roth in 1964 when the story addition was added to the east elevation. Gregory Williams acquired the property in 1993 (Siskiyou County 1964, 1993). A modern brick chimney and vinyl windows were added after the original construction.

B7. Moved? No
B8. Related Features: n/a
B9a. Architect: Unknown **b. Builder:** Unknown

B10. Significance:

The residence with attached garage (FS-17) was constructed in 1957. Newspaper and archival research did not identify any additional information about the residence's construction, use, or occupants. The Williams Property reflects the general development of residential properties along the Klamath River in Siskiyou County during the mid-twentieth century.

Theme: Community Planning and Development
Area: Northern California
Period of Significance: 1957
Property Type: Private residence
Applicable Criteria: N/A

B11. Additional Resource Attributes: N/A

B12. References: See continuation sheet

B13. Remarks: None
B14. Evaluator: Tim Wood and Erin Swicegood, AECOM
888 SW 5th Avenue, Suite 600
Portland, OR 97204

Date of Evaluation: April 15, 2022

(This space reserved for official comments.)

Evaluation

Criteria Analysis

NRHP Criterion A
Research does not indicate that the Williams property is associated with any historic events or patterns of events under NRHP Criterion A.

NRHP Criterion B
Although associated with Verna Roth, research does not indicate that the Williams property is associated with any historically significant individuals under NRHP Criterion B.

NRHP Criterion C
The residence 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 residence is not significant as a source (or likely source) of important information regarding history. 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 residence with attached garage (FS-17) 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.* The residence and shed remain at their original building site on the banks of the Klamath River, 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 design of the residence has undergone several alterations since its original construction, including construction of the east addition in 1964 and the addition of vinyl windows, a brick chimney, and rollup garage doors at unknown dates. Although the addition substantially changed the design of the residence, it was conducted shortly after the original construction and within the potential period of significance. Overall, these changes have not significantly impacted the overall design of the building, therefore the residence retains integrity of design.

Setting *is the physical environment of a historic property that illustrates the character of the place.* The residence retains integrity of setting in the rural area of Siskiyou County on the banks of the Klamath River.

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.* Despite the addition of replacement vinyl windows and new chimney, the residence continues to exhibit a majority of the original materials and the craftsmanship of its builders. Therefore, it retains 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 residence retains integrity of feeling because it continues to exhibit its historic use as a private residence overlooking the Klamath River.

Association *is the direct link between a property and the event or person for which the property is significant.* The integrity of association is retained because the residence has not undergone any major alterations after the historic period and has remained at its historic location near the Klamath River.

The residence retains integrity but is not significant under any NRHP criteria. Therefore, it is not eligible for listing in the NRHP.

B12. References

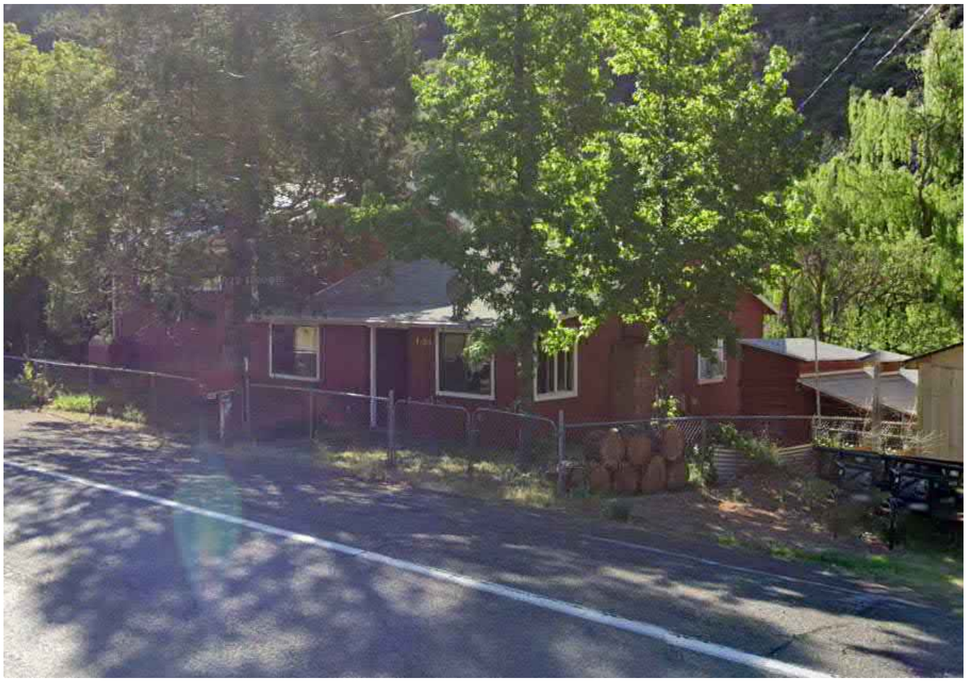
Siskiyou County. 1964-1993. 1936 State Route 96 Building Permits. On file with Siskiyou County Building Division, Yreka, CA.

United States Geological Survey (USGS). 1932. Yreka, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8331/-122.5847, accessed April 5, 2022.

United States Geological Survey (USGS). 1955. Hornbrook, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8331/-122.5847, accessed April 5, 2022.

Zillow. 2022. 1936 Highway 96, Yreka, CA 96097. Electronic document, https://www.zillow.com/homedetails/1936-Highway-96-Yreka-CA-96097/15975755_zpid/, accessed 4/21/2022.

Photographs:



Photograph 1. Williams Property residence north and west elevations (FS-17) and shed (FS-16) (right); view facing southeast, 2021.

Photograph 2. Williams Property residence north elevation (FS-17); view facing south, 2021.

Photographs (Continued)**:**

Photograph 3. Williams Property residence north and east elevations (FS-17); view facing southwest, 2021.

Photograph 4. Williams Property residence south elevation (FS-17); view facing north, 2019.

Photographs (Continued):

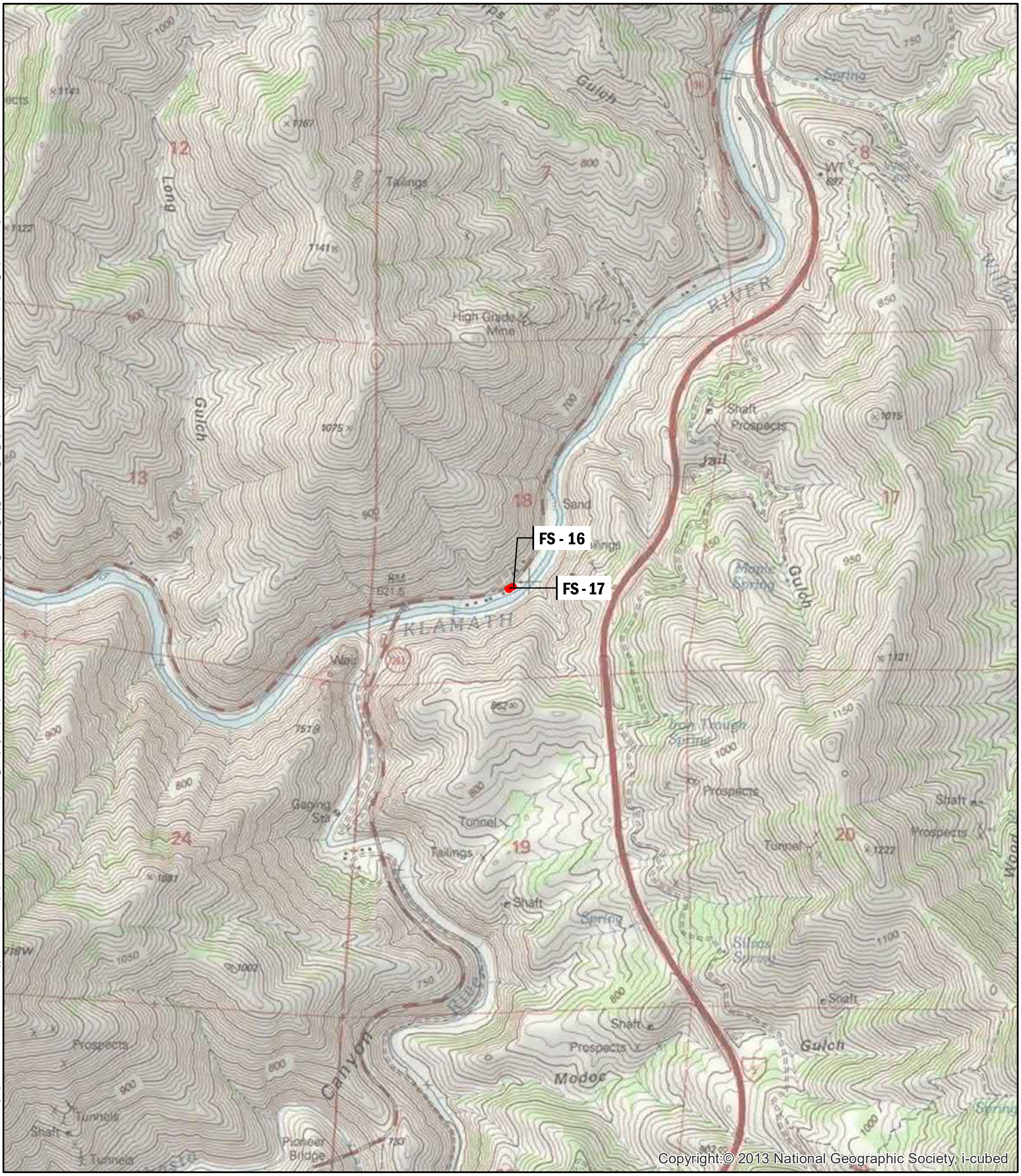
Photograph 5. Williams Property residence west and south elevations (FS-17) and shed (FS-16) (left); view facing north, 2019.

LOCATION MAP

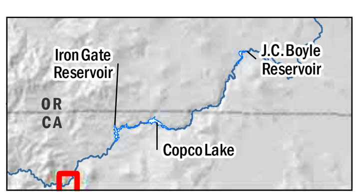
***Resource Name or #:** Williams Property (FS-16 and FS-17)

***Map Name:** ***Scale:** ***Date of Map:**

See Sketch/Site Map on next page.



Resource



0 2,000 Feet
0 600 Meters
1:24,000

Williams Residence and Shed

1936 State Highway 96
FS-16 and FS-17

AECOM
April 2022

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

Primary #
HRI#
Trinomial

Sketch MAP

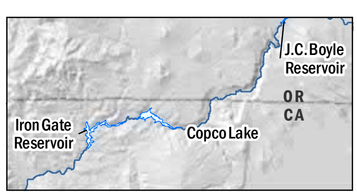
***Resource Name or #:** Williams Property (FS-16 and FS-17)

***Map Name:** ***Scale:** ***Date of Map:**

See Sketch/Site Map on next page.

Resource

0 300 Feet
0 50 Meters
N
1:1,800



Williams Residence and Shed

1936 State Highway 96
FS-16 and FS-17

AECOM
April 2022

AECOM Oakland CA 4/22/2022 USER alexander.remar PATH \\na.aecomnet.com\lfs\AMER\Oakland-USOAK01\Secure_DCS\Projects\Water\Klamath Dam\400-Technical\440 GIS\02_Maps\02_Map_Production_and_Reports\Cultural Reports\BuiltEnvironment\2022_FS\Site Map - Williams Residence and Shed.mxd

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

Primary #
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code Reviewer Date

 Resource Name or #: Robertson Property (FS-18 and FS-19)

P1. Other Identifier: Robertson Property (FS-18 and FS-19)
***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**
***a. County** Siskiyou
***b. USGS 7.5' Quad** Iron Gate Reservoir, CA **Date** 2022 **T** 46N; **R** 6W; SE1/4 of SW 1/4 **of Sec** 18; Mount Diablo B.M.
c. Address 1942 State Route 96 City Yreka Zip 96067
d. UTM: Zone 10 T, 534352.948mE/4631265.549mN
e. Other Locational Data: N/A

***P3a. Description:**

Located at 1942 State Route 96 near Yreka, California, the Robertson Property was constructed circa 1950. The property consists of two residences situated on a .88-acre parcel of land bounded by State Route 96 to the north and the Klamath River to the south. Residential parcels bound the property to the east and west. The two residences are spaced several yards apart. County records indicate one of the buildings is a manufactured home with an attached garage. A detached garage was constructed adjacent to the eastern property boundary in 1982 (Siskiyou County 1982). Residence 1 (FS-18), on the eastern half of the property is an L-shaped single-story, single-family residence. It rests on a continuous concrete masonry block foundation, is clad in vertical T1-11 siding and includes a side-gabled roof finished with asphalt shingles. A brick chimney rises from the building's eastern gable end. Oriented toward the highway (north), the residence stands four bays wide at its façade. A pedimented front porch supported by simple wooden columns frames the building's primary entrance that consists of a single pedestrian door flanked by a combination of sliding aluminum windows to the east and a glass block window to the west. The east elevation lacks fenestration and architectural detail except for the brick chimney. The south elevation includes a deck that provides access to the Klamath River. The west elevation includes a pedestrian entrance flanked by at least two window openings. The entrance is covered by a front gable awning supported by partial walls to the north and west. Stone and concrete retaining walls are positioned adjacent to the river. Residence 2 (FS-19) is a 1½-story single-family residence with a rectangular plan and clad in vertical T1-11 siding. The building features a gambrel roof with shed roof addition extending from its western elevation. The roof is finished with corrugated metal panels. The north façade consists of large, one-over-one and sliding vinyl and aluminum windows. A large wooden deck extends from the building's rear (south) elevation. Tiered retaining walls, made of both concrete and stone, are found to the rear of the building. The retaining walls feature extensive plantings and manicured vegetation. Alterations to the property include the addition of the detached garage in 1982, replacement or construction of the rear decks, and some replacement vinyl windows.

***P3b. Resource Attributes:** (HP3) Multiple Family Property
***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)
P5a. Photograph:
P5b. Description of Photo: North elevation of FS-18 (left) and FS -19 (right) (2019).

***P6. Date Constructed/Age and Source:**
☒ Historic, c.1950

***P7. Owner and Address:**
Robertson, Charles Thomas & Carol Ann Trust, 450 South Havenside Avenue, Newbury Park, CA 91320

***P8. Recorded by:**
Tim Wood, AECOM
888 SW 5th Ave, Suite 600
Portland, OR 97204

***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 #**: Robertson Property (FS-18 and FS-19) ***NRHP Status Code**: 6Z

Page 2 **of** 10

B1. Historic Name:
B2. Common Name: Robertson Property (FS-18 and FS-19)
B3. Original Use: Private residence
B4. Present Use: Private residence
B5. Architectural Style: Colonial Revival; Minimal Traditional
B6. Construction History:

The two residences on the Robertson property were constructed circa 1950. A review of United States Geological Survey (USGS) maps reveals minimal development in the surrounding area until the mid-twentieth century. A 1932 USGS map depicts Jims Camp appears to the east of the property and US 99 running adjacent to it (USGS 1932). By 1955, ten properties appear in the immediate area with two structures to the north of US 99 and eight to the south (USGS 1955). Siskiyou County building permits indicate the property was owned by Alexander V. Partida from at least 1982 until 1993 (Siskiyou County 1982, 1993). Research did not identify previous owners. Changes to the property include the construction of a detached garage in 1982, the installation of a solar system in 1983, a new foundation and remodeling and rewiring in 1983, a porch in 1984, the chimney was relined in 1989 and a new roof was installed in 1993 (Siskiyou County 1983, 1984, 1989, 1993). The permits do not indicate which of the two residences the permits were for.

B7. Moved? No
B8. Related Features: A detached garage is also on the property and was constructed circa 1982.

B9a. Architect: Unknown **b. Builder:** Unknown

B10. Significance:

The two residence were constructed circa 1950. Newspaper and archival research did not identify any additional information about the two residences' construction, use, or occupants. The Robertson Property reflects the general development of residential properties along the Klamath River in Siskiyou County during the mid-twentieth century.

Theme: Community Planning and Development
Area: Northern California
Period of Significance: c.1950
Property Type: Private residence
Applicable Criteria: N/A

B11. Additional Resource Attributes: N/A

B12. References: See continuation sheet

B13. Remarks: None
B14. Evaluator: Tim Wood and Erin Swicegood, AECOM
888 SW 5th Avenue, Suite 600
Portland, OR 97204

Date of Evaluation: April 13, 2022

(This space reserved for official comments.)

Evaluation

Criteria Analysis

NRHP Criterion A
Research does not indicate that either of the two residences are associated with any historic events or patterns of events under NRHP Criterion A.

NRHP Criterion B
Research does not indicate that either of the residences are associated with any historically significant individuals under NRHP Criterion B.

NRHP Criterion C
Neither of the two residences 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 residences are not significant as a source (or likely source) of important information regarding history. 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 two residences on the Robertson property retain 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.* The residences remain at their original building site on the banks of the Klamath River, 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 design of the residences has undergone minor alterations since their original construction, including some replacement windows and the replacement or addition of wooden decks at unknown dates. However, these changes have not substantially impacted the overall design of the two residences, and therefore the residences retain integrity of design.

Setting *is the physical environment of a historic property that illustrates the character of the place.* The residences retain integrity of setting in the rural area of Siskiyou County on the banks of the Klamath River.

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 residences continue to exhibit most of the original materials and the craftsmanship of their builders. Therefore, they retain 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 residences retain integrity of feeling because they both continue to exhibit their historic uses as private residences overlooking the Klamath River.

Association *is the direct link between a property and the event or person for which the property is significant.* The integrity of association is retained because the residences have not undergone any major alterations and have remained at their historic locations near the Klamath River.

The residences retain integrity but are not significant under any NRHP criteria. Therefore, the two Robertson property residences are not eligible for listing in the NRHP.

CONTINUATION SHEET

Property Name: Robertson Property (FS-18 and FS-19)

B12. References

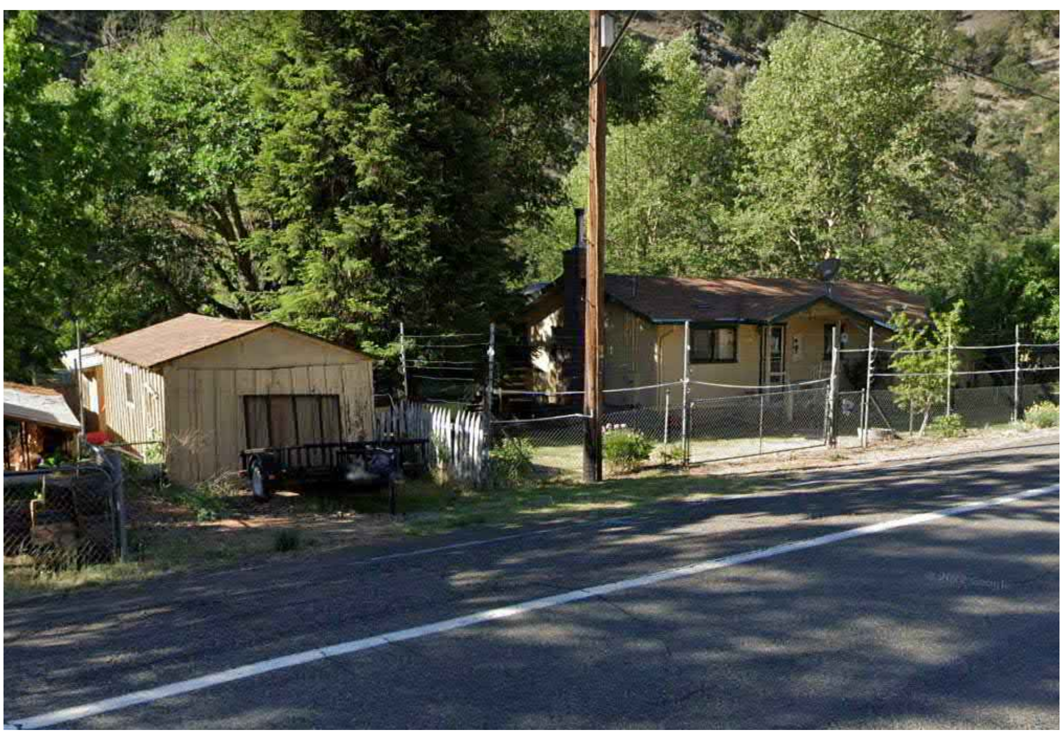
Siskiyou County. 1982-1993. 1942 State Route 96 Building Permits. On file with Siskiyou County Building Division, Yreka, CA.

United States Geological Survey (USGS). 1932. Yreka, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8331/-122.5847, accessed April 5, 2022.

United States Geological Survey (USGS). 1955. Hornbrook, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8331/-122.5847, accessed April 5, 2022.

Photographs:

Photograph 1. Robertson Property residence (FS-18) north elevation; view facing south, 2021.



Photograph 2. Robertson Property residence north elevation and east elevations (FS-18) and detached garage (left); view facing south, 2021.

Photographs (Continued):

Photograph 3. Robertson Property residence north and east elevations (FS-19); view facing southwest, 2021.

Photograph 4. Robertson Property residence south elevation (FS-19); view facing northwest, 2019.

Primary #
HRI#

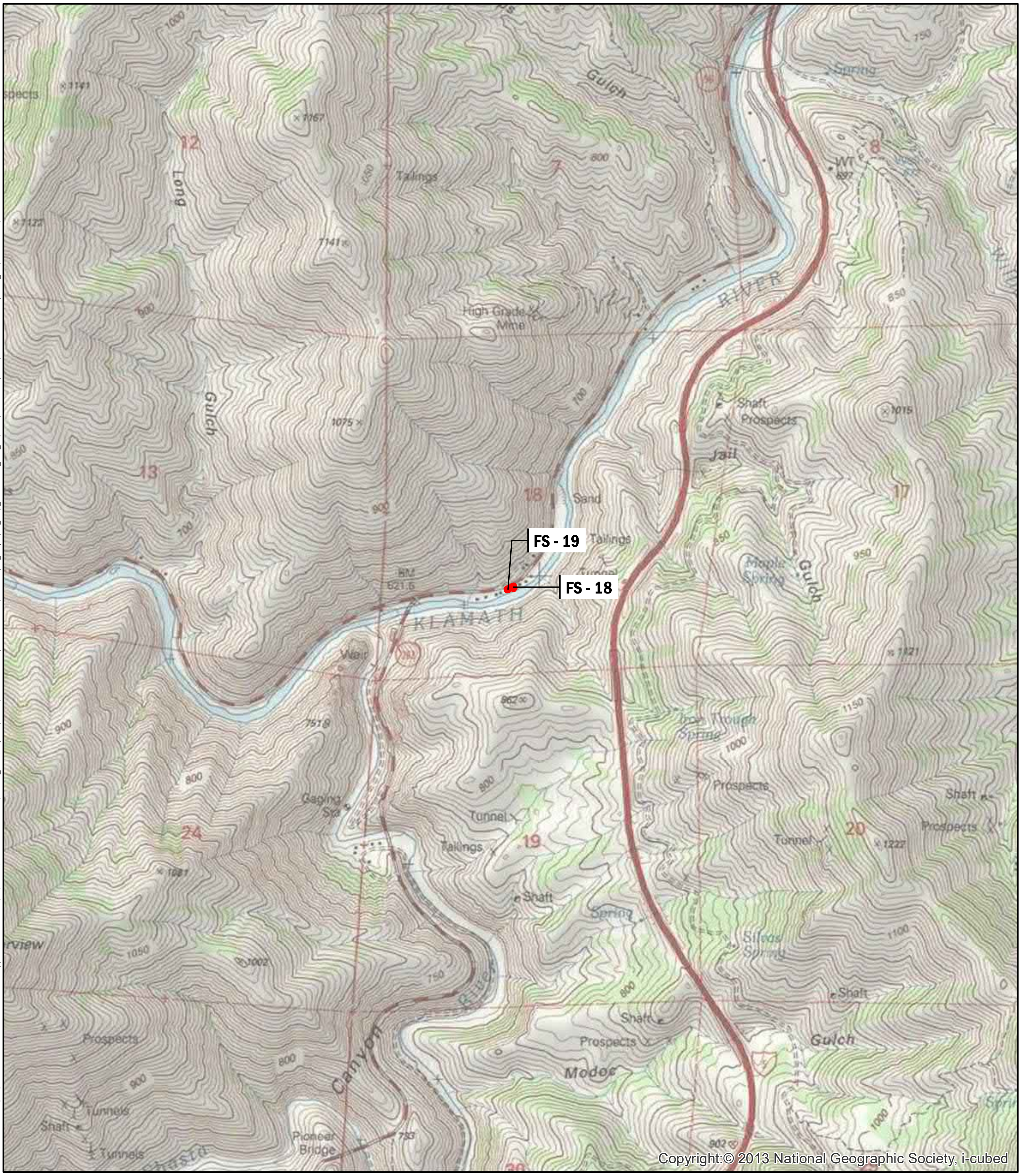
LOCATION MAP

Trinomial

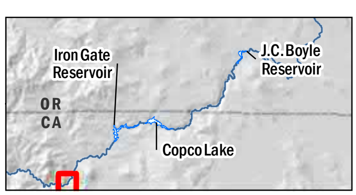
***Resource Name or #:** Robertson Property (FS-18 and FS-19)

***Map Name:** ***Scale:** ***Date of Map:**

See Sketch/Site Map on next page.



Resource



0 2,000 Feet
0 600 Meters
N
1:24,000

Robertson Property

1942 State Route 96
FS-18 and FS-19

AECOM
April 2022

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

SKETCH MAP

Primary #
HRI#
Trinomial

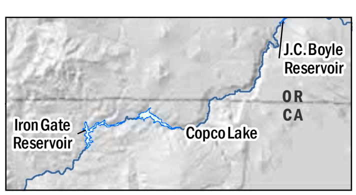
***Resource Name or #:** Robertson Property (FS-18 and FS-19)

***Map Name:** ***Scale:** ***Date of Map:**

See Sketch/Site Map on next page.

Resource

0 300 Feet
0 50 Meters
N
1:1,800



Robertson Property

1942 State Route 96
FS-18 and FS-19

AECOM
April 2022

 Resource Name or #: Brower Property (FS-20)

P1. Other Identifier: Brower Property (FS-20)
***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**
- ***a. County** Siskiyou
- ***b. USGS 7.5' Quad** Iron Gate Reservoir, CA **Date** 2021 **T** 46N; **R** 6W; NE1/4 of SW 1/4 **of Sec** 18; Mount Diablo B.M.
- c. Address 2014 Highway 96 City Yreka Zip 96067
- d. UTM: Zone 10 T, 534325.585mE/4631257.423mN
- e. Other Locational Data: N/A

***P3a. Description:**

The Brower Property at 2014 State Route 96 near Yreka, California was constructed circa 1950. The single-story single-family residence with a basement is situated on a small .39-acre parcel on the south side of State Route 96 and the north bank of the Klamath River. The building stands three bays wide at its façade and features a centrally placed replacement front door flanked on either side by multi-lite windows. The front gable roof is finished with corrugated metal panels. An open-air shed roof porch with exposed rafter tails extends from the building's western elevation. Decorative wooden brackets ornament the gable of the building's façade. The building rests on a continuous concrete foundation and is clad in vertical T1-11 siding. Windows consist of original one-over-one wood sash windows with their original surrounds and aluminum slider windows. The building's rear elevation has a detached wooden deck which extends towards the river. A rock wall is closer to the river. Alterations to the residence include the shed addition on the west elevation and replacement aluminum windows.

***P3b. Resource Attributes:** (HP2) Single Family Residence
***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other
P5a. Photograph:

P5b. Description of Photo: West elevation of the residence with shed addition (2019).

***P6. Date Constructed/Age and Source:**
☒ Historic, 1948 (Zillow 2022)

***P7. Owner and Address:**
Elmer Browler, Jr. 2014 State Highway 96, Yreka CA 96097-9218

***P8. Recorded by:**
Tim Wood, AECOM
888 SW 5th Ave, Suite 600
Portland, OR 97204

***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 #:** Brower Property (FS-20) ***NRHP Status Code:** 6Z

B1. Historic Name:
B2. Common Name: Brower Property (FS-20)
B3. Original Use: Private residence
B4. Present Use: Private residence
B5. Architectural Style: Minimal Traditional
B6. Construction History:

The residence on the Brower property was constructed in 1948 (Zillow 2022). A review of United States Geological Survey (USGS) maps reveals minimal development in the surrounding area until the mid-twentieth century. A 1932 USGS map depicts Jims Camp appears to the east of the property and US 99 running adjacent to it (USGS 1932). By 1955, ten properties appear in the immediate area with two structures to the north of US 99 and eight to the south (USGS 1955). Historic building permits indicate the property was owned by Mary C. Youngblood in 1997 and Kelly Youngblood in 1999 (Siskiyou County 1997, 1999). The shed addition and replacement aluminum slider windows were added at an unknown date.

B7. Moved? No
B8. Related Features: The residence is associated with a rock wall near the Klamath river on the property.

B9a. Architect: Unknown **b. Builder:** Unknown

B10. Significance:

The residence on the Brower property was constructed in 1948. Newspaper and archival research did not identify any additional information about the residence's construction, use or occupants. The Brower Property reflects the general development of residential properties along the Klamath River in Siskiyou County during the mid-twentieth century.

Theme: Community Planning and Development
Area: Northern California
Period of Significance: 1948
Property Type: Private residence
Applicable Criteria: N/A

B11. Additional Resource Attributes: N/A

B12. References: See continuation sheet

B13. Remarks: None
B14. Evaluator: Tim Wood and Erin Swicegood, AECOM
888 SW 5th Avenue, Suite 600
Portland, OR 97204

Date of Evaluation: April 15, 2022

(This space reserved for official comments.)

Evaluation

NRHP Criterion A
Research does not indicate that the residence (FS-20) at the Brower Property is associated with any historic events or patterns of events under NRHP Criterion A.

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

NRHP Criterion C
The residence 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 residence is not significant as a source (or likely source) of important information regarding history. 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 residence at the Brower Property 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.* The residence remains at its original building site on the banks of 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.* The design of the residence has undergone moderate alterations since its original construction, including the addition of aluminum slider windows and to the shed addition at unknown dates. However, these changes have not impacted the overall design of the building, therefore the building retains integrity of design.

Setting *is the physical environment of a historic property that illustrates the character of the place.* The residence retains integrity of setting in the rural area of Siskiyou County on the banks of the Klamath River.

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 residence continues to exhibit a majority of the original materials and the craftsmanship of its builders. Therefore, it retains 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 residence retains integrity of feeling because it continues to exhibit its historic use as a private residence overlooking the Klamath River.

Association *is the direct link between a property and the event or person for which the property is significant.* The integrity of association is retained because the residence has not undergone any major alterations and has remained at its historic location near the Klamath River.

The residence retains integrity but is not significant under any NRHP criteria. Therefore, it is not eligible for listing in the NRHP.

B12. References

Siskiyou County. 1997-1999. 1942 State Route 96 Building Permits. On file with Siskiyou County Building Division, Yreka, CA.

United States Geological Survey (USGS). 1932. Yreka, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8331/-122.5847, accessed April 5, 2022.

United States Geological Survey (USGS). 1955. Hornbrook, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8331/-122.5847, accessed April 5, 2022.

Zillow. 2022. 2014 State Route 96, Yreka, CA 96097. Electronic document, https://www.zillow.com/homedetails/2014-State-Highway-96-Yreka-CA-96097/15975753_zpid/, accessed April 21, 2022.

Photographs:

Photograph 1. Brower Property residence (FS-20) north elevation; view facing south, 2021.

Photograph 2. Brower Property residence west elevation (FS-20); view facing southeast, 2019.

Photographs (Continued):

Photograph 3. Brower Property residence (FS-20) north elevation; view facing south, 2019.

Primary #
HRI#

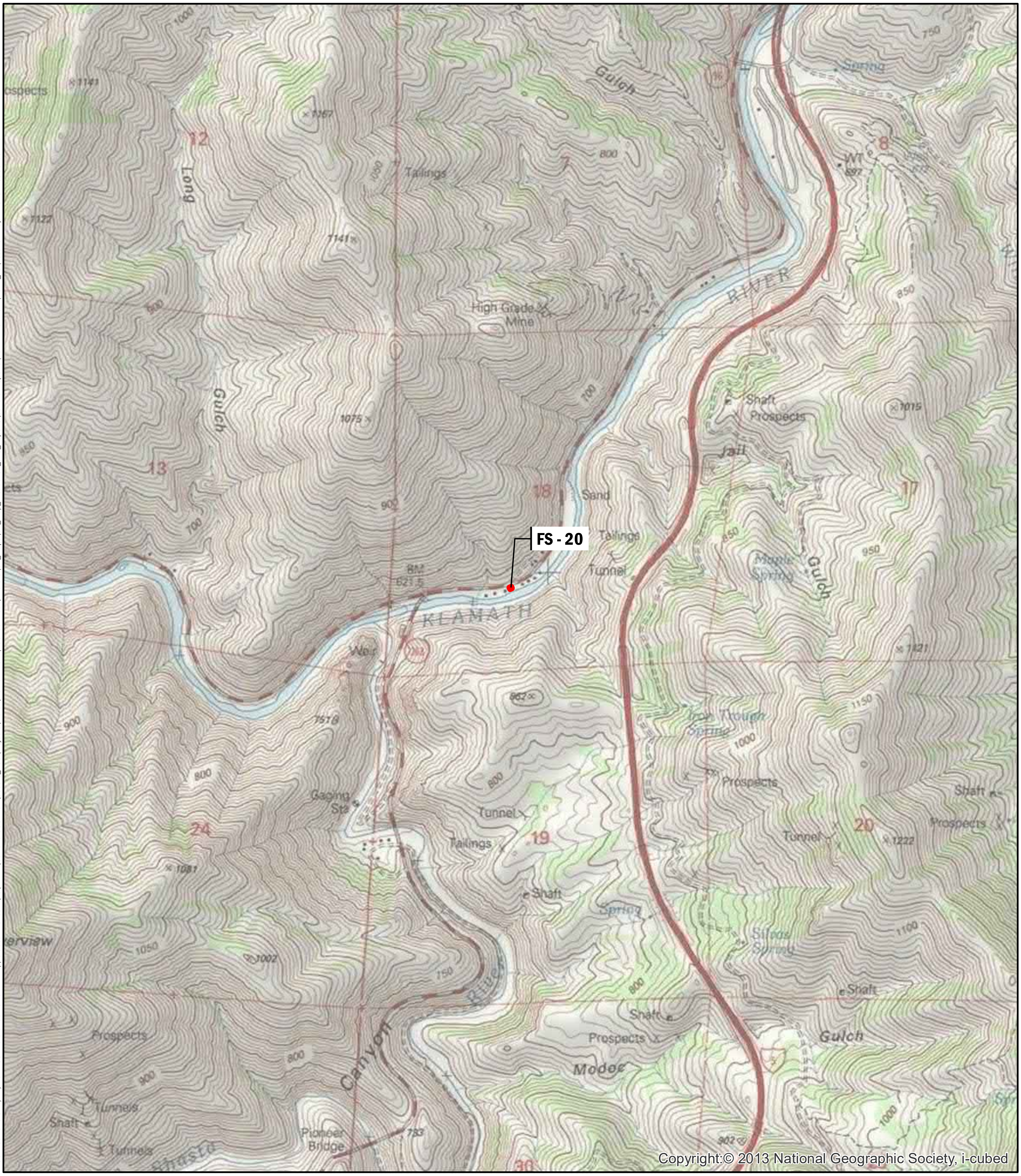
LOCATION MAP

Trinomial

***Resource Name or #:** Brower Property (FS-20)

***Map Name:** ***Scale:** ***Date of Map:**

See Sketch/Site Map on next page.

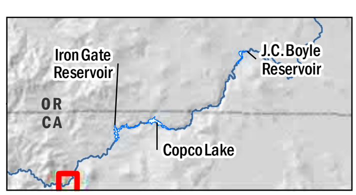


Resource

0 2,000 Feet

0 600 Meters

1:24,000



Brower Residence

2014 State Highway 96
FS-20

AECOM

April 2022

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

Primary #
HRI#
Trinomial

Sketch MAP

***Resource Name or #:** Brower Property (FS-20)

***Map Name:** ***Scale:** ***Date of Map:**

See Sketch/Site Map on next page.

AECOM Oakland CA 4/22/2022 USER alexander.remar PATH \\na.aecomnet.com\lfs\AMER\Oakland-USOAK01\Secure_DCS\Projects\Water\Klamath Dam\400-Technical\440 GIS\02_Maps\02_Map_Production_and_Reports\Cultural Reports\BuiltEnvironment\2022_FS\Site Map - Brower Residence.mxd

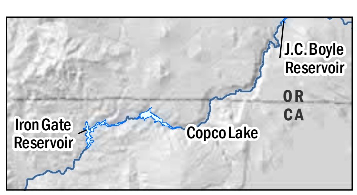
Resource

N

0 300 Feet

0 50 Meters

1:1,800



Brower Residence

2014 State Highway 96
FS-20

AECOM
April 2022

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

Primary #
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code Reviewer Date

Page 1 of 10 **Resource Name or #:** Shulz Property (FS-22 and FS-21)

P1. Other Identifier: Shulz Property (FS-22 and FS-21)
***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**
***a. County** Siskiyou
***b. USGS 7.5' Quad** Iron Gate Reservoir, CA **Date** 2022 **T** 46N; **R** 6W; NE1/4 of SW 1/4 **of Sec** 18; Mount Diablo B.M.
c. Address 2020 Highway 96 City Yreka Zip 96067
d. UTM: Zone 10 T, 534306.705mE/4631246.452mN
e. Other Locational Data: N/A

***P3a. Description:**

Located at 2020 State Highway 96, the Shulz Property was constructed in 1969. The property is comprised of a narrow 0.57-acre parcel situated on the south side of State Highway 96 and on the northern bank of the Klamath River. The parcel contains two resources, a single family residence (FS-22) and a shed (FS-21). The single-story single-family residence features a rectangular plan, a continuous concrete-masonry-block foundation, horizontal vinyl siding, and a low-sloped side gable roof finished with standing-seam-metal panels. The presentation of the house suggests its classification as a pre-fabricated residence. A chimney rises from the building's eastern elevation. The northwest (primary) facade is comprised of at least four discernable bays, one of these being an off-centered door framed by a low-sloped portico supported by wooden posts. The northwest facade's visible window openings are paired, single-lite vinyl sliding windows. The southwest elevation consists of two three-lite vinyl sliding windows. A large multi-bay, open-air porch extends from the building's southeast (rear) elevation and is cantilevered over two retaining walls leading to the river. Changes to the residence include the installation of replacement vinyl siding and windows and the rear porch on an unknown date. The shed is rectangular in plan and includes a front gable roof. The south (rear) elevation has a single pedestrian door flanked by a two-lite vinyl sliding window. A pedestrian pathway divides the two buildings and leads towards the river.

***P3b. Resource Attributes:** (HP2) Single Family Property
***P4. Resources Present:** ☒ Building ☒ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other
P5a. Photograph:

P5b. Description of Photo: Side (southwest) elevation of FS-22 (2019).

***P6. Date Constructed/Age and Source:**
☒ Historic,1969 (Zillow 2022)

***P7. Owner and Address:**
Del L & Lois E Schulz Trust, 42 Fallbrook Avenue, Newbury Park, CA 91320

***P8. Recorded by:**
Tim Wood, AECOM
888 SW 5th Ave, Suite 600
Portland, OR 97204

***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 #:** Shulz Property (FS-22 and FS-21) ***NRHP Status Code:** 6Z

B1. Historic Name: D.A. Schulz Property
B2. Common Name: Shulz Property (FS-22 and FS-21)
B3. Original Use: Private residence
B4. Present Use: Private residence
B5. Architectural Style: Manufactured
B6. Construction History:

The residence on the Shulz Property was constructed in 1969 (Zillow 2022). A review of United States Geological Survey (USGS) maps reveals minimal development in the surrounding area until the mid-twentieth century. A 1932 USGS map depicts Jims Camp to the east of the property and US 99 running adjacent to it (USGS 1932). By 1955, ten properties appear in the immediate area with two structures to the north of US 99 and eight to the south (USGS 1955). Historic building permits indicate D.A. Schulz owned the property when the residence was constructed in 1969. Dell & Lois Schulz acquired the property in 2009 (Siskiyou County 1969, 2009). The current owner is listed as Lucille Petal Schulz. Records do not indicate when the vinyl siding and windows were installed.

B7. Moved? No
B8. Related Features: Multiple tiered retaining walls, made of stone and concrete block, extend to the rear (south) of the building and lead to the river. These walls have been artistically decorated with stonework and serve as outdoor living space for the residence.
B9a. Architect: Unknown **b. Builder:** Unknown

B10. Significance:

The residence on the Shulz Property was constructed in 1969. Newspaper and archival research did not identify any additional information about the residence's construction, use or occupants. The Shulz Property reflects the general development of residential properties along the Klamath River in Siskiyou County during the mid-twentieth century.

Theme: Community Planning and Development
Area: Northern California
Period of Significance: 1969
Property Type: Private residence
Applicable Criteria: N/A

B11. Additional Resource Attributes: N/A

B12. References: See continuation sheet

B13. Remarks: None
B14. Evaluator: Tim Wood and Erin Swicegood, AECOM
888 SW 5th Avenue, Suite 600
Portland, OR 97204

Date of Evaluation: April 15, 2022

(This space reserved for official comments.)

Evaluation

NRHP Criterion A
Research does not indicate that the Shulz Property is associated with any historic events or patterns of events under NRHP Criterion A.

NRHP Criterion B
Although associated with the Shulz family, research did not identify any information to suggest their consideration as historically significant individuals under NRHP Criterion B.

NRHP Criterion C
Neither the residence or the shed 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 Shulz Property is not significant as a source (or likely source) of important information regarding history. 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 Shulz Property retains integrity of location, design, setting, feeling, and association.

Location *is the place where the historic property was constructed or the place where the historic event took place.* The residence and shed remain at their original building site on the banks of the Klamath River, 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 design of the residence has undergone minimal alterations since their original construction, including the addition of vinyl windows and siding as well as the rear porch to the residence (dates unknown). However, these changes have not impacted the overall design of the buildings; therefore the residence and shed retain integrity of design.

Setting *is the physical environment of a historic property that illustrates the character of the place.* The residence and shed retain integrity of setting in the rural area of Siskiyou County on the banks of the Klamath River.

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 addition of vinyl siding and windows has substantially diminished the 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 residence and shed retain integrity of feeling because they continue to exhibit their historic uses as a private residence and storage shed overlooking the Klamath River.

Association *is the direct link between a property and the event or person for which the property is significant.* The integrity of association is retained because the buildings are sufficiently intact in their original location near the Klamath River to establish a direct link to their historic use.

The residence and shed retain overall integrity but are not significant under any NRHP criteria. Therefore, they are not eligible for listing in the NRHP.

CONTINUATION SHEET

Property Name: Shulz Property (FS-22 and FS-21)

B12. References

Siskiyou County. 1969-2009. 2020 State Route 96 Building Permits. On file with Siskiyou County Building Division, Yreka, CA.

United States Geological Survey (USGS). 1932. Yreka, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8331/-122.5847, accessed April 5, 2022.

United States Geological Survey (USGS). 1955. Hornbrook, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8331/-122.5847, accessed April 5, 2022.

Zillow. 2022. 2020 State Route 96, Yreka, CA 96097. Electronic document, https://www.zillow.com/homedetails/2020-Highway-96-Yreka-CA-96097/15975752_zpid/, accessed April 21, 2022.

Photographs:

Photograph 1. Shulz Property residence (FS-22) north facade; view facing south, 2019.

Photograph 2. Shulz residence (FS-22) east and south elevation; view facing west, 2019.

Photographs (Continued):

Photograph 3. Shulz residence (FS-22) south elevation (left); view facing north, 2019.

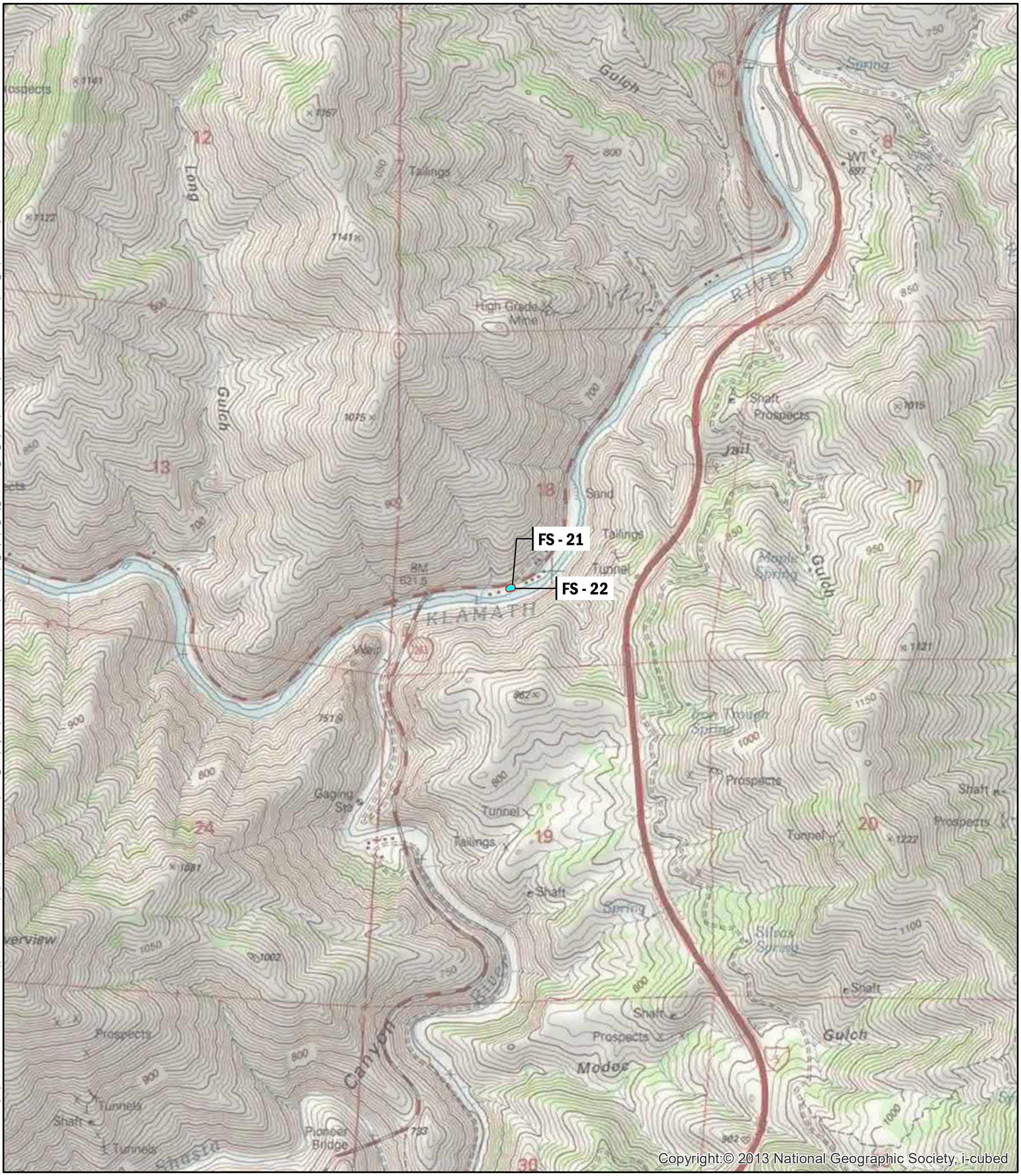
.

LOCATION MAP

***Resource Name or #:** Shulz Property (FS-22 and FS-21)

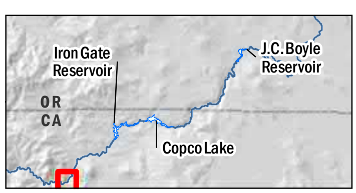
***Map Name:** ***Scale:** ***Date of Map:**

See Sketch/Site Map on next page.



AECOM Oakland CA 4/22/2022 USER alexander.remar PATH \\na.aecomnet.com\lfs\AMER\Oakland-USOAK01\Secure_DCS\Projects\Water\Klamath Dam\400-Technical\440 GIS\02_Maps\02_Map_Production_and_Reports\Cultural Reports\BuiltEnvironment\2022_FS\Location Map - Shulz Residence and Shed.mxd

Resource



0 2,000 Feet
0 600 Meters
1:24,000

Shulz Residence and Shed

2020 State Highway 96
FS-21 and FS-22

AECOM
April 2022

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

Primary #
HRI#
Trinomial

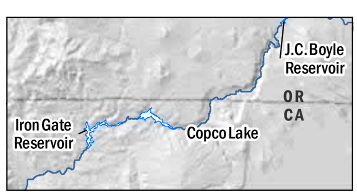
Sketch MAP

***Resource Name or #:** Shulz Property (FS-22 and FS-21)

***Map Name:** ***Scale:** ***Date of Map:**

See Sketch/Site Map on next page.

Resource



0 300 Feet
0 50 Meters
1:1,800

Shulz Residence and Shed

2020 State Highway 96
FS-21 and FS-22

AECOM
April 2022

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

Primary #
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code Reviewer Date

 Resource Name or #: Shulz Property (FS-24)

P1. Other Identifier: Shulz Property (FS-24)

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

***a. County** Siskiyou

***b. USGS 7.5' Quad** Hawkinsville, CA **Date** 2022 **T** 46N; **R** 6W; NE1/4 of SW 1/4 **of Sec** 18; Mount Diablo B.M.

c. Address 2100 State Route 96 City Yreka Zip 96067

d. UTM: Zone 10 T, 534210mE/4631231mN

e. Other Locational Data: N/A

***P3a. Description:**

Constructed in 1974, the residence at 2100 State Route 96 near Yyreka, California is situated on a 1.42-acre parcel on the southern side of State Route 96 and above the northern bank of the Klamath River. The mobile home is rectangular in plan and features T1-11 siding and a side gable roof finished with corrugated aluminum panels. Windows consist of a combination of fixed and sliding aluminum and vinyl windows. Some of the original aluminum windows include decorative shutters. The north (primary) façade includes two entrances covered by a shed awning. The entrances are accessed by a wood porch and staircase. Alterations to the building include the addition of the front porch and the replacement vinyl windows (dates unknown).

***P3b. Resource Attributes:** (HP2) Single Family Property

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other

P5a. Photograph:

P5b. Description of Photo: North and west elevations of residence (FS-24) (2021).

***P6. Date Constructed/Age and Source:**
☒ Historic, 1974 (Zillow 2022)

***P7. Owner and Address:**
Helen L. Shulz, 2032 Highway 96,
Yreka CA 96097

***P8. Recorded by:**
Tim Wood, AECOM
888 SW 5th Ave, Suite 600
Portland, OR 97204

***P9. Date Recorded:** April 28, 2022

***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 #:** Shulz Property (FS-24) ***NRHP Status Code:** 6Z

B1. Historic Name: Shulz Property
B2. Common Name: Shulz Property (FS-24)
B3. Original Use: Private residence
B4. Present Use: Private residence
B5. Architectural Style: American Vernacular
B6. Construction History:

The single-family residence on the Shulz Property was constructed in 1974 (Zillow 2022). A review of United States Geological Survey (USGS) maps reveals minimal development in the surrounding area until the mid-twentieth century. A 1932 USGS map depicts Jims Camp to the east of the property and US 99 running adjacent to it (USGS 1932). By 1955, ten properties appear in the immediate area with two structures to the north of US 99 and eight to the south (USGS 1955). Siskiyou County building permits indicate the residence is a manufactured home and Howard Shulz was the owner of the property in 1973 (Siskiyou County 1973).

B7. Moved? No
B8. Related Features: N/A
B9a. Architect: Unknown **b. Builder:** Unknown

B10. Significance:

The mobile home on the Shulz Property was constructed in 1974. Newspaper and archival research did not identify any additional information about the property's construction, use or occupants. The Shulz Property reflects the general development of residential properties along the Klamath River in Siskiyou County during the mid-twentieth century.

Theme: Community Planning and Development
Area: Northern California
Period of Significance: 1974
Property Type: Private residence
Applicable Criteria: N/A

B11. Additional Resource Attributes: N/A

B12. References: See continuation sheet

B13. Remarks: None
B14. Evaluator: Tim Wood, AECOM
888 SW 5th Avenue, Suite 600
Portland, OR 97204

Date of Evaluation: April 28, 2022

(This space reserved for official comments.)

Evaluation

Criteria Analysis

NRHP Criterion A
Research does not indicate that the residence on the Shulz Property is associated with any historic events or patterns of events under NRHP Criterion A.

NRHP Criterion B
Research does not indicate that the residence on the Shulz Property is associated with any historically significant individuals under NRHP Criterion B.

NRHP Criterion C
The residence on the Shulz Property 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 residence on the Shulz Property is not significant as a source (or likely source) of important information regarding history. 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 residence on the Shulz Property (FS-24) 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.* The residence remains at its original building site on the banks of 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.* Despite the construction of the front porch, the building retains integrity of design.

***Setting** is the physical environment of a historic property that illustrates the character of the place.* The residence retains integrity of setting in the rural area of Siskiyou County on the banks of the Klamath River.

***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.* Despite the construction of the front porch and the replacement vinyl windows, the residence continues to exhibit a majority of the original materials and the craftsmanship of its builders. Therefore, the residence retains 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 residence retains integrity of feeling because it continues to exhibit its historic use as a private residence overlooking the Klamath River.

***Association** is the direct link between a property and the event or person for which the property is significant.* The integrity of association is retained because the residence has remained at its historic location near the Klamath River.

The residence retains integrity but is not significant under any NRHP criteria. Therefore, it is not eligible for listing in the NRHP.

B12. References

Siskiyou County. 1973. 2100 State Route 96 Building Permits. On file with Siskiyou County Building Division, Yreka, CA.

United States Geological Survey (USGS). 1932. Yreka, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#14/41.8323/-122.5880, accessed April 28, 2022.

United States Geological Survey (USGS). 1955. Hornbrook, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#14/41.8323/-122.5880, accessed April 28, 2022.

Zillow. 2022. 2100 State Highway 96, Yreka, CA 96097. Electronic document, https://www.zillow.com/homedetails/2100-State-Highway-96-Yreka-CA-96097/15975750_zpid/, accessed April 5, 2022.

CONTINUATION SHEET

Property Name: Shulz Property (FS-24)

Photographs:

Photograph 1. Shulz Property residence (FS-24) north and west elevations; view facing southeast, 2021.

Photograph 2. Shulz Property residence (FS-24) north elevation; view facing south, 2021.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary #
HRI#
Trinomial

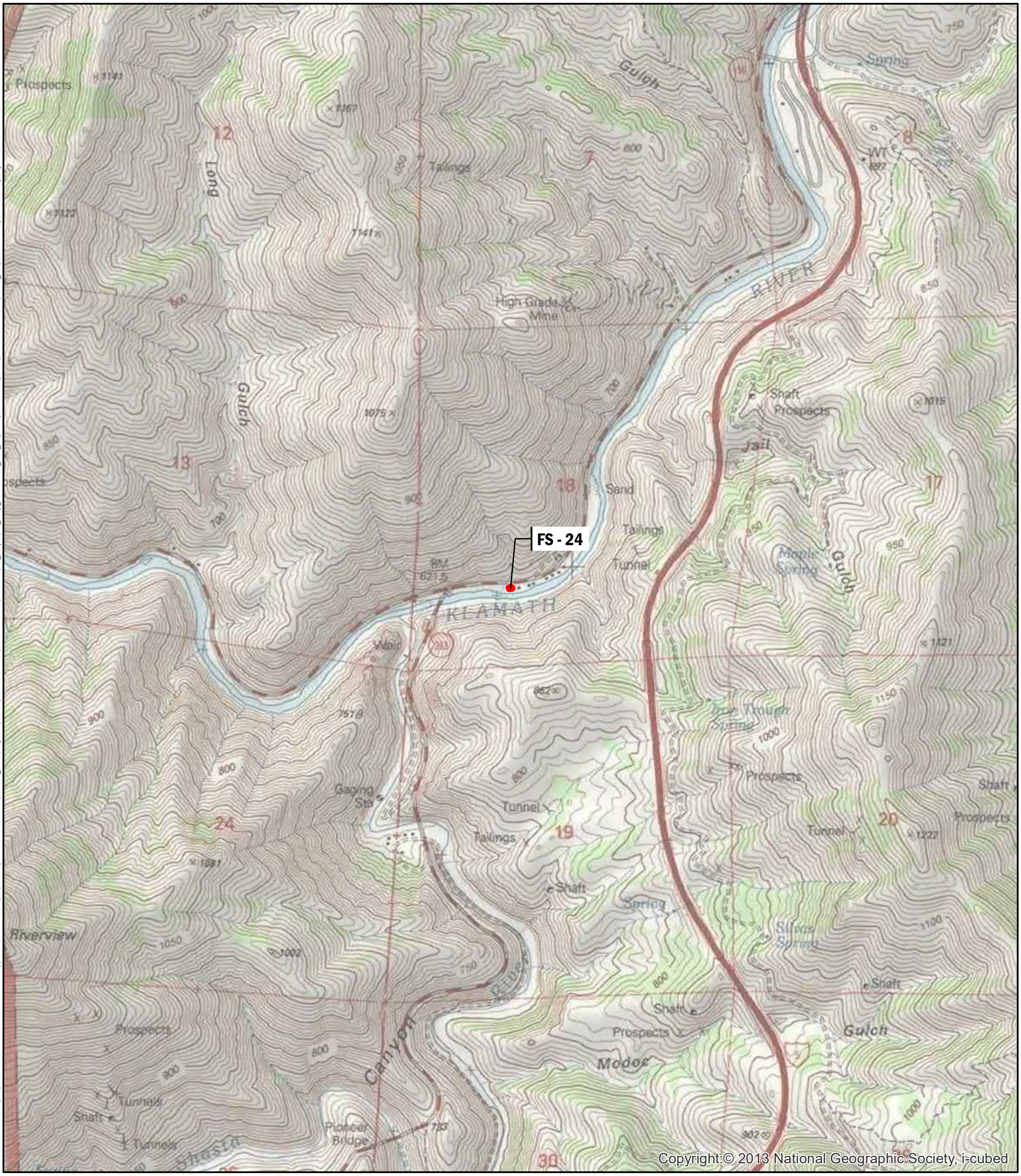
*Resource Name or #: Shulz Property (FS-24)

*Map Name:

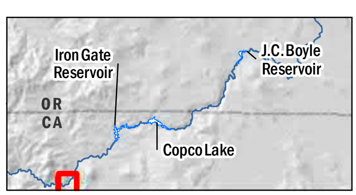
*Scale: *Date of Map:

See Sketch/Site Maps on next pages.

*Required information



Resource



N
0 2,000 Feet
0 600 Meters
1:24,000

Shulz Property

2100 State Route 96, Yreka
FS-24

AECOM
April 2022

Primary #
HRI#
Trinomial

SKETCH MAP

 *Resource Name or #: Shulz Property (FS-24)

*Map Name:

*Scale: *Date of Map:

See Sketch/Site Maps on next pages.

*Required information

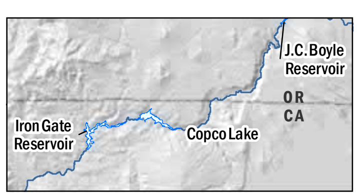
Resource

0 300 Feet

0 50 Meters

N

1:1,800



Shulz Property

2100 State Route 96, Yreka
FS-24

AECOM
April 2022

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

Primary #
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code Reviewer Date

 Resource Name or #: Chandler Property (FS-29)

P1. Other Identifier: Chandler Property (FS-29)

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

***a. County** Siskiyou

***b. USGS 7.5' Quad** Badger Mountain, CA **Date** 2021 **T** 46N; **R** 7W; SE1/4 of SW 1/4 **of Sec** 14; Mount Diablo B.M.

c. Address 4834 State Route 96 City Yreka Zip 96067

d. UTM: Zone 10 T, 530512mE/4631304mN

e. Other Locational Data: N/A

***P3a. Description:**

Constructed in 1972, the single-story residence at 4834 State Route 96 near Yreka, California is situated on a 3.7-acre parcel on the southwestern side of State Route 96 and above the northern bank of the Klamath River. The residence is composed of two staggered rectangular blocks, similar in size. Both blocks feature T1-11 wood sheathing, front gable roofs finished with standing-seam-metal panels, and a variety of replacement vinyl windows. An exterior, shouldered chimney, made of concrete block, rises from the western elevation of the western block. The south elevation of the western block includes two multi-lite sliding patio doors with large fixed transom windows above.

***P3b. Resource Attributes:** (HP2) Single Family Property

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other

P5a. Photograph:

P5b. Description of Photo: Eastern elevation of residence (FS-23) (Zillow 2022).

***P6. Date Constructed/Age and Source:**
☒ Historic, 1972 (Zillow 2022)

***P7. Owner and Address:**
Chris Chandler, 4834 Highway 96, Yreka CA 96097

***P8. Recorded by:**
Tim Wood, AECOM
888 SW 5th Ave, Suite 600
Portland, OR 97204

***P9. Date Recorded:** April 28, 2022

***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 #**: Chandler Property (FS-29) ***NRHP Status Code**: 6Z

B1. Historic Name:
B2. Common Name: Chandler Property (FS-29)
B3. Original Use: Private residence
B4. Present Use: Private residence
B5. Architectural Style: Contemporary
B6. Construction History:

The single-family residence on the Chandler Property was constructed in 1972 (Zillow 2022). A review of United States Geological Survey (USGS) maps reveals minimal development in the surrounding area until the mid-twentieth century. A 1932 USGS map depicts Jims Camp to the east of the property and Klamath River Road on the south side of the river (USGS 1932). By 1955, four structures are depicted along State Route 96 in the immediate area of the property. Additional properties appear further west and east on the highway. Mining activity is depicted on Ash Creek to the east with the Indian Girl Mine being identified a few thousand feet to the east of the property (USGS 1955). A historic aerial photograph from 1955 depicts a building with a rectangular plan near the location of the current residence. Agricultural fields are also visible on the property to the southeast of the building (NetrOnline 2022). Research did not identify any additional information about the residence's construction or alterations to it.

B7. Moved? No
B8. Related Features: N/A
B9a. Architect: Unknown **b. Builder:** Unknown

B10. Significance:
The residence on the Chandler Property was constructed in 1972. Newspaper and archival research did not identify any additional information about the property's construction, use or occupants. The Chandler Property reflects the general development of residential properties along the Klamath River in Siskiyou County during the mid-twentieth century.

Theme: Community Planning and Development
Area: Northern California
Period of Significance: 1972
Property Type: Private residence
Applicable Criteria: N/A

B11. Additional Resource Attributes: N/A

B12. References: See continuation sheet

B13. Remarks: None
B14. Evaluator: Tim Wood, AECOM
888 SW 5th Avenue, Suite 600
Portland, OR 97204

Date of Evaluation: April 28, 2022

(This space reserved for official comments.)

Evaluation

Criteria Analysis

NRHP Criterion A
Research does not indicate that the residence on the Chandler Property is associated with any historic events or patterns of events under NRHP Criterion A.

NRHP Criterion B
Research does not indicate that the residence on the Chandler Property is associated with any historically significant individuals under NRHP Criterion B.

NRHP Criterion C
The residence on the Chandler Property 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 residence on the Chandler Property is not significant as a source (or likely source) of important information regarding history. 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 residence on the Chandler Property (FS-29) 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.* The residence remains at its original building site on the banks of 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.* Siskiyou County building permits and recent photographs do not indicate the building has undergone any substantial alterations. Therefore, the building retains integrity of design.

Setting *is the physical environment of a historic property that illustrates the character of the place.* The residence retains integrity of setting in the rural area of Siskiyou County on the banks of the Klamath River.

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.* Despite the replacement vinyl windows and roof cladding, the residence continues to exhibit a majority of the original materials and the craftsmanship of its builders. Therefore, the residence retains 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 residence retains integrity of feeling because it continues to exhibit its historic use as a private residence overlooking the Klamath River.

Association *is the direct link between a property and the event or person for which the property is significant.* The integrity of association is retained because the residence has remained at its historic location near the Klamath River.

The residence retains integrity but is not significant under any NRHP criteria. Therefore, it is not eligible for listing in the NRHP.

B12. References

NetrOnline. 2022. 4834 State Highway 96, Yreka, CA. Electronic database, https://www.historicaerials.com/viewer, accessed April 28, 2022.

United States Geological Survey (USGS). 1932. Yreka, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8345/-122.6465, accessed April 28, 2022.

United States Geological Survey (USGS). 1955. Hornbrook, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#15/41.8345/-122.6465, accessed April 28, 2022.

Zillow. 2022. 4834 State Highway 96, Yreka, CA 96097. Electronic document, https://www.zillow.com/homedetails/4834-Highway-96-Yreka-CA-96097/15968361_zpid/?, accessed April 28, 2022.

Photographs:

Photograph 1. Chandler Property residence (FS-29) south and west elevations; view facing northeast (Zillow 2022).

Photograph 2. Chandler Property residence (FS-29) west elevation; view facing east, 2019.

Photographs (Continued):

Photograph 3. Chandler Property residence (FS-29) south and east elevations facing north, (Zillow 2022).

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

LOCATION MAP

Primary #
HRI#
Trinomial

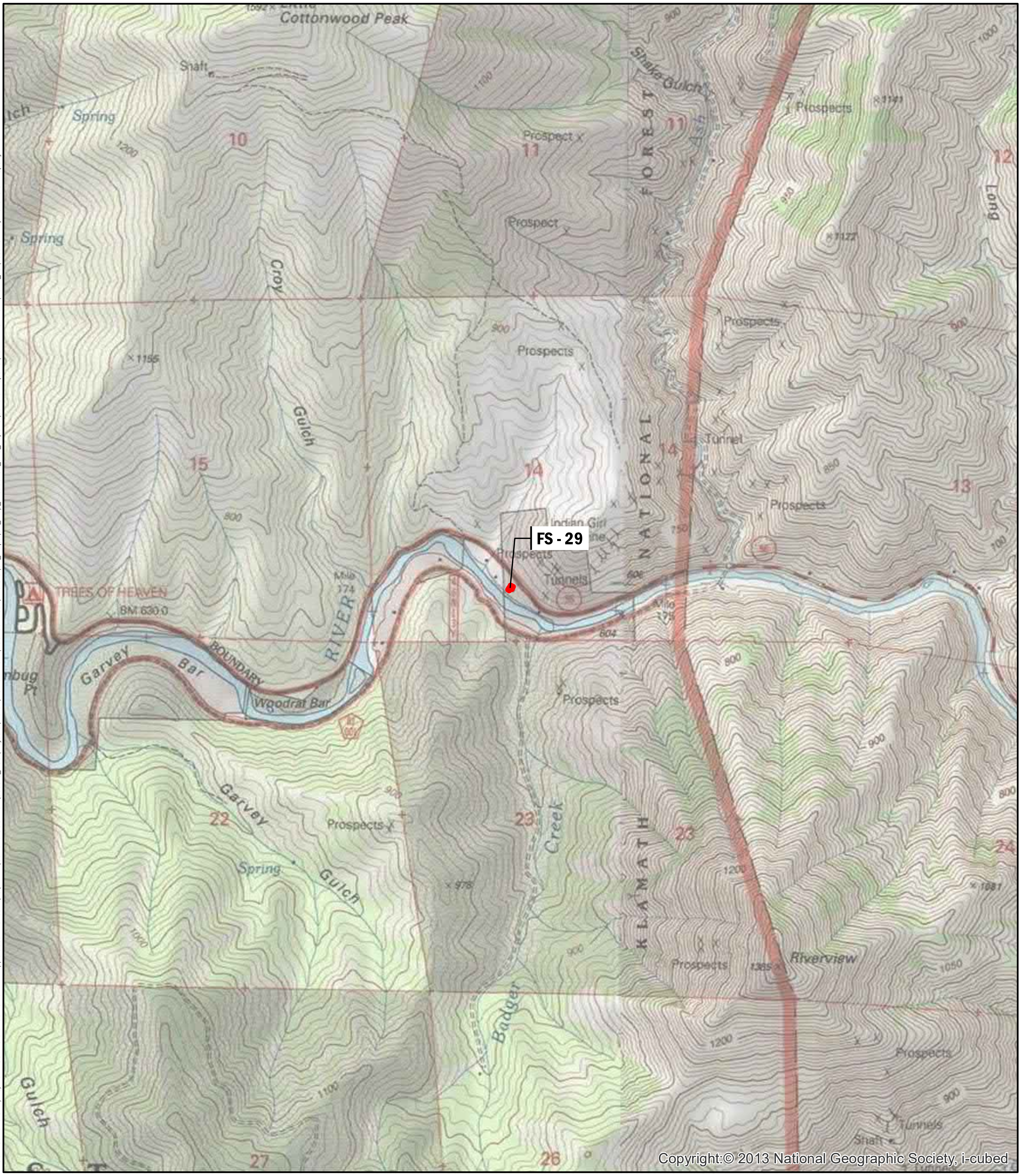
*Resource Name or #: Chandler Property (FS-29)

*Map Name:

*Scale: *Date of Map:

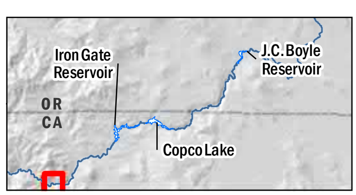
See Sketch/Site Map on next pages.

*Required information



Resource

Feet
0 2,000
Meters
0 600
N
1:24,000



Chandler Property

4834 State Route 96, Yreka
FS-29

AECOM
April 2022

AECOM Oakland CA 4/28/2022 USER alexander.remar PATH \\na.aecomnet.com\lfs\AMER\Oakland-USOAK01\Secure_DCS\Projects\Water\Klamath Dam\400-Technical\440 GIS\02_Maps\02_Map_Production_and_Reports\Cultural Reports\BuiltEnvironment\2022_FS\Location Map - Chandler Property.mxd

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

Primary #
HRI#
Trinomial

SKETCH MAP

*Resource Name or #: Chandler Property (FS-29)

*Map Name:

*Scale: *Date of Map:

See Sketch/Site Map on next pages.

AECOM Oakland CA 4/28/2022 USER alexander.remar PATH \\na.aecomnet.com\lfs\AMER\Oakland-USOAK01\Secure_DCS\Projects\Water\Klamath Dam\400-Technical\440 GIS\02_Maps\02_Map_Production_and_Reports\Cultural Reports\BuiltEnvironment\2022_FS\Site Map - Chandler Property.mxd

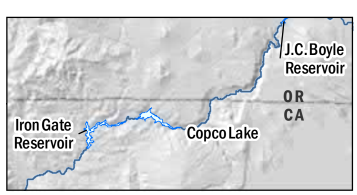
Resource

0 300 Feet

0 50 Meters

N

1:1,800



Chandler Property

4834 State Route 96, Yreka

FS-29

AECOM

April 2022

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

Primary #
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code Reviewer Date

 Resource Name or #: Kimball/Wagner Property (FS-31 and FS-31.5)

P1. Other Identifier: Kimball/Wagner Property (FS-31 and FS-31.5)

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

- ***a. County** Siskiyou
- ***b. USGS 7.5' Quad** Badger Mountain, CA **Date** 2021 **T** 46N; **R** 7W; SW1/4 of SW 1/4 **of Sec** 14; Mount Diablo B.M.
- c. Address 5125 Klamath River Road City Yreka Zip 96067
- d. UTM: Zone 10 T, 530171.194mE/4631414.621mN
- e. Other Locational Data: N/A

***P3a. Description:**

The 5.4-acre parcel at 5125 Klamath River Road, Yreka, California was built circa 1968. It is positioned between State Route 96 and Klamath River Road on the southern bank of the Klamath River. Built resources on the property includes two residences and a garage/workshop. Residence 1 (FS-31) is a one-story single-family residence with an irregular plan, vertical board and batten wood sheathing, and a side gable roof finished with standing seam metal panels. Windows consist of single-lite aluminum sliding windows with original wooden surrounds. Residence 2 (FS-31.5) is a two-story manufactured house with a large side gable roof and exposed rafters. The roof features a wide overhang on one side and a substantially larger overhang on the other, establishing an open car port larger than the living quarters. The building is clad with vertical wood boards. A wood staircase and porch lead to the primary entrance. The main entrance includes a single pedestrian door flanked by two-lite sliding vinyl windows. The garage/shed building would not be affected by the project and is not documented. Alterations to the property include replacing the roof on Residence 1 (FS-31).

***P3b. Resource Attributes:** (HP3) Multi-family residence

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other

P5a. Photograph:

P5b. Description of Photo:
Residence 1 (FS-31) southwest facade (2019).

***P6. Date Constructed/Age and Source:**
☒ Historic, c.1968

***P7. Owner and Address:**
Brett B Kimball, 108 Davis Road, Yreka, CA 6097

***P8. Recorded by:**
Tim Wood, AECOM
888 SW 5th Ave, Suite 600
Portland, OR 97204

***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

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

BUILDING, STRUCTURE, AND OBJECT RECORD

***Resource Name or #:** Kimball/Wagner Property (FS-31 and FS-31.5) ***NRHP Status Code:** 6Z

B1. Historic Name:
B2. Common Name: Kimball/Wagner Property (FS-31 and FS-31.5)
B3. Original Use: Private residence
B4. Present Use: Private residence
B5. Architectural Style: Rustic/Prefabricated
B6. Construction History:
The two residences on the Kimball/Wagner Property were constructed circa 1968. A review of United States Geological Survey (USGS) maps reveals minimal development in the surrounding area until the mid-twentieth century. A 1932 USGS map depicts Jims Camp to the east and Klamath River Road and State Route 96 in their current positions (USGS 1932). By 1955, several structures are depicted along Klamath River Road and State Route 96 to the west and east. Mining activity is depicted on Ash Creek to the east with Indian Girl Mine being identified a few thousand feet to the east of the property on the north side of the Klamath River (USGS 1955). A single structure is depicted on or near the property in the 1984 map (USGS 1984). The Indian Girl Mine remains depicted on maps until 2001. A single structure is depicted to the southeast of the property in 2001 (USGS 2001). Historic building permits indicate the installation of a mobile home and ramada (shelter) in 2000. Another mobile home was added in 2014. Rick Butler was listed as the owner in 2000. Brett B. Kimball was listed as the owner in 2014 and remains the current owner (Siskiyou County 2000, 2014).

B7. Moved? No
B8. Related Features: There is a garage/shed on the property in addition to the two residences.

B9a. Architect: Unknown **b. Builder:** Unknown

B10. Significance: Residence 1 (FS-31) and Residence 2 (FS-31.5) on the Kimball/Wagner Property were constructed circa 1968. USGS maps depict the Indian Girl Mine a few thousand feet from the property but research has not established any relationship between the Kimball/Wagner Property and mining operations. Newspaper and archival research did not identify any additional information about the construction of the two residences, their use or occupants. The Kimball/Wagner Property reflects the general development of residential properties along the Klamath River in Siskiyou County during in the late 1960s.

Theme: Community Planning and Development
Area: Northern California
Period of Significance: N/A
Property Type: Private residence
Applicable Criteria: N/A

B11. Additional Resource Attributes: N/A

B12. References: See continuation sheet

B13. Remarks: None
B14. Evaluator: Tim Wood and Erin Swicegood, AECOM
888 SW 5th Avenue, Suite 600
Portland, OR 97204

Date of Evaluation: April 17, 2022

(This space reserved for official comments.)

Evaluation

NRHP Criterion A
Research does not indicate that Residence 1 (FS-31) or Residence 2 (FS-31.5) are associated with any historic events or patterns of events under NRHP Criterion A.

NRHP Criterion B
Research does not indicate that Residence 1 (FS-31) or Residence 2 (FS-31.5) are associated with any historically significant individuals under NRHP Criterion B.

NRHP Criterion C
Neither Residence 1 (FS-31) or Residence 2 (FS-31.5) 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
Neither Residence 1 (FS-31) or Residence 2 (FS-31.5) are significant as a source (or likely source) of important information regarding history. 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 two residences retain integrity of location, setting, 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.* Residence 1 (FS-31) and Residence 2 (FS-31.5) remain at their original building site near the Klamath River, 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 design of Residence 1 (FS-31) and Residence 2 (FS-31.5) has remained generally intact since their original construction. Therefore, the buildings retain integrity of design.

Setting *is the physical environment of a historic property that illustrates the character of the place.* Residence 1 (FS-31) and Residence 2 (FS-31.5) retain integrity of setting in the remote, mostly 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.* Residence 1 (FS-31) and Residence 2 (FS-31.5) continue to exhibit a majority of their original materials and the craftsmanship of their builders. Therefore, they retain 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.* Residence 1 (FS-31) and Residence 2 (FS-31.5) retain integrity of feeling because they continue to exhibit their historic use as private residences near the Klamath River.

Association *is the direct link between a property and the event or person for which the property is significant.* The integrity of association is retained because the buildings have not undergone any major alterations and have remained at their historic location near the Klamath River.

Residence 1 (FS-31) and Residence 2 (FS-31.5) retain integrity but are not significant under any NRHP criteria. Therefore, they are not eligible for listing in the NRHP.

CONTINUATION SHEET

Property Name: Kimball/Wagner Property (FS-31 and FS-31.5)

B12. References

Siskiyou County. 2000-2014. 1942 State Route 96 Building Permits. On file with Siskiyou County Building Division, Yreka, CA.

United States Geological Survey (USGS). 1932. Yreka, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#14/41.8344/-122.6372, accessed April 5, 2022.

United States Geological Survey (USGS). 1955. Hornbrook, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#14/41.8344/-122.6372, accessed April 5, 2022.

United States Geological Survey (USGS). 1984. Badger Mtn, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#14/41.8344/-122.6372, accessed April 5, 2022.

United States Geological Survey (USGS). 2001. Badger Mountain, CA. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#14/41.8344/-122.6372, accessed April 5, 2022.

Photographs:

Photograph 1. Kimball/Wagner Property Residence 1 (FS-31) north elevation; view to southwest, 2019.

Photograph 2. Kimball/Wagner Property Residence 1 (FS-31), south and west elevations; view to northeast, 2019.

Photographs (continued):

Photograph 3. Kimball/Wagner Property Residence 1 (FS-31) north elevation; view to southeast, 2019.

Photograph 4. Kimball/Wagner Property Residence 1 (FS-31) south elevation; view to north, 2019.

Photographs (continued):

Photograph 5. Kimball/Wagner Property Residence 2 (FS-31.5) south and east elevations; view to northwest, 2019.

Photograph 6. Kimball/Wagner Property Residence 2 (FS-31.5) north and west elevations, 2019.

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

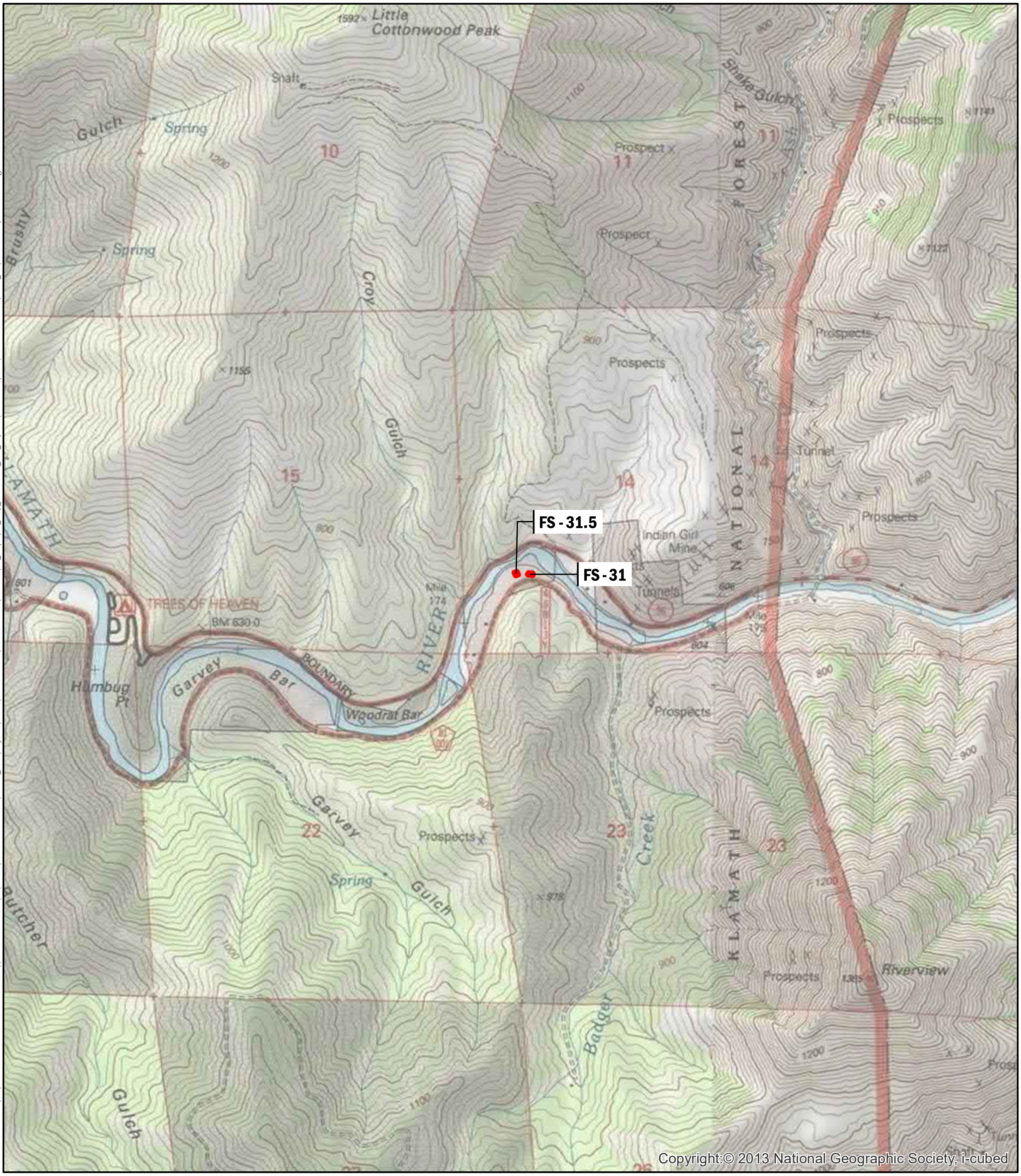
LOCATION MAP

Primary #
HRI#
Trinomial

 ***Resource Name or #:** Kimball/Wagner Property (FS-31 and FS-31.5)

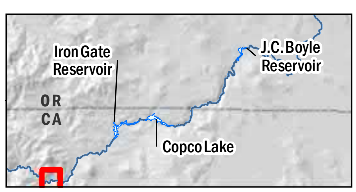
***Map Name:** ***Scale:** ***Date of Map:**

See Sketch/Site Map on next page.



Resource

0 2,000 Feet
0 600 Meters
1:24,000



Kimball Wagner Property

5125 Klamath River Road
FS-31 and FS-31.5

AECOM
April 2022

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

SKETCH MAP

Primary #
HRI#
Trinomial

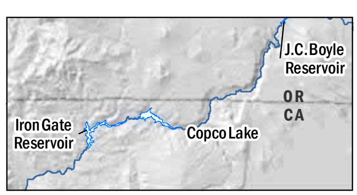
***Resource Name or #:** Kimball/Wagner Property (FS-31 and FS-31.5)

***Map Name:** ***Scale:** ***Date of Map:**

See Sketch/Site Map on next page.

Resource

N
0 300 Feet
0 50 Meters
1:1,800



Kimball Wagner Property

5125 Klamath River Road
FS-31 and FS-31.5

AECOM
April 2022

APPENDIX B OREGON HISTORIC SITE FORMS

J.C. Boyle Historic District

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

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

Other Listings
Review Code | Reviewer | Date

Resource Name or #: Klamath Hydroelectric Project Historic District

P1. Other Identifier: Klamath Hydroelectric Project Historic District
*P2. Location: ☒ Unrestricted
*a. County: Siskiyou, Calif; Klamath, Ore.
*b. USGS 7.5' Quad (See Continuation Sheet)
c. Address ______ City ______ Zip ______
d. UTM: (See Continuation Sheet)
e. Other Locational Data: N/A

*P3a. Description:

The Klamath Hydroelectric Project (KHP) is a previously documented historic district that consists of seven hydroelectric developments along the Klamath River in southern Oregon and northern California, built by the California Oregon Power Company (Copco) and its successor Pacific Power and Light Company (Pacific Power). The seven developments are Copco No.1, Copco No. 2, Iron Gate, Fall Creek [in California] and J.C. Boyle, Link River, and Keno [in Oregon]. (See **D6. Significance** on District Record for information regarding previous recordation and evaluation and see attached Oregon Inventory of Historic Properties Section 106 Documentation Form and State of California Department of Parks and Recreation [DPR] 523 form).

This Primary Record and District Record provides an overall description of the hydroelectric resources at the four hydroelectric developments that are proposed for removal within the KHP Historic District (Copco No. 1, Copco No. 2, Iron Gate, and J.C. Boyle), a historic context of the development of the KHP, and an updated National Register of Historic Places (NRHP) evaluation. Following the District Record are the Primary, Building Structure and Object (BSO) Records, and Continuation Sheets for the Copco No. 1, Copco No. 2, and Iron Gate hydroelectric developments. The J.C. Boyle Historic District is documented in the Oregon Historic Sites Database (see attached Oregon Inventory of Historic Properties Section 106 Documentation Form.). (See District Record.)

The KHP consists of dams, water conveyance systems, powerhouses, administrative and support facilities and, in certain locations, fisheries management structures situated along remote sections of the Klamath River and its tributaries in Klamath County, Oregon, and Siskiyou County, California. The KHP boundary begins at the Link River Dam in Klamath Falls, Oregon, and extends in a southwest direction following the Klamath River (see Location Map & Sketch Map). (See D3. Detailed Description on District Record)

*P3b. Resource Attributes: AH2, AH3, AH6, AH8, AH15, AH16, HP2, HP3, HP4, HP6, HP8, HP9, HP11, HP15, HP20, HP21, HP22, HP39, P21
*P4. Resources Present: ☒ District ☒ Buildings ☒ Structures

P5a. Photograph:

P5b. Description of Photo: Copco No. 1 powerhouse and dam, facing west (June 11, 2018).

*P6. Date Constructed/Age and Source: ☒ Historic, 1903-1962 (Boyle 1976)

***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. 2020. 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):

COPCO NO. 1

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

Resource	Township	Range	Section
Dam	48N	4W	SE 1/4 of SW 1/4 of Sec. 29
Penstocks	48N	4W	SE 1/4 of SW 1/4 of Sec. 29
Powerhouse	48N	4W	SE 1/4 of SW 1/4 of Sec. 29
Warehouse 1112 (garage/warehouse)	48N	4W	SE 1/4 of SW 1/4 of Sec. 29
Guesthouse Remains	48N	4W	SE 1/4 of SW 1/4 of Sec. 29
Bungalow 1107 (bungalow no. 1)	48N	4W	SE 1/4 of SW 1/4 of Sec. 29
Bungalow 1108 (bungalow no. 2)	48N	4W	NE 1/4 of SW 1/4 of Sec. 29

COPCO NO. 2

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

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

IRON GATE

USGS 7.5' Quad Iron Gate Reservoir, CA Date 2018; Mount Diablo B.M.

Resource	Township	Range	Section
Dam	47N	5W	SW 1/4 of SW 1/4 of Sec. 9
Dam Fish Facilities	47N	5W	SW 1/4 of SW 1/4 of Sec. 9
Penstock (Water Conveyance System)	47N	5W	SW 1/4 of SW 1/4 of Sec. 9
Powerhouse	47N	5W	SW 1/4 of SW 1/4 of Sec. 9
Substation	47N	5W	SW 1/4 of SW 1/4 of Sec. 9
Communication Building (Support Facilities)	47N	5W	SW 1/4 of SW 1/4 of Sec. 9
Restroom Building (Support Facilities)	47N	5W	SW 1/4 of SW 1/4 of Sec. 9
Operator Residence No. 1	47N	5W	SW 1/4 of SW 1/4 of Sec. 9
Operator Residence No. 2	47N	5W	SW 1/4 of SW 1/4 of Sec. 9
Hatchery Building (Hatchery Fish Facilities)	47N	5W	NE 1/4 of NE 1/4 of Sec. 17
Raceways (Hatchery Fish Facilities)	47N	5W	NE 1/4 of NE 1/4 of Sec. 17
Settling Ponds (Hatchery Fish Facilities)	47N	5W	NE 1/4 of NE 1/4 of Sec. 17
Fish Feed Silos (Hatchery Fish Facilities)	47N	5W	NE 1/4 of NE 1/4 of Sec. 17
Office (Hatchery Administration and Auxiliary Facilities)	47N	5W	NE 1/4 of NE 1/4 of Sec. 17
Shop (Hatchery Administration and Auxiliary Facilities)	47N	5W	NE 1/4 of NE 1/4 of Sec. 17
Gas Shed (Hatchery Administration and Auxiliary Facilities)	47N	5W	NE 1/4 of NE 1/4 of Sec. 17
Hatchery Residence No. 1	47N	5W	NE 1/4 of NE 1/4 of Sec. 17
Hatchery Residence No. 2	47N	5W	NE 1/4 of NE 1/4 of Sec. 17
Hatchery Residence No. 3	47N	5W	NE 1/4 of NE 1/4 of Sec. 17
Hatchery Residence No. 4	47N	5W	NE 1/4 of NE 1/4 of Sec. 17
Lakeview Road Bridge	47N	5W	NE 1/4 of NE 1/4 of Sec. 17

J.C. BOYLE

USGS 7.5' Quad Chicken Hills, OR-CA Date 2012; Willamette B.M.

Resource	Township	Range	Section
Dam	40S	7E	NE 1/4 of NW 1/4 of Sec. 6
Concrete Flume	40S	6E	NE 1/4 of NW 1/4 of Sec. 6
Forebay	40S	6E	SE 1/4 of SW 1/4 of Sec. 12
Powerhouse	40S	6E	L9 of Sec. 13
Substation	40S	6E	L6 of Sec. 14
Powerhouse Residence Site	40S	6E	L6 of Sec. 14
Armco Warehouse	40S	6E	L9 of Sec. 13

*P2d. Location/UTM (continued):

COPCO NO. 1

Resource	Zone	UTM
Dam	10 T	555121mE/4647704mN
Single Penstock (Water Conveyance System)	10 T	555056mE/4647689mN
Double Penstock (Water Conveyance System)	10 T	555075mE/4647686mN
Powerhouse	10 T	555063mE/4647650mN
Bungalow 1107 (Town of Copco)	10 T	554879mE/4647744mN
Bungalow 1108 (Town of Copco)	10 T	555008mE/4647959mN
Warehouse 1112 (Town of Copco)	10 T	554976mE/4647802mN
Guesthouse Remains (Town of Copco)	10 T	555097mE/4647801mN

COPCO NO. 2

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

*P2d Location/UTM (continued):

IRON GATE

Resource	Zone	UTM
Dam	10 T	546707mE/4642665mN
Dam Fish Facilities	10 T	546688mE/4642547mN
Penstock (Water Conveyance System)	10 T	546778mE/4642568mN
Powerhouse	10 T	546694mE/4642489mN
Substation	10 T	546704mE/4642495mN
Communication Building (Support Facilities)	10 T	546702mE/4642509mN
Restroom Building (Support Facilities)	10 T	546688mE/4642429mN
Operator Residence No. 1	10 T	546455mE/4642431mN
Operator Residence No. 2	10 T	546417mE/4642422mN
Hatchery Building (Hatchery Fish Facilities)	10 T	546255mE/4642149mN
Raceways (Hatchery Fish Facilities)	10 T	546266mE/4642094mN
Settling Ponds (Hatchery Fish Facilities)	10 T	546220mE/4642014mN
Fish Feed Silos (Hatchery Fish Facilities)	10 T	546292mE/4642187mN
Office (Hatchery Administration and Auxiliary Facilities)	10 T	546288mE/4642144mN
Shop (Hatchery Administration and Auxiliary Facilities)	10 T	546267mE/4642170mN
Gas Shed (Hatchery Administration and Auxiliary Facilities)	10 T	546284mE/4642155mN
Hatchery Residence No. 1	10 T	546324mE/4642110mN
Hatchery Residence No. 2	10 T	546338mE/4642087mN
Hatchery Residence No. 3	10 T	546351mE/4642068mN
Hatchery Residence No. 4	10 T	546343mE/4642046mN
Lakeview Road Bridge	10 T	546306mE/4642288mN

J.C. BOYLE

Resource	Zone	UTM
Dam	10 T	578683mE/4663824mN
Intake	10 T	578649mE/4663772mN
Steel Pipeline	10 T	578649mE/4663772mN to 578525mE/4663630mN
Intake Flume Headgate	10 T	578525mE/4663630mN
Concrete Flume	10 T	578525mE/4663630mN to 576990mE/4660833mN
Forebay	10 T	576990mE/4660833mN
Tunnel	10 T	576990mE/4660833mN to 576857mE/4660638mN
Surge Tank	10 T	576857mE/4660638mN
Penstock	10 T	576857mE/4660638mN to 576845mE/4660622mN
Powerhouse	10 T	576845mE/4660622mN

DISTRICT RECORD

*Resource Name or #: Klamath Hydroelectric Project
D1. Historic Name: N/A
D2. Common Name: Klamath Hydroelectric Project

D3. Detailed Description:

Before crossing into California, the river flows by the J.C. Boyle hydroelectric development west of the Keno Dam at Keno, Oregon. Within the State of California, the river flows by the next development, Copco No. 1. Nearby, along Fall Creek, is the Fall Creek hydroelectric development. The Klamath River continues past the Copco No. 2 and Iron Gate hydroelectric developments. Iron Gate is the western boundary of the KHP. The geographic boundary for the KHP Historic District coincides with the KHP boundary as defined by the Federal Energy Regulatory Commission (FERC) License No. 2082.

Each hydroelectric development consists primarily of interconnected components that function collectively to generate electricity: (1) a dam that impounds a reservoir; (2) a water conveyance system that conveys water impounded in the reservoir through the dam and into a powerhouse; and (3) a powerhouse that houses the massive machinery that generates the electrical power. The four developments also contain administrative and operations facilities and worker residences. In addition, J.C. Boyle and Iron Gate implement fisheries management facilities designed to mitigate the impacts of hydroelectric developments on Klamath River fish habitats. The fish ladder at J.C. Boyle dam was designed to enable fish passage over the dam. Fisheries facilities, including a hatchery at Iron Gate's dam are operated by the California Department of Fish and Wildlife.

D4. Boundary Description: The district boundary is the Federal Energy Regulatory Commission (FERC) boundary for the Klamath Hydroelectric Project (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 and fisheries management

Area: Southern Oregon and Northern California

Period of Significance: 1903 – 1970

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

See Continuation Sheets for historic context and NRHP re-evaluation.

D7. References: See Continuation Sheets.

D8. Evaluator: Shoshana Jones, AECOM

Date: June 11, 2018

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

D3. Detailed Description (Continued):

The KHP is characterized by its seven hydroelectric developments and by the Upper Klamath basin, a predominantly remote landscape consisting of the winding Klamath River, narrow river canyons, large manmade reservoirs, prominent basalt rock formations, and pine and fir forests. Located in south-central Oregon and northwestern California, the Klamath River Basin is a large north-south oriented watershed that drains nearly 16,000 square miles, with approximately 35 percent of the drainage in Oregon and 65 percent in California (NRCS 2018). The Klamath River headwaters begin in Upper Klamath Lake, Oregon's largest natural freshwater lake, and flows for approximately 250 miles until it reaches the Pacific Ocean at Requa, California. The Klamath River Basin geography, topography, hydrology, and biology are distinct from other watersheds in the Pacific Northwest because water in the Klamath River originates in relatively flat, open valleys before crossing the Trinity and Coast Ranges in a steep river canyon and intercepting cold water inputs from the Scott, Salmon, and Trinity Rivers (USBR and CDFG 2012). The river is one of only three waterways that pass through the Cascade Mountains to the Pacific Ocean. The river basin is generally rural, with a total population of approximately 120,000. Its largest communities are Klamath Falls, Oregon and Yreka, California.

The Klamath River Basin is divided into Upper and Lower Klamath basins, with Iron Gate Dam serving as the dividing feature (NRCS 2018). The Upper Klamath Basin includes the headwaters, Sprague River, Williamson River, Upper Klamath Lake, Lost River, Upper Klamath East, and Butte Creek Sub-basins that flow through Jackson, Lake, and Klamath Counties in Oregon, and Siskiyou and Modoc Counties in California. Five main lakes are in the Upper Klamath Basin: Crater Lake, Upper Klamath Lake, Lower Klamath Lake, Clear Lake, and Tule Lake. Additionally, numerous creeks empty into the Klamath River, notably Spencer Creek (near J.C. Boyle), Fall Creek (near Copco No. 2), and Bogus Creek (near Iron Gate). The Lower Klamath Basin includes 200 miles of river corridor downstream from Iron Gate Dam to the Pacific Ocean.

The KHP and the United States Bureau of Reclamation's (USBR's) Klamath Project currently manage water flow in the Klamath River Basin via several diversions in the Upper Klamath Basin. Along its 250-mile course, water flows from Upper Klamath Lake through Link River Dam into the Link River and then through the Keno Impoundment/Lake Ewauna (controlled by Keno Dam) and the KHP reach (from J.C. Boyle Dam to Copco No. 1 and No. 2 dams, to Iron Gate Dam), before reaching the Pacific Ocean.

D6. Significance (continued):

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 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).

[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).

D6. Significance (continued):

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 the Project Area.

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).

Historic Context

[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 2003b).]

The Klamath Hydroelectric Project

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), (4) Iron Gate (1960-1962), (5) Keno (1966), and (6) Fall Creek (1903). [The Link River development (1921) is owned by the USBR and is not included in the Klamath project license. However, Kramer identified the dam as part of the Klamath hydroelectric system (Kramer 2003a:36)]. The KHP integrated groups of hydroelectric elements—dams, powerhouses, water conveyance systems—into a layered landscape of pre-contact occupation and historic land use. Sites of pre-contact occupation were associated with Native American customs and culture, subsistence and recreational fishing, as well as sites of early European-American industries such as ranching, mining, and logging. KHP construction geographically and temporally overlapped with these types of sites and activities, causing significant impacts to the land and its peoples.

Development of hydroelectric plants in the Klamath Basin began in 1891 in Shasta River Canyon to provide electricity to the City of Yreka. In 1895, another facility was constructed along the Link River to supply power to Klamath Falls, Oregon. The authorization of the USBR's Klamath Project in 1905 triggered additional hydrologic changes to the Klamath River and led to the construction of Link River Dam by California Oregon Power Company (now PacifiCorp) in 1921, as well as several hundred miles of irrigation ditches and canals that diverted water from the Klamath River and its wetlands to convert land for agricultural use (USBR and CDFG 2012:3.6-7). As the largest water management effort in the Upper Klamath Basin, the USBR's Klamath Project features a vast system of reservoirs, dams, canals, and pumps. Development and construction of these features occurred between 1905 and 1966, with most major facilities completed by the early 1940s (USBR and CDFG 2012:1-12).

The USBR originally designed the Klamath Project 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 2003b:21). Hydroelectric development in the Klamath Basin began in 1891 to supply electricity to Yreka, California, the Siskiyou County seat. Four years later, the Klamath Falls Light and Water Company built the East Side Power Plant No. 1. The power plant was on the Link River's eastern bank, within the city limits of Klamath Falls,

D6. Significance (continued):

Oregon. 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 which SEP&L had operated since its completion in 1903 (Kramer 2003b:12). In 1920, eight years after Copco formed, the company acquired the Keno Power Company, which operated the Keno hydroelectric development, built in 1911 (Kramer 2003b:5).

Copco Through World War II (1912-1945)

Copco's first construction 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 powering major regional industries, including nearly all the large Northern California lumber mills and several large mining dredgers (*Sacramento Bee* 1917). 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 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 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 grew 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 power supply, requiring new projects for future Copco customers (McCready 1950).

Seeking to develop additional power facilities, Copco began to reassess the Klamath River's power generation potential, reigniting conflict over Klamath Basin irrigation and water rights, as well as fishing and recreational interests (Kramer 2003b: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). During the 1950s, Copco 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 were not completed until the 1950s, as power demands soared (Kramer 2003b:30-31). In 1958, when Big Bend began operations, Copco's residential customers had the highest average annual usage of any private utility nationwide. The service area contained about 50,000 square miles in 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 population was approaching 250,000 and 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. After the acquisition, Pacific Power initiated a $500 million construction program spanning 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).

D6. Significance (continued):

When Pacific Power acquired Copco, the two companies were supplying power to 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. According to *The Bend Bulletin*, both companies spent a combined $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). Additionally, 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. Some 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 activities 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 energized its largest substation, located 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 a quarter-mile downstream. Fish eggs collected at the dam site are transported to the fish hatchery complex where they are hatched and then moved into a series of raceways. The fish remain in the raceways until they are ready for release into the river.

As Pacific Power's construction program proceeded, officials monitored the existing developments and continued planning for future improvements. Progress was interrupted by historic flooding along the Klamath River in December 1964 that caused severe damage to the Copco No. 1 and Iron Gate facilities which required Rebuilding the Copco No. 1 powerhouse and Iron Gate spillway channel. In September 1967, company officials, including the Copco division manager, met in Yreka, California 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 increased local growth and power demands 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 and 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 hydroelectric 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.

John Christie Boyle (1887-1979)

Pacific Power renamed the Big Bend development after John C. Boyle in honor of his significant contributions to regional hydropower development. Boyle spent his 50-year career as an engineer, construction supervisor, and later as a company official at Copco and its successor company, Pacific Power. He designed most of the hydroelectric projects in the Southern Oregon/Northern California region and as noted by Kramer (2018), he was "principally responsible for Copco's ground-breaking multi-dam generation facilities on the Klamath and North Umpqua Rivers" (Boyle 1962).

D6. Significance (continued):

Boyle was born in 1887 at Ft. Jones in Siskiyou County, California. He graduated with a degree in civil engineering from the University of California in 1910. That same year, he was hired by the Siskiyou Electric Power & Light Company (SEP&L), one of Copco's predecessor companies, as an assistant engineer. He began his tenure at SEP&L by surveying the Klamath River at Ward's Canyon which became the site of the Copco No. 1 hydroelectric development. In 1916, two years after construction began on Copco No. 1, Boyle became the site construction supervisor (Kramer 2003a:19; Oregonian 1917). Boyle also engineered the Link River Dam (1921) at Klamath Falls, Oregon which helped expand the region's agricultural economy.

Throughout the 1920s and 1930s, Boyle continued investigating the power potential of the Klamath, Rogue, and Umpqua river basins and in the 1940s and 1950s, he used the gathered data to plan future hydroelectric sites. By then, Boyle was not only Copco's chief engineer, but also vice-president and general manager. In 1945, he led Copco in expanding the company's generating capacity, primarily through the North Umpqua project. In 1951, Boyle was named Oregon's Engineer of the Year by Professional Engineers of Oregon for the design and development of the North Umpqua River projects' eight plants (Boyle 1962). During the 1950s and 1960s, he engineered and supervised construction of the Big Bend (Boyle) and Iron Gate hydroelectric developments. He retired as director of Pacific Power in 1963 but continued as a consultant (Oregon Civil Engineer 1975:1).

Re-Evaluation: Eligible Historic District

The 2003 Request for Determination of Eligibility report for the KHP and the corresponding California and Oregon survey inventory forms did not formally evaluate the KHP Historic District and its resources under all four NRHP criteria (Kramer 2003b; Durio 2003a; Durio 2003b). The evaluation in the California DPR and the Oregon Inventory of Historic Properties Section 106 Documentation stated:'

> The resources of the Klamath River Hydroelectric Project are strongly associated with the early development of electricity in the southern Oregon and northern California region, and they played a significant role in the area's economy both directly and indirectly, through the role that increased electrical capacity played in the expansion of the region's timber, agriculture, and recreation industries during the first six decades of the 20th century. They are significant under Criterion A, as defined by the National Park Service, for its association with events that have made a significant contribution to the broad patterns of our history. Specific portions of the project, such as COPCO #1, are also significant under Criterion C for design and engineering characteristics that exemplify the design of early hydroelectric generation facilities. The applicable areas of significance for the project are **Commerce**, for the development of electrical services, and **Industry**, for the economic impact on the area as a result of abundant hydropower capacity. Individual resources such as the Fall Creek Powerhouse and COPCO #1 may also be evaluated under the area of Engineering. For industrial resources such as those associated with the Klamath River Hydroelectric Project, the inherent nature of the project as a continuously operating generation facility complicates the evaluation of integrity. New technologies are often required to allow a powerhouse, water management feature, or other element to continue functioning in a highly structured, highly regulated environment. (Durio 2003a; Durio 2003b).

The current study includes an expanded historic context and a reevaluation that applies all four criteria of the NRHP below.

NRHP Criterion A

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 important role that electrical generation and transmission played in industrial expansion in California and the region (Kramer 2003a). The KHP played a significant role in regional commerce for its critical role in meeting growing regional demands for electricity. The KHP also significantly contributed to the development of regional industry as a "regionally-significant, locally-owned and operated, private utility" and by supplying power that contributed to the early-twentieth-century growth of regional industries, such as timber, mining, agriculture, and recreation (Kramer 2003a:58).

The KHP is also locally (regionally) significance under NRHP Criterion A in the area of **Conservation** for its fisheries management activities during the early- and mid-twentieth century. The KHP's fisheries management efforts began in large part with construction of the Fall Creek hatchery (1919).About 40 years later, the KHP's final hydroelectric development, Iron Gate, was built by Pacific Power as a reregulating facility. Four years after completion of the Iron Gate Dam, Pacific Power built the Iron Gate fish hatchery. The hatchery operates in conjunction with the Iron Gate Dam and the dam's fish capture, spawning and holding facilities to advance regional fish management objectives (see Iron Gate historic district DPR forms for more detailed information).

D6. Significance (continued):

NRHP Criterion B

Research has not indicated that the KHP is associated with any historically significant individuals under NRHP Criterion B. While the KHP is associated with master hydropower engineer John C. Boyle, Boyle's association with the KHP is more appropriately evaluated under NRHP Criterion C as the work of a master rather than under NRHP Criterion B, which is generally used to evaluate the eligibility of residences and workplaces of historically important persons (NPS 1997:16).

NRHP Criterion C

The KHP is significant under NRHP Criterion C in the area of **Engineering** for embodying the distinctive characteristics of twentieth century hydroelectric development that implemented technological advances in conception, design, and construction.

The KHP is also significant under NRHP Criterion C in the area of **Engineering** as representing the work of master hydropower engineer John C. Boyle. Boyle made highly important contributions to twentieth-century hydropower development in the Southern Oregon/Northern California region. Boyle began his association with the KHP as a young SEP&L engineer surveying Ward's Canyon for the Copco No. 1 dam. He became construction site supervisor for Copco No. 1, and also engineered the Link River dam to help expand the region's basic agricultural economy. During his tenure as an officer and engineer for Copco and, later, Pacific Power, Boyle designed the J.C. Boyle and Iron Gate hydroelectric developments. The J.C. Boyle hydroelectric development, originally named Big Bend, was re-dedicated in Boyle's honor shortly after Pacific Power acquired Copco. Boyle's involvement in design and construction of the entire KHP enabled him to write the 1976 book *50 Years on the Klamath*, which documented the KHP's history.

NRHP Criterion D

The KHP 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.

The contributing resources at each of the four hydroelectric developments are listed in **Table 1** below.

Integrity Analysis

In addition to meeting one or more of the NRHP criteria, a property must also retain a significant amount of its historic integrity to its period of significance to be considered eligible for listing. Integrity is the authenticity of an historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. The KHP retains overall integrity of location, design, setting, materials, workmanship, feeling, and association; and continues to convey its historic role in the Upper Klamath Basin's 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.*
The KHP retains integrity of location, because the primary components of its hydroelectric developments, such as dams, water conveyance systems, and powerhouses, remain in their original locations.

Design *is the composition of elements that constitute the form, plan, space, structure, and style of a property.*
The KHP retains integrity of design, generally conveying the original as-built construction of its primary components at their original locations and with their original functional interconnections. Certain alterations within the KHP, which have occurred over time, are historic in their own right. For instance, in 1922, the Copco No. 1 Dam was raised by 14 feet to substantially increase reservoir storage and output capacity. At that time, Copco installed the single penstock, built Gatehouse No. 2, enlarged the powerhouse, and added a second powerhouse generator unit. These design modifications and augmentations occurred during the period of significance, and only 4 years after the development's original completion. Alterations within discrete KHP hydroelectric development historic districts are detailed in their own DPR form sets. Many of the observed alterations are relatively minor and reflect modifications over time, but do not substantially diminish the KHP's overall integrity of design.

Setting *is the physical environment of a historic property that illustrates the character of the place.*
The KHP retains integrity of setting, which consists of a predominantly remote landscape characterized by the winding Klamath River, narrow river canyons, large manmade reservoirs, prominent basalt rock formations, and pine and fir forests within south-central Oregon and northwestern California.

D6. Significance (continued):

Materials *are the physical elements combined in a particular pattern or configuration to form the historic property.*
The KHP retains integrity of materials, particularly the massive concrete and earthen elements in the dams, the steel and concrete elements in the water conveyance systems, and the concrete construction of its powerhouses (except for the Copco No. 1 powerhouse).

Workmanship *is the physical evidence of the crafts of a particular culture or people during any given period of history.* The KHP retains integrity of workmanship; specifically, the engineering skill demonstrated by the excavation of the canyon walls for dam alignments and the large-scale construction of dams, water conveyance systems, and powerhouses with functional interconnections.

***Feeling** is the quality that a historic property has in evoking the aesthetic or historic sense of a past period of time.*
The KHP engineering features—the dams, water conveyance systems, and powerhouses—as well as the remote setting and intensive use of natural and industrial construction materials, collectively convey the historic character of the region's historic twentieth-century hydroelectric development, and support integrity of feeling. A variety of historic-era buildings and structures that were designed for administration and operations are present throughout the KHP and further support 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 intact, historic hydroelectric resources and features within the KHP boundaries directly links the KHP with historic power development in the region, contributing to integrity of association.

In conclusion, the KHP is an eligible historic district that is locally (regionally) significant under NRHP Criterion A in the areas of Conservation and Commerce and Industry, and locally (regionally) significant under Criterion C in the area of Engineering and retains integrity to convey its significance.

Table 1: Klamath Hydroelectric Project Contributing Resources

Hydroelectric Development	Resource Name	Year Constructed
Copco No. 1	Dam	1918/1922
	Water Conveyance System	1918/1922
	Powerhouse	1918/1922
	Bungalow 1107	c.1925
	Bungalow 1108	c.1925
	Warehouse 1112	c.1913
	Guesthouse Remains	c.1917
Copco No. 2	Dam	1925
	Water Conveyance System	1925
	Powerhouse	1925
	Bungalow/Building 1121	1925
	Radio Station	c.1950
	Modern Bunkhouse	1964
	Fall Creek School	1965
	Control Center	1966
	Ranch House Nos. 1,2,3 and 4	1967-1968
Iron Gate	Dam	1962
	Dam Fish Facilities	1962
	Water Conveyance System	1962
	Powerhouse	1962
	Support Facilities (communication building and restroom)	1962
	Operator Residence No. 1 and 2	c.1964
	Hatchery Fish Facilities (hatchery building, raceways and settling ponds, fish feed silos)	1966

	Hatchery Residence Nos. 1,2,3 and 4	1966
	Lakeview Road Bridge	1960
JC Boyle	Dam	1958
	Water Conveyance System	1958
	Powerhouse	1958
	Armco Warehouse	1956

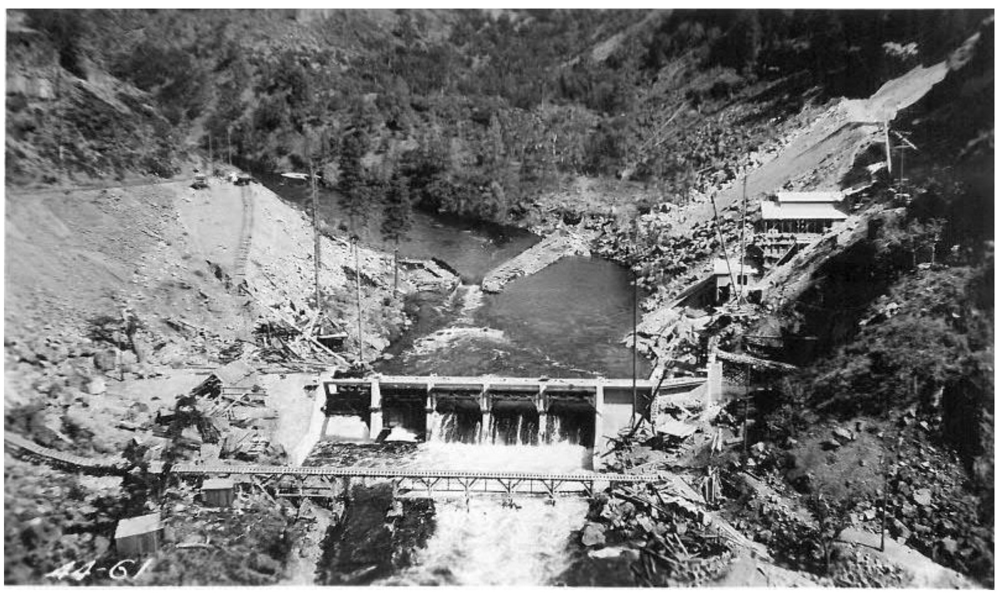
Representative photographs of components at each of the four hydroelectric developments are included below.

District Representative Photographs:

Photograph 1. Copco No. 1 Powerhouse and dam, completed between 1918 and 1922; facing southwest/downstream, 2018.

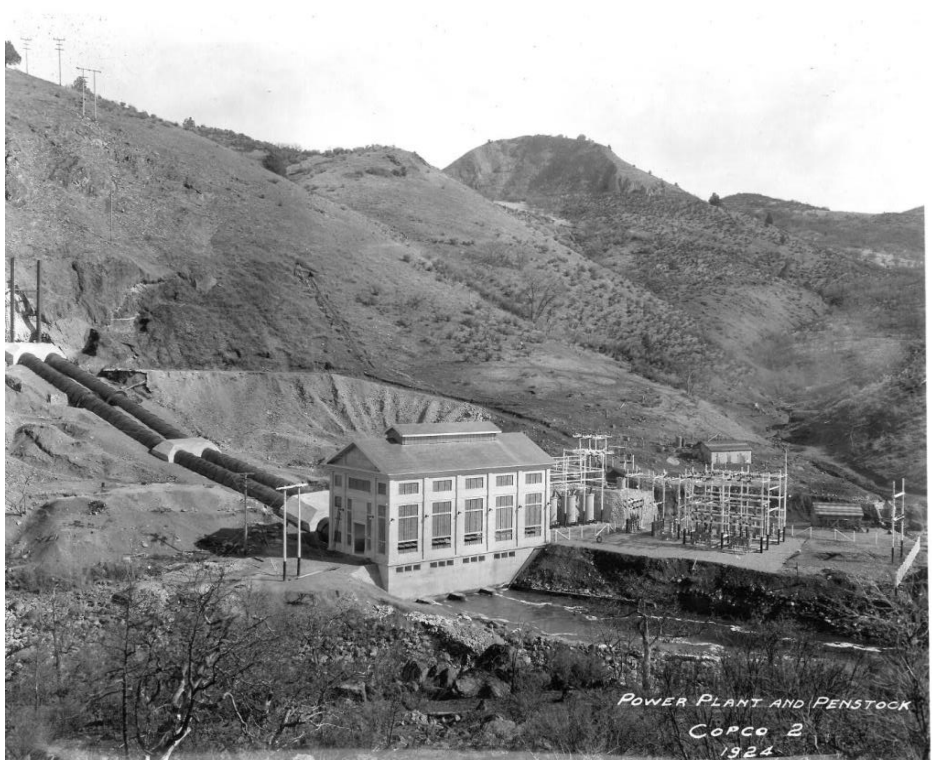
Photograph 2. Copco No. 1, December 1917; facing northeast/upstream (SOHS 1917).

Photograph 3. Copco No. 2 Dam, completed 1925; facing southwest, 2018.



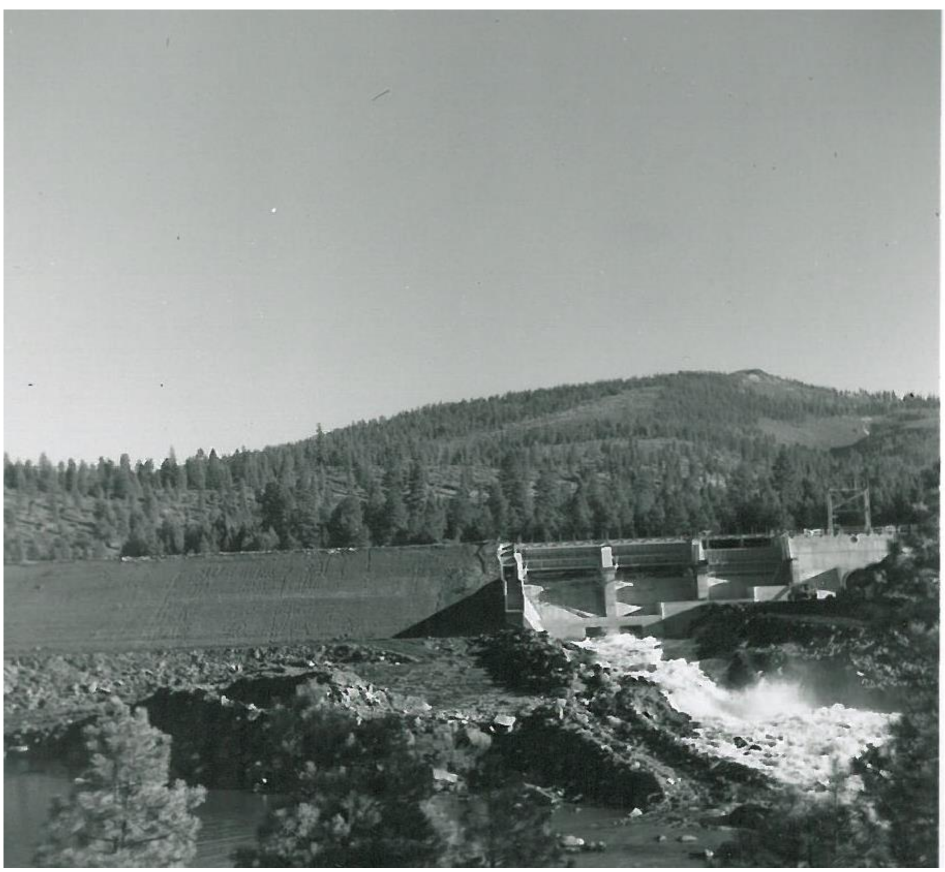
Photograph 4. Copco No. 2 Dam, July 8, 1925; facing southeast/upstream (PacifiCorp Archive image CO2-91).

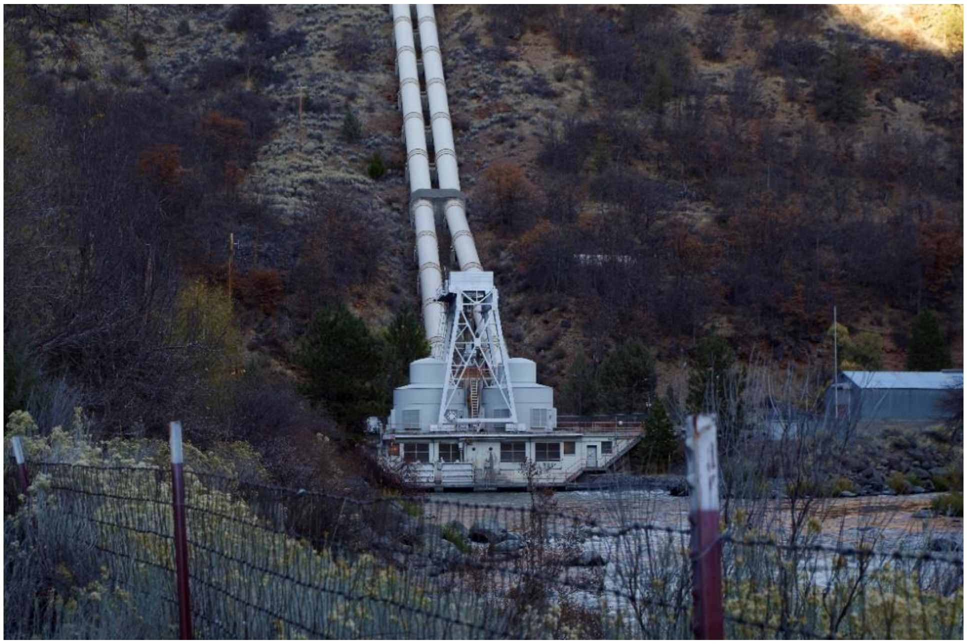
Photograph 5. Copco No. 2 Powerhouse, completed 1925; facing north, 2018.



Photograph 6. Copco No. 2 Powerhouse, 1924; facing southeast (PacifiCorp archive image CO2-36).


Photograph 7. J.C. Boyle Dam; facing northwest/downstream, 2018.


Photograph 8. J.C. Boyle Dam; view facing northwest/downstream, c.1958 (PacifiCorp Archive image BB-494).



Photograph 9. J.C. Boyle Powerhouse, completed 1958; facing north, 2018.

Photograph 10. J.C. Boyle Powerhouse, aerial view, c.1958 (PacifiCorp Archive image BB-1043).

Photograph 11. Iron Gate Dam, completed 1962; facing north, 2018.

Photograph 12. Iron Gate dedication, February 3, 1962 (PacifiCorp archive image IG-290).

References:

Bend Bulletin [Bend, Oregon]. 1960. “Agreement Made on Power Merger: PP&L Due to Absorb COPCO Firm.” December 30.

Boyle, John C.

1962 “Honoring John C. Boyle” [program pamphlet]. Presented to Luncheon Program Guests, Winema Hotel, Klamath Falls, Oregon, June 25 (item #2016.002.0435, Klamath County Museum).

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

Durio, Lori

2003a Klamath Hydroelectric Project. Oregon Inventory of Historic Properties Section 106 Documentation Form. July.

2003b 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.

Gauntt, Tom. 2012. “Hall of Fame: Prospect No. 1 Honored for 100 Years of Operation.” Hydro Review. https://www.hydroworld.com/articles/hr/print/volume-31/issue-07/articles/hall-of-fame-prospect-no-1-honored-for-100-years-of-operation.html (accessed October 22, 2018).

Guernsey, John. 1957. “Basin Potential Outlined At Teacher Session: Speakers Emphasize Natural Resources.” *Herald and News* (Klamath Falls, Oregon). September 1.

Kramer, George

2003a K*lamath 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.

McCready, Al. 1950. “Flying Weather Makers Introduce New Act Into Repertoire, Chase Fog From Umpqua Area to Speed Dam-Building Job.” Oregonian [Portland, Oregon]. October 15.

Mail Tribune [Medford, Oregon]

1959 “Past 11 Years Notable for Power Company.” July 26.

1960 “Preliminary Work on Iron Gate Dam Starts.” April 10.

Natural Resources Conservation Service (NRCS). 2018 Klamath River Basin. Electronic document, https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/home/?cid=nrcs143_023523, accessed February 15, 2019.

Oregonian [Portland, Oregon]. 1917. “Big Power Plant Near Completion.” October 8.

Pacific Power & Light Company (Pacific Power)

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

1961b 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).

Sacramento Bee [Sacramento, California]

1917 “Great Power Project On Klamath Near Completion: California-Oregon Power Company Rushes Finishing Touches.” November 8.

1967 “Pacific Power Aides Hold Meeting In Yreka.” September 29.

1968a “Pacific Power Installs Copco Unit Equipment.” October 9.

1968b “$41,000 Job.” April 5.

1970 “Pacific Power Sets Budget For Additions.” January 19.

San Mateo Times [San Mateo, California]. 1960. “Power Firms Plan Merger.” December 30.

Southern Oregon Historical Society (SOHS)

1912 J.C. Boyle, 1912 [photograph]. J.C. Boyle Collection.

1917 Copco No. 1, December 1917 [photograph]. J.C. Boyle Collection.

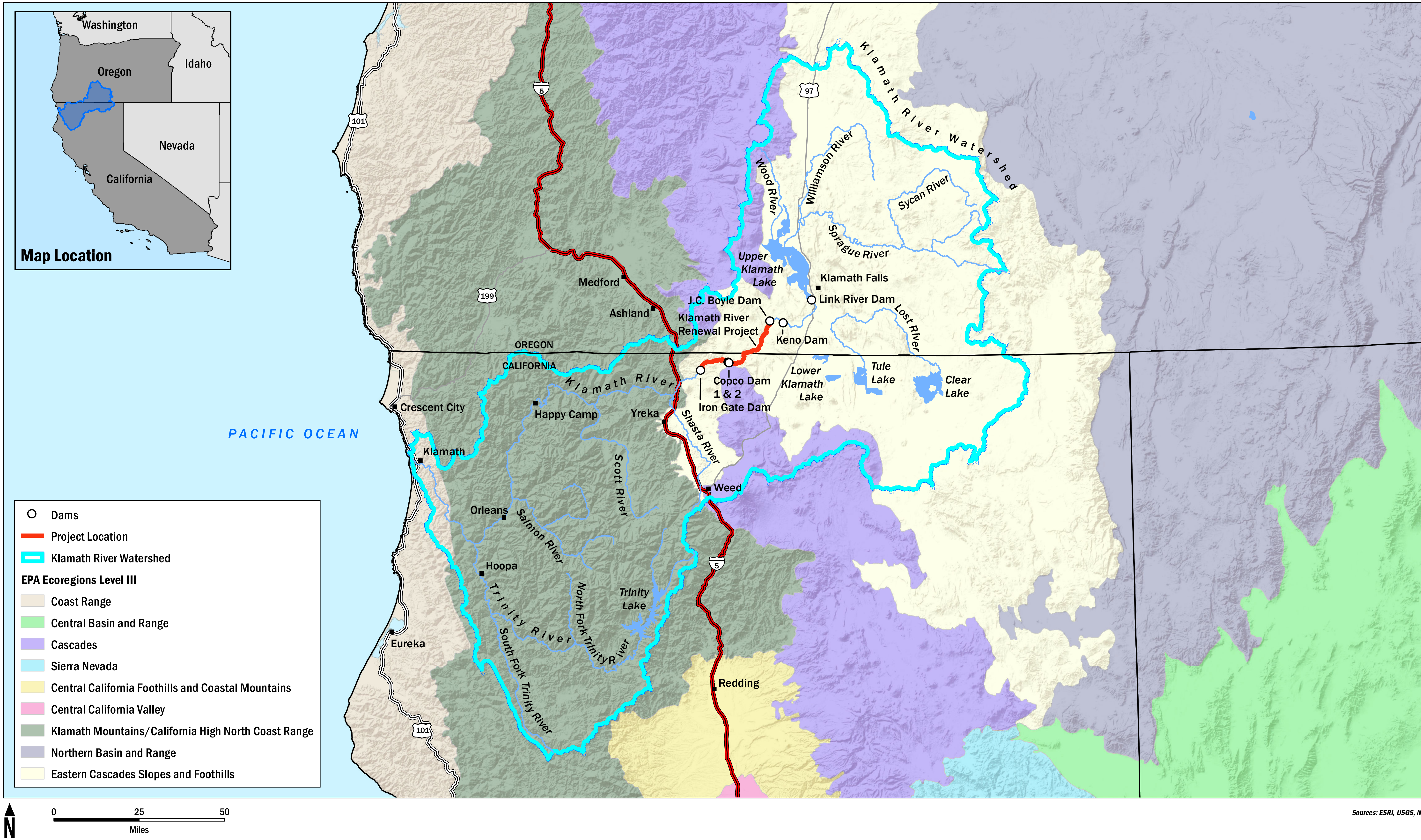
D7. References:

U.S. Bureau of Reclamation and California Department of Fish and Game (USBR and CDFG). 2012. Klamath Facilities Removal Final EIS/EIR. US Department of Interior, Bureau of Reclamation and California Department of Fish and Game.

Wynne, Floyd L.

1957 "New Klamath River Canyon Power Development Project Viewed." *Herald and News* [Klamath Falls, Oregon]. June 30.

1958 "Power of Upper Klamath Harnessed By Copco." *Herald and News*. October 2.



AECOM
Klamath River Renewal Corporation
Klamath River Renewal Project

KLAMATH RIVER WATERSHED

Oregon Historic Site Form

LOCATION AND PROPERTY NAME

address: ☐ apprx. addrs

Keno ☑ vcnt Klamath County

historic name: **J.C. Boyle Hydroelectric Development**

current/ other names: **Big Bend Project**
[The J.C. Boyle hydroelectric development was known as Big Bend during the planning and construction phase. On September 1, 1958, soon after completion, the development was dedicated as Big Bend. It was rededicated on February 3, 1962 in honor of Copco and Pacific Power engineer John Christie Boyle.]

Optional Information

assoc addresses:
(former addresses, intersections, etc.)

location descr:
(remote sites)

USGS 7.5' Quad Chicken Hills, OR-CA Date 2012
TSR
T40S R6E L9 of Sec. 13
T40S R6E L6 of Sec. 14
T40S R7E L6 of Sec. 6
T40S R7E L8 of Sec. 6
T40S R7E NE 1/4 of SW 1/4 of Sec. 6
T40S R7E NE 1/4 of NW 1/4 of Sec. 6

UTMs (all Zone 10)
Dam: 578683mE/4663824mN
Intake: 578649mE/4663772mN
Steel Pipeline: 578649mE/4663772mN to 578525mE/4663630mN
Intake Flume Headgate: 578525mE/4663630mN
Concrete Flume: 578525mE/4663630mN to 576990mE/4660833mN
Forebay: 576990mE/4660833mN
Tunnel: 576990mE/4660833mN to 576857mE/4660638mN
Surge Tank: 576857mE/4660638mN
Penstock: 576857mE/4660638mN to 576845mE/4660622mN
Powerhouse: 576845mE/4660622mN

Lat/Long
Dam: 42.12225829024586, -122.0483022236985
Intake: 42.122109, -122.048518
Steel Pipeline: 42.122109, -122.048518 to 42.120843, -122.050037
Intake Flume Headgate: 42.120843, -122.050037
Concrete Flume: 42.120843, -122.050037 to 42.095807, -122.068973
Forebay: 42.095807, -122.068973
Tunnel: 42.095807, -122.068973 to 42.094064, -122.070607
Surge Tank: 42.094064, -122.070607
Penstock: 42.094064, -122.070607 to 42.093921, -122.070754
Powerhouse: 42.0938570535504, -122.06959224969894
Dam Communications Building: 42.12175899192577, -122.04868217766011
Domestic Well House: 42.120268168483946, -122.04710053369328
Fire System Control Building:

block nbr: lot nbr: tax lot nbr:
township: 40S range: 6E section: 13 1/4: L9
zip:

42.12165031626379, -122.04822008216304
Fuel Station: 42.12060813506629, -122.04783312414519
Red Barn: 42.12089236800195, -122.04815621530574
Residence 1: 42.12068058669595, -122.0463454020274
Residence 2: 42.11923989786646, -122.045022982385

PROPERTY CHARACTERISTICS

resource type: **district**
height (# stories):
total # eligible resources: **4**
total # ineligible resources: **9**
elig. evaluation: **eligible/significant**
NR status:
primary constr date: **1958** (c.)
secondary date: (c.) (optional--use for major addns)
NR date listed: (indiv listed only; see Grouping for hist dist)
primary orig use: **Energy Facility**
orig use comments: **J.C. Boyle hydroelectric development has multiple structures built in a variety of materials.**
secondary orig use:
primary style: **Utilitarian**
prim style comments: **Dam, water conveyance, and powerhouse are industrial structures. The Armco warehouse is utilitarian.**
secondary style:
sec style comments:
primary siding: **Poured Concrete**
siding comments:
secondary siding:
plan type: **Other/Undefined**
architect: **John C. Boyle and Copco engineers**
builder: **Morrison-Knudsen Company**

comments/notes: **The J.C. Boyle hydroelectric development consists of a dam, water conveyance system, powerhouse, Armco warehouse, along with other operations and support facilities.**

GROUPINGS / ASSOCIATIONS

survey project name or other grouping name: Klamath River Hydroelectric Project - JC Boyle Hydroelectric Development, 2018 — Survey & Inventory Project

farmstead/cluster name:

external site #: (ID# used in city/agency database)

SHPO INFO FOR THIS PROPERTY

NR date listed:
ILS survey date: **6/11/2018**
RLS survey date: **6/11/2018**
Gen File date:

106 Project(s)

SHPO Case #	Date	Agency Effect Eval
17-1370	6/11/2018	adverse effect

JC Boyle Dam, facing W

Oregon Historic Site Form

ARCHITECTURAL / PROPERTY DESCRIPTION

(Include expanded description of the building/property, setting, significant landscape features, outbuildings, and alterations)

The J.C. Boyle historic district is part of the larger, discontiguous Klamath Hydroelectric Project (KHP) 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), Iron Gate (California), and J.C. Boyle (Oregon).

The J.C. Boyle hydroelectric development, located in a remote part of Klamath County, Oregon, was completed by the California Oregon Power Company (Copco) in 1958 to generate hydroelectric power. The development is a component of the Klamath Hydroelectric Project and is the easternmost of the four major hydroelectric developments, including Copco No. 1, Copco No. 2, and Iron Gate. Originally known as Big Bend, J.C. Boyle was the Klamath River's first post-World War II hydroelectric development. Unprecedented postwar population growth in Klamath, Jackson, Josephine, and Douglas Counties in Oregon, and Siskiyou County in California, led to soaring regional power demands. In response, Copco evaluated potential sites for a new hydropower project, and identified a stretch of the Klamath River as an ideal location. In that area, west of Keno, Oregon, and north of the Oregon – California border, Copco proposed to build the Big Bend facilities to generate an additional 88,000 kilowatts (kW) of power. The Big Bend hydroelectric development was completed in 1958. In 1962, one year after Pacific Power and Light Company (Pacific Power) acquired Copco, Big Bend was rededicated as the J.C. Boyle hydroelectric project in honor of the Copco/Pacific Power engineer and official who designed and supervised construction of Big Bend, as well as other significant regional hydroelectric projects.

The dam's remote setting is characterized by the J.C. Boyle Reservoir, the Klamath River, Topsy Grade Road, and Topsy Campground. The campground is developed with paved roads, parking areas, a boat dock, restrooms, and interpretive signs. The mixed-conifer forest setting contains ponderosa pine and Douglas fir, as well as annual grasses, mostly cheatgrass, and other non-native species (AECOM 2017:3-19 – 3-20).

The administrative area of the dam site contains the dam, Red Barn office, truck shop, fire system control building, dam communication building, and two modern operator residences. The water conveyance system, extending over 2 miles from the dam to the powerhouse, is composed of a steel pipeline, concrete flume, forebay facility, concrete-lined tunnel, and penstock. The dam intake conveys water through the elevated steel pipe that crosses the river at the dam's downstream side. The pipe discharges into an intake flume headgate. From there, water flows downhill through the curving 11,000-foot-long concrete flume, which generally runs parallel between the Klamath River and J.C. Boyle Powerhouse Road, until reaching the forebay. This area downstream of the dam consists of a narrow canyon with steep, forested slopes and exposed rock cliffs. Abundant reed canarygrass grows along the Klamath River shoreline, while patches of arroyo willow grow in sections above the flume (AECOM 2017:3-21).

The J.C. Boyle hydroelectric development, including the reservoir, extends along the Klamath River between River Mile (RM) 233.3 and RM 225.2. The dam, built at RM 229.8, is about 6 miles west of Keno, Oregon; and about 18 miles southwest of Klamath Falls, Oregon (AECOM 2017:2-1). The development components are site downstream of Keno and upstream of Copco No. 1, both part of the Klamath Hydroelectric Project. The dam impounds the J.C. Boyle Reservoir (known locally as Topsy Reservoir).

At the forebay, water enters the intake of a 1,615-foot concrete-lined tunnel that carries the flow to a bifurcated penstock. The penstock legs, each 819 feet long, convey water down the hillside and into the powerhouse (News-Review 1958). As water flows into the powerhouse, it turns the blades of the water wheels, which turn the turbines. The turbine blades are connected to a shaft that turns the generators. Within each generator, a set of coils creates a magnetic field through which another set of coils passes, breaking the magnetic field and generating electricity. The electricity is conducted over transmission lines. After passing through the turbine, the water is discharged back into the Klamath River. The powerhouse area contains a substation and the Armco warehouse. Vegetation on the slopes surrounding the powerhouse consists of an open forest of Oregon oak and conifers with mixed chaparral/sagebrush vegetation (AECOM 2017:3-21).

Reservoir and Recreation Sites

The J.C. Boyle Reservoir, impounded by the dam, is a feature of the hydroelectric development. The narrow 420-acre reservoir provides approximately 2,629 acre-feet of total storage capacity at reservoir water surface (RWS) elevation 3,793.5. The maximum and minimum operating levels are between RWS elevations 3,793 and 3,788, a vertical operating range of 5 feet, although the reservoir is normally maintained at RWS elevation 3,793, or 0.5 foot below the top of the spillway gates. Recreational facilities at the reservoir include Topsy Campground (managed by the Bureau of Land Management, or BLM), Pioneer Park (managed by PacifiCorp), Sportsman's Park (managed by Klamath Sportsman's Association), and other smaller shoreline recreation sites (USBR 2012:16-18; PacifiCorp 2004a). These recreational facilities are evaluated as features of the J.C. Boyle Hydroelectric Development.

Pioneer Park

Pioneer Park consists of two separate day use areas on the western and eastern shoreline of J.C. Boyle Reservoir. Both sites have access from SR 66 and are located on each side (west and east) of the SR 66 Bridge over a narrow point of the reservoir. Pioneer Park West has 12 picnic tables and 12 fire rings with grills. The shoreline is used for fishing and an unimproved boat ramp is used primarily to launch car-top boats. The main access road into Pioneer Park West is 200 feet long and paved, but the undefined parking area is gravel and dirt and can accommodate approximately 25 vehicles without trailers. Pioneer Park East has three interpretive signs with information regarding the Applegate Trail. The site had a concrete boat launch before the SR 66 bridge was replaced in 2005 by the Oregon Department of Transportation (ODOT). A large stretch of gravel along the shoreline provides car-top boat launching and shoreline fishing opportunities. The access road to Pioneer Park East and the parking area are gravel. While undefined, the parking area can accommodate approximately 40 vehicles without trailers or 15 to 20 vehicles with trailers.

Sportsman's Park

The 345-acre Sportsman's Park at 22811 Oregon State Route 66 is positioned within large, open grassland areas with groupings of pine trees and shrubs. Developed circa 1994, the park consists of shooting ranges, dirt racetracks, archery ranges, a model aircraft flying field, and an off-highway vehicle area (kenosportspark.com n.d.). The site also includes several buildings, a large paved area, grass-covered model aircraft landing fields, off-highway vehicle earthen mounds and trails, and day use amenities such as 16 picnic tables and 2 restrooms (KRRC 2021:19; PacifiCorp 2004a:5-138).

Topsy Campground

Located within a Ponderosa pine forest, Topsy Campground (or Recreation Site) along the southeastern shoreline of J.C. Boyle Reservoir can be accessed via the Topsy Grade Road off of SR 66. The site, which was designated for recreation circa 1960, consists of a campground, small day use area, and a boat launch (Lebanon Express 1968). All roads within the campground are asphalt. Topsy Campground has approximately 15 campsites, all of which have some degree of ADA-accessibility. All but two of the campsites have tent pads. Additionally, there are restroom facilities, an RV dump station, five water faucets, two drinking fountains, 14 trash receptacles, and one trash dumpster associated with the campground. These facilities are also shared by the day use and boat launch areas at the site. The small day use area provides two sites with a picnic table and grill, one of which is an ADA-accessible site. The boat launch has two concrete lanes, a concrete abutment, and a floating dock. There is also an ADA-accessible fishing pier with two benches. A paved parking area near the boat launch can accommodate three vehicles with trailers for day use parking.

Spring Island River Access

Spring Island River Access is a Special Recreation Management Area owned and managed by Bureau of Land Management (BLM) Klamath Falls Field Office. It is a small, riverside recreation day-use site located approximately 0.3 miles downstream of the J.C. Boyle powerhouse. The site has informational signage, paved parking with a carry down boat launch, picnic tables, and vault toilets. It is the primary staging area for the Upper Klamath whitewater boating, a popular and well-known destination activity. It serves as a portal to the Upper Klamath Wild and Scenic River corridor and is also used by visitors for fishing, wildlife viewing, and picnicking.

Transportation

The J.C Boyle hydroelectric development has several access roads and a bridge. The short vehicular "timber bridge" was originally built in 1956, then rebuilt in 1971 and 2003. The bridge spans the Klamath River adjacent to the steel pipe, about 350 feet southwest of the dam, and provides access to the concrete flume via Canal Road (PacifiCorp 2004b:4-1,4-2; AECOM 2017:5-7). The Boyle/Red Barn access road, built circa 1958, is a paved asphalt road that provides access from Topsy Grade Road to the dam and administrative area (FERC 2007:3-495). The Canal Road, built circa 1958, is a narrow, unpaved PacifiCorp maintenance road that runs parallel to the concrete flume, between the flume and the Klamath River below (Durio 2003:44). The Canal Road begins near the western approach of the timber bridge, closely following the canal flume's curved alignment, and ends at the forebay. Near the forebay area, the Canal Road merges with J.C. Boyle Powerhouse Road, which provides access to the powerhouse area. The J.C. Boyle Powerhouse Road follows the flume from the dam area to the powerhouse. Portions of the J.C. Boyle Powerhouse Road near the forebay area were constructed with material excavated from the tunnel (PacifiCorp archive image BB-136). After passing through the powerhouse area, the road continues south, following the Klamath River towards the Oregon-California border. This gravel road provided the first convenient mode of access to fishing areas of the Klamath River that had been virtually unreachable (Wynne 1958).

The J.C. Boyle hydroelectric development's four contributing resources (dam, water conveyance system, powerhouse, and Armco warehouse) are documented in individual inventory forms. The development's 9 non-contributing resources are described below:

Red Barn (1958, circa 1978)

The Red Barn, built in 1958 and modified circa 1978, is a two-story, wood-frame building with rectangular plan that functions as an administrative office and vehicle/equipment storage. The Red Barn is located in the administrative area of the dam and originally provided vehicle and equipment storage. In a topographic drawing signed by Copco engineer John C. Boyle, the Red Barn is labeled as "warehouse" (Copco 1959). The building has a side-gable roof with a medium-pitch, slightly overhanging eaves, and corrugated metal cladding. There is red R-panel metal siding and modern light fixtures. All first floor windows were replaced circa 1978 with aluminum frame sliding windows of varying dimensions (Durio 2003:44; Kramer 2003a:6). The two symmetrically spaced second-floor windows at the northern elevation consist of original 4/8 multi-pane wood sash. On the northern (primary) elevation, a one-story vestibule addition with shed roof contains the east-facing front entry door that displays a "JCB Red Barn" sign, installed after 2003. The garage doors on the southern and eastern elevations are newer metal rollup. A one-story storage shed addition with double metal doors and corrugated metal roofing is attached to the western elevation. The building rests on multiple foundation types: concrete footings at the southwestern section and poured concrete in other sections. Alterations include the vestibule addition, shed addition, roofing, siding, windows, pedestrian doors, garage doors, and the new exterior light fixture at the southern elevation.

Truck Shop (Maintenance Building) (1991) and Fuel Station/Waste Storage (circa 1991)

The large, modern metal Truck Shop, built in 1991, functions as a maintenance building (Durio 2003:44; Kramer 2003a:6). The Truck Shop is sited immediately southeast from the Red Barn in the administrative area. A 1968 aerial photograph indicates that the Truck Shop replaced a smaller building in the same approximate location (UO 2018:1968_cno_2jj_50). The Truck Shop is characterized by four large, drive-through vehicle bays with metal overhead doors along the western (primary) and eastern (rear) elevations. The building has a concrete foundation, rectangular plan, and steel post-and-beam construction. The low-pitched front-gable roof is clad in standing-seam sheet metal. The siding is corrugated metal and modern light fixtures are affixed to the exterior. A fuel canopy at the southern elevation was constructed in 1993 and has four steel I-beam posts supporting the steel-frame shed roof and is clad in corrugated metal roofing (PacifiCorp 2004b:4-2). Metal entry doors are located on the northern and southern elevations and the door at the northern elevation is sheltered by a small plywood canopy with a metal frame and corrugated metal roofing.

The fuel station/waste storage area, built circa 1991, consists of two associated structures directly west across the road from the Truck Shop. The fuel station was likely installed around the same time as the Truck Shop (1991). The station contains two Convault brand fuel tanks with pumps resting on a shared poured-concrete foundation. The large tank, a PetroVend automated K-2500 fueling terminal, holds 1,000 gallons of unleaded fuel. The smaller 500-gallon tank holds diesel fuel. The tanks are sheltered by a metal shed roof canopy with standing-seam sheet metal roofing that is supported on four metal posts.

The waste storage area, built circa 1991, sits adjacent to the fuel station's northwestern corner on a concrete foundation. The small, one-story structure with rectangular plan has a low-pitched side-gable roof. The only fenestration is a relatively large metal overhead door along the eastern (primary) elevation. Standing-seam metal panels cover the roof and the exterior. A white sign with black lettering that reads "Waste Storage Area" is mounted on the metal overhead door beneath a red sign with white lettering that reads "No Smoking." The eastern elevation has an emergency shut-off switch and overflow alarm, as well as a panel box to power the fuel pumps. A metal cabinet adjacent to the southern elevation contains an auxiliary fuel pump.

Fire System Control Building (circa 1995)

The Fire System Control Building, built circa 1995, houses a water pump and 480-volt (V) motor. A nearby transformer steps down power entering the building from 12 kV to 480 V. The small, modern building is near the edge of the reservoir, immediately south of the dam. It has a rectangular plan, rough-faced concrete masonry unit (CMU) construction, and a shed roof with wide metal flashing. A metal double door (the only fenestration) and louvered metal vent are located along the western (primary) elevation. The building rests on a concrete foundation, and a concrete pad is located in front of the metal door. A white sign with red and black lettering on the eastern (rear) elevation, facing the reservoir, warns "Spillway Ahead." The interior contains plywood ceilings, CMU walls, and poured-concrete flooring. Based on a comparison of photographs, the only alterations since 2003 are a replacement light fixture above the door, and the installation of a white sign with black lettering on the door that reads "Fire System Control Building."

Dam Communication Building (circa 1995)

The Dam Communication Building, built circa 1995, enables communication with PacifiCorp's Hydro Control Center (HCC) at Merwin Dam (located on the Lewis River in Washington State, at the border of Cowlitz and Clark Counties) (Durio 2003:44; Kramer 2003a:6). HCC controls operations at all PacifiCorp dam facilities. The small building, which sits on a poured-concrete foundation, has a rectangular plan, metal panel exterior, and a low-pitched front-gable roof finished with corrugated metal. The only fenestration is a metal door on the northern (primary) elevation that is sheltered by a metal awning. A white sign with black lettering, installed on the door after 2003, reads "Dam Communication Building." Plywood is visible in the southern (rear) gable. The interior contains metal panel walls and concrete flooring.

Operator Residence No. 1 (circa 1975)

Operator Residence No. 1, built circa 1975, is one of two occupied operator residences near the dam administrative area. The house is approximately 470 feet east of the Red Barn, and 200 feet south of the reservoir. The street number "26030" is posted on the entry fence (the street name is unknown). The Ranch-style residence has a rectangular plan, concrete foundation, medium-pitched side-gable roof with minimal eave overhang, an attached two-car garage, and a brick chimney. The roofing is standing-seam sheet metal while the siding consists primarily of vertical grooved plywood siding. Vinyl frame sliding windows and wood-panel doors are located on the northern and southern elevations. The northern (primary) elevation faces the reservoir and dam. Three concrete steps lead to the wood-panel front door with metal screen door. The western and eastern elevations lack fenestration. A covered porch shelters the southern (rear) entry. The garage door, also at the southern elevation, is a metal overhead. A wood, multi-pane upper panel pedestrian door is on the northern elevation. The house has several outbuildings and structures, including a storage shed clad in the same vertical grooved plywood siding as the house. Another structure, presumably used for outdoor seating or dining, consists of a wood-board roof supported by square, pressure-treated wood posts mounted into a concrete pad. Operator Residence No. 1 and its associated driveway appear in a 1980 aerial photograph (UO 2018:1980_gs-veyu-c_1-59). In addition, PacifiCorp references upgrades to what may be Operator Residence No. 1, performed in 1976: "Dam operator's house repairs/construction of masonry walls and vent performed" (PacifiCorp 2004b:Exhibit C, 4-2). The aerial photograph, the PacifiCorp report references, and the residence's design and materials indicate a circa-1975 construction date.

Operator Residence No. 2 (circa 1985)

Operator Residence No. 2, built circa 1985, is in the dam site's administrative area, approximately 625 feet south of Operator Residence No. 1. The Ranch-style residence has a concrete foundation, rectangular plan, medium-pitched side-gable roof with moderate eave overhang, attached two-car garage, and brick chimney. The roofing is standing-seam sheet metal, while the siding consists primarily of vertical grooved plywood and some horizontal wood composition board. The windows are mostly metal sash and sliding, as well as a bay window at the southern (primary) elevation, adjacent to the front door. Siding along the primary elevation appears to be horizontal wood composition board. The front door is wood with two inset panes. The eastern elevation lacks fenestration. At the northern (rear) elevation, the garage door is a metal overhead. A wood panel pedestrian door is on the western elevation of the garage. A sliding glass door at the rear (northern) elevation, adjacent to the garage door, is sheltered by a corrugated metal canopy. During December 2017 fieldwork, a gambrel-roof storage shed was adjacent to the house's western elevation that was clad in the same vertical grooved plywood siding as the house and rested on wood-beam footings. Operator Residence No. 2, which is not depicted in the same 1980 aerial photograph as Operator Residence No. 1, appears to have been constructed at a slightly later date.

Domestic Well House (circa 1958, circa 1997)

The domestic well house, built circa 1958, supplies water to the Red Barn, Operator Residence No. 1 (170 feet to the east), and Operator Residence No. 2 (735 feet to the southeast). The small shed-roof structure has a rectangular plan, concrete foundation, and red corrugated metal roofing and siding. The pump was likely replaced in 1997, when the site's septic system was upgraded (PacifiCorp 2004b:Exhibit C, 4-3). A white sign with black lettering that reads "Domestic Well House" is mounted on a narrow plywood door. The door is the only fenestration on the building and is centered along the western (primary) elevation. The interior contains concrete flooring, corrugated metal panel walls, and a plywood ceiling.

Timber Bridge (2003)

Built in 1956, then rebuilt in 1971 and 2003, the timber bridge is a short vehicular bridge that crosses the Klamath River adjacent to the steel pipe, about 350 feet southwest of the dam (PacifiCorp 2004b:4-1,4-2). The single-span, rolled-steel beam bridge measures 100 feet long and 18 feet wide, with a 16-foot travel lane. The timber deck rests on four beams that are welded to steel floor beams at the abutments. The floor beam is founded on four steel piles. The wooden deck boards measure 1 foot wide by approximately 17 feet long, while the timber railing posts measure 16 inches tall and 1 foot wide (AECOM 2017:5-7). The original bridge alignment is indicated by a circa-1958 aerial photograph as well as remnants of timber cribbing on both sides of the river immediately north of the bridge abutments (PacifiCorp archive image BB-791). The rebuilt bridge extends east-west over the river, while the original bridge extended northeast-southwest. The bridge was rebuilt in 2003 for an HS20-44 truck design load and continues to provide access to the concrete flume via Canal Road.

Powerhouse Residence Site (circa 1958, demolished 1995)

The Powerhouse Residence site is the previous location of operator residences completed circa 1958, and according to Kramer (2003a:7) and Durio (2003:45), were demolished in 1995 in anticipation of the conversion of the J.C. Boyle powerhouse to an automated system. The site is near the powerhouse, immediately southwest of the substation. The site consists of concrete foundation remains, along with large cottonwood, poplar, and crab apple trees (Durio 2003:45). PacifiCorp archive photographs, dated 1958, depict three buildings: two duplexes with living quarters divided by attached two-car garages and an adjacent single-family dwelling with an attached one-car garage. Based on historic photographs, the residences exhibited Ranch-style architectural form and features such as long, rectangular, one-story plans; side-gable roofs with moderately overhanging eaves; and attached garages (PacifiCorp archive images BB 1042 and BB1044). These historic photographs also indicate that the poplar and crab apple trees were not present at the site in 1958 and were planted at a later date.

HISTORY

(Chronological, descriptive history of the property from its construction through at least the historic period [preferably to the present])

SIGNIFICANCE

HISTORIC CONTEXT

The Klamath Hydroelectric Project

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), (4) Iron Gate (1960-1962), (5) Keno (1966), and (6) Fall Creek (1903). [The Link River development (1921) is owned by the USBR and is not included in the Klamath project license. However, Kramer identified the dam as part of the Klamath River hydroelectric system (Kramer 2003a:36)]. The KHP integrated groups of hydroelectric elements—dams, powerhouses, water conveyance systems—into a layered landscape of pre-contact occupation and historic land use. Sites of pre-contact occupation were associated with Native American customs and culture, subsistence and recreational fishing, as well as sites of early European-American industries such as ranching, mining, and logging. KHP construction geographically and temporally overlapped with these types of sites and activities, causing significant impacts to the land and its peoples.

Development of hydroelectric plants in the Klamath Basin began in 1891 in Shasta River Canyon to provide electricity to the City of Yreka. In 1895, another facility was constructed along the Link River to supply power to Klamath Falls, Oregon. The authorization of the USBR's Klamath Project in 1905 triggered additional hydrologic changes to the Klamath River and led to the construction of Link River Dam by California Oregon Power Company (now PacifiCorp) in 1921, as well as several hundred miles of irrigation ditches and canals that diverted water from the Klamath River and its wetlands to convert land for agricultural use (USBR and CDFG 2012:3.6-7). As the largest water management effort in the Upper Klamath Basin, the USBR's Klamath Project features a vast system of reservoirs, dams, canals, and pumps. Development and construction of these features occurred between 1905 and 1966, with most major facilities completed by the early 1940s (USBR and CDFG 2012:1-12).

The USBR originally designed the Klamath Project 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 2003b:21). Hydroelectric development in the Klamath Basin began in 1891 to supply electricity to Yreka, California, the Siskiyou County seat. Four years later, the Klamath Falls Light and Water Company built the East Side Power Plant No. 1. The power plant was on the Link River's eastern bank, within the city limits of Klamath Falls, Oregon. 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 which SEP&L had operated since its completion in 1903 (Kramer 2003b:12). In 1920, eight years after Copco formed, the company acquired the Keno Power Company, which operated the Keno hydroelectric development, built in 1911 (Kramer 2003b:5).

Copco Through World War II (1912-1945)

Copco's first construction 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 powering major regional industries, including nearly all the large Northern California lumber mills and several large mining dredgers (Sacramento Bee 1917). 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 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 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 grew 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 power supply, requiring new projects for future Copco customers (McCready 1950).

Seeking to develop additional power facilities, Copco began to reassess the Klamath River's power generation potential, reigniting conflict over Klamath Basin irrigation and water rights, as well as fishing and recreational interests (Kramer 2003b: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). During the 1950s, Copco 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 were not completed until the 1950s, as power demands soared (Kramer 2003b:30-31). In 1958, when Big Bend began operations, Copco's residential customers had the highest average annual usage of any private utility nationwide. The service area contained about 50,000 square miles in 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 population was approaching 250,000 and 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. After the acquisition, Pacific Power initiated a $500 million construction program spanning 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 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. According to The Bend Bulletin, both companies spent a combined $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). Additionally, 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. Some 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 activities 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 energized its largest substation, located 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 and help restore some of the fish habitat disturbed by dam operations at Copco No. 1 and Copco No. 2. 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 a quarter-mile downstream. Fish eggs collected at the dam site are transported to the fish hatchery complex where they are hatched and then moved into a series of raceways. The fish remain in the raceways until they are ready for release into the river.

As Pacific Power's construction program proceeded, officials monitored the existing developments and continued planning for future improvements. Progress was interrupted by historic flooding along the Klamath River in December 1964 that caused severe damage to the Copco No. 1 and Iron Gate facilities which required Rebuilding the Copco No. 1 powerhouse and Iron Gate spillway channel. In September 1967, company officials, including the Copco division manager, met in Yreka, California 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 increased local growth and power demands 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 and 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 hydroelectric 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.

John Christie Boyle (1887-1979)

Pacific Power renamed the Big Bend development after John C. Boyle in honor of his significant contributions to regional hydropower development. Boyle spent his 50-year career as an engineer, construction supervisor, and later as a company official at Copco and its successor company, Pacific Power. He designed most of the hydroelectric projects in the Southern Oregon/Northern California region and as noted by Kramer (2018), he was "principally responsible for Copco's ground-breaking multi-dam generation facilities on the Klamath and North Umpqua Rivers" (Boyle 1962).

Boyle was born in 1887 at Ft. Jones in Siskiyou County, California. He graduated with a degree in civil engineering from the University of California in 1910. That same year, he was hired by the Siskiyou Electric Power & Light Company (SEP&L), one of Copco's predecessor companies, as an assistant engineer. He began his tenure at SEP&L by surveying the Klamath River at Ward's Canyon which became the site of the Copco No. 1 hydroelectric development. In 1916, two years after construction began on Copco No. 1, Boyle became the site construction supervisor (Kramer 2003a:19; Oregonian 1917). Boyle also engineered the Link River Dam (1921) at Klamath Falls, Oregon which helped expand the region's agricultural economy.

Throughout the 1920s and 1930s, Boyle continued investigating the power potential of the Klamath, Rogue, and Umpqua river basins and in the 1940s and 1950s, he used the gathered data to plan future hydroelectric sites. By then, Boyle was not only Copco's chief engineer, but also vice-president and general manager. In 1945, he led Copco in expanding the company's generating capacity, primarily through the North Umpqua project. In 1951, Boyle was named Oregon's Engineer of the Year by Professional Engineers of Oregon for the design and development of the North Umpqua River projects' eight plants (Boyle 1962). During the 1950s and 1960s, he engineered and supervised construction of the Big Bend (Boyle) and Iron Gate hydroelectric developments. He retired as director of Pacific Power in 1963 but continued as a consultant (Oregon Civil Engineer 1975:1).

J.C. Boyle Hydroelectric Development

The J.C. Boyle hydroelectric development, originally known as Big Bend, is part of the Klamath Hydroelectric Project (KHP) 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), Iron Gate (California), and J.C. Boyle (Oregon). The J.C. Boyle hydroelectric development was designed by California Oregon Power Company (Copco) engineers and construction personnel; specifically, John C. Boyle, who also supervised construction (News-Review 1958). Copco's project manager was Truman Runyan (Wynne 1957) and assistant project manager was Reuel Rians, Jr. (Underhill 1957:13). Copco hired the Morrison-Knudsen Company, Inc. as general contractor (Mail Tribune 1958). Larry Wicks served as the Morrison-Knudsen project superintendent and Ed Heiser was the Morrison-Knudsen project engineer (PacifiCorp archive images BB-718, BB-719). Power generated by the new hydroelectric development was transmitted over a 70-mile, 230-kV transmission line to Klamath Falls and Medford (Wynne 1958).

Big Bend was part of the original Klamath River hydroelectric project survey in 1911; however, plans for constructing Big Bend were not advanced until the 1950s, after completion of Copco No. 1 and Copco No. 2 hydroelectric developments (Kramer 2003a:30-31). The Federal Power Commission granted a license for the newdevelopment on January 28, 1954 on the condition that Copco obtain "an extension of its 1917 agreement with the Bureau of Reclamation relating to the regulation of Upper Klamath Lake and operation of Link River dam" (Dierdorff 1971:277).

In January 1956, Copco entered into agreements with Public Utility Commissions (PUCs) in Oregon and California, the U.S. Department of the Interior, the U.S. Bureau of Reclamation, and the Federal Power Commission (FPC) (now the Federal Energy Regulatory Commission [(FERC]). These agreements anticipated the construction of the Big Bend hydroelectric development facilities, the first such developments on the Klamath River since Copco No. 2 was dedicated in 1925 (Kramer 2003a:30-31). The agreements also provided, with some exceptions, that Copco would refrain from using Klamath River water "when it may be needed or required for use for domestic, municipal, or irrigation purposes within the Upper Klamath River Basin" (Boyle 1976:54). Copco initially proposed the Big Bend development as two different projects, with a diversion dam at the original Big Bend No. 1 site and an associated powerhouse at the original Big Bend No. 2 site, but the company ultimately consolidated the two projects (Herald and News 1957). Copco filed an amended application with the FPC to reflect the consolidation plan. The FPC granted the 50-year license, effective March 1, 1956 (Herald and News 1956a).

Construction of Big Bend began in July 1956 (News-Review 1958). By August, 15 men were working on access roads and prepping the site, including pouring sections of the dam foundation (Herald and News 1956b). Although Copco generally used its own engineers for planning, the company hired Morrison-Knudsen Company, Inc. as general contractor (Wynne 1957; Mail Tribune 1958). Morrison-Knudsen produced the sand and gravel used in construction on-site with portable crushers, washers, and sorters, while the Ideal Cement Company's Gold Hill plant supplied all project cement (Mail Tribune 1958). An estimated60,000 yards of concrete was needed for the dam with 10,000 yards of rock and dirt for dam fill (Wynne 1957). At the peak of construction, about 700 men were employed (News-Review 1958). The project cost breakdown was 10 percent for area roads, 40 percent for labor, and the remaining 50 percent for materials, engineering, and administrative costs (Wynne 1957). As construction progressed, Copco personnel invited members of the public to tour the site. In June 1957, 42 members of the Klamath County Chamber of Commerce toured the dam site with Copco vice president, general manager, and engineer John C. Boyle (Wynne 1957). The final project total was $12.4 million and Big Bend's 80,000-kW capacity made it Copco's largest plant (News-Review 1958).

Big Bend was dedicated on September 1, 1958, with about 30 guests in attendance (News-Review 1958; Wynne 1958). Officials present included Copco president A.S. Cummins, as well as engineer and supervisor John C. Boyle (News-Review 1958). At the dedication ceremony, Cummins touted the new plant, declaring "The electrical energy from this plant will surge into the interconnected Copco network which serves the homes, farms, the commercial and industrial establishments and the public institutions of Southern Oregon and Northern California, and serves them all equally without discrimination" (Wynne 1958). Cummins also unveiled a bronze dedication plaque mounted on the powerhouse's exterior wall. The plaque read, "[T]hrough God's merciful providence and man's ingenuity this plant is today placed in operation and is dedicated to the lasting benefit of the people we are honored to serve" (Wynne 1958).

On February 3, 1962, after Pacific Power had acquired Copco, Big Bend was officially renamed the John C. Boyle Hydroelectric Project. A rededication ceremony was held on June 25, 1962 (Herald and News 1962a). At the ceremony, a new plaque, mounted on the base of a powerhouse area flagpole, was unveiled. The plaque contained the text from the original plaque plus Boyle's name and a description of his professional contributions to Copco and Pacific Power. Glenn L. Jackson, a vice-chair of Pacific Power's board of directors, stated that the former Big Bend project was the largest that Boyle had designed and constructed during his career. Following the rededication ceremony, over a hundred of Boyle's friends and business associates attended a luncheon program at the Winema Hotel in Klamath Falls, Oregon (Herald and News 1962b).

BOUNDARY DESCRIPTION
The boundary is the Federal Energy Regulatory Commission (FERC) boundary for the Lower Klamath Project (see Boundary Map).

BOUNDARY JUSTIFICATION
The boundary is based on the FERC boundary for the Lower Klamath Project.

THEME
Hydroelectric Development

AREA
Southern Oregon/Northern California

KLAMATH RIVER HYDROELECTRIC PROJECT PERIOD OF SIGNIFICANCE (1903 - 1970)

J. C. Boyle was completed in 1958 during the revised period of significance for the Klamath Hydroelectric Project (KHP) historic district: 1903 – 1970.

The original period of significance proposed for the KHP historic district (1903-1958) has become outdated since the 2003 surveys by George Kramer and Lori Durio. In the Klamath Hydroelectric Project Request for Determination of Eligibility and Historic Context (Kramer 2003a and 2003b), the proposed period of significance begins in 1903, when the Siskiyou Electric Power & Light Company (SEP&L) completes the Fall Creek powerhouse:

"[The Klamath Hydroelectric Project's] earliest known generation activities occurred in 1895 with the development of the first East Side Power House in Klamath Falls. However no built element of this structure is known to survive. The earliest surviving hydroelectric generation-related resource within the project area is the Fall Creek Powerhouse, begun in 1902 and completed in 1903. As a result 1903 serves as the beginning of the period of significance (Kramer 2003a:2; Kramer 2003b:57)."

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 2003b: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 2003b: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 16 years have elapsed since the 2003 surveys, the KHP's period of significance end date should be extended 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.

JC BOYLE HISTORIC DISTRICT PERIOD OF SIGNIFICANCE (1958 - 1970)

J.C. Boyle's period of significance begins in 1958, when 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.

APPLICABLE CRITERIA

National Register of Historic Places Criteria A and C

EVALUATION (Eligible Historic District/Contributes to Klamath Hydroelectric Project Historic District)

NRHP Criterion A

J.C. Boyle, completed in 1958 by the California Oregon Power Company (COPCO), 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 important role that development played in industrial expansion in California and the region (Kramer 2003b).

As a component of the KHP, J.C. Boyle played a significant role in regional Commerce by substantially increasing the output of the Copco system to meet the region's urgent postwar electricity demands. J.C. Boyle also significantly contributed to the development of regional Industry in two ways. First, J.C. Boyle was a major development of a "regionally-significant, locally-owned and operated, private utility" (Kramer 2003b:58). Second, as part of the Copco system, J.C. Boyle supplied power that contributed to the mid-twentieth-century growth of regional industries, such as timber, agriculture, and recreation (Kramer 2003b:58).

NRHP Criterion B

Research has not indicated that the J.C. Boyle Historic District is associated with any historically significant individuals under NRHP Criterion B. While the hydroelectric development is associated with master hydropower engineer John C. Boyle, it is more appropriately evaluated under NRHP Criterion C as the work of a master rather than under NRHP Criterion B, which is generally used to evaluate the eligibility of residences and workplaces of historically important persons (NPS 1997:16).

NRHP Criterion C

The J.C. Boyle 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. These three hydropower resources are also collectively significant under NRHP Criterion C (Engineering) as representing the work of master hydropower engineer John C. Boyle. Boyle made significant contributions to twentieth-century hydropower development in the Southern Oregon/Northern California region. The J.C. Boyle hydroelectric development, completed in 1958, was re-dedicated in his honor in 1963, shortly after Pacific Power acquired Copco.

NRHP Criterion D

J.C. Boyle 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 J.C. Boyle Historic District retains integrity of location, design, setting, materials, workmanship, feeling, and association, and continues to convey its historic identity as a mid-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 2003b:57).

Location is the place where the historic property was constructed or the place where the historic event took place. J.C. Boyle retains integrity of location, because primary district components, such as the dam, powerhouse, and penstocks, remain in their original locations.

Design is the composition of elements that constitute the form, plan, space, structure, and style of a property. J.C. Boyle retains integrity of design, generally conveying the original as-built construction. Nearly all the original buildings and structures remain extant and operating in accordance with their original functions.

Setting is the physical environment of a historic property that illustrates the character of the place. J.C. Boyle retains integrity of setting in a remote, undeveloped stretch of the Klamath River that has experienced little development since the facility was constructed in 1958.

Materials are the physical elements combined in a particular pattern or configuration to form the historic property. J.C. Boyle retains integrity of materials, especially as represented by the earthen dam, steel pipe and penstock, and concrete flume and powerhouse.

Workmanship is the physical evidence of the crafts of a particular culture or people during any given period of history. J.C. Boyle retains integrity of workmanship, specifically the engineering skill demonstrated by excavation of the dam, flume, and powerhouse sites, as well as 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 J.C. Boyle engineering features—the dam, penstock, and powerhouse—as well as the remote setting and intensive use of natural and industrial construction materials, collectively convey the historic character of a mid-twentieth-century hydroelectric development, and support 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 midcentury power development in the region, contributing to integrity of association.

The following buildings and structures within the J.C. Boyle historic district were built after the period of significance and, therefore, do not contribute to the district: Truck Shop (1991), Fuel Station (1991), Fire System Control Building (circa 1995), Dam Communication Building (circa 1995), Operator Residence No. 1 (circa 1975), and Operator Residence No. 2 (circa 1985).

The following buildings and structures within the J.C. Boyle historic district were built during the period of significance but have lost historic integrity and, therefore do not contribute to the district: Red Barn (1958, 1978 substantially modified), Domestic Well House (1958, circa 1997 substantially modified), and Timber Bridge (1956, rebuilt in 1971 and 2003).

The J.C. Boyle hydroelectric development retains integrity and is, therefore, eligible as a historic district, which also contributes to the larger KHP historic district.

RESEARCH INFORMATION

(Check all of the basic sources consulted and cite specific important sources)

☐ Title Records	☑ Census Records	☐ Property Tax Records	☑ Local Histories
☐ Sanborn Maps	☑ Biographical Sources	☑ SHPO Files	☑ Interviews
☑ Obituaries	☑ Newspapers	☐ State Archives	☑ Historic Photographs
☐ City Directories	☐ Building Permits	☐ State Library	

Local Library: Klamath Falls Library
University Library: Oregon Institute of Technology
Historical Society: Klamath County Museum
Other Repository: Southern Oregon Historical Society

Bibliography: Dierdorff, John. 1971. How Edison's Lamp Helped Light the West: The Story of Pacific Power & Light Company and Its Pioneer Forebears. Portland, Oregon: Pacific Power & Light Company.

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.

FERC (Federal Energy Regulatory Commission). 2007. Klamath Hydroelectric Project, FERC Project no. 2082-027, Oregon and California. Final Environmental Impact Statement For Hydropower License. Volume I. Office of Energy Projects, Division of Hydropower Licensing. November.

Guernsey, John. 1957. "Basin Potential Outlined At Teacher Session: Speakers Emphasize Natural Resources." Herald and News (Klamath Falls, Oregon). September 1.

Herald and News [Klamath Falls, Oregon]
1956a. "Copco Files Changes With FPC On Big Bend Projects." July 24.
1956b. "Preliminary Work Started On Klamath Big Bend Dam." August 26.
1957. "'Big Bend' Wins Approval." September 29.
1962a. "Unveiling Of John Boyle Marker Scheduled At Big Bend Monday." June 24.
1962b. "PPL Honors John Boyle At Big Bend Ceremony." June 25.

kenosportspark.com. n.d. Welcome to Bill Scholtes Klamath Sportsmen's Park. Electronic document, https://kenosportspark.com/, accessed April 7, 2022.

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.
2018. John C. Boyle (1887-1979). The Oregon Encyclopedia.

KRRC. 2021. Recreation Facilities Plan. Lower Klamath Project, FERC No. 14803. Prepared by AECOM for Klamath River Renewal Corporation. Electronic document, http://www.klamathrenewal.org/wp-content/uploads/2021/03/Recreation-Plan-Feb2021.pdf, accessed April 7, 2022.

Lebanon Express [Lebanon, Oregon]. 1968. "Fishing Outlook for Opening." April 17.

Mail Tribune [Medford, Oregon]
1958. "Big Bend Project." June 20.
1959. "Past 11 Years Notable for Power Company." July 26.
1962. "Dedication of Klamath River Project Scheduled on Monday: John C. Boyle To Be Honored; Plant Named for Him." June 24.

McCready, Al. 1950. "Flying Weather Makers Introduce New Act Into Repertoire, Chase Fog From Umpqua Area to Speed Dam-Building Job." Oregonian. October 15.

NPS (National Park Service). 1997 (rev'd). How to Apply the National Register Criteria for Evaluation. National Register Bulletin. U.S. Department of the Interior. National Park Service. Cultural Resources.

News-Review [Roseburg, Oregon]. 1958. "Rites Open Copco Plant." September 2.

Oregon Civil Engineer. 1975. "Two Life Members Honored." Vol. 22 No. 12. March (John C. Boyle collection, Southern Oregon Historical Society).

Oregonian [Portland, Oregon]. 1917. "Big Power Plant Near Completion." October 8.

PacifiCorp. 2004a. Recreation Resources Final Technical Report. PacifiCorp, Portland, OR. Electronic document, https://www.pacificorp.com/content/dam/pcorp/documents/en/pacificorp/energy/hydro/klamath-river/relicensing/recreational-resources/REC_Report.pdf, accessed April 7, 2022.

PacifiCorp. 2004b. Exhibit C – Construction History and Proposed Construction. Klamath Hydroelectric Project (FERC Project No. 2082). PacifiCorp: Portland, OR.

Pacific Power (Pacific Power & Light Company). 1962. Initial Statement of Pacific Power & Light Company Copco Division to the Federal Power Commission showing Actual Legitimate Original Cost of Project No. 2082 (Klamath Basin – Iron Gate Plant) Located in the State of California as of July 31, 1962 (Box 5/16, J.C. Boyle Collection, Southern Oregon Historical Society).

Underhill, Dave. 1957. "Opportunity Lives Here: A Look-See Around Booming Klamath Falls." Pacific Telephone Magazine. December (Klamath County Museum).

UO (University of Oregon). 2018. Knight Library Aerial Photography Collection. https://library.uoregon.edu/aerial-photography-collection (accessed and ordered through aerial photography research service).

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.

Wynne, Floyd L.
1957. "New Klamath River Canyon Power Development Project Viewed." Herald and News. June 30.
1958. "Power of Upper Klamath Harnessed By Copco." Herald and News. October 2.

JC Boyle Dam

Photograph 1. Dam; facing east, 2018.

Photograph 2. Dam; facing northwest, 2018.

Photograph 3. Dam; facing southeast, 2017.

Photograph 4. Dam and steel pipeline; facing southeast, 2018.

Photograph 5. Fish Screen House; facing north, 2018.

Photograph 6. Intake structure; facing southeast, 2018.

Photograph 7. Gated spillway and diversion culvert; facing east, 2018

Photograph 8. Fish ladder; facing northwest from dam crest, 2018.

Photograph 9. Fish ladder; facing west from dam crest, 2018.

Photograph 10. Fish House interior, 2018.

Photograph 1. Steel pipe and flume intake headgate; facing northeast, 2018.

Photograph 2. Flume; facing southwest, 2018.

Photograph 3. Flume; facing northeast, 2018.

Photograph 4. Flume; facing north, 2018.

Photograph 5. Flume; facing northeast, 2018.

Photograph 6. Forebay spillway house; facing north, 2018.

Photograph 7. Forebay control building; facing west, 2018.

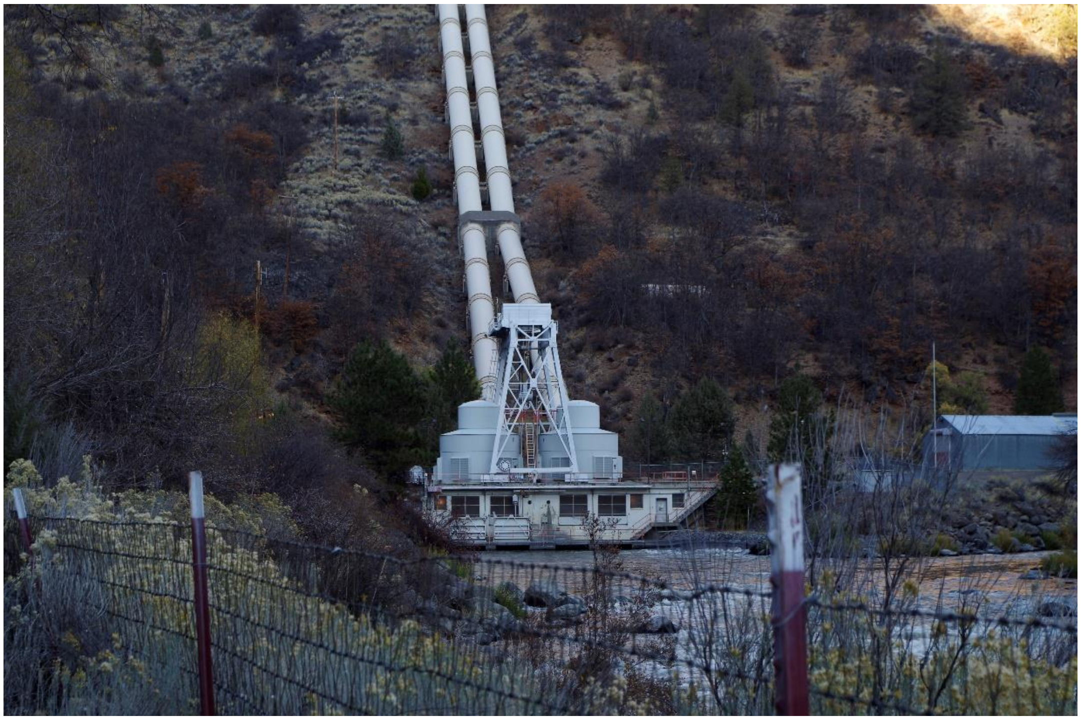
Photograph 8. Forebay; facing southwest, 2018.

Photograph 9. Penstocks and powerhouse; facing northeast, 2017.

Photograph 10. Penstocks and surge tank; facing northeast, 2018.

JC Boyle Powerhouse

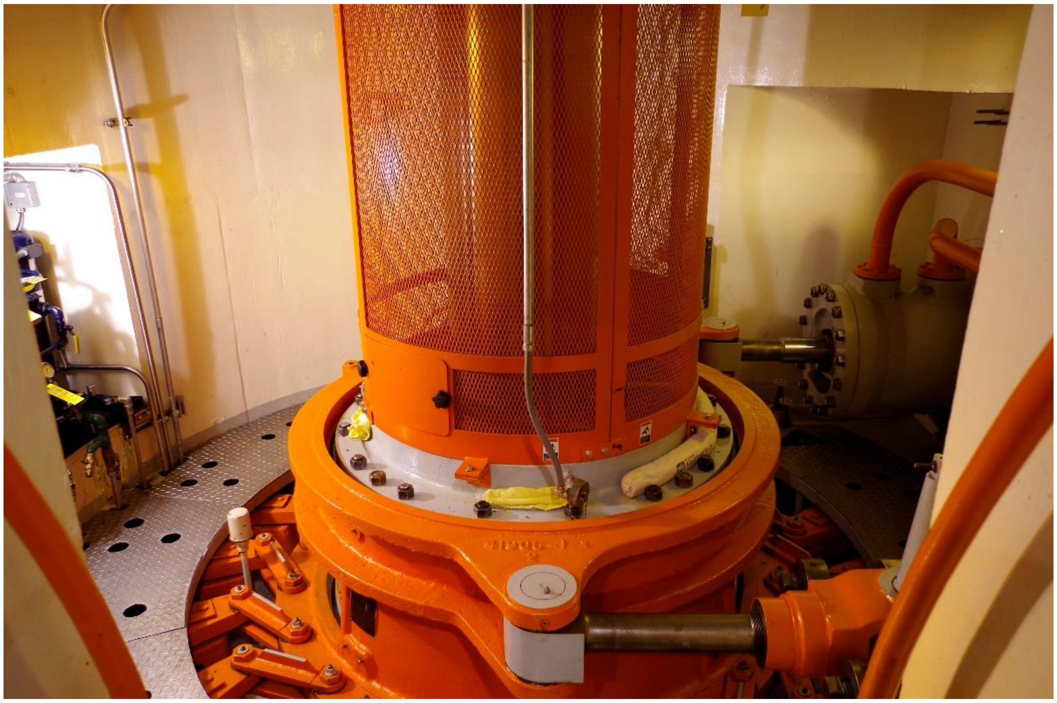
Photograph 1. Powerhouse; facing northwest, 2018.



Photograph 2. Powerhouse; facing northeast, 2017.

Photograph 3. Powerhouse; facing east, 2018.

Photograph 4. Powerhouse; facing northwest, 2018.



Photograph 5. Powerhouse turbine; 2018.

JC Boyle Armco Warehouse

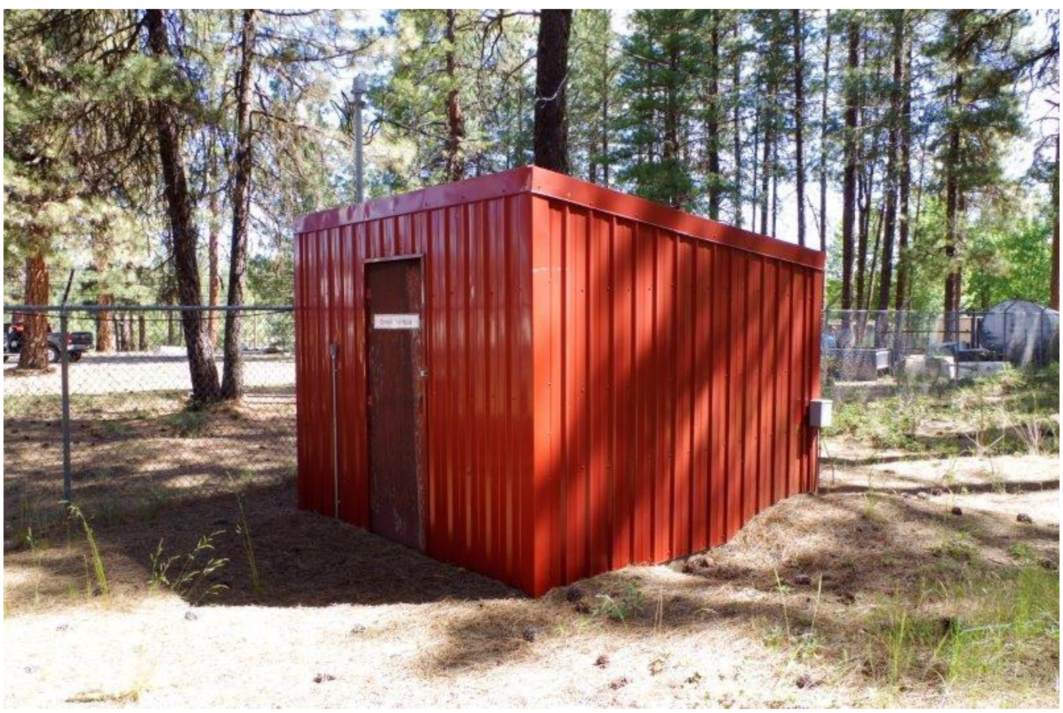
Photograph 1. Armco Warehouse; facing southwest, 2018.

Photograph 2. Armco Warehouse; facing southeast, 2018.

Photograph 3. Armco Warehouse; facing northwest with powerhouse in background, 2017.

Non-contributing Resources

Photograph 1. Communications Building; facing southwest, 2018.



Photograph 2. Domestic Well House; facing northwest, 2018.

Photograph 3. Fire Protection Building; facing east, 2018.

Photograph 4. Fuel Station; facing northwest, 2018.

Photograph 5. Red Barn; facing northwest, 2018.

Photograph 6. Residence 1; facing north, 2018.

Photograph 7. Residence 2; facing southeast, 2018.

Photograph 8. Timber Bridge; facing northeast, 2018.

Photograph 9. Waste Storage; facing southwest, 2018.

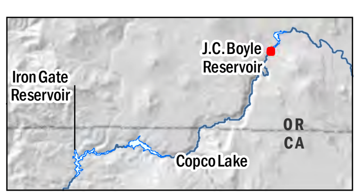
Contributing Resource

Non-Contributing Resource

0 200 Feet

0 50 Meters

1:2,400



J.C. Boyle Hydroelectric Development

Klamath River Dam Removal
Topsy Grade Road
Keno, Klamath County, Oregon

AECOM
March 2022

Contributing Resource

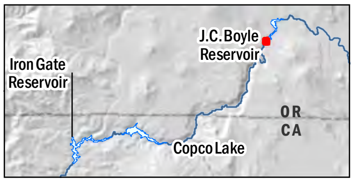
Non-Contributing Resource

0 200 Feet

0 50 Meters

N

1:2,400



J.C. Boyle Hydroelectric Development

Klamath River Dam Removal
Topsy Grade Road
Keno, Klamath County, Oregon

AECOM

March 2022

AECOM Oakland CA 3/24/2022 USER alexander.remar PATH \\na.aecomnet.com\lfs\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_JCB2022.mxd

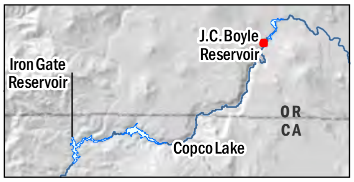
Contributing Resource

Non-Contributing Resource

0 200 Feet

0 50 Meters

1:2,400



J.C. Boyle Hydroelectric Development

Klamath River Dam Removal
Topsy Grade Road
Keno, Klamath County, Oregon

AECOM

March 2022

AECOM Oakland CA 3/24/2022 USER alexander.remar PATH \\na.aecomnet.com\lfs\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_JCB2022.mxd

Contributing Resource

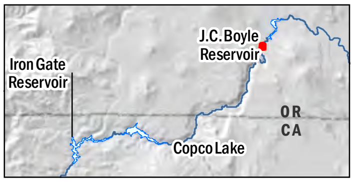
Non-Contributing Resource

N

0 200 Feet

0 50 Meters

1:2,400



J.C. Boyle Hydroelectric Development

Klamath River Dam Removal
Topsy Grade Road
Keno, Klamath County, Oregon

AECOM

March 2022

AECOM Oakland CA 3/24/2022 USER alexander.remar PATH \\na.aecomnet.com\lfs\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_JCB2022.mxd

Contributing Resource

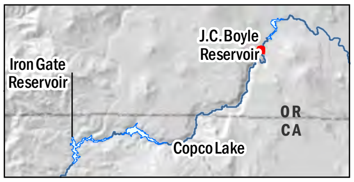
Non-Contributing Resource

0 200 Feet

0 50 Meters

N

1:2,400



J.C. Boyle Hydroelectric Development

Klamath River Dam Removal
Topsy Grade Road
Keno, Klamath County, Oregon

AECOM

March 2022

AECOM Oakland CA 3/24/2022 USER alexander.remar PATH \\na.aecomnet.com\lfs\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_JCB2022.mxd

Contributing Resource

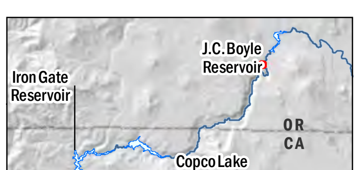
Non-Contributing Resource

0 200 Feet

0 50 Meters

N

1:2,400



J.C. Boyle Hydroelectric Development

Klamath River Dam Removal
Topsy Grade Road
Keno, Klamath County, Oregon

AECOM

March 2022

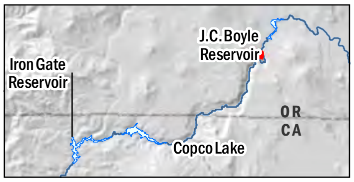
Contributing Resource

Non-Contributing Resource

0 200 Feet

0 50 Meters

1:2,400



J.C. Boyle Hydroelectric Development

Klamath River Dam Removal
Topsy Grade Road
Keno, Klamath County, Oregon

AECOM

March 2022

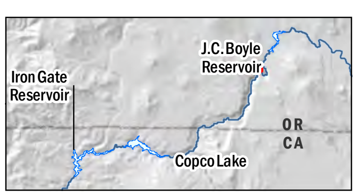
Contributing Resource

Non-Contributing Resource

0 200 Feet

0 50 Meters

1:2,400

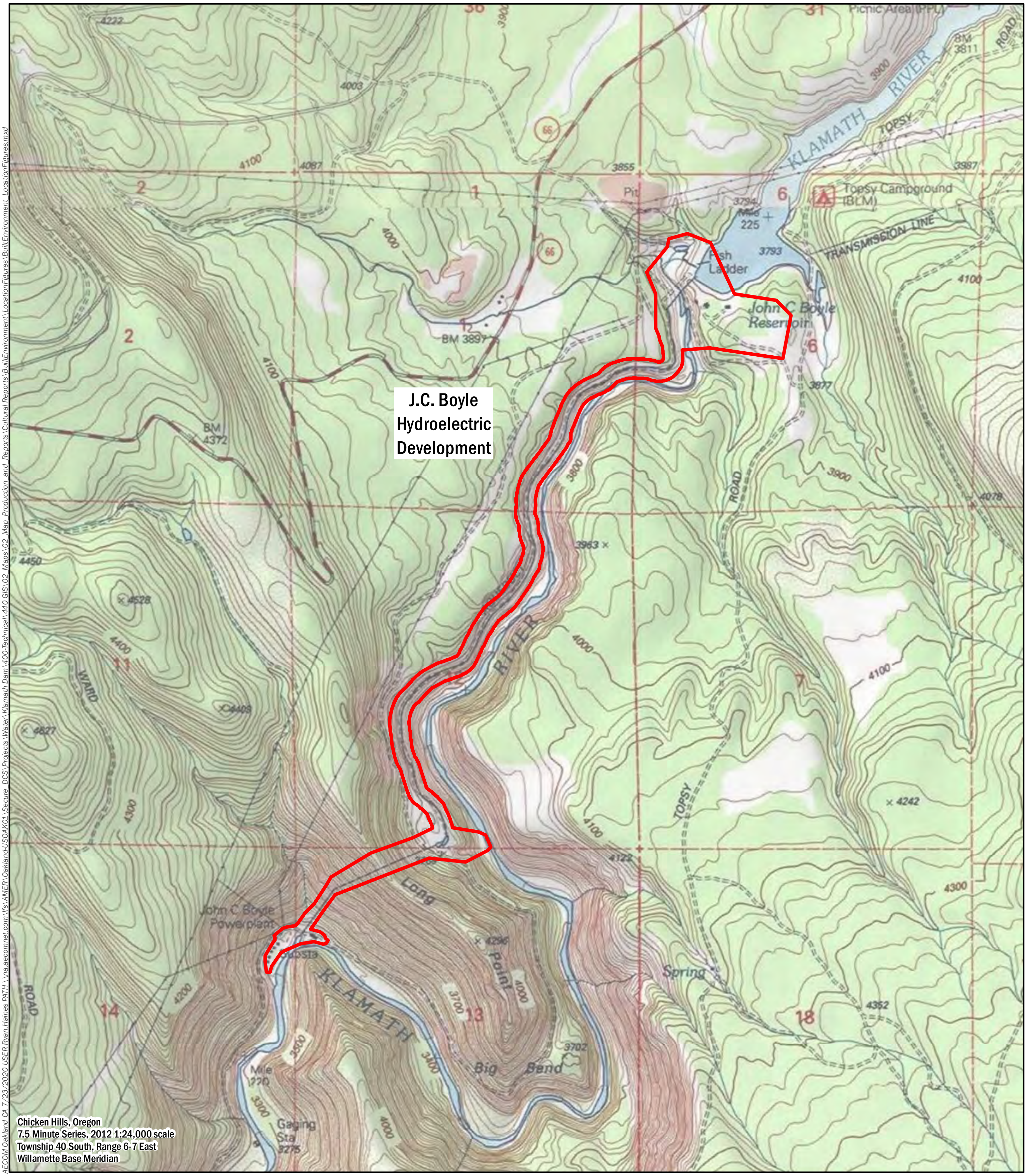


J.C. Boyle Hydroelectric Development

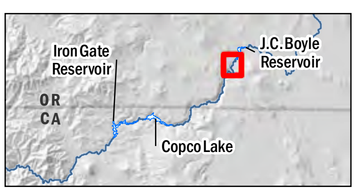
Klamath River Dam Removal
Topsy Grade Road
Keno, Klamath County, Oregon

AECOM
March 2022

AECOM Oakland CA 3/24/2022 USER alexander.remar PATH \\na.aecomnet.com\lfs\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_JCB2022.mxd



J.C. Boyle Hydroelectric Development



J.C. Boyle Hydroelectric Development

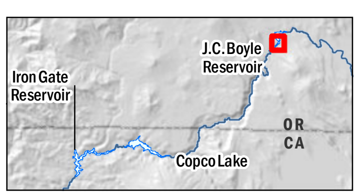
Klamath River Dam Removal
Topsy Grade Road
Keno, Klamath County, Oregon

0 2,000 Feet
0 600 Meters
N
1:24,000

AECOM
July 2020

AECOM Oakland CA 4/6/2022 USER alexander.remar PATH \\na.aecomnet.com\lfs\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_JCB_RecSites.mxd

Recreational Feature



0 1,000 Feet

0 200 Meters

N

1:10,000

J.C. Boyle Hydroelectric Development

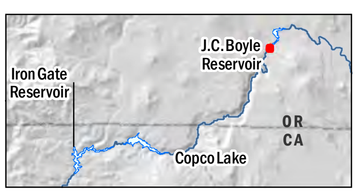
Klamath River Dam Removal
Topsy Grade Road
Keno, Klamath County, Oregon

AECOM

April 2022

Contributing Resource
Non-Contributing Resource

N
0 200 Feet
0 50 Meters
1:2,400



J.C. Boyle Hydroelectric Development

Klamath River Dam Removal
Topsy Grade Road
Keno, Klamath County, Oregon

AECOM
March 2022

Contributing Resource

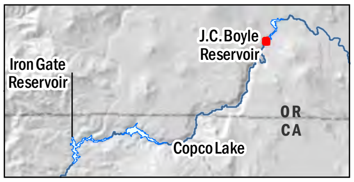
Non-Contributing Resource

N

0 200 Feet

0 50 Meters

1:2,400



J.C. Boyle Hydroelectric Development

Klamath River Dam Removal
Topsy Grade Road
Keno, Klamath County, Oregon

AECOM
March 2022

AECOM Oakland CA 3/24/2022 USER alexander.remar PATH \\na.aecomnet.com\lfs\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_JCB2022.mxd

Contributing Resource

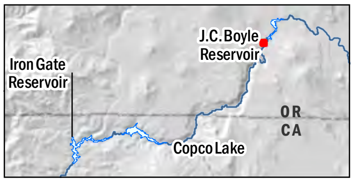
Non-Contributing Resource

N

0 200 Feet

Meters 0 50

1:2,400



J.C. Boyle Hydroelectric Development

Klamath River Dam Removal
Topsy Grade Road
Keno, Klamath County, Oregon

AECOM

March 2022

Contributing Resource

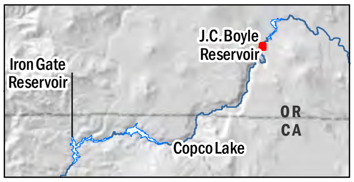
Non-Contributing Resource

N

0 200 Feet

0 50 Meters

1:2,400



J.C. Boyle Hydroelectric Development

Klamath River Dam Removal
Topsy Grade Road
Keno, Klamath County, Oregon

AECOM

March 2022

Contributing Resource

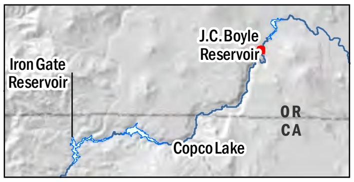
Non-Contributing Resource

N

0 200 Feet

0 50 Meters

1:2,400



J.C. Boyle Hydroelectric Development

Klamath River Dam Removal
Topsy Grade Road
Keno, Klamath County, Oregon

AECOM

March 2022

AECOM Oakland CA 3/24/2022 USER alexander.remar PATH \\na.aecomnet.com\lfs\AMER\Oakland-USOAK01\Secure_DCS\Projects\Water\Klamath Dam\400-Technical\440 GIS\02_Maps\02_Map_Production_and_Reports\Cultural Reports\LocationFigures\BuiltEnvironment\BuiltEnvironment_SiteFigures_JCB2022.mxd

Contributing Resource

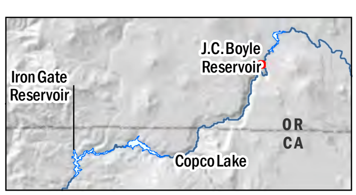
Non-Contributing Resource

N

0 200 Feet

0 50 Meters

1:2,400



J.C. Boyle Hydroelectric Development

Klamath River Dam Removal
Topsy Grade Road
Keno, Klamath County, Oregon

AECOM
March 2022

AECOM Oakland CA 3/24/2022 USER alexander.remar PATH \\na.aecomnet.com\lfs\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_JCB2022.mxd

Contributing Resource

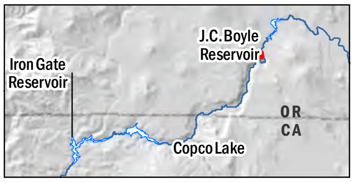
Non-Contributing Resource

N

0 200 Feet

0 50 Meters

1:2,400



J.C. Boyle Hydroelectric Development

Klamath River Dam Removal
Topsy Grade Road
Keno, Klamath County, Oregon

AECOM
March 2022

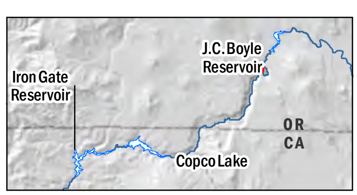
Contributing Resource

Non-Contributing Resource

0 200 Feet

0 50 Meters

1:2,400



J.C. Boyle Hydroelectric Development

Klamath River Dam Removal
Topsy Grade Road
Keno, Klamath County, Oregon

AECOM

March 2022

Oregon Historic Site Form

LOCATION AND PROPERTY NAME

address: ☐ apprx. addrs

Keno ☑ vcnt **Klamath County**

historic name: **J.C. Boyle dam**

current/ other names: **Big Bend dam**
[The J.C. Boyle hydroelectric development was known as Big Bend during the planning and construction phase. On September 1, 1958, soon after completion, the development was dedicated as Big Bend. It was rededicated on February 3, 1962 in honor of Copco and Pacific Power engineer John Christie Boyle.]

Optional Information

assoc addresses:
(former addresses, intersections, etc.)

location descr: (remote sites)
USGS 7.5' Quad Chicken Hills, OR-CA Date 2012 T40S; R 7E; NW 1/4 of NW 1/4 of Sec 6; Willamette B.M.
UTM: Zone 10, 578683mE/4663824mN
Lat/Long: 42.122250909093154, -122.0483275726901

block nbr: lot nbr: tax lot nbr:

township: 40S range: 7E section: 6 1/4: NW

zip:

PROPERTY CHARACTERISTICS

resource type: **structure** height (# stories):

total # eligible resources: **1** total # ineligible resources: **0**

elig. evaluation: **eligible/contributing**

NR status:

primary constr date: **1958** (c.) ☐ secondary date: (c.) ☐
(optional--use for major addns)

NR date listed: (indiv listed only; see Grouping for hist dist)

primary orig use: **Energy Facility**

secondary orig use:

orig use comments:

primary style: **Not Applicable**

secondary style:

prim style comments:

sec style comments:

primary siding: **Poured Concrete**

secondary siding:

siding comments:

plan type: **Dam**

architect: **John C. Boyle and Copco engineers**

builder: **Morrison-Knudsen Company**

comments/notes:

GROUPINGS / ASSOCIATIONS

survey project name or other grouping name: Klamath River Hydroelectric Project - JC Boyle Hydroelectric Development, 2018 Survey & Inventory Project

farmstead/cluster name:

external site #:
(ID# used in city/agency database)

SHPO INFO FOR THIS PROPERTY

NR date listed:

ILS survey date: **6/11/2018**

RLS survey date: **6/11/2018**

Gen File date:

106 Project(s)

SHPO Case #	Date	Agency Effect Eval
17-1370	6/11/2018	adverse effect

Oregon Historic Site Form

JC Boyle Dam, facing E

Oregon Historic Site Form

ARCHITECTURAL / PROPERTY DESCRIPTION

(Include expanded description of the building/property, setting, significant landscape features, outbuildings, and alterations)

The J.C. Boyle dam, completed in 1958, is located at River Mile (RM) 229.8 along the Klamath River, approximately 1.25 miles downstream from the Oregon State Highway No. 66 river crossing (AECOM 2017:1-7). The dam is composed of four sections that collectively form a 714.3-foot total crest length and 68-foot height (Durio 2003:44; FERC 2007:2-8). The earthfill embankment portion of the dam is 68 feet tall. The crest measures 413 feet long and 15 feet wide. According to the United States Bureau of Reclamation (USBR), the "zoned embankment has a central impervious clay core flanked by upstream and downstream shells composed of compacted sand and gravel, with a downstream filter blanket." Riprap layers are 3 feet thick on the upstream face and 2 feet thick on the downstream face. The concrete portion of the dam is 279 feet long, consisting of a 117-foot-long spillway section, 48-foot-long intake structure, and 114-foot-long concrete gravity section (USBR 2012:16-18).

The spillway is a concrete gravity overflow structure with three, 36-foot-wide by 12-foot-high radial arm "Tainter" gates and upstream stop-log slots to control water flow. A traveling gate hoist operates the spillway gates. The USBR describes the spillway bay as discharging onto a 13-foot-long concrete apron stepped at three elevations, and generally following the profile of the bedrock surface. Below the apron is a vertical drop of 15 feet to the discharge channel, which was excavated in rock. A concrete box culvert with two 9.5-foot by 10-foot bays is located beneath the center and right spillway gates, 30 feet below the spillway crest. This feature was used for diversion during dam construction and has been sealed with concrete stop-logs at the upstream end (USBR 2012:16-18). During 2018 fieldwork, a stop-log with the date 1956 was observed.

The intake structure, next to the spillway, consists of a 40-foot-high reinforced-concrete tower. There are four 11-foot by 37-foot openings to the reservoir, each with a steel trash rack, stop-log slot, and vertical traveling fish screen with high-pressure spray cleaners. Spray water, along with any screened fish, is collected and diverted downstream of the dam through a 340-foot-long, 24-inch-diameter fish screen bypass pipe (USBR 2012:16-18; AECOM 2017:2-3).

The reservoir-level gauge house measures and controls the reservoir levels and the fish ladder flow. Five gates are perpendicular to the gauge house and are attached to the shaft. A pond indicator in the gauge house is associated with the fish ladder. The gauge house has a shed roof, corrugated metal siding, and wood-board flooring. According to Bob Roach, PacifiCorp Senior Environmental Analyst, issues with gauge house equipment required installation of an ultrasonic distance meter to measure water level.

In 1989, PacifiCorp added an irregularly shaped fabricated metal "Fish Screen House" to the intake to contain the four rotating fish screens: two manufactured by Rex, and two manufactured by Siemens. The low-pitched hip roof is articulated into four equal sections and exterior walls are clad in corrugated metal. A timber walkway with low wood railing encircles the reservoir side of the structure. A metal entry door that lacks exterior walkway access is visible on the southern side of the building. A white "Fish Screen House" sign with black lettering is mounted on an exterior south-facing wall. Interior access is gained through a metal door with inset pane on the western side (PacifiCorp 2004a:4-2, 4-3). A metal conveyor carries debris caught behind the screens to an onshore concrete platform. Downstream of the fish screens is the entrance to the 14 foot-diameter steel pipeline.

Non-historic alterations to the dam include a headgate repair in 1971 to address corrosion and a spillway stop-log monorail constructed in 1973. In 1988, the spillway was modified with extension of the channel and reinforcement of the plunge pool to prevent erosion. Steel decking was installed on the dam in 1993; and the headgate was upgraded again in 1998 (PacifiCorp 2004a:4-2 - 4-3).
The dam appears to be in good condition.

Fish Ladder (1958)

The reinforced-concrete pool and weir fish ladder, a design feature of the dam, was completed in 1958 to facilitate upstream fish passage. The fish ladder is situated along the abutment wall between the dam's embankment and concrete sections and extends along the downstream face of the dam. It measures approximately 569 feet long, with 63 pools (AECOM 2017:2-3). Reservoir releases to the fish ladder are regulated by a 24-inch slide gate and water pumped to the base of the fish ladder creates turbulence that attracts fish (USBR 2012:17; AECOM 2017:2-3). The ladder was designed to permit resident trout to ascend about 60 feet, the ladder's approximate gross head range, for passage through the dam (Hume 2016). Although the J.C. Boyle, Keno, and Link River facilities all have fish ladders, only J.C. Boyle has downstream passage facilities (screens and bypass at the diversion intake) (PacifiCorp 2004b:7-1). The ladder has been maintained to original construction specifications.

The fish ladder appears to be in fair to poor condition due to extensive spalling.

HISTORY

(Chronological, descriptive history of the property from its construction through at least the historic period [preferably to the present])

SIGNIFICANCE

HISTORIC CONTEXT (For detailed history, see the J.C. Boyle Hydroelectric Development Historic Sites Inventory Form.)

The J.C. Boyle dam, including the fish ladder, was completed in 1958 by the California Oregon Power Company (Copco) as a major component of the Big Bend (now J.C. Boyle) hydroelectric development. Copco senior engineer John C. Boyle designed the Big Bend development and Copco contracted with Morrison-Knudsen Co., Inc. for the construction (Wynne 1957; Mail Tribune 1958) Several non-historic modifications have been made since that time. In 1971, the dam headgate was repaired to address corrosion; and in 1973, a spillway stop-log monorail was constructed. In 1988, PacifiCorp added the fish screen house to the intake structure. Also in 1988, the spillway was modified with extension of the channel and reinforcement of the plunge pool to prevent erosion. Steel decking was installed on the dam in 1993, and the headgate was upgraded again in 1998 (PacifiCorp 2004a:4-2 - 4-3).

EVALUATION (Contributes to J.C. Boyle Historic District)

NRHP Criterion A

The J.C. Boyle 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 J.C. Boyle dam adds to the significance of the J.C. Boyle Historic District by impounding the J.C. Boyle reservoir, which enables the generation of hydroelectric power.

NRHP Criterion B

Research does not indicate that the dam 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 a mid-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 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 a mid-twentieth-century hydroelectric development 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 at its original location.

Design is the composition of elements that constitute the form, plan, space, structure, and style of a property. The dam retains integrity of design. Repairs and additions have been completed over time, such as the 1971 headgate repair; 1973 spillway stop-log monorail addition; 1988 spillway modification; 1989 fish screen house addition; 1993 steel decking installation; and 1998 headgate upgrade. 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 2003:57). Consequently, except for the addition of the fish screen house, the alterations enumerated above may be considered minor alterations. Although the fish screen house is a large structural addition at the dam’s southern abutment, it does not obscure the dam’s original design, materials, or function.

Setting is the physical environment of a historic property that illustrates the character of the place. The dam retains integrity of setting, which is characterized by the Klamath River, J.C. Boyle reservoir (which the dam impounds), and a landscape of pine trees and other vegetation.

Materials are the physical elements combined in a particular pattern or configuration to form the historic property. The dam retains integrity of materials, particularly its clay core and bedrock foundation.

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 engineering skill required to excavate and align the dam and spillway, 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 use of natural and industrial construction materials convey the historic character of a midcentury earthen hydroelectric dam and contribute to integrity of feeling.

Oregon Historic Site Form

Association is the direct link between a property and the event or person for which the property is significant. The presence of the intact dam and its related features at this location directly link the property with midcentury power development in the Southern Oregon-Northern California region, contributing to integrity of association.

The dam retains integrity and is, therefore, eligible as a contributing resource to the J.C. Boyle Historic District.

RESEARCH INFORMATION

(Check all of the basic sources consulted and cite specific important sources)

☐ Title Records	☐ Census Records	☐ Property Tax Records	☑ Local Histories
☐ Sanborn Maps	☑ Biographical Sources	☑ SHPO Files	☑ Interviews
☐ Obituaries	☑ Newspapers	☐ State Archives	☑ Historic Photographs
☐ City Directories	☐ Building Permits	☐ State Library	

Local Library: Klamath Falls Library

University Library: Oregon Institute of Technology

Historical Society: Klamath County Museum

Other Repository: Southern Oregon Historical Society

Bibliography: 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.

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.

FERC (Federal Energy Regulatory Commission). 2007. Klamath Hydroelectric Project, FERC Project no. 2082-027, Oregon and California. Final Environmental Impact Statement For Hydropower License. Volume I. Office of Energy Projects, Division of Hydropower Licensing. November.

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

Mail Tribune [Medford, Oregon]. 1958. "Big Bend Project." June 20.

PacifiCorp. 2004. Exhibit C – Construction History and Proposed Construction. Klamath Hydroelectric Project (FERC Project No. 2082). PacifiCorp, Portland, OR.

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. U.S. Department of the Interior, Bureau of Reclamation. Technical Service Center. Denver, Colorado. July.

Wynne, Floyd L. 1957. June 30. "New Klamath River Canyon Power Development Project Viewed." Herald and News. June 30.

JC Boyle Dam

Photograph 1. Dam; facing east, 2018.

Photograph 2. Dame; facing northwest, 2018.

Photograph 3. Dam; facing southeast, 2017.

Photograph 4. Dam and steel pipeline; facing southeast, 2018.

Photograph 5. Fish Screen House; facing north, 2018.

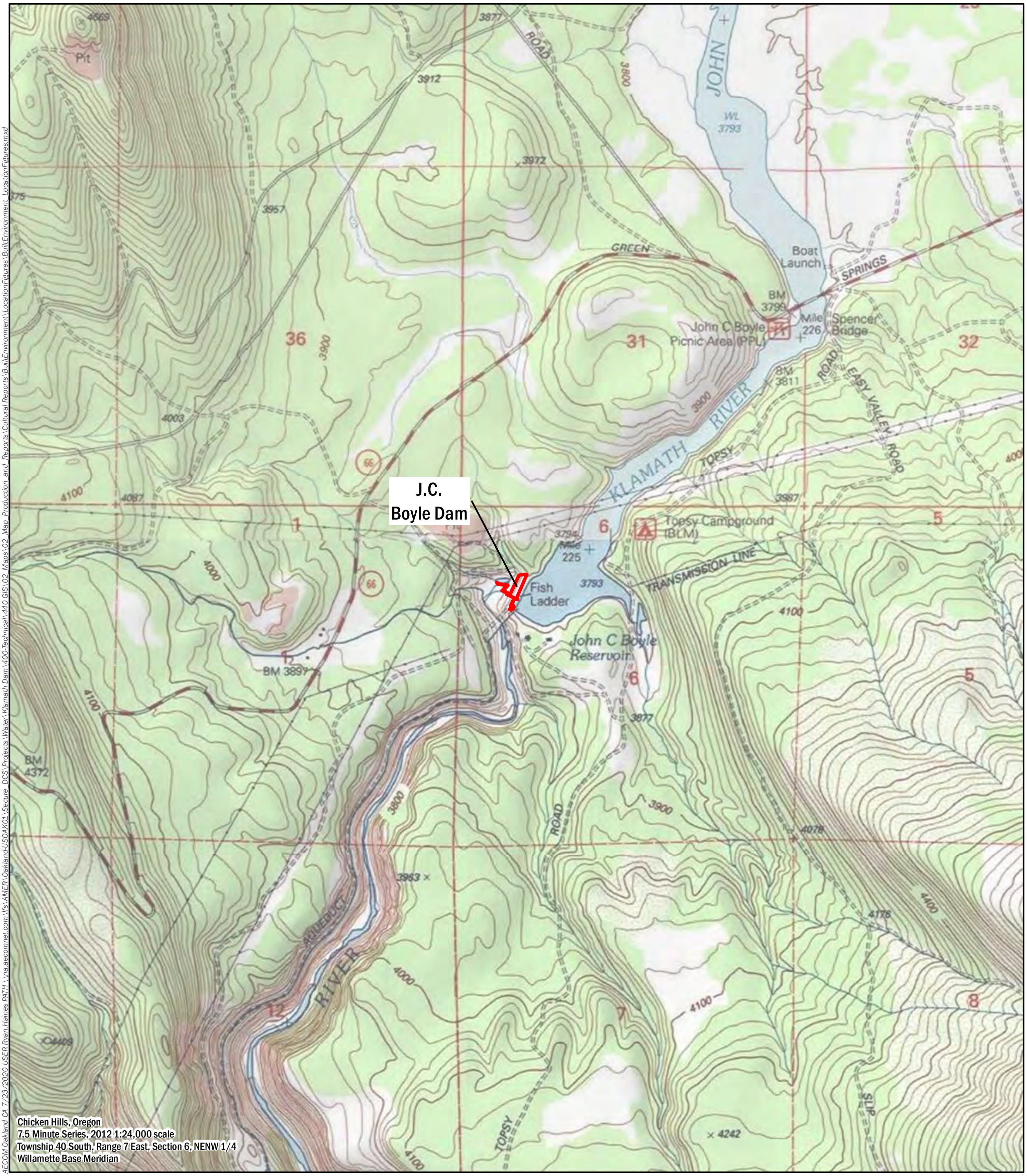
Photograph 6. Intake structure; facing southeast, 2018.

Photograph 7. Gated spillway and diversion culvert; facing east, 2018

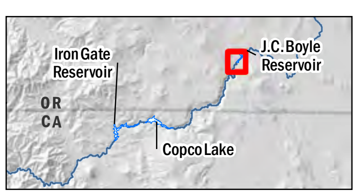
Photograph 8. Fish ladder; facing northwest from dam crest, 2018.

Photograph 9. Fish ladder; facing west from dam crest, 2018.

Photograph 10. Fish House interior, 2018.



J.C. Boyle Dam



N

0 2,000 Feet

0 600 Meters

1:24,000

J.C. Boyle Dam

Klamath River Dam Removal
Topsy Grade Road
Keno, Klamath County, Oregon

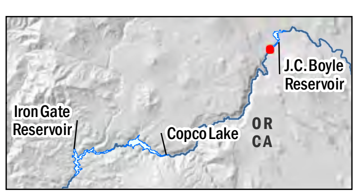
AECOM

July 2020

AECOM Oakland CA 7/29/2020 USER Ryan.Haines PATH \\na.aecomnet.com\lfs\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

J.C. Boyle Dam

0 100 Feet
0 20 Meters
N
1:1,200



J.C. Boyle Dam

Klamath River Dam Removal
Topsy Grade Road
Keno, Klamath County, Oregon

AECOM
July 2020

Oregon Historic Site Form

LOCATION AND PROPERTY NAME

address: ______ ☐ apprx. addrs

Keno ☑ vcnt Klamath County

historic name: **J.C. Boyle water conveyance system**

current/ other names: **Big Bend water conveyance system [The J.C. Boyle hydroelectric development was known as Big Bend during the planning and construction phase. On September 1, 1958, soon after completion, the development was dedicated as Big Bend. It was rededicated on February 3, 1962 in honor of Copco and Pacific Power engineer John Christie Boyle.]**

Optional Information

assoc addresses: (former addresses, intersections, etc.)

location descr: (remote sites)

USGS 7.5' Quad Chicken Hills, OR-CA Date 2012
TSR
T40S R7E L6 of Sec. 6
T40S R7E NE 1/4 of NW 1/4 of Sec. 6
T40S R7E NE 1/4 of NW 1/4 of Sec. 6
T40S R6E L9 of Sec. 13
T40S R6E L6 of Sec. 14

UTMs (all Zone 10)
Intake: 578649mE/4663772mN
Steel Pipeline: 578649mE/4663772mN to 578525mE/4663630mN
Intake Flume Headgate: 578525mE/4663630mN
Concrete Flume: 578525mE/4663630mN to 576990mE/4660833mN
Forebay: 576990mE/4660833mN
Tunnel: 576990mE/4660833mN to 576857mE/4660638mN
Surge Tank: 576857mE/4660638mN
Penstock (terminates at powerhouse): 576857mE/4660638mN to 576845mE/4660622mN

Lat/Long
Intake: 42.122109, -122.048518
Steel Pipeline: 42.122109, -122.048518 to 42.120843, -122.050037
Intake Flume Headgate: 42.120843, -122.050037
Concrete Flume: 42.120843, -122.050037 to 42.095807, -122.068973
Forebay: 42.095807, -122.068973
Tunnel: 42.095807, -122.068973 to 42.094064, -122.070607
Surge Tank: 42.094064, -122.070607
Penstock: 42.094064, -122.070607 to 42.093921, -122.070754

block nbr: ___ lot nbr: ___ tax lot nbr: ___
township: 40S range: 6E section: 13 1/4: L9
zip: ___

PROPERTY CHARACTERISTICS

resource type: **structure** height (# stories): ___

total # eligible resources: **1** total # ineligible resources: **0**

elig. evaluation: **eligible/contributing**

NR status: ___

primary constr date: **1958** (c.) ☐ secondary date: ___ (c.) ☐ (optional--use for major addns)

NR date listed: ___ (indiv listed only; see Grouping for hist dist)

primary orig use: **Energy Facility**

orig use comments: ___

secondary orig use:

Oregon Historic Site Form

secondary orig use:

primary style: **Not Applicable**

secondary style:

primary siding: **Poured Concrete**

secondary siding:

plan type: **Other/Undefined**

prim style comments:

sec style comments:

siding comments:

architect: **John C. Boyle and Copco engineers**

builder: **Morrison-Knudsen Company**

comments/notes: **The J.C. Boyle water conveyance system is a linear resource within the J.C. Boyle hydroelectric development.**

GROUPINGS / ASSOCIATIONS

survey project name or other grouping name: Klamath River Hydroelectric Project - JC Boyle Hydroelectric Development, 2018 — Survey & Inventory Project

farmstead/cluster name:

external site #:
(ID# used in city/agency database)

SHPO INFO FOR THIS PROPERTY

NR date listed:

ILS survey date:

RLS survey date: **6/11/2018**

Gen File date:

106 Project(s)

SHPO Case #	Date	Agency Effect Eval
17-1370	6/11/2018	adverse effect

JC Boyle Flume, facing N

ARCHITECTURAL / PROPERTY DESCRIPTION

(Include expanded description of the building/property, setting, significant landscape features, outbuildings, and alterations)

The J.C. Boyle water conveyance system is a primary component of the J.C. Boyle hydroelectric development. The system, built mostly in 1958, is composed of water conveyance and accessory structures. The water conveyance structures include the intake, steel pipeline, modern intake flume headgate (2002-2003), concrete flume, forebay, spillway, spillgate house, forebay control building, concrete-lined tunnel, surge tank, and penstock. Accessory structures include a modern headgate area communication building (2002-2003) and flume shack. The entire system extends 2.56 miles between the dam and the powerhouse.

Consolidated Western Steel operated a field fabrication yard at the J.C. Boyle dam site for assembling the steel pipeline (PacifiCorp archive image BB-688). Consolidated Western Steel crews also installed the penstock (PacifiCorp archive image BB-931).

Intake and Steel Pipeline

The intake structure receives water from the J.C. Boyle Reservoir, which flows through the 638-foot-long, 14 foot-diameter steel pipeline. The pipeline spans the Klamath River and is supported by steel frames mounted in concrete bases on either side of the river. Metal straps brace the pipeline to the supporting structures (USBR 2012:17).

Intake Flume Headgate and Communication Building

The downstream end of the pipeline employs a 14-foot by 14- foot automated fixed-wheel gate within a concrete intake flume headgate structure that discharges into a concrete flume (also called a power canal) (USBR 2012:17). Completed in 2002-2003, the headgate structure enables operators to halt flow to the flume, thereby enabling inspection and maintenance activities. A metal ladder provides access from the ground to the top of the headgate. Metal railing atop the headgate structure encloses a lookout platform for viewing the dam. A modern communication building, likely built in 2002-2003, is adjacent to the headgate and enables communication with PacifiCorp’s Merwin Dam hydro control center along the Lewis River in Washington. The one-story building consists of concrete masonry unit (CMU) construction, with a metal double door at its northern elevation. The shed roof has minimal overhang, metal flashing, and standing-seam sheet-metal cladding. A modern light fixture is centered above the door. The building is nearly identical to the communication buildings at the Keno and Link River hydroelectric developments, both operated by PacifiCorp. The headgate and communication building are contained within a fenced area.

Concrete Flume

From the headgate structure, water is conveyed via a 2.2-mile-long concrete flume that traverses land administered by the U.S. Bureau of Land Management. The flume winds downhill, with water flowing via gravity to the forebay. The flume was built into a bench cut in the face of the Klamath River canyon and has poured-in-place concrete panel walls that measure 16 feet high. The plywood board forms marks on the concrete panel walls measure 4 feet by 8 feet. The flume ranges from 24 to 35 feet in width, alternating between double- and single-wall construction, with single-wall construction at the widest sections (Morrison-Knudsen 1958:4). About half of the flume has single-wall construction, where the natural mountain slope serves as the inner wall. In areas with single-wall construction, shotcrete has been applied to the canyon wall. The 6-inch wall bolts have 4-inch heads; and the 12- to 18-inch concrete base has a 2-inch chamfer. Prefabricated steel used in the flume floor was installed using a crane. Numerous wall sections have visible spalling. A power line is strung along the upper section of the exterior wall of the flume. Overflow structures are located at the upstream end (siphon pipe) and downstream forebay (gated overflow weir) (USBR 2012:17). The Canal Road, a gravel access road, parallels the entire span of the flume.

Flume Shed

The flume shed, built circa 1958, is a small structure that historically provided access for workers to measure the flume flow. The shed was built atop the flume wall, approximately 180 feet south of the modern intake flume headgate structure. The shed has a rectangular plan, wood shake siding, and sits on a suspended concrete base adjoining the external western wall of the flume. The low-pitched shed roof has corrugated metal cladding and a wood board door that is accessed via a metal catwalk and suspended metal platform. The precise built date of the shed is unknown, but the structure is visible in a 1968 aerial photograph (UO 2018:1968_cno_2jj-50). Its current use is unknown.

Forebay

The flume terminates at the forebay area, which consists of a concrete forebay structure and associated buildings and structures. The forebay is wider and deeper than the flume and ensures a constant supply to the tunnel. The 340-foot-long concrete forebay intake structure has two floating spillgates and impounds water and traps sediment before water is conveyed through the tunnel, surge tanks, and penstocks to the powerhouse (Durio 2003:44; Kramer 2003:7). From the forebay, water for power generation is drawn through a 60-foot-wide, 18-foot-high trash rack with 2-inch bar spacing (USBR 2012:18). A small bump-out at the forebay’s northern side is known as the Deer Escape and has a concrete stairway that functions as an escape route for wildlife.

Forebay Control Building

The forebay control building is located at the terminus of the forebay and contains controls for forebay intake operations through Programmable Logic Controller (PLC) units. The building has a rectangular plan, steel-frame and metal panel construction, a low-pitched side-gable roof, and standing-seam sheet-metal roofing. The building is elevated on wooden posts and is oriented facing south. Access to the metal door located slightly off-center along the southern (primary) elevation is provided by a small metal staircase that leads to a metal platform. Along this elevation, a shed canopy with standing-seam sheet-metal roofing is supported by three metal posts that shelters the entry. The door displays a PacifiCorp sign. A four-paned steel awning window (bolted shut), is adjacent to the façade door and is covered by a metal panel. A similar window is centered along the eastern elevation with a white "JCB Forebay Control Building" sign with black lettering. The northern elevation, facing the forebay intake, has a metal door with inset pane and an adjacent four-paned steel window. The western elevation lacks fenestration but includes an air conditioner unit mounted near the northern end. The forebay control building and three other structures are in a fenced area. The other structures include a steel lattice communication tower, mounted on concrete footings, adjacent to the forebay control building's southern elevation. A generator building, which houses the forebay generator, is situated adjacent to the forebay control building's southwestern corner. The generator housing has a rectangular plan, metal panel construction, flat roof, concrete footings, and a large exterior exhaust unit. The generator powers the forebay control building's PLC units (Roach 2018). A small portable bathroom building immediately north of the generator housing has a steeply pitched shed roof, corrugated metal siding, and concrete foundation. The forebay control building appears in a 1968 aerial photograph (UO 2018:1968_cno_5jj-170).

Spillway

The spillway at the forebay area handles overflow using two float-operated automatic spill gates, which release water during the hydraulic surge from the flume following any load rejection at the powerhouse. The discharge moves through the spillway entrance, then flows beneath the spillway house and enters the spillway. The spillway consists primarily of a 190-foot-long, open concrete-lined chute, with two concrete baffle blocks that control water velocity. The spillway area is enclosed by a chain-link metal fence and barbed wire. Water discharges from the spillway through a large, eroded channel (or scour hole) in the hillside (USBR 2012:17-18). From there, the water flows over the edge, free-falling to the plunge pool below, where it enters the Klamath River bypass reach. The spillway is visible in a May 1968 aerial photograph (UO 1968: 1968_cno_2jj-51). During June 2018 field work, remnants of an overflow channel, also called a forebay sluiceway pipe, were observed adjacent to the spillway. The channel, which has been abandoned in place, extends underground from the forebay to the spillway (USBR 2012:36).

Spillgate House

The spillgate house at the southern side of the forebay contains two motorized spillway gates to control the release of water from the forebay to the spillway. The gates are operated remotely from the forebay control building (Roach 2018). The elevated spillgate house sits on a tall concrete and stone foundation and is oriented facing southwest. This small, wood-framed structure has a rectangular plan, high-pitched front-gable roof, exposed wooden rafter tails, and corrugated metal roofing and siding. A catwalk skirting the southern side of the spillway leads to the spillgate house entrance, where a concrete and metal platform with metal railing provides access interior access through a plywood entry door. A white "JCB Spillgate house" sign with black lettering is mounted on the door. A large metal vent is adjacent to the door and a smaller metal vent is located along the northeastern (rear) elevation. Adjacent to the rear elevation is a small storage shed with a gable roof and corrugated metal roofing and siding. Kramer (2003:7) refers to the "small spillway house" as "of newer but undated construction," while Durio (2003) refers to the entire J.C. Boyle water conveyance system, including the "spillway house," as having a 1958 construction date. The spillgate house is visible in a May 1968 aerial photograph and was likely constructed circa 1958 (UO 1968: 1968_cno_2jj-51).

Tunnel

After water passes through the forebay trash rack it enters the tunnel inlet, which is usually submerged. The water then descends through a 15.5-foot-diameter, horseshoe-shaped tunnel (USBR 2012:18). The tunnel consists of unlined sections, as well as alternately lined sections with steel and concrete and extends a total of 1,660 feet from the forebay to the centerline of the surge tank (Durio 2003:44; FERC 2007:2-8). The concrete-lining is 12 inches thick (Morrison-Knudsen 1958:4). The last 57 feet of the tunnel near the downstream portal are steel-lined and bifurcates into two 10.5-foot-diameter steel penstock legs. The bifurcated section is encased in a concrete anchor block (USBR 2012:18; FERC 2007:2-8).

Surge Tank

The surge tank is a tall, cylindrical steel structure that neutralizes sudden pressure changes in the tunnel flow by filling when the pressure increases and emptying when the pressure decreases. The open top prevents a vacuum effect that could cause the penstocks to collapse (Roach 2018). The tank measures 78 feet high and 30 feet in diameter and is mounted on a reinforced-concrete base (USBR 2012:37).

Penstock

The bifurcated penstock conveys water by gravity from the tunnel outlet downhill to the powerhouse. Each penstock leg measures 956 feet in length and is supported by steel-ring girders seated on concrete footings. The penstock legs narrow in two steps, from 10.5 feet to 9 feet, as they approach the powerhouse (FERC 2007:2-8). A 108-inch-diameter butterfly valve is operative at the downstream end of each penstock leg (USBR 2012:18). The penstocks legs pass through a concrete expansion joint approximately 300 feet before entering the powerhouse.

The water conveyance system and associated features appear to be in good condition.

HISTORY

(Chronological, descriptive history of the property from its construction through at least the historic period [preferably to the present])

SIGNIFICANCE

HISTORIC CONTEXT (For detailed history, see the J.C. Boyle Hydroelectric Development Historic Sites Inventory Form)

The J.C. Boyle water conveyance system was built in 1958, except for the intake flume headgate and associated communication building, which were built in 2002-2003. The California Oregon Power Company (Copco) contracted with Morrison-Knudsen Company to construct the J.C. Boyle hydroelectric development. Other than the 2002-2003 additions, the system appears to have undergone no substantial alterations since its original construction.

During the original construction period at the Big Bend site, Herald and News reporter Floyd L. Wynne made at least two site visits. In June 1957, Wynne observed excavation of the flume site, and wrote that: "Some 400,000 yards of dirt is being gouged out of the sides of the precipitous cliffs of the canyon as a shelf is prepared to hold the concrete conduit. The conduit itself is 26 feet wide at the base, and the walls will be 16 feet high on each side. Some 26,000 yards of concrete will be used in its construction, and it is expected to handle approximately 2,500 second feet of water" (Wynne 1957).

Wynne also reported on construction of the tunnel between the forebay and surge tank: "The tunnel was carved out during the winter and is a unique feat of engineering. There is a 20-foot drop from the upper end to the lower end where the water will emerge and drop some 450 feet into the powerhouse portion of the development. Now braced by huge timbers, the tunnel will be concrete lined. This is to be one of the winter projects at the dam" (Wynne 1957).

Later that year, Wynne returned to observe progress on flume construction and reported that, "workmen were busy pouring the 11,000 feet of concrete flume which carries the water in a snakelike fashion around the side of the mountain on a man-made shelf and then leads it into the 1,600 foot tunnel which drops it over 800 feet into the canyon and the Big Bend powerhouse" (Wynne 1958). Wynne marveled at how the construction equipment worked on sheer mountainsides, hundreds of feet above the river, to build the "winding ribbon of concrete flume" (Wynne 1958).

EVALUATION (Contributes to J.C. Boyle Historic District)

NRHP Criterion A

The J.C. Boyle 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 J.C. Boyle water conveyance system adds to the significance of the J.C. Boyle Historic District by conveying water over two miles 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 a mid-twentieth-century hydroelectric development that implemented technological advances in its conception, design, and construction.

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 important component of a mid-twentieth-century hydroelectric development.

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

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 dam and powerhouse.

Setting is the physical environment of a historic property that illustrates the character of the place. The water conveyance system winds two miles through a setting characterized by the Klamath River running parallel below, steep canyon walls, and a landscape of pine trees and other vegetation.

This remote setting has remained virtually undeveloped since the water conveyance system was built and retains integrity.

Materials are the physical elements combined in a particular pattern or configuration to form the historic property. The original materials of the water conveyance system are primarily the concrete flume and tunnel, and steel pipeline and penstock. Except for the intake flume headgate (2003), the water conveyance system maintains virtually all of its original materials.

Workmanship is the physical evidence of the crafts of a particular culture or people during any given period of history. The 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. This in particularly notable in the way Morrison-Knudsen Co., Inc. constructed the nearly two-mile flume with 16-foot high concrete walls that alternates between double- and single-wall construction. Morrison-Knudsen employed single-wall construction at the widest sections of the flume; about half of the flume has single-wall construction, where the natural mountain slope serves as the inner wall.

Feeling is the quality that a historic property has in evoking the aesthetic or historic sense of a past period of time. The. The system’s remote setting and retention of original design and materials conveys the historic character of a mid-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 role as a physical link between the dam and powerhouse directly associate this linear resource with the historic construction and operations at J.C. Boyle, contributing to integrity of association.

The water conveyance system retains integrity and is, therefore, eligible as a contributing resource to the J.C. Boyle Historic District.

RESEARCH INFORMATION

(Check all of the basic sources consulted and cite specific important sources)

- [ ] Title Records
- [ ] Sanborn Maps
- [ ] Obituaries
- [ ] City Directories
- [ ] Census Records
- [x] Biographical Sources
- [x] Newspapers
- [ ] Building Permits
- [ ] Property Tax Records
- [x] SHPO Files
- [ ] State Archives
- [ ] State Library
- [x] Local Histories
- [ ] Interviews
- [x] Historic Photographs

Local Library: Klamath Falls Library

University Library: Oregon Institute of Technology

Historical Society: Klamath County Museum

Other Repository: Southern Oregon Historical Society

Bibliography:

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.

FERC (Federal Energy Regulatory Commission). 2007. Klamath Hydroelectric Project, FERC Project no. 2082-027, Oregon and California. Final Environmental Impact Statement For Hydropower License. Volume I. Office of Energy Projects, Division of Hydropower Licensing. November.

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

Morrison-Knudsen. 1958. “Oregon River Detours for Power.” The Em-Kayan: Magazine of “M-K” 17(3). May. Boise, Idaho: Morrison-Knudsen Company, Inc. Available at Boise State Digital Collections. http://digitalcollections.boisestate.edu/jsp/RcWebImageViewer.jsp?doc_id=0704f3d4-818f-45a6-808a-d4edac654e6c/idbb0000/00000001/00000194 (accessed October 30, 2019).

UO (University of Oregon). 2018. Knight Library Aerial Photography Collection. Https://library.uoregon.edu/aerial-photography-collection (accessed and ordered through aerial photography research service).

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.

Wynne, Floyd L.
1957 “New Klamath River Canyon Power Development Project Viewed.” Herald and News. June 30.
1958 “Big Bend.” Herald and News. October 3.

Photograph 1. Steel pipe and flume intake headgate; facing northeast, 2018.

Photograph 2. Flume; facing southwest, 2018.

Photograph 3. Flume; facing northeast, 2018.

Photograph 4. Flume; facing north, 2018.

Photograph 5. Flume; facing northeast, 2018.

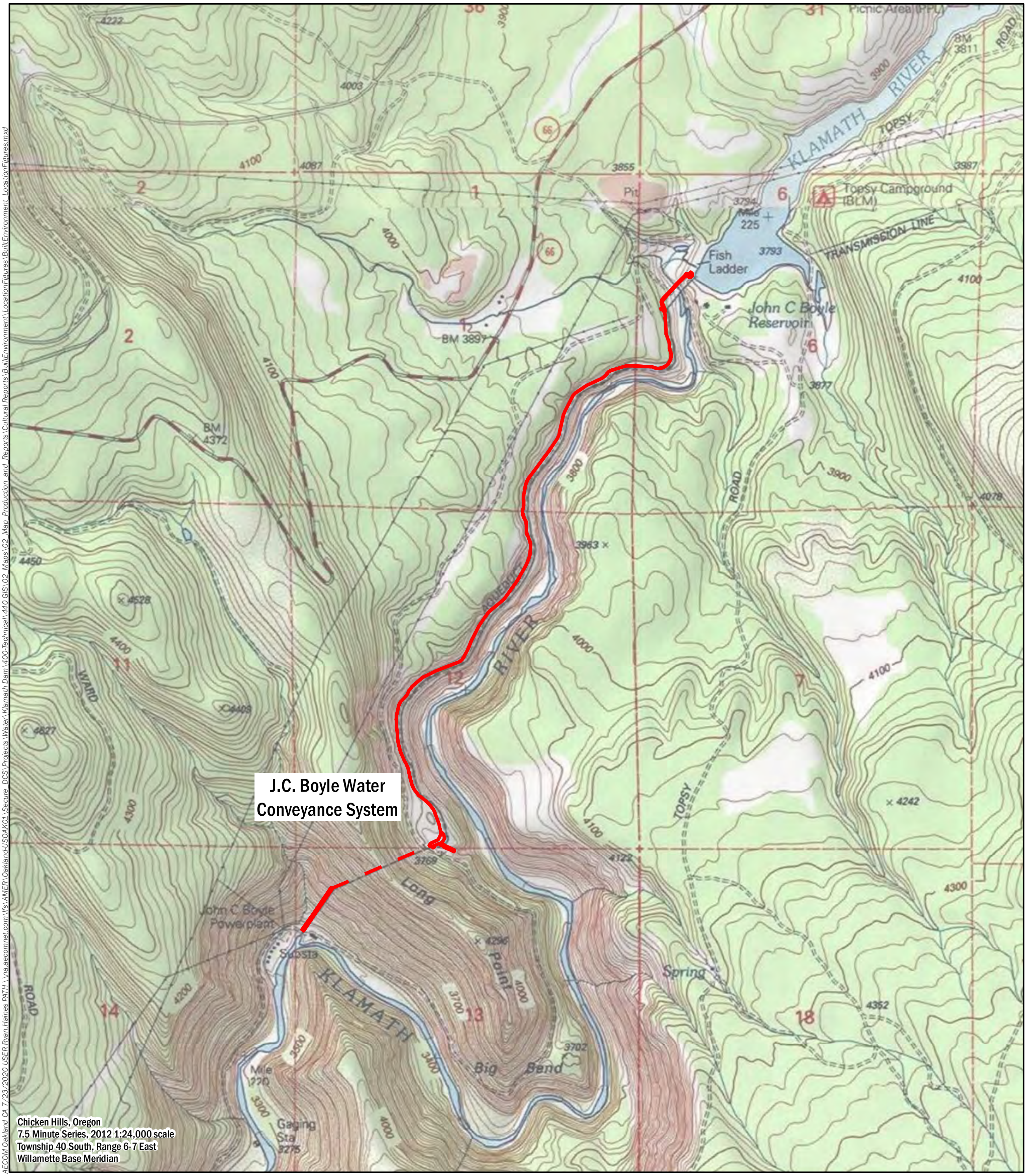
Photograph 6. Forebay spillway house; facing north, 2018.

Photograph 7. Forebay control building; facing west, 2018.

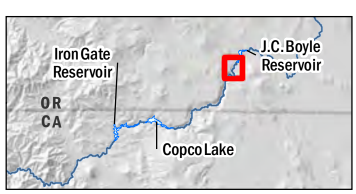
Photograph 8. Forebay; facing southwest, 2018.

Photograph 9. Penstocks and powerhouse; facing northeast, 2017.

Photograph 10. Penstocks and surge tank; facing northeast, 2018.



J.C. Boyle Water Conveyance System



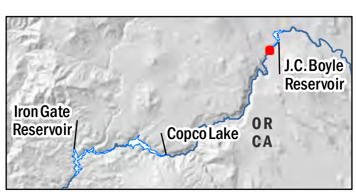
J.C. Boyle Water Conveyance System

Klamath River Dam Removal
J.C. Boyle Canal Access Road
Keno, Klamath County, Oregon

0 2,000 Feet
0 600 Meters
N
1:24,000

AECOM
July 2020

J.C. Boyle Water Conveyance System



N

0 100 Feet

0 20 Meters

1:1,200

J.C. Boyle Water Conveyance System

Klamath River Dam Removal
Topsy Grade Road
Keno, Klamath County, Oregon

AECOM

July 2020

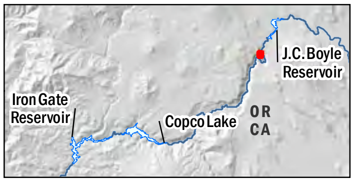
J.C. Boyle Water Conveyance System

N

0 200 Feet

0 50 Meters

1:2,400



J.C. Boyle Water Conveyance System

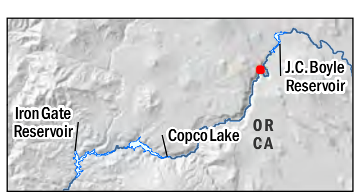
Klamath River Dam Removal
Topsy Grade Road
Keno, Klamath County, Oregon

AECOM

July 2020

J.C. Boyle Water Conveyance System

N
0 200 Feet
0 50 Meters
1:2,400



J.C. Boyle Water Conveyance System

Klamath River Dam Removal
Topsy Grade Road
Keno, Klamath County, Oregon

AECOM
July 2020

Oregon Historic Site Form

J.C. Boyle powerhouse

Keno, Klamath County

LOCATION AND PROPERTY NAME

address: ☐ apprx. addrs

Keno ☑ vcnt **Klamath County**

historic name: **J.C. Boyle powerhouse**

current/ other names: **Big Bend powerhouse**
[The J.C. Boyle hydroelectric development was known as Big Bend during the planning and construction phase. On September 1, 1958, soon after completion, the development was dedicated as Big Bend. It was rededicated on February 3, 1962 in honor of Copco and Pacific Power engineer John Christie Boyle.]

Optional Information

assoc addresses: (former addresses, intersections, etc.)

location descr: (remote sites) USGS 7.5' Quad Chicken Hills, OR-CA Date 2012 T 40S; R 6E; L9 of Sec 13; Willamette B.M.
UTM: Zone 10, 576845mE/4660622mN
Lat/Long: 42.09388898728235, -122.07078115389395

block nbr: lot nbr: tax lot nbr:

township: 40S range: 6E section: 13 1/4:

zip:

PROPERTY CHARACTERISTICS

resource type: **structure** height (# stories): **1**

total # eligible resources: **1** total # ineligible resources: **0**

elig. evaluation: **eligible/contributing**

NR status:

primary constr date: **1958** (c.) ☐ secondary date: (c.) ☐ (optional--use for major addns)

NR date listed: (indiv listed only; see Grouping for hist dist)

primary orig use: **Energy Facility**

secondary orig use:

orig use comments:

primary style: **Utilitarian**

secondary style:

prim style comments:

sec style comments:

primary siding: **Poured Concrete**

secondary siding:

siding comments:

plan type: **Other/Undefined**

architect: **John C. Boyle and Copco engineers**

builder: **Morrison-Knudsen Company**

comments/notes:

GROUPINGS / ASSOCIATIONS

survey project name or other grouping name: Klamath River Hydroelectric Project - JC Boyle Hydroelectric Development, 2018 Survey & Inventory Project

farmstead/cluster name:

external site #: (ID# used in city/agency database)

SHPO INFO FOR THIS PROPERTY

NR date listed:

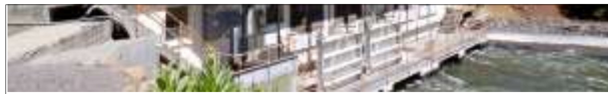
ILS survey date: **6/11/2018**

RLS survey date: **6/11/2018**

Gen File date:

106 Project(s)

SHPO Case #	Date	Agency Effect Eval
17-1370	6/11/2018	adverse effect



JC Boyle Powerhouse, facing E

Oregon Historic Site Form

ARCHITECTURAL / PROPERTY DESCRIPTION

(Include expanded description of the building/property, setting, significant landscape features, outbuildings, and alterations)

The J.C. Boyle powerhouse was built as the Big Bend powerhouse in 1958 at River Mile 225.2 along the Klamath River, 4.6 river miles downstream of the Big Bend (now J. C. Boyle) dam. The powerhouse is a conventional, outdoor-type, reinforced-concrete powerhouse generating at 11.5 kilovolts (kV). This design reflects the culmination of an early twentieth century trend toward minimizing expense by reducing or eliminating a powerhouse superstructure. In more modern designs, such as the J.C. Boyle powerhouse, generators are contained in protective metal housing and serviced with free-standing gantries that roll on rails mounted atop the substructure (Hay 1991:93). Below grade, the powerhouse has a single southwest-facing elevation with symmetrical design. Access to the powerhouse interior is gained through a descending concrete staircase with metal railings at either end of the structure. Each staircase leads to a metal entry door that is flanked by six-paned steel windows with upper awning operation and wire glass panes. Two pairs of two large six-paned steel windows are centered on the southwestern elevation, with each of the two metal doors flanked by smaller six-paned steel windows. Water that passes through the penstock and into the powerhouse is discharged back into the Klamath River. The flow then passes into the 17.3-mile-long “peaking reach” before entering Copco Lake (FERC 2007:2-8). The Iron Gate powerhouse, completed by Copco’s successor Pacific Power in 1962, has a similar outdoor-type, reinforced-concrete design to the J.C. Boyle powerhouse (USBR 2012:18).

The mechanical and electrical equipment inside the J.C. Boyle powerhouse includes two vertical-shaft Francis-type hydraulic turbine units, 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, two electric oil sump pumps and tank, two draft tube bulkhead gates, two vertical sump pumps, bearing-oil storage tank(s), and other mechanical equipment, piping, and valves. The powerhouse also contains plant transformers, distribution equipment, unit breakers, two generators, conduit and cable, plant control equipment, and other electrical equipment (USBR 2012:37).

The original turbines were manufactured by Baldwin Lima Hamilton. The replacement turbines, manufactured by American Hydro Corporation of York, Pennsylvania are rated at 75,700 horsepower (hp) for Unit No. 1 (installed in 1994), and 63,900 hp for Unit No. 2 (installed in 2005), with a net head of 440 feet. No bypass capacity is provided. Four draft tube bulkhead gates and slots, with two hoists, are provided downstream of the units (AECOM 2017:2-7). The original governors and exciters have been replaced (Durio 2003:45). A single 150-ton gantry crane used for repair and maintenance is currently located at the J.C. Boyle powerhouse, but can also be transferred to the Iron Gate powerhouse (AECOM 2017:2-7).

The powerhouse operates using the original General Electric generators, which are rated at 53 megavolt-amperes (MVA) for Unit No. 1, with a 0.95 power factor (50 megawatts [MW]), and 50 MVA for Unit No. 2, with a 0.95 power factor (48 MW) (AECOM 2017:2-8). Two 3-phase transformers in the substation step up the generator voltage to 230 kV for transmission interconnection (FERC 2007:2-8). The J.C. Boyle powerhouse generally operates as a power peaking facility. According to PacifiCorp:

“Power generation (and hence flow through the powerhouse) is shaped to coincide with PacifiCorp’s peak customer electricity demand. During the summer months, peak demand typically occurs on weekdays in the late afternoons and early evenings. In general, on a daily basis, water storage occurs in the J.C. Boyle reservoir at night when generation is not occurring. Given the existing required ramp rate for the J.C. Boyle powerhouse (9 inches per hour), generation must begin well in advance of peak load requirements so that the units are at full generation capacity for the peak demand period. The reservoir usually begins to fill sometime after dark, is full by early morning, and begins to be drawn down again during the daylight hours. The specific period of releases may vary widely depending on the anticipated time of peak demand” (PacifiCorp 2004: 4-1 – 4-2).

The powerhouse was originally built as a manned facility, but controls were modified by 1998 to implement automatic remote operation (Durio 2003:45; PacifiCorp 2004: 4-3). In 1995, in anticipation of automating the powerhouse, PacifiCorp demolished the circa 1958 built operator housing in the powerhouse area, immediately southwest of the substation.

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

Substation (1958)

Immediately west of the powerhouse is the substation which was built in 1958. The substation is enclosed by a chain-link metal fence in an area measuring approximately 175 feet by 145 feet. The substation equipment includes two large 230-kV power transformers that are connected to the powerhouse by underground cables. The substation also contains two sets of three 230-kV gas circuit breakers, as well as potential transformer units; two A-frame dead-end towers (60 to 80 feet high); and steel buswork. A small fenced area, approximately 60 feet southwest of the substation, contains a non-operating power transformer on a concrete platform.
The substation appears to be in good condition.

Transmission Lines

Several transmission lines are associated with the J.C. Boyle powerhouse and substation. Line No. 59, completed in 1958, is the Klamath Hydroelectric Project’s primary connection (“main grid facilitator”), and provides stepped-up power of 230-kV to PacifiCorp’s general transmission grid in Klamath Falls and Medford through Copco No. 1. Upon completion, Line No. 59 connected the J. C. Boyle powerhouse to the existing Klamath Falls – Medford transmission circuit. The line measures 69.9 miles, and consists of wooden H-frame transmission structures, using 40-inch steel cross-arms with three 795 MCM ACSR conductors strung for heavy loading (Klamath County Museum c. circa 1958; BLM 2012:Appendix A). Line No. 59 was initially energized in September 1958 for a cost of $1.8 million but the total cost of the line and four associated power substations, including a $1 million Medford substation, was over $3.5 million (News-Review 1958; Mail Tribune 1958).

Line No. 18 is a 66-kV line that pre-dates the J.C. Boyle substation. The precise built date is unknown, and it is no longer in service. Line No. 18 was connected to the powerhouse by Line No. 98, which also predates the substation with an unknown construction date; and is no longer in service. The 0.24-mile, 69-kV Line No. 98 extended northwest from the substation to a tap point on Line No. 18. By 2007, Line No. 98 was de-energized. It was subsequently removed and the right-of-way restored to natural conditions (FERC 2007:2-8, 4-8; USBR 2012:18).

The condition of the transmission lines has not been evaluated.

Pumphouse (circa 1960)

A pumphouse, built circa 1960, supplies water to the powerhouse, and may have supplied the J.C. Boyle operator residences before they were demolished in 1995. The small pumphouse is located approximately 50 feet northwest from where the penstock enters the powerhouse. It has a low-pitched side-gable roof with asphalt shingles, vertical grooved plywood siding, wood-board foundation, and a centered door along the southern (primary) elevation. The interior contains plywood ceiling and walls, and wood-board flooring. A boulder rolled downhill and severely damaged the western wall. The pumphouse is visible in a May 1968 aerial photograph (UO 1968:1968cno_2jj-51).

The pumphouse appears to be in fair condition due to damage to the western wall.

HISTORY

(Chronological, descriptive history of the property from its construction through at least the historic period [preferably to the present])

SIGNIFICANCE

HISTORIC CONTEXT (For detailed history, see the J.C. Boyle Hydroelectric Development Historic Sites Inventory Form)

The J.C Boyle powerhouse was completed in 1958 by the California Oregon Power Company (Copco) as a major component of the Big Bend (now J.C. Boyle) hydroelectric development (AECOM 2017; Durio 2003; FERC 2007; News-Review 1958; PacifiCorp 2004). John C. Boyle, Copco senior engineer and official, worked with other Copco engineers to design the powerhouse. Copco contracted with Morrison-Knudsen Co., Inc. for construction of the Big Bend development, including the powerhouse (Wynne 1957; Mail Tribune 1958). Dedicated as the Big Bend powerhouse in October 1958, it was rededicated in honor of John C. Boyle on June 25, 1962 with a commemorative bronze plaque located near the powerhouse. The J.C. Boyle powerhouse is the largest generating facility for the Klamath River Hydroelectric Project and was automated in 1998.

Since the original construction of the powerhouse, two new turbines have been installed: the Unit No. 1 turbine was replaced in 1994, and the Unit No. 2 turbine was replaced in 2005. In 1998, the powerhouse was automated, dispensing with the need for on-site operators and operator residences. Other relatively minor changes include replacement governors and exciters (AECOM 2017:2-7; Durio 2003:45). The J.C. Boyle hydroelectric development and powerhouse are owned by PacifiCorp.

EVALUATION (Contributes to J.C. Boyle Historic District)

NRHP Criterion A

The J.C. Boyle 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 J.C. Boyle powerhouse adds to the significance of the J.C. Boyle 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 a mid-twentieth-century hydroelectric development that implemented technological advances in its conception, design, and construction.

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.

INTEGRITY ANALYSIS

The powerhouse retains integrity of location, design, setting, materials, workmanship, feeling, and association; and continues to convey its historic identity as a mid-twentieth-century hydroelectric development 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 at its original location.

Design is the composition of elements that constitute the form, plan, space, structure, and style of a property. The powerhouse is an outdoor-style structure with a generator deck that reflects the midcentury trend in hydroelectric powerhouse construction. Modern alterations to the powerhouse include the replacement of the powerhouse generators in 1994 and 2005 and the powerhouse's conversion to an automated system in 1998. These alterations arguably diminish the integrity of the functional design; however, they do not impact the exterior structural design and "do not seriously reduce the ability to convey original character or association with historic events and themes under [the] context" (Kramer 2003:57).

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. The setting is characterized by the Klamath River and the largely undeveloped landscape. The powerhouse's immediate setting contains the riverbank, the steel penstocks descending the steep hill into the powerhouse, the adjacent Armco warehouse, and interconnected substation. The immediate setting has undergone virtually no change since the Big Bend (now J.C. Boyle) powerhouse site was completed in 1958, except for demolition of nearby powerhouse operator residences (3 buildings next to the substation) in 1995.

Materials are the physical elements combined in a particular pattern or configuration to form the historic property. The powerhouse retains integrity of materials, particularly its concrete construction.

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 workmanship, as demonstrated by the engineering skill required to excavate the powerhouse site between the adjacent river and a steep hill slope and to build the powerhouse to functionally interconnect with the water conveyance system.

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, outdoor-style design, and intensive use of industrial construction materials convey the historic character of an midcentury powerhouse, and contribute to 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 powerhouse and its related features at this location directly link the structure with midcentury power development in the Southern Oregon-Northern California region, contributing to integrity of association.

The J.C Boyle powerhouse retains integrity and is, therefore, eligible as a contributing resource to the J.C. Boyle Historic District.

RESEARCH INFORMATION

(Check all of the basic sources consulted and cite specific important sources)

☐ Title Records	☐ Census Records	☐ Property Tax Records	☑ Local Histories
☐ Sanborn Maps	☑ Biographical Sources	☑ SHPO Files	☐ Interviews
☐ Obituaries	☑ Newspapers	☐ State Archives	☑ Historic Photographs
☐ City Directories	☐ Building Permits	☐ State Library	

Local Library: Klamath Falls Library

University Library: Oregon Institute of Technology

Historical Society: Klamath County Museum

Other Repository: Southern Oregon Historical Society

Bibliography: 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.

BLM (Bureau of Land Management). 2012. Decision Record & Categorical Exclusion Review. PacifiCorp Electrical Distribution Line (Line 59) Right-of-Way Grant OR 24416 (OR-M040-2014-002-CX). BLM, Medford, OR.

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.

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.

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.

Klamath County Museum. circa 1958. Big Bend Development. Accession no. 2016.002.0425.

Mail Tribune [Medford, Oregon]. 1958. "Big Bend Project." June 20.

News-Review [Roseburg, Oregon]. 1958. "Rites Open Copco Plant." September 2.

PacifiCorp. 2004. Exhibit C – Construction History and Proposed Construction. Klamath Hydroelectric Project (FERC Project No. 2082). PacifiCorp: Portland, OR.

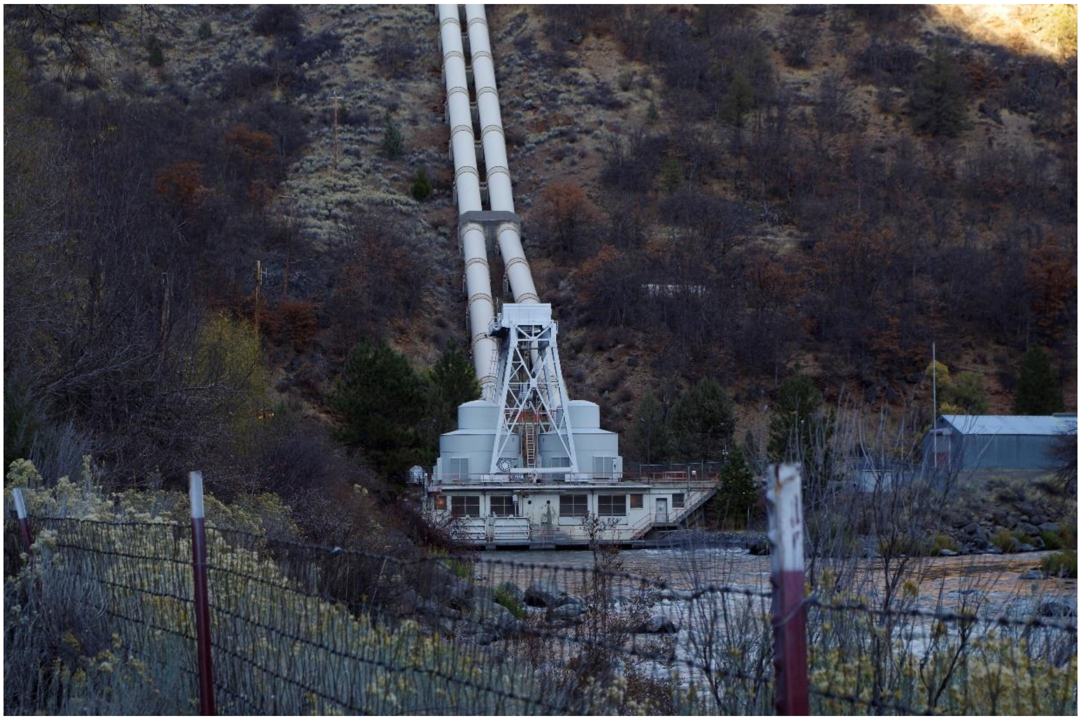
UO (University of Oregon). 2018. Knight Library Aerial Photography Collection. https://library.uoregon.edu/aerial-photography-collection (accessed and ordered through aerial photography research service).

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.

Wynne, Floyd L. 1957. June 30. "New Klamath River Canyon Power Development Project Viewed." Herald and News. June 30.

JC Boyle Powerhouse

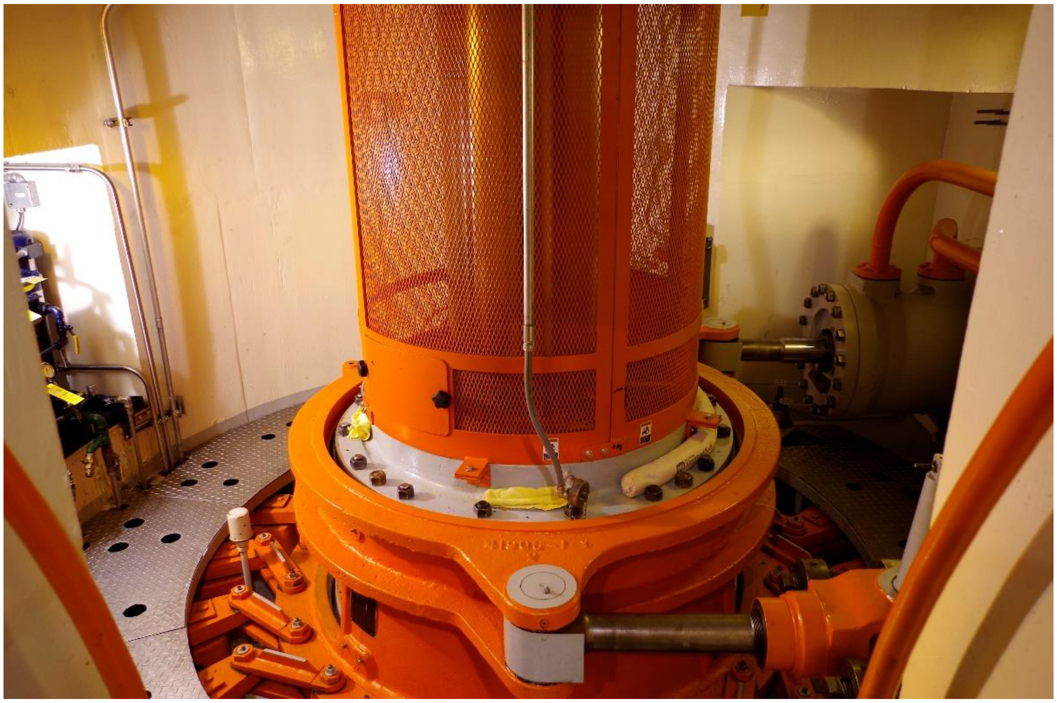
Photograph 1. Powerhouse; facing northwest, 2018.



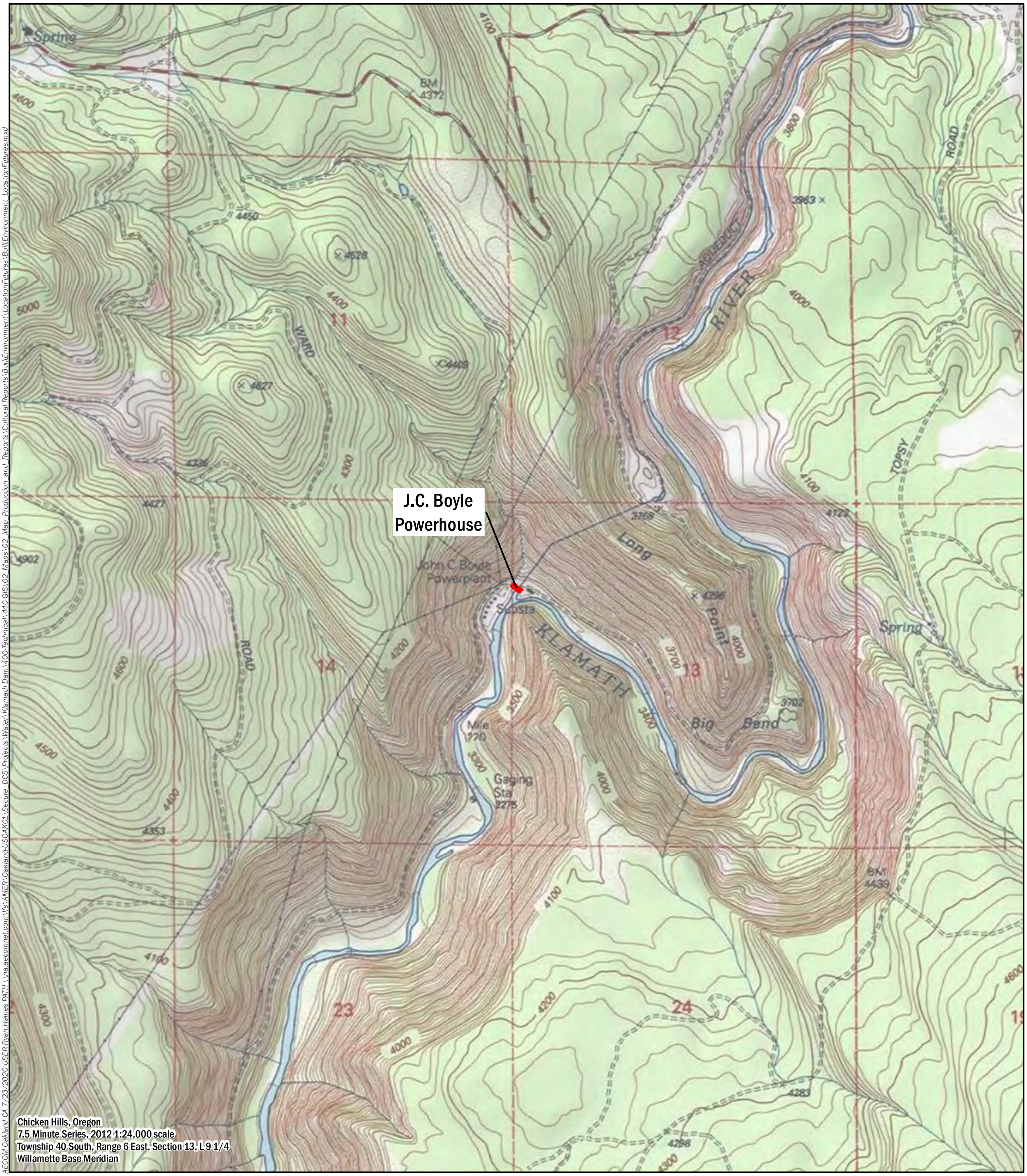
Photograph 2. Powerhouse; facing northeast, 2017.

Photograph 3. Powerhouse; facing east, 2018.

Photograph 4. Powerhouse; facing northwest, 2018.

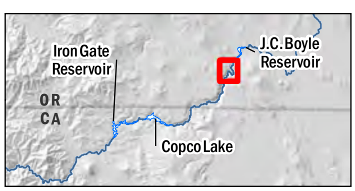


Photograph 5. Powerhouse turbine; 2018.



J.C. Boyle Powerhouse

0 2,000 Feet
0 600 Meters
1:24,000



J.C. Boyle Powerhouse

Klamath River Dam Removal
J.C. Boyle Powerhouse Road
Keno, Klamath County, Oregon

AECOM
July 2020

AECOM Oakland CA 7/29/2020 USER Ryan.Haines PATH \\na.aecomnet.com\lfs\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

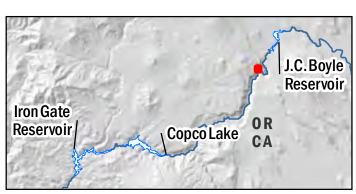
J.C. Boyle Powerhouse

N

0 100 Feet

0 20 Meters

1:800



J.C. Boyle Powerhouse

Klamath River Dam Removal
J.C. Boyle Powerhouse Road
Keno, Klamath County, Oregon

AECOM

July 2020

Oregon Historic Site Form

LOCATION AND PROPERTY NAME

address: ☐ apprx. addrs

Keno ☑ vcnt **Klamath County**

historic name: **J.C. Boyle Armco warehouse**

current/ other names: **[The J.C. Boyle hydroelectric development was known as Big Bend during the planning and construction phase. On September 1, 1958, soon after completion, the development was dedicated as Big Bend. It was rededicated on February 3, 1962 in honor of Copco and Pacific Power engineer John Christie Boyle.]**

Optional Information

assoc addresses: (former addresses, intersections, etc.)

location descr: (remote sites) USGS 7.5' Quad Chicken Hills, OR-CA Date 2012 T 40S; R 6E; L9 of Sec 13; Willamette B.M.
UTM: Zone 10, 576911mE/4660607mN
Lat/Long: 42.09376272872435, -122.06993730805145

block nbr: lot nbr: tax lot nbr:

township: 40S range: 6E section: 13 1/4: L9

zip:

PROPERTY CHARACTERISTICS

resource type: **Building** height (# stories): **1**

elig. evaluation: **eligible/contributing**

primary constr date: **1957** (c.) ☐ secondary date: (c.) ☐ (optional--use for major addns)

total # eligible resources: total # ineligible resources:

NR status:

NR date listed: (indiv listed only; see Grouping for hist dist)

primary orig use: **Warehouse**

secondary orig use:

orig use comments:

primary style: **Utilitarian**

secondary style:

prim style comments:

sec style comments:

primary siding: **Steel**

secondary siding:

siding comments: **Siding is steel panels.**

plan type: **Warehouse**

architect: **American Rolling Mill Company (ARMCO)**

builder: **ARMCO and Morrison-Knudsen Company**

comments/notes:

GROUPINGS / ASSOCIATIONS

survey project name or other grouping name: Klamath River Hydroelectric Project - JC Boyle Hydroelectric Development, 2018 | Survey & Inventory Project

farmstead/cluster name:

external site #: (ID# used in city/agency database)

SHPO INFO FOR THIS PROPERTY

NR date listed:

ILS survey date: **6/11/2018**

RLS survey date: **6/11/2018**

Gen File date:

106 Project(s)

SHPO Case #	Date	Agency Effect Eval
17-1370	6/11/2018	adverse effect

Oregon Historic Site Form

Armco warehouse, facing NW

ARCHITECTURAL / PROPERTY DESCRIPTION

(Include expanded description of the building/property, setting, significant landscape features, outbuildings, and alterations)

The Armco warehouse, assembled on site in December 1957, is located about 100 feet east of the J.C. Boyle powerhouse and 35 feet north of the Klamath River (Durio 2003:45). The pre-fabricated, utilitarian-style building with steel post-and-beam construction still functions as a warehouse. Its rectangular footprint measures approximately 120 feet by 40 feet. Oriented northwest-southeast, the warehouse has a low-pitched front-gable roof, corrugated metal roofing, two roof vents, and steel panel siding. The northwestern and southeastern elevations each contain a large vehicle entrance with an original metal rollup door centered along the elevation. The northwestern elevation also contains a metal entry door. The northeastern and southwestern elevations lack fenestration or architectural detail. The warehouse has no apparent alterations and appears to be in good condition.

HISTORY

(Chronological, descriptive history of the property from its construction through at least the historic period [preferably to the present])

SIGNIFICANCE

HISTORIC CONTEXT (For detailed history, see the J.C. Boyle Hydroelectric Development Historic Sites Inventory Form)

The Armco warehouse was completed in 1957, the year before the J.C. Boyle powerhouse dedication (Kramer 2003). The Armco Building Systems of Cincinnati, Ohio, the warehouse's fabricator, was known for its two-dimensional steel systems with walls and floors made of interlocking channels and "Z"s. ARMCO is an acronym for the American Rolling Mill Company incorporated in Ohio in 1917. The company became Armco Steel Corporation in 1948. A successor company later merged into what is now AK Steel Corporation (Armco Steel Corporation 1966). Armco, like other prefabricated building systems, was engineered to reduce on-site labor, time, and building costs (Haeger 1972:142). The Armco warehouse at the J.C. Boyle Powerhouse site has no evident alterations to its original construction. It presently provides space for storage.

The Armco warehouse is an auxiliary operations building within the J.C. Boyle hydroelectric development. Built in 1957, the warehouse represents support facilities at J.C. Boyle, and was in use during construction of the powerhouse as a facility for equipment and vehicle storage. A photograph published in the Herald and News on October 2, 1958 shows the Armco warehouse with another warehouse (now demolished) adjacent to its northern side (Wynne 1958). The photograph also shows other smaller construction-related structures near the powerhouse that have been demolished or removed.

EVALUATION (Contributes to J.C. Boyle Historic District)

NRHP Criterion A

The J.C. Boyle 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 Armco warehouse adds to the significance of the J.C. Boyle Historic District by its role as a support facility near the powerhouse that provided storage for construction and, later, operations.

NRHP Criterion B

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

NRHP Criterion C

The prefabricated warehouse 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 are therefore not significant under NRHP Criterion C.

NRHP Criterion D/CRHR Criterion 4

The warehouse 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 warehouse retains integrity of location, design, setting, materials, workmanship, feeling, and association; and continues to convey its historic identity as a storage facility at the hydroelectric development.

Location is the place where the historic property was constructed or the place where the historic event took place. The warehouse retains integrity of location, because it remains at its original location.

Design is the composition of elements that constitute the form, plan, space, structure, and style of a property. The warehouse retains integrity of design as a prefabricated building, with no evident exterior alterations, that was erected to support construction and operations at the J.C. Boyle powerhouse area.

Setting is the physical environment of a historic property that illustrates the character of the place. The warehouse retains integrity of setting in the remote, undeveloped area of the Klamath River basin. The setting is characterized by the Klamath River and the largely undeveloped landscape. The warehouse's immediate setting contains the riverbank, the steel penstocks descending the steep hill into the powerhouse, and substation. The immediate setting has undergone virtually no change since the Big Bend (now J.C. Boyle) powerhouse site was completed in 1958, except for demolition of nearby powerhouse operator residences (3 buildings next to the substation) in 1995.

Materials are the physical elements combined in a particular pattern or configuration to form the historic property. The warehouse retains integrity of materials, particularly its steel construction.

Workmanship is the physical evidence of the crafts of a particular culture or people during any given period of history. The warehouse has no evident exterior alterations and retains integrity of workmanship.

Feeling is the quality that a historic property has in evoking the aesthetic or historic sense of a past period of time. The warehouse's remote setting, proximity to the river and powerhouse, and intact construction materials convey its historic character as a support facility for a midcentury hydroelectric development, which contributes to 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 warehouse at this location directly link the building with midcentury power development in the Southern Oregon-Northern California region, contributing to integrity of association.

The warehouse retains integrity and is, therefore, eligible as a contributing resource to the J.C. Boyle Historic District.

RESEARCH INFORMATION

(Check all of the basic sources consulted and cite specific important sources)

☐ Title Records	☐ Census Records	☐ Property Tax Records	☑ Local Histories
☐ Sanborn Maps	☐ Biographical Sources	☐ SHPO Files	☐ Interviews
☐ Obituaries	☑ Newspapers	☐ State Archives	☑ Historic Photographs
☐ City Directories	☐ Building Permits	☐ State Library	

Local Library: Klamath Falls Library

University Library: Oregon Institute of Technology

Historical Society: Klamath County Museum

Other Repository: Southern Oregon Historical Society

Bibliography: Armco Steel Corporation (Armco Steel Corporation v. International Armament Corporation). 1966. 249 F. Supp 954. January 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.

Haeger, Leonard G. 1972. "An Historic Survey of American Building Construction Systems." International Symposia on Low Cost Housing Problems, 85.https://scholarsmine.mst.edu/cgi/viewcontent.cgi?article=1084&context=islchp (accessed October 10, 2018).

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

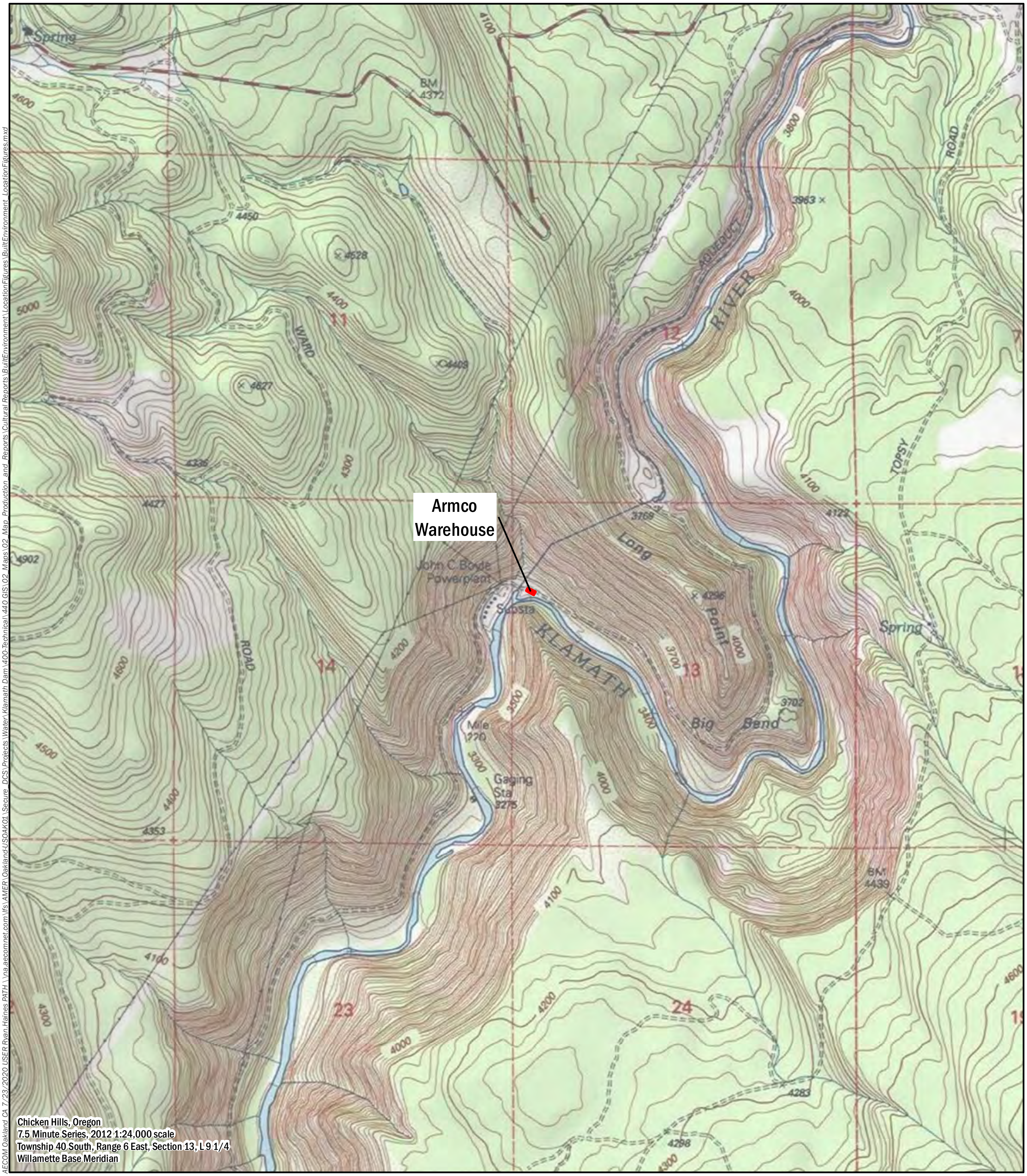
Wynne, Floyd L. 1958. "Power of Upper Klamath Harnessed By Copco." Herald and News [Klamath Falls, Oregon]. October 2.

JC Boyle Armco Warehouse

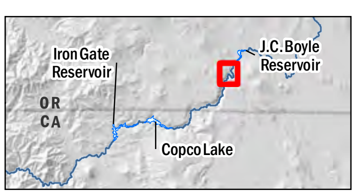
Photograph 1. Armco Warehouse; facing southwest, 2018.

Photograph 2. Armco Warehouse; facing southeast, 2018.

Photograph 3. Armco Warehouse; facing northwest with powerhouse in background, 2017.



Armco Warehouse



Armco Warehouse

Klamath River Dam Removal
J.C. Boyle Powerhouse Road
Keno, Klamath County, Oregon

AECOM
July 2020

0 2,000 Feet
0 600 Meters
1:24,000

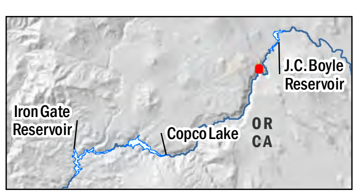
Armco Warehouse

N

0 100 Feet

0 20 Meters

1:600



Armco Warehouse

Klamath River Dam Removal
J.C. Boyle Powerhouse Road
Keno, Klamath County, Oregon

AECOM

July 2020

www.klamathrenewal.org