

CUSHMAN NO. 1 HYDROELECTRIC POWER PLANT
Spanning the North Fork of Skokomish River
Hoodsport vicinity
Mason County
Washington

HAER WA-26
HAER WA-26

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

FIELD RECORDS

HISTORIC AMERICAN ENGINEERING RECORD
PACIFIC WEST REGIONAL OFFICE
National Park Service
U.S. Department of the Interior
333 Bush Street
San Francisco, CA 94104

HISTORIC AMERICAN ENGINEERING RECORD

CUSHMAN NO. 1 HYDROELECTRIC POWER PLANT

Location: Spanning the North Fork of the Skokomish River, Mason County, Washington
USGS Topographic Quad: Hoodspout
Township 22 North, Range 4 West, Section 5

GPS Coordinates: Latitude: 47° 25'397 N, Longitude: 123° 13'265 W
This coordinate represents the eastern bank of Lake Cushman at the Cushman No. 1 dam parapet road. Obtained October 16, 2012, using Google Earth (© 2012). The coordinate's datum is North American Datum 1983.

Present Owner: City of Tacoma, Department of Public Utilities, Light Division (doing business as Tacoma Power)

Present Use: Hydroelectric Power Production

Significance: Cushman No. 1 Hydroelectric Power Plant represents a significant achievement in power production for the City of Tacoma. It was constructed in response to unprecedented increases in power demands in the city and led to further industrial and commercial expansion. Cushman No. 1 is a notable example of medium-head hydroelectric technology from the mid-1920s. Moreover, its construction was an engineering feat, located in steep, nearly inaccessible terrain prone to flooding.

Date: Constructed 1923–1925

Builder: Tacoma City Light

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Submittal Date: July 17, 2014

I. PROJECT DESCRIPTION

The City of Tacoma, Department of Public Utilities, Light Division (doing business as Tacoma Power) owns and operates the Cushman Hydroelectric Project (the Project). The Project is operated under a 50-year Federal Energy Regulatory Commission (FERC) license (FERC Project No. 460), which was granted on July 15, 2010, following over 20 years of negotiations with federal, state, local, and tribal entities. The Cushman Hydroelectric Project comprises two historic districts listed in the National Register of Historic Places (NRHP) in 1988, specifically the Cushman No. 1 Hydroelectric Plant Historic District and the Cushman No. 2 Hydroelectric Plant Historic District. At the time of this writing, the two districts are being combined into one historic district known as the Cushman Hydroelectric Project Historic District; the district, as revised, encompasses the Cushman Nos. 1 and 2 Developments and a segment of the Potlatch (Cushman) Transmission Line.

The Cushman Hydroelectric Project plays an integral role in the City of Tacoma's infrastructure and economic development. The Cushman No. 1 Hydroelectric Power Plant or, more accurately, the Cushman No. 1 Development, includes buildings and structures from the initial building campaign of the Project, 1923–1925. The Cushman No. 1 Development impounds Lake Cushman, and includes the Cushman No. 1 dam and valve house (HAER No. WA-26-B), the Cushman No. 1 powerhouse (HAER No. WA-26-C), the inclined tram and tram house (HAER No. WA-26-D), the water conveyance system (HAER No. WA-26-E), and the Potlatch (Cushman) transmission line (HAER No. WA-26-F). The original spillway (HAER No. WA-26-A) was removed and replaced with a modern spillway in 1991. One additional resource is historically related to the Cushman No. 1 Development: the Cushman Substation (HAER No. WA-26-G), located in Tacoma, Washington. Additionally, resources of the Cushman No. 2 Development (HAER No. WA-192), completed in 1930, are integrally tied to the Cushman No. 1 Development via shared resources such as the Potlatch transmission line and, historically, the Cushman Substation.

As part of FERC relicensing, Article 414 requires a floating surface collector (FSC) and net transition structure (NTS) be installed at the Cushman No. 1 Development, to facilitate downstream fish passage. Construction of the FSC and NTS is considered an undertaking under Section 106 of the National Historic Preservation Act of 1966 (as amended), and constituted an unavoidable adverse effect on a historic property. To minimize the adverse effect, Tacoma Power consulted with an architectural historian during project design phases; combined the Cushman Nos. 1 and 2 Hydroelectric Power Plant historic districts into one Cushman Hydroelectric Project historic district via a NRHP nomination update; and completed this Historic American Engineering Record (HAER) documentation to addend the 1989 recordation of the Cushman No. 1 spillway.

Aside from minor alterations to the Cushman No. 1 dam deck and parapet to accommodate minimal attachment of the FSC, limited character-defining features and/or historic fabric will be altered or removed for construction of the FSC. As indicated, modifications to original materials, design, and workmanship were reviewed and revised with the aid of an architectural historian, to ensure compliance with the Secretary of the Interior's *Standards for Rehabilitation*.

II. HISTORIC CONTEXT

In 1792, Captain George Vancouver entered the Strait of Juan de Fuca to chart new territory in the name of the British Empire. He dispatched a ship, commanded by Lieutenant Peter Puget, to head south into the sound that would bear Puget's name. Vancouver led his expedition down the narrow channel that he named Hood Canal in honor of a colleague. In his journal, he noted "several runs of fresh water" and compared the "luxuriant appearance" of the landscape to English estate grounds. On May 12, at the mouth of the Skokomish River, Vancouver visited "new friends" who had approached his ship in canoes to barter small fish and clams in exchange for beads, iron, and copper. He wrote, "These good people conducted themselves in the most friendly manner."¹

In 1833, the British Hudson's Bay Company established the region's first non-Native settlement at Fort Nisqually, north of what later became Olympia. Native people from hundreds of miles around came to the fort to trade furs for iron pots, tools, and other goods that were new to them. Later in the 1830s, fur traders reportedly built a blockhouse on a bluff near the mouth of the Skokomish River. In 1841, an American exploring expedition, commanded by Lieutenant Charles Wilkes, mapped southern Puget Sound and Hood Canal, naming many bays and inlets, including Anna's Bay at the mouth of the Skokomish River.²

In 1846, Great Britain relinquished its claim to the Puget Sound region and negotiated a treaty with the United States that established the current Canadian/American border. Oregon Territory extended down the Pacific Coast to California until 1853, when President Franklin Pierce signed the act that created Washington Territory north of the Columbia River. The next year, the territorial legislature established Mason County, where a few settlers had already staked their claims. In the Skokomish area, there were Euroamerican trappers and loggers, including Benjamin Franklin Shaw, who named Lake Cushman in honor of his companion, Orrington Cushman.³

By this time, the area's indigenous people had been ravaged by diseases introduced by Euroamericans. But the most significant upheaval resulted from treaties with the U.S. government. Having promised land to homesteaders, the federal government initiated programs to obtain legal title from Indian peoples for their ancestral homelands and to establish reservations where they would live. In Washington, the task was assigned to Isaac I. Stevens, who came west as the territory's first governor and superintendent of Indian affairs.⁴

Stevens scheduled treaty councils with Tribal groups throughout the territory. In 1855, he met with chiefs, headmen, and other designated delegates from the Skokomish (which included

¹ William T. Anderson and Shirley Payne Low, *Interpretation of Historic Sites*. Second Ed. Walnut Creek, CA: Altamira Press, 1996.

² Harry W. Deegan, *History of Mason County, Washington* (1943; rptd., Shelton, WA: n.p., 1960), 37.

³ Loretta Neumann, William Beckner, Janet Friedman, Steve DelSordo, and John J. Culliname, *Cultural Resource Management Plan: Cushman Hydroelectric Project*, submitted to Tacoma Public Utilities, Tacoma, WA, 1996, A3-7, on file at Tacoma Public Utilities, Tacoma, WA.

⁴ Robert E. Ficken and Charles P. LeWarne, *Washington: A Centennial History* (Seattle: University of Washington Press, 1989), 26.

all of the Twana-speaking communities), S'klallam, and Chemakum Tribes to sign the Point No Point Treaty that established the Skokomish Indian Reservation, a six-section tract at the head of Hood Canal. The treaty required Skokomish/Twana people to move to the reservation, along with members of the S'klallam and Chemakum Tribes, who in turn were required to abandon their ancestral homelands. On behalf of the U.S. government, Stevens agreed to pay the Tribes \$60,000 for their lands, with the stipulation that the president of the United States had the authority to decide how the money was to be used (ultimately, the financial agreement was ignored). Governor Stevens assured the Tribes that they would retain access to areas where they had traditionally hunted, fished, and gathered food. The terms of the treaty were translated into Chinook jargon (a language comprising some 350 Indian, French, and English words that had evolved to facilitate trading) and then into Salish dialects. The treaty bears the signatures of Stevens and several Euroamerican witnesses, along with marks affixed by 56 Indian chiefs and delegates.⁵ The Indians were never granted access to their hunting and fishing grounds as promised. Instead, settlers and logging companies claimed the land.⁶

The region's lush forests were a magnet for lumber barons from the tree-shorn Midwest and for Euroamerican loggers. By the 1870s, approximately 50 logging camps operated in the south Hood Canal area.⁷ As loggers cleared the land, homesteaders moved in to establish farms. By the late nineteenth century, there were three Euroamerican communities along the 10-mile stretch of the Skokomish River, between its mouth and the confluence of its north and south forks near Vance Creek. Fernwood was located near the mouth of the Skokomish River, on what became the Nalley Farm. Mohrweis was located east of Vance Creek near the confluence of the north and south forks of the river. The third community, Middle Skokomish, was midway between the other two. Fernwood boasted a school district as early as 1894, while Mohrweis included a post office and school district by 1908. The Middle Skokomish School District was formed in 1904.⁸

In the early 1890s, William T. Putnam opened Cushman House, a resort for families, anglers, and hunters. The resort was located on the family farm where the Putnams produced vegetables, fruits, meat, milk, and eggs to serve to their guests. (The Putnam farm was one of the only substantial clearings in the forest that rimmed the lake.) In 1899, two wealthy bachelors, Russell Homan and Stanley Hopper, opened the exclusive Antlers Hotel, which became a destination for elite New Yorkers. One of the attractions was the thrill of fly-fishing for trout that measured up to 30 inches.⁹

In 1893, the City of Tacoma bought Charles Wright's Tacoma Light and Water Company, thereby becoming one of the first cities in the Pacific Northwest to own and operate a municipal electrical system.¹⁰ Known for political Progressivism, the Pacific Northwest was at the

⁵ Isaac I. Stevens, Undersigned Chiefs, Headmen, and Delegates of Skokomish, Chemakum, and S'klallam tribes and Witnesses, *Treaty of Point No Point* (Point No Point, WA: n.p., 1855).

⁶ Ficken and LeWarne, *Washington*, 27.

⁷ Michael Fredson, *Short History of Mason County* (Shelton, WA: Mason County Historical Society, 1994).

⁸ Neumann et al., *Cultural Resource Management Plan*, A3-7.

⁹ Larry Overland, *Early Settlement of Lake Cushman* (1974; rptd., Belfair and Shelton, WA: Mason County Historical Society, 2008), 10–12, 18–19, 25.

¹⁰ Dick Malloy and John S. Ott, *The Tacoma Public Utilities Story: The First 100 Years, 1893–1893* (Tacoma, WA: Department of Public Utilities, 1993), 84.

vanguard of the reform movement to control the cost and quality of utilities by placing them under public ownership. In the mid-nineteenth century, most American cities awarded franchises to private utility companies. Reformers in the Progressive Party targeted the system's potential for graft, favoritism, and corruption. They maintained that a publicly owned utility would not only eliminate unsavory collusion among private businessmen and public officials but would also promote more efficient management.¹¹ Unlike many of their counterparts in the American East and Midwest, Tacoma and Seattle were able to move quickly toward more democratic utility systems.

Tacoma City Light was formed to provide municipal lighting and power. By the turn of the twentieth century, growing consumer demand had overtaxed the direct current system, and the city had to purchase additional power from private companies in the region. In 1909, Tacoma voters authorized construction of a hydroelectric generating facility on the Nisqually River. Attempts to develop a power plant on the North Fork of the Skokomish River at Lake Cushman began in 1912, when Seattle citizens approved a related bond issue. The City of Seattle issued condemnation notices to property owners, but abandoned the project in 1914.¹²

By 1917, Tacoma was experiencing a population explosion and needed a new source of electric power to meet increasing demands of labor-saving devices in the home and of power-dependent industries. Public Utilities Commissioner Ira S. Davisson and Tacoma City Light selected the Lake Cushman site for a new hydroelectric complex. The city applied for a power franchise lease in 1919 and began condemnation proceedings the same year for the needed land. Acquisition of the property consumed two years of often-acrimonious negotiations, including objections by Ed Sims, chair of the Washington State Fisheries board. By 1920, however, the Phoenix Logging Company had been awarded a six-year contract to clear the heavily timbered land that would be inundated.¹³

In 1922, Davisson hired Jay L. Stannard from San Francisco to serve as chief engineer for the Cushman project. While some of the interviewees for the position wanted as much as \$35,000 a year, Stannard offered his services at the bargain rate of \$7,500. He explained, "It's just what I wanted to do. I made a thorough investigation of the Cushman project in 1917 with the idea of doing it for Seattle and have always wanted to develop the project."¹⁴ In 1923, a village rose at the site, with buildings that included warehouses, garages, machine shops, and residences for about 500 workers.¹⁵ Now referred to as "Camp A," the village surrounded Lake Standstill; no evidence of original Camp A buildings and structures remain today.

Construction of the first Cushman dam and power plant was a significant engineering feat because the structures were located in steep, inaccessible terrain prone to flooding. The dam rises 275 feet in height and its crest extends 1,111 feet across the river valley. On October 20, 1925, the dam gates were closed, and Lake Cushman began rising to fill the valley. As water

¹¹ Robert Wiebe, *The Search for Order, 1877-1920* (New York: Hill & Wang, 1967), 166-172.

¹² Neumann et al., *Cultural Resource Management Plan*, A3-9.

¹³ Neumann et al., *Cultural Resource Management Plan*, A3-9; Overland, *Early Settlement*, 38.

¹⁴ Malloy and Ott, *Tacoma Public Utilities Story*, 84.

¹⁵ Malloy and Ott, *Tacoma Public Utilities Story*, 84.

approached the Antlers Hotel and Cushman House, workers doused the buildings with kerosene then burned them to the ground in an effort to minimize floating debris on the water's surface. By May 1926, there was sufficient water in the reservoir to begin producing power.¹⁶ The 44-mile transmission line, extending from the power plant to Tacoma, was the longest aerial electrical span in the world. At the end of the line, pairs of 315-foot steel towers supported cables that carried Cushman power across the windy mile-wide Tacoma Narrows to the city.¹⁷

From its inception in 1893, Tacoma's public utility had sold power for commercial purposes in order to reduce the cost of residential power and light. The move to promote industrial expansion within the city directly influenced municipal power development. Following the opening of Cushman No. 1 in 1926, several large industrial enterprises located plants in Tacoma. A consequent population boom and the availability of inexpensive electricity encouraged consumers to purchase electric stoves, refrigerators, washing machines, and smaller appliances. By 1927, the City Light Department was promoting a second dam on the Skokomish River with the dire prediction that without increased electrical output, Tacoma would "face a power shortage within three years."¹⁸

In 1929, Tacoma City Light began construction of the second power plant on the Skokomish River, 2 miles downstream from the first. The next year, a journalist reported that "work on Cushman No. 2 project is being carried on seven days a week and 24 hours a day, as the power is urgently needed to supply the market at Tacoma."¹⁹ "Camp B," a workers' village, rose north of the site of Powerhouse No. 2; as with Camp A, most of Camp B has since been subsumed by new development, although a few remnant buildings stand near the No. 2 powerhouse and at least two buildings are known to have been relocated nearby (but are no longer in the City's possession).

Project engineers controlled the flow at Cushman No. 1 to avoid hazards of spring flooding. To divert the river's flow during construction, work crews built a 900-foot-long, 2,200-cubic-foot-per-second (cfs)-capacity wooden flume mounted on tall posts. In addition, they constructed a 23-foot-high, rock-filled timber-crib cofferdam that redirected the river 300 feet above the dam site. Using drills and hoists to remove large boulders and gravel, workers excavated the dam foundation 75 feet below the riverbed. The new 240-foot, constant-radius, high-arch dam rose to create Lake Kokanee, and today, the dam and its appurtenant structures are known as the Cushman No. 2 Development.

¹⁶ Malloy and Ott, *Tacoma Public Utilities Story*, 84; Overland, *Early Settlement*, 40.

¹⁷ Malloy and Ott, *Tacoma Public Utilities Story*, 81–88.

¹⁸ City of Tacoma, Department of Public Utilities, Light Division, 1926–27 Information Book (n.p.: n.p., 1927), 18, Tacoma Public Utilities History Collection, Accession PS-20091012-02, Box 7116, Tacoma Public Utilities Archival Collection, Washington State Archives, Puget Sound Regional Branch (hereafter WSA-PSRB).

It should be noted that a dual development, with both Cushman Nos. 1 and 2 dams being constructed, seems to have been the plan as early as 1919, at the time of initial permitting of Cushman No. 1. The 1927 promotional efforts likely stem from the need to approve funding for Cushman No. 2. For more information see various reports, Cushman Project/Historic Information 1888–1929, Water Rights Files, provided by Steve Fischer, Tacoma Public Utilities.

¹⁹ "Cushman Power Plant No. 2 for Tacoma," *Western Construction News* (November 10, 1930): 538.

In the early 1930s, Tacoma and Seattle were the only municipalities in Washington State with the capability of developing hydroelectric facilities in remote areas. On August 22, 1939, John D. Ross, chief administrator of Bonneville Power (and former head of Seattle City Light), addressed Congress on the status of Bonneville Dam (1934) and the newly proposed Grand Coulee Dam for which he sought federal funding. He said, “the enterprises the Pacific Northwest needs most for industrial development are those requiring large quantities of cheap electrical energy of which the region will soon have abundance.” In a feature article, the *Seattle Post-Intelligencer* listed 13 key regional units that provided power and light. Among them was “Tacoma City Light (public monopoly—at present America’s lowest power rates).”²⁰

In the mid-twentieth century, the City of Tacoma leased Cushman property that it owned for recreational and residential development. By the late 1960s, residential areas were established along the eastern shores of Lake Cushman and Lake Kokanee.²¹ Water sports, fishing, and hiking continue to lure visitors to lakeshore resorts. The area attracts tourists and hikers who drive from Hoodspport up the highway toward Lake Cushman and the Olympic National Park (authorized by Congress in 1938).

III. PHYSICAL DESCRIPTION

The Cushman No. 1 Development, constructed in 1923–1925, is synonymous with the Cushman No. 1 dam that impounds Lake Cushman. Lake Cushman is a 9.6-mile-long storage impoundment with a 4,058-acre surface area, and a 453,350 acre-foot storage capacity at full pool. The level of the lake is moderated via the Cushman No. 1 Development, which includes the dam, spillway, power intake and tunnel, the Cushman No. 1 powerhouse, and various other buildings and structures.

Topography determined the original positioning of Cushman No. 1 dam and its associated structures and buildings. The dam was built in a relatively inaccessible gorge that separated Lake Standstill and Deer Meadow. The buildings and structures originally constructed on the site generally retain their character-defining features. Their close proximity creates a feeling of singleness of purpose. Their existence in this remote location is evidence that the struggle for technological dominance over nature was alive in the mid-1920s.

Cushman No. 1 dam (HAER No. WA-26-B) is a constant-angle arch dam that spans a narrow rock gorge. The dam rises 275 feet above bedrock. It is 1,111 feet long, including gravity wing abutments, and has a thickness that telescopes from 52 feet at the base to 8 feet at the top. Containing 90,000 cubic yards of concrete, the dam impounds 453,350 acre-feet of water. At the base of the dam on the downstream side is the valve house, which contains a 62-inch Pelton-Johnson needle valve and a Pelton 90-inch butterfly valve to regulate water flow into the river outlet.

²⁰ John D. Ross, “Plentiful Electricity Seen As Stimulant. Accompanied by Quotes from the Author’s Address to Congress and by a List of ‘Key Units and Their Present Power and Light Services,’” *Seattle Post-Intelligencer*, August 22, 1939, Costello Scrapbooks, vol. 8, “Dams and Power,” Seattle Public Library, Seattle, WA.

²¹ Natalie K. Perrin and Heather Lee Miller, *Cushman No. 2 Hydroelectric Development, Hoodspport, Mason County, Washington: North Fork Powerhouse and Fish Passage Section 106 Evaluation* (prepared for Tacoma Public Utilities, Tacoma, WA, 2010).

The Cushman No. 1 powerhouse (HAER No. WA-26-C) is located approximately 600 feet downstream from the dam. The three-story, reinforced-concrete building is rectangular in plan, and features neoclassical details such as engaged pilasters with corbelled capitals between the multi-light, metal-sash windows, and a full entablature. With the exception of a few feet of the southernmost segment of the dam's parapet wall, the dam face is not visible from the powerhouse.

The inclined tram (HAER No. WA-26-D) runs on a 450-foot-long tramway at a 38-degree incline from the top of the canyon to the Cushman No. 1 powerhouse. The electrical and operating equipment for the tram is located at the top of the incline in a rectangular concrete building known as the tram house. The inclined tram (and tram house) was one of the first structures completed for the Cushman No. 1 Development. Completion of the tram enabled construction of the Cushman No. 1 powerhouse to proceed.

The water conveyance system for the Cushman No. 1 Development (HAER No. WA-26-E) includes the diversion intake, intake gate house and platform, the power tunnel (also known as the diversion tunnel), and two penstocks. A control house (originally constructed in 1924 but altered in 1988) and switchyard are located at the top of the canyon. The switchyard features two 115-kilovolt (kV) primary transmission lines, a segment of the Potlatch (Cushman) transmission line (HAER No. WA-26-F), which extend approximately 5 miles to the Cushman No. 2 Development before continuing on to Tacoma.

Other buildings and structures at the Cushman No. 1 Development include a warehouse/garage building (constructed ca. 1925 with a 1939 addition), and a modern spillway and control house. The original spillway (HAER No. WA-26-A), constructed in 1928, was removed in 1991 and replaced with the current structure. The current spillway occupies roughly the same footprint as the original.

IV. CONSTRUCTION AND MAINTENANCE

The City of Tacoma applied for a permit to “appropriate public waters of the state of Washington” on December 11, 1919. The permit stipulated that actual construction work was required to begin on or before May 23, 1923, for the purposes of “generation of electric current for domestic light, heat and for street lighting in City of Tacoma.”²² The construction was completed on October 19, 1925, and certificate of water right for 1,000 cfs of continuous water was awarded on January 20, 1933.

In 1957, a buttress dam was constructed downstream of the Cushman No. 1 dam in the canyon between the dam and powerhouse. The buttress dam, constructed of concrete, was built to maintain a plunge pool for the river valve outlet. Also around this time, a tunnel was bore into the rock face to enable additional seepage to be conveyed from the reservoir through the face of the rock walls.

²² Application No. 353, Permit No. 1956, Supplement to Permit 252, Filed by City of Tacoma, County of Pierce, December 11, 1919, Approved January 4, 1933, Recorded in Book 8 of Permits, Page 1956, Chas. J. Bartholet, State Supervisor of Hydraulics.

The Cushman No. 1 Development has seen only minor maintenance and system upgrades since its initial construction, with the following exceptions. First, the control house was heavily altered in 1988. The transmission control house (a.k.a. service house) is located in the switchyard, which is west across the paved parking area from the tram house. The control house was constructed of reinforced concrete and is rectangular in plan. The original building was wrapped on three elevations by additions, and due to the extensive modifications no longer retains sufficient integrity to convey its historical significance.

Second, the spillway was altered in 1991, as detailed in HAER No. WA-26-A. The existing spillway and control house are modern resources.

Finally, with the exception of the current FSC-NTS project, the dam and other facilities have been only minimally altered. Recent alterations to the dam included adding a series of metal platforms on the downstream face, installed in 2004, to enable facilitation of a FERC-ordered seismic study and a subsequent order to monitor seepage and the ongoing interface of the dam with the rock walls. Additionally, access stairs on the downstream dam face were added in 2012. As part of the project, which will tie into the metal platforms installed in 2004, the valve house was minimally altered and a bank of windows on the west elevation was changed to a door.

V. REFERENCES

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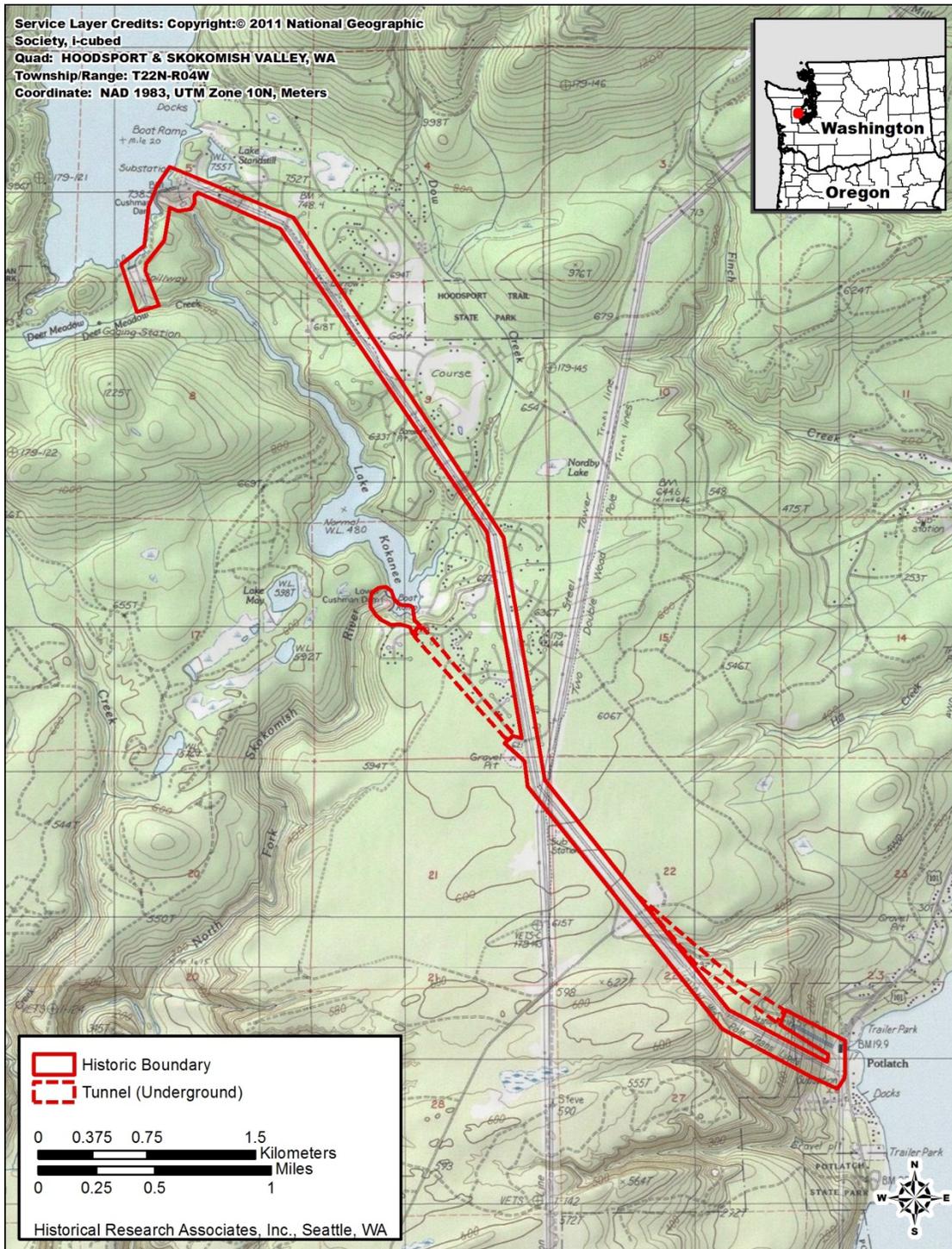
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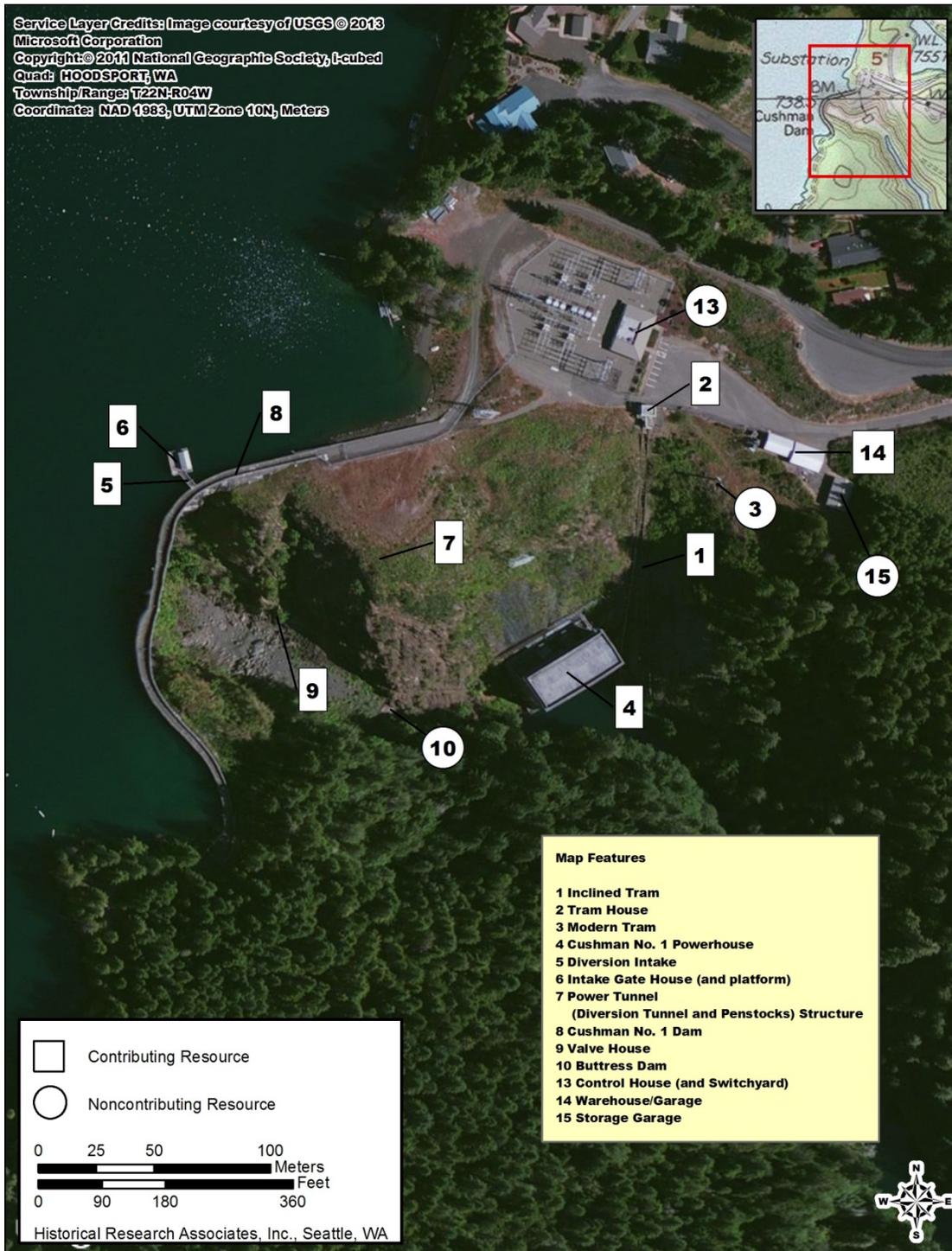
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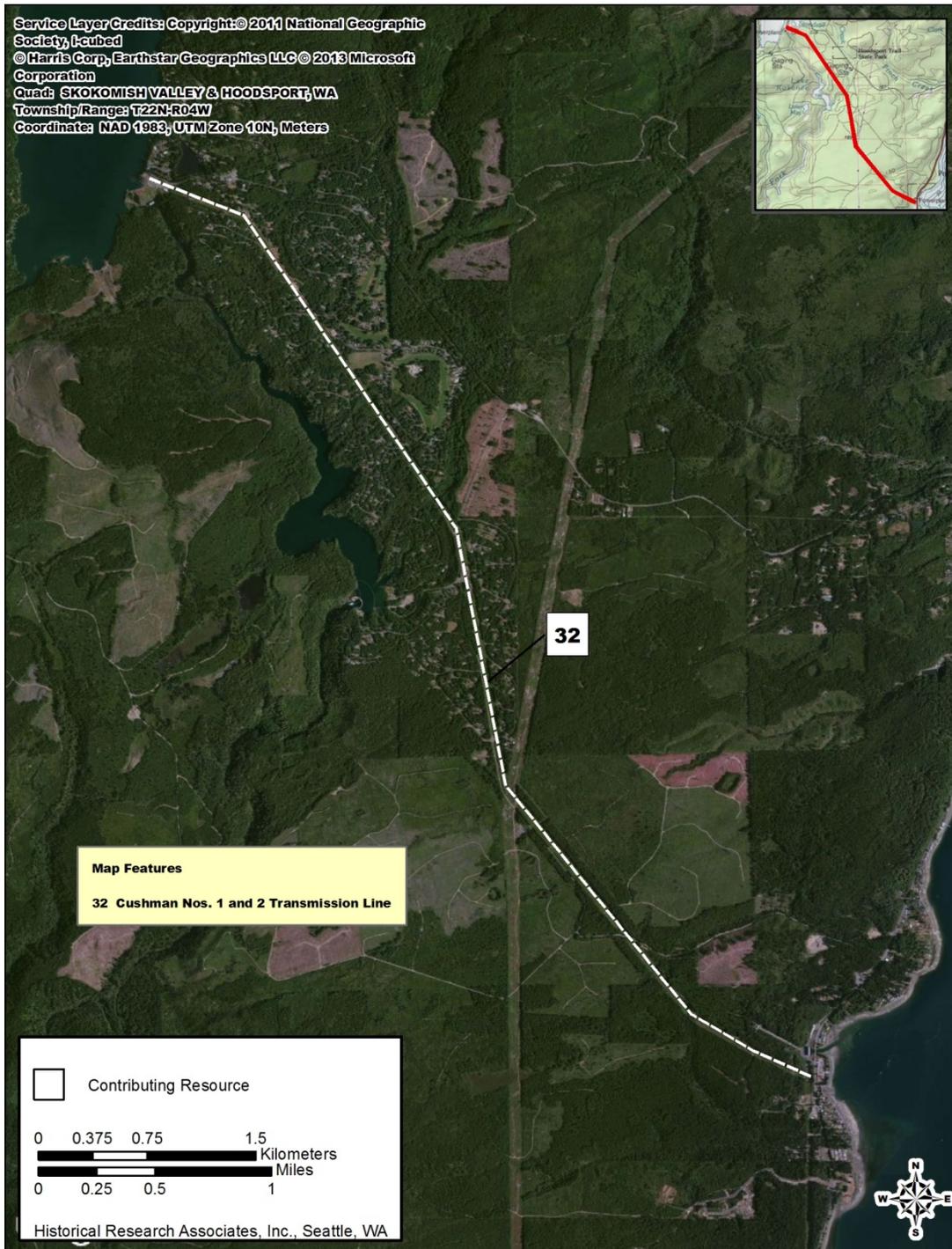
Map 1. Cushman Hydroelectric Project Boundary Map, including Cushman Nos. 1 and 2 Developments and a segment of the Potlatch (Cushman) transmission line.



Map 2. Cushman Hydroelectric Project Historic District, Resources (1 of 3). Contributing resources are those built during the original build campaign of the Cushman Project; noncontributing resources are later additions and/or buildings or structures that do not serve the hydroelectric mission of the Project.



Map 3. Cushman Hydroelectric Project Historic District, Resources (2 of 3).



Map 4. Cushman Hydroelectric Project Historic District, Resources (3 of 3).

CUSHMAN NO. 1 POWER PLANT, HAER NO. WA-26

TIMELINE OF EVENTS

- 1917 Tacoma City Light selects dam site on the North Fork of the Skokomish River at Lake Cushman, 44 miles north of the city.
- 1923 The utility erects a temporary village (Camp A) at the site with warehouses, machine shops, garages, and residences for approximately 500 workers.
- 1924 Federal Power Commission issues a 50-year license to the City of Tacoma for the Cushman Project (Project No. 460); construction begins on Cushman No. 1 power plant.
- 1925 The dam's gates are closed and Lake Cushman begins to rise.
- 1926 Power plant and transmission line to Tacoma are completed; two generator units carry the city's entire 32,000 kilowatt energy load.
- 1927 Tacoma experiences industry and population boom; city council approves construction of Cushman No. 2 power plant.
- 1928 Construction begins on Cushman No. 2 project.
- 1930 Cushman No. 2 begins generating power in December
- 1957 Buttress dam and tunnel constructed downstream of Cushman No. 1 dam
- 1988 Cushman No. 1 Hydroelectric Power Plant Historic District is listed in the NRHP under criteria A and C with 1923–38 identified as the period of significance.
- 1991 A new concrete spillway, located south of Cushman No. 1 dam, replaces the original spillway, which is obliterated.
- 2004 Metal stairs installed on downstream face of Cushman No. 1 dam to enable monitoring of seepage on rock face and as part of an ongoing seismic study.
- 2010 Cushman Hydroelectric Project (FERC Project No. 460) is granted a fifty-year license after over twenty years of negotiations with federal, state, local, and tribal entities. Article 414 stipulates construction and installation of a floating surface collector (FSC) and net transition structure (NTS) to facilitate downstream fish passage.
- 2012 FSC and NTS designed and installed at Cushman No. 1 dam; Cushman Nos. 1 and 2 Hydroelectric Power Plant historic districts revised/combined to create Cushman Hydroelectric Project Historic District.