

DRAFT—Archaeological Inventory for the
Quinault National Fish Hatchery Exclusion Barrier,
Grays Harbor County, Washington

Submitted to:
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HISTORICAL
RESEARCH
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This report was prepared by HRA Research Archaeologist Jordan Pickrell, PhD, RPA, who meets the Secretary of the Interior's professional qualifications standards for archaeology. Information concerning Tribal Trust Assets was prepared by James Grant, MA, who meets the Secretary of the Interior's professional qualifications standards for history and regularly works on projects concerning tribal trust issues. This report is intended for the exclusive use of the Client and its representatives. It contains professional conclusions and recommendations concerning the potential for project-related impacts to archaeological resources based on the results of HRA's investigation. It should not be considered to constitute project clearance with regard to the treatment of cultural resources or permission to proceed with the project described in lieu of review by the appropriate reviewing or permitting agency. This report should be submitted to the appropriate state and local review agencies for their comments prior to the commencement of the project.

Executive Summary

The U.S. Fish and Wildlife Service (USFWS) is overseeing the construction of a new fish exclusion barrier at Quinault National Fish Hatchery (Project) in Grays Harbor County, Washington. The Project will “maintain the functionality of the Quinault National Fish Hatchery” (QNFH) by replacing the existing weir with a velocity barrier (consisting of an Obermeyer Weir gate system), replacing the existing electric weir control building, , modifying riprap and an access road, and adding a fish bypass ladder. Additionally, the Project includes routine maintenance activities consisting of cleaning water intakes, and removing woody debris and gravel buildup around the weir, and use of a construction staging area (Raymond 2015:1). The Project is located in Township 22 North, Range 10 West, Section 31, Willamette Meridian, USGS Stevens Creek quadrangle.

The QNFH is owned and managed by the USFWS, which determined that the Project is a federal undertaking. Therefore, the Project must comply with the requirements of Section 106 of the National Historic Preservation Act. The USFWS notified the Quinault Indian Nation (QIN) of the Project and consulted with the Tribe while defining the Area of Potential Effects (APE). The APE consists of the footprint of all ground disturbing activities, areas of new inundation along Cook Creek, and a temporary staging area. In total, the APE covers 6.9 acres.

In October 2015, McMillen Jacobs Associates contracted with Historical Research Associates, Inc. (HRA), to conduct an archaeological inventory to determine the presence of cultural resources within the APE. A review of available historic and archaeological literature indicated a very high risk of cultural resources occurring within the APE. HRA archaeologists conducted an archaeological inventory, consisting of surface and subsurface survey, from November 4–6, 2015. No precontact or historic-period cultural resources were identified during the inventory.

Based on the results of the archaeological inventory, HRA recommends that no further archaeological studies are necessary for the Project. However, if the Project undergoes substantial design changes, additional archaeological work may be necessary.

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1. Introduction and Project Description

The U.S. Fish and Wildlife Service (USFWS) is overseeing the construction of a new fish exclusion barrier at Quinault National Fish Hatchery (Project) in Grays Harbor County, Washington. The Quinault National Fish Hatchery (QNFH) is owned and managed by the USFWS and is located within the boundaries of the the Quinault Reservation. In September 2015, McMillen Jacobs Associates contracted with Historical Research Associates, Inc. (HRA), to conduct an archaeological inventory for the Project, located in Township 22 North, Range 10 West, Section 31, Willamette Meridian, USGS Stevens Creek quadrangle (Figure 1-1).

1.1 Project Description

“The [P]roject will maintain the functionality of the Quinault National Fish Hatchery (QNFH) by replacing the existing weir, modifying riprap and an access road, and adding a fish bypass ladder. Additionally, the Project includes routine maintenance activities which include cleaning of water intakes and removal of large woody debris and gravel buildup near or on the weir” (Raymond 2015:1).

The Project “will replace the existing electric weir with a velocity barrier consisting of a concrete slab (apron) with two 40-foot-wide Obermeyer weir panels separated by a central concrete pier. A new fishway (fish ladder) will be constructed on the north abutment of the weir to allow fish passage” (Raymond 2015:1). The existing control building will be replaced with a new building for the new Obermeyer Weir’s control equipment (Raymond 2015:Attachment A).

An existing access road between Moclips Highway and the fish exclusion barrier will be widened by 2–4 ft and two access ramps will be added to provide maintenance access to the weir. Clearing and grubbing will occur along the Access Road and where the concrete curb will be added to the top of the berm on the right bank. A temporary staging area that was once a gravel pit will be used during the Project (Raymond 2015:1).

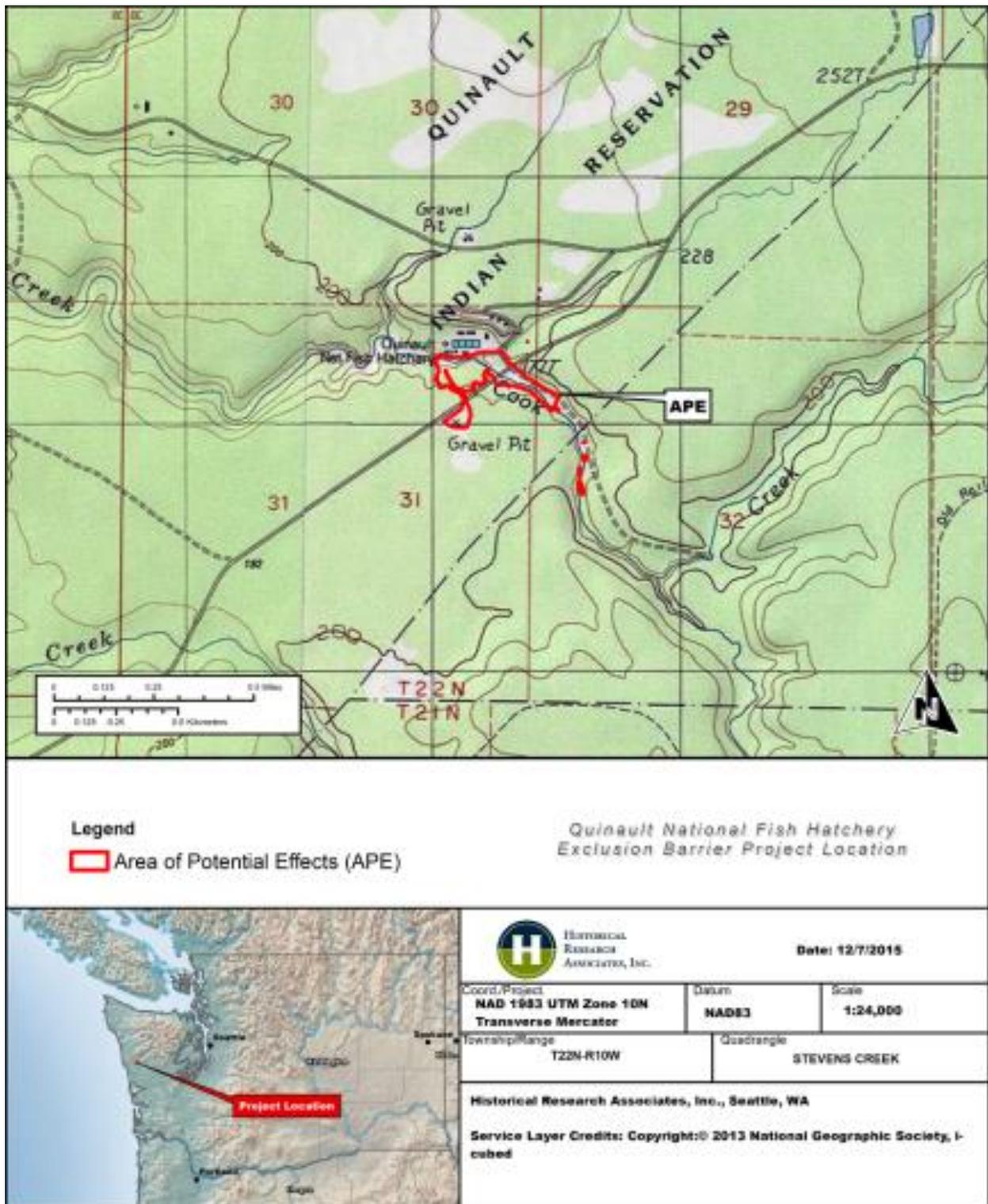


Figure 1-1. Location of the APE and vicinity.

1.2 Area of Potential Effects

USFWS consulted with the Quinault Indian Nation (QIN) while defining the APE (Raymond 2015; Parks, personal communication Appendix D). The previous project limits were the initial extent of the APE. However, after revisions to the project the APE includes the limits of ground disturbance as well as the limits of flooding during a typical flood event (Figure 1-2). USFWS notified the Quinault of the project revisions and expansion of the APE on December 1, 2015 (Parks, personal communication 2015). Only the areas of within the previous project limits were subject to surface and subsurface survey.

The QIN had no comment on the APE defined by the USFWS. The APE “includes the footprint of all ground disturbing activities and areas of new inundation, specifically activity areas associated with the weir, fishway, control building, , access road, and staging areas” (Raymond 2015; Raymond personal communication 2015; Appendix D).

No buildings, structures, or objects (BSOs) were considered during definition of the APE because indirect effects (e.g., visual effects) are not anticipated. The Project includes the replacement of the existing electric weir and an associated control building. It is HRA’s understanding that the electric weir and the control building are less than 50 years old; therefore, they do not need to be treated as historic-period resources.

1.3 Regulatory Context

The QNFH is owned and managed by the USFWS. The USFWS determined that the Project is a federal undertaking. As such, it requires compliance with Section 106 of the National Historic Preservation Act (NHPA). The USFWS consulted with the QIN in defining the APE (see Section 1.2). This cultural resources inventory partially satisfies requirements of Section 106 of NHPA and its implementing regulations (36 CFR 800). The USFWS has responsibility to consult with the Washington State Department of Archaeology and Historic Preservation (DAHP), affected Native American tribes, and other interested parties.

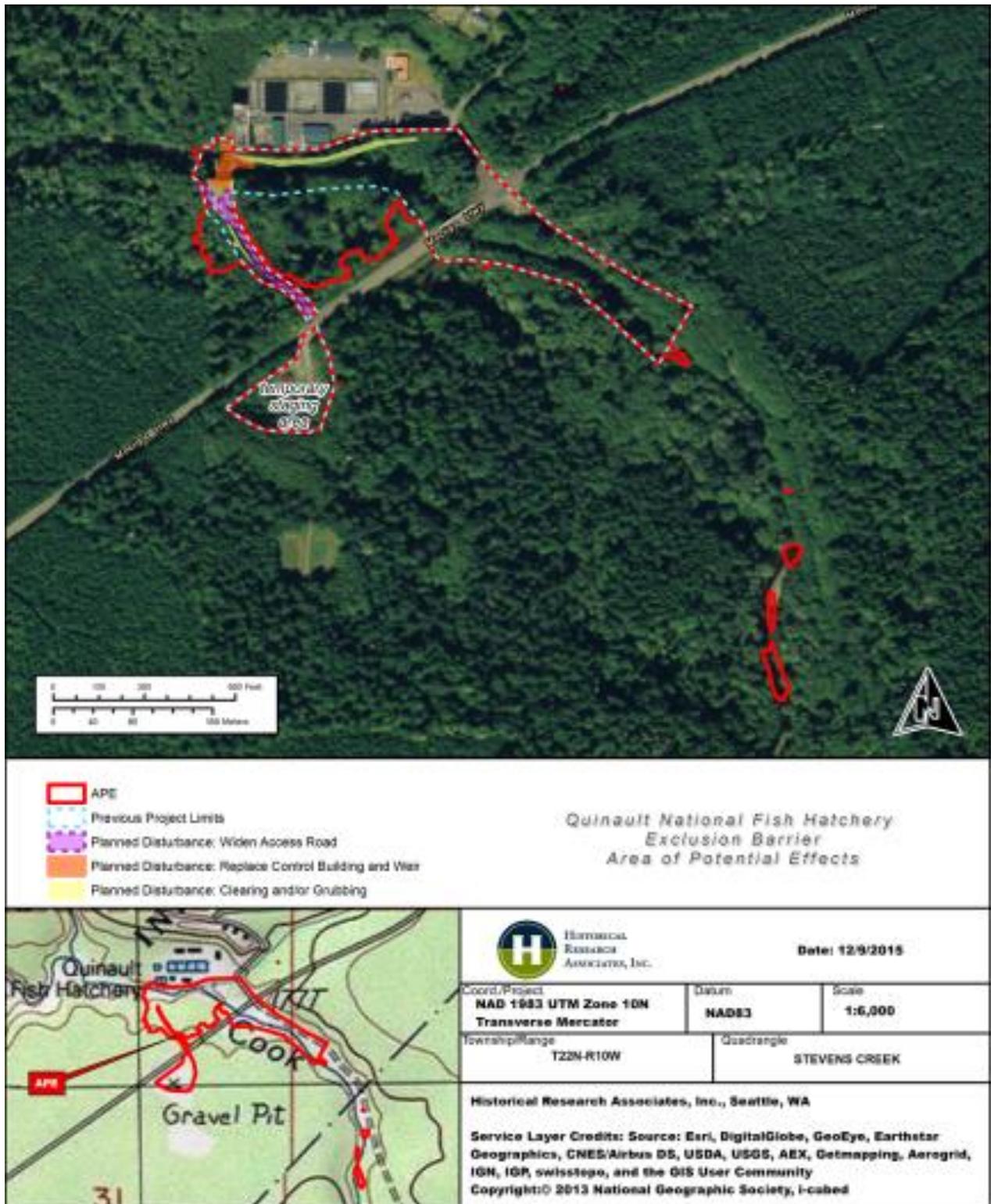


Figure 1-2. Aerial photograph of the APE.

2. Indian Trust Assets

Indian Trust Assets (ITAs) are the legal interests in property held in trust by the United States government for the benefit of federally recognized Indian tribes or individual Indians. ITAs often include real property and its associated natural resources, but can also be federally reserved hunting and fishing rights, federally reserved water rights, in stream flows associated with trust land, water quality, fisheries, native plants, and more (U.S. Bureau of Reclamation 1994).

In upholding its fiduciary duties, the United States, as trustee, is responsible for protecting and maintaining rights reserved by, or granted to, Indian tribes or individual Indians by treaties, statutes, and executive orders. It also must ensure that trust assets not be sold, leased, or otherwise encumbered without the approval of the Secretary of the Interior (U.S. Bureau of Reclamation 1994). On August 20, 2014, Secretary of the Interior Sally Jewell issued an order upholding the federal government’s trust responsibility to federally recognized Indian tribes and individual Indian beneficiaries, which stated, among other things, “The trust responsibility consists of the highest moral obligations that the United States must meet to ensure the protection of tribal and individual Indian lands, assets, resources, and treaty and similarly recognized rights” (Jewell 2014).

The APE is located on a tributary to the Quinault River and is surrounded by the 208,000-acre Quinault Reservation, which is home to the QIN. The reservation is bordered on the west by 24 miles of rugged Pacific coastline. The reservation extends inland to the foothills of the Olympic Mountains and Lake Quinault, from which the Quinault River drains southwest through the reservation to the sea. The lower Queets River runs through the northern corner of the reservation (Tiller 1996:596–597).

QIN’s traditional territory extends far beyond the borders of today’s reservation (Hajda 1990:503–507). In 1855, however, the Quinault and neighboring tribes agreed to the Quinault River Treaty—also known as the Olympia Treaty (ratified in 1856 and proclaimed in 1859)—with the United States that established the current reservation, while guaranteeing the Indians’ right to fish “at all usual and accustomed grounds and stations” and the “privilege of hunting, gathering roots and berries, and pasturing their horses on all open and unclaimed lands” (Kappler 1904:719–721). In 1873, President Ulysses S. Grant expanded the Quinault Reservation by executive order to approximately 190,000 acres for the benefit of the “Quinaielt, Quillehuete, Hoh, Quite, and other fish-eating tribes on the Pacific Coast”¹ (Grant 1873; Tiller 1996:597).

¹ Note inconsistencies with current spelling of tribe names.

The Quinault Reservation supports viable steelhead and salmon fisheries in both the Pacific Ocean and in area rivers. The fisheries provide a major source of employment and tribal revenue. Associated industry, such as the tribally-owned Quinault Pride Seafood, is important to the reservation economy (Tiller 1996:597). The QIN's Department of Fisheries oversees certain harvest management and other technical activities related to the QIN's fisheries resources, and operates two tribally-owned fish hatcheries that are located at Lake Quinault and the along the Cook Creek (Quinault Indian Nation 2015). The QIN continues to utilize its ocean fishery in accordance with tribal fishing rights guaranteed by the 1855 Treaty and upheld in 2015 in U.S. District Court (*Peninsula Daily News* 2015).

3. Archival Research

Prior to fieldwork, HRA staff reviewed DAHP's online database, the Washington Information System for Architectural and Archaeological Records Data (WISAARD), for cultural resource survey reports, archaeological site records, cemetery records, and National Register of Historic Places (NRHP)- and Washington Heritage Register (WHR)-listed resources. DAHP's statewide predictive model layer was also reviewed for probability estimates of precontact cultural resources, and to aid in developing the field strategy. Background research for archaeological sites and cultural resources studies was conducted using an approximate 1-mile (mi) research radius from the APE. There are, at this time, no anticipated aboveground impacts associated with the Project; therefore, the search radius for aboveground BSOs was limited to the APE and adjacent parcels for the purposes of identifying past construction on and/or use of the landform.

HRA's in-house library was used to obtain information on the environmental, archaeological, and historical context of the project vicinity. HRA research staff also examined General Land Office (GLO) plats, available online through the Bureau of Land Management (BLM) website, to locate potential historical features. These nineteenth-century maps, arranged by township and range, indicate locations of then extant historical structures, trails, and features. Although most of these structures are no longer extant, the maps indicate where historic period cultural resources could be encountered. Researchers reviewed additional historic maps (e.g., U.S. Geological Survey [USGS] maps, Sanborn Fire Insurance maps, and County atlases) available through online resources. Based on environmental characteristics, ethnographic data, and the distribution of previously recorded cultural resources, HRA formulated initial expectations about the sensitivity of the APE for containing archaeological remains.

3.1 Previous Cultural Resource Investigations

An online records search of WISAARD revealed that one cultural resources study has been conducted within the APE. Within an approximate 1 mi radius, the review documented two additional cultural resource studies (Table 3-1).

Archaeological research in the vicinity of the APE has fallen exclusively under the domain of cultural resources management (CRM) work. CRM, by its nature, focuses on development-oriented projects, and can be somewhat limited in its research scope. The studies conducted in this area are related to roadway improvement and transmission line projects and did not result in the identification of any cultural resources. Bourdeau (2002) conducted an assessment for a road improvement project that lies within part of the APE. This study included background research and

pedestrian survey adjacent to the road, which runs parallel to Cook Creek. No cultural resources were identified.

Table 3-1. Previous Cultural Resource Studies Located Within 0.5 mi of the APE.

Author(s)	Date	Title	Project Description	Cultural Resources Identified
Bourdeau*	2002	<i>Quinault Intake Road - Quinault NFH, Grays Harbor County, Washington</i>	Background research, pedestrian survey	None
Chambers	2006	<i>Cultural Resources Assessment for Rayonier's Cook Creek Road Construction Project, Grays Harbor County, Washington.</i>	Background research, pedestrian survey, shovel probes	None
Flenniken and Trautman	2011	<i>Phase I, Moclips Highway Transmission Line Reliability Project, Grays Harbor PUD No. 1, Grays Harbor County, Washington</i>	Background research, pedestrian survey, shovel probe	None

*survey conducted within the APE

3.2 Previously Recorded Archaeological Sites

Research revealed that no archaeological sites have been recorded within 1 mi of the APE. The nearest recorded archaeological site, Puncheon Road (45OL93), is located approximately 3 mi east of the APE (Table 3-2). The site consists of a few extant sections of a cedar plank puncheon road that was constructed over a trail built in 1890 to carry mail from Quinault to Humptulips. The road was mostly destroyed when the county road was built on the alignment, but the marshy conditions in the Cook Creek Hill area preserved some of the puncheon road (Righter 1978).

Table 3-2. Previously Recorded Cultural Resources Located Within 3 mi of the APE.

Resource	Location	Site Type	Landform	Cultural Materials and Features	NRHP Status
Puncheon Road (45OL93)	3 mi east of APE	Historic Trails	Hill	Sections of cedar plank and stringer puncheon road	Not Evaluated

3.3 Cemeteries

No cemeteries have been recorded within 1 mi of the APE.

3.4 Historic Map Research

The 1904 GLO survey plat for the “Quinault² Indian Reservation” in Township 22 North, Range 10 West, Willamette Meridian (United States Surveyor General [USSG] 1904) notes the Cook River but no BSOs in the vicinity of the APE. The 1921 USGS topographic map shows Cook Creek and the Quinault Indian Reservation, as well as a beaver dam and the Chow Chow Prairie north of the APE (USGS 1921). The 1990 USGS topographic map shows the Quinault National Fish Hatchery, the Moclips Highway (unlabeled), the access road on the eastern edge of the APE, and the gravel pit in the Project staging area (USGS 1990).

3.5 Ethnographic Place Names

The APE is located within the traditional territory of the QIN. Quinault villages were established and maintained throughout the Quinault River Watershed, including locations around Lake Quinault and along smaller streams and tributaries (such as Cook Creek) to the Quinault River. Taholah, the principal village, is located on the coast, approximately 14 mi west of the APE (Ruby and Brown 1992). *Negve'lan* (Salmon River) is the Quinault name for Cook Creek. It is also the name of a village located at the confluence of Cook Creek and the Quinault River, approximately 3 mi west of the APE (Flenniken and Trautman 2011).

3.6 DAHP Predictive Model

DAHP's predictive model is based on statewide information, using large-scale factors. Information on geology, soils, site types, and landforms, and GLO maps were used to establish or predict probabilities for precontact cultural resources throughout the state. DAHP's model uses five categories for the predictions: Low Risk, Moderately Low Risk, Moderate Risk, High Risk, and Very High Risk. According to the DAHP, the APE is located within an area with Very High Risk for containing precontact cultural resources.

² Note inconsistencies with current spelling of tribe name.

4. Environmental Context

This chapter provides a brief overview of the local environment, including historic modification to this landscape and natural resources. Understanding the local environment, including geology, climate, flora, and fauna, is important for understanding how people used the landscape in the past. Like archival research, this environmental context is necessary for developing expectations regarding the potential for cultural resources to be encountered during the Project (see Section 6).

4.1 Topography and Geology

The APE is within the Coast Range Province of Washington, approximately 15 mi from the Washington coast (McKee 1972:154; Roll 1974:4–5). The APE is located along Cook Creek, in the Quinault River Watershed, southwest of the Olympic Mountain Range.

The western foothills and plains of the Coast Range include varying sedimentary contexts. The basic geology of the region consists largely of sedimentary layers of sandstones, siltstone, and conglomerates, formed in shallow marine and non-marine conditions prior to approximately 15 million years ago (mya). During the later Miocene (from 15 to 2 mya) and Pleistocene epoch (after 2 mya), these layers were gradually uplifted to form the Coastal Range (Alt and Hyndman 1995:xi; McKee 1972:172). The Fraser glaciation during the Pleistocene covered the vicinity of the APE in glacial drift, which has been cut through by creeks and rivers in the area (Alt and Hyndman 1995:277). Soils in the vicinity of the APE consist of glacial and alluvial deposits including stratified sand, gravel, silt, and clay deposits (McKee 1972:168; Tabor and Cady 1978).

4.2 Climate and Vegetation

The climate in the region has changed dramatically in the 13,500 years since the Vashon Stade. Immediately after glacial retreat and the uplifting of landforms around northwestern Washington, the newly exposed glacial sediments were barren. However, between approximately 13,000 and 12,000 years ago, a much cooler and drier climate than that of the modern period supported an ecosystem characterized by lodgepole pine (*Pinus contorta*), sedges (*Cyperaceae sp.*), sage (*Artemisia sp.*), and a variety of grasses and herbs (Barnosky 1984; Barnosky et al. 1987; Brubaker 1991; Whitlock 1992). After 12,000 years ago, the climate warmed while continuing to dry, and Douglas fir (*Pseudotsuga menziesii*), western hemlock (*Tsuga heterophylla*), and red alder (*Alnus rubra*) joined the developing parkland forest on inland areas. This warm, dry period lasted from 12,000 to approximately 7,000 years ago, with relatively high summer temperatures and more frequent summer droughts than currently. The Douglas fir and western hemlock altered the amount of light that breached the forest canopy, reducing foliage in the understory and opening up the forest in general.

Prairies were also more common on inland terraces, largely due to drier climatic conditions (Barnosky et al. 1987; Brubaker 1991; Whitlock 1992).

By around 6,000 years ago, the climate of the region had cooled and moistened to levels comparable to today's maritime regime, producing the current *Picea sitchensis* (sitka spruce) vegetation zone. Studies of pollen extracted from coastal sediment samples have shown little to no climatic change over the past 5,000 years (Hansen 1941, 1947; Heusser 1960, 1965). The *Picea sitchensis* zone on upland areas is characterized by a dominant climax overstory of sitka spruce, western hemlock, Douglas fir, western red cedar (*Thuja plicata*), and fir (*Abies* sp.). Deciduous components including red alder (*Alnus rubra*) and big-leaf maple (*Acer macrophyllum*) represent secondary species in forested habitats and are dominant in disturbed areas or, in the case of alder, within riparian and wetland zones (Franklin and Dyrness 1973).

Understory vegetation on uplands typically consists of a variety of ferns including sword fern, deer fern, and bracken fern (respectively *Polystichum munitum*, *Blechnum spicant*, and *Pteridium aquilinum*); berries including red huckleberry (*Vaccinium parvifolium*), salmonberry (*Rubus spectabilis*), trailing blackberry (*Rubus ursinus*), and snowberry (*Symphoricarpos albus*); salal; Oregon grape (*Berberis nervosa*); and rose (*Rosa gymnocarpa*) (Franklin and Dyrness 1973:59–61). Camas (*Camassia quamash*) and a host of edible tubers, berries, fruits, and nuts would have been available closer to the shoreline of the bay and within inland prairies (Franklin and Dyrness 1973).

4.3 Fauna

Changing vegetation presented opportunities for multiple species of animals in the region surrounding the APE. In the Late Pleistocene, as the glaciers were retreating from the area, terrestrial fauna including mastodon (*Mammuth americanum*), black-tailed deer (*Odocoileus hemionus*), and elk (or wapati, *Cervus elephus*) would have browsed on grasses, shrubs, and herbs in the newly emerging forest parkland. With fluctuating temperatures and levels of precipitation affecting the number and types of trees providing canopy cover, and therefore the amount and kinds of understory vegetation, the location and abundance of terrestrial animals varied over the millennia. Before extensive Euroamerican influence in the area, larger terrestrial mammals would have included elk, deer, black bear (*Ursus americanus*), coyote (*Canis latrans*), bobcat (*Lynx rufus*) and mountain lion (cougar, *Felis concolor*). Smaller mammals would have included plentiful snowshoe hare (*Lepus americanus*) along with raccoon (*Procyon lotor*), red fox (*Vulpes vulpes*), and porcupine (*Erethizon dorsatum*) (Larrison 1967).

Estuary and river resources included waterfowl (*Aix* and *Anas* sp.), beaver (*Castor canadensis*), otter (*Lutra canadensis*), and mink or weasel (*Mustela* spp.). Freshwater fish would include rainbow or steelhead trout (*Oncorhynchus mykiss*), cutthroat trout (*Salmo clarkii*), and eels (Anguillidae). Those fish moving from fresh to saltwater and back included the eucaloon (candlefish, *Thaleichthys pacificus*) and perhaps most significantly, the salmon species that seasonally migrate up the local drainages, notably

chum (*Oncorhynchus keta*) and coho (*Oncorhynchus kisutch*) salmon in the Grays Harbor vicinity (Atkinson et al. 1967; Larrison 1967).

Marine resources were readily available on the nearby coast. Whales and dolphins (particularly gray whales [*Eschrichtius glaucus*], killer whales [*Orcinus orca*], and the Pacific Harbor porpoise [*Phocoena phocoena*]), northern fur seals (*Callorhinus ursinus*), harbor seals (*Phoca vitulina*), sea lions (order *Pinnipedia*), and sea otter (*Enhydra lutris*) were available in the nearby coastal waters for meat, bones, and skins (Roll 1974:236). Saltwater fish including herring (*Clupea pallasii*), halibut (*Hippoglossus stenolepis*), and dogfish (*Squalus acanthias*) were available, in addition to the anadromous fish mentioned above. Shellfish were important to the local diet, being as they were extremely abundant. These included Bent-nose clam (*Macoma nasuta*), razor clam (*Siliqua patula*), horse clam (*Schizothaerus nuttallii*), butter clam (*Saxidomus giganteus*), littleneck clam (*Protothaca staminea*), bay mussel (*Mytilus edulis*), and basket cockle (*Clinocardium nuttallii*) (Roll 1974).

5. Cultural Context

5.1 Prehistoric Background

There is evidence that humans have been present in Washington State for at least the past 14,000 years (Jenkins et al. 2012; Waters et al. 2011). However, coastal sites dating to this period will only be found offshore, due to the rising sea level that accompanied the end of the last ice age. For example, off Haida Gwaii Island in British Columbia, sites have been recorded in settings similar to the Washington coast that date to 10,700 calibrated (cal.) years before present (B.P.) (Mackie et al. 2014). Earlier sites situated alongside rivers have also likely fallen victim to erosional forces as the river course meandered through the centuries (Storm and Capoeman 1990:46). As such, the archaeological record of the Washington coast is limited to a large extent by conditions of preservation and erosion. For this reason, the best known time period in the archaeological record is the last 2,500 years (Wessen 1990). A great deal of the available information comes from the Ozette and Minard sites, located on the coast north and south of the APE, respectively (Roll 1975; Wessen 1990). Archaeological remains recovered from Washington coastal sites indicate a broad economy centered along the saltwater bays in the area (for instance, Grays Harbor) and featuring inland resources. This economic pattern appears to differ from the marine focus of peoples farther to the north. Inland archaeological sites in the vicinity of the APE are generally not well documented, but those that have been reported generally consist of lithic scatters including cryptocrystalline silicate (CCS) projectile points have also been recorded (Wessen 1990). Based on these observations, the economy of the southern Washington coast may be more comparable to that of Puget Sound.

5.2 Ethnographic Background

The Native American groups that would have been present in the general vicinity of the APE prior to European contact were ancestors of the Quinault Nation, and the Humptulips and Copalis peoples. These groups spoke mutually-intelligible dialects of the Southern Coast Salish language group (Hajda 1990:503). The Washington coast displays remarkable linguistic diversity (Wessen 1990:420–421).

The Quinault peoples, who seasonally used portions of the north shore of Grays Harbor, traditionally inhabited the coast from Joe Creek to Raft River, along with the Quinault River valley. The Copalis bands claimed territory “from Joe Creek to the mouth of Grays Harbor and a portion of North Bay,” the largest settlement in which was “Oyehut.” The Humptulips lived along the northern shore of Grays Harbor, east to Elliott Slough, and had several villages on the mouth and along the course of the Humptulips River (Hajda 1990:503; Van Syckle 1982:55–57).

The culture of the Northwest Coast was built around canoe transport and travel. The canoe was a daily-used item, conveying wealth and status within the community. Different models were utilized for ocean and river travel, and a canoe was eventually used for aboveground internment during death rituals. Canoes were generally constructed from cedar, while the paddles were carved from Oregon ash. Canoes opened the door to warfare, a practice common on the coast (Singh 1966; Storm and Capoeman 1990:45, 77).

The groups along the southern Washington coast relied more heavily on anadromous fish, shellfish, and land mammals than some of their neighbors to the north, who were renowned for their use of sea mammals and deep-sea fish (Singh 1966:48). Sea-based resources were caught using a hook and line for the smaller fish or composite toggling harpoons for larger mammals. Within the bay and riverine systems, smaller fish and mammals were caught using any number of devices, including dip and drift nets (the latter operated from canoes), weirs, harpoons, spears, clubs, and rakes (specifically herring rakes). Arguably the most important fish was the salmon, whose plentiful runs in April provided surplus for winter stores and for trade to groups further inland. Shellfish were dug utilizing the ubiquitous digging stick, and those not eaten fresh were dried over a fire for storage and winter consumption. Hunting parties traveled inland, to higher-elevation forest or prairies. Large and small mammals and birds were taken with bow and arrow, noose, net, or pit. Any meat not eaten fresh was processed for storage and the skins and bones and feathers were processed for tools and personal ornamentation (Hajda 1990:505–507; Storm and Capoeman 1990:68).

There was a division of labor between men and women among the Salishan speakers. Generally women gathered and dug plant and shellfish resources, while men hunted, fished, and peeled cedar bark. Women typically processed (i.e., cooked, pounded) and stored plant and faunal resources, while men twisted cedar bark into rope (Storm and Capoeman 1990:66).

The Euroamerican influence, in down-the-line trade items and disease, was felt long before most Native groups met incoming settlers to the Pacific Northwest. By 1792, smallpox was reported on the southern shore of the Strait of Juan de Fuca (Taylor 1963:161). In 1830, the botanist David Douglas reported an “intermittent fever... which has depopulated the country [of the lower Columbia River]”; this plague lasted two more years (Davies 1981:159). Populations in southwestern Washington were severely depleted well before the formal arrival of Euroamerican settlers (Swan 1972).

In 1855, after negotiations between Washington Governor Isaac Stevens and local tribes (including the Quinault, Chinook, Lower Chehalis, Queets, Satsop, Upper Chehalis, and Cowlitz), the Quinault and some neighboring tribes signed the Quinault River Treaty, by which they were consigned to a reservation on the mouth of the Quinault River. The treaty guaranteed fishing rights “at all usual and accustomed grounds and stations” and hunting, and gathering rights on “all open and unclaimed lands” (Kappler 1904:719–721). Native groups continued to hunt, fish, and gather, but they also participated in the local logging, small-scale farming, and railroading economies during the historic period (Hajda 1990:514–515).

5.3 Historic Background

Euroamerican exploration of the area occurred when fur traders and explorers traveled around the Olympic Peninsula. Spanish explorers were in the area by 1775 and the English by 1787 (Wilma 2006). On May 7, 1792, Robert Gray and his crew were the first non-indigenous group to enter Grays Harbor. Gray's party was met by local people in dugout canoes, thought to be Chinook, who frequented Grays Harbor in the nineteenth century (Gunther 1972). Although Gray only spent three days in the harbor, his crew named it after their captain. The name continued when Lt. Joseph Whidbey, part of Captain George Vancouver's expedition, surveyed the harbor and labeled it Gray's Harbor, and a Spanish crew called it Puerto de Gray during their expedition (Oldham 2003). Vancouver's party indicated a native village with approximately 100 inhabitants was on Grays Harbor, near Point Hanson (Gunther 1972). With the arrival of Euroamericans, disease was spread and epidemics, including smallpox in the 1770s, malaria in 1829, and cholera in 1836, and in 1853 smallpox again, decimated the native Chinook population, so much so that by the 1850s Chehalis groups migrated to that territory (Wilma 2006).

The Quinault River Treaty was signed in 1855 between the Quinault, Hoh, Queets, and Quileute tribes and the Washington Territorial Governor Isaac Stevens. The treaty ceded 1.2 million acres on the Olympic Peninsula to the U.S. in exchange for fishing rights and a reservation. In 1873, President Ulysses S. Grant expanded reservation lands to the present boundaries, however individual allotments were granted to tribal members and the result was that a majority of the land passed to non-Indians via alienation. Non-treaty tribal members of the Chinook, Chehalis, and Cowlitz groups were also allowed to apply for allotments, and many times sold the land to timber companies (Grant 1873; Tiller 1996:597; Wilma 2006).

Euroamerican settlement began in the 1850s, with the encouragement of the Donation Land Act. The first Euroamerican settlers in present-day Grays Harbor County were William O'Leary, and Isaiah Scammon and his wife Lorinda. Scammon became a postmaster, judge, school administrator, and church leader. In 1859, the first cannery was established on Grays Harbor. Fishing and canning of such resources as salmon, razor clam, and whale meat was prevalent into the 1900s. Clam and fish canneries were "all along the beach" (Berg 1952:80–82; Van Syckle 1982:315–318; Wilma 2006). Flenniken and Trautman (2011) note that Euroamericans began to move north in the 1880s, settling in areas around Cook Creek and Lake Quinault.

Between 1870 and 1900, the towns of Montesano, Aberdeen, and Hoquiam were established and flourished with the rise of the timber industry. Additionally, railroad lines were also important to the growth of Grays Harbor County. A line from Aberdeen to Montesano was built by local labor under the leadership of Samuel Benn, Aberdeen's founder, and was later incorporated as part of the Northern Pacific line. By the turn of the century, transcontinental rail lines connected Grays Harbor and Aberdeen to the rest of the nation. A lighthouse was built at the harbor entrance in 1898. This would have helped improve maritime safety and continue the growth of the shipping industry in the area. Rivalries between the communities and leadership led to a campaign to split the county, which

occurred by March 1907 (Wilma 2006). The county, formerly called Chehalis, was renamed Grays Harbor in 1915. The spelling without the apostrophe remained after this time (Oldham 2003).

A decline in the timber industry began in the 1920s, with much of the old growth trees having been logged on private lands. Economic impacts from the Great Depression affected housing, construction, and eventually the local sawmills. In an effort to spur the economy and to manage forests, Weyerhaeuser opened a tree farm in Montesano in 1941, and Congress passed the Forest Practices Act in 1946. An economic boom in Asia starting in the 1960s–1970s reinvigorated the demand for timber in Washington. However, the recession in the early 1980s and in the 1990s the environmental concerns about endangered species, such as the Northwest Spotted Owl, again affected the timber industry. Limitations on logging public and private lands prompted a decline for local timber. The decrease in the economy spurred unemployment and eventually a population decline (Wilma 2006).

The QNFH was established in 1968 as a joint venture between the USFWS and the Quinault and Hoh Indian Nations. It seeks to rebuild salmon and steelhead runs along the Washington coast. The QNFH releases coho, chum, and steelhead into Cook Creek (USFWS 2008, 2014).

6. Expectations for Precontact or Historic Cultural Resources

Environmental factors (e.g., proximity to water and available food and material resources), the DAHP predictive model, and ethnographic and historic records suggest a very high probability of intact archaeological remains in the APE vicinity. The area was likely used as a travel corridor during precontact and ethnographic times, with groups traveling along Cook Creek for hunting and fishing purposes.

Many types of archaeological materials may be encountered during construction activities. These may include, but are not limited to:

1. Precontact or ethnohistoric-period archaeological materials and features (ethnohistoric-period materials would include artifacts or features the same as those for precontact timeframes with the inclusion of some historic-period items).
 - Stone tools and flaking debris.
 - Organic-rich, midden sediments (may contain shell).
 - Antler or non-sawed bone fragments.
 - Charcoal concentrations, darkened earth, and fire modified rock (FMR).
2. Ethnohistoric-period or historic-period archaeological materials.
 - Low-fired and bisque ceramics with subdued colors, or blue/pink willow-like design; thick-bodied pieces indicating crockery.
 - Non-tempered glass; violet-colored glass; stopper-topped glass jars or bottles; press-capped (cork gasket liner) heavy-walled soda or liquor bottles (not twist-top, thin-walled); zinc and vitreous glass-lidded glass canning jars with colored body.
 - Miscellaneous fragments of metal (or plated) clothing closures (hooks and eyes, and suspender fittings, but not zippers), shell buttons, fragments of bakelite houseware, celluloid.
 - Sawed animal bone and fruit pits; punch-opened and solder-sealed beverage cans; solder-sealed food tins (not thin-walled aluminum and welded-steel cans); enameled ironware.

7. Field Strategy and Methods

7.1 Archaeological Inventory

Surface and subsurface surveys were performed across the APE in order to identify archaeological materials and to assess the potential of the project area to contain archaeological materials.

7.1.1 *Pedestrian Survey*

HRA archaeologists walked parallel pedestrian transects within the APE, examining the ground for cultural materials. Transects were spaced a maximum of 20 m apart. During the survey, the archaeologists sought out ground exposures (e.g., ditches and cutbanks). Representative photographs were taken during the course of the survey in order to document the landscape.

7.1.2 *Utility Locates*

Prior to archaeological fieldwork, HRA arranged for utility locates to meet the requirements of Washington's Underground Utilities regulations (RCW 19.122). These regulations require obtaining a locate survey for any kind of excavation on public and private property that will exceed 12 inches in depth. A locate service was contacted by HRA at least two (2) business days before fieldwork began. HRA provided the locate service with adequate documentation in the form of maps and text descriptions to complete the locate survey.

7.1.3 *Subsurface Survey*

HRA archaeologists excavated shovel probes (SPs) within the APE along both sides of Cook Creek and the access road to the fish weir in order to assess the probability for and identify buried cultural materials. SPs were placed at approximately 25- to 30-meter (m) intervals in areas of planned ground disturbance. SP placement was determined by the field supervisor, based on the Project's design plan, topographic circumstances and other field observations.

SPs measured 35–40 centimeters (cm) in diameter. Excavated sediments were screened through ¼-inch hardware mesh. Sediments observed in each shovel probe were documented on standard HRA shovel probe forms. Observations regarding SP soils were documented on standardized forms and included sediment grain size, color, presence and characteristics of gravels, presence of roots, signs of soil development, origin of soil, and evidence of disturbance. Cultural materials recovered during SP excavation were noted and photographed using a digital camera. Excavations were terminated upon glacial material, or upon encountering a buried obstruction (such as a large cobble or other impediment), or when a maximum depth of 1 m below ground surface (bgs) was reached.

Each SP was filled upon the completion of documentation and its location was noted using a Global Position System (GPS) instrument.

The temporary staging area south of Moclips Highway was once used as a gravel pit and has already been greatly disturbed. No SPs were placed within the temporary staging area.

Field work was performed prior to revisions in the project. As such, only areas of previous ground disturbance were subject to subsurface survey. USFWS indicated that because of the limited anticipated effects elsewhere in the APE that additional subsurface survey was not needed.

8. Archaeological Inventory Results

HRA archaeologists Jordan Pickrell, Dan Focke, Ali Gulduren, and David Treichel conducted the archaeological inventory between November 4 and 6, 2015. The inventory included surface and subsurface survey methods across the APE.

8.1 Pedestrian Survey

HRA archaeologists walked parallel transects, spaced approximately 10 m apart, across the 6.9 acre APE (Figure 8-1). The APE encompasses the shoreline along Cook Creek, which is “comprised of a riparian habitat consisting of mature deciduous riparian vegetation near the creek, mature coniferous trees in the upland area, and sedges and rushes in the wetland areas” (Raymond 2015:2). Dense vegetation limited ground surface visibility in most areas within the APE (Figure 8-2). For safety reasons, HRA employees did not cross the exclusion fences on either side of the electric fish weir. The fenced-off area south of the creek appeared to be previously disturbed, perhaps during construction of the current weir (Figure 8-3).

Neither precontact nor historic-period cultural resources were observed during the pedestrian survey within the APE around Cook Creek and along the access road to the fish weir. Temporally non-diagnostic materials (a group of three wooden poles with protruding metal spikes lying perpendicular to the creek’s south bank) (see Figure 8-1), and a few pieces of modern trash (beer cans, other debris) were noted but not recorded during the pedestrian survey.

The crew also conducted a pedestrian survey of the temporary staging area south of Moclips Highway (Figure 8-4). Neither precontact nor historic-period cultural resources were observed in this portion of the APE. The crew noted, but did not record, three concentrations of temporally non-diagnostic construction materials, including lumber, rebar, and slabs of concrete, in the southwestern portion of the staging area (see Figure 8-1). Based on the amount of modern debris (energy drink cans, beer cans, nylon rope, fish carcasses, PVC pipe, etc.), the temporary staging area appears to have been used recently.

8.2 Subsurface Survey

As stated in Section 7.1.2, utility companies were contacted in order to mark out infrastructure prior to fieldwork. Two utility companies responded to HRA’s request, reporting that they had no infrastructure within the APE. During the pedestrian survey along the northeastern edge of the APE, in the vicinity of present QNFH buildings, HRA archaeologists noted utility boxes and other indications of possible underground disturbance associated with the QNFH.

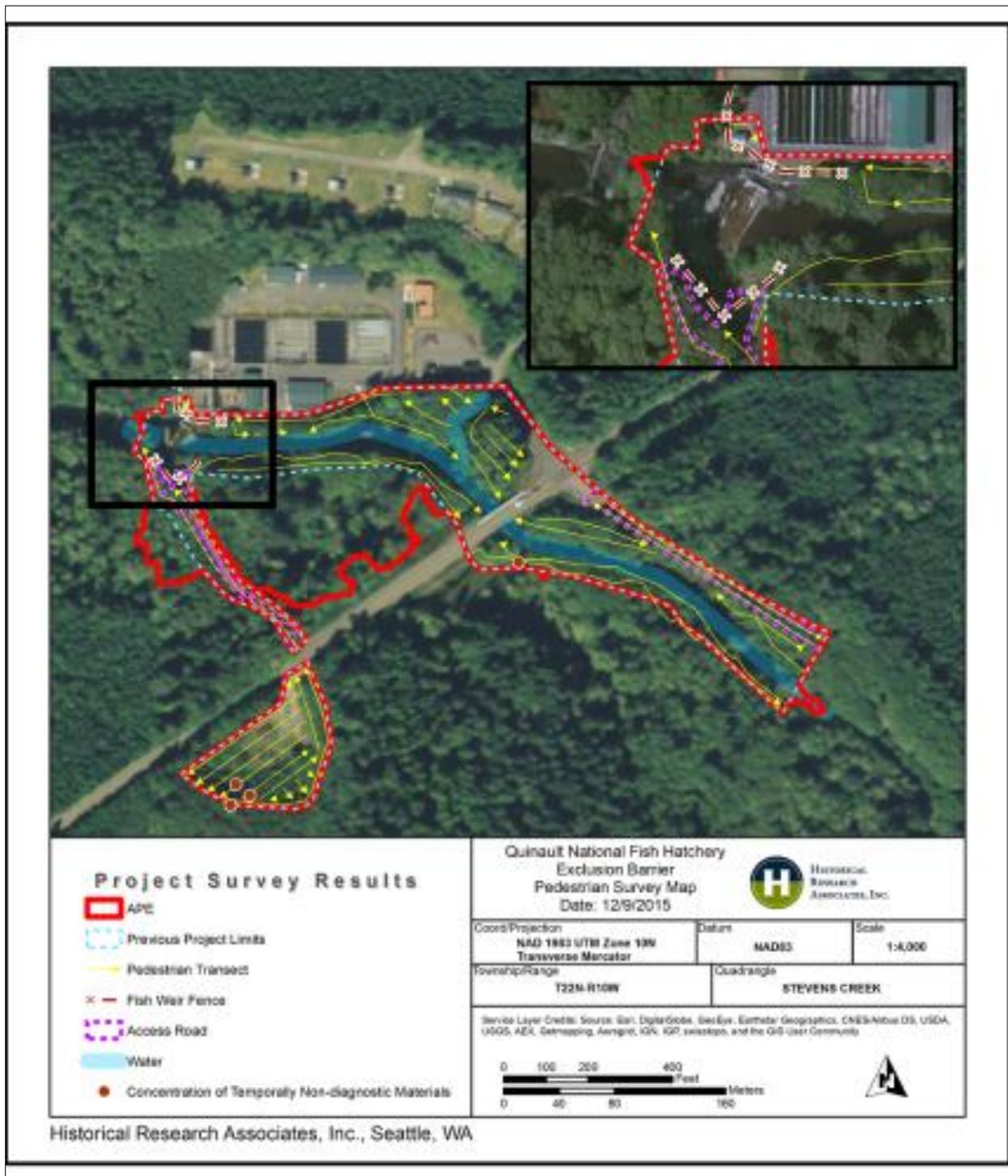


Figure 8-1. Pedestrian survey map.



Figure 8-2. Vegetation along south bank of Cook Creek (view southeast).



Figure 8-3. Chain link safety fence on south bank of Cook River. Note disturbed, mounded area inside the fence (view northwest).



Figure 8-4. Temporary staging area (view southwest).

HRA archaeologists excavated a total of 34 SPs across the APE (Table B-1 in Appendix B; Figure 8-5). SPs were spaced approximately 20 to 30 m apart, depending upon field conditions. No SPs were excavated along the north bank west of SP 24 because the steep bank in this area had been stabilized with large angular rocks (Figure 8-6). One of these rocks was encountered 24 cmbgs (centimeters below ground surface) in SP 24, indicating the ledge between the QNFH buildings and the creek was a part of the previous bank stabilization. Similar bank stabilization methods were present on a steep slope in the western section of the APE, between an access road and the creek below. Probes were not placed in the temporary staging area due to the high level of disturbance at that location. No probes were placed in the vicinity of the control building. It was evident that the area was previously disturbed by construction of the QNFH (Figure 8-7).

Neither precontact nor historic-period cultural resources were identified during the subsurface survey. Two modern, colorless glass fragments were recovered from shallow sediments in SP1; all other shovel probes were sterile of any cultural materials.

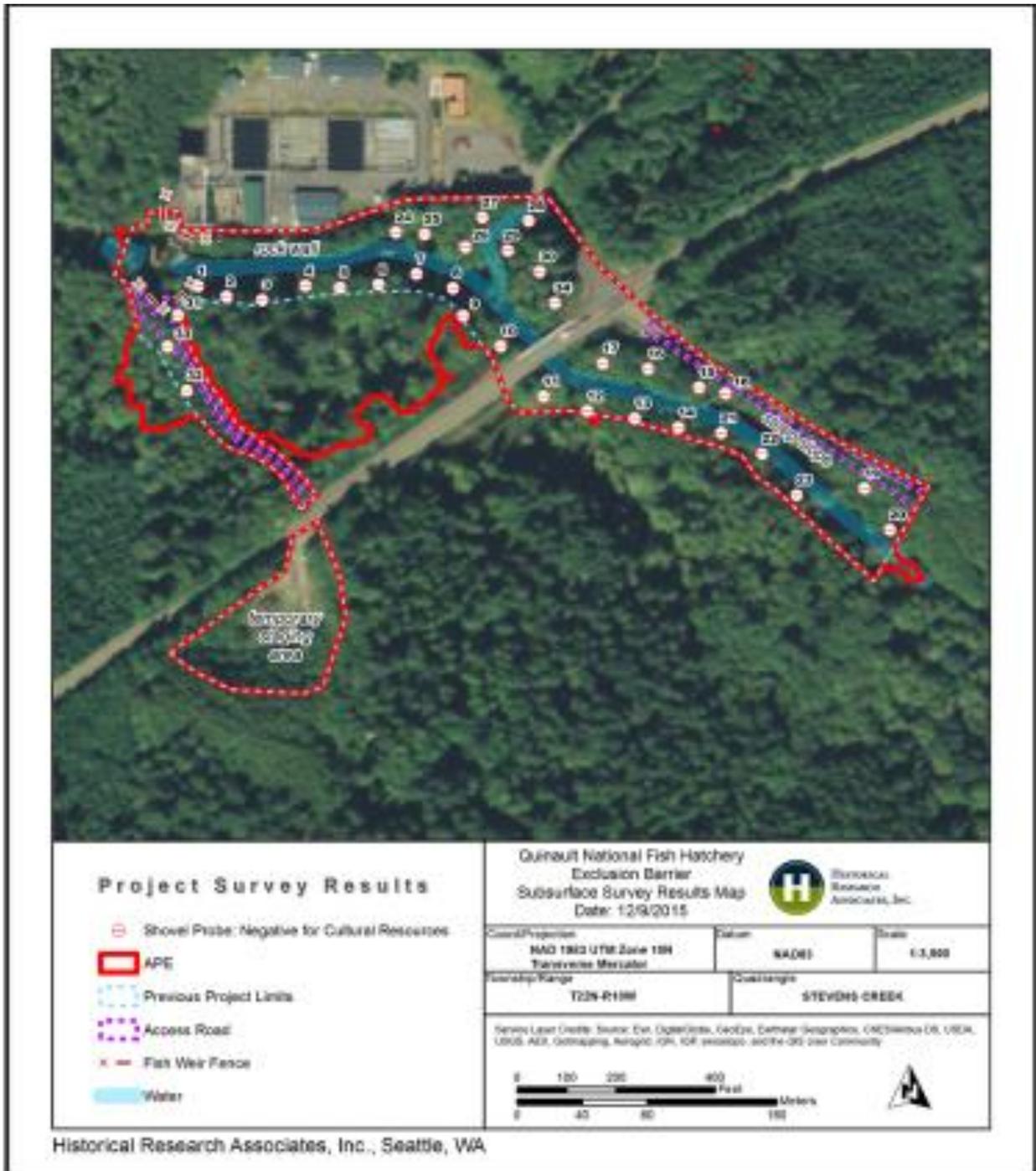


Figure 8-5. Subsurface survey results map.



Figure 8-6. Erosion control on north bank of Cook Creek (view north).



Figure 8-7. Electric weir control building. Note impervious surface in foreground and infrastructure around the building (view west).

Stratigraphy within the APE is consistent with the APE's location in a flood plain (Figures 8-8 and 8-9). In general, observed sediments include dark brown silty sand with many roots extending approximately 25 to 30 cmbgs. Sediments below this stratum transition to brown or gray sands with many gravels (ranging in size from pea gravels to medium-sized cobbles). At a typical depth between 60 and 80 cmbgs, soils become sandier and are colored dark to grayish brown, commonly with an increase in gravel content and grain size with depth. Sediments across the APE remained relatively loose to depths of 100 cm. Moisture content typically increased with depth, and the water table was reached at depths between 50 and 100 cmbgs in some SPs.



Figure 8-8. SP 14 extent of excavation.



Figure 8-9. SP 9 extent of excavation. Note water table at 50 cmbgs.

9. Summary and Recommendations

USFWS will oversee the construction of a new fish exclusion barrier at the QNFH in Grays Harbor County, Washington. The Project is defined as a federal undertaking. Therefore, compliance with Section 106 of the NHPA is required. In September 2015, McMillan Jacobs Associates contracted with HRA to conduct an archaeological inventory to partially satisfy requirements of Section 106 of the NHPA and its implementing regulations (36 CFR 800).

HRA's review of available historic and archaeological literature indicated a very high risk of cultural resources occurring within the APE. HRA archaeologists conducted the archaeological inventory, consisting of surface and subsurface survey across the APE, from November 4–6, 2015.

The archaeological inventory identified neither precontact nor historic-period cultural resources. HRA recommends no further cultural resources work within the APE, unless the Project undergoes substantial design changes.

9.1 Inadvertent Discovery of Cultural Resources

In the event that archaeological deposits are inadvertently discovered during the Project in any portion of the APE, ground-disturbing activities in the vicinity of the find should be halted immediately, USFWS should be notified, and the Project's *Inadvertent Discovery Plan* (Appendix B) should be followed. Work in the immediate area of the find will not resume until treatment of the discovery has been completed or the discovery has been adequately protected.

9.2 Inadvertent Discovery of Human Remains

Any human remains that are discovered during project-related activities will be treated with dignity and respect. In the event that human remains are discovered, the following procedures are to be followed to ensure compliance with RCW 68.50 *Human Remains*, RCW 68.60: *Abandoned and Historic Cemeteries and Historic Graves*, and RCW 27.44: *Indian Graves and Records*.

If ground disturbing activities encounter human or potentially human skeletal remains during activities associated with the Project, then all activity **must** cease that may cause further disturbance to those remains and the area of the find must be secured and protected from further disturbance.

1. To establish if a bone is human, Dr. Guy Tasa is available to review pictures of a bone. His information is in the contact list in Appendix C of this report. USFWS will contact Dr. Guy Tasa.

2. If Dr. Tasa establishes that the bone **is not human**, then there is no need to contact the coroner and procedures outlined in Appendix B-1 for the discovery of archaeological materials should be followed.
3. If Dr. Tasa establishes that the bone **is human**, USFWS will contact the coroner and local law enforcement to inform them of the discovery.

If the discovery is human remains, USFWS will completely secure the work area by moving the land-altering equipment to a reasonable distance, and will immediately contact the Grays Harbor County Coroner (to determine if the remains are forensic in nature), DAHP, and may consult a professional archaeologist (see Appendix C for contact information). If the remains are not forensic in nature, USFWS will determine an appropriate method of treatment for the remains and will consult with the affected tribes.

The legal requirements are as follows:

1. Per RCW 68.50.645, 27.44.055, and 68.60.055 (1) Any person who discovers skeletal human remains must notify the county coroner and local law enforcement in the most expeditious manner possible. Any person knowing of the existence of human remains and not having good reason to believe that the coroner and local law enforcement has notice thereof and who fails to give notice thereof is guilty of a misdemeanor.
2. If the bone is human, the remains should not be touched, moved, or further disturbed. The coroner will assume jurisdiction and determine if the remains are forensic or not.
3. If the bones are not forensic, the coroner will report that to USFWS, who will then take jurisdiction over the human remains and report the remains to any appropriate cemeteries and to affected tribes.
4. The state physical anthropologist will make a determination of whether the remains are Native American or not and will report that finding to any appropriate cemeteries, to affected tribes, and to other appropriate parties.
5. USFWS will then conduct all consultation with the affected parties as to the future preservation, excavation, and disposition of the remains.

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Appendix A. Shovel Probe Table

Table A-1. Results of Shovel Test Probes in the APE.

Shovel Probe	UTM: East/North	Maximum Depth Below Surface (cmbs)	Description	Cultural Materials Identified
1	424964E/ 5245434N	90	<p>0-16 cmbs: dark brown, silty sand, high organic content</p> <p>16-30 cmbs: reddish brown, silty loam, few round to subangular gravels, many roots</p> <p>30-90 cmbs: pale grayish brown, loamy clay, some subround gravels (pebble to small cobble-sized), soil becomes paler and clay content increases with depth</p> <p><i>Terminated on rock obstruction</i></p>	0-16 cmbs: 2 colorless glass fragments – <i>modern</i>
2	424982E/ 5245428N	100	<p>0-9 cmbs: dark brown, organic rich silty sand, some roots, duff layer</p> <p>9-60 cmbs: brown fine sandy loam</p> <p>60-100 cmbs: yellowish brown, fine sandy loam, many poorly sorted round to subround gravels (small pebble to large cobble-sized)</p> <p><i>Terminated at maximum depth</i></p>	none
3	425004E/ 5245426N	98	<p>0-12 cmbs: dark brown, organic rich silty sand, many roots, duff layer</p> <p>12-75 cmbs: brown, silty loam, fewer roots with depth, few subround gravels</p> <p>75-98 cmbs: grayish tan, medium-grained sand, increase in gravel content (small pebble to small cobble-sized) with depth, decrease in root content with depth</p> <p><i>Terminated at maximum depth</i></p>	none

Table A-1. Results of Shovel Test Probes in the APE.

Shovel Probe	UTM: East/North	Maximum Depth Below Surface (cmbs)	Description	Cultural Materials Identified
4	425030E/ 5245435N	100	<p>0-3 cmbs: dark brown, organic, silty sand, some roots, duff layer</p> <p>3-48 cmbs: brown, sandy loam, very loose, many small, round to subround gravels</p> <p>48-85 cmbs: pale brown, sandy loam, some subround gravels</p> <p>85-100 cmbs: pale brown, sandy loam, many round-subround gravels (small pebble to medium cobble-sized)</p> <p><i>Terminated at maximum depth</i></p>	none
5	425051E/ 5245433N	68	<p>0-20 cmbs: dark brown, organic rich silty sand, duff layer</p> <p>20-68 cmbs: dark brown, coarse-grained sand, many subround to rounded gravels (small pebble to large cobble-sized)</p> <p><i>Terminated after reaching water table</i></p>	none
6	425075E/ 5245435N	72	<p>0-16 cmbs: pale gray, medium-grained sand, few rounded gravels</p> <p>16-55 cmbs: grayish brown sand, some roots, some moderately sorted subround gravels</p> <p>55-72 cmbs: gray sand, gravel and moisture content increasing with depth, many subround gravels (pebble to large cobble-sized), few roots</p> <p><i>Terminated after reaching water table at 72 cm</i></p>	none
7	425099E/ 5245442N	80	<p>0-15 cmbs: gray sandy loam</p> <p>15-80 cmbs: dark brown sandy loam, many rounded gravels (pebbles and large cobbles)</p> <p><i>Terminated on rock obstruction</i></p>	none

Table A-1. Results of Shovel Test Probes in the APE.

Shovel Probe	UTM: East/North	Maximum Depth Below Surface (cmbs)	Description	Cultural Materials Identified
8	425151E/ 5245397N	60	0-12 cmbs: dark grayish brown, fine grained sand, some roots, some subround gravels (pebble to small cobble-sized) 12-60 cmbs: dark grayish brown, fine-grained sand, many subround gravels (small pebble to large cobble-sized) <i>Terminated on rock obstruction</i>	none
9	425127E/ 5245416N	50	0-14 cmbs: pale gray, silty sand, some roots, some subround gravels 14-50 cmbs: grayish brown, silty sand, no roots, many subround gravels (medium pebble to small cobble-sized), increase in gravel size with depth <i>Terminated after reaching water table at 50 cmbs</i>	none
10	425151E/ 5245397N	100	0-9 cmbs: gray sandy loam 9-34 cmbs: brown sandy loam, many rounded gravels 34-80 cmbs: dark brown sandy loam 80-100 cmbs: brown sandy loam, compact, some round to subround gravels <i>Terminated at maximum depth</i>	none
11	425177E/ 5245366N	78	0-30 cmbs: dark brown, organic rich silty sand, many roots 30-78 cmbs: dark brown, coarse-grained sand, many subrounded gravels (pebble to small cobble-sized), gravel sphericity decreasing with depth <i>Terminated after reaching water table</i>	none

Table A-1. Results of Shovel Test Probes in the APE.

Shovel Probe	UTM: East/North	Maximum Depth Below Surface (cmbs)	Description	Cultural Materials Identified
12	425204E/ 5245357N	100	0-66 cmbs: brown, loose sandy silt, many roots, very few gravels 66-100 cmbs: grayish brown, coarse-grained sand, loose, some subround gravels (pebble to cobble-sized), few roots <i>Terminated at maximum depth</i>	none
13	425233E/ 5245353N	60	0-40 cmbs: grayish brown sandy loam, many rounded gravels (pebble to cobble-sized) 40-60 cmbs: dark brown sandy loam, many rounded gravels (pebble to cobble-sized) <i>Terminated on rock obstruction</i>	none
14	425260E/ 5245347N	95	0-18 cmbs: dark brown to grayish brown fine grained sand with organic content 18-48 cmbs: grayish brown, fine-grained sand 48-95 cmbs: yellowish brown, coarse-grained sand, many subrounded gravels (small pebble to large cobble-sized), gravel content increasing with depth <i>Terminated on gravel obstruction</i>	none
15	425273E/ 5245372N	100	0-20 cmbs: brown sandy loam, some roots, few rounded gravels (pebble-sized) 20-90 cmbs: brown sandy loam, some roots, no gravels 90-100 cmbs: gray sandy loam with yellowish mottling <i>Terminated at maximum depth</i>	none
16	425241E/ 5245383N	61	0-42 cmbs: dark brown, organic rich silty sand near surface, organic content decreasing with depth 42-61 cmbs: dark brown coarse-grained sand, many round to subround gravels (pebble to cobble-sized) <i>Terminated on rock obstruction</i>	none

Table A-1. Results of Shovel Test Probes in the APE.

Shovel Probe	UTM: East/North	Maximum Depth Below Surface (cmbs)	Description	Cultural Materials Identified
17	425231E/ 5245387N	80	0-2 cmbs: gray, organic rich silty sand, duff layer 2-50 cmbs: grayish brown fine-grained sand, moist, many roots 50-80 cmbs: dark grayish brown medium-grained silty sand, many rounded to subrounded gravels (small pebble to medium cobble-sized) <i>Terminated on rock obstruction</i>	none
18	425289E/ 5245368N	49	0-49 cmbs: brown, fine sandy loam, many roots, few subrounded gravels (small to medium pebble-sized) <i>Terminated on subsurface obstruction</i>	none
19	425375E/ 5245309N	100	0-8 cmbs: gray sandy loam 8-36 cmbs: grayish brown sandy loam 36-85 cmbs: brown sandy loam, many rounded gravels (pebble to cobble-sized) 85-100 cmbs: blackish brown, coarse-grained sand, many rounded gravels (pebble to cobble-sized) <i>Terminated at maximum depth</i>	none
20	425390E/ 5245284N	73	0-22 cmbs: gray fine-grained sand 22-30 cmbs: brown silty sand, moist, many roots 30-73 cmbs: grayish brown, medium-grained silty sand, many subround gravels (pebble to medium cobble-sized) <i>No recovery on cobbles</i>	none

Table A-1. Results of Shovel Test Probes in the APE.

Shovel Probe	UTM: East/North	Maximum Depth Below Surface (cmbs)	Description	Cultural Materials Identified
21	425287E/ 5245344N	100	<p>0-25 cmbs: dark brown, organic rich sandy loam, few rounded to subangular gravels (pebble-sized)</p> <p>25-81 cmbs: dark brown sandy loam, some subangular to rounded gravels (pebble-sized)</p> <p>81-100 cmbs: Dark brown to grayish brown, coarse-grained sand, many gravels (pebble to cobble-sized)</p> <p><i>Terminated at maximum depth</i></p>	none
22	425312E/ 5245331N	100	<p>0-28 cmbs: grayish brown sandy loam</p> <p>28-65 cmbs: blackish brown, very coarse-grained sand, few small rounded gravels</p> <p>65-85 cmbs: brown sandy loam, some small rounded gravels</p> <p>85-100 cmbs: brown, sandy loam, many rounded gravels (pebble to cobble-sized)</p> <p><i>Terminated at maximum depth</i></p>	none
23	425333E/ 5245305N	100	<p>0-10 cmbs: dark brown, organic rich silty sand, some roots, duff layer</p> <p>10-34 cmbs: brown silty sand, many roots</p> <p>34-74 cmbs: grayish brown sandy loam, some roots</p> <p>74-100 cmbs: pockets of dark gray sandy loam in bluish gray sandy clay, some subround gravels (small to large pebble-sized)</p> <p><i>Terminated at maximum depth</i></p>	none
24	425086E/ 5245468N	24	<p>0-8 cmbs: gray sandy loam, no gravels</p> <p>8-24 cmbs: brown, fine-grained sandy loam, some roots, abrupt boundary with upper sediments</p> <p><i>Terminated upon rock retaining wall/ landscaping</i></p>	none

Table A-1. Results of Shovel Test Probes in the APE.

Shovel Probe	UTM: East/North	Maximum Depth Below Surface (cmbs)	Description	Cultural Materials Identified
25	425104E/ 5245467N	62	0-21 cmbs: dark brown, organic rich sandy loam, duff layer 21-62 cmbs: dark brown, coarse-grained sand, some gravels (pebble to medium cobble-sized) <i>Terminated after reaching water table</i>	none
26	425129E/ 5245459N	100	0-27 cmbs: grayish brown, sandy loam 27-100 cmbs: dark brown, coarse-grained sand, many subround to rounded gravels (pebble to cobble-sized) <i>Terminated at maximum depth</i>	none
27	425139E/ 5245477N	64	0-64 cmbs: dark brown, coarse-grained sand, very many gravels (pebble to cobble-sized) <i>Terminated due to compaction</i>	none
28	425168E/ 5245475N	100	0-11 cmbs: dark brown, organic rich silty sand, some roots, duff layer 11-40 cmbs: brown sandy loam, many roots, many rounded gravels 40-95 cmbs: dark brown sandy loam, many rounded gravels (pebble to cobble-sized) 95-100 cmbs: gray, fine sandy loam, very moist <i>Terminated at maximum depth</i>	none
29	425155E/ 5245457N	100	0-12 cmbs: dark brown, organic rich silty sand, some roots, duff layer 12-34 cmbs: reddish brown, sandy loam 34-55 cmbs: brown, compact sandy loam, very few gravels (small pebble-sized) 55-90 cmbs: grayish brown, fine-grained sandy loam 90-100 cmbs: bioturbation <i>Terminated at maximum depth</i>	none

Table A-1. Results of Shovel Test Probes in the APE.

Shovel Probe	UTM: East/North	Maximum Depth Below Surface (cmbs)	Description	Cultural Materials Identified
30	425175E/ 5245443N	100	0-14 cmbs: dark brown, organic rich silty sand, some roots, duff layer 14-27 cmbs: dark brown silty sand, few roots 27-80 cmbs: grayish brown silty sand, one root @ 73 cmbs 80-100 cmbs: grayish brown, sandy clay <i>Terminated at maximum depth</i>	none
31	424952E/ 5245416N	24	0-24 cmbs: dark brown, coarse-grained sand, many gravels (pebble to cobble-sized) <i>Terminated due to compaction</i>	none
32	424957E/ 5245370N	96	0-68 cmbs: brown sandy loam, some roots, few gravels (pebble-sized) 68-96 cmbs: dark grayish brown, coarse grained sandy loam, moist, no roots, some subround gravels (pebble-sized), moisture increasing with depth <i>Terminated after reaching water table at 96 cmbs</i>	none
33	424945E/ 5245397N	85	0-25 cmbs: brown, organic rich sandy clay, many roots 25-60 cmbs: brown sandy clay, very few gravels 60-85 cmbs: dark brown, coarse-grained sand, some subround gravels (pebble to small cobble-sized) <i>Terminated after reaching water table</i>	none
34	425184E/ 5245424N	95	0-15 cmbs: dark brown, organic rich sandy loam, duff layer 15-95 cmbs: brown, medium-grained silty loam, many roots, root content decreasing with depth <i>Terminated on root obstruction</i>	none

Appendix B. Inadvertent Discovery Plan

Compliance with all applicable laws pertaining to archaeological resources (RCW 27.53, 27.44 and WAC 25-48) and to human remains (RCW 68.50) is required. Failure to comply with these requirements could result in a misdemeanor and possible civil penalties and/or may constitute a Class C felony.

B.1 Inadvertent Discovery of Cultural Resources

1. If any member of the construction crew believes that they have encountered precontact or historic-period archaeological materials during the Project, the crew member will direct the contractor to stop work at that location to protect potential additional resources. The contractor will establish a buffer zone of 50 ft around the find to protect the location. This will also ensure the Secretary of the Interior (SOI) Qualified Archaeologist's safety while inspecting the possible find.
 - a. **Precontact cultural materials** include, but are not limited to:
 - i. Buried layers of black soil with layers of shell, charcoal, and fish and mammal bones (Figure B-1).
 - ii. Non-natural sediment or stone deposits that may be related to activity areas of people;
 - iii. Stone, bone, shell, horn, or antler tools that may include projectile points (arrowheads), scrapers, cutting tools, wood working wedges or axes, and grinding stones (Figures B-2 and B-3);
 - iv. Stone flakes created during the manufacture of stone tools (Figures B-2 and B-3);
 - v. Fragments of basketry, weaving, wood tools, or carved pieces
 - b. Historic-period cultural materials include, but are not limited to:
 - i. Remnants of logging machinery or implements;
 - ii. Low-fired and bisque ceramics with subdued colors, or blue/pink willow-like design; thick-bodied pieces indicating crockery (Figure B-4);
 - iii. Non-tempered glass; violet-colored glass; stopper-topped glass jars or bottles; press-capped (cork gasket liner) heavy-walled soda or liquor bottles

- (not twist-top, thin-walled); zinc and vitreous glass-lidded glass canning jars with colored body (Figure B-5);
- iv. Miscellaneous fragments of metal (or plated) clothing closures (hooks and eyes, and suspender fittings, but not zippers), shell buttons, fragments of bakelite houseware;
 - v. Sawed animal bone and fruit pits;
 - vi. Enameled ironware;
 - vii. Punch-opened and solder-sealed beverage cans; solder-sealed food tins; (not thin-walled aluminum and welded steel cans);
 - viii. Older automotive parts; and
 - ix. Knob-and-tube electrical insulators; and
2. The contractor will temporarily halt the work in the location of the find and immediately contact USFWS. USFWS will then contact the SOI Qualified Archaeologist (see Appendix C for contact information), and describe the find to ascertain the necessary next steps.
 3. If archaeological materials (excluding human remains) are found, USFWS and the contractor will take appropriate steps to protect the discovery site by maintaining the 50 ft buffer around the find, installing a physical barrier (i.e., exclusionary fencing), and prohibiting all machinery, other vehicles, and unauthorized individuals from crossing the barrier until the SOI Qualified Archaeologist examines and verifies the find.
 4. If there is suspicion that the artifact(s) may be disturbed or an isolate, the archaeologist may request that excavation continue in order to assess the extent of the deposit and the nature of the soils/ sediments below the observed materials. The archaeologist will coordinate with the Contractor to direct the crew in such circumstances. If excavation is allowed to continue, the archaeologist will take notes on the find along with overview photographs to form a basic description of the characteristics and location of the cultural materials, to allow for minimal delays.
 5. For safety reasons, no archaeologist will enter any excavations deeper than 4 ft to inspect a possible find until the excavation has been shored by the contractor, per OSHA standards at 29 CFR 1926.652 (www.osha-slc.gov/).
 6. Halting of construction excavation for inspection of a possible find will allow the archaeologist to identify whether the find is an isolate, an intact archaeological deposit, disturbed artifact deposits, or other materials.

Isolate: One distinct artifact or a few fragments of the same artifact that are too far away (typically more than 30 meters) from other cultural materials (over 50 years old) to be

considered part of a site. Generally, an isolate will not take long to document. If diagnostic, the find should be recorded on an Isolate Form and photographs taken.

Intact Artifact Deposit or Feature: Two or more distinct artifacts or one feature (immovable object such as a concrete foundation) within a 50-m area. Intact deposits would be considered an archaeological site and be recorded on an Archaeological Site Inventory Form.

Disturbed Artifact Deposits: Artifacts identified in disturbed soils (such as historic fill) should be documented in monitoring notes and photographed. Depending on the volume of artifacts and the level of disturbance, the deposit may or may not need to be recorded on a Site Form. Limited investigation around the artifacts may be necessary to determine if additional materials are present and the site boundaries extend, following the protocol steps below as necessary.

Other: Abandoned/remnant utilities and materials less than 50 years old are not considered significant. No further action is necessary.

7. If the archaeologist believes the find represents an intact archaeological site, excavation will halt completely at that location. The archaeologist will then inform USFWS of that determination.
8. Depending on the nature and size of the archaeological resource, it is feasible that construction may continue elsewhere in the APE, provided that a safe buffer zone is maintained between the archaeological resource and construction area. This will be decided between the archaeologist and USFWS, in consultation with DAHP.
9. Under RCW 27.53, all precontact archaeological sites are protected regardless of significance or eligibility for national, state, and/or local historic registers. A determination of eligibility for listing on the state or national register by DAHP must be obtained for archaeological resources. It is presumed that historic-period resources are eligible for listing in the NRHP until and unless DAHP makes a determination that they are not.
10. USFWS, in coordination DAHP and the affected Tribes, will determine an appropriate form of treatment for the archaeological site. Treatment measures may include mapping, photography, limited probing, and sample collection, or other activities.
11. If treatment measures determined by the consulting parties include sample collection, the archaeological resources will be examined by the archaeologist and possibly analyzed by specialists, as needed and appropriate.
12. All precontact and historic artifacts collected within the APE will be analyzed, catalogued, and temporarily curated by HRA. Ultimate disposition of cultural materials will be determined by USFWS.

13. When all archaeological investigation work has been completed, the Professional Archaeologist will prepare a report discussing the methods and results of the work.
14. If any ground disturbing activities associated with the Project reveal human remains, the procedures listed in Section B.2 will be followed.



Figure B-1. Shell midden.



Figure B-2. Example of stone tools.



Figure B-3. Example of stone flake and tools.



Figure B-4. Example of historic artifacts from debris scatter.



Figure B-5. Example of bottles from historic debris dump.

B.2 Inadvertent Discovery of Human Remains

Any human remains that are discovered during project-related activities will be treated with dignity and respect. In the event that human remains are discovered, the following procedures are to be followed to ensure compliance with RCW 68.50 *Human Remains*, RCW 68.60: *Abandoned and Historic Cemeteries and Historic Graves*, and RCW 27.44: *Indian Graves and Records*.

If ground disturbing activities encounter human or potentially human skeletal remains during activities associated with the Project, then all activity **must** cease that may cause further disturbance to those remains and the area of the find must be secured and protected from further disturbance.

1. To establish if a bone is human, Dr. Guy Tasa is available to review pictures of a bone. His information is in the contact list in Appendix C of this report. USFWS will contact Dr. Guy Tasa.

2. If Dr. Tasa establishes that the bone is not human, then there is no need to contact the coroner and procedures outlined in Appendix B-1 for the discovery of archaeological materials should be followed.
3. If Dr. Tasa establishes that the bone is human, USFWS will contact the coroner and local law enforcement to inform them of the discovery.

If the discovery is human remains, USFWS will completely secure the work area by moving the land-altering equipment to a reasonable distance, and will immediately contact the Grays Harbor County Coroner (to determine if the remains are forensic in nature), DAHP, and may consult a professional archaeologist (see Appendix C for contact information). If the remains are not forensic in nature, USFWS will determine an appropriate method of treatment for the remains and will consult with the affected tribes.

The legal requirements are as follows:

1. Per RCW 68.50.645, 27.44.055, and 68.60.055 (1) Any person who discovers skeletal human remains must notify the county coroner and local law enforcement in the most expeditious manner possible. Any person knowing of the existence of human remains and not having good reason to believe that the coroner and local law enforcement has notice thereof and who fails to give notice thereof is guilty of a misdemeanor.
2. If the bone is human, the remains should not be touched, moved, or further disturbed. The coroner will assume jurisdiction and determine if the remains are forensic or not.
3. If the bones are not forensic, the coroner will report that to USFWS, who will then take jurisdiction over the human remains and report the remains to any appropriate cemeteries and to affected tribes.
4. The state physical anthropologist will make a determination of whether the remains are Native American or not and will report that finding to any appropriate cemeteries, to affected tribes, and to other appropriate parties.
5. USFWS will then conduct all consultation with the affected parties as to the future preservation, excavation, and disposition of the remains.

Appendix C. Inadvertent Discovery Contact Information

United States Fish and Wildlife Service

Anan Raymond, Regional Archaeologist
20555 Gerda Lane
Sherwood, OR 97140
Telephone: (503) 625-8215 ext. 520
Email: anan_raymond@fws.gov

Grays Harbor County Coroner

Lane Youmans, Coroner
1006 North H St.
Aberdeen, WA 98520
Telephone: (360) 537-6139
Telephone 24 hr: (360) 532-2322

Grays Harbor County Sheriff's Department

Rick Scott, Sheriff
100 W. Broadway, Suite 3
Montesano, WA 98563
Telephone: (360) 249-3711
Telephone: (360) 532-3284
Telephone: 1-800-562-8714

Archaeological Consultant

Historical Research Associates, Inc. (HRA)
Alex Stevenson
1904 Third Ave, Suite 240
Seattle, WA 98101
Telephone: (206) 343-0226

Tribes

Justine James, Cultural Resource Specialist
Quinault Indian Nation
P.O. Box 189 Taholah, WA. 98587
Telephone: (360) 276-8211 ext: 520
Email: jjames@quinault.org

Washington State Department of Archaeology and Historic Preservation (DAHP)

State Archaeologist
Dr. Rob Whitlam
PO Box 48343
Olympia, WA 98501
Telephone: (360) 586-3080 (office)
Email: Rob.whitlam@dahp.wa.gov

State Physical Anthropologist
Dr. Guy Tasa
PO Box 48343
Olympia, WA 98501
Telephone: 360-586-3534 (office)
Email: Guy.tasa@dahp.wa.gov

Appendix D. Tribal Consultation



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Anan Raymond, Regional Archaeologist
Region 1+ Region 8 Cultural Resource Team
20555 Gerda Lane, Sherwood, OR 97140
phone:503-625-4377, fax:503-625-4887, cell:503-803-7913
email: anan_raymond@fws.gov



27 October 2015

To: Justine James, Cultural Resources
PO Box 189
Taholah, WA 98587-0189
P/ 360-276-8215 ext. 520
jjames@quinault.org

From: Anan Raymond, Regional Historic Preservation Officer (RHPO)

Subject: Section 106 of the National Historic Preservation Act (NHPA) for **Quinault NFH Fish Exclusion Barrier**, Grays Harbor County, Washington

The U.S. Fish and Wildlife Service (FWS) is proposing a fish passage project at Quinault National Fish Hatchery (NFH) in Grays Harbor County, Washington (T22N, R10W, S31, Stevens Creek 7.5' USGS quad) (Figures 1). Pursuant to its responsibilities under Section 106 of the National Historic Preservation Act (NHPA) and 36 CFR 800, the FWS has determined that the proposed action is a federal undertaking. Through this letter, the FWS is initiating consultation with your tribe pursuant to 36 CFR 800.2(c), 800.4(a)(3) and 800.4(a)(4).

Undertaking and Area of Potential Effects (APE): The project will maintain the functionality of the Quinault NFH by replacing the existing weir, modifying riprap and an access road, and adding a fish bypass ladder. Additionally, the proposed project includes routine maintenance activities which include cleaning of water intakes and removal of large woody debris and gravel buildup near or on the weir. These repairs and maintenance activities are needed to allow the weir and fish ladder to function properly, allow fish passage, and improve human safety.

The proposed project will replace the existing electric weir with a velocity barrier consisting of a concrete slab (apron) with two 40-foot-wide Obermeyer weir panels separated by a central concrete pier. A new fishway (fish ladder) will be constructed on the north abutment of the weir to allow fish passage. The total width of the new weir and fishway, including abutments and piers, will be approximately 89 feet. The new weir will be oriented perpendicular to the flow of the creek.

A flood wall will be added to the south bank of Cook Creek for a distance of about 1,275 feet upstream of the weir. The flood wall will contain the backwater from the weir and prevent permanent inundation of wetlands "D" and "E" and the surrounding riparian and forest areas. With the exception of the staging area, all work activities occur within the 100-year floodplain (Figure 2). A more detailed description of the project elements is attached as Attachment A.

The Area of Potential Effects (APE) includes the footprint of all ground disturbing activities and areas of new inundation, specifically activity areas associated with the weir, fishway, control building, flood walls, access road, and staging areas, a total of 6.9 acres.

Background Information: The project occurs at Quinault National Fish Hatchery located on Cook Creek. The surrounding properties adjacent to the project area are managed by the USFWS, the Quinault Nation, and the United States Forest Service. The adjacent land consists of native riparian areas and mixed upland deciduous and coniferous forest. Both the US Forest Service and Quinault Tribe use their property for timber production and harvesting, recreation, and/or forest preservation.

The Quinault National Fish Hatchery (NFH) was authorized on July 7, 1964, by the Appropriation Act (78 stat. 283) and the Fish and Wildlife Act of 1956 (70 Stat. 1119) and began operations in 1968 "...to restore and enhance depleted runs of salmon and steelhead on the Quinault Indian Reservation and adjacent federal lands..." The hatchery is operated by U.S. Fish and Wildlife Service and is located on Quinault Indian Reservation land.

The project area is located within the Olympic Mountains on the Olympic Peninsula. The Holocene post glacier or the outwash from the Quinault River ice advance likely formed the contemporary topography of the area. The shoreline along Cook Creek is comprised of a riparian habitat consisting of mature deciduous riparian vegetation near the creek, mature coniferous trees in the upland area, and sedges and rushes in the wetland areas.

The portion of the property south of Cook Creek is moderately undisturbed from development activities, and the noxious weed presence is low. The portion of the property north of Cook Creek has been developed into the hatchery. The areas surrounding the project have been previously logged, some possibly twice. Logging continues along the Moclips Highway.

Proposed Identification Effort: A professional archaeologist (Alexander Stevenson, HRA, astevenson@hrassoc.com) has been contracted to conduct research, fieldwork, and documentation for this project.

Requested Action: We look forward to receiving comments and information from your office as we determine the appropriate action for protection of historic properties within the APE. This may include tribal input regarding sites of religious or cultural significance. We recognize that cultural resource information is sensitive and must be treated confidentially. We will be happy to talk or meet with you or your staff regarding this project. An individual meeting the Secretary of the Interior's standards for professional in archaeology (36 CFR 61) will ensure proper implementation of all identification, evaluation, and mitigation activities, as appropriate. If you believe this undertaking requires direct consultation with tribal government, please let us know.

To ensure your comments are given adequate consideration and the determination and identification process can proceed in a timely manner, we request that you respond within 30 days. If you have questions or concerns, please contact me at 503-625-4377 or anan_raymond@fws.gov.

Sincerely,



Anan Raymond, Regional Historic Preservation Officer

Attachment A: Description of Project Activities

Figure 1. Project location on Stevens Creek 7.5' USGS quad.

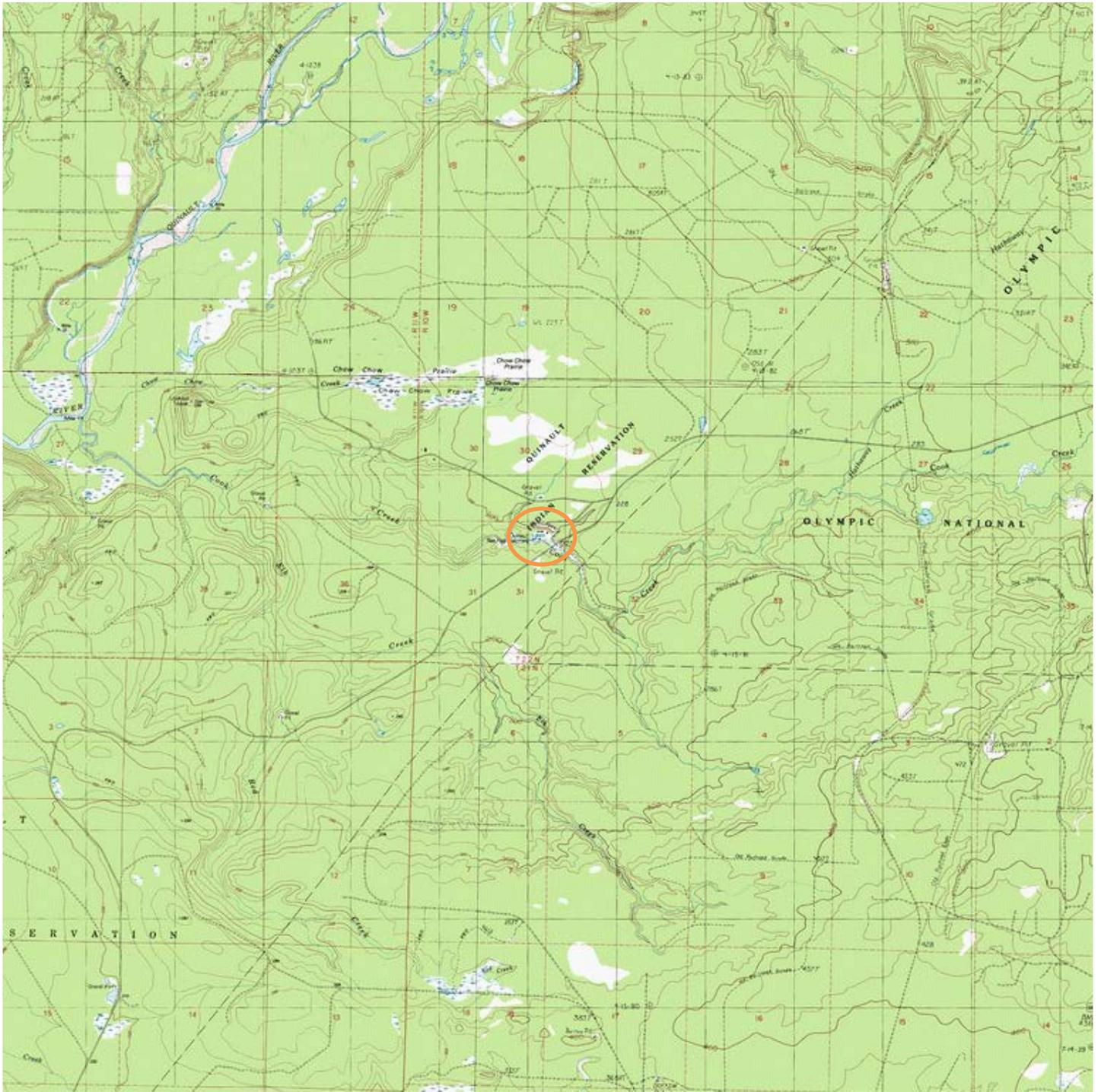


Figure 2. Close up of project area on Stevens Creek 7.5' USGS showing area of potential effects (APE).

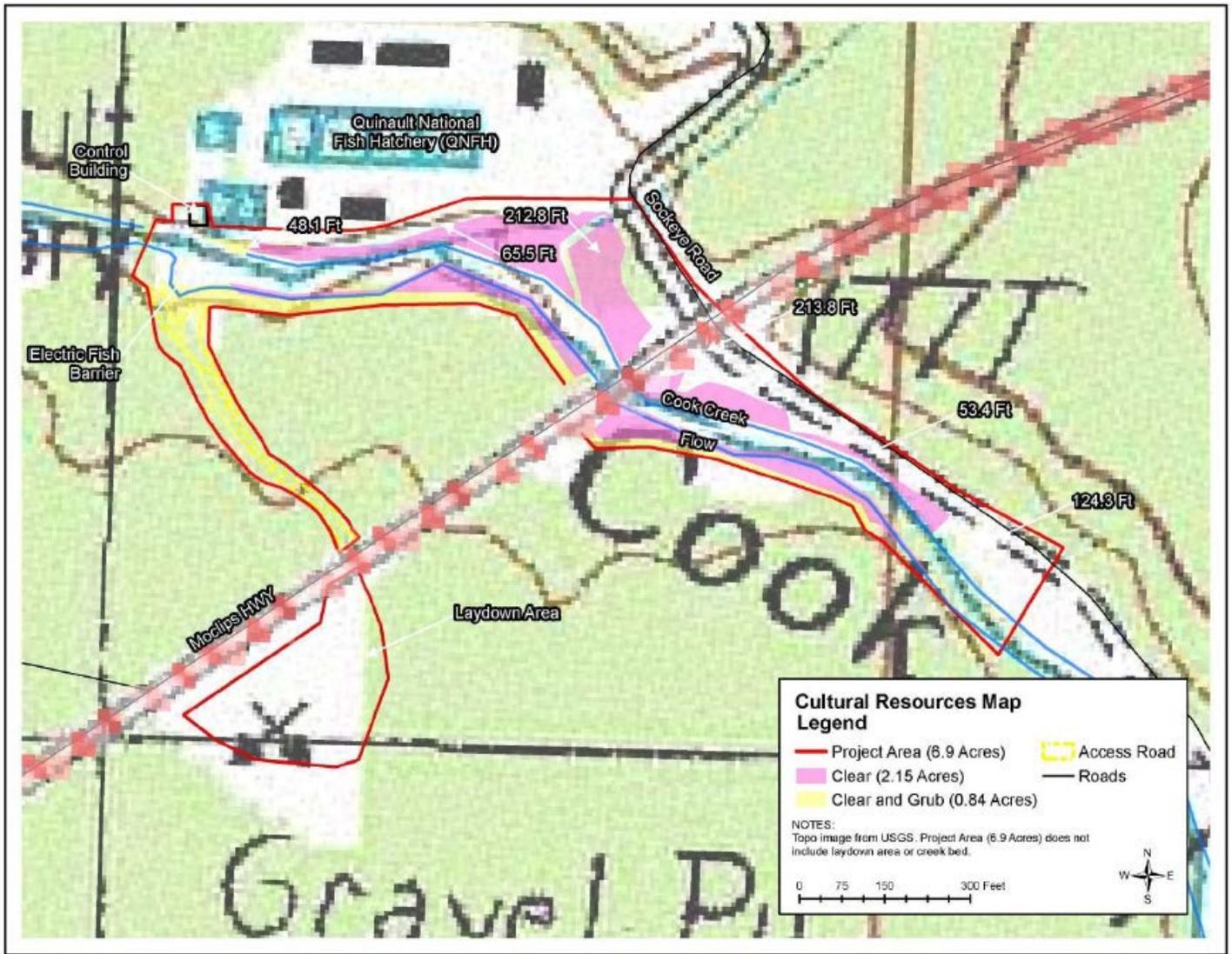
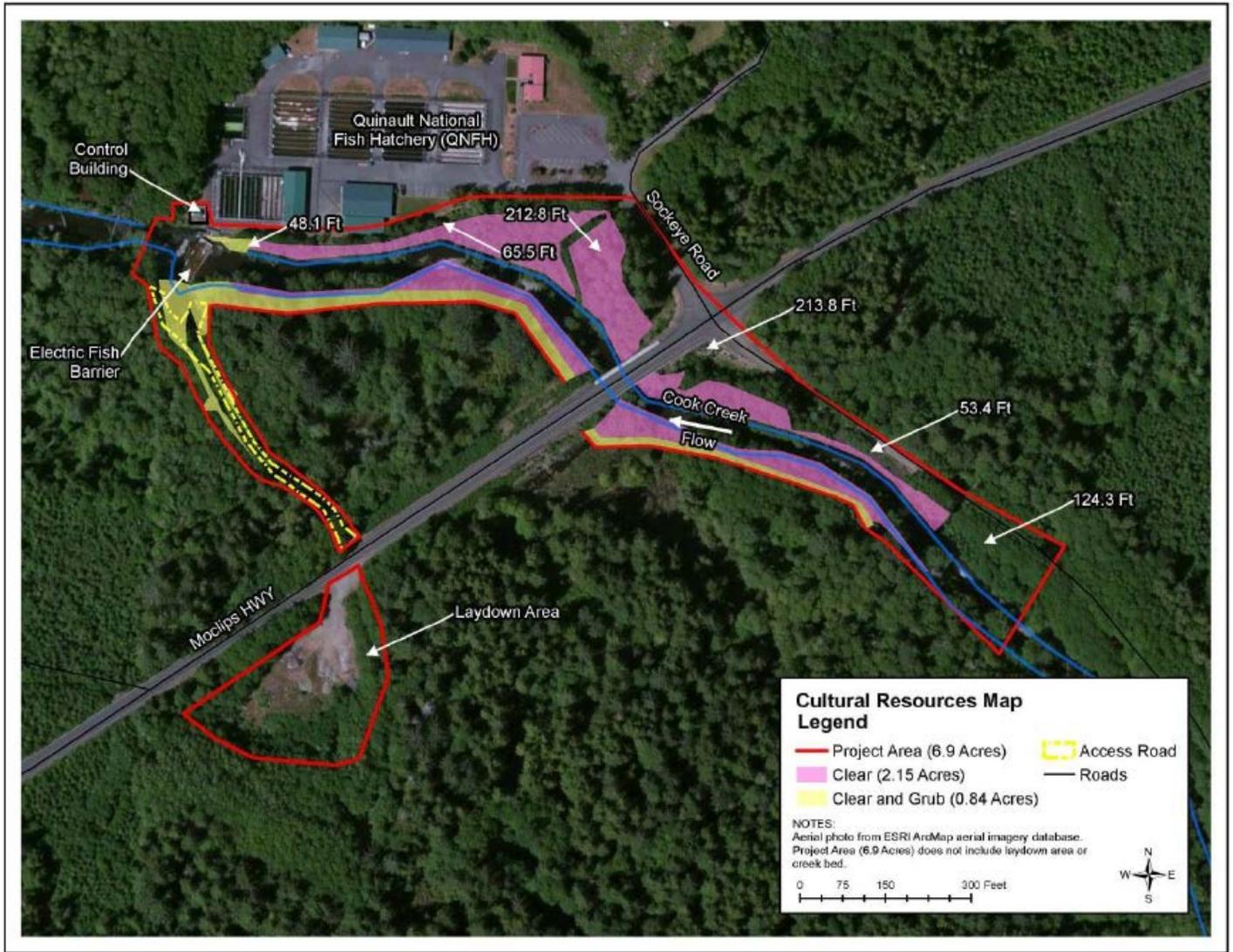


Figure 3. Aerial photograph showing area of potential effects (APE).



Attachment A: Description of Project Elements

Weir: A 24-foot-wide by 80-foot-long velocity barrier consisting of a 20-foot-wide downstream concrete apron will be constructed spanning Cook Creek. The velocity barrier will consist of an adjustable Obermeyer Weir gate system. The Obermeyer Weir will consist of two 40-foot-long weir sections that will be operated in conjunction. The velocity barrier will have cutoff walls at both the upstream and downstream side, protected by rock riprap. An approximately 8-foot-wide by 4-foot thick layer of 12-inch rock riprap will extend downstream of the cutoff wall and an approximately 4-foot-wide by 4-foot thick layer of 12-inch rock riprap will extend upstream of the cutoff wall. The new velocity barrier will raise the ordinary high water mark (OHWM) of Cook Creek by approximately 6.5 feet, inundating approximately 2.44 acres of non-riverine land upstream. Large woody vegetation will be cleared within this new inundation area, to ensure the velocity barrier or other areas downstream do not get congested/obstructed with debris .

Fishway (fish ladder): A new 8-foot-wide by 100-foot-long concrete fishway (i.e. fish ladder) will be constructed on the north side of Cook Creek adjoining the velocity fish barrier structure. This fishway will allow upstream fish passage if desired in the future. Aluminum stop logs could be installed in the structure to create pools to facilitate fish passage.

Control Building: The existing electric weir control building, located approximately 30 feet north of the fish barrier structure, will be demolished and replaced with a new larger pre-engineered metal building. The new building will house the necessary operation and control equipment for the new Obermeyer Weir and will be situated within the limits of the existing disturbed upland area.

Flood walls: In order to prevent over-topping during 100-year flood flows and to protect adjacent wetlands, a flood wall will be constructed along the left bank (southern side) of Cook Creek. The wall will extend from the velocity fish barrier upstream approximately 1,275 feet. Construction of a concrete flood wall will not be required on the north side of Cook Creek, as the steep topography there will contain the anticipated high flow. Currently two designs are noted, and depending on funding and recommendation from permitting agencies, one of the two designs will proceed.

Flood Wall Option 1 – Concrete Flood Wall: The concrete flood wall will be approximately 4 to 8 feet above the ground and extend 4.5 feet below ground.

Flood Wall Option 2 - Sheet pile Flood Wall: The sheet pile flood wall would be approximately 4 to 8 feet above the ground and extend 20 to 40 feet below ground. Holes would be created in the underground portion of the sheet pile wall to facilitate subsurface water flow.

Access Road: The existing access road to the fish exclusion barrier would be widened by two to four feet to allow construction access and public parking. The existing gate across the access road would be removed to provide public access to the area, and relocated to the entrance of the proposed downstream access ramp. Two new access ramps would be constructed on the upstream and downstream sides of the barrier to provide maintenance access. The upstream access ramp would be 20-feet-wide and require a sheet pile flood wall on the upstream (east) side to protect it from high flood events. This ramp would be fenced off to exclude the public. The downstream access ramp would be 20-feet-wide and would allow access for both maintenance and public pedestrian traffic to Cook Creek.

Temporary Staging Area: The construction staging area would be located in a pre-disturbed area off of the Moclips Highway. There would be no additional clearing of vegetation in this area, and the site would be stabilized.

Alexander Stevenson

From: Parks, Virginia <virginia_parks@fws.gov>
Sent: Thursday, December 03, 2015 10:05 AM
To: James, Justine
Cc: Alexander Stevenson; Anan Raymond; Yvonne Dettlaff; Roberts, Wendy
Subject: Re: Quinault NFH Fish Exclusion Barrier - An FWS Undertaking in Grays Harbor County
Attachments: Quinault_NewFloodMap_20151124.pdf

Good morning, Justine:

We've been informed by the consultant for the project at Quinault NFH that the APE for the project has changed slightly. The change involves a larger area of inundation than was previously planned, but does not involve any additional ground disturbing activities. An aerial photograph showing the new APE is attached to this email.

While this larger area was not included in the area surveyed by Alex Stevenson, based on the negative findings of the archaeological survey and shovel probe tests (shown on the attached aerial and for which a report is forthcoming) and the fact that this new area will only be subject to inundation and not otherwise disturbed, the FWS is inclined to recommend that no additional fieldwork is necessary in this area, if such a recommendation raises no issues for you. Please let us know if you have concerns or believe the revised APE warrants additional investigation.

Thanks very much,
Virginia

On Fri, Oct 30, 2015 at 8:27 AM, Parks, Virginia <virginia_parks@fws.gov> wrote:
Thank you very much, Justine, and I'll forward your caution regarding the presence of fishers to everyone involved.

Virginia

On Wed, Oct 28, 2015 at 3:55 PM, James, Justine <JJAMES@quinault.org> wrote:

Greetings,

Regarding the Quinault – Cook Creek facility

Thank you for the opportunity to review the Quinault NFH Fish Exclusion Barrier

The QIN does not have issue with the project as proposed.

I visited the site on October 27 and discussed the project with a couple of staff members at the Cook Creek facility. In addition, Alex and I have discussed the project on 2 occasions.

I will be out of town when the Alex and the crew will be visiting the site. I understand the timeliness of the schedule and informed Alex that I do not need to be on site to monitor the initial fieldwork. I would, however, appreciate an update/progress report of the activities.

During yesterday's visit, I noticed there were Quinault guides and fisherman just below the weir. So, schedules may need to be double-checked to ensure that the fishers will not be in construction zone. I understand that the initial activities should not disturb fishing activities – arch fieldwork. The project is ready to roll.

Sincerely,

Justine James

Cultural Resource Specialist

Quinault Indian Nation

From: Parks, Virginia [mailto:virginia_parks@fws.gov]

Sent: Tuesday, October 27, 2015 8:40 AM

To: James, Justine

Cc: Alexander Stevenson; Yvonne Dettlaff; Roberts, Wendy; Anan Raymond

Subject: Quinault NFH Fish Exclusion Barrier - An FWS Undertaking in Grays Harbor County

Good morning, Justine:

Attached is a tribal review and consultation memo for a fish barrier removal project that the FWS is implementing at Quinault NFH in Grays Harbor County, Washington.

It's our understanding that you have already been in communication with the project partners regarding this project. We want to make sure we address any issues or concerns you might have before Alex Stevenson heads out to the hatchery to begin the fieldwork for the project.

Alex may be contacting you directly to follow up, if that's OK.

Thanks very much!
Virginia

--

Virginia Parks

Cultural Resources Team, Region 1

U.S. Fish and Wildlife Service

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