

EXHIBIT “7”

Confidential Report

**CULTURAL RESOURCES MITIGATION AND
MANAGEMENT PLAN FOR
SNOQUALMIE FALLS PROJECT, FERC NO. 2493**

Prepared for

PUGET SOUND POWER & LIGHT COMPANY
411 - 108th Avenue N.E.
Bellevue, Washington 98004

by

Gail Thompson, Ph.D.

Historical Research Associates, Inc.
119 Pine Street, Suite 207
Seattle, Washington 98101

February 26, 1996

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EXECUTIVE SUMMARY

This Cultural Resources Mitigation and Management Plan (Cultural Plan) establishes policy direction and procedures for the cultural resources that are known or that might be discovered in the future as part of the Snoqualmie Falls Project in King County, Washington. It also outlines Puget Sound Power & Light Company's (Puget Power) long-term stewardship role in caring for and protecting the Snoqualmie Falls Traditional Cultural Property.

The Cultural Plan is based on Puget Power's Application for New License from the Federal Energy Regulatory Commission (FERC), filed in November, 1991 (License Application) and subsequent filings. These include Puget Power's revised plans for a Refurbished Project, filed on February 17, 1995, with additional information filed on June 28, 1995. The Company prepared the Cultural Plan to meet the requirements of the FERC and Section 106 of the National Historic Preservation Act, as amended. During preparation of this Cultural Plan, Puget Power reviewed literature on anthropology and archaeology, conducted cultural resources field surveys, and consulted at length with representatives from the Washington State Office of Archaeology and Historic Preservation, the National Park Service, the Advisory Council on Historic Preservation, and Indian Tribal Organizations, consisting of The Tulalip Tribes, the Yakama Indian Nation, and the Snoqualmie Indians.

The management program described in the Cultural Plan will run for the 40-year term of the new License. This plan applies to the Snoqualmie Falls Traditional Cultural Property that was determined eligible for listing in the National Register of Historic Places in 1992. The Cultural Plan has been designed for implementation by Project personnel and other Puget Power employees.

The purpose of the Cultural Plan is to integrate the preservation of the Snoqualmie Falls Traditional Cultural Property with the objectives and goals of Puget Power for the refurbished Snoqualmie Falls Project. Protection of the property's character-defining elements is ensured through the guidelines, review procedures, and various mitigation measures contained in the Cultural Plan. This document establishes review procedures that correspond to the levels of response required by any proposed action. Discussions of mitigation are based on the proposals made by Puget Power in the License Application and subsequent filings, and ongoing consultation with Indian Tribal Organizations and state and federal agencies since the License Application was filed.

Puget Power will establish ongoing interpretation and education programs to aid the public in appreciating and understanding Native American traditional use and the cultural resources of the Project Area. Periodically, Puget Power will establish task forces regarding this development, as needed.

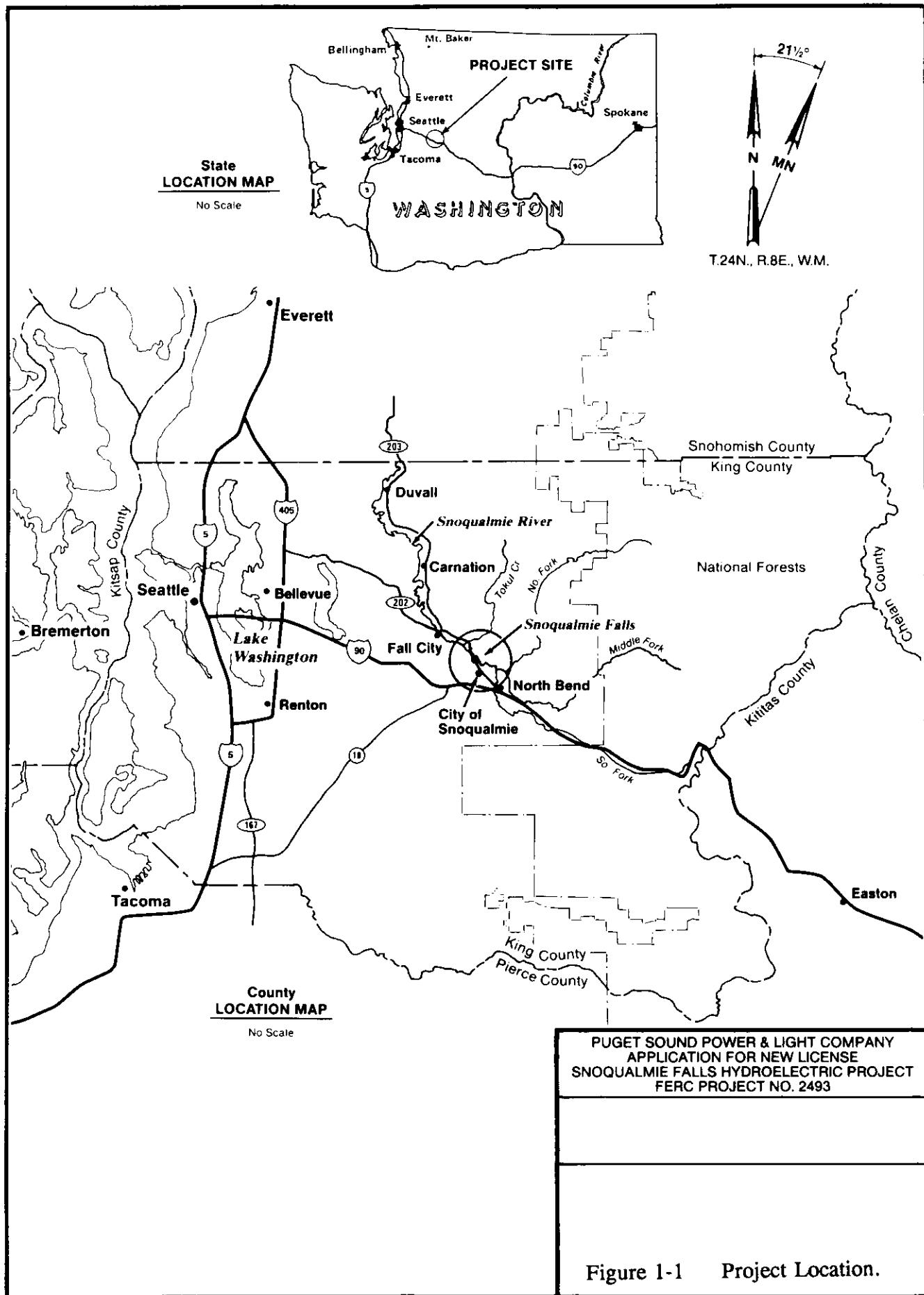
1.0 INTRODUCTION

Puget Sound Power & Light Company (Puget Power) is in the process of relicensing its Snoqualmie Falls Project No. 2493 (Project) before the Federal Energy Regulatory Commission (FERC) (Figure 1-1). Puget Power filed its Application for New License with the FERC in November 1991 (License Application). The License Application proposed an Expanded Project that would have increased the Project capacity to 79 megawatts and made major changes and improvements to Project facilities. In a February 17, 1995, filing, Puget Power reduced the scope of its plan to a Refurbished Project. In June 28, 1995, the Company provided the FERC with additional information on the Refurbished Project. This Cultural Plan is based on the Refurbished Project. If, at License issuance, there is a change in the Refurbished Project as noted in the License Articles, Puget Power may need to reexamine the provisions presented in this document.

The FERC is required under the provisions of Section 106 of the *National Historic Preservation Act* of 1966, as amended (NHPA), to consider the impact of its licensing action upon identified cultural resources listed in or eligible for the National Register of Historic Places (National Register). In addition, the FERC must give the Advisory Council on Historic Preservation (AHP) an opportunity to comment on the proposed undertaking by following the procedures set forth in 36 CFR Part 800, "Protection of Historic and Cultural Properties." Applicable FERC staff guidelines appear in the *Hydroelectric Project Relicensing Handbook* (April 1990).

Following the FERC regulations and to satisfy the agency's cultural resources responsibilities, Puget Power contracted with Historical Research Associates, Inc. (HRA) to conduct cultural resources work for the Project. The Company consulted with the Washington Office of Archaeology and Historic Preservation (OAHP) and the National Park Service (NPS) to conduct cultural resources and historical resources inventory and assessments of the Project (Beak and BOAS 1989; Catton et al. 1991; Thompson and King 1991). Those studies identified two properties that are eligible for listing in the National Register: the Snoqualmie Falls Traditional Cultural Property, based on its significance to The Tulalip Tribes and the Snoqualmie Indians, and the Snoqualmie Falls Project Historic District encompassing a number of buildings and structures associated with the hydroelectric project. Both the Traditional Cultural Property and the Historic District incorporate the Falls as a primary contributing element. OAHP and the Keeper of the National Register determined in 1992 that the Traditional Cultural Property is eligible for National Register listing; in the same year the Historic District was listed in the National Register.

This Cultural Resources Mitigation and Management Plan (Cultural Plan) and its companion Historical Resources Mitigation and Management Plan (Historical Plan) are intended to assist Puget Power personnel in defining standards and procedures to preserve and treat cultural and historical resources in the Project Area over the term of the new License. Following the process established in Section 106 of NHPA, the two plans are designed to mitigate the potential adverse effects of the Project on the Traditional Cultural



Property and the Historic District and to manage Snoqualmie Falls and the rest of the Project's significant elements to preserve the integrity of the cultural and historical attributes.

This is the sixth draft of the Cultural Plan, which was first issued for review on June 2, 1992. The second draft of the document was sent out for review on June 28, 1992. On September 1, 1993, the third draft of the Cultural Plan was filed with the FERC as part of Puget Power's response to a FERC additional information request. In April 1994, the FERC forwarded the plan to the Advisory Council on Historic Preservation (AChP), Office of Archaeology and Historic Preservation (OAHP), The Tulalip Tribes, the Snoqualmie Indians, and the Yakama Indian Nation for review. Puget Power submitted a revised fourth draft of the Cultural Plan for review on September 16, 1994 and filed a fifth draft with the FERC on October 28, 1994. All of these drafts were based on the Expanded Project. After Puget Power submitted a plan for a Refurbished Project, the FERC directed the Company to again revise this document to reflect proposed changes. This sixth draft reflects changes based on the Refurbished Project.

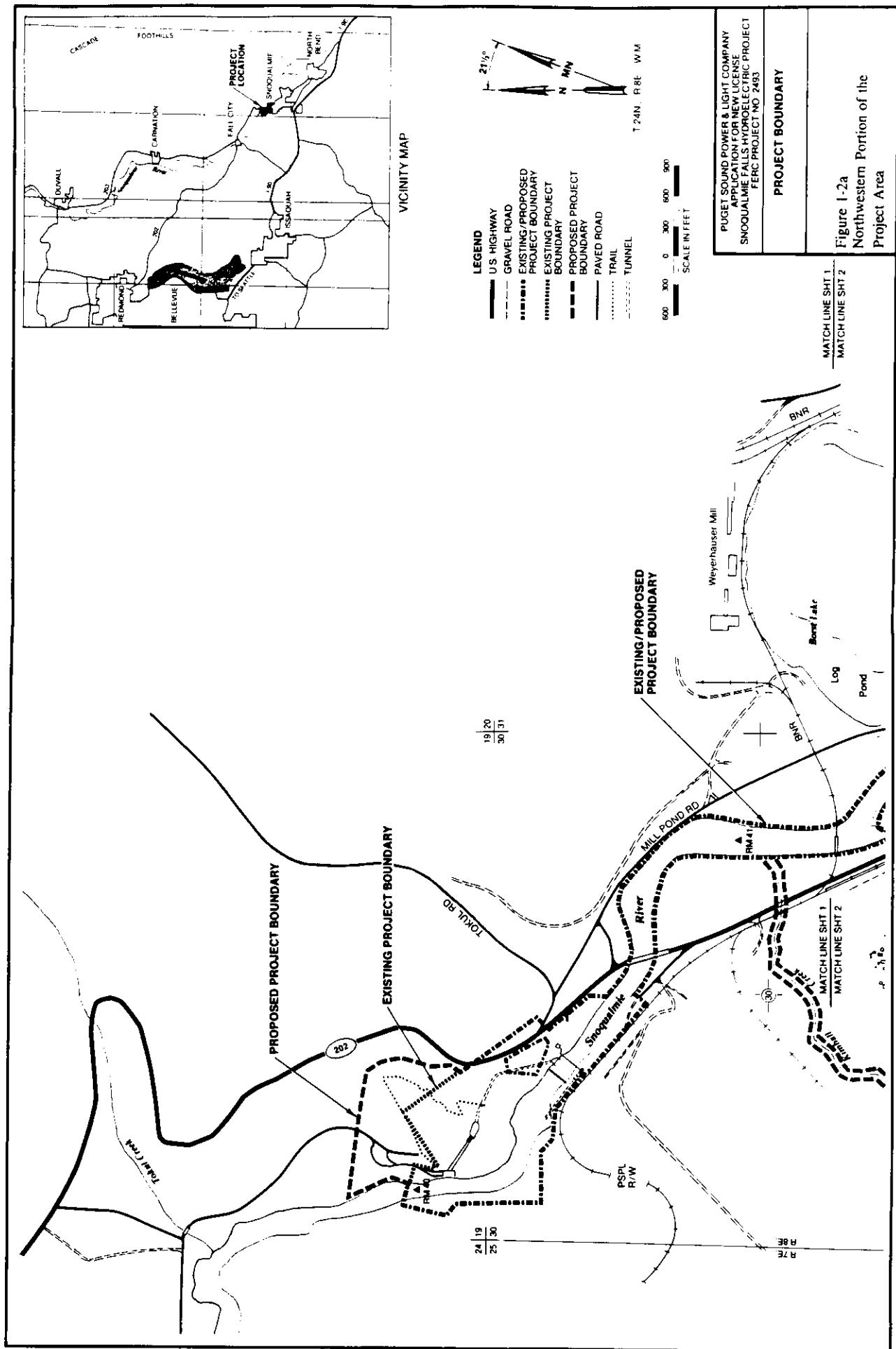
This Cultural Plan reviews the research that led to the identification of the Snoqualmie Falls Traditional Cultural Property and discusses the character-defining features of the property, the impact issues of relicensing, and the measures that will be taken to preserve the character-defining features during the 40-year License period. The Historical Plan follows a similar format for the Project's significant buildings and structures (Mighetto et al. 1995). A Programmatic Agreement (PA) among the FERC, the OAHP, and the AChP will implement both Plans and the Snoqualmie Falls Project Maintenance Guidelines that Puget Power will produce for the Project's buildings and structures. Signatory parties to the PA will include the FERC, the AChP, and the OAHP. Puget Power, The Tulalip Tribes, the Snoqualmie Indians, and the Yakama Indian Nation will be invited to sign the PA. The PA will require implementation of the Cultural Plan, and preparation of maintenance guidelines for the historic buildings and structures and a mitigation proposal for cultural resources. The PA also will explain how Puget Power will consult with the Indian Tribal Organizations¹ and the agencies, how the company will treat inadvertently discovered archaeological deposits and human remains, how artifacts will be curated, and how cultural resources work on the Project will be reported.

The Company values the cultural diversity and historical perspective represented in prehistoric, ethnohistoric, and historic cultural resources. Puget Power is committed to exercising good stewardship over its significant cultural resources by following applicable federal, state, and local laws, rules, and regulations in consultation with oversight agencies and affected Indian tribes and community groups, consistent with the Company's responsibilities to its shareholders and to the natural and other resources it manages.

¹Throughout the Cultural Plan, the term "Indian Tribal Organizations" is used to refer to The Tulalip Tribes and the Yakama Indian Nation, two federally recognized Indian Tribes, and the Snoqualmie Indians, a group seeking federal recognition as a tribe.

Figures 1-2a through 1-2c show the Project Area, and Figure 1-3 shows the locations of Project facilities. Project components near Snoqualmie Falls have changed slowly over the years and are expected to continue changing. During the term of the new License, construction will take place at a few locations in the Project Area including some, such as the dam and the Plant 2 intake, that are relatively close to the Falls. The potential for construction to affect the Snoqualmie Falls Traditional Cultural Property makes it important to develop this Cultural Plan.

Section 2.0 of the Cultural Plan describes the Project, the background research on cultural resources, and field surveys of the Project Area. Section 3.0 presents information on the environmental, prehistoric, ethnohistoric, and contemporary cultural setting of Snoqualmie Falls. Section 4.0 chronicles Puget Power's consultation with state and federal agencies, The Tulalip Tribes, the Snoqualmie Indians, and the Yakama Indian Nation, while Section 5.0 provides information on the Snoqualmie Falls Traditional Cultural Property. Section 6.0 outlines Puget Power's approach for managing the Traditional Cultural Property, using a number of management standards that function in a manner similar to the Secretary of Interior's Guidelines for managing historical properties. Section 7.0 discusses the potential adverse effects of the Project and provides mitigation and management measures based on the management standards. Section 8.0 describes how the mitigation and management plan will be implemented, and Section 9.0 lists the references cited in the Plan.



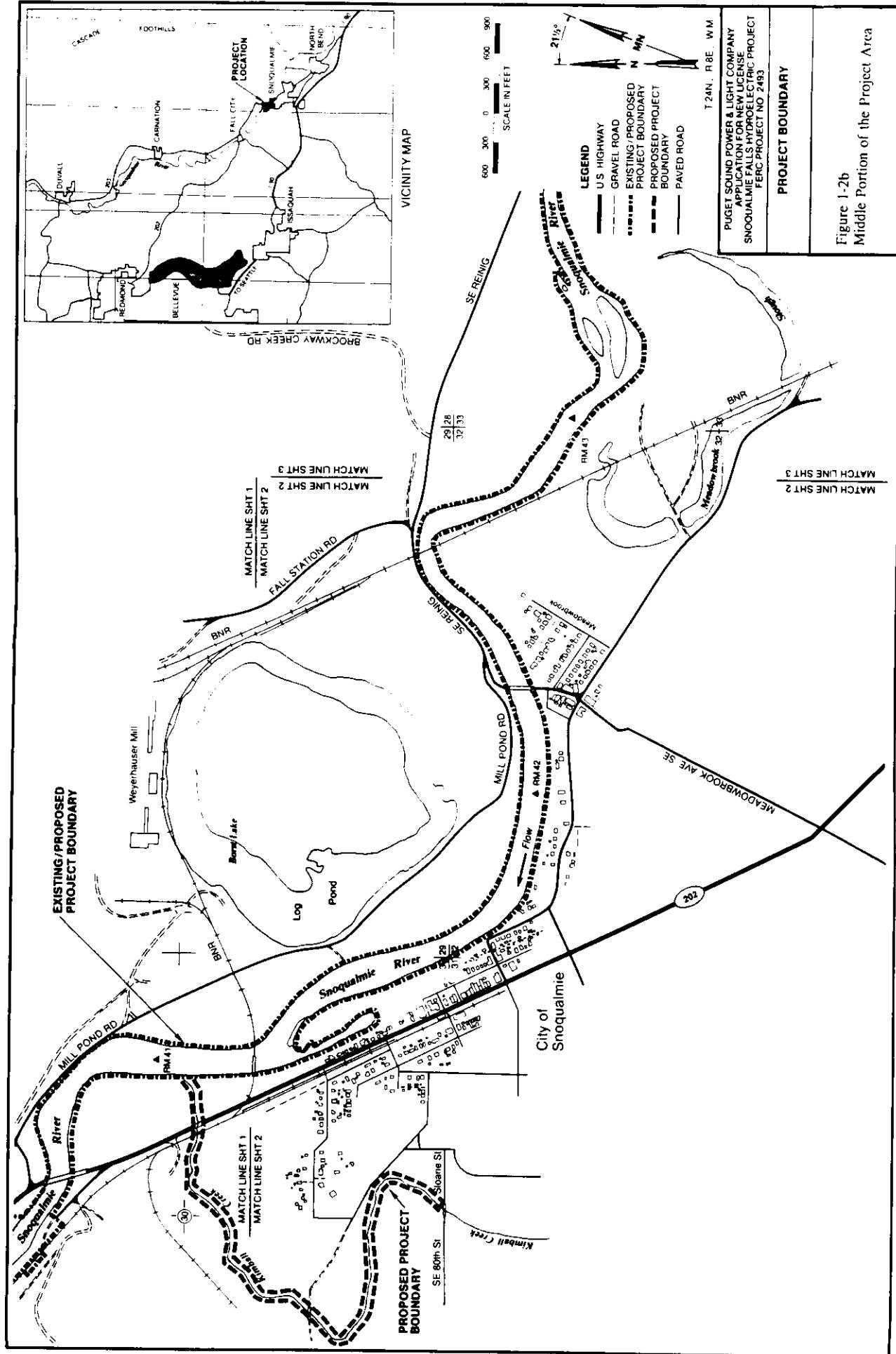
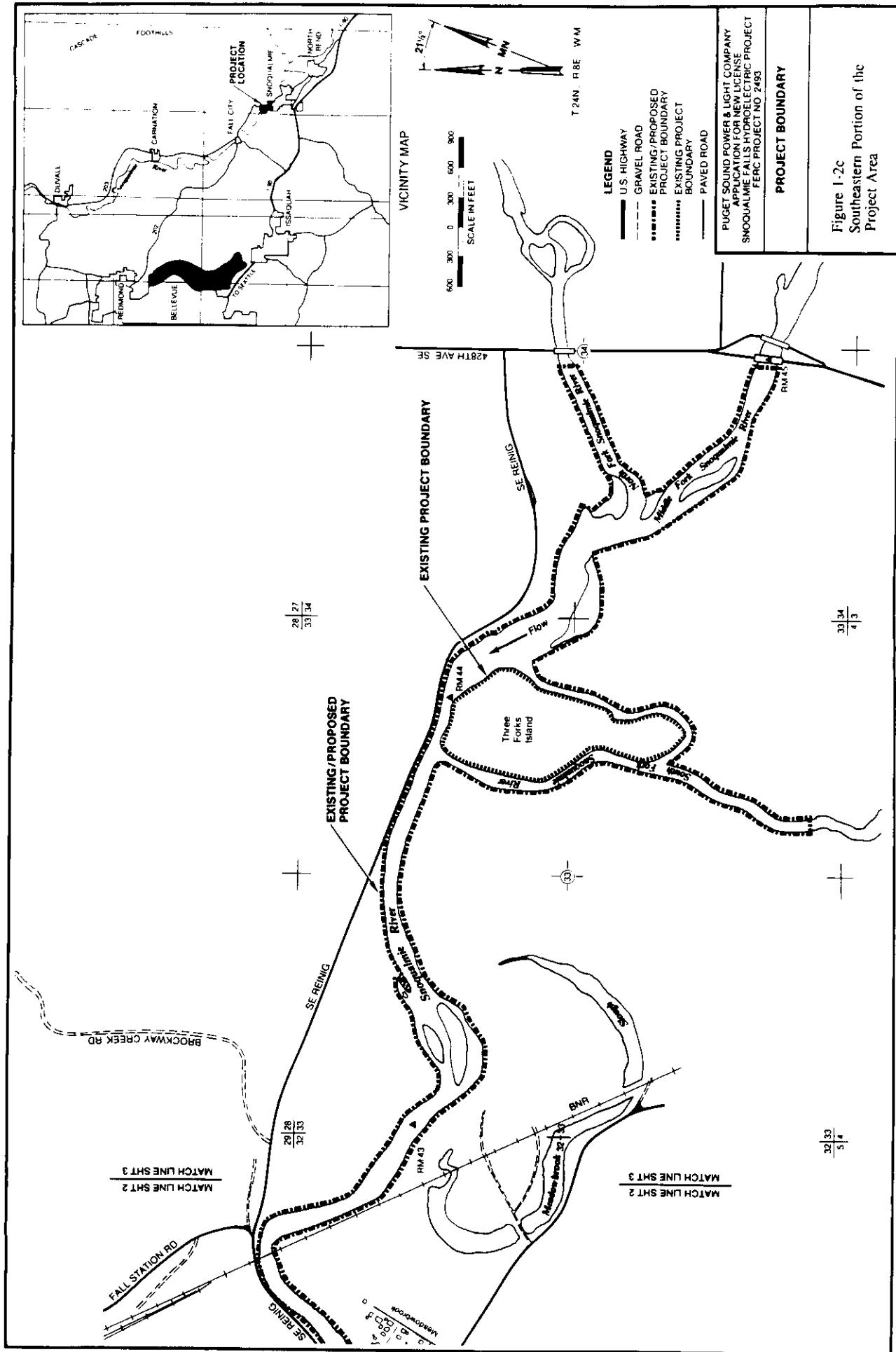
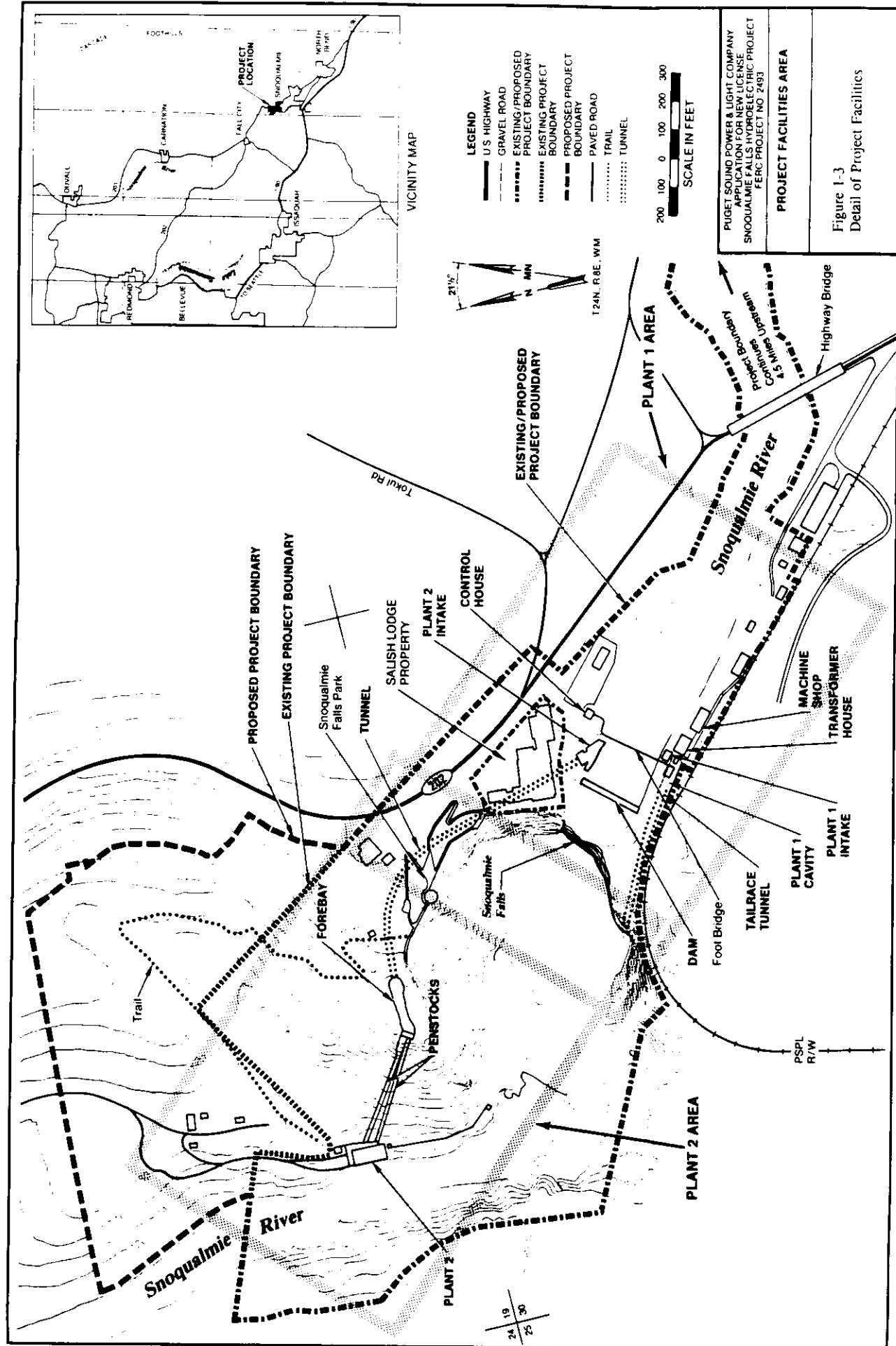


Figure 1-2b
Middle Portion of the Project Area





2.0 BACKGROUND RESEARCH

2.1 Project Description

The Snoqualmie Falls Project, which was constructed at the turn of the century, was the first electric generating facility built totally underground. Utilizing the 268-foot Snoqualmie Falls, it was the first major hydroelectric project in Washington State. The Project includes two power generation plants. Plant 1, constructed in 1898 and expanded in 1905, is located within an underground chamber below penstock intakes on the south bank of the Snoqualmie River immediately upstream of the Falls (Figure 1-3). Plant 2, located on the north bank of the river approximately one-quarter mile downstream of the Falls (Figure 1-3), was built in 1910 and expanded in 1957 and 1958. In addition to the power plants and intakes, the Snoqualmie Falls facility includes a concrete and wooden dam, four penstocks, a tailrace tunnel, a concrete-lined tunnel, an open forebay, a headgate house, generator leads, transformers, transmission lines connecting both plants to a switching station, and appurtenances.

As part of the FERC relicensing process, Puget Power is proposing a number of changes to Project facilities. Surface ground disturbance and other significant modifications include the following:

Upstream of the Falls

- Rebuild the existing dam foundation, in the same location.
- Install an inflatable dam or spillgate system (including a control facility) to replace the existing flashboard system on the dam.
- Add a 75-foot-long inflatable spillway for flood control.
- Add a sediment exclusion channel to transfer bed load from the Plant 2 intake to pass through a sluice pipe at the new diversion dam.
- Modify existing Plant 1 intake structures and replace metal components as needed.
- Remove penstocks to Plant 1, and install new 6-foot and 8-foot diameter penstocks for new Units 1 and 2.
- Inside Plant 1, remove Units 1,2,3, and 5; retire Unit 4 in place; install new Unit 1 sized for 600 cfs and new Unit 2 sized for 200 cfs; new units will require some additional concrete work inside the plant.
- Replace elevator house; install new elevator and controls.

- Add a computer control system, integrating control functions of the generating units and headgates, while providing operating data and alarm indications.
- Provide seismic stabilization of transformer house and machine shop.
- Modify existing Plant 2 intake structure and replace metal components as needed.

Downstream of the Falls

- Modify the Plant 1 tailrace channel.
- Enhance structure of existing gatehouse and replace metal components as needed.
- Excavate 650 cu.yd. to enlarge existing Plant 2 forebay to improve hydraulics for safety and operation.
- Improve Plant 2 penstocks with saddle supports and anchors, lining and coating, and additional expansion joint to Unit 1 penstock.
- Modify Plant 2 structure for increased seismic stability and upgrade Units 1 and 2.
- Excavate and install a flow bypass system.
- Upgrade the trail from the Park to the lower observation deck.
- Enhance wetlands.
- Provide kayak access below Plant 2.

In the Park

- Provide a new observation patio at the end of the sidewalk by the Centennial Green.

2.2 Background Research

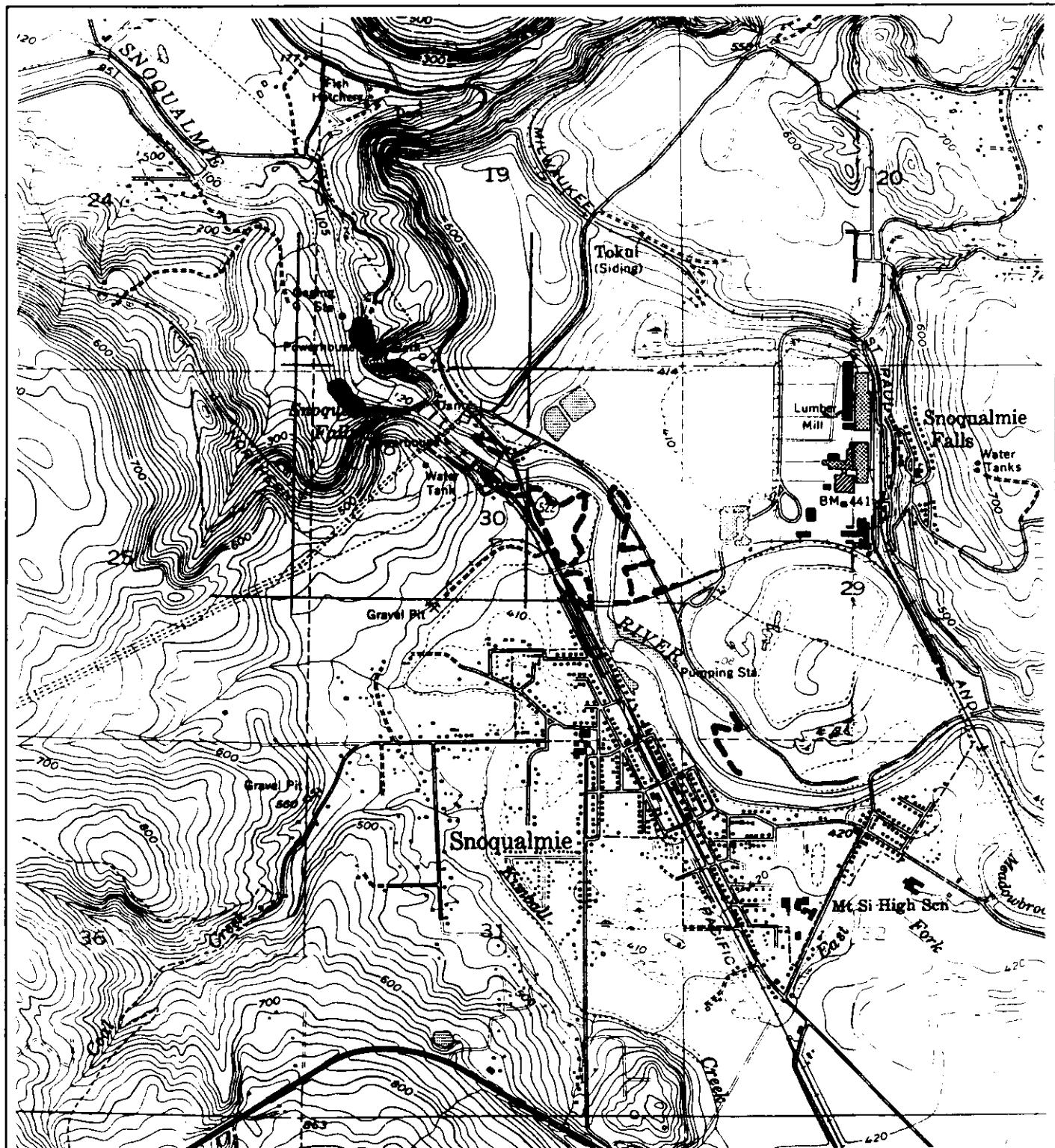
Background research for the Project consisted of compilation and review of published and unpublished sources on the archaeology, ethnography, ethnohistory, and history of the Snoqualmie Falls area. The documents included previous cultural resource assessments of the Falls area, one of which also addressed sites important to Snoqualmie Indians (Beak and BOAS 1989; Larson 1988) and a study of Native American religious use, practices, localities, and resources (Blukis-Onat and Hollenbeck 1981). HRA also consulted a variety of sources including the records of the OAHP and the University of Washington Libraries and Archives.

2.3 Field Survey

Several cultural resources surveys have occurred around Snoqualmie Falls over the past 25 years. The Area of Potential Effect (Project Area) for the Project includes the land within the FERC Project Boundary; the Project Area was extended just south of the Project Boundary in a small area southeast of the transformer house to include two Project employees' houses, owned by Puget Western, Inc. Portions of the Project Area were surveyed during previous archaeological fieldwork in the Snoqualmie Falls area, and others were surveyed for the relicensing effort. Figure 2-1 shows the approximate locations of surveys in the immediate Project Area. Dr. Astrida Blukis-Onat originally surveyed the area immediately below Snoqualmie Falls in 1967, and she revisited the area in November of 1988. She observed that the area has been disturbed by construction (from 1897 through 1957) of more than 50 Project facilities, and she found no evidence of archaeological deposits (Beak and BOAS 1989).

Lynn Larson surveyed the area above the Falls in August 1987, for a U.S. Army Corps of Engineers flood damage reduction study, which considered excavating 45 acres of floodplain on the north bank of the river upstream from the SR 202 bridge, and 23 acres on the south bank. The Corps of Engineers also considered widening the river channel, modifying about 1,200 feet of shoreline along both banks of the river lying between the SR 202 bridge and the Falls (Larson 1988:1). Larson found that accessibility for systematic investigation of riverbank was impeded by dense vegetation and a lack of roads or trails. She walked opportunistic transects (see Figure 2-1), observing good soil exposures in some areas and using a shovel to expose the soil in others (Larson 1988:21). Her survey identified no archaeological deposits (Larson 1988:22).

HRA staff members reviewed a number of maps, historical photographs, and aerial photographs of the area and visited it on several occasions. This examination confirmed that extensive construction activities from the late 19th century through the middle 20th century extensively altered the natural soils on both sides of the river above the Falls and on the north bank of the river below the Falls.



KEY

- Boas 1989
- — Larson 1988

Reference: USGS Snoqualmie Quadrangle
7.5 Minute Series Map, 1973

Figure 2-1
APPROXIMATE LOCATIONS OF ARCHEOLOGICAL SURVEYS IN THE IMMEDIATE PROJECT AREA (from BOAS 1989 and LARSON 1988)

Construction on the south side of the river above the Falls included the railroad and its depot; a workers' dormitory; the Plant 1 intake, penstocks, and cavity powerhouse; and supporting structures including the elevator house, transformer house, machine shop, carpenter shop, garages, employee houses and garages, and access roads. On the north side of the river above the Falls, constructed facilities consisted of the Salish Lodge, Plant 2 intake, the control house, the substation, and SR 202 and access roads. On the north side of the river below the Falls, construction included the park, the forebay and forebay house, Plant 2 and its penstocks and outbuildings, worker housing and outbuildings, and access roads. Only the south side of the river below the Falls has not received previous construction activities.

HRA staff members concluded that within the Project Area, previous surveys should be adequate to have located aboriginal archaeological deposits around the Falls, if such deposits exist. HRA consulted with Dr. Robert Whitlam of OAHP about additional survey needs for relicensing the Project. Dr. Whitlam agreed that archaeological survey should not be needed above the Falls in areas that have received extensive construction for Project facilities. HRA staff and Dr. Whitlam agreed that archaeological survey should not be needed for most of the Project area further upriver, where the past and proposed Project Boundary follows the shoreline and encompasses no land areas except for a few gravel bars and recent alluvial areas.

The Project Area includes land near the Falls and the Three Forks Island wildlife mitigation area. Near the Falls, construction activities under the new License are proposed for both sides of the river just above the Falls and the north side of the river just below the Falls. Although no construction is planned for the south side of the river below the Falls, The Tulalip Tribes, the Snoqualmie Indians, and the Yakama Indian Nation have expressed concerns about archaeological remains that might have resulted from past use for habitation, traditional religious activities, and burials. Landforms that required archaeological survey because they might contain cultural remains from past Indian activities included Three Forks Island; the plunge pool area on the south side of the river below the Falls; the Plant 2 area on the north side of the river below the Falls, and the Plant 2 intake area on the north side of the river above the falls. Three Forks Island was identified during the course of Project planning for wildlife mitigation, and little, if any, activity is planned for the island.

It should be noted that the surveys described here were conducted for the originally proposed Expanded Project, which would have included more ground disturbance than the presently proposed Refurbished Project. Information on the methods and results of the surveys is included as part of the record of cultural resources work for the Project. Because the Refurbished Project will disturb smaller areas than those planned for the Expanded Project and because the Refurbished Project will affect only areas that have been previously disturbed or previously surveyed, no additional survey is needed for the Refurbished Project.

2.3.1 Three Forks Island

Three Forks Island is located approximately three miles upstream of the Falls and is bounded on the west side by the South Fork of the Snoqualmie River, on its east and south sides by a small tributary of the South Fork, and on its north side by the main fork of the Snoqualmie River (Figure 2-2). The island is characterized by approximately 37 acres of level terrain dominated by riparian vegetation such as black cottonwood with a thick understory of vine maple. Along the small tributary channel of the South Fork, in the eastern portion of the island, wetlands dominate.

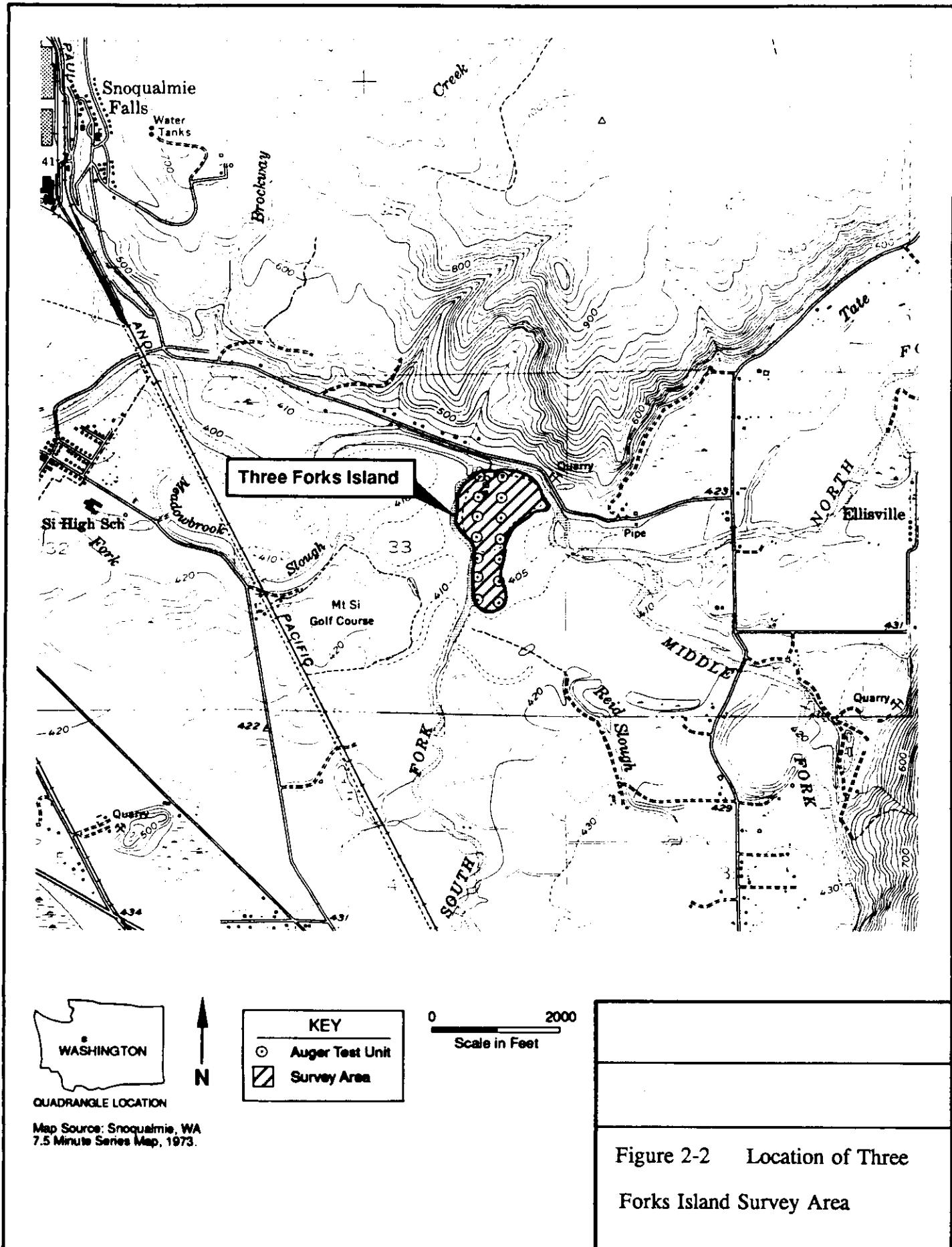
Between February 24 and February 26, 1992, an HRA archaeologist completed a cultural resources field survey of Three Forks Island. The field archaeologist surveyed 100 percent using 30-meter transects that were oriented north/south, examining subsurface exposures such as windthrown trees and erosional areas. In areas of poor ground visibility the archaeologist cleared duff from 1x1 meter units at 50-meter intervals to expose the surface. He also excavated 14 10-cm auger units to identify cultural deposits that might be buried on the island. These units were placed at 50-meter intervals along two north-south transects that traversed the length of the island (Figure 2-2).

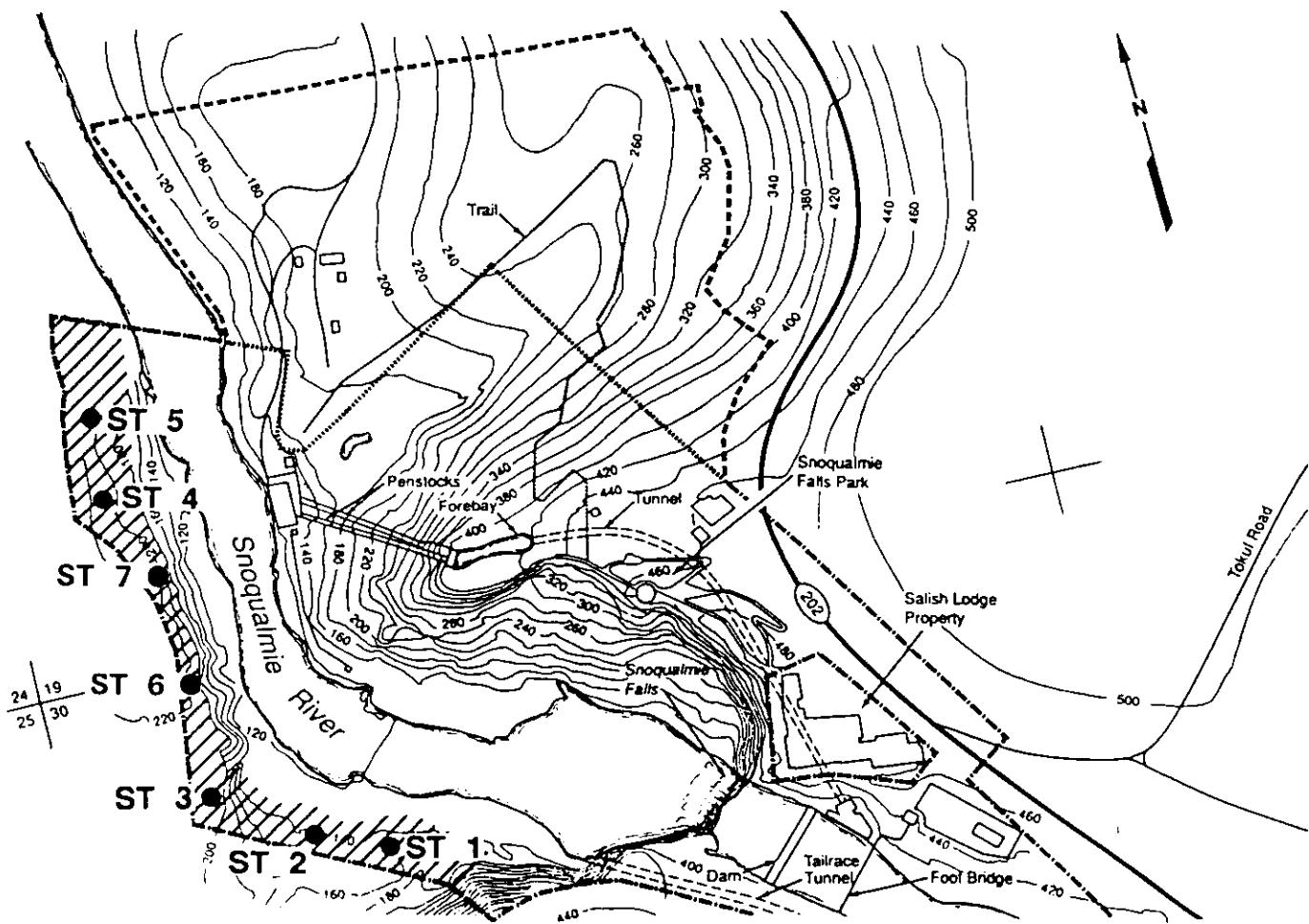
The field archaeologist excavated the auger units to a depth of approximately 1.40 meters below present ground surface, where the water table was most often encountered. He sifted matrix through one-quarter-inch mesh screen and completed test excavation record forms and profiles for each unit. The typical profile consisted of approximately 40 cm of medium-brown clayey silt with some organics followed by medium-brown fine-grained sand with interbedded lenses of silt. A distinct humus layer exists toward the interior of the island where vegetation is most dense. The survey and auger test units revealed no cultural materials.

2.3.2 Plunge Pool Area

The small plunge pool area directly on the south side of the river beneath Snoqualmie Falls is the only area immediately adjacent to the Falls that has not been disturbed by Project construction, and Project plans will not disturb the area. Logging near the turn of the 20th century is evidenced by springboard stumps. Some Snoqualmie Indians believe that a village was once located in this area, and a few Snoqualmie individuals use the area for traditional religious practices. The plunge pool area consists of about five acres of cobble riverbed, bedrock, and second-growth forest.

The riverbed portion of the plunge pool location is highly erosional, comprising welded tuff bedrock that is exfoliating and rocks of various sizes that have eroded from it. The 50-year flood reaches an elevation of 142 ft above sea level (see Figure 2-3). (The flood of record at this station, which occurred on November 24, 1990, when a discharge estimated at 78,900 cfs was observed, inundated the pool area to an elevation of 142 ft.) Driftwood covers portions of the riverbed area as do some riparian shrubs and herbs. Slopes





LEGEND

- ST 1 Shovel Test Location and Number
- Survey Area
- Existing/Proposed Project Boundary
- Existing Project Boundary
- Proposed Project Boundary

200 100 0 100 200 300
Scale in Feet

Figure 2-3
Plunge Pool Survey Area

above the riverbed are moderate to steep and consist of colluvial deposits that thinly overlie the bedrock; a few small cuts drain the area. HRA archaeologists conducted pedestrian survey of the plunge pool area on February 27, 1992, June 2, 1993, and December 9, 1993, walking 30-meter transects along contours where practical and examining subsurface exposures such as windthrown trees and erosional cuts.

The study area is an approximately 250-foot-wide corridor located along the south side of the Snoqualmie River, extending from just below Snoqualmie Falls roughly 2,500-feet downstream. At the time of the survey, the boundary of the survey area between Puget Power and Snoqualmie Falls Forest Theater properties was marked along a hiking path by green metal stakes.

Figure 2-3 shows the plunge pool survey area, including the locations of seven shovel test pits that were excavated on June 2 and December 9, 1993. Figures 2-4 and 2-5 provide views of the survey area and Figures 2-6 and 2-7 show survey conditions of the riverbank and the forested slope. In areas of 25 degrees slope or less, HRA excavated 40-cm² shovel test units to a depth of 40cm and screened matrix through one-quarter-inch wire mesh. HRA excavated shovel test units at 60-m intervals, a distance generally consistent with survey procedures in areas of steeper topography in western Washington.

The plunge pool survey area is characterized by a mixture of deciduous and fir trees, shrubs, thorny vines, ferns, and mosses. Ground visibility is limited due to duff on the forest floor. Sediments in the plunge pool survey area are brown, fine-grained sand and silt, mixed with small, rounded pebbles. No prehistoric or historic artifacts were identified in any of the shovel tests during the course of the survey.

2.3.3 Plant 2 Area

Although larger areas of construction around Plant 2 were planned for the Expanded Project, the currently proposed Refurbished Project will disturb more limited areas along the penstocks and near Plant 2. The survey work discussed here was conducted for the Expanded Project. HRA staff contacted BOAS, Inc. and learned that no maps are available of the area that they had previously surveyed around Plant 2.

HRA historians and archaeologists assembled and reviewed photographs of the original construction of Plant 2 and the penstocks, and subsequent construction in the 1950s to determine which areas had been disturbed by work. As the maps and photographs in Appendix A show, the areas around Plant 2, including the Refurbished Project's proposed improvements to the penstocks and construction of the flow bypass facility, were all greatly disturbed during the construction periods in the early 1900s and in the 1950s. This disturbance extended along the river bank above and below Plant 2. Because the historical construction photographs do not reveal the exact limits of construction disturbance and a map of areas previously surveyed by BOAS is unavailable, Puget Power directed HRA to survey the proposed construction area northeast of Plant 2.

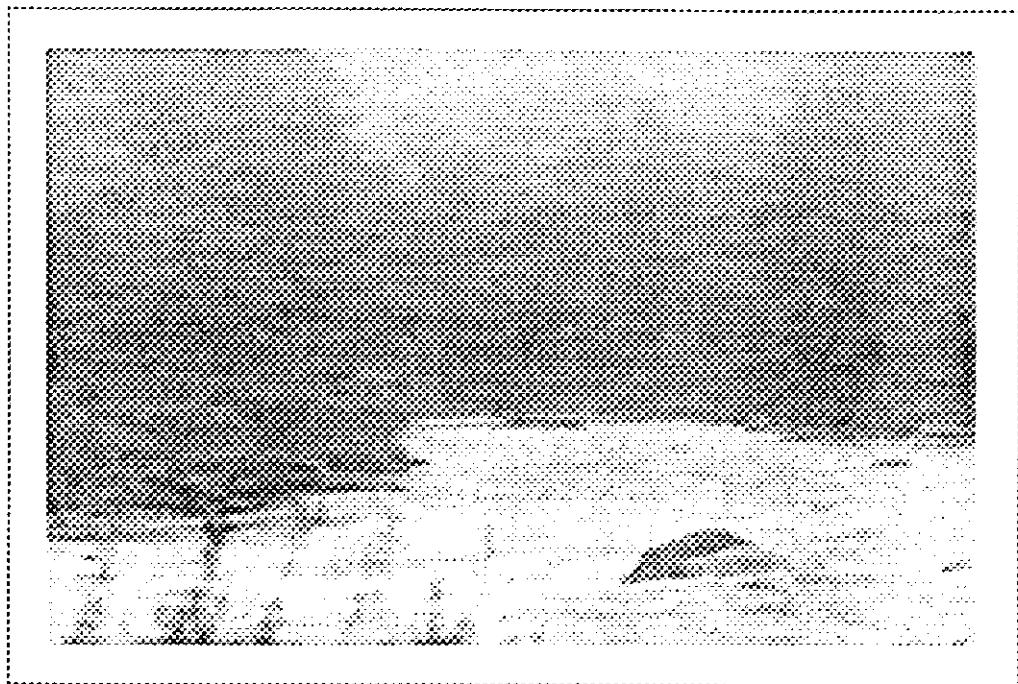


Figure 2-4 Downriver View of Plunge Pool Survey Area. (Portion of survey area seen in left middle ground.)

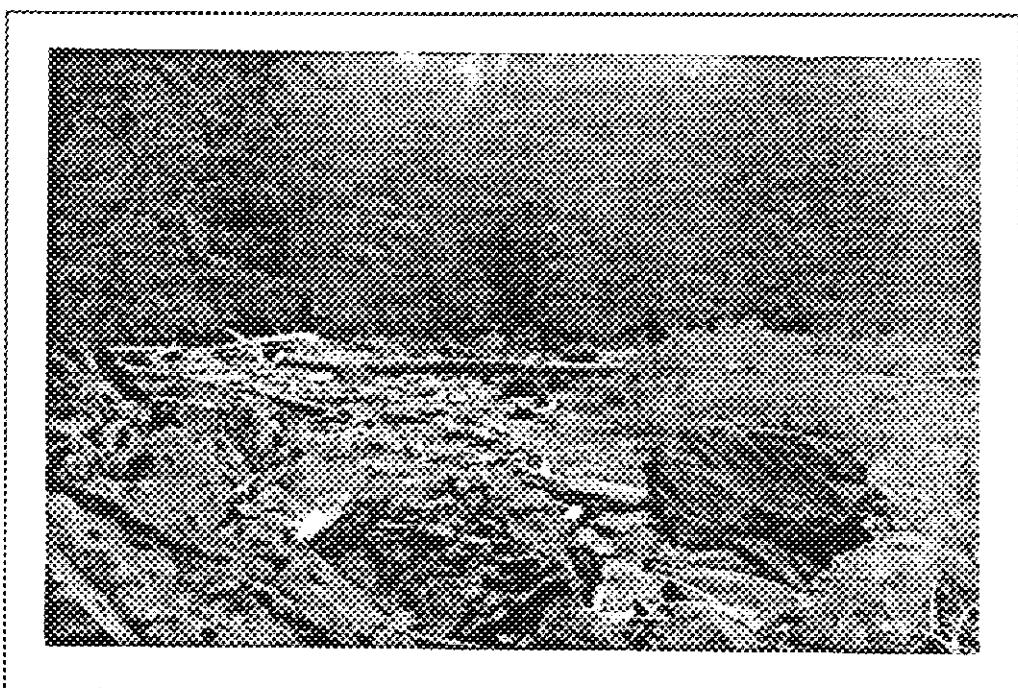


Figure 2-5 Plunge Pool Survey Area Showing Bedrock, Driftwood, and Forest Setting.

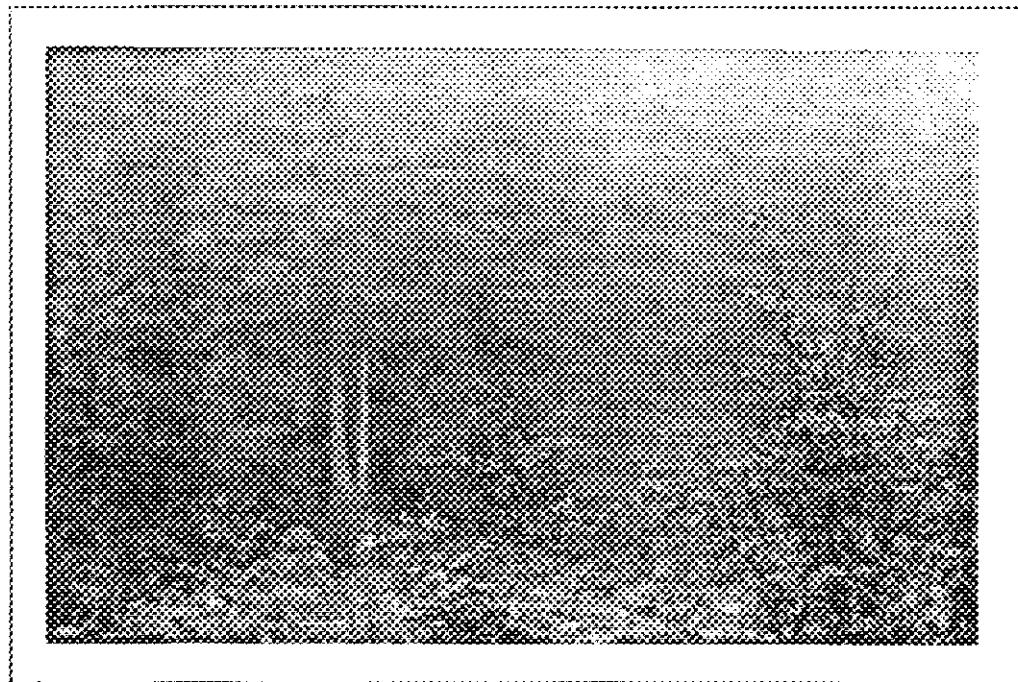


Figure 2-6 Survey Conditions of Forested Riverbank.

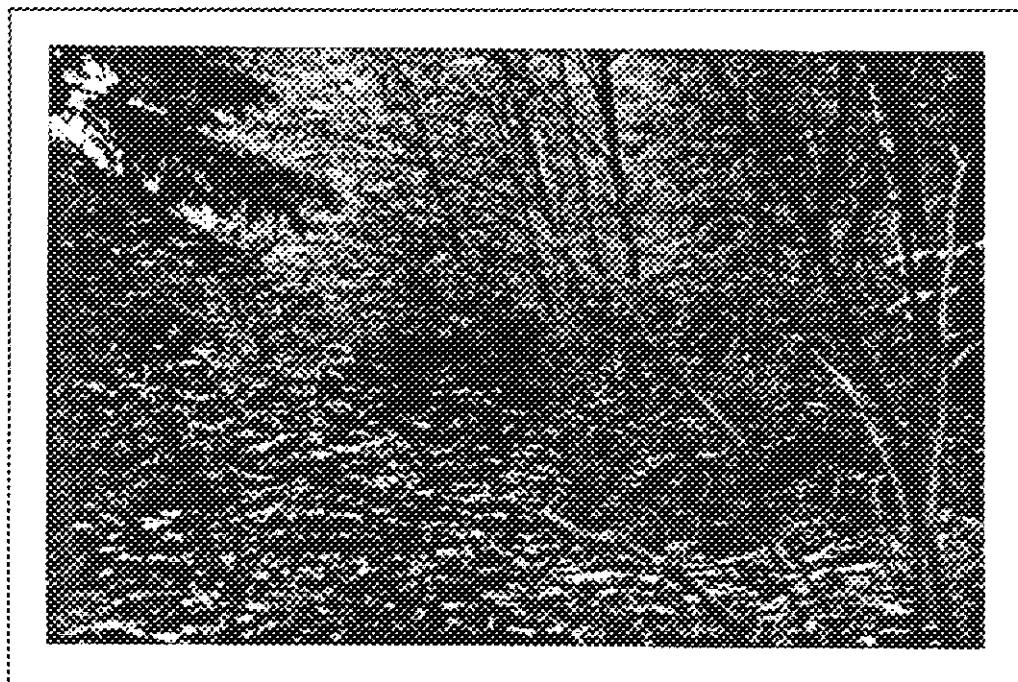


Figure 2-7 Survey Conditions in Forest.

On February 2, 1994, an HRA archaeologist surveyed the Plant 2 construction area. The study area is a 200-foot-wide corridor located along the northern bank of the Snoqualmie River, extending north from the existing powerhouse for approximately 800 feet (see Figure 2-8). The archaeologist walked the area systematically and placed 12 shovel tests at 30-m intervals. The Plant 2 survey area is characterized by a mixture of short and tall grasses, shrubs, thorny vines, mosses, and stands of deciduous and fir trees. Ground visibility is limited due to a covering of grasses, moss, or vines.

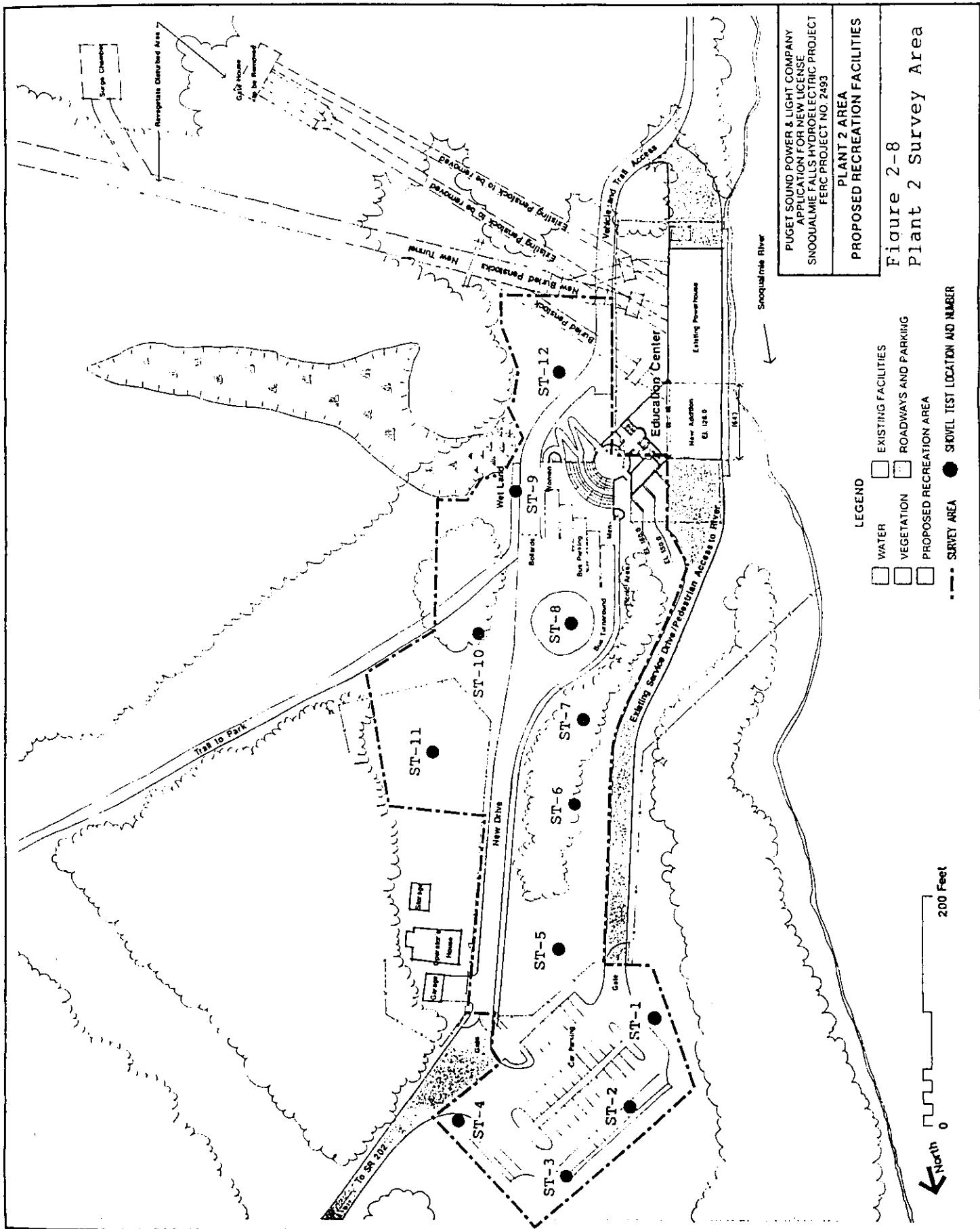
HRA excavated 40-cm² shovel tests to a depth of 40cm and screened matrix through one-quarter-inch wire mesh. The archaeologist examined the contents of the screen for prehistoric and historic artifacts. Plant 2 area sediments are characterized by brown silt in the top 10 to 15 cm, with dark tan sand and silt below. Angular, subangular, subrounded, and rounded pebbles and cobbles were found in each shovel test. The archaeologist found several pieces of rusted metal, glass, and porcelain in ST-5 and ST-7 (Figure 2-8). These shovel test units are located near the operator's house, and the material retrieved from them may be associated with the construction or occupation of this structure. None of the artifacts were temporally or functionally diagnostic and, in the opinion of HRA, do not indicate potentially significant archaeological deposits.

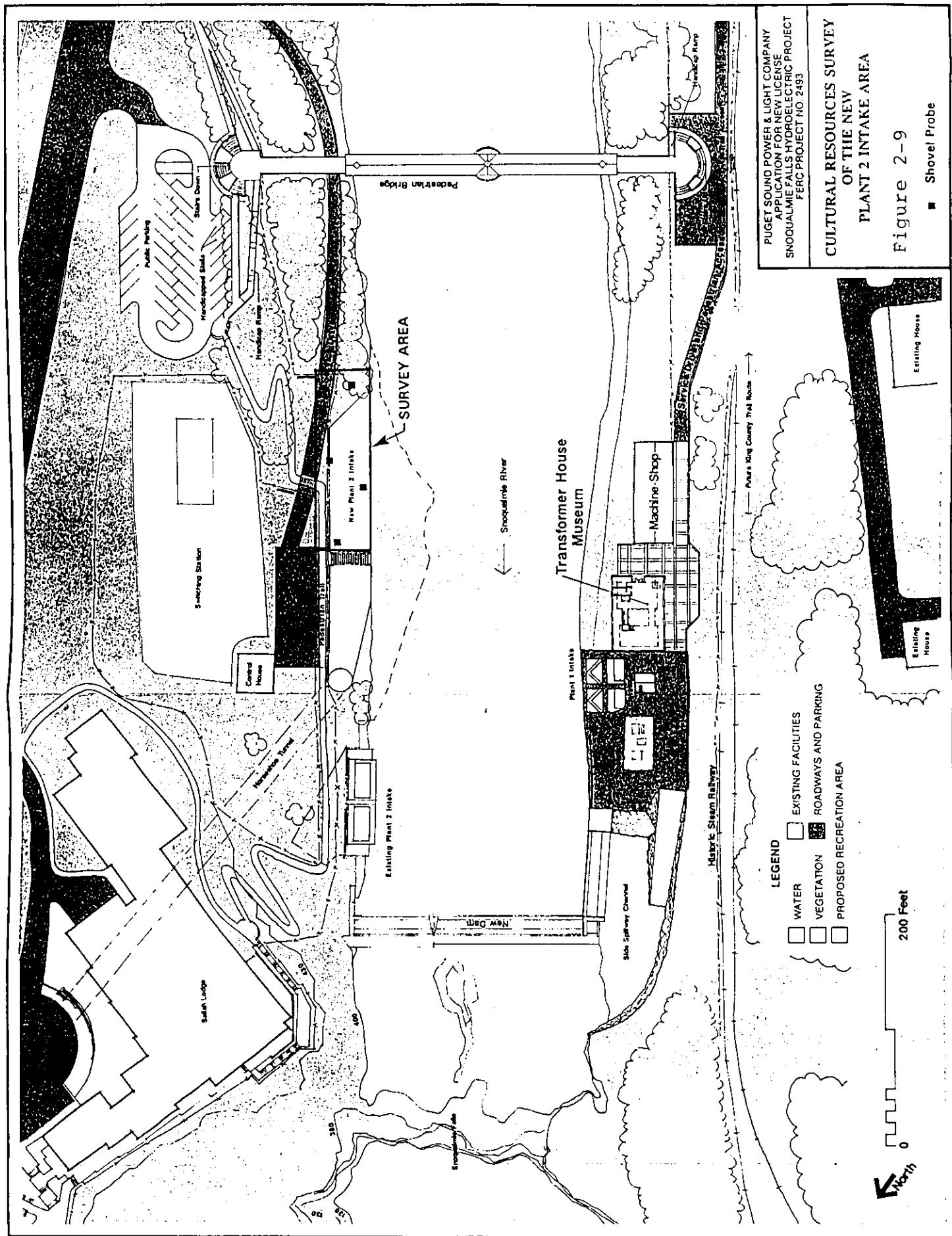
2.3.4 Plant 2 Intake Area

The archaeological survey included an area that was proposed under the Expanded Project for a new Plant 2 intake, located on the north side of the Snoqualmie River, approximately 100m upstream from the Falls. This new intake is no longer proposed for the Refurbished Project. The study area extends along the riverbank for approximately 50m and extends 20m to the north. Vegetation in the survey area consists of mixed fir and deciduous trees, shrubs, short grasses, and thorny vines. Several large cedars are located along the bank of the Snoqualmie River.

An HRA archaeologist performed a cultural resources survey of the proposed Plant 2 intake Area on April 20, 1994. Personnel from the Puget Power machine shop unlocked the gates to provide access to the survey area, verified the location of the proposed intake area, and reported that two service roads had been graded and filled through the survey area recently. The roadfill deposit ranges from 30 to 60cm in depth.

The surveyor excavated four 50-cm² shovel tests at 50-m intervals to an average depth of 50cm in the survey area (Figure 2-9). Due to the recent road-building activity, the shovel probes were limited to the margins of the survey area. However, a cutbank along one of the new roads was also examined for cultural material, affording a view of the center of the survey area. Excavated sediments were screened through one-quarter-inch wire mesh. Sediments in the survey area consist of silts and sand, with poorly-sorted, rounded-to-angular pebbles and cobbles.





HRA found no cultural material in the shovel tests. However, a section of wooden stave pipe is located at the river's edge beneath several cedar trees at the western margin of the survey area. The pipe is relatively intact, 20cm in diameter, and roughly 3m long (see Figure 2-10). The pipe is not attached to any existing structures and its association is unknown. Therefore, it does not appear to be a significant cultural resource.



Figure 2-10 Photograph of Wooden Stave Pipe.

3.0 CULTURAL SETTING

3.1 Environment

The Project Area is located within the Snoqualmie River drainage. The river flows from the Cascade Mountains northwestward along tertiary volcanic rock composed of andesite breccia and volcanic flows of andesite, basalt, rhyolite, and tuff (Livingston 1971). Between river miles 40 and 41, the Snoqualmie plunges 268 feet, forming Snoqualmie Falls (Figures 3-1 and 3-2). The river deposits alluvial sediments above and below the Falls during periodic seasonal flooding episodes which range in intensity from minor to catastrophic.

The regional climate is characterized by cool, wet winters and mild, dry summers. The Project Area is within the Western Hemlock (*Tsuga heterophylla*) Zone (Franklin and Dyrness 1973), a vegetation designation that includes major tree species such as Douglas fir (*Pseudotsuga menziesii*), western hemlock, and western red cedar (*Thuja plicata*), and riparian species such as black cottonwood (*Populus trichocarpa*), red alder (*Alnus rubra*), and bigleaf maple (*Acer macrophyllum*). Understory species vary, depending on the moisture gradient. In dry areas, the understory is lush with salal (*Gaultheria shallon*). Swordfern (*Polystichum munitum*), salmonberry (*Rubus spectabilis*), and vine maple (*Acer circinatum*) are predominant in wetter areas.

Because Snoqualmie Falls is a natural barrier to salmon migration, salmon are only found downstream of the Falls. Other fish, such as trout and Dolly Varden, are found in the Snoqualmie River and its tributaries, and in mountain lakes above the Falls. Waterfowl, deer, and small mammals are common in the riparian environment of the Snoqualmie River drainage.

3.2 Prehistory

Intensive archaeological research in western Washington has focused on the coastal areas of Puget Sound. In the foothills of the Cascades and other inland areas this research has been limited to single-site investigations and minor, project-related surveys. Current understanding of the prehistory of the Snoqualmie Falls area is based on archaeological investigations in the vicinity of the confluence of the Snoqualmie River and Tokul Creek (Kennedy and Larson 1984; Onat and Bennett 1968) and within Fall City (Buck 1982; Rhode 1985).

Tokul Creek flows into the Snoqualmie River approximately one mile downstream from Snoqualmie Falls. Several archaeological deposits are known from the area. An extensive multicomponent site (45-KI-50) is located on the Snoqualmie River near the mouth of Tokul Creek. Test excavations at 45-KI-19, located along the Snoqualmie River just

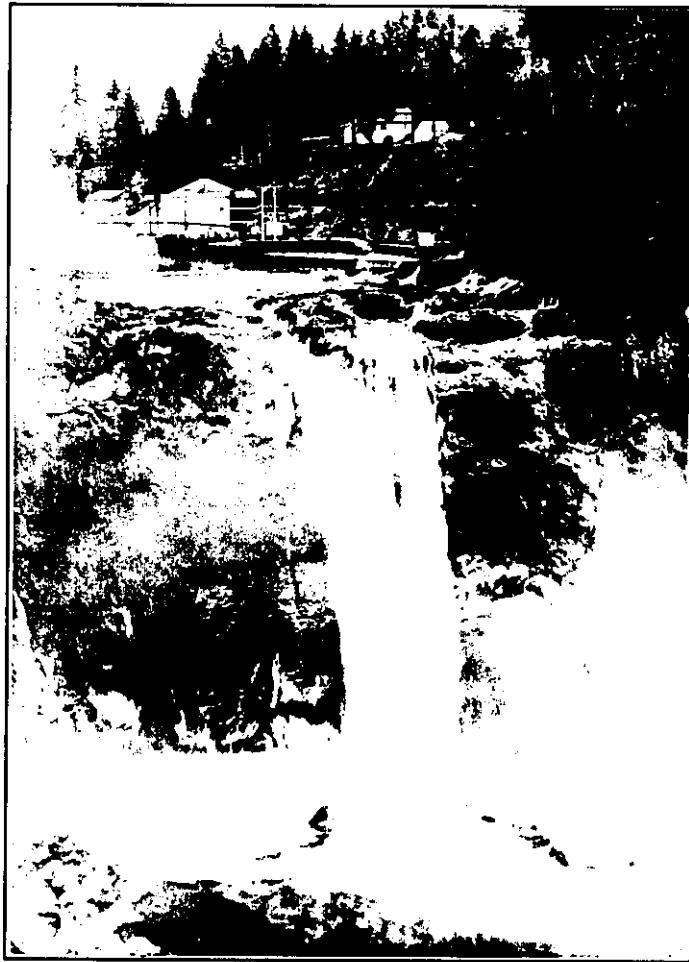


Figure 3-1 View of Snoqualmie Falls
Looking Southeast



Figure 3-2 View of Snoqualmie Falls Showing the Salish Lodge and some Project Facilities.

downstream from the mouth of Tokul Creek, recovered lithic debitage and tools which suggest frequent use of the locality, perhaps for fishing, beginning no earlier than 2,500 years ago (Onat and Bennett 1968:23-25). Subsequent archaeological survey of the north bank of the Snoqualmie River just south of 45-KI-19 located a groundstone fragment and a basalt core (Kennedy and Larson 1984:20). Examination of the river bank stratigraphy in this area revealed evidence of occupation. In addition, a number of artifacts were collected on the Plum farm northeast of the confluence of the Snoqualmie River and Tokul Creek. The relationships among these archaeological deposits is not well understood, but the area appears to be one of relatively high artifact density and considerable archaeological age.

Two archaeological sites are known from the Fall City area. Subsurface tests of a prehistoric site at Riverfront Park located intact archaeological deposits consisting of food-processing and tool-making debris (Buck 1982; Rhode 1985). This archaeological deposit has been interpreted as corresponding stratigraphically with deposits from 45-KI-19 (Rhode 1985). However, a historic Snoqualmie Indian occupation has been reported for the Riverfront Park area. Artifacts recovered during subsurface testing of the area may correspond to this more recent occupation. Another prehistoric site, 45-KI-20, has been recorded in the eastern portion of Fall City, near the mouth of the Raging River.

3.3 Ethnohistory

Snoqualmie Falls is within the historic territory of the Snoqualmie Indians. At the time of sustained Euroamerican contact, the Snoqualmie consisted of two distinct groups, upper and lower bands (Waterman 1920). When the Point Elliott Treaty was signed in 1855, the Upper Snoqualmie band occupied approximately 58 houses on the prairies above Snoqualmie Falls (U.S. Court of Claims 1933:29, 178, 187). The lower band inhabited approximately 38 houses from the Falls area downriver to the confluence of the Snoqualmie and Skykomish Rivers (Tollefson 1990, personal communication; U.S. Court of Claims 1933:29, 178, 187). Estimates of Snoqualmie Indian population in the mid-1800s varied from as high as 373 in 1844 to as low as 225 in 1857 (Baenen 1981:450). These estimates represent populations decimated by disease and do not reflect pre-epidemic population levels (Baenen 1981:450).

Although both the upper and lower bands occupied the Snoqualmie River drainage, there were differences between them. The Upper Snoqualmie traded and had kinship ties with the Yakama and Wenatchee Indians of eastern Washington (Gibbs 1877:179-180). The lower band intermarried with Skykomish and Snohomish peoples and also interacted with Indian groups living along the coast of Puget Sound.

Settlement

References to the number and location of ethnohistoric Snoqualmie villages vary. Watson Martin, a Snoqualmie Indian interviewed in 1927 at the age of 88, recalled up to 10

villages containing 3 to 18 houses each (U.S. Court of Claims 1933:178). Several villages are known for the Upper Snoqualmie, who occupied the area above the Falls. *Soxqo'ko*, located on the prairie north of the Falls at the present town of Tokul, may have been the principal Upper Snoqualmie village at one time (Teit 1928:108). Teit's information suggests the village was abandoned by ca. 1700, predating most ethnographic accounts of the area. Waterman (1920:48) records a ceremonial village similar to *Soxqo'ko* called *Sq-qo'qo* which was located just south of North Bend on the South Fork of the Snoqualmie River. Tollefson (1988) identifies three Upper Snoqualmie villages: *Bokwab*, *Tswodum*, and *Sotsoks*.

A number of authors have referred to a Snoqualmie village located below Snoqualmie Falls. It is unlikely that such a village was located directly below the Falls, as there is no location suitable for a village site. However, the Falls is featured in Snoqualmie Indian oral tradition, and a Snoqualmie informant stated that women may have hidden behind the Falls during hostile raids (Larson 1988:4). In what may be a variation of this oral tradition, Corliss (1972:21) writes about the Indians using a cave that was said to stretch from beneath the Falls back under the prairie that lies above the Falls.

A large Snoqualmie village was located near Tokul Creek, about one mile downstream of the Falls, and this may be the village so often referred to as the village below the Falls. Watson Martin referred to this village as *Toquill* (U.S. Court of Claims 1933:178). Curtis (1913:174) identified a village in this location as *Tipahlduhl*. *Toquill* and *Tipahlduhl* may be different names that refer to the same village, possibly to the site near the mouth of Tokul Creek excavated by Onat and Bennett.

Tollefson (1988:121-124) identifies three principal Lower Snoqualmie villages: a large village, which may have been an important military center (Tollefson 1988:124), located along the Snoqualmie River at the present town of Fall City; the possible administrative center of the Snoqualmie Indians (Tollefson 1988:124) located at Tolt, several miles downstream of the Fall City village; and a third village located at the confluence of the Snoqualmie and Skykomish Rivers. Tollefson asserts that this village was strategically placed to guard the mouth of the Snoqualmie River from intruders (1988:121).

Subsistence

The Snoqualmie Indians subsisted primarily on inland riverine and terrestrial resources. Salmon were taken along the length of the Snoqualmie River and its tributaries below the Falls during the autumn runs from September through December. Trout and Dolly Varden were available in the Snoqualmie River and its tributaries, and in mountain lakes above the Falls. Upper Snoqualmie people relied on kinship ties with villages below the Falls for salmon fishing privileges, offering prairie resources such as deer, and camas and bracken fern roots in return (Larson 1988). The river also provided freshwater mussels and crayfish (Turner 1976:31).

The Snoqualmie in general, and the Upper Snoqualmie in particular, hunted throughout the year, emphasizing deer and mountain goat. Lower Snoqualmie people supplemented their diets with resources from both lacustrine and marine environments. The prairies above Snoqualmie Falls provided camas and bracken fern roots, and wild tiger lily which were gathered during the summer months (Haeberlin and Gunther 1930). In addition, a variety of berries were available to Upper and Lower Snoqualmie groups along the river and at Snoqualmie Pass.

Traditional Spiritual Life

The Snoqualmie Indians participated in the Mt. Baker-Snoqualmie National Forest study of religious use of the forest, identifying seven important use areas within the forest; four of these relate to spiritual practices (Baenen 1981:456). The traditional religious and spiritual beliefs and practices of the Snoqualmie emphasized the individual's integration with a natural order (Baenen 1981). This was achieved through belief concepts centering on power and guardian spirits. Baenen reports that "the environment was thought to contain a variety of supernatural spirits, some of which could be enlisted by humans as helpers" (1981:451).

Guardian spirits were usually acquired in youth, around the age of puberty. Spirits might come to a person during a serious illness or be actively sought by spirit questing (Baenen 1981:451). Guardian spirits could also be inherited, sometimes coming unsolicited to someone who resembled the individual the spirit had been with before (Larson 1988).

Snoqualmie elders sent their children out during the winter to find a spirit (Haeberlin and Gunther 1930:68). The quest could take several days and was often accompanied by fasting and bathing. To obtain a warrior spirit, an individual had to dive into deep water. This activity appears to have been particularly important on Snoqualmie Indian vision quests (Baenen 1981:451). Renewal and reaffirmation of guardian spirits was a continuous process (Blukis-Onat and Hollenbeck 1981:95).

Religion, ritual, and healing were important aspects of everyday life. The most important rituals were associated with birth, puberty, marriage, and death. Natural resources including cedar, medicinal and utilitarian plants, and a variety of foods were important in rituals. Because cedar was a primary source of resources for most rituals, it was important for ritual sites to be located near a well-developed grove. Areas containing flora important in Snoqualmie ritual were considered to have religious importance (Blukis-Onat and Hollenbeck 1981).

Healing was an important aspect of Snoqualmie spiritual beliefs. Larson (1988:12) reports that Indian doctors healed spiritual ills, which often manifested themselves as physical symptoms. Indian doctors gathered ceremonial paraphernalia and collected medicinal plants in spirit questing areas. Traditional religious practices continued into the 1930s, with the

observance of winter ceremonial gatherings (U.S. Department of the Interior 1993, Anthropological Report:48).

Indian doctoring was banned in 1871 by the Superintendent of Indian Affairs. This spiritual gap stimulated development of the Indian Shaker religion, a belief system combining aspects of traditional Salish Indian spirituality with many of the basic symbols of Christianity (Baenen 1981:453). The Shaker religion emphasizes social solidarity within the community and retains features of traditional healing practices. In 1912, the Snoqualmie established a congregation of the Shaker Church, and through part of the 1930s, the Fall City Shaker Church performed funerals for Snoqualmie Indians (U.S. Department of the Interior 1993, Anthropological Report:48).

Recent Religious Use of Snoqualmie Falls

Anthropologists have noted an increase during recent decades in aboriginal-style winter ceremonial dancing and associated traditional religious activities (Amoss 1978; Blukis-Onat and Hollenbeck 1981). In a 1988 cultural resources study of the Snoqualmie River area, Larson (1988) found that Snoqualmie Falls is an important spiritual place for some contemporary Snoqualmie and Tulalip Indians, and that some Snoqualmie individuals were currently practicing traditional religious activities there. Tulalip representatives have stated that construction and tourism have interfered with cultural use of the site, which requires seclusion and lack of environmental disturbance (Williams 1992).

Larson (1988:23) states that many Snoqualmie Indians found spirit power at the Falls or used the water there for purification before ceremonial and other activities. Some contemporary Snoqualmie Indians believe that the Falls is home to a powerful water spirit (Corsaletti 1986; Kenny Moses, cited in Larson 1988:15). In a 1986 interview with the *Seattle Times*, Andy de los Angeles stated that the Falls is home to a powerful spirit that guides the lives of many Snoqualmie persons (Corsaletti 1986). Professor Tollefson asserts that the Falls was important in earlier times, that Snoqualmie families repeatedly used particular places for spiritual activities, and that parents directed their children to seek guardian spirits in specific locations (Tollefson, personal communication 1991a). The Snoqualmie Indians assert that the Falls is sacred to them regardless of whether it is actively used for spiritual practices (de los Angeles 1993).

In 1990, after Project relicensing activities started and Snoqualmie Indian leadership changed, Snoqualmie representatives began opposing Puget Power's proposal for relicensing. They joined with the Church Council of Greater Seattle's Native American Task Force², forming the Snoqualmie Falls Preservation Project in early 1991, with the goal of stopping the generation of hydroelectric power at Snoqualmie Falls. The group sponsored three public

²In 1987, Christian ecumenical leaders of Pacific Northwest Churches formally apologized to area Indians for long-standing participation in the destruction of traditional Native American spiritual practices. Church leaders pledged to assist the tribes in recovering ancient teachings and protecting Indian religious sites.

religious ceremonies at the Falls, on February 23, 1991, September 21, 1991, and September 12, 1992, to call attention to their opposition to relicensing (Adams 1991; Corsaletti 1991; Landauer 1991; Magnuson 1992; Megliola 1991a, 1991b; Simonitch 1992; Simms 1991a, 1991b; Varosh 1991).

Professor Tollefson and sociologist Martin Abbott recently conducted an opinion survey of Snoqualmie Indians to obtain information about the meaning and significance of the Falls (Tollefson and Abbott 1993). The study consisted of individual interviews with 50 Snoqualmie Indians living within a 25-mile radius of the Falls and a questionnaire returned by mail from 37 others living outside the radius. The professors found that the Falls are important to Snoqualmie respondents, who perceive and act toward the Falls in accordance with "cultural importance" (Tollefson and Abbott 1993:221).

The usefulness of the study in interpreting traditional religious use of the Falls is unfortunately hampered by the professors' failure to distinguish such use from the recent public ceremonies that the Snoqualmie Indians and the Preservation Project conducted at the Falls in conjunction with the relicensing protests, especially because the last section of the paper points out the Snoqualmies' opposition to relicensing the (Expanded) Project. Questions to survey respondents included whether or not they had heard a Snoqualmie story that included mention of the Falls; whether they had ever gone to the Falls to seek spiritual power, meditate, or seek personal renewal; whether they had participated in a group ritual or ceremony at the Falls; how important the Falls is for such uses as pursuing Indian identity, seeking personal renewal, practicing spiritual meditation, and seeking spiritual power, among others; and whether respondents had personally encountered such events at the Falls as gaining a sense of personal renewal, feeling renewed Indian identity, feeling the presence of spirit power, participating in group ceremonies, and experiencing personal healing/cleansing, among others.

Because the recent public ceremonies fostered these activities and feelings, and the professors do not mention the public ceremonies and their influence on the results of the study, its readers cannot rely on the study to learn more about continuities and discontinuities in traditional religious activities and the reinvention of tradition by displaced people. These practices have been reported to vary by being held by individuals, in private, and in a different area (Larson 1988). The Tollesfon and Abbott study suggests that the Falls is central to the Snoqualmie Indians' traditional religious practices. However, when the Snoqualmie Indians described their traditional, revitalized, and contemporary religious practices in an extensive report to the Bureau of Indian Affairs in 1986 in support of their petition for tribal acknowledgment, they made no mention of Snoqualmie Falls. The study does not discuss this inconsistency.

Snoqualmie Falls in Snoqualmie Indian Oral Tradition

Waterman recorded the Snoqualmie names for the Falls as *Sqwut*, which translates as "the underpart to which the stream plunges," and *Ska'ldal*, "the place where the river takes a

leap" (1920:189). Snoqualmie Falls is mentioned in some stories of the Snoqualmie and other Puget Sound groups. Ballard (1929:69-81) recounts the origin story of Moon the Transformer, as related to him by Snoqualmie Charlie. In this story, Moon changes the environment and the Indian peoples into their present (pre-Euroamerican contact) form. His work includes the creation of Snoqualmie Falls:

Moon came to the place where Snuqualmi Falls now are, near the place where he was stolen as a child. It was then a fish weir of wood, closed so that the salmon could not go up the stream. Most of the people who owned the trap lived on the prairie above. Moon turned the fish weir into a waterfall.

Moon addressed the waterfall thus: "You, Waterfall, shall be a lofty cataract. Birds flying over you will fall and people shall gather them up and eat them. Deer coming down the stream will perish and the people shall have them for food. Game of every kind shall be found by the people for their subsistence" (Ballard 1929:78).

Southern Coast Salish storytellers sometimes start the Moon tale with an adaptation of the Star Husband, which has been described as one of the most popular Indian folktales, found everywhere south of the Arctic (Bierhorst 1985:136). In this story, two sisters marry stars and go to live with them, with one sister bearing a child. The sisters eventually become homesick and return to earth on a ladder they make from twisted cedar roots. The ladder eventually drops down into a pile, forming a large round rock in the Snoqualmie Valley (Haeberlin 1924:374). In a version of this story told by Henry Sicade, however, "the years passed and the ladder finally fell down from the sky and was turned into Snuqualmi Falls" (Haeberlin 1924:376).

A rock located in the bed of the river at the top of the Falls once divided the flow. Corliss (1972:6) calls this "Seattle Rock" and recounts an Indian story about it:

The Indians from east of the mountains would sometimes come over the Pass, planning to make raids on the Coast Indians. Chief Seattle sent word to them to meet him in the Pass somewhere above Snoqualmie Prairie. There he provided canoes and guided them down the river to go to a big potlatch! When they got to this rock he jumped out onto it and saved himself, and the enemies were swept over the Falls. After that it was called "Seattle Rock."

To contemporary Snoqualmie Indians, the story's main characters are two Snoqualmie warriors, not Chief Seattle, as one might expect on the basis of the name Seattle Rock. Only a portion of the rock remains today.

3.4 Contemporary Snoqualmie Indians

The Point Elliott Treaty of 1855 provided for the Snoqualmie Indians to move to the Snohomish Bay Reservation, which later became part of the Tulalip Indian Reservation. Some Snoqualmie Indians settled on the Tulalip Indian Reservation with Snohomish, Stillaguamish, and Sammamish peoples after the Point Elliott Treaty was ratified in 1859, but many chose to remain in their home territory (Baenen 1981:450; *United States v. Washington* 476 F.Supp. 1101, 1108). Between 1856 and the 1940s, local U.S. Office of Indian Affairs officials periodically recommended establishment of a reservation for non-reservation Snoqualmie people (*United States v. Washington*, 476 F.Supp. 1101, 1108). These recommendations were never acted upon, and some off-reservation Snoqualmie continue actively to seek a land base.

The Snoqualmie were among a number of Indian groups that were plaintiffs in the *United States v. Washington*, an early 1970s federal court case addressing Indian treaty fishing rights. Although the court decided in favor of the plaintiffs, the decision excluded the Snoqualmie and several other Indian groups because the court did not consider them federally recognized tribes (*United States v. Washington*, 476 F.Supp. 1101, 1108-1111). The federal government recognizes The Tulalip Tribes as representing the Snoqualmie Indians. Some non-reservation Snoqualmie Indians are seeking recognition from the federal government, and have submitted an application prepared with the assistance of Professor Tollefson. The Snoqualmie maintain that the federal government should recognize them as a tribe because the government recognized a Snoqualmie Tribe in the past and because Congress has taken no action to terminate it. The Tulalip Tribes are contesting the Snoqualmie application.

On May 6, 1993, the BIA issued a proposed finding that the Snoqualmie Indians met all of the mandatory criteria for Federal Acknowledgment. Under the provisions of Section 83.9(g) of the Acknowledgment regulations, the Tulalip Tribes of the Tulalip Reservation in Washington challenged the proposed finding and submitted substantial documentation rebutting the evidence on which it was based. In accordance with Section 83.8(d) of the Acknowledgment regulations, the Snoqualmie Indians were provided an opportunity to respond to the rebuttal submitted by the Tulalip Tribes. Because of the large volume of documentation involved, the comment period was extended by the BIA to September 8, 1995. The petition is awaiting the availability of a BIA research team to analyze the rebuttal and counter-rebuttal evidence and to recommend a final determination to the Assistant Secretary of the Interior for Indian Affairs. The BIA does not expect to begin this evaluation until the early part of 1996.

4.0 AGENCY AND NATIVE AMERICAN CONSULTATION³

Puget Power consulted with OAHP, NPS, and representatives of The Tulalip Tribes and Yakama Indian Nation as required by the FERC regulations. In addition, the Snoqualmie Indians were included in all phases of the consultation although they are not a federally-recognized Indian Tribe at present. Consultation also included local agencies, historical societies, Project Area residents, and others. The subjects addressed included the inventory of traditional cultural and archaeological properties, Project effects on the Snoqualmie Falls Traditional Cultural Property, and proposals for education and interpretation. Complete documentation for this consultation process to November 1991 is included in Volumes 4 and 5 of the License Application.

The agencies, Tulalip Tribes, and Snoqualmie Indians received the Project's initial consultation documents in Spring 1989 and were invited to the initial consultation meeting on May 31, 1989. Discussion began with a public meeting on July 12, 1989, in which information was presented on the Project and the relicensing process. Comments by members of the public were solicited.

Puget Power held an agency meeting on cultural resources on February 19, 1991, inviting representatives from the NPS, OAHP, Washington Department of Ecology, King County Parks Department, Snoqualmie Indians, and The Tulalip Tribes, among others. At this meeting, HRA and Puget Power described the methods and results of the historical and cultural resources studies, focusing on potential Project impacts and recommended mitigation measures.

On October 3, 1991, Puget Power held a Stage II consultation meeting with the agencies and Indian groups to discuss Project issues that had not yet been resolved. Facilitated by James Arthur from the Mediation Institute, the meeting results included the acknowledgment that the Snoqualmie Indians believe that power generation and traditional religious use of the Falls are incompatible uses of the area. Details of this meeting are contained in Volume 5 of the License Application.

Puget Power received a number of letters commenting on its assessments of historical and cultural resources for the Project. These letters came from OAHP, NPS, The Tulalip Tribes, the Snoqualmie Indians, the Snoqualmie Valley Historical Society, and the Puget Sound Railway Historical Association. The letters and Puget Power's responses to their comments are included in Volume 5 of the License Application.

In its comments on the Project Draft Environmental Impact Statement filed on February 17, 1995, Puget Power proposed to develop a Refurbished Project instead of the

³The term "Native American" is used here to refer to The Tulalip Tribes and the Yakama Indian Nation, two federally recognized Indian Tribes, and the Snoqualmie Indians, a group seeking recognition as a tribe. The term "Indian Tribal Organizations" is used to refer to these groups collectively.

original Expanded Project. The Company provided more information to the FERC on the Refurbished Project on June 28, 1995, and the FERC requested comments on the changed design during a 30-day period from September 5, 1995 to October 5, 1995. Of the above agencies and Indian Tribal Organizations, only OAHP provided comments, noting in a letter dated October 26, 1995, that the Refurbished Project will result in less effect on historic resources.

4.1 Agency Consultation

State Office of Archaeology and Historic Preservation. Consultation with OAHP involved meetings with staff and a number of telephone calls to discuss research methods and results, and to obtain information from similar studies in other areas. Puget Power and HRA staff met with key staff members of the OAHP on June 28, 1991, to discuss the Project draft historical and cultural resource assessments. OAHP staff expressed their overall approval of the reports and recommended the development of more detailed management plans for both of these resource categories.

Puget Power met with OAHP staff on September 3 and November 3, 1992, to discuss their comments on and seek additional guidance in revising the draft cultural and historical resources plans. A meeting occurred on April 14, 1993, to discuss the revisions to the historical and cultural plans, preparation of the PA, and ongoing consultation with the Indian tribal groups. Puget Power also met with OAHP staff on August 9, 1994 to discuss that agency's and ACHP's comments on, and the Company's revisions to, the Cultural Plan, the Historical Plan, and the PA. Additional meetings to discuss the Refurbished Project took place on April 3 and November 29, 1995.

National Park Service. Puget Power met with staff members of the NPS Pacific Northwest Regional Office (PNRO), who provided a copy of National Register Bulletin 38, "Guidelines for Evaluating and Documenting Traditional Cultural Properties" (National Park Service 1990). In addition, HRA staff members consulted with the NPS Western Region Office staff about their cultural resources concerns in reviewing hydroelectric projects. PNRO staff members attended the agency meeting on cultural resources that Puget Power held on February 19, 1991, and the Stage II consultation meeting on October 3, 1991. Four staff members toured the Project on August 13, 1992.

On October 6, 1992, Puget Power and HRA representatives accompanied Western Region staff members Ron Corbyn and Tom Burge on a site tour including a visit to the Traditional Cultural Property. PNRO staff member Bob Karotko also attended the November 19, 1992, meeting with the Snoqualmie Indians and OAHP. The Company met with PNRO staff members on January 12, 1993, to discuss the roles of the NPS offices and staff members in the relicensing review and to discuss the Department of Interior's motion to intervene in the relicensing process. Attendees agreed on the desirability of a series of meetings planned by the Department of Ecology to discuss issues surrounding Puget Power's request to divert additional flow from the river for power generation.

Advisory Council on Historic Preservation. On April 4, 1994, the FERC submitted copies of the draft Cultural Plan, Historical Plan, and PA to the ACHP for review and comment. ACHP responded on June 20, 1994, and Puget Power has discussed the comments with ACHP staff members. The agency provided comments on the draft PA (dated September 1, 1994) in a letter dated October 25, 1994; the Company has incorporated these comments in revising the PA.

Washington Department of Ecology Instream Flow Meetings. The Washington Department of Ecology (WDOE) held a series of five meetings with an informal flow advisory group. Participants included representatives from the following groups:

National Park Service
Bureau of Indian Affairs
Northwest Power Planning Council
Washington State Energy Office
Washington Department of Fisheries
Washington State Office of Archaeology and Historic Preservation
Washington State Parks
The Tulalip Tribes
Snoqualmie Indians
Yakama Indian Nation
King County
City of Snoqualmie
Northwest Rivers Council
Washington Trout
Snoqualmie Valley Historical Society
Puget Sound Power & Light Company
Snoqualmie Falls Preservation Project
Church Council of Greater Seattle Native American Task Force

The WDOE held the meetings to gather information and perspectives from a number of groups before determining the specific form and process for amending its regulations to allow Puget Power to divert an additional 1,500 cfs of instream flow at Snoqualmie Falls for the proposed Expanded Project. Occurring between early February and early April 1993, these meetings included a series of presentations on water flow and other issues associated with the Project by most of the participants. To facilitate reaching a decision on instream flow that would maximize the opportunity to meet a number of competing uses of water at Snoqualmie Falls, WDOE staff sought discussion of a number of values, including aesthetic and scenic, cultural and historical, religious and spiritual, fish and wildlife, water quality, flood protection, affordable hydropower, and recreation.

4.2 Consultation with Native Americans

As stated in Section 4.0, Puget Power provided The Tulalip Tribes and the Snoqualmie Indians with Project consultation documents beginning in Spring 1989 and invited their representatives to attend a number of consultation meetings that discussed the Project in general and such specific issues as cultural resources, aesthetics, fisheries, water quality, recreation, and others. In addition, The Tulalip Tribes and the Snoqualmie Indians received draft copies of the cultural and historical assessments (Volumes 7 and 8 of the License Application), and several drafts of the cultural and historical mitigation and management plans for review and comment. Both The Tulalip Tribes and the Snoqualmie Indians intervened in the FERC relicensing proceeding.

The Yakama Indian Nation expressed their concerns about cultural resources in a petition to intervene filed in December 1992, after which Puget Power provided Project documents to them and met with their tribal council. The following paragraphs summarize Puget Power's specific consultation activities with each of the Indian Tribal Organizations.

The Tulalip Tribes. In a letter dated March 21, 1991, Kurt Nelson of The Tulalip Tribes responded that after review of the Beak and BOAS (1989) report, The Tulalip Tribes had no additional concerns about cultural resources impacts associated with the Project. Puget Power sent a letter dated April 8, 1991, to clarify that the Project would involve a limited amount of new construction. The cultural resources assessment was submitted to The Tulalip Tribes on April 23, 1991, for review. On May 30, 1991, Tulalip attorneys wrote to Puget Power to clarify the relationship of the Snoqualmie Indians to The Tulalip Tribes (Jones 1991). This relationship was referenced again when Tribal representatives asserted that The Tribes are "the only legally recognized Indian tribal entity affected by this project" (Williams 1992:1).

Puget Power and HRA staff met with representatives of The Tulalip Tribes on September 24, 1991, to discuss proposed Project changes and the Tribes' concerns. Meeting attendees decided to make a field visit to the Falls area. In a letter dated October 19, 1992, Daryl Williams of The Tulalip Tribes discussed the Tribes' concerns regarding cultural resources.

Puget Power met with Tulalip representatives on February 8, 1993, to discuss Project impacts and possible mitigation options. On March 1, 1993, Puget Power provided a site tour for Hank Gobin, Daryl Williams, and Richard Young, which included a visit to an archaeological site near Tokul Creek.

Throughout the consultation process, Tulalip representatives have repeatedly emphasized that fish are central to their culture and that any developments affecting water quality and fisheries upriver eventually impact The Tulalip Tribes in their downriver location. They have acknowledged that the Project is a non-consumptive use of water because flow diverted for power generation returns to the river.

The Tulalip Tribes are co-managers of fish resources in the area and have supported the Washington State Department of Fisheries in its efforts to introduce salmon above the Falls. The Tribes supplied juvenile salmon from their own hatchery for use in a survival rate study of juvenile salmon going over the Falls (Williams 1992:2). Representatives of The Tribes participated in fisheries studies meetings for the Project. In the meeting on February 8, 1993, staff members stated an "intangible" concern for possible cumulative impacts on fish resources.

Tribal representatives want protection for the character of the Snoqualmie River and any archaeological sites along it from the Falls down to Tokul Creek, which includes land inside and outside the Project Area. They want to avoid development, forestry activities, ground disturbance, and public access in this area and want early review of any proposed changes to the area.

Although the Falls were historically important for cultural and religious uses, construction and tourism have interfered with such uses of the area, according to the Tulalip (Williams 1992). The Tulalip have noted that Indian cultural ceremonies require seclusion and an undisturbed site, with water flows minimally affected by human development. The Tulalip are seeking compensation for their loss of the Falls as a cultural site, following original Project construction in 1898.

Tulalip representatives have commented that the nighttime flow of 25 cfs is very low. Regarding Puget Power's supplemental flows proposed under the Expanded Project to be used at the discretion of Native Americans, the Tribe has stated that cultural/religious use is a personal and private matter and that tribal members do not tell anyone when and where they plan to make such use. Consequently, the concept of higher flows on request for cultural purposes would not meet their needs.

Regarding Puget Power's other proposed mitigation measures, The Tulalip Tribes have commented that fencing the Preston-Snoqualmie Trail would help prevent impacts to cultural and archaeological sites. The same is true for preserving land along the river below the Falls and for restricting access to the plunge pool area on the south side of the river at the base of the Falls.

The Tribes' staff have indicated that displays in a Project museum that was planned under the Expanded Project could be beneficial for tribal public relations. Tulalip representatives expressed interest in the possible exchange of exhibits between Puget Power's Museum and their own Cultural Center, although they do not want such exhibits to detract from their planned museum or from support that Puget Power might offer this facility.

Because the Tribes feel that on-site mitigation has little benefit, they have suggested three options for off-site mitigation: designating property containing three longhouse sites for preservation, donating this property to The Tribes, and donating funds to The Tribes' proposed museum and cultural center. Puget Power has explored all of these options with The Tribes through a number of telephone calls and a meeting at tribal offices on February 16, 1994.

Snoqualmie Indians. Specific consultation with the Snoqualmie Indians occurred at meetings with Puget Power representatives in August 1989, where the Snoqualmie representative expressed a desire to minimize construction and to discourage people from visiting the south side of the river below the Falls. Puget Power also met with Snoqualmie representatives in August 1990 to discuss their various concerns about the Project. These included the source of Puget Power's water rights, a legendary tunnel behind the Falls, the need to avoid attracting visitors to the base of the Falls, the introduction of anadromous fish above the Falls, the possibility of burial sites in the area, the curation of archaeological remains that might be found, possible Project effects on "little red fish," and Puget Power's desire to interview Snoqualmie elders. During early consultation, Snoqualmie Indians asked that flow over the Falls be set at 200 cfs on a 24-hour basis.

Puget Power and HRA staff members also discussed the Project at a Snoqualmie Council meeting on November 24, 1990. Puget Power offered to conduct a series of interviews with Snoqualmie Indians, inviting Professor Tollefson, consulting anthropologist for the Snoqualmie, to review the proposed interview process, attend the interviews, and receive copies of interview tapes or notes. Council members declined to allow Puget Power to perform such a study, even with the participation of Professor Tollefson.

The Council decided that Professor Tollefson would speak with the Snoqualmie people about cultural values at the Falls and the Project's potential effects on them. Council members indicated that they would use the information resulting from Professor Tollefson's discussions to provide Puget Power with the Council's comments on potential Project effects by January 15, 1991, so that Snoqualmie comments could be incorporated into the draft application for a new License.

On January 4, 1991, representatives of the Snoqualmie toured the Project facilities with Puget Power and HRA staff. The tour was followed by a discussion of Snoqualmie Indian concerns. Puget Power staff asked Snoqualmie representatives for written comments on the Project by January 15, 1991. In early January 1991, Puget Power received a letter from the Snoqualmie dated December 13, 1990. In this letter, the Snoqualmie Council notified Puget Power that they had authorized Professors Tollefson and Abbott to conduct interviews on Snoqualmie cultural values and sites around the Falls and to evaluate their significance. Although no information was presented on the specific scope of work, schedule or budget, the Council offered to share the study with Puget Power if it would pay one-half of the costs.

Puget Power informed the Snoqualmie Indians in a letter on January 25, 1991, that the Company believed it was not prudent or appropriate to fund a study in which it had no participation in developing the scope, objectives, methods, schedule, or budget. Puget Power again offered to conduct a study that would be developed jointly with the Snoqualmie Council and their consultants. Early in 1991, the Snoqualmie Indians joined with the Church Council of Greater Seattle's Native American Task Force to form the Snoqualmie Falls Preservation Project, which began to oppose the relicensing effort, and to request abandonment of all hydroelectric power generation at the Falls and restoration of the river's

full flow over the Falls. Appendix B summarizes Snoqualmie Indian concerns about the Project and Puget Power responses up to November 1991.

After the Project cultural resources assessment (Thompson and King 1991) determined that the Falls was eligible for listing as a traditional cultural property in the National Register of Historic Places, the Snoqualmie Indians initiated a nomination for such a listing. The nomination was reviewed and unanimously recommended by the Washington State Advisory Council on Historic Preservation.

A number of newspaper articles discussed reports that Snoqualmie representatives stated they would use the property's National Register listing in their attempts to oppose Project relicensing (Anonymous 1992; Corsaletti 1992; Harrell 1992; Lange 1992; Rhea 1992b). In consideration of the possible effects of such opposition on the Company's ratepayers and shareholders, Puget Power reluctantly opposed listing of the property in the National Register. The Company has stated its commitment to treat the Falls as though it were listed in the National Register and has expressed willingness to reconsider listing in the future. The Keeper of the National Register officially determined the property to be eligible for listing on June 22, 1992.

Following circulation of the draft Cultural Plan, Puget Power received a letter from the Snoqualmie Indians stating that the report was not acceptable (Freese 1992). The Company asked for a meeting to hear the details of their concerns. After several requests, Snoqualmie representatives arranged a meeting in Redmond on November 19, 1992, also inviting representatives of the Church Council of Greater Seattle's Native American Task Force and Snoqualmie Falls Preservation Project, the State Office of Archaeology and Historic Preservation, and the National Park Service. Snoqualmie representatives declined to provide specific information on the Cultural Plan but discussed a number of issues about the Project. The Snoqualmie Indians presented their views during scoping meetings conducted by the FERC during August, 1993.

These issues have included a persistent request that Puget Power refer to the Snoqualmie as an Indian Tribe. Puget Power's consultation with the Snoqualmie throughout the relicensing process has been as comprehensive as it would have been if they were a federally recognized tribe.⁴ The Snoqualmie are also concerned that existing interpretive signs in the park include no information on historical Indian use of the area.

Snoqualmie representatives stated their anger that Puget Power had objected to National Register listing of the Falls Traditional Cultural Property and their feeling that Puget Power had not heard their concerns about the Project. During its lengthy consultation with the Snoqualmie Indians since 1989, Puget Power has addressed a number of the

⁴The Bureau of Indian Affairs issued a proposed finding on May 6, 1993, that the Snoqualmie Tribe met all of the mandatory criteria for Federal Acknowledgment. The Tulalip Tribes submitted substantial documentation rebutting the evidence on which the finding was based, and the Snoqualmie responded to the rebuttal. BIA plans to begin evaluating all of the evidence in the early part of 1996.

Snoqualmies' issues that are summarized in Appendix B. Although there is no documentation of opposition to the Project in the past, the Snoqualmie now say they opposed various past Project activities.

The Snoqualmie continue to object to use of the Falls for hydroelectric power generation, desiring the full flow of the river over the Falls, and they particularly oppose the increased diversion called for in plans for the Expanded Project. Former Vice Chair Art Freese has stated that for him the aesthetics of the Falls include the mist, rainbow, ground movement, and sound of the falling water and, therefore, all of the water should be allowed to go over the Falls.

Snoqualmie representatives also wish to keep the entire Falls area in as natural a state as possible by avoiding any additional construction and recreation development that was proposed for the Expanded Project but is not part of the proposed Refurbished Project, such as construction of a footbridge, refurbishment of historic buildings to include a museum with interpretive information, and expansion of Plant 2 to include an education center. A recreation element that remains part of the Refurbished Project is the development of a trail, which the Snoqualmie feel would slow the movement of tourists through the Falls area. They are concerned about archaeological sites, including burials, that their oral tradition holds are located in the vicinity of the Falls, and they are also concerned about the cumulative effects of overall development in the vicinity of the Falls.

Puget Power has responded that the Company's responsibilities to the recreation and historic preservation communities as well as its ratepayers and shareholders strongly support continuation of the Project, not its removal. In addition, the natural character of the area has been affected by tourism for more than 100 years and currently receives about 1.5 million tourist visits annually. Company representatives feel that responsibilities for the safety of visitors to the Falls, for assistance in the education of school children, and for the comfort of those who visit the Falls justify the proposed construction. The Company believes that its ability to provide improvements in the areas of historic preservation, education, interpretation, and flood protection are closely linked to the continuation of power generation.

The Snoqualmie also stated their desire not to comment on the Project during its planning stage, preferring to wait until plans were fully developed. Group members sometimes feel that their limited resources are overwhelmed by the FERC relicensing schedule. They also disagreed with Puget Power's interpretation of past comments they have made on the Project.

Yakama Indian Nation. The Yakama Indian Nation intervened in the FERC licensing process in December 1992, citing their concerns for cultural resources, treaty rights to use plant and animal resources, kinship ties to the Snoqualmie Indians, and a treaty fishing area at the mouth of the Snohomish River. In March 1993, Puget Power provided the Yakama Tribal Council with a copy of the final License Application, including the cultural

and historical resources assessments and the draft cultural and historical plans. The Company requested a meeting to present information on the Project.

The Yakama Tribal Council received the Company's presentation on May 4, 1993, and Council members expressed several concerns about the Project, including: requesting that Puget Power's brochure on the Project provide information on Native American use of the Falls; expressing surprise that archaeological surveys of the Falls area located no prehistoric deposits, including burials; stating sympathy for the desire of the Snoqualmie Indians to preserve the area's beauty, ecology, water, fish, and plants; and expressing discomfort with hydroelectric development, population increase, and tourist use of the Falls.

5.0 SNOQUALMIE FALLS TRADITIONAL CULTURAL PROPERTY

5.1 Site Inventory

Cultural resource surveys of the Project Area did not identify prehistoric or historic Native American archaeological deposits (Beak and BOAS 1989; Larson 1988; Onat and Bennett 1968). The inventory for the Project did identify Snoqualmie Falls as a traditional cultural property based on its importance in the oral tradition of the Snoqualmie people. In addition, Snoqualmie Indians say that the Falls holds great spiritual importance, which they have allowed Professor Tollefson to study (Tollefson and Abbott 1993). As discussed in Section 3.3, this study unfortunately does not distinguish traditional religious use from contemporary ceremonies to protest Project relicensing, and HRA could not independently verify spiritual importance of the Falls through ethnographic or ethnohistoric references.

Oral traditions of the Snoqualmie people tell of the Falls area being used for burials. The Snoqualmie are hesitant to reveal specific locations that they suspect contain burials because they are concerned about vandalism and rights to privacy. Professor Tollefson has stated that warriors were buried in the Snoqualmie Falls area (Personal communication 1990, 1991a). It should be noted that burials would not be expected in areas of bedrock, previous disturbance, or recent fill, conditions that characterize the area around the Falls within the Project Boundary.

As discussed in Section 3.3, references have been made to both a Snoqualmie village and a cave or tunnel located below Snoqualmie Falls. There is, however, no location directly beneath the Falls suitable for a village site, and archaeological survey beneath the Falls did not identify cultural remains (Beak and BOAS 1989; Onat and Bennett 1968; Section 2.3 above). Further, snorkeling reconnaissance by Puget Power of the area beneath the Falls in 1990 did not locate the cave or tunnel said to exist behind the Falls. Mentions of use directly below the Falls may refer to Snoqualmie Indian spiritual practices and, perhaps, to refuge taken during hostile raids (Larson 1988:4).

5.2 Significance of the Falls

The cultural resources assessment (Thompson and King 1991) identified Snoqualmie Falls as a National Register-eligible traditional cultural property based on the criteria for eligibility listed in 36 CFR 60.6. The Falls is significant based on its association with important Snoqualmie Indian stories that were documented more than 50 years ago. The Falls also is reported to be associated with traditional religious activities (Larson 1988; Tollefson and Abbott 1993). Ethnographic study of the Falls might yield information important in anthropology. OAHP and the Keeper of the National Register determined in 1992 that the Traditional Cultural Property is eligible for listing in the National Register.

The Falls has been affected since at least 1889 by tourist visitation and construction of the railroad, and by construction and operation of the Project since 1898. The Project draws up to 2,500 cfs of flow from the river. Although this reduction of flow and the 1.5 million tourist visits to the Falls every year affect the integrity of the Falls, the Snoqualmie Indians maintain that it is sacred to them (Tollefson and Abbott 1993). Tollefson (1991b) states that the Snoqualmie view the Project buildings and structures near the rim of the Falls as more of an annoyance than as an obstacle to their traditional cultural use of the Falls.

By contrast, information from Larson (1988) and Williams (1992) suggests that the integrity of the Falls for traditional religious activities of Tulalip tribal members has been compromised by construction of the original Project and tourist visitation because Indian cultural ceremonies generally require seclusion and an undisturbed site.

5.3 Character-Defining Features

Figure 5-1 shows the setting of Snoqualmie Falls and the location of the Traditional Cultural Property. The character-defining features of the Traditional Cultural Property center on its natural qualities, beginning with the magnificence of the Falls itself. The water flow over the Falls existing at the time of its Determination of Eligibility in 1992 also is a character-defining feature of the Traditional Cultural Property. The Snoqualmie Indians have vested these natural qualities with cultural, including spiritual, meaning. These features include its rock formation with sheer cliffs that form the waterfall. The remnant of Seattle Rock is a character-defining feature, as are the pool at the base of the Falls and the mist that occurs under certain atmospheric and flow conditions. The natural vegetation that occurs below the Falls forms part of its character, as does the riverbank on the south side of the river adjacent to the plunge pool.

The inaccessibility and lack of development on the south bank of the river at the base of the Falls also define its traditional cultural character. The area is difficult to access because only a rough anglers' trail leads to it. Moreover, most of the hydroelectric and tourist facilities are not visible from the area.

5.4 Boundary of the Traditional Cultural Property

Figure 5-1 shows the boundary of the Snoqualmie Falls Traditional Cultural Property. Based on the geomorphology of the Falls, the boundary includes the natural character-defining features of the Falls, which consist of the rock cliff (including Seattle Rock), the waterfall, and the plunge pool.

The property boundary extends along the rim of the cliff where the waterfall plunges over the rock, then continues southwest and down a cliff to cross the river downstream of the plunge pool. The boundary encloses an area of about eight acres.

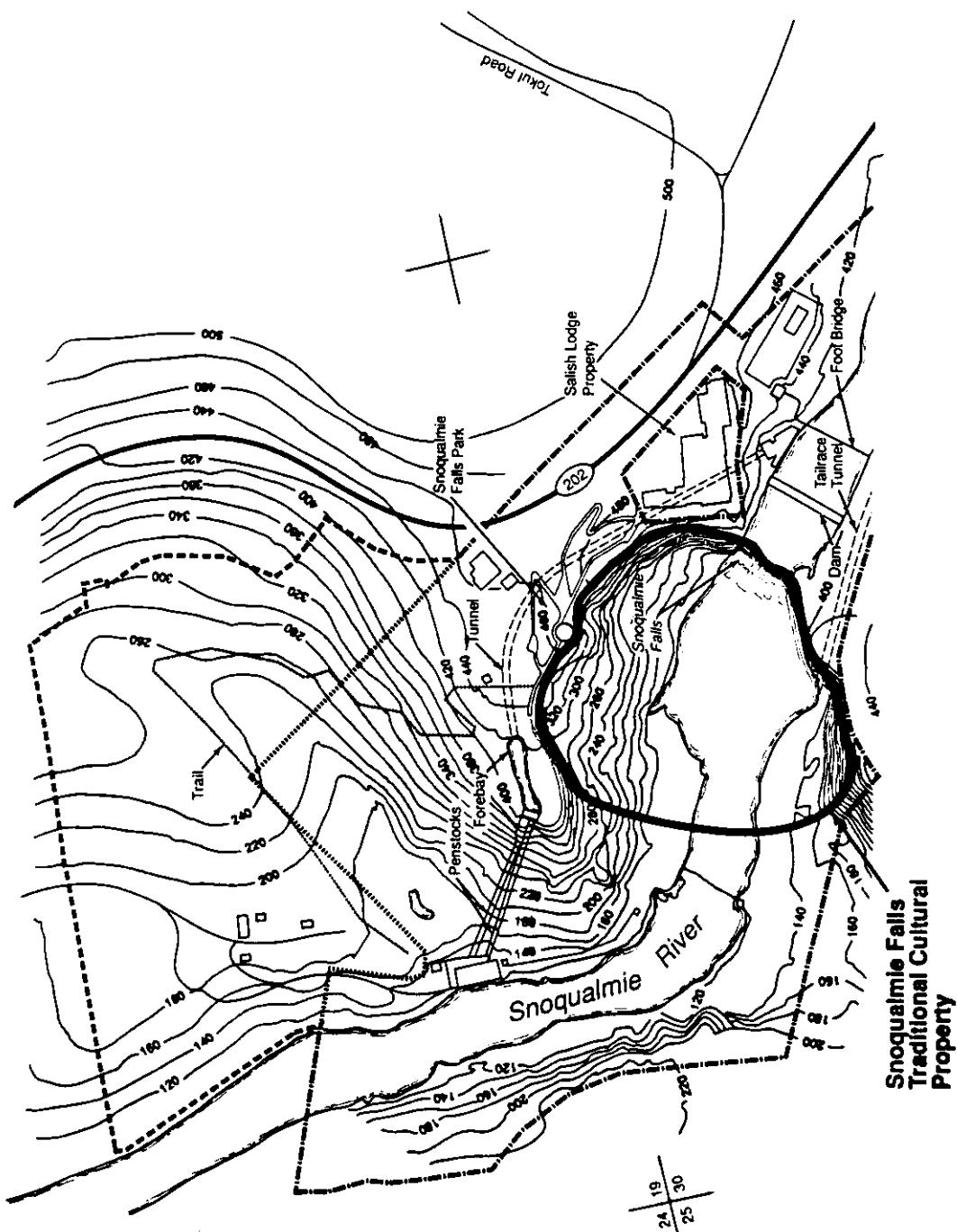


Figure 5-1 Location of Snoqualmie Falls Traditional Cultural Property

6.0 MANAGEMENT APPROACH

Puget Power appreciates the Native American heritage represented in the Snoqualmie Falls Traditional Cultural Property and wishes to enhance public awareness of Native American values. Traditional religion and spiritualism are both interwoven with all aspects of Native American culture and constitute a personal and private part of Native American life. The Company recognizes that the Falls played a meaningful role in Snoqualmie Indian oral tradition and that some Snoqualmie Indians have used the Falls for traditional religious practices. Over the past few decades Native Americans have experienced a renewed interest in their spirituality and other aspects of their traditional culture. Even though the Falls no longer exhibits all of the qualities that are usually needed for spiritual sites, Native Americans still regard the site as important historically and contemporarily. The natural setting of the waterfall is especially valued and Puget Power is committed to preserving it.

Puget Power will manage the Snoqualmie Falls Traditional Cultural Property in a manner that preserves its character-defining features while balancing Puget Power's other obligations, which include safety concerns, preservation of the Historic District, recreation, fisheries resources, flood protection, tourism, aesthetics, handicapped access, and the need to continue producing hydroelectric power. Although each of these interests is an important consideration to Puget Power, safety concerns, production of power, and preservation of the Traditional Cultural Property and the Historic District remain the Company's priorities. When an action has a potential effect on the Traditional Cultural Property, Puget Power will review the undertaking, taking into account these various interests and the Company's priorities. The Company's management approach includes both sensitivity for the cultural significance of the Falls and balance of the Company's management obligations for various aspects of the Project.

Puget Power's approach includes a number of standards, listed below, that will guide the Project's mitigation and management activities. In developing the standards the Company has considered several characteristics that appear to be representative of qualities important to certain traditional cultural properties of western Washington Indians. The qualities, set forth in a document prepared for the FERC by the Lummi Indian Nation (Cagey 1991), include:

- purity (protection from human disturbance),
- privacy (protection from observation by outsiders),
- isolation (separation from the visual and auditory signs of development), and
- permanence (protection from future disturbance).

The Snoqualmie Indians' stated concern to preserve the Falls area in as natural a state as possible is consistent with the qualities listed above, and comments from The Tulalip

Tribes refer to the importance of seclusion and an undisturbed site for cultural ceremonies (Williams 1992:1). It is important to note that purity, privacy, and isolation are very limited at Snoqualmie Falls because about 1.5 million people visit the Falls every year. Nevertheless, Puget Power's standards have been developed in an attempt to preserve the character-defining features of the Falls in light of current circumstances.

6.1 Preservation Standards

The standards that follow will inform and guide future actions affecting Snoqualmie Falls in particular and the Area of Potential Effect in general. These standards represent an adaptation from the Secretary of the Interior's *Standards for Historic Preservation Projects* (1983). Puget Power will apply the standards to the Project in a reasonable manner, taking into consideration economic and technical feasibility, the various requirements of the new License, and the overall goals and objectives of the Company.

The underlying principle behind the first seven standards is the retention and protection of the character-defining features of the Falls; the last two standards relate to Indian cultural concerns for the wider Area of Potential Effect. At the same time, the standards recognize that the Falls is part of a functioning hydroelectric project in which change is inherent. Through application of the standards, Puget Power will seek to maintain the cultural integrity of the Falls without losing the necessary flexibility to operate the Project and to preserve the Historic District that also includes the Falls.

Puget Power will utilize the following standards in treating the Snoqualmie Falls Traditional Cultural Property:

- (1) Acknowledge the traditional cultural value of the Falls. Avoid Company use of the Traditional Cultural Property. Avoid engaging in or encouraging recreation activities that would intrude into the boundary of the Traditional Cultural Property physically, or be visible or audible from the south side of the river within the traditional property boundary.
- (2) Recognize that the lack of evidence of modern human activities within the Traditional Cultural Property boundary holds cultural significance. Avoid Company activities within the boundary of the Traditional Cultural Property or that might be visible or audible from the south side of the river within its boundary.
- (3) Recognize that the natural setting of the Falls holds traditional cultural significance. Maintain a minimum flow over the Falls as specified in the FERC License. Do not remove or alter such natural features as rock and vegetation within the boundary of the Traditional Cultural Property except as needed for public safety.

- (4) Recognize that privacy and isolation are important to the users of some traditional cultural properties. Discourage recreational access within the boundary of the Traditional Cultural Property.
- (5) When ground-disturbing activities are needed near the Falls, conduct them with sensitivity to avoid erosion and other types of disturbance to the natural environment within the boundary of the Traditional Cultural Property.
- (6) Avoid, to the extent practical, construction of structures on Project lands that are visible from the south side of the river within the boundary of the Traditional Cultural Property. If there is any such construction, make sure it is compatible to the extent practicable with the natural environment.
- (7) Recognize that permanence of the Traditional Cultural Property is important to its cultural significance. Conduct actions that affect the Traditional Cultural Property in a manner that maintains and preserves its overall integrity.

The last two standards delineate how Puget Power will take into consideration the concerns of the Indian Tribal Organizations in treating potential burial sites and aboriginal archaeological sites within the Area of Potential Effect:

- (8) Preserve any burial sites that may be found within the Project Boundary. If preservation is not possible, treat burials in accordance with procedures developed in consultation with The Tulalip Tribes, the Snoqualmie Indians, and the Yakama Indian Nation.
- (9) Protect and preserve significant archaeological resources that might be found within the Project Boundary. Develop and implement measures in consultation with OAHP, NPS, The Tulalip Tribes, the Snoqualmie Indians, and the Yakama Indian Nation to mitigate disturbance that might occur.

7.0 PROJECT EFFECTS AND MITIGATION/MANAGEMENT MEASURES

Operation of the Snoqualmie Falls Project since 1898, in addition to tourism and recreation in the Project Area, has affected the Falls. These activities have coexisted with Native American spiritual use of the Falls, which retains sufficient integrity to be eligible for listing in the National Register. Construction associated with relicensing alterations will change some aspects of existing Project facilities. The following paragraphs summarize these changes and the Project's potential adverse effects on the Snoqualmie Falls Traditional Cultural Property. They then discuss Puget Power's mitigation and management measures related to the preservation standards listed in Section 6.1.

The mitigation measures discussed in the following sections have evolved during a lengthy process. Initial actions affecting the Traditional Cultural Property and proposed mitigation measures were reviewed by the Puget Power Cultural Resources Coordinator, engineers, and cultural resources specialists before being included in the Draft and Final License Applications filed in May and November 1991, respectively. Additional review of these measures was prompted by comments, which were received on the draft Cultural Plan from The Tulalip Tribes, the Snoqualmie Indians, OAHP, and NPS. The consultation process involved numerous meetings and site visits and is ongoing for some issues yet to be resolved.

As the PA states, within one year of Puget Power's acceptance of the FERC License, the Company will draft a Cultural Resources Mitigation Proposal that provides additional detail pertaining to measures required to implement the Cultural Plan. This Mitigation Proposal will provide any additional detail available at the time it is prepared on the measures for mitigating Project impacts on the Snoqualmie Falls Traditional Cultural Property that are discussed in the following sections. For the mitigation measures outlined in the Mitigation Proposal, the Company will develop individual work plans stating how and when the measures will be accomplished. Puget Power will develop the work plans within one year of the issuance of this Mitigation Proposal.

7.1 Relicensing Alterations

Table 7-1 provides a summary of the surface ground disturbance and other significant modifications proposed for the relicensed Project. As it shows, most changes to the Project involve alterations of existing facilities, although a few facilities will be removed and some will be added. None of the changes will be apparent from the area within the boundary of the Traditional Cultural Property. None of the Project modifications will be visible or audible from the Traditional Cultural Property on the south side of the river below the Falls. The minimum instream flow in future will be no less than the current requirement, and on many days it will be higher.

Table 7-1 Project Modifications.

Project Modification	Reduction in Built Environment	Modification to Existing Facility	Addition to Built Environment
UPSTREAM OF THE FALLS			
Rebuild existing dam in the same location		X	
Install an inflatable dam or spillgate system (including a control facility) to replace existing flashboard system on dam		X	
Add 75-foot-long spillway for flood control			X
Add sediment exclusion channel to transfer bedload from Plant 2 intake through the diversion dam		X	
Modify existing Plant 1 intake structures; replace metal components as needed		X	
Remove and replace Plant 1 penstocks		X	
Inside Plant 1, retire Unit 4 and replace Units 1-3 and 5		X	
Replace elevator house; install new elevator and controls		X	
Add a computer control system		X	
Provide seismic stabilization of transformer house and machine shop		X	
Modify existing Plant 2 intake: excavate two sections, construct headwall, and install headgates and bar screen		X	
DOWNSTREAM OF THE FALLS			
Modify Plant 1 tailrace channel		X	
Enhance gatehouse structure; replace mechanical running gear, trashracks, etc.		X	
Excavate 650 cu.yd. to enlarge existing Plant 2 forebay		X	
Modify Plant 2 penstock supports, anchors, etc.		X	
Modify Plant 2 for increased seismic stability; upgrade Units 1 and 2		X	
Excavate and install a flow bypass system			X
Upgrade trail from Park to lower observation deck		X	
Enhance wetlands		X	
Provide kayak access below Plant 2		X	

Project Modification	Reduction in Built Environment	Modification to Existing Facility	Addition to Built Environment
IN THE PARK			
Provide new observation patio at end of sidewalk by Centennial Green			X

Water Flow

Water flow over the Snoqualmie Falls has been a source of disagreement for many of the parties involved in discussion of cultural resources and other aspects of the Expanded Project. As noted in Section 4.1, the Washington Department of Ecology (Ecology) held a series of five advisory meetings to gather information from interested parties, including Native American groups, before deciding whether it would issue an additional water right allowing Puget Power to divert an additional 1,500 cfs for the Expanded Project. The existing Project diverts 2,500 cfs. The Expanded Project would have diverted 4,000 cfs, and therefore would have required an additional appropriation of 1,500 cfs.

In a February 17, 1995, filing, Puget Power informed the FERC that, after extensive review, it had determined for various reasons that the Expanded Project was no longer a preferred course of action. In this filing, Puget Power reduced the scope of the Project to a Refurbished Project, which requires no further diversion of water. As currently proposed, the Refurbished Project will actually divert less water for generation than does the existing Project, resulting in an enhancement of flow over the Falls.

The Snoqualmie Indians expressed concern about the additional water flow diversion initially proposed for the Expanded Project. As discussed in the Cultural Resources Assessment report (Thompson and King 1991), the Snoqualmie Indians are concerned that further reduction of the flow could affect the power of the water spirit that they believe inhabits the pool at the base of the Falls. Likewise, they feel that reduced mist from the Falls would lessen the Snoqualmie's connection to the spirit world. They have stated that the amount of water flowing over the Falls relates directly to the amount of spiritual power there. Further reduction of the flow is considered by the Snoqualmie Indians to be an adverse effect on the Traditional Cultural Property.

The Refurbished Project responds to these concerns. Flow will not be stopped or reduced; it will be enhanced. Although the presence of mist is influenced by atmospheric conditions, the enhanced flow of the Refurbished Project will not lessen or diminish these occurrences. The Snoqualmie Indians oppose the Refurbished Project, although this opposition has not been specifically directed toward the enhanced flow. Rather, the opposition of the Snoqualmie Indians to the Refurbished Project is expressed as a demand to remove rather than relicense the existing Project.

From the standpoint of potential impacts on the Traditional Cultural Property, the Refurbished Project will result in:

- An enhancement of existing flow over the Falls, thereby enhancing a character-defining feature (i.e., flow) of the Traditional Cultural Property.
- A greater seasonal variation in flow, following the river's natural hydrograph, as compared to existing conditions. This also enhances the character-defining features of the Traditional Cultural Property.
- A broader distribution of higher flow viewing opportunities, an enhancement for those whose beneficial use of the Falls is related to higher flow.

The proposed instream flow for the Refurbished Project is as follows:

Table 7-2 Proposed Minimum Instream Flows.

Proposed Minimum Instream Flow over Snoqualmie Falls (7 days per week - 10 a.m. to sunset)	
March 16 - March 31	200 cfs
April 1 - April 30	450 cfs
May 1 - May 31	700 cfs
June 1 - June 30	450 cfs
July 1 - July 15	200 cfs
July 16 - March 15	100 cfs
Nighttime flow over the Falls would not be less than 25 cfs	

The instream flows between Plant 1 and Plant 2 will be maintained at 300 to 800 cfs during operations at total river flow of less than 2,500 cfs.

The proposed flow would, on average, increase the number of days per year of flow over the Falls in excess of current minimum daylight flow from 144 days to 198 days, an increase of 54 days or 38%. The change in flow on these days would result in 50 more days of flow over the Falls in the 101-400 cfs range, 26 more days of flow over the Falls in the 401-650 cfs range, and 13 more days of flow over the Falls in the 651-1600 cfs range.

This flow proposal is a "potential condition" of a Water Quality Certification set forth in a letter provided to the FERC by Ecology, dated May 12, 1995. As reflected in Ecology's letter, this additional flow is proposed with Puget Power's consent. Puget Power's consent is required because nonconsensual imposition of this flow would be an impairment of Puget Power's existing 2,500 cfs water right. In establishing this flow, Ecology concluded that this flow was necessary to "maintain and protect the beneficial uses of the Snoqualmie River." Ecology's authority to establish the instream flow for the Refurbished Project in its Water Quality Certification is based on a previous court decision (See *PUD No. 1 of Jefferson County v. Washington Department of Ecology*, 114 S. Ct. 1900 [1994]).

Hydroelectric power production is a beneficial use of the Snoqualmie River under Washington law (RCW 90.54.020[1]), affording the existing Project legal protection. Puget Power has advised the FERC and Ecology of its willingness to consent to the flow proposal described above. However, Puget Power has also advised FERC and Ecology that any further diminution of water available for hydroelectric power production would degrade the existing beneficial use. A further diminution in flow for hydroelectric power production would violate the State's antidegradation policy (see WAC 173-201A-070) and would be an impermissible taking of the Company's existing water right. Puget Power has also advised the FERC and Ecology that its consent to the above-described flow proposal is contingent upon Puget Power's receipt of the License with terms and conditions that do not result in any further diminution of water available for hydroelectric power production.

In the context of mitigation ad management measures for cultural resources, the nomination form for Snoqualmie Falls as a traditional cultural property states:

Today, standing on the cliffs surrounding the falls, one has a panoramic glimpse of the valley below; standing below the falls, one sees sheer cliffs which rise almost straight up over 300 feet. In both cases, the view is largely unchanged from the century before, and the majesty of the Falls, the roar of its current, the mist rising from the pool, and the mossy cliffs which rise on three sides still convey the traditional setting of the site which has played a continuous role in the culture of the Snoqualmie people.

The Refurbished Project will enhance the existing flow. The Refurbished Project will not adversely impact flow as a character-defining feature of the Traditional Cultural Property.

Longhouse Sites

The Tulalip Tribes have offered options for offsite mitigation that include designating property containing three longhouse sites for preservation and donating this property to The Tribes (Williams 1992). HRA staff identified two potential places as being archaeological sites designated 45-KI-19, located on the north bank of the river near the confluence of Tokul Creek, and 45-KI-50, located along the south bank of the river opposite the creek

mouth. Tulalip cultural resource specialists are identifying the third site. The Snoqualmie Indians have also indicated interest in longhouse sites in the area.

After license acceptance, Puget Power will initiate discussions with property owners, which include the State Department of Wildlife and the Snoqualmie Falls Forest Theater, to explore options for preserving these sites.

Visitor Access

Increasing the number of visitors to the Traditional Cultural Property is another potential effect that concerns the Snoqualmie people. They fear the disturbance of their spiritual use and the risk of vandalism to possible burial sites. The Indians have said that they use the Falls at various times, depending on individual spiritual needs, and that they prefer privacy.

Following Preservation Standards 2, 4, 7, 8, and 9, Puget Power will mitigate these potential effects and manage the property to avoid them in the future by designing new Project elements to confine visitors to designated areas. A fenced walkway already directs visitors to the lower observation deck, and signs discourage access beyond the maintained walkway. Signs at Plant 2 include "Absolutely No Trespassing on Cliff," "End of Maintained Trail," and "Danger--No Trail--Dead End." The south side of the river below the Falls cannot be accessed except from private property that is not owned by Puget Power.

The Company will use fencing and landscaping to confine recreational visitors to the Preston-Snoqualmie Trail route. This control of visitor movement is designed to minimize human intrusion into the Falls environment and the potential for vandalism of the Traditional Cultural Property. The Tulalip Tribes have viewed this mitigation measure favorably (Williams 1992).

Puget Power also will present in at least one of the Project's dispersed interpretive displays some general information on Native American spiritual beliefs and the traditional cultural importance of the Falls. This information will acquaint visitors with the Indians' desire for privacy and will suggest that others show respectful behavior at the Falls. Puget Power will consult with The Tulalip Tribes, the Snoqualmie Indians, and the Yakama Indian Nation in developing this information and will not make statements of Indian beliefs or stories without their approval.

Puget Power will explore with the Indian Tribal Organizations how best to provide information on Indian use of Snoqualmie Falls. This could include revision of the Project brochure or an additional brochure. The Company will consult with the Indian Tribal Organizations and will submit drafts of written materials to The Tulalip Tribes, the Snoqualmie Indians, and the Yakama Indian Nation to request review comments. The Company will make revisions as needed based on the review comments.

Construction Disturbance

Although the Refurbished Project will disturb fewer and smaller areas than the originally proposed Expanded Project, the Indian Tribal Organizations are concerned about construction disturbance. Snoqualmie Indian representatives have expressed a concern that construction in previously undisturbed areas could impact the aesthetics of the Falls area and disturb possible burials or other cultural resources sites. They would prefer not to have any blasting and removal of rock at the Falls and would prefer no new construction, especially within the Traditional Cultural Property. The Tulalip Tribes and the Yakama Indian Nation are also concerned about disturbance of possible archaeological deposits around the Falls.

Following Preservation Standards 4, 5, 6, 7, 8, and 9, Puget Power will mitigate these potential effects and manage the property to minimize them in the future. The Company's Refurbished Project includes no new construction within the boundary of the Traditional Cultural Property. Puget Power will arrange for archaeological monitoring of ground-disturbing construction activities that occur in contexts where cultural resources could be present.

In the case of inadvertent discovery of Native American burials or Native American human remains during construction, archaeological fieldwork, or laboratory analysis, Puget Power will consult with the OAHP, The Tulalip Tribes, the Snoqualmie Indians, and the Yakama Indian Nation regarding the treatment of the remains in accordance with applicable Federal and state law and the Indian Tribal Organizations' policies, if any. Puget Power will ensure that any human remains encountered during the course of the Project are treated in a respectful manner.

The Company will develop a policy for the curation of prehistoric and ethnohistoric artifacts in consultation with the OAHP, the FERC, The Tulalip Tribes, the Snoqualmie Indians, and the Yakama Indian Nation, and will incorporate this policy by reference in the Section 106 PA. The curation policy will be developed within one year of Puget Power's acceptance of the Project FERC License.

Interpretive Elements

Under the originally proposed Expanded Project, Puget Power initially proposed to build an Interpretive Center at the west end of the sidewalk in the Park. It would have included information on the geological history, flora and fauna, and Native American use and European history of the Project Area. The Snoqualmie Indians stated that they prefer no new structures at the Project, including a new Interpretive Center. They also raised a concern about their role in selecting information for presentation in the proposed Interpretive Center. Unless they have a meaningful role, the Snoqualmie fear that the materials will not reflect their view of their history.

In response to the concerns of the Snoqualmie Indians and others, and in keeping with Preservation Standards 1, 2, 3, 5, and 7, Puget Power later decided not to build an Interpretive Center as a separate building in the Park as part of the Expanded Project. The functions of the initially proposed Interpretive Center were to be located in the Transformer House Museum that was proposed for the Expanded Project. With the change to the Refurbished Project, all interpretive materials will be presented on interpretative displays dispersed around the Project. The Company has determined that dispersed interpretive displays will convey interpretive information with minimal effect on the natural and cultural resources of the Area of Potential Effect.

Puget Power will manage its interpretive work on the Falls area to address Native American concerns. The Company will consult with cultural resources professionals, The Tulalip Tribes, the Snoqualmie Indians, and the Yakama Indian Nation in interpreting the natural and cultural history of the Falls area and in designating the kind of information to be presented in the interpretive displays.

The Tulalip Tribes have stated that interpretive information at the Project could be beneficial if the exhibits do not detract from the Tribes' own planned Museum and Cultural Center. Puget Power will consult with The Tulalip Tribes and seek their review comments in developing one or more interpretive displays that complement those created by the Tulalip. The Company will revise its interpretation plans as needed, based on review comments made by the Tulalip. Puget Power will also upgrade the existing trail from the Park to Plant 2 into an interpretive trail, including examples of plants that have been important to local Native Americans and brief information on their uses.

Native American Use of the Park and Exhibits in the Museum

The Snoqualmie Indians have expressed a concern about feeling unwelcome in the past to demonstrate skills in dancing and handicrafts in the Project park. As part of its mitigation and management program for the Traditional Cultural Property, Puget Power will meet with the Snoqualmie to develop ways in which Native American dancing and craft demonstrations can be incorporated into the Project.

As part of their concern about receiving compensation for the loss of ceremonial use of the Falls, The Tulalip Tribes have discussed potential onsite and offsite mitigation measures. They believe that allowing The Tribes to set up cultural displays at the Project "would be beneficial for tribal public relations" (Williams 1992:2). They do not want such exhibits to detract from their planned museum.

Tulalip staff have suggested donating funds for The Tulalip Tribes' proposed Museum and Cultural Center, which will be used to teach tribal history, wood carving, basket weaving, language, and religious ceremonies. Williams (1992:2) notes that the Federal government had banned the practice of Indian ceremonies and the use of the Indians' language: "after the government legalized the ceremonies and language again, there were

few tribal members who could remember how. In recent years there has been a resurgence of tribal customs. More tribal members are learning the tribal ceremonies, language, carving and basket weaving." Puget Power will work with The Tulalip Tribes to address their concerns about preservation of their culture, including how to support appropriately the planned Museum and Cultural Center.

Cumulative Impacts

No evidence is available to evaluate the effects of the existing Project on prehistoric archaeological sites because none have been reported within the Project Area. The existing Project introduced numerous changes, restricted Native American access to and uses of the immediate area and may have compromised some cultural and spiritual values of Indian people. However, the Falls continues to play an important role in the culture of the Snoqualmie Indians, as reflected in the eligibility determination of the Falls as a traditional cultural property. Tulalip Tribal members appear not to have been using the Falls in 1988 (Larson 1988), and a representative of The Tulalip Tribes has noted that construction and tourism have compromised the value of the area for such use (Williams 1992). The Snoqualmie Indians asserted that the diversion of additional water called for in the initial relicensing application would have adversely affected the Traditional Cultural Property. The Refurbished Project, however, will not divert additional water flow from the Falls.

Several parties have expressed concern about development pressures in the Snoqualmie Valley. The Tulalip Tribes, the Snoqualmie Indians, and the Yakama Indian Nation have concerns about the effects of ongoing or planned residential development in the vicinity of the Falls. These developments are not related to the Refurbished Project, which will not contribute to them, and these developments will occur regardless of the Refurbished Project.

The Refurbished Project will not have an adverse cumulative impact on the Snoqualmie Falls Traditional Cultural Property. On the contrary, it will have beneficial impacts on interpretation, education, historic preservation, and other areas. As noted above, the Refurbished Project will enhance existing flow. The Refurbished Project will preserve from development land around the Falls that is located within the Project Boundary. The Refurbished Project is, therefore, expected to make a positive contribution by maintaining and enhancing existing cultural resources.

8.0 IMPLEMENTATION

This Cultural Plan reflects the culmination of Section 106 review with respect to the construction, operation, maintenance, and repair of Puget Power's proposed Project as described in its License Application. As such, the Cultural Plan describes, among other things, the cultural setting of the Project and the effects of the Project on the Traditional Cultural Property, together with measures to mitigate the adverse effects of the proposed Project and to manage the proposed Project in a manner that integrates preservation of the character-defining features of the Traditional Cultural Property with the actions needed for the Project. For example, one of the management tools Puget Power created is the Preservation Standards described in Section 6. These and the other provisions of the document were developed over many months during which the Company consulted with oversight agencies and submitted drafts of the Cultural Plan for review by these agencies and The Tulalip Tribes, the Snoqualmie Indians, and the Yakama Indian Nation (collectively, the Indian Tribal Organizations).

Puget Power has devised a series of mechanisms to implement the mitigation and management measures of the Cultural Plan. The Company also recognizes that it may, over the course of a 40-year License, propose changes or modifications to the Project other than those described for the Refurbished Project that may have additional or different effects on the Traditional Cultural Property for which Section 106 review is necessary and has not previously occurred. Such changes or modifications could include, among other things, any further ground disturbing activity, any further effect (as defined by 36 CFR 800.9(a)) on the Traditional Cultural Property, any change in flow rate that is not specified or permitted under the FERC License for the Project, or any change in public access or use authorized by Puget Power within the Project Boundary. Thus, Puget Power has also developed a process for initiating additional Section 106 review for such future changes or modifications.

8.1 Mechanisms to Implement the Cultural Plan

The following sections detail the mechanisms to guide employees in Puget Power's compliance with the Cultural Plan.

8.1.1 Cultural/Historical Resources Coordinator

After Puget Power receives a License for the Project, the Company will assign one employee to serve as the Cultural/Historical Resources Coordinator (Coordinator) for the Project. The Coordinator will be charged with oversight responsibilities for cultural and historical resources related to the Project. The Coordinator's duties will include the following:

- 1) Oversight of the implementation of the mitigation and management measures described in the Cultural Plan;
- 2) Preparation of training materials, reports, and status updates;
- 3) Coordination and conduct of meetings called for by the Cultural Plan; and
- 4) Coordination of any additional Section 106 review required for changes or modifications to the Project.

In assigning the Coordinator, Puget Power will consider a candidate's interest in the preservation of historical and cultural resources and recognition of the Company's commitment to good stewardship of these resources, as well as his or her ability to communicate with and relate well to individuals from diverse cultural backgrounds. Puget Power will require the assigned Coordinator to complete successfully ACHP's training courses on Section 106 compliance and preparing agreement documents.

8.1.2 Training

Once assigned, the Coordinator will develop a training plan to introduce appropriate Project personnel to the general principles of cultural resources preservation and the Cultural Plan. Through the training, the Coordinator will also introduce Project personnel to the Snoqualmie Falls Project Maintenance Guidelines (Maintenance Guidelines), when they are completed, and discuss procedures for addressing emergency situations that could affect cultural or historical resources. The Coordinator will develop the training plan in consultation with OAHP and specialists in cultural and historical resources preservation. The training plan will be developed within one year of Puget Power's acceptance of the FERC Project License.

The Coordinator will supplement this initial training with annual training updates, which will include a review of the general principles of cultural resources preservation, the Cultural Plan, and any amendments to it. This training will also provide Project personnel with further information on any recently-passed or pending regulations. The training will include a discussion of the appropriate time to review a proposed idea for a Project change or modification with the Coordinator to ensure that, if required, Section 106 review for a proposal occurs in a timely manner. Participation in the annual training update will be mandatory for appropriate Project personnel.

8.1.3 Annual Cultural/Historical Resources Meeting

The Coordinator will hold a meeting on cultural/historical resources concerns for the Project once a year during the term of the License for appropriate Company personnel. The Coordinator will choose an appropriate time for this meeting in relation to Puget Power's annual cycle for Project planning and budgeting. At the start of each meeting, the Coordinator will

familiarize the representatives with the Project, the FERC License requirements for the Project, the importance of cultural resources, and the provisions of the Historical Plan, the Cultural Plan, and the Maintenance Guidelines.

The Coordinator will discuss Puget Power's implementation of the mitigation and management measures for the year just ended and for the upcoming year. The Coordinator will also ask the representatives about any anticipated proposals or goals for the Project. The Coordinator will follow up with any representative who describes an anticipated proposal that the Coordinator believes may involve a change or modification to the Project that would require additional Section 106 review.

After the meeting, the Coordinator will prepare, and provide to the meeting's participants, a memorandum summarizing the meeting discussions. The Coordinator will also send a written request to appropriate Company personnel on a quarterly basis, asking that they provide information to the Coordinator on any anticipated changes to the Project or other Project activities that might affect the cultural/historical resources.

8.1.4 Annual Meeting with OAHP and the Indian Tribal Organizations

Once a year during the term of the License (after Puget Power's internal annual cultural/historical resources meeting), the Coordinator will request a meeting with the Indian Tribal Organizations and the OAHP to discuss Puget Power's implementation of the Cultural Plan for the year just ended and for the upcoming year. If, at the time of this annual meeting, Puget Power has any proposals for changes or modifications to the Project that it has determined might require additional Section 106 review, Puget Power will describe the proposals to the Indian Tribal Organizations and the OAHP, and seek their comments on such proposals at this annual meeting. After the meeting, the Coordinator will prepare, and provide to the meeting's participants, a memorandum summarizing the meeting discussions.

8.2 Additional Section 106 Review

The mitigation and management measures described in this Cultural Plan mitigate the adverse effects of the Refurbished Project. However, over the course of a 40-year License, Puget Power expects that it may have new ideas with respect to the Project that, if implemented, might have effects on the Traditional Cultural Property, or other cultural resources, for which there has been no Section 106 review. The following procedure is adopted to provide for additional Section 106 review when required.

8.2.1 Internal Decision-Making Process

When the Coordinator becomes aware (through a request for review of a proposal, the internal annual cultural/historical resources meeting, or otherwise) of a proposal to change or

modify the Project, the Coordinator will discuss the proposed change or modification with the appropriate Puget Power employees or departments to determine whether the a change or modification might involve an effect on the Traditional Cultural Property, or other cultural resources, for which Section 106 review is required and has not previously occurred.

Should the Coordinator identify a potential effect, the following internal decision-making process will be undertaken:

- 1) Preliminary descriptions of one or more proposed alternatives for achieving the goal of the proposed change or modification will be prepared. These preliminary descriptions may include, among other things, a discussion of appropriate timing, estimates of cost, safety considerations, environmental considerations, regulatory considerations and expected Indian Tribal Organization and agency perspectives.
- 2) The preliminary description of the alternatives prepared pursuant to paragraph (1) above will undergo internal review by appropriate employees and departments, including the Coordinator. The Coordinator will provide an evaluation of the alternatives. This evaluation will include the following actions: (a) delineate a specific area of potential effect appropriate to the activity; (b) inventory cultural resources and consider their likely significance; (c) analyze the anticipated extent of the effects of each alternative on any likely significant cultural resources; and (d) propose appropriate mitigation measures.
- 3) Based upon an analysis of numerous factors (which may include, among other things, consideration of budget constraints, effects on customers' rates, the timing of the proposed change or modification in conjunction with other proposed actions, and specific public interests, such as cultural and historical resource preservation, recreation, tourism, aesthetics, safety, and the generation of hydropower), Puget Power will review the preliminary alternatives and make a determination as to whether or not to pursue a change or modification. If it determines that it will pursue a change or modification, it will select its preferred preliminary alternative and those other preliminary alternatives it believes are appropriate for further, detailed analysis.
- 4) Before undertaking detailed analysis of any of the selected alternatives pursuant to paragraph (3), Puget Power will, to the extent appropriate, initiate consultation with relevant agencies regarding the proposed change or modification. The Coordinator will consult with the OAHP and the Indian Tribal Organizations, as appropriate, pursuant to Section 8.2.2, below.

- 5) After requesting the input of the relevant agencies, including the OAHP and the Indian Tribal Organizations, Puget Power will undertake further analysis of the preferred preliminary alternative and selected preliminary alternatives. Analysis will include consideration of, among other things, the effects of the proposed change or modification on the Traditional Cultural Property or other cultural resources and appropriate measures to mitigate for those effects, as determined after consultation with the OAHP and the Indian Tribal Organizations.
- 6) After further analysis, including other considerations, Puget Power will decide whether to undertake a proposed change or modification.
- 7) If Puget Power decides to undertake a proposed change or modification, the Company will seek any required approvals at that time.

8.2.2 Consultation with OAHP and Indian Tribal Organizations

If, after its preliminary analysis, Puget Power determines that it will pursue a change or modification that may have an effect on the Traditional Cultural Property, or other cultural resources, for which no Section 106 review has occurred, the Coordinator will initiate consultation with the OAHP and the Indian Tribal Organizations, in accordance with applicable sections of 36 CFR Part 800, as amended.

8.3 Revision of the Cultural Plan

Conditions of the Snoqualmie Falls Project may change over the 40-year life of the License, necessitating revision of the Cultural Plan. If revision becomes necessary, Puget Power will make changes to the document or will contract for the appropriate technical expertise that may be needed. The Company will produce a draft revised plan and will submit it for review to the Indian Tribal Organizations, the OAHP, the NPS, the FERC, and the ACHP. After receiving comments on the draft, Puget Power will make changes as necessary and file final copies of the revised plan with the agencies listed above.

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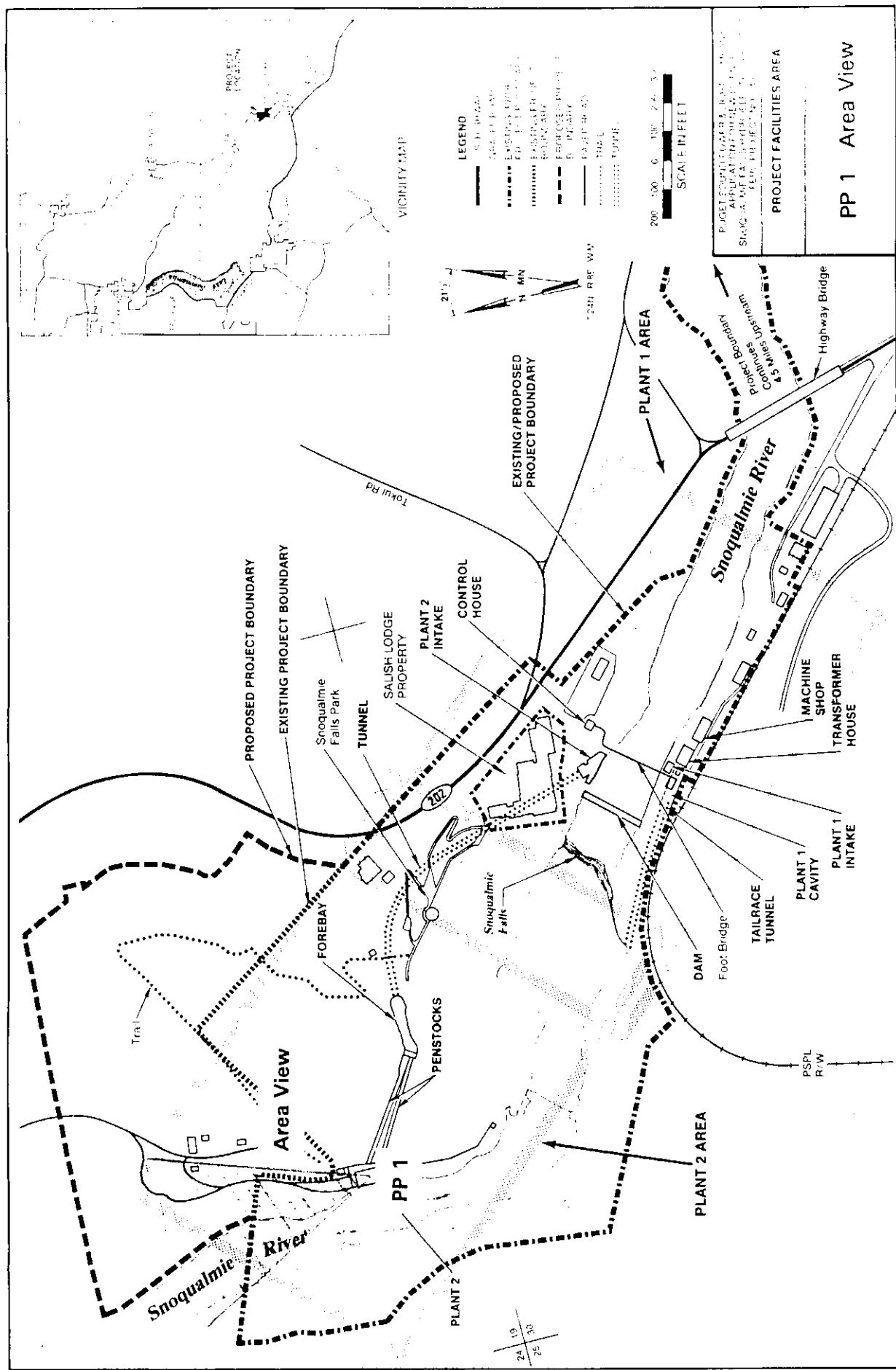
APPENDIX A
HISTORICAL CONSTRUCTION PHOTOGRAPHS OF PLANT 2 AREA

Table A-1 Historical Construction Photographs of Plant 2 Area.

NUMBER	DATE	DESCRIPTION
PP-1	4/16/10	"Powerhouse Site Showing Dump." View from Plant 2 site showing area to the north. Loose earth and fill are evident near the rail line.
PP-2	4/22/10	"Powerhouse Site From Penstock Line." View toward the northwest shows shed, coffer dam, and workers shovelling dirt and rock into side-dump rail cars.
PP-3	5/19/10	"Powerhouse Site Looking From Opposite Side of River." View toward east bank showing coffer dam, side dump cars, and workers excavating on grade at right. A fill area is clearly visible on the left.
PP-4	6/29/10	"Powerhouse From Penstock Lines Site." Photo shows concrete mixing and pouring for powerhouse at Plant 2. View is from the south and shows the area to the north. Fill area is visible in background.
PP-5	8/1/10	"Powerhouse Looking South." View from hill just to the north of Plant 2. A large area disturbed by the construction is visible in the foreground.
PP-6	9/6/10	"Powerhouse From Penstock Line." Shows powerhouse nearly finished with penstock pipes being attached. View is from part-way up the penstock line looking west.
PP-7	5/19/10	"Looking Up Penstocks Line From Powerhouse Site." View up cleared and graded slope towards the southeast.
PP-8	8/10/10	"Penstocks Looking S.E." View faces southeast. A graded slope with incline railway tracks runs from the forebay area to the gatehouse.
PP-9	9/6/10	"Penstock Line and Powerhouse Looking S.W." View of Plant 2 and penstock line looking towards the south. Penstock line is shown as a graded hillside with incline narrow gauge tracks. Debris piles are shown in the foreground.
PP-10	4/21/11	"Power Station and Penstock Line Looking S.E." View looks straight up the penstock line from across the river. Fill areas and grading are evident.
PP-11	5/17/10	"Point of Forebay Hill." Picture taken from downstream of Plant 2, near river, looking up at forebay site where steam donkey and crane are visible. A road-cut is visible in the foreground.



PP 1

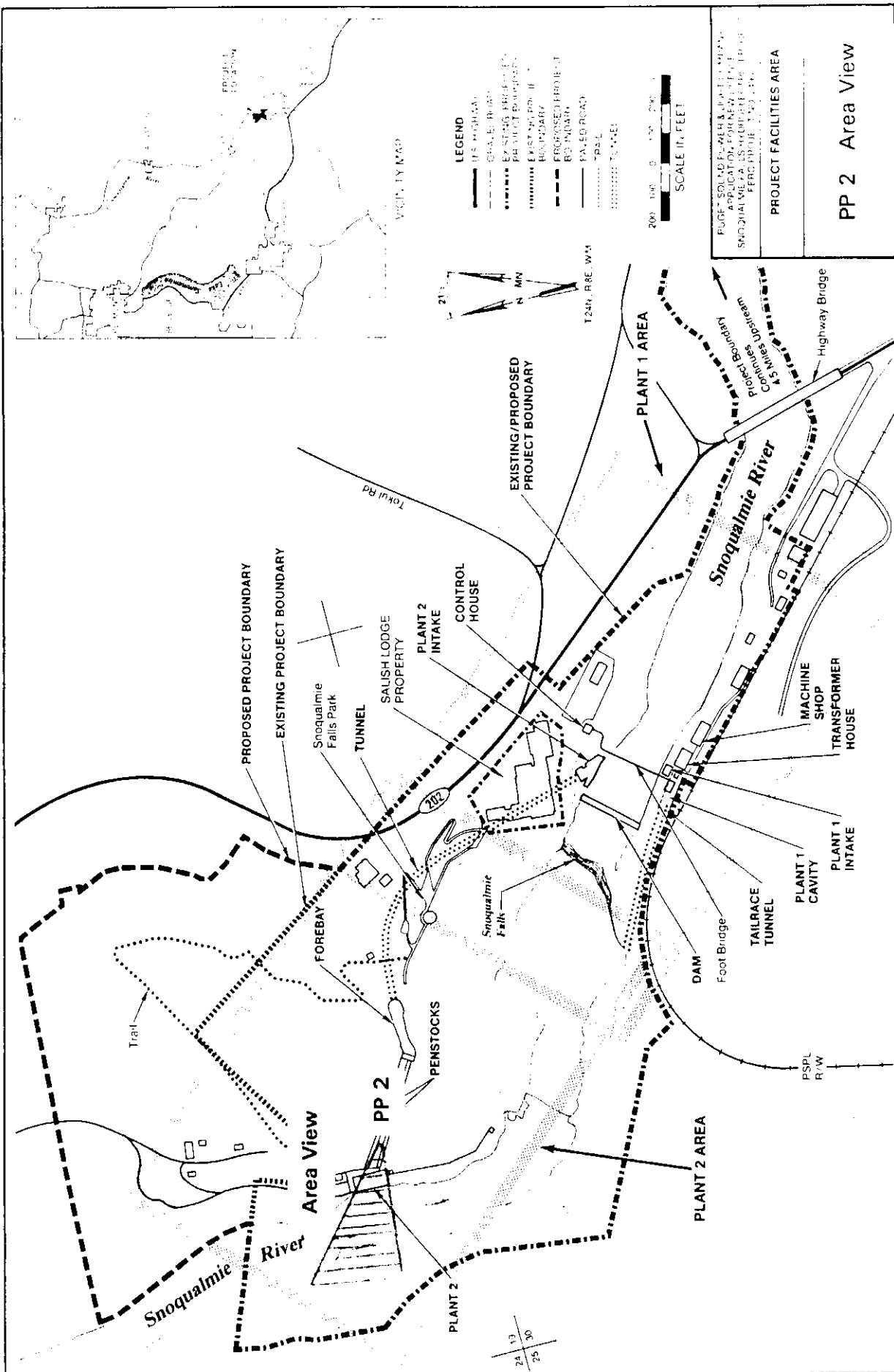


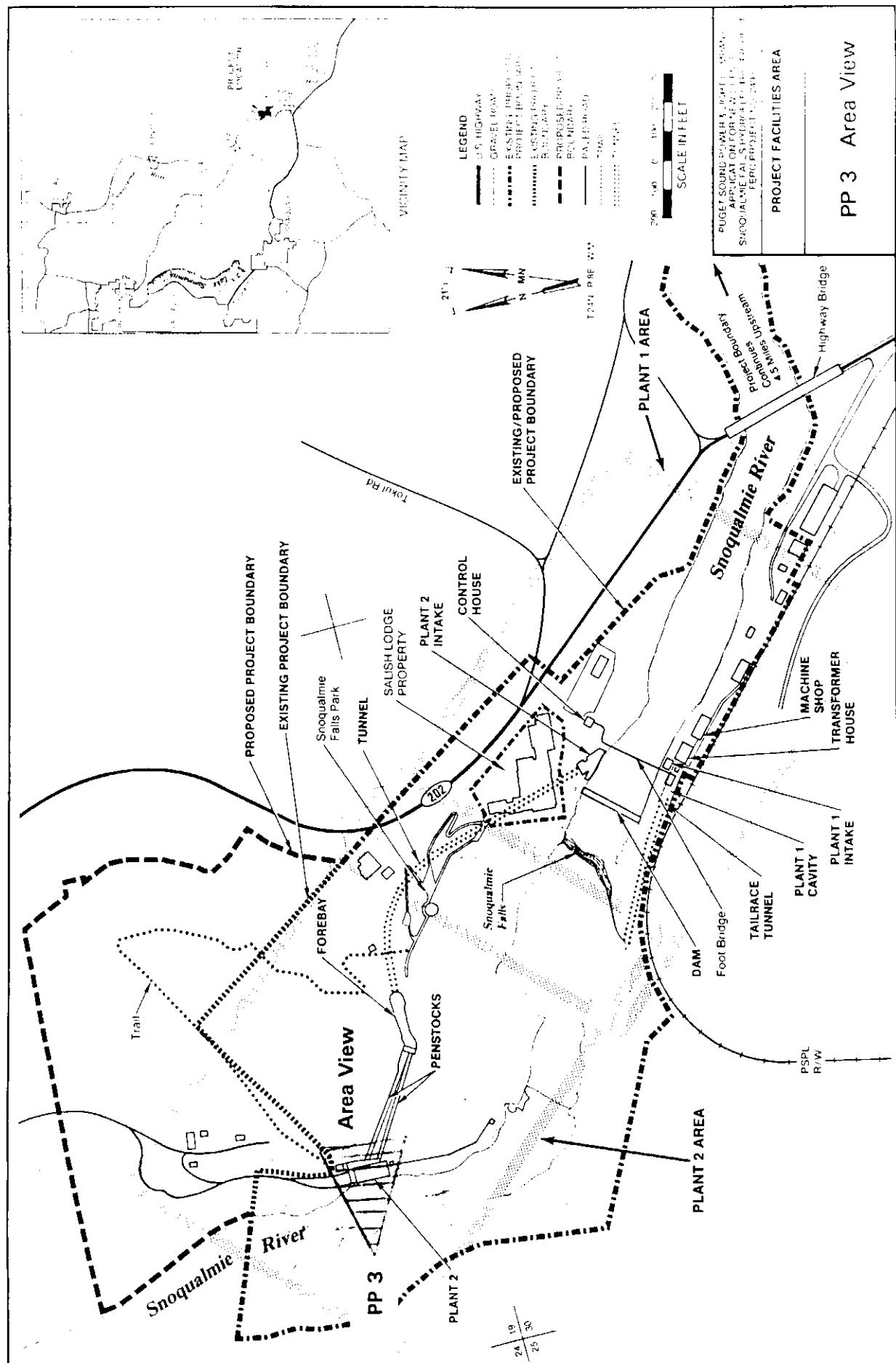
PP 1 Area View

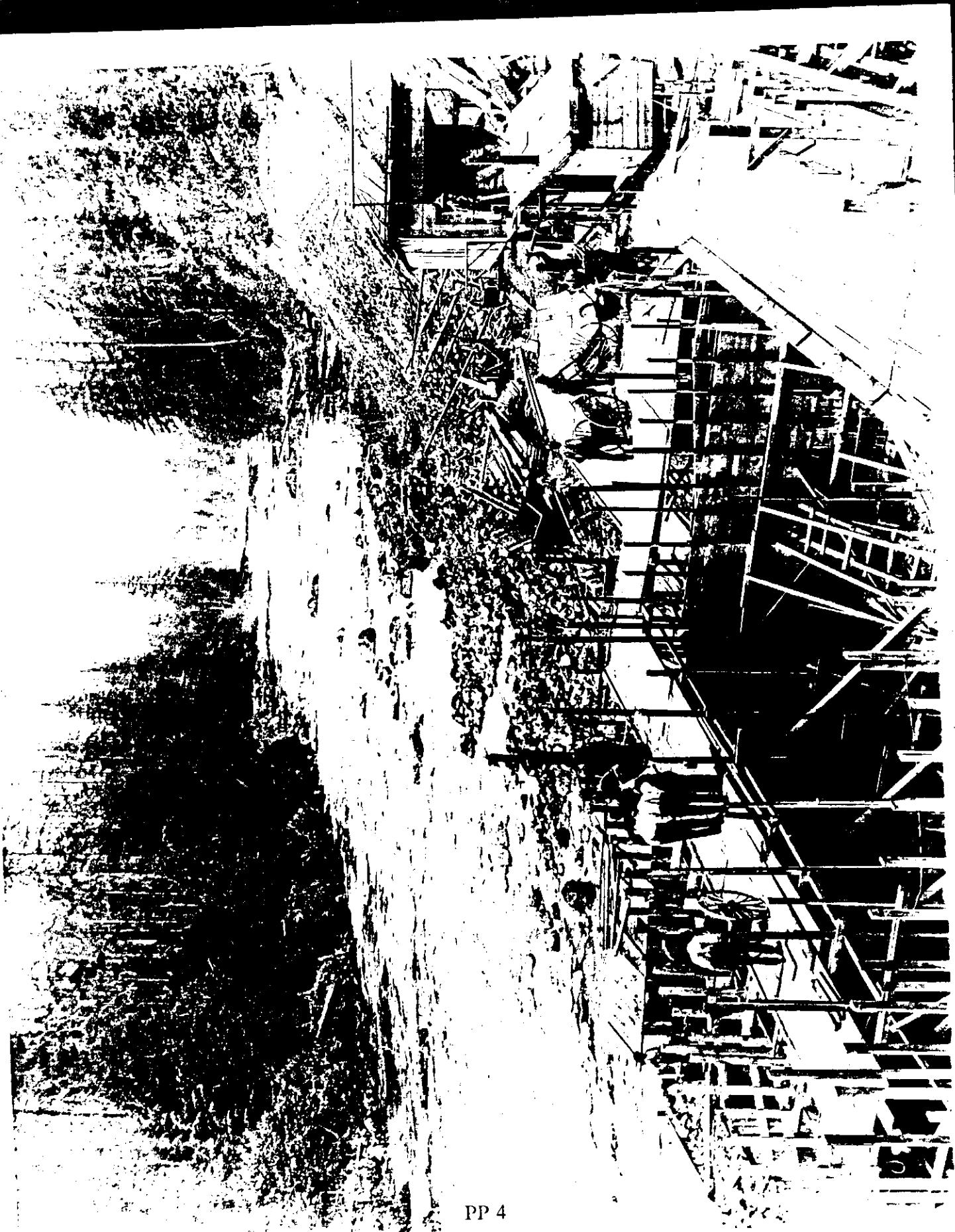
PUGET #107

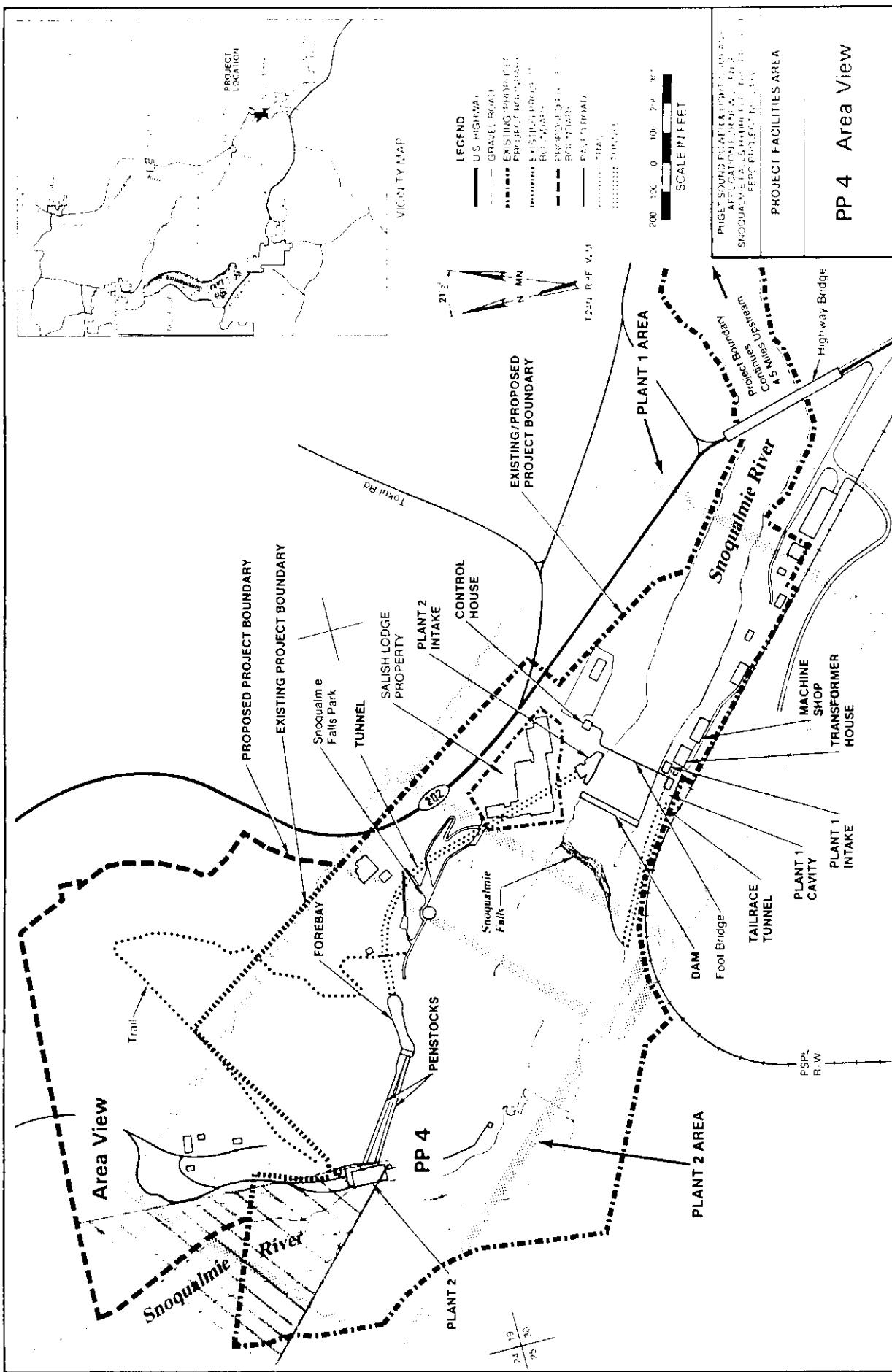


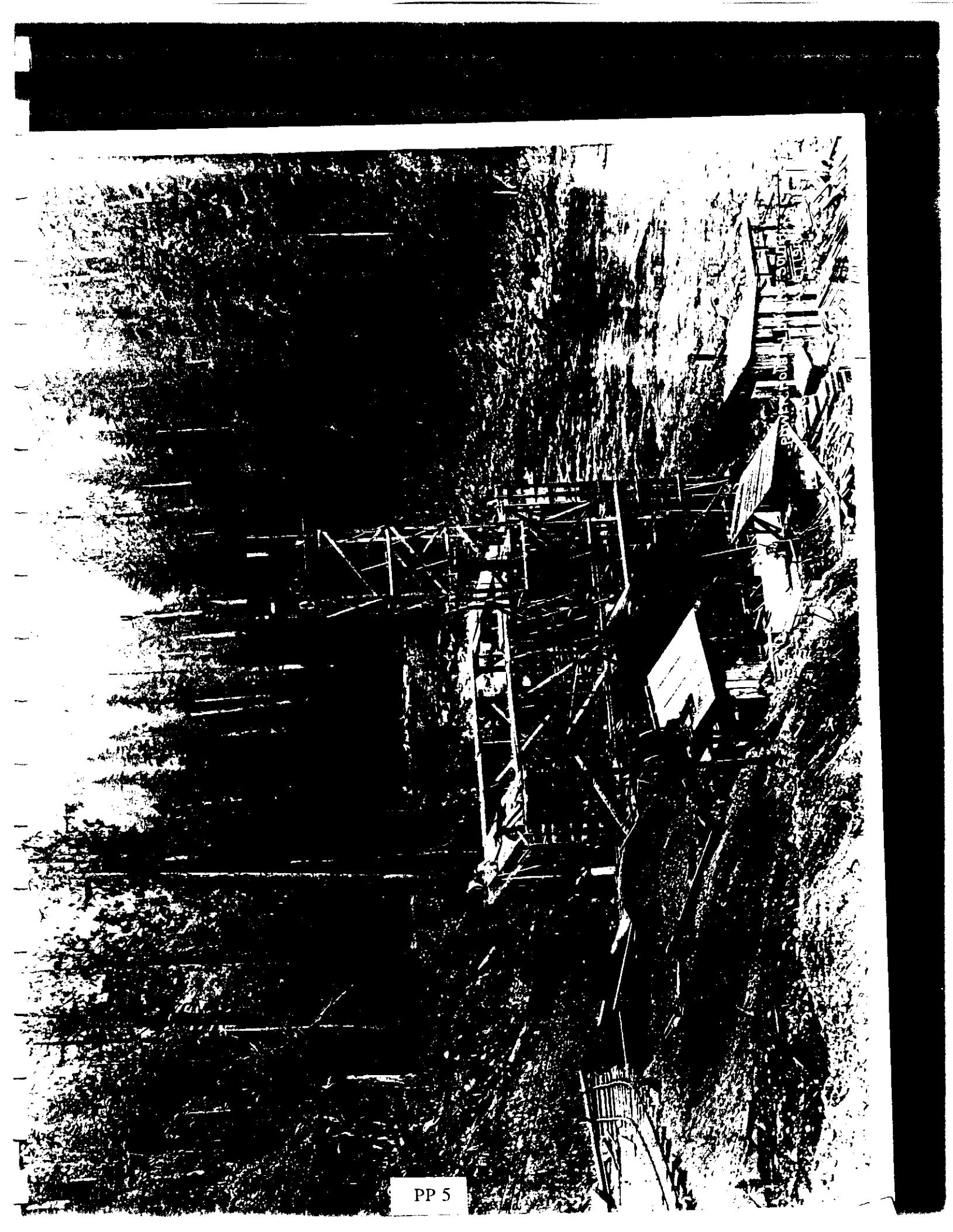
POWER-HOUSE SITE FROM PENSTOCK
#3F 10.608 4-22-10 LINE

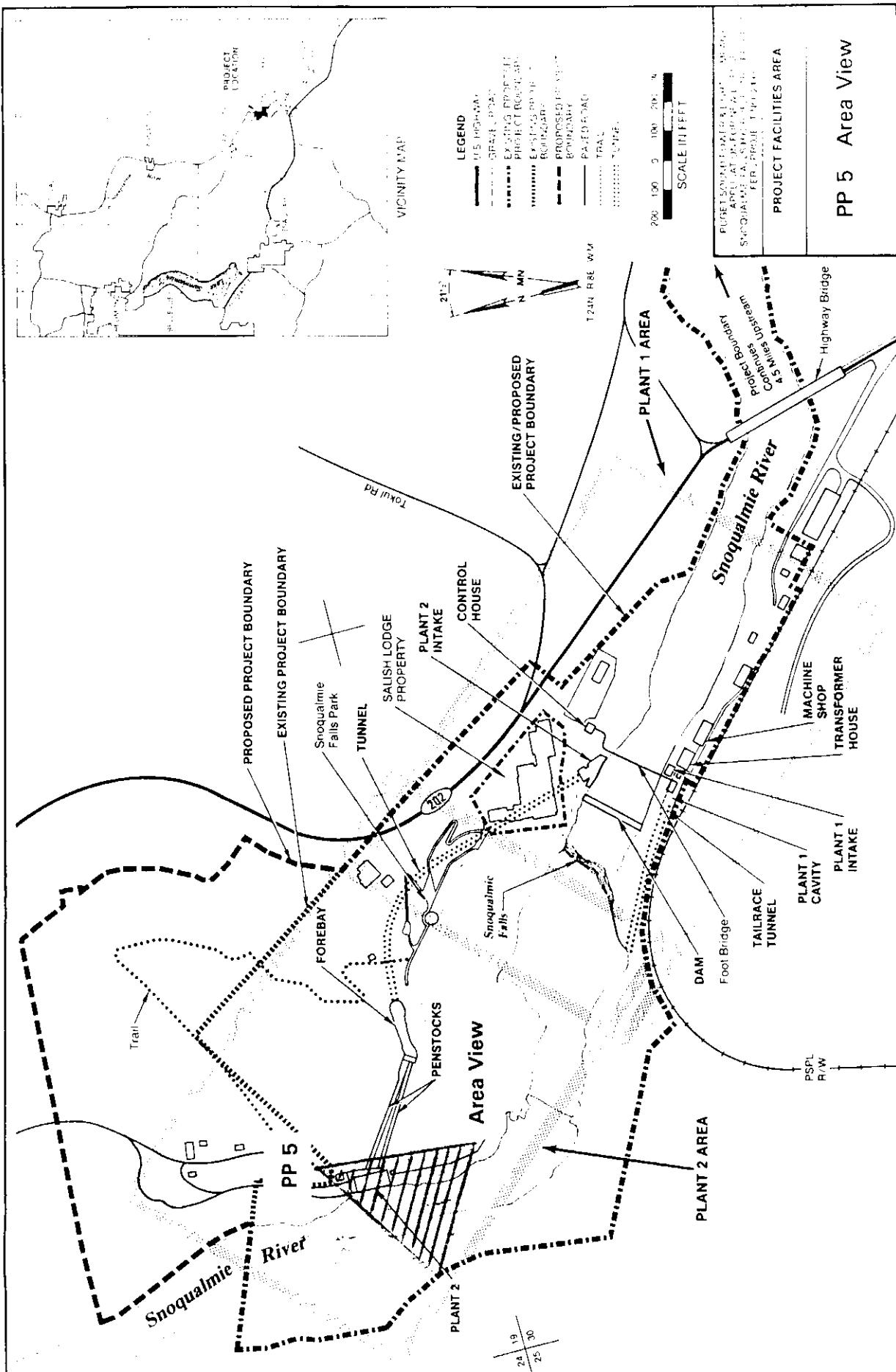


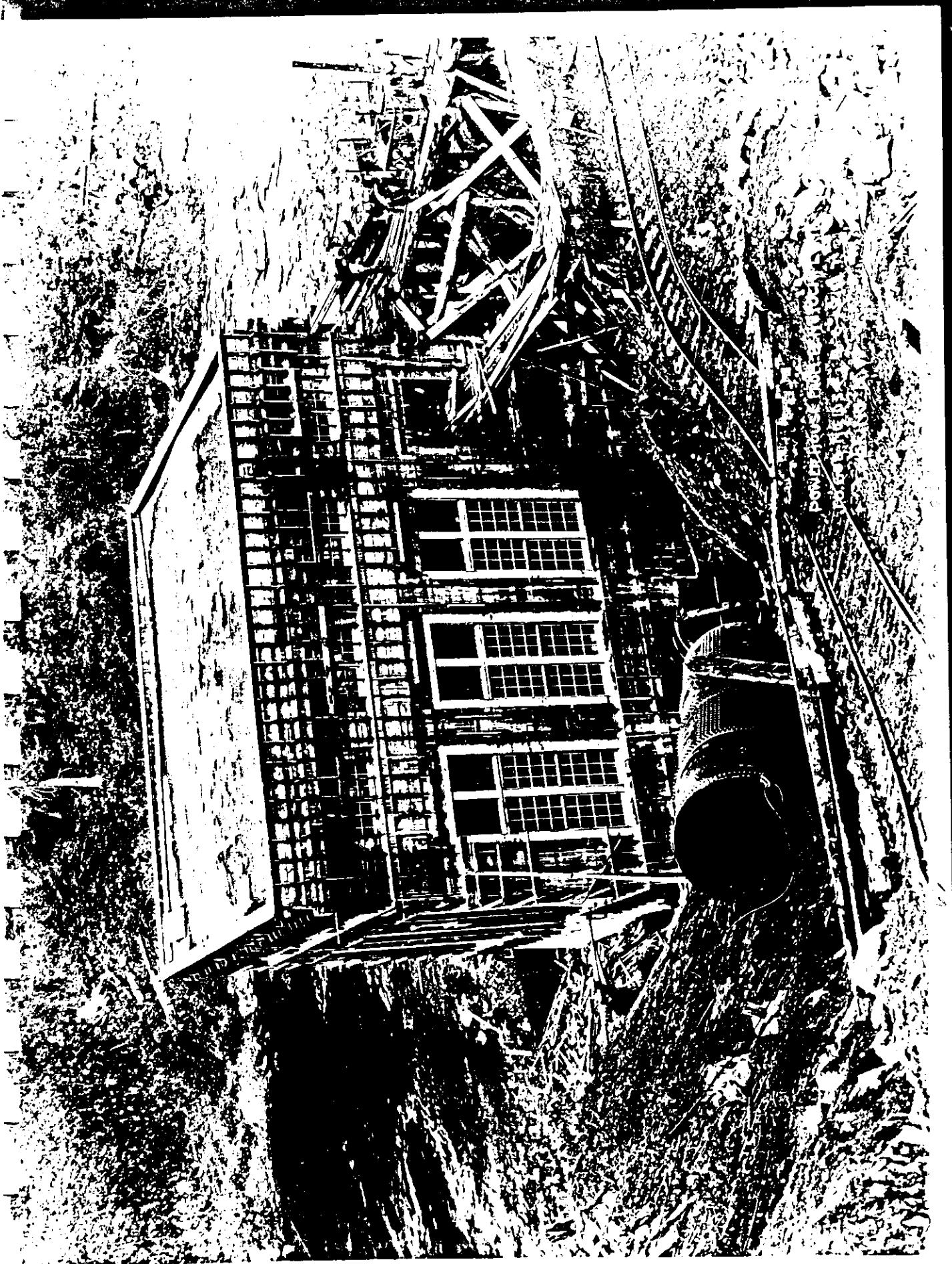


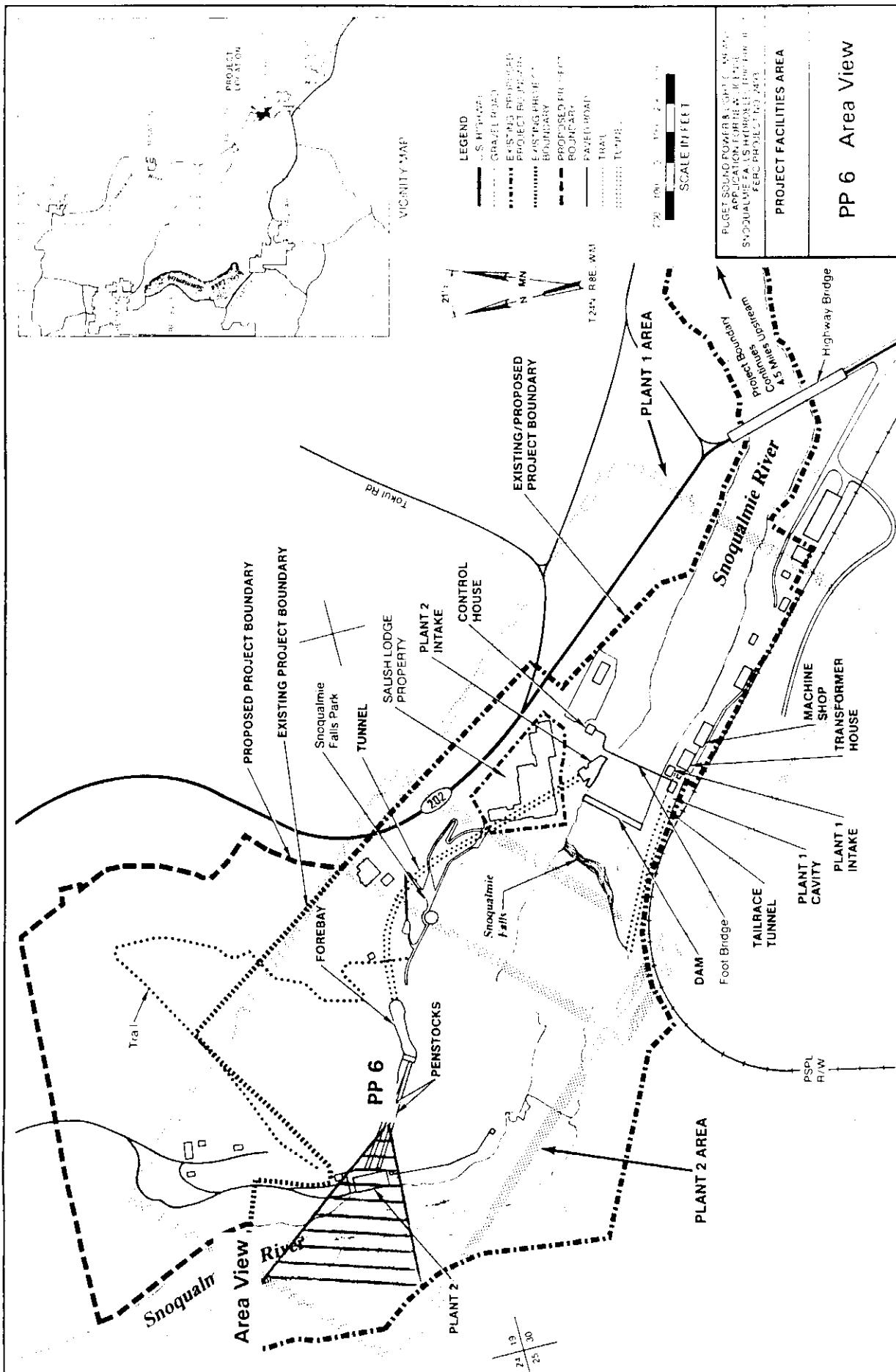




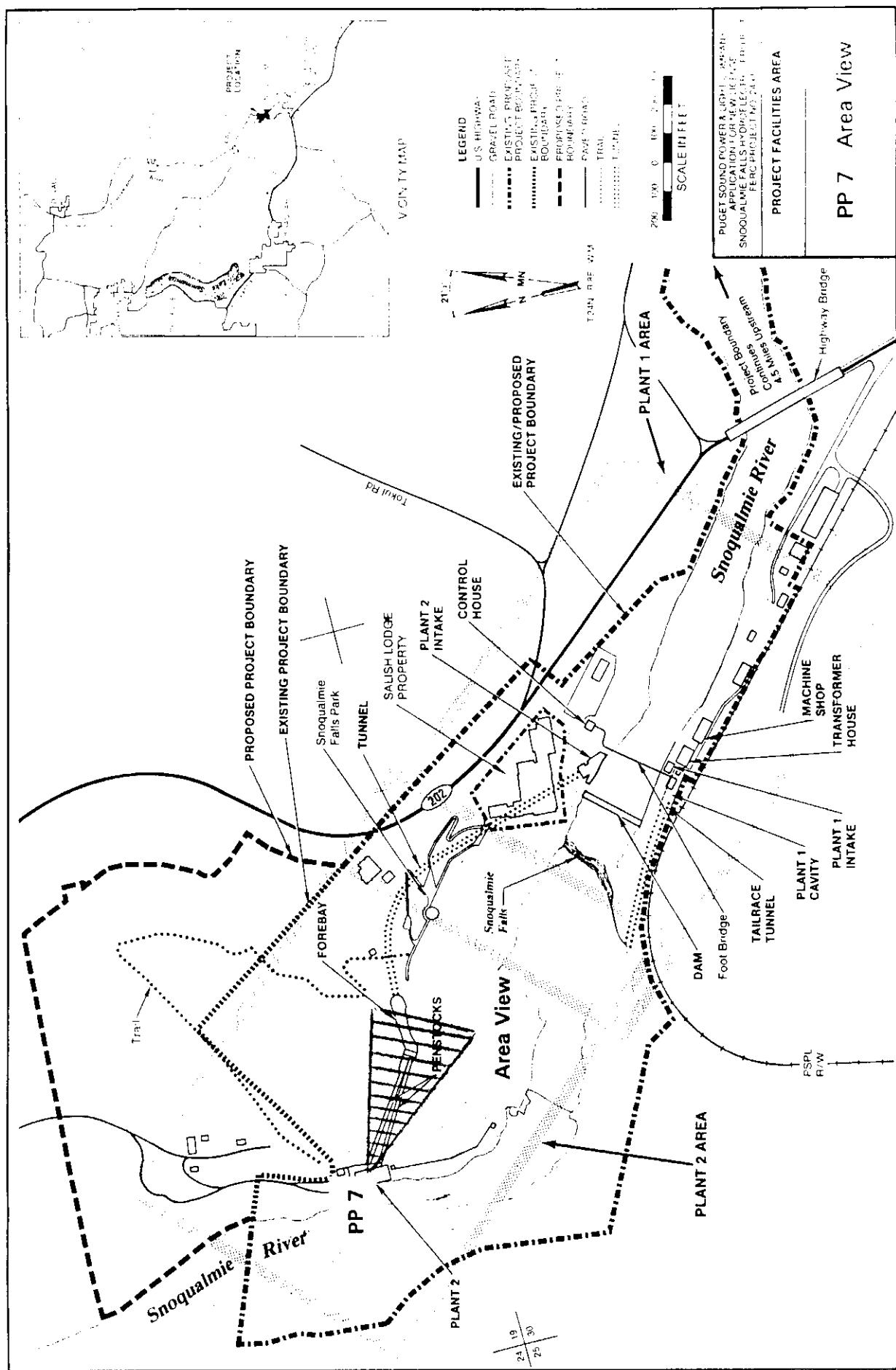




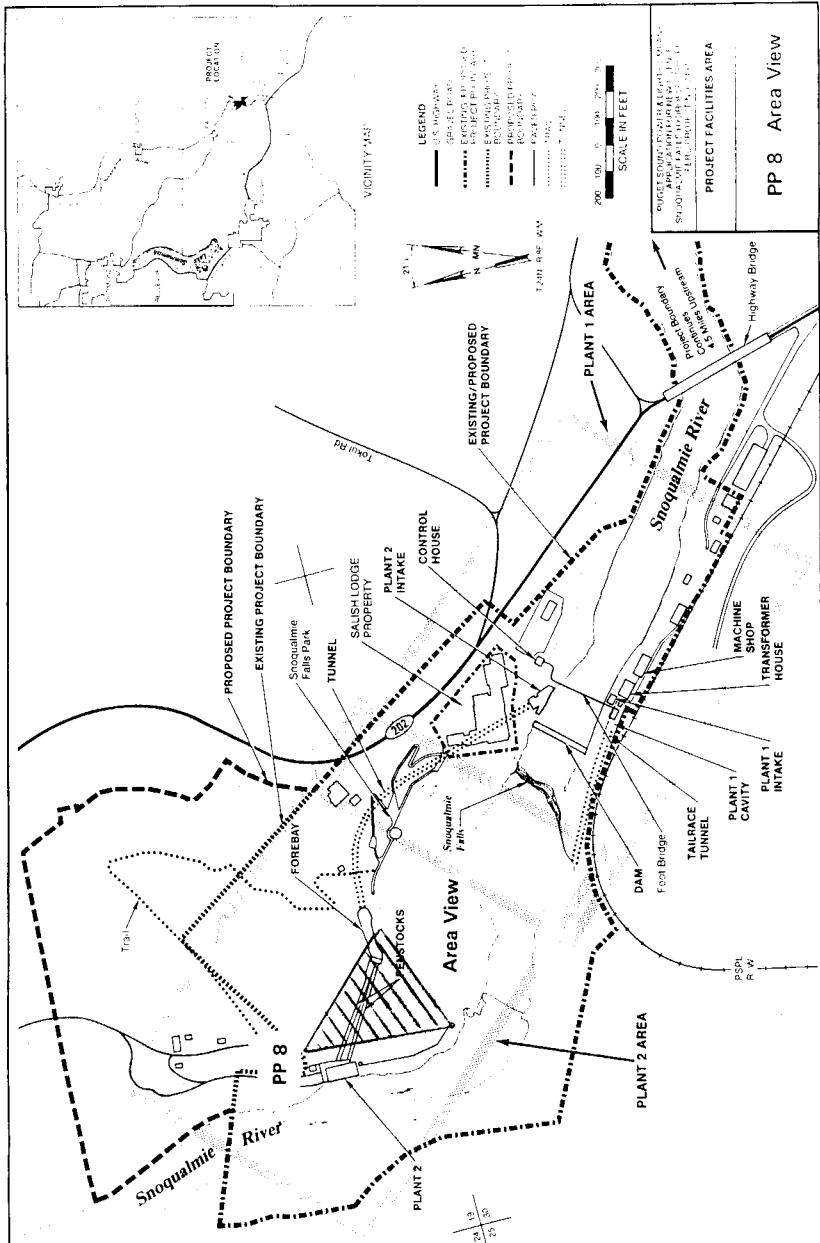


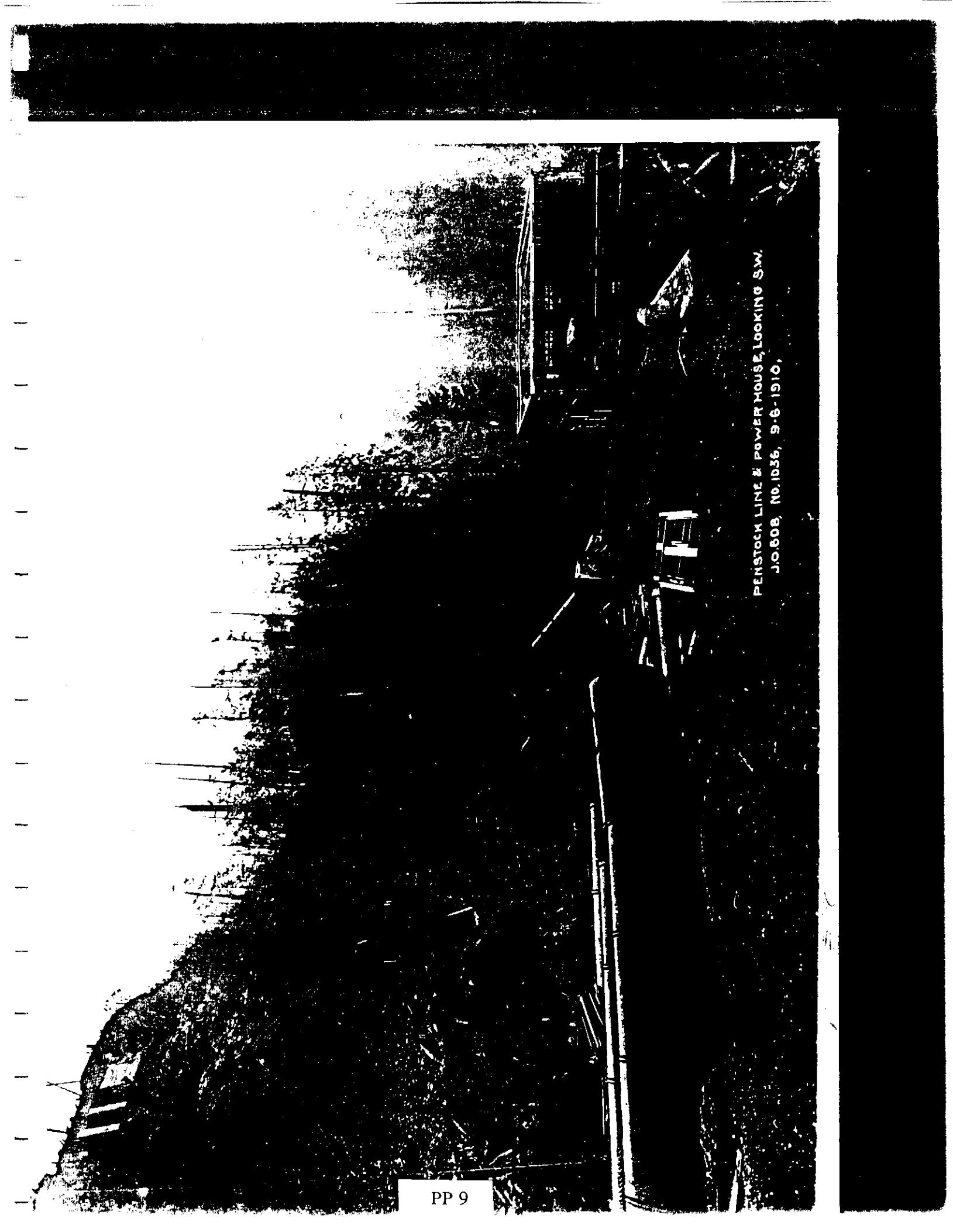




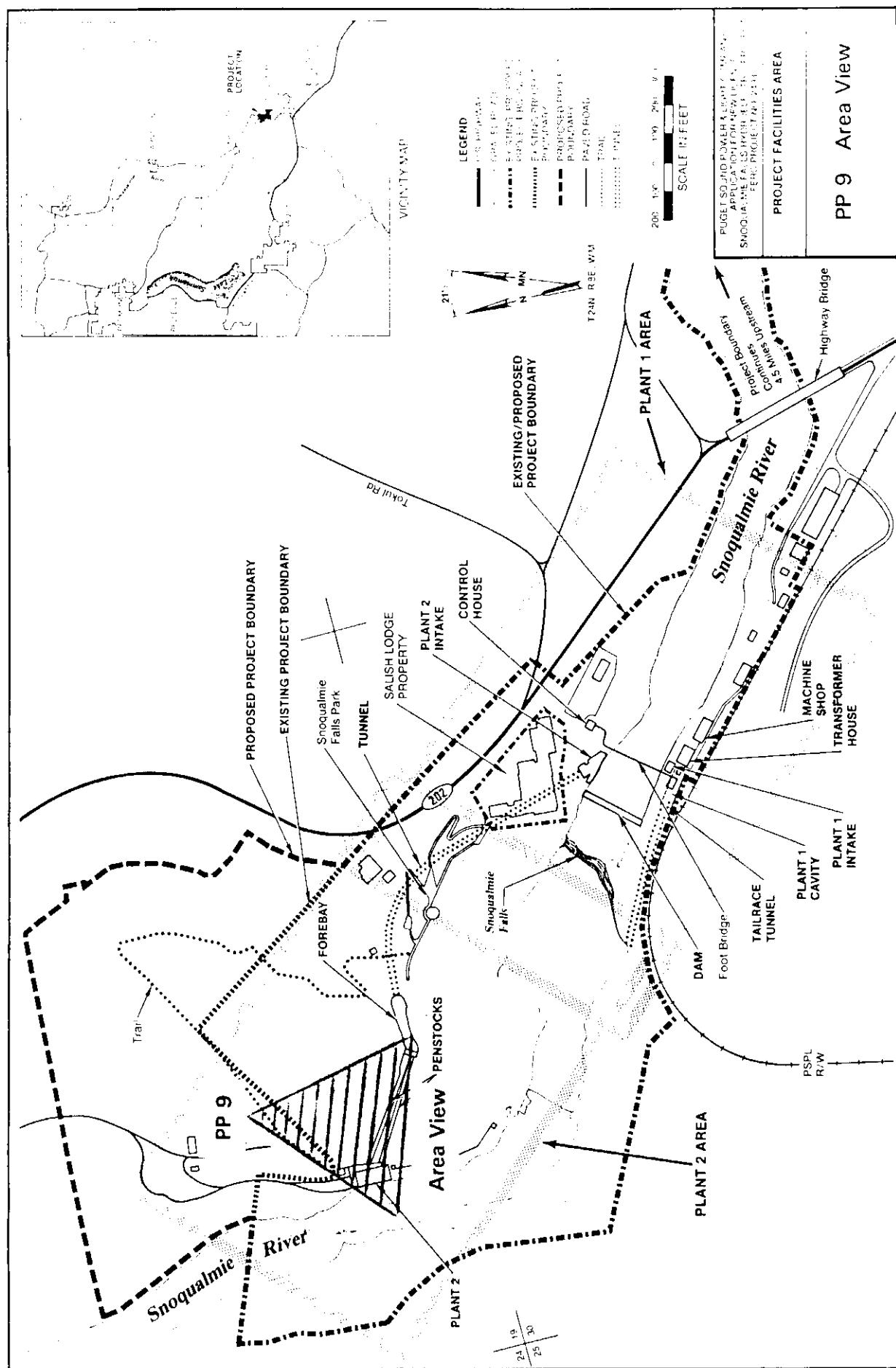


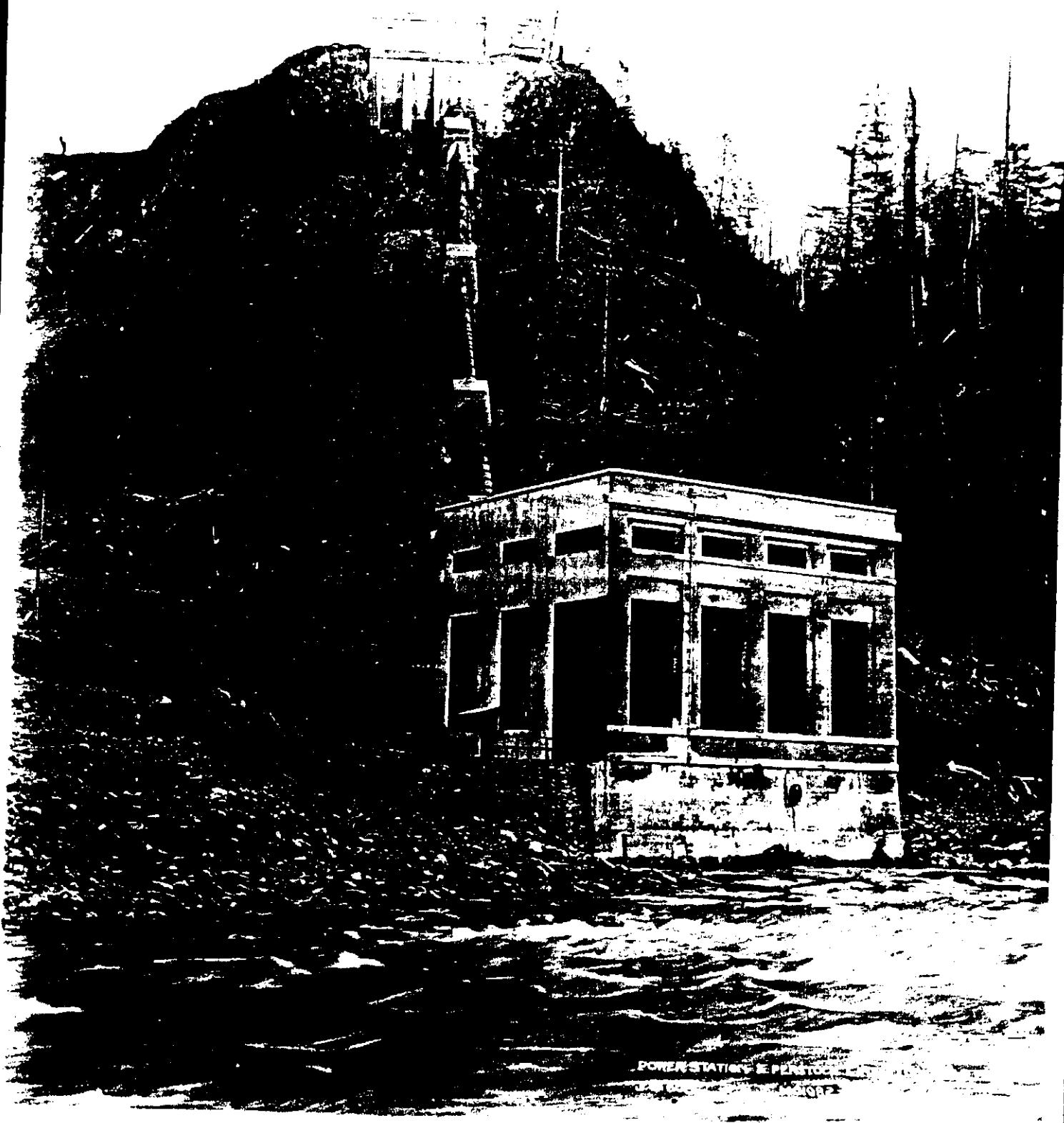




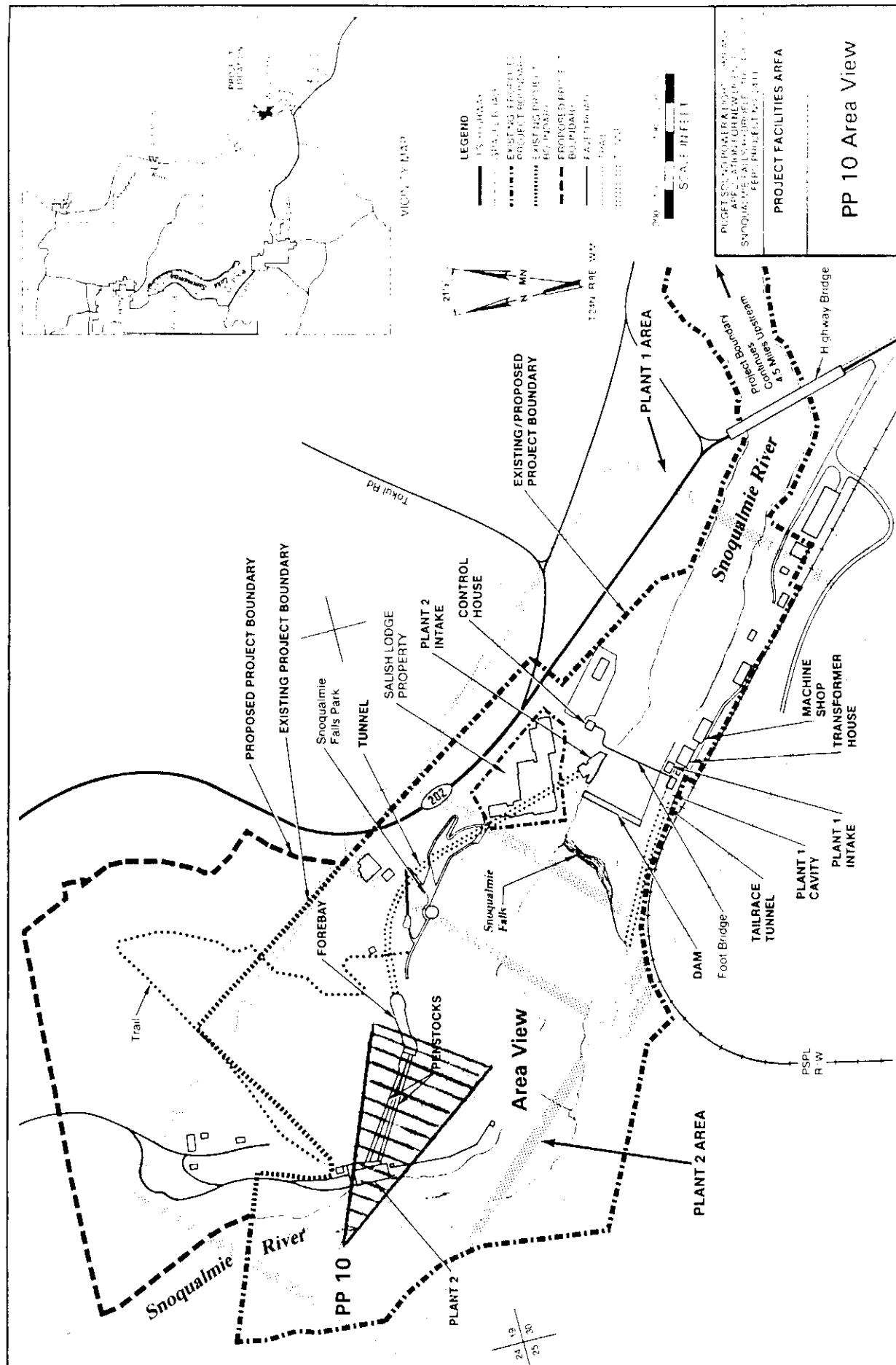


PENSTOCK LINE & POWER HOUSE, LOOKING S.W.
J.O. 60B, NO. 1036, 9-6-1910.

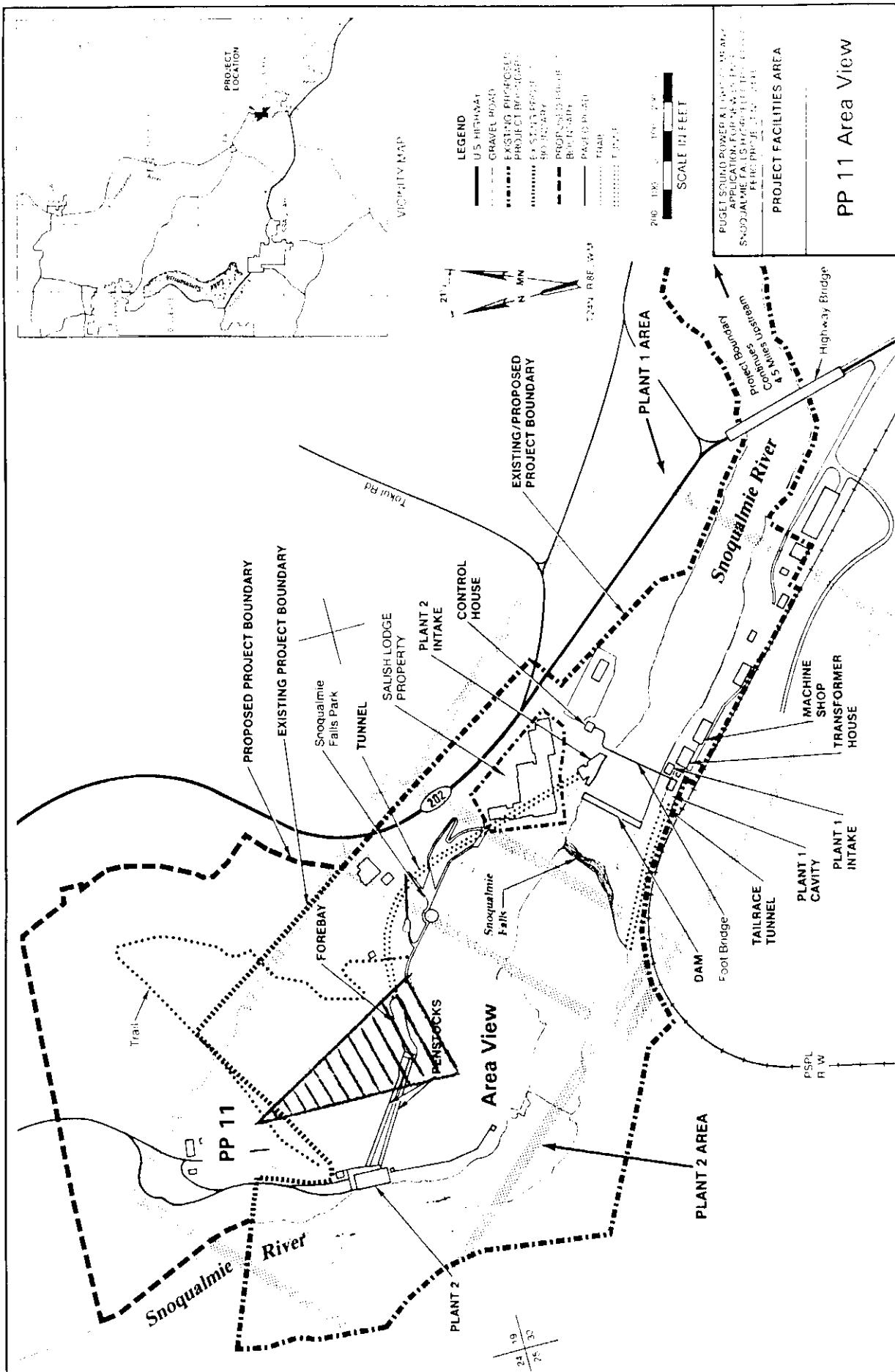




POWER STATION AT PENSTOC







APPENDIX B

SNOQUALMIE INDIAN CONCERNS AND PUGET POWER RESPONSES

Table B-1 Snoqualmie Indian Concerns about Snoqualmie Falls Project and Puget Power Responses (based on License Application, Attachment E4-1, p.E4-21).

SNOQUALMIE INDIAN CONCERNS	PUGET POWER RESPONSES
Daytime flow over Falls.	At least 100 cfs (the present daylight minimum flow) will flow over the Falls during daylight hours. An additional 1050 sfd per year will be available as supplemental flow at times to be determined by Native Americans.
Nighttime flow over Falls: no complete cessation of flow.	At least 25 cfs flow will flow during nighttime hours so there will always be water over the Falls.
Freeze/thaw when Falls are dry might increase erosion of rock.	Falls will never be dry because of nighttime target flow. In addition, Puget Power's geotechnical consultant determined that freeze-thaw would not increase the rate of erosion of the Falls.
Fish facilities for introducing anadromous fish above Falls would be harmful to aesthetics and spiritual value of Falls area.	Puget Power opposes introduction of anadromous fish above the Falls and does not propose to build screens or other associated facilities.
Possible tunnel or cave behind Falls.	Snorkeling below the Falls and surface investigation of the rock face above water revealed no tunnel or cave.
Low flows between the plunge pool and Plant 2 may adversely affect fish.	At least 300 cfs will flow in this reach of the river at all times, through a combination of flow over the Falls and flow through Plant 1.
Area below the Falls, particularly on south bank, is culturally important: people should not be encouraged to be below the Falls, and Project facilities should not be visible from there.	No development is planned for the south bank below the Falls. The Education Center, attached to Plant 2 on the north bank, involves organized groups and will not attract more tourists below the Falls.
Possible impact on "little red fish."	After interviewing Snoqualmie, little red fish have not been identified. Puget Power biologists have concluded that these fish are not present.
Potential for disturbance of burial sites.	Development is on previously disturbed land. Consideration will be given to this issue as coordination with other parties on the Preston-Snoqualmie Trail progresses.
Potential impact on underground hydrological connection to Lake Sammamish, perhaps through Patterson Creek.	Hydrologists have concluded there is no evidence supporting such an underground connection.

SNOQUALMIE INDIAN CONCERNS	PUGET POWER RESPONSES
Snoqualmie Indians oppose construction of a separate Interpretive Center in the Park. If built at all, the Interpretive Center might be built as a longhouse.	The originally proposed Interpretive Center has been deleted from the Project in response to preference by the Snoqualmie Indians and others who opposed construction of new buildings.
Snoqualmie Indians should have a meaningful role in selection of Museum information regarding Native American history at the site.	Puget Power will seek the participation of cultural resources professionals and Snoqualmie Indians regarding Native American information for the museum.
Snoqualmie Indians oppose alteration of the rock face of the Falls.	Puget Power proposes no modification of the face of the Falls.

1. Descriptions and photographs obtained from Kenneth Greg Watson, Photographic Database, Snoqualmie Falls Project, Puget Sound Power and Light Company, Bellevue, Washington, 1992.