QUINNAULT INDIAN NATION
ADVANTAGES OF WORKING WITH QUINAULT:

• Work with a mature business organization
• Quality aggregate product
• Largest undeveloped sand and gravel resource on the West Coast
• Tribal Tax Advantages
INTRODUCTION

The Quinault Indian Nation (QIN) is honored to present this summary of Quinault aggregate resources. The sovereign Quinault Indian Nation is located on the Olympic Peninsula, west of the city of Seattle, Washington. The huge QIN aggregate resource is the only remaining uncommitted large near-shore sand and gravel source on the West Coast of the lower United States. The aggregate resources are composed primarily of extensive glacial outwash deposits of sand and gravel, with supplemental potential identified in the form of various basalt deposits.

The Quinault Indian Nation is seeking a company to lease or joint-venture portions of their land with the primary objective of mining and producing high quality construction aggregate materials. The QIN is the largest Indian reservation on the Olympic Peninsula, and also the largest Indian reservation on the West Coast of the United States. Due to the unique federal trust status of the tribal lands, a company producing aggregate materials from Quinault lands would not be subject to state taxes. In addition, federal taxes may not apply, depending upon the business structure of the operating company selected by the aggregate producer and QIN.

THE QUINALULT PEOPLE

The people of the Quinault Indian Nation are among the small number of Americans who can walk the same beaches, paddle the same waters, and hunt the same lands their ancestors did centuries ago. The QIN consists of the Quinault and Queets tribes and descendants of five other coastal tribes: Quileute, Hoh, Chehalis, Chinook, and Cowlitz.

The Quinault Indian Nation is a sovereign nation with the inherent right to govern itself and deal with other tribes and nations on a government-to-government basis. Bylaws were established in 1922: under these Bylaws, the QIN established an elective government ruled by the Tribal Council (made up of voting members of the Nation), and a Business Committee made up of a President, Vice President, Secretary, Treasurer and seven councilmen. A constitution, generally preserving the established type of government, was approved in 1975, and forms the foun-
The General Council meets annually on the last Saturday in March to hold elections, accept new tribal members, allocate fishing grounds, and discuss other issues relevant to tribal operations. The Quinault Business Committee is entrusted with the business and legislative affairs of the Quinault Indian Nation throughout the year. Tribal operations include Administration, Natural Resources, Community Services, Health and Social Services.

The Quinault people are business-oriented. The Quinault Indian Nation operates several enterprises: Land and Timber (to manage the extraordinary timber production operations on the reservation), Quinault Pride Seafood (which produces a variety of products including Salmon, Dungeness crab, Halibut, and Black Cod), as well as Quinault Beach Resort, and the Mercantile, all of which promote the growth and develop the potential of the reservation.

People remain the Quinault Indian Nation’s most important resource. It takes educated people to fill the nation’s many technical jobs. Nearly 700 people are employed by QIN and its enterprises, making it one of the largest employers in Grays Harbor County.

THE LAND

The Quinault Indian Reservation is a land of magnificent forests, swift-flowing rivers, gleaming lakes and 23 miles (37 kilometers) of unspoiled Pacific coastline. Its boundaries encompass over 208,150 acres (84,271 hectares) of some of the most productive conifer forest lands in the United States.

Located on the southwestern corner of the Olympic Peninsula, its rain-drenched lands embrace an abundance of natural wealth, including timber, aggregate, and other resources. Conifer forests composed of western red cedar, western hemlock, Sitka spruce, Douglas-fir, Pacific silver fir and lodgepole pine dominate upland areas, while extensive stands of hardwoods, such as red alder and Pacific cottonwood, can be found in the river valleys.

Twenty-five thousand years ago, glaciers plowed the land, leaving thick deposits of sand & gravel outwash, and glacial till that cover most of the reservation and create the rolling terrain visible in the area today. As a wet, mild climate began to evolve 12,000 years ago, the glaciers withdrew to the higher peaks of the Olympic Mountains. These conditions have produced a land with enormous forest and aggregate resources.

MARKETS FOR AGGREGATE PRODUCTS

The Quinault Indian Reservation is located on the west coast of the Olympic Peninsula, west of the
city of Seattle, Washington, as shown in Figure 1.

Local aggregate markets include the Quinault Reservation, the US Highway 101 corridor and the Aberdeen-Hoquiam Metro Area. Major potential markets for Quinault aggregate products include:

• Seattle-Tacoma, Washington
• Portland, Oregon
• San Francisco, California
• Los Angeles, California
• San Diego, California
• Japan
• China
• Korea
• Pacific Islands

A serious shortage of aggregate exists along the West Coast of the United States, particularly in the San Francisco Bay, Los Angeles, and San Diego regions. An expansion of San Francisco International Airport has been planned which will require about 100 million tons of aggregate; however, project delays have occurred, which have pushed the requirement for the specified aggregate material into the future.

Substantial quantities of aggregate are currently being imported by sea into the United States by Canadian producers with operations in British Columbia. This aggregate is currently being sold in the Puget Sound area, San Francisco, Los Angeles, and San Diego. Canadian aggregate was reportedly used by the San Diego Naval Base for a major expansion project at that facility.

In the Far East, the existence of expanding populations and economies is well known. The demand for commercial aggregate is high in Japan, China, Korea, and Taiwan, in particular. This suggests that high-demand aggregate products could be shipped to those countries in dedicated bulk carriers, or perhaps as back-haul loads in other types of vessels.

It is also worth noting that many Pacific Islands lack good construction aggregate, primarily because they are of volcanic or coral-atoll origin. Such areas could represent potential markets for Quinault aggregate resources.

RESOURCE LOCATION AND ACCESS

The Quinault Indian Nation’s glacial outwash aggregate resources cover a large portion of the Nation’s surface area. Obviously, because of the great extent of those resources, the QIN does not anticipate that all such resources will immediately be developed. The QIN’s preferred location for the initial phase of aggregate development is an 80 acre (32.37 hectare) tract near the eastern tip of the reservation (Figure 6). This area is preferred by QIN at this stage of development, due to the existence of previous commercial-quality aggregate production in the immediate vicinity and the ready availability of power, water, and paved highways.

DEPOSIT DESCRIPTION AND TEST RESULTS

Extensive glacial deposits of sand and gravel cover most of the Quinault Indian Reservation. Reconnaissance sampling and testing of those deposits was conducted in 2005. The sand and gravel deposits sampled appear quite similar, and have up to four feet of loess as overburden. All samples proved to be of sufficient quality to satisfy the stringent requirements of the Washington State Department of Transportation (WSDOT).
Quinault Reservation
Geologic Map

Figure 3: Geology and sample locations

Explanation
100K Geology

Geologic Units
- Alluvium
- Alpine Glacial Outwash
- Alpine Glacial Till and Drift
- Basalt Flows and Intrusives
- Marine Sedimentary Rocks
- Water

Reservation Boundaries
Principal Highway
Sample Locations

Figure 4: Washington Degradation test results for Quinault
Eleven samples were obtained from seven gravel pits, one quarry, and one prospective area (Figure 3). The full suite of tests including L.A. Abrasion, Degradation Value, Sieve Analysis, Specific Gravity and Absorption were performed on samples from the two largest sand and gravel operations, the Corwin Pit (Figure 2) and the Potato Patch Pit (Figure 3).

The other sand and gravel samples were analyzed for: L.A. Abrasion, Sieve Analysis, and Specific Gravity. The bedrock sample had all tests performed except for the sieve analysis.

Specific Gravity values for the sand and gravel samples tested ranged from 2.505 to 2.586. Water absorption percentages for the same samples ranged from 1.939 to 3.078.

Samples from the largest and most active sand & gravel pits on the reservation met L.A. Abrasion, Washington Degradation Values, Specific Gravity and Water Absorption criteria for WSDOT specified materials as indicated on Figure 4.

For samples from other sand & gravel locations, L.A. Abrasion values achieved by testing to WSDOT specifications all passed required levels as indicated on Figure 5.

The Two Switchback Quarry basalt samples taken during the study met the Washington Degradation Value, Specific Gravity, Water Absorption and L.A. Abrasion specifications in the WSDOT system as indicated in Figure 5.

The Puget Sound Railroad line also runs from Aberdeen to Seattle-Tacoma-Everett via connections with the Burlington Northern Santa Fe (BNSF) Railroad.

Overall, the materials sampled on the Quinault Indian Reservation demonstrated a high resistance to abrasion, high resistance to abrasion in the presence of water, and a small percentage of fine materials. They are suitable for use as Portland Cement Concrete aggregates applications.

![Figure 4: Washington Degradation test results for Quinault](image)

![Figure 5: L.A. Abrasion test results for Quinault](image)
RESOURCE ESTIMATES

Glacial outwash deposits cover much of the Quinault Indian Reservation’s surface (Figure 3), and contain many millions of tons of aggregate. Quite obviously, not all of these resources will be available for immediate development.

The Quinault Indian Nation’s preferred location for the initial phase of future aggregate development is an 80 acre (32.37 hectare) parcel (Figure 6). Aggregate resources within the parcel can be estimated as exceeding 214,000 tons (194,000 tones) per foot of depth. This initial development site is at least 40 feet thick. This results in a minimum tonnage of at least 8.4 million tons of aggregate.

INFRASTRUCTURE

Power and paved roads are present on the Quinault Indian Reservation. Water, where not available commercially or at the surface, is generally present at relatively shallow depths (the Quinault Indian Nation owns all water rights). In addition, commercial port facilities are located at Grays Harbor, approximately 40 miles south via US Highway 101 from the proposed initial development site (Figure 7).

POSSIBLE BUSINESS AGREEMENTS

The Quinault Indian Nation will consider any business arrangement that can be beneficial for all parties. Some possibilities are:

- **Lease of property with royalties on sales**
- **Joint venture with qualified aggregate producer**
- **QIN as project owner with partner as contract operator (operation would not be subject to federal income tax)**

BARGE FACILITIES

The Quinault Indian Nation borders the Pacific Ocean, and includes approximately 20 miles of coastline. Because of the unique location of the reservation, tide levels are such that the potential exists for the on-site construction of a barge-out facility. A barge-out facility could be constructed to handle both bulk freight transfer and storage, for any potential production rate (up to and including 5 million tons per year), reducing transportation costs associated with aggregate production to an absolute minimum. State-of-the-art technologies could be employed to guarantee that no aggregate enters the ocean, eliminating potential permitting difficulties. The QIN’s initial preference for the location of a barge-out facility is in the vicinity of the mouth of the Queets River, near the northern tip of the reservation (see Figure 6: Bathymetry map). As the sovereign nation QIN controls 20 miles of Pacific coastline on the Reservation, other options may also exist for the location of a barge-out facility.
PORT FACILITIES

The Quinault Indian Nation is also located just north of the Port at Grays Harbor, home to four different marine terminals (Figure 7). Centrally located between Seattle, Washington and Portland, Oregon, the Port at Grays Harbor is the only deep-water, deep-draft port on Washington’s coast, and the closest western port to the Pacific Rim, which lends itself to prospective international markets. With a very stable climate, the area sees dry summers and mild, wet winters. Although the average rainfall is 70 inches per year, there is little snow fall and minimal temperature change. Along with climate stability, the Port at Grays Harbor benefits from being classified as a Foreign Trade Zone, which makes it extremely attractive to companies engaging in international trade. With four airstrips in the vicinity, as well as two major airports nearby, the Port at Grays Harbor offers easy accessibility.

The Port at Grays Harbor has three working ports, Terminals 1, 2, and 4, and one port that is available for sale or lease, Terminal 3.

Figure 7: Port Facilities at Grays Harbor
Figure 8: both pictures above and below, Terminal #1
Figure 9: Terminal #2
Terminal 1 (Figure 8) operates as a barge and bulk terminal, with a berth draft of -32 feet Mean Lower Low Water level (MLLW). It is 480 feet long and has an apron width of 50 feet.

Terminal 2 (Figure 9) operates as a bulk loading facility, and is run in conjunction with Ag Processing Inc. They developed the facility using the latest technology, including enclosed conveyers that transport product from a receiving building onto inline scales then into the vessel. Terminal 2 has a deep water berth draft of -41 feet MLLW, is 600 feet long, and has an apron width of 100 feet. The last working terminal, Terminal 4 (Figure 10), is the main general cargo terminal. It has self-scouring twin-deep water berths at drafts of -41 feet MLLW. It is 1,400 feet long, has an apron width of 100 feet, and is secured and capable of vessel operation 7 days a week, 24 hours a day.

**TAXATION**

No state taxes would apply to an operation on the Reservation. Because the Quinault Indian Nation is not subject to federal taxation, a tribally-owned operation would not pay federal income taxes.

**FEDERAL REGULATIONS**

Agreements between Indian entities and other parties, and mining operations on Indian reservations such as the Quinault Indian Reservation, are regulated to a specific extent by federal law. The laws are interpreted in the Code of Federal Regulations (CFR). The main CFRs that apply are:

- **25 CFR 225** (Indian Mineral Development Act of 1982, mineral agreements, tribal lands) states that:
  
  ◦ All terms are negotiable except the operating regulations of the Bureau of Land Management and the royalty regulations of the Minerals Management Service.
  ◦ The Tribe may negotiate directly with other parties.
  ◦ No particular form of agreement is prescribed.
  ◦ The approval of the Secretary (Bureau of Indian Affairs) is required.

- **25 CFR 216, 43 CFR 3590 & 3600** – Mine plan approved by the Bureau of Land Management consisting of:
  
  ◦ Mining plan of operations
  ◦ Reclamation plan
• 25 CFR 216.8 – Performance (reclamation) bond
• 25 CFR 211.24 – Lease bond

QUINAULT NATIONAL LEADERSHIP

Fawn R. Sharp is the current President of the Quinault Indian Nation. Her past positions included managing attorney and lead counsel; staff attorney for the Quinault Indian Nation; administrative law judge for the Washington state Department of Revenue – Tax Appeals Division; Quinault Tribal Court Associate Judge; and Counsel for Phillips, Krause & Brown.

Ms. Sharp has held numerous leadership positions, including an appointment by Governor Gary Locke to serve as Trustee for Grays Harbor College, Governor of the Washington State Bar Association, Trustee of Washington State Bar Association – Indian Law Section, Vice President and Founding Member for the National Intertribal Tax Alliance, and Director/Secretary of the Quinault Nation Enterprises Board. Fawn has numerous publications to her credit and has lectured throughout the United States.

Ms. Sharp graduated with a Bachelor of Arts from Gonzaga University at the age of 19. She received her Juris Doctorate from the University of Washington in 1995 and has subsequently received certificates from the National Judicial College at the University of Nevada, and from the International Human Rights Law at Oxford University.

Ms. Sharp resides with her husband, Dan Malvini, and their son, Daniel Malvini II.
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