EXHIBIT NO. ___(EMM-17HC)
DOCKET NO. UE-06___/UG-06___
2006 PSE GENERAL RATE CASE
WITNESS: ERIC M. MARKELL

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, **Complainant,** **v.** **PUGET SOUND ENERGY, INC.,** **Respondent.**	**Docket No. UE-06____** **Docket No. UG-06____**

SIXTEENTH EXHIBIT (HIGHLY CONFIDENTIAL) TO THE PREFILED DIRECT TESTIMONY OF ERIC M. MARKELL ON BEHALF OF PUGET SOUND ENERGY, INC.

REDACTED VERSION

FEBRUARY 15, 2006

Puget Sound Energy's Baker River Hydroelectric Project:

An Overview

July 2005

PUGET SOUND ENERGY

Baker River Hydroelectric Project: *An Overview*

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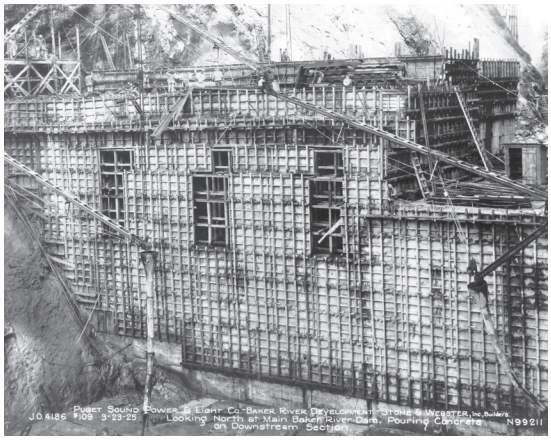
1 Project History

Lower Baker Development

The idea for a hydroelectric project on the Baker River was conceived by the Stone & Webster Service Corporation, which in 1912 consolidated more than 50 separate Washington utilities into Puget Sound Traction, Light & Power Company. The latter company's acquired holdings included hydroelectric plants at Snoqualmie Falls, Lake Tapps, (White River), Nooksack Falls, and on the Puyallup River (Electron).

Stone & Webster announced plans in 1917 to build a hydroelectric dam on the Baker River to provide electricity for the growing Puget Sound population. Construction of the Lower Baker Dam began in April 1924, and was completed 19 months later, in November 1925. In 1927, the dam was raised another 33 feet, to its existing height of 285 feet.

Lower Baker Dam's powerhouse originally was equipped with two 19.75-megawatt generators. A third generating unit was installed in October 1960. The powerhouse was subsequently destroyed in an earth slide in May 1965. The powerhouse was rebuilt but Units 1 and 2 were abandoned. In 2001, Puget rewound the Unit 3 generator and refurbished the turbine, increasing the authorized plant capacity to 79 megawatts.



Construction crews work on lower-tier sections of Lower Baker Dam. (March 1925)

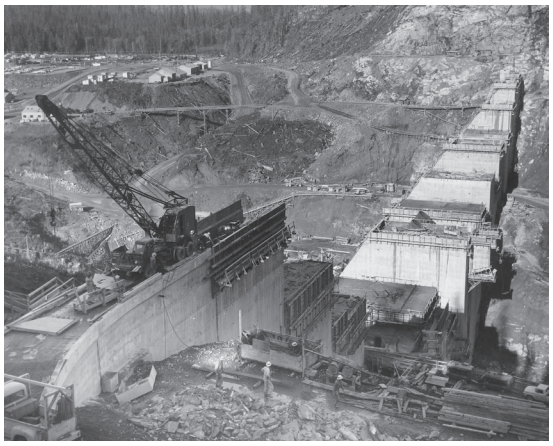
A worker inspects 22-foot-diameter "pressure tunnel" that will feed water to Lower Baker Dam powerhouse. (October 1925)

Project History

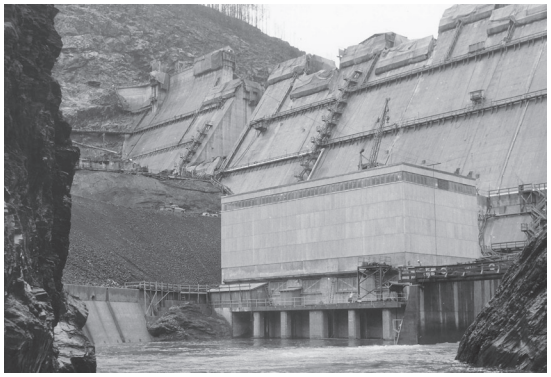
Upper Baker Development

To meet the need for additional generating capacity, Puget Sound Power & Light Company (its name was changed in 1920 from Puget Sound Traction, Light & Power Company) began construction in mid-1956 on a second hydroelectric dam on the Baker River. The project was completed in October 1959.

Following powerhouse upgrades in the 1980s and '90s, the Upper Baker Dam's two turbines currently have an authorized generating capacity of 90 megawatts.



Looking across the entire width of the Baker River canyon (facing downstream), crews work on constructing Upper Baker Dam.



Facing upstream, construction proceeds on Upper Baker Dam, with the powerhouse centered at the dam's base.

Project History

Transmission System

There is one primary transmission line within the Baker River Project. The Lower Baker Development's power output is transmitted at 115kV to the Baker River switching station, which is the Project's link to the regional transmission/distribution system. This line was built in 1925 as part of the original Lower Baker Development.

Fish Facilities

The Lower Baker Development's initial construction in 1925 included upstream fish-passage facilities consisting of a ladder and a tank to deliver migrating fish into the Lake Shannon reservoir. These facilities were replaced with an incline tramway and aerial cables in 1929. In 1957, the system was again redesigned to improve efficiency. This system, still in place today, consists of the existing barrier dam, fish trap, and holding facility located downstream of the Lower Baker powerhouse.

Adult salmon are captured at this fish-collection facility below Lower Baker Dam, and then are trucked upstream for spawning in Baker Lake or in the nearby spawning beds constructed by PSE.

Two artificial salmon-spawning beaches and a test beach were established at the upper end of Baker Lake between 1957 and 1960 to provide spawning habitat for sockeye salmon. These beaches were replaced by a fourth beach of equivalent size in 1990. Although the first two spawning beaches and the test beach are officially retired from service, Spawning Beach 3 remains in operation as auxiliary spawning habitat.

Guide nets spanning Baker Lake just above Upper Baker Dam direct juvenile salmon into a fish-collection facility, where they're captured, trucked downstream, and released back into the Baker River for their migration to sea.

The most recent additions to the fish-passage facilities at the Baker River Project paralleled the construction of the Upper Baker Dam. An attraction barge ("gulper") to guide juvenile salmon for downstream migration was placed in operation in the forebay of Lake Shannon in April 1958. A second barge, similar but with increased flow capacity, was installed in Baker Lake one year later. Over the years, a number of modifications have been made to the gulpers to improve migration conditions, including the 1996 installation of a trapping facility for capturing and transporting juvenile migrants around the Project's two dams.

2 Project Description

Upper Baker Hydroelectric Project

Location

The Upper Baker River Development is located upstream of Lake Shannon, about 9½ river-miles upstream from the town of Concrete. The Baker River is the second largest tributary to the Skagit River, with its headwaters in the glacial ice fields of Mt. Baker (El. 10,778 feet) and Mt. Shuksan (El. 9,127 feet).

Reservoir

The Baker Lake reservoir is approximately 9 miles long and one mile wide, and has drainage of 215 square miles and a useable storage of 184,796 acre-feet. The normal full-pool elevation is 724 feet. The minimum operating pool elevation is 674 feet. However, the top of the penstock intake is at elevation 654 feet. The lake surface area covered at normal full pool is 4,985 acres.

Dam

The Upper Baker concrete gravity dam is 312 feet high, 1,200 feet long and the roadway across the top is 12 feet wide. The dam has a volume of 609,000 cubic yards of concrete.

Powerhouse

The powerhouse contains two generating units with a combined capacity of 90.7 megawatts (MW). In November 1997, the runner (water wheel) on Unit #1 was replaced, and the unit now produces 52.4 MW. In 1996, Unit #2 was repaired and now produces 38.3 MW.

Upper Baker Fish-Passage Facilities

Upstream migrating *adult* salmon and steelhead passage is provided year-round by a trap-and-haul facility located one-half mile downstream of Lower Baker Dam. Fish are collected, loaded into specially designed tank trucks, and transported to the Upper Baker reservoir and/or spawning beaches. Each year, tank trucks transport an average of 9,900 salmon and steelhead to Baker Lake. (In 2003 more than 20,000 adult sockeye returned to the Baker River – a record return.) Downstream migrating juvenile salmon are collected upstream of each dam by a surface collection barge (gulper) from March through August. Fish are transported daily by tank trailer and released into the Skagit River.

Upper Baker Dam

Spawning Beaches

Three sockeye salmon spawning beaches (Spawning Beaches 1, 2 and 3) are located together at the northern end of Baker Lake near Channel Creek, and Spawning Beach 4 is located adjacent to Sulphur Creek, just west of the Upper Baker Dam. The beaches are lined, shallow ponds filled with graded gravel. Beneath the gravel is a series of diffusion pipes that provide upwelling spring water to simulate a natural environment and enhance the hatching and growth of salmon fry.

Upper Baker Project's Spawning Beach 4

Proposed Upper Baker Fish-Facility Changes in Settlement Agreement

Spawning Beaches/Hatchery

PSE had agreed to make physical improvements to the existing Spawning Beach 4, to eventually decommission Spawning Beaches 1,2 and 3, and to construct a sockeye salmon hatchery. The new hatchery would be an expansion of the current rearing facility located adjacent to Spawning Beach 4 and would include adult holding facilities, artificial incubation facilities, a small concrete hatchery building, and starter ponds.

Downstream Fish-Passage Facilities

The downstream fish-passage implementation plan calls for a higher-capacity floating surface collector behind the Upper Baker Dam. The surface collector would likely include a guide net and a transition structure between the guide net and the floating surface collector.

Project Description

Lower Baker Hydroelectric Project

Location

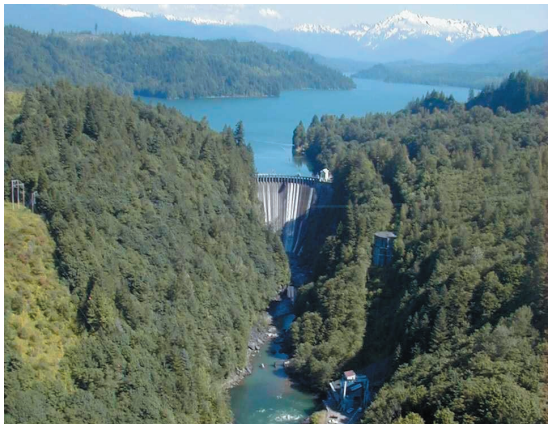
The Lower Baker River Development is located on the Baker River approximately one mile upstream from its confluence with the Skagit River. The development lies inside the Town of Concrete, Washington.

Reservoir

Lake Shannon reservoir covers 2,218 acres at full-pool elevation 438.6 feet. The minimum operating elevation is 370 feet. However, the top of the penstock intake is at elevation 350 feet. The reservoir is 7 miles in length.

Dam

A combined gravity arch dam is 285 feet high and 550 feet long, containing 125,000 cubic yards of concrete.



Lower Baker Dam

Tunnel

The 1,410-foot-long penstock is tunneled underground, with a one-mile slope. The first 905 feet of tunnel has a 22-foot inside diameter, with concrete lining. The lower 505 feet of tunnel has a 16-foot inside diameter, with steel lining.

Surge Chamber

A large concrete surge chamber is located just upstream of the powerhouse and is connected to the penstock. The chamber is 20 feet in diameter and 259 feet high, and serves as an energy-relief reservoir in the event of a load rejection.

Powerhouse

The reconstructed powerhouse features a sloping roof, which will allow any landslide activity at the site to pass over the top of the facility with no resulting damage. The powerhouse's turbine generator set has a generating capacity of 85 MW, but currently is limited by transformer constraints to 71 MW of peak output.

Lower Baker Fish-Passage Facilities

Upstream migrating adult salmon and steelhead passage is provided year-round by a trap-and-haul facility located one-half mile downstream of Lower Baker Dam. The facility consists of a barrier dam that blocks adult fish from continuing upstream and guides them into a fish-trap facility. The fish-trap facility is a concrete and steel structure consisting of an entrance vestibule, three holding ponds, and a hopper pond.

Fish are loaded into specially designed tank trucks and transported to the Upper Baker (Baker Lake) reservoir and/or spawning beaches. Each year, tank trucks transport an average of 9,900 salmon and steelhead to Baker Lake. Downstream migrating juvenile salmon are collected upstream of each dam by a surface collection barge (gulper). The barge consists of a barrier net guidance system, an attraction barge, and a fish trap/sampling facility. Fish are transported daily by tank trailer and released into the Skagit River from March through August.

Migrating salmon are trapped in this facility below Lower Baker Dam and then are trucked upstream for release above Upper Baker Dam.

Proposed Lower Baker Fish-Related Changes in Settlement Agreement

Powerhouse

PSE has agreed to rehabilitate the original power-generating facilities at the Lower Baker development that were destroyed by the 1965 landslide. The auxiliary powerhouse, currently unused, would include two new 15 MW turbine generators attached to an existing penstock within the concrete foundations of the original 1925 powerhouse. The purpose of these new generators is to increase operational flexibility and comply with new fish-protection requirements in the settlement agreement. The new generators would allow a higher minimum flow of water to pass through the Lower Baker Dam powerhouse. The generators also would enable a slower, more gradual reduction in the flow of water released through the dam, as required by the settlement agreement.

Upstream Fish-Passage Facilities

The settlement agreement's proposed upstream fish passage implementation plan will involve a combination of new facilities and renovations to existing facilities at the Lower Baker trap-and-haul facility.

Downstream Fish-Passage Facilities

The settlement agreement's downstream fish-passage implementation plan calls for a higher-capacity floating surface collector (FSC) at the Lower Baker development. The surface collector would likely include a guide net, an FSC, a transition structure between the guide net and FSC (including a transportation conduit and floating fish trap), transfer facilities, and stress-relief pond.

3 Project Power Costs

REDACTED

Project Power Costs

Project net book value
Pre-license levelized power-production cost
Current energy production
Post-license levelized power-production cost
Energy production with new license

Allocation of increased production costs (levelized

License-related:
- Terrestrial license articles
- Recreation license articles
- Aquatics (fish) license articles
- Cultural license articles
- Common to all license articles
- Tribal settlement
- City of Concrete
- Replacement energy & capacity

Subtotal (license-related)

Not license-related:
- FERC-recommended dam-safety improvements

Total increase in production costs

Cost Totals (stated in nominal dollars)

Plant costs

Cost of plant additions, independent of license
Aggregate cost of plant O&M, independent of license
Subtotal of 30-yr plant costs, independent of license

Licensing costs
Cost of plant additions associated with license
Aggregate cost of plant O&M associated with license
Subtotal of 30-yr license-implementation costs

Replacement Energy
Replacement power
Replacement capacity
Subtotal of licensing cost for replacement energy over 30 years

Total of plant and licensing costs over 30 years

Comparative cost of "market" power over 30 years

Net 30-yr cost difference in project vs "market" power

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4 Relicensing Settlement Agreement

5 Media Coverage

Settlement Agreement

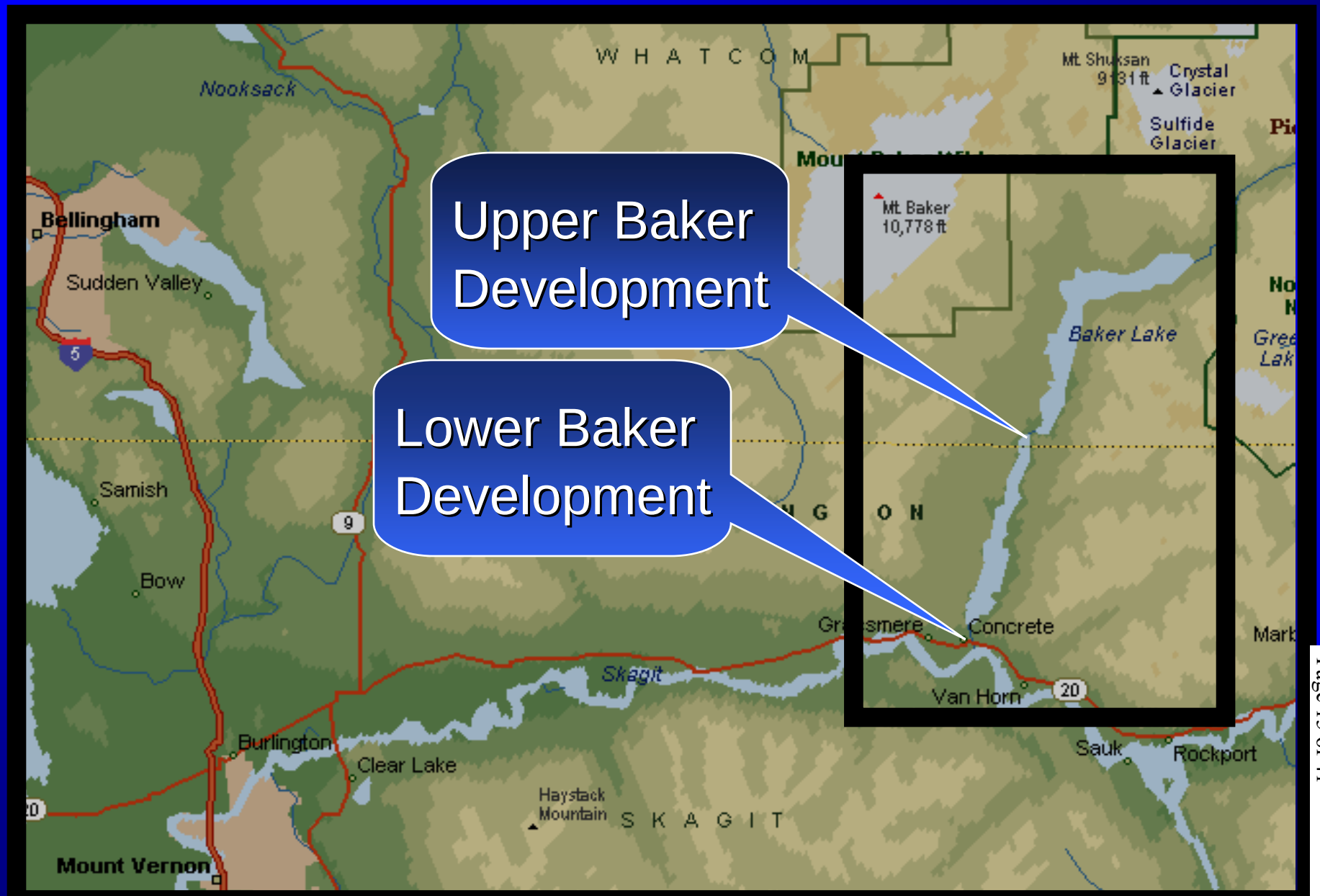
for the

Baker River Hydroelectric Project

FERC License No. 2150

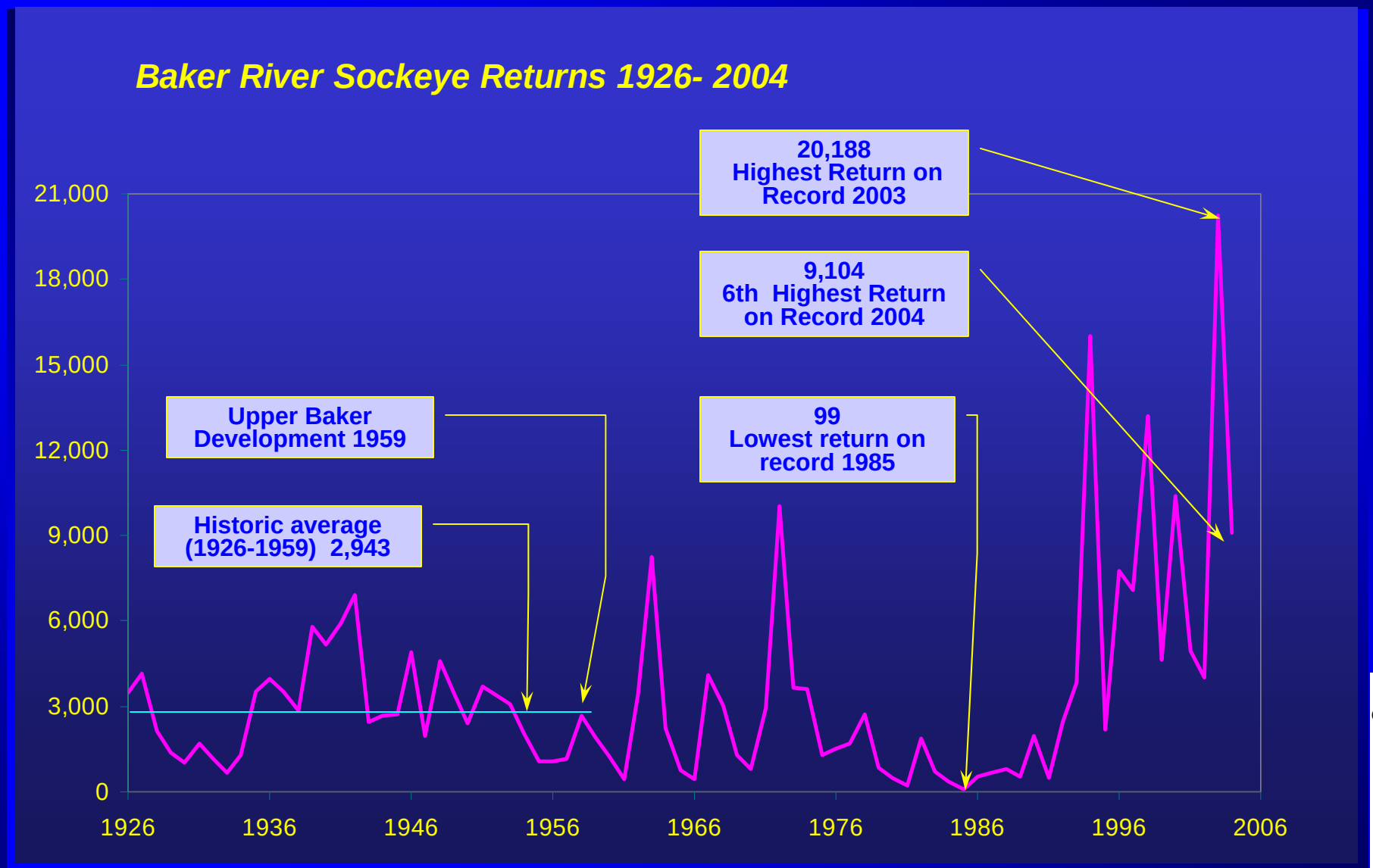
Baker River Project Relicense


Baker River
Project Area
Richmond
Surrey
BRITISH
COLUMBIA
Bellingham
Mount Vernon
Saanich
Victoria
Anacortes
Oak Harbor
Forks
Port Townsend
Olympic
N.P.
Everett
Shoreline
Kirkland
Seattle
Tacoma
Renton
Federal Way
Lakewood
Olympia
Hoquiam
Aberdeen
Centralia
Chehalis
South
Bend
Pacific
Ocean
Astoria
Seaside
Longview
Portland
Hillsboro
Stevenson
Hood
River
The Dalles
Goldendale
Yakama
Indian
Reservation
Sunnyside
Yakima
Ellensburg
Quincy
Wenatchee
Ephrata
Waterville
Chelan
Bridgepo
Oliver
Osoyoos
Grand
Forks
Trail
Creston
Bonners
Ferry
Spokane
Post
Falls
Coeur
d'Alene
Opportunity
Moses Lake
Royal
City
Othello
Ritzville
Colfax
La Crosse
Moscow
Pullman
Connell
Pomeroy
Lewiston
Richland
Kennewick
Walla
Walla
Hermiston
Milton-Freewater
Pendleton
Enterprise
WASHINGTON
UNITED STATES


Upper Baker Development
Lower Baker Development
WHATCOM
Nooksack
Bellingham
Sudden Valley
Samish
Bow
Burlington
Clear Lake
Haystack Mountain
SKAGIT
Mount Vernon
Mt Shuksan 9131 ft
Crystal Glacier
Sulfide Glacier
Mt Baker 10,778 ft
Baker Lake
Concrete
Van Horn
Skagit
Sauk
Rockport
5
9
20

Baker Project is Rich in Natural Resources

- Fish
- Wildlife
- Recreation



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Baker Project Relicense is about Collaboration

The Baker Collaboration created a forum to:

- **understand stakeholder interests and issues**
- **achieve the best comprehensive use of resources**
- **balance competing interests**
- **develop enduring solutions and relationships**

Licensing-Filing Timeline

<1999 2000 2001 2002 2003 2004 >

Plan Process

Consult with Parties

Identify Interests / Issues

Accumulate Information / Conduct Studies

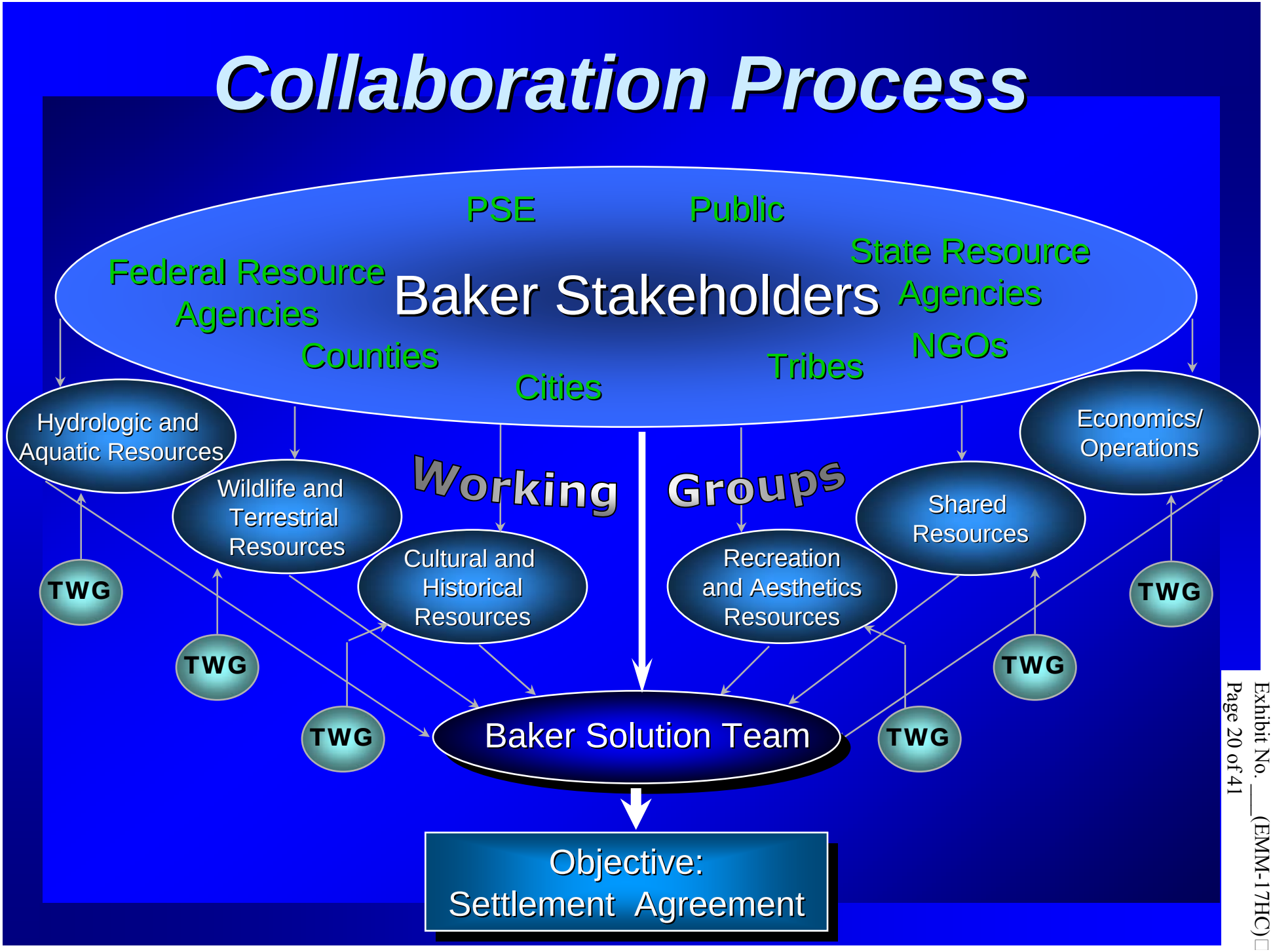
Assess Needs

Analyze Options

Balance Objectives

Filed License

Collaboration Process

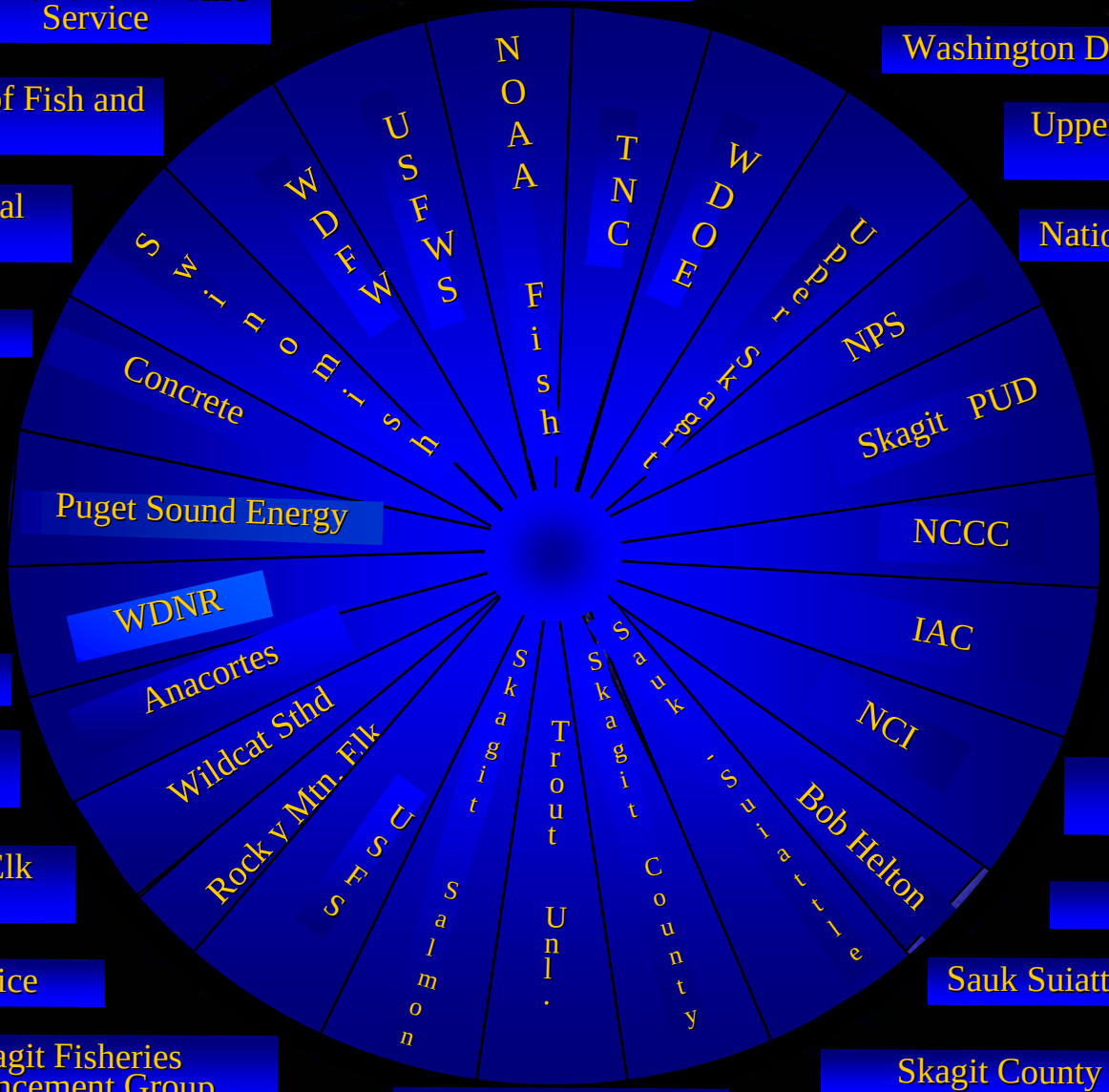


Licenses Are About Complex Relationships

PSE's long-term relationships with:

- General public and our customers
- FERC
- Federal and state resource agencies
- Tribes
- Counties and municipalities
- Environmental groups

24 Settlement Parties



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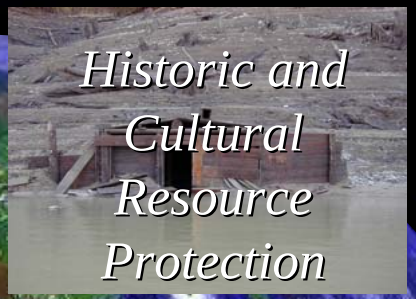
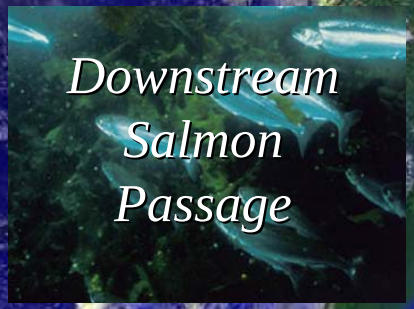
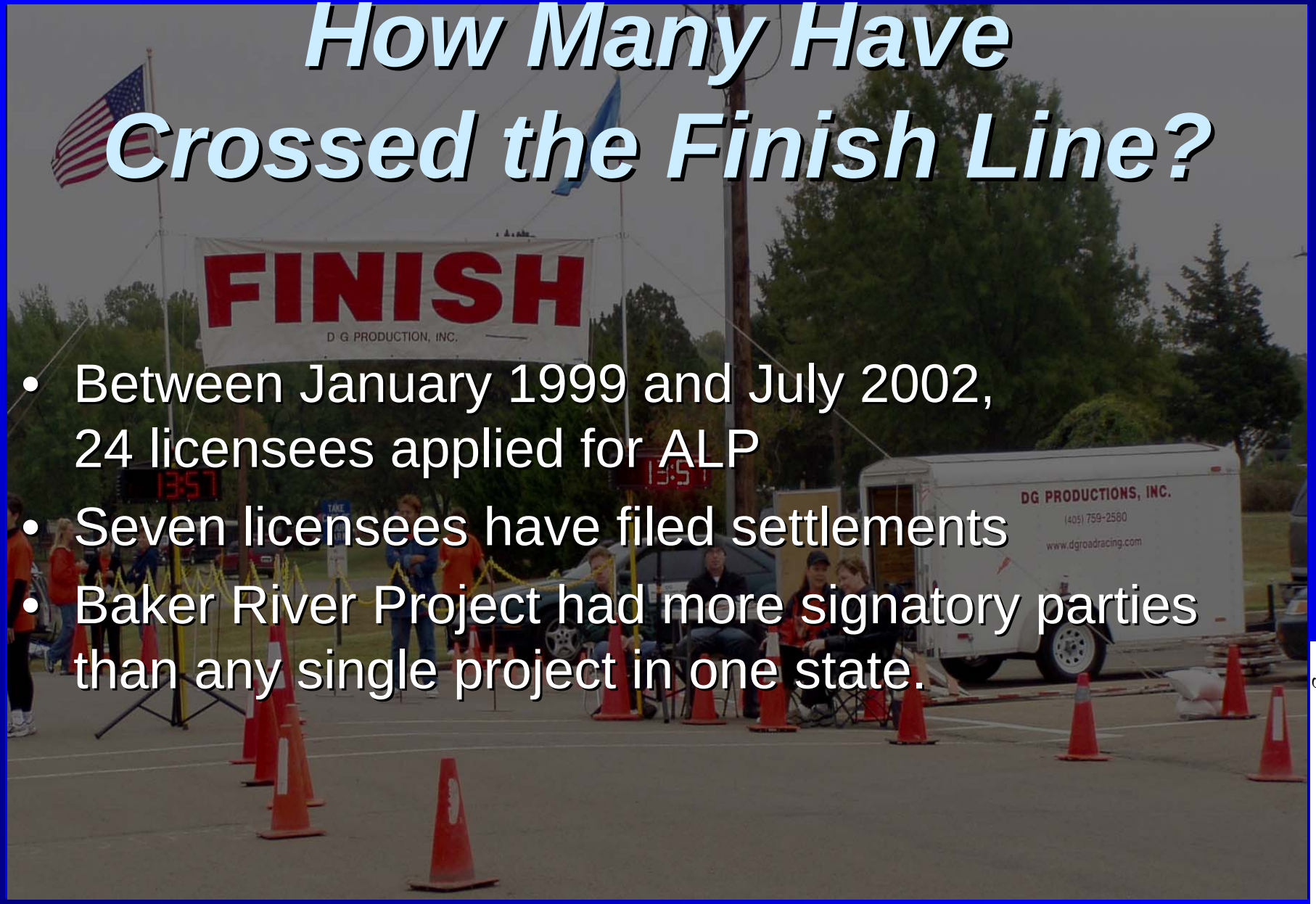
Settlement Issues- 50 separate topics





How Many Have Crossed the Finish Line?



- Between January 1999 and July 2002, 24 licensees applied for ALP
- Seven licensees have filed settlements
- Baker River Project had more signatory parties than any single project in one state.

Settlement Scope

- **Comprehensive** - collaboratively developed and carefully crafted to meet all interests
- **Multi-party** - reflects all associated federal, tribal and state resource agencies, local jurisdictions and NGOs
- **Long-term** - the settlement recommends up to a 45-year license and parties would not oppose 45 years or more
- **Flexible** - provides mechanism and funding for adaptive management to reduce future conflicts while improving outcomes

Settlement Benefits

- Settlement of 50 issues
- Inclusiveness enhances outcomes and certainty
- Reduced potential for legal challenges to license
- Longer license (45-50 years) than otherwise would be supported
- Stable market competitive power cost for term of license
- Increased future collaboration / access to diverse parties
- Regulatory support (at WUTC) by signing parties
- Reduced and contained cost exposures

Project License
30-Yr. Implementation Cost

- *Project's net book value = $[redacted] (12/31/05)*
- *Existing power cost $[redacted] / MWH*
- *Est'd administrative cost to obtain new license = ~ $[redacted]*
- *Est'd capital-improvement cost = ~ $[redacted]*
- *Est'd O&M cost (over 30 yrs) = ~ $[redacted]*
- *New power cost = $[redacted] / MWH*

HIGHLY CONFIDENTIAL per WAC 480-07-160

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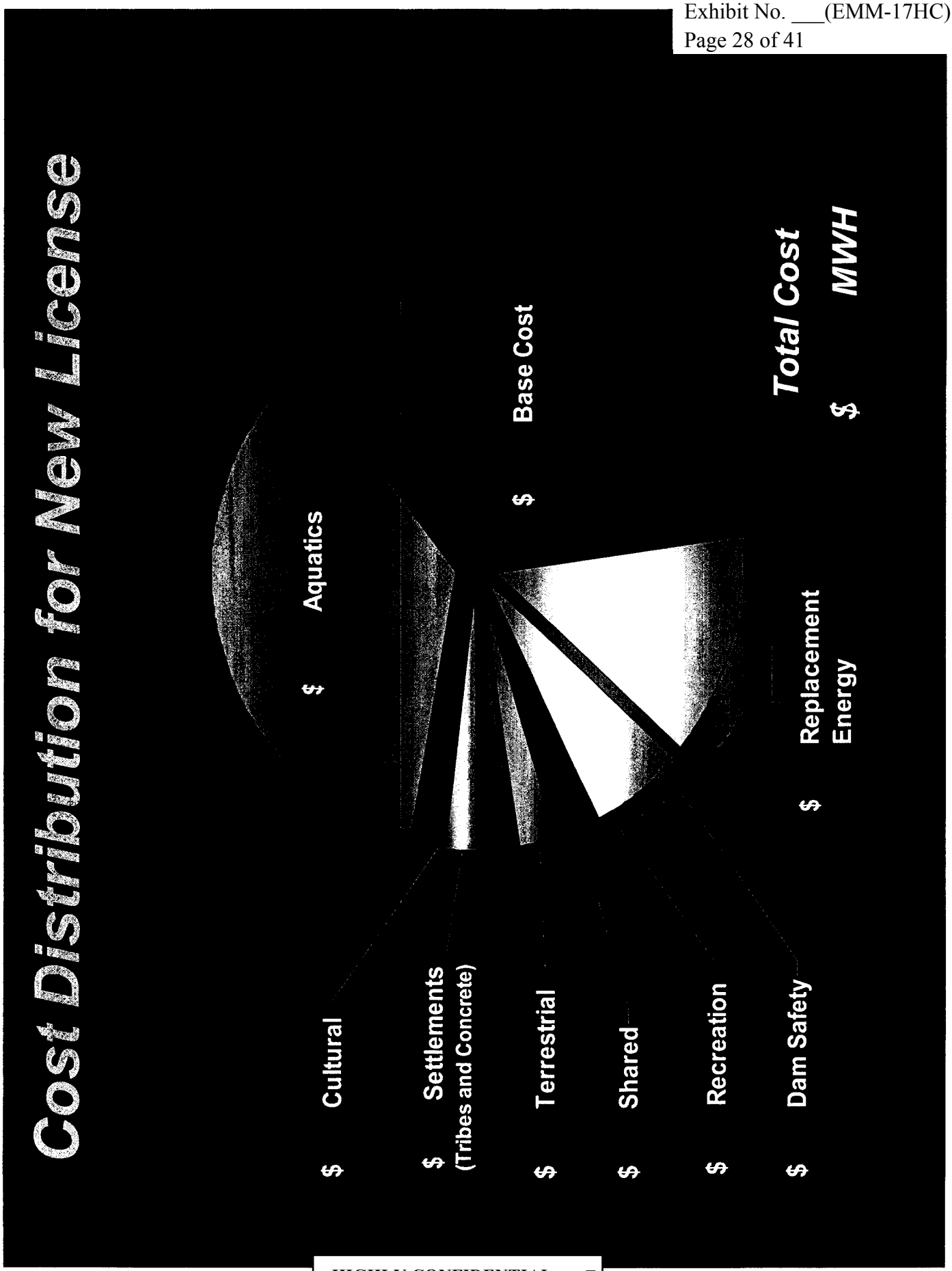
Cost Distribution for New License
$ Cultural
$ Settlements (Tribes and Concrete)
$ Terrestrial
$ Shared
$ Recreation
$ Dam Safety
$ Aquatics
$ Base Cost
$ Replacement Energy
Total Cost
$ MWH

Some Uncertainty Still Remains

- FERC still needs to adopt settlement without major change
- New ESA listings or other environmental issues can arise
- New regulations can change what we are able to do
- Energy market remains volatile
- Outside lawsuits by other parties can increase exposure

Five Challenges to Overcome

- Uncertain cost of fish passage
- Performance of fish passage
- Design and cost of new generation capacity
- Flood-control agreement with Skagit County
- Maintenance of collaboration

Lessons Learned:
When You Build Bridges, You Can Keep Crossing Them

- Competent facilitation makes collaboration journey efficient and enjoyable
- Licenses are for decades, so long-term relationships are key to success
- Broad-based involvement a key to future successes

Licensing Implementation

The Baker Settlement is:

- An innovative collaboration of diverse interests to reach a common goal
- An enduring commitment by the parties to work together to implement resource protection and enhancement for decades
- A commitment for the public benefit
- A worthy effort

Settlement by the Numbers

- 5 years in making
- 24 settling parties
- Over 400 meetings
- 1,200 pages of application / environmental assessment /settlement documents
- 83,000 pages of studies
- $15 million

Settlement by the Numbers

- **1 settlement agreement lasting decades**

PUGET SOUND ENERGY

News Release

For Immediate Release:
Dec. 7, 2004

Contacts:
Media: Grant Ringel
888-831-7250
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425-462-3808

Settlement reached on conditions for new Baker River hydropower license

BELLEVUE, Wash. – After nearly five years of effort, Puget Sound Energy [*utility subsidiary of Puget Energy (NYSE: PSD)*] and a large group of governmental entities, Indian tribes, fisheries interests, environmental organizations, and other parties today announced their ratification of a proposed set of long-term license conditions for PSE's Baker River Hydroelectric Project.

The group's 162-page settlement agreement, if approved by the Federal Energy Regulatory Commission (FERC), will enable PSE to continue generating low-cost hydropower at its North Cascades facility for decades to come. The settlement's provisions also would enhance fish and wildlife habitat, improve recreational facilities for the public, enhance flood mitigation in the Skagit River Valley, and protect Native American cultural resources.

"This collaborative agreement preserves an important source of clean, cost-effective electricity for our customers," said Steve Reynolds, PSE's president and chief executive officer. "We are deeply grateful for the extraordinary amount of time and effort that everyone at the table devoted to reaching the accord. Together, we showed that people can find common ground for the common good even when they hold widely differing interests and objectives at the outset."

Crafted by 24 different parties, the settlement recommends that FERC grant the utility a new Baker Project license lasting at least 45 years. PSE is scheduled to meet tomorrow (Dec. 8) with FERC representatives in Washington, D.C., to discuss the settlement. The utility said it will ask the commission to incorporate all of the settlement's resource measures into a new Baker Project license.

The 175-megawatt Baker River Project, PSE's largest hydropower facility, was last issued a federal license in 1956. Since then, stricter environmental laws and regulations – for example, the Endangered Species Act, National Environmental Policy Act, Clean Water Act, and amendments to the Federal Power Act – have required hydropower facilities to operate in greater harmony with the environment. Compliance with these laws and regulations has raised the cost of generating hydropower.

PSE estimates it will cost about $360 million to meet the settlement's proposed licensing provisions over the next 30 years (or about $178 million measured in today's dollars). While the Baker Project's power-production costs would rise, Baker River hydropower would still be favorably priced, long-term, compared to other available power resources.

"We have an obligation to provide our customers with reliable energy service at a good price," said Eric Markell, PSE's senior vice president of energy resources. "This settlement will help us do that. What's more, the agreement upholds our broader responsibilities to the public and the environment."

Numerous parties to the settlement praised its environmental measures.

"The Upper Skagit Indian Tribe believes this is an excellent long-term agreement that will help to protect and enhance the natural resources so important to us, and which fosters a spirit of continuing cooperation between the Tribe and Puget Sound Energy," said Marilyn Scott, the Tribe's chairman.

--more--

"We are happy to be a part of the relicensing agreement and are especially pleased by its provisions for upstream and downstream fish-passage facilities," said Steve Fransen, a fisheries biologist for the National Oceanic and Atmospheric Administration Fisheries agency. "We also think the modifications to the Lower Baker powerhouse will improve stream-flow management for ESA-listed Chinook salmon and other fish species."

The settlement's terms for boosting local flood-control capacity also were applauded.

"We commend PSE and all of the other participants in the Baker River Project settlement process for agreeing to increased flood protection for Skagit County citizens," said Skagit County Commissioner Ken Dahlstedt. "We look forward to working closely with PSE and others to make improved flood control a reality as soon as possible."

The settlement grew out of a relatively new, FERC-authorized "alternative licensing process" for hydroelectric projects. The goal of this process is to resolve the differences of interested parties *before* a license application reaches FERC, and thereby avert the long and costly legal battles that traditionally have ensued once the commission begins its review of an application.

Participants in the Baker Project settlement process initiated 76 major studies and held more than 400 separate meetings over the past four-plus years to reach their agreement. Besides enabling continued Baker River hydropower production, the settlement also offers the following public benefits:

Fisheries Enhancement

- Construct improved upstream and downstream fish-passage facilities for moving migrating salmon around the project's two dams, and provide fish passage between Lake Shannon, Baker Lake, and other parts of the Baker basin for bull trout and other native, non-salmon species;
- Construct new fish-hatchery facilities and upgrade spawning beaches to increase the project's sockeye propagation at least threefold (with eventual capacity for 14.5 million fry per year); and
- Increase the *minimum* outflow and reduce the *maximum* outflow of water from Lower Baker Dam into the Baker and Skagit rivers to protect fish and fish habitat (the planned construction of two new Lower Baker turbines will enable much higher *minimum* outflows than is currently possible).

Flood Control

- A commitment by PSE to pursue federal authorization for an increase in the project's flood-storage capacity during winter months by up to 29,000 acre-feet (above the existing 74,000 acre-feet already provided).

Recreation

- Redevelop Baker Lake Resort with 30 to 50 new campsites, reconstruct Bayview Campground, and provide funding to maintain numerous U.S. Forest Service campgrounds, trails, and roads;
- Construct a new public boat ramp, day-use area, and parking lot at Lake Shannon; and
- Construct up to 8 miles of new hiking trails around Baker Lake and Lake Shannon.

Wildlife Habitat

- Provide funding to acquire, maintain, and enhance varied habitats for elk, mountain goats, osprey, loons, bald eagles, spotted owls, marbled murrelets, and other endangered or threatened species; and
- Provide funding for additional acquisition or enhancement of wetlands or riparian habitat in the Skagit and Baker basins.

Cultural Resources

- Provide training, education, and program coordination to preserve artifacts and to protect and enhance historic properties and traditional cultural properties that are affected by Baker Project construction and use of the project area.

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A FERC decision on PSE's Baker Project license application is not expected until 2006, the same year the facility's current, 50-year operating license expires.

The parties that signed the settlement agreement are: Puget Sound Energy, the U.S. Forest Service, the U.S. Fish and Wildlife Service, the National Park Service, NOAA Fisheries, the Upper Skagit Indian Tribe, the Sauk-Suiattle Indian Tribe, the Swinomish Indian Tribal Community, the Washington Department of Ecology, the Washington Department of Fish and Wildlife, the Washington Department of Natural Resources, Skagit County, the City of Anacortes, the Town of Concrete, the Public Utility District No. 1 of Skagit County, the Interagency Committee for Outdoor Recreation, The Nature Conservancy of Washington, the North Cascades Conservation Council, the North Cascades Institute, the Rocky Mountain Elk Foundation, the Skagit Fisheries Enhancement Group, the Washington Council of Trout Unlimited, the Wildcat Steelhead Club, and Skagit County resident Bob Helton.

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Additional quotes on the settlement from parties to the agreement:

- "This is an excellent long-term agreement that provides a great deal of protection for fish and wildlife resources throughout the Baker River watershed now and into the future," said Dr. Jeff Koenings, Ph.D., director of the **Washington Department of Fish and Wildlife**. "The agreement secures significant financial resources for fish-passage improvements, increased sockeye and coho salmon production, habitat protection, and habitat enhancement for a number of wildlife species."

- "This settlement will have very beneficial effects not only for people and for salmon, but for bull trout, bald eagles, marbled murrelets, spotted owls, and many other species," said Ken Berg, manager of the Western Washington office of the **U.S. Fish and Wildlife Service**. "In that sense, it will benefit everyone in the Pacific Northwest over the long run."

- "The Baker Project agreement provides national-forest users and ecosystems in and around the project a very good future," said Linda Goodman, regional forester for the Pacific Northwest Region of the **U.S. Forest Service**. "The mix of measures in this settlement continues to foster multiple uses of the land while sustaining a healthy forest ecosystem."

The Bellingham Herald
12/9/04

PSE deal improves Baker River area to keep dams open

Puget Sound Energy has agreed to improve recreational facilities, fish passageways and wildlife habitat in the Baker River area as part of an agreement for renewal of the company's license to operate its two hydroelectric dams on the river.

In a press release, company spokesmen said the agreement was the result of five years of negotiations with government entities, American Indian tribes, fisheries advocates and environmental groups.

If the Federal Energy Regulatory Commission approves it, the 162-page agreement will enable the company to continue generating low-cost hydroelectric power from its two Baker River dams for decades to come. FERC is not expected to rule on the agreement until 2006, when the company's current operating license expires.

Company officials estimated the cost of complying with the deal at $360 million, spread over the next 30 years.

Among other measures, the company said it has agreed to:

- **Add 30 to 50 campsites** at Baker Lake Resort, reconstruct Bayview campground and help pay for maintenance of U.S. Forest Service roads, trails and camps.
- **Construct up to eight miles** of new hiking trails around Baker Lake and Lake Shannon, and build a new boat ramp and day-use area at Lake Shannon.
- **Improve passageways for fish** moving upstream or downstream around the two dams, and adjust river flows to accommodate the needs of fish.
- **Acquire or enhance additional acreage** for wildlife habitat in the Baker and Skagit rivers' drainage.

The two dams generate about 175 megawatts, enough power for about 72,000 homes.

MEGAWATT DAILY
12/8/04

Puget renews 175-MW hydro license

Puget Sound Energy has ended five years of controversy and reached a settlement with stakeholders on a new 45-year license for its key 175-MW Baker River hydroelectric project in Washington state, the utility said Tuesday.

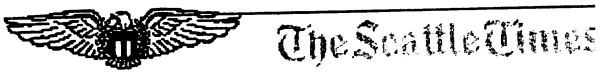
The utility will spend $360 million over the next 30 years alone to enhance fish survival at the Baker project, which is its largest hydroelectric facility. The funds also will cover environmental mitigation, increased flood control in the Skagit valley, improved recreational facilities and protection of tribal cultural resources.

Eric Markell, senior vice president of energy resources, said the hydropower would still be favorably priced for the long-term, compared with other available power resources. The pact will be submitted to the Federal Energy Regulatory Commission for approval and the utility, a unit of Puget Energy of Bellevue, Wash., expects to receive approval before the current 50-year license expires in 2006.

Some 24 entities agreed to the settlement, including the Upper Skagit Indian Tribe and state and federal officials. Steve Fransen, a fisheries biologist for National Oceanic and Atmospheric Administration Fisheries, said modifications to the Lower Baker powerhouse will improve stream-flow management for Chinook salmon and other species listed under the Endangered Species Act.

Puget will construct improved upstream and downstream fish-passage facilities for moving migrating salmon around the project's two dams. It will provide passage between Lake Shannon, Baker Lake and other parts of the Baker basin for bull trout and other non-salmon species.

The utility also will build fish-hatcheries and upgrade spawning beaches to triple sockeye propagation. It will increase the minimum outflow and reduce the maximum outflow of water from Lower Baker Dam into the Baker and Skagit rivers to protect fish and fish habitat. The utility plans to seek federal authorization for an increase in winter flood-storage capacity.



The Seattle Times
12/8/04

New plan for dams aims to improve salmon runs

By Warren Cornwall
Seattle Times staff reporter

Two hydroelectric dams once blamed for harming Skagit River and Baker River salmon runs would be managed in a more fish-friendly way under an agreement reached by Puget Sound Energy, tribes, state and federal environmental agencies and environmental groups.

The deal would set stricter limits on how much water should be released from two dams on the Baker River, which flows through the North Cascades town of Concrete, Skagit County, before joining the Skagit River.

The energy company, which owns the dams that have a combined output of 175 megawatts of power, also would pay for expanding a fish hatchery, transporting fish around the dams, improving habitat, redeveloping a resort along Baker Lake and protecting tribal cultural sites.

The agreement, which the energy company said would cost $360 million over the next 30 years, marks an unusual consensus.

Setting the rules governing dam operation is often an acrimonious process pitting environmental and tribal interests against power companies. In this case, 24 parties signed off on a deal negotiated over five years.

"Together, we showed that people can find common ground for the common good even when they hold widely differing interests and objectives at the outset," Steve Reynolds, PSE president and chief executive officer, said in a prepared statement.

Larry Wasserman, environmental-services director for the Skagit River System Cooperative, described it as a process of compromise by everyone.

"All of the parties felt that it was better to have an agreement than to take it to court," said Wasserman, whose cooperative works on fisheries management for the Swinomish and Sauk-Suiattle tribes. Those tribes signed the agreement.

The dams presented myriad problems for salmon. On the Baker River, they flooded habitat and blocked the upper reaches, except when the fish were moved by truck. On the Skagit River, the dams also created sharp river fluctuations. High water could cause spawning salmon to lay eggs in places that later would be left dry.

Low water could strand young salmon in small pools of water. In early 2001, after the reservoirs were drawn down, the company stopped water flow below the dams, sparking criticism. Skagit River chinook are listed as threatened under the federal Endangered Species Act.

Under the agreement, the company would release at least 1,200 cubic feet per second of water. Flows would be capped at certain times of the year. The limit under the last license, issued in 1956, required at least 80 cubic feet per second and had no upper limit.

The agreement will be sent to the Federal Energy Regulatory Commission, with the hope it will be used to craft a new license for the dam. The agency probably won't act on the license request until 2006.