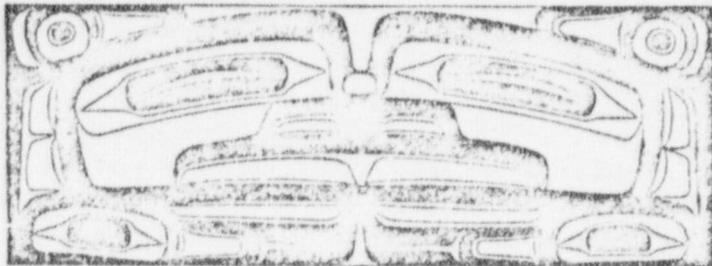


SKAGIT SYSTEM COOPERATIVE

Swinomish • Upper Skagit • Sauk-Suiattle



October 18, 1978

Bill Dirkes
Deputy Executive Director
Nuclear Regulatory Commission
1717 H Street N.W.
Washington, D.C. 20555

Dear Mr. Dirkes,

I am Andy Fernando, information officer of the Skagit System Cooperative, a three-tribe Indian fisheries management consortium on the Skagit River system in Washington state.

You were referred to us as one interested or potentially involved in nuclear energy.

We recently petitioned the Nuclear Regulatory Commission for intervenor status in hearings on twin nuclear power plants proposed for the Skagit River Valley. Our tribes are aboriginal inhabitants of the valley and have vested interests in the river's salmon fisheries through historical practice and federal treaties.

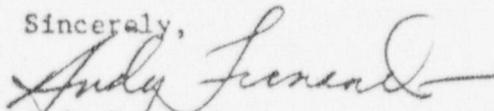
These interests were not adequately addressed in state licensing procedures four years ago and are not now being addressed in NRC licensing hearings.

Our tribal organizations are small and young, yet our resolve is great and our interest in the Skagit as old as our ancestry.

We are interested in opening dialogues with you on this project. Perhaps we may find our concerns are the same and we can be helpful to each other. Enclosed is background information on the Skagit System Cooperative and a summary of our concerns in the nuclear project. I would be pleased to discuss this with you after you review this material.

If you have any questions, please call me at (206) 466-3450. Thank you for taking time to personally read this letter.

Sincerely,

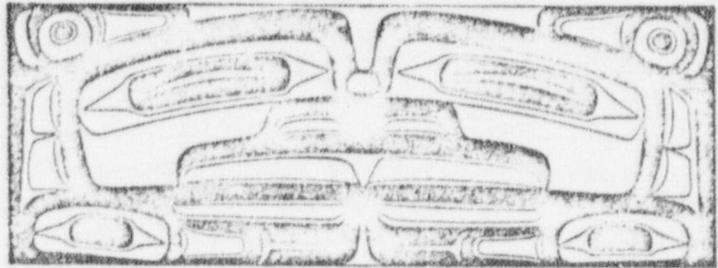

Andy Fernando

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AF:sp

SKAGIT SYSTEM COOPERATIVE

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FACT SHEET

ORGANIZED:

The Skagit System Cooperative was organized in 1976

PURPOSE:

The SSC's purpose is to implement the salmon fisheries management plans, projects and ordinances of the member tribes.

MEMBER TRIBES:

The member tribes are the Swinomish Tribal Community, Upper Skagit Tribe, and the Sauk-Suiattle Tribe. All three are federally-recognized tribes.

LOCATION:

SSC offices are located on the Swinomish Reservation, PO Box 368, LaConner, Washington 98257. Member tribes' offices are:

Swinomish Tribal Community Swinomish Reservation Box 277 LaConner, Washington 98257	Upper Skagit Tribe 808 Fairhaven Ave. Burlington, Wash. 98233	Sauk-Suiattle Tribe 1324 4th Street, 2nd Floor Marysville, Washington 98270
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OFFICERS AND STRUCTURE:

The SSC is managed by the three tribes jointly. Two representatives from each of the three tribes form the SSC Board. Those representatives are selected each year by their respective councils or senate. The Chairmanship of the Board rotates from tribe to tribe each year.

The SSC Board administers directives from the three member tribes through the three SSC departments. They include:

Administration: Don Bread, Program Director
Andres Fernando, Public Information

Enforcement: R. Bruce Haley, Chief of Police
Sgt. Jim Fernando, Operations Supervisor

Biology: Richard Granstrand, Senior Biologist
Steve Fransen, Enhancement & Research Biologist

OFFICERS AND STRUCTURE (cont.)

Thirteen persons work from the SSC offices in LaConner, including those listed above and an enforcement staff of six persons and an accountant.

In addition, the SSC coordinates the activities of the Fisheries Managers, fisheries technicians, and enrollment clerks of the three tribes.

FUNDING RESOURCES-

Funding for the SSC programs comes from money appropriated by the Bureau of Indian Affairs to implement the final decision #1 of U.S. v. Washington, commonly known as the Boldt Decision. The funds are for assisting the tribes in salmon fisheries management, enhancement, rights protection, enforcement, and identification. Some SSC employees are funded through CETA.

IMPORTANCE OF THE SSC CONCEPT-

The SSC was formed to better implement the fisheries management strategies of the member tribes while avoiding waste and duplication of effort. Instead of each tribe separately managing their fishery without regard for the other, the three tribes banded together for the good of the resource, since all share in the salmon that spawn and migrate in the Skagit River System. The concept has proved very workable and is the model for larger, long-organized tribes to cooperate with one another.

The three member tribes recognized that they have certain common goals in the fishery, and certain differences that could be resolved by working together rather than drifting apart.

AREA OF COVERAGE-

SSC enforcement personnel patrol the entire mainstem of the Skagit River upstream to Newhalem, and most of the Sauk, Suiattle, Baker, and Cascade tributaries of the Skagit--more than 100 river miles. Also, they range from the Canadian border to Vashon Island when necessary. The three member tribes have "usual and accustomed" fishing rights within these areas, although only the Swinomish Tribe has usual fishing rights in marine (salt) water.

Enhancement projects serve all of the three areas, but are primarily concerned with rebuilding the once great salmon runs of the Skagit River System.

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PERTINENT FACTS ABOUT THE SKAGIT RIVER SYSTEM-

The Skagit is one of the few rivers in Washington State that still are habitat of all five salmon species, as well as steelhead. One-third of all the natural (wild) salmon and steelhead stocks that return to Puget Sound are destined for the Skagit. About 30 percent of the water that empties from rivers into Puget Sound flows from the Skagit System. The Skagit is one of the few rivers in the U.S. planned for designation as "Wild and Scenic" by the Congress.

CURRENT PROJECTS OF THE SSC-

Two salmon enhancement projects operate under the direction of SSC Biologists. Both are "natural" chum salmon enhancement projects using a minimum of hardware to bolster wild runs. The projects include one on the Swinomish Reservation, and another near the Sauk River near Rockport. When funding becomes available, a \$1.9 million natural chum enhancement project is planned for the Marblemount area.

SSC enforcement programs are hinged on the spirit of cooperation --both tribe-to-tribe and tribe to general public. The SSC now has cooperative enforcement pacts with Washington State Fisheries Patrol. The SSC is developing good relations with Skagit County Sheriffs Department, and other police agencies. Some of the SSC officers are commissioned with the LaConner Police Department as well. Currently five of the SSC's seven enforcement personnel have successfully completed the Washington Basic Police Training, and two other have completed the Bureau of Indian Affairs Academy. All SSC enforcement personnel receive as many as 200 hours of intensive police training annually.

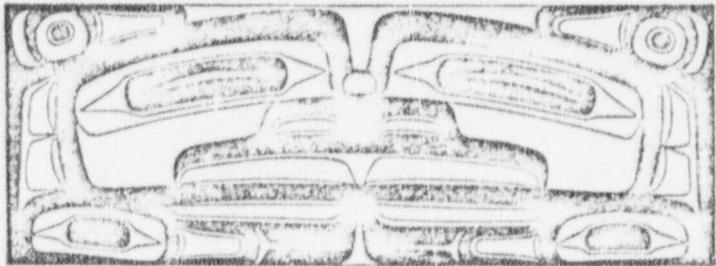
ISSUES FACING THE SKAGIT RIVER TRIBES-

The Skagit is one of the key rivers in many of the issues facing tribes on treaty rights. Phase II of the Boldt Decision will decide the tribe's role in protecting the fisheries environment. Twin nuclear reactors, two dams, and a river dredge are planned for the Skagit. The tribes are fighting those impacts they feel are adverse to the river, while encouraging those projects that will benefit the environment and the fisheries.

In Congress, and in the legislatures around the country, tribes are faced with increasing attacks on treaty-guaranteed promises made by the federal government in the 1800's. Although the tribes are without substantial funds, they are attempting to protect those rights by making tribal members aware of the rights they have, and urging action through tribal governments. In this role, the SSC plays a vital function for the Skagit River System.

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CONCERNS OF THE SSC MEMBER TRIBES ON
THE PROPOSED SKAGIT NUCLEAR PROJECT.

AN SSC EDITORIAL SEMINAR

As a preface, perhaps the most important aspect of the entire process of hearings by the state and federal governments on the Skagit Nuclear Project is that the three tribes on the Skagit which would feel a direct impact from the project were not contacted for input on the project. There many concerns raised by the tribes -- sociological, economic, genetic, fisheries related ones -- the overriding concern is that neither the applicant not the state appeared to realize that this is also a people issue. Beyond all the dollars, facts, and figures, there are real people that will be affected, and many of those people happen to be members of the Skagit River Indian Tribes. The following listed concerns emphasize those impacts on people.

POINTS OF CONTENTION --

GEOLOGIC

There have been at least three earthquake faults found on or near the project site. These faults, if found to be a danger to the plant, would increase the risk of harmful radiological or thermal contaminants into the river, posing a real risk to all plant and animal life -- including man -- in the region. The fact that two of these fault lines were only recently discovered points to the inadequacy of the applicant's original studies.

GENETIC

This rather exotic but real danger faced by the three tribes may be the most difficult to gauge. Indications are that tribal members tend to marry within the tribal group or into neighboring tribal groups. This forms what can be called a "closed genetic population." If the trends continue, the effects on the gene pool formed by the three tribal groups may not be seen until future generations. Radiological

GENETIC IMPACTS cont.

damage to chromosome material may occur through a higher-than-average contact with the environment affected by the nuclear project. Because of traditional living patterns that persist within the tribes, tribal members still use many of the plants and animals, especially mountain berries, deer, elk, and salmon. Concentrations of higher-than-normal levels of radiation may increase for tribal members. The same may be true for other populations, human and otherwise, which have an abnormal level of contact to the increased radiation from the nuclear plant.

SOCIO-ECONOMIC IMPACTS

The economics of a nuclear project coming to the Skagit Valley may appear beneficial to the tribes at the outset, but the opposite may be true. The member tribes of the SSC ave high rates of unemployment -- 70% Upper Skagit, 73% Sauk-Suiattle, and 36% Swinomish -- compared to the county in general at 13 per cent (1975). These rates have not changed dramatically in three years. This tribal work-force is largely undereducated and under-skilled. Also, usual employment for tribal members has always centered around the land -- usually in fishing, logging, etc.

Because of the highly technological nature of nuclear plant construction and operation, this work force will have little chance of competing for jobs, nor will be able to complete the extensive training necessary in time to benefit from the "economic boom." Even non-Indian county residents may have a difficult time competing with talents imported from other areas of the state and around the country.

Furthermore, tribal members, whose median annual income is lower than the general population, may feel the greatest impact from higher property and utility prices and higher local taxes from the project and periphery industries.

CONSTRUCTION

Although the entire project poses numerous threats to the environment and the way of life on the Skagit River, of course the tribes' first objection is to the project itself.

The applicant -- Puget Power -- intends to place a massive industrial project in an area that is almost entirely rural and agricultural. Such a change would alter the character of the whole Skagit Valley.

Also, the Skagit River is under consideration by Congress for Wild and Scenic designation under the 1968 law backed by Washington Congressman Lloyd Meeds and Senator Henry Jackson. Jackson and Meeds also support the Nuclear Project.

It would appear incongruous to name the river "wild and scenic" and at the same time allow a mammoth industrial project that could damage those very same qualities.

The project would be constructed in an area that now supports important populations of deer and elk, as well as some bear, eagle, and game birds. All of these animals are important to the traditional tribal way of life. Building a large industrial complex there would severely alter those animals' habits and habitat such that they might become more difficult for Indian and non-Indian persons to utilize.

PERIPHERY EFFECTS OF THE PROJECT -

The nuclear reactors and cooling towers notwithstanding, the periphery effects of the project stand to impact the tribes most.

RANNEY WELLS

The applicant has not yet shown to the tribes' satisfaction that Ranney Well collectors are an efficient method of cooling water intake for the Nuclear Project that will not seriously affect fish and fishing on the Skagit River.

Bechtel, the applicant's consulting firm, said the originally planned wells would require protective riprapping of the river bank and bottom near Hamilton. The Ranney site is one of the most productive drift fishing sites on the River. Also, more than 50 per cent of the Upper Skagit salmon gill net effort occurs in the area impacted by the project.

The applicant has proposed recently that Ranney Wells may not be placed so near the bank. This raises another problem. The applicant failed to study the groundwater conditions at this new site, and water pumped from this location may contain higher than permissible chemical and nutrient levels. If returned to the river, these chemicals and nutrients would very probably have an adverse impact on the river.

Also, Ranney Wells serving Anacortes and Marysville have failed in the past because of higher than permissible levels of minerals. Failure of Ranney Wells for the Nuclear Project may precipitate direct pumping from the river, although the applicant says it will not pump from the river. The tribes are concerned that the applicant may seek justification in the future to pump from the river if Ranney Wells fail.

DIFFUSER DISCHARGE

The applicant intends to return water drawn from the Ranney Wells and used for reactor cooling to the river at a site near the existing Skagit PUD water corridor South of Sedro Woolley. The reactor works like a giant distillery -- releasing water vapor and leaving concentrated levels of minerals and chemicals.

The applicant says it intends to dilute the minerals and chemicals before returning them to the river. However, this water will contain toxic (although not necessarily deadly) levels of copper, zinc, and ammonia, as well as other sublethal elements.

The applicant claims that by releasing these chemicals into the river at mid-stream they will be diluted further and will pose not health hazards after 1,000 feet from release. Puget says up-and-down-stream migrating salmon will not travel through or stay long in this part of the channel. But the tribes disagree.

Any disruptions in the river floor, such as rock stabilizers to protect the diffuser pipe, or the diffuser itself will cause turbulence in the river. These areas of turbulence are havens for both up-and-down-stream migrating salmon and other water life. When the fish are resting

or searching for food in this turbulence, they are subject to these toxic chemicals and minerals. The effects in terms of disease, death, or or impairment on the fish has not adequately been addressed.

An even greater danger is the temperature of the water discharged from the diffuser. Although the applicant's impact statments show what it calls acceptable limits between water temperature and discharge coolant, the actual result may be a much greater temperature variance.

This will result in a "thermal plume" effect downstream from the diffuser. Some fish, such as winter chum and steelhead, may be attracted to this plume to escape colder water. If these fish become acclimated to this warm environment, a sudden cold-shock would be felt if the plant were to shut down, killing those fish in the plume. Such a shock could be felt even in the warmer months. Recent history shows that new nuclear plants have a high shut-down rate in the first years of operation.

SALMON HATCHERY

In an attempt to mitigate the adverse impacts of the nuclear project, the applicant proposes a salmon hatchery on the project site.

However, the fish produced at such a hatchery will pose a problem.

It is the stated managment goal of the Skagit River Tribes to enhance for the benefit of wild or natural runs only, and prevent the introduction of any new artificial stocks into the Skagit. This also is the desire of National Fish and Wildlife Service and is a preference of the State Department of Fisheries.

The introduction of any new artificial salmon stocks will cause an imbalance with the existing natural stocks in terms of competition. The hatchery would produce mainly coho, which prey heavily on other salmon smolt and fry in the river. These coho would surely adversely impact the wild chum and pink runs.

These fish too may be very inferior to wild stocks in the Skagit. They will be reared in warm water from the reactor coolant. This does not prepare them for the very cold environment their natural counterparts are born into, and to which the hatchery would be released. These hatchery fish may also have defects caused by radiation or chemical exposure from the plant which may not appear until the fish reproduce or attempt to reproduce. If such fish were allowed to mix with the wild stock, irreparable damage may be done.

HABITAT DESTRUCTION AN ALTERATION

Siltation and erosion are major problems associated with building projects of this scale in rainy climates, as witnessed by the Satsop Nuclear Project.

Similar situations will probably be encountered by Puget in building the Skagit Project. Yet precautions have been taken to handle only the average rainfall and runoff. Any slides or excessive runoff will damage property, as well as creek habitats.

Wiseman, Coal and Tank Creeks are in the immediate construction area, and are spawning streams for coho, steelhead, and some chum salmon.

HABITAT DESTRUCTION AND ALTERATION

In 1977, at least 400 coho spawned in Wiseman Creek, and as many as 800 may have spawned there. The applicant considers the loss of habitat on these creeks "insignificant," yet it is far from so. Based on the 400 spawners, and estimated 1,600 fish could be harvested from returning migrants from that spawn. When it is considered that three coho sold by a tribal fisherman could feed his family for one week, the loss increases in significance.

Alteration of habitat or surrounding habitats in the creeks will result in severe loss or elimination of habitat for many animals, including salmon and its food web.

BARGE SLIP AND DREDGE

The applicant intends to transport much of the parts and supplies for the plant by barge up the Skagit River. It also intends to build a barge slip near the South end of Fruitdale Road near Sedro Woolley. Both present problems for the tribes.

The applicant plans to use an ocean-going barge to transport material up 26 miles of river from the Bay. Puget says it will have to remove obstacles from the river channel to permit the barge to pass. But these obstacles -- logs, deadheads, and debris -- provide habitat for a wide range of plants and animals in the river.

Also, Puget believes that it can bring an ocean-going barge up 26 miles of fluctuating river without the aid of a dredge. This feat depends on the cooperation of both tides and river flow for more than a week. The implications of Puget and Seattle CityLight raising their dam flow for that period then cutting off the flow again have been documented.

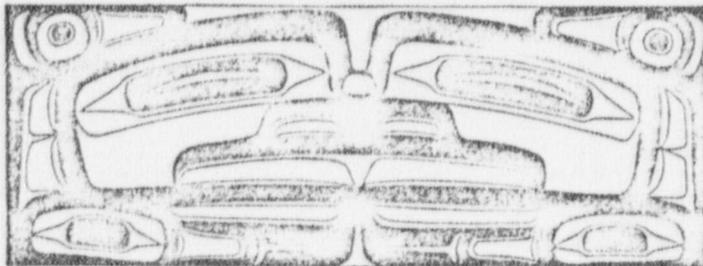
The impact would be hundreds of thousands, if not millions of salmon fry and smolt killed.

It is coincidental that the Army Corps of Engineers plans a dredge of the Skagit River at a time when the applicant needs it most, although the benefit to the rest of the public has not been demonstrated.

This information is surprising since an official of Puget Power told the Upper Skagit Tribe earlier this year that the barge would require only a six inch draft, rather than the five feet of draft the applicant now says is necessary.

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PERTINENT FACTS ABOUT THE SKAGIT RIVER SYSTEM

LOCATION -

Northwest Washington State, about 60 miles north of Seattle.

LENGTH AND FLOW

The entire Skagit System flows more than 295 miles before emptying into Skagit Bay near LaConner, Skagit County. The main stem begins at Allison Pass in British Columbia, Canada, and is joined along the way by the Cascade, Sauk, Suiattle, and Baker Rivers. Also, thousands of miles of lesser rivers and creeks make up the Skagit drainage.

Averaging 17,000 cubic feet-per-second, the Skagit discharges one-third of all fresh water entering Puget Sound, more than any other river in the Sound. A flood in December, 1975 emptied 129,000 cfs into Skagit Bay, still lower than the 100-year flood of 180,000 cfs.

INDIAN TRIBES ON THE SKAGIT

Three federally-recognized tribes originated in the Skagit basin, which include the Swinomish, now at LaConner on the Swinomish Reservation; the Upper Skagit, based in Burlington, Skagit County; and the Sauk-Suiattle, based in Marysville, Snohomish County.

Other tribes or bands, such as the Samish, Nookachamps, Miskaiwha, Chobahabsh, Kikialus, Sbaluqwa, and others originated there also. Some of these groups are part of the larger recognized tribes, while others have or are now seeking federal recognition.

Membership in the three recognized tribes is near 2,000. They have banded together in fisheries management to form the Skagit System Cooperative.

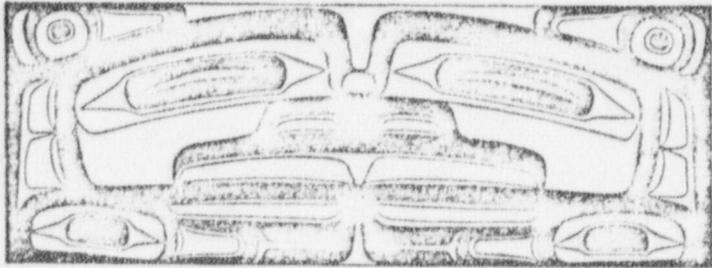
SALMON RESOURCES

All five Pacific salmon species originate in the Skagit System, including chinook (king), coho (silver), sockeye, chum (dog) and pink (humpback). Steelhead Trout, considered a salmon by Indian people spawn there also. Three distinct runs of chinook salmon (distinguished by the time they enter the river) are present each year. Sockeye spawn almost exclusively in the Baker River and Lake. All other species spawn throughout the Skagit System.

Although natural runs are severely depleted, the Skagit supplies nearly one-third of all naturally-reared (wild) salmon returning

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2

to Puget Sound. The Skagit System Cooperative Tribes enhance for the benefit of wild salmon runs only, and are the only tribes or agency to do so.

CURRENT IMPEDIMENTS ON THE SKAGIT

Five Hydropower dams have been built on the Skagit System since 1925.

Two are on the Baker River, built by Puget Sound Power and Light of Bellevue, Washington. The first of those dams nearly wiped out the sockeye run, the largest in Washington. Pre-1925 escapements exceeding 20,000 sockeye now rarely reach 3,000, 53 years later.

Three dams were built on the mainstem Skagit by Seattle City Light. Fluctuations in flow are known to kill perhaps hundreds of thousands of salmon daily (Washington Department of Fisheries manuscript, 1973) in their earliest stages of life.

Also, the Corps of Engineers built a jetty near LaConner in 1937. This jetty effectively cut off the natural flow of the river mouth through Swinomish Channel. The channel was an important rearing ground for all species of salmon entering and leaving the Skagit System. Today the channel supports few salmon; a severe setback to Indian and non-Indian economies.

ISSUES AFFECTING THE SKAGIT TRIBES

The Swinomish, Upper Skagit, and Sauk-Suiattle Tribes are intervenors in U.S. v. Washington, Phase II, addressing environmental questions and the tribes role in protecting the salmon resources.

The three tribes also intervened in Federal Energy Regulatory Commission proceedings on raising Ross Dam. This project would increase the fluctuation of the mainstem Skagit, increasing the salmon mortality shown above.

The SSC tribes also are attempting to enter the federal hearings on twin nuclear plants proposed near Sedro Woolley. Construction associated with the plants would affect salmon resources along the mainstem for sixteen river miles and possibly more.

Two more dams -- one on the mainstem, and another on the Sauk River -- are proposed by Seattle City Light and the Army Corps of Engineers, respectively. The SSC tribes feel neither are necessary to regulate the River, and are detrimental to existing salmon stocks. The tribes are taking whatever steps are necessary to prevent any damage these projects will cause.

