

January/February 1994

# NORTHWEST ENERGY NEWS

Northwest Power Planning Council

Volume 13, No. 1



## CONTENTS

### 3 Northwest Governors Concur on Common Problem

"The salmon can't wait for us to get our act together."

### 7 Strategies for Freshwater Fish and Wildlife

Measures to improve survival of other species added to fish and wildlife program.

### 11 Interview: Ted Bottiger

Council chair makes his priorities clear.

### 17 Two Nations, One Habitat

Addressing the loss of salmon from the upper Columbia River Basin.

### 23 Shaping the Future of the Fraser River Basin

British Columbians develop a sustainability strategy.

### 25 Solar City

New homes in Nampa, Idaho, face the sun for energy savings.

### 27 Letters to the Council

### 29 Shorts/Calendar

*This issue's cover illustration is by Stephen Hayes.*

## from the CHAIR

This being the first issue of *Northwest Energy News* in 1994, I want to take the opportunity to praise some of last year's major accomplishments in the Northwest.

Number one, in my book, is the unprecedented success of the Manufactured Housing Acquisition Program. Less than two years ago, all 18 Northwest manufactured housing companies agreed to work with the region's utilities to build their electrically heated manufactured homes to the highest standards of energy efficiency. We figured they'd construct about 13,000 homes and save about 6,000 kilowatt-hours in each one. In fact, construction is about 40 percent above that estimate, and expected energy savings are also greater than we thought they'd be. More of the houses are being sited in colder climates where they would have had to use a lot more electricity if they weren't so well insulated. The best news is it's costing utilities less than two cents per kilowatt-hour to save the electricity. This bodes well for our efforts to try to influence other manufacturers to make their products more efficient.



I also want to mention the remarkable fish and wildlife efforts going on throughout the region. Every state has its favorite river basin recovery project where local citizens are working with state and federal agencies, Indian tribes, utilities and others to restore watersheds. One that I heard about recently was in Idaho, in a section of the Salmon River where there hadn't been salmon in years. Only two years into a cooperative habitat repair project on the Busterback Ranch near the Sawtooth Valley, there are now salmon spawning in that stretch of the river. These are some of the fish listed under the Endangered Species Act.

I could fill this issue with many more success stories. When we look ahead at all we still have to do, it's helpful to look back at what we've already accomplished.

A handwritten signature in orange ink, appearing to read "Ted Bottiger".

# Northwest Governors Concur on Common Problem



Left to right: Idaho Governor Cecil Andrus, Washington Governor Mike Lowry, Montana Governor Marc Racicot and Oregon Governor Barbara Roberts.

*"The salmon can't wait for us to get our act together."*

by Linda Gist

Washington Governor Mike Lowry said it was an "historic meeting." Governors of the four Northwest states haven't met to discuss a common problem since the late 1970s.

"You've got to wonder what we've been waiting for," Governor Lowry joked with a reporter. The governors lunched together and wrote a joint statement supporting the Northwest Power

Planning Council's Strategy for Salmon and insisting that the states be involved in the federal Endangered Species Act process.

Governor Lowry hosted the December 15 meeting in Spokane of his colleagues, Idaho Governor

Cecil Andrus, Montana Governor Marc Racicot and Oregon Governor Barbara Roberts.

To watch them together, you would have thought it was a reunion of old friends. They chatted informally and listened attentively to each other's points. Democrats Lowry, Andrus and Roberts have known each other for years as they served in various state and federal offices. Montana Governor Racicot was new to the circle.

Introducing Andrus, Lowry referred to him as the "dean" of the group. "He's referring only to my years of service," shot back the 62-year-old Andrus.

Republican Racicot used his opening remarks to articulate what proved to be the theme of the meeting. "When it comes to water resources, all of us in this region are in this difficult allocation and protection process together. We can't be drawing jealous boundaries like the old

*"It's not my  
water.  
It's not  
your water  
—it's  
our water."*

*Montana Governor Marc Racicot*

days. ... It's not my water. It's not your water — it's our water," Racicot said.

While the attitudes were amiable, it wasn't a day of fun and games. At the request of the governors, Council members and staff

briefed the chief executives all morning on the status of various fish populations and salmon recovery efforts in the Columbia River Basin.

"When we took this assignment, we knew it was going to be controversial," Council Chair Ted Bottiger told the governors. "We knew that to be successful, everyone who is benefitting from the Columbia River system is going to have to give something back. We want to do this without putting any one industry out of business."

The governors heard some bleak news. Council staff outlined the current status of threatened and endangered fish stocks in the region and told them the outlook for 1994 salmon runs is not optimistic.

With active questioning and comments from the governors, Council staff compared the Council's Strategy for Salmon and the National Marine Fisheries Service Recovery Team's draft plan for restoring listed Snake River salmon.

In addition to fish and wildlife issues, the governors heard the latest proposals on reorganizing the Bonneville Power Administration, including information about legislation that may be introduced in Congress next year to turn Bonneville into a federal corporation.

After a working lunch, the governors met reporters and issued a joint statement strongly supporting the Council's Strategy for Salmon. "The Northwest's fish cannot wait," the statement said. "We urge federal agencies, tribal governments, state agencies and public groups involved in fish recovery in the Columbia River

*Washington Governor Mike Lowry(left) and Montana Governor Marc Racicot.*



Basin to continue, without delay, full implementation of the Council's program."

Governor Andrus, long known as a strong advocate for restoring salmon to Idaho, said: "Many times over the past three years, I've felt like I was standing out there in the rain all by myself. Today, when you bring four chief executives of the Northwest states together, let me tell you, it adds strength when we present our position to the people."

"The four of us today agree very solidly that we support the Power Council's salmon strategy and urge for its early implementation. I think we've taken a giant step forward." Andrus continued.

The most controversial portion of the Strategy for Salmon has been its position on drawing down the levels of the lower Snake River reservoirs. The strategy "identifies actions necessary to develop, demonstrate and implement a reservoir drawdown strategy for the lower Snake River. ... It is the intent of the Council to have the Snake River drawdown strategy implemented by April 1995, unless it is shown to be structurally or economically infeasible, biologically imprudent or inconsistent with the Northwest Power Act."

The center of the controversy has been whether reservoir drawdowns are too expensive for the region and whether they are based on scientific evidence that they will help young salmon survive. Opponents argue that continuing to barge salmon smolts around the dams is the most effective and economic method.

The Council's strategy includes improving barging methods and exploring drawdowns, as well as finding additional water storage opportunities and more efficient

"Relying on science is important to the Council's plan and to our position."

*Washington Governor Mike Lowry*

use of water. The strategy argues that no single measure can accomplish the salmon survival goals.

The Recovery Team said barging is the best current alternative because team members found little scientific evidence that drawdowns will improve fish survival.

The governors' statement concurred with the Council. It said, "... we must test, demonstrate and evaluate the biological effects, and evaluate and compare the economic effects of any restoration efforts. ... Evidence remains to be collected. At this time we will make no presumptions that any one restoration method to improve downstream fish passage is preferable to any other."

Lowry and Andrus told reporters their joint statement is a "clarification" of the Strategy for Salmon. "The plan called for a biological test on drawdown among other tests, and that is one of the many tests. Relying on science is important to the Council's plan and to our position. We have

strong support for the plan in our statement," Lowry said.

"Whatever alternative we might choose, it must meet the standard of testing biological and scientific soundness," Governor Roberts added.

"It's just a reaffirmation of the scientific method which we hope to employ whenever we're making decisions," Governor Racicot said. "I see it as a reaffirmation of what ought to be the guiding principle of all of our deliberations."

The governors agreed to immediately send letters to Clinton administration Cabinet officials asking that the Council represent the states in the official consultation process for Endangered Species Act decisions. "The decisions made by the federal government under the Endangered Species Act have a profound effect on the Northwest economy and environment. Because of the extraordinary importance of having all state interests fully represented and all evidence fairly considered, the governors insist that the federal agencies open the ESA consultation process at every stage to the states through the Northwest Power Planning Council," their statement demanded.

The governors also directed the Council to hold public hearings and workshops throughout the region to examine Bonneville's proposal to become a government corporation, assess the implications for the region and explore possible alternatives. They asked the Council to schedule the meetings before February 15, 1994, and report back to the governors.

"We are very concerned that Bonneville's accountability to the people of our four states not be undermined by this action [proposed organizational change]. The

"We believe in the strategy the Council has brought forward, and we should begin to act on that."

Oregon Governor Barbara Roberts

concerns of the states must be addressed if this legislation is to have our support," the governors' statement said.

The mood of the one-day meeting was perhaps best summarized by Governors Roberts and Racicot.

"The salmon can't wait for us to get our act together and bring all of our differences to the table over and over and over. At some point we must begin to act," Oregon's Governor Roberts told reporters. "What these four governors have said is, we believe in the strategy the Council has brought forward, and we should begin to act on that. There will be other requirements, other decisions, other biological and scientific evaluations as we go through this process. But if we continue to delay action, we will not have a chance to save the salmon. In fact, the decision will be made for us by our own delays."



Idaho Governor Cecil Andrus(left) Montana Governor Marc Racicot and Oregon Governor Barbara Roberts.

Governor Racicot expressed strong support for the Council as an institution trying to solve regional problems. "I guess I view the Council as an experiment in democracy," he said. "I really think it's a forerunner, a prototype of a problem-solving mechanism that we're going to see emulated and reproduced in a number of different venues throughout this country and, ultimately, in this hemisphere."

The governors were so energized by their December 15 meeting that they announced they want to meet at least two times a year. They asked the Council to help arrange a second regional governors' meeting next summer.

"When you bring four chief executives of the Northwest states together, it adds strength when we present our position to the people."

Idaho Governor Cecil Andrus

# Strategies for Freshwater Fish and Wildlife



by John Harrison

Measures to improve survival of other species added to fish and wildlife program.

If salmon are the talisman fish of the Columbia River Basin, a fish esteemed for economic, cultural and even religious purposes, then other native fish — trout, kokanee, sturgeon — are the fish next door.

We are more likely to encounter these “resident” fish — freshwater fish that don’t swim to the ocean — than salmon because dams blocked salmon from thousands of miles of their historic range. Fishing opportunities for resident fish are far more numerous than for salmon.

Last November the Northwest Power Planning Council amended its Columbia River Basin Fish and Wildlife Program with a number of measures designed to improve the survival of resident fish and

wildlife. This action was part of a two-year process of amending the fish and wildlife program, which the Council was scheduled to complete in mid-January 1994.

The Northwest Power Act of 1980, which created the Council, says the fish and wildlife program must include measures to “protect, mitigate and enhance” all fish and wildlife in the Columbia Basin that have been harmed by hydropower, not just salmon. Like salmon, resident fish and other wildlife suffered the impacts of dams and habitat destruction.

## A strategy for resident fish

Dams created reservoirs, blocked resident fish migrations, raised water temperatures, slowed

river flows at some times of the year and boosted them at other times. Because of lower flows, sediment built up in spawning beds. This reduced the amount of spawning habitat. Sediment also can collect chemical pollutants, creating potentially harmful concentrations in reservoirs and other resident fish environments.

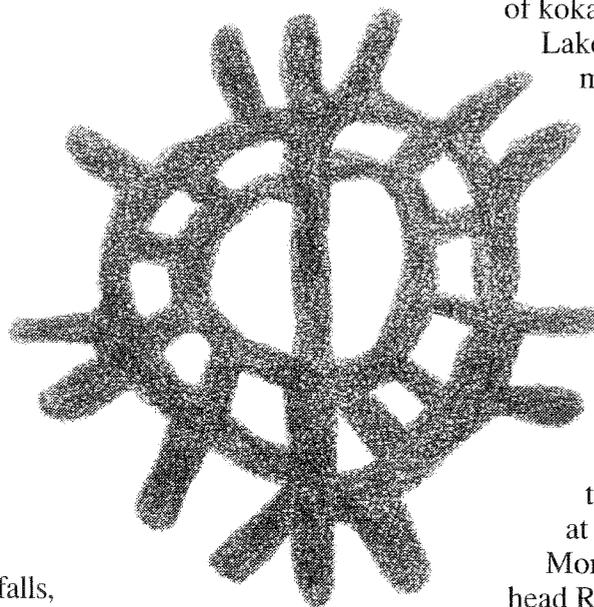
White sturgeon and bull trout were hit particularly hard by hydropower operations. Sturgeon appear to need extended, rapid flows to spawn. Bull trout are especially sensitive to environmental impacts in their spawning areas, such as sudden changes in river temperature as water is released from dams, or fluctuations in water levels caused by dam operations.

The Council's goal for resident fish is to recover and preserve the health of fish populations injured by the hydropower system wherever the damage occurred, if this is feasible. In areas where it is not feasible, losses could be mitigated with actions elsewhere in the Columbia Basin ecosystem. The amendments acknowledge the need to accelerate regional efforts to improve the survival of resident fish.

To date, regional efforts have focused more attention on salmon than on resident fish. This is reflected in Bonneville Power Administration financing of the Council's fish and wildlife program. Funding for resident fish and wildlife mitigation proceeded at low levels in the past, and the Council expects these activities will get a higher percentage of Bonneville's fish and wildlife program budget in the future. The amendments suggest that a funding level of approximately 15 percent for resident fish, 15 percent for wildlife and 70 percent for salmon are appropriate budget planning targets.

The amendments reiterate a goal of the fish and wildlife program that affects resident fish as well as salmon: while the Council is concerned about all weak stocks of fish in the basin, highest priority for ratepayer-financed mitigation should go to weak, but recoverable, native fish populations injured by the hydropower system. Similarly, the Council prefers to rebuild native species in native habitats, where feasible, but the amendments emphasize that this must be done carefully to avoid impacts on existing populations. For example, the amendments discourage opening new fish passage at natural barriers, such as water-

## The Council prefers to rebuild native species in native habitats.



falls, because of the potential impact on established ecosystems above the barriers.

The Council continues to support efforts to increase resident fish populations where salmon runs cannot be rebuilt. Such substitutions have been a part of the program since the early 1980s. In areas where dams wiped out salmon and steelhead populations, Bonneville finances construction of new hatcheries, introduction of

freshwater fish and habitat improvements in consultation with state agencies and Indian tribes.

Because the Council wants to learn more about the extent of freshwater fish losses, the amendments call on fishery managers in the four Northwest states to report by the end of 1995 on the impact of hydroelectric dams on freshwater fish populations. There is particular concern about bull trout and sturgeon populations, which have been petitioned for protection under the federal Endangered Species Act. The amendments call for studies to address specific populations and recommend recovery measures. The Council also called for a study of kokanee in northern Idaho's Lake Pend Oreille to determine the cause of their decline.

The amendments call for actions to protect fish at specific dams. For example, to increase protection of fish spawning and rearing areas, the amended program continues to call on the Bureau of Reclamation to regulate water releases at Hungry Horse Dam, on Montana's South Fork Flathead River, and the Corps of Engineers to do the same at Libby Dam on the Kootenai River. Drawdowns of Hungry Horse Reservoir would be limited to 85 feet while new operating rules for the dam are developed.

The program calls for a study to determine whether adding three new generators at Libby Dam would allow the lake to be held at consistently higher levels than currently possible and afford greater

flexibility in dam operations. This could allow Lake Koocanusa, the reservoir behind Libby Dam, to refill earlier in the summer than is currently possible. It might also benefit fish in the river downstream of the dam.

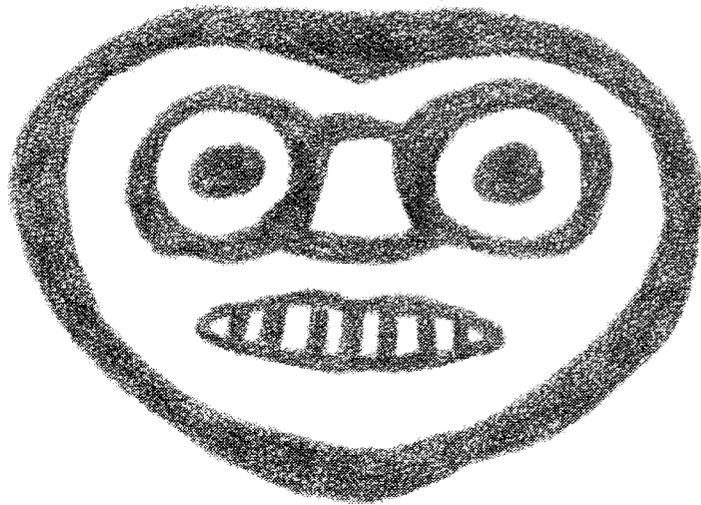
The amended program recognizes that the Columbia River Basin does not stop at the international border. Some fish and wildlife migrate back and forth across the border, and so we call for negotiations to determine whether, and to what extent, U.S. electricity ratepayers could share funding with Canada on projects to improve the survival of border-crossing fish and wildlife.

The amendments also call for development of model watershed projects to improve fish habitat.

### A strategy for wildlife

Hydroelectric dams in the Columbia River Basin impact wildlife as well as fish. Some flood plain and riparian habitats that are important to wildlife were inundated when reservoirs behind the dams filled with water. In some reservoirs, fluctuating water levels caused by dam operations scoured the shoreline of vegetation, resulting in the loss of wildlife habitat and exposing wildlife to increased predation. A number of other dam-related impacts altered land and streamside areas where wild birds and animals live. These include road construction, draining and filling of wetlands and altering streambeds.

Development of the hydropower system also had some benefits for wildlife. For example, some reservoirs provide important resting, feeding and wintering habitat for waterfowl. The Council's fish and wildlife program addresses the net adverse effects of the hydropower system on wild-



life. Electricity ratepayers will finance wildlife mitigation measures to the extent that losses of these animals were caused by construction and operation of the hydroelectric facilities. Mitigation costs attributable to other purposes of the dams — flood control, navigation and irrigation, for example — would be paid by those responsible.

Through the fish and wildlife program, the Council hopes to achieve and sustain levels of habitat and species productivity that fully account for wildlife losses resulting from the construction and operation of both federal and non-federal dams.

During the past several years, ratepayer-financed wildlife recovery efforts were accomplished on a project-by-project basis. The Council approved projects such as acquisition of wetland habitat along the Pend Oreille River in northeastern Washington and along the Willamette and Columbia near Portland and near Umatilla, Oregon; big game habitat in Idaho and Washington; and habitat for pygmy rabbits and

sharp-tailed grouse in eastern Washington. The Council hopes that by protecting and managing habitat to benefit specific animal populations, other animals that use the same land also will benefit.

Initially, future wildlife mitigation will be accomplished through short-term agreements between Bonneville and each state. The Council hopes long-term agreements will be negotiated. Bonneville already has such an agreement with Montana and a short-term agreement with Washington.

To ensure mitigation efforts proceed quickly, the amended program calls on Bonneville and state wildlife managers to negotiate interim, five-year agreements with Idaho, Oregon and appropriate Indian tribes by February 15, 1994. The Council calls on the same parties to negotiate longer-term agreements by late 1997. In the absence of these agreements, the Council will select and approve individual projects for funding in a given fiscal year. The Council also plans to review long-

term agreements in an open, public process before they go into effect, in order to ensure that they are consistent with the fish and wildlife program.

The Council recognizes that some wildlife recovery already has occurred, and it should be properly credited. So the Council will determine, in consultation with state wildlife managers, Indian tribes and federal river management agencies, the amount of credit to be given for this existing mitigation. This work should be completed by July 31, 1994. The Council then will determine how much wildlife work still must be accomplished and amend the fish and wildlife program accordingly.

#### A strategy for success

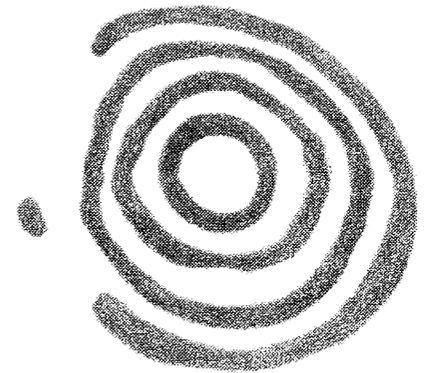
Adaptive management forms the foundation of the amended fish and wildlife program. Adaptive management is a process that treats actions as experiments designed to gain knowledge as well as accomplish a task. The knowledge gained is then used to shape subsequent actions.

The Columbia River Basin is an unimaginably complicated ecosystem. Understanding of key biological relationships is clouded by scientific uncertainty. In embracing the concept of adaptive management, the Council recognizes that scientific knowledge about fish and wildlife continues to evolve, but that efforts to protect, mitigate and enhance fish and wildlife cannot wait for perfect knowledge.

The  
Council  
hopes that  
by  
protecting  
and  
managing  
habitat to  
benefit  
specific  
animal  
populations,  
other animals  
that use the  
same land  
also will  
benefit.

For resident fish and wildlife, and for salmon, the amendments make clear that we must proceed on the basis of the best, most current scientific knowledge. So the amended program begins a process of organizing these efforts into an overall framework so that work throughout the basin can be monitored and evaluated.

The framework concept is an essential element of the program. When it is completed, in consultation with Bonneville and state, federal and tribal fish managers, it will tie together the program's goals, rebuilding targets, performance standards and measures. Through the framework, the Council should be able to clarify mitigation objectives and develop systems to measure biological effectiveness of the actions in the program and credit their results.



New Council chair makes his priorities clear.

# Ted Bottiger

with Carlotta Collette

*In 1989, when the Washington Legislature debated upgrading the state's residential energy building code to make new electrically heated homes more efficient, builders lobbying against the code argued that no one could construct a house that would meet the new standards. Ted Bottiger, one of Washington's two representatives on the Northwest Power Planning Council, which had designed the new building standards, fired back: "Even a dumb lawyer can read a book and build a house."*

*Then he did just that — ably aided by his daughter and her husband.*

*The new house "grossly exceeds the code," Bottiger admits. "They were arguing about using 2x6 walls," he says. "Hers are 2x8s. It's all blown-in insulation." When it came time to install the heating system for the new home, the furnace contractor said: "Where do you want me to put the three candles?" "He figured that's all it would take to heat the place," Bottiger brags.*

*This tale is typical of Bottiger. He does not preach what he is unwilling to at least attempt to practice. He is not a sidliner. He is not afraid of confrontation.*

*After more than 22 years' service in his state's*



Portrait by Stephen Hayes

Legislature, five as Senate majority leader and two as minority leader, Bottiger has earned a reputation for not running from the issues. This characteristic will serve him well as he assumes the chair of the Power Council at a time when the Council faces issues that are ever more complex and seemingly unresolvable.

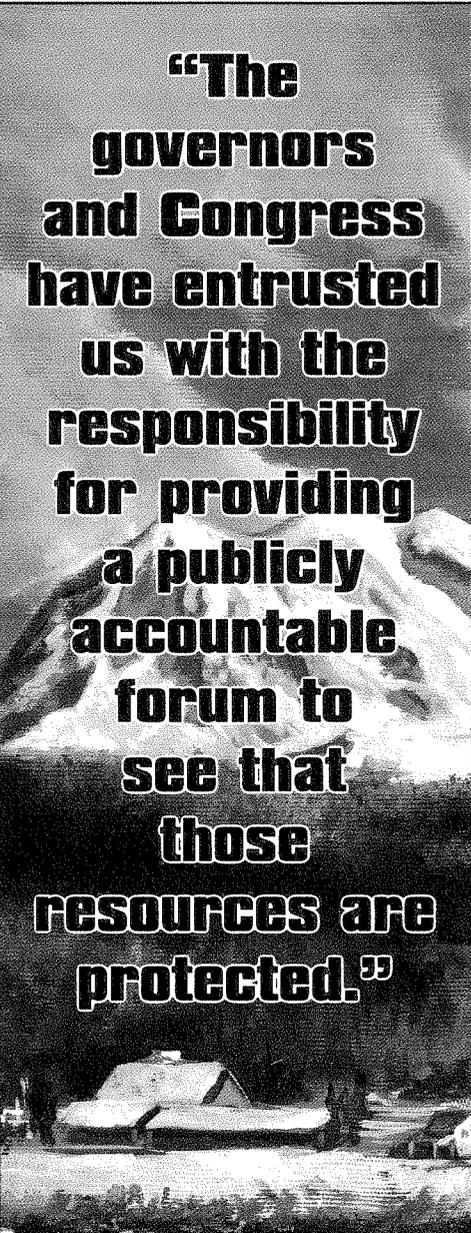
During his first months as chair, the Council adopted a new Columbia River Basin Fish and Wildlife Program and began work on its next Northwest Power Plan. As the region's salmon and other fish and wildlife begin to appear on federal endangered species lists, and the utility industry moves toward decentralized and potentially uncoordinated resource decision-making, the role of a regional body representing the four Northwest states in these important issues is coming into question.

"I've heard some people say that the Council is irrelevant in these arenas," Bottiger says. "That's like saying 'the people are irrelevant, the governors are irrelevant.' Certainly there are vested interests that would like to convince us that this is their game and we have no role to play here. Not everyone remembers what it was like before there was a public forum for power and fish and wildlife decisions, but I do."

Bottiger has a more intimate understanding of pre-Council utility decisions than most people. In addition to serving as chair of the energy and utilities committee of the Washington Senate for four years, he also chaired that state's Senate inquiry into the nuclear power plant construction program un-

dertaken by the Washington Public Power Supply System.

That program was easily the most controversial and costly event in Northwest history. Bottiger's committee exposed the cost overruns, delays and generally questionable business practices of the plants' contractors and managers. Not long afterward, two of the five partially constructed plants were terminated, and two more were "mothballed." Only one was ever completed.



**"The governors and Congress have entrusted us with the responsibility for providing a publicly accountable forum to see that those resources are protected."**

Bottiger's path into politics was fairly direct. He was in the top 10 of his law school class at the University of Washington and was hired straight out of college to serve with John O'Connell, then Washington's attorney general. "O'Connell was an active political figure," says Bottiger. "O'Connell said, 'I don't care if you're a Democrat or a Republican, but you are involved in politics. By the very nature of this office, you're involved in politics.' So he encouraged people to go out and join Young Democrats or Young Republicans."

Bottiger became president of Pierce County's Young Democrats. When a legislative seat opened in his district, O'Connell said, "You're fired. I'll give you your job back if you lose the election."

Like a kid tossed from a boat at sea and told to learn to swim, Bottiger had entered politics. He swam well.

"I won that seat by 176 votes. You never forget your first election, especially when it's a close race." He was 29, and he has been in politics ever since.

While in the Legislature, Bottiger acquired a reputation for being one of the state's most "energy-smart" politicians. But the Council must address both power and fish and wildlife issues, and Bottiger is the first to admit that for a long time he "didn't know zilch about fishing except with a rod in my hand. I understand that part," he says, and few who've fished with him would disagree. "But how the fish got there and what the problems were, I never spent a lot of time thinking about."

This is a shortcoming Bottiger has clearly corrected. He studied

*the fishery. He met with both commercial and sport fishers. He toured the dams and hatcheries, as well as wild and damaged habitat. He asked questions and listened to the answers.*

*Today, he's more frequently described as a "fish person" than a "power person." "It's kind of a backhanded compliment," he says. "I guess I can still learn some things. I've kinda come full circle."*

*Bottiger, his wife Darlene, two of their three daughters and their families all live on a 10-acre "ranchette," as he calls it, along with "a couple of horses, four cows, three dogs and I don't know how many cats." Both of his daughters' houses — each on its own acre — were father/daughter construction projects.*

**Q.** *Let's start with your priorities. What are they?*

The main message I want to send is that there's a damn good reason why we're doing what we're doing. The U.S. Congress, our state governors and an awful lot of people in this region think that Northwest fish and wildlife, especially our salmon, and the security and affordability of our electricity are worth saving. Those two areas have very significant impacts on the region's economy and its environment. The governors and Congress have entrusted us with the responsibility for providing a publicly accountable forum to see that those resources are protected.

With the Endangered Species Act listings of some of our salmon and all this talk about the Bonneville Power Administration re-inventing itself, public attention and concern are growing, as is the difficulty of our task. I'm not about to steer away from this. We hear a lot of

talk about Bonneville's health. I'm worried about the region's health.

We have a bigger role than just putting a lot of good ideas down on paper so someone can file them away on a shelf. The Northwest Power Act, our governing legislation, specifically tells us to review Bonneville's actions to determine whether they are consistent with our power plan and fish and wildlife program.

Congress wants to see these things implemented. I'm pretty clear on that score. I think there's more than enough talk in this re-

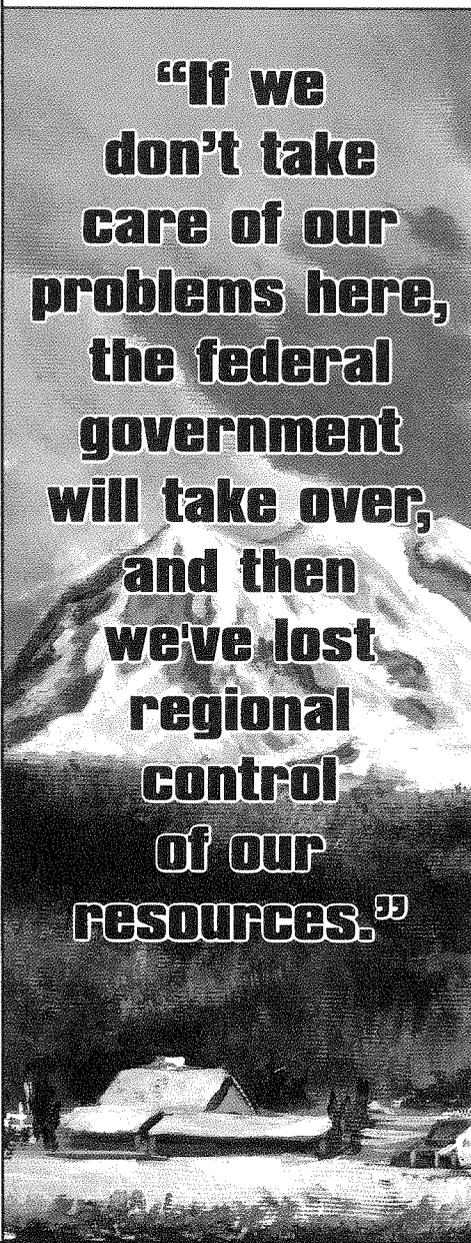
gion. What we need is action. If we don't take care of our problems here, the federal government will take over, and then we've lost regional control of our resources.

**Q.** *Well, there appears to be action on the power side. It's not just Bonneville's reorganization. The utility industry is opening to independent power producers, and federal law has created the possibility for wider access to transmission lines. This is not the same utility scene that existed at the time the Act was passed.*

That's true. The utility industry probably is going through more changes right now and in the next decade than ever before. The whole idea of having clear distinctions between power producers and power consumers is changing. Certainly the worldwide economy is shifting, and pretty much all businesses have to become smarter about how they conduct themselves than before. Everything is more competitive.

Utilities are somewhat unique in that they have been pretty much monopolies until now. Bonneville in particular has had it comparatively easy. It's had this cheap electricity that almost nobody could compete with. It still is the region's low-cost provider of electricity, but it needs to become more efficient if it is to maintain that position.

I think it's important that Bonneville re-invent itself. There clearly are ways to make Bonneville better — more efficient and easier to work with. But it's the Council's job, as representatives of the four Northwest state governors, to make sure that a new Bonneville is still responsive to the states and the policies set here in the Northwest. Bonneville still has legislative mandates that, regard-



**"If we don't take care of our problems here, the federal government will take over, and then we've lost regional control of our resources."**

less of the agency's corporate structure, it is still obliged by law to fulfill.

The Council has been working with Bonneville as much as we can to help set priorities and get the work done. We're also analyzing the changes in the utility industry so we can incorporate them into our planning process. These things could seriously affect how well we accomplish the goals of the Power Act.

We've already begun work on our next power plan because things are changing so fast. It's going to take a considerable amount of analysis to figure out where the region should go in this much more complex utility world. What does "least-cost resource"

really mean when it's not clear who's producing the power, who's selling it and who's buying it? Devising an integrated resource plan that will be useful for the whole Northwest under these conditions is just that much more complicated.

*Q. Some people will argue that it's impossible, possibly unnecessary. Why do a regional power plan?*

Well, first of all, it's our job. The Northwest Power Act specifically tells us to do it because it's the only way to protect the values this region chose when it worked with Congress to write the Power Act — conservation of electricity, development of renewable resources, public involvement in

utility planning and equitable treatment given to the needs of fish and wildlife in managing Columbia River dams.

The Council brings an important template, if you will, to the utility planning process. We can help evaluate the changes in the industry and especially the new technologies. Some of what is happening in this industry fits very well with the goals spelled out in the Act: smaller resources that can be brought into the system more quickly, for example. These are the sorts of risk-hedging resources we've been promoting for more than a decade.

But we're also concerned about some of the changes. If, for example, a more competitive industry means that the only thing



that matters is having the lowest power rates, then longer-term concerns for the Northwest environment, for our fish and wildlife, for electricity as a service, rather than just a commodity, could fall by the wayside.

The Council still believes that there are great benefits to be gained by coordinating resource planning regionwide, by sharing efficiencies, as well as sharing the risk of constructing new power plants. I'm excited when I see that several Northwest utilities are working together to develop some of the region's wind resources, for example. This is a new technology for the Northwest, and it's a lot easier to develop if utilities feel like they've got company on the frontier, so to speak.

The region needs more electricity, both because our population and our economy are growing and because we've lost some resources — the Trojan nuclear power plant and hydropower losses to help migrating salmon, for example. Some of our other power plants are old, and they'll be retired in the next couple of decades. We have an opportunity here to create a new portfolio of electrical resources, ones that align more closely with those called for in the Power Act: more renewables, more conservation.

We've got a fairly good resource in natural gas-fired combustion turbines, but we need to be careful not to put all our eggs in that basket. Even the utilities are wondering how much gas is too much. At what point do we, as a region, become vulnerable because we are too dependent on a single fuel whose price and supply we have minimal control over?

We've gotten much more efficient in our energy use, but we need to save even more electricity because lots of energy savings, especially in the commercial and industrial sectors, are still cheaper than energy generation. We could be doing our region's businesses and industries a great service by helping them cut their electricity costs. Utilities are doing some of that. They could be doing more. They need to do more.

The region's economy was built on cheap electricity, and we want to preserve that advantage as much as we can. But the Northwest has grown into a place where tradeoffs have to be made. I see the Council's role as helping to guide those tradeoffs.

**Q. Do you see the Council really having an influence?**

The Council has had a good deal of success. I think it's important to remember that a lot of what we take for granted as "standard utility practice" — things like least-cost planning and conservation being treated as a resource — just didn't exist in this region until we instituted them.

Council members have been able to work with their respective state legislatures and local jurisdictions to get more efficient energy codes adopted. We've worked with Bonneville through our resource review process to get new generating resources into development. Congress regularly asks us to report on how the region is doing. The Federal Energy Regulatory Commission solicits our view on petitions to license or relicense Northwest dams.

We worked with a broad group of people — the tribes, fishing groups, outdoor enthusiasts, state governments — to select streams

where we want to preserve habitat for salmon and other fish and wildlife, instead of building new dams.

We brought as many people as we could into the debate over how to save our salmon. Until the National Marine Fisheries Service finalizes its recovery plan for endangered and threatened Snake River stocks — and that could take years — our Strategy for Salmon is the only really comprehensive effort under way to take care of these fish.

I don't want to sound like I'm playing the same tape over and over again, but if we don't get on with implementation of the only salmon recovery plan we have right now — the Council's strategy — we can just about write off Snake River salmon. And it's just a matter of time before other runs join them.

If people are worried about what it's costing us now, wait until the federal government lists more and more of our fish. We can protect them all now, or pay a greater price later. The Endangered Species Act can require some pretty drastic measures.

On the other hand, if the local community or some other entity has developed and is implementing its own recovery plan for a species that could come up for listing as endangered or threatened, the federal government can forego the listing in favor of the local effort. The key, of course, is that the plan has to be implemented.

I'm especially excited about the watersheds where ranchers and farmers and environmentalists and business people from in town and all sorts of folks are developing their own plans for repairing habitat so salmon can thrive in their streams. If they get out there in those streams and do the work they propose, they could keep fish

and wildlife in their areas from being listed.

In the Sacramento River Basin, they had a pretty good recovery plan written, but they didn't implement it. Well, when that happens, the federal government can step in and order people to do what needs to be done. In California, it meant farmers had tremendous cutbacks in their irrigation water so there'd be water left in the river for salmon. We need to make sure we don't make the same mistake they made in California.

**Q. What is the most difficult piece of the strategy to get implemented?**

Well of course most of the controversy is about how to operate the dams. Half the people who yell at us are mad because we didn't demand enough water for the fish. The other half say we ask for too much.

I find it interesting to look at the amount of water we set aside for fish in comparison to other uses. We estimate that we give up between 300 and 400 megawatts of hydropower to protect the salmon every year. That's water we either spill over the dams instead of through turbines or water we store when we could be generating and release later to help migrating fish when we have less of a need for hydropower.

For comparison, it takes about 1,200 megawatts worth of water to irrigate the region's farms every year. And I'm not saying that's wrong. I'm just saying I don't hear a lot of people complaining about the lost electricity — more than enough for the whole city of Seattle, by the way — because the water is diverted into fields and orchards instead of run through dams.

Farming is very important to the Northwest economy. So are the salmon.

**Q. Is the region implementing the Strategy for Salmon? Or can we expect more stringent federal controls in the near future?**

The Council has been tracking the region's implementation of the Strategy for Salmon and reporting to Congress on it every month. Right now, we're implementing about 90 percent of the measures. And I want to say here that we're not just talking about ratepayer-funded measures. Congress appropriated about \$100 million for the Northwest's salmon in last year's federal budget and more than that in this year's. There are also volunteer efforts and activities funded by the states and other sources.

Some federal and state agencies have been very cooperative. Others have been less so. At the end of March, we'll be sponsoring our annual review of implementation, and we'll name names and point fingers there. But anyone can get copies of our monthly implementation reports from our central office.

**Q. What about resident fish and wildlife?**

We adopted new measures for protecting wildlife and non-seagoing fish in November. Probably the most important aspect of those measures is that they take an "ecosystem" approach.

One of the things we're learning from our efforts to save salmon is that you can't just fix one stretch of a river and ignore upstream and downstream impacts. Well that's equally true of other fish and of wildlife.

We're learning a lot about nature by trying to restore parts of it. It's tough going. Sometimes we do something for salmon that then has a negative effect on some fish upstream that don't swim to the ocean, but still need a specific set of water conditions.

On the positive side, we often can create a beneficial habitat for one specific species and find that many other species also benefit. Sometimes we know in advance what those side benefits are going to be so we can plan with that whole system in mind. Sometimes we're just lucky.

It's almost a model for our larger task with the Columbia River Basin as a whole: we have to try to balance systems that are very complex and that have been badly damaged — not just natural systems, but local economies that depend on the river, too. Some of the damage is irreparable. We can't fix everything we'd like. Other parts are fixable, but it's neither cheap nor easy. I think we're learning how to fix some of it. I think it's important work we're doing. I mean the region, here. I think it's important work the region is doing.

# Two nations, one habitat.

## Addressing the loss of salmon from the upper Columbia River Basin.

by John Harrison

**I**n the Ktunaxa-Kinbasket language, the word for salmon is sw'aqmu.

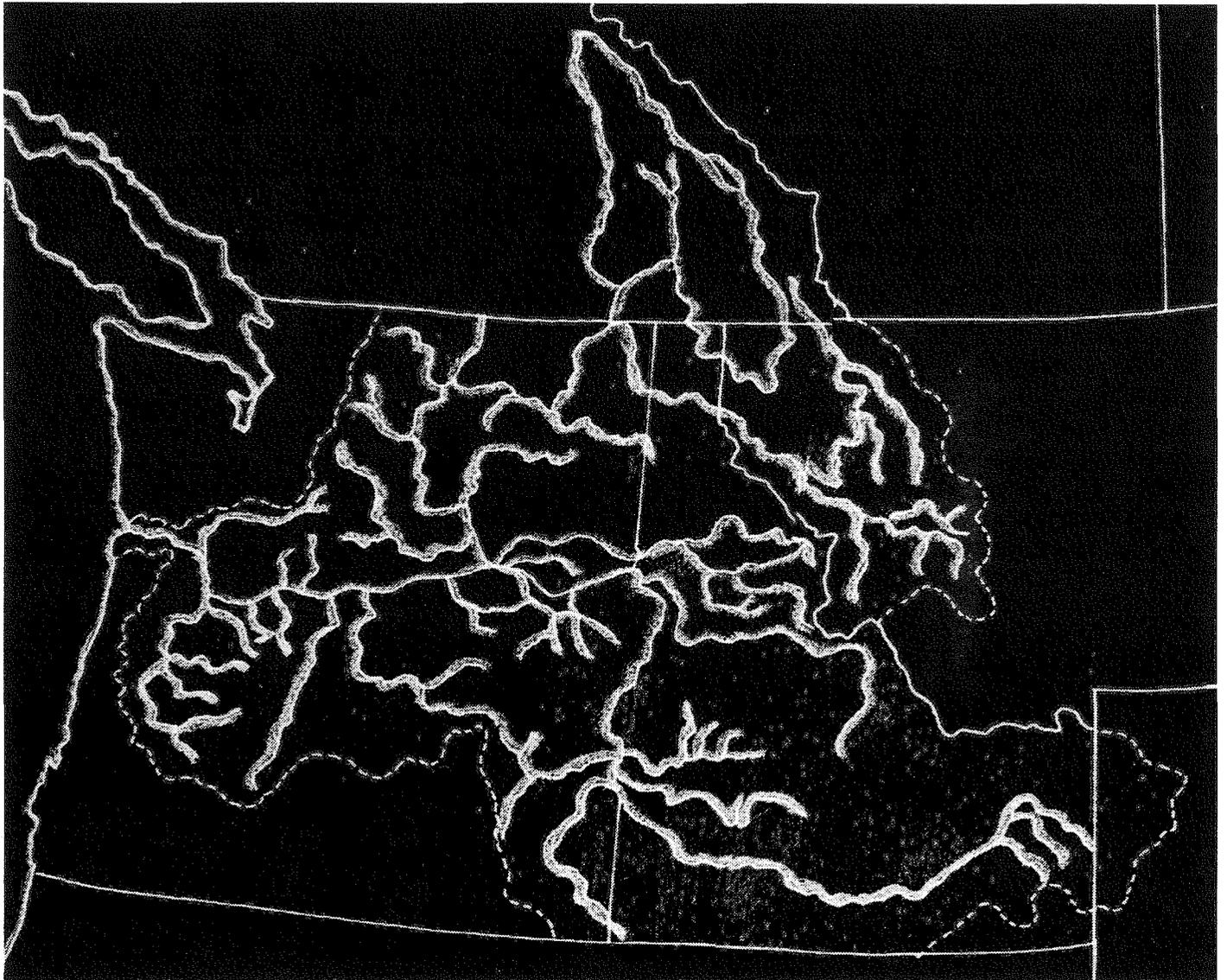
To the Ktunaxa-Kinbasket people, whose descendants have populated the upper Columbia River Basin for millennia,

sw'aqmu is a word without substance. There are no salmon today in the Ktunaxa-Kinbasket homeland. Sw'aqmu evokes only memories of salmon.

One who remembers is Wilfred Jacobs of Creston, the 60-year-old

hereditary chief of a Ktunaxa band. He has boyhood memories of salmon in the Kootenai and upper Columbia rivers, runs that were decimated by pollution and the impact of dams downstream.

"The elders told me what the



resource had been," Jacobs told an audience of about 60 at a fisheries workshop in Vernon, British Columbia, recently. "We had the word for salmon in our language, but we had no salmon. Grand Coulee Dam was the final blow to our salmon."

**A** year ago the Ktunaxa-Kinbasket Nation and two other British Columbia tribes — the Okanagan and Shuswap — formed the Canadian Columbia River Inter-Tribal Fisheries Commission. Through the Commission, the tribes are pursuing their goal of improving all fish runs and fish habitat — not just salmon — in the rivers of the upper Columbia Basin. They envision a cooperative effort involving tribal and non-tribal governments on both sides of the border.

But it will take more than wishful thinking to turn the vision of sw'aqmu into reality. It will take determination, muscle — political and corporal — common vision and money. That's what the tribes came to Vernon to discuss: finding the will and the money to reach their goal.

The Vernon conference, a year in the planning, was the first step. It will be a long journey.

### Indians without treaties

"The United States is about 15 years ahead of us in many ways in dealing with tribal fisheries issues, and we're looking for ideas on how to proceed," said Doug Gordon, fisheries policy consultant who helped organize the Vernon conference.

**"We  
had  
the word  
for  
salmon  
in our  
language,  
but we  
had  
no  
salmon."**

**R**oy Sampsel, a fisheries consultant who has worked with mid-Columbia tribes south of the border, said the U.S. tribes faced similar issues 15 years ago. The tribes — Yakima, Umatilla, Nez Perce and Warm Springs — formed the Portland-based Columbia River Inter-Tribal Fish Commission to give the tribes legal and technical expertise. Those tribes have fishing rights guaranteed by treaties with the United States that date to 1855.

Their Canadian counterparts have no similar guarantees. Nor does the Canadian Columbia River Inter-Tribal Fisheries Commission have a permanent staff or budget, as does its counterpart in Portland.

But the two commissions have common interests. Both are working to improve salmon runs in the Columbia Basin. Both represent tribes whose ancestors fished for salmon in the Columbia River and its tributaries before white people arrived. The Portland-based Commission co-sponsored the fisheries conference with the Canadian tribes, the Northwest Power Planning Council and agencies of the B.C. and Canadian federal governments.

**B**ecause they lack fishing treaties, and because their homelands are at the top of a staircase of dams from the ocean up the U.S. portion of the Columbia, British Columbian tribes say the salmon loss was particularly painful.

"That mighty Columbia River, it starts right in the heart of Ktunaxa homeland," said Sophie Pierre of Cranbrook, a member of the Ktunaxa-Kinbasket Tribal Council and one of three keynote speakers at the Vernon conference. "We have [the Columbia] in common with at least three aboriginal nations, whose lives are affected by and guided by the Columbia River. And yet, when this river was being so dramatically impacted and when the resources were indiscriminately destroyed, these three nations of people were not considered. It was like we didn't even exist.

"Well, a lot of aboriginal teachings say everything in life comes a full circle. You spit on your neighbor, and the wind changes and it comes back to you. Everything comes to full circle. So, too, this destruction on the Columbia has come full circle, where now we are looking at the restoration of this great river."

## In search of cooperation

Right now in Canada the question of tribal fishing rights is emotionally charged, to say the least (see box). Some would call it hostile. So the Canadian Columbia River Inter-Tribal Fisheries Commission has a difficult task as it seeks to promote cooperation and coordination to restore fish runs and improve habitat in southeastern British Columbia.

"You have come here to help us help each other to develop a process for our mutual benefit, and more importantly, a process for the benefit of the Columbia River," Pierre noted in her keynote address at the Vernon conference.

**P**erhaps because the Columbia River in Canada doesn't suffer commercial fishing pressures like the Fraser River, which flows through Vancouver, the parties defining native fishing rights in the upper Columbia are generally more conciliatory than those battling in the Fraser Basin. That probably also reflects the fact that fish in the upper Columbia, in the Okanogan and Kootenai watersheds, do not have the commercial value of fish caught and sold on the coast. This in turn reflects a lower government priority to anadromous fisheries in the Canadian Columbia. While the tribes agree on the need for compensation, there are different opinions about what that means.

"We were overrun by Europeans," said Ray Hance, natural resource management advisor to the Tsilhqot'in Tribal Council. Hance is something of an outsider in the Columbia Basin, as the Tsilhqot'in tribal homeland is in the Fraser River Basin. However, issues of tribal rights are similar, he said.

**"The United States is about 15 years ahead of us in dealing with tribal fisheries issues."**

"You hear that no one knows the answer to the question of aboriginal title to land, but Indian people know," Hance said. "We know we own all the land until there is a treaty."

**T**o Hance, that means the First Nations, as Indian tribes are called in Canada, are due compensation for the loss of their land and natural resources. "It means money — quite a lot of money," he said. "I think we've been robbed pretty badly."

To Albert Saddleman of the Okanogan Tribe, compensation "doesn't have to mean just money. From the First Nations' perspective, it means fish, too," said Saddleman, tribal fisheries coordinator. The tribe's homeland is along the Okanogan River, a Columbia tributary that begins in Canada. Salmon still spawn in the Okanogan, which enters the Columbia below Chief Joseph Dam, but not in the numbers that spawned before dams were built downstream.

**T**o Sophie Pierre, compensation means restoration of species while recognizing the limitations imposed by modern civilization, but working within those constraints to make the river as productive as possible.

"The Ktunaxa nation — and I think I can safely say this is the aboriginal perspective — first of all is concerned with the Columbia River," she said. "I know that river will never be exactly the way it was. No, there are too damn many dams on that river. And, more significantly, we are too dependent on the power that comes out of that river. So our goal is to find the optimum restoration of the water quality as well as the water quantity."

Jacobs of the Ktunaxa band agreed. "Compensation, for me, means cleaning up the pollution. Salmon will never return to the Kootenai, but there are other enhancement programs that we are interested in," he said.

The tribes are finding support for their restoration goals from non-Indians. "For too long, aboriginal and non-aboriginal people alike have been told by govern-

ments what they want to hear, and then the governments do something completely different," said Bill Wimpney of Chilliwack, near

Vancouver. A gunsmith by trade, Wimpney is the director of the B.C. Wildlife Federation. "It happens to all of us. We need a

process that is jointly developed. In those areas where we can cooperate, we need to move forward."

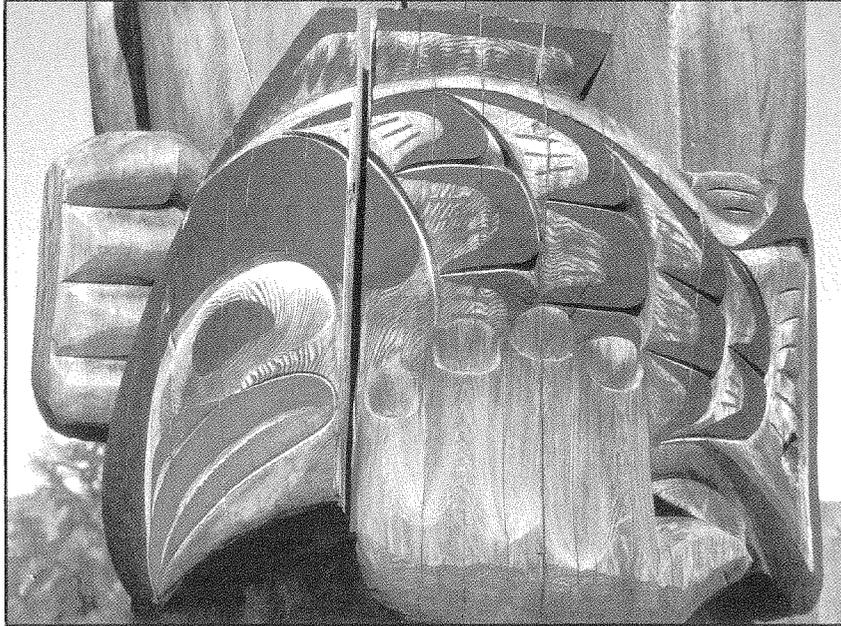
## The Rights of First Nations

Until 1991, it was illegal for Indians to sell fish in Canada. In fact, it may still be illegal, as the torturous fall-out of legal opinions and appeals continues from a landmark court decision. It will be several years before the matter is settled.

The critical decision came in 1991 when the Supreme Court of Canada ruled that Indians have the right to fish for food, social and ceremonial purposes, and that the government could only regulate the Indian fishery for purposes of conserving the fish runs. The case involved Indian fisher Ron Sparrow, a member of a Fraser River tribe in western British Columbia who was arrested in 1984 for fishing illegally. While his case did not specifically involve commercial fishing, it did raise critical issues of tribal fishing rights and the Canadian government's responsibility to protect the rights and well-being of Indians.

"The Sparrow case reaffirmed the Indian right to fish, and some have interpreted the social aspect as involving commercial fishing," said Doug Gordon, a Vancouver-area consultant who is working with the Canadian Columbia River Inter-Tribal Fisheries Commission on upper Columbia River fisheries issues. "But a more recent B.C. Court of Appeals decision said the social aspect is no justification for commercial fishing, and so the matter is headed back to the Supreme Court."

It is a highly controversial topic, particularly in British Columbia, where native Indians have been waging a long fight for equal rights. It was not until 1960, for example, that Indians were allowed to vote in federal elections. Aboriginal rights to land were recognized by the King James' Royal Proclamation of 1763, but these rights are a matter of contention in British Columbia.



*Detail from a Vancouver Island totem pole.*

In June 1991, a task force appointed to address Indian land issues recommended that the government negotiate treaties with the tribes. In September 1992, the First Nations and the federal and provincial governments agreed to create the B.C. Treaty Commission to facilitate treaty negotiations. Tribal rights to fish and wildlife are certain to be key topics for negotiation.

A federally financed study concluded that allocating half of the commercial fishery to Indians would cost

British Columbia's existing fishing industry \$5.5 billion over the next 25 years.

Meanwhile, in the summer of 1992 the government negotiated commercial fishing agreements with several tribes for Fraser River sockeye. It was the first sockeye season after the Sparrow decision. The Lower Fraser Fishing Authority was allocated 400,000 fish for the fishery, but the catch surprisingly was less — about 300,000 fish. This was far below estimates of commercial fishing groups, who had accused the native fishers of taking upwards of 1.2 million fish.

Native fishers felt vindicated by the final figures, but an atmosphere of distrust, anger and suspicion lingered. In a January 7, 1993, editorial entitled "Breeding contempt," the Campbell River Courier (Campbell River, B.C.) commented: "Certainly, Native Indians should be allowed a certain amount of special hunting and fishing rights so that their culture and traditions can be upheld. But those rights should be rigidly allocated and enforced. ... To be painfully honest ... it would be impossible to find a conquered or assimilated people who enjoy the special status our Native Indians do. Yet today's politicians seem bent on giving them more when, in fact, the benefits Native Indians do enjoy should be cut back."

— JAH

**T**he First Nations could pursue compensation through a variety of legal remedies, said Harry Slade, a Vancouver attorney who has represented Indian tribes. "The most powerful argument could be made against Canada for failing to protect the First Nations' right to fish," Slade said. "But negotiation is the best way to deal with this. It would be difficult to establish a level of mitigation and compensation."

Art Pape, also an attorney for Indian tribes, agreed. "How much compensation is enough?" Pape asked. "You couldn't ever put a price on it. Compensation means conserving, rebuilding the resource — it must have broad overall objectives. It must be informed by the expertise and spiritual strength of the people, particularly the elders."

### Who will pay?

Fifteen years ago, the mid-Columbia tribes faced a similar dilemma, Sampsel told the Canadian tribes.

"The vision of our tribes was not what the tragedy of the past had been, but what was the hope of the future," Sampsel said. "We thought about the children, we thought about the resource because what's good for the resource is good for Indian people. I hate to sound like a pragmatist, but once you get past the vision, two things change the status quo — money and people."

It was clear at Vernon that the Canadian tribes are thinking along the same lines. They have the people, but they need money and Canadian government support to turn their good intentions into action.

**"Two things change the status quo — money and people."**

**T**here are various potential sources, including B.C. Hydro, which has a fund to pay for mitigation of the environmental impacts of dams, and the federal and provincial governments. Even the Bonneville Power Administration, which purchases some of its power from B.C. Hydro, and is funding recovery efforts for fish and wildlife losses on the U.S. side of the border, has been pointed to as a possible source of money.

But perhaps the funding source that most intrigues the tribes is the Columbia River Treaty, a power-generation agreement signed by the United States and Canada in the early 1960s. Under the agreement, British Columbia built three

dams in the upper Columbia Basin — Keenleyside and Mica on the Columbia, and Duncan on the Duncan River, which flows into the Kootenai, a Columbia tributary. Only Mica generates electricity. Keenleyside and Duncan have huge reservoirs that store water for power generation at downstream dams and for flood control.

**I**n exchange for coordinating water storage and power generation with dams downstream, Canada receives half of the additional electricity generated downstream as a result of the treaty. This amount of power is known as the Canadian Entitlement. Canada sold its entitlement in 1964 to the Columbia Storage Power Exchange, a consortium of 41 electric utilities in the Pacific Northwest.

Under terms of the agreement, the consortium will begin returning that power to Canada in 1998 — 9 percent that year, 46 percent in 1999 and 45 percent in 2003. In all, the amount totals 550 megawatts of energy and 1,440 megawatts of capacity. That's nearly enough energy for a city the size of Portland.

Deciding how to return the power is a complicated matter. British Columbia probably will not be satisfied with simply receiving the power. In an official publication, the province's Ministry of Energy, Mines and Petroleum Resources, which regulates B.C. Hydro, said: "The Province is determined to maximize the value of its benefits represented by the Entitlement. Included in calculating this value are direct financial development benefits and environmental costs."

**T**o the tribes, “environmental costs” include repairing some of the damage done to Columbia Basin fish and wildlife by the dams — not just in the United States but in Canada, too. To be sure, dams south of the border caused the greatest damage to anadromous fish. But the tribes suggest that, if the United States is returning downstream benefits to Canada, perhaps a portion could be directed to the Canadian Columbia River Inter-Tribal Fisheries Commission to be used for mitigating environmental damage in the Kootenai and Columbia drainages, which would include restoration of anadromous and resident fisheries.

That’s not really an issue for the United States because neither Bonneville nor the utilities can direct where British Columbia spends the money it receives. But Sophie Pierre intends to let the provincial government know how the tribes feel.

“Our two countries are talking about downstream benefits,” she said. “It’s quite an issue here in British Columbia. When we talk about downstream benefits, I think we should be asking what’s in it for the river and what’s in it for the fish. That is very high on the aboriginal agenda.”

Fish are high on other agendas, too, including the Northwest Power Planning Council’s.

**“We  
should  
be  
asking  
what’s  
in it  
for  
the  
river.”**

“Unless we address both Canadian and U.S. concerns in the Columbia River, both for resident fish and for anadromous fish, we’ll be ignoring major portions of the watershed. We need to work with the Canadians,” said Council Chair Ted Bottiger, who attended the Vernon meeting. “There are important benefits for all of us if we work together.”

**F**or Canadians, that could mean more salmon returning up the Okanagan River. Or, it could mean financial assistance to improve the habitat and productivity of those fish and wildlife populations that migrate back and forth across the border.

Whatever happens, though, the tribes want it done quickly.

“We know [the Columbia] is never going to be exactly the same. Ktunaxa will never catch sw’aqmu again at the end of the Columbia,” Pierre said. “But the optimum restoration of those species that can survive in a Columbia River at its optimum quality and quantity, that’s what we’re talking about — bringing the river back to life, back to that full circle.”

# Shaping the Future of the Fraser River Basin

by Carlotta Collette

## British Columbians develop a sustainability strategy.

About a quarter of British Columbia is drained by the Fraser River. It's an area the size of Great Britain. The Fraser starts high in the Northern Rockies and eventually slides through Vancouver into the Straits of Georgia. From its headwaters, through the vast majority of its 820-mile run, the river is unmarred. But as it closes in on the urban south, the pressures of an expanding economy begin to diminish it.

British Columbia is the fastest growing province in Canada, and two-thirds of British Columbia's population reside in the Fraser Basin, almost all of that in the lower few miles in and around Vancouver. Population projections peg growth in those areas at between 50 percent and 200 percent over the next 25 years. There are altogether 60 local communities in the Fraser Basin and 96 Indian Bands.

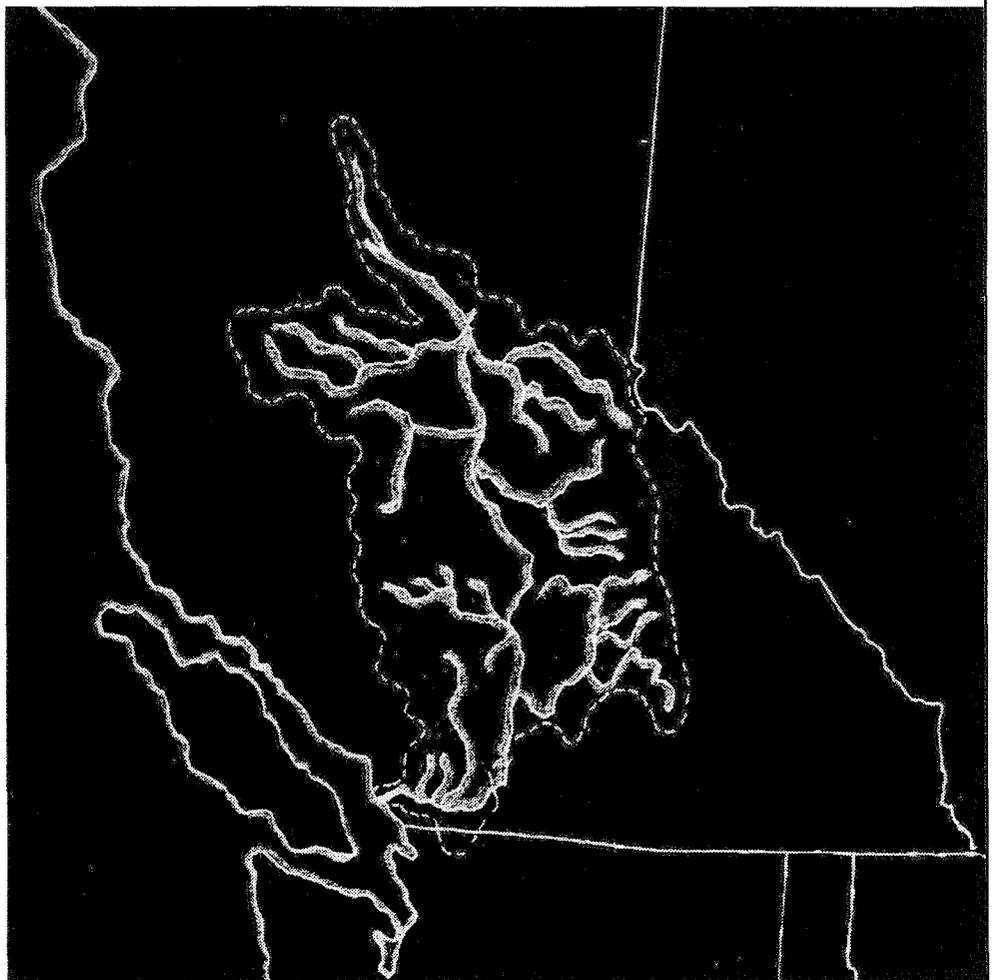
The basin is remarkably resource-rich with timber, coal, natural gas and an assortment of tempting metals to mine. The Fraser is purported to be the greatest salmon producing river system in the world. There's also

a broad base of manufacturing, a robust service sector and exciting opportunities in high technology. Agriculture there is thriving.

In short, all the signs point up: the Fraser Basin is booming. Is

there a problem with that?

The people of the Fraser Basin think there could be, and they are taking precautionary steps now before potential problems become irreversible. What one hears these



days, in the halls of British Columbia's Parliament, as well as in town meetings, is talk of "sustainability." Having watched the rest of the world develop without a great deal of attention to the very long term, residents of the Fraser Basin, many of them in flight from overdeveloped places like Hong Kong and Los Angeles, want to do things differently.

In 1991, there was a remarkable coalescing of federal, provincial and local initiatives all focused on managing the Fraser Basin's future. The federal government adopted a "Green Plan" that included a Fraser River Action Plan. The provincial government announced its own "Environmental Action Plan" for the Fraser. Local governments formed a coalition to coordinate their efforts on behalf of the basin.

Finally, on May 26, 1992, the federal, provincial and local governments agreed to a five-year cooperative effort to coordinate government and private sector actions to "ensure sustainability in the Fraser Basin." They formed the Fraser Basin Management Board, with three federal, three provincial, three local government and three First Nation (Canadian Indian tribes) representatives. Six members at large represent environmental, industry and labor interests from throughout the basin. A chairperson oversees the group.

Government appointees to the board are high-level department heads, deputy ministers and senior advisors. There's a city mayor and a tribal chief. There's a retired corporate chief executive officer and a few college professors. They are all people with clout.

## Residents of the Fraser Basin want to do things differently.

The Board began by holding public meetings throughout the basin. They asked everyone they could reach for advice — what should they be doing, what are the local concerns.

With a stack of comments in hand, the board and its small staff began its analysis. On May 26, 1993, exactly a year after the Fraser Basin Management Program was initiated, the board released its first five-year strategic plan.

The strategic plan established six principles that underlie the sustainability program:

- Influence the governments to ensure the fundamental needs and values of the people of the Fraser Basin, present and future, are met while recognizing the Basin's ecological constraints.

- Foster equal and fair access to information and decision-making processes to reflect all citizens' needs and aspirations for ecological, community and cultural diversity.

- Incorporate and support First Nations in a manner that is consistent with the existence of their aboriginal rights.

- Ensure that integrated and innovative approaches occur throughout the full range of planning levels in the basin by coordinating the collection, analysis and sharing of data and information.

- Ensure renewable and non-renewable resources are conserved and prudently managed.

- Recognize the need for adaptive and precautionary decision-making.

Because the board is broadly representative and has access to federal, provincial, local and private funding sources, the research and demonstration projects outlined in the strategic plan stand a good chance of being implemented.

Work in each of the four priority areas — water resources management, waste management, fisheries and aquatic habitat management and community development — has already begun, largely by tagging existing efforts and tailoring new efforts to support and expand on the best models. An analysis of existing institutions and institutional relationships is also under way, the goal being to identify gaps and overlaps so efforts can be more effectively integrated.

# SOLAR CITY

NEW HOMES IN NAMPA, IDAHO, FACE THE SUN FOR ENERGY SAVINGS.

by Maridee Buersmeyer

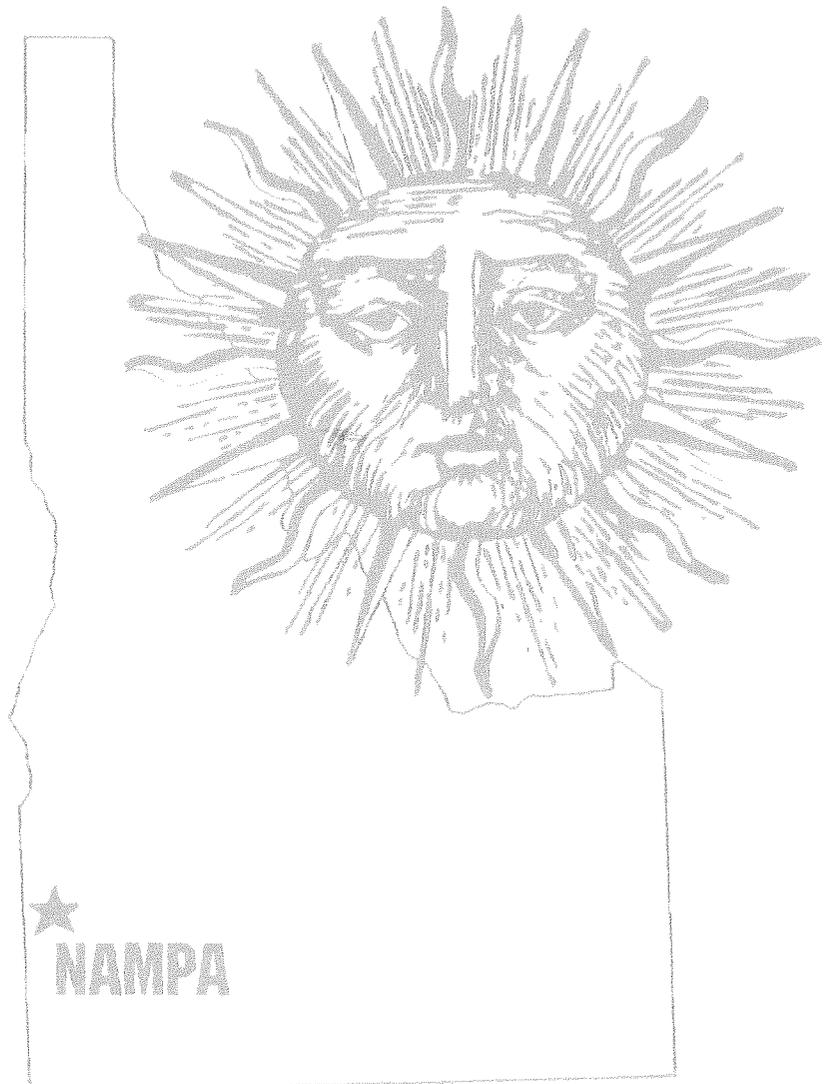
The natives are getting restless. The Idaho natives, that is. There has been a lot of publicity about "their own private Idaho." Recent articles in publications such as Money magazine and the New York Times have promoted Idaho's livability factors: clean air, recreation access and a low crime rate. All of this free publicity has resulted in many new residents and an increased demand for new housing.

Many Idaho natives would prefer to have kept their private Idaho private. But as urban planners say, you can't stop growth, you can only plan for it responsibly. And responsible growth includes conservation of limited resources like electricity.

One important factor that rarely seems to be mentioned in articles promoting Idaho is the climate. Even in the Treasure Valley, an area in the southwest part of the state that is often called Idaho's "banana belt," heating bills run in excess of \$150 per month for an average home. Newcomers should not plan to grow bananas in Treasure Valley cities. There are bone-chilling winter winds and the temperature may hover around zero degrees Fahrenheit for one to two months.

But "banana belt" cities like Nampa, which is about 20 miles west of Boise, have more days of sunshine, even when it is bitterly cold, than most sister cities out-

side of the valley. This may not make the Treasure Valley a balmy paradise, but it does provide an opportunity to "side with the south" and maximize solar effi-



ciency when building new homes.

Which is where responsible city planning comes into play.

Five years ago, Nampa was experiencing a growing demand for new housing subdivisions. City planners had been talking for some time about passing an ordinance to orient new subdivisions so homes faced the south, to maximize solar heating benefits.

With funding from the Bonneville Power Administration, the planners obtained data on how much electricity such an ordinance could save. The City of Portland had studied and adopted a similar ordinance, but Nampa's average daily sunshine rate is much higher than Portland's, so the opportunity for energy savings is even greater. The studies indicated that energy savings could average 10 percent to 20 percent per home when compared to non-solar homes. Adding solar water heating or photovoltaic electricity could increase those savings.

Norman Holm, planning director for the city of Nampa, was the catalyst for this project. He'd long promoted energy conservation. Adding solar access to the city's building ordinance was a logical next step, he figured.

The ordinance reflects five key principles:

- Protect solar access;
- Keep administration simple and efficient;
- Provide equitable treatment for all properties;
- Provide certainty about what levels of sun and shade would be protected in the future; and
- Be flexible in dealing with a variety of development conditions.

It was passed in 1988. That same year, the city of Nampa received the national Department of Energy Award for Energy Efficiency for its solar work.

The Nampa ordinance requires builders to orient new homes to face south and ensure that the streets run accordingly. Holm found that builders and developers were very cooperative.

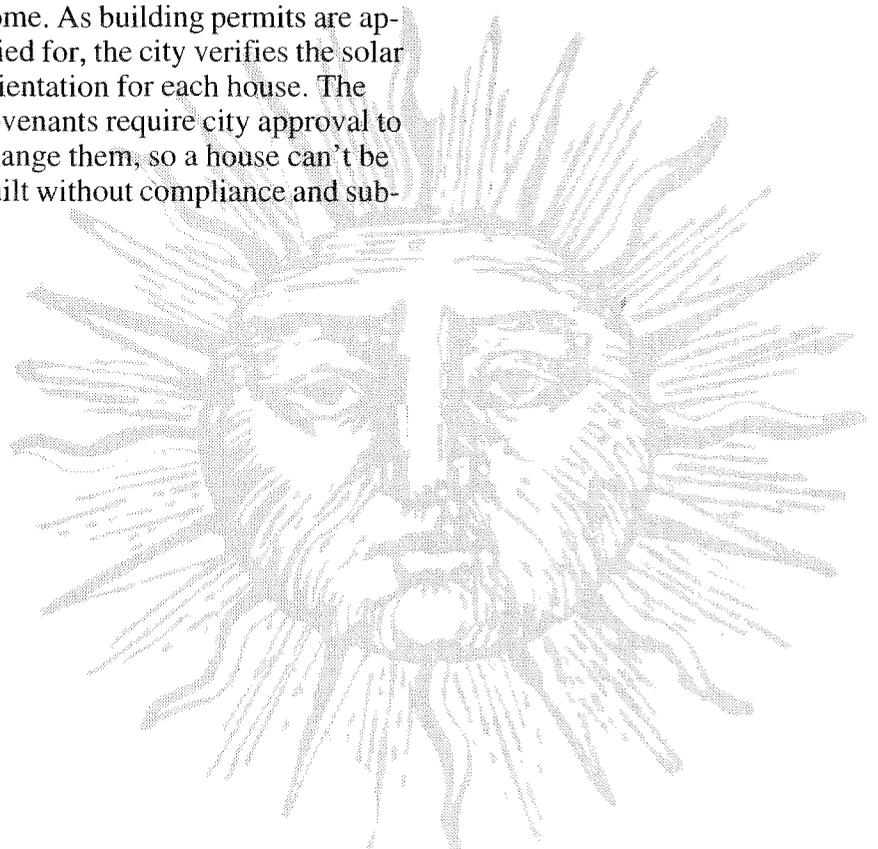
"We've not had any problems getting them to do this," he says. "The goal of the program is to have 80 percent of new homes in a subdivision comply with the covenants. Some builders are able to go over the goal, and we're flexible with those who can't orient every single house to the standards."

Enforcement of the ordinance is not a problem either because it is recorded in the covenant provisions for each development and home. As building permits are applied for, the city verifies the solar orientation for each house. The covenants require city approval to change them, so a house can't be built without compliance and sub-

sequent city approval.

"When we started thinking about doing something like this," says Holm, "it was slow around here. There wasn't much building going on. Now we see it was just in time." Annual new single-family and two-family residential building permits increased in the past five years from 36 to 350. Holm says "the full impact of this won't be recognized until energy costs get so high that solar is the only feasible alternative."

*Maridee Buersmeyer is public affairs director in the Council's Idaho office.*



# Letters

## TO THE COUNCIL

### Editor's Note

*Energy News encourages letters on subjects discussed in this magazine. Please keep letters under 200 words, refer only to topics covered in Energy News and address them to LETTERS, when you send them to our office. Thank you.*

### Dear Energy News:

I am appalled at the unconscionable influence allowed by government and the press to extremist environmental preservation groups. Including small local groups that assume instant regional stature with a name-change, like Pacific Rivers.

Public polls showing support for environmental restoration are based on press-fed, unsubstantiated cries of "Wolf!" that decry man's use of the environment. Such as *USA Today's* quote of EPA administrator Carol Browner to the effect that wetlands are "currently being lost at a rate of nearly 300,000 acres per year," when she knows that the last authoritative surveys were done in the mid-1980s. She also knows that the significant wetlands

preservation/restoration laws were promulgated in the late 1980s. (The National Audubon Society's latest plea for donations used that same sky-is-falling figure of 300,000 acres "lost every year...")

Fish are not vanishing because of dams and agriculture and forestry, as proved by abundant fish populations that previously coexisted with those circumstances.

The circumstances that have changed are preservation of predators, ocean driftnet fishing, and increased, self-regulated fish netting across streams by Indians after the Boldt decision.

The public will be furious when they finally realize, after the expenditure of billions of restoration dollars and dam removals, that they've been had because the cure was not addressed to the cause. Sincerely,

Maxine Keesling  
Woodinville,  
Washington

**"Fish are not vanishing because of dams and agriculture and forestry, as proved by abundant fish populations that previously coexisted with those circumstances."**

### Dear Energy News:

Thank you for your pertinent articles in the November/December issue of NW Energy News.

Regarding "Paper Fish," the actual, not paper, redd count of returning Snake River fall chinook to the area below Hell's Canyon Dam near Lewiston this year was 32 nests. Compared with 47 counted last year, this is not only a significant loss, but it is also clear that these "threatened" fish are on the verge of extinction.

According to the Idaho Department of Fish and Game, the deaths of wild fall chinook caused by man are as follows: 1.3 percent adult migration through the hydroelectric system, 7.3 percent

harvest in the ocean and Columbia River, and 91.4 percent juvenile migration through the hydroelectric system.

Ninety percent of our effort to recover threatened and endangered Snake River salmon should be directed at juvenile migration issues. Establishing firm velocity targets during juvenile salmon migration season should be the priority of all recovery plans, whether they are issued by the National Marine Fisheries Service or the Northwest Power Planning Council. Sincerely,

Kathleen Menke  
McCall, Idaho

# Letters TO THE COUNCIL

Dear Energy News:

Your article on "The PIMBY Future" was very disappointing. Your author quickly dismisses the renewable technologies on her way to promoting fuel cells — exceedingly expensive machines with enormous embedded energy costs, including the external costs of running fuel to all these cells. It is sad that in the same issue, I found not a single mention of the first "National Tour of Independent Homes" (October 16, 1993), which included several homes near and in our region. You really do make me wonder. If you could meter the sun and wind, would you promote it more?

Seems like it.  
Regretfully,

John F. Erickson  
10400 N. 29th St., Suite 100  
Bellevue, WA 98004

Dear Northwest Energy News:

You state in your response to Mr. Erickson [last issue's letters] that 15,639 acres were inundated by the construction of McNary Dam. How many more miles of shoreline have been created that is now waterfowl habitat, and what is the net gain?

The Conforth Ranch is really nothing but a

pile of rocks, and the previous owners must be laughing all the way to the bank; all in the name of "mitigation."

Sincerely,

Don Erickson  
10400 N. 29th St., Suite 100  
Bellevue, WA 98004

Response:  
Dear Don,  
I am sorry to hear that you were disappointed in the article. The author's intent was to highlight the challenges of renewable energy, particularly fuel cells, which at the time were indeed very expensive and had high embedded energy costs. The article was not intended to dismiss renewable technologies but to provide a realistic assessment of their current state. The "National Tour of Independent Homes" was a significant event, and I regret that it was not mentioned in the article. Your feedback is appreciated, and we will strive to provide more comprehensive coverage of renewable energy and local events in the future.

Today we received our regular issue of the "Northwest Energy News" produced by the Northwest Power Planning Council. The news in this issue once again is concentrated on salmon fishing in the states of Idaho, Oregon and Washington. Quite frankly, the

Northwest Power Planning Council seems to have put in place an effort based on the saving of *our* fish and "to hell with *your* fish." Today the Hungry Horse dam is again pouring out a stream of water in spite of the fact the reservoir behind the dam is a disaster. All of western Montana, our water and our fish, seem to be expendable when it comes to saving the majority of the Council's fish.

Frankly, I am proud of our Governor Racicot when he threatened to sue Bonneville Power for their arbitrary use of Montana waters.

During my early years, I worked on and was privy to, the creation of the Hungry Horse Dam. If my memory serves me correctly, Senator Mike Mansfield was instrumental in requiring reservoir levels be maintained at the maximum until September 1 of each year; thereby allowing Montanans and our Montana visitors to enjoy the recreational use of this area.

Today, any and all early commitments seem to have been ignored with regard to the Hungry Horse reservoir. I am sure that the

Kootenai Dam reservoir is experiencing similar inconsiderate management, leaving us with summer-long massive mud flats far outdistancing existing boat ramps.

At this point, I would strongly encourage Governor Racicot and the State of Montana to proceed with the lawsuit.

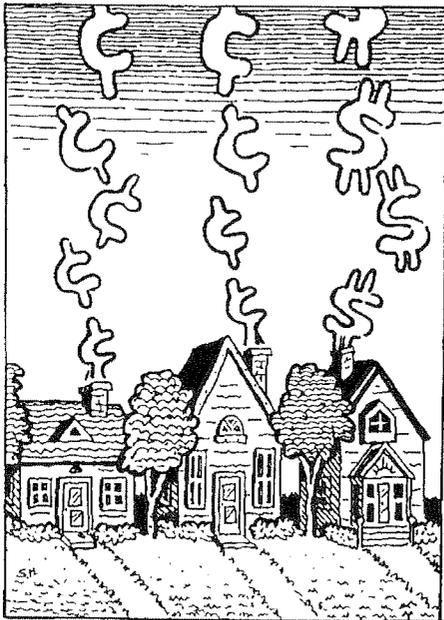
Sincerely,

John F. Erickson



# SHORTS

## The Northwest



### Home energy use is declining.

The U.S. Department of Energy reports that energy use in the average Pacific Northwest residence is 10 to 15 percent less today than 15 years ago. The average price of energy — this includes electricity, natural gas and heating oil — is about the same as it was between 1977 and 1979, adjusted for inflation. [Source: Clearing Up, November 1, 1993.]

**Oregon cities join forces to finance energy-efficiency measures.** Six municipal governments in Oregon have agreed to pool their resources to finance energy-efficiency projects such as home weatherization. The cities all operate municipal electric utilities and purchase their electricity from the Bonneville Power Administration. The new Oregon Municipal Energy and Conservation Agency includes Ashland, Forest Grove, Milton-Freewater, Monmouth and Springfield. [Source: Ashland Daily Tidings, October 8, 1993.]

### Idaho leads in job creation.

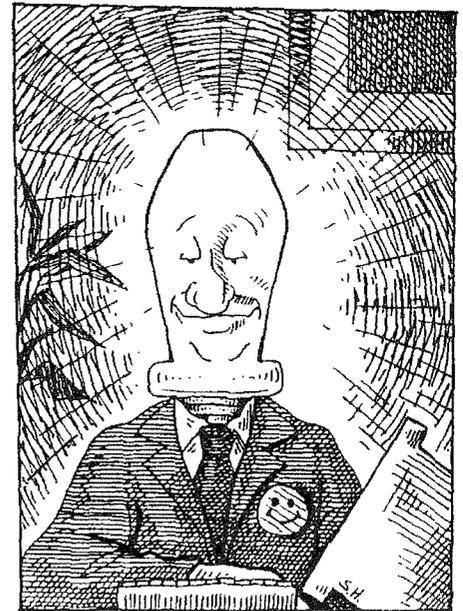
Idaho topped all states in new jobs as a percentage of the existing work force in 1992, according to the U.S. Bureau of Labor Statistics. The outlook is for continued strong growth. [Source: Marple's Business Newsletter.]

## The Nation

**Bond rating service sours on utility industry.** Standard & Poor's Corporation, the bond rating agency, stiffened its debt-rating formula for the electric utility industry last fall. The agency announced "negative implications" for five utility companies and said it was concerned about the future of 40 other companies. The five companies placed on S & P's CreditWatch list, which means the agency is concerned about the companies' financial strength, are in Connecticut, Ohio, Maine, New Mexico and Texas. S & P noted that the utilities face slow growth in demand for electricity, growing cost pressures and decommissioning costs for nuclear power plants. [Source: Wall Street Journal, October 1993.]

**Energy-efficiency database will go on line.** The Database on Energy-Efficiency Programs will be available by computer in June 1994. The nationwide database includes information on demand-side management programs operated by electric and gas utilities, government agencies and others. Sponsors of the database include the Bonneville Power Administration. A telephone number has not been established for com-

puter access, but more information is available from Ed Vine at the Lawrence Berkeley Laboratory, 510-486-6047. [Source: Demand-Side Technology Report, October 1993.]



### Bright lights, happy workers.

Recent research on the effect of lighting on worker productivity indicates that indoor lighting that is much brighter than is typically found in working environments may have a beneficial, stimulative effect on worker performance. The research focused not only on the brightness of light, but also on wavelength and duration of exposure. The research does not recommend using more electricity in the workplace, as that would run counter to energy-efficiency measures. However, finding the best combination of these factors — including energy efficiency — could maximize worker performance. [Source: EPRI Journal, September 1993.]

## SHORTS

Guide offers help in purchasing energy-efficient office equipment. A new guide published by the American Council for an Energy-Efficient Economy defines the energy consumption characteristics of office equipment and explains how to calculate potential energy savings. The guide recommends what types of equipment to buy and how to operate it efficiently. The Guide to Energy-Efficient Office Equipment is available for \$10 from ACEEE Publications, 2140 Shattuck Avenue, Suite 202, Berkeley, California, 94704. For more information, contact Loretta Smith, 202-429-8873.



Scientists successfully guide fish with sound. An experiment in California's Sacramento River indicates that underwater speakers can be used to guide fish away from water intakes at dams or canals. The speakers emit sound at a frequency that fish can hear. In test experiments, the number of juvenile salmon entering the canal dropped by 83 percent. Scientists said the technology could be used at dams on the Columbia and Snake rivers, but the U.S. Army Corps of Engineers needs more information before testing, a Corps spokesman said. [Source: Tri-City Herald, Pasco, Washington, October 6, 1993.]

## CALENDAR

**February 8-10** — Northwest Power Planning Council meeting in Washington.

**February 9-11** — "Innovative Electricity Pricing," Tampa, Florida. Conference will focus on pricing in an increasingly competitive business environment including pricing as a business strategy and new forms of regulation that may promote market-based pricing. Contact Steve Braithwait, 608-231-2266 (technical information) or Pam Turner, 415-855-2010 (registration).

**March 8-10** — Northwest Power Planning Council meeting in Montana.

**March 14-16** — Science and Communication Seminar on Electromagnetic Fields, Santa Clara, California. Contact the Electric Power Research Institute, 612-623-4600.

**March 18-19** — "Rivers at the Crossroads: Law, Science, Politics & People," an Idaho Rivers symposium, Boise, Idaho. This conference will focus on the emerging concepts and issues related to ecosystem management, public water and public trust. Contact Marti Bridges, 208-343-7481 or 800-574-7481.

**March 27-30** — International Solar Energy Conference, San Francisco. Contact the American Society of Mechanical Engineers, 212-705-7793. This conference also is offered April 19-21, also in San Francisco.

**April 6-7** — Conference and Expo on Energy and the Environment (GLOBALCON '94), Anaheim, California. The annual conference of the Association of Energy Engineers includes five concurrent programs: HVAC and Building Systems Congress, Lighting Efficiency Congress, Federal Energy Management Congress, CFC Congress and Environmental Management Congress. Telephone 404-447-5083 or FAX 404-446-3969.

**April 8-9** — Salmon Symposium in Salmon, Idaho.

**April 11-12** — Renew '94, Stamford Connecticut. Conference on the environmental and economic benefits of renewable energy, sponsored by the Sustainable Energy Association. Contact the Association, 413-774-6051.

**April 12-14** — Northwest Power Planning Council meeting in Oregon.

**April 13-14** — Industrial Energy Technology Conference, Houston, Texas. Contact W.T. Johnson, 409-846-0440.

**April 22** — Earth Day.

**April 24** — Sun Day 1994. This national celebration of renewable energy and energy conservation includes events across the nation coordinated with Earth Day wherever possible. Contact Sun Day, Takoma Park, Maryland, 301-270-2258.

## Northwest Power Planning Council

### Idaho

Northwest Power Planning Council  
Statehouse Mail  
450 West State  
Boise, Idaho 83720  
Telephone: 1-208-334-2956  
Council Members:

**Robert Sarvik**

**Jay L. Webb, vice chair**

### Montana

Northwest Power Planning Council  
Capitol Station  
Helena, Montana 59620  
Telephone: 1-406-444-3952  
Council Members:

**John Etchart**

**Stan Grace**

### Oregon

Northwest Power Planning Council  
620 S.W. Fifth Avenue, Suite 1025  
Portland, Oregon 97204  
Telephone: 1-503-229-5171  
Council Members:

**Angus Duncan**

**Ted Hallock**

### Washington

Northwest Power Planning Council  
925 Plum Street, S.E.  
P.O. Box 43166  
Olympia, Washington 98504-3166  
Telephone: 1-206-956-2200  
Council Member:

**R. Ted Bottiger, chair**

Northwest Power Planning Council  
Anderson Hall #34-36  
North Ninth and Elm Streets  
P.O. Box B  
Cheney, Washington 99004  
Telephone: 1-509-359-7352  
Council Member:

**Tom Trulove**

### Central Office

Northwest Power Planning Council  
851 S.W. Sixth Avenue, Suite 1100  
Portland, Oregon 97204  
Telephone: 1-503-222-5161  
Toll Free: 1-800-222-3355  
Executive Director: Edward Sheets  
Public Affairs Director: Steve Crow

The Northwest Power Planning Council is required by an Act of Congress to develop a program to protect, mitigate and enhance the Columbia Basin's fisheries and a regional electric energy plan that provides a reliable electricity supply at the lowest cost. For further information, see Pacific Northwest Electric Power and Conservation Act—Public Law 96-501.



Northwest Energy News is printed with soy-based inks on recycled paper that is 50-percent de-inked fiber, including 10-percent post-consumer waste.



Executive Editor: Carlotta Collette  
Art Director: Stephen Sasser  
Writer: John Harrison  
Production Assistant: Tamara Nester

Reprinting is encouraged. Please credit the Northwest Power Planning Council. A copy of any reprint would be appreciated.

## COUNCIL PUBLICATIONS ORDER FORM

Please send me a copy of the following publications of the Northwest Power Planning Council. (Note: not all publications are available immediately, but they will be sent to you as soon as possible.) A listing of all Council publications circulated since 1987 also is available from the Portland central office.

### Publications

- 93-23 Acquiring energy efficiency more efficiently
- 94-1 Columbia River Basin Fish and Wildlife Program Overview
- 94-2 Columbia River Basin Fish and Wildlife Program
- 94-3 Direct Use of Natural Gas: Analysis and Policy Options
- 94-4 Restructuring of the Electric Utility Industry: Implications for the Northwest Power Act.

### Mailing Lists

Please **add** my name to the mailing lists for the following publications. (Note: please do not check if you already are receiving them.)

- Northwest Energy News** (this bimonthly magazine)
- Update** (monthly public involvement newsletter that contains the Council meeting agenda, deadlines for public comment and a more detailed publications list)

Please **delete** my name from the mailing lists for the following publications (please include the 12-digit number next to your name on the mailing label).

- Northwest Energy News**
- Update**

Name \_\_\_\_\_  
Organization \_\_\_\_\_  
Street \_\_\_\_\_  
City/State/Zip \_\_\_\_\_  
Telephone\_\_ ( ) \_\_\_\_\_

(Or call the public affairs division at the Council's central office, 503-222-5161, or toll free 1-800-222-3355.)

Northwest Power Planning Council  
851 S.W. Sixth Avenue, Suite 1100  
Portland, Oregon 97204

BULK RATE  
U.S. POSTAGE  
PAID  
PERMIT NO. 11  
PORTLAND, OR

IN THIS ISSUE

Northwest  
Governors  
Concur on  
Common Problem

**Ted**  
**Böttiger**

**Two nations,  
one habitat.**

Strategies  
for  
Freshwater  
Fish  
and  
Wildlife

**Shaping**  
the Future  
of the  
**Fraser River**  
Basin

**SOLAR CITY**