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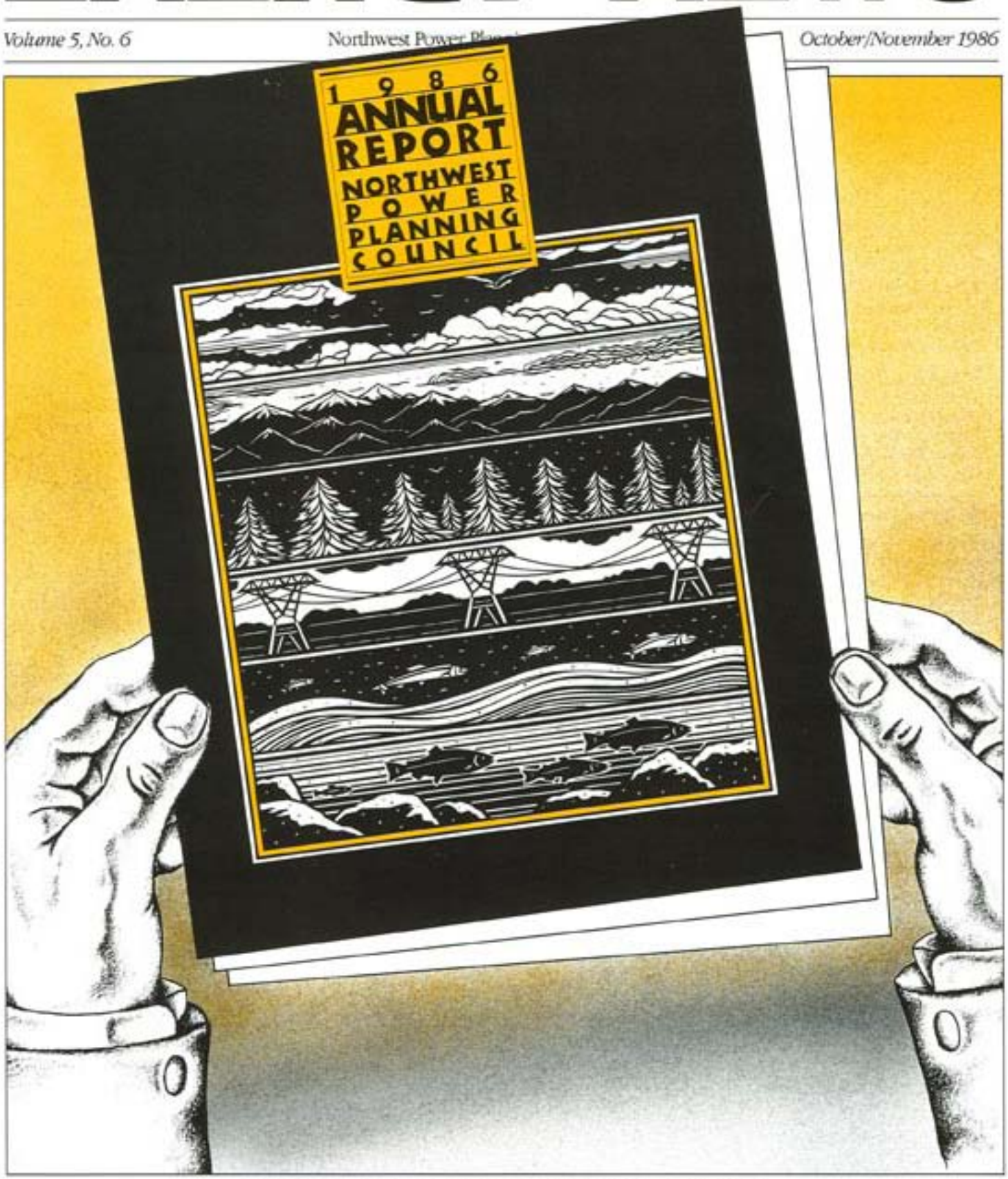

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The Northwest Power Planning Council is required to develop a program to restore the Columbia fisheries and a regional electric energy plan, to be carried out by the Bonneville Power Administration, emphasizing cost-effective conservation and renewable resources.

Executive Editor: Carlotta Collette
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Editor's Notes

In September, the Council published its Draft Amendment Document containing recommendations for changes to the Columbia River Basin Fish and Wildlife Program. Soon after that, we sent out the *1986 Annual Report*, which had gone out in a draft form earlier in the summer. In this issue we've summarized both documents, with highlights from the Annual Report and an overview to place the Council's actions in the context of the rest of the region.

In the midst of producing the above-mentioned publications, Paula Walker came on board to assume the positions of special projects editor (e.g., annual reports, power plans and fish and wildlife programs) and assistant editor of *Energy News*. (I double as her assistant editor, too.) Paula comes from Montana, where she was press secretary and speech writer for Governor Ted Schwinden. She is a welcome addition to our staff.

Let me also reintroduce the other contributors to this issue. Jim Nybo serves as public liaison for the Council. He has been particularly involved in promoting regionwide understanding and acceptance of the Council's model conservation standards for new electrically heated buildings.

Ruth Curtis coordinates information resources at the Council. In *Energy News*, she has kept readers informed about the Council's fish and wildlife studies through her regular column. Ruth also edits the Council's monthly publication, *Update!*.

Dulcy Mahar is the public information and involvement division director as well as previous editor of this magazine. Her interviews with individuals in the electric power and fish and wildlife arenas provide views from outside the Council.

And art director Stephen Sasser, with the assistance of free-lance production artist Marty Todd, gives us our "snappy graphix" (or so says the sign on his office door).

COVER ILLUSTRATION: This month's cover is a reproduction of our annual report. The illustration is by Portland printmaker Dennis Cunningham. The hands were drawn by Lynn Carson.

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Illustration by Joan Barbour

U.S. VERSUS OREGON

BUILDING A BETTER HARVEST

by Carlotta Collette

There's an ironic symmetry in the fact that a white-educated Nez Perce Indian known as "Lawyer" was privy to the so-called "Stevens' Treaties" of 1855. These were the four treaties through which most of the Columbia River Basin Indian tribes ceded the land that has become the Northwest states, while retaining their rights to fish, hunt and gather nuts and berries "at all usual and accustomed places." It is ironic because these treaties, some of which were signed after only two weeks of discussions, have evolved into some of the longest-running, most complex legal battles in the history of the Northwest.

Now more than 130 years later, other lawyers, along with fisheries biologists and resource managers, are still attempting to settle questions first raised at that early treaty council. The current litigation has its own history, which goes back nearly 20 years.

The case, United States versus Oregon (U.S. v. Oregon), involves the Columbia River fisheries, in which the tribes that were parties to the 1855 treaties (the Yakima Indian Nation, the Confederated Tribes of the Warm Springs, the Confederated Tribes of the Umatilla and the Nez Perce Tribe) have asserted their "right of taking fish at all usual and customary places in common with citizens of the territory." After years of piggybacked lawsuits, U.S. v. Oregon may be producing an ambitious new agreement among the parties to the case.

U.S. v. Oregon includes a series of federal court decisions, beginning in 1969, that consistently affirmed the tribes' right to take a fair share (approximately half) of fish passing tribal fishing areas. Those rulings were considered landmarks in Indian natural resources law and are very important to the tribes involved. Because the rulings involved major natural resource reallocations, they have, particularly in the last decade, heightened tensions between Indian and non-Indian fishers.

Unfortunately, the fish runs in the Columbia River Basin no longer resemble the runs the Indians fished at the time the treaties were signed. A "fair share" of next to nothing is still next to nothing. As the litany of court cases proceeded, it became clear to the litigants on both sides that it would be better to work together to rebuild the fish runs, than to fight each other for shares of a shrinking resource.

The tribes and the states of Oregon and Washington took a step in that direction in 1977. With encouragement from the federal court, they negotiated a five-year agreement to allocate harvest of salmon, steelhead and other ocean-migrating fish in the Columbia River Basin. While the agreement worked in some respects, it also had failings, particularly in its failure to provide means for increasing the size of fish runs in the upper basin.

When it came time to renew the agreement in 1982, the parties changed tack. Instead of renewing the old agreement, they began a lengthy process not only to allocate harvest rates for the various stocks of fish, but also to develop production plans for increasing the number of fish available for harvesting, particularly in the higher reaches of the basin. The goal of this painstaking planning effort is to make fish production complement harvest agreements.

The negotiations are made even more complex by the relatively recent interventions of the State of Idaho and the Shoshone-Bannock Indian tribe of Idaho. Because that state is located in the upper Columbia River Basin, its fish harvest occurs only after the fish have run the full gauntlet of lower river fisheries. Neither the state nor the tribe has had direct control over the lower river fish harvest and, consequently, Idaho's fishers can only take leftovers at the end of a long line of other harvesters.

The negotiations focus on three major areas of fisheries' improvements. The first of these, the spring and summer chinook stocks, have been greatly depleted. Negotiators hope that harvest constraints, hatchery production and habitat repair, together with current fish protection measures on the river, will improve their runs.

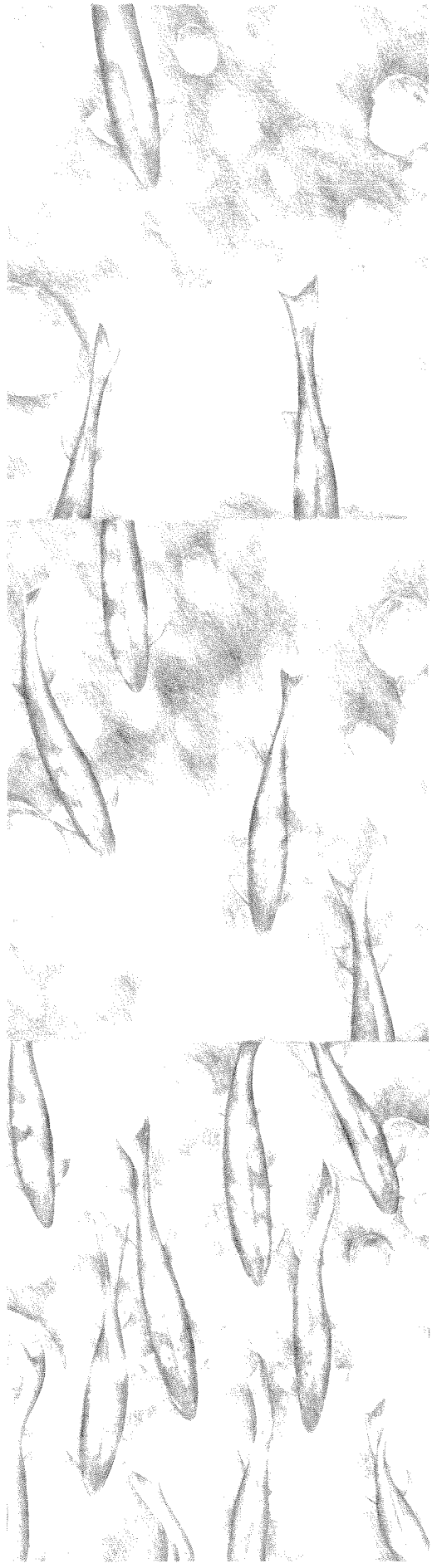
With the fall chinook and coho runs, the negotiators are betting that harvest constraints and a fair split between inriver and ocean harvests will rebuild the stocks without having to resort to new hatcheries.

The plan for improving the steelhead runs includes three hatcheries that are in construction or planning on the lower Snake River and in the Umatilla and Yakima river basins.

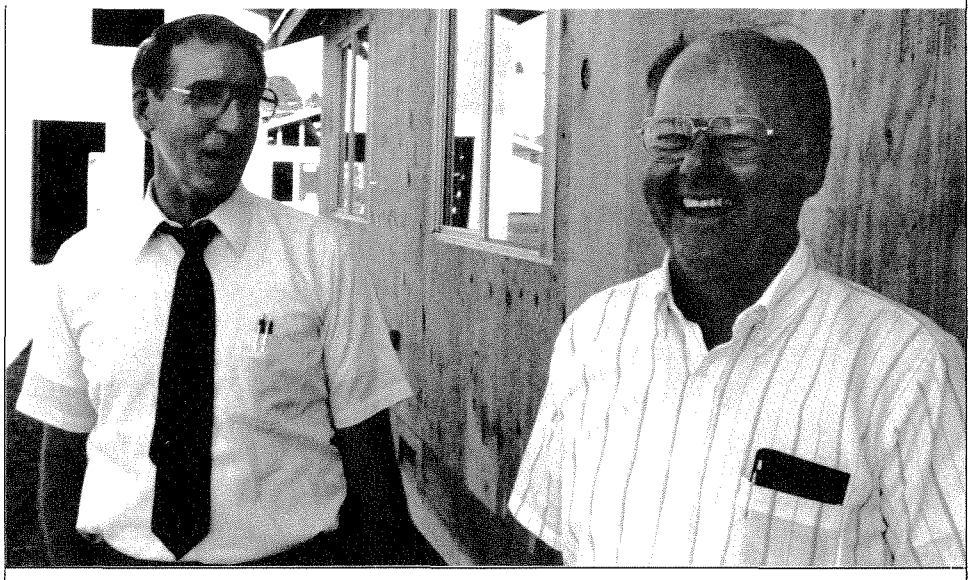
"The immediate goal," explained Jim Martin, from the Oregon Department of Fish and Wildlife, "is to beef up the runs, harvest fairly what we have and rebuild the spring and summer runs. In a year or so, we'll be able to look at long-range plans," he added.

All parties in this process have enormous incentives to reach agreement, in part, because the courts have repeatedly ordered negotiations for a new plan for the Columbia River fisheries. The negotiations are also likely to play an important role in the Northwest Power Planning Council's Columbia River Basin Fish and Wildlife Program, since program measures must complement the activities of the fish and wildlife agencies and Indian tribes.

Tim Wapato, executive director of the Columbia River Inter-Tribal Fish Commission said of the U.S. v. Oregon proceeding, "More than 15 years of litigation didn't increase the fish runs one iota. It did, however, clearly establish the tribal right to a fair share of the fishery and the right to have that fishery forever. With the U.S. v. Oregon framework, we'll be able to implement that right in a cooperative manner that improves the fish runs for all residents of the Columbia Basin."



A HOUSEHOLD LABORATORY: NEW STUDY EXAMINES THERMAL PERFORMANCE OF HOMES



Photograph by Jim Nybo

Montana Council member Morris Brusett visits with contractor Paul Nolan on the site of the University of Washington study.

A new study in Washington state has turned homes into laboratories in order to examine the effect of various household components on energy efficiency. The study, which is being conducted by the University of Washington, was a provision of legislation passed in 1985 to upgrade the state's building code.

Proposed by builder representatives, the study was included in the 1985 legislation in order to gain builder support for the code upgrade bill.

Funded by a surcharge on local building permits, the study necessitated the construction of four houses with identical floor plans based on the original prototype house developed by the Northwest Power Planning Council in conjunction with its model conservation standards.

In early September, Council members Tom Trulove (Washington) and Morris Brusett (Montana) visited the buildings, which were then under construction. The two Council members spoke at length with the building contractors and representatives of the Seattle Master Builders Association, long-time advocates of this research.

Each house has three bedrooms, two baths, a laundry closet, kitchen, living room and dining room. The floor area of each house is 1,350 square feet. Although they are all single-story with concrete foundations and crawl spaces, the houses are not identical with respect to energy features. Two are built to the 1980 Washington energy code, and two are built to the Council's model conservation standards.

While it is true there have been many studies on the energy efficiency of buildings in the Northwest, the University of Washington study is unique in its focus on the performance of individual components of a building's thermal "envelope." That is, the area that separates the heated interior space from the colder outside environment. Ceilings, walls, floors, doors and windows are all parts of the envelope.

"This study will examine in tremendous detail the energy performance of building components when embedded in a complex system of a living, breathing house," says Richard Watson, director of the Washington State Energy Office, which is administering the study.

Data from the study will include information on computer programs that simulate energy use in homes and on the specific ways heat is transferred through various wall constructions. The project will also monitor and record thermostat settings; power use for space heating, water heating and clothes drying in addition to total power use; the time and degree that doors and windows are open; and relative humidity.

Investigation of how occupant behavior affects the thermal performance of the homes is an important part of the study. Two of the homes (one code home and one model conservation standard home) will be occupied by university graduate student families. The other two will be unoccupied. Actual energy consumption data from studies of large numbers of occupied homes have varied widely. Those discrepancies have often been attributed to differences in occupant behavior. The study of the occupied and unoccupied homes might shed some light on the effects occupants have on energy efficiency.

Because the study targets actual performance of various residential building components, it does not directly deal with the question of the cost effectiveness of implementing codes that adhere to the model conservation standards. The study's findings may lead to revision of the estimates of energy savings or the costs of conservation measures, but they will not directly address the cost-effectiveness question, which entails many factors not included in the University of Washington study. Such factors include the costs of power resources in the region, retail power rates and mortgage interest tax deductions.

Data from the study will be turned over to the Washington State Energy Office, which will make recommendations on the 1986 state energy code to the Washington Legislature in 1988.

YEAR-END REPORT

n December 5, 1980, President Jimmy Carter signed into law the Pacific Northwest Electric Power Planning and Conservation Act (the Northwest Power Act or just the Act), which set into motion a regionwide transformation in policies and priorities that has no precedent in the United States.

The Act created the opportunity for Idaho, Montana, Oregon and Washington to plan together the most efficient, environmentally sound and cost-effective means to provide for their states' future electric power needs. The Act also promoted a Columbia River Basin fish and wildlife restoration effort that will likely be one of the most ambitious natural resource restorations on the planet.

Last December the Northwest celebrated or survived—depending on the viewpoint—the fifth anniversary of the Act. To mark that event, *Energy News* interviewed a number of people who had been involved in the Act's development to see what they thought it had accomplished. While there were numerous caveats, the prevailing mood was that the Act had been a positive force in the region.

The region has something new to be proud of. In less than six years, electric ratepayers in the Pacific Northwest have turned what had been the most electricity-consuming corner of the country into one famous for its successful conservation efforts. Hood River County, in Oregon, could well be renamed "Conservation County," because nearly every electrically heated home there has been weatherized.

In Snohomish County, Washington, over 30,000 homes have been insulated as the result of a program operated by the Public Utility District (PUD). The PUD has also sponsored the construction of a new super-conserving subdivision of houses and the development of weather-tight housing on the Tulalip Indian Reservation.

Hundreds of thousands of dollars in lighting, heating and cooling bills will be saved on commercial buildings that are being built in all four Northwest states.

Irrigating farmers are working with their local utilities to save millions of dollars in electrical costs and huge quantities of limited groundwater and river water.

There are cooperative conservation programs going on in all sectors—residential, commercial, industrial and agricultural.

The emphasis on conservation is not the only new aspect of the region's electrical power scene. The whole concept of forecasting future energy demands has been changed, and the process of building resources to meet that anticipated demand has changed with it.

In the past, energy planners attempted to prejudge the average rate at which electrical loads would grow over 10 or even 20 years. Resource developments were then keyed to a single percent-of-growth rate. If the figure were large, big plans were made and equally big investments followed. Resource planners bet bundles because they had to be prepared to meet the future need—if it materialized.

In the Northwest, after steady growth from the 1940s to the 1970s, planners raised their projections higher still, and saw, instead, a quick decline in electrical use. Utilities are now coping with surplus electricity, a surplus made all the more expensive by the costly new generating resources built to meet that anticipated need.

Such pin-point forecasts are history when compared to the Council's power planning. The innovative "range" forecast used by the Council takes into account the unpredictability of the future. Rather than pick a single target to build to, the range forecast brackets likely load growth. Growth could be low, high or somewhere between the two extremes.

Resource developers no longer have to commit to multi-million dollar projects that may never be needed. Instead, the Council proposed a process called "optioning," in which the relatively inexpensive business of design, siting and licensing generating facilities can go on, but the construction is postponed until the facility is clearly needed.

Similar innovations and success stories can be told of the fish and wildlife side of the Act's mandate. In the years before the Act was signed, huge hydropower dams had threatened the future of Columbia River salmon and steelhead. While the dams continue to pose a threat to the runs, Northwesterners can take satisfaction in knowing that the region has moved several important steps closer to balancing its valuable hydroelectric system's power potential with the equally valuable fish and wildlife that share the Columbia River Basin.

The transformation began while the Act was still being written. To develop the fish and wildlife sections of the Act, fish and wildlife agencies, Indian tribes, hydropower project operators, utilities and other interested parties formed an ad hoc committee and negotiated the language that became Section 4(h) of the Act.

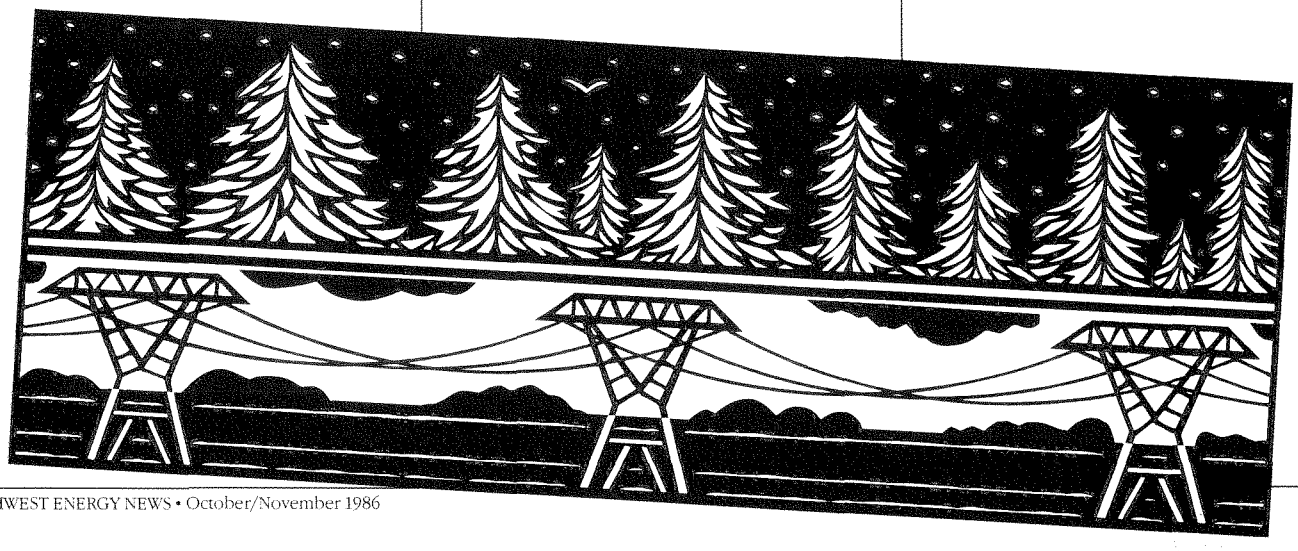
Section 4(h) called for a "systemwide" approach to actions aimed at restoring the fish and wildlife populations affected by hydropower development and operation. This in itself was a first for the Northwest, where corrective measures were often taken on a dam-by-dam and stream reach-by-stream reach basis. The Act also recognized the basin's Indian tribes status as co-managers of the fisheries resource along with the fisheries agencies.

Since the Act's signing, negotiation has replaced litigation more often, and even the big mainstem Columbia River dams are undergoing reconstruction to make them more conducive to the migrations of salmon and steelhead. Until that work is complete, water laden with juvenile fish is being spilled over the dams to reduce fish mortalities resulting from the alternate passage—through the turbines.

Many areas of particular progress stand out in the basin. These are covered more fully in the summary of the Council's Sixth Annual Report on the next few pages.

Each state can take some pride in the work going on in its locale, yet each state's individual success story is ultimately eclipsed by the growing cooperation among all four states. Some of the same forces that created the Northwest Power Act and the Council have also led the way toward building a regional consensus. But that consensus is still more a goal than an achievement. The old controversies run deep. Data can sometimes conflict and confuse. The power system and the ecosystem are both far too complex to be easily finetuned.

The work has begun. There is some success; there are some failures. Much remains to be done. What follows is a summary of the Council's Sixth Annual Report to Congress. The Act requires that the Council report annually on its fish and wildlife activities. The Council has chosen to report on its power planning, public involvement, legal and administrative activities as well—an indication of how tightly the Council's activities are interwoven. Copies of the full annual report are available from the Council's central office.



by Paula M. Walker

Although it may be a bit early for the strains of "Auld Lang Syne" for most people, agencies and organizations that abide by the congressional calendar bid farewell to 1986 on September 30 and greeted the New Year on October 1. For the Northwest Power Planning Council, the beginning of Fiscal Year 1987 provided an opportunity to look backward a moment before moving ahead, a time to re-assess the events of Fiscal Year 1986 and to set priorities for 1987 and beyond.

Since October 1, 1985, the world has watched as the Philippines and Haiti installed new governments; oil prices dropped to 1974 levels; and the Challenger and Chernobyl disasters made society take a second look at two technological achievements it had begun to take for granted. Meanwhile in the Northwest, state governments confronted budget cuts, and Expo '86 brought tourists into the region on their way to Vancouver, British Columbia.

During this time, the Northwest Power Planning Council continued its efforts to balance the conscientious development of electrical energy resources with the careful restoration of fish and wildlife.

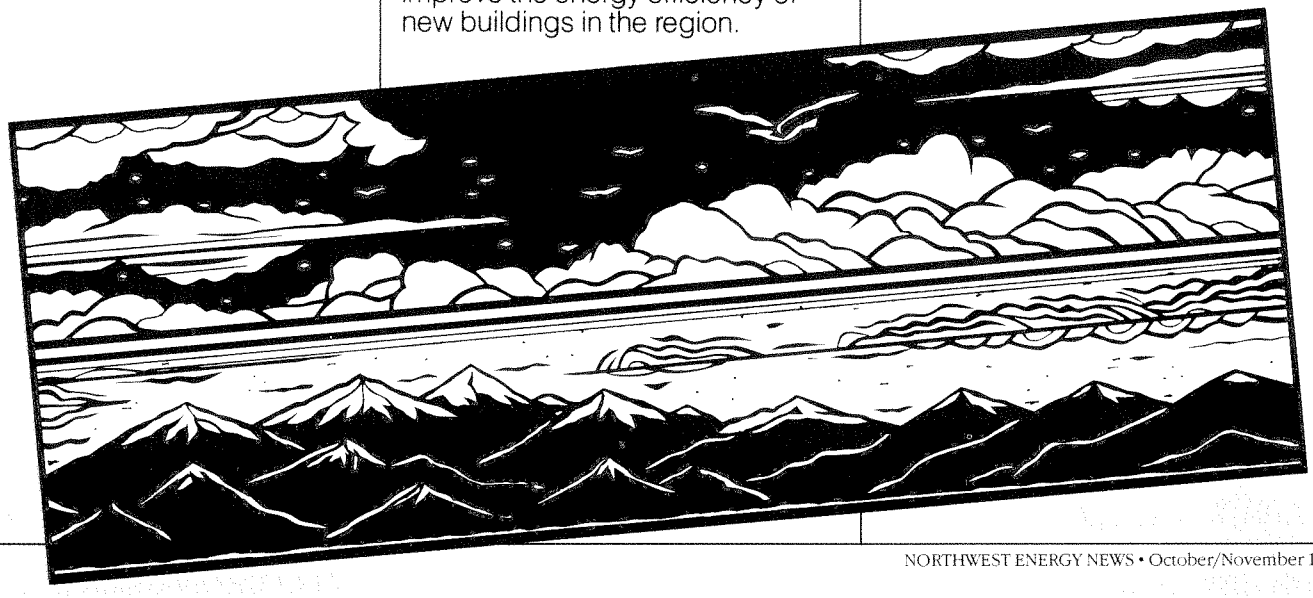
In its *1986 Annual Report* to Congress, the Council detailed progress in the region regarding its power planning and fish and wildlife activities. A review of that report shows that the Council succeeded in keeping most of its 1986 "resolutions."

During Fiscal Year 1986, the Council continued to work with the Bonneville Power Administration, utilities, federal, state and local governments, interest groups, Indian tribes and others concerned about Northwest energy and fish and wildlife issues. In keeping with the spirit of the Northwest Power Act, fish and wildlife are not an afterthought but an equal partner in the Council's dual goals of developing an economical, reliable power supply for the region and protecting its fish and wildlife resources. Council activities in 1986 emphasized both areas.

Foremost among the events of the past year was the decision by the United States Court of Appeals for the Ninth Circuit upholding the constitutionality of the Council. A suit initiated in July 1983 by the Seattle Master Builders Association and others challenged the validity of the Council's model conservation standards, which were developed in accordance with the Northwest Power Act to improve the energy efficiency of new buildings in the region.

The petitioners argued that the standards were not cost-effective and that the Council used improper methods to determine their cost effectiveness. A secondary aspect of the suit challenged the Council's constitutionality on the grounds that the selection of its members by state governors breached the Appointments Clause of the U.S. Constitution, which requires officers of the United States to be appointed by the executive branch of the federal government. That "secondary" issue soon became the primary focus as various agencies and groups lined up on both sides, filing briefs supporting either the Council or the homebuilders.

On April 10, 1986, the Ninth Circuit Court ruled in the Council's favor on both its constitutionality and the validity of its model conservation standards. Calling the Council "an innovative system of cooperative federalism," the Court agreed with the Council's contention that it is an interstate compact agency operating under the Compact Clause of the U.S. Constitution. The Court said precedent existed for federal agencies to follow policies set by non-federal agencies.



In upholding the validity of the Council's model conservation standards, the Court also affirmed the Northwest Power Plan itself. It noted that the Act gives the Council considerable flexibility in preparing the plan and said choosing the methodology for determining the model conservation standards was within the scope of the Council's responsibilities.

When the Court's favorable decision was issued, 1986 was already half over for the Council. By that time, the Council had, among other things, approved a new power plan; amended the model conservation standards; received recommendations for changes in the fish and wildlife program; and voted to amend that program to extend the spill period (the time during which water is released from dams operated by the U.S. Army Corps of Engineers to help juvenile fish in their downstream migration).

The adoption of the 1986 Power Plan represented not only one of the Council's major accomplishments last year but also reflected the ever-changing nature of power planning. Although the Northwest Power Act requires the Council to update its plan within five years, the Council decided to begin revising it only two years after adopting the initial plan in 1983 because of the major uncertainties hovering over the region's electrical energy picture.

Like dark clouds warning of an impending electrical storm, these uncertainties cast shadows over past assumptions the Council had used to make predictions about the region's energy future in the 1983 plan. Since then, questions have arisen about the future of the two unfinished Washington Public Power Supply System nuclear projects; the future of the region's aluminum industry, which buys nearly one-third of the Bonneville Power Administration's power; the extent of acceptance of model conservation standards throughout the region; and the extent of surplus power sales and purchases outside the region.

The Bonneville Power Administration and the Eugene Water and Electric Board issued the first tax-exempt bonds ever sold to fund conservation efforts. The $17 million sale will go to weatherize residences in the utility's service area in west-central Oregon.

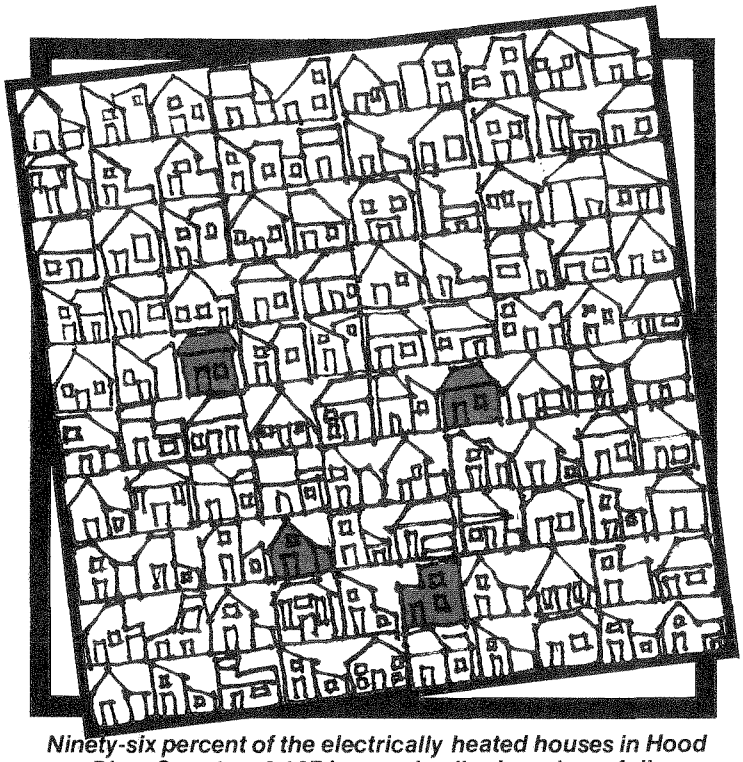
Illustrations by Fredrika Spillman

The 1986 Power Plan revised both the regional forecast and the resource portfolio. Because of new information, the Council changed the region's projected growth rate. The current figures project the region to grow from a low of 0.2 percent to a high of 2.7 percent, compared to the 1983 forecast range of 0.7 percent to 2.5 percent. If the projected low-end growth occurs, the Council predicts the current surplus would continue for 20 years and conservation could fulfill the region's electrical energy needs. At the high-end growth rate, the region would consume the surplus by 1990, when it would need new resources.

The Council's resource portfolio, which has been compared to an investor's portfolio, lists the types and amounts of resources that would be available to meet growth in the demand for electricity. Adhering to the directive of the Northwest Power Act, the resources are listed in descending order of cost effectiveness. The least costly resources would be brought on line first. While the 1986 Power Plan generally identifies the same types of resources that appeared in the 1983 plan, a few changes stand out.

Conservation, which has been identified as the least costly resource, is anticipated to provide about 1,000 megawatts less than was projected in the 1983 plan. That decrease corresponds to the reduced electrical demand forecast in the new plan. Lower growth means fewer new buildings would be constructed; thus, it would be harder to exact energy savings, and conservation would be less available.

A second major change in the resource portfolio is the recommended use of small hydropower facilities. The 1986 figure of 200 megawatts is down from the 920 average megawatts estimated in the 1983 plan, because the Council has included only new hydropower available through improvements and upgrades at existing sites. No new sites will be included in the portfolio until the Council has completed its hydropower assessment study to determine areas that should be protected from future hydropower development.



Ninety-six percent of the electrically heated houses in Hood River County—2,987 houses in all—have been fully weatherized as the result of a cooperative effort among the Council, the Bonneville Power Administration, Pacific Power and Light Company, the Hood River Electric Cooperative, the Natural Resources Defense Council, the Pacific Northwest Utilities Conference Committee and the Northwest Public Power Association.

The Council's Action Plan recommends acquiring cost-effective resources, which if not developed now, will be lost to the region forever. The best example is the model conservation standards. If the standards aren't implemented now to make new buildings more energy efficient, those buildings will consume electricity inefficiently long after the current surplus has been used up.

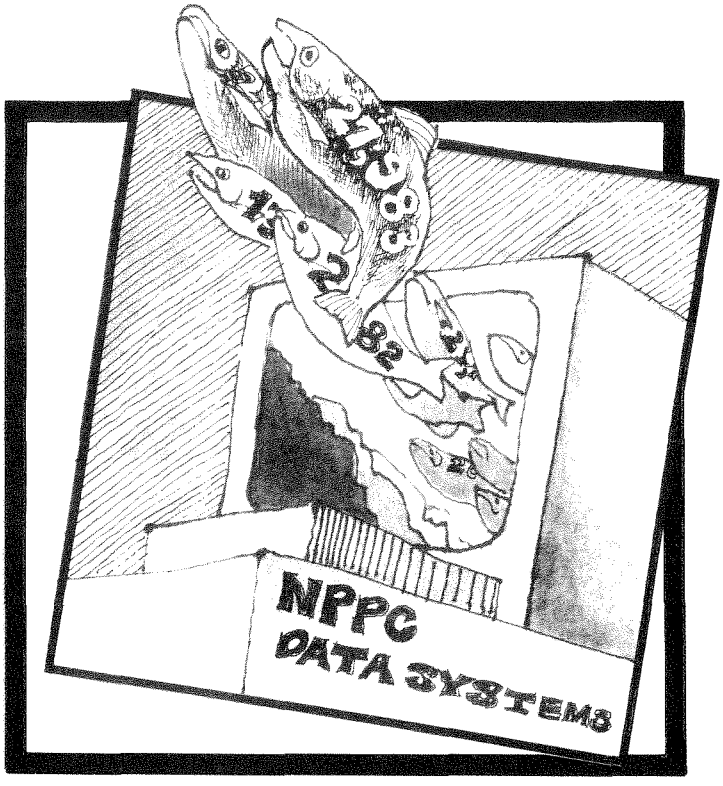
Other Action Plan priorities include developing mechanisms to transfer conservation savings from utilities that have a surplus to those that need new resources; demonstrating the cost effectiveness of renewable resources; preserving the two Washington Public Power Supply System plants as potential future power resources; and initiating a Western Energy Study to examine the possible benefits of power sales between regions.

In December 1985, the Council amended the model conservation standards to give utilities and builders greater flexibility in how to implement them. The standards themselves, however, have not changed.

A third major change emphasizes strategies to use the existing hydropower system more effectively. The 1986 plan calls for the region to explore ways to firm up its "nonfirm" power, that portion of the hydro system's output that is available only in average or good water years. The Council estimates that 700 megawatts of this secondary power could be firmed up to meet the region's needs.

In yet another departure from the 1983 plan, the 1986 plan includes recommended actions for the region's public utility commissions and investor-owned utilities. Those recommendations underscore the major theme of the new plan—regional cooperation.

In its Action Plan, the 1986 Power Plan established a new set of resolutions for the region to keep in order to achieve the Council's long-term goals. The current Action Plan sets near-term steps to be taken, but it gives the Bonneville Power Administration, which has the primary responsibility for implementing the plan, greater flexibility in how it meets the Council's objectives.



The peripatetic life cycle of Columbia River salmon and steelhead has been simulated by a computer model of the Columbia River Basin. The model can be used to collect and organize data about the fish. The data can then be used to test various restoration measures such as facilitating fish passage, improving fish habitat or controlling the harvest of salmon and steelhead.

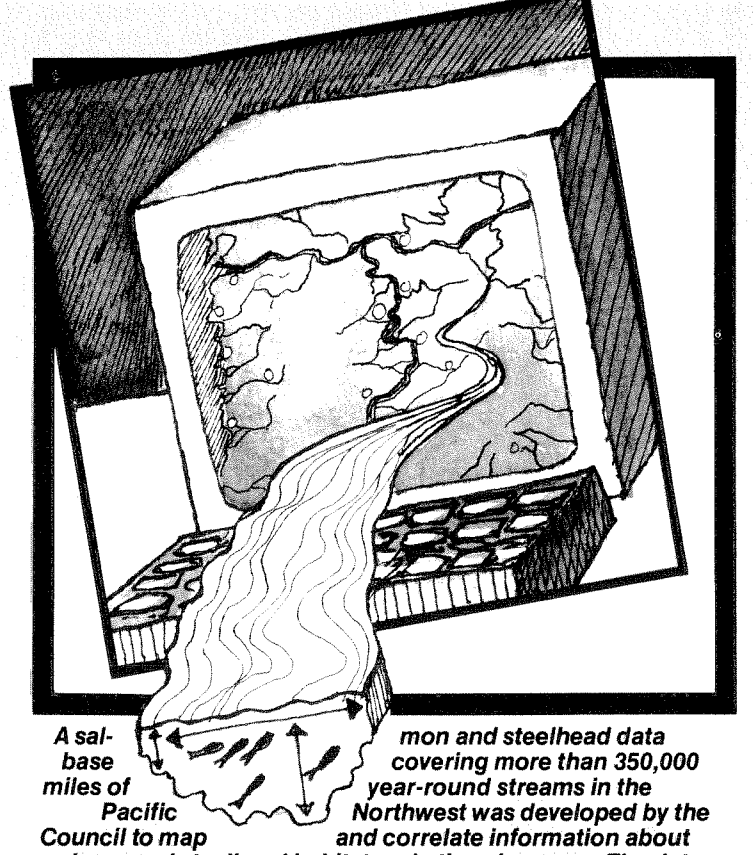
The amendments delayed the previous 10 percent surcharge that would have been assessed against utilities if the standards were not adopted in their service areas by January 1986. The Council also has worked with Bonneville to create an incentive program, called the BPA/Utility MCS Program, that will encourage builders to construct new electrically heated homes to the standards by offering both marketing and financial assistance.

Utilities must choose to participate in the program or submit their own alternative incentive program for approval by Bonneville. The programs are to go into effect for 1987 and must produce at least 30 percent of the savings possible through model conservation standards that year.

The early adopters program continued in 1986. Since the model conservation standards were amended last December, four more Washington municipalities have adopted codes meeting the standards, bringing the total number of early adopters to ten.

Just as the power picture has changed in the past year, so have fish and wildlife concerns. Having revised the power plan to more accurately reflect worldwide and regional changes, the Council also took the opportunity to begin refining its Columbia River Basin Fish and Wildlife Program. A wealth of information has been revealed by the Council's study on salmon and steelhead losses in the basin as well as other major efforts in the complex process of building a framework and systemwide policies for the program.

After compiling 120 years of information on activities that affected salmon and steelhead populations in the basin, Council staff then estimated how many of the fish were lost because of hydropower development and operations. The estimate ranges between 5 and 11 million adult salmon and steelhead annually. Currently, the basin produces about 2.5 million of those fish each year.



A salmon and steelhead data base covering more than 350,000 miles of year-round streams in the Pacific Northwest was developed by the Council to map and correlate information about salmon and steelhead habitat and other river uses. The data base maps stream reaches from one river confluence to the next. It can describe stream reach length, width, presence or absence of fish, habitat available at low river flows and potential for fish production on that reach. The system can also cross-reference to data about the cultural, recreational, archeological and other institutional values identified at each stream reach.

Developing a framework for the salmon and steelhead portion of the program also has involved planning workshops for fish and wildlife agencies, tribal representatives and power interests, where a valuable computer model of the life cycle of the salmon was developed. The model will help fish and wildlife interests look at salmon and steelhead management policies from a basinwide perspective. Other activities in the framework-building process in 1986 included steps to coordinate production planning activities in the basin and proposals for solidifying salmon and steelhead research priorities.

After asking for amendments for the program in the summer of 1985, the Council received more than 85 recommendations for changes from 25 individuals or organizations by February 18, 1986.

As a result of a series of discussions on specific amendment issues, the Council produced a draft amendment document for the program, which includes Council and staff-generated amendments as well as those received from other entities.

Major features of the document, which was distributed for public comment in September, include a statement of the responsibility of the hydropower system for salmon and steelhead losses in the basin; a description of the Council's systemwide approach to restoring those fish in the Columbia River Basin; support of completion of habitat and tributary projects by 1989; and a policy for substituting resident fish (those that do not migrate to the ocean) in those areas where hydropower facilities have blocked ocean-migrating fish from their upstream spawning habitat.

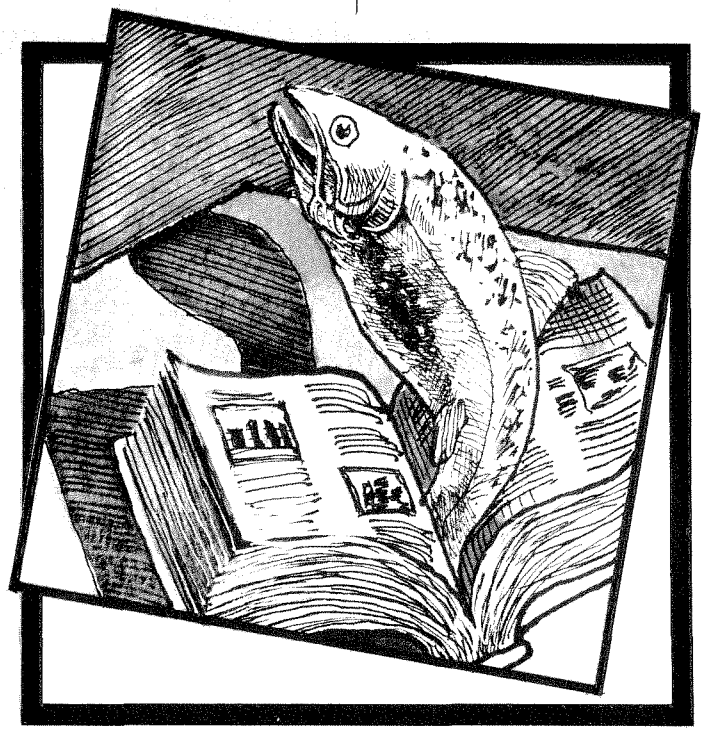
Changes in water budget accounting (the body of water released from the dams to help juvenile fish travel downstream) and transportation policy (the practice of moving juvenile salmon and steelhead around the mainstem Columbia dams by truck or barge) are also included in the draft amendment document. These and many other recommendations are currently being examined by interested parties throughout the region who have until December 15 to comment on the draft.

Initiating the amendment process for the fish and wildlife program is just one of many actions the Council has taken in the past year to maintain the balance between fish and wildlife needs and hydroelectric operations.

The first fish hatchery to be completed under the Council's program officially opened last July in Idaho. As a resident fish hatchery for kokanee salmon, it is designed to help reverse declining populations of the fish in Lake Pend Oreille.

The Yakima Basin yielded one of the happiest tales of 1986—yes, a fish tale. Once a home for over half a million adult salmon and steelhead, the Yakima Basin had produced as few as 2,000 as recently as 1979. The 1986 salmon and steelhead runs were recorded at 12,000 returning adult fish. Fish passage improvements share credit for this success along with better water management practices and the water budget on the Columbia.

Bonneville funding and congressional appropriations in Fiscal Year 1986 provided more than $15 million, which has been spent on 20 separate fish passage improvement projects in the Yakima Basin. All told, the estimated cost of all improvements in the Yakima Basin is $46 million. The basin will also be the site of a major salmon and steelhead hatchery facility recommended by the Council. The current successes in the Yakima Basin represent years of planning that have paid off in tangible results.



The 120-year history of sport and commercial salmon and steelhead catches, cannery output and archaeological and anthropological studies regarding the uses of salmon and steelhead in the Columbia River Basin were among the information compiled by the Council and distributed to the public as the Compilation of Information on Salmon and Steelhead Losses in the Columbia River Basin. It is the most comprehensive record of the status and history of Columbia River salmon and steelhead runs ever written.

During 1986, the Council also made some headway in correcting mainstem passage problems experienced by juvenile fish at the dams as they migrate toward the ocean. While many elements are involved in improving their chances for survival as these fish travel both upstream and downstream, the water budget and fish passage improvements at the dams are two of the most important.

The water budget is a block of water set aside for use during the April 15 to June 15 spring smolt migration. It creates an artificial spring freshet by releasing water that would otherwise be held in the reservoirs. This special release replaces the natural runoff that used to carry young salmon and steelhead from their spawning grounds to the ocean in the years before dams were built on the Columbia River. In those days, the trip took less than a month. The water budget increases flows below Priest Rapids Dam on the Columbia and Lower Granite Dam on the Snake River. In 1986, good flow conditions, partly as a result of high natural runoff conditions, helped the young fish reach their destination.

Salmon and steelhead received an added boost last year through a variety of fish passage improvements at dams on the mainstem of the Columbia and Snake rivers. Bypass systems, including fish ladders and submersible traveling screens, were put in place at several dams on the mainstem. The U.S. Army Corps of Engineers has juvenile fish bypass facilities in place at Bonneville, John Day, McNary, Little Goose and Lower Granite dams. Ice Harbor and The Dalles dams have sluiceways that are operated as juvenile bypasses. And feasibility studies are under way at other dams.

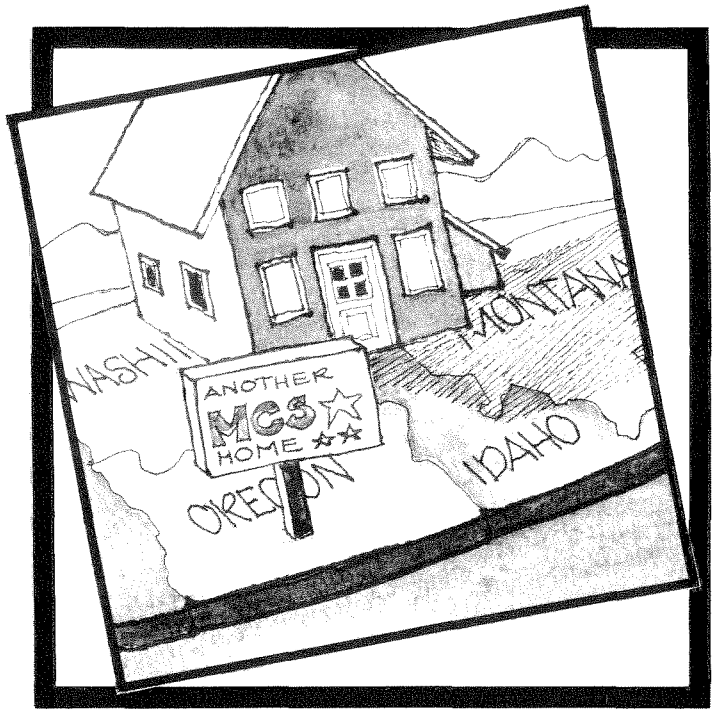
Channels to help juvenile salmon and steelhead past mainstem Columbia and Snake river dams, and screens to prevent them from being forced through the dam's turbines are being improved at or added to mainstem dams. Until these passage improvements are in place, water is being spilled at each dam to increase the survival of juvenile migrants.

The Council took another step to assist juvenile fish by extending the "spill period" for Corps-operated dams on the mainstem of the Columbia and Snake rivers. Its action extended to August 15 the time during which water is released at the dams to help the fish on their downstream migration. The Council's decision sustained the minimum 90 percent juvenile fish survival rate at seven mainstem Corps dams, but the extended spill period now covers 80 percent of the spring and summer downstream migrations.

With all its activities to help the basin's fish populations, the Council did not overlook its commitment to the wildlife side of the fish and wildlife program. Mitigation status reviews of hydroelectric impacts on wildlife were completed in Oregon, Washington and Montana. Loss studies have been completed on the Montana projects and on the Willamette River projects in Oregon as well as several projects in Idaho.

The Montana Department of Fish, Wildlife & Parks has submitted proposals to mitigate harm caused to wildlife because of the development and operation of the Hungry Horse and Libby dams. The proposals, which are being considered in the fish and wildlife program amendment process, would provide habitat protection and improvement for elk, mule deer, grizzly and black bear, waterfowl, bald eagles, white-tailed deer, bighorn sheep, Columbian sharp-tailed grouse and small mammals.

Although 1986 had its share of good news regarding power and fish and wildlife activities in the Northwest, greeting the New Year on October 1 involved more than confetti-throwing and horn-blowing. Because the Columbia River Basin has been home for both one of the world's largest salmon and steelhead populations and one of the world's most valuable hydropower resources, the two uses sometimes clash. When two such worlds collide, it often requires solutions of major proportions. As a new year dawns, the Northwest Power Planning Council will continue working to develop those solutions in the months ahead.



More than 400 houses throughout all four Northwest states have been built to the model conservation standards through the Residential Standards Demonstration Program. The program also provided training for home builders, building code officials and others in the shelter industry.

In The News

Efficient appliances nationwide are goal of Evans' bill

National energy conservation standards for most major home appliances will replace individual state standards, if legislation introduced by Senator Dan Evans of Washington is passed by Congress.

The new bill will unify what Evans, a former Northwest Power Planning Council chairman, referred to as "a patchwork of differing state requirements." The standards would be phased in over five years, at which time they would be subject to a U.S. Department of Energy review for possible revision.

"The National Appliance Bill calls for interim standards that are generally less stringent than those called for in the Northwest Power Planning Council's 1986 Power Plan," explained Ed Sheets, executive director of the Council. "But the bill would improve the efficiency of appliances not covered by the power plan, and it includes an opportunity to strengthen the standards later," he added.

The proposed legislation was the result of a compromise between appliance manufacturers and energy conservation advocates. Appliance manufacturers prefer the bill's attempts at national standardization to the costly task of having to build appliances to different codes in each state.

The conservationists, led by the Natural Resources Defense Council, calculated the benefits they expect will accrue over 20 years with the standards in place. They include nationwide savings of up to 30,000 average megawatts of electricity and natural gas savings equal to a tenth of the total U.S. oil imports. —*CC*

Fisheries agencies and Indian tribes form new team

Columbia River Basin Indian tribes and federal and state fish and wildlife agencies have agreed to work together as the Columbia Basin Fish and Wildlife Authority. The new organization, formed in late September, replaces the Columbia Basin Fish and Wildlife Council.

The decision came as the result of a unanimous vote by the Washington Department of Fisheries, the Washington Department of Game, the Oregon Department of Fish and Wildlife, the Idaho Department of Fish and Wildlife, the Columbia River Basin Inter-Tribal Fish Commission (CRITFC), the National Marine Fisheries Service and the U.S. Fish and Wildlife Service. Each of these organizations is considered a voting member of the group, which intends to make the majority of its decisions by consensus.

The Montana Department of Fish, Wildlife & Parks has an option of becoming a full voting member or choosing a lesser role (along with the eight basin Indian tribes that are not members of CRITFC).

The new organization will be different from its predecessor, the Columbia Basin Fish and Wildlife Council, according to Rollie Schmitten, who chairs the new authority. "The group's membership is different, with the tribes as full participating and voting members along with the other active managers on the river," explained Schmitten.

"The group is not an 'authority' as such," said Tim Wapato, executive director of the Columbia River Inter-Tribal Fish Commission. "It is a common ground for fishery managers to meet and plan for the restoration of the Columbia River Basin's fish runs," he added.

"All fish and wildlife policy questions will now go through this body," Schmitten pointed out. The group's members hope to reach a consensus on management decisions before taking their concerns to the Northwest Power Planning Council and the Bonneville Power Administration, said Schmitten.

—*CC*

Cheney becomes tenth "early adopter"

Cheney, Washington has become the most recent city to adopt building codes meeting the model conservation standards. The City Council held two public hearings before casting a unanimous vote for adoption in August.

To allow time to prepare for implementation of the new codes, the Cheney City Council set January 1, 1987, as the effective enforcement date.

Cheney joins the Washington cities of Fircrest, Milton and Cathlamet as early adopters of codes meeting the model conservation standards since they were reviewed and reaffirmed by the Northwest Power Planning Council last December. The early adopter program, sponsored by the Bonneville Power Administration, provides financial assistance to state and local governments for implementation and enforcement of codes that meet the levels set by the model conservation standards.

The other early adopters, all from Washington, are the City of Tacoma, Grays Harbor County, and the municipalities of Stanwood, Elma, McCleary and Republic.

Cheney is the home of Washington Council member Tom Trulove, who served as the city's mayor until joining the Council.

—*JN*

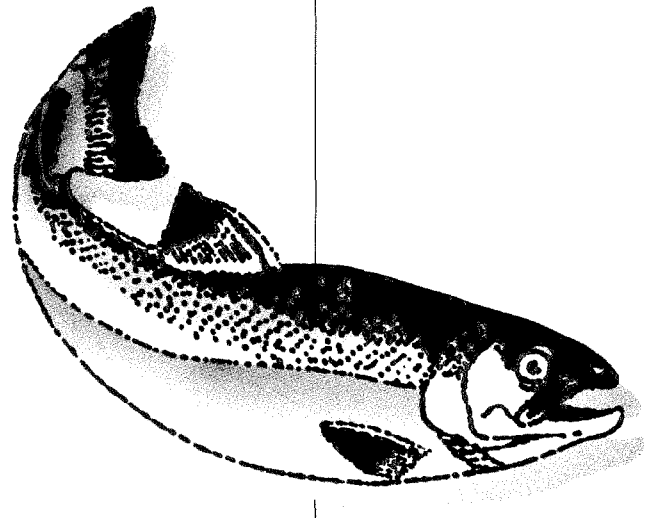


Illustration by Stephen Sasser

In The News

Tie-line expansion moving ahead at Bonneville Power

The Bonneville Power Administration will proceed with expansion of the transmission system connecting Bonneville's electrical facilities in the Northwest with those of the Los Angeles Department of Water and Power, agency officials announced in September.

This upgrade will increase the capacity of the system from 2,000 megawatts to 3,100 megawatts. The decision to proceed was made after environmental assessments conducted by Bonneville indicated that no significant environmental impacts would result from the project.

Several organizations and individuals had expressed concerns about the apparent lack of need for the project; potential impacts on fish and wildlife in the region; and the methods used by Bonneville to identify those impacts. The Northwest Power Planning Council also had commented on the Bonneville proposal—primarily on fish and wildlife issues.

Bonneville concluded that no significant impacts would occur either from the construction or from changes in regional power system operations resulting from the increased capacity.

In announcing the agency's decision, Bonneville Administrator Jim Jura said the additional capacity produced by the expansion will benefit the Northwest by providing another outlet to market surplus power, which will yield additional revenues.

Construction is expected to begin in spring of 1987 with completion scheduled for February 1989. The project is anticipated to cost an estimated $95 million.

—PMW

Bonneville holds public review of nuclear plants

The Bonneville Power Administration has been asking a lot of questions about the partially completed Washington Public Power Supply System Nuclear Projects 1 and 3 (WNP-1 and 3) to try to come to grips with what fate the plants should face. Should the plants be completed, kept in mothballs or scrapped, Bonneville officials wonder.

The questions are among the most complex and difficult ones the Northwest is facing. They relate to concerns about the region's future electrical energy needs. What rates will electricity consumers be paying for the resource? What alternative resources can replace the plants? How else could the plants be used if they are terminated?

Bonneville is the financial backer of the two unfinished plants whose construction was halted in 1982 and 1983. WNP-1, at Hanford, Washington, is 63 percent complete. WNP-3, at Satsop, Washington, is 76 percent complete. A total of $5 billion has been invested in the two projects, according to Bonneville.

The Northwest Power Planning Council, in its 1986 Power Plan for the region, estimated that the plants have an average expected value to the region of $630 million—if they can be preserved at minimal costs and if they can then be completed with resolution of the financial and legal problems that have plagued them.

The Council stopped short of listing the plants in the power plan's portfolio of resources but considered them potential options that could be cost-effective to complete when and if they are needed.

Bonneville hopes to make recommendations to the Supply System's board of directors by March 1987.

—CC

Salmon River Basin hydro permits overturned

At the urging of the Northwest Power Planning Council and others, preliminary permits issued by the Federal Energy Regulatory Commission (FERC) for seven hydroelectric dams in Idaho's Salmon River Basin were overturned on September 30.

The decision, by the U.S. Court of Appeals for the Ninth Circuit, concluded that FERC had issued the permits without first conducting comprehensive studies and plans to control the effects of developing and operating many projects in one basin. (While only seven preliminary permits were granted, almost 50 permit applications were pending when FERC acted.) The Court also determined that FERC had not established sound reasons for failing to conduct the comprehensive studies.

The National Wildlife Federation, the Idaho Wildlife Federation and the Nez Perce Indian tribe filed the suit against FERC on May 11, 1984. The petitioners were concerned that hydroelectric development in the Salmon River Basin could endanger spring chinook salmon and steelhead runs in that basin.

The Council had filed a brief in support of the wildlife federations and the tribe, arguing that FERC was obliged to take into account "to the fullest extent practicable" the Council's fish and wildlife program, which FERC admitted it had not done.

The Ninth Circuit ruled that "the Commission failed to consider the Council's [Columbia River Basin Fish and Wildlife] Program at all—a clear violation of the Northwest Power Act's express requirement that the Council's program be 'taken into account at each relevant stage.'"

The Court also ruled that FERC gave no evidence to explain why it had decided "not to develop a comprehensive plan, not to require permittees to study cumulative impacts, not to impose uniform study guidelines on permittees, and not to collect environmental baseline data." The Court agreed with the petitioners, who argued that FERC had not satisfied requirements of the Federal Power Act and the Northwest Power Act.

"Congress' commitment to coordinated study and comprehensive planning along an entire river system before hydroelectric projects are authorized is a central feature of the Federal Power Act," the Court concluded.

—CC

Dulcy Mahar
Interview with

ROLLIE SCHMITTEN

His Seattle office is down on the brushy shores of Lake Washington, where, because they can't see him through his mirrored glass wall, geese walk up and peer in. That is just fine with Rollie Schmitten, because he had always wanted to be a wildlife biologist.

It didn't quite work out that way, but Schmitten ended up in fish and wildlife anyway—as a manager. He is currently Northwest regional director of the National Marine Fisheries Service (NMFS), a part of the National Oceanic and Atmospheric Administration under the U.S. Department of Commerce. The regional NMFS office is involved in regulation, research and management of the Northwest's coastal fisheries, with some inland jurisdiction extending to research on salmon and steelhead migrations. Schmitten is directly responsible for NMFS activities in nine western states.

He is also chairman of the new Columbia Basin Fish and Wildlife Authority (formerly the Columbia Basin Fish and Wildlife Council), an organization of the basin's federal, state and tribal fish and wildlife agencies, which meets to discuss joint problems and strategies.

Schmitten's dream of becoming a wildlife biologist was set aside in college when he realized "there were very few jobs available at that time, and those who secured jobs weren't making very much money." So he switched to a forestry major and didn't have the time to take a look at fish and wildlife again until he ran successfully for the Washington state legislature in 1976.

As a state representative, he made natural resources his priority, chairing the natural resources committee in the Washington House from 1979 to 1981. He added environmental affairs to the committee's charges, because he "felt the whole natural resources package included the environment as well as timber, fish and game."

In 1981, Governor John Spellman offered him the directorship of the Washington Department of Fisheries, where he served for two years before joining the governor's personal staff as chief of policy for natural resources. He later was named chief of staff. In January 1985, he joined the National Marine Fisheries Service as regional director.

Q. How does the National Marine Fisheries Service fit into regional fish management?

Many of the actions and the problems surrounding production and management in the Columbia River Basin are really between the states and tribes. But that's not to say that the National Marine Fisheries Service or other federal entities don't have some Columbia River management responsibility. All of us agree we don't operate in a vacuum.

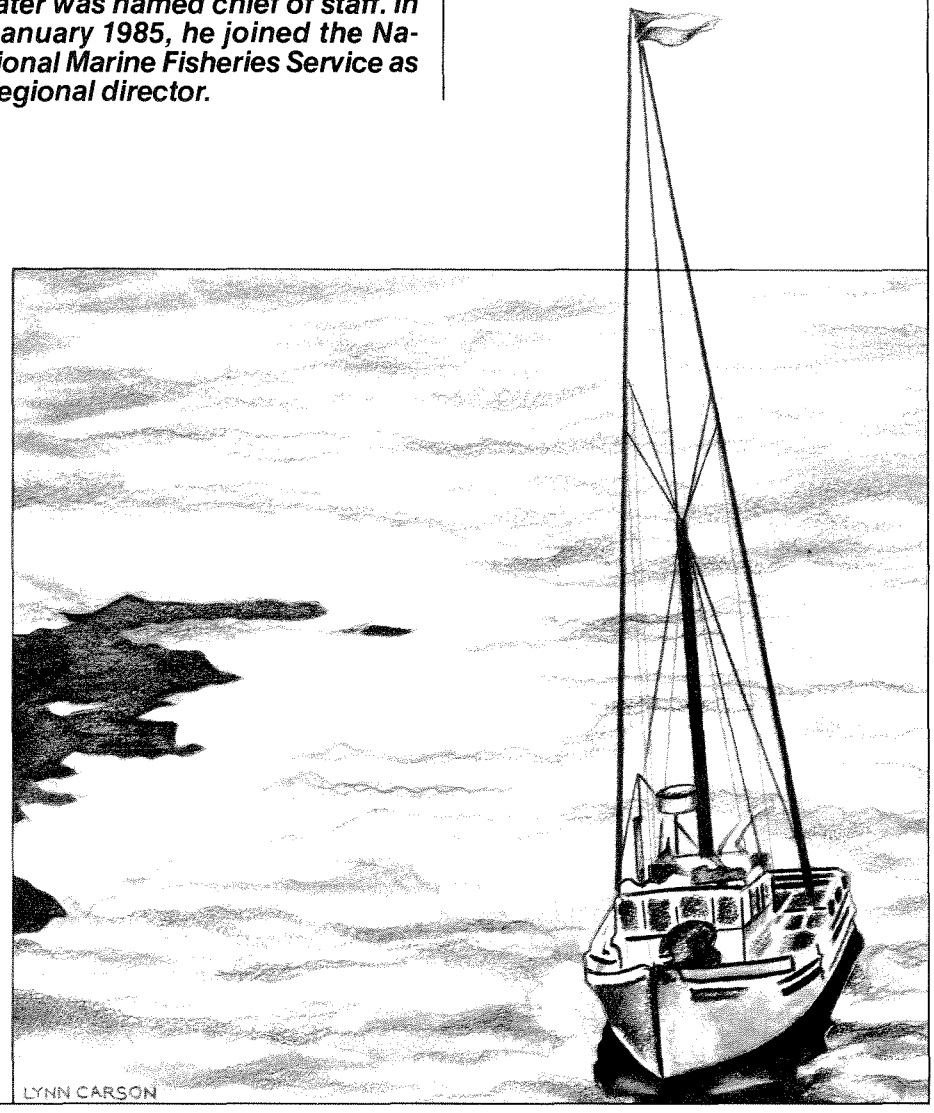


Illustration by Lynn Carson

The states and the tribes have a stake in what occurs in the ocean outside three [miles], where it becomes federal management. If I err by allowing overharvest, it certainly is going to have an impact on the tribes and vice versa if they fail to produce or if they overharvest inside the basin. So we've got to work together.

NMFS has some direct management responsibilites as far as habitat and the proper conduct of hatcheries under the Mitchell Act.[1] Specifically, we help with production planning and pass funds through to the states of Oregon and Washington for hatchery operations. Finally, we're involved in research and development in the Columbia River. But, overall, it's important to understand that no entity stands alone; that each one's management activities have impacts on others. We work in a partnership.

Q. In what ways have the Northwest Power Act and the Northwest Power Planning Council's fish and wildlife program affected salmon and steelhead enhancement in the basin?

First, let me say what I view the Act as doing. I think it's brought about equality for all competing users. It certainly has not placed one user ahead of the other. It has really provided for a basinwide look at power, water and fish and wildlife needs. It has given fish and wildlife managers a forum in which we can express our desires as equals.

I wouldn't want to look at the Act strictly in dollars and cents, but no doubt about it, it has provided the necessary funding to get moving with the restoration of fish and wildlife. The success stories, I'm happy to suggest, are some of the tributary passage improvements. I can see improvements in the Wenatchee, the Yakima and the Umatilla river basins.

[1] The Mitchell Act of 1938 and amendments to it provided funding to offset fish losses in the Columbia River Basin due to federal water project developments and other impacts. The program has helped build 22 hatcheries and three salmon rearing ponds.

Q. What areas do you feel the Power Council needs to focus on more?

I would say the Council has been the least responsive in enhancing the fisheries. We're not as successful in restoring the upper Columbia and Snake river runs. And I think there's been little progress in resolving juvenile fish mortality issues. New hatchery propagation and research and development that could improve the current hatchery processes are also still lacking. I believe that this is because of the Council's strict commitment to the cost-benefit process, and I personally don't disagree that the projects have to be viable.

But I disagree with the length of time it's taking us to determine whether to go or not go with the suggested projects. Concerning enhancement, I think that from a fisheries manager's standpoint, there has been neither as fast an improvement or as dramatic an improvement as many of us anticipated.

And we were hoping for more habitat protection. In that area, we have concerns about low-head hydropower potential, especially in the Snake River system and in some of the tributaries of the Columbia. I'm not certain we're getting the habitat protections that we hoped for.

In general, I think there is too much study, too much planning and too little action. It's imperative that the fish and wildlife directors be reasonable, that we don't anticipate getting all the requests we put forward. I think we have to be accountable for what we ask for. On the other hand, if we can meet the criteria in the Act and the program, we should be able to go ahead with our projects. I feel that we have not been granted the ability to move forward as fast as we'd like.

Q. There has been talk among some power interests suggesting that the Act created funding for some "impoverished" agencies, which are now using it to further their own goals and build empires beyond fish and wildlife protection. Could you respond?

Certainly, these people are entitled to their own opinions, and I have not had the opportunity to discuss this with them face to face, as I'd like to, but let me just state that *they're wrong.* I think the Act recognizes all interest groups and brings each into an equal position. It certainly doesn't put "impoverished" fish and wildlife agencies over power interests or water interests or allow empire-building.

My view is that to survive, we have to be reasonable in our requests. We have to reflect on and understand the needs of the other users. Most importantly, we have to work together with them. We certainly are not going to back down from our needs just because there are other needs, but we'll try to consider all of them in developing a balanced package. I certainly want to work in harmony with the power and water interests. That's why the fisheries managers and tribes contacted the [Bonneville Power Administration] Administrator and the Power Council and why we have agreed to discuss policy matters with them on a regular basis.

Q. How receptive have you found Jim Jura [Bonneville's Administrator] to your interests?

I am *very* impressed with the new Administrator. Mr. Jura certainly isn't acquiescing to all of our requests, but what I'm impressed with is that he is listening to us, and he's trying to understand some very complicated issues. I think you'll see some resolution on issues that have been on the table for several years.

Today's process of communicating with the Administrator and Power Council is much superior to past practices of allowing lower level staff managers to wrestle with decisions with little or no guidance.

Q. In your view, what progress has been made in managing fish harvests over the last few years?

I think there has been significant progress. Even 10 years ago, we had each state and each tribe regulating its own fisheries both inside the state and in the ocean. There was little or no coordination. But with the Magnuson Act a coordinated effort was created, at least in ocean management, and things have changed dramatically since then.

The Northwest Power Act, enacted six years ago, and the more recent U.S.-Canada Treaty [regarding Pacific salmon harvests] have helped provide a holistic view toward harvest management. These have all been parts of the puzzle that helped bring about coordinated coastwide management. We still need to stop the destruction of habitat, which we're trying to do, but we need some additional help.

Q. You suggest that coordination is the biggest achievement in the fisheries. Can you talk about the relationship between the fish and wildlife agencies and the basin's Indian tribes?

Currently, the relationships are probably the most positive aspect of fish and wildlife management. And I cannot say that loudly enough or often enough. If you go back to just 1981, when I started in

fisheries management, I remember coming aboard as the state director and facing nearly 80 residual lawsuits. Many other suits were filed that first year. Today, things have changed dramatically. Two or three suits per year are the norm.

I think what changed was everyone's willingness to take a new look; to get away from court confrontations; to get away from allowing the courts to manage our fisheries; and to begin to sit down and learn about each other's needs through a negotiating process. What really helped was to make the needs of fish Number One; to make fish the common denominator that we all work from.

I should add that what goes with this is full recognition that the tribes are co-managers of the fish and wildlife resource. In my opinion, they are doing a good job. In this past year, the tribes released 58 million fish regionwide as part of their ongoing programs. That's significant because those are fish for all citizens. I just can't say enough about how attitudes have changed.

It's not perfect. We still have disagreements. And those disagreements occasionally lead to lawsuits. But what we've developed is a process in which we can talk, in which we can look at our differences and at least try to reach alternatives to having the judicial system manage the fishery resource.

Q. What are your particular goals as chairman of the Columbia Basin Fish and Wildlife Authority?

From a fish and wildlife perspective, my goals are to bring forward a coordinated effort. I find that's where we have the most strength when dealing with our counterparts. We've been met with a lot of willingness from the other parties to do this.

Q. How will the new Basin Authority differ from its predecessor, the Basin Council? What changes are you proposing?

When I came on board nearly a year ago as the chairman of the Council, I made a commitment to the other directors that I was going to be an activist. I was going to get involved in Columbia Basin matters. I was committed to improving our relationships with the Power Council, Bonneville, the Corps [U.S. Army Corps of Engineers] and the Public Utility Districts [PUDs]. I think that for the most part we've done that.

We have had a couple of working sessions with the Power Council. We've scheduled quarterly meetings with the new Bonneville Administrator. We've had several visits with the PUDs, and the message we're carrying is that fish and wildlife directors intend to be united in their positions and that we want to work with them as policy-makers one on one.

The significant change and major improvement of the new Basin Authority is that it brings the Columbia Basin Indian tribes in as full members. At the same time we will modernize our charge to reflect changes in the basin, such as those brought about by U.S. v. Oregon [see story on page 3] and the U.S.-Canada Treaty. We are also looking at restructuring some of the old council's subcommittees. But our major thrust is to take a united front on issues.

Q. There has been some controversy over whether the Council's fish and wildlife program is for so-called "meat or museum" fish. Would you comment on that?

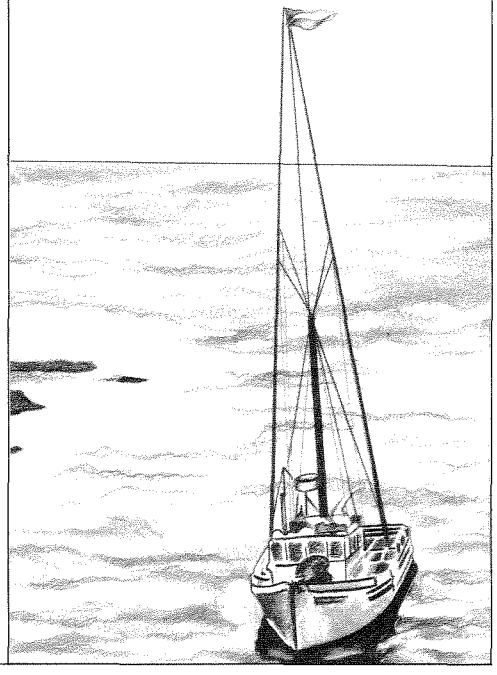
My answer would have to be: a balance of both. Certainly it's my goal, and I think the Council's goal, too, to rebuild the fish runs and restore the habitat for use by recreational, commercial and tribal fishermen. I guess it all boils down to providing a protein resource to the public at a reasonable price. It can't strictly be a showpiece resource, although we should provide opportunities for those who just appreciate the aesthetic value of salmon. It's a careful balancing act of production and of fish-watching.

There is another side of this question: Do you enhance the fish by artificial means at the expense of our wild fish, or do you try and completely dedicate all your energy and resources to preserving the wild stocks? The direction we've chosen as salmon managers is a balance of both, recognizing that if you overplay either side of the equation, it could spell disaster.

There's agreement among fisheries managers that we've got to look at both aspects of the "meat or museum" fish question and that we can't put all our "eggs in one basket."

Q. Is it fairly universally accepted that wild stocks are genetically superior?

That battle has loomed for so long, I don't know who's winning. I think the better answer is that there's a commitment to promote both stocks—not one instead of the other. It is alleged that the wild stocks are more durable. At least the sports and the commercial [fishing] communities have indicated this. I don't know if that can be scientifically substantiated or not. We've also found that wild fish can be more fragile in some ways. Any habitat disturbance affects them far more than the hatchery fish, which are protected in their own controlled environment.



Q. You've had a unique opportunity to see fisheries management from both the state position and the federal position. What are the differences?

I've had the opportunity to observe all the directors in the Washington state government, and I can say without a doubt that the director of fisheries is one of the most, if not *the* most, challenging position in the state. The difficulty is being in the position of having to allocate too few resources among too many user groups. I used to liken that to dividing a candy bar among your children when the first thing they always do is compare the pieces to see who was favored. Well, the same jealousy exists with the user groups. It's very tough to survive in a position like the state director of fisheries over a long period of time. Having to make tough resource decisions does not help long-term job security. I think that Bill Wilkerson [Washington's director of fisheries] has done a tremendous job in that regard, and that's why he's survived changes in administrations.

The difference in the federal position is that you really are a bit removed and buffered from the pressures of direct contact with the user groups. And the issues are much broader. In addition to management of domestic ocean fisheries, I'm involved with foreign fisheries off the West Coast and with development of fisheries products as well as enforcement. I've thoroughly enjoyed both jobs and am absolutely dedicated to our natural resources.

Q. You've been in the news quite a bit with the recent dramatic seizure of illegal fish on the high seas.

This is really a significant event. In early September we announced the seizure of 600,000 pounds of illegally caught chum and sockeye salmon. We have since accounted for another 2.9 million pounds of salmon. This is the largest seizure in the history of the nation and most likely the history of the world.

The whole scam now appears to include around 3.5 million pounds of fish which were laundered by a Taiwanese group through a very elaborate scheme of processing these fish; labeling them as fish other than salmon with a California corporation name and with phony bills of lading, sending them to Hong Kong or Singapore and then into the Port of Tacoma. The bills of lading were changed in the Port of Tacoma, where the fish became a product of the United States and were sent back as such to Japan, the ultimate destination.

We're left with the serious question: "What's going to happen to the fish?" At first I was concerned that the fish might have to be destroyed, but that's not the case. That would have been an extreme injustice and a waste of the resource. On the other hand, we didn't want to put them on the market all at once and depress the market. That would have created an adverse situation for our own processors.

I finally reached an agreement that the fish will be donated to charitable organizations along the West Coast. It will be exciting to see food banks that, in addition to cheese and butter, will also provide salmon. Can you imagine—salmon! Some people may never have eaten it before.

Q. One final question; if you were the Power Council, what would you do differently?

I don't think any major overhaul is needed for the Power Council. I think that, as with many oversight bodies, including our own, there's a need for an introspective look at what you're doing and a need to be open to criticism to see how you might improve. I think we've had that kind of frank discussion with the Council members with some success.

We would like more help getting on with some of the projects, getting them out of the study phase, and getting the process started. I guess it's the business side of me. I'm impatient, and I want to get this system going. Certainly, we'll make mistakes, but I think we can correct the mistakes. The Council has been forthright and easy to deal with. We just need to get going.

Fish and Wildlife Update

by Ruth Curtis

It appears to be a plain document, but it is a bestseller for the Council. "It" is the 1986 Draft Amendment Document, affectionately known as the "DAD," which contains proposals to amend the Columbia River Basin Fish and Wildlife Program.

The Draft Amendment Document contains preliminary recommendations to adopt, modify or reject each of more than 80 amendment applications the Council received from various parties last winter. It also incorporates amendment proposals from the Council and its staff.

The document currently is being distributed for public comment. Use the order form on the back cover of this magazine to request a copy. Public hearings were held in each state in October, and written comment will be accepted through December 15, 1986.

The Council will consider all the comments received and adopt final amendments in February 1987. The Council will also publish a written response to any amendment proposals that are rejected.

Salmon and steelhead planning

In late October, every person and group who received the Draft Amendment Document also was sent an issue paper on systemwide policies for salmon and steelhead planning in the Columbia River Basin. These systemwide policies recognize the need to integrate river passage improvements; salmon and steelhead production; and harvesting to improve the fisheries in the Columbia River Basin. The discussion of alternative planning strategies described in the paper could affect program amendments proposed in the Draft Amendment Document.

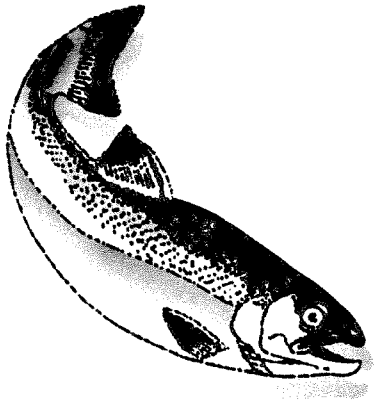
Major features of the Draft Amendment Document

- A statement that hydropower development in the Columbia River Basin is responsible for a reduction in salmon and steelhead runs of about 5 to 11 million adult fish. This statement was proposed by the Council last spring.
- A description of the Council's approach to systemwide planning for salmon and steelhead. The approach emphasizes the interdependence of three types of action—river passage improvement, fish production and harvest management.
- A set of guiding principles and areas of emphasis for salmon and steelhead research in the basin.
- Provision for Bonneville Power Administration funding of data collection on hatchery and natural production of fish.
- A policy on resident fish substitutions (proposed by the Council last spring) and the proposed addition to the program of a variety of resident fish substitution projects in areas above Chief Joseph and Hells Canyon dams. Resident fish are fish, such as certain trout or kokanee, which do not migrate to the ocean. They are used as substitutes for fish populations lost when salmon and steelhead passage into parts of the basin was blocked by hydroelectric dams.
- Changes in the water budget accounting and implementing process. The water budget is a block of water set aside to be used in timed releases corresponding to spring salmon and steelhead runs. It actually increases the regulated flow of the river to speed the migrating juvenile fish downstream.
- Changes in the fish transportation policy. Transportation refers to collecting downstream migrating fish and transporting them in barges or trucks around the dams.
- Changes in funding of habitat improvements and projects to clear fish passage on tributaries.
- Support for Bonneville funding of a spring chinook hatchery in northeastern Oregon.
- Provision of Bonneville power for a Umatilla pumping project to increase water flows for fish in the Umatilla River.
- Recognition of the Montana Power Company's agreement to fund the purchase of water from Painted Rocks Reservoir to maintain flows for fish.
- Plans to mitigate the effect of Libby and Hungry Horse dams on wildlife in Montana.

Fish and wildlife activities work plan

In response to the fish and wildlife program Five-Year Action Plan, the Bonneville Power Administration plans to release a draft work plan for fish and wildlife activities in Fiscal Year 1987. The draft work plan reflects the Bonneville Administrator's recent decision to reduce Bonneville's fish and wildlife program budget to about $36.9 million. The Council intends to take comment on the proposed work plan at its November 12-13 meeting in Portland. Background materials and additional information are available from the Council.

(To receive copies of the documents mentioned here, use the order form on the back cover.)



Shorts

Last year, builder Campbell Massey won an award for the most efficient home built in climate Zone 3 (cooler Montana climates) under the Bonneville Power Administration's Super Good Cents Program. This year Massey used the promotional funds he received with the award to build cut-away wall and floor section displays showing the features of a Super Good Cents home. (The Super Good Cents Program markets super energy-efficient new homes.) Massey and Rudy Kratofil of the Ravalli County Public Utility District, in the Bitterroot Valley of western Montana, worked with high school construction classes to build the displays, which are now featured in local retail building supply stores and fairs. Next, Massey plans to build an entire Super Good Cents home in cooperation with a local high school. (Source: Bonneville Power Administration, *Super Good Cents Bulletin,* September 1986)

Norway is about to take an even bigger bite out of the market previously served almost exclusively by Pacific Northwest salmon fishers. By 1990, the bounty of Norway's domestic salmon is expected to top 100,000 metric tons as Norwegian salmon-farming operations quadruple. In the Northwest, Alaska harvests about 290,000 tons, and Washington hauls in about a tenth of that. As other countries expand their salmon-farming ventures, overproduction could cause the collapse of prices in the marketplace. (Source: *Marple's Business Newsletter,* 911 Western Ave., #300, Seattle, WA 98104)

Texas may follow the Northwest with a "least-cost" electrical energy policy, if a coalition of citizens' groups has its way. The coalition, which includes environmentalists, energy conservation advocates, senior citizen groups and other organizations, has petitioned the Texas Public Utilities Commission to adopt new rules that would require utilities to use the least costly method of meeting electrical energy needs. According to Tom Smith, director of Public Citizen of Texas and a coalition member, the move could potentially save Texans 33-66 percent of their annual energy consumption by the year 2000, at less cost than the power plants now under construction. (Source: Energy Conservation Coalition, 1525 New Hampshire Avenue N.W., Washington, D.C., 20036)

A super battery being studied in California might provide one answer to the problem of having to build enough electrical generating resources to meet even occasional peak loads. Southern California Edison Company and the Electric Power Research Institute plan to build the battery, the world's largest; a device that can store enough electricity for 10,000 customers. The battery will be charged at night, when generating equipment is usually idle, and discharged during the day as it is needed to meet peak electrical demands.

The battery will use thousands of lead-acid cells—like those in car batteries—and it will cover an acre of ground. The project is expected to cost $10 million and be completed in 1987. (Source: *The Wall Street Journal*)

An entire community of town houses with solar-generated electricity (photovoltaic) has been completed in San Diego, California—an area with electric rates that are higher than the national average. Each town house features a 1-kilowatt (peak) array of ARCO Solar Inc. photovoltaic modules. (*Solar Energy Intelligence Report,* July 15, 1986.)

The Pacific Northwest still has the lowest electric rates in the nation, according to a recent survey by the National Association of Regulatory Utility Commissioners. The Northwest's rates ranged from 3.62 cents to 4.8 cents per kilowatt hour. This compares with a national average of about 8 cents per kilowatt hour and a high of over 15 cents for an East Coast utility. (Source: Oregon State University Extension Service, *ENERGYgram,* Corvallis OR 97331)

Total energy consumption during 1986 will increase 2 percent to 75.4 Quads (quadrillion Btu), with a further 4 percent increase by mid-1987, according to the U.S. Energy Information Administration. The agency also makes the following projections for the country's energy use during 1986: oil imports will average 4.8 million barrels per day, up from 4.3 million in 1985; demand for petroleum products will increase moderately due to demand for residual fuel by electric utilities; natural gas consumption will decrease slightly to 17 trillion cubic feet; coal consumption will increase less than 1 percent to 827 million tons; and electricity generation will increase 2 percent over 1985 and another 5 percent by mid-1987. (Source: Oregon State University Extension Service, *ENERGYgram,* Corvallis, OR 97331)

COLUMBIA FISH COUNTS CLIMBING

	Average 1976-1986	1986
Bonneville Dam (Columbia River)		
Spring Chinook	84,262	*123,177*
Summer Chinook	35,494	*31,041*
Fall Chinook	224,743	*227,132*
Coho	39,743	*93,084*
Steelhead	185,274	*356,858*
Sockeye	79,775	*58,094*
McNary Dam (Columbia River)		
Spring Chinook	40,380	*76,058*
Summer Chinook	23,651	*25,857*
Fall Chinook	78,418	*110,566*
Coho	6,556	*128*
Steelhead	88,132	*96,761*
Sockeye	45,489	*46,058*
Ice Harbor Dam (Snake River)		
Spring Chinook	22,425	*39,089*
Summer Chinook	6,177	*7,748*
Fall Chinook	2,869	*1,607*
Coho	558	*0*
Steelhead	60,477	*37,180*
Sockeye	231	*16*

(Source: U.S. Army Corps of Engineers)

Most salmon and steelhead runs in the Columbia River continued to show improvement this year as indicated by the number of adult fish counted at three dams on the river system. While some runs do not top the 10-year average, the only runs that did not improve over the 1985 counts were the sockeye—whose runs typically are cyclical. The steelhead runs for 1986 are likely to be the highest on record. (The figures above are as of September 21, 1986. The count of fall chinook will increase substantially at each dam as the year progresses.)

Calendar

October 28-30—"2nd Annual Northwest Energy Expo" in Seattle, Washington. Sponsored by Puget Sound Power and Light, in cooperation with Seattle City Light, Snohomish County Public Utility District, the City of Tacoma Light Division, and the Bonneville Power Administration. For more information: Puget Sound Power and Light Co., P.O. Box 97034, Bellevue, Washington 98009-9734, (206) 462-3726.

November 4-6—"U.S. Coal: Markets, Contracts, & Procurement Decisionmaking" in Denver, Colorado. The fourth annual conference on coal marketing strategies, sponsored by the Edison Electric Institute, the Western Coal Export Council, and Resource Data International. For more information: Coal Marketing Strategies, 1660 S. Albion, Suite 623, Denver, Colorado 80222, (303) 756-1267 or (303) 295-3227.

November 5—"Package Economizers: A Prime Source of HVAC Recovery," in Portland, Oregon. A Commercial Energy Forum monthly luncheon sponsored by the Oregon State University Extension Service. For more information: Susan Vogt, Oregon State University Extension Service, Multnomah County Office, 211 S.E. 80th Ave., Portland, Oregon 97215, (503) 241-9172.

November 12-13—Northwest Power Planning Council meeting in Portland, Oregon. Meeting will be held at the Council's central office at 850 S.W. Broadway, Suite 1100.

December 1-5—"Riparian/Stream Management," a training program offered by Taecan, and Don Chapman Consultants, Inc., to be held in Boise, Idaho. For more information: Don Chapman Consultants, Inc., 3180 Airport Way, Boise, Idaho 83705, (208) 383-3401.

December 3—"Using Energy Accounting as a Diagnostic Tool in Selected Commercial Buildings," in Portland, Oregon. A Commercial Energy Forum monthly luncheon sponsored by the Oregon State University Extension Service. For more information: Susan Vogt, Oregon State University Extension Service, Multnomah County Office, 211 S.E. 80th Ave., Portland, Oregon 97215, (503) 241-9172.

December 10-11—Northwest Power Planning Council meeting in Seattle, Washington. Meeting will be held at the Federal Building, 915 Second Avenue, Seattle, Washington.

Compiled by Ruth Curtis

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 will be sent to you as soon as they are.)

Publications

- ☐ Issue paper on Columbia Basin salmon and steelhead policies (See page 21.)
- ☐ Draft Amendment Document—Columbia River Basin Fish and Wildlife Program (See page 21.)
- ☐ Summary of 1986 Applications for Amendments—Columbia River Basin Fish and Wildlife Program
- ☐ 1986 Applications for Amendments—Columbia River Basin Fish and Wildlife Program (five-volume set)
- ☐ 1986 Northwest Power Plan
- ☐ 1986 Annual Report of the Northwest Power Planning Council
- ☐ Background Information on Bonneville Power Administration Fish and Wildlife Program Work Plans

Mailing Lists

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

- ☐ *Northwest Energy News* (this bimonthly magazine)
- ☐ *Update!* (public involvement newsletter mailed with the Council meeting agenda)

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(Or call Judy Allender at the Council's central office, (503) 222-5161, or toll free 1-800-222-3355 in Idaho, Montana and Washington, or 1-800-452-2324 in Oregon.)

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