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This issue's cover illustration is a photograph from the canyon country of northeast Oregon by John Harrison.
Fifty miles northeast of Enterprise, in a remote region of northeast Oregon the Nez Perce Indians call “canyon country,” the stunningly vertical landscape rises and falls and folds upon itself in a maze of precipitous drainages thousands of feet deep.

Here the few trees, mostly pines, firs and cottonwoods, collect along the valley floors, and the steep canyon walls are thick with native bluebunch wheatgrass, still green in early June, and native wildflowers — tiny purple phlox and yellow lomatium, and the taller bright yellow blossoms of arrowleaf balsamroot.

But for the warm wind rustling the grass and flowers, and the buzzing of curious insects, there is no sound as Keith Lawrence surveys the timeless vista from a ridgetop above Joseph Creek, a tributary of the Grande Ronde River. Away in the hazy distance, perhaps a half mile and several hundred feet below, a bull elk stands alone on another ridgetop. The animal is huge, its dark brown cape and sable flanks contrasting with the green hillside.

“Look at him there, like a monarch surveying his kingdom,” says Lawrence, wildlife manager for the Nez Perce Tribe.

An aerial survey once counted more than 1,000 Rocky Mountain elk in this area. White tail deer, bighorn sheep, cougar, black bears and coyotes also have been sighted, as have numerous species of birds, from bald eagles to songbirds. It is remarkable, nearly pristine habitat for wildlife, and that’s a big part of the reason why Lawrence and the tribe are working to acquire it — 10,300 acres, to be precise — with the hope of acquiring an adjoining 6,200 acres from willing sellers in the future. The land is bordered on the south by the Wallowa Whitman National Forest and on the north by the Washington border.

The tribe hopes to acquire the land through a complex, three-party deal designed to mitigate the loss of wildlife habitat caused by the operation and construction of federal hydropower dams on the nearby Snake River. Under the
Northwest Power Act of 1980, the Bonneville Power Administration, which sells electricity generated at federal dams in the Columbia River Basin, is required to protect, mitigate and enhance fish and wildlife that have been affected by those same dams. For wildlife, this often involves buying acreage near the rivers to replace habitat flooded under reservoirs. But it’s not a straight acres-for-animals calculation. For each of the federal dams, the Northwest Power Planning Council and Bonneville have calculated how much wildlife habitat was affected — by inundation or other disturbances. This habitat is quantified in “habitat units.” Because every type of wild animal or bird uses differing amounts of land for survival, the size of a habitat unit for, say, an elk, will be different than that for, say, a rabbit or an eagle. Bonneville and the Council have agreed on a list of wildlife species to represent the habitats inundated by federal dams on the Snake River and also the number of habitat units needed for compensation.

By purchasing the 16,500 acres along Joseph Creek, Bonneville will partially satisfy its obligation to replace lost Snake River habitat. Bonneville expects the land to cost $4.5 million.

The Trust for Public Land, a national conservation organization that acquires significant conservation lands, currently holds an option to buy the larger of the two parcels, the 10,300-acre former cattle ranch owned by Helm Resources of Boardman, Oregon. Bonneville will pay the tribe, which will enter an agreement with the Trust to acquire the property title. The tribe is seeking an additional $3.9 million from Bonneville to establish a trust fund to pay the anticipated $200,000 in annual expenses for managing the property. These expenses include fire and weed control, as well as maintenance and some limited development.
"Getting the dollars together with the property is very complicated," Lawrence says in something of an understatement. It is true that the purchase is a slow process — the tribe has been working on the project for more than a year. Partly, that is because it involves an environmental assessment by Bonneville. Recently, that assessment was completed and Bonneville issued a formal “Finding of No Significant Impact.” Meanwhile, the Columbia Basin Fish and Wildlife Authority, an association of state, federal and tribal fish and wildlife managers who recommend projects for funding by Bonneville, gave the northeast Oregon project high priority. The Council planned to review the Basin Authority’s list of prioritized projects in July, following a public comment period.

Assuming these final hurdles are cleared, the actual process of transferring ownership will begin. Bonneville will provide $3 million this year, and the remaining $1.5 million for the land purchases in Fiscal Year 1997, which begins October 1, 1996. Money to establish the trust fund for annual expenses will be pursued in 1997, as well.

While all the paperwork seemingly could fill one of the deep canyons on the property, the result will be worth the effort, judging by the project’s long list of supporters. Governors John Kitzhaber of Oregon and Mike Lowry of Washington support it, as does the U.S. Forest Service, Wallowa County’s commissioners, the Confederated Tribes of the Umatilla Indian Reservation, Oregon’s and Washington’s fish and wildlife departments and more than a dozen citizen groups ranging from environmentalists to hunters.

Perhaps the most significant letter of support came from one of the current owners, Hans Magden. In a letter dated October 13, 1995, to Ken Casavant, the Council’s eastern Washington member and vice chairman, Magden wrote:

“We have concluded it is wonderful land; it was a good home, but not a good cattle ranch.... When we decided to sell the land, we did not think about the land being used for wildlife mitigation. We thought about how it would be nice to keep the land in one ownership and used for something that would not require development of roads or degradation of watersheds. That is why we approached the Trust for Public Land with a proposal to buy the land but get it into public ownership. We felt it was the ideal solution. We think wildlife mitigation would be a good use of the land.”

The Nez Perce Tribe plans to manage the land for wildlife conservation, but people will not be excluded. Hunting will be allowed, for example; but human impacts will be carefully controlled to protect and conserve the native wildlife and vegetation.

The property, bisected by seven major creeks, is mostly unfenced and unimproved. While there are about 6.45 million board feet of merchantable timber on the property, primarily ponderosa pine and Douglas fir, no timber has been harvested in recent decades and livestock have not grazed there for more than five years, except for occasional strays from nearby ranches. As a result of past management practices, large tracts of the land are virtually weed-free. Elsewhere in the canyon country, signs of historic overgrazing — weed infestations and erosion — are evident.

“This country is remote, inhospitable and harsh,” Lawrence says. “But it also is fragile. It can be abused.”

And so parts of it are being protected. The purchase of the Helm Resources property is the latest in a series of purchases designed to protect wildlife as well as cultural and recreational resources in the Snake River country where northeast Oregon, southeast Washington and west-central Idaho meet. Steadily, it is becoming a publicly owned ecosystem of connected habitats.

For example, the Trust for Public Land bought the 7,300-acre Cache Creek Ranch in the Hells Canyon National Recreation Area and turned it over to the U.S. Forest Service and Bureau of Land Management in 1991 and 1992. The Trust bought the 1,400-acre Lime Hill property at the confluence of the Snake and
Grande Ronde rivers in 1992 and conveyed it to the Bureau of Land Management. And Bonneville bought 59,700 acres on Craig Mountain, on the Idaho side of the Snake River, in 1992 and conveyed it to the state.

Taking land out of private ownership is controversial in northeastern Oregon, particularly if that means shutting out the public and curtailing economic activities like logging and grazing. The Nez Perce Tribe plans to write a comprehensive management plan for the property, including rules for logging, hunting, grazing and law enforcement, Lawrence said. Nonetheless, winning Wallowa County’s support was crucial to the success of the project.

“The thing that is probably most important is that they came to us early on,” Wallowa County Commissioner Pat Wortman said in a separate interview. “The tribe first approached us regarding this project about a year ago. We have a working relationship with the tribe that goes back to 1989. That helped because I had about five stipulations to assure our acceptance.”

These included paying property taxes, paying for fire suppression and weed control, and developing a comprehensive management plan that includes consideration of livestock grazing that would be compatible with wildlife. Maintaining tax income from the land and promoting economic activities, from agriculture to recreation, are important considerations in a county where 63 percent of the land is owned by the federal government and therefore not taxed, and where timber sale receipts have declined 95 percent in the last decade or so.

Power Planning Council members John Brogoitti of Oregon and Ken Casavant of Washington worked closely with Lawrence to assist the tribe in obtaining Council approval and Bonneville funding for the project. “This is the sort of wildlife mitigation project that can serve as a model for others,” Brogoitti said. “The tribe did an excellent job working with Wallowa County and the state of Oregon, and Lawrence should also be commended for putting together an operation and maintenance plan to ensure that ratepayers’ funds are used in the most prudent manner possible. It will serve as a standard for other wildlife mitigation projects approved by the Council and funded by Bonneville.”

Wortman said the project is “a positive thing because it meets our needs; as our revenues dwindle, we need to protect our tax base.”

Lawrence says the tribe understands: “The tribe intends to be a good neighbor.”

It is indeed a historic neighborhood for the Nez Perce. There is archaeological evidence that the Nez Perce have lived in the canyon country for 12,000 years. They were semi-nomadic people, moving around their homeland to take advantage of the seasonality of foods and resources. They spent summers on the ridgetops and plateaus, and then moved to the warmer valleys during fall and winter. They hunted elk, deer and bighorn sheep, and fished for salmon and steelhead — fish accounted for 60 percent of their diet. They also dug the abundant camas roots.

When Lewis and Clark first encountered them, near present-day Weippe, Idaho, in September 1805, the Nez Perce were a well-organized tribe of widely scattered settlements with a diverse economy, sending traders far to the west and south and defending a homeland that stretched across some 13 million acres of present-day Washington, Oregon and Idaho. On October 10, Clark wrote, “Their amusements appear to be but few; as their situation requires the utmost exertion to procure food, they are generally employed in that pursuit, all the summer and fall fishing for the salmon, the winter hunting the deer on snow shoes in the plains and taking care of their immense number of horses.”

In more recent times, many people tried to establish homesteads in the canyon country, but most failed, Lawrence says: “The Nez Perce thrived on this land, but they did it by taking advantage of the adjoining forest land rather than trying to stay in one place.”

Soon, “if the paperwork trail leads the dollars to the property,” as Lawrence likes to say, the Nez Perce once again will manage this small portion of the canyon country. Like their ancestors, the modern tribe will welcome visitors, but the tribe also plans to manage the land in a way that preserves its timeless qualities for future generations.

There is cultural significance in this approach, as well as wildlife significance, a point recognized by Magden, the current owner, in his letter to Casavant:

“As a child, I found pictographs and arrowheads made by the Nez Perce people long ago,” Magden wrote. “Although it is not your purpose, it seems ‘just,’ somehow, that the land could also serve as ‘heritage’ mitigation for the Nez Perce. It seems fitting they would assume title once again.”
They like to use the word “normative” when they talk about the Columbia River and its ability to sustain the salmon runs that once flourished here like nowhere else on the planet. They don’t mean “normative,” the way the dictionaries usually mean it—“based on a standard.” Their intent is to describe some of the conditions, or “norms,” that help define the way a salmon-supporting ecosystem would work. It is all part of the “conceptual framework” they were asked to develop for the Columbia River Basin Fish and Wildlife Program.

“They” are the scientists convened by the Northwest Power Planning Council to provide insight into one of the most confounding questions this region faces: How can we bring back the salmon? They were selected from a list of nominees submitted by government agencies, Northwest Indian tribes, special interest organizations and others that are...
Dr. Rick Williams, a geneticist from Meridian, Idaho, was elected by the group to be its chair and spokesperson. While the scientists have spent the past year and a half developing their 500-page draft report, Williams maintains that the group itself has some collective piece of knowledge now. It’s through interaction with each other that the whole state of that knowledge base has moved forward.

The scientists began the process with group discussions, then broke into subcommittees to address specific topics, such as hatcheries and habitat. The subcommittees drafted their reports and circulated them through the whole group. On occasion, an outside expert was brought in to fill a gap in the group’s knowledge or experience. They operated by consensus. There has always been consensus in their decisions. They submitted their preliminary findings to the Council in April. After peer review, the report will be released to the public.

The Council is considering opening the Columbia River Basin Fish and Wildlife Program for amendment to respond to the report’s findings and other information learned since the program was last amended in December 1994.

Tell me how you arrived at the concept of a “normative river.” How is it different from the pristine river before dams or from the river as it is run today?

After considerable debate, the group settled on the term “normative” as a way to describe the central processes of the Columbia River salmonid ecosystem. A lot of people want to see the Columbia River returned to a more “natural” river because they think it would benefit salmon. That implies that we can go back to some historical, pristine condition.

While the pristine river idea would get us back to the conditions under which the salmon evolved, we recognize that we can’t go back to that pristine river. We live in a highly developed Northwest, with a developed hydropower system. So what we’re suggesting with the word “normative” is that we try to identify what processes drive the river under natural conditions, and we try to bring those processes into higher relief.

What we are proposing sounds simple: you re-regulate the river using the existing hydropower projects so that more natural, or normative, processes emerge and the salmon respond to those. It’s an intuitively attractive idea. But like many things, the hard part will be in the details, in the integration of, not only the political and economic constraints, but even the biological constraints. However, because this may run contrary to the operation of the river for economic benefit, it is likely to be expensive and will not be painless.

Do you mean by “processes” those factors that are conducive to the salmon?

It’s even larger than that. We looked for the features of large, natural rivers that are undammed. For example, natural rivers are highly seasonal. Water comes off in the spring when the snow melts. You can plot over a number of years, what normal outflow is going to look like. And the graphs of large river systems of this temperate portion of the northern hemisphere are going to look very similar whether those rivers are in Europe or North America or wherever.

When we run the river to generate electricity, however, the shape of that hydrograph dampens a lot. The peak, which characterizes the spring flows, comes way down. And the lower summer and winter flows go up. So you flatten in both directions the natural hydrograph of the river.

We’re suggesting that the region should try to take the hydrograph more toward what it was naturally, recognizing that we can’t restore it to exactly what it was naturally. So we allow spring flows that are high enough to restructure the riverine habitat, to make pools and eddies, clear out old sediment and deposit new, as well as assist the downstream migration of juvenile fish.

The other big thing you see in a natural river is that daily fluctuations are usually limited to about 2 to 5 percent. However, in a river that’s regulated for hydropower, that variance may be 5 to 15 percent. What happens then is that when the water is high, the nearshore food chain organisms will start to colonize the higher areas, and when it drops, there isn’t enough groundwater to support them. These nearshore areas provide food and habitat for rearing and migrating fish. Under the present regulated system, you end up with a dead zone between the high-water and low-water marks.
If you could stabilize those flows, you'd start to get, even in these reservoirs, some habitat and shoreline connections. It still may not solve all of the problems, but it certainly will help. What we're saying is that restoring the normative condition would call for increasing seasonal variability in the river, by restoring a portion of the spring freshet, and minimizing daily fluctuations to allow re-establishment of the biological communities at the river's edge.

So normative is our way of describing where we want to go. Normative sets the parameters. Flow is a parameter, water velocity and reservoir fluctuations are parameters, substrate characteristics, nearshore habitat, they are all parameters you can define as the norms you want to achieve. You can imagine a host of things that would define why a river is different than a lake, why a river that supports salmon is different than one that doesn't. These are the characteristics we need in the Columbia River Basin if we're going to have salmon back.

Look at rivers where those characteristics are in place, where there are still salmon. In natural rivers, spring flows move the smolts out to sea. There's good spawning habitat. There are back channels and sidebars with intact food links where the juveniles are rearing and growing.

If you go back and look at our river, we have some of those, but not all of those and not in the right proportions. Salmon rearing and food base areas in the mainstem channels have been dramatically reduced. The smolts are moving through a mainstem system that's very, very unfriendly to them. It's unfriendly not just from the perspective of passage and mortality associated with the dams, but the reservoirs lack good food bases.

By going toward the normative condition, we should help re-establish the food bases, reduce the exotic, maybe even the native, predator loads. Make the whole river more friendly toward the salmon. It should decrease their mortality and increase their survival and production.

We're not just talking about the impounded sections of the salmon habitat, after all, is any place where salmon carry out some phase of their life cycle — the tributaries, the rivers, the estuary, even the ocean. Many of the processes I mentioned above in regard to the mainstem also apply to the tributaries. It's also important that the fish can move between these places at specific times. These are highly migratory organisms. They have requirements at each stage of their migrations.

We spent a lot of time on the impounded sections of the salmon habitat, just like everybody else has, because these are obvious areas where the ecosystem has been highly modified by development. But we also know that because we have so much water in the big reservoirs, we could use that system to regulate reservoir levels, flow and water velocity to restructure those rivers — to reconnect the habitat and replenish the food supply.

Some of the tributaries, like the Grande Ronde and the Imnaha, don't have dams or appreciable storage capacity, so we have to try to restructure those tributaries with whatever flow they have. In the tributaries, riparian conditions and land use practices will be of greater importance in restoring these systems. Restoring tributary habitats will be more diffuse, perhaps more difficult and may take longer than the mainstem areas. In the mainstem, where we have the dams and the water, we should be able to make quicker progress in restoring the
habitat. Restoration needs to occur at both levels for salmon populations to recover.

The question people will ask is what’s new about what you’re saying? It seems we’ve been saying all along that we need to get the river back closer to what it was before the dams were put in. We may have moved slowly or been ineffective, but haven’t we been trying to approach the river as an ecosystem since the Council’s first Columbia River Basin Fish and Wildlife Program? What is different about what you’re saying now?

In one respect, nothing is new. When we did our review, we restricted ourselves to published, final reports. So basically we looked at what was already written.

But there are several things that are in fact new. One of the things we identified in our “critical uncertainties” paper a few years ago, was that the fish and wildlife program didn’t seem to have an overarching conceptual foundation, a framework that describes how we think the system works with respect to salmon. It’s there, but it’s kind of implicit, it’s not really stated explicitly.

So what we develop in the early part of our report is that conceptual foundation. It’s a view of how the ecosystem works in the Columbia, which, as I said, with respect to salmon and steelhead in all their different life stages, includes the river, the estuary, the ocean and the tributaries. You would think that kind of view would be in the fish and wildlife program, but it wasn’t in there explicitly enough to work as a kind of filter to screen recovery measures that are proposed.

The second thing we looked at was having the riverine aspects of the river re-emerge and using that as the vehicle to achieve the habitat restoration. That’s what I mean when I say we can use the dams themselves to flush out the river in the spring and restructure the habitat linkages.

This is actually quite a radical contrast to the approach that has guided most salmon recovery in the Northwest. The traditional approach has been that we could simply engineer solutions to ecosystem changes that resulted from development activities. We are saying that, in most cases, these simply haven’t worked, and the evidence is clear. Many runs have disappeared, and the number of “healthy” populations in the basin is very small, despite hatcheries, transportation and other engineering solutions.

Our conclusion is that productive runs will be restored only when ecosystem characteristics that are conducive to salmon recovery are restored — conditions that we have collectively termed “normative.”

The third thing was looking at how the salmon might respond to a restored ecosystem using a concept called “metapopulation theory.” This theory recognizes that populations of many organisms typically have some level of organization and linkage amongst themselves. We’ve tended in the past to view populations as isolated, in fact, because they have often been isolated by areas of unfavorable conditions within the basins. Even though we’ll give lip-service to the fact that individuals move into the population through immigration or disperse out into other populations, we usually go back to treating the populations as isolated units in time and space.

If you look at historical information and at other salmon-producing systems, what you find are all these populations, some that are in proximity to each other, probably have a lot of gene dispersal, and
We know from the data that’s historically were scattered through a mosaic of tight or looser linkages. The larger, core populations existed in high-quality habitats, like the Hanford Reach, which still has a core fall chinook population. We know from the data that’s coming out of there that the Hanford Reach has a fairly stable population, given current ocean conditions. Most of the chinook harvested from the Columbia right now come from the Hanford Reach population. Despite this, it’s still maintaining itself.

So here’s a population that is supporting significant harvests — it gets caught in Alaska, in British Columbia — and yet it’s coming back and replacing itself. Why is it doing that? Well there’s very good spawning habitat there and probably even more important, just downstream of the spawning habitat are a series of sloughs and backwaters where the juveniles, after they come out of the gravel, go in and rear until they get enough size and bulk so they can go down through the rest of the system.

That’s telling us a number of things. It’s telling us that these populations can sustain a fair amount of harvest, of human-induced mortality, if there’s good spawning habitat, if there’s good rearing habitat. It also tells us that they can get through the lower Columbia’s four dams and survive whatever mortality is inflicted by passage through that lower river. That’s in strong contrast to the populations that come out of the Snake River right now, which have to go through eight dams.

We don’t know enough to say it’s just the difference of passing through eight dams instead of passing through four dams that is tipping the Snake River runs under. The Snake River is different from the Columbia, and the food webs in the Snake River reservoirs look to be different from the Columbia’s. They’re very poor by comparison. So there may be a lot of things affecting the runs. Still, the fishery at Hanford can handle passage through four dams, as long as these other features are there, and the ones on the Snake can’t.

It’s telling us that the most robust population of fish in the Columbia River is also the only one that has intact, riverine conditions. It’s the only free-flowing part of the Columbia. Hanford fall chinook come into the river in late September and spawn in late November. They’re resident in that part of the river for two months.

The radio tag data coming from these fish is suggesting that they move all over the upper Mid-Columbia and Snake River system, including moving up through all four Snake River dams, including adult Hanford chinook going back through some of the turbines. It’s just incredible. They’re going up above Priest Rapids. They’re going up and down into the Snake, up the Columbia, in and out of the Yakima. What it suggests is they’re spending those two months going around looking for appropriate habitat in which to spawn.

One of the questions that comes out of this observation then is, are there some other places in the main river that were historic production zones, so we can focus efforts there and not just be shooting in the dark? We looked into that and learned that the John Day reservoir appears to have been a high production area. There are probably others. One of the things the region could do, if it chose to, would be to draw those reservoirs down, use high-spring flows to scour those reservoirs out, clean them, get a lot of the sediment out, restructure the river there, build gravel bars, build back eddies, back channels. The adult chinook data — the way they’re moving around — suggests that if that habitat were available, the fish would move back into it very fast.

In the past, drawdowns have been looked at solely for their impact on water velocities to flush out migrating smolts. Our conceptual foundation, which calls for restoration of normative river conditions, suggests that the benefits of drawdown may include restoring habitat for spawning and rearing.

Another thing we know about core populations is that they have high reproduction. There’s competition for nest sites among adults, therefore there’s higher dispersal for most populations into adjacent, perhaps less optimal but good enough, habitats. So if we can rebuild these core populations, they’re going to be moving back into the lower parts of the tributaries. They’ll re-colonize. We should get this stair-step colonization of linked populations, as well as overall increase of populations.

How compatible is this suggestion — drawing down some of the reservoirs to recreate good habitat — with other uses of the river?

That’s really outside the purview of what we were asked to do. We have always been asked to restrict ourselves to scientific and technical issues and not get into policy issues. Clearly, that’s a question that needs to be addressed. Our feeling right now,
and I emphasize that we don’t have the expertise to walk very far out on this limb, is that this call to re-expose some major areas of the mainstem may not exclude any of the present uses of the river, but it’s certainly going to affect them.

This sounds like a recommendation. Do you have recommendations for the region?

Recommendations allow you to cross from science into policy. We view our role as laying out the strengths and weaknesses in the current fish and wildlife program with respect to what is known science. To a great extent, the recommendations should derive out of that.

It’s unlikely that more than small, incremental increases in salmon abundance could occur in the middle section of the Columbia Basin with status quo practices. So if policy-makers want to increase salmon abundance in the middle reaches of the Columbia, the option is to do something that is dramatically different than the status quo.

The conventional paradigm that salmon management has been operating under for most of this century is that there are engineering-based solutions; we will engineer ecological practices back in. Where we lack habitat, we’ll build a hatchery or we’ll get the dozers out. We’ll put in concrete. The most extreme example is building an alternative river, a river in a tube. That’s as far from our normative model as you can get. That’s a highly technical response. It is probably doomed to failure because it ignores or oversimplifies the ecology and the behavior of the fish.

What is different in our report is the suggestion that we allow natural river processes to take over and basically get out of the way. Let the natural force of the river re-establish the habitat. Don’t try to re-engineer the habitat. Use the river to re-establish the habitat, then the salmon will respond to it with increases in abundance, diversity and productivity.

The essence of this is you can’t separate salmon from their ecosystem, which is what we’ve tried to do. We’ve tried to put them in barges to carry them past the dams. We’ve put them in hatcheries. We’re talking about putting them in a tube. We’re separating salmon from their ecosystem and managing the ecosystem for something else.

What this report is saying is you can’t have salmon without their ecosystem. They’re one and the same. It’s so blasted logical that it comes off as nothing new.

What people will wonder is can the Pacific Northwest really do this?

If you look at the way the river’s been managed over the past 10 years versus the past 60 years, there already has been a move to try to operate the river in a more natural condition. We propose to take that further. At the same time, we would propose there be less emphasis on other kinds of active measures. By active I mean getting out there, squeezing fish, planting fish, running bulldozers around, moving earth, modifying habitat.

Instead, we’re saying, “Let the river do the work. Let the salmon respond to the habitat. But go out there and measure the response. Evaluate it. See what kind of progress you’re making.” It’s going to take an awful lot of attention to detail and careful planning.
What would be your dream for what the Council should do?

The first thing we'd like is for people to understand the concept. It's like I said, in some ways it's very simple. In other ways, it's very complex. It's a package. It's a whole. So people are misled at the simplicity of it because they think we're doing it already. But if you really treat the basin as a whole, then when you take an action here, you have to judge how that action will affect things elsewhere. That's what's going to make this viable.

We really hope the Council will understand and endorse this. We hope the fishery managers will be able to use this to revisit the fish and wildlife program to help decide which measures are consistent with this approach and which are not. If it's done right, we should be able to take this conceptual framework and use it as a filter for all the actions we take. It's going to take all the scientists, policy people and fishery people working together to get to that.

There's a misconception that we're going to lay down a whole new set of mandates. What we're really doing is providing a new perspective and a new concept. It's going to take a substantial amount of work on a lot of peoples' part to use it as a tool to revise the fish and wildlife program.

It's critical to understand that we were not charged to come up with a new program. We were charged with reviewing the science. The science can serve as a navigator as the region moves ahead in this journey. It can help find the shoals ahead and read the signs to predict storms. But even science cannot chart the route with certainty. The route is not fixed. The shoals may shift as quickly as they're charted. What limits salmon production this century, may be resolved in the next. A new limiting factor or set of factors may emerge. So science can navigate, but the people who look to science for unerring guidance, for simple answers to complex problems, will be disappointed. Nonetheless, no captain would embark on a long and hazardous journey without a navigator to help traverse the unknown.
A Merging of the Minds

In May, the Northwest Power Planning Council and the National Marine Fisheries Service, the federal agency responsible for the recovery of endangered Snake River salmon, formed a joint committee of scientists to help broaden the region’s understanding of fish and wildlife science. The new 11-member Independent Scientific Advisory Board includes seven members from the Council’s Independent Scientific Group, plus four new members who were appointed by Council Chair John Etchart and the Fisheries Service’s Pacific Northwest Director Will Stelle.

The scientists were first brought together by the Bonneville Power Administration and the region’s fishery managers in 1989, in part, to offer peer review and scientific scrutiny regarding proposed measures to save the fish. Then called the “Scientific Review Group,” the scientists were an integral part of the implementation of the Council’s Columbia River Basin Fish and Wildlife Program.

In 1993, the Scientific Review Group produced a report cataloging the “critical uncertainties” that could limit the effectiveness of any major effort to protect and rebuild the Columbia’s failing salmon runs. This report called for development of an explicit conceptual foundation to guide the Council’s efforts.

In February 1995, the Council asked the scientists to expand their efforts to critically examine the science underlying the Council’s program and to develop a conceptual foundation for restoration of the basin’s salmon and steelhead populations. Their name was again changed, this time to the “Independent Scientific Group.” They were told to review only existing research reports rather than carry out original research.

In the course of a year and a half, they’ve studied more than 4,000 reports. They presented their preliminary findings to the Council this spring. After peer review, the report will be released for public review this fall.

The group initially had a core of six non-affiliated scientists, with an additional three scientists from regional agencies serving as technical advisors. The technical advisors — one representing Columbia Basin Indian tribes, one from the utilities and one from the Power Council — were eventually merged in as fellow group members.

When the Fisheries Service decided it needed the advice of scientists to help in the recovery of endangered salmon, the Council urged the expansion of the existing group rather than the formation of a separate team. The Service agreed.

While the new panel has no specific assignments yet, in general it will be asked to:
- Review scientific and technical issues associated with salmon survival;
- Develop guidelines and procedures for scientific peer review of research proposals;
- Provide for technical review of research proposals;
- Review and provide advice on priorities for salmon conservation and recovery efforts, including research, monitoring and evaluation;
- Provide specific scientific advice on salmon recovery and conservation efforts.

Members of the Independent Scientific Advisory Board:
- Peter A. Bisson, Ph.D., a specialist on tributary habitat issues at the Olympia (Washington) Forestry Sciences Laboratory of the U.S. Forest Service.
- Charles C. Coutant, Ph.D., senior resource ecologist, Oak Ridge National Laboratory, Oak Ridge, Tennessee.
- Dan Goodman, Ph.D., an expert in ecological risk assessment at Montana State University in Bozeman.
- Charles Lichatowich, an independent fisheries scientist, Alder Creek, Washington, formerly assistant chief of fisheries, Oregon Department of Fish and Wildlife.
- William Liss, Ph.D., a fisheries professor at Oregon State University in Corvallis.
- Lyman McDonald, Ph.D., a statistician at Western Ecosystems Tech., Inc., Cheyenne, Wyoming.
- Philip Mundy, Ph.D., an independent fisheries scientist from Lake Oswego, Oregon, and former manager of fisheries science for the Columbia River Inter-Tribal Fish Commission.
- Brian Riddell, Ph.D., an expert in international fisheries management at the Department of Fisheries and Oceans Canada, Nanaimo, British Columbia.
- Jack A. Stanford, Ph.D., a professor of ecology, University of Montana, and director of the university’s Flathead Lake Biological Station.
- Richard R. Whitney, Ph.D., an independent fisheries consultant, Wenatchee, Washington, formerly a professor in the School of Fisheries, University of Washington.
- Richard N. Williams, Ph.D., an independent fisheries scientist, Meridian, Idaho.

In addition, there are two ex-officio members: Usha Veranas, Ph.D., science and research director at the Fisheries Service’s Northwest Fisheries Science Center in Seattle, and Chip McConnaha, senior fisheries scientist for the Northwest Power Planning Council.
Oregon’s Salem Electric Cooperative votes to become an “all renewables” utility.

It’s been about a decade since the board of directors of the Salem Electric Cooperative first started to get interested in offering its members a “green power product” — electricity that would be generated by renewable rather than fossil-fueled resources.

The idea, even then, was that Salem Electric, with its dependence on the Bonneville Power Administration for all its electricity, could fairly easily convert to an all renewables resource base. Bonneville already is mostly “green,” with 83 percent renewable hydropower and only 17 percent fossil-fueled electricity. But it took the right combination of resources and opportunity for the utility that serves parts of Oregon’s capital city and the nearby town of Keizer to vote to “go green” exclusively.

The utility had first explored the idea with focus groups of its members. The response was consistently positive. Even Salem’s largest industrial customer, Siltec, the huge microelectronics firm that manufactures silicon wafers and purchases about 16 percent of the electricity Salem Electric sells, was in agreement.

“We usually don’t do anything without consulting Siltec,” said former Salem Electric board President Ted Coran, who was on the board between 1986 and 1996. “They had people at our membership forum meetings. One of the things that was important to them — they plan to be in our service territory for decades — is that the long-term costs, as they projected them out, if anything were going to go down. The overall costs, fuel costs, operations and maintenance, and such, wouldn’t be as susceptible to price fluctuations as would be natural gas, for instance. They said they want to be able to count on some things.”

by Carlotta Collette
Retail customers concurred. In June 1995, the utility’s newsletter asked members whether they’d be willing to pay more than their current, admittedly very low rate to bring new renewable resources into their portfolio.

“The overwhelming response was yes,” says Roger Kuhlman, engineering and operations manager of the utility. “One hundred people responded. Eighty percent were in favor. The majority of these said they’d pay between 2 percent and 4 percent more for renewable resources.” About 60 percent said they’d also pay more to enable low-income customers to share the renewable resources without having a rate hike.

“We were very encouraged at the cross-section of individuals, from senior citizens on fixed incomes to young families just starting out,” reported Coran. “They said, ‘Thank you for giving me a concrete opportunity to do something for $2.50 a month.’ If anything, we were moving a little slower than our members wanted us to on this. The area we’re in is a reasonably representative cross-section of individuals who live in the Northwest. We had hoped that the response would be what it was,” he added.

Salem Electric serves more than 14,000 customers, with a total electricity load of 42 megawatts. To become an “all green” utility, Salem would have to replace the 17 percent of its power Bonneville supplies from nuclear and other non-renewable resources. “We were looking around for other sources for our 7 megawatts,” explained Coran, who described the Salem plan to Northwest Power Planning Council members at their meeting in Idaho this spring. “We were seriously considering 41-mill power [4.1 cents per kilowatt-hour], when Bonneville came out with its new ‘green power product.’ With the Bonneville deal, it became a no-brainer.”

The Bonneville green power product will give participating utilities the same reliability, transmission and load shaping characteristics they expect from Bonneville, but with the addition of being able to buy electricity generated at Bonneville’s pilot wind, geothermal and biomass cogeneration plants. The price of Bonneville’s green power offering varies with the duration of the purchase. Salem, which is buying in for at least five years, will pay 35 mills (3.5 cents) per kilowatt-hour for its 7 megawatts of green power. “We’d really like something for the much longer term,” said Coran. Less committed utilities can buy in for as short a term as one year, but they pay a premium 55 mills.

According to Judy Johansen, vice president for generation supply at Bonneville, the agency’s green power product offers customer utilities a great deal of flexibility. “Bonneville can play some of the central power resource role it has in the past so a utility that’s interested in dipping its toes into green power doesn’t have to take the development risk of buying into a large project. We’re very flexible in the amount of electricity a utility can sign up for, and we’re very flexible in terms of the duration of that sale, although we’d like longer-term commitments because we’re committing to the long term in these resources.”

Bonneville sweetened the deal even more when the agency announced an 8 to 9 percent rate drop so it could remain competitive with new power marketers offering low-priced electricity. “The rate drop amounted to about $900,000 in annual savings to Salem Electric,” says Kuhlman. “The green power rate at 3.5 cents per kilowatt-hour would amount to an annual cost of $500,000 over Bonneville’s new lowered rate. That left an additional $400,000 in savings off the utility’s annual power bill from Bonneville. A lot of utilities are trying to get their rates down. Our customers want us to keep rates stable, but plan for the future. They want us to support renewables and keep conserving energy. So we plan to use the extra $400,000 for conservation programs.”
But Coran pointed out that calling a resource portfolio “green” doesn’t make it so. “We’re not fooling ourselves that an ‘all renewables’ utility is as golden as it sounds. We know there are problems with the hydro-power system. Some of our customers asked if we were just trading one species’ destruction for another. They’ve heard about wind turbines ripping birds apart, and they asked what’s the difference between ripping birds apart or ripping salmon apart. Besides, green power has to do with how you define the 83 percent of Bonneville’s power that comes from hydro. They are melding in the nuclear power. If you could identify electrons and sort the nuclear ones out and put the wind ones in, then we could really say we are 100-percent renewable. We’re not really fooling anybody. It’s more of a philosophical distinction rather than a real one.”

Salem Electric isn’t the only utility in the Northwest choosing greener sources of electricity. Several, like Portland General Electric and the Eugene Water and Electric Board, have been interested in developing renewables for a number of years. Both are cosponsors of pilot wind or geothermal projects in the region. Portland General was the first Northwest utility to offer a renewables-only solicitation for new resources to replace the power lost when the company shut down its only nuclear power plant.

CARES, the Conservation and Renewable Energy System, a coalition of eight Washington-based public utilities, also is developing a wind power project to supply some of its member utilities’ power needs. CARES is planning to survey its customers to determine their level of interest in renewable resources.

The biggest obstacle to renewable resources has been their cost of development relative to lower-priced new gas-fired power plants. While the costs of renewables have plummeted, so have the costs of natural gas and gas-fired technologies. But that fact isn’t deterring Salem. “Our board has never been a very strong advocate of gas turbines,” says Roger Kuhlman. “Our customers, too, feel that renewables will be the best for the region in the long run. They are willing to invest in the future.”
Editor's Note: What follows is an excerpt from the report on the Comprehensive Review of the Northwest Energy System’s forum: Putting It All Together, which was prepared for the Comprehensive Review steering committee by Resource Writers, Inc. The full text of this report, copies of individual reports presented at the forum, and summaries of previous meetings of the steering committee can all be obtained from the Review’s Internet site, http://www.newsdatalnternet/review/review.html, or by calling the Power Planning Council’s telephone information system at 1-800-222-3355, extension 700.

Nearly 450 people packed into the Rainier Room at Seattle Center July 12th, to hear a full day’s update on the Comprehensive Review of the Northwest Energy System. The Friday forum followed an all-day steering committee meeting on Thursday. The Thursday meeting was the first opportunity for the four working groups that had been discussing and debating specific aspects of the energy system — competition and customer choice; conservation, renewables and public purposes; transmission; and federal power marketing — to share their conclusions with the steering committee.
The Friday forum brought together the working group reports, plus five perspectives on how all of the working groups’ findings might be woven into a future regional energy system. What follows are summaries of the five new energy system proposals, representing 1) environmental groups; 2) direct service industries (aluminum and chemical plants that buy electricity wholesale from the Bonneville Power Administration), 3) investor-owned utilities, 4) public utilities; and 5) industry. The proposals represent the views of the speakers only. They are not the consensus views of the groups represented.

The Review’s steering committee plans to spend the next several weeks integrating these proposals into one that will then be released for public review and comment throughout the Northwest states. The goal is to have a proposal to present to the governors of Idaho, Montana, Oregon, and Washington, as well as to the region’s Indian tribes, by early December.

Comprehensive Proposals: Putting the Pieces Together

Environmental Perspective: Putting the Pieces Together

Environmental Perspective: Putting the Pieces Together

We are presenting a blueprint that does not deal only with conservation, renewables, salmon, low income and consumer protection, Patton continued. It is comprehensive because fulfilling our goals requires a power system that supports and integrates these goals into its basic operation, she said.

She called for implementing a “non-bypassable system benefits charge” that would collect up to $245 million for conservation. An allocation of $30 million per year would go to market transformation and the rest to local conservation programs. The proposal also calls for establishing a form of regional conservation governance.

Renewable resources face “big market disadvantages,” Patton said, and she proposed establishing an energy “portfolio standard” that requires retail suppliers to provide 1 percent of their energy from renewables, collecting a non-bypassable system charge to fund renewables, and offering a green option in power sales. Low-income energy services should be funded with a non-bypassable system benefit charge, she added.

The review has started to bring these issues to the public, Patton said, and she urged mechanisms for accountability to the public and ensuring public information. With regard to the Washington Public Power Supply System debt (for terminated nuclear power plants), she said everyone should pay “their fair share,” and she advocated removing the nuclear plant debt from power rates. The Northwest Conservation Act Coalition/Save Our Wild Salmon proposal also calls for separately marketing the power from WNP 2 (the only remaining operating nuclear plant in the Northwest).

“We are united for clean and affordable energy from conservation and environmentally responsible renewables, for wild salmon and for the proposition that everyone pays their fair share.”

—Sara Patton
The governance of power marketing and transmission should be acceptable to the public and public officials, Patton stated. The system should retain preference and guarantee payments on the debt to the U.S. Treasury. Access to the transmission system must not disadvantage renewables, she added.

Choice must be available to all, and competition implemented simultaneously for all classes of customers, Patton said. The system must deliver universal service and allow for aggregation of customers. As for subsidies, Patton called for reform, saying irrigation debt should be borne by irrigators, and there should be user charges at navigation locks.

Sears began his remarks by quoting Mark Twain, who said “whiskey is for drinking, water is for fighting.” The Columbia River will continue to produce millions of kilowatts of electricity, but will it produce salmon and steelhead? Will we decide to use the river efficiently and share it fairly?

We can choose to implement salmon recovery and conservation, he said, urging the region to get on with creating an efficient system. Sears called on the review to make decisions in public and not “in secret deals.”

“Reliable and cheap power is a public purpose,” he stated. What we do must be accountable, and it must have vision.

Direct Service Industries Perspective:
John Carr, executive director of Direct Service Industries, Inc.

Carr said the electricity industry is being restructured to bring the benefits of competition to the consumer. The belief is that competition will bring efficiencies and innovation to the marketplace — that’s why we’re here.

Carr continued, the first thing to do is open up the distribution system for customers to have access. This means operating with “the golden rule,” which means providing other suppliers with comparable access to a utility’s distribution system, he explained. In this vision, there are bundled and unbundled services — you can pick and choose a power supplier and the services, Carr said. Your power bill is “transparent” and can be checked against the price of power in the open market.

We need distribution access, market generation and transmission access, Carr asserted. The other issues on the table are transition issues. Stranded investment is not the problem in the Northwest that it is elsewhere in the country, he said; our average costs are still close to the market. The challenge is to find a way around “punitive fees” to deal

"We need to have a strong relationship between who pays and who benefits.”
—John Carr

with stranded investments, Carr contended. I don’t believe Bonneville has stranded investments; with low-cost hydropower melded in with other resources, Bonneville still looks competitive, he said.

For public purposes, Carr advocated using the competitive market to maximize choices and minimize the costs to end-use consumers. We need to have a strong relationship between who pays and who benefits, he continued. Carr urged local control of conservation and weatherization programs, noting that “some things need to be discussed on the state level.”

Everywhere I go, people point out that “we have the gem of a renewable resource” in the Northwest hydropower system, Carr said; “it is clean, flexible and renewable.” As for fish, I agree, it’s an obligation of the system and a cost of doing business, like the environmental controls on a coal plant, he stated. We strongly support a continuing and effective salmon program, Carr said.

The market will not sustain subsidies, he said. The direct-service industries are the first group of industries in the country to have open access to the market, Carr pointed out. If Bonneville is subsidizing the direct service industries, they would have stayed with Bonneville — but instead, 30 percent of the load left, he said.

Federal legislation may be desirable if we could get Bonneville’s transmission system under the control or ownership of customers and get accountability of the fish and wildlife program — but it’s not necessary. We can stretch what we have a long way, Carr observed. The path is always putting the consumer first, he concluded.
Investor-Owned Utilities Perspective:
Jim Litchfield, President, Litchfield and Associates

Litchfield described the goals for the investor-owned utilities’ comprehensive proposal. These include: retaining the benefits of the federal hydropower and transmission systems for all Northwest citizens; securing important social values, such as protecting rural communities from undue hardship; protecting fish and wildlife; fostering energy efficiency and renewables; and ensuring that changes are in the public interest and consistent with national energy policy.

In addition, the investor-owned utilities said Bonneville’s role is not to become a federal competitor in power or energy services markets, and its transmission and power marketing functions should be separated through federal legislation. Bonneville transmission must be subject to the same Federal Energy Regulatory Commission rules imposed on investor-owned utilities, and changes must not increase risk to the Treasury.

Litchfield said the investor-owned utilities’ energy-efficiency goals call for measures to be market neutral and adaptable to new electric utility and competitive structures. They would eliminate artificial market boundaries, opening the market to energy service companies, as well as encourage efficient markets, and provide stable funding and equitable access to funds.

The investor-owned utilities recommend focusing conservation efforts on market transformation, Litchfield said. They urge state legislatures to impose a universal meter charge for all customers, which would provide funding for market transformation. “We need to tell the governors we will stand up and support this,” he noted. A two-year interim fund is proposed as a bridge to the meter charge. The fund would be centrally controlled, perhaps by the Northwest Power Planning Council, Litchfield said. Retail utilities would contribute to the fund in proportion to their regional loads, and Bonneville would contribute only for its direct-service industry load, he explained. In the investor-owned utility proposal, the contribution would replace current demand-side management budgets; this would require public utility commission approval, he said.

The states should provide retail customers with access to competitive power markets by the year 2000. The utilities also propose that state legislatures establish stranded investment procedures and allow public utility commissions to resolve stranded investment recovery for investor-owned utilities. As for retail access to Bonneville transmission, Litchfield said the investor-owned utilities favor it only when state or federal legislation permits it and when Bonneville’s transmission system is legally separated from its power marketing.

Litchfield called for the establishment of an independent grid operator as a good first step in transmission restructuring. The investor-owned utilities have developed principles and policies for an independent grid operator, which include improving transmission efficiency, establishing a single tariff and possibly divesting transmission assets in the future to create a transmission company. They signed a memorandum of agreement regarding an independent grid operator to run all investor-owned utility transmission by July 1997. The investor-owned utilities also encourage Bonneville’s legal separation so that the agency can participate in the independent grid operator proposal. The investor-owned utilities called transmission system wires charges “difficult to apply.”

As for federal power marketing, the investor-owned utilities support federal legislation that would create an agency with limited authority. The agency would administer the sale of the output of existing federal generation, with recognition for public and regional preference. The new
agency would allocate the Federal Base System power under long-term contracts and only at wholesale. The first priority for allocations would be for public loads currently served by Bonneville, followed by direct-service industries, investor-owned utilities, and public regional loads not currently served by Bonneville. If power is left after these allocations, the agency could offer it to the market as a whole and award it to the highest bidder.

Public Power Perspective:

Marty Kanner, government affairs representative for public power

Kanner said, as the principal beneficiary of the existing system, public power has much at stake in the debate. Public power recognizes the need for changing the system; the question is how to make the changes. They can occur administratively or legislatively. To avoid the risk of unintended consequences, public power prefers to see the changes occur through administrative means.

The system doesn’t need radical surgery, he continued. Bonneville needs to be retained in federal hands, and organizationally, the agency’s power marketing and transmission functions should be separated. A single fund should be retained to secure the Washington Public Power Supply System bonds, he said, and fish and wildlife recovery costs should be capped.

There is a general consensus that Bonneville should compete only in the wholesale market, and that the agency should not provide for load growth, Kanner said. Power should be sold first to preference customers, he continued, and any customer leaving the system would not be guaranteed the right to return on the same conditions. Public power would eliminate the residential exchange.

The direct-service industries could exercise regional preference rights to Bonneville resources, and power would be sold on a take-or-pay basis, so long as customers have the ability to resell, Kanner explained. The public power proposal calls for more efficient ratemaking and full Federal Energy Regulatory Commission accounting, he continued.

As for transmission, all players would have comparable access, and transmission policies would be subject to full Federal Energy Regulatory Commission review. Transmission rates could be used to satisfy Washington Public Power Supply System bond covenants and ensure Treasury payments, as a last resort, Kanner said.

The Public Power Council’s Executive Committee did adopt a consensus position in support of the idea of a market transformation trust (a proposal to set aside money to encourage conservation through the development and marketing of more efficient products), Kanner reported. We don’t support a wires charge for public purposes, he said, because public power commits to providing for these purposes locally, implementing a meter charge if necessary, he said.

Public power believes in customer choice, Kanner said, and will work locally to implement it. Utilities also must be able to aggregate services to give true customer choice.

Industrial Customers’ Perspective:

Ken Canon, director of the Industrial Customers of Northwest Utilities

Canon offered support for a competitive electric power market with customer choices. An open market will lead to better services, he said, with costs aligning with factors such as risk. Some customers may want to pay more for a highly reliable supply, Canon pointed out. His member industries say choice is not only important to us, but it flows through to our vendors and employees, he continued; we hope by 2000 there is a system with choice for all.

Conservation and renewables will be “value-added items,” Canon stated. Transmission should be available to all. It’s important to begin unbundling so you can “buy what you need and pay for what you buy.” Stranded costs are a crucial transition issue,
he acknowledged. We propose there be no guarantee of 100 percent recovery, and all customers and shareholders should share in the costs. The obligation to serve would become the obligation to connect, he said.

As for federal power marketing, we see two entities: power marketing and transmission. We heard concern about Bonneville’s ability to pay the Treasury, and we would urge an allocation of power for 20 to 30 years, with the ability to re-market. Public customers would be first in line and then all others. Bonneville would coordinate and operate the federal base system with a customer-driven board of directors, he said.

Transmission seems “headed in the right direction” for an open and competitive market Canon said. We see the need for an independent grid operator, he added. Canon cited two other functions that could become issues: operating and pricing mechanisms so one system doesn’t lean on another; and solutions to reliability concerns.

Canon said conservation programs should be phased out of the rate base, concurrent with the phasing in of individual choice. There is strong public support for conservation and renewables, he said. The best way to achieve them is to have customers be able to express their unique values, with such offerings as green power, Canon stated. These would be customer-driven and targeted by market pricing. We believe there could be legislative solutions, he said, citing the Oregon Energy Tax Credit, which has been available for years.

We believe low-income assistance and energy conservation that is above market value are legislative issues, he said. We have concerns about having them as part of electricity rates.
Your Chance to Speak Up

The Comprehensive Review of the Northwest Energy System is heading into the final stretches. After the July 12th forum, staff of the Northwest Power Planning Council were asked to integrate the five proposals described in the accompanying story. The goal is to develop draft recommendations for how the benefits of a more competitive electricity industry can be broadly shared in the Pacific Northwest.

The integrated draft proposals were presented to the Comprehensive Review Steering Committee in late July. After the Steering Committee reviews and refines the proposals, they will be distributed regionwide for public review. To reach the widest possible audience, the draft proposals will be available from several sources, see below.

After the proposals are distributed, workshops — where the public can ask questions and learn more about the alternatives — and hearings — where the public can comment on the proposals — will be held throughout the Northwest. See the schedule below.

Hearings will occur in a room adjacent (or close) to the room in which the workshops will occur. Hearings will begin one hour after the workshops and will run until 9 p.m., or as long as people are providing comments (the workshops will run the entire evening, including during the hearings). Comments will be limited to three minutes. Longer comments can be submitted in writing.

Workshops will begin at 5 p.m. and the hearings will begin at 6 p.m.

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To obtain copies of the proposals and other materials about the Comprehensive Review of the Northwest Energy System, or for more information on the hearings, call 800-222-3355.

To comment on the proposals:
Write:
Comprehensive Review, c/o Public Affairs, 851 SW 6th Avenue, Suite 1100, Portland, OR 97204.
Be sure to include your name, address and phone number. If you have a fax number and/or an e-mail address, include them.

E-mail:
comments@nwppc.org
Or, add yourself to the Comprehensive Review e-mail list by sending a message to:
listserver@nwppc.org
In the message field, type:
subscribe compreview yourfirstname yourlastname
An example, using a person named John Doe, is:
subscribe compreview john doe

World Wide Web:
New Norm Thompson Outfitters corporate headquarters is energy and resource efficient.

by Carlotta Collette

o particular exterior features distinguish the new Norm Thompson corporate headquarters building from those in other industrial and business parks. A discrete, two-story concrete structure, it is nice enough looking, landscaped mostly with native plants like those that thrive in the watershed out back, but nothing about its surface suggests the Norm Thompson Outfitters, Inc., slogan, “Escape from the ordinary.” On the inside, however, there is much about the building that is extraordinary.

If ever a building could be said to express an ethos — a whole integrated set of beliefs and values — this one is it.

It is energy efficient, beating Oregon’s already fairly rigorous commercial building energy code by about 40 percent. It is resource efficient, relying almost exclusively on building materials that have been recycled from other products and uses. And its interior space is designed to nurture teamwork over more traditional, hierarchical management approaches. There are no “corner offices,” for example, claiming the best views of Rock Creek, which sidles along behind the building. The corners are open, shared, work and play spaces where employees can mingle. A small gym,
an espresso stand and second-floor balconies that look out to the creek are added amenities to keep the staff, most of whom work on the company’s catalogue, creative and happy.

This is a building with its own metaphor, a theme that reflects Norm Thompson’s affiliation with the out of doors: “A river runs through it.” Deep water-colored walls are slanted, rather than straight vertical, creating gorge-like hallways that suggest cuts a river might make. The halls meander gently rather than only turning at sharp right angles. A balcony overlooking the entrance foyer is made to look like a suspension bridge.

When Chief Executive Officer John Emrick began planning the new headquarters, he figured he needed a building that would be easy to lease to other occupants if Norm Thompson moved out, but he still wanted a building he could live with now. “We wanted a ‘vanilla’ building price with some soul in it,” Emrick says. “We wanted a building that could reflect our values. My wife and I, for many years, have been very concerned about the environment. We try to be socially responsible and environmentally responsible. We tried to find ways to do this building responsibly, and we found out it wouldn’t cost much more than a conventional building.”

Emrick thought he’d have a difficult time finding an architect, contractors, etc., who would understand what he was trying to accomplish. He was wrong. Not only were there architects and builders who could deliver Emrick’s dream building, but Portland General Electric (PGE), the utility that serves the suburban Portland business park where the building is located, wanted to help, too.

Portland General worked with Emrick and his team to make the headquarters the first PGE-certified “Earth Smart” new commercial building. Earth Smart buildings use all resources as carefully as possible, relying on recycled building materials and efficient designs and equipment. The goal is a building that is healthy to work in and healthy on the environment at the same time.

In the Norm Thompson building, Portland General helped the architect, William Ruecker of Sienna Architecture Company, select energy-efficient heating, cooling and lighting systems. The utility provided incentives to help offset the cost of newer technologies. A southern orientation for solar heating and natural lighting, and openable windows for fresh air and reduced air conditioning helped lower energy costs even more. In addition, Portland General Electric covered the costs of having the building commissioned to ensure that all the new systems worked as they were designed to and to train staff in the efficient maintenance of the structure and its mechanical and electronic systems.

For the floors, the design team found beautiful hardwood that had been recycled from old freight-train cars. The maple wall paneling came from “sustainable-yield” forests, where harvest practices are designed to encourage the long-term health of the forest. The fiberboard under the maple veneer was made from recycled wood. The walls are textured and painted with a material made from crushed car windshields. Old plastic milk jugs and detergent bottles were re crafted into solid plastic doors and dividers for the restrooms. Recycled tires make up the material for the gym floor. Even construction wastes from the project were recycled onsite.

Nearly all the materials were found locally, so transportation costs could be saved, too. Emrick had his own bottom line in mind when he agreed to all the innovative new products and equipment in the building. “If we figured we could recover our costs in eight years, I would approve an idea,” he says. “As it turned out, with PGE’s help and the energy and water savings, we figure we’ll see our payback in only 4.1 years.”

Norm Thompson’s employees are happy about the new building, too. “They’re glad Norm Thompson decided to do this,” Emrick notes. “They’re glad to be part of a company that does things this way.”

More...

Norm Thompson Outfitters, Inc., corporate headquarters is located at 3188 Northwest Alocleck Drive in Hillsboro, Oregon, just west of Portland.

For more information:
- Portland General Electric’s Earth Smart Program, Doug Bolyn, 503-464-8652.
June 19 marked construction start-up for long-awaited salmon hatchery.

by Bill Dunbar

In Cle Elum, Washington, to break ground for a new salmon hatchery, Northwest Power Planning Council Chair John Etchart — a Montanan, mind you, where the mountains are dwarfed only by the sky — marveled at the landscape around him. The spectacular black-and-white Cascades. Deep blue skies. A steady buzz of alder leaves. And the smells — dust, pine, spring wildflowers and backwater pools of the Yakima River.

Clearly, the place was perfect for salmon. In fact, Indians once trapped salmon every summer in the nearby Cle Elum River as the fish returned to spawn.

Today, those salmon runs are gone, victims of the many impacts — some natural, others human-caused — that have driven down salmon runs throughout the Columbia River Basin. But the value of this place as an incubator of salmon is not lost. Hence, the new hatchery — but not a typical one.

The Cle Elum hatchery won’t be just another set of concrete pools spilling millions of genetically compromised clones into a river that may or may not be their ancestral home. Rather, the project will be the region’s largest test of wild stock supplementation, a process that involves taking wild adult fish from the river, incubating and protecting their tiny progeny in an environment safe from predators and eventually placing the juveniles in acclimation sites near the hatchery.

By increasing the number of healthy, wild juveniles migrating downstream to the mainstem Columbia and out to sea, the hope is to increase returns of adult salmon capable of spawning in a river system ripe for their presence.

It is this hope that drew Chairman Etchart, and with him other state, tribal and federal dignitaries, who were welcomed by Ross Sockzehigh, chairman of the Yakama Nation.

“The Yakama Nation is exceedingly exhilarated to have construction under way,” Sockzehigh said. “The many years coming are something to look forward to in replenishing the fish stocks in the Yakima River system.”

The promise of the hatchery is to rebuild in the Yakima River Basin at least some semblance of the abundant salmon runs that once made up what has been called a “fish factory.” The Bonneville Power Administration, which is funding the hatchery, estimates that between 600,000 and 960,000 salmon and steelhead once made their way up the Yakima. The project looks to add as many as 6,500 spring chinook to last year’s return of 663 adults. Eventually, native steelhead will be added to the facility.

Of course, the ultimate test of this project — as well as the smaller supplementation projects
run by Douglas and Chelan county public utility districts — will be whether these fish live up to expectations that their genes will mean better returns and better spawning success. While estuary and ocean conditions also are major factors in salmon survival, the hatchery should help the region’s fishery scientists better understand the role genetics and early life conditions play in determining how and why some salmon and steelhead runs do well and others do not.

Questions, concerns, controversy

The new Yakima Basin hatchery has broad political and scientific support, but it has not been free of controversy. The Northwest Power Planning Council called for construction of the Yakima hatchery in 1982, in the Council’s first Columbia River Basin Fish and Wildlife Program. But the Yakima River Basin is a showcase of irrigated agriculture, including many high cash-value crops, and river flow guarantees for fish and their effects on water rights — real or perceived — have dominated much of the haggling over the facility. Despite years of public hearings, accommodations and assurances that no water right would be compromised, questions persisted.

Mel Wagner, chair of the Yakima River Watershed Council, says recent and “very positive” developments should waylay some irrigators’ attempts to put a last-minute end to the project. He notes, “For the first time in 150 years, the Yakama tribe and the irrigation districts are formally speaking with one another. And the Watershed Council will continue to be a primary local forum for discussions of these issues.”

Another concern about the hatchery comes from trout fishers worried that an infusion of juvenile salmon will compete with trout for the insects that nurture both species. Their fear is that the Yakima’s blue-ribbon trout fishery eventually will be driven out of existence.

Bob Tuck, fisheries consultant to the Yakama Indian Nation, disagrees. He says that the trout and other fish and wildlife in the Yakima will actually get a boost from the increased numbers of returning, spawned-out and decaying salmon the hatchery will add to the ecosystem.

“If we get good adult returns, the carcasses of the dead fish will supply quite a bit of nitrogen and other nutrients to the soil and the stream bed,” Tuck says. “In fact, if you look at what makes this a good trout stream — lots of aquatic insects, good habitat, clean water — and look at this project’s agreements on instream flows and habitat work, you could easily see the Yakima rival the Deschutes (in central Oregon) as the best combination trout, salmon and steelhead river anywhere in the West. As both a biologist and a trout fisherman, I’m pretty excited about it.”

Northwestern high hopes

On one issue there is no debate. Wild salmon help define the Pacific Northwest, and Northwesterners demand a healthy salmon population in the Columbia for everybody — this generation and generations to come. This project should add significant new experience and information to the region’s understanding of what makes salmon thrive. It will help put salmon back in their place.

— Bill Dunbar is Washington public affairs director for the Northwest Power Planning Council.

(Left to right) Yakama tribal Chairman Ross Sockzehigh, Power Council Chairman John Etchart, Bonneville Administrator Randy Hardy, John Dooley from the Bureau of Reclamation, Rich Lincoln from the Washington Department of Fish and Wildlife and Fred Ike, Sr. at the podium.
Letters to the Council

Editor's Note: In our Summer 1995 issue, we ran a story detailing a proposal to test forest thinning — where large, healthy trees are retained, but smaller, diseased or overcrowded trees are cut — as a means of restoring forest health while also providing fuel for small power plants. Here, one year later, are excerpts from a letter from the company that had proposed the demonstration, Wheelabrator Environmental Systems, Inc.

Dear Editor,

After nearly 18 months of effort, Wheelabrator must walk away from plans to demonstrate integrated biomass power generation/forest health improvement in the Blue Mountains of eastern Oregon at this time.

Ultimately, we could not overcome the loss of our host plant, the Blue Mountain Forest Products plant at Long Creek. That plant has a sale pending and will be dismantled for use outside the United States. We had recently switched our focus to the D.R. Johnson plant at Prairie City as a host for the demonstration, but that arrangement could not be put together on acceptable terms.

It turned out that we were also swimming against a tide of falling wholesale electricity prices in the region. Also, with electric utility restructuring on the minds of every utility executive, none were willing to contract for even this small amount of output over a brief period of time. The short-term glut of cheap Canadian natural gas has really shortened the thinking of utilities about future regional power needs.

All this has left us in a position of not being able to respond to the POGO Timber Sale on the Long Creek Ranger District of the Malheur National Forest, the first sale in that area designed around the thinning concepts that we have been advocating. We had hoped to be the successful bidder on this sale and to

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use our performance to show early on the value to forest health of an integrated thinning/biomass removal approach.

We sincerely hope that there will be successful bidders on that sale, and others like it in the region. The national forests are in dire need of such treatment in order to improve the growing conditions for remaining trees and to remove the huge fire loads in the region. Also, we remain convinced that such sales would restore much of the historical volume of commercial timber, even though the purpose of the sales will have been to create the “desired future condition” on the site. Let us state, one final time for the record, that biomass removal is not in competition with any other forest product. The sale of any other higher-valued product simply improves the economies of removal of the remaining biomass.

The thinning techniques that we have been pushing took center stage at the recent American Forest Congress and were a point of consensus for nearly all groups at the Congress. We have known for several years that these methods are a way to lower confrontation over the use of our public forests. In fact, we had briefed several environmental groups regarding our demonstration proposal and found none that were opposed philosophically. We are positive that follow-on studies by the Blue Mountain Natural Resource Institute would have demonstrated the environmental benefits of such an approach.

Our biggest fear at this point is that sales such as POGO will attract no bidders by virtue of the fact that the infrastructure to consume the fuel fraction is not in place. If this happens, and the concept [of forest thinning to restore forest health and produce electricity] is discredited as a result, this will be a shame. This concept held the only real promise for being able to deal with huge health and fuel buildup problems on western forests in a manner that would be supported by virtually all sectors.

Our inability to move forward at Long Creek does not mean that we are abandoning the effort to move the integrated forest thinning/biomass power concept forward. We will continue to look for other locations in the West that have the right set of circumstances for such a demonstration. We are also not backing away from our commitment to biomass power, as evidenced by our recent purchase of our third wood-burning plant in California.

We are also forming a coalition to work in the next Congress on expansion of the federal tax credit for “closed loop business” to cover operations such as we had envisioned at Long Creek. [Currently, tax credits for biomass power plants are only granted if the biomass is grown specifically for fuel. Forest byproducts or other residues that can also be burned to generate electricity are not covered by the tax credits.] This will allow the removal of one major impediment by making biomass power cost competitive in an area of cheap natural gas. We had hoped to accomplish this in the context of an operating demonstration plant, but will now move forward without the plant.

Over the last year and a half, we have met many fine people and organizations who, like us, simply want to see the right thing done for the forests and communities of the inland West. We wish this chapter had turned out differently, but the whole book has not yet been written.

Sincerely,

Jerry Duffy, Plant Manager
William Carlson, Vice President and General Manager
Wheelabrator Environmental Systems, Inc.
Anderson, California
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The Northwest Power Planning Council is required by an Act of Congress to develop a program to protect, mitigate and enhance the Columbia River'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.

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Executive Editor: Carlotta Collette
Art Director: Stephen Sasser
Information Officer: John Harrison
Involvement Coordinator: Jim Maddox
Editorial Assistants: Judi Hertz and Tamara Nester

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We’re Up

The Council now has a homepage on the Internet where you can learn more about the Northwest’s natural resource issues and obtain copies of many of our documents. Use the homepage to comment on Council issues, as well.

from the CHAIR

Early last year, the Council asked several independent scientists to help us understand the plight of our Columbia River Basin salmon and advise us about the directions we’ve been taking to rebuild salmon populations. This spring we received their preliminary findings. In this issue, Dr. Rick Williams, the chair of that group, talks about what they found and what they hope the region will do with those findings. There is almost certain to be considerable debate in the Northwest over these findings, but let me interject a couple of points here.

First, it’s important to remember that the Council asked these scientists to explore the science, not make policy. The Council and the region’s fishery managers, utilities and ratepayers, and anyone else with an interest in the fish or in the hydropower system will have ample opportunity to react to the scientists’ report. People, for one reason or another, will be tempted to pick isolated parts of the report, rushing to use them to buttress a favorite argument. A better use would be the deliberate and reasoned application of this learning to that which we already know. We will all have a part in setting the priorities.

And second, I don’t think this report is so much about new actions or a new fish and wildlife program as it is about a new framework for action. This report can be, to use one of Dr. Williams’ terms, a “filter” for reviewing future action. It provides a framework we can use to integrate what we do, to connect the pieces into a coherent whole that is most likely to yield the best returns.

This new body of knowledge the scientists have provided should help us make more prudent choices and help us understand some of the consequences of those choices. The choices should be the responsibility of the region.