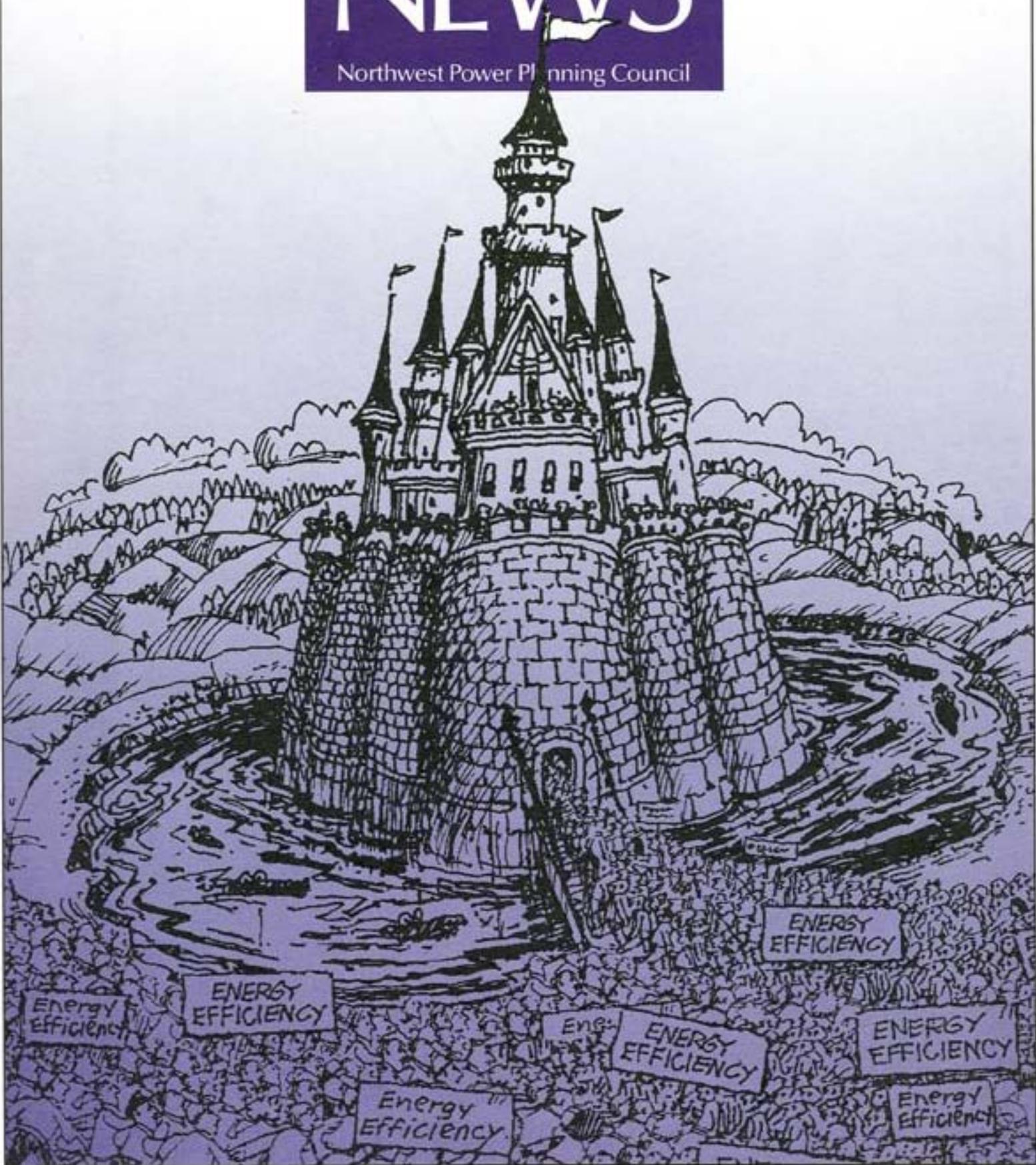


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NORTHWEST ENERGY NEWS

Northwest Power Planning Council



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This issue's cover illustration is by Frank Farah.

from the **CHAIR**

It is time for the region to consider recent wake-up calls.

In the electric power arena, the region and the Bonneville Power Administration currently cannot meet 25 percent of the electricity needs of the direct service industries (aluminum and other metal processing plants). The Bureau of Reclamation is planning to draw down our most valued upstream reservoir 46 feet below its previous all-time record to create the power necessary to meet our requirements.

It is time for planners, politicians, regulators and the utility industry to join business leaders and environmental organizations to determine the price we are willing to pay for the planning reserve to guarantee a reliable power supply.

A wake-up call is also due in the area of fish and wildlife.

An investment in excess of \$1 billion in research grants and mitigation measures over the past 10 years has not prevented endangered species listings of salmon stocks, nor has it given us the knowledge necessary to implement a successful salmon recovery program.

The Northwest Power Planning Council, the funding agencies and recipients of funding must be more responsible and accountable in making future fiscal decisions.

Everyone with responsibility for protecting salmon must join together to implement a financially responsible program based on sound scientific knowledge, not smoke and mirrors.



Stan Shoop

ECO-COPS

Police in three states go after habitat criminals.

by John Harrison

Snapshots from the scrap book of Lieutenant Lindsay Ball, Oregon State Police:

Click: An illegal diversion dam causes a Northeast Oregon creek to flood over a screen that was supposed to keep juvenile fish out of an irrigation canal.

"We picked 547 spring chinook salmon up out of an alfalfa field," Ball said.

Click: A giant front-end loader is scooping gravel from the Grande Ronde River in La Grande, Oregon. The gravel is for an illegal diversion dam that sends water into an irrigation canal and log holding pond.

"There was no permit for this work, and it was halted immediately," Ball said.

Click: An aerial photo shows a crude diversion dam in Catherine Creek, a major tributary of the Grande Ronde.

"The creek was dammed with sand bags to divert water into an irrigation slough," Ball said.

Click: At a logging camp on Mill Creek, a tributary of Catherine Creek, the ground is polluted with diesel fuel and motor oil.

"They changed oil in their vehicles and dumped it on the ground. They just threw out bar-

rels of oil and diesel. We found a sheen of oil running down Mill Creek, and that is lethal to fish," Ball said.

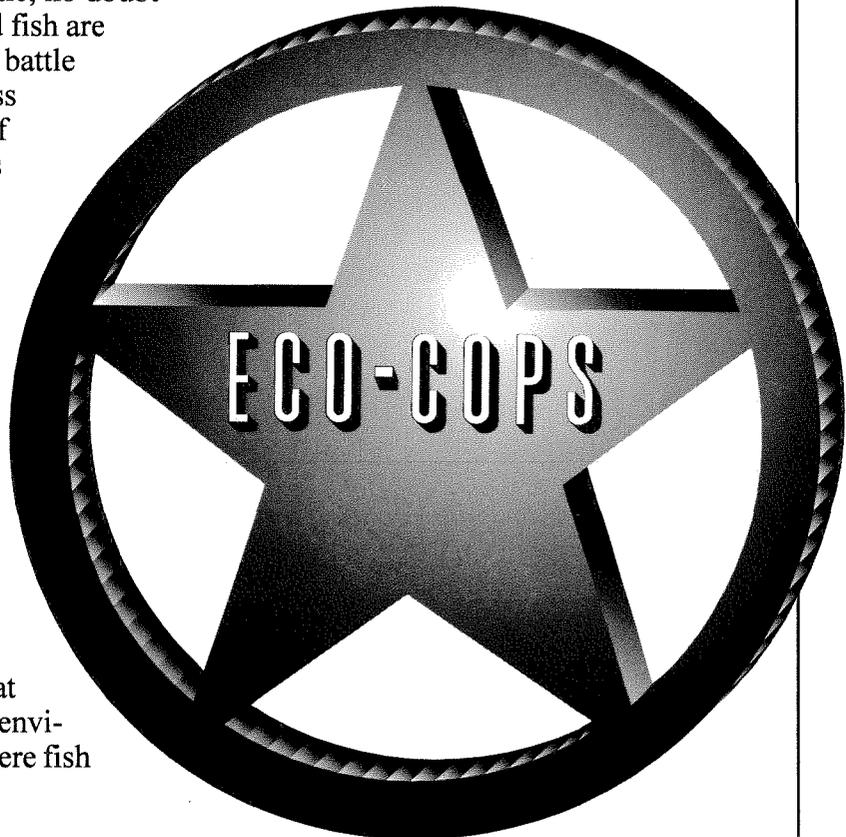
Click: An aerial photo shows a stretch of Oregon's John Day River lacking streamside vegetation, its banks eroding. Someone with a tractor literally moved the river 50 yards so it would pour into an irrigation ditch.

There's more, lots more.

It's a battle, no doubt about it, and fish are dying. It's a battle waged across thousands of square miles of the Columbia River Basin, from central Idaho through Washington and Oregon. The enemy is unlawful land-use practices that damage the environment where fish

spawn and rear.

Law enforcement officers are tackling the problem, and some of their work is being financed by Northwest electricity ratepayers through the Bonneville Power Administration. In 1991, the Northwest Power Planning Council called on Bonneville to help the states finance law enforcement and increase





educational programs on the impact of illegal or wasteful fisheries. The Northwest Power Act of 1980 requires Bonneville to protect, mitigate and enhance fish and wildlife of the Columbia Basin.

Bonneville contributed \$3.9 million to the effort in 1991. The money went to fish and wildlife agencies in Idaho, Oregon and Washington and to the Columbia River Inter-Tribal Fish Commission. In 1992, the amount was \$2.8 million, and this year it will be \$3 million. Using the ratepayer money, Oregon added six officers, Washington added four, and Idaho added four officers and a conservation education specialist. The money also paid for equipment, including an airplane for surveillance work and additional boats for patrol officers.

Habitat isn't the only focus of this work. Officers also patrol for fishing violations. That's the case with the Inter-Tribal Fish Commission, which focuses on fishing violations in the Columbia River.

"The tribes are interested in upgrading the on-reservation enforcement, including habitat enforcement," said Lieutenant John Johnson of Hood River, Oregon. He is Inter-Tribal's law enforcement manager.

Good habitat is critical to rebuilding wild runs of salmon and steelhead. Good habitat has cold, clear water, overhanging vegetation along the stream bank to



Above: The Breckenridge Dam once diverted most of the upper Salmon River onto the Busterback Ranch. Today the Idaho ranch is a wildlife preserve, and the dam is gone.

shade the water and keep it cool, and clean gravel where fish lay their eggs. When this environment is damaged, fish runs are damaged, too.

Illegal land-use practices — sometimes willful, but most often done with ignorance of their impact — take many forms. "It's cutting down streamside trees and vegetation; it's re-routing a creek, destroying the streambed and increasing the amount of mud in the water; it's a lot of things that require a state permit, but often are done without one," said Gayle Kreitman, Columbia River and coastal habitat manager for the Washington Department of Fisheries. "We could work at this all day, seven days a week, 24 hours a day, and we probably wouldn't get to all of the problem areas."

Like Washington and Oregon, fish habitat in Idaho has been damaged, too, but the situation

appears to be improving, at least in the Stanley Basin, the high mountain country at the source of the Salmon River that is home to endangered Snake River sockeye. "I think leaps and bounds have been made in habitat protection in the last five years," said Gary Gadwa, an Idaho Department of Fish and Game

conservation officer in the Stanley Basin.

Historically, livestock caused the biggest problems in the Stanley Basin, Gadwa said. Improper grazing practices encourage livestock to destroy streamside vegetation and pollute the water with their waste.

"Through intensive management, ranchers have really reduced trampling along riparian zones, and fencing has been built to keep livestock out of the water," Gadwa said.

He pointed out that habitat destruction is only one of many factors that have contributed to the decline of Columbia Basin salmon runs. Other impacts include the construction and operation of hydroelectric dams and overfishing in rivers and the ocean. "Up here, ranchers say they remember a time when there were more cattle in this basin, and there were lots of salmon," Gadwa said. "But they also understand the importance of protecting habitat, and they understand they have to cooperate."

Working together to help fish

Cooperation is an important theme underlying habitat enforcement efforts in all three states. It is particularly evident in Oregon, where the Oregon Department of Fish and Wildlife joined forces with the Oregon State Police to pursue and prosecute habitat violations in the state's vast, largely rural northeastern corner.

There was a time when the job of a fish and game officer mainly involved writing citations for hunting or fishing out of season. That's still part of the job, but in the last two years law officers have increased their environmental protection efforts. Ball laughs as he suggests a new nickname for this type of police officer: "eco-cop."

The name fits, he asserts. "I'm a strong advocate of habitat protection and habitat enforcement," he said at a recent meeting with his officers in Pendleton. "Trust me, you cannot have a wildlife species unless you have the appropriate habitat."

In a word, Ball's goal is compliance. He wants to help landowners comply with laws designed to protect fish and wildlife habitat. He'll also pursue and prosecute those who refuse.

As might be expected, there are landowners who don't share that commitment to the environment. In fact, the officers sometimes are greeted

with open hostility by landowners who don't want to change time-honored practices. Some cooperate voluntarily when it is pointed out that they need a permit to alter a stream bank, extract gravel from a river or build a dam, Ball said.

Others don't. That's when it's helpful to have the state police backing you up, said Jim Lauman of La Grande, regional supervisor for the Oregon Department of Fish and Wildlife.

"The number one priority of our department is habitat," Lauman said. "Oregon has environmental laws, but enforcement always has been the responsibility of the relevant agency. About two years ago, we started working with the state police. The reason was that our people are biologists, not investigators. We need the expertise of trained investigators. It was a bold step for us, and it is

paying off."

There have been convictions, but more importantly there have been contacts — most of them cordial — with landowners. Working together, the two agencies are gradually raising public awareness about the importance of adequate habitat for fish and wildlife.

"I'll tell you, there's been a big attitude change on our part, too, to change our focus from catching a guy who foul-snags one salmon to saving thousands of salmon by keeping one guy from taking his tractor into the river for 15 minutes," said Senior Trooper Bob Lund, who works out of the police agency's La Grande office.

In addition, the federal Endangered Species Act could force land-use changes to protect salmon, such as Snake River spring chinooks, which spawn in Snake tributaries in northeastern Oregon, Lauman said.

Still, there is resistance from landowners. Officers admit that while they have made inroads, attitudes change slowly. Dennis Wagner, a state policeman stationed at Umatilla, Oregon, knows that frustration. Wagner investigated the case of a landowner who bulldozed a new



Left: This stretch of East Birch Creek, a tributary of Oregon's Umatilla River, was prime steelhead habitat until the landowner decided to "improve" it for flood control.



channel in Birch Creek, a tributary of the Umatilla River, after high water damaged about one-quarter acre of his alfalfa field. Birch Creek is considered a first-class spawning stream for wild steelhead.

"[The landowner] said he knew he needed a permit, but he decided he couldn't afford to do it the right way so he went in and did it himself," Wagner said.

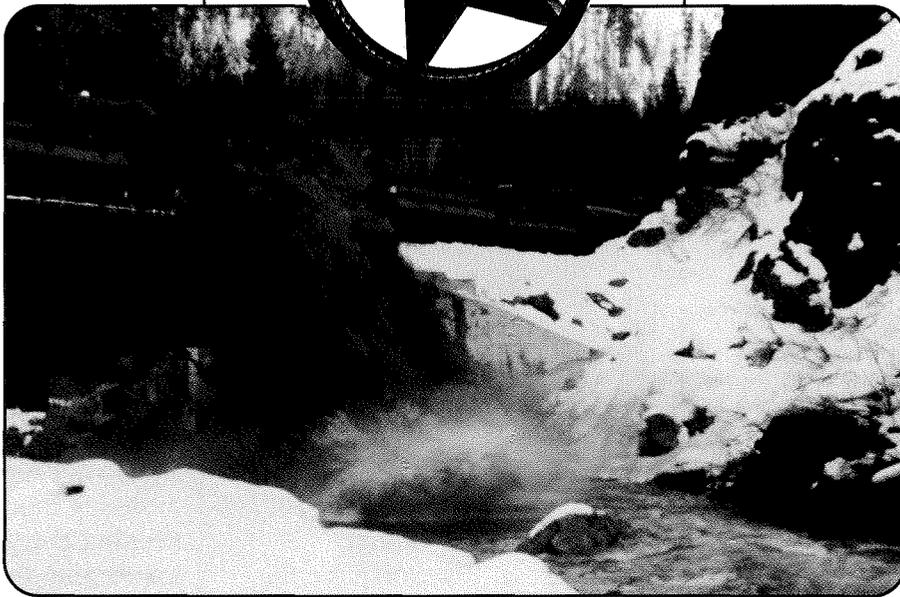
Wagner wrote a citation to the landowner. A trial date was set. It should have been a slam-dunk case for the police, but it was thrown out of court.

Why didn't the judge take the case seriously? Sergeant Nick Cooke, who is Wagner's supervisor, offers an observation. He says the case illustrates that public education about the importance of habitat crimes should include the judiciary as well as the general public.

"It just isn't perceived as a serious problem," Cooke said. "I credit the [judge's] decision to the fact that habitat crimes are something new, something [judges] haven't seen before. Yet they deserve the same court attention as any out-of-season illegal deer kill."

While there are frustrations, like the Birch Creek case, there are hopeful notes, too.

Not long after the Birch Creek case was dismissed, another landowner on nearby East Birch Creek ravaged some 400 yards of the stream. He claimed it was neces-



Above: Nason Creek, a salmon-spawning tributary of Washington's Wenatchee River, receives a load of dirt -- illegally -- from a construction project.

sary to straighten, deepen and widen the channel to protect his land from flooding. Just the potential for a criminal citation was enough to convince the landowner to comply with the law and begin a rehabilitation project.

In Oregon's John Day River, an absentee landowner ordered an employee to re-channel the river after flooding damaged a field. Confronted by state biologists and law officers, the owner was openly remorseful. He simply was ignorant of the law, as was his employee, and now restoration work is in progress. "It's still a scab, but it's getting better," said Trooper Mike Durr of John Day, who investigated the case. "The frustrating thing is, it may never be the same. It's a little like trying to fix a car that someone else tore into already. You don't know all that's missing, and you don't know if you will have the parts."

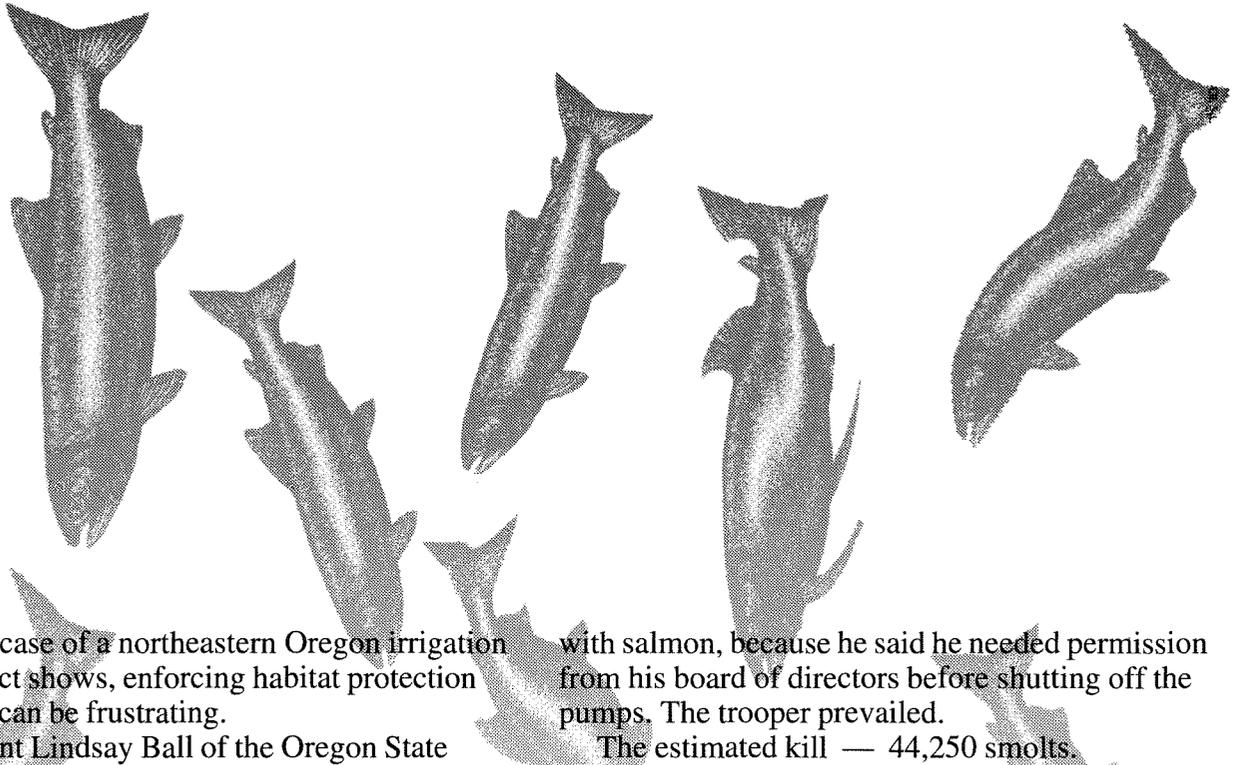
In 1992, the U.S. Forest Service closed Woodley Campground near the headwaters of the Grande Ronde River from August 22 until about the first of October to protect spawning spring chinook salmon. The Forest Service provided booklets about salmon, and

Trooper Lund drove through the area repeatedly. He handed out the booklets and talked to every person he could find — near the campground and at impromptu picnicking and camping spots along that stretch of river — about the importance of protecting the fish, which are a threatened species. He was well-received. "By the time we were done, the word had spread, and I think those people were more possessive of the fish than we were," he said.

Lauman said he believes rural landowners gradually are coming around to the idea that they are caretakers of a critical part of the Columbia Basin ecosystem.

"In the couple of years we've been doing this, we've had some good successes. We're not where we want to be, but we're on the way," he said. 

THE DAY SALMON FELL FROM THE SKY



As the case of a northeastern Oregon irrigation district shows, enforcing habitat protection laws can be frustrating.

Lieutenant Lindsay Ball of the Oregon State Police in Baker City described the case to the Northwest Power Planning Council in December at a public meeting in Portland.

Last May the irrigation district's superintendent allegedly ordered an employee to raise a screen in front of a pumping station near the Umatilla River, Ball said. Previously, the superintendent complained that the screen was expensive to maintain and operate, but he had been warned not to tamper with it, Ball said. The screen keeps juvenile salmon out of the pumping station as they migrate down the Umatilla to the Columbia and on to the ocean.

Nevertheless, the screen was raised six inches and set on blocks of wood. At the same time, some 3 million hatchery-raised salmon smolts were released into the Umatilla river. As the fish passed, accompanied by a large release of water from upriver storage reservoirs, thousands were sucked under the screen and into the pumping station.

Flocks of gulls arrived. As mutilated fish floated to the surface of the irrigation canal, the gulls feasted. Fish and fish parts rained along the canal, including into the backyard of a curious resident, who called the Oregon Department of Fish and Wildlife. That agency notified the Oregon State Police, and a trooper went to the scene and ordered the pumps shut off, Ball said. The superintendent balked, even as the forebay of the pumping station frothed white

with salmon, because he said he needed permission from his board of directors before shutting off the pumps. The trooper prevailed.

The estimated kill — 44,250 smolts.

"We cited the superintendent for tampering with a fish screening device," Ball said. "But typical of the defense side of a lot of criminal cases, there is a stall tactic and they keep continuing the court date. That's one of the tactics that is used. They hope that someday it will just go away. This won't go away. Trust me."

The crime is a misdemeanor punishable by a fine of up to \$2,500 and a jail sentence of up to one year — basically a wrist slap, Ball contends.

Oregon Council Member Angus Duncan agreed.

"I bet \$2,500 doesn't even approach what the value of that water was to that irrigation district at the time," Duncan said.

"Basically, they may view that as a cost of doing business," Ball agreed.

A trial date finally was set: January 5, 1993. On that day, however, the weather in northeastern Oregon was treacherous. The judge, concerned that jurors would have to travel through a blizzard to get to court, postponed the trial. A new date has not been set.

Regardless of the trial's outcome, Oregon won't stop with criminal prosecution. A civil lawsuit will be filed against the irrigation district seeking some \$76,000 for the lost fish, Ball said. 

- JH

ROBERTA PALM BRADLEY

A bright new spirit at Seattle City Light

with Carlotta Collette

There is the sound of an elevator opening down the hall and one warm peal of laughter. Nods of recognition pass among the staff. Roberta Palm Bradley, new superintendent at Seattle City Light, has arrived for work. "She laughs a lot," says her assistant, appreciatively. Bradley thinks she has reason to.

Some people might consider the top position at one of the biggest municipal utilities in the United States, a utility with a history of personnel strife that goes back nearly two decades, to be stressful. Not the 45-year-old new boss. She says, "The opportunity to come to Seattle and run my own shop was something I just couldn't turn down. It's every middle manager's dream. My life is much, much less stressful than at PG&E [Pacific Gas and Electric in San Francisco], because I feel much more in control of my life."

Control is a critical concept to Bradley. She argues that more people should have more control of their lives. More people should have the kind of support and encouragement that enabled her to thrive. "I have some strong opin-

ions about how people should be treated in the workplace," she says. "There's a culture in many organizations that you don't rock the boat and that you stay on the course, shake your head up and down no matter what's said. I think that was one of the reasons I left PG&E, because I felt that the diversity of thought was not as appreciated as it could be. But I believe that unless you stand for something in life, you might as well be dead."

Bradley grew up in the South, in Frederick, Maryland. "People say that's not the South, but it is," she says. She attributes much of her impressive self-confidence to her parents.

"I had what I call 'gold card' parents. My parents never set limits. We were disciplined, but they never set limits on what we could achieve. No one from my family ever said to me that I can't do something because I am a woman or a black. That was never part of any conversation at my house."

She also credits the community she grew up in. "In my small town, I had lots of unofficial aunts and uncles and nosy neighbors

who really cared about us. When I got this appointment, the letter of congratulations that meant the most to me was from this lady who lived down the street (in the South we call them spinster ladies). She's got to be in her eighties or even her nineties. She always was chiding my brother and me to make something of ourselves. Her name was Ruby Scheffler. That letter was very affirming. Where are the Miss Rubys of today? Why aren't we reaffirming and validating young people? I grew up in this atmosphere where people were affirming not who you were, but what you could be."

At City Light, she is plainly thrilled to have the opportunity to be a "Miss Ruby." Bradley wants to encourage her staff to be creative and assertive. She is ready to put her ideals to the test with the 1,800 employees who now look to her for leadership. One of the first things she wants to do is create an official mentors program. "You cannot survive as a woman or a person of color in a major organi-

zation without having some people on your side, without having a mentor," she maintains.

In her case, she points to Pacific Gas and Electric Vice President Norm Bryan, among others, who was, she says, "as formally my mentor as the company had." He was at one time her immediate supervisor. Even now they still communicate, and he is still someone she feels able to turn to for advice.

Bradley arrived at Pacific Gas and Electric in 1976, after working "all over the United States," primarily in journalism in Washington, DC. She started out in the utility's news services department, specializing in nuclear power. At the time, Pacific was in the process of licensing its nuclear power plant at Diablo Canyon.

For 10 years, she took on various news service assignments, including becoming the company's first conservation information coordinator. "I was the person charged with getting word out about our conservation work to our customers," she explains. With her help, Pacific gained an international reputation for its innovative energy-efficiency programs.

From there, she moved into more and more supervisory positions. By 1988, she was manager of the company's widespread Silverado Division, an area that encompasses the Napa Valley, and Sonoma and Solano counties, and includes about 300,000 customers. Along with thousands of residences, her service territory included an Exxon oil refinery and a number of "small boutique wineries."

She was responsible for human resources, customer services, marketing and operations. "Operations was wonderful," she declares. "It was my first experience supervising line

crews. I loved it. It's very clear; either the lines are up or they're down. People aren't confused about their objectives or what the goals are. If the lines are down, put them up!"

Like her line crews, Bradley seems to be rarely confused about her goals or objectives. One can almost hear her saying,



Illustration by Stephen Hayes

"If the organization is down, pull it up!" She has been widely quoted as saying she is in the "organization renewal business." At Seattle City Light, she moved quickly in that regard. Before she was even confirmed by Seattle's City Council, she had called for the resignations of two of the utility's deputy superintendents. It was a move that drew both rancor and praise. On September 28, the City Council announced its support of her decision and unanimously approved her appointment to be superintendent.

Q. *You are the first black woman to head a major U.S. utility. Do you feel that race and gender diversity are important to the energy industry?*

I think diversity is very important for a lot of reasons. The main reason is just a business reason. I mean, this isn't a sociology project. This is about business. If we want to know how we are being perceived by the diverse customers in our marketplace, we don't have to hire some high powered market analysis group. We can go to our employees. We can go to our Asian-American employees and say is this translation correct? If we make this presentation to a group of Asian-Americans is there something culturally that we don't know that might offend people?

Or we can go to our African-American employees and say, "We know that you have access to parts of a community that we don't normally have access to, such as churches or clubs. How can you help us gain access to that community?"

You have all these resources right within your organization if

If you don't have diversity, you're missing out on what a major part of your market has to say.

you have diversity. If you don't have diversity, you're missing out on what a major part of your market has to say.

Another reason, and this gets to the notion of diversity of thought, we have seen many examples, GM is one of them, IBM is another, where people get into this locked-step speech and thought in an organization. Everybody goes into that "group speak." And God help the person who says, "Wait a minute, the emperor has no clothes."

Diversity — ethnic, gender and thought diversity — prevents you from getting into that group think and group speak, so that you can seize the opportunities and hear what your customers are saying.

GM has not been hearing what its customers have been saying about its lousy cars for years and years. IBM hasn't been listening to what people have been saying about the need to get into services. Was there anyone there who had the courage to speak up, and was that valued in the organization?

Q. *Seattle City Light is known more for its history of discrimination and harassment than for its cultural diversity. How will you address that?*

Let's talk about the good part of it. When I came through on my initial tour of Seattle last summer, my mouth was wide open. I had never seen as many women in the physical forces [field crews] in any utility I had ever visited, certainly not my old utility. It was unheard of. City Light has done an extraordinary job of recruiting and bringing women into the workplace. That's the positive side, the up side of it.

The down side is that in bringing diversity into the work force you have to nurture it along. You have to train people about how to work together. You have to not just train them once, you have to have a continuous program on how to deal with diversity in the workplace, how to treat each other.

That's where City Light was probably lacking. We didn't let people know how important it was to the organization that people get along. And that people understand that certain behaviors will not be tolerated. We were inconsistent in rewarding some behaviors that probably should not have been rewarded. For example, rewarding the fact that supervisors were not taking full responsibility for the climate in their workplace. Even though they themselves may not be discriminating or harassing, someone in their organization was doing that. That supervisor is as much responsible for that environment as the actual person who is doing the harassing.

What we're doing about it is we have started sexual harassment training again for all of our folks,

particularly for crew chiefs. It's something that's going to be offered to the entire organization. It's mandated by the city that we have sexual harassment training for everyone. It's something that we need to do.

We're also putting together a task force that's going to deal with how we can make this — learning to get along — part of our strategy as an organization. It's one thing to bring people into the workplace. It's another thing to have a culture that's accepting of them once they are here. It's a big job and we've got a long way to go.

Q. *You recently completed an employee survey that indicated that morale was quite low at City Light. Did it shock you that things were so bad?*

It wasn't shocking because I don't shock easily. But again, on

the positive side, it leaves no question about where we need to go. It sends a real mandate about what we should be doing, about where, specifically, we need to improve. The other very positive thing about the survey is that 80 percent of the employees participated in the survey. They didn't have to. That tells me that everyone here wants to change.

Q. *Can you compare working at Seattle City Light, a public utility, to working at Pacific Gas and Electric, one that's owned by its investors?*

There are many similarities. Certainly the industry is the industry—in terms of competition and other things. But the industry is not the way it used to be. It's no longer a cradle-to-grave type of work environment. We have to change, and the same kinds of issues that we had at PG&E we

have here. People want to work for utility companies because they think it's going to be a stable work environment over years and years. You'll collect your 25-year watch and walk off into the sunset. That's just not the way it is anymore.

Q. *Why? What's changed?*

The industry changed. As our prices increase, we will be having rate increases. The demands from our customers will increase. The demand for value will increase.

Also, we cannot put all of our resources into one basket anymore. To be able to have a work force that can go into the next century, we have to get some visioning going about where we should put our resource dollars.

The need to keep costs low is even more important in a public utility. The private utility has as its motive ultimately the maintenance



of shareholder value.

Here it's different. The objective around cost containment is different. We want to keep rates low. In order to keep rates low, we have to constantly be looking at how we do our business and how we can save money, and where we can find more efficient ways of doing things.

Q. *Are there differences in working with a city council for a boss rather than corporate officers?*

Certainly politics with a capital "P" intercede with some things that we're trying to do here, but I have to tell you that that's not any different than at an investor-owned utility. There'll be politics with a small "p" there, corporate politics. Politics by any other name is still politics.

I view the City Council and the mayor as though they are my board of directors. They've been very supportive of the efforts we've been undertaking in the short time I've been here. I think they are open-minded about the need for change and very supportive of that.

Q. *Is conservation a personal priority for you, as former conservation information coordinator at PG&E?*

I think it's absolutely the way to go. Conservation gets a bad name. It should be called something else. It should be called energy management because that's what we're really talking about people doing, particularly since we're shifting emphasis from single-family homes and into the big commercial and industrial sec-

**Our
competitiveness
as a utility
has to be measured
by how well we
help to keep our
customers
competitive.**

tors. What we're really doing is asking to form a partnership with our large customers around helping them manage their energy use. I think this is going to be very exciting, and I'm glad I'm here at the beginning of this process because I think it's going to be one that will do well in this environment. The fact that the Bonneville Power Administration is a very willing partner with us is also helpful.

Q. *Do you think your goal of 100 average megawatts of energy savings is achievable?*

Oh I do. Just by shifting the emphasis from single-family to large industrial and commercial customers it's doable. The mindset I need to get folks around here to see is that even though we may not have competition, our customers have competition. And their competition is our competition. Our competitiveness as a utility has to be measured by how well we help to keep our customers competitive.

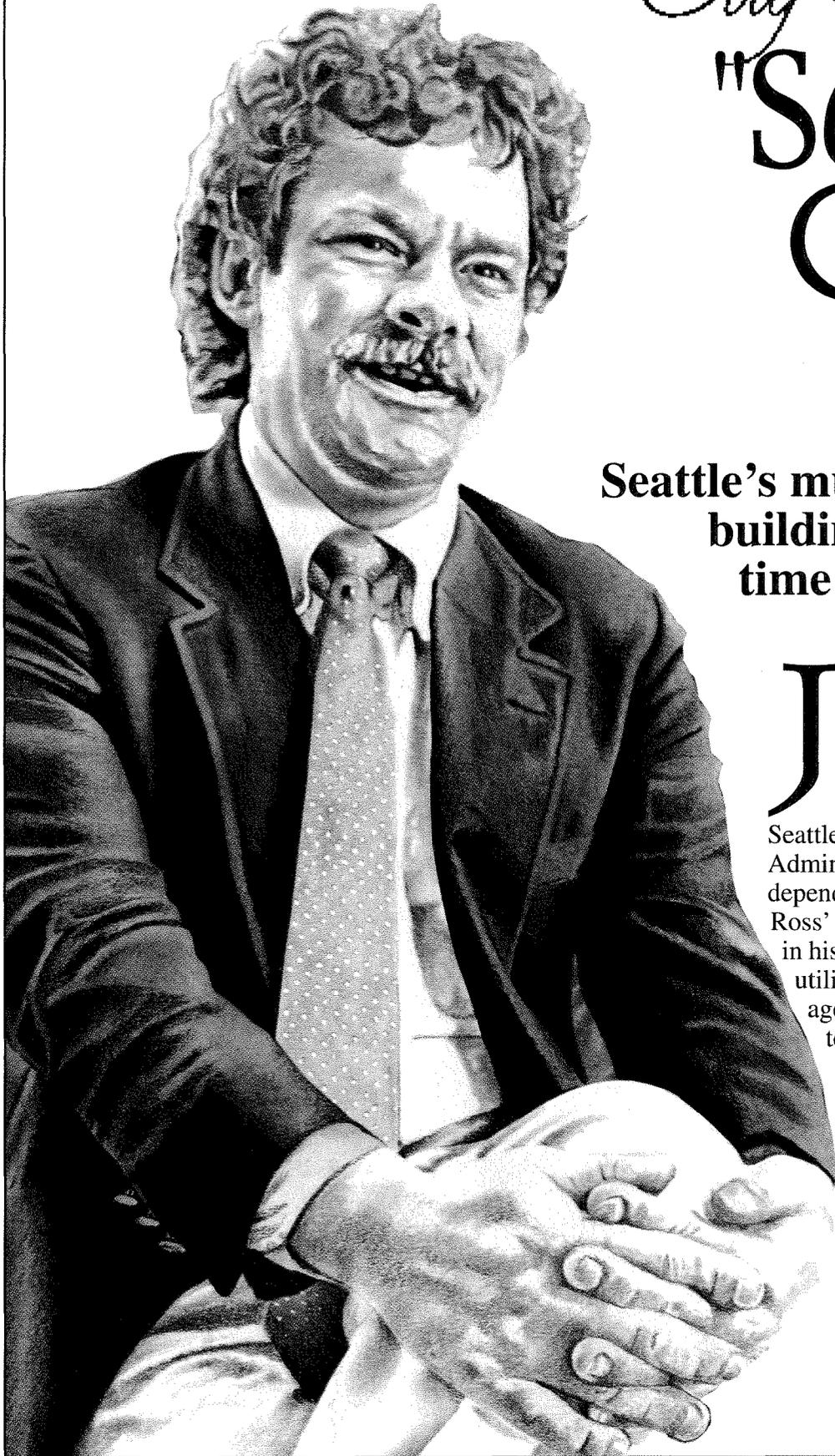
Q. *Where does the money come from to do that big of a conservation program, and what does it do for your revenues when you cut future sales by 100 megawatts?*

Well of course it helps us that Bonneville will help pay for the conservation effort. That helps Bonneville, it helps the whole region because it costs a lot less to save a kilowatt-hour than to create one. If we are not pushed right now into making major capital expenditures for generating facilities, then we're way ahead of the game. Conservation can be the thing that helps us transcend into the next century.

What does that do to our revenues? It has a very, very small impact—a cumulative impact of about 2 percent by the year 2000. I'd say that's pretty near minimum.

Q. *What about other resources? Are you looking beyond conservation?*

I have encouraged my power resources planning people to be even more inclusive when we're looking at what kinds of resources we have out there that we haven't tapped. I want some people who are real visionaries to be able to "blue sky" and say, "Well, maybe we can have a combination of wind and some combustion turbines." I want us to really explore the cogeneration potential with our customers. I'm looking for partnerships. That's really key to the way I like to do business. 



City Light's "Second Great Era"

Seattle's municipal utility is building efficiency this time instead of dams.

by Carlotta Collette

James Delmage McKenzie Ross may seem an unlikely hero for a fellow who for years fought Seattle City Light, the Bonneville Power Administration and increasing regional dependence on nuclear power. But it's Ross' portrait that faces Marc Sullivan in his corner office as the Seattle utility's new director of energy management services. And it's Ross' tenure as the hero of populist power that inspired Sullivan to get involved in energy issues in the first place.

Ross, more commonly called J.D., was the second superintendent of the city's municipal utility, serving from 1911 until his death in 1939. Most

Seattlelites consider him the "father of City Light." It was Ross who pushed the city to construct its powerful hydroelectric system on

Energy conservation could supply all of the 100 more megawatts the city could need over the next decade.

the Skagit River. The Skagit's three dams—Gorge, Ross and Diablo—still can supply about 40 percent of the power the utility is capable of generating.

Ross could also be called the father of the Bonneville Power Administration. As that agency's first administrator (he kept his job at City Light, working part time at both), he often is considered public power's last great promoter at Bonneville. His dream of low-cost electricity for citizens and communities across the Pacific Northwest matched that of the president who appointed him, Franklin Delano Roosevelt. It was Ross' idea to build the vast transmission system that carried the miracle of hydroelectricity to remote reaches of the West.

J.D.'s Legacy

It's Ross' dream of low-cost power and his populist politics that Sullivan has adopted. And Sullivan accepts the challenge to bring Seattle the most cost-effective electricity available with all the eagerness and enthusiasm that were attributed to Ross during his lifetime of service.

"In a very real sense," Sullivan says, "the 1992 Energy Resources Strategy, with conservation as its largest compo-

nent, is the initiation of the second great era of Seattle City Light. The first era was built on the development of the hydroelectric system, and we've lived off the riches of that vision for many, many decades."

The new vision, where more carefully managed use of electricity is the dominant characteristic, grew out of a proposal made to City Light by Seattle's Citizens' Conservation Committee and the utility's Resources Advisory

Group. Those groups, whose combined membership comes to about 50 individuals, studied Seattle's projected economic growth and the resources already available to the community to meet the energy needs created by that growth.

Their conclusion: Seattle could cut its electricity use by the same amount that the city's use is expected to grow over the next decade. In other words, energy conservation could supply all of the 100 more megawatts the city could need over the next decade. And conservation is the least costly new resource the city could find.

To produce a detailed implementation plan that could show how the savings would be secured, City Light turned again to its community advisors, this time creating a conservation task force to work with its staff. The group looked at City Light's existing conservation programs and ways to improve them, conducted an analysis of the potential energy savings from the city's major sectors, and designed new programs that can improve energy efficiency in those sectors.

In relative terms, securing 10 megawatts of energy-efficiency



Charlie Hilf, president of Olympic Sportswear West, is pleased with the efficient lighting in his new factory.

improvements every year for a decade isn't that enormous a task. Puget Sound Power and Light, the municipal's investor-owned neighbor utility, obtained 27.9 megawatts in savings in 1992 alone. But Puget is roughly twice as big as City Light and had the added incentive that it was facing power deficits and very expensive new power purchases if loads couldn't be cut.

For City Light to meet its 10-megawatt annual target, it will have to quadruple its conservation activities over those of the past decade. Between 1980 and 1990, City Light spent roughly \$120 million and cut energy use by about 25 megawatts. The utility estimates that it will require about \$425 million to save the next 100 megawatts. The city is counting on the Bonneville Power Administration to ante up considerably more money than came from that quarter in previous years.

Says Sullivan, "In the 1980s, City Light covered \$100 million of the \$120 million we spent on conservation. Bonneville only had to come up with \$20 million of that investment." But City Light's energy savings are essential to Bonneville's own resource strategy for the coming decade.

In its 1991 Northwest Conservation and Electric Power Plan, the Northwest Power Planning Council called on Bonneville and the region's utilities to save at least 1,500 megawatts of electricity by the end of this century. The Council's analysis showed that efficiency is the least-costly resource the region can turn to as its energy

For City Light to meet its 10-megawatt annual target, it will have to quadruple its conservation activities over those of the past decade.

needs grow.

Bonneville's piece of that resource pie is about 750 megawatts. As a customer of Bonneville, City Light should be able to call on the federal power marketer to reimburse it for a major portion of its conservation spending. After all, the power City Light can save will go a long way toward meeting Bonneville's target.

Bonneville's assistant administrator for energy resources, Sue Hickey, has announced that her agency will find the money to buy all the cost-effective conservation her customer utilities can capture. But Bonneville has only committed to providing half the utility's first-year conservation funding and somewhat increasing amounts after that. That leaves City Light short, and there is concern at the utility that Bonneville may pull back even further as the agency's own budget tightens.

For Seattle to meet its target, a full and reliable partnership with Bonneville is critical, Sullivan stresses. City Light's bosses on the Seattle City Council concur. They have announced that they won't approve the implementation plan until Bonneville's long-term

support is ensured. The City Council is expected to vote on the implementation plan in late March. In the meantime, the utility is relying primarily on existing programs to capture efficiency improvements.

Home savings

City Light spent the past decade and a half garnering more than half of the energy savings potential in single-family homes in the Seattle area. That effort will be expanded under the new plan to include a block-by-block canvassing of Seattle's neighborhoods, seeking opportunities to cut energy use in both homes and businesses.

In one neighborhood where energy supply is a problem due to an overloaded power distribution system, the utility is running an experiment to reduce energy consumption in 420 residences during periods of concentrated drain on those power lines.

City Light's primary emphasis in the residential sector will shift in coming years from single-family home efficiency improvements to those that address multifamily dwellings and energy saving appliances. In the past, City Light offered a modest rebate to homeowners upgrading their electric water heaters. The current proposal would increase those rebates and expand them to cover other appliances until national energy-efficiency standards for appliances take effect in 1997.

In another proposed pilot project, one designed to be carried out jointly by City Light and Washington Natural Gas, some residential customers will be en-

couraged to choose an alternative power source — natural gas — for such household applications as water and space heating.

Making Better Business

With the residential sector well in hand, City Light's major focus will now be on those customers and structures that use the most electricity—office towers and industries that rely on electricity for production. These are also the sectors of the area's economy that are expected to grow the fastest.

More than half the energy savings anticipated in City Light's conservation plan could come from new and existing commercial buildings. In these structures, just changing all the lighting systems and adding computerized heating and cooling facilities can cut electricity use by more than a quarter.

But all too often, commercial and industrial customers still think of "energy conservation" as working in the dark. So City Light is changing its approach, calling for better "energy management," a concept that connotes smart business practices to people for whom electricity is a big chunk of their overhead. These are the customers City Light hopes to convert through its new efficiency plan.

The utility already has made advances in this area. In 1992, City



The SODO Building south of downtown Seattle is being retrofit with energy-efficient lighting systems.

Light met or exceeded virtually all of its commercial and industrial program goals. Participants in the utility's conservation programs in 1992 shared the cost of the energy savings, lessening the financial impact on City Light.

For example, the downtown Bon Marche department store

More than half the energy savings anticipated in City Light's conservation plan could come from new and existing commercial buildings.

worked with City Light to shave \$73,000 off its annual energy bill. The savings came entirely from new lighting. Bon Marche contributed about one-third the cost of the new fixtures.

A computerized heating and cooling

management system at the 320,000 square foot Metropolitan Park I office building is saving that building's operators about \$45,000 every year. Building owners pitched in staff time and half of the \$315,000 the new system cost.

One potential client, Charley Hilf, president of Olympic West Sportswear, balked at the notion of putting what he thought would be less lighting in his new factory than he was used to. Hilf competes directly with Asian clothing manufacturers and considers his edge the quality and rapid turnaround he can give his customers — major catalogue companies like L.L.Bean. He had orders to deliver and a shop to open. The last thing he needed was to get bogged down in dealings with the local utility.

But lighting engineer Dale Jensen and the facilities manager at the huge Sodo building where the new factory is located both argued the assets of the efficient lighting systems. Jensen noted that he'd worked with other utility conser-

vation programs, and "City Light's people make it really easy." He said, "Folks at City Light can give you four-hour turnaround on decisions."

Hilf was sold. Today, his workers are busy and the lights are bright — but efficient.

The savings at industrial sites can be even more impressive, but the apprehension is often even greater. Salmon Bay Steel, a newer "mini-mill" in a 1902 foundry, is a prime example.

With the breakup and crash of the huge steel companies in the 1960s and 70s, U.S. steel processors had to reinvent their industry to compete effectively. The solution was the mini-mill, where smaller amounts of steel could be produced and fabricated. Salmon Bay Steel is one of these, manufacturing rebar from recycled scrap metal. The scrap metal is melted in huge electric furnaces. The furnaces consume about 275 million kilowatt-hours every year. The average Northwest home uses 15,000.

The mini-mills are fiercely competitive, and their industrial secrets are closely held. As Salmon Bay rebuilds and remodels its archaic facilities, City Light is standing by with a check to hire engineers who can help streamline the company's future production operations.

But Salmon Bay's directors in Birmingham, Alabama, aren't accepting the offer. They've agreed to lighting upgrades, which have already saved them more than \$10,000 in annual lighting costs, but they have not approved use of outside engineers, even free

The savings at industrial sites can be even more impressive, but the apprehension is often even greater.

ones. The fear seems to be over the potential loss of trade secrets.

Salmon Bay's reluctance frustrates Phoebe Caner, an engineer working on industrial conservation at City Light. "We could save them so much more electricity than just the lighting improvements," she says, "if they'd just let us."

Standing in the vast furnace hall at the plant, where a room-sized "ladle" pours twisted old steel into a massive vat where it is electrically melted, it is hard to imagine that great sums of electricity couldn't be saved with more modern technologies. Instead, Salmon Bay Steel is applying to City Light for an increase in electrical service to the plant. The increase would be substantial, costing upwards of \$1 million and requiring new power lines and roughly four years of development before any new power is transferred.

"It would be so much cheaper and easier for them to let us help them save electricity instead of taking the four years to just buy more," says Caner.

If Marc Sullivan and the rest of City Light's energy management staff have their way, Salmon Bay Steel will be compelled by the ad-

vantages of more efficient production processes to join the growing number of industries that are "seeing the light." Everyone will be doing it, and Salmon Bay will not be able to compete without refining its processes, too.

This is the vision Sullivan has, where energy efficiency frees up capital to create jobs, bolsters the economy and creates partnerships among businesses and government in the Seattle area. It's J.D.'s dream come full circle.



Where the **Environment** is the **Economy**

by Carlotta Collette

Oregon kicks off an innovative idea: Coastwide salmon recovery.



On December 16, 1992, Oregon Governor Barbara Roberts stood before a gathering of more than 200 people whose common concern is the plight of coastal river salmon. There were sport and commercial fishers; citizens from coastal communities; representatives of local, state, regional and federal governments; farmers and foresters, environmentalists, fisheries scientists, tribal members and others.

Each had a particular agenda, an interest to protect. All were aware that the future would require them to take action and make compromises. It is a concept they are getting used to as West Coast salmon follow other natural resources into scarcity.

"I want this conference to mark the beginning of an essential change in the way we manage these fisheries and our environment — a change that acknowledges the environment as a foundation of our economy, not a competing interest," Roberts said.

In recent years, most wild Pacific salmon populations have dropped off dramatically. Unlike in the Columbia River Basin, where hydroelectric dams are

blamed for a large portion of the salmon losses, coastal rivers where salmon spawn have few dams that kill the fish. Instead, declines in coastal runs have numerous causes, many that are difficult to trace.

The degradation of spawning habitat caused by development along rivers that drain into the ocean is a significant handicap. Once in the ocean, fishers and predatory sea mammals take a tremendous toll on the runs. In addition, weather patterns, such as the water-warming "El Niño" threaten salmon survival. All in all, the fishing industry, and with it the small, seaside towns that serve and rely on the industry, have taken a fierce beating.

In 1992, sport fishing was cut roughly in half compared to peak fishing years. Commercial fishing experienced its second lowest season on record, with salmon catches at only about 35 percent of 20-year averages. Of the three fishing season options considered last year by fishery managers, one was known as the "zero option" — a season with no commercial salmon harvests. The zero option wasn't adopted, but its threat sent new chills through fishing communities.

Even with a more lenient harvest regime, last year's lost income in Oregon's commercial fishing industry amounted to between \$30 million and \$50 million. In the recreational fisheries, incomes were off by between \$6 million and \$10 million. In personal terms, that translates to crashing salaries in coastal communities. Many incomes have plummeted by 80 to 90 percent.

In 1992, sport fishing was cut roughly in half compared to peak fishing years.

Vulnerable coastal economies, already hobbled by the loss of jobs in forestry, are incapable of absorbing such losses. In Oregon, logging and fishing are the coast's two major industries. While tourism is still healthy in the state, even tourism is dependent on a healthy natural resource base.

Endangered species and threatened economies

The litany of impacts from the loss of salmon is a long one. Ramifications vibrate throughout the state's economy, and up and down the coast into California, Washington, British Columbia and Alaska. Along this stretch of Pacific shoreline, more and more individual salmon runs are being targeted for listing under the federal Endangered Species Act. The West is learning the hard lesson that such listings compel harsh choices to preserve the wild legacy of the region. Regional leaders are increasingly concluding that protecting remaining species now, before they become endangered, can help the region avoid the divisiveness that accomplishes little and causes much pain.

In 1991, Rollie Schmitt, regional director of the National Marine Fisheries Service, the agency that has been kept busy

addressing endangered species listings of the West's salmon, told the Northwest Power Planning Council that a coastwide salmon recovery strategy was necessary. "We need to start a proactive campaign to identify wild stocks and critical habitat, and develop a restoration program that the states and tribes and conservation groups can take to Congress to fund a major restoration of wild fish. If we want to get out of the position in which we find ourselves," Schmitt added, "it's going to take this kind of initiative to get started."

But Schmitt's time since then has been taken up with recovery planning for already listed endangered salmon runs, primarily in the Columbia River Basin. In the meantime, declines in coastal runs are digging an ever deepening hole in the region's economy.

So Oregon seized the initiative. With her "Coastal Salmonid Restoration Initiative Conference," Governor Roberts made it clear she was not about to allow delays and competing parochial interests — sport versus commercial fishers, loggers versus environmentalists, etc. — to sabotage the coastal economies in her charge. "Former adversaries ... must become willing partners," she announced. "Your real adversaries are time and the sometimes unforgiving fragility of our natural ecosystems," she explained.

"What we do here," Roberts stressed, "... cannot be an academic or political exercise. None of us will have 'won' if we spend three days arguing, staking out positions, attempting to assign guilt and postponing action. We need specific direction and tangible plans to move forward."

Roberts used the seemingly

unresolvable spotted owl debate as an example of what the gathered group should not do. The spotted owl's listing as a threatened species under the Endangered Species Act has led to three years of often violent controversy over how to protect owl habitat in ancient forests while still allowing logging in those forests. Attention to the owls has been sidetracked by the debate itself.

A better example was set in the Columbia River Basin, she said, where "we have managed — with difficulty and some reluctance — to cooperate in adopting and beginning to implement recovery measures."

No consensus, but shared commitment

In the three days allotted, conference participants did not expect to come to full agreement on recovery measures for the coastal fisheries, but a common direction was hoped for and a shared commitment to work cooperatively was considered essential. "We cannot afford to wait for perfect knowledge or perfect consensus

Former adversaries...must become willing partners.

before we act," said the governor.

To begin, participants broke into four technical working groups. Each group was assigned a particular aspect of the salmon problem and charged with the task of suggesting solutions to the problem. The groups explored: habitat protection, restoration and enhancement; hatchery production; harvest management; and, "biological community management," a concept that encompasses public education and involvement in environmental activities and additional research about existing salmon resources.

In their break-out sessions, participants voiced their concerns, brainstormed solutions and sorted the solutions into categories that could be developed into an action plan. Two or three top actions from each group were further refined into each group's recommended projects.

There were few rules. By common agreement, participants built their strategies on recent or historic successes rather than tossing out what may have worked along with what hasn't. They sought practical short-term projects that could be implemented in the next

six months, while longer-term projects are carefully designed. Measurable results from these projects should begin showing up within two years, the groups decided.

They preferred incentives over regulations — more carrots and fewer sticks. They encouraged partnerships rather than single-source funding or actions, because they agreed that the history of the declining fisheries had more than one villain and should have more than one hero. In all of this, they demanded a degree of flexibility to help ease what would undoubtedly be a rocky transition for salmon-based industries and communities.

From the long lists of ideas, a draft strategy was proposed. That strategy is now being circulated, reviewed and refined by a task force formed at the conference. Among the proposed actions are the following:

- The Oregon Department of Fish and Wildlife was asked to designate particular watersheds that offer important opportunities for salmon production. The Department would form partnerships with agencies and individuals in



those watersheds to design, carry out and evaluate specific pilot habitat restoration and salmon production projects.

- Existing data about salmon productivity and habitat in coastal areas would be compiled in a central data base. Gaps in the data would be identified and a plan for filling the gaps devised.

- Existing hatcheries and hatchery practices would be reviewed and new hatchery management techniques established to help protect genetic diversity, reduce impacts on wild stocks and increase hatchery productivity.

- All hatchery-reared salmon would be marked so they can be identified when wild and hatchery salmon are caught together. Hatchery fish can be kept, while unmarked fish are released. This measure was considered a top priority, with implementation to begin immediately. On January 21, Northwest state natural resource directors, the National Marine Fisheries Service, the Pacific Fisheries Management Council and others met to refine this proposal, but no decisions regarding marking were reached at the meeting.

- Harvest managers would calculate and seek to minimize the economic impacts of their fishing season schedules.

- Newspapers would be encouraged to institute a natural resources section that is separate from science and sports sections.

- Natural resource educational programs would be developed for schools.

- A "stewardship ethic" would be encouraged with funding provided for volunteer stream enhancement efforts and small-scale salmon production projects.

- Oregon's initiative would be expanded to other West Coast states, particularly Washington and California, which have already shown interest in the Oregon approach.

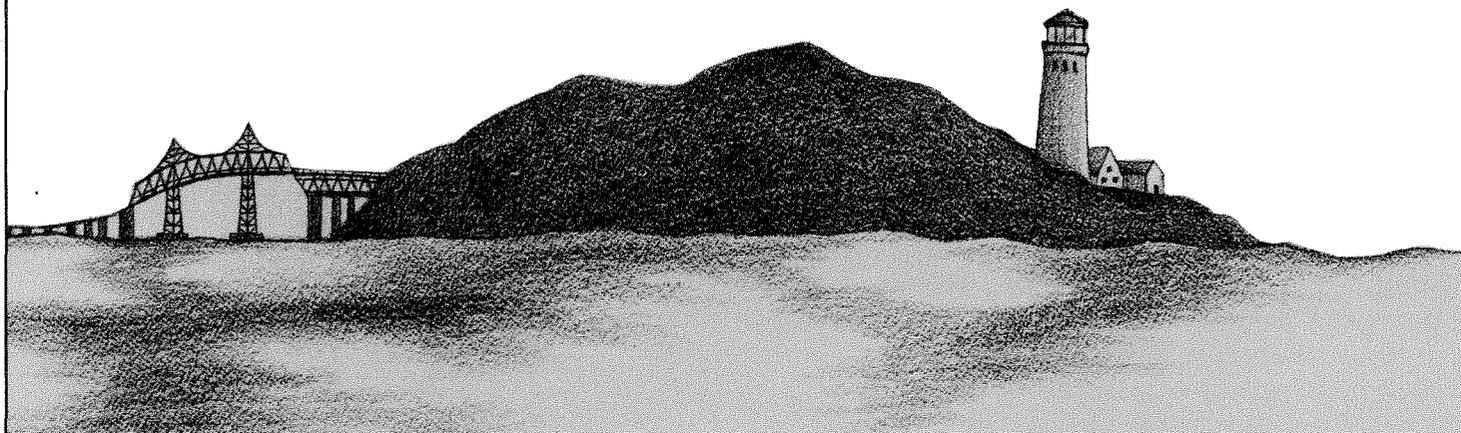
For her part, Governor Roberts promised that her, admittedly slender, budget will reflect the priorities she asked her guests to adopt. "In the budget process ... I made decisions about what government's most important functions must be, and where taxpayer dollars will provide the most valuable return on their investment," she said. "My budget reflects my belief that our natural

resource base in Oregon is as much a part of our infrastructure as our highways and bridges. Our economy depends on these resources. ... In depleting our salmon runs, we have expended precious 'capital' from our natural resources portfolio."

Roberts outlined budget outlays she anticipates making this year to preserve and rebuild coastal fisheries. She set aside \$10 million for watershed work, which she expects to use as job-creating grants to local communities for habitat repair efforts. Another \$3 million was targeted to resolving problems of water allocation and water use in Oregon.

"If we move quickly to guide events, then our communities will be well-placed to benefit from the coming changes, not merely survive them," Roberts concluded. "If we can show nothing but division and delay, then we will have little chance of securing the support and cooperation we need to reach beyond this crisis to an environmentally sustainable, economically productive future." 

We cannot afford to wait for... perfect consensus before we act.



CROSSING THE MOAT TO CONSERVATION

Experimental regulations help open the path to efficiency.

by John Harrison

It's been 17 months since Puget Sound Power & Light Company stopped making money from the sale of electricity. No, the utility is not sinking into deep water. Washington's utility regulators have helped Puget bridge the gap between efficiency and profits. The utility's experiment with "decoupling" — industry jargon for making money from something other than the sale of power — has been a qualified success so far.

Qualified, because there were some problems, but successful because decoupling helped the utility aggressively pursue energy conservation. In 1991, its first year under decoupling, Puget Power's conservation programs saved 17.5 megawatts of electricity, more than twice the amount obtained in 1990. In 1992, the company's programs cut another 27.9 megawatts off the utility's electric load. Combined, that's enough electricity for about 27,240 homes.

Almost everyone, including the Washington Utilities and Transportation Commission, which regulates the utility, wants to continue the experiment. In fact, in its

first review of the Bellevue-based company's innovative rate structure, the commission committed to continuing the experiment, adding: "The Commission will not reject the mechanism now because of problems raised by the parties or dissatisfaction in certain areas."

It's an important experiment, one being undertaken by utilities and state regulatory commissions across the country — in Maine, California and Wisconsin, for example — and studied elsewhere, including in Oregon and Montana. It's important because demand for electricity is growing, and new power plants are expensive and often difficult to site due to legal or environmental restrictions.

As a result, utilities are interested in low-cost power — both in terms of dollars and cents and impacts on the environment. Increasingly, utilities are turning to energy-efficiency improvements to meet demand for power. But by improving efficiency, utilities sell less electricity. Under traditional regulation, when they sell less electricity, they make less money.

What to do?

One solution is to change the nature of state utility regulation to separate — decouple — utility income from the sale of electricity. Once decoupled, a utility becomes essentially indifferent to profiting from increased electricity sales and is free to pursue energy-saving measures without losing money. Puget Power, for example, makes money on the basis of the number of customers served, not on the amount of kilowatt-hours sold. In part as a result of this, the utility is aggressively pursuing energy-efficiency programs.

Puget Power, the largest utility in Washington and the fastest growing, has been conducting its experiment in something of a regulatory fishbowl. Other states and utilities have been watching — and acting. Last year in Oregon, for example, the Public Utility Commission ordered Pacific Power and Light Company and Portland General Electric to investigate conservation rate mechanisms. Montana Power Company is studying the issue, too, as part of its least-cost resources planning.

A high priority for the Council

In 1990, Washington's Legislature mandated that the Washington Commission consider policies to improve the efficiency of energy use while protecting utilities from the loss of income due to improved efficiency. In May 1990 the Washington Commission issued a Notice of Inquiry entitled "Examining Whether there are Regulatory Barriers to Least-

Cost Planning." In response, Puget Power formed an advisory committee of public and private energy experts, environmentalists and other interested citizens to study the question and respond to the commission with a rate structure that would encourage utility conservation efforts.

In its 1991 Northwest Conservation and Electric Power Plan, the Northwest Power Planning



Illustration by Frank Farah

Council recognized the importance of regulatory incentives for energy efficiency. The Council called on public utility commissions and the companies they regulate to work together to “establish policies that reward aggressive conservation action.”

Puget’s rate went into effect in October 1991 after lengthy negotiations and public hearings before the commission. To decouple Puget’s sales and profits, the rate experiment ties the utility’s income to the number of customers served, not to metered kilowatt-hour sales.

As further encouragement, Puget’s rate includes financial incentives if the company meets or exceeds its efficiency targets. In addition, Puget’s costs of power purchases and investments in conservation can be recovered through its rates. While a general rate case will be held every three years, Puget’s rates can be adjusted every year to provide more timely recovery of investments in the new resources the company needs to meet its rapid load growth.

Annual rate adjustments are calculated using a system known as the Periodic Rate Adjustment Mechanism (PRAM). The PRAM relies on estimates of future costs — the cost of serving customers or the cost of purchasing power, for example — to calculate rates. Rates are adjusted each year to “true-up” income to costs allowed by the state regulatory commission.

But what happens when income is less than the amount needed to cover costs? This happened to Puget Power in 1992,

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when drought left little opportunity to generate power for sale, and a warm winter meant that less electricity was required by its customers. Income dropped.

Faced with power costs that were higher than anticipated and income that was lower than anticipated, the company sought a rate increase that was more than twice the amount of the first increase under the rate experiment. The

commission responded by cutting about one-quarter of the proposed rate increase, deferring that amount for later consideration, and criticizing the decoupling mechanism. The commission said decoupling was difficult to administer and largely misunderstood by the public, adding: “the mechanism should not be left untouched when it has become obvious that some midcourse corrections or modifications” are needed.

But the decoupling element of Puget’s rate experiment — that piece that ties company profits to customers served rather than to sales of electricity — only accounted for a fraction of the proposed rate increase. In fact, the cost of developing new resources (including conservation) to meet future load growth was the prime contributor — more than two-thirds of the total, according to Puget’s calculations. About 26 percent was due to poor hydropower conditions, which forced the utility to purchase power, and to warm weather, which decreased the utility’s income.

The irony is that if the weather had been different — cold and wet during winter, for example — Puget would have been able to generate and sell more electricity. It would not have required so steep a rate adjustment. That was a point made by Puget Power’s chief executive officer, Richard Sonstelie, in testimony to the commission:

“To allow the perception of the PRAM/decoupling mechanism to be overshadowed by the transitory effect of an unusual winter would

be a mistake," Sonstelie said.

The company has proposed spreading the deferred costs over two years to soften the impact on ratepayers, and it is working with commission staff to improve the innovative rate structure.

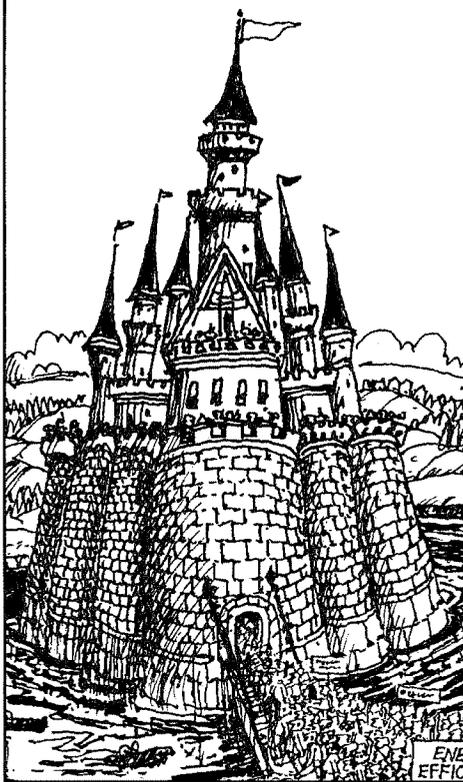
Sonstelie said there is a clear tie between decoupling and the company's impressive conservation gains. "I cannot speak for all utilities, but I can say that for Puget Power, the PRAM/decoupling mechanism was essential for us to triple the amount of conservation," Sonstelie told the commission. "It provided the essential assurance called for in the legislative policy — that conservation would not be achieved at the expense of revenues of the company."

Dick Watson, director of the Council's power planning division, agreed. "The lesson of the Puget case is not that decoupling is a failure. It worked," Watson said. "Decoupling was only one piece of a set of incentives to help Puget push through barriers that were discouraging it from doing conservation. With those incentives, including decoupling, Puget moved very aggressively to capture energy savings. Last year, the weather worked against the experiment. In another year, Puget's rates could actually be adjusted down. The regulatory experiment didn't fail."

Other states take an interest

Meanwhile in Oregon, the Public Utility Commission issued an order on November 22, 1992, directing Pacific Power and Light Company and Portland General

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It worked.*



Electric to investigate rate structures that would separate utility profits from electricity sales. Both utilities formed advisory committees to help them accomplish the task. Initial reports should be submitted to the commission this spring.

In their order, Oregon Commission Chairman Ron Eachus and Commissioner Roger Hamilton wrote:

"We are persuaded that the connection between profits and sales should be severed. As long as the regulatory system provides that increased sales may lead to increased profits, a conflict will exist between the motivation to sell energy and the motivation to promote reduction in energy consumption. No other change in the regulatory system can ensure that we will move toward the goal."

In a separate, partially dissenting opinion, Commissioner Joan Smith said she disagreed that "decoupling of profits and sales must take place, and that, furthermore, without decoupling, regulatory efforts to reconcile a utility's acquisition of its least-cost resources with its most profitable course of action are doomed to failure."

Smith said she believes decoupling "insulates the utility from the business risk of competing in the marketplace and perhaps inappropriately assumes that the utility itself should be the main provider of energy services provided through conservation."

Utility officials agreed with Smith. Gordon McDonald of Pacific Power said the utility has concerns about decoupling but, like Smith, is not opposed to studying the concept. "What's needed is cost recovery for our conservation investments, and that doesn't have to be through decoupling," he said.

Portland General Electric is responding with similar caution, said Alvin Alexanderson, vice president of rates and regulatory affairs. "We made a commitment to the commission to do our best, be creative and do our homework. We

want to see if there is a form of decoupling we could support," he said. "But that's a little short of saying we endorse the concept."

The Oregon Commission didn't require Idaho Power Company, which serves some Oregon customers in the far eastern side of the state, to investigate decoupling. But the commission's order indicated Idaho Power may be included later.

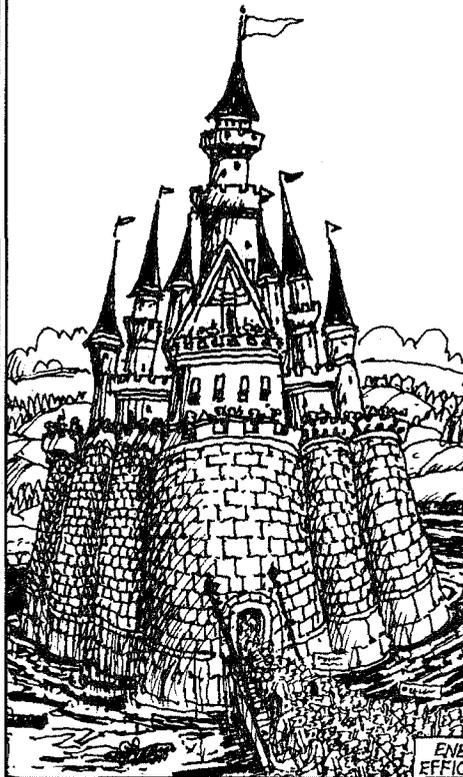
The Idaho Public Utilities Commission has not formally asked Idaho Power to study regulatory incentives for conservation.

"We've been looking at it internally, but we haven't decided whether it's a good idea or a bad idea," said Debbie Johnson of Idaho Power. "There is a lost-revenue impact from conservation, but we're not to the point that we need to pursue decoupling."

In Montana, that state's largest investor-owned utility, Montana Power Company, worked with an advisory committee to develop a least-cost plan last year. The company intends to file it with the state's Public Service Commission this March. With the company's encouragement, the committee currently is studying both decoupling and a rate-adjustment mechanism that would allow the company to recover power sales income lost to conservation.

"The committee's theme is that decoupling is worth looking at, but we're not going to copy the Puget Power example," said John Hines, an economist at the Montana office of the Power Planning Council and a committee member. "There is a concern that Puget did not

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bear enough of the (business) risk."

Gerald Mueller, a former Council member from Montana, is facilitating the Montana meetings. He said the committee is interested in decoupling income from energy sales in a way that would not require major changes in the way the state regulates utilities. The committee's first meeting to discuss decoupling was on January 22 in Butte. Mueller said the committee hopes to have a draft for Montana Power to study by April.

He said the company deserves a lot of the credit for pursuing regulatory incentives to conservation so aggressively. The company made it clear — as have other utilities studying decoupling — that such regulation must protect the company as well as its ratepayers, Mueller noted. "Management will never be enthusiastic about this resource as long as it adversely affects the bottom line," he added.

Alexanderson of Portland General Electric agreed. "Decoupling should be good for customers," he said. "But it should be good for the company, too." 

Filling a Need in IDAHO

by Maridee
Buersmeyer

The 1992-93 school year marks a milestone for students and teachers in Idaho. For the first time, they are recipients of a national energy education program designed to bring an understanding of science, energy and conservation to their schools.

The National Energy Education Development (NEED) project held its first Idaho workshop on Friday, November 13, in Coeur d'Alene, Idaho. Each participating teacher selected a few students to attend the workshop, and in turn, the student and teacher teams took the program back to their schools to add to their regular curriculum. In Coeur d'Alene, 20 teachers and 42 students attended the workshop to learn about energy and how they can help conserve it. The participants studied all sources of energy, from solar to nuclear.

The NEED program helps students and teachers brush up on their science skills and enables them to understand various energy concepts. It encourages students and teachers to learn about science in a fun way—by using games and activities. The program strives to be objective, providing factual information about the advantages and disadvantages of energy resources without getting



Students chant energy rhymes to help them remember energy concepts. This is an example of making learning fun.

into resource politics. Students can draw their own conclusions about each resource's relative advantages.

The program provides not just energy knowledge, but leadership training. Students commit to do a project at their own school in the next few months, using goal-setting skills learned in the class.

Grant Schoeneweis, a senior from Lakeland High School in Rathdrum, Idaho, serves as the student director for the workshops. Schoeneweis has been involved with NEED since 1989, when he participated in a workshop in Missouri. He says he "loved the program because it was student-taught." After completing the course as a student, he decided to pursue some leadership training with the national NEED office. He then became a student director for programs in Missouri. In 1991, Grant moved to Idaho and contacted the national NEED director

to express his disappointment that his new Idaho school didn't offer the program.

The national office got in touch with the Idaho Northwest Power Planning Council office to see if the Council had an interest in supporting the project. Karen Nelson, the Council's Idaho energy analyst and Idaho NEED program director, responded with an enthusiastic "yes."

She contacted Schoeneweis and asked him to serve as the state's student director. Classes have been booked to capacity since then, Nelson said. "This is an indication of how hungry Idaho teachers and students are for energy education materials. They really want to learn, and they love this particular program."

The program is being brought to Idaho by the Northwest Power Planning Council's Idaho office, the Idaho Department of Water Resources, the Association of Idaho Cities and the Idaho Association of Counties. Nelson added, "The Council is trying to obtain more sponsors so we can offer the program to those on our waiting list and to all grade levels. Our goal is to use the program in schools throughout the state." 

SHORTS

The Northwest

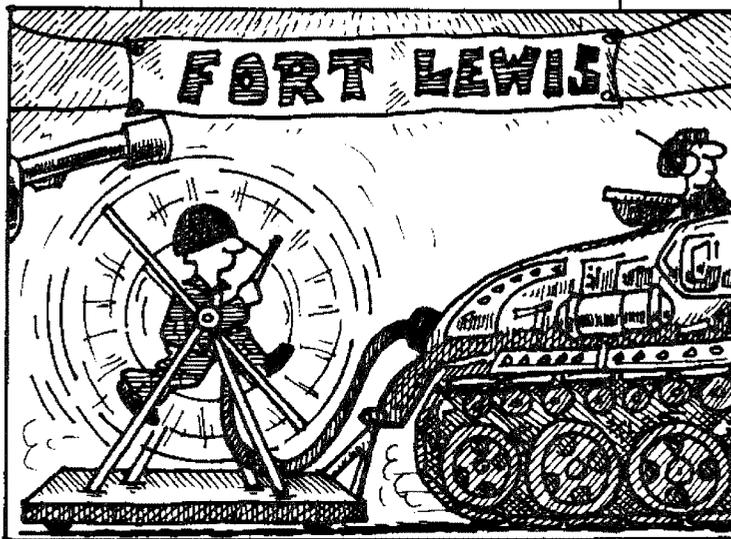
Northwest economic news not all gloomy. Of the 10 states with the most rapid growth in personal income in four quarters through June 1992, six are in the West. They are, in order, Montana, 8.4 percent; Washington, 6.6 percent; Idaho, 6.4 percent; Oregon, 6.4 percent; Alaska, 4 percent; and California, 3.3 percent. Meanwhile, the Tri-Cities (Richland, Kennewick and Pasco, Washington) and Spokane were ranked among the five hottest housing markets in the United States in the third quarter of 1992, according to the National Association of Realtors. The Tri-Cities ranked second and Spokane was fifth. Topping the list was Cedar Rapids, Iowa. [Source: Marple's Business Newsletter, December 2, 1992.]

Survey: Consider environment as well as economics in trade pacts.

In a recent survey of Washington residents, 80 percent said they favored including environmental considerations in international trade agreements. Sixty percent said environmental considerations should have equal or more weight than economic considerations. Strongest support came from those who blamed America's competitiveness problems on other countries' trading practices. [Source: The Elway Poll, November 1992.]

Klamath River salmon are at center of river use dispute. Farmers and fishermen are at odds over the use of Klamath River water. A 1957 agreement between California and Oregon gives farmers and domestic water suppliers first right to Klamath Basin water, but a task force that is writing a protection plan for depleted Klamath

math River salmon say the run won't survive unless more water is allowed to flow down the river. Endangered sucker fish in the upper Klamath Basin also need more water to survive. The Klamath flows from southern Oregon to the Pacific Ocean in northern California. Hoopa and Yurok Indians in Northern California also are involved in the dispute, as they have subsistence salmon fishing rights in the lower Klamath River. A spokesman for commercial fishermen said he is optimistic that the salmon run can be saved without destroying the agricultural economy of the upper Klamath Basin. [Source: The Oregonian, January 20, 1993.]



Tacoma utility will save energy at Fort Lewis. Tacoma City Light recently signed the last contract for its energy conservation program at the Fort Lewis Army base. The utility's least-cost plan envisions acquiring 5 megawatts of energy savings at Fort Lewis. EUA/Onsite Limited Partnership got the Tacoma contract and will install energy conservation improvements throughout the 24 million square feet of buildings at the base. The daily population of the base is about 30,000. [Source: Clearing Up, January 4, 1993.]

The Nation

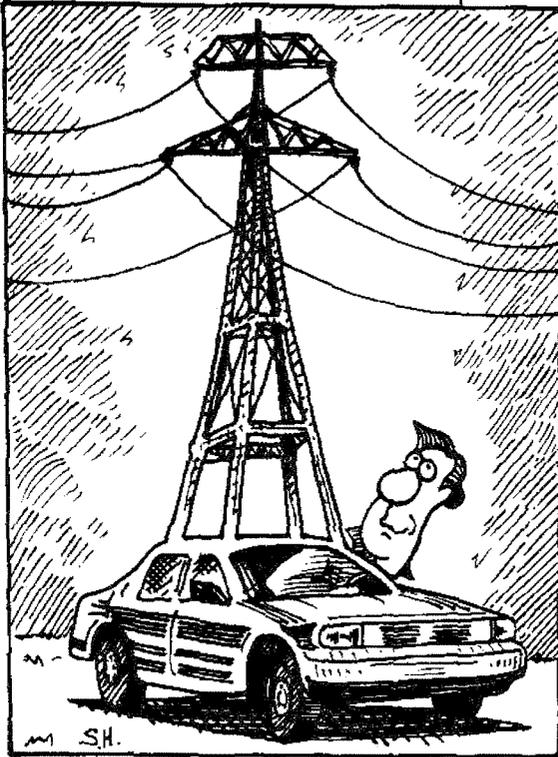
Texas investigates conservation impact on poor. Texas Public Utility Commissioner Karl Rabago believes the best way to ensure that energy-efficiency programs don't harm the poor is to guarantee access to electric service, regardless of income. The Texas Commission will take up that question this year as it studies integrated resource planning. Rabago said the poor lose under traditional energy-efficiency programs because they don't participate — it costs too much — or they pay higher rates to subsidize those who do participate. Rabago predicts a battle between those who espouse the "no losers" test, which holds that only those who

participate should pay for the programs, and the "social-cost" test, which holds that energy efficiency has broad social values and its cost should be shared by all ratepayers. "I want to look at it from the premise of the regulatory compact," he said. "What does 'the obligation to serve' really mean?"

[Source: The Quad Report, Consumer Energy Council of America Research Foundation, January 1993.]

Free guide tells about energy-related graduate programs. The Energy Foundation has a new, free publication entitled "Directory of Energy-Related Graduate Programs in U.S. Universities." The publication describes more than 60 programs in the fields of energy, resources, the environment and development. The directory, which is being distributed by Home Energy magazine, is available either as a printed book or on computer diskettes. Contact Home Energy, 2124 Kittredge Street, Number 95, Berkeley, California, 97404.

SHORTS



Developers claim fast-charging system will speed up electric cars.

Developers claim fast-charging system will speed up electric cars. A new fast-charging system for electric cars, unveiled at a recent auto show in Los Angeles, could make recharging electric cars of the future as rapid as filling a conventional car's gasoline tank, according to the developers. Norvick Technologies of Ontario, Canada, and the Chrysler Corporation developed the system, which they call the "Smart Charging System." The system allows quick charging of any type of battery without overcharging, the companies claim. [Source: Seattle Post-Intelligencer, January 7, 1993.]

Directories list energy organizations and periodicals. Public Citizen, a non-profit research and advocacy organization founded by consumer advocate Ralph Nader, recently released two new directories of citizen groups and periodicals addressing energy issues. The National Directory

of U.S. Energy Periodicals, lists the names and addresses of more than 700 publications that report on renewable energy, energy efficiency, nuclear power, fossil fuels, electric utilities and related environmental issues. The National Directory of Safe Energy Organizations lists more than 1,000 citizen groups and other non-profit agencies that promote improved energy efficiency and renewable technologies or oppose nuclear technologies. The directories sell for \$12.50 apiece. Write to Public Citizen at 215 Pennsylvania Avenue, S.E., Washington, D.C., 20003.

Improved energy efficiency could add 1 million jobs. A study by the American Council for an Energy-Efficient Economy concludes that energy-efficiency improvements throughout the U.S. economy could lead to 1 million or more new jobs by the year 2010. The study also concludes that another quarter-million jobs could be added by improving the fuel economy of automobiles and light trucks. [Source: Energy Conservation Digest, November 1992.]

The World

U.S.-style energy labeling coming to European appliances. Manufacturers and importers of electric appliances in the European Community will be required to supply customers with energy-consumption information beginning in 1994. Recently the Council of Ministers, the European Community's legislative body, voted to require energy-consumption labels similar to those on appliances sold in the United States. Initially, consumer information will be required for refrigerators, freezers, washing machines, dryers, dish washers, ovens, water heaters, lights and air conditioners. Other appliances may be added later. [Source: Environment Watch: Western Europe, October 23, 1992.]



— Compiled by John Harrison

CALENDAR

March 10 — “International Global Warming Solutions Symposium,” Portland, Oregon. Focus will be on ideas and approaches that can reduce carbon dioxide emissions, including building energy efficiency, transportation alternatives, renewable resources, solid waste recycling and tree planting. For more information: Susan Anderson, Portland Energy Office, 1120 S.W. Fifth Avenue, Suite 1030, Portland, Oregon 97204, phone 503-823-7222, Fax 503-823-5370.

March 10-11 — Northwest Power Planning Council meeting in Helena, Montana.

March 8-12 — “Affordable Comfort Conference” at the Adam’s Mark Hotel in Philadelphia, Pennsylvania. Sponsored by Affordable Comfort, Inc., the Pennsylvania Energy Office and others. Presentations at the conference will be given by experts in housing, energy, utility programs and public policy. For more information: Diane Tirio, phone and FAX 412-373-0482.

March 11-12 — “Implementing an Effective Natural Gas Purchase Program,” Holiday Inn Mart Plaza, Chicago, Illinois. This course is designed for buyers and managers of industrial, utility and government natural gas purchase programs. For more information: Association of Energy Engineers, 404-447-5083, FAX 404-446-3969.

March 11-12 — “Managing Demand-Side Management Programs,” Holiday Inn Mart Plaza, Chicago, Illinois. This seminar will examine major conservation programs, and the technical, legal and financial framework for understanding contracts and agreements, as well as precedents for regulatory incentives. For more information: Association of Energy Engineers, 404-447-5083, FAX 404-446-3969.

March 18-19 — “Fundamentals of Energy Management,” Embassy Suites Downtown, Austin, Texas. Sponsored by the Association of Energy Engineers. This two-day refresher course reviews the fundamentals of energy management and is an ideal brush-up course for the certified energy manager examination. For more information: Association of Energy Engineers, 404-447-5083, FAX 404-446-3969.

March 24-26 — “Making a Difference,” the sixth national demand-side management conference in Miami Beach, Florida. Sponsored by the Electric Power Research Institute (EPRI), the U.S. Department of Energy and others. For more information: EPRI, 3412 Hillview Avenue, Palo Alto, California 94304, phone 415-855-8900, FAX 415-855-2041.

April 14-15 — Northwest Power Planning Council meeting in Pendleton, Oregon.

April 21-22 — “Globalcon ’93,” Anaheim, California, Convention Center. This annual event comprises four energy and environment shows spanning all segments of the marketplace for efficiency improvements, demand-side management, power generation and environmental management. For more information: Ruth Bennett, 404-447-5083.

May 3-4 — “On Track: Demand-Side Management Program Evaluation Techniques and Tactics,” San Francisco, California. Experts will discuss successful techniques and tactics for evaluating utility conservation programs. For more information: Tom Vogt, phone 510-528-5566.

May 12-13 — Northwest Power Planning Council meeting in Lewiston, Idaho.

June 21-25 — “Innovative Housing ’93,” Vancouver, British Columbia. International conference will focus on emerging energy-efficient and environmentally responsive housing technologies, including high-performance windows, integrated heating and cooling systems, building envelope designs and systems, recycled and recyclable materials and water conservation technologies. For more information: Karen Grieg, CANMET, Energy, Mines and Resources Canada, 580 Booth Street, 7th Floor, Ottawa, Ontario, K1A 0E6, phone 613-943-2259, FAX 613-996-9416.

June 24-25 — “Demand-Side Management and the Global Environment,” Hyatt Regency Crystal City, Arlington, Virginia. This conference will address the opportunities energy efficiency can provide in improving the environmental aspects of electricity production, conversion, transmission and utilization. For more information: Diane Muscella, 215-667-2160, FAX 215-667-5593.

July 7-8 — Northwest Power Planning Council meeting in Jackson, Montana.

A more detailed calendar of Council committee meetings and consultations is published each month in Update.

— Compiled by John Harrison

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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 Basin's fisheries and a regional electric energy plan that provides a reliable electricity supply at the lowest cost. For further information, see Pacific Northwest Electric Power and Conservation Act—Public Law 96-501.



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Art Director: Stephen Sasser
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Please send me a copy of the following publications of the Northwest Power Planning Council. (Note: not all publications are available immediately, but they will be sent to you as soon as possible.)

Publications

- 91-04 1991 Northwest Power Plan-Volume I
- 91-05 1991 Northwest Power Plan-Volume II
- 92-21 Columbia River Basin Fish and Wildlife Program
-Strategy for Salmon-Volume I
- 92-21A Columbia River Basin Fish and Wildlife Program
-Strategy for Salmon-Volume II
- 92-23 1992 Annual Report to Congress

Mailing Lists

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

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

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Environment
is
the **Economy**

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