

Conservation of Columbia Basin Fish

Public Meetings Planned & Report Summaries

Winter 2000 • Issue 3

A publication of the Federal Caucus, Columbia River Fish and Wildlife Recovery

Public meetings begin February 3, 2000, on fish recovery in the Columbia River Basin. This *Citizen Update* is intended to help Northwest citizens understand various studies on recovery of endangered and threatened fish and other aquatic species throughout the basin. The updates are sponsored by the Federal Caucus, a group of nine agencies responsible for federal actions in the Northwest that affect salmon, steelhead, bull trout, white sturgeon and snails listed under the Endangered Species Act.

This is the third *Citizen Update*. The first provided an overall context for federal actions and studies related to listed aquatic species in the Columbia River Basin. The second provided a summary of the Federal Caucus *All-H Paper*. If you missed these two, please see the back page for information on how to obtain copies.

This issue summarizes other reports and studies that pertain to Columbia River Basin fish recovery, and provides information on the upcoming public meetings. Report summaries in this issue include:

- **Biological Assessment** of proposed actions in the Federal Columbia River Power System from the Bonneville Power Administration, Bureau of Reclamation and U.S. Army Corps of Engineers (*see page 2*);
- Corps of Engineers studies — the **Draft Lower Snake River Juvenile Salmon Migration Feasibility Report/Environmental Impact Statement** (*see page 4*) and the **Draft John Day Drawdown Phase I Study** (*see page 7*);
- **Interior Columbia Basin Ecosystem Management Project EIS** (*see page 8*); and
- **Multi-Species Framework Project** report. (*see page 9*)

This update provides only a brief summary of these reports. For information on how to obtain the reports and other information, see page 12.

Shaping Our Future

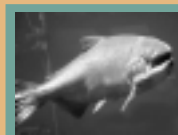
With twelve species of salmon and steelhead, Kootenai River white sturgeon, bull trout and several other aquatic species in the Columbia River Basin listed as threatened or endangered under the Endangered Species Act, federal agencies have joined together in a Federal Caucus to address recovery options for salmon that consider needs of other aquatic species. Recovery requires a coordinated effort across all areas over which people have some control: habitat conditions, harvest strategies, hatchery practices and hydropower operations.

Meetings Planned in Five State Area

This update includes a schedule for public meetings the federal agencies will host in



Habitat



Harvest



Hatcheries



Hydro

Washington, Oregon, Idaho, Montana and Alaska in February and March. These meetings will provide citizens an opportunity to learn more about the options being considered for recovery of Columbia Basin fish, and to make comments on the Federal Caucus *All-H Paper*, the Corps' *Draft Lower Snake River Feasibility Report/EIS* and the Corps' *Draft John Day Drawdown Phase I Study*.

Page 11 has a list of meetings and how to comment.

The Federal Caucus has released a draft *All-H Paper* that examines options for actions across the life cycle Hs: habitat, harvest, hatcheries and hydropower. In preparing these options the Caucus incorporated existing information and ongoing studies as well as new scientific analyses, some of which are still being completed. The Caucus considered information from the Corps Lower Snake River Feasibility Study/EIS in the hydropower options and from the ICBEMP in habitat options. They worked with a team sponsored by the Northwest Power Planning Council, called the Multi-Species Framework Project, to share information and expertise.

The *All-H Paper* is a conceptual recovery plan for salmon. It provided guidance for the biological assessment you will read about below. It will guide the ESA regulatory agencies in determining needed recovery actions.

If this all seems complex, that's because it is. There are many entities and actions that need to come together if we are to make the best use of the basin's resources and get the best possible outcome for fish, wildlife and people. The series of public meetings in February and March will provide an opportunity for you to meet with federal agency representatives, ask questions, and give comments. You can help shape management of the region's resources for the future.

The Biological Assessment – Hydro

The biological assessment has two important objectives. First, it describes how the action agencies propose to operate the federal hydropower system in a way that avoids jeopardy to ESA-listed species. Second, the biological assessment recommends a construct for prioritizing and defining new actions.

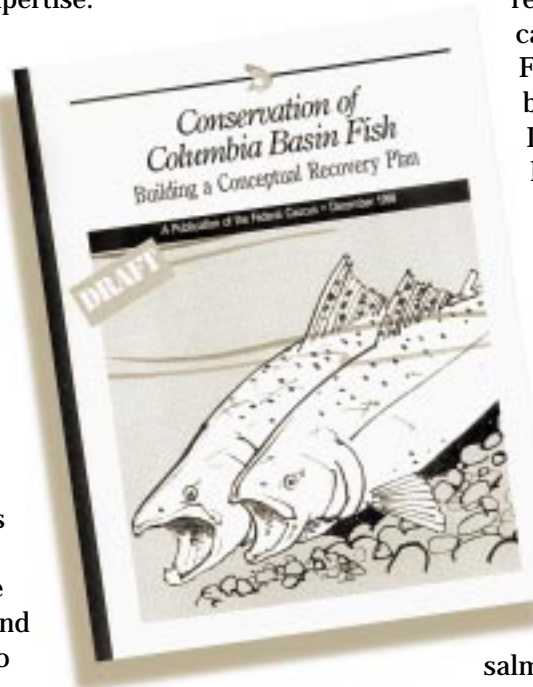
The U.S. Army Corps of Engineers, U.S. Bureau of Reclamation, and the Bonneville Power Administration recently prepared a Biological Assessment, or BA, outlining how they propose to operate the Federal Columbia River Power System (FCRPS) for threatened and endangered species. The BA is part of the consultation process required under the Endangered Species Act (ESA) between BPA, the Corps, Reclamation, and the ESA regulatory agencies: National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (FWS).

BPA, the Corps, and Reclamation are collectively referred to as “the action agencies” because they carry out and coordinate the operation of the FCRPS. The action agencies submitted the 1999 biological assessment to NMFS and FWS on Dec. 21, 1999. As the ESA regulatory agencies, NMFS and FWS will consult with the action agencies to prepare biological opinions in response to the BA. Expected this spring, the biological opinions will offer further guidance on operating for the good of the listed species.

Proposed River Operations

The 1999 biological assessment incorporates measures that were put into place under the 1995 NMFS and FWS biological opinions, a 1998 supplemental biological opinion, a 1999 biological assessment on listed bull trout and sturgeon, and a 1999 draft biological opinion pertaining to listed Columbia River chum salmon. The BA identifies both near and long-term actions intended to improve fish passage. The important near-term actions include:

- **Flow augmentation** – Release of water from storage or headwater reservoirs to meet flow targets in the lower river for salmon and steelhead. Flow refers to the volume and velocity of water in a stream, which is important in moving juvenile salmon, or *smolts*, downstream through the reservoirs.
- **Reservoir operations** – Operations of headwater projects to provide for spawning and recruitment of Kootenai River white sturgeon and minimize rapid fluctuation in both reservoirs and unimpounded river reaches for improved bull trout habitat conditions.
- **Spill measures** – Water passed at a dam through a spillway rather than being sent through the turbines. It is used to help fish get safely past the



The All-H paper looks at options for actions in habitat, harvest, hatcheries and hydropower.

dam by guiding them away from the turbines, thereby reducing the percentage of turbine-related mortality.

- **Fish transportation** – Juvenile salmon and steelhead collected at dam sites on the Snake and Columbia rivers and placed in specially designed

barges to be transported down river and released below Bonneville Dam.

- **Predator control programs** – Programs intended to help protect juvenile salmon from other species that prey on them, such as northern pikeminnow and Caspian terns.

Columbia River Basin



The important long-term actions in the biological assessment include:

- *Breaching studies* – Ongoing studies to evaluate the feasibility of breaching the lower Snake River dams.
- *Water quality* – Studies intended to improve dissolved gas and temperature conditions. The level of dissolved gas in water, primarily nitrogen, tends to increase during times when the rate of spill is high. When the level of dissolved gas gets too high, it can cause a condition in salmon called gas bubble disease, which can be fatal.
- *Passage improvements* – Improving turbine design to make turbine passage less harmful to fish, testing of surface collectors, and adding fish transport facilities.

The BA Construct for Achieving Survival Improvements

While the near and long-term measures in the BA reflect those in existing biological opinions, the 1999 BA presents an important new construct that calls for establishing performance standards for determining and prioritizing future actions, monitoring and evaluating the results of those actions, and managing key uncertainties. The construct describes a scientific approach to determining what actions are needed to achieve measurable biological results in benefiting listed species. In addition, the action agencies believe longer-term biological opinions would be a more efficient way to manage the FCRPS, and they would like the 1999 BA to lead to such opinions from both NMFS and FWS.

As mentioned above, a major objective of the construct is to provide a mechanism for scientifically monitoring and evaluating the results of various recovery actions in order to better manage key uncertainties. These uncertainties include:

- *Delayed transportation mortality* – Some biologists contend that, although approximately

98 percent of transported fish are alive at release, many may suffer post-release mortality.

- *Multiple bypass effects* – Some information indicates that juvenile survival is lower when fish pass through multiple bypass systems. More data are needed to understand the effects on juvenile salmon and steelhead of migrating through fish passage facilities at multiple dams on the lower Snake and Columbia rivers.

The construct recognizes that many key uncertainties will probably not be resolved to all parties' satisfaction. Further attention is needed on the question of how decisions will be made in an uncertain environment.

Lower Snake River Juvenile Salmon Migration Feasibility Study

The primary purpose of the study is to examine ways to improve migrating conditions for salmon and steelhead in the lower Snake River. The study addresses questions

related only to the four lower Snake River dams.

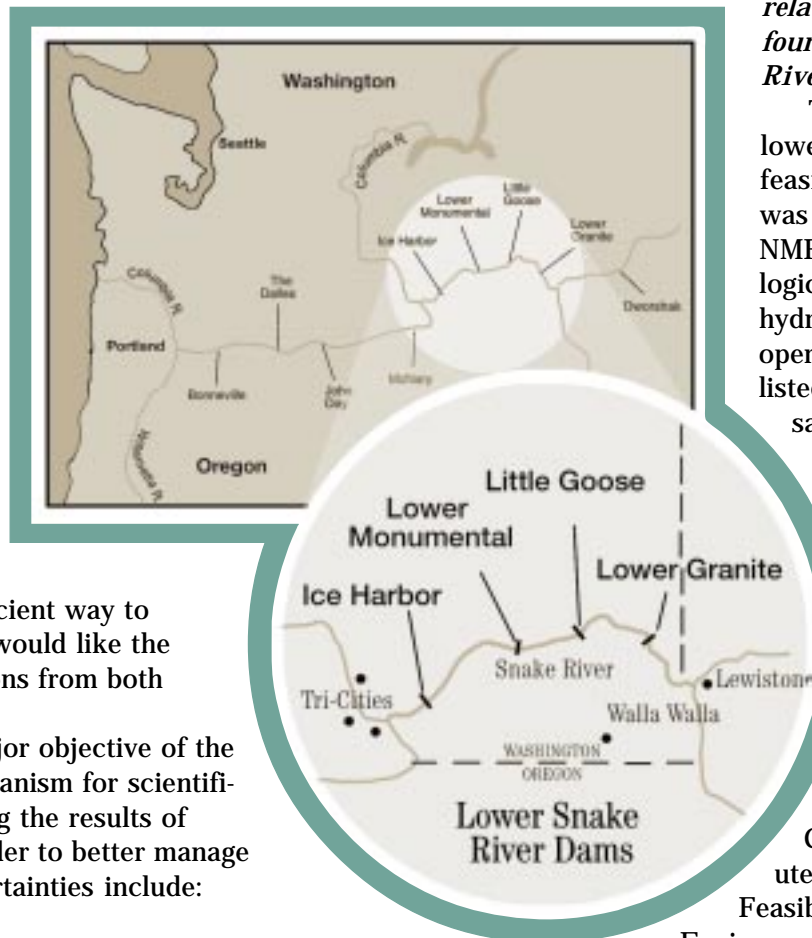
The Corps' lower Snake River feasibility study was called for in NMFS' 1995 biological opinion on hydropower operations for ESA-listed Snake River salmon species


and in a 1998 supplemental biological opinion for listed steelhead populations.

In December 1999, the Corps distributed a draft Feasibility Report/

Environmental Impact

Statement for public comment. The Corps plans to incorporate comments into a revised





draft EIS for release later this year. The revised draft will identify a preferred alternative.

The Corps' draft report includes an analysis of economic, social, cultural, biological and engineering effects of four major alternatives for the dams: maintaining the existing condition; maximum transport of juvenile fish; major system improvements; and natural river drawdown.

- **Alternative 1** – Maintain the existing condition. This alternative includes the juvenile fish bypass system, juvenile fish transport system, spill for juvenile fish passage at the dams, and release of water from storage dams to augment flows, which aid juvenile fish migration. Ongoing improvements include longer screens to guide more fish away from the turbine intakes and into the juvenile bypass systems at dams; new fish barges; turbine improvements; and more or improved flow deflectors on spillways to decrease gas supersaturation.
- **Alternative 2** – Maximum transport of juvenile fish. This alternative would include most of the actions in alternative 1, but with emphasis on maximizing the number of fish that are collected for barge or truck transport past the dams. Spill would be minimized so that maximum numbers of juvenile fish would be diverted into bypass/collections systems so there would be no need to modify spillway flow deflectors.
- **Alternative 3** – Major system improvements. This alternative would include the actions under alternative 2 and would also maximize barge and truck transport of young fish. It would differ from alternative 2 in that it would include a full-length surface bypass collector at Lower Granite Dam, which is the first dam juvenile fish encounter in their downstream migration. Surface bypass aims to minimize stress to juvenile fish by diverting them into the bypass system *before* they dive down toward the turbine intake area.
- **Alternative 4** – Natural river drawdown, or breaching the dams. In this option, the earthen portion of the four dams on the lower Snake River – Lower Granite, Little Goose, Lower Monumental and Ice Harbor – would be removed, forming a channel around the dams and eliminating the existing reservoirs, creating a 140-mile stretch of free-flowing river. This would eliminate existing reservoir-related and dam-passage mortality and would speed up the downriver migration of juvenile salmon. This option also would eliminate commercial naviga-

tion and hydropower production, and would make irrigation more expensive. Recreation on the river would change.

The feasibility study includes detailed investigations into the engineering work required for the alternatives; the biological effects on salmon, steelhead, resident fish and wildlife; the effects on recreation, cultural resources and water quality; and the socioeconomic effects, including implementation costs and effects on navigation, irrigation and power generation. Some results are summarized briefly below; more detailed information is available on the Corps' Web site at <http://www.nww.usace.army.mil>.

Effects on Salmon and Steelhead

Four Snake River salmon and steelhead stocks are listed under the Endangered Species Act – Snake River sockeye, spring/summer chinook, fall chinook and steelhead. Another eight stocks are listed elsewhere in the Columbia River Basin.

NMFS provided essential information to this study on the effects of the four alternatives on ESA-listed stocks. NMFS used two primary sets of analyses to help quantify the likely effects: the Plan for Analyzing and Testing Hypotheses (PATH) analysis, and the Cumulative Risk Initiative (CRI) analysis. The PATH analysis models predict the likelihood of achieving survival and recovery of the listed Snake River stocks. PATH incorporates direct mortality effects from passage through the hydropower system and indirect (delayed) mortality assumed to occur as a result of passage through the hydrosystem and/or transportation system. CRI analysis estimates the likelihood of extinction of listed fish stocks within specified time periods. For example, CRI can provide an estimate of the likelihood of Snake River fall chinook going extinct within 10 years if alternative 3, major system improvements, were implemented.

Both PATH and CRI relied on many assumptions since there is insufficient data to make definite predictions. This means there is a high degree of uncertainty about the outcomes of both analyses.

PATH analysis indicated that dam breaching has the highest frequency of achieving survival and recovery of listed Snake River species. The relative benefits of dam breaching depended on what was assumed about delayed mortality for transported fish and “extra” mortality assigned to the hydropower system. The PATH results could not be used to determine the risk of extinction or whether any of the alternatives would be enough to recover the listed salmon and steelhead stocks.



The CRI analysis indicates that it is unlikely any of the alternatives alone, including dam breaching, could recover spring/summer chinook, unless it resulted in very high survival increases in the areas below Bonneville Dam, which is the final dam the juvenile fish pass before they reach the estuary and ocean. CRI indicates that the same is true for actions

Delayed and “Extra” Mortality

The extent of delayed mortality is a key uncertainty that determines how much dam removal might contribute to recovery. While transported fish generally survive well in the barges and trucks, we don’t know how they fare after release below Bonneville Dam. Some scientists believe transported fish die after their release below Bonneville Dam as a result of the transportation experience. Early estimates of this “delayed” mortality were high, but recent studies using PIT-tag data indicate that spring/summer chinook do not suffer substantial delayed mortality from transportation. NMFS estimates it will take five to 10 years of ongoing study to resolve this uncertainty.

Another uncertainty is how ocean conditions are affecting salmonid decline. If conditions remain poor or deteriorate considerably, opportunities for recovery will be limited. But if ocean conditions improve markedly, salmonid populations may increase temporarily.

A final major uncertainty is what scientists have labeled “extra” mortality. Historically, a much larger percentage of juveniles that migrated from the Snake River to the ocean returned as adults to spawn than is currently the case. After figuring in all of the direct losses due to life-cycle hazards (including dams and ocean conditions), Snake River fish seem to suffer a large “unexplained” mortality in comparison with spring chinook from the lower Columbia River. This is called “extra” mortality.

Scientists have proposed a number of hypotheses to explain extra mortality, including effects of the hydropower system, hatcheries, habitat degradation, genetics and degraded ocean conditions. New technology and experiments, and large-scale databases should allow scientists to answer the uncertainties about extra mortality in the next 10 to 20 years.

in habitat or harvest as well, which suggests that a combination of many management actions may be needed to recover these stocks.

CRI analysis indicates that dam breaching could achieve recovery of fall chinook and steelhead if overall estuary survival were increased by at least 20 percent, and that alternatively, extinction risk could be reduced to acceptable levels through dramatic reductions in harvest. Based on the CRI analysis, the chance of extinction for some spring/summer chinook in the short term (within 10 years) under current conditions is relatively high (up to 15 percent). Fall chinook and steelhead have a low risk of extinction in the short term.

Economic and Social Effects

Another technical workgroup that developed information critical to the Corps’ feasibility study is the Drawdown Regional Economic Workgroup (DREW). DREW, which includes economists from federal agencies, the Northwest Power Planning Council, states, tribes, contractors, and other regional stakeholders and professionals, analyzed social and economic effects of the four alternatives, including the effects on recreation and tourism. The workgroup’s findings are summarized below.

For alternatives that do not involve breaching the dams, the overall long-term changes in regional employment would be minor. Those communities that depend on the salmon and steelhead fishery would, however, be adversely affected by lower probabilities of salmon recovery. For the dam breaching alternative, the long-term effect on employment would be a net gain to communities in the upriver region and a net loss to communities in the reservoir and downriver regions.

In the lower river region, the most significant effect would be the expected increase in tourism that a free-flowing river would bring. According to surveys, the value of alternative recreation and tourism on the lower Snake River would be expected to increase over \$80 million per year.

Natural river drawdown would cause an increase in electricity rates throughout the Pacific Northwest of between 1.9 percent and 6.7 percent. This increase would be expected to have little social and economic effect because of the existing low electricity rates throughout the region.

Tribal Circumstances and Perspective

A part of the feasibility study, funded by the Corps and conducted under the direction of the Columbia River Intertribal Fish Commission, identifies the

major cultural and material importance of Snake River salmon to the tribes, from the 1700s to the present day.

In the tribes' perspective, if the dams were breached, salmon would not necessarily recover to pre-dam levels. But they expect harvests available to the tribes would increase by up to 30 percent from present levels. The report determines that such recovery, together with tribal access to uncovered lands, would have substantial benefits for tribal culture, material well-being and health. In addition, the report concludes that breaching the lower Snake River dams would represent a major policy change away from past practices that have harmed tribal peoples.

Engineering Analysis of Dam Breaching

The Corps conducted an engineering analysis of dam breaching for the feasibility study. Under dam breaching, up to 25 bridge piers would need protection from erosion due to higher velocity in the river, as would railroad and highway embankments. Huge quantities of rock would be required to stabilize these embankments.

If the dams were breached, the Corps estimates that approximately 50 percent of the material deposited behind the four Snake River dams would be eroded and transported by the river within a few years after breaching. This is a major consideration since the total sediment deposited behind the four dams is estimated to be 100 to 150 million cubic yards. For comparison, consider that a one-square mile section of land can be covered to a depth of approximately 1 foot by 1 million cubic yards of sediment.

This sediment ranges in size from coarse clays to cobble-sized rocks, and much of it likely would be deposited in Lake Wallula, behind McNary Dam. It is estimated that the cost of a sediment-monitoring program during the first 10 years after dam removal would be over \$2 million.

The time frame for implementing drawdown of the four lower Snake River dams is estimated to

extend over seven to eight years. Numerous engineering and construction activities would need to be done both before and after dam breaching. The recommended sequence of activities would be to breach Lower Granite and Little Goose dams in one construction season – year six of the process – and to breach Lower Monumental and Ice Harbor dams the following construction season, during year seven.

The cost of all engineering and construction activities required for natural river drawdown is estimated to be approximately \$1 billion.

John Day Dam Drawdown Study

The purpose of this Phase I study is to determine if it would be worthwhile to do further study of the costs and benefits of drawing down John Day Dam for improved salmon survival through the hydro corridor.

Just over a year ago, the Corps of Engineers began the first phase of a two-phase study of draw-

down options for John Day Dam. Like the lower Snake River study, this inquiry stems from NMFS 1995 biological opinion and 1998 supplemental biological opinion on river operations.

John Day Dam spans the Columbia River between Oregon and Washington 215 miles upstream from the Pacific Ocean, creating a 76-mile

long reservoir. Deep drawdown would speed the current in this stretch of the river, returning the river to more natural conditions for migrating juvenile salmonids, shortening the time it takes for them to journey to the Pacific Ocean, and possibly increasing survival rates. Drawdown would have a negative impact on navigation, irrigation and hydropower generation.

The normal operating level of John Day is elevation 265 feet. The first phase of the study looks at two options for lowering the reservoir: 1) spillway crest drawdown, to about elevation 215 feet – the lowest level at which the water behind the dam would be



John Day Dam on the Columbia River



high enough to flow through the spillway; and 2) natural river level drawdown, to about elevation 165 feet – a level at which much of the fish passage mitigation in place at the dam for both upstream and downstream migration would have to be reconfigured. The study evaluates each of these two options with and without the flood-control capability now authorized for John Day Dam (about 500,000 acre-feet).

In the John Day study, the Corps is assessing the biological, social, and economic benefits and costs, as well as the physical impacts of drawdowns. The study includes impacts on irrigation, fisheries, wildlife, flood control, hydropower production, navigation, cultural resources, recreational activities, water supply, hydraulics and hydrology effects, and associated structural changes at the dam, and to some extent, the direct impacts to the reservoir and nearby communities.

In late January 2000, the Corps will release its draft recommendation for public review and input. The public comment period will end March 31, 2000. And later in the year, the Corps will make a final recommendation to Congress, based on its studies and public comment, on whether to continue to Phase II.

Interior Columbia Basin Ecosystem Management Project

In July 1993, the President directed the U.S. Forest Service to develop a scientific and ecosystem-based strategy for managing millions of acres of federal land in the interior Columbia River Basin, the Upper Klamath Basin and parts of the Great Basin.

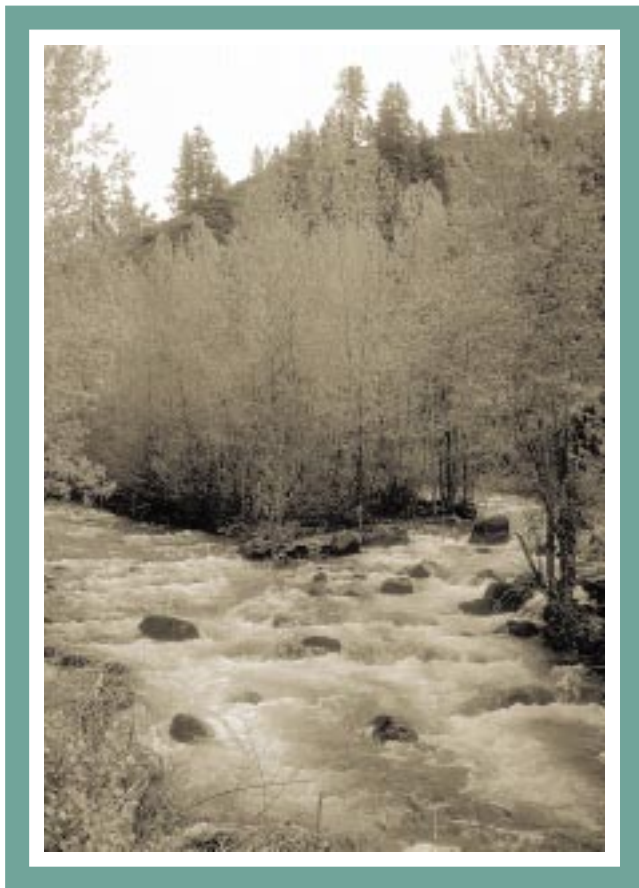
This effort, called the Interior Columbia Basin Ecosystem Management Project (ICBEMP), has produced two draft environmental impact statements that were released in 1997.

A supplemental draft EIS is currently being prepared and is due to be released in the winter of 2000.

These documents contain strategies for the management of forests, rangelands, and aquatic and riparian habitats, and they are an important component of the federal government's efforts to restore and protect habitat that is home to fish and wildlife populations in the Northwest.

The ICBEMP study area covers over 140 million acres in the states of Washington, Oregon, Idaho and western Montana. The Bureau of Land Management and the Forest Service administer approximately 64 million acres, primarily in the upper and middle reaches of the basin's watersheds. These public lands encompass over half of the spawning and rearing habitat for the region's steelhead and salmon populations. The final EIS and Record of Decision in ICBEMP will apply to the lands administered by the Bureau of Land Management and Forest Service.

ICBEMP has looked closely at the role federal habitat protection and restoration can play in the region's salmon recovery efforts. Habitat conditions on federal lands vary but generally tend to be higher than conditions found on non-federal lands. Federal habitat conditions tend to be the best in areas where little management has taken place, including wilderness and roadless areas. These areas are capable of supporting salmon at near historic levels. Federal lands with lower habitat conditions tend to be characterized by a past legacy of extensive logging, livestock grazing, road construction and mining. These areas may still support salmon at lower levels and are in need of restoration. The ICBEMP is developing a strategy that protects high quality habitat areas and restores areas in poorer condition.



North Pine Creek on the Bureau of Land Management Vale District

Alternatives

The supplemental draft EIS for ICBEMP has three proposed alternatives. S1 is the no action alternative, which reflects current land management policies and includes management directives that are derived from NMFS and FWS biological opinions on endangered species. Current practices also incorporate the guidance provided in two other studies – PACFISH and INFISH – that are specific to the management of aquatic resources in the Columbia River Basin.

Two other ICBEMP alternatives, S2 and S3, call for more aggressive protection and restoration, with the goal of maintaining important habitats and restoring those that are in poor condition. Both of these alternatives designate certain subbasins as high aquatic priority, but there is a difference between the two in terms of balancing short- and long-term risk.

S2 addresses the need to maintain core aquatic and terrestrial habitats in the short term, while S3 takes a longer-term view. It calls for a higher level of restoration and provides more flexibility in where to conduct management activities to benefit economically vulnerable communities, including tribes. A critical element of the supplemental draft EIS is the development of a socioeconomic strategy. That strategy calls for maintaining predictable and sustainable products and services from forests and rangelands.

When ICBEMP is complete, it will contain long-term guidance on the protection and restoration of aquatic habitat on federal lands that replaces the current policies provided by PACFISH and INFISH. The public will have an opportunity to comment on the supplemental draft EIS when it is released in the winter of 2000.

The Multi-Species Framework Project

From the beginning, the project was conceived to look at the entire system: humans, salmon, steelhead, bull trout, black bear, beavers, eagles and other species that share the Columbia River Basin. The project management was set up to be collaborative, including states, federal agencies and tribes. The



Framework project also aimed to include the public, and hundreds of individuals and organizations participated actively throughout a year-long series of workshops and meetings.

The Northwest Power Planning Council undertook a project in 1998 to link Columbia Basin fish and wildlife restoration policy to a scientific foundation that treats the river and the species that inhabit it as an interrelated community. The seeds of the Multi-Species Framework project were sown in the mid-1990s, when two panels of independent scientists concluded that the region's salmon recovery efforts could be greatly improved if they went beyond looking at each species and each management activity in isolation. According to the scientists, recovery planning should consider the entire community of plants, animals and people of which each species is a part.

EDT: The Framework's Analytical Tool of Choice

An innovative scientific tool called "Ecosystem Diagnosis and Treatment," or EDT, is the backbone of the framework's analytical effort. The EDT is all about ecosystems – the places where fish and wildlife live and the ways they interact with their environment. The bottom line with EDT is the condition of the ecosystem predicts the condition of fish and wildlife.

At the most basic level, EDT evaluates current ecological conditions, examines the changes that are likely to result from different management actions, and predicts how different species will respond to those changes. The system works with the best available scientific information to come up with its evaluations and predictions.

The EDT analysis, which is currently under way, will combine a vast amount of habitat data with an analysis of fundamental assumptions about habitat carrying capacity, fish and wildlife productivity, and life history diversity. The results of this analysis will provide a picture of how different recovery actions would change ecological conditions and thus the status of fish and wildlife. Information about the results will be shared with the region as soon as it is available.



One of the scientific panels, the Independent Scientific Advisory Board, focused its study specifically on the Council's Fish and Wildlife Program. The Council heeded the scientists' advice, concluding that its program needed a new foundation – a blueprint for future decision making that would take into account the multiple species in the Columbia River Basin. As a result, the Framework process was launched.

The Framework is intended to support important decisions on fish and wildlife recovery that will be made in the coming months by the Northwest Power Planning Council and by federal agencies. It will lay a foundation so the region can work from scientifically sound, economically balanced information, and policymakers can choose from a broad range of possible options.

Seven Alternatives for the Future

At the heart of the Framework project's policy work is a series of seven science-based alternatives for the river's future. These alternatives, developed in a series of open, public workshops, represent a range of plans, from those that are most protective of ecology to those that are most protective of the region's economy. Each alternative includes a vision, objectives, and strategies.

The alternatives reflect a range of options designed to capture the breadth of the region's views. They range from alternative 1 which would restore fish and wildlife by returning the ecosystem to a much more natural state by eliminating dams, hatcheries, and other artificial constraints, and by taking very aggressive actions to protect and restore habitat; to alternative 7 which would create a river system that is managed to provide maximum economic benefits. Additional detail is available in other publications specific to the Framework, including the Council's *The Year of Decision*. See page 12 for Web site information.

Public Meetings

Public meetings have been scheduled throughout the region. The meetings will provide an opportunity for the public to comment on the *All-H Paper* and other aspects of endangered species recovery in the Columbia River Basin. The meetings will continue the Corps National Environmental Policy Act (NEPA) public review process on the Draft Lower Snake River Feasibility Study and EIS.

At the meetings, citizens can learn more about the options in all Hs (habitat, harvest, hatcheries and hydropower), ask questions, talk with study manag-

ers, and make written and oral comments. This regional discussion will guide decisions that the federal agencies must make to recover salmon and steelhead in the Columbia River Basin.

At each public meeting, an open house will run concurrently with presentation and public comment sessions. The open house will provide the opportunity to tour information booths and talk with agency representatives. The public comment sessions will begin with an overview presentation on the draft *All-H Paper* and the Corps *Draft Lower Snake River Feasibility Report/EIS*. This will be followed by a brief question and answer period, and then members of the public will be invited to offer oral comments. Speakers should sign up at the front table at the beginning of the meeting and will be limited to three minutes each to ensure that everyone has an opportunity to be heard.

How to Comment

- Attend a public meeting and sign up to give oral comments
- Attend a public meeting and provide written comments
- E-mail written comments to : federalcaucus@bpa.gov
- Mail written comments to :
Federal Caucus Comment Record
c/o BPA-PL
707-W. Main Street, Suite 500
Spokane, WA 99205

Comments should be received by March 17, 2000, for the All-H Paper and by March 31, 2000, for the two Corps study reports.

The Federal Caucus

In 1998, nine federal agencies formed the *Federal Caucus* to examine opportunities the region has in each of the Hs for recovering listed salmon, steelhead and resident fish. The intent was to develop a conceptual recovery plan that could guide future federal actions. The agencies of the Federal Caucus are the: Bonneville Power Administration, Bureau of Indian Affairs, Bureau of Land Management, Bureau of Reclamation, Environmental Protection Agency, National Marine Fisheries Service, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service and U.S. Forest Service.

Public Meeting Schedule

February 3, 2000 – Portland, Oregon

Holiday Inn @ the Airport
8439 N.E. Columbia Blvd.
Columbia Conference Center - *Willamette Room, John Q Hammons Hall, Foyer*
(503) 256-5000
12:00 noon

February 8, 2000 – Spokane, Washington

DoubleTree Hotel
322 N. Spokane Falls Court
Grand Ballroom
(509) 455-9600
12:00 noon

February 10, 2000 – Lewiston, Idaho

Williams Conference Center
9th Avenue & 4th Street
Lewis and Clark College
Selway River Room & Snake River Room
(208) 799-2357
12:00 noon

February 15, 2000 – Astoria, Oregon

Clatsop County Fair Grounds
92937 Walluski Loop
Multi-Purpose Arena/Exhibit Hall
(503) 325-4600
5:00 p.m.

February 17, 2000 – Tri-Cities (Pasco), Wash.

DoubleTree Hotel
2525 North 20th Avenue
Medallion 1 & 2
(509) 544-3934
12:00 noon

February 23, 2000 – Boise, Idaho

Centre on the Grove
850 West Front Street
The Summit & Flying Hawk Eyrie
(208) 336-8900
12:00 noon

February 29, 2000 – Seattle, Washington

Seattle Center
200 Thomas Street
Seattle Center Pavilion
(206) 684-8582
12:00 noon

March 1, 2000 – Kalispell, Montana

Outlaw Inn
1701 Highway 93 South
Winchester Room & Colt 44 Room
(406) 755-6100
6:00 p.m.

March 2, 2000 – Missoula, Montana

DoubleTree Hotel
100 Madison
Blackfoot Room & Bitterroot Room
(406) 728-3100
6:00 p.m.

March 7, 2000 – Idaho Falls, Idaho

Shilo Inn
780 Lindsay Boulevard
Yellowstone Room & Grand Teton Room
(208) 523-0088
5:00 p.m.

March 7, 2000 – Sitka, Alaska

Westmark Hotel
330 Seward Street
Conference Room 1 & Lobby
(907) 747-6241
5:00 p.m.

March 8, 2000 – Twin Falls, Idaho

Weston Plaza
1350 Blue Lakes Blvd. N.
Blue Lakes, Shoshone, Pomerelle, Teton & Sawtooth Rooms
(208) 733-0650
5:00 p.m.

March 8, 2000 – Juneau, Alaska

Centennial Hall Convention Center
101 Egan Drive
Sheffield Ballroom 1, 2
(907) 586-0485
5:00 p.m.

Please check the Federal Caucus Web site for meeting updates:

www.bpa.gov/federalcaucus

If you have special needs for any of the above public meetings, please contact Jessi Phelps two weeks prior to the event at (509) 358-7421, or via e-mail at federalcaucus@bpa.gov. There will also be a small space available at the information tables for public interest/citizen groups to share written materials, contact Jessi Phelps at the above number to reserve a space.



For More Information

For copies of the reports summarized in this update, for previous *Citizen Updates* or for other related information, contact the Federal Caucus by phone or mail, or visit the Web sites listed at the right:

Phone

1-509-358-7415 in Spokane or toll-free 1-888-921-4886

E-mail

federalcaucus@bpa.gov

Mail

Federal Caucus Comment Record
c/o BPA-PL
707 W. Main Street, Suite 500
Spokane, WA 99201

Web sites

- For information on the Federal Caucus *All-H Paper* visit www.bpa.gov/federalcaucus. This Web site also lists other sites and Internet links you may want to visit, and it provides information and updates about the public meetings.
- For information on the Corps *Draft Lower Snake River Feasibility Study/EIS*, visit www.nww.usace.army.mil.
- For information on the Corps *John Day Draw-down Study* visit www.nwp.usace.army.mil under "Information."
- For information on the Multi-Species Framework Project, visit www.nwframework.org.
- For information on ICBEMP, visit www.icbemp.gov.

Printed in the USA on recycled paper

Federal Caucus Comment Record
c/o BPA-PL
707 W. Main Street, Suite 500
Spokane, WA 99201

BULK RATE
U.S. POSTAGE
PAID
PORTLAND, OR
PERMIT NO. 2462