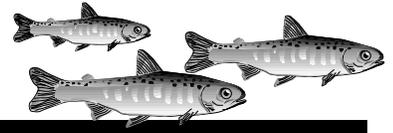
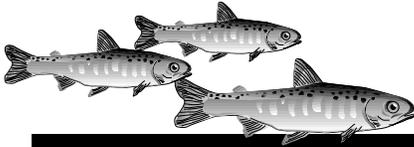




US Army Corps
of Engineers®
Walla Walla District

Lower Snake River

JUVENILE SALMON MIGRATION Feasibility Study



JANUARY 2000

NEWSLETTER NO. 8

The U.S. Army Corps of Engineers (Corps) is conducting a feasibility study of ways to improve juvenile salmon migration through the hydropower system on the lower Snake River. The study focuses on how the lower Snake River dams can be changed to improve migration prospects for Snake River salmon stocks listed under the Endangered Species Act.



STUDY UPDATE

By Greg Graham, Corps
Project Manager for the
Study

Draft FR/EIS Released

The Draft Feasibility Report/Environmental Impact Statement (FR/EIS) was released for public review on December 17, 1999. This is a major milestone in the process. I would like to express my appreciation to the many people who have contributed to this report.

The Draft FR/EIS is a large document—with appendices it is well over 4,000 pages long. Even the summary report is 40 pages. A huge amount of information is included within this report. It incorporates the best available results of biological, engineering, and environmental analyses associated with the alternatives investigated. The Corps had broad regional input in developing this information. Some of the material in this report you may have already seen or heard before, since we have been trying to share information as it becomes available as part of our “no surprises” study policy.

There is no preferred alternative identified in this report. We decided to hold off on issuing a preferred alternative at this time for three reasons: 1) to allow the public and agencies to review and understand the information and

provide much needed input before a preferred alternative is selected; 2) to allow regional scientists, agencies, and the public to further discuss and examine the uncertainties associated with the science; and 3) to allow us to continue working closely with the Federal Caucus to understand how the “All-H” process, aimed at salmon recovery throughout the entire Columbia-Snake River Basin, will influence decisions on the lower Snake River dams.

What Happens Next?

There is still much work to be done. The next step in the process is to get input from the public on this report. The comment period began with the release of the Draft FR/EIS, and we will continue to accept written or oral comments until March 31, 2000. To facilitate the oral comments, there will be a series of 13 public meetings around the region (see page 3). These meetings will be designed to accept comments on the Corps’ Draft FR/EIS, as well as the Federal Caucus All-H Paper that was also released on December 17, 1999.

Following the public comment period, the Walla Walla District intends to review the comments and select a preferred alternative. Because of the regional importance of this decision, our current plan is to issue a Revised

Draft FR/EIS to document this preferred alternative. That report would then be distributed to the public for comment on the “proposed Federal action.” This would then be followed by a Final FR/EIS that reflects public input. The schedule for release of the Revised Draft FR/EIS is contingent on the number and complexity of the comments received on the current Draft FR/EIS. Our current plan is to issue the Revised Draft FR/EIS later this year.

Although the Corps is not ready today to make a recommendation, we do realize the urgency and importance of improving migration of salmon and steelhead. Because our next move could be so critical to this effort, we want to be sure the entire region is involved in understanding what each action entails, evaluating the possible degree of success of each action, and weighing the balance of what we may have to give up in other areas. I hope that you take the time to read the report (at least the summary report), attend one of the public meetings, and provide us with your feedback. ☺

Inside This Issue

- Public meeting dates
- Draft FR/EIS at glance
- Available documents



REGIONAL COORDINATION UPDATE

Corps and Federal Caucus to Host Series of Public Meetings

In association with the nine agencies of the Federal Caucus, the Corps is hosting a series of public information meetings throughout the Columbia-Snake River Basin. Participants will be able to make written and oral comments on the U.S. Army Corps of Engineers Juvenile Salmon Migration Draft FR/EIS and the Federal Caucus Conservation of Columbia Basin Fish All-H Paper. These meetings will also provide citizens the opportunity to learn more about the options being considered for salmon and steelhead recovery through an open house, presentation, and Q&A session.

The future of anadromous fish in relation to the four dams on the lower Snake River and in the Columbia-Snake River Basin as a whole is important to us all. Potential actions affect us all. Attending one of these public meetings will enable you to bring us your questions, concerns, and recommendations before critical decisions are made regarding which path to choose towards salmon and steelhead recovery in the lower Snake River and in the broader region.

At each public meeting, an open house will run concurrently with the presentation and public comment session. The open house will provide the opportunity

to tour information booths on fish recovery topics, talk with agency representatives, provide written comments, and obtain information on viewing or receiving copies of reports. In addition to the Corps FR/EIS and the Federal Caucus All-H Paper, you will be able to talk to representatives regarding the Interior Columbia Basin Ecosystem Management Project and the John Day Project.

The presentation will provide specific information on the four alternatives evaluated in the Corps Lower Snake River Juvenile Salmon Migration Draft FR/EIS, which addresses improving salmon and steelhead migration throughout the four lower Snake River dams. The presentation will also provide an overview of Columbia River Basin fish recovery efforts and options related to habitat, hatcheries, harvest, and the hydropower system, as identified in the Federal Caucus All-H Paper. The nine agencies cooperating in the Federal Caucus are: The Corps, National Marine Fisheries Service, U.S. Fish and Wildlife, Bureau of Reclamation, Bonneville Power Administration, Environmental Protection Agency, Bureau of Indian Affairs, Forest Service, and Bureau of Land Management. Following the presentation, there will be a brief question-and-answer (Q&A) session.

After the Q&A session, members of the public will be invited to offer their oral comments on the Draft FR/EIS and the Federal Caucus All-H Paper. Speakers should sign up at the front table at the beginning of the meeting (one person per sign-up) and will be limited to 3 minutes each to ensure that as many people as possible have the opportunity to be heard.

Written and oral comments on the Corps' Draft FR/EIS that are provided at the public meetings or received before the end of the comment period on March 31, 2000, will be reviewed and reflected in the Revised Draft FR/EIS that will likely be produced later this year. ☺

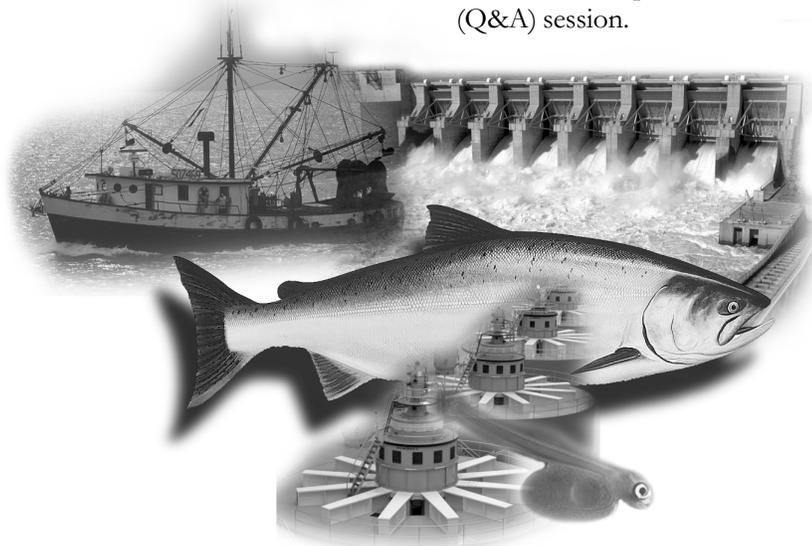


PUBLIC INVOLVEMENT OPPORTUNITIES

To submit comments, learn more about the study or the public meetings, request more information about the study, or be added to the study mailing list, you can:

- Visit the Walla Walla District home page at <http://www.nwww.usace.army.mil>
- E-mail salmonstudy@usace.army.mil
- Mail your comments to: U.S. Army Corps of Engineers, Walla Walla District, Attention: Lower Snake River Study, 201 North Third Avenue, Walla Walla, WA 99362-1876
- Fax your comments to: Attention Lower Snake River Study, (509) 527-7832.

For more information on the Federal Caucus decision tools and documents, or meeting dates and locations, visit www.bpa.gov/federalcaucus, or e-mail federalcaucus@bpa.gov.



PUBLIC MEETING SCHEDULE

U.S. Army Corps of Engineers Lower Snake River Juvenile Salmon Migration Draft FR/EIS with Federal Caucus Conservation of Columbia Basin Fish AII-H Paper.

**Thurs., February 3
Portland, Ore.**

Holiday Inn at the Airport
8439 NE Columbia Blvd.
Columbia Conference Center
1 p.m. and 6:30 p.m. (two sessions)
Open house begins at noon and runs concurrently with sessions.

**Tues., February 8
Spokane, Wash.**

DoubleTree Hotel
322 N. Spokane Falls Court
Grand Ballroom
1 p.m. and 6:30 p.m. (two sessions)
Open house begins at noon and runs concurrently with sessions.

**Thurs., February 10
Lewiston, Idaho**

Williams Conference Center
Lewis Clark State College
8th Avenue and 6th Street
Selway River Room and Snake River Room
1 p.m. and 6:30 p.m. (two sessions)
Open house begins at noon and runs concurrently with sessions.

**Tues., February 15
Astoria, Ore.**

Clatsop County Fairgrounds
92937 Walluski Loop
Multi-purpose Arena/Exhibit Hall
5 p.m.
Open house runs concurrently with session.

**Thurs., February 17
Tri-Cities (Pasco), Wash.**

DoubleTree Hotel
2525 North 20th Avenue
Medallion 1 & 2
1 p.m. and 6:30 p.m. (two sessions)
Open house begins at noon and runs concurrently with sessions.

**Wed., February 23
Boise, Idaho**

Centre on the Grove
850 West Front Street
The Summit and Flying Hawk Eyrie
1 p.m. and 6:30 p.m. (two sessions)
Open house begins at noon and runs concurrently with sessions.

**Tues., February 29
Seattle, Wash.**

Seattle Center
200 Thomas Street
Seattle Center Pavilion
1 p.m. and 6:30 p.m. (two sessions)
Open house begins at noon and runs concurrently with sessions.

**Wed., March 1
Kalispell, Mont.**

Outlaw Inn
1701 Highway 93 South
Winchester Room and Colt 44 Room
6 p.m.
Open house runs concurrently with session.

**Thurs., March 2
Missoula, Mont.**

DoubleTree Hotel
100 Madison
Blackfoot Room and Bitterroot Room
6 p.m.
Open house runs concurrently with session.

**Tues., March 7
Idaho Falls, Idaho**

Shilo Inn
780 Lindsay Boulevard
Yellowstone Room and Grand Teton Room
5 p.m.
Open house runs concurrently with session.

**Tues., March 7
Sitka, Alaska**

Westmark Hotel
330 Seward Street
Conference Room 1 and Lobby
5 p.m.
Open house runs concurrently with session.

**Wed., March 8
Twin Falls, Idaho**

Weston Plaza
1350 Blue Lakes Boulevard N.
Blue Lakes, Shoshone, Pomerelle, Teton, and Sawtooth Rooms
5 p.m.
Open house runs concurrently with session.

**Wed., March 8
Juneau, Alaska**

Centennial Hall Convention Center
101 Egan Drive
Sheffield Ballroom 1, 2
5 p.m.
Open house runs concurrently with session.



FOR MORE INFORMATION

The FR/EIS documents listed below can be viewed from your computer or downloaded in whole or by sections by accessing the Walla Walla District's home page at <http://www.nww.usace.army.mil> (Draft Feasibility Report/Environmental Impact Statement link). Interested parties can also request a copy of the Draft FR/EIS CD, which also contains the following documents. The CDs are also available for viewing at libraries throughout the region.

- Summary Document (40-page synopsis of FR/EIS)
- FR/EIS (complete text of the main document)
- Appendix A—Anadromous Fish
- Appendix B—Resident Fish
- Appendix C—Water Quality
- Appendix D—Natural River Drawdown Engineering
- Appendix E—Existing Systems and Major System Improvements Engineering
- Appendix F—Hydrology/Hydraulics and Sedimentation
- Appendix G—Hydroregulations
- Appendix H—Fluvial Geomorphology
- Appendix I—Economics
- Appendix K—Real Estate
- Appendix L—Lower Snake River Mitigation History and Status
- Appendix M—Fish and Wildlife Coordination Act Report
- Appendix N—Cultural Resources
- Appendix O—Public Outreach Program
- Appendix P—Air Quality
- Appendix Q—Tribal Consultation and Coordination
- Appendix R—Historical Perspectives
- Appendix S—Snake River Maps

Additional support documents, fact sheets, and feasibility study information can also be accessed through the Walla Walla District home page. 🌐



DRAFT FR/EIS CONCLUSIONS AT A GLANCE

The Corps' Juvenile Salmon Migration Draft FR/EIS includes the best available information on the biological effectiveness, engineering approaches, economic effects, and other environmental effects associated with the four alternatives for improving salmon and steelhead passage through the four lower Snake River dams to recovery criteria recommended by the National Marine Fisheries Service. The alternatives, the actions involved under each alternative, and the major potential effects of each alternative are summarized from the Draft FR/EIS in the following table.

Alternative 1 — Existing Conditions

Every FR/EIS has a starting point from which all other alternatives are measured. Alternative 1 is the baseline or no action alternative under which the Corps would continue operating the four lower Snake River dams according to their current configuration, including all fish passage programs now in operation. More than 50 percent of the fish would be transported via truck and barge, while the remainder would migrate in-river. This alternative does not mean that no further improvements would be made. The Corps, as part of its ongoing development plans and in response to changes in agency requirements, plans to improve technology at the dams to promote fish passage. The Corps' current plan calls for turbine improvements, structural modifications to fish facilities at Lower Granite Dam, new fish barges, adult fish attraction modifications, a new trash boom at Little Goose Dam, modifications to fish separators, added cylindrical dewatering screens, and more or improved spillway flow deflectors.

Alternative 2 — Maximum Transport of Juvenile Salmon

Most of the improvements planned for Alternative 1 would also be included in Alternative 2. The emphasis in this alternative, however, is on operating the existing facilities to maximize the passage of fish through the existing collectors into trucks or barges for transport downriver. Voluntary spill to bypass fish would be minimized. Fish would be collected in the existing facilities and transported past the dams. Under this alternative, there would be no need to modify spillway flow deflectors, because voluntary spill would be minimized. Some juvenile fish would still pass through the dam turbines.

Alternative 3 — Major System Improvements

This alternative, like Alternative 2, also maximizes transport of juveniles. It differs from Alternative 2 in that it incorporates a full-length surface bypass collector at Lower Granite Dam, which is the first dam juvenile fish encounter, thus the logical point to collect the fish. This new collection technology, in combination with existing bypass screens, would increase collection capability at Lower Granite Dam to 90 percent or higher and minimize the number of dams, bypass systems, and reservoirs that juvenile fish encounter. This bypass collector would span the powerhouse and work in conjunction with the existing extended submerged bar screens to divert fish from the turbines. At Lower Monumental and Ice Harbor, the existing submerged traveling screens would be replaced with bar screens to improve the collection or bypass of juvenile fish that originate from tributaries below Little Goose Dam.

Alternative 4 — Dam Breaching

This alternative consists of breaching the four dams and creating a free-flowing 140-mile stretch of river. This would involve removing the earthen embankment section of each dam and eliminating the reservoirs behind the dams. Under this alternative, all facilities for transporting fish would cease to operate. A free-flowing river can be achieved by removing only the embankment. The powerhouses, spillways, and navigation locks would not be removed, but would no longer be functional, eliminating power production and commercial navigation.

1

ACTION

EFFECTS

- No reservoir drawdowns
- No major changes to fish passage systems

- Slight reduction in extinction risks for listed stocks (CRI)
- Continued hydropower generation
- Continued navigational activity
- Continued irrigation and water supply
- No major economic impacts

2

ACTION

EFFECTS

- No reservoir drawdowns
- Maximization of juvenile fish transport with current systems
- Optimized voluntary spill

- Slight reduction in extinction risks for listed stocks (CRI)
- Continued hydropower generation
- Continued navigational activity
- Continued irrigation and water supply
- No major economic impacts

3

ACTION

EFFECTS

- No reservoir drawdowns
- Installation of surface collectors and other structural changes to maximize both transport programs for juvenile fish
- Optimized voluntary spill

- Slight reduction in extinction risks for listed stocks (CRI)
- Continued hydropower generation
- Continued navigational activity
- Continued irrigation and water supply
- No major economic impacts

4

ACTION

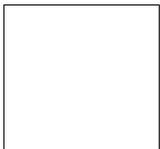
EFFECTS

- Removal of dam embankment
- Elimination of reservoirs
- Shut down of navigation lock
- Shut down of powerhouse
- End of juvenile fish transport program on the lower Snake River
- New fish and wildlife mitigation
- Protection of cultural resources
- Modifications to some reservoir facilities

- Moderate reduction in extinction risks for fall chinook and steelhead (CRI)
- Slight reduction in extinction risks for spring/summer chinook (CRI)
- Loss of hydropower generation; raised electric rates
- Loss of navigational capacity; impacts on other transportation systems; increased transportation costs
- High sediment movement
- Impacts to irrigation and water supplies
- Short-term gain and long-term loss of jobs and income
- Gain in recreation opportunities

*CRI = Cumulative Risk Initiative, a set of analyses used by NMFS

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STUDY MILESTONES

= Task already completed

- Notice of Intent June 1995
- Scoping Meetings July 1995
- Interim Status Report December 1996
- Regional Roundtable Workshops Initiated April 1997
- Public Information Meetings September 1997 and November 1998
- NMFS Release of Draft Anadromous Fish Appendix April 1999
- Complete Technical Analysis June 1999
- Federal Agency/Independent Review Period July 1999
- Distribute Draft FR/EIS December 1999
- Public Review of Draft FR/EIS December 17, 1999 to March 31, 2000
- Public Meetings on the Draft FR/EIS February/March 2000
- Distribute Revised Draft FR/EIS Later in 2000
- Public Review of Draft FR/EIS Later in 2000
- Public Hearings on Revised Draft FR/EIS Later in 2000
- Distribute Final FR/EIS To Be Determined
- Sign Record of Decision To Be Determined