



The Lower Snake River Juvenile Salmon
Migration Feasibility Report/
Environmental Impact Statement



Social Analysis

Information on social analysis

The U.S. Army Corps of Engineers (Corps) continues to study ways to improve juvenile salmon passage through the hydropower system on the Snake River. As part of this effort the Corps released the Draft Lower Snake River Juvenile Salmon Migration Feasibility Report/Environmental Impact Statement (FR/EIS) in December 1999. These information sheets discuss specific topics covered in the FR/EIS. The entire FR/EIS can be found on line at <http://www.nww.usace.army.mil>. For more information contact Dave Dankel, Walla Walla District Corps, at (509) 527-7288, dave.a.dankel@nww01.usace.army.mil.

The Drawdown Regional Economic Workshop (DREW) was established to aid in the development of a comprehensive social and economic analysis for this Feasibility Study. The DREW includes economists from Federal agencies, the Northwest Power Planning Council, states, tribes, contractors, and other regional stakeholders. The DREW analyses on any given subject presented with these sheets should be seen as only part of the overall economic analysis and should always be viewed in the context of the larger economic analysis as presented in Appendix I of the Draft FR/EIS.

Goals of the Social Analysis

The social analysis workgroup, a DREW subgroup, has completed a draft analysis that formed the basis of Section 7 of *Technical Appendix I - Economics*. It is important to note that this analysis is subject to review and revision, based on comments received as part of the reviews of the Independent Economic Analysis Board (IEAB) and comments received from the public.

The purpose of this report is to examine the range of potential social effects that may occur as a result of the implementation of one of the four alternatives. Communities are the focus of this report, because it is at this level that social effects, resulting from changes in the local and regional biological, economic, and physical environment, may be most keenly felt. The categories of effects include community impacts; effects on income, employment, and population distribution; life, health, and safety factors; displacement; long-term productivity; and energy requirements and conservation.

The key issues addressed include:

- What will be the social effects and when will they occur?
- Who will be affected?
- How will they be affected?
- How much will they be affected?
- How might the communities respond?

How the Analysis Was Conducted

The communities in the study area were divided into three subregions: downriver of the four dams (Pasco, Kennewick, Umatilla), reservoir (Pomeroy, Colfax, Clarkston), and Upriver (Lewiston, Orofino, Riggins). These key focus communities were selected to capture the range of possible effects.

The analysis was derived from information provided by other DREW workgroups, the National Marine Fisheries Service, secondary data analysis, key informant interviews,



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and existing studies. Another study, the community-based impact assessment, provides a different but complementary approach to community impact assessment (Discussed in the Community-Based Impact Assessment information sheet and in section 4.14.2 of the *FR/EIS*).

Results for Alternatives 2 and 3

Maximum Transport (Alternative 2) and Major System Improvements (Alternative 3) would result in a gradual effect on the economic and physical human environment for most communities and provide a degree of economic security for those communities that use the lower Snake River waterway. Communities (particularly in the upriver region) that depend socially and economically on the salmon and steelhead fisheries would be adversely affected by the lower probabilities of salmon recovery. Overall changes in regional employment would be minor and consist primarily of employment associated with short-term increases in Corps spending. All communities in the region would be adversely affected by the probability of continued salmon declines.

Results for Alternative 4

Alternative 4 – Dam Breaching would significantly change the economic and physical environment of the study region.

Employment

The overall long-term employment effect of the drawdown alternative would be a net gain to communities in the upriver subregion and a net loss to communities in the reservoir and downriver subregions. The majority of the job losses are related to irrigated agriculture on the Ice Harbor reservoir and operation of the four lower Snake

River facilities. Short-term employment gains are expected in the construction field during implementation of drawdown. The table below displays net long-term employment changes for 20 years after dam breaching.

Downriver Region

Downriver communities would lose agricultural production from the Ice Harbor pool. This loss would be partially offset by an increase in transportation-related activity, although this carries associated traffic and congestion concerns.

Reservoir Region

Reservoir communities would lose Corps employment and face increased financial pressure on family farms caused by increased transportation, storage, and handling costs for agricultural products. This might lead to an increased rate of farm consolidation, increased stress in the farm sector, and a loss of rural farm population. This would significantly affect the largest number of communities. Reservoir communities would be affected by the short-term loss of recreation access and the increased truck traffic on the highways (US12 and SR 26) that cross the region.

Upriver Region

Upriver communities would benefit from the expected increase in the tourism industry with a free-flowing section river. Lewiston and Orofino would face economic uncertainty, because it is unknown how significantly the loss of river navigation would affect the forest products industry. The effect of increased transportation costs would be the most significant in Latah, Nez Perce, Idaho, and Lewis Counties in Idaho.

Net Long-Term Employment Changes, 20 years after Breaching, by Subregion and Pacific Northwest (Alternative 4)^{1,2/}

	PNW Region Net		Reservoir Region		Downriver Region		Upriver Region	
	Year 20 net forecast	Year 20 % net change	Year 20 net forecast	Year 20 % net change	Year 20 net forecast	Year 20 % net change	Year 20 net forecast	Year 20 % net change
Net worst case (low gains/high losses)	(3,354)	(0.06)	(1184)	(1.28)	13	0.01	116	0.15
Net Best case (high gains/low losses)	(899)	(0.02)	(220)	(0.24)	455	0.30	129	0.17
Net most likely (low gains/med. losses)	(2,780)	(0.05)	(1176)	(1.27)	32	0.02	123	0.16

^{1/} Totals may not add up to regional summary due to the allocation of power impacts by population distribution. Positive impacts of recreation are constrained by DREW recreation team and A-Fish team estimates. The uncertainty associated with these estimates corresponds to the uncertainties faced by each of the DREW study teams and the regional model.

^{2/} Long term effects are those that are permanent and lasting through the period of analysis.

Source: Table 7-2, Appendix I

