

**RECORD OF DECISION
LOWER SNAKE RIVER NAVIGATION MAINTENANCE**

**U.S. Army Corps of Engineers, Northwestern Division
Portland, Oregon**

This Record of Decision (ROD) documents my decision and rationale for maintaining the navigation channel and certain public port facilities in the lower Snake and Clearwater Rivers. Several locations in the federal navigation channel and two public port facilities in the lower Snake and Clearwater Rivers need immediate corrective action to restore the channel to authorized depth that would facilitate navigation and increase public safety. I have considered the environmental and economic analysis presented in the *Final Lower Snake River Navigation Maintenance (Lower Snake and Clearwater Rivers, Washington and Idaho): Environmental Impact Statement*, June 2005 (FEIS), associated appendices, and other documentation. I have also taken into account the comments and correspondence received in response to the public coordination of these documents. I find that the preferred alternative, Maintenance Dredging with Beneficial Use of Dredged Material, as described in the FEIS, is consistent with all statutory and regulatory requirements, including the Endangered Species Act (ESA) and the Biological Opinions issued by NOAA Fisheries and the U.S. Fish and Wildlife Service; provides for the congressionally authorized uses of the lower Snake and Clearwater Rivers; is technically feasible and economically justified; includes all practical means to avoid and/or minimize environmental harm; and, is in the public interest. Therefore, I select for implementation the Maintenance Dredging with Beneficial Use of Dredged Material alternative to maintain selected areas in the federal navigation channel and berthing areas at certain public port facilities in the near future.

BACKGROUND

The U.S. Army Corps of Engineers (Corps) has the responsibility to operate and maintain the lower Snake River navigation channel, established in Section 2 of the Rivers and Harbors Act of 1945 (Pub. L. No. 79-14) and approved on March 2, 1945 in accordance with House Doc. No. 704, 75th Congress (See Section 1.2 of the FEIS). The lower Snake River navigation system includes a 14-foot deep, 250-foot wide navigation channel from the McNary Lock and Dam reservoir on the mid-Columbia River, up the Snake River to its confluence with the Clearwater River near Clarkston, Washington and Lewiston, Idaho, and up the Clearwater River just past the Port of Lewiston (See Section 1.3 of the FEIS).

Historically, the Corps routinely used dredging actions to maintain the authorized dimensions of the navigation channel in those areas where depths were less than authorized dimensions. However, there has not been any maintenance of the channel since the winter of 1998-1999, when the Lower Monumental Lock and Dam navigation lock approach was dredged (See Section 1.1 of the FEIS). Sediment buildup (shoaling) has reduced the proportion of the channel with adequate depth for navigation and has created unsafe conditions in five locations: the downstream navigation lock approaches to Lower Monumental and Lower Granite Locks and Dams, the confluence of the Snake and Clearwater Rivers, and the Ports of Lewiston and Clarkston. In 2003, there were approximately 38 acres in the Snake and Clearwater confluence

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area that were less than the authorized 14-foot depth. In 2004, that area increased to 52 acres (See Section 1.1 of the FEIS). This incremental buildup of sediment in the channel creates an increased safety risk, an increased risk of damage to equipment, and an increased risk of grounding. In response to shallow conditions, barge companies are making operational changes such as light loading and using alternate landing sites, thereby experiencing a loss in efficiency due to having to modify their practices to adapt to the change in condition (See Section 1.5.4 of the FEIS). This impacts the local and regional economy, as well as creates a safety risk within the ports themselves (See Section 1.1 of the FEIS).

DESCRIPTION OF PROJECT ALTERNATIVES

The Corps evaluated and considered a range of alternatives in an effort to select an alternative that was consistent with the stated purpose of maintaining a 14-foot depth throughout the designated navigation channel and restoring access to selected port berth areas in the project area (See Section 2.1 of the FEIS). The Corps evaluated and screened out from further consideration three alternatives because they would not accomplish the project purpose and satisfy project needs (See Section 2.3.1 of the FEIS). These alternatives are summarized as follows:

Sediment Reduction: This alternative is a means of altering land use practice over a large geographic area to reduce the amount of sediment entering the lower Snake and Clearwater River systems from their respective basins. Such efforts have been promoted by members of the public and resource agencies through comments on this EIS and on other previous documents, but implementing such an alternative does not meet the purpose and need of the current project because it would not have an effect on sediment already deposited within the project area. Benefits from this alternative would only be realized at some point in the future and so could not meet the immediate need for a remedy.

Navigation Objective Reservoir Operation Alternative: This alternative involves operating the lower Snake River projects at water surface elevations that provide a 14-foot channel depth within the defined project area. Currently the Corps operates the lower Snake River reservoirs at Minimum Operating Pool (MOP), or near MOP, during the juvenile salmonid outmigration season in the spring and summer. Under this alternative, the Corps would discontinue operating at MOP and potentially operate the projects at the upper end of the operating range year round. This would provide the increased depth for a more functional navigation system, but there would still be critical navigation areas less than 14 feet deep adjacent to the Port of Clarkston and near the Port of Lewiston, which does not meet the purpose and need of the project.

Drawdown/Sediment Flushing Alternative: Under this alternative, the Corps would draw down Lower Granite reservoir 10 to 15 feet below MOP (measured at the confluence of the Snake and Clearwater Rivers), which would increase water velocity at the head of the reservoir in an attempt to move sediment downstream and out of the navigation channel. The drawdown would occur for up to 6 weeks during the period of late April through late June on a one-time basis to take advantage of naturally high spring freshet flows. This alternative would only have a localized effect, might not remove material at the desired

locations, could not scour out the sediment impeding the navigation lock approaches, and would not deposit sediments with any precision. Based on the Corps' analyses, this alternative would likely remove sediment from the historic river channel, which does not always coincide with the federally authorized navigation channel. In addition, this alternative could have unacceptable negative biological and hydraulic effects.

The Corps considered five alternatives in depth (See Sections 2 and 4 of the FEIS) and these are summarized as follows:

No Action (Alternative 1): This alternative involves performing no maintenance of the federal navigation channel and selected port facilities such that the channel would remain partially filled and would continue to fill, impeding navigation. Commercial barges would likely continue to light load, which would increase transportation costs and decrease the capability to transport commodities. Navigation conditions would continue to deteriorate in the channel and port berthing areas as additional sediment accumulates and vessels would continue to experience grounding problems, creating increasing risks to human safety and to the natural environment. This alternative also involves continuing to coordinate deviations from MOP operation for some of the reservoirs. This alternative was not selected because it does not meet the purpose and need of the project to maintain a 14-foot deep channel and would not provide immediate results or benefits following implementation.

Maintenance Dredging with Beneficial Use of Dredged Material (Alternative 2, Preferred Alternative): This alternative is a one-time action to dredge only those areas needed to provide a 14-foot channel depth for commercial navigation. The Corps considered various upland and in-water disposal options and determined that in-water disposal to create shallow water resting and rearing habitat for juvenile salmonids at Knoxway Canyon would best address the needs of ESA-listed fish while following Corps policy on the use of dredged material. The preferred alternative is discussed in more detail below.

Maintenance Dredging with Traditional In-Water Disposal (Alternative 3): Similar to the preferred alternative, this is also a one-time action to dredge only those areas necessary to provide a 14-foot channel depth for commercial navigation. Unlike the preferred alternative, however, this alternative uses traditional in-water disposal of dredged material, which does not include reshaping the material at the disposal site to create higher quality aquatic habitat. The habitat created under this alternative would be at depths from 15 to 20 feet below the water surface and is considered lesser quality resting or rearing habitat for listed salmonids.

Navigation Objective Reservoir Operation with High-Spot Dredging (Alternative 4): This alternative involves operating the lower Snake River projects in the near future at water surface elevations that would provide a 14-foot deep channel year-round and limiting the dredging component to remove only the remaining high spots that would encroach on a 14-foot channel. To achieve this, all of the reservoirs except Lower Monumental would need to be operated above MOP. Dredging would be used only in Lower Granite reservoir as there would still be areas less than 14-feet deep even at near

maximum pool. Disposal of the dredged material would also be used for beneficial use, but reduced quantities would dictate placing the material in-water at Centennial Island which less habitat than what would be created under the preferred alternative. In addition, this alternative is not consistent with preferred operations under the Action Agencies proposed actions for operation of the Federal Columbia River Power System (FCRPS) and NOAA Fisheries' FCRPS Biological Opinions dating back to 1994, which a preference for operating at MOP during the juvenile outmigration. There were also concerns about other possible impacts to juvenile salmonids.

Drawdown/Sediment Flushing and Dredging (Alternative 5): This alternative involves drawing down Lower Granite reservoir 10 – 15 feet below MOP (measured at the confluence of the Snake and Clearwater Rivers) to flush sediment out of the confluence area with the resultant increased velocities. The drawdown would be followed later in the year by dredging to remove the remaining material encroaching on the 14-foot channel and port facilities. The Corps would use in-water disposal of the dredged material and would select a disposal site based on the amount of material actually dredged. There would likely be significant negative effects to the environment from the drawdown and additional impacts from the dredging/disposal action, including potential adverse biological impacts and impacts to physical structures combined with economic impacts of implementation.

ENVIRONMENTALLY PREFERRED ALTERNATIVES

The Corps identified two environmentally preferred alternatives based on the analysis in the FEIS: Alternative 1 (No Action) and Alternative 2 (Maintenance Dredging with Beneficial Use of Dredged Material) (See Section 2.3.2.2 of the FEIS). Factors the Corps considered to make this determination included impacts these alternatives would have on ESA-listed fish and their habitat, water quality, terrestrial resources, and cultural resources. Both alternatives 1 and 2 had minimal negative impacts to the resources considered, but Alternative 1 does not meet the project purpose of providing authorized navigation depth in the channel or access to port facilities.

SELECTION OF THE PREFERRED ALTERNATIVE

In comparing the best available information with regard to each alternative, the Corps determined that Alternative 2, Maintenance Dredging with Beneficial Use of Dredged Material, best satisfies the purpose and need when selecting it as the preferred alternative. The benefits anticipated from implementation of this alternative include lessened economic effects on the navigation industry; the reduction of the conditions considered to be unsafe, such as groundings, barge accidents; and, possible cargo spills and the creation of shallow-water habitat for listed salmonids. This alternative would produce results in the near future, after the 2005 spring runoff, and provide a 14-foot navigation channel and access to port berthing areas.

This alternative would have short-term adverse impacts, primarily due to mobilizing sediments that may increase turbidity and ammonia levels during dredging and disposal. The dredging and disposal operation contains measures to minimize and avoid these effects, including

implementing the operation during winter when the temperatures are lower and fewer fish are present, limiting the intensity and extent of the turbidity plume, and requiring monitoring for ammonia and turbidity. There would be minor, short-term adverse impacts to food sources (macroinvertebrates) for aquatic species, although no long-term effects are anticipated. Based on previous investigations, it is expected that disturbed substrates will be rapidly recolonized by macroinvertebrates. This alternative “may affect and would likely adversely affect” Snake River fall Chinook, Snake River spring/summer-run Chinook, Snake River basin steelhead, and bull trout, although no jeopardy is expected to these listed species. All practicable means to avoid or minimize environmental harm from the action have been incorporated into the preferred alternative.

When compared to the other alternatives, the Corps considered Alternative 2 to best meet navigation needs while minimizing environmental impacts and maximizing environmental benefits. This alternative would provide a 14-foot channel in the critical areas while Alternative 1 would not. Compared with Alternative 3, this alternative would provide better quality juvenile salmon habitat and would use all of the dredged material for beneficial use rather than disposing of the silt in a deep site where it would provide no benefit. Compared with Alternative 4, the preferred alternative would have more dredging, both in area and quantity of dredged material, which could be considered to be more of an adverse effect on the aquatic environment. Although both alternatives would result in the creation of about three acres of higher-quality salmon habitat, the preferred alternative would create a new area of habitat further downstream, which would address the need to provide a better distribution of resting/rearing habitat in the reservoir. The preferred alternative would have less of an adverse impact on water quality and infrastructure than Alternative 5. For further information on comparisons see Table 2-5 of the FEIS, Summary Comparisons of Environmental Effects by Alternative Considered.

The alternatives were further evaluated to determine their cumulative effects. (See Section 4.10 of the FEIS). The Corps determined that the preferred alternative would not have significant impacts on the environment when the incremental impact of the action is added to the impact of other past, present, and reasonably foreseeable future actions, as analyzed in the FEIS.

ENDANGERED SPECIES ACT CONSULTATION

The Corps completed Endangered Species Act (ESA) Section 7 consultation on the preferred alternative for navigation channel maintenance with NOAA Fisheries and the United States Fish and Wildlife Service (USFWS) concerning listed species that may be affected by the action. The Corps originally consulted with NOAA Fisheries and USFWS in 2004, but the project was not implemented. The Corps updated their consultation with NOAA Fisheries and USFWS to address the change in date and the reduced scope (no longer proposing to dredge recreation areas) in 2005 (See Appendix A and Appendix B of the FEIS).

NOAA Fisheries issued a Biological Opinion (BiOp) on March 15, 2004 that concluded that implementation of the preferred project is not likely to jeopardize the continued existence of any of the ESA listed species or result in the destruction or modification of designated critical habitat. On June 1, 2005, NOAA Fisheries sent a letter stating that they agree with the Corps that the changes to the proposed action will not affect ESA listed species beyond the effects

anticipated by the March 2004 BiOp and agreed that the Corps has satisfied its responsibilities for ESA and Magnuson-Stevens Act consultation. This letter is attached to this decision document in Attachment B

Similarly, the USFWS issued a BiOp for the proposed work on October 18, 2004 concluding the action is not likely to jeopardize the continued existence of bull trout or bald eagles. The USFWS also sent a letter dated July 3, 2005, stating that the proposed project modifications do not change the analysis of effects in the 2004 BiOp and that it still applies to the currently proposed action. Their letter is attached to this decision document in Attachment B.

The Corps intends to implement the conservation recommendations listed in the 2004 Biological Opinions for Snake River dredging and will comply with the Incidental Take Statement and Reasonable and Prudent Measures listed therein.

NATIONAL HISTORIC PRESERVATION ACT CONSULTATION

Pursuant to the National Historic Preservation Act and its implementing regulations (36 CFR part 800), the Corps undertook a cultural resources review of the project area of potential effect. Based on the location and nature of the proposed work, cultural resources will not likely be impacted by the project undertaking. The Corps made a determination of “no historic properties affected” and consulted with the Washington and Idaho State Historic Preservation Offices (SHPO), and coordinated with various Tribes, as needed. The SHPOs concurred with the Corps “no historic properties affected” determination. The SHPO concurrence letters are in Attachment C of this document.

CLEAN WATER ACT

The Corps requested an extension of Water Quality Certificate/Modification Order #1155 issued by Washington Department of Ecology on May 4, 2004 for the Lower Snake River, Winter 2004-2005 Maintenance Dredging in response to the Corps’ Public Notice CENWW-PM-PD-E 03-01. This certificate was issued for a one-year period and expired March 1, 2005. The Corps was unable to perform the proposed dredging and in-water disposal work in the winter of 2004-2005. Because the preferred alternative for work in the winter of 2005-2006 is very similar to the action addressed by the existing certification, the Corps requested a five-year extension of the existing certification. Washington Department of Ecology issued an amendment to the Water Quality Certification for the preferred alternative on July 11, 2005. Under the amendment, the certification is valid either through May 4, 2009 or immediately after the dredging and disposal is completed, whichever comes first. The certification is also valid for only a one-time dredging project. The certification is included in Attachment C to this document.

The Corps requested a Short Term Activity Exemption (STAE) from the Idaho Department of Environmental Quality (IDEQ) for the proposed maintenance activity. On April 8, 2005, the IDEQ issued an STAE for the Lower Snake River and Clearwater Rivers, Winter 2005-2006 Maintenance Dredging. This exemption was issued for the period December 15, 2005 through March 1, 2006. The STAE is also included in Attachment C of this document.

CONSIDERATION OF PUBLIC AND AGENCY COMMENTS

Throughout the development of this EIS, the Corps considered public and agency comments and incorporated information received into the EIS as appropriate. During the development of the Draft EIS (DEIS), the Corps considered comments provided during scoping, comments received on similar navigation maintenance proposals, input from other related environmental compliance efforts, and input from technical staff to identify, evaluate, and determine a reasonable and feasible range of alternatives.

The Corps circulated the DEIS for this proposed action in March 2005 for public review and comment and received 224 comment letters. The Corps received comments on the DEIS from elected officials, federal and state agencies, local and tribal governments, tribal organizations, other organizations and individuals. The comments indicated both support for, and criticism of, the proposed project. Many comment letters expressed strong regional support for maintaining navigation in the Lewiston/Clarkston area, emphasizing the economic impacts and safety concerns of operating at less than a 14-foot depth. Some natural resource management agencies expressed some concern for environmental issues associated with the proposed project; however, they did not oppose performing channel maintenance. Several environmental not for profit organizations, as well as some tribes or tribal organizations, expressed concerns regarding potential negative environmental impacts associated with this maintenance dredging activity. The Corps also conducted a public information meeting and a public hearing regarding the proposed project during the DEIS public review period. Comments expressed at these meetings were similar to those expressed in the comment letters.

The Corps considered all comments received and responded to comments by either changing the text of the FEIS, or explaining why the Corps felt changes were not needed. Comment letters and the Corps' responses to the comments are in Appendix E of the FEIS. All of the comments received were carefully considered during the development of the FEIS.

The Corps also received a few letters after the release of the FEIS. Generally, the letters indicated support for the preferred alternative. A joint letter, signed by the governors of the states of Idaho, Montana, Oregon, and Washington, indicates regional support by stating that maintaining year-round navigation to port facilities is important to the regional economy. The Environmental Protection Agency (EPA) cooperated in the development of the Environmental Impact Statement and provided a letter indicating that the Corps adequately addressed EPA's comments on the DEIS in the FEIS. All letters received on or before July 11, 2005 relating to the FEIS were fully considered in this decision and are included in Attachment A to this decision document.

OTHER CONSIDERATIONS

The Corps considered several other factors in this decision-making process. Some of these were regional participation (scoping process, public information meeting, and public hearing), time required for project implementation, short-term uses and long-term productivity, irreversible and irretrievable commitment of resources, Environmental Justice, and potential impacts to the

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Lewiston Levee System. The Corps also reviewed earlier discussion and litigation on previous similar projects. Finally, the Corps considered the views expressed through Government-to-Government consultation held with various Native American Tribes.

Concern that the Corps is not focusing on a long-term solution was also considered. The Corps is working with EPA and others to develop a long-term plan for sediment management in the lower Snake River reservoirs and McNary reservoir on the Columbia River that could help reduce future shoaling and dredging needs. However, this FEIS is meant to address the immediate need to maintain the navigation channel.

The Corps weighed all of these other considerations in making this decision to proceed.

MONITORING

Monitoring throughout the dredging and disposal activities will be implemented as described in the Monitoring Plan presented in Appendix D of the FEIS. The monitoring plan evaluates several issues associated with the planned activities including water quality, biological impacts, and structural stability of the disposed material. This plan includes water quality monitoring that has been historically required for maintenance dredging projects in the lower Snake River, as well as addressing concerns raised in ESA consultations. These concerns include potential for releases of ammonia, viability of fish habitat, and stability of the disposal embankment.

STATEMENT OF DECISION

Based on the discussion above and after careful consideration of the documents and the public concerns associated with this project, I hereby select the preferred alternative, Maintenance Dredging with Beneficial Use of Dredged Material, as the most appropriate method of restoring the depth of the navigation channel and adjacent port facilities to improve navigation and public safety. I find the preferred alternative, as described in the FEIS, is consistent with all statutory and regulatory requirements, provides for the congressionally authorized uses of the lower Snake and Clearwater Rivers, is technically feasible and economically justified, includes all practical means to avoid and/or minimize environmental harm, and is in the public interest. I believe that in order to best provide safe and efficient navigation in the near future, as authorized by Congress, the preferred alternative will best serve the public and the region.

Issued in Portland, Oregon on July 13, 2005.

/signed/

WILLIAM T. GRISOLI
Brigadier General, U.S. Army
Division Engineer