Dredged Material Management Plan and Supplemental Environmental Impact Statement: Columbia and Lower Willamette River Federal Navigation Channel. Portland: US Army Corps of Engineers, Portland District, 1998. (Reviewed by Kyle Walker)

The Corps of Engineers issued this 1998 report in order to "determine how to maintain the existing 40-foot Columbia and Lower Willamette River navigation channel over the next 20 years using the criteria of least cost, environmental acceptability and technical feasibility." To accomplish this objective, the report includes five primary sections: an introduction to the proposed Dredged Material Management Plan, alternatives to the plan, the affected environment, potential environmental consequences, and review and consultation requirements.

The Columbia/Lower Willamette navigation project originated in 1878 and has dictated multiple channel depth authorizations, terminating in 1976 with a depth of 40 feet. Riverbed adjustment has been needed at each step of the channel modification process. In order to maintain the channel, the Corps have employed multiple different dredging techniques, and dispose of the material by methods of shoreline, upland, and inwater disposal.

In the second section of the report, the Corps considers four potential alternatives for dredged material management in the channel. The first, called No Action, would employ the minimum requirements in order to continue disposal and dredging on the channel. The second, the Least Cost Plan, would attempt to minimize the overall cost of channel maintenance. Alternative Three, the Operational Plan, is based upon the No Action Plan but would provide additional disposal sites; and the fourth plan, the Proposed Plan, would allow for periodic pipeline dredging and upland disposal in areas that would be maintained by hopper dredging. After examining the potential physical, biological and socio-economic impacts and the required channel improvements, the Corps concludes that the Proposed Plan would be the best.

The next two sections of the report detail how the Corps' plan would affect the environment, and what potential consequences it could have. It goes into further detail about physical, cultural, and socioeconomic impacts, and explains in-depth about how they could manage dredged material while minimizing negative environmental impacts. In conclusion, the report explains how its plan would comply with numerous governmental regulations including the Clean Water Act and the Endangered Species Act.

Critique

Although the report emphasized potential effects involving the Columbia River, it still serves as a valuable resource about Willamette River maintenance, as it involves the lower Willamette near Portland. Furthermore, it gives information about how dredging affects Northwest river ecosystems, and what methods can be employed to ensure environmental protection. The report certainly does not lack depth; the Corps goes to great lengths in order to ensure that every possible consequence is analyzed, and that the proposed plan is truly the best alternative. Detailed maps and charts throughout the report

allow the reader to visualize how and where the impacts of the plan will occur. Furthermore, the report includes a glossary of technical terms, which renders the report accessible to the layperson.

A very important and interesting part of the report occurs after the report's conclusion. The Corps includes letters from many different interest groups opposed to their proposed plan, and then accompanies those letters with the Corps' response. By including these documents, the Corps allows the reader to understand the perspectives and the scope of those who may be affected by the dredging plan.

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