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Books/ Periodicals Reviewed

A Process for Setting, Managing, and Monitoring Environmental Windows for Dredging Projects, Special Report 262.
Committee for Environmental Windows for Dredging Projects, Marine Board, Transportation Research Board, Ocean Studies Board, National Academies. Washington, D.C. 2001. Soft-cover, 6 x 9 inch, 83 pages, with glossary. US$20.

National Academy Press

This small volume is the result of a workshop established by the National Research Council to explore the decision-making process used to establish environmental windows for dredging projects, as well as consistency in the windows-setting process.

Environmental windows are those periods of the year when dredging and disposal activities may be carried out because regulators have determined that the adverse impacts associated with dredging and disposal can be reduced below critical thresholds during these periods. The first environmental windows in the United States were established more than 30 years ago. Today environmental windows are applied to over 80 percent of all federal dredging projects according to the U. S. Army Corps of Engineers (USACE).

The cumulative impacts of the application of environmental windows are significant and costly. For this reason, the USACE requested that the National Research Council's Transportation Board-Marine Board conduct a workshop to explore the decision-making process used to establish environmental windows, as well as the consistency of the windows-setting process.

The report is organised into seven parts, beginning with an Executive Summary and ending with appendices and biographical information of the study committee.

Specifically, the report is divided as follows:
Executive Summary
1. Introduction
2. Workshop Preparations, Design, and Major Points of Discussion
3. Process for Setting, Managing, and Monitoring Environmental Windows
4. Key Findings and Recommendations
Appendices
Study Committee Biographical Information

The Executive Summary and the Key Findings and Recommendations capture the essence and value of the report. The report itself is fairly repetitive and those two sections appeared to be of the most interest, both to the casual reader as well as to those with a more intimate involvement with environmental windows and their effects.

Environmental windows restrict or prohibit dredging and disposal activities during those periods when perceived harm to aquatic resources is above a determined critical threshold. They are an intuitively simple means of reducing risks to biological resources from stressors generated during dredging and disposal activities. The use of windows has significant cost implications for both the USACE and the local sponsors of dredging projects and thus the taxpayers. They can prolong completion of dredging projects, delay project deadlines, and increase the risk to dredging personnel by shifting dredging to periods of inclement weather and sea states.

The report documents the windows-setting process and sets a template by which the process can be summarised. The workshop involved a broad spectrum of stakeholders in the dredging of marine projects and intended to synthesise these diverse perspectives into a set of findings that serve as basis to place the issue of environmental windows on a more objective and consistent framework and practice.

The study resulted in eight recommendations, summarised as follows:

1. The decision-making process for managing dredging and disposal operations to achieve sustainable waterways and to protect natural resources, both living and nonliving, should be broadly based.
2. All tools, including windows, should be considered in designing a management plan for carrying out dredging and disposal operations.
3. The proposed process for assessing the need for windows and for managing and monitoring windows when selected should be tested in a small number of districts.
4. All existing scientific data and information should be exploited in evaluating and setting windows as part of an overall management strategy for dredging and disposal activities.
5. Cross-training opportunities should be created for resource manager and dredging operators.
6. A special effort should be made in identifying existing tools for structured decision making in complex socio-political situations and to evaluate their applicability to the process of setting, managing and monitoring environmental widows for dredging. One or two of the most promising tools should be selected for additional testing, research, and refinement aimed at enhancing their acceptability and use in the window-setting process.
7. Additional funding should be allocated to resource agencies to ensure full, thorough, and active participation in the window-setting process.
8. The windows-setting process should reflect the principle of adaptive management. That is, as new data and information are acquired and experience is gained, they should be fed back into the process.

If these recommendations sound a bit vague and ambiguous it is because, as is often the case when a report is generated by a committee of stakeholders with opposing disciplines and perspectives, they are.

Certainly, the report adds to the literature on environmental windows, but some specific guidelines and a framework by which to answer the basic questions and issues stated in its purpose and objective would have been welcome. In spite of this, it does give a valuable insight into the issues and the process by which such contentious matters are studied and how reports are then written by such prestigious organisations as the National Research Council.

The report is available from:
Transportation Research Board Business Office
National Research Council
2101 Constitution Avenue NW
Washington, DC 20418

or through the Internet at:
www.national-academies.org/trb
email: TRBsales@nas.edu

http://education.usace.army.mil
U.S. Army Corps of Engineers Education Center. 2002.

The effort to encourage young people to enter the field of dredging as well as attempts to educate the public about the positive aspects of dredging have been of major concern both in Europe and in the United States. After many years of planning, the United States Army Corp of Engineers (USACE) has recently launched a new educational website. Though the site is obviously US oriented, it provides an enormous amount of information for any science teacher or pupil with computer access, anywhere in the world.

USACE's Education Center, as it is called, is aimed at kindergarten through secondary school (K–12+) students, teachers, librarians and other educators. Its stated objectives are: to promote an understanding of the USACE, create a Corps Classroom connection; and spark interest in applied sciences. Subjects covered in general are Engineering and Construction, Navigation, Water Resources Management, Disaster Response, Environmental Protection, R&D and Recreation.

Its main components are:
- a Young Engineer's Club, designed for elementary age children;
- Classroom Resources, with a wide range of resources, lesson plans, activities, and education links;
- Corps Classroom Connection with stories about engineering, environmental biology, chemistry, physics, geography and other relevant science subjects;
- Mission Lessons with classroom activities, interactive quiz games, puzzles, glossaries and references;
- Fun science experiments (over 250), with 30 topic categories utilising simple materials; and
- Navigation lessons, emphasising the importance of ports and navigation channels, hydrographic surveys, dredging and beneficial uses of dredged material.

This website is a monumental work, and marks the beginning of a much-needed ongoing effort to educate the public from the ground up (that is, from youth onward) to the important role that dredging plays in our modern society. Anything that helps people understand the positive aspects of dredging and does not encourage knee-jerk negativity is worth taking a look at. The creators of this website deserve a round of applause.

It is available at: http://education.usace.army.mil.
Like most of the Internet, it's free of charge, just log on.