

#### 4. **SPECIAL PROJECTS AND REPORTS**

##### A. **Greening Federal Facilities (DOE)**

The U.S. Department of Energy (DOE) has published the second edition of its document titled *Greening Federal Facilities: An Energy, Environmental, and Economic Resource Guide for Federal Facility Managers and Designers*. This report (DOE/GO-102001-1165) is a comprehensive resource guide designed to increase energy and resource efficiency, cut waste, and improve the performance of federal buildings and facilities. It is intended primarily for federal facility managers, who administer more resources and have more impact on the environment than any other group in the world. Collectively, these managers are a powerful force for introducing improvements, and they set an example for the rest of the economy.

This guide highlights practical actions that facility managers, planners, and design and construction staff can take to save energy and money, improve the comfort and productivity of employees, and benefit the environment. The guide is one more step in a national effort to promote energy efficiency and sustainable actions in the nation's 500,000 federal buildings and facilities. Topics addressed include: (1) environmental and energy decision-making; (2) site and landscape issues; (3) building design; (4) energy systems; (5) water and wastewater; (6) materials, waste management, and recycling; (7) indoor environmental quality; and (8) managing buildings.

The guide highlights best practices to: (1) invest in improvements that have quick paybacks and make economic sense; (2) increase the productivity, comfort, and health of employees and building occupants; (3) maximize innovative financing and partnering opportunities; (4) facilitate interagency cooperation; (5) work within the ongoing operations and procedures of facilities management staff; and (6) reduce environmental impacts. It concentrates on actions that are practical and cost-effective. Furthermore, it reflects a long-standing commitment to make government work better and cost less, to use the federal government's enormous purchasing power to stimulate markets for U.S. energy and environmental technologies, and to save taxpayers money by reducing materials costs, waste disposal costs, and utility bills.

Executive Order 13123 instructs federal agencies to develop sustainable design principles and use them in planning and building new facilities. This order also instructs agencies to optimize life-cycle costs and other environmental and energy costs associated with the construction, life-cycle operation, and decommissioning of a facility.

For further information, contact Ms. Elizabeth Shearer, Director, Federal Energy Management Program, U.S. Department of Energy, 1000 Independence Avenue, SW, Washington, DC 20585, (telephone: (202) 586-5772, electronic mail: [elizabeth.shearer@hq.doe.gov](mailto:elizabeth.shearer@hq.doe.gov)).

For a copy of the guide, refer to the following DOE Web Site:  
[http://www.eren.doe.gov/femp/techassist/green\\_fed\\_facilities.html](http://www.eren.doe.gov/femp/techassist/green_fed_facilities.html).

## B. Beneficial Uses of Great Lakes Dredged Material (GLC)

The Great Lakes Commission (GLC) has published a report titled *Beneficial Uses of Great Lakes Dredged Material: A Report of the Great Lakes Beneficial Use Task Force*. The report defines “beneficial use” as the placement or use of dredged material for some productive purpose, such as beach/near-shore nourishment, habitat restoration, landscaping, amendments to agricultural soils, road construction fill, strip mine restoration, or temporary cover for landfills. The need to find and advance beneficial use alternatives to conventional dredged material management, i.e., alternatives to open water disposal and placement in a confined disposal facility (CDF), has been a topic of increasing importance to state, federal, and local stakeholders. This need stems not only from diminishing CDF capacity and decreasing acceptance of indiscriminate open water disposal, but also from an emerging philosophy that, where possible, reuse and recycling of dredged material should take priority over disposal. The beneficial use of dredged material that is not contaminated or only mildly contaminated can allow CDF capacity to be reserved for the most contaminated dredged material.

The report contains findings and recommendations, prioritizes several recommendations, and proposes actions for their implementation. It also contains examples of beneficial use projects throughout the Great Lakes basin, provides an overview of selected innovative technologies for treating contaminated dredged material for beneficial use, and includes profiles of the regulatory framework for beneficial use of dredged material for each of the Great Lakes states. A GLC resolution on making beneficial use of dredged material a policy priority is included as well.

Among the report’s findings and recommendations are the following:

1. A more expansive, codified federal definition for dredged material and its beneficial use should be developed. In this definition, dredged material should be considered a distinct material, neither a solid waste nor a discharge. In addition, the definition should be broad enough to allow flexibility to incorporate multiple beneficial use options. The definition should be initiated through a stand-alone piece of legislation.
2. Testing protocols specific to dredged material should be developed and adopted by all Great Lakes states.
3. Risk-based guidance that establishes contamination thresholds or parameters for different beneficial use applications, based on the physical and chemical properties of the dredged material and its end use, should be developed. This guidance should use a comparative, risk-based approach instead of strict numerical standards, yet could allow for case-specific determinations to consider the range of physical and chemical characteristics of dredged material and exposure pathways associated with its end use.
4. Federal guidance to evaluate the benefits and impacts of beneficial use projects should be developed. Such guidance would aid federal as well as state agencies with decision-making regarding beneficial use proposals and will foster public understanding of the environmental and other benefits of beneficial use. Federal guidance should encourage beneficial use by

prioritizing reuse and recycling of dredged material over disposal, and should consider the benefits of using dredged material to avoid resource-depleting activities.

5. The federal standard should be modified to promote beneficial use of dredged material. The new policy should allow for cost-effectiveness over the “least costly” alternative. Such a policy should clarify the flexibility of the federal standard as it is applied to beneficial use. The federal standard should be applied based on an evaluation of the net social, environmental, and economic benefits and impacts/costs of different dredged material management options, not strict adherence to the least costly alternative based on present value.
6. Existing state regulations governing beach/littoral nourishment should be expanded where possible to support a variety of beneficial use options.
7. Consideration should be given to the development/enhancement of state and federal programs to encourage creative cost-sharing arrangements to cover additional costs associated with beneficial use options that meet a new federal standard. Such programs would make beneficial use projects more cost-effective than utilizing disposal options.
8. Beneficial use should be identified as a priority when developing, updating, and periodically reexamining Dredged Material Management Plans (DMMPs). Federal, state, and local agencies involved in the DMMP process should work closely to ensure that beneficial use is considered early and throughout the process so opportunities for beneficial use are maximized. DMMPs should be flexible to allow beneficial uses after a DMMP has been developed, should opportunities arise.
9. Cooperative and continuous planning processes should be established to manage material dredged from federal and non-federal navigation and recreation channels with a priority for beneficial use options. Ports’ strategic planning processes are a logical vehicle to plan for local dredged material management needs and priorities from both navigation and non-navigation channels.
10. The current Army Corps of Engineers’ authority for beneficial use of dredged material (Section 204 of the 1992 Water Resources Development Act) should be expanded to include all beneficial uses.
11. Monitoring programs for beneficial use projects should be established and implemented.
12. Guidance for monitoring protocols should be developed where beneficial use involves contaminated dredged material.
13. Public education campaigns and business outreach programs about beneficial use of dredged material should be established.

14. Federally approved state coastal management programs should be reviewed and, where practicable, modified to incorporate the beneficial use of dredged material as a policy priority, and to reflect state laws and policies that pertain to beneficial use.
15. Funding opportunities should be established for research and development of new treatment technologies to address contaminated dredged material to render it suitable for beneficial use.

For further information, contact the Great Lakes Commission, Argus II Building, 400 Fourth Street, Ann Arbor, MI 48103-4816, (telephone: (734) 665-9135). The report is available on the Great Lakes Dredging Team Web Site: <http://www.glc.org/dredging>.

### C. Global Climate Change and Transportation (ENO)

The ENO Transportation Foundation has published a report dated 2002 and titled *Global Climate Change and Transportation: Coming to Terms*. The Foundation's Board of Advisors recommended in December 1998 that the Foundation build awareness of the key facts and issues related to global climate change among transportation leaders. The U.S. Department of Transportation and the National Cooperative Highway Research Program agreed to partner with the Foundation in this effort. The aim is to build understanding, not to advocate anything. The partnership conducted a series of programs addressing different aspects of global climate change and transportation. These presentations form the body of this report.

According to the report, emissions of greenhouse gases from transportation in the United States constitute a significant share of the global total. It states that the United States produces about one-quarter of the world's total emissions of greenhouse gases, and transportation produces about one-third of these. Once in the atmosphere, these gases last for many decades. However the future of global climate change unfolds, the U.S. transportation sector will be at center stage. Not only is this sector a huge emitter of greenhouse gases, but any changes in U.S. transportation vehicles could influence practices in many other nations as well.

The report addresses the following issues: (1) global warming: a science overview; (2) changing the future of light-duty vehicle energy use and greenhouse gas emissions; (3) the history of climate change policies, international negotiations, and the Kyoto Protocol; (4) credit for early action; (5) climate change and the carbon cycle; (6) global warming: an issue whose time is past; (7) global warming, infrastructure, and land use in the metropolitan New York area: prevention and response; (8) impacts on greenhouse gas emissions of using alternative transportation fuels with advanced vehicle technologies; (9) electric and hybrid vehicle energy storage R&D programs of the U.S. Department of Energy; (10) charting a course for transportation in the new world of climate change: some first steps toward integrating energy efficiency and emissions trading into U.S. transportation policy; (11) community-oriented planning in the Charlottesville, Virginia, region; (12) designing climate-sensitive state transport policy: lessons from the Delaware Climate Change Action Plan; (13) aviation and the changing climate; (14) marine transportation and global climate change; and (15) global climate change and transportation: challenges and implications.

For further information, contact the ENO Transportation Foundation, 1634 I Street, NW, Suite 500, Washington, DC 20006, (telephone: (202) 879-4700), or visit the Foundation's Web Site: <http://www.enotrans.com>.