

DRAFT – MARCH 12, 2008 – DRAFT

**ASSESSMENT OF NAVIGATION NEEDS AND THE MEANS FOR
RESTORATION, DEVELOPMENT AND IMPROVEMENT OF
TRANSPORTATION BY WATER**

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Introduction

Pennsylvania's commercial and recreational navigation assets provide significant economic benefit to the Commonwealth. Navigational commerce offers direct employment, and supports thriving businesses that depend on the availability of commercial ports and accessible waterways. Commercial port activities on the Delaware Estuary, Lake Erie, and on the Allegheny, Monongahela and Ohio Rivers are vital to the economy of those regions. Many Pennsylvanians and visitors to the Commonwealth also enjoy sailing, pleasure boating, fishing and other water sports that further contribute to the economic strength and the quality of life in Pennsylvania.

The Commonwealth has a legal obligation to preserve public rights in submerged lands of the Commonwealth and navigation. Pennsylvania's water resource management decisions should support both commercial and recreational navigation opportunities but must also carefully consider public trust responsibilities, as well as economic benefit, the needs of water dependent uses, wetland, and aquatic resources preservation, and private property rights.

Institutionally, there are numerous public and private organizations and programs that collectively manage and support both commercial and recreational navigation. Examples include:

- Port authorities
- Private sector interests in shipping and support services
- U.S. Army Corps of Engineers divisions and districts -- dredging, infrastructure construction related to reservoir management, locks and dams, and port facilities
- U.S. Department of Homeland Security -- Coast Guard districts and stations
- Water quality monitoring, ballast water management, and emergency response systems
- Interstate compact commissions and international treaty organizations
- State agencies, including the Departments of Environmental Protection, Conservation and Natural Resources, Community and Economic Development (PennPorts), and the Fish and Boat Commission
- U.S. and Pennsylvania Geological Surveys, U.S. Environmental Protection Agency and the National Park Service
- Marina and other access operators
- U.S. Department of Commerce, National Oceanic and Atmospheric

Administration – charting, weather services and planning support, coastal resources management and Sea Grant programs through state partnerships

Challenges

The potential environmental consequences of commercial and recreational navigation differ by region in the Commonwealth. Infrastructure needs also vary widely, extending from locks and dams, flood protection and flow management, reservoir operations, and control structures, to Great Lakes water management measures affecting lake levels and ice conditions. Dredging equipment and dredged material disposal facilities, applied technological solutions for preventing the introduction and spread of invasive species (including ballast water discharge controls), short sea shipping, ferry boat support facilities, and special structures related to tidal estuary and marine shipping requirements present additional challenges. Vessel types capable of operating globally and using regional infrastructure vary broadly, as do sanitation needs for marine or fresh water environments. In addition, flow management, flooding, and water quantity protection and monitoring strategies are not regionally or internationally consistent.

Commercial shipping, international trade and maintenance of federal navigation channels and recreational boating harbors raise multifaceted management issues related to aquatic habitats and dredged material disposal. Alterations of navigable waterways and non-navigation related uses of submerged lands provoke questions about public benefits and equitable compensation.

Because of the importance of commercial and recreational navigation to the Commonwealth, specific steps are needed to address these challenges.

Recommendations for addressing Navigation Needs and Improving Water Transportation

1. Hydrology and channel configuration create the fundamental conditions for navigation in Pennsylvania's waters. Where appropriate, the Commonwealth should build on prior efforts related to infrastructure construction, shipping channel maintenance, security, adequate flow management and water quality protection to support commercial and recreational navigation. Also crucial are related mapping and dredging activities to allow safe passage. The Commonwealth should work closely with the United States Army Corps of Engineers and other operators of dams and impoundments to maximize the benefits of multiple use management. The Commonwealth should support bathymetric mapping of waterways used for navigation, currently being conducted by the U.S. Geological Survey and the Department of Conservation and Natural Resources.
2. Safe and effective management of dredged material is important to navigation on our rivers and lakes. The Commonwealth, and other resource regulators and operators, should manage dredging and dredged material for multiple purposes such as enhanced navigation, beneficial uses, protection of watercourses, and wetlands and beach formation.
3. The Commonwealth should advance and encourage the efforts of PennPorts in the Department of Community and Economic Development, with the support of

several federal agencies, to expand its efforts through regional port authorities to develop strategic plans for supporting and managing commercial navigation in Pennsylvania. The Commonwealth should continue to promote the competitive position of the Ports of Philadelphia, Pittsburgh, Bucks County, and Erie.

4. The Commonwealth should continue to address navigation-related water quality and quantity issues such as ballast water management, wastewater and trash disposal from commercial and recreational vessels, monitoring systems, emergency response and security management.
5. The Commonwealth should continue to manage public natural resources in the beds of navigable waterways, subject to the permitting and submerged lands license or legislative lease process provided under the Dam Safety and Encroachments Act, as well as the requirements of the Fish and Boat Code.
6. The Commonwealth should continuously evaluate infrastructure needs for locks and dams, reservoirs, and intermodal transportation facilities. Where appropriate, the Pennsylvania Fish & Boat Commission should continue to fund or endorse dam removals where the dams no longer serve a useful purpose, thereby improving migratory fish passage and eliminating obstructions to recreational navigation. The Commonwealth should periodically re-examine its institutional arrangements for evaluating infrastructure needs and their adequacy for achieving the Commonwealth's goals.
7. The Commonwealth should continue to participate in regional institutional efforts to manage water quantities, flows, and flooding, which all affect navigation. Institutional arrangements and agencies that support Pennsylvania's navigation interests such as the Great Lakes Water Management Agreements, the interstate river basin compact commissions, and the International Joint Commission should be continued and encouraged.
8. Where appropriate, the Pennsylvania Fish & Boat Commission and other agencies should continue to fund or permit boat launches and other on-shore and in-water facilities that enhance recreational boating. Recreational boating should be facilitated in locations where it will not unduly interfere with water dependent biological communities, commercial navigation in areas with federal navigation channels or other more appropriate human uses. Diverse considerations may apply for different types of watercraft.
9. In implementing each of these recommendations, the Commonwealth should continue to protect both the public rights in public trust resources and private rights in private property.