### RECOMMENDATIONS FOR ACTION

The Statewide Water Resources Committee is comprised of 31 appointed and ex officio members representing a cross section of water users and public interests. The Committee is charged with coordinating the development of the *State Water Plan*, recommending policies and guidelines and overseeing development of the Plan in consultation and collaboration with the Regional Water Resources Committees and the DEP. The recommendations presented below were made by the Statewide Water Resources Committee to further improve water resources management in the commonwealth.

# Integrated Water Resources Management

1) DEP, with the advice and guidance of the Statewide Water Resources Committee, will develop and evaluate a framework and incentives for integrated water resources planning and management -- DEP, with assistance from other state agencies, compact basin commissions and local government representatives, should develop a framework that links water resources planning elements from the State Water Plan and programs such as Sewage Facilities Planning, Stormwater Management Planning, Source Water Protection Planning, Water Supply and Wastewater Planning, Flood Control Planning and the Watershed Restoration and Protection Program. Ultimately, this concept enhances water resources planning in Pennsylvania and directs planning efforts toward watersheds through county/multicounty/multi-municipal planning. In conjunction with this technical guidance, DEP should craft a financial incentive package that encourages integrated water resources planning and implementation. Initially, the incentive bank could be capitalized from various DEP financial assistance programs, the Department of Conservation and Natural Resources (DCNR) Rivers Conservation Fund, and the Department of Community and Economic Development (DCED) Land Use Technical Assistance Fund.

- This approach enables counties to develop integrated water resources plans and provide planning consultation services to the municipalities in their jurisdiction. Municipalities would adopt the county/multicounty plan and develop ordinances that are consistent with the Plan. Counties with a DEP-approved integrated water resources plan could be eligible for priority state funding to implement the recommendations of the plan. To be considered for funding, the relevant county plan would need to be generally consistent with the *State Water Plan*.
- 2) Implement trial integrated water resources plans using the Stormwater Management Planning program in cooperation with willing counties/multi-county areas -- DEP should work with willing local government officials and citizens to undertake integrated water resources planning in a variety of settings. The plans should encompass the elements in the framework, recommend implementation vehicles and identify specific decision-points and decision makers. The trial plans should be developed and implemented within the existing regulatory structure. The trial planning efforts should be continuously assessed to reveal gaps, barriers, inconsistencies, inefficiencies and decisionmaking voids created by the current regulatory and institutional structures. Based on the outcome of these evaluations, the above-referenced framework may be revised or further enhanced to promote a more efficient planning process. Proposals to amend pertinent regulations and to revise institutional organization or responsibilities governing all levels of water resources management could also be made.
- Provide services to assist county and local officials to prepare and implement integrated water resources management plans. Ongoing training should be conducted to educate county and municipal

officials about the practical benefits and fiscal advantages of integrated water resources planning and management. DEP should provide flexible planning guidelines and model ordinances to assist county and local government officials to develop and implement integrated water resources plans that meet their specific needs. Model ordinances, guidance, standards and criteria should be developed and recommended for use by municipalities to aid in implementing their plans and ordinances. Training that is tailored to municipal solicitors and engineers should also be presented. Non-governmental organizations such as the Pennsylvania State Association of Township Supervisors and the Pennsylvania State Association of Boroughs, and professional associations including the Pennsylvania Planning Association and the Consulting Engineers Council should be prepared to offer counties and municipalities the assistance and guidance needed to adopt approaches that best suit their water resources objectives.

- 4. Provide sufficient resources to re-establish the multi-agency single point of contact (SPOC) for integrated water resource plans. The multi-agency SPOC for integrated water resources plans should be coordinated by the Governor's Center for Local Government Services and include participation by DEP, DCNR, the Pennsylvania Infrastructure Investment Authority (PENNVEST), Department of Transportation (PennDOT), Pennsylvania Energy Management Agency (PEMA) and the Public Utility Commission (PUC) to prioritize integrated water resource planning and implementation. The decisions of these agencies must be consistent with the State Water Plan.
- 5. Review current policies and identify potential roadblocks to integrated water resources management. During and after the development of the trial integrated water resources plans for selected counties, a third party should assist DEP and the Statewide Water Resources Committee to identify roadblocks to successful integrated water resources management plan implementation as well as legislative

changes and possible amendments that would encourage more effective and efficient water resources integration. These analyses and the recommendations that flow from the trial projects will be highlighted and implemented as appropriate. The recommendations will be reviewed and updated as part of the 2013 *State Water Plan*.

## 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 DCNR.
- 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 those 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, Erie and Bucks County.
- 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<sup>17</sup>, as well as the requirements of the Fish and Boat Code<sup>18</sup>.
- 6) The commonwealth should continuously evaluate infrastructure needs for locks and dams, reservoirs and intermodal transportation facilities. Where appropriate, the Pennsylvania Fish and Boat Commission (PFBC) 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, PFBC and other agencies should continue to fund or permit boat launches and other on-shore and inwater 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.
- 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.

### Stormwater Management and Flood Control

Flood Control Recommendations

- 1) Review and update elements of the Pennsylvania Enhanced All-Hazard Mitigation Plan that address flooding. Revising the flood loss reduction and flood mitigation portions of the plan would provide updated guidance for federal, interstate, state and local agency activities in the commonwealth. To begin this effort, the Delaware River Basin Commission Interstate Flood Mitigation Task Force Report (July 2007) should be evaluated and relevant provisions should be considered for statewide application. In conjunction with this initiative, stormwater management plans developed under the Storm Water Management Act should be expanded to support local flood mitigation projects and should include specific recommendations for reducing flood events.
- Invest in enhanced Flood Forecasting and Warning Systems for all major river basins, utilizing a partnership of federal, state and local government.
- 3) Support FEMA's efforts to update Flood Insurance Rate Maps.
- 4) Amend the Flood Control Act<sup>19</sup> to provide DEP with general authority to indemnify federal agencies for water resources projects.

<sup>&</sup>lt;sup>17</sup> 32 P.S.693.1 et seq.

<sup>&</sup>lt;sup>18</sup> 30 Pa.C.S. §101 et seq.

<sup>&</sup>lt;sup>19</sup> 35 P.S. §653 et. seq.

- 5) Increase efforts to protect the floodplain and enhance community recovery assistance following a flooding event.
  - a) Evaluate Section 301(a) of the Flood Plain Management Act<sup>20</sup> to consider expanding the list of floodplain obstructions that have been determined to present a special hazard to public health and safety, that may cause significant pollution, or that may endanger life and property.
  - b) Amend the Flood Control Act to provide authority to consider and implement all potential flood control solutions, including non-structural alternatives and preventive approaches to reduce the risk of flooding; and allow all types of flood control solutions to be funded through the capital budget process.
  - c) Review and evaluate the Federal Flood Insurance Program to identify policies, such as the buy-out option, which can be enhanced to decrease the amount of damage to communities.
  - d) Prioritize flood recovery funds for activities that protect the flood carrying capacity of the floodplain. Invest funds effectively and reasonably to restore the floodplain and to reduce future losses.
  - e) Revise existing post-flood recovery funding programs to require postdisaster assessments and mitigation investigations, and to emphasize increased efforts on floodplain restoration and restoration of flood carrying capacity.
  - f) Ensure that state funding programs offer a preference for locating or relocating structures outside the floodplain. Where this approach is not feasible, approval to build or rebuild within the floodplain should include provisions for restoration and remediation of the floodplain to minimize future flood losses.

- g) Ensure that existing programs are coordinated and provide incentives for floodplain protection and restoration. Public funds used for flood recovery and rebuilding should target floodplain and carrying capacity restoration and obstruction removal. Retrofitting existing development with facilities designed to minimize flood losses should be considered where appropriate.
- 6) Appoint a commonwealth Flood Coordinator charged with coordinating flood prevention and recovery activities among state agencies. The commonwealth Flood Coordinator would also serve as the primary point of contact for federal, interstate and local officials on flood-related matters.
- 7) Working through the Department of Community and Economic Development, establish an information center/clearinghouse to provide education and training to local government officials, municipal solicitors, municipal engineers and the design community that emphasizes the importance of embedding integrated stormwater and floodplain management considerations into every municipal decision.

### Stormwater Management

Through appropriate legislation, regulation and administrative changes, integrate and leverage existing state and federal stormwater management regulations, policies and requirements (e.g., Storm Water Management Act, Sewage Facilities Act, Municipalities Planning Code, Chapters 102 and 105, NPDES, MS4, TMDLs) to provide an effective, straightforward, seamless stormwater management program that is blind to regulatory origin.

 Establish an information center/clearinghouse (such as the Water Resources Technical Assistance Center authorized by Section 3120(A) of the Water Resources Planning Act<sup>21</sup>) to deliver education and training to local government

<sup>&</sup>lt;sup>21</sup> 27 Pa.C.S. §3120(A).

<sup>&</sup>lt;sup>20</sup> 32 P.S. §679.301.