## DRAFT - AUGUST 14, 2008 -- DRAFT

## NATURAL RESOURCES PROTECTION

Protecting and enhancing Pennsylvania's water resources is the overarching theme that resonates throughout this plan. Pennsylvania has over 86,000 miles of streams and rivers, 161,455 acres of lakes, and is underlain by enough groundwater to submerge the entire state beneath eight feet of water if it were brought to the surface. Pennsylvania also holds 63 miles of Lake Erie shoreline, 17 square miles of Delaware Estuary, 512 acres of tidal wetlands, and 403,924 acres of freshwater wetlands<sup>1</sup>. These waters and wetlands are home to over 1200 kinds of insects and other invertebrates, 30 species of amphibians, 19 species of reptiles, and 221 known species of fish. These formidable resources supply water to maintain a vigorous economy, productive farms, numerous water-dependent recreational activities, and the daily needs of nearly twelve and a half million Pennsylvanians. Such a wide variety of uses inevitably generates competition and sometimes creates conflict among users. The fundamental intent of this plan is to identify and recommend strategies to avoid and resolve such conflicts, and ensure that water demands are met in a sustainable manner while providing natural resource protection.

The opening statement of this State Water Plan entitled "A Vision for Pennsylvania's Future", emphasizes stewardship of the state's water resources and references the state constitution as vesting a right to pure water and the values of the natural environment in all Pennsylvanians. The Water Resources Planning Act reinforces this principle by requiring the State Water Plan to consider "the water quantity and quality necessary to support reasonable and beneficial uses" including protection of fish and wildlife habitat and the aquatic environment. The Clean Streams Law and federal Clean Water Act provide the prime legal support necessary to back the plan's prevailing obligation to resource protection.

The three principal statewide priorities guiding this plan are mainly directed toward natural resource protection. The priority endorsing integrated water resources management, in particular, solidifies this commitment. Integrated water resources management recognizes the critical links among water quality and quantity, surface and ground water, and land use and water resource management. Each of the six Regional Water Resources Committees has also established priorities designed to protect Pennsylvania's abundant and diverse environmental resources. Specific regional priorities include protecting the quantity and quality of the water in Lake Erie, maintaining regional hydrologic integrity, reclaiming waters impaired by drainage from abandoned mines, connecting land use decisions and water resources management, protecting "at

<sup>&</sup>lt;sup>1</sup> 2008 Pennsylvania Integrated Water Quality Monitoring and Assessment Report, April 2008

risk" waters, protecting important headwater habitats, and initiating land use programs that protect water quality and quantity and preserve the ecological integrity of ground and surface water. In addition, one of the major outcomes of the state water planning process will be to identify Critical Water Planning Areas areas where existing or future demands exceed or threaten to exceed the safe yield of the available water resources. An essential step in this process is determining whether in-stream aquatic resource requirements can be sustained in the watershed.

This plan also includes numerous recommendations for action under the general topics of Integrated Water Resources Management, Navigation Needs and Improving Water Transportation, Stormwater Management and Flood Control, Water Quality, Water Withdrawal and Use, and Water Conservation and Efficiency. A majority of those recommendations were made to assure that Pennsylvania's surface and ground water, and riparian resources continue to be restored, protected and enhanced.

Emphasizing natural resource protection as one of the key themes for this plan provides clear and plain direction that forms a firm base for water resource planning. This principle also sets the stage for sound decision-making and sustainable actions in the future. As water use demands evolve in response to ever changing conditions, the natural resource protection premise will remain a familiar benchmark that will help define appropriate courses of action set to avoid or resolve major problems and conflicts as they arise.