

# 1. Introduction

## 1.1 How to use the State Water Plan Update

The 2022 State Water Plan Update (2022 Update) was developed for decision makers at all levels to help make informed decisions, avoid conflicts, and employ effective management practices to protect water resources. The 2022 Update may be used as a source for extensive water resource data, the latest information, and policy recommendations. Additionally, the 2022 Update may be a helpful guide for the development and implementation of policies, programs, and projects on water availability, infrastructure investment, water resource protection, health and safety, and access to climate change adaptation strategies. It further serves all Pennsylvanians by extending environmental educational opportunities on water resource topics.

## 1.2 History of the State Water Plan

State water planning has existed as a concept in Pennsylvania for over a hundred years in various forms starting with several pieces of legislation in the early 20<sup>th</sup> century. These included the Purity of Waters Act of 1905 in response to outbreaks of typhoid and cholera. Additionally, the Controlling of Water Resources Act of 1913, which led to a large inventory to be taken of Pennsylvania's water resources, included records reaching as far back as the early 1800s.

Various federal laws led to a slew of other laws to be passed in Pennsylvania throughout the 1920s and 1930s that dealt with many concerns surrounding water quality, flooding, and water rights. In the 1960s, a severe drought in the northeastern United States led to broader federal water resources planning that allowed for the dispersal of grant monies to states to begin building their own water resource inventories and plans. Pennsylvania responded by forming an Interagency Water Resources Coordinating Committee that, in 1968, developed an outline of what would be the Commonwealth's first water resources plan that was to be part of a broader statewide comprehensive plan. That 1968 document established plan components including objectives, what was to be inventoried, development needs, regional analyses of demands/needs, development solutions, and implementation actions.

It was not until the 1970s that the predecessor to the Pennsylvania Department of Environmental Protection (DEP) – the Pennsylvania Department of Environmental Resources (DER) – began a comprehensive state water plan based on the 1968 outline. The DER Division of Comprehensive Resources Programming coordinated among federal and other state agencies to produce what would be 20 sub-basin plan volumes completed periodically between 1975 and 1983. Each volume presented:

- Summary and recommendations
- Physical features and resources
- Socio-economic features
- Water resource problems and solutions/alternatives
- Impacts of structural alternatives

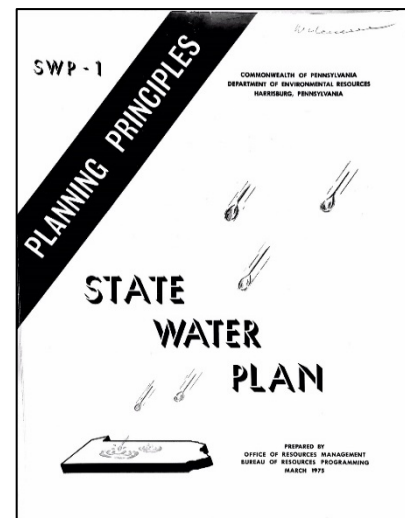


Figure 1. 1970s and 1980s State Water Plan

Beginning in 1997, several inquiries would be launched over a period of four years that would gauge the need for revised water resources legislation and planning. At that point, 14 years had passed since the completion of the last State Water Plan volume.

The 21<sup>st</sup> Century Environment Commission was launched by Governor Tom Ridge in 1997 to determine Pennsylvania's 21<sup>st</sup> century environmental priorities. As the 21<sup>st</sup> Century Environment Commission was underway, a drought during 1998 and 1999 further underscored the critical need for updating of Commonwealth-wide water resource management planning. That commission produced recommendations that promoted responsible land use, conservation of natural resources, making a healthy environment and promotion of environmental education, training, and stewardship.

As a follow-up to the [report](#) and recommendations of the 21<sup>st</sup> Century Environment Commission, Governor Ridge directed the establishment of a statewide sound land use outreach program. The [Sound Land Use Implementation Plan](#) documented the high level of interest of Pennsylvania citizens in protecting the quality and quantity of water resources, including recognition of possible water shortages, and in advocacy of planning on a watershed basis through updating and implementing the State Water Plan. Of note in that plan was the critical need to understand groundwater resources.

A series of 15 water forums were convened across Pennsylvania in the spring of 2001, just months before initial county drought declarations were made later in August. During those meetings, agreement was reached on the need to manage water resources more effectively. With over 1,700 people participating in the water forums, citizens spoke to the need to update the State Water Plan (whose last volume was published then 18 years prior) and they offered other ideas on ways to address water resource needs through meaningful water resources legislation and administrative changes. The outcomes from those water forums highlighted the need for education on water resources, and for the integration of water quantity with quality.

By December of 2001, the Commonwealth was about a half a year into drought, and with recent past water forums and studies calling for action, the conditions were right for initiation of new water resources legislation.

### 1.3 Legislative Foundation of the State Water Plan Update: Act 220 of 2002

Water resources legislation supported by Governor Mark Schweiker during the 2001-2002 Pennsylvania General Assembly session took the form of several bills – [HB 2230](#) , [HB 2302](#), and [SB 1230](#) – that would require updating the State Water Plan, promoting water conservation, and identifying Critical Water Planning Areas (CWPAs). The major elements of these bills were based on the water forums held during the spring of 2001.

With fairly bipartisan support, HB 2302 was enacted as the Act of December 16, 2002, P.L. 1776, No. 220 ([Act 220 of 2002](#)), also referred to as Pennsylvania's "Water Resources Planning Act".

### 1.4 2009 State Water Plan Update

Under Act 220 of 2002, the first State Water Plan was to be updated within five years to help answer the basic questions: How much water do we have? How is the water being used? Where will the demand for

water exceed the supply? Between 2003 and 2009, the State Water Plan update workplan involved registering and reporting of certain water withdrawals, identification of CWPAs, and initiation of Critical Area Resource Plans (CARPs) for several watersheds identified as CWPAs. This work was completed by DEP with the input of 169 appointed people with a wide range of representation serving on six regional committees, a statewide committee, and subcommittees, as well as additional public input.



Figure 2. 2009 State Water Plan Principles Document

Early in what became the 2009 State Water Plan Update, the planning team identified three principal priorities:

- The efforts initiated in the plan to collect, interpret, and disseminate water resources information should continue.
- An integrated approach to managing water resources should be encouraged and sustained.
- The Commonwealth should adopt policies that encourage technological advances designed to conserve and enhance water resources.

The framework for the 2009 State Water Plan Update fell into four tiers: **data** (collection, consolidation and analysis); **regional components** (key issues that reflected the priorities of each of the six planning regions); **marketing and engagement of the plan**; and an **action agenda** for the recommendations.

Notable accomplishments from the 2009 State Water Plan Update include:

- Water use registration and reporting
- United States Geological Survey GIS-based water availability screening
- Identification of CWPAs

The results of the 2009 State Water Plan Update were then distilled into four [components](#):

- A principles document highlighting the plan priorities, recommendations for action, and key components of the plan
- A marketing document also known as the “Touchstone Document” explaining the basis for water resources planning
- A coffee table-sized Water Atlas as an educational aid that laid out the landscape of Pennsylvania’s water resources and how they are managed
- A web-based system for water use registration and reporting

For more information on the 2009 State Water Plan Update, please visit DEP’s webpage for the [2009 State Water Plan Update](#).

## 1.5 2022 State Water Plan Update Process

### 1.5.1 Goals and Outcomes

Building on Pennsylvania's rich history of water resource planning from the 1970s into the 2000s, DEP began working under the provisions Act 220 of 2002 to review and update the 2009 State Water Plan Update. This review included revisions and updates to regional plan components as well as amendments and updates to the statewide components.



Figure 3. A Regional Water Resources Committee Meeting

This 2022 Update followed the requirements within Act 220 of 2002 for the periodic review, amendment, and updating of a State Water Plan, which necessitated a balancing of considerations. Deliberations took place within DEP and in consultation with the several State Water Plan committees on regional priorities, objectives, and recommendations of the regional committees to assure the regional and statewide components reflect federal, state, and interstate basin compact commission policies, plans, objectives, and priorities. Components of the 2022 Update include the following:

- A reviewed and updated State Water Plan resulting from the input, guidance, and advice of a repopulated and reinstated statewide committee, six regional committees, and the public
- Approved and adopted CARPs within the Potomac and the Ohio planning areas that were incomplete at the time of the 2009 State Water Plan Update
- Enhanced web-based applications and tools to deliver improved access to water resources information, data, and statistics for educational and water planning purposes
- Plan provisions to implement applicable water resources related strategies outlined in both the 2018 and 2021 Pennsylvania Climate Action Plans

### 1.5.2 Collaboration: Statewide and Regional Committees

Act 220 of 2002 calls for a collaborative approach that, in this 2002 Update, necessitated the reconstitution of the statewide committee and the six regional committees. More information on the geographic extent of regional committees may be found within the State Water Plan Digital Atlas.

Act 220 of 2002 is prescriptive as to the roles and responsibilities of various parties in preparation and updates of the State Water Plan. DEP, having responsibility over developing and drafting of the plan and regional components, received guidance, advice, and recommendations from six regional committees made up of representatives of agriculture, public water supply, wastewater, industrial, commercial, mining and energy enterprises, environmental and conservation interests, water resource management, and local government.

The statewide committee was primarily responsible for making recommendations to the DEP Secretary for approval and adoption of the entire plan update including: regional components, assisting with

public participation, recommending policies and guidelines, and reviewing and commenting on proposed regulations and policies. Statewide committee participants included appointments from the regional committees, the same interest sectors of the regional committees, in addition to ex officio voting members made up of the secretaries, directors, chairs or designees of DEP, the Pennsylvania Department of Agriculture, the Pennsylvania Department of Conservation and Natural Resources, the Pennsylvania Fish and Boat Commission, and the Pennsylvania Emergency Management Agency.

Once reconstituted, the committees reviewed the 2009 State Water Plan Update's regional and statewide priorities and recommendations for action. These reviews, in conjunction with DEP program reviews, considered which of the priorities and recommendations for action had been addressed since the 2009 State Water Plan Update, and which should change with this 2022 Update. Furthermore, these reviews evaluated whether to add any new or emerging issues to the lists of priorities and recommendations for action.

### 1.5.3 Public Process

DEP believes public participation is an integral part of achieving its mission to protect Pennsylvania's air, land, and water from pollution and to provide for the health and safety of its citizens through a cleaner environment. As part of the public participation process, the 2022 Update utilized a wide range of opportunities and approaches to inform the public, solicit input, and respond to input during the development of the Update. Public outreach and participation efforts included the following:

- Posting of regional and statewide committee information on the DEP website, including meeting agendas, meeting dates, and meeting minutes
- Utilization of a hybrid model for conducting meetings with both online and in-person participation options for the public, committee members, and agency staff
- Publishing notices of meetings in the *Pennsylvania Bulletin*
- Outreach for public input at the beginning of the process through a hearing on January 6, 2021
- Availability of a public comment opportunity during each of the committee meetings
- Outreach for public comment on the regional priorities at a hearing [estimated March of 2022]
- Invitation to the public to review and submit written comments regarding the draft plan [set for summer of 2022]