



Annual Report on the Status of the State Water Plan



December 2023



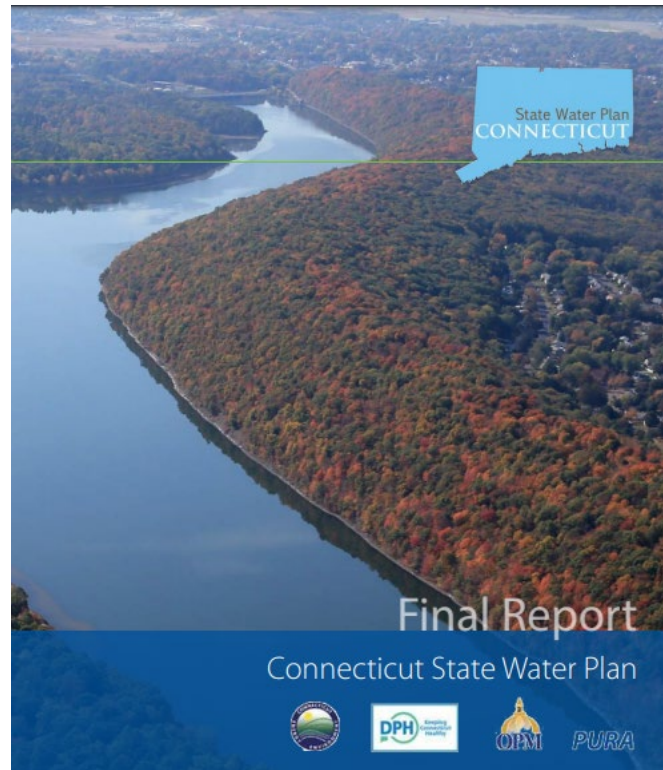
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Submitted jointly by the Secretary of the Office of Policy and Management, the Commissioners of Public Health and Energy and Environmental Protection, and the Chairman of the Public Utilities Regulatory Authority in accordance with Section 22a-352 of the Connecticut General Statutes

Executive Summary

[Section 22a-352\(i\)](#) of the Connecticut General Statutes requires the Water Planning Council (WPC)¹ to “oversee the implementation and periodic updates of the State Water Plan.” This report summarizes the work of the WPC and the following topical workgroups on implementing the State Water Plan during the calendar year 2023:

- Standing Committees:
 - Water Planning Council Advisory Group
 - State Water Plan Implementation
 - Outreach and Education
 - Interagency Drought
 - Watershed Lands
- Topical Workgroups:
 - Conservation Pricing and Rate Recovery Analysis
 - Evaluation of U.S. Geological Survey Data Collection Programs
 - Source Water Protection



In consideration of the WPC’s statutory responsibilities, this report also identifies two focus areas for the coming years: (1) **Identify options to fund implementation of the State Water Plan** - to ensure the WPC is equipped with the resources necessary to make further progress implementing the plan, and (2) **Update the State Water Plan as a dynamic policy document to address emerging challenges** – to provide support for continued planning capacity to keep pace with evolving climate change impacts and public health threats such as PFAS contamination in drinking water.

A WPC retreat on July 12, 2023, focused on reviewing areas of success, identifying opportunities and challenges for the future, and streamlining the way the WPC conducts business.

In 2024, the WPC intends to spend significant time on the priority focus areas, in tandem with ongoing work to improve its website, encourage water conservation, coordinate with other planning efforts, increase public outreach and education, improve implementation tracking, and streamline workgroups for efficiency.

¹ The WPC is authorized under Section 25-33o of the Connecticut General Statutes

Introduction

The WPC was established in 2001 to address issues involving water companies, water resources, and the future of the state's drinking water supply. In furtherance of this mission, the General Assembly in 2014 directed the WPC to develop a State Water Plan for the management of the state's water resources, and in doing so, to balance the needs of public water supply, economic development, recreation, and ecological health. The General Assembly adopted the State Water Plan in June of 2019, after which the WPC began implementing the plan's recommendations.

A legislatively established Water Planning Council Advisory Group (WPCAG) and several administratively established topical workgroups assist the WPC in its efforts. While numerous state agency programs support objectives identified in the State Water Plan, this report summarizes specific initiatives of the WPC, WPCAG, and topical workgroups.

As the frequency of very costly public health and environmental disasters increases, the hub that the WPC provides to address these issues through coordinated planning and implementation is more important than ever. To learn more about the WPC and to download an electronic copy of the State Water Plan and the 2022 annual report, visit portal.ct.gov/water. Additional legislative history and physical copies of the State Water Plan are on file at the [Connecticut State Library](#).

Priority Focus Areas

In accordance with Conn. Gen. Stat. § 22a-352(i), *The Water Planning Council shall oversee the implementation and periodic updates of the state water plan*. The following focus areas have been deemed a priority to meet this statutory objective:

Identify options to fund implementation of the State Water Plan

The implementation of the State Water Plan is currently dependent on the combined coordinated efforts of state agency staff and the generosity of volunteers who are personally and professionally committed to the WPC's mission.

Despite the many individuals who dedicate time towards implementing the State Water Plan, the four state agencies comprising the WPC have finite resources to carry out the robust goals of the plan. It has become increasingly evident that for Connecticut to remain on the cutting edge of addressing persistent and growing threats to our water resources, dedicated funding and staffing for water planning efforts is needed. This was initially recognized upon the plan's adoption and continues to emerge as a growing need. The WPC will review various avenues for more effectively implementing the goals of the State Water Plan over the next calendar year. The WPC also recognizes the underutilized opportunity to identify and leverage state investments in our higher education institutions to collaborate on emerging water issues and support research and policy initiatives.

Update the State Water Plan as a dynamic policy document to address emerging challenges

If left as a static document, the State Water Plan will not meet current and future needs. Resources must be allocated for regular updates. In response to unprecedented droughts and flooding, many states and jurisdictions in the northeastern United States have prioritized water resource planning. Connecticut is less equipped than many of its peers in this area to address impacts from climate change, never-ending changes in water use, and evolving challenges of emerging contaminants such as PFAS and harmful algal blooms. These challenges place new demands on limited water resources in continual need of reassessment and rebalancing to ensure long-term resilience.

The WPC and workgroups continue to implement relevant recommendations of the current plan and develop new recommendations to address emerging challenges; however, these efforts alone will not be enough to ensure future resilience. Throughout the next calendar year, the WPC will develop recommendations for how to best proceed with modernizing the State Water Plan.

Water Planning Council Retreat

The WPC held a retreat on July 12, 2023, to gauge progress on the State Water Plan, assess the effectiveness of the existing structure, determine how to address opportunities and challenges, and re-energize the state water planning process. There were 22 attendees representing state agencies, watershed groups, academia, water industry, and environmental organizations.

Designed to elicit genuine, unfiltered commentary from attendees, the retreat brought to the WPC's attention a number of challenges and concerns, while also highlighting past successes that attendees felt were particularly impactful. A full discussion and bulleted breakdown of these challenges and successes

is found in the [Meeting Report of the State Water Plan Retreat July 12, 2023](#).

The process by which the WPC arrived at these outcomes can be seen in the topical workgroup highlights presented in the next section and in the reports of prior workgroups summarized in the [2022 Annual Report on the State Water Plan](#).



Outcome #1: Acknowledgement of overall progress on State Water Plan implementation

Much time was spent identifying the successes of the State Water Plan since its initial adoption. Examples of areas with significant progress include drought management, streamflow regulation, consumptive water diversion reporting, electronic documentation of new well drilling reports, required testing of potable well water, improved land conveyance transparency, and public education and outreach.

Outcome #2: Simplification of organizational structure

The retreat's attendees agreed that the missions of the WPCAG and the State Water Plan Implementation Workgroup (IWG) are too similar and proposed that the two groups be merged. The WPC voted to do so at its November 7th meeting.

Outcome #3: Identification of opportunities and challenges

The challenges highlighted by attendees tended to revolve around a lack of resources to implement and update the State Water Plan, the need to re-emphasize and re-energize the importance of water to the General Assembly and other stakeholders, and the lack of public awareness or appreciation of critical issues related to water.

2023 Implementation Activities

Topical Workgroups



Water Meter

Conservation Pricing & Rate Recovery Analysis

Through previous efforts of the WPC, drought management has been greatly improved. The focus now has shifted to drought resilience by focusing on year-round conservation. This can be difficult for some utilities to implement as their operations rely on revenue. This group is identifying regulatory and operational barriers that prevent utilities from taking advantage of conservation pricing programs and various rate setting tools. This work complements the State Water Plan goal of drought

resiliency and conservation that is being explored in the Water Utility Coordinating Committee implementation process.

2023 Deliverables: The group has developed a public water system survey to better understand the rate-making experience of municipal and certain community systems.

Chair: Alicea Charamut, Executive Director, Rivers Alliance of Connecticut

Evaluation of United States Geological Survey Data Collection Programs

Complete and comprehensive data about our water resources is necessary to make sound management decisions. Continuing and expanding data collection on water quantity and quality is imperative. This workgroup is evaluating the U.S. Geological Survey's surface water and groundwater monitoring programs in Connecticut. The issues discussed include:

- evaluating how monitoring data supports decision making,
- identifying gaps within the monitoring networks to address current and future needs,
- reviewing the recommendations of the State Water Plan that might be resolved by expanding data collection, and
- identifying funding requirements to support current and expanded data collection efforts.



2023 Deliverable: A report on the status of U.S. Geological Survey surface and groundwater monitoring in Connecticut is in draft form and expected to be submitted to the WPC in 2024.

Chair: Chris Bellucci, Assistant Director, Water Planning and Management Division, Department of Energy and Environmental Protection

Source Water Protection

As the threats and costs of addressing water quality and quantity issues increase exponentially, protecting the sources of our drinking water is vital. This workgroup is reviewing the status of source water protection in Connecticut and the roles of the WPC agencies, federal and state programs and regulations, and the report of the Governor’s Council on Climate Change (GC3). The group is analyzing other ongoing efforts and identifying gaps in source water protection.

2023 Deliverable: A white paper on the status of Source Water Protection in Connecticut is expected to be published in 2024.

Chair: Denise Savageau, President, Connecticut Association of Conservation Districts

Standing Workgroups

Interagency Drought Workgroup

A timely, systematic, and coordinated response to drought helps to mitigate impacts to water resources, public health, and the economy. The Interagency Drought Workgroup (IDW) is a standing committee of the WPC responsible for regularly monitoring drought conditions and implementing the Connecticut Drought Preparedness and Response Plan (State Drought Plan). The IDW recommends drought declarations and mitigation actions to the Office of the Governor and communicates with stakeholders about drought conditions.

2023 Deliverables: The WPC formalized the IDW’s operational procedures and appointed a state drought coordinator consistent with the 2022 revision of the State Drought Plan. The IDW declared the conclusion of the 2022 drought and produced [an after-action report](#).

Chair: Martin L. Heft, Undersecretary, Intergovernmental Policy and Planning Division, Office of Policy and Management

Watershed Lands Workgroup

This workgroup reviews and determines the adequacy of current statutory and regulatory provisions to protect public water supplies and maintain Class I and II lands², as well as comparable lands that are not owned by water companies. This group also reviews controversial or environmentally sensitive land use proposals (both public and private) that could have detrimental effects on drinking water watersheds and makes recommendations to the WPCAG concerning such proposals.



2023 Deliverables: The group monitored MDC’s abandonment of water in Colebrook Reservoir, proposed a mechanism to ensure information on water resources is included in land transfers, and is researching policies to protect groundwater supplies more consistently.

Chairs: Margaret Miner, WPCAG member representing river protection, and Rich Hanratty, Governments Affairs Specialist, Connecticut Water Company

Outreach and Education

The WPC’s efforts to ensure that Connecticut’s most vital resource is protected can only go so far without outreach and education. The goal of the Outreach and Education Workgroup is to increase stakeholder and public awareness of the State Water Plan and participation in water resource planning, management, and protection in Connecticut. The group hosts educational opportunities and provides informative materials depicting what agencies, stakeholders, and the public can do to protect, conserve, and enhance Connecticut’s water resources.

2023 Deliverables: As part of this year’s climate change theme, a workshop titled “Preparing for Drought in Connecticut” was held on April 12, 2023 (see Appendix B). The group developed a marketing strategy

² Land owned by a water company within a drinking water supply watershed, defined by [Conn. Gen. Stat. § 25-37c](#).

to brand the Water Planning Council and State Water Plan names and published communications tools. A group of agency staff meet regularly to update and maintain the website.

Chair: Denise Savageau, President, Connecticut Association of Conservation Districts

Water Planning Council Advisory Group

The WPCAG is optionally established under Conn. Gen. Stat. § 25-33o(c) to assist in researching and analyzing water resource issues and advise the WPC on matters of interest. The statute requires that the WPCAG [membership](#) be balanced between consumptive and non-consumptive water interests. The WPCAG helps the WPC set priorities for implementing and/or updating the plan. A list of WPCAG membership is included in Appendix A.

2023 Deliverables: The WPCAG shared and distributed information on current issues such as management of hydrilla in the Connecticut River, impact of drought and flooding on utility operations and communities, and legislative proposals. It also directed and oversaw the activities of topical workgroups.

Chairs: Alicea Charamut, Executive Director, Rivers Alliance of Connecticut, and Dan Lawrence, Vice President of Engineering, Planning, and Real Estate, Aquarion Water Company

State Water Plan Implementation Workgroup*

The IWG is charged with carrying out work assigned by the WPC to implement recommendations in the State Water Plan. The IWG forms topical workgroups with appropriate expertise to investigate the recommendations that the Water Planning Council has deemed to be a high priority.

2023 Deliverables: Directed the activities of topical workgroups.

Chair: Virginia de Lima, Director (retired), U.S. Geological Survey - Connecticut Water Science Center

**At the November 7, 2023, WPC meeting, the WPC voted to integrate the IWG into the WPCAG, effective 2024.*

Alignment with Statutory Plan Requirements

Pursuant to [Conn. Gen. Stat. § 22a-352](#), the State Water Plan incorporates seventeen specific requirements. The Plan addresses each of the requirements through guiding principles based on available information, specific consensus recommendations, and a framework with which to resolve remaining issues. Appendix C indicates how the various implementation initiatives undertaken in 2023 align with the statutory plan requirements. Implementation activities undertaken in prior years are included in Appendix D.

2024 Outlook

In addition to the two priority focus areas, future implementation efforts will focus on the objectives listed below. The WPC's ability to achieve the listed objectives depends on available resources.

- Enhance the WPC website to be more comprehensive and user-friendly;
- Establish a permanent methodology to track plan implementation and facilitate reporting;
- Encourage water conservation through legislative and non-legislative channels;
- Coordinate plan implementation with priorities identified in the GC3 and other agency reports;
- Expand outreach and education efforts; and
- Consolidate the IWG into the WPCAG to efficiently use the time and efforts of agency staff and volunteers.

Acknowledgements

This report was prepared with the assistance of the following staff and volunteers:

Eric Lindquist, Connecticut Department of Public Health
Rebecca Dahl, Connecticut Office of Policy and Management
Kim Czapl, Connecticut Department of Energy and Environmental Protection
Virginia de Lima (retired), United States Geological Survey
Alicia Charamut, Connecticut Fisheries Advisory Council
Denise Savageau, Connecticut Association of Conservation Districts
Anne Hulick, Clean Water Action

Appendix A: WPC, WPCAG, and IWG Members

The following lists reflect membership slates as of July 2023. Note: Membership is subject to change on an ongoing basis. Vacancies are filled by the WPC on a continual basis. The WPC voted to consolidate the IWG and the WPCAG at its November 7, 2023, regular meeting.

Water Planning Council Members

Chair: John W. Betkoski III, Vice Chairman, Public Utilities Regulatory Authority

Graham J. Stevens, Bureau Chief, Bureau of Water Protection and Land Reuse, Department of Energy and Environmental Protection

Lori Mathieu, Branch Chief, Environmental Health & Drinking Water Branch, Department of Public Health

Martin L. Heft, Undersecretary, Intergovernmental Policy and Planning Division, Office of Policy and Management

Water Planning Council Advisory Group Members

Academia, Public Health, Ecology	Jon Morrison, U.S. Geological Survey
Agriculture	Bonnie Burr, UConn Extension
Business & Industry – Association	Joe Violette, Waterbury Chamber of Commerce
Conservation	Denise Savageau, CT Association of Conservation Districts
Consumer	Brenda Watson, Operation Fuel and Alison McHorney, CT Office of Consumer Counsel
Electric Power	Fred Klein, Pullman & Comley, LLC
Fisheries	Alicea Charamut, Fisheries Advisory Council (Co-chair)
Investor-owned Water Utility	Dan Lawrence, Aquarion Water Company (Co-chair)
Lakes and Ponds	Sean Hayden, Lake Waramaug Task Force
Land Protection	Karen Burnaska and Kathy Czepiel, Save the Sound
Municipal Water Utility	Patrick Kearney, Town of Manchester Water Department
Public Health District	David Knauf, Darien Health Department
Recreation	Eric Hammerling, CT Forest & Park Association and Jeff Shaw, Connecticut Outdoor Recreation Alliance
Regional Councils of Governments	Aaron Budris, Naugatuck Valley Council of Governments
Regional Water Utility	Steve Vitko, South Central CT Regional Water Authority
River Protection	Margaret Miner, Rivers Alliance of Connecticut
Small Water Utility	Josh Cansler, Southeastern CT Water Authority
Wastewater	Tom Tyler, Metropolitan District Commission
Water Intensive Industry	Darryl Newman, CT Nursery and Landscaping Association
Water Resources Protection	Carol Haskins, Pomperaug River Watershed Coalition

Implementation Workgroup Members

In-Stream Advocates:

- Anne Hulick, Clean Water Action)
- Denise Savageau, Connecticut Association of Conservation Districts
- Kelsey Sudol, Northwest Conservation District

Out-of-Stream Advocates:

- David Radka, Connecticut Water Company, retired, Co-Chair - *through April 2023*
- Janice Erlemeyer, Lower CT River Valley Council of Governments

Subject Matter Experts:

- Mike Dietz, UConn
- Steve Rugar, WSP USA
- David Murphy, Resilient Land & Water

Water Planning Council Advisory Group Appointees:

- Tom Tyler, Metropolitan District Commission
- Virginia de Lima, US Geological Survey, retired, Co-Chair

Water Planning Council Agencies:

- Lori Mathieu and Dan Aubin, Department of Public Health
- Ally Ayotte, Public Utilities Regulatory Authority
- Chris Bellucci, Department of Energy and Environmental Protection
- Bruce Wittchen, Office of Policy and Management

Appendix B: 2023 Implementation Documents

State Water Plan

<https://portal.ct.gov/Water/Water-Planning-Council/State-Water-Plan>

Connecticut Drought Preparedness and Response Plan

<https://portal.ct.gov/Water/Drought/State-Drought-Plan>

2022 Annual Report on the State Water Plan

https://portal.ct.gov/-/media/Water/WPC-2022/WPC_Annual_Report_2022.pdf

2022 Drought After-Action Report & Improvement Plan

<https://portal.ct.gov/-/media/Water/Drought/2023/231003-WPC-IDW-Adopted---2022-Drought-Post-Action-Report.pdf>

April 13 Outreach & Education Webinar: Preparing for Drought in Connecticut (90 attendees)

<https://youtu.be/c6U7H26YVN8?si=h19wWBBbOnO7V5uR>

8) Inform state residents on the importance of water resource stewardship and conservation		S						
9) Establish conservation guidelines and incentives for water conservation with energy efficiency consideration						A		
10) Develop a water reuse policy with incentives for matching the water quality to the use								
11) Meet data collection and analysis needs to provide for data driven decisions	S						A	
12) Account for the ecological, environmental, public health and safety and economic impact that implementation will have on the state	S							
13) Include short and long-range objectives and strategies to communicate and implement the plan		S						
14) Incorporate regional and local plans and programs for water use and management								
15) Promote intra-regional solutions and sharing of water resources								
16) Develop and recommend strategies to address climate resiliency	S		S					A
17) Identify modifications to laws and regulations necessary in order to implement recommendations	S			S		A		

Appendix D: 2019 – 2022 Implementation Matrix

STATE WATER PLAN ACTIVITIES 2019-2022									
Workgroup Status: Active (A) Complete (C)	Topical Sub-Workgroups								
State Water Plan Recommendations	Siting of Solar Renewable Energy Projects on Source Water Lands	State Land Conveyance and Water Resource Protection	Alliance for Water Efficiency	Drought Workgroup	State Water Plan Implementation Tracking and Reporting	Private Well Workgroup (management of domestic water supply well records in CT)	Recommendations for water quality testing of private and semi-public drinking water wells	Evaluation of United States Geological Survey Data Collection Programs to support the recommendations of the State Water Plan	Water Planning Chief Position Description
1) Identify the quantities and qualities of water available								A	
2) Identify present and projected demands for water									
3) Recommend utilization of water resources to balance public water supply, economic development, recreation and ecological health	C	A							C
4) Recommend steps to increase the climate resiliency of existing water resources and infrastructure				C					
5) Recommend technology and infrastructure upgrades, interconnections and/or major engineering works								A	

6) Recommend land use and other measures to ensure the desired quality and abundance and promote development in concert with available water resources	C	A							
7) Take into account desired ecological, recreational, agricultural, industrial and commercial use of water bodies									
8) Inform state residents on the importance of water resource stewardship and conservation									C
9) Establish conservation guidelines and incentives for water conservation with energy efficiency consideration			C						
10) Develop a water reuse policy with incentives for matching the water quality to the use									
11) Meet data collection and analysis needs to provide for data driven decisions				C		C	C	A	
12) Account for the ecological, environmental, public health and safety and economic impact that implementation will have on the state			C						
13) Include short and long-range objectives and strategies to communicate and implement the plan					C				C
14) Incorporate regional and local plans and programs for water use and management									
15) Promote intra-regional solutions and sharing of water resources									
16) Develop and recommend strategies to address climate resiliency									
17) Identify modifications to laws and regulations necessary in order to implement recommendations			C	C			C		