State Water Plan Overcoming Future Challenges

SECTION 5.3

Section 5.3 Overcoming Future Challenges

Numerous challenges were identified that may pose barriers to implementing new water management strategies in the future.

Challenges whose future may be more ambiguous, have been addressed below with general recommendations on how the WPC might consider these challenges and barriers in the years ahead.

Rather than specific fact-finding and consensus-building activities, the following suggestions are generalized to create awareness within the WPC and its stakeholders on how these issues could be addressed.

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Changes to Laws and Regulations

Within the State Water Plan are a series of policy recommendations which should help establish uniform guiding principles for future legislation and regulatory updates.

As the WPC oversees the implementation of the Plan by helping to usher recommended policies through the legislature and initiating next steps to help bring unresolved issues closer to closure, its regular public meetings should offer a consistent forum for debating and reconciling recommended changes to future laws and regulations.

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Levels of Authority for Implementation

The Water Planning Council does not have statutory authority to establish laws, but will be in the position to recommend such to the legislature based on the policies formulated in the Plan and with the Plan's help.

In such a capacity, it is recommended that the WPC strive for consensus in its recommendations to the legislature, but where this is not achievable, to share with the legislature the alternative views of the WPC members, so that informed decisions can be made.

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Watershed and Aquifer Protection where Incentives are Lacking

While the state has several programs in place to protect public water supply watersheds and aquifers, some surface waters and aquifers are less protected. One concern is that headwater streams may not have or will begin to lose existing strong protections if they cannot be viably used for public water supply. Without protection for the purpose of public water supply watershed protection, other tools may be needed to protect these rural headwaters regions of the state. The WPC should review at least once every five years the status of small headwaters streams that may be at risk due to loss of automatic protections afforded by status as a public water supply.

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Vulnerability and Security Issues

The need for access to information to conduct effective statewide water planning must be balanced against the need to maintain water system security. From time to time, WPC has participated in the development and/or support of legislative actions (proposed bills) to help achieve this balance. The WPC should consider supporting legislative bills which meet the stated purpose of achieving this balance.

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Food-Energy-Water Nexus

There are many synergies and trade-offs between water and energy use and food production. Using water to irrigate crops might promote food production but it can also reduce river flows and hydropower potential. Growing bioenergy crops under irrigated agriculture can increase overall water withdrawals and jeopardize food security. Converting surface irrigation into high efficiency pressurized irrigation may save water but may also result in higher energy use. Recognizing and communicating these synergies and balancing these trade-offs is central to jointly ensuring water, energy and food security.

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Emerging Contaminants

Because the State of Connecticut restricts the discharge of wastewater to drinking water supply systems, emerging contaminants are not likely as high a concern here as they are in other states that derive drinking water from sources that also receive treated wastewater. However, because of the close proximity of some well fields in the state to Class B river reaches, further study may be warranted. The WPC and DPH may wish to develop a testing program for such well fields to determine if there are consistent readings and/or trends for detectable toxic, biological or pharmaceutical contaminants in groundwater in close proximity to Class B waterways. The testing could be conducted as part of the existing GWUDI testing protocol for new wells.

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Constraints on System Expansion

The challenges associated with sewer system expansion in Connecticut are inconsistency with state, regional, and local plans; local opposition due to perceived induced development; inability to secure state funding when the action is contrary to the State C&D Plan to the point that the inconsistency cannot be resolved; and lack of funding in general. In contrast, the challenges associated with water system expansion in Connecticut are fewer, and mainly related to lack of discretionary funding available from the public, regional, or private water utility. However, state- funded extension of public water must be consistent with the State C&D Plan and bring with it the same challenges regarding potential induced growth. While there do not appear to be vast areas of water or sewer need at this time, it is likely that expansion needs will materialize in the future. The WPC should monitor future needs and ensure that they can be met appropriately.

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Climate Change

The Plan does not specifically address potential increases in flood potential or sea level rise

The WPC could sponsor forums or workshops as part of its regular meetings that discuss the relative risk of climate change impacts in the balance with other issues in Connecticut, in order to help prioritize initiatives.

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Climate Change

The WPC could also seek to have technical results included in this Plan combined with results from other studies (such as mentioned above) to formulate adaptation guidelines, which would help municipalities and utilities assess local risks, since it is unlikely that one universal policy on climate change adaptation would be applicable statewide.

The WPC could also consider the following "best management practices" for climate change adaptation, measures which are often beneficial for other reasons but have multiple benefits because of the protections they offer against an uncertain climate.