Connecticut

WATER PLANNING COUNCIL
ISSUES WORK PLAN

January 28, 2002

MISSION STATEMENT

The Water Planning Council will identify issues and strategies which bridge the gap between the water supply planning process and water resources management in order that water can be appropriately allocated to balance competing needs while protecting the health, safety and welfare of the people of Connecticut and minimize adverse economic and environmental effects.

BACKGROUND

Public Act 01-177, An Act Establishing a Water Planning Council, established a Water Planning Council consisting of the chairperson of the Department of Public Utility Control, the Commissioner of Environmental Protection, the Secretary of the Office of Policy and Management, and the Commissioner of Public Health, or their respective designees. The Water Planning Council is charged with addressing issues involving the water companies, water resources and state policies regarding the future of the state's drinking water supply.

The Public Act identified eleven issues to be studied. In general the issues identified in the legislation creating the Water Planning Council and the testimony received to date fall into two distinct areas of investigation: water company management, and natural resource water management.

Other items concerning interagency coordination will be addressed within the broader Water Planning Council agenda.

GENERAL ISSUES OF CONCERN

As we study each of the eleven subjects contained within Public Act 01-177, it becomes clear that there are some general issues of overarching concern.

1. Connecticut Law on Management of Water Resources

The legal framework that governs water use and management in Connecticut is complex and fragmented making it difficult for the general public, the regulated community, and regulatory agencies to have a clear and comprehensive understanding of all the laws and policies that impact water resource management.

In the context of these overarching issues and as we review the eleven (11) study areas, we should keep in mind the following questions:

- ? What are the various elements of jurisdiction for water resources in Connecticut?
- ? What needs to be done to compile a thorough review of existing common law, case law, and statutory laws dealing with water rights and management?
- ? Are current allocation and water rights laws adequate in the context of today's water management needs and those expected in the future?
- ? Where are the emerging needs for protection of multiple interests and public trust going to lead?
- ? Does the current network of regulation of water resources in Connecticut provide sufficient order and direction to the components?

2. Long Range Planning for Management of Water Resources

There is no long-range plan for the statewide management of water resources. The law requiring The Long-Range Plan for the Management of Water Resources was passed in 1967 (22a-352 CGS). Much of the original work that was incorporated into the Conservation and Development Policies Plan for Connecticut. However, no work has been done on this plan since the late 1980's and the process in statute of adoption by the heads of what are now DEP, OPM, and DPH was never done. The law was changed in 1973 to make this a continuous planning process.

Subsequently, two planning processes were adopted into law. One required the water utilities that serve over 1,000 people to prepare water supply plans. In addition, the state was divided into seven Water Supply Management Areas in which Water Utility Coordinating Committees (WUCC's) are to prepare areawide water supply plans. These areawide WUCC's are to prepare areawide water supply plans. These areawide WUCC plans are to dovetail with the individual water utility supply plans.

The need for an overall water resources plan for the state is a legitimate concern and its accomplishment would take a long-term commitment by the state agencies to implement. Further the DPUC should be included in this process by modifying section 22a-352 CGS.

3. Implementation of Water Conservation

There is no integrated statewide policy that requires all major water users to consistently implement conservation measures. Each agency program has a conservation component that functions within the limits of its unique regulatory authority**.** While DPUC requires implementation of some conservation measures such as metering and reduction of lost and unaccounted-for water, authority for assuring implementation of water conservation measures by non-DPUC regulated water companies and other water users is not clearly vested with any agency. The DPH requires conservation plans as part of the water supply plan prepared by the largest public water suppliers. The OPM's Conservation and Development Policies Plan for Connecticut 1998-2003, states " Water Conservation must be an integral part of water supply planning as it is an important component of protecting against water shortages and of minimizing the social, environmental, and economic costs of developing new water supplies." [1]The DEP requires all applicants for a diversion permits to identify conservation measures instituted by the applicant prior to the application and the applicant's long-range water conservation plan to be implemented after the permit is issued.

It is clear that not all major water users are reached by existing permitting and/or planning programs that have a conservation component in them.

Questions to consider:

? How are water conservation measures implemented?
? What is the possible impact of conservation on future water use needs?
? How should water conservation criteria be established and integrated into plans for resource management?
? What conservation criteria should there be for various user groups and categories?
? Should implementation of conservation measures and other alternatives be required in Water Supply Plans?
? What authorities are needed in order to assure that cost-effective conservation measures are implemented prior to a request for a water allocation?
? Should a single agency be responsible for establishing conservation criteria and assuring implementation of conservation measures?

OTHER THINGS TO CONSIDER

? What work groups can be useful to answer key questions raised in this process?
? How have other states dealt with the patchwork quilt of water regulation when multiple state agencies are involved? Are there effective integrated water resource planning processes that exist in other states with riparian laws similar to Connecticut?
? What work has already been done by various groups that already provide a launching pad for the issues to be addressed by the Water Planning Council?

[1] In section 22a-380 CGS Water Resources Policy, there are 3 specific water conservation goals. "The following are declared to be the goals and policies of the state: "…(3) to make water resources conservation a priority in all decisions; (4) to conserve water resources through technology, methods and procedures designed to promote efficient use of water and to eliminate the waste of water;... (7) to reduce or eliminate the waste of water through water supply management practices."

Specific Issues of Concern

Each of the specific issues that the Water Planning Council is charged with studying pursuant to Public Act 01-177 are presented below and include: a summary describing the current situation, points of consideration associated with issues, and possible areas of investigation which may help address the identified issues. These eleven issues are presented in the pages that follow under three main subject areas: Water Utility Management, Water Resource Management and Technical Management.

WATER UTILITY MANAGEMENT:

Issue 1: The financial viability, market structure, reliability of customer service and managerial competence of water companies;

> **Summary of Current Situation:** At present, the Department of Public Health's *Capacity Development Strategy for Public Water Systems* provides a framework for the State of Connecticut and public water systems to work together in three areas: technical, managerial, and financial. "In 1982, the Connecticut legislature created a Water Resources Task Force to evaluate the State's water supply issues and recommend improvements in the management of water resources. The Task Force included key stakeholders: legislators, utilities (small, large, municipal and investor owned) and state agencies. The result of this task force was not only the establishment of a planning unit within DPH but a mechanism to control the creation of new public water systems and a mechanism to consolidate or regionalize poorly structured existing systems through take over proceedings.' "[2]
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> The Department of Public Health has identified a number of factors that impair capacity development in its October 2000 *Capacity Development Strategy.* The major factors identified were:
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>> Producing water is not a main function of many small water companies**,** state agency reviews, limited state technical assistance, appreciation for regulations, willingness to cooperate, relative isolation from other systems, complex regulations, lack of planning, competition for resources, cumulative regulatory impact, business driven for profit, complex loan requirements, cost of compliance, inadequate rate structure, lack of knowledge, lack of available funding, lack of financial planning, lack of state and local regulatory resources, bureaucracy, multi-agency regulations of public water supplies, non-enforcement or delays, too many federal/state regulations, non-uniform enforcement, lack of funds for loan/grant program, public indifference, state inability to take greater financial risk to aid small water systems, complex & time consuming EPA reporting requirements, and un-focused public involvement due to media agendas.

[2] State of Connecticut Department of Public Health Bureau of Regulatory Services Capacity Development Strategy for Public Water Systems August, 2000 Page 1.

Point of Consideration:

Various factors related to the way water utilities are structured, operated and managed impair capacity development.

Possible Areas to Investigate:

? The methodology DPUC developed a few years ago to evaluate the general financial, technical, and managerial competence of a water utility may be useful.
? The small system capacity issue in Connecticut and determine how to identify the factors that have impeded the growth of adequate, reliable, and safe public water throughout the State.

***Issue 2:* Fair and reasonable water rates;**

Summary of Current Situation: Thirty water companies are regulated by the DPUC. The DPUC's mission is to achieve fair and reasonable rates while allowing the regulated company adequate revenues to maintain its operations and attract needed capital.

In determining the appropriate returns to allow a water company, Conn. Gen. Statute 16-19(e)(4) requires that: … the level and structure of rates be sufficient, but no more than sufficient, to allow public service companies to cover their operating and capital costs, to attract needed capital and to maintain their financial integrity, and yet provide appropriate protection for the relevant public interests, both existing and foreseeable.

The other water companies in the state are either small water systems that do not meet the criteria for regulation by DPUC or regional, municipal or homeowners associations that are exempt from DPUC regulation.

The Department of Public Health identified inadequate rate structures as one of many factors that impair capacity development in its Capacity Development Strategy dated October 2000.

Few water companies in Connecticut have true inclined rate structures that discourage high water use. However, most water companies have moved away from decreasing block rate structures (where water rates decrease with increasing use) to a level block rate structure (water rates remain stable despite use).

Point of Consideration:

The public has expressed a concern that there is disparity in the water rates charged by water companies. In addition, the DPH has suggested that small supplies may not be collecting revenues that are sufficient to maintain financial stability and provide appropriate levels of service.

Possible Areas to Investigate:

? The disparity of expenses and rates for water utilities. Should the Water Planning Council consider a company by company comparison of rates to determine if there are valid explanations for most variances in rates? There are many variables to consider when evaluating a water utility. For example, a surface water supply will be evaluated differently than a ground water well supply**.** Other examples include: Private water companies have

additional costs that municipal suppliers do not. Private companies pay local, state and federal taxes not paid by their municipal counter parts. In addition, private companies are allowed to earn a return on their investment.

? The current roles of DPUC and the Office of Consumer Council in rate making.

? The use of rate structure and metering as conservation tools for all water users.

Issue 11: ***The procedure for coordination of planning of public water supply systems***.

Summary of Current Situation: The annual progress report prepared each year by the Department of Public Health on the Water Supply Planning Process identified a number of issues regarding the existing coordinated planning process pursuant to CGS §25-33h.[3]

> "Many municipalities have expressed a desire to be designated as official Water Utility Coordinating Committee (WUCC) members. Some have been recognized as members by virtue of their ownership of a public water system. Others could only participate as non-members, without any voting rights. Municipal officials have not always participated in the process when not given official membership status, and regional planning agencies have not always represented each municipality as thoroughly as necessary."
>
> Difficulties encountered in administering the WUCC process since its inception include: producing water supply plans acceptable to all state agencies, maintaining appropriate contract funding, and coordinating the regional WUCC processes. These aspects have delayed the required 10 year plan revisions of the initial 3 WUCCs, which are now over 10 years old. Currently, of the 7 defined management areas, 4 WUCCs have been completed. "Each WUCC has labored over issues involving revisions to exclusive service areas. This has occurred in Durham/Middlefield, Burlington/Harwinton, and Brookfield. The process for making such revisions is unclear and an evaluation may be appropriate."

The prescribed WUCC planning process requires that exclusive service areas be reconciled prior to other water supply planning being performed such as consideration of the potential availability of water supplies or review of existing system capabilities to provide reliable water service. DEP in a letter dated January 31, 2001 to the Southeast WUCC noted that this is problematic and pointed out that since the WUCC process is silent as to potential environmental implications associated with exclusive service area service, future water supply conflicts are inevitably created.[4]

Exclusive service areas are not developed consistent with growth and preservation areas as identified within the *Conservation and Development Policies Plan for Connecticut 1998-2003.* As a result plans for service area expansion are not coordinated with state growth plans and policies.

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[3] Report Pursuant to Section 25-33n of the Connecticut General Statutes *Annual Report on the Water Supply Planning Process*. January 2001.

[4] Letter to SEWUCC dated January 31, 2001 from Fred Banach, Assistant Director Planning and Standards Division, Water Management Bureau, DEP.

Points of Consideration:

Establishment of Exclusive Service Area Boundaries (ESA) is often difficult and delayed due to conflicts in claimed exclusive service areas and the process for making revisions to exclusive service areas is unclear.

Providing legal counsel and liability coverage for WUCC members were issues identified during the public hearing.

Municipalities have expressed a desire to be designated as official WUCC members.

Exclusive service areas have been assigned to entities that have no demonstrated ability to satisfy future public water supply needs.

Areas for Action

? The four state agencies on the Water Planning Council should develop a reasonable timeline and cost estimates for (a) completion of the WUCC process in the three remaining Water Supply Management Areas that have not yet been convened, and (b) continuing the process of revising all WUCC plans every ten years as legislatively required.

Possible Areas to Investigate:

? Should a new comprehensive approach be created or should changes to existing statutes and the current system be made to fix problems with the WUCCs?
? Are exclusive service areas working, or are they an impediment to water allocation?
? Do WUCC's have sufficient authority/guidance?
? What needs to be done to make the revision process for exclusive service area boundaries more clear?
? How should exclusive service areas be coordinated with state growth and preservation policies?
? How can the WUCC process be accelerated to address all 7 Water Supply Management Areas?

WATER RESOURCE MANAGEMENT:

***Issue 3:* Protection and appropriate allocation of the state's water resources while providing for public water supply needs;**

Summary of Current Situation: Connecticut's drinking water sources are either surface water or shallow ground water sources (typically less than 200 feet deep) with primarily urban/suburban development and a fairly high population density and a historic reliance on manufacturing.

Land use decisions, which affect water quality, are primarily regulated at the local level. The State's Conservation and Development Plan (1998-2003), recommends a strategy to guide intensive development away from existing and potential water supply watersheds and water supply aquifers and consider the cumulative effects of incremental growth in the state, regional and local planning, programs, and regulations.[5]

Protection of the state's drinking water resources generally assigns various responsibilities and authorities between DPH and DEP. DPH has various authorities regarding watershed lands for the purpose of drinking water protection. In addition, DEP has a land acquisition program that includes acquisition of watershed lands for the purpose of protection. DEP recently acquired a large parcel of watershed property previously owned by BHC.

The Department of Public Health and the Department of Environmental Protection have formed a partnership to develop and implement the new Source Water Assessment Program (SWAP) mandated by the federal Safe Drinking Water Act. The goal of the SWAP program is to evaluate the susceptibility of all of Connecticut's public drinking water supply sources, both surface water reservoirs and ground water supply wells, to prevent potential contamination for the protection and benefit of the public water systems. Assessments will include delineation of source water protection areas, inventory of potential contaminants, and a determination of susceptibility for each water supply source. The SWAP program is being built on existing DEP and DPH protection programs such as the Well Head Protection Program, (the foundation of this program is the Aquifer Protection Act), Water Quality Standards, Water Company Land regulation, etc. DEP's aquifer protection land use regulations proposed in June 2000 are currently in the final stages of internal review.

Points of Consideration:

"The cumulative impacts of continuing development on both existing and potential water supply watersheds and Aquifer Protection Areas can result in deterioration in water quality, need for additional treatment, abandonment or the preemption of a site."[6]

The protection of public drinking water quality and associated lands is divided between several agencies.

Regulations mandated by the Aquifer Protection Act of 1989 to regulate high-risk activities in aquifer protection areas have not been adopted.

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[5] *Conservation and Development Policies Plan for Connecticut 1998-2002*. OPM.

[6] *Conservation and Development Policies Plan for Connecticut 1998-2002*. OPM.

Possible Areas to Investigate:

Evaluate protection by examining separately the strengths and weaknesses of each component of protection:

? Acquisition and ownership of land by utilities and government open space ownership,
? Management of infrastructure to steer development away from watersheds,
? Regulation of land uses and wastewater discharges by towns and by state programs including the aquifer protection program and its possible land use application to surface waters,
? Technical assistance and public awareness adequacy as measured by newly emerging Source Water Assessment Program (SWAP) measure of susceptibility and risk,
? Watershed land use monitoring and enforcement regarding violations through improved coordination among utility, government, and private organizations,
? General security issues.

***Issue 4:* The adequacy and quality of the state's drinking water supplies to meet current and future needs;**

Summary of Current Situation:

Adequacy. To date the evaluation of the adequacy of water supplies has been either piecemeal, i.e. safe yield estimations and future supply needs identified in the 81 plans of the larger water utilities and the 4 out of 7 completed areawide plans, or anecdotal with various other sources relied upon by the Conservation and Development Policies Plan. These data need to be aggregated and assessed and omissions noted in order to formulate a statewide picture.

Quality. According to reports by the Department of Public Health, in 1999, three bedrock public water supply systems were found to contain organic chemicals above action levels, and in 2000, two more public water supply systems were added to that list. "The large increase in the number of MCL violations from calendar year 1999 to 2000 is in large part due to the Water Supply Section's efforts to identify and regulate transient non-community public water systems in the past year." At present, one hundred sixty eight (168) public water systems in the State have organic chemicals present at concentrations below legally enforceable standards, or for which no legally enforceable standard exists, and fifty three (53) public drinking water suppliers are currently treating their water to remove organic chemical contaminants. Also, each year during the period between 1996 and 2000, thousands of non-transportation related chemical releases were reported to the Department of Environmental Protection Oil and Chemical Spill Unit.

"While new sources of water supply will be needed in the future, potential sources are not always located where demand is anticipated and new-large scale sources are limited due to potential impact from development." [7]

[7] *Conservation and Development Policies Plan for Connecticut 1998-2002*. OPM.

Points of Consideration:

Statewide adequacy of drinking water supplies to meet all public water supply needs now and into the future has not been comprehensively evaluated. WUCC plans have been completed in only 4 of 7 public water supply management areas.

Standards established in accordance with the Federal Safe Drinking Water Act (SDWA) to protect human health have caused and will continue to cause water utilities to spend significant monies to upgrade treatment levels.

While major pollution control laws enacted in the 1970s and 1980s have resulted in much improved management of hazardous materials, continued efforts are necessary to protect Connecticut's public supply wells.

Possible Areas to Investigate:

Identify a mechanism to determine:

? Is there sufficient class AA and GAA supplies available to meet the long-range drinking water needs of the state, where and when it is needed?
? Where are shortfalls?
? What are long range implications of water company consolidation on supply adequacy and quality?
? Are there sufficient supplies available to meet non-potable water needs such as cooling water, industrial processes, and irrigation? How much AA and GAA water is required for non-potable water needs?
? Are there benefits to be achieved through better utilization of drinking water supplies?
? The appropriate uses of non-potable water.
? The provision of regional water-supply interconnections where appropriate.
? The provision of upgrading Class B watercourses to Class A watercourses.

Issue 6: The status of current withdrawals, projected withdrawals; river flows and the future needs of water users;

Summary of Current Situation: It is critical for the state to get a handle on current withdrawals. Presently, water data is scattered among many different state agencies and bureaus throughout state government. These data are collected for specific purposes by numerous agencies but, combined, they comprise a considerable yet incomplete share of data necessary for rational water management decisions.

Furthermore, through the registration process established by the Water Diversion Policy Act, the legislature authorized registered diverters to continue to use water at any time consistent with and up to the full capacity of their registration with no regulatory review of environmental affects. Registered Diversions represent the majority of water withdrawals in the state and they are exempt from regulation.[8]

[8] *Report to the General Assembly on State Water Allocation Policies Pursuant to Public Act 98-224*. January 2000.

Points of Consideration:

Quantity of water withdrawals in the state is not known.

The current diversion registration process makes it difficult for DEP to adequately assess the water quantity available for use by other water users who apply for a permit.

The current number of stream gaging stations in the state is not adequate to gather the data necessary to properly evaluate stream flow conditions statewide.

Possible Areas to Investigate:

? How do we determine the data necessary and required to properly assess water resources withdrawal status and river flows?
? How should the state collect, develop, evaluate, manage and disseminate water resource data? What future legislative authorities are needed?
? What changes, if any, should be made to the current diversion registration process? Should legislative authority be enacted to prevent or stop a registered diversion from impairing the chemical, physical or biological integrity of the state's rivers and streams, or require a registered diversion to avoid wasting water by metering, implementing leak detection and repair, or other basic conservation measures? Should legislative authority be created to retire unused or defunct registrations, to avoid complicating the process of issuing new diversion permits? What strategies or mechanisms should be used to address a registrant that is causing substantial or avoidable damage to water resources?
? Should there be a requirement for registered diverters to tell how much water they are diverting and how much they intend to divert in the future?
? Some future needs of water users can be determined by state government, e.g. waste assimilation needs, and also information can be gleaned from regulated utilities. Other needs will be harder to ascertain.

Issue 9: The streamlining of the water diversion permit process;

Summary of Current Situation: In response to Public Act 98-224, the DEP submitted in January 2000 its Report to the General Assembly on State Water Allocation Policies Pursuant to Public Act 98-224. As required by the Public Act the report developed (1) an inventory of diversion registrations, and (2) a report on state allocation policies which discussed the adequacy of state water allocation policies in protecting and preserving the integrity of water resources while providing for public drinking water needs and proposed a methodology for allocating water for other uses when consistent with protection of resources.

Within the Report to the General Assembly on State Water Allocation Policies Pursuant to Public Act 98-224, DEP requested statutory revisions to modify the general permit authorization to increase flexibility and create a three-tiered approach similar to the general permit statutes administered by other DEP programs. The DEP also proposed a statutory authorization to perform basin-wide studies of water use, including permitted, registered, and unauthorized diversions. This would assist the DEP in addressing watershed flow and allocation issues and will assist both the DEP and local governments in determining how much water in a watershed remains for new diversions an would be a baseline for setting priorities. And the DEP recommended that the Diversion Act be amended to allow the establishment of a procedure (to include an administrative hearing) for closing a watershed to additional consumptive withdrawals, based upon the results of a comprehensive basin study. This would protect over-allocated watersheds from further pressures by directing diversion applicants to other areas and avoid un-necessary expense and delays by applicants.

Point of Consideration:

There is a perceived lack of reliability and predictability in the diversion permit process by applicants.

Possible Areas to Investigate:

? Given existing resources, what is the best way to address applicant concerns (e.g. technical outreach, communication, and clarity of statutory mandates, etc)?
? What types of data and information or state standards/policies are necessary to provide better water resource direction to applicants and coordination among state agencies?
? What type of up front resource evaluations is needed to resolve environmental conflicts prior to the permitting stage?
? What mechanisms and strategies have been effectively utilized by other permitting programs? Are there innovative streamlining techniques used by other states?
? What sort of basin planning is necessary to streamline permitting decisions?
? What other streamlining concepts would stakeholder groups like to have considered?

Point of Consideration:

The current legislative authorization for general permits administered by the Inland Water Resources Division (IWRD) does not provide the flexibility or administrative options consistent with other general permit programs within DEP.

Areas for Action

The WPC will review & make subsequent recommendations for proposed legislative changes.

? **Legislative Proposal:** Propose legislation to streamline general permits administered by DEP IWRD. This will create additional flexibility and tools for DEP and reduce costs and uncertainty for applicants who may now qualify for general permits.

Point of Consideration:

Minor water supply facility changes can not be made without a costly and uncertain permit process.

Areas for Action

The WPC will review & make subsequent recommendations for proposed legislative changes.

Legislative Proposal: Propose legislation to allow minor water facility changes to be made under the authority of a general permit. Such minor intake changes to registered facilities would be addressed via development of a general permit requiring only a simple notification filing. Minor facility changes may include, altering the site or elevation of an intake valve or structure which was properly registered for water quality purposes where no diversion quantity increase results providing diversion is operated consistent with prior registration.

Point of Consideration:

In-adequate diversion permit staffing and lack of program funding.

Possible Areas to Investigate:

? What are reasonable timeframes for reviews and decisions pursuant to the water diversion application process?
? What level of staffing is needed to provide for desired turn around times?
? How should such staff resources be funded to maintain a viable and self-sustaining water resources planning function in addition to adequate permit processing and compliance functions?

Point of Consideration:

Improper or illegal water diversion can adversely affect the environment and restrict legitimate users from further diversion opportunities.

Possible Areas to Investigate:

? What statutory authorities are needed to request that information be furnished relating to suspected violations of the Water Diversion Policy Act, including installation and maintenance of equipment to record water withdrawals where necessary?
? What staffing levels are required to perform permit compliance monitoring and to investigate unauthorized water diversions?
? What other tools for addressing unregistered, unpermitted historical diversions should be considered?

Point of Consideration:

There is no procedure under the Water Diversion Policy Act to review, modify, or retire unused or inactive registrations filed in 1983.

Possible Areas to Investigate:

? Could a registration renewal process be effective in obtaining accurate information on registered diversions? How could defunct or abandoned diversions be retired?

<u>Issue 10:</u> Coordination between the DEP, DPH and DPUC in review of applications for water diversion;

<u>Summary of Current Situation</u>: "The Diversion Act does not contain regulatory authority for prioritizing water among competing users, or for reserving a particular amount for specific future needs, or the environment."[9]

"In addition, some of the problems with the diversion program are symptoms of larger problems concerning comprehensive water resource planning. The State's Water Supply Planning Process (CGS §25-32d) requires individual water utilities to plan for existing and future water supply needs for their customers. The focus of this planning is the water supply system, not impacts on the resource or other competing water uses." [10] The Water Utility Coordinating Committee (WUCC) process also focuses on the water supply systems and water resources to meet their future needs and does not address the impacts on the resource or other competing uses.

There is an information gap in the water supply planning process and the Diversion Permitting Process. Environmental impacts and conservation measures are not taken into consideration early on in the existing water supply/resource planning process. Environmental impact assessments are not done until long after the planning process is over and the water utility comes in for a diversion permit**.** The data necessary to appropriately comment on environmental impacts and resource concerns is not necessarily collected or required for the water supply plan.

"Finally, the water supply planning process applies only to the larger public water suppliers. There is no comparable process for other users. A planning process to consider the future requirements of other consumptive water users is needed."[11]

The application process for consumptive diversions has been a source of frustration for DEP, the regulated community and the public. Often applications take a significant amount of time due to public intervention and adjudicatory hearing processes. Often the application process is the first time the public has been informed about a project and given an opportunity to comment. Means of incorporating public input and concerns upfront during planning stages should be considered.

<u>Point of Consideration:</u>

The Water Diversion Policy Act does not prioritize among competing users of water, or have provisions for reserving a particular amount for specific future needs.

Some forum for public participation before an applicant comes in for a diversion permit must be created to minimize public hearings for contested cases. Typically, public involvement happens late in the planning process which can create a contentious situation for an applicant who has already made a significant investment.

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[9] *Report to the General Assembly on State Water Allocation Policies Pursuant to Public Act 98-224*. January 2000.
[10] Ibid
[11] Ibid

Possible Areas to Investigate:

? Should the State of Connecticut establish by law or by regulation, guidelines for prioritizing the use of water resources? A statewide priority setting process may likely be controversial and the results too simplistic to be the basis for meaningful decisions in real water allocation situations. However, priority-setting guidelines may be considered as potential management tools in areas of insufficient supply.

? Should the State of Connecticut establish a water supply reservation system for preferential access when supplies are inadequate to meet all demands?

? Should priorities be set for each of the basins?

? How would priority-setting change during emergencies or times of drought?

? The diversion act requires that diversions only be permitted when found to be necessary. How should the reasonable use of the state's water resources be evaluated?

? What should the priority or access to high-quality protected Class AA supplies be for non-potable uses?

? How can Connecticut's existing laws and policies concerning water supply, water management and water allocation be modified to work in concert and fill existing gaps?

? Should the state require an early-warning system to alert a potential applicant to potential issues and problems and obtain up-front input from the public and municipalities?

? Should water utility supply plans be modified in order to require an analysis of environmental impacts of water supply sources that would be needed in the next five years, so that a clearer picture is made available to the water utilities before they apply for a diversion permit? The idea would be to better integrate planning with the permitting process.

TECHNICAL MANAGEMENT

Issue 5: An inventory of land and land use by water companies;

Summary of Current Situation: DPH regulates the sale of water company owned lands. Water Companies must apply for DPH for approval to sell certain watershed parcels of property. This control is applied to watersheds for reservoirs and for water systems having identified ground water recharge areas. DPH also has authority to permit "changes of use" on water company owned lands. DPH also has authority to permit or deny recreational activities on such lands.

A land inventory was performed as part of the 1977 Report of the Connecticut Council on Water Company Lands. It did not evaluate water company lands classification or land use, either existing or zoned. Information on lands owned by water companies is partially contained in the water supply plans. However, these plans and the resultant information are not collected for systems serving under 1000 people. In addition approximately seventy five percent of watershed lands are not owned by water companies.

Point of Consideration:

A comprehensive and up-to-date inventory of land and land-use by water companies does not exist.

Possible Areas to Investigate:

? What are the primary uses of the inventory and how could it influence other issues under consideration by the Water Planning Council?
? Should an inventory of all watershed land & land use, not just land owned & used by water companies be undertaken?
? How should inventory data of water company land holdings and land-uses be tracked over time?
? How should inventory information be collected, stored and made available to the public?
? What other land use inventories currently exist that can be used to provide a more complete picture of land uses on watershed properties? For example: Aquifer Protection Land Use Inventories, and SWAP inventories.

***Issue 7*: Methods for measurement and estimations of natural flows in Connecticut waterways in order to determine standards for stream flows that will protect the ecology of the state's rivers and streams;**

Summary of Current Situation: Instream flow is currently approached in Connecticut in a fragmented way through the Connecticut Environmental Policy Act,[12] the Connecticut Environmental Protection Act,[13] Riparian Rights Doctrine, Minimum Streamflow Regulations, Clean Water Act, Designated Uses under Water Quality Standards & Criteria, 401 Water Quality Certifications, and the Water Diversion Policy Act and Case Law. DEP Minimum Flow Regulations apply only to streams stocked by DEP and have no ecological basis for standards selected. As noted by the *Conservation and Development Policies Plan for Connecticut 1998-2003*, "Beyond clean water, the health and vitality of Connecticut's watercourses are dictated by the quantity of water flowing in their banks. The over allocation of water has depleted the health of streams in many watersheds. Restoring stream flow and accessing new, replacement water supplies will be a critical component in ensuring the health of the state's watercourses."

Point of Consideration:

A consistent way to determine how much water is needed in a stream to preserve and protect aquatic life needs to be established for water resources in Connecticut.

In some drainage basins over allocation is a major concern.

The relationship between low flow situations, water diversion and designated surface water uses within individual watersheds is not fully known.

Possible Areas to Investigate:

? What reasonable instream flows can be achieved, while still ensuring adequate water available to meet water supply needs?
? Does Connecticut in its uniqueness need its own flow standard, rather than relying on that of the US Fish and Wildlife Service standard?
? What stream flow standards are needed to protect the chemical, physical and biological integrity of the state's rivers and streams?
? Should one standard be applied to every watershed basin, or should there be a more customized approach, such as developing a streamflow method that develops a flow standard unique to each basin?
? What level of in-stream flow is necessary to safeguard the environment and preserve water quality?
? How would an instream flow standard specific to Connecticut be applied and used in decision making?
? Explain extent that over allocation is a statewide problem.
? In cases where diversions exceed natural base flow, what steps can be taken to ensure that aquatic integrity is maintained?
? What legislative or other mechanisms are needed to provide future protections with the goal of maintaining natural base flow?
? Use of clean stormwater for groundwater recharge.

[12] Section 22a-1a CGS. Declaration of policy:Coordination of state plans and programs. Requires state agencies that propose actions to prepare documents evaluating impacts.
[13] Section 22a-14 through 20 CGS. Environmental Protection Act. Gives any person the ability to intervene against actions by anyone in order to protect the air, water, and other natural resources from un-reasonable pollution, impairment, or destruction.

<u>Issue 8</u>: The status of river flows and available data for measuring river flows;

<u>Summary of Current Situation</u>: Funding of stream gages has deteriorated over the years making it impossible to gather comprehensive or accurate data on the status of river flows. Currently additional funding from the legislature during FY01 has only stemmed the loss of essential stream gaging stations.

<u>Point of Consideration:</u>

Essential scientific information necessary to engage in meaningful water use management and planning is often incomplete.

<u>Possible Areas to Investigate:</u>

? What would a strategic stream gaging network for long range water resources planning purposes look like? How many gaging stations are needed ideally? What types of additional data, if any, should be collected?

? What information related to applied watershed hydrology, environmental monitoring, assessment of water resources, and identification of the causes of water resource degradation should be undertaken?

? What fiscal and staff resources are needed?

? How can various federal and state agencies work synergistically to provide better science for water allocation issues? How can more federal assistance be employed for stream gaging stations? Also, how can the processes be changed so that a drop in federal funding does not automatically mean a drop in the number of stream gaging stations? How can this be addressed on the state and federal level? Do we need a national stream gaging station coalition?

Programmatic and Process Timeline for Water Planning
Council Report to General Assembly

1. October 22, 2001 – Council holds a public meeting and informational hearing.

2. December 19, 2001 – Council holds a public technical meeting to review and discuss the proposed report to the General Assembly.

3. January 2002 – Council holds a public technical meeting to review the technical staff's analysis and recommendations on written comments received from stakeholders. The Council will discuss, amend, and consider adopting the proposed report to the General Assembly, including the final structure of the committees. Opportunity provided for stakeholders to sign up for the committees established by the Water Planning Council**.**

4. January 2002 – Status report to three Committees of General Assembly by Council.

5. February 2002 – Committees convened and define scopes of study and begin assessment and analysis.

6. April 2002 – Council meets – status reports by committees.

7. June 2002 - Council meets – committees present progress reports to WPC and get feedback from Council.

8. September 2002 – Council meets – committees present preliminary reports to WPC and get reaction from Council.

9. October 2002 – Draft committee reports made available to public, Council holds public hearing, and receives public comment on committees' reports.

10. November 2002 – Council meets –committees make final revisions and report to WPC.

11. December 2002 – Council develops recommendations and prepares final report to three Committees of General Assembly.

12. 1/1/03 – Report given to General Assembly regarding findings and proposed legislative changes.

Committees – Format and Procedures

1. Each committee will be chaired by either a member of WPC or a technical person from one of the four agencies (up to WPC members to decide how to proceed with this).

2. Each committee will have at least one or more technical persons from the four agencies as members.

3. Any representative of any party defined in Public Act No. 01-177 may become a member of any one or more committees.

4. The chair of each committee will be responsible for the direction of the committee, the content of any reports, and the recommendations to the WPC.

Committees of the Water Planning Council

1. Water Utility Management Committee

- ? Issue#1: The financial viability, market structure, reliability of customer service and managerial competence of water companies.
- ? Issue#2: Fair and reasonable water rates.
- ? Issue#11: The procedure for coordination of planning of public water supply systems.

2. Water Resource Management Committee

- ? Issue#3: Protection and appropriate allocation of the state's water resources, while providing for public water supply (drinking water) needs.
- ? Issue#4: The adequacy and quality of the state's drinking water supplies to meet current and future needs.
- ? Issue#6: The status of current withdrawals, projected withdrawals, river flows and future needs of water users.
- ? Issue#9: The streamlining of the water diversion permit process.
- ? Issue#10: Coordination between the DEP, DPH, and DPUC in review of applications for water diversions.

3. Technical Management Committee

- ? Issue#5: An inventory of land and land use by water companies.
- ? Issue#7: Methods for measurement and estimations of natural flows in Connecticut waterways in order to determine standards for stream flows that will protect the ecology of the state's rivers and streams.
- ? Issue#8: The status of river flows and available data for measuring river flows.