| **Recommendation** | **Tasks** | **Topic #** |
| --- | --- | --- |
| Water Data Needs  Sec 5.1 | Standardize annual reporting for permitted diversions and make electronic | 1 |
| Annually report registered water withdrawals to DEEP using an electronic format | 1 |
| Proceed with legislation that allows certain parts of water supply plans to be made available to the public, and streamline the FOIA process | 3 |
| Annually report daily transfers of water between reservoirs within reservoir systems to DEEP and DPH | 2 |
| Annually report daily withdrawals at each source in small community water systems to DPH and/or DEEP | 2 |
| Annually report weekly or monthly withdrawals in Non-Transient Non-Community water systems to DPH electronically | 2 |
| Annually report weekly or monthly withdrawals in Transient Non-Community water systems to DPH electronically | 2 |
| Establish a database of all groundwater wells in the state, public and private | 27 |
| Implement a water quality testing and reporting program for private wells with automatic reporting to DPH and local health districts | 27 |
| Implement a water volume monitoring or reporting program for private wells | 27 |
| Maintain state partnership programs with the USGS for flow and groundwater monitoring | 33 |
| Land Use Practices and Protection Related to Water  Sec 5.2.3.1 | Reaffirm support for the protection of Class I and Class II lands, as well as watershed property protected for water supply | 7 |
| Encourage the acquisition or protection of addition watershed lands | 7 |
| Continue to carefully manage water company owned lands | 7 |
| Strive for consistency with the recommendations of the State’s Green Plan | 17 |
| Avoid the construction of new sewer, gas, and oil pipelines through public water supply watersheds | 7 |
| Review the State C&D Plan to ensure that the initiatives and recommendations of each are synchronized and/or complementary | 17 |
| Help educate CT citizens about the benefits of Low-Impact Development | 14 |
| Promote groundwater protection through land management programs, and extend best practices to protect private wells | 13 |
| Encourage local governments to incorporate best management practices for water demand management, water efficiency, and water conservation into land-use decisions | 14 |
| Examine barriers in state law while implementing local development tools | 14 |
| Revise state building codes to insure wise water use in building design and development | 15 |
| Partner and establish meetings for the next two years with many different agencies and groups to be successful in integrating land-use and water planning | 14 |
| Water Quality and Quantity Management  Sec 5.2.3.2 | Evaluate effects to water quality associated with proposed water management solutions | 9,11,12 |
| Define opportunities for projects that restore and enhance existing water quality conditions | 9,11,12 |
| Define green-infrastructure approaches, and explore ways in which entities can use green infrastructure to address water quality | 10 |
| Examine ways to design and operate supply projects to advance water quality protection and enhancement |  |
| Develop a library of reuse examples and the associated water quality issues for each type of reuse | 24 |
| Determine whether stormwater is a viable additional source of non-potable supply to address out-of-stream needs | 11 |
| Address nonpoint sources through ongoing management activities | 12 |
| Identify risks of climate change as they relate to integrated water quality and quantity management | 41 |
| Explore how entities can most efficiently integrate the Clean Water Act and Safe Drinking Water Act requirements |  |
| Continue to engage in creative, solution-oriented actions |  |
| Modify existing regulations, guidance, and policy documents for new types of wastewater reuse so that revisions will protect public health and the environment | 24 |
| Continue investment in statewide monitoring that supports assessment of the quality and quantity integration goals and measures |  |
| Investigate the potential to develop water quality trading programs |  |
| Water Conservation  Sec 5.2.3.3 | Develop an education and outreach strategy that includes water conservation topics | 14 |
| Work with stakeholders to explore means of reducing outdoor water use | 15 |
| Identify opportunities for improvement of existing conservation program implementation in water conservation plans | 15 |
| Adopt policies stating water providers may conduct comprehensive, integrated water-resource planning geared toward implementing water conservation best practices. Incentives may be required. | 15 |
| Adopt policies stating that water providers may conduct water-resource planning geared toward implementing water conservation best practices for all customer classes | 15 |
| Document expected passive conservation savings and track over time | 15 |
| Evaluate the funding, technical support, and training necessary to assist water providers in improving the management of their water systems | 15,31 |
| Work with stakeholders to explore possibilities for tax-credit programs or other incentives for reducing outdoor water use | 15 |
| Provide training that supports local regulatory efforts that shape the ways in which water utilities respond to droughts | 16 |
| Determine which state agencies govern green infrastructure and green-building, identify barriers, and adapt regulations to allow for graywater, green infrastructure, on-site water recycling, etc. | 10 |
| Collaborate with landscape-related businesses to implement water efficient landscape installations and maintenance | 15 |
| Strengthen partnerships to reach water conservation goals | 15 |
| Consistency with Existing State Plans  Sec 5.2.3.4 | The recommendations in this plan should be incorporated into other state plans as they are finalized or when they are updated | 17 |
| Intersecting recommendations from the State Water Plan and the WUCC plans should be cross-checked for consistency | 17 |
| The State Water Plan should incorporate elements of the six Growth Management Principles of the State C&D Plan | 17 |
| Consider revisiting some of the principles in the previous State C&D Plan, and coordinate between the State Water Plan and where applicable, the next edition of the State C&D Plan | 17 |
| Applicable policy recommendations from the State Water Plan should be considered in the next edition of the State C&D Plan |  |
| Consider these four objectives of the Economic Development Strategy: (1) Grow the business clusters that drive CT’s economy and encourage entrepreneurial development, (2) ensure a workforce that meets the needs of the future, (3) create livable, vibrant communities, and (4) invest in infrastructure and support systems that will foster business growth | 17 |
| The Green Plan objectives should be incorporated in the State Water Plan | 17 |
| The Climate Change Preparedness Plan includes numerous strategies and recommendations related to water which should be considered in the State Water Plan | 17 |
| The State Water Plan should be considered in future updates to the CT Climate Change Preparedness Plan |  |
| The State Water Plan should contribute strategies or actions related to flooding and droughts to the Natural Hazard Mitigation Plan that is scheduled for an update in 2017-2018 | 17 |
| Some of the energy strategy recommendations in the Comprehensive Energy Strategy should be incorporated into the State Water Plan | 17 |
| The State Water Plan should contribute recommendations or policy to the Blue Plan | 17 |
| Some recreational recommendations of the Comprehensive Outdoor Recreation Plan should be incorporated into the State Water Plan to the extent that they involve water management | 17 |
| The State Water Plan should contribute recommendations to the Sustainable CT Plan | 17 |
| Drought Plan recommendations should be included in the State Water Plan | 16 |
| State Water Plan data and recommendations should be considered in updates to the DOT Strategic Long-Range Transportation Plan | 17 |
| The WPC should have an advisory or review role in many of the plans listed above | 17 |
| Monitoring for Plan Implementation  Sec 5.2.3.5 | Develop a method of assessing future decisions in the context of the Plan, its goals/requirements, and its recommendations |  |
| Develop a method to monitor and report on the implementation of the Plan’s recommendations to ensure full compliance with the 17 requirements of the statute |  |
| Update the Plan every 5 years and advise the state legislature at least two years in advance of planned updates |  |
| Explore the benefits and risks of various funding mechanisms as experienced by other states and make appropriate recommendations to the legislature |  |
| Redefine the WPC’s responsibility/authority to oversee the implementation of the Plan, direct future periodic revisions, and secure funding for associated activities |  |
| Establish or designate a standing advisory committee to assist the WPC with Plan implementation |  |
| Review, assess and as necessary, redefine the role of the WPCAG |  |
| Clearly define specific roles for each of the four WPC branches during implementation phases of the Plan, as well as future revisions |  |
| Agricultural Practices  Sec 5.2.3.6 | Evaluate the impacts to water quality associated with proposed water management solutions | 6 |
| Quantify water use by various agriculture activities to determine the current demand and use of water by differing crops, livestock, nurseries, etc. | 6 |
| Promote water policies that encourage and reward innovations that produce the most “crop per drop” | 6 |
| Identify innovative solutions through partnerships | 6 |
| Obsolete Registered Water Diversions  Sec 5.2.3.7 | Identify whether a diversion registration quantity is obsolete in whole, and if so, removing it from the record | 18 |
| Consider a means of identifying whether the quantity associated with a diversion registration is obsolete in whole or in part. |  |
| It is recommended that the upper limit on expected water use be based on future demand projections and not include unused diversions beyond those. |  |
| Outreach, Education, and Public Engagement  Sec 5.2.3.9 | Create a new outreach, education, and public engagement framework that align with CT Water Plan goals | 14 |
| Create a data-based water education plan to reach key constituencies that may not be active in the Plan development process | 14 |
| Regionalization  Sec 5.2.3.10 | There should be outreach to municipal governments when utility water supply plans are being prepared | 14 |
| The state should encourage, support, and/or incentivize inter-municipal negotiations on water sharing | 14,26 |
| Class B Water for Non-Potable Use  5.2.3.11 | Only Class A waters continue to be used for human consumption, and Class B waters remain available only for non-potable uses | 23 |
| Current and future non-potable uses of water be reviewed by individual users to determine if Class B water could be an environmentally prudent and cost-effective alternative to higher quality water | 23 |
| Provide guidelines for review of Class B water for non-potable uses | 23 |
| If there are regulatory requirements that inhibit non-potable uses of Class B waters, the WPC should explore whether these regulations should be changed or clarity can be defined | 23 |
| Data Availability, Accessibility and Accuracy  Sec 5.2.3.12 | Ongoing environmental monitoring activities related to water and/or land use should be tracked and coordinated at the state level | 5 |
| Establish a single database or portal that will serve as a repository for ongoing and future water and environmental monitoring data | 5 |
| Calculations on effects of Streamflow Regulations should be incorporated into implementation decisions for the Plan | 20 |
| Information on all new well completion reports should be entered into a database to be maintained by the Department of Consumer Protection and/or another agency | 2 |
| The Plan supports the finalization and distribution of the reporting form required by PA 04-185 | 1 |
| The Plan supports ongoing efforts to make additional planning data available from Water Supply Plans while protecting security |  |
| The Plan recommends a reasonable policy that results in phased-in requirements for reporting withdrawals from Community water systems | 2 |
| Promote reasonably accurate estimation of surface water transfers | 2 |
| Other data gaps should be identified and addressed |  |
| Coordination with WUCCs  5.2.3.13 | Consistency between the Plan and the Coordinated Water System Plans | 17 |
| Develop a method to resolve conflicts between the Plan and the Coordinated Water System Plans | 17 |
| Issues, needs, and deficiencies identified in the final water supply assessment reports that are germane to the Plan should be considered | 17 |
| Upon completion of the draft SWP, its findings and recommendations should be considered in the Integrated Reports | 17 |
| The WUCCs may become vehicles for implementation of some SWP recommendations | 17 |
| The following Pathways Forward (next steps) are offered as suggested ideas to be advanced at the discretion of the WPC based on its priorities and available resources. They do not represent recommendations in policies, laws or regulations. Unlike the policy recommendations where the intent is for the legislature to adopt the draft policies as guiding principles for future laws and regulations, these next steps are suggested opportunities specifically for the WPC. The fact that the stakeholders selected these five issues reflects their preference for developing the next steps collaboratively in the workshop and does not necessarily translate into policy priorities. | |  |
| Water Conservation (Pathway Forward)  Sec 5.3.2.1 | Identify conservation incentives that have been successful in Northeast U.S. | 15 |
| Identify case studies in CT, including possible pilot cases | 15 |
| Address residential and non-residential conservation to ensure they are fair and balanced | 15 |
| Estimate passive conservation savings potential, and explore ways to accelerate with incentives | 15 |
| Monitor water use for plan update | 1,2,15 |
| Study ongoing efforts of billing frequency and the associated administrative efforts and costs, and whether the month-to-month comparison incentivizes customers to monitor water use | 15 |
| Study and report on the role of the municipalities and regional/local entities | 15 |
| Work with utilities on outreach/education |  |
| Coordinate conservation and incentives with interconnection planning |  |
| Coordinate with “Sustainable CT” |  |
| Consider potential for State to adopt EPA Water Sense Standards |  |
| Encourage green infrastructure to reduce dependence on water for landscaping and other outdoor water needs |  |
| Coordinate conservation with land use decisions |  |
|  |  |  |
| Regionalization/ Interconnections (Pathway Forward)  Sec 5.3.2.2 | Commission the documentation of several case studies on regional water planning | 26 |
| Commission a white paper assessment of the advantages and disadvantages of having so many separate water supply systems in the state | 26 |
| Evaluate historical and potential reasons for completion of regionalization | 26 |
| Develop guidelines to determine the benefits of interconnections | 26 |
| Coordinate with existing informational sources for infrastructure capacities | 26,28 |
| DPH departments including local health department coordinate with private wells and decentralized wastewater systems |  |
| Coordinate with the State Plan of C&D to ensure compatible with other Plans |  |
| WPC could consider serving as facilitator or non-binding mediation and negation when beneficial opportunities for regionalization and/or interconnection arise |  |
| Encourage interconnections between public water systems with controls and considerations |  |
|  |  |
| Registered Water Diversions Sec  (Pathway Forward)  5.3.2.3 | Define parameters for when an impairment is occurring | 19 |
| Define the extent of the problem – where are registered diversions causing adverse environmental impacts now? | 19 |
| Build off of DEEP’s photo-documentation project | 19 |
| Conduct desktop screening analysis of registered diversions to determine degree and likelihood of significant flow impairments | 19 |
| Enlist registered diverters with high likelihood of impairment to document whether their withdrawals are causing impairments or not | 19 |
| Assess where the use of unused allocations within registered diversions could cause adverse environmental impacts through continuation of DEEP’s analysis | 19 |
| Case studies on environmental impacts | 19 |
| Monitor to enable prediction of future issues | 19 |
| Assess potential funding mechanisms for technical assistance, operational improvements, and/or capital improvements to address impacts while meeting out of stream water needs | 19 |
|  | Reach out to diversion registration holders to inquire about intent, incentives to abandon and potential to convert to emergency |  |
|  | Consider a formal process for voluntary abandonment of registrations |  |
|  | Develop a list of incentives so that individual discussions can be tailored to actual needs. |  |
|  | Summary of Action Items for WPC provided in Plan |  |
| Aging Infrastructure  (Pathway Forward)  Sec 5.3.2.4 | Define the problem related to water quantity and quality | 31 |
| Consider studies where unaccounted for water is used as a tool to compare against age of infrastructure | 31 |
| Evaluate and incorporate the needs survey as a 20-year study | 31 |
| Utility asset management plans | 31 |
| Update the report on aging infrastructure that the WPCAG previously completed | 31 |
| Add section on CWSRF and DWSRF Needs Survey information | 31 |
| Evaluate the CWSRF and DWSRF Needs Survey results as an information source for multiple types of infrastructure | 31 |
| Consider how ratepayer and WICA program could apply to municipal and regional utilities. |  |
| Economic Impacts  (Pathway Forward)  Sec 5.3.2.5 | Conduct an overarching evaluation to determine cost of implementing the Plan and its recommendations vs. the costs of NOT implementing the Plan | 30 |
| Determine whether there is a consistent way to monetize the value of water | 30 |
| Consider a “Lessons Learned” Case Study and how water related to economic competitiveness for business and residential population growth | 30 |
| Consider cataloguing information which could support economic growth more readily than others | 30 |
| Consider communicating policy recommendations and/or new projects with triple bottom line approach |  |
| Consider formulating a template such that all water-related proposals that go to the legislature have common financial analysis |  |
| The following Pathways Forward were developed by the consulting team… The fact that they are not included as high priorities is not indicative of their relative importance, but rather the stakeholders decision to focus their collective attention on other issues during the workshop. | |  |
| Funding for Implementation  Sec 5.3.2.6 | Create a list of recommended policies and projects | 29 |
| Identify agencies, departments, and committees that should be responsible for administration and/or execution of recommendations | 29 |
| Determine cost estimates for recommended projects, studies, agency staffing, etc. | 29 |
| Identify possible funding paradigms based on other states | 29 |
|  | Query agencies for ideas about allocating resources for Plan implementation |  |
|  | Form a permanent WPC Committee to address funding |  |
|  | Consider beginning with ID of agencies that should be responsible for recommendations |  |
|  | Review existing funding programs and partnerships |  |
| Future Class B Water for Non-Potable Uses  Sec 5.3.2.7 | Review current non-potable uses of water by individual types of users to determine if use of Class B water could be an environmentally prudent and cost-effective alternative for other users and/or other types of users | 23 |
| Develop Case Studies of the existing users of non-potable water to compare and consider future uses | 23 |
|  | Prepare a template for review of Class B waters for non-potable uses |  |
| Statewide  Drought Planning Sec 5.3.2.8 | Identify priorities for action items | 16 |
| Approve the State Drought Plan | 16 |
| Develop a template for interpreting statewide drought indices to local risk levels and response measures | 16 |
| Provide training that supports local regulatory efforts to enforce water conservation measures | 16 |
| Study the benefits and costs of implementation of drought period surcharges to encourage conservation during drought trigger stages | 16 |
| Wastewater and Water Reuse  Sec 5.3.2.9 | Report on UCONN reuse experience | 24 |
| Compare assimilative flow needs to ecological flow needs | 24 |
| Water Use Accounting  Sec 5.3.2.10 | Obtain data related to usage by registered diversions | 1 |
| Obtain data related to usage by water users that do not use more than 50,000 gpd or do not serve more than 1,000 people | 1,36 |
| Determine a method for estimating and updating private water usage | 2 |
| Obtain data related to unaccounted for water usage | 2 |
| Consider recommending methods to facilitate reporting of small water system usage | 2 |
| Identify a state agency to conduct estimation of private water usage for planning purposes | 1,36 |
| Request large public water systems to track unaccounted for water use on an annual basis | 2 |
| Consolidate disparate water usage data information from each agency into a single report | 5 |
| Instream Flow: Ecological Flows and Stream Flow Standards and Regulations  Sec 5.3.2.11 | Impacts of minimum stream flow regulations on safe yield and margin of safety should be incorporated into implementation decisions of the Plan | 20 |
| Assess the effects of regulatory reservoir releases in accordance with the “triple bottom line” approach | 20 |
| Better understand the actual water needs of the ecosystem and the potential flexibility in the ecological flow targets | 20 |
| Estimate the amount of basin-wide ecological flow that occurs in headwater streams to better understand the potential impacts on these sensitive areas as well as considerations for future water supply | 20 |
| Overcoming Future Challenges  Sec 5.3.2.12 | Watershed and Aquifer Protection: Review at least once every 5 years the status of small headwater streams that may be at risk due to loss of automatic protections afforded by status as a public water supply |  |
| Watershed and Aquifer Protection: Determine whether there is a need to incentivize additional aquifer protections |  |
| Emerging Contaminants: Develop a testing program for well fields close to Class B river reaches to determine if there are consistent readings and/or trends for emerging contaminants |  |
| Climate Change: Sponsor forums or workshops that discuss the relative risk of climate change impacts |  |
| Climate Change: Include technical results and results from other studies in the State Water Plan to formulate adaptation guidelines |  |
| Climate Change: Encourage localized drought response plans, green infrastructure, and climate trend tracking at the state level |  |
| Private Wells  Sec 5.3.2.14 | Use GIS-based tools to refine figures on private well data | 2 |
| Information on drillers’ logs should be entered into a database to be maintained by the Department of Consumer Protection and/or another agency | 2,27 |
| Previous attempts to catalog private well records should be obtained and used as a starting point or example | 2,27 |
| A statewide pilot program could be tested initially to gauge methods of gathering existing water quality data that are already collected in connection with real estate transactions and other existing testing program | 2,07 |
| Role and Authority of the WPC  Sec 5.5.1 | Prioritize the basins in the state that would most benefit from further evaluation based on the information contained within the Plan |  |
| Consider hiring a “Water Planning Chief”, who would be tasked specifically with oversight and coordination of Plan Implementation |  |
| Commission volunteer basin committees as needed |  |
| Consider adding a 5th non-regulatory member to the WPC to avoid the potential for tie votes when making decisions |  |
| Near Term Goals  Sec 6.8.2 | Prioritize topics and tasks for initial implementation |  |
| Hire a Water Plan Chief | 32 |
| Begin outreach program | 14 |
| Identify basins for simulation modeling | 21 |
| Partner with existing watershed associations and/or establish volunteer River Basin Commissions | 22 |
| Formulate plans for centralized data portal | 5 |
| Seek funding | 29 |
| Review the Plan recommendations to determine if and when to propose specific legislation |  |
| 5-Year Goals  Sec 6.8.3 | Study Climate change further and with more specificity | 41 |
| Additional Topics offered by readers during the public comment period for WPC Discussion  Sec 6.8.6 | Water as a public trust | 34 |
| Discussions on large water uses, including water bottling | 35 |
| Health equity and health equity initiatives | 36 |
| Environmental equity | 37 |
| Harmonizing energy priorities with the stewardship of water | 39 |
| Transparency and local involvement in decisions on how water is used and where it can be transferred | 36 |
| Emerging and re-emerging contaminants | 40 |
| Stormwater management | 11 |
| Green infrastructure and low-impact development, specifically how these can be incentivized | 9,10 |
| Dam removal | 42 |
| Biosolids and other wastewater related topics | 24 |
| Water quality in Long Island Sound | 43 |
| Decentralized sewage systems | 25 |
| climate change, specifically inland flooding potential (not covered by coastal studies), and impacts on future drought risks | 41 |
| Additional work on agricultural and industrial water needs, uses, and practices | 6 |