

**State of Connecticut, Department of Energy and Environmental Protection  
Remediation Division  
ENVIRONMENTAL ASSESSMENT CHECKLIST**

<b>Date:</b>	January 11, 2018	<b>Staff Contact:</b>	Shannon Pociu
<b>Applicant PWS Name:</b>	Connecticut Water Company	<b>Towns:</b>	Haddam, Chester
<b>PWSID#:</b>	CT0261031		
<b>Project Name:</b>	Tylerville (Haddam) Water Main Extension		
<b>Funding Sources:</b>	Potable Water Program Bond Funds; State Superfund Bond Funds		
<b>State Funds:</b>	\$7.3 million (\$2.1 million Potable Water Bond Funds; \$5.2 million State Superfund Bond Funds)		

**This assessment is being conducted in conformance to the generic Environmental Classification Document for Connecticut state agencies to determine Connecticut Environmental Policy Act (CEPA) obligations.**

**Project Description:** The Town of Haddam is proposing to extend the Connecticut Water Company's public water main from its current terminus on Route 154 at Denlar Drive in Chester, north approximately 2 miles to Tylerville Center in Haddam. The water main would provide a long-term source of potable water to 18 residential properties with drinking water wells polluted above the Department of Public Health's (DPH's) Drinking Water Action Levels and also serve additional properties whose wells are threatened by the contamination. The Department of Energy and Environmental Protection (DEEP) has studied the groundwater pollution in Tylerville and identified contaminated and at-risk properties in the report entitled "Tylerville Center Water Supply Alternatives Evaluation – Final," dated October 2017, prepared by AECOM. DEEP and DPH have determined that the 8-inch minimum pipe size is the recommended alternative to provide a reliable, long-term source of potable water to the area based on the extent and persistence of the pollutants and the resistance of one pollutant to carbon treatment.

The section of the proposed water main extension on Route 154 between Denlar Drive in Chester and the vicinity of 1640 Saybrook Road in Haddam will be treated as a transmission main, as this area lies outside of the Proposed Water Service Area in Tylerville where polluted and threatened wells are located. Only properties along this section of Route 154 with a public health need identified by local or state health or environmental officials would be permitted to connect to the transmission main.

Fire hydrants may be installed along the water main as determined by the towns of Haddam and Chester in consultation with the Connecticut Water Company and would not be funded by the State.

DEEP received a potable water bond fund allocation of \$2.1 million for the project in 2011 for the Town of Haddam. DEEP will be requesting an allotment of approximately \$5.2 million in State Superfund bond funds for the balance of the project cost.

**Regulations of Connecticut State Agencies (RCSA) Section 22a-1a-3 Determination of Environmental Significance (direct/indirect)**

1. Impact on air and water quality or on ambient noise levels
  - a. Air Quality – The proposed project is not expected to cause significant adverse air quality effects. Limited fugitive dust emissions can occur during materials handling, storage, and movement of equipment during construction. Fugitive dust is most likely to be a problem during periods of intense activity and windy or dry weather conditions. Potential air quality impacts from fugitive dust will be addressed through the use of best management practices, which may include covering stockpiled materials, limiting dust-producing construction activities during high wind conditions, and using water trucks to minimize dust as needed.
  - b. Water Quality – The proposed project is not expected to cause significant adverse water quality effects to the adjacent watercourses. The proposed project will provide the minimum separation distance between public water supply and septic systems. No construction activities are proposed within any surface waterbody or wetland. Construction period erosion and sediment control measures will comply with the *Connecticut Guidelines for Erosion and Sediment Control*, as amended.
  - c. Ambient Noise Levels – The proposed project will not cause long-term noise impacts to the project area. Construction noise will be a temporary impact.
2. Impact on a public water supply or serious effects on groundwater, flooding, erosion, or sedimentation
  - a. Public Water Supply – The proposed project is not located in a public drinking water source water area. Connecticut Water Company has adequate water quantity in its Chester System to supply drinking water to the proposed water supply area in Tylerville.
  - b. Groundwater – The proposed project is not expected to cause significant impacts to neighboring groundwater. Groundwater within the proposed water service area in Tylerville is currently polluted, necessitating this project. After drinking water wells are abandoned when buildings are connected to the proposed water main, the groundwater elevation may rise slightly based on cessation of water withdrawal, but this is not expected to cause any adverse effects.
  - c. Aquifer Protection – The project area is not located within an Aquifer Protection Area.
  - d. Flooding – Portions of the proposed water service area on Bridge Road east of the Valley Railroad, along Little Meadow Road, and along Saybrook Road in the vicinity of Clark Creek and the Route 82 connector are within the 100-year flood zone on the Town of Haddam's Flood Insurance Rate Map. If any State-funded project elements are within the 100-year flood zone, they must be certified as being in compliance with flood and storm water management standards specified in section 25-68d of the Connecticut General Statutes (CGS) and section 25-68h-1 through 25-68h-3 of the Regulations of Connecticut

State Agencies (RCSA) and receive approval from the Department of Energy and Environmental Protection (DEEP).

The flood management certification requirement will be discussed with the Town of Haddam and Connecticut Water Company. The Town will submit the completed documentation form for flood management certification to DEEP, and approval will be obtained prior to starting the project construction. Because no structures other than underground pipe and hydrants will be installed and there will be no increase in impervious area, no alterations to the floodplain are expected.

- e. Coastal Zone – Although the project area is located within the Coastal Boundary, no impact upon Coastal Resources is anticipated because the project involves construction along existing roadways.
  - f. Erosion or Sedimentation – Stormwater discharges from construction sites where one or more acres are to be disturbed, regardless of project phasing, require an NPDES permit from the DEEP Permitting & Enforcement Division. The General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities (DEEP-WPED-GP-015) will cover these discharges and will require appropriate sedimentation and erosion control measures.
3. Effect on natural land resources and formations, including coastal and inland wetlands, and the maintenance of in-stream flows – No significant impact expected. The portions of the proposed water service area on Bridge Road east of the Valley Railroad and along Little Meadow Road are mapped as inland wetland soils. However, because construction is planned to occur within existing roads and rights-of-way, direct impacts to inland wetlands are not anticipated. No structures will be installed in wetland areas. Erosion and sedimentation controls will be maintained, and silt fence, silt sacks, and hay bales will be installed where deemed necessary along the water main extension. Erosion and sedimentation control measures will comply with the *Connecticut Guidelines for Erosion and Sediment Control*, as amended. There are wetlands adjacent to the project area; however, there are no anticipated direct/indirect impacts to federally-recognized and state jurisdictional wetlands since work will be done outside of existing wetland areas.

Any inland wetlands or watercourses at the site are regulated by the local inland wetlands agency, pursuant to section 22a-42 of the CGS. Many local agencies have established setback or buffer areas and require review and approval of activities within these upland areas adjacent to wetlands or watercourses. The local agency should be contacted regarding permit requirements.

4. Disruption or alteration of an historic, archeological, cultural or recreational building, object, district, site or surroundings – Because the proposed water main extension will run through Eagle Landing State Park along Little Meadow Road, a Land Management Review Request will be needed from DEEP to obtain permission and property rights (temporary or permanent easement) to install, operate, and maintain the system. The water main extension would be located within the existing paved access road at the state park and is not anticipated to cause any adverse impacts to recreational resources.

The proposed project is not anticipated to cause adverse impacts to any other historic, archaeological, cultural, or recreational resources.

5. Effect on natural communities and upon critical species of animal or plant and their habitats, interference with the movement of any resident or migratory fish or wildlife species – The June 2107 Natural Diversity Database (NDDB) map for Haddam, maintained by DEEP, shows State and Federal Listed Species and Significant Natural Communities areas located in the vicinity of the proposed water main project. Consequently, a request for further review of the proposed project was made. According to NDDB Determination letter, dated January 10, 2018, the State Special Concern plant *Optunia humifusa* (eastern prickly pear cactus) has been identified on the Clark Creek Wildlife Management Area parcel, located approximately 250 feet west of the proposed water main extension route on Little Meadow Road. Because of the distance and separation from the proposed water main route by the Valley Railroad right-of-way, it is unlikely that the eastern prickly pear cactus would be impacted by the proposed water main construction activities. Nevertheless, the plant will be marked in the field prior to construction to avoid disturbance, and photographs and locational maps will be provided to DEEP Wildlife Division as part of the NDDB Review. It is noted that State Threatened *Haliaeetus leucocephalus* (bald eagles) utilize the Connecticut River and are known to nest on the east bank of the Connecticut River, located approximately 1,200 to 2,000 feet away from the proposed project. Care will be taken to maintain 600 feet from any new bald eagle nesting sites during construction.
6. Use of pesticides, toxic or hazardous materials or any other substance in such quantities as to create extensive detrimental environmental impact – No significant impact expected.
7. Substantial aesthetic or visual effects – Due to the nature and timeframe of the proposed project, substantial aesthetic or visual impacts in the area are not expected. The project itself will consist of underground utility pipes which will not be visible when the construction is completed. The project construction is expected to be completed in a short period of time.
8. Inconsistency with the written and/or mapped policies of the statewide Plan of Conservation and Development (C&D) and such other plans and policies developed or coordinated by the Office of Policy and Management or other agency – The *Conservation and Development Policies: The Plan for Connecticut, 2013-2018* (C&D Plan) provides the policy and planning framework for administrative and programmatic actions and capital and operation investment decisions for state government. The project is generally consistent with the Growth Management Principles identified in the C&D Plan, specifically Principles #1, #4, and #6.

The proposed water main extension project is consistent with Growth Management Principle #1, to redevelop or revitalize regional centers and areas with currently planned physical infrastructure. According to correspondence from DPH dated October 12, 2012, water service to Haddam “is consistent with the Connecticut Water Company’s Shoreline Region individual water supply plan and with the South Central Connecticut Water Utility Coordinating Committee (WUCC) plan dated April 1990.” Connecticut Water Company confirmed in correspondence dated April 26, 2017 that water service to Tylerville was included in Connecticut Water Company’s 2016 water supply plan update. Further, the proposed water main size has been

planned at an appropriate scale and density to serve the area of Tylerville identified as having polluted and threatened wells.

The proposed project is also consistent with Growth Management Principle #4, through *“support[ing] the introduction of expansion of public water only when there is a demonstrated environmental, public health, public safety, economic, social or general welfare concern, and then introduce[ing] such services only at a scale which responds to the existing need without serving as an attraction to more extensive development.”* The proposed project is in response to a demonstrated existing environmental and public health need, specifically to provide potable water to the Tylerville area where widespread, groundwater contamination has persisted for more than 30 years, and for which point of entry treatment systems are not capable of adequately and reliably removing all contaminants found in drinking water wells to safe levels. Two different water main sizes were evaluated to provide potable water to Tylerville – an 8-inch diameter main and a 12-inch diameter main. Although some public comments supported extension of the larger, 12-inch pipe size to accommodate future growth, ultimately, DEEP, DPH, and the Town of Haddam selected the smaller, 8-inch pipe size as the recommended alternative because it is the minimum water main size with adequate capacity to provide public water to the affected community, but will not accommodate future growth or development beyond Tylerville Center. It should be noted that some growth in Tylerville is consistent with both the Haddam Plan of Conservation and Development and the State C&D Plan, which identifies Tylerville Village as a Village Priority Funding Area (PFA). Further, the proposed water service area is limited to connecting to public water those properties in Tylerville with wells polluted above Drinking Water Action Levels established by DPH and those with wells that are threatened by the pollution. The section of the proposed water main along Route 154 between Denlar Drive in Chester and the proposed water service area in Tylerville will be designated as a transmission main, which means that adjacent properties will be prevented from connecting to the transmission main unless a public health need is documented by state or local health or environmental agencies.

Finally, the proposed project is consistent with Growth Management Principle #6 since the project was planned across multiple levels of government. Both the Haddam and Chester adopted Plans of Conservation & Development anticipate water service to Tylerville. DEEP has coordinated with state agencies including DPH and OPM, the Town of Haddam, local health departments including the Chatham Health District and Connecticut River Area Health District, and Haddam’s legislative delegation since the early stages of project development beginning in 2012. In 2017, DEEP conducted outreach to the Town of Chester and sought comments from State agencies on the proposed project pursuant to Connecticut Environmental Policy Act (CEPA) (CGS Sections 22a-1 through 22a-1h).

In addition to evaluating the proposed project relative to the Growth Management Principles in C&D Plan, the project location was evaluated relative to the C&D Plan’s accompanying Locational Guide Map (LGM). The majority of the proposed public water service area in Haddam is located within a Village Priority Funding Area (PFA, Tylerville Center) where the polluted and threatened wells are located. Public water service is also proposed along Little Meadow Road to address polluted wells there, including those wells located at Eagle Landing State Park and residential properties to the south, which are designated as protected land and

conservation areas on the LGM, respectively. The fact that the majority of the proposed water service area is within a PFA is not necessarily indicative that it is consistent with the statewide C&D Plan. However, consistency is demonstrated by the proposed project's general conformance with the C&D Plan's Growth Management Principles.

The proposed water main extension route from Chester to Tylerville lies outside of the Tylerville Village PFA. Land along the Route 154 corridor in Chester and Haddam is depicted as undesignated, protected, or conservation land on the LGM. In order to maintain consistency with the C&D Plan and LGM, the length of water main extending along Route 154 from Denlar Drive in Chester to the Proposed Water Service Area in the Tylerville section of Haddam will be designated a transmission main, consistent with comments submitted by OPM to DEEP dated July 10, 2017. Any property along this section of the water main would be authorized to connect to the water main only if a local health department, DPH, and/or DEEP determines that the property must be connected to correct a public health problem.

9. Disruption or division of an established community or inconsistency with adopted municipal or regional plans – No significant impact expected. Plans of Conservation and Development (POCDs) for the Towns of Chester and Haddam were reviewed. The proposed water main extension project is consistent with the POCD for each town.
10. Displacement or addition of substantial numbers of people – No significant impact expected. The water main has been sized to serve existing zoning within the proposed water service area in Tylerville Center, a Village Priority Funding Area.
11. Substantial increase in congestion (traffic, recreational, other) – The proposed project is not expected to create substantial traffic congestion in the area. The Town will provide personnel to maintain traffic rules and public safety in the area during construction.
12. A substantial increase in the type or rate of energy use as a direct or indirect result of the action – No significant impact expected.
13. The creation of a hazard to human health or safety – The project is not expected to create significant public hazard and safety. The project will improve public health through eliminating the use of polluted and threatened water supply wells in Tylerville.
14. Any other substantial impact on natural, cultural, recreational or scenic resources – No significant impact expected. A water service connection is proposed for installation at Eagle Landing State Park to replace the existing polluted well.

### **Conclusions:**

DEEP received comments on the proposed water main extension project from the Office of Policy and Management (OPM) on July 10, 2017, and from many other individuals during the public comment period held from June 6 to July 10, 2017 and the public hearing held on June 21, 2017. Those comments and DEEP's responses were documented in Appendix I to the report entitled "Tylerville Center Water Supply Alternatives Evaluation – Final," dated October 2017 (attached).

Based on the comments received and incorporated into the final report, DEEP has determined that the proposed project does not require the preparation of Environmental Impact Evaluation under CEPA. The DEEP will coordinate the project with the Towns of Haddam and Chester and Connecticut Water Company to ensure that OPM's recommendations will be implemented.

### **Recommendations:**

Prior to starting the project construction, the following best management practices will be required:

1. **Construction Maintenance:** No construction should take place before erosion and sedimentation controls are installed. These controls should be properly installed, maintained, inspected regularly, and remain in place until the project construction is completed. During construction and until a vegetative cover is reestablished, the project area should be inspected daily and after rainfall events to verify erosion control measures are properly functioning. Any defects on the structure must be immediately repaired.
2. **Utility Company Excavation:** Development plans for utilities in urban areas that entail soil excavation should include a protocol for sampling and analysis of potentially contaminated soil. A soil management plan should be developed for the project to deal with soils during construction. DEEP's Guidance for Utility Company Excavation should be used as a guide in developing the plan. The 2001 guidance is available on-line at: [Utility Guidance](#).
3. **Emergency Response Plan:** Develop an Emergency Spill Response Plan before construction begins. Spill response equipment should be available on-site at all times along with personnel trained in the proper use of such equipment.
4. **Hazardous Materials Storage:** Hazardous materials should be removed from the site during non-work hours or otherwise stored in a secure area to prevent vandalism. Place covered trashcans and recycling receptacles around the site. Cover and maintain dumpsters. Check frequently for leaks. Place dumpsters under a roof or cover with tarps or plastic sheeting. Never clean a dumpster by hosing it down on site.
5. **Vehicles and Machinery:** Methods and locations of refueling, servicing, and storage of vehicles and machinery should be addressed and included as notes on the final site plans. All equipment fueling or minor repairs should occur on a fueling pad. Onsite fuel storage for heavy equipment should have containment and be located in a secure area where it will not be vandalized or struck by equipment or vehicles on the job site.
6. **Separation Distance from Existing Septic Systems:** Water service connections to properties within the proposed water service area should be located a minimum of 10 to 25 feet from existing septic systems. In accordance with Public Health Code Regulations Section 19-13-103B and Technical Standards for Subsurface Sewage Disposal Systems, revised January 1, 2011, pressurized water lines must be located at least 10 feet from septic systems and cannot be backfilled with free draining material within 25 feet of any part of a septic system.

7. **Protection of Eastern Prickly Pear Cactus and Bald Eagles:** No construction materials or equipment staging shall be allowed on the Clark Creek Wildlife Management Area in the vicinity of the prickly pear cactus which will be marked in the field. Any requests to stage materials or equipment on the Clark Creek Wildlife Management Area must be reviewed by the DEEP Land Management and Wildlife Divisions. In addition, care will be taken to maintain 600 feet from any bald eagle nesting sites during construction.