State of Connecticut, Department of Public Health
Drinking Water Section, Drinking Water State Revolving Fund (DWSRF)
ENVIRONMENTAL ASSESSMENT SUMMARY

Date: February 5, 2013		**Staff Contact:**	Cam Walden
Applicant PWS Name:	East Lyme Water & Sewer Com	**Town:**	East Lyme
DPH DWSRF Project #:	2010 0450011a	**PWSID:**	CT0450011
Project Name:	East Lyme-New London Interconnection		
Funding Source:	Drinking Water State Revolving Fund (DWSRF)		
State Funds:	$ 10,298,980.00		

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 project will involve installing a 16 inch transmission water main from the existing northern terminus of the Town of East Lyme's water main on Route 161 to the City of New London's Water Treatment Plant near Lake Konomoc. The project is designed solely to transfer water between the Town of East Lyme and City of New London in order for the Town of East Lyme to meet summertime peak demands of their current service area, address other public health, and water system operational needs within the Town of East Lyme and provide fire protection for enhanced public safety along the transmission water main. The project will include the installation of a 400,000 gallon water storage tank in the Montville Industrial Park, a booster/pressure reducing station, meter and manhole structures and appurtenances and necessary improvements to the New London Water Treatment Plant. The project will also include the installation hydrants along the entire length of the transmission water main and individual fire service connections to 11 lots in the Montville Industrial Park.

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.

    b. Water Quality - The proposed project is not expected to cause significant adverse water quality effects to the adjacent watercourses.

    c. Ambient Noise Levels - The proposed project is not expected to cause significant noise in the immediate area.

2. Impact on a public water supply or serious effects on groundwater, flooding, erosion, or sedimentation

    a. Water Supply - A portion of the pipeline and a pumping station is proposed to be located on New London's Class I and II water company land. East Lyme Water and Sewer and the

New London Water Department have applied for a Water Company Land Change in Use Permit pursuant to CGS Section 25-32 for this work. Conditions placed in the permit will ensure that the construction on water company land will be protective of the source of public drinking water. In addition, a portion of the proposed pipeline route is within the public water supply watershed of Lake Konomoc. The construction best management practices identified in the Recommendations section of this document should be adhered to in order to protect the purity and adequacy of the source of public drinking water for the City of New London.

b. Groundwater - The proposed project is not expected to cause significant impacts to neighboring groundwater.

c. Flooding – A portion of the structure necessary to support the water main as it crosses Latimer Brook in Montville, CT is proposed to be located within 100-year flood zone. The DPH has reviewed and submitted a Flood Management Certification application (prepared by Tighe & Bond on behalf of the Town of East Lyme) to the Department of Energy and Environmental Protection (DEEP). DEEP's approval of the FMC application is necessary prior to the Town starting the project construction.

d. Erosion or Sedimentation - In order to protect any wetlands and watercourses adjacent to the site, strict erosion and sediment controls should be employed during construction. The appropriate local agencies should be contacted to discuss the regulatory and permitting requirements prior to starting the project construction.

3. Effect on natural land resources and formations, including coastal and inland wetlands, and the maintenance of in-stream flows –The proposed water main will cross several wetlands, Latimer Brook, unnamed waterways along Route 16, and several drainage ways leading to Lake Konomoc along Route 85. Existing wetlands and watercourses along the proposed route have been delineated by a certified soil scientist. Any inland wetlands or watercourses at the site are regulated by the local inland wetlands agency, pursuant to section 22a-42 of the Connecticut General Statutes (CGS). The Town is currently working with local agencies regarding permit requirements.

   Any work or construction activity within federally regulated wetland areas or watercourses along the route may require a permit from the U.S. Army Corps of Engineers pursuant to section 404 of the Clean Water Act or section 10 of the Rivers and Harbors Act. The Town is currently working with the Corps Regulatory Branch in Concord, Massachusetts regarding permit requirements.

   If a permit is required from the U.S. Army Corps of Engineers, a Water Quality Certificate will also be required from the DEEP pursuant to section 401 of the Clean Water Act.

4. Disruption or alteration of an historic, archeological, cultural or recreational building, object, district, site or surroundings – No significant impact expected.

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 –It was

reported that Chaffseed (*Schwalbea americana*), a Federally endangered plant species, has been documented in the vicinity of the project. As described in DEEP's comment, a thorough botanical survey of the project area should be conducted and the results forwarded to the Natural Diversity Data Base (NDDB) of the DEEP for further review. On August 30, 2012, LEC (environmental consultant for this project) conducted a habitat assessment to review the existing condition of the project site. A report dated September 26, 2012, was submitted to NDDB in compliance with the DEEP request. On November 20, 2012, the Wildlife Division of the DEEP issued a letter concurring with the findings identified in the habitat assessment report. DEEP recommends that precautions be taken to avoid altering the physical or chemical nature of aquatic habitats, and limiting the deposit of siltation or any source of pollution into the waterways.

The Natural Diversity Data Base, maintained by DEEP, contains a record of a species listed by the State as threatened, pursuant to section 26-306 of the CGS, in the vicinity of this proposed project. The Tiger Spiketail dragonfly (*Cordulegaster erronea*) occurs in the Latimer Brook area near Silver Falls. The Tiger Spiketail dragonfly is associated with small streams in densely forested ravines. Activities that alter the physical or chemical nature of the aquatic habitat, cause siltation or any source of pollution would be detrimental.

It was stated in an email dated November 26, 2012 from Inland Fisheries Division-Habitat Conservation and Enhancement Program of the DEEP, that there are no significant fisheries resource and instream habitat concerns relative to the proposed project. As a best management practice, any unconfined in-stream work within Latimer Brook should be restricted to the period from June 1 to September 30 to protect the habitats that live within the project area.

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 project construction, the project is not expected to cause substantial aesthetic or visual impacts in the area.

8. Inconsistency with the written and/or mapped policies of the statewide Plan of Conservation and Development and such other plans and policies developed or coordinated by the Office of Policy and Management (OPM) or other agency - No significant impact expected based on restrictions on any water service connections to the new water transmission main imposed by the DPH (see Conclusions Section) to address the comments received by the OPM on May 20, 2011and additional subsequent meetings held with OPM to determine the project's consistency with the statewide Plan of Conservation and Development .

9. Disruption or division of an established community or inconsistency with adopted municipal or regional plans- No significant impact expected.

10. Displacement or addition of substantial numbers of people - No significant impact expected.

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.

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.

14. Any other substantial impact on natural, cultural, recreational or scenic resources - No significant impact expected.

Conclusions:

Based on the DPH's environmental assessment of this project which includes comments provided by the DEEP dated May 14, 2010 and May 20, 2011, the DPH Drinking Water Section Source Water Protection (SWP) Unit dated May 20, 2011 (revised July 24, 2012) and restrictions on water service connections to the new water transmission main imposed by the DPH to address comments received by the Office of Policy and Management on May 20, 2011, it has been determined that the proposed water main extension project does not require the preparation of Environmental Impact Evaluation under CEPA.

The DPH will coordinate the project with the Town of East Lyme to ensure that all DEEP and DPH recommendations will be implemented during project construction.

The water transmission main will traverse through areas identified as rural, conservation or preservation areas within the Connecticut Conservation and Development Policies Plan. The primary intent of the water transmission main project is solely to transfer water between the Towns' of East Lyme and New London to augment East Lyme's existing summertime water supply deficiencies due to increased water demands in the summer months by existing seasonal customers. In addition, the water transmission main will provide fire protection along its path via hydrants along the roadways and individual fire service connections to certain lots within the Montville Industrial Park for public safety purposes. In order to restrict drinking water service to these rural, conservation or preservation areas, the DPH has implemented the following provisions to this project.

1. The DPH has added a special requirement to East Lyme's loan agreement requiring the approval of DPH for any new water connections to the water transmission main. The DPH will only approve connections that the DPH determines are consistent with the Connecticut Conservation and Development Policies Plan. The DPH will consult with the OPM, as necessary, to render appropriate determinations on such connections.

2. The Towns of East Lyme and Montville have entered into a Memorandum of Understanding to restrict individual water service connections to the Montville Industrial Park to fire service only and only to the industrial lots: 16, 17, 18, 43, 44, 45, 46, 47, 48, 49 and 50 located on Butlertown Road and Satchatello Drive. However, lot 17 which is owned by East Lyme and will be used for

the installation of a water storage tank and related facilities may also be connected to the water main for the purpose of conveying water to and from said water storage tank. The MOU also establishes a requirement for the Town of Montville to record these restrictions on Montville land records. The Town of East Lyme shall verify these land record recordings and provide copies of them to the DPH prior to any construction activities.

A portion of the structure necessary to support the water main as it crosses Latimer Brook in Montville, CT is proposed to be located within 100-year flood zone. The DPH has reviewed and submitted a Flood Management Certification application (prepared by Tighe & Bond on behalf of the Town of East Lyme) to the Department of Energy and Environmental Protection (DEEP). DEEP's approval of the FMC application is necessary prior to the Town starting the project construction.

The proposed interconnection will require a permit from the DEEP-IWRD for the diversion of waters of the State pursuant to section 22a-368 of the CGS. The diversion permit was issued by the DEEP on January 18, 2013.

Stormwater discharges from construction sites where one or more acres are to be disturbed require a permit pursuant to 40 CFR 122.26. The Town of East Lyme has been instructed to contact the DEEP for more details on the regulatory and permitting requirements for stormwater discharges.

Recommendations:

Since the water line is to be pressure tested and disinfected after installation, the discharge would be covered by the *General Permit for the Discharge of Hydrostatic Pressure Testing Wastewater* (DEP-PERD-GP-011). This general permit applies to all discharges of waters used to test the structural integrity of new or used tanks and pipelines that hold or transfer drinking water, sewage, or natural gas. The general permit contains pH, chlorine, oil and grease, and suspended solids limits which will need to be complied with during the testing and verified through monitoring. Registration is required to be submitted to the DEEP in order for the discharges to be authorized by this general permit. For further information, please contact the DEEP at 860 424-3018 or visit its website at: www.***ct.gov/-deep***/

Prior to starting the project construction, the following best management practices should be considered:

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 to verify erosion control measures are properly functioning. Any defects on the structure must be immediately repaired. Precautions be taken to avoid altering the physical or chemical nature of aquatic habitats, and limiting the deposit of siltation or any source of pollution into the waterways.

2. **Unconfined In-Stream Work Construction Schedule:** Any unconfined in-stream work within Latimer Brook should be restricted to the period from June 1 to September 30 to protect the habitats that live within the project area.

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:** A specific area of the project site outside of the public water supply source water areas should be designated for auto parking, vehicle refueling and routine equipment maintenance. 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. **Sanitation:** Portable toilets should be provided on site. The toilets should be properly maintained to ensure that leaks will be prevented.

7. **Notification:** Notification of the project start date should be sent to all affected public water systems as soon as it has been determined. A representative of the New London Water Department should be granted site access to review compliance with construction site best management practices. The New London Water Department and Drinking Water Section must be notified immediately of any chemical/fuel spill at the construction site, along with the Department of Environmental Protection's Oil and Chemical Spill Response Unit. Emergency telephone numbers and a statement identifying the construction site as a sensitive public water supply area should be posted where they are readily visible to contractors and other on-site personnel. A note should be added to the site plans stating the sensitivity of the area.