



March 23, 2016

Lori Mathieu, Public Health Section Chief
CT Department of Public Health
Drinking Water Section
410 Capitol Avenue
MS#51-WAT
PO Box 340308
Hartford, CT 06134

RE: Woodridge Lake Sewer District's Proposed Regional Sewer Connection Project

Dear Ms. Mathieu:

Per your request, attached is a table summarizing DEEP's review of the Woodridge Lake Sewer District's ("WLSD") alternative routes for the proposed regional sewer connection project ('proposed project'). The table shows a review of considerations completed by DEEP as if the project was being funded through the Connecticut Clean Water Fund Program; however, as you are aware CEPA review is not a requirement as there are no state funds being used for this project. Therefore, the project is not considered a state action under the State of Connecticut Conservation and Development Plan. You will note that the review for the option to the Litchfield Wastewater Treatment Plant is not as complete as the others as it was discovered early on that the Litchfield plant would be unable to accept the entire flow from Woodridge Lake Sewer District and this option was not pursued.

WLSD was a planned development approved for 835 homes in 1972. The entire build out of the sewer system was done when the community was developed and the roads were put in. There will be no expansion of the original sewer service area for this site. The proposed project serves to replace the existing treatment plant's ridge and furrow system that is failing and allowing pollution to enter the waters of the State. This pollution affects downstream waters and aquifers in the Bantam River Watershed. The Class AA Bantam watershed includes the Aquarion Aquifer Protection area associated with the Goshen wellfield. It is important to note that all involved watersheds are classified as Class AA watersheds.

The proposed project consists of converting the existing treatment facility into a pump station to pump sewage via force main to the existing Torrington wastewater treatment facility. The project as proposed is located on existing WLSD owned property and State of CT Department of Transportation owned roads. No water company owned lands are being disturbed though the project will pass a public water supply watershed.

Based on the review of the four options to Torrington, the Route 4 option appears to be the best route environmentally and economically. The Route 4 option has: a lower potential for secondary or induced growth; the least amount of topographically induced issues (such as odors); a similar number of key culvert crossings; no potential interference with a dam; and is consistent with the State of CT Conservation and Development Plan principles and mapping, and associated review requirements for DEEP, which cannot be said for the other routes. The Route 4 option also avoids additional land use permit approvals from the Town of Litchfield including an additional inter-municipal agreement.

Although the Route 4 option is the best option, it is not without a downside. That downside being traveling along a public drinking water watershed. The project proposes to mitigate any potential threat to the public water supply through monitoring and containment. The risk of a leak, compared to the significant potential vehicular sources traversing the watershed daily, is minimal.

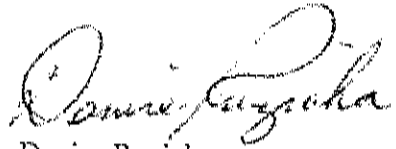
Please consider important points previously made:

- No growth is being introduced either in Goshen or Torrington.
- The maximum, and previously approved, build out of WLSD in Goshen is already planned for and no additional connections can be made along the force main in Torrington as required by the City of Torrington.
- No water company owned lands are being disturbed as the force main will be entirely within the existing DOT roadway.
- The chance of a leak is small, but WLSD has already stated they will include additional safety measures to provide redundancy at the most sensitive crossing closest to the Allen Dam Reservoir.
- Existing sewer pipe within the Allen Dam Watershed is being replaced with pipe that has tighter joints thereby decreasing the risk of a leak in the existing sewer main.
- The sewer main is being brought as directly to the plant as possible to avoid creating other potential public health issues such as overflows, clogging or odors within the existing City of Torrington sewer collection system.
- The sewer line in question and the associated pump station will be operated by the City of Torrington WPCA which has extensive experience operating such systems and has a vested interest in protecting the water sources serving the City of Torrington.

This sewer system is not different from those that currently exist in many other towns and watersheds across the state. Inter-municipal cooperation and regional solutions are increasingly needed to solve important water quality and water pollution problems. Public drinking water surface watersheds are located in 93 municipalities in the state of Connecticut. Of the 214 public drinking water surface watersheds in Connecticut, 130 have sewer service area parcels within them.

Please also refer to information provided in our previous letters of November 18, 2016 and January 27, 2017. Feel free to contact Jennifer Perry of my staff if you need further information on any aspect of this letter at (860) 424-3802 or by email at jennifer.perry@ct.gov.

Sincerely,



Denise Ruzicka

Director

Water Planning and Management Division
Bureau of Water Protection and Land Reuse

cc: Johan Strandson, USDA-RD (via e-mail)
Ray Turri, President, WLSD (via e-mail)
Oswald Inglese, DEEP (via e-mail)

Attachments:

Letter dated November 18, 2016 from Betsey Wingfield to DPH
Letter dated January 27, 2017 from Betsey Wingfield to DPH
Letter dated March 9, 2017 from Lori Mathieu to Denise Ruzicka
Summary table of alternate routes

Table 1
Summary of WLS D Regional Alternatives

Consideration	Regional Alternative T1 (Route 4)	Regional Alternative T2 (Highland Ave)	Regional Alternative T3 (Weed Road)	Regional Alternative T4 (Rte 63 to Rte 202)	Regional Alternative L1 (Litchfield Plant)
Environmental Impact Overview					
Air Quality & Ambient Noise	Quality and ambient noise should not change from current use.	Quality and ambient noise should not change from current use.	Quality and ambient noise should not change from current use.	Quality and ambient noise should not change from current use unless multiple pump stations needed, then an increase in noise might be expected.	Quality and ambient noise should not change from current use unless multiple pump stations needed, then an increase in noise might be expected.
Water / Effluent Quality	Level of treatment anticipated at Torrington WPCF slightly higher than Litchfield WPCF. Improved effluent discharge from present.	Level of treatment anticipated at Torrington WPCF slightly higher than Litchfield WPCF. Improved effluent discharge from present.	Level of treatment anticipated at Torrington WPCF slightly higher than Litchfield WPCF. Improved effluent discharge from present.	Level of treatment anticipated at Torrington WPCF slightly higher than Litchfield WPCF. Improved effluent discharge from present.	Level of treatment anticipated at Litchfield WPCF slightly less than Torrington WPCF. Improved effluent discharge from present.
Public Water Supply (existing and future) including Groundwater	Traverses a section of TWC watershed along Route 4 and GAA water supply area; no direct work proposed on watershed lands; redundant measures proposed to minimize risk.	Traverses GAA water supply area.	Traverses a section of TWC watershed along Route 4 and GAA water supply area; no direct work proposed on watershed lands.	Traverses GAA water supply area.	Traverses GAA water supply area.
Aquifer Protection Areas	Within GAA water supply area; traverses a section of TWC watershed; no work proposed on watershed lands.	Within GAA water supply area.	Within GAA water supply area; traverses a section of TWC watershed; no work proposed on watershed lands.	Within GAA water supply area.	Within GAA water supply area.
Floodplains	Traverses three (3) 100 year floodplain areas; localized flooding possible.	Traverses two (2) 100 year floodplain areas and crosses below a dam; localized flooding possible.	Traverses one (1) 100 year floodplain area and crosses below a dam; localized flooding possible.	Traverses nine (9) 100 year floodplain areas; localized flooding possible; multiple pump stations increase risk.	Traverses one (1) 100 year floodplain area; localized flooding possible.
Erosion	The completed project will not contribute to erosion. Erosion protection measures will be utilized during construction.	The completed project will not contribute to erosion. Erosion protection measures will be utilized during construction.	The completed project will not contribute to erosion. Erosion protection measures will be utilized during construction.	The completed project will not contribute to erosion. Erosion protection measures will be utilized during construction.	The completed project will not contribute to erosion. Erosion protection measures will be utilized during construction.

DEEP

Consideration	Regional Alternative T1 (Route 4)	Regional Alternative T2 (Highland Ave)	Regional Alternative T3 (Weed Road)	Regional Alternative T4 (Rte 63 to Rte 202)	Regional Alternative L1 (Litchfield Plant)
Land Resources (Farmlands, Open Spaces, Etc)	Prime and important farmlands exist along all routes. Municipal and private open space exist along the route; no proposed direct impacts.	Prime and important farmlands exist along all routes; Private open space exists along the route; unknown impacts.	Route passes through prime and important farmlands; Route passes through municipal and private open space and protected open space; unknown impacts.	Route passes through prime and important farmlands; Route passes through municipal and private open space and protected open space; unknown impacts.	Prime and important farmlands exist along all routes; unknown impacts.
Wetlands	All routes run adjacent to wetland indicative soils; Goshen and Torrington Wetlands permits already secured.	All routes run adjacent to wetland indicative soils; Permitting in Goshen, Litchfield and Torrington not applied for.	All routes run adjacent to wetland indicative soils; Permitting in Goshen, Litchfield and Torrington not applied for.	All routes run adjacent to wetland indicative soils; permitting in Goshen and Litchfield not applied for.	All routes run adjacent to wetland indicative soils; permitting in Goshen and Litchfield not applied for.
In-Stream Flows / Wild and Scenic Rivers	No impacts to flows; no W&S Rivers present.	No impacts to flows; no W&S Rivers present.	No impacts to flows; no W&S Rivers present.	No impacts to flows; no W&S Rivers present.	No impacts to flows; no W&S Rivers present.
Coastal Zone Management and Shell Fish Impacts	Not applicable.	Not applicable.	Not applicable.	Not applicable.	Not applicable.
Endangered Species	Pump station exists in and pipe will traverse 2 NDDB areas; pipes are completely within existing roadway; no anticipated impacts.	Pump station exists in and pipe will traverse 4 NDDB areas; impacts expected to be minimal except by dam.	Pump station exists in and pipe will traverse 4 NDDB areas; impacts expected to be minimal except by dam.	Pump station exists in and pipe will traverse 4 NDDB areas; impacts expected to be minimal.	Pump station exists in and pipe will traverse 1 NDDB area; impacts expected to be minimal.
Historical & Archaeological Sites	Evaluated as part of Environmental Report; approved by the State Historic Preservation Officer February 9, 2016	Proposed to be constructed in roadways; No impacts foreseen without full review by state office.	Proposed to be constructed in roadways; No impacts foreseen without full review by state office.	Proposed to be constructed in roadways; No impacts foreseen without full review by state office.	Proposed to be constructed in roadways; No impacts foreseen without full review by state office.
Use of Pesticides or Hazardous Materials	Not applicable.	Not applicable.	Not applicable.	Not applicable.	Not applicable.
Aesthetic or Visual Affects	Pump station at existing WWTP - no impact.	Pump station at existing WWTP - no impact.	Pump station at existing WWTP - no impact.	Pump station at existing WWTP - no impact. Additional pump stations may have an aesthetic impact.	Pump station at existing WWTP - no impact. Additional pump stations may have an aesthetic impact.

Consideration	Regional Alternative T1 (Route 4)	Regional Alternative T2 (Highland Ave)	Regional Alternative T3 (Weed Road)	Regional Alternative T4 (Rte 63 to Rte 202)	Regional Alternative L1 (Litchfield Plant)
Displacement or Addition of Substantial Numbers of People	The use of a force main through areas that about open space and no-growth areas, this alternative precludes additional growth along the route.	Increased potential for growth pressure from sewers in populated areas along the route causing additional induced growth risk.	Increased potential for growth pressure from sewers in populated areas along the route causing additional induced growth risk.	Increased potential for growth pressure from sewers in populated areas along the route causing additional induced growth risk.	The use of a force main through areas that about open space and no-growth areas, this alternative precludes additional growth along the main in Goshen only.
Increase in Traffic or Congestion	Short-term construction traffic congestion only.	Short-term construction traffic congestion only.	Short-term construction traffic congestion only.	Short-term construction traffic congestion only.	Short-term construction traffic congestion only.
Increase in Energy Use	Energy use should decrease from existing WWTTP.	Energy use should decrease from existing WWTTP.	Energy use should decrease from existing WWTTP.	Energy use should decrease from existing WWTTP. Use could be more than other alternatives if more pumps stations needed.	Energy use should decrease from existing WWTTP. Use could be more than other alternatives if more pumps stations needed.
Creation of Hazard to Human Health or Safety	Project currently in GAA aquifer and will pass through drinking water supply watershed. Existing pollution problem will be abated. Future risk to TWC reservoir is deemed minimal.	Project currently in GAA aquifer and will pass through drinking water supply watershed. Existing pollution problem will be abated. Future risk to TWC reservoir is deemed minimal.	Project currently in GAA aquifer and will pass through drinking water supply watershed. Existing pollution problem will be abated. Future risk to TWC reservoir is deemed minimal.	Project currently in GAA aquifer and will pass through drinking water supply watershed. Existing pollution problem will be abated.	Project currently in GAA aquifer and will pass through drinking water supply watershed. Existing pollution problem will be abated.
Impact to Natural, Cultural, Recreational or Scenic Resources	Project is in state roadway. No impact.	Project is in state and local roadways. Possible impact to toe of existing dam.	Project is in state and local roadways. Possible impact to toe of existing dam.	Project is in state roadway. No impact.	Project is in state and local roadway. No impact.
CT State Plan of Conservation & Development GMP 1 (redevelopment of existing infrastructure) and 5 Review (integrated planning and conservation and protection of natural resources) - as if for CWF project	Consistent with the principles and mapping. Fixing a demonstrable community pollution problem with no expansion of growth being allowed. Minimizing impact to public water supply watershed and aquifer protection areas -- no impervious surface coverage being introduced.	Consistent with principles. May be inconsistent with the conservation mapping in 1 to 2 areas. The possibility for growth could make the project completely inconsistent with the Plan of Conservation and Development.	Consistent with principles. May be inconsistent with the conservation mapping in 2 to 3 areas. The possibility for growth could make the project completely inconsistent with the Plan of Conservation and Development.	Consistent with principles. May be inconsistent with the conservation mapping if not completely in the roadway. The possibility for growth could make the project completely inconsistent with the Plan of Conservation and Development.	Consistent with principles. May be inconsistent with the conservation mapping if not completely in the roadway. The possibility for growth could make the project completely inconsistent with the Plan of Conservation and Development.

Consideration	Regional Alternative T1 (Route 4)	Regional Alternative T2 (Highland Ave)	Regional Alternative T3 (Weed Road)	Regional Alternative T4 (Rte 63 to Rte 202)	Regional Alternative L1 (Litchfield Plant)
Permitting					
Inland Wetlands	Goshen WPCAs's Water Pollution Plan approved to accommodate the proposed Project. Torrington WPCA approval pending DPH decision.	Not applied for. Would be needed from Goshen, Torrington and Litchfield.	Not applied for. Would be needed from Goshen, Torrington and Litchfield.	Not applied for. Would be needed from Goshen, Torrington and Litchfield.	Not applied for. Would be needed from Goshen, Torrington and Litchfield.
Planning & Zoning	Positive 8-24 referrals received from Goshen and Torrington. Does not pass through Torrington.	Not applied for. Would be needed from Goshen, Torrington and Litchfield.	Not applied for. Would be needed from Goshen, Torrington and Litchfield.	Not applied for. Would be needed from Goshen, Torrington and Litchfield.	Not applied for. Would be needed from Goshen, Torrington and Litchfield.
Inland Wetlands	Inland Wetlands Permits within Goshen and Torrington secured	Not applied for. Would be needed from Goshen, Torrington and Litchfield.	Not applied for. Would be needed from Goshen, Torrington and Litchfield.	Not applied for. Would be needed from Goshen, Torrington and Litchfield.	Not applied for. Would be needed from Goshen, Torrington and Litchfield.
CT DOT	CT DOT approvals pending	CT-DOT permit not applied for but would be required.	CT-DOT permit not applied for but would be required.	CT-DOT permit not applied for but would be required.	CT-DOT permit not applied for but would be required.
Dam Safety	Not needed.	Due to location relative to a dam, will need state dam safety review, may need dam safety permit.	Due to location relative to a dam, will need state dam safety review, may need dam safety permit.	Not needed.	Not needed.
Environmental Review	NEPA review completed by USDA Rural Development	CEPA and/or NEPA reviews may need to be completed based on final funding type.	CEPA and/or NEPA reviews may need to be completed based on final funding type.	CEPA and/or NEPA reviews may need to be completed based on final funding type.	CEPA and/or NEPA reviews may need to be completed based on final funding type.

Consideration	Regional Alternative T1 (Route 4)	Regional Alternative T2 (Highland Ave)	Regional Alternative T3 (Weed Road)	Regional Alternative T4 (Rte 63 to Rte 202)	Regional Alternative L1 (Litchfield Plant)
Design Considerations					
Downstream Receiving Sewers	Replacement of 3,500 ft of gravity sewer between end of proposed force main and City's large diameter gravity interceptor sewers.	Replacement of 6,000 ft of gravity sewer between end of proposed force main and City's large diameter gravity interceptor sewers; additional concerns with future sewer extension pressures tributary to existing receiving sewers.	Replacement of 3,500 ft of gravity sewer between end of proposed force main and City's large diameter gravity interceptor sewers; additional concerns with future sewer extension pressures tributary to existing receiving sewers.	Replacement of 21,500 ft of gravity sewer between end of proposed force main and City's large diameter gravity interceptor sewers; additional concerns with future sewer extension pressures tributary to existing receiving sewers.	Unknown replacement amount of gravity sewer; additional concerns with future sewer extension pressures tributary to existing receiving sewers.
Culvert Crossings	11 total crossings; Three main culvert crossings on Route 4; Main culvert crossing on Pie Hill Road.	7 total crossings; One culvert/dam crossing on Weed Road; geotechnical analysis not performed.	12 total crossings; One culvert/dam crossing on Weed Road; geotechnical analysis not performed.	7 total crossings; Several key culvert crossings; geotechnical analysis not performed.	Unknown - project route not driven as it is not being considered for other reasons.
Potential for Odors and Corrosion at Downstream Receiving Sewers	Moderate potential; odor control system designed.	Moderate potential.	Moderate potential.	High potential based on topography.	Moderate potential.
Rock and Ledge	Borings completed at 100-foot increments along entire route; only one rock outcropping along project route.	Borings not advanced; several rock outcroppings apparent along route with possible impact.	Borings not advanced; several rock outcroppings apparent along route with possible impact.	Borings not advanced; several rock outcroppings apparent along route with possible impact.	Borings not advanced; several rock outcroppings apparent along route with possible impact.
Status of Design and Permitting Phase	90%+ complete.	Preliminary design concept completed.	Preliminary design concept completed.	Preliminary design concept completed.	No design completed. Litchfield unable to accept the sewage.

Consideration	Regional Alternative T1 (Route 4)	Regional Alternative T2 (Highland Ave)	Regional Alternative T3 (Weed Road)	Regional Alternative T4 (Rte 63 to Rte 202)	Regional Alternative L1 (Litchfield Plant)
Financial Considerations					
Inter-Municipal (MA) Agreement(s)	Required with Torrington, Torrington WPCA staff preferred pipe route; both towns prefer the lower potential for secondary/induced growth; least amount of new sewer infrastructure in City to maintain; IMA not finalized.	Required with Torrington and Litchfield.	Required with Torrington and Litchfield.	Required with Torrington and Litchfield.	Required with Litchfield.
Total Length of Pipe	34,370 LF Total	36,015 LF Total	36,140 LF Total	Involves connection to a low pressure grinder pump system. Estimate not given.	23,890 LF Total
Cost Estimate	\$15,612,000	\$20,010,000	\$18,200,000	Involves connection to a low pressure grinder pump system. Estimate not given.	\$23,909,000
Operation & Maintenance Estimate	\$590,486	\$605,486	\$600,486	Involves connection to a low pressure grinder pump system. Estimate not given.	\$797,514
Construction Loan	Fully funded by USDA-RD for a five-year term beginning April 2016.	Not committed. Funding terms uncertain.	Not committed. Funding terms uncertain.	Not committed. Funding terms uncertain.	Not committed. Funding terms uncertain.
Long Term Financing	Fully funded by USDA-RD for a five-year term beginning April 2016; Maximum 40-year interest rate guaranteed.	Not committed. Financing terms uncertain.	Not committed. Financing terms uncertain.	Not committed. Financing terms uncertain.	Not committed. Financing terms uncertain.
Taxpayer Appropriation	Approved by voters in Spring 2016.	Approval of additional funds by voters uncertain.	Approval of additional funds by voters uncertain.	Approval of additional funds by voters uncertain.	Approval of additional funds by voters uncertain.
Socio-Economic Impacts	Lowest cost to residents.	Moderate cost to residents.	Higher cost to residents.	Highest cost to residents.	Not considered for other reasons.