ENVIRONMENTAL IMPACT EVALUATION

FOR THE BUILDING OF A

REGIONAL COMPOSTING FACILITY

TOWN OF KENT – HRRA

August 2025

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List of Acronyms

ASP – Aerobic Static Pile
BMP – Best Management Practices
CEJST – United States' Climate and Economic Justice Screening Tool
CEPA – Connecticut Environmental Policy Act
CFR – Code of Federal Regulations
CMMS – Comprehensive Materials Management Strategy
CS – Carbon Disulfide
CTDOT – State of Connecticut Department or Transportation
DEEP – State of Connecticut Department of Energy & Environmental Protection
DEM – Digital Elevation Model
DMDS – Dimethyl Disulfide
DMS – Dimethyl Sulfide
ECD – Environmental Classification Document
EIE – Environmental Impact Evaluation
FEMA – Federal Emergency Management Agency
FIRM – Flood Insurance Rate Map
GHG – Greenhouse Gases
H2S – Hydrogen Sulfide
HAP – Hazardous Air Pollutants
IWQR – Integrated Water Quality Report
kWh – Kilowatt Hours
MMI – Material Management Infrastructure
MSW – Municipal Solid Waste
NAAQS – National Ambient Air Quality Standards
NDDB – National Diversity Database
NMFS – National Marine Fisheries Service
NPDES – National Pollutant Discharge Elimination System
NRCS – Natural Resources Conservation Service
OPM – State of Connecticut Office of Policy Management
PILOT – Payment in Lieu of Taxes
PM – Particulate Matter
POCD – Plan of Conservation & Development
RCSA – Regulations of Connecticut State Agencies
SCRRRA – Southeastern Connecticut Regional Resource Recovery Authority
SEAT – Southeast Area Transit District
SECOG – Southeastern Connecticut Council of Governments
SHPO – State of Connecticut Historic Preservation Office
SOP – Standard Operating Procedure
SSO – Source-Separated Organics
SSURGO – Soil Survey Geographic Database
TRD – Thames River District
USEPA – United States Environmental Protection Agency

USFWS – United States Fish & Wildlife Service
VFA – Volatile Fatty Acids
VOC – Volatile Organic Compounds
WTE – Waste-to-Energy

1.0 INTRODUCTION

1.1 Background/Purpose & Need

The Purpose of this Materials Management Infrastructure (MMI) Grant administered by the Department of Energy and Environmental Protection (DEEP) is to provide funds to the Housatonic Resource Recovery Authority (HRRA) to construct a solar-powered regional in-vessel composting facility at the Kent transfer station to process food scraps on-site. Processing the food scraps on-site will provide readily available compost for residents, local community groups, farmers, and for municipal use, which will incentivize participation. In addition, the Kent location will serve as a drop-off location to support the food scraps collected from the satellite metroSTOR food scrap collection receptacles in the Northern HRRA region. The location will act as a local hub for surrounding municipalities to be able to implement additional municipal food scraps programs. The facility will be situated on approximately 5,000 square feet of land owned by the SCRRRA at 44 Maple Street (Route 381) in the Town of Kent.

With this facility, HRRA will provide the infrastructure to create a sustainable, scalable system for diverting Source Separated Organics (SSO) from the Municipal Solid Waste (MSW) stream, to be turned into a high-quality soil amendment for residents of the HRRA region. Creation of this facility will save HRRA municipalities money in the face of rising waste management costs, reduce greenhouse gas emissions produced by trucks and landfilling, sequester carbon in the natural process of composting, help alleviate the state's waste disposal crisis by reducing MSW tonnages, and help advance progress towards the statewide 60% diversion rate set forth in Connecticut's Comprehensive Materials Management Strategy (CMMS). The project will be completed in general conformance with the MMI grant application as submitted by HRRA and further described in a Grant Assistance Agreement to be executed by and between DEEP and HRRA.

This EIE is intended to provide a detailed analysis of potential environmental impacts of the proposed action. This review was conducted using readily available information and based on qualitative and quantitative assessments of the existing and proposed conditions. If during the course of implementing the proposed action described in this EIE re-evaluation of the project results in modifications to the proposed action, it is not anticipated that small mid-course improvements or adjustments will necessitate the drafting of a new EIE.

In accordance with the regulations of the Connecticut Environmental Policy Act Sections 22a-1a-1 to 22a-1a-12, the findings of the environmental review are summarized below.

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1.2 Public Involvement

Given that the proposed action would constitute a state-funded action that could have impacts on the environment, the Connecticut Environmental Policy Act (CEPA) was investigated to determine its pertinence to the proposed action and the process for appropriate environmental review and noticing. DEEP operates its CEPA process under the Generic Environmental Classification Document (ECD) as promulgated by the Office of Policy and Management (OPM) for use by state agencies that do not have their own agency-specific ECD. Examination of this document and the Regulations of Connecticut State Agencies (RCSA), Sections 22a-1a-1 to 22a-1a-12, determined that a Notice of Scoping needed to be prepared, followed by a Post Scoping Notice after the required 30 day public comment period. The next steps after the Post Scoping Notice were to be determined by the comments received during the public comment period and the specifics of the CEPA statutes and regulations.

In the May 20, 2025 issue of the Environmental Monitor, a Notice of Scoping for Regional Composting Facility and Recycling Infrastructure was published. The public comment period concluded on June 19,2025, and no public comments were received regarding the proposed action.

Although no comments were received during the public review period, upon review of the ECD, it was determined that as a "regional solid waste facility," the proposed action necessitated the completion and publishing of an Environmental Impact Evaluation (EIE). In the August 5, 2025 issue of the Environmental Monitor, a Post-Scoping Notice for Regional Composting Facility in Kent was published, which explained that an EIE was being prepared for the proposed action, as the current ECD lists regional solid waste facilities as requiring an EIE. This EIE is available for public review and comment.

2.0 ALTERNATIVES

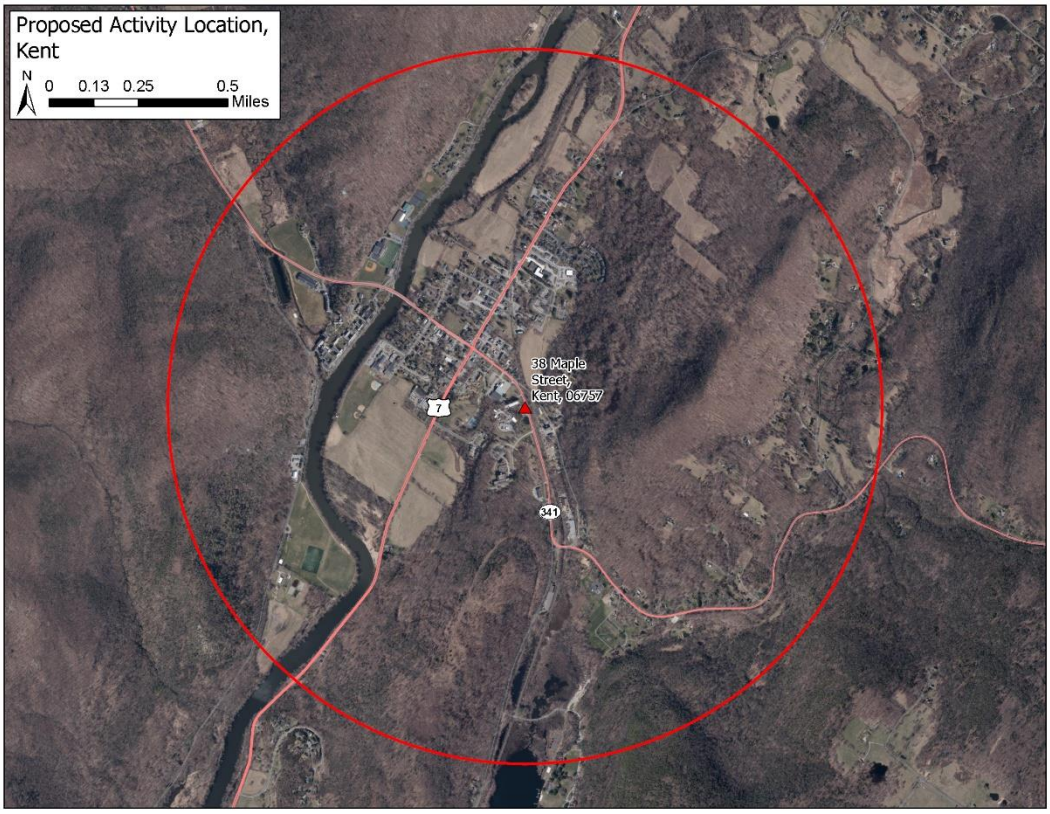
This section describes the alternatives considered for the regional in-vessel composting facility. DEEP has evaluated the following alternatives as part of its grant action:

- **Proposed Action:** Execute the grant assistance agreement for the HRRA Regional Composting Facility.

- **No Action:** Not execute the grant for the SCRRRA Regional Composting Facility.

2.1 Alternative 1 – The Proposed Action

The proposed action includes installing a solar-powered in-vessel composting system by at the Kent transfer station to process food scraps on-site. Processing the food scraps on-site will provide readily available compost for residents, local community groups, farmers, and municipal use which will incentivize participation. In addition, the Kent location will serve as a drop-off location to support the food scraps collected from the satellite metroSTORs in the Northern HRRA region. The location will act as a local hub for surrounding municipalities to be able to implement additional municipal food scraps programs.

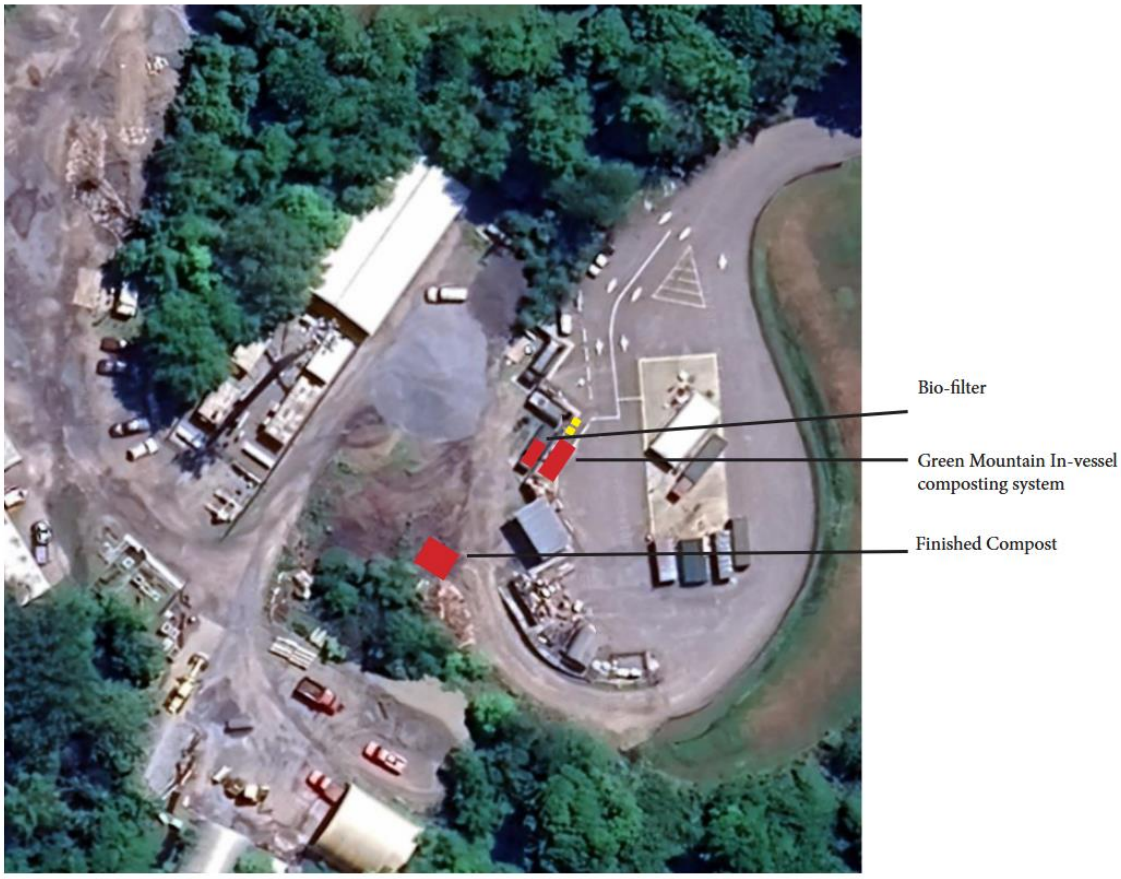


HRRA is currently in discussions to expand collection with neighboring adjacent, non-HRRA member communities to bring their material for processing therefore expanding the municipalities being served beyond HRRA. In addition, food scraps collected from

the satellite metroSTOR containers in the Northern HRRA region will be transported to the Kent transfer station, rather than being trucked to New Milford Farms or Quantum Biopower in Southington. This infrastructure will improve, expand, and provide waste reduction for organics management services to this part of the region and beyond. This infrastructure will significantly reduce the carbon footprint of food scraps collection and reduce the operating cost to the Town. HRRA has been implementing food waste diversion programs for ten years; improving collection, processing and becoming more self-sustainable to demonstrate that municipalities can create a closed-loop sustainable composting system to manage food waste locally, reducing the carbon footprint of offsite disposal and contributing to the waste diversion goals of the state.

Appendix B

Town of Kent Transfer Station - Solar Powered Composting System Proposal



2.2 Alternative 2 – No Action

The No Action Alternative consists of not constructing the proposed regional in-vessel composting facility. In this case, the No Action Alternative does not meet the purpose and need for waste reduction and waste diversion from the region's and the State of Connecticut's waste streams. Food waste diversion will be further constrained in the region; although small local composting operations will continue to function, it will be very difficult to expand and increase waste diversion opportunities in western Connecticut without the proposed facility due to limited available land and lack of

financial resources to invest in capital infrastructure for expansion, which can be very costly. Without increased capacity in waste diversion infrastructure, the region will need to continue incinerating its waste at roughly the same rate as in 2025 for the foreseeable future, incurring the cumulative environmental impacts associated with this form of disposal. Therefore, DEEP has determined that the No Action Alternative is not a feasible alternative.

3.0 Required Licenses, Permits, and Certifications to Implement the Proposed Action

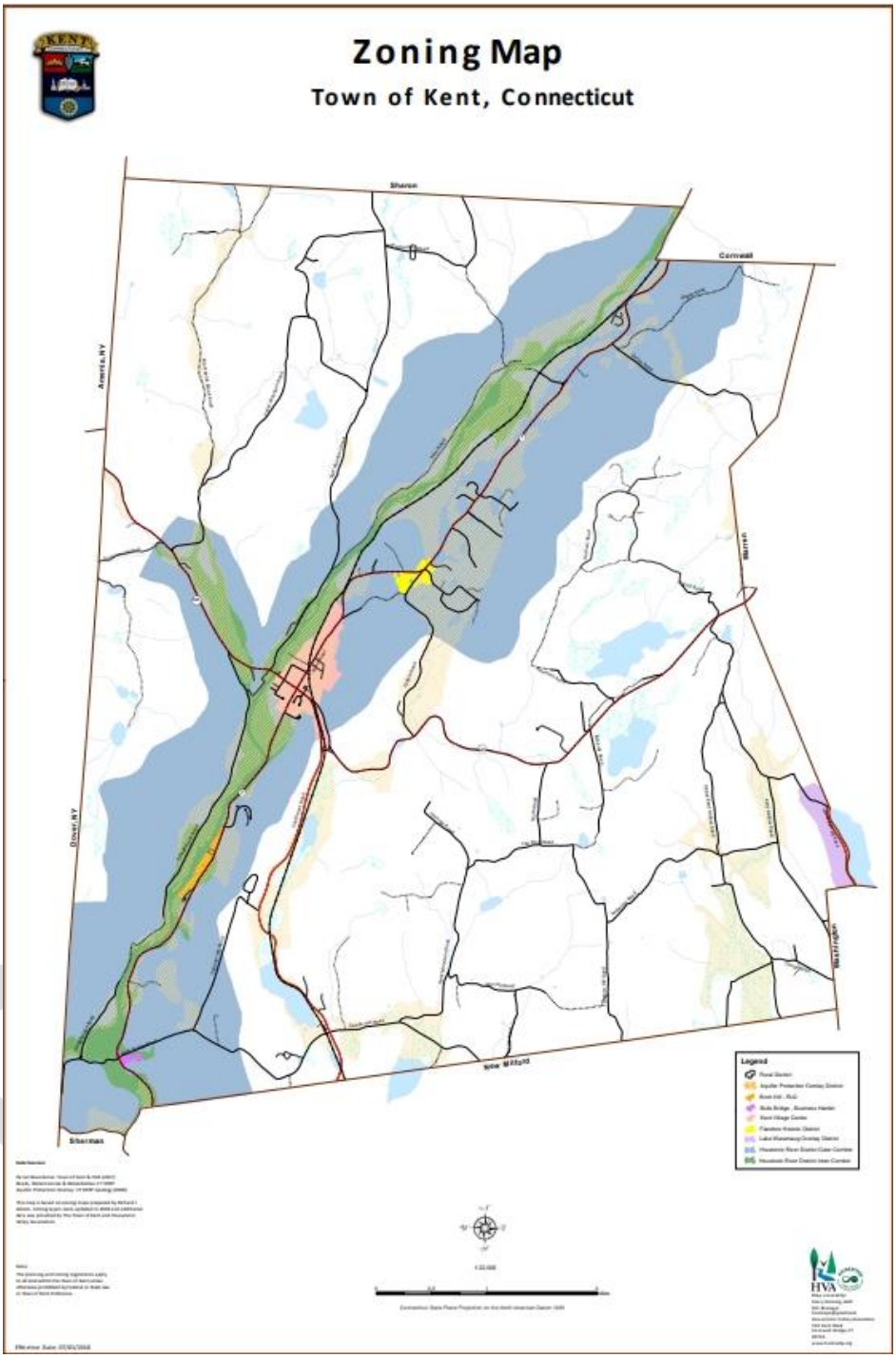
It is expected that in order to operate the proposed regional composting facility in Kent, HRRA will need to obtain a DEEP Permit for Construction and Operation of a Solid Waste Facility from the department's Waste Engineering and Enforcement Division. The project will also require a Discharge of Stormwater and Dewatering Wastewater Associated with Construction Activities – General Permit Registration, an NDDB Review Request (endangered, threatened, and special concern species and habitats), and an Individual NPDES Wastewater Permit for Discharge of Leachate or Co-Mingled Stormwater. In addition, local building permits and land use/zoning permits will be required prior to site disturbance and construction activities commencing.

4.0 Affected Environment and Environmental Consequences

This section summarizes the physical, biological, social and development environments of the affected project area and the potential changes to those environments due to implementation of the Proposed Action. Identification and description of any mitigation measures considered, including any mitigation measures that must be adopted to ensure the action will not have significant impacts, are provided under each resource area, as applicable.

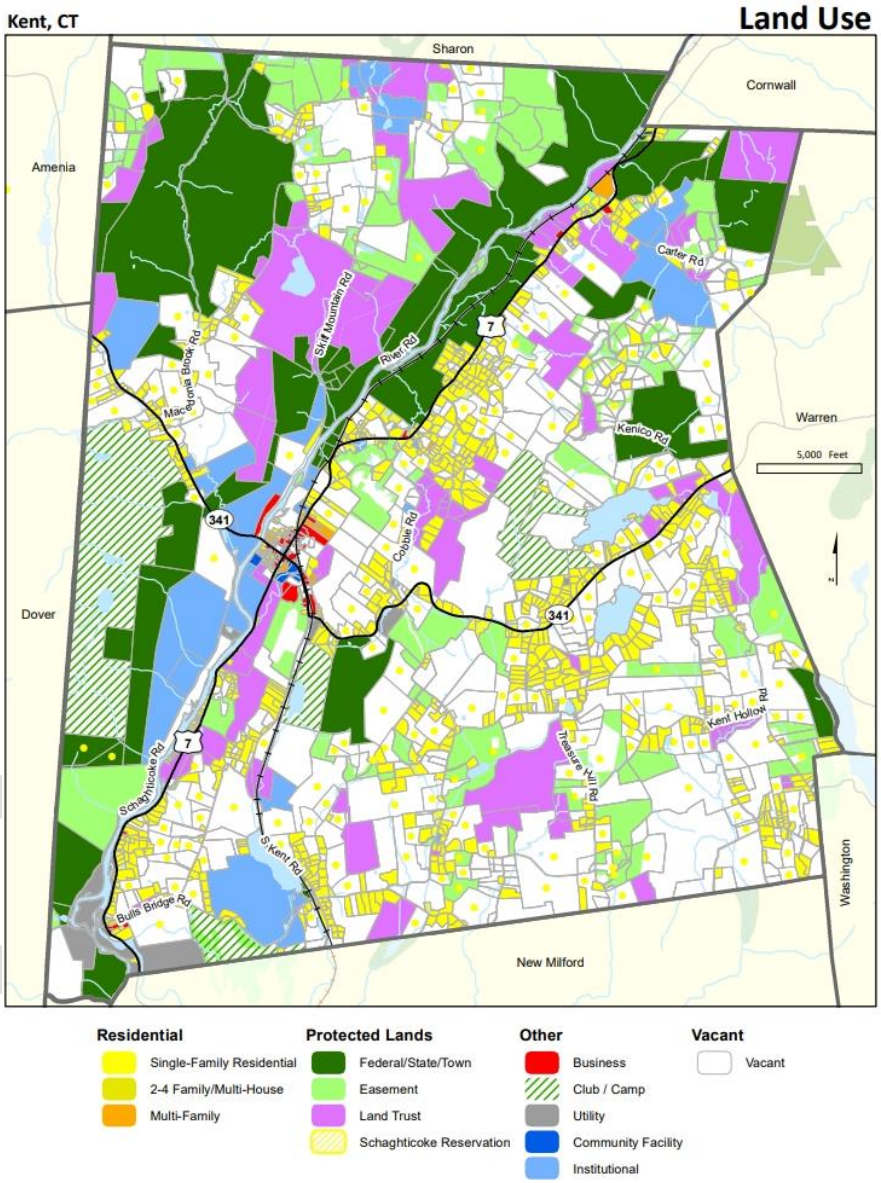
4.1 Land Use Planning and Controls

The site of the proposed action is located within the Rural Residential (RU-1) zone and the Housatonic River Overlay District (HROD) Outer Corridor zone under the Town's Zoning Regulations. The Zoning Regulations note that *"the Rural Residential district is intended to guide residential development in accordance with soil types, terrain, and other environmental considerations and with due consideration for the character of the community."* The regulations also state that *"the purpose of the Housatonic River Overlay District (HROD) is to protect, in a cooperative effort with neighboring towns and with appropriate uniform standards, the Kent segment of a carefully defined area of land designated as the Housatonic River Corridor, which is deemed to be flood prone, environmentally sensitive and to possess many valuable natural resources and historic sites."* The HROD zoning designation provides additional regulatory language on top of the underlying RU-1 regulations.

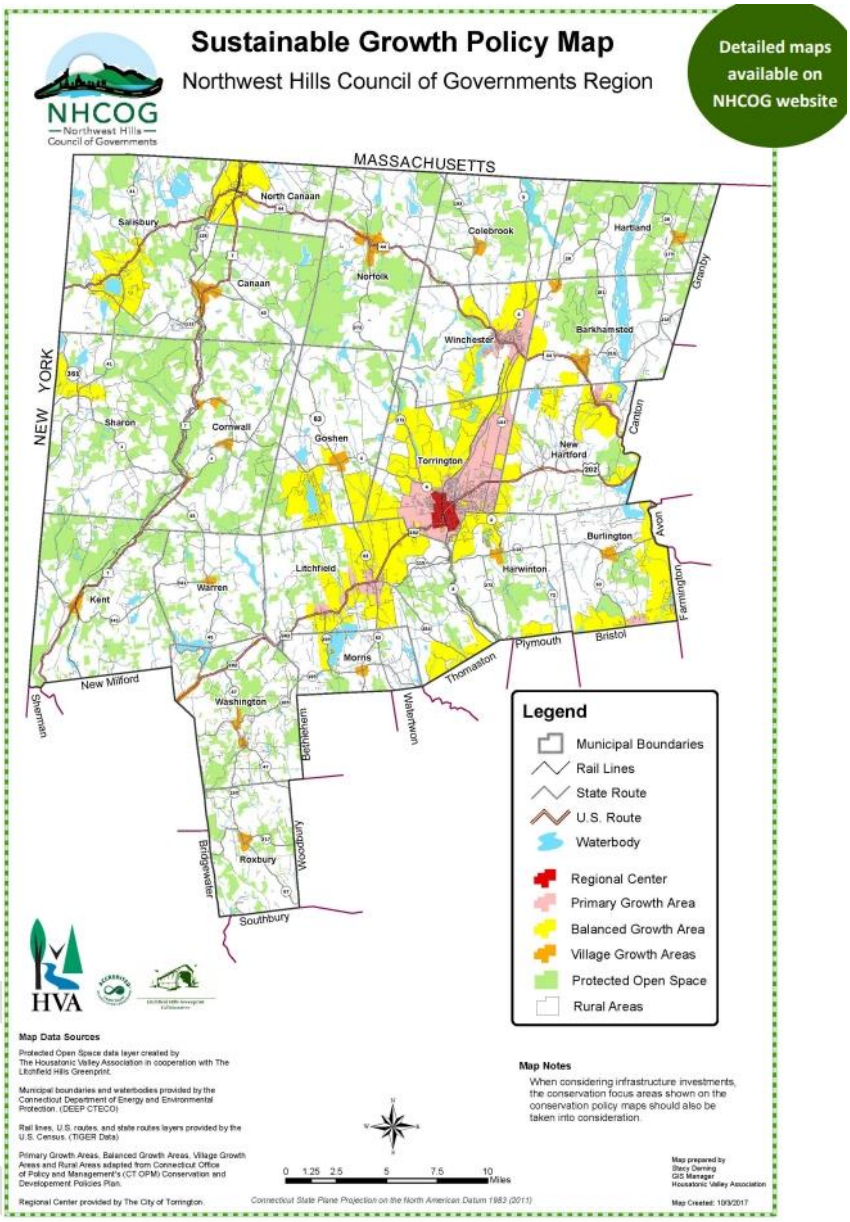


In the Outer Corridor subarea, an additional zoning requirement has put in place as follows: *"Activities involving construction or earth moving shall be reviewed with regard to soil types in exposed areas to determine whether provisions shall be made for special erosion and sediment control in accordance with current guidelines available from the U.S. Department of Agriculture Natural Resources Conservation Service."*

In the Town of Kent's 2022-2032 Plan of Conservation and Development, the Land Use Map has the site of the proposed action identified as "Community Facility," as the proposed site shares a parcel with the existing municipal transfer station. In reviewing the Goals & Objectives of the Plan of Conservation Development, the proposed action is consistent with the Plan and its recommendations for the future of the Town.



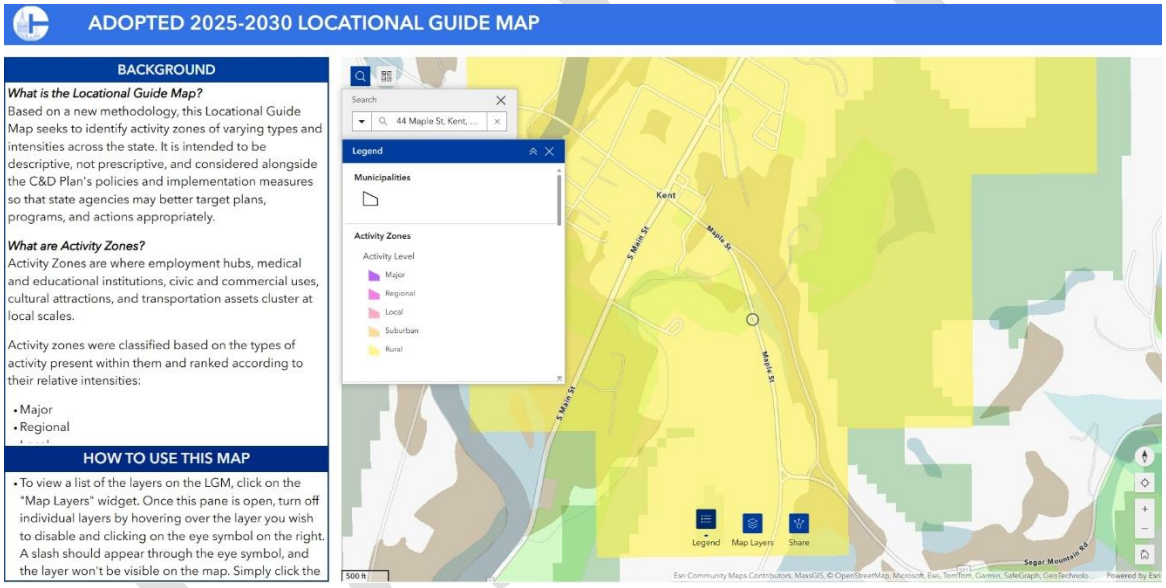
The Northwest (CT) NEXT 2017-2027 Regional Plan of Conservation and Development (POCD) issued by the Northwest Hills Council of Governments (NHCOG) is the regional planning document that provides guidance to the Town of Kent and impacts the development of the site of the proposed action. Under the 2017 Regional POCD, the Sustainable Growth Policy Map identifies the site of the proposed action as "Village



Growth Area." As a point of reference, "Village Growth Area" is defined in the POCD as follows: *"These areas were determined locally and represent the traditional village centers of our rural towns. In most cases they are not served by public water and/or sewer. Investments in these areas that would be consistent with the Regional Plan include infill housing, sidewalks, bikeways, and "Main Street" improvements. Any action or investment should take into consideration ways to strengthen or improve the traditional village character of these areas."*[1] The proposed action is consistent with the Regional POCD's future development objectives and is not inconsistent with any of the POCD's identified goals and strategies for regional development.

[1] Northwest (CT) NEXT 2017-2027 Regional Plan of Conservation and Development, pg. 17.

The Connecticut Conservation and Development Policies Plan, 2025-2030 (C&D Plan) was adopted by the Connecticut General Assembly via House Joint Resolution No.67 on March 5, 2025. The Adopted 2025-2030 Locational Guide Map indicates that the site of the proposed action falls within the "Rural" Activity Zone designation. In the associated text section, the Plan notes that Rural activity zones consist of *"clusters of civic, cultural, and some commercial uses in relatively small geographic areas at less concentrated levels. Traditional village centers and other nodal areas of activity within less densely developed regions of the state make up Rural Activity Zones."*[2] Given the fact that the site of the proposed action shares a parcel with a pre-existing municipal transfer station and is relatively low-intensity in its use, the proposed action meets the threshold of appropriateness. In addition, the site of the proposed action is located in one of the few areas of Kent where public sewer service and public water service are available, further supporting the location as an appropriate location for development in the Town.



The proposed action is either consistent with or not inconsistent with the policies and implementation measures identified for the State of Connecticut in the C&D Plan, including:

- Promote reduction of greenhouse gas emissions
- Develop coordinated capacity and infrastructure for solid waste management that provides efficient, equitable and sustainable systems that incorporate source reduction, recycling and composting
- Increasing capacity and sustainability of in-state management of Municipal Solid Waste

[2] Connecticut Conservation and Development Policies Plan, 2025-2030, pg. 37.

4.2 Air Quality and Resources

Impacts on air quality are determined by analyzing current environmental characteristics in comparison to the potential emissions from the proposed action. The focus is placed on whether the proposed action will cause emissions concentration to exceed any NAAQS or is additive to a present NAAQS violation, delays the attainment of any NAAQS within a reasonable timeframe, significantly increases GHG emissions above current levels, or impairs visibility of any “Class I” national park or wilderness area.

According to data from USEPA and DEEP, all of the State of Connecticut is currently in attainment for all criteria air pollutants with the exception of ozone. The site of the proposed action is located in the Greater Connecticut Ozone non-attainment area; this area, encompassing Hartford, Litchfield, New London, Tolland, and Windham counties, is also classified as "moderate" nonattainment for ozone. In addition, the Greater Connecticut area was recently reclassified from "moderate" to "serious" nonattainment for the 2015 ozone NAAQS, according to the Federal Register. This reclassification was requested by the State and indicates how difficult meeting federal ozone standards has been for the larger region.

The Clean Air Act also provides a heightened level of air quality protection for “Class I” areas, which are specific national park and wilderness areas across the country are given special protection under the Clean Air Act, known as “Class I” areas. The Town of Kent is not in a Class I Protected Area under the Clean Air Act, nor are there any Class I areas within the larger HRRA region.

The construction of the in-vessel composting facility will involve site preparation and clearing, excavation, and construction. Land development typically causes dust, along with the generation of particulate matter (PM), including PM 2.5 and PM 10 primarily from “fugitive” sources (i.e., emissions released through means other than through a stack or tailpipe). Smaller amounts of other air pollutants generated by the operation of construction equipment are also present. PM 10 and PM 2.5 emissions from construction can vary greatly based upon the level of activity during a particular timeframe and site-specific characteristics such as soil composition and weather. Larger diameter dust particles (greater than 30 microns) tend to be deposited in and around the area of disturbance, while smaller diameter particles (PM 10 and PM 2.5) remain airborne until deposited through weather effects and are more likely to have human health impacts.

Construction of the proposed composting facility will have very minor and localized impacts on air quality. To minimize any impacts, all construction vehicles must have effective emission controls and must be operated in compliance with BMPs such as reducing vehicle speeds, anti-idling requirements, etc. Overall, air quality impacts during construction will be localized and generally short-term but less than significant with the implementation of BMPs.

Table 1 provides the estimated greenhouse gas (GHG) emissions savings from increased diversion of approximately 182 tons of source-separated organic material (SSOM) per year from the incinerator in Bridgeport. To the extent that the region ships its municipal solid waste to out-of-state landfills, diverting organic waste will provide even greater emissions savings. Emissions calculations have been performed utilizing EPA WARM v.16.

TABLE 1

Proposed Action Total Organic Waste (Food Scraps & Wood) Composted GHG Emissions	**2027 Proposed Action Projection***
Baseline (Landfill)	N/A
Incineration	(13.42)
Proposed Action (Composting)	(27.69)
Incremental GHG Emissions ($MTCO_2E$):	**(14.27)**
*GHG Emissions Savings in Metric Tons of carbon dioxide equivalent (MTCO2E).	

Source: U.S. EPA, Waste Reduction Model Tool, Version 16.

As this table indicates, the Proposed Action will reduce greenhouse gas emissions by over 14 metric tons annually as compared to incineration of the food scraps, and by over 27 metric tons annually as compared to landfilling out of state.

Overall, the construction of the compost facility's effect on air quality during construction is expected to be minor and short-term and will result in no significant impacts to air quality. Cumulative impacts in air quality in the Town of Kent are expected to be low, since neither the proposed action nor the "no action" scenario would have considerable air quality impacts, and air quality in the area of the project site is generally good.

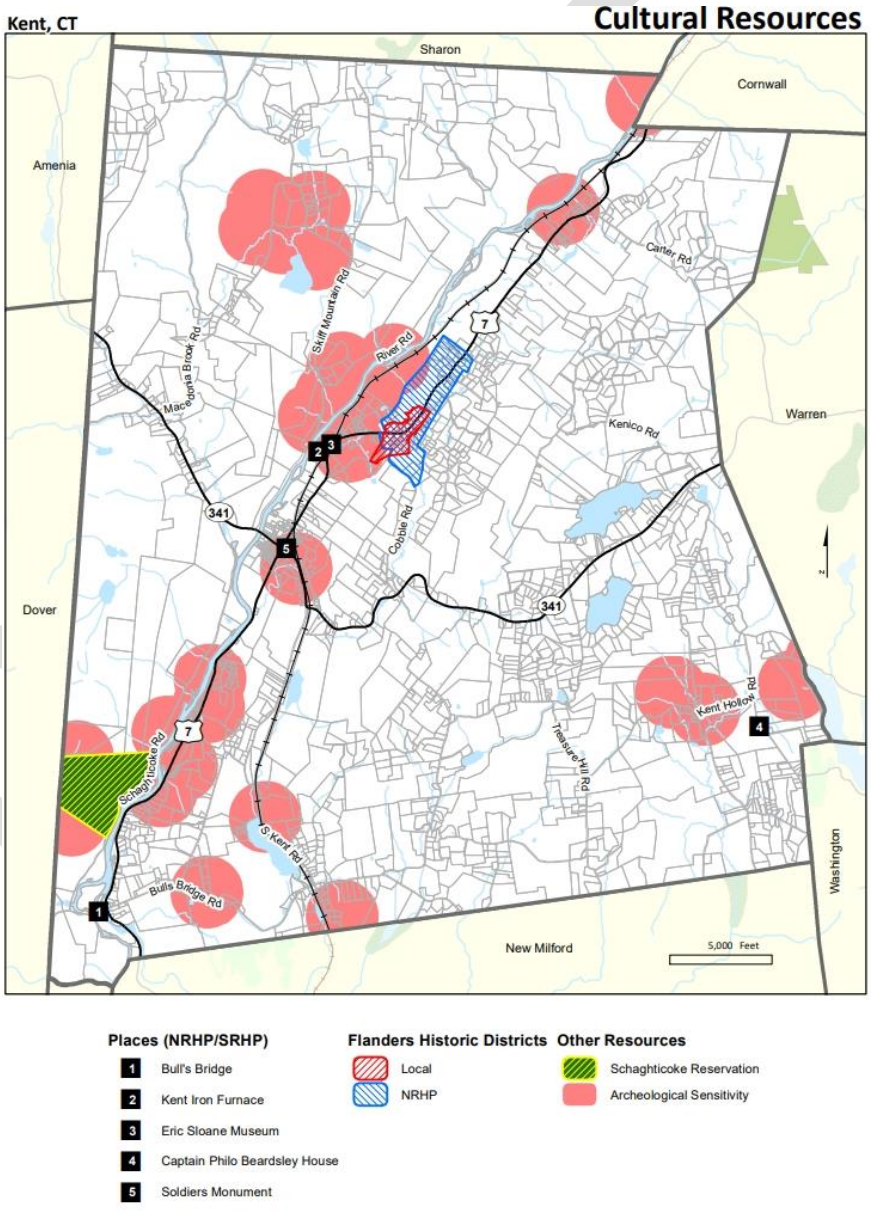
4.3 Use and Conservation of Energy Resources

Energy expenditure for the proposed action has two components: construction phase and operations phase. In terms of the construction phase, energy consumption would primarily include power for construction vehicles, production of project components, and assembly of these project components at the site of the proposed action. These energy expenditures will be quite minor in scale. In terms of the operations phase, the energy expenditures would consist of resources to operate the composting facility and equipment supporting the operations.

Using the metric of 55 kWh per ton to operate an in-vessel composter annually, with 182 tons of annual feedstock, the proposed action would draw 10,010 kWh annually. This figure is only equivalent to the energy required to power one single family home for just under one year based upon the US Energy Information Administration's estimate of 10,500 kWh/year for a residential household. Therefore, within the scale of regional energy markets, the impact of the proposed action on energy resources is expected to be less than significant.

4.4 Cultural, Historic, and Archaeological Resources

The Town of Kent has one national historic district designation and one local historic district designation that largely overlap. The Flanders Historic Districts, a local and National Historic District, are centered around the intersection of Route 7 and Cobble Road, slightly north of the Kent village center. The "Conservation – Resources and Assets" section of the 2022-2032 Town of Kent Plan of Conservation and Development also identifies four additional properties that are listed on the National Register of Historic Places. However, the site of the proposed action is outside of the historic district area, and would not impact any other historical properties or assets in the town.



From an archaeological standpoint, the 2022 POCD notes that *"Kent has a number of areas where archeologic resources have been found and this points out that there are*

likely to be additional archeologic resources which have not yet been found. Kent should be aware of (and sensitive to) the presence of archeologic resources and consider ways to protect and preserve these resources in the future." In addition, the general area around the Kent Village Center, inclusive of the site of the proposed action, is identified in the POCD as an area of "Archaeological Sensitivity" in the POCD. However, the exact location of the proposed action is unlikely to have particular archaeological value given that it shares a parcel with the existing municipal transfer station, and therefore the site has been substantially disturbed for a significant period of time.

Therefore, no significant impacts are expected to cultural, historic, and/or archaeological resources as a result of the proposed action.

4.5 Noise, Vibration, and Odors

Noise and Vibrations: Construction activities for the proposed in-vessel composter will create low to moderate levels of noise; however, these noise levels would return to baseline conditions upon completion of project construction. The temporary impacts would be the result of heavy equipment operation. The construction activities would occur during daytime hours and on weekdays when noise levels of a low to moderate range would be more frequently expected and better tolerated.

In an effort to minimize any potential annoyances caused by a temporary increase in noise levels, construction activities should be limited to between 8:00am and 5:00pm, Monday through Friday. This mitigation measure would further ensure no significant impacts as a result of a short-term increase in noise. As the project site is located adjacent to the existing municipal transfer station that currently produces low to moderate levels of noise localized to the general project area, construction and operational noise is not expected to disturb residents and other sensitive noise receptors above current levels.

During operation of the in-vessel composter, there will be noise from the composting equipment itself, as well as from support equipment and vehicles such as front-end loaders. Vehicular traffic noise associated with the operation and maintenance of the facility will be incidental when considered in combination with the existing traffic use of surrounding roadways (see Section 4.10 for traffic data). With the implementation of proper mitigation measures, the potential operational noise impacts will be less than significant.

Odors: Composting facilities, while beneficial for diverting waste from landfills and creating valuable soil amendments, can generate unpleasant odors that can be a source of concern for nearby communities. These odors result from the biological activity of microorganisms during the decomposition of organic materials and can

impact both air quality and human health. The two most important site management practices to reduce odors are rigorous housekeeping and water management.

Several classes of compounds contribute to compost odors:

- Volatile Fatty Acids (VFAs): These are produced as carbohydrates, fats, and oils decompose, and can create "sour-smelling" odors like vinegar (acetic acid) or rancid smells (butyric acid).

- Volatile Nitrogen Compounds: This group includes:
    - Ammonia: A pungent, irritating odor, especially when processing high-nitrogen feedstocks like manure or fish waste.
    - Amines: Foul-smelling compounds like putrescine and cadaverine, which are associated with decaying flesh.
    - Indoles: Compounds like indole and skatole, which can have a fecal odor.

- Volatile Sulfur Compounds: These are highly offensive and include:
    - Hydrogen sulfide (H2S): The characteristic "rotten egg" smell, a sign of anaerobic decomposition.
    - Mercaptans: Strong, pungent odors reminiscent of rotten cabbage, garlic, or skunks.
    - Organic sulfides: Compounds like dimethyl disulfide (DMDS), dimethyl sulfide (DMS), and carbon disulfide (CS), which are also associated with strong, offensive odors.

- Other VOCs: Ketones, aldehydes, and alcohols also contribute to the overall odor profile of a composting facility.

The proper implementation of appropriate BMPs for odor control must be included as part of the proposed action to ensure that potential impacts from odors will be less than significant. Section 4.14 on Mitigation Measures for Potential Adverse Impacts provides additional specifics on implementing BMPs for odor control.

4.6 Geological and Soil Resources

Geological Resources: Geological resources are defined as the topography, geology, and geological hazards of a given area.

The statewide 10-foot Digital Elevation Model (DEM) surface based on the Connecticut 2000 LiDAR ground elevation data indicates that the site of the proposed action has relatively flat topography. As such, development of the site under the proposed action would require limited excavation and grading activities, thereby reducing potential impacts to the surrounding environment. The site of the proposed action is intersected by the “Owm” and “Csb” bedrock geology typologies. The “Owm” category is defined as

the Basal marble member of Walloomsac Schist consisting of dark- to light-colored schistose marble. The "Csb" category is defined as the Unit B of Stockbridge Marble consisting of white to light-gray dolomite marble and schist. The quaternary geology mapping indicates that the site of the proposed action includes "Till" consisting of thin till deposits. No apparent geological hazards are evident from the mapping.

Soil Resources: Soil information, including soil surveys and soil classification, is available through the Natural Resources Conservation Service (NRCS) and DEEP's online GIS mapping. Soils and topography at a project site are characterized prior to construction to assess suitability for construction and potential for erosion.

The soil on the site of the proposed action includes categories "31B – Copake fine sandy loam, 3 to 8 percent slopes" and "31C – Copake gravelly loam, 8 to 15 percent slopes." Copake fine sandy loam offers advantages for development due to its well-drained nature, but it is important to address the need for proper soil management to prevent erosion and ensure long-term stability. Copake gravelly loam soils are generally considered a well-drained and relatively stable soil type, but some degree of susceptibility to compaction and potential for erosion can pose challenges for development.

Given the characteristics of the site of the proposed action such as relatively level topography and availability of a public sewer connection, as well as the nature of the proposed action and the previously developed status of the property, no significant impacts to geological resources are expected as a result of the proposed action.

Soil erosion is best controlled using appropriate erosion and sediment control measures and typical BMPs such as sandbag or hay bale installations, erosion blankets, and silt fences. Other BMPs can also be specified in the proposed action's stormwater pollution prevention plan, dust control plan, and/or erosion and sedimentation control plan.

Hydric Soils: No hydric soils are present on the site of the proposed action.

Prime Farmland: The site of the proposed action consists of soils identified as "Statewide Important Farmland Soils" and "Prime Farmland Soils" in the Soil Survey Geographic (SSURGO) database for the State of Connecticut' geographic data layer. Prime Farmland Soils are defined as *"soils that have the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oil seed crops, and are also available for these uses (the land could be cropland, pastureland, range-land, forestland, or other land, but not urban built-up land or water). It has the soil quality, growing season and moisture supply needed to economically produce sustained high yields or crops when treated and managed, including water management, according to acceptable farming practices."* Statewide Important Farmland Soils are defined as soil *types "that fail to meet one or more of the*

requirements of prime farmland, but are important for the production of food, feed, fiber, or forage crops. They include those soils that are nearly prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods." This category of potential farmland soils is the second level of importance out of the three farmland soil categories (after Prime Farmland Soils).

While the proposed action would impact some farmland soils, several factors associated with the proposed action significantly reduce any potential impacts to farmland as a whole. First, the site of the proposed action only includes a very small area of Prime Farmland Soils as mapped in the Farmland Soils Map, in accordance with the Code of Federal Regulations, CFR title 7, part 657. These are the most critical soils for farmland preservation and have a greater priority than the other two categories of soils on the map. Second, given the fact that the site of the proposed action shares a land parcel with the pre-existing municipal transfer station, it is exceedingly unlikely that the site would be available in the future for utilization as actively managed farmland. Finally, the very close proximity of the municipal transfer station to the site of the proposed action, and the general incompatibility of such a use with active farming, essentially preclude any farming use of the project site going forward.

In terms of impacts as from the proposed action, construction will involve limited soil-disturbing activities, including some excavation and grading necessary to establish level surfaces. Less than approximately 5,000 square feet of land area will be affected by the soil-disturbing activities for the installation of the in-vessel composter and associated staging areas for composting inputs and finished product. Stormwater for the proposed action is further discussed in Section 4.7 Water Resources below.

In summary, short-term and long-term impacts on geologic and soil resources are anticipated to be less than significant given the compliance requirements and implementation of BMPs to control stormwater runoff.

4.7 Water Resources

Surface Water and Water Quality: Per Connecticut Water Quality mapping, a small stream that branches off from the nearby Housatonic River running to the west and north of the site of the proposed action is designated Class A waters, meaning its water quality is appropriate for habitat for fish and other aquatic life and wildlife; potential drinking water supplies; recreation; navigation; and water supply for industry and agriculture. The 2022 Integrated Water Quality Report (2022 IWQR) produced by DEEP identifies which uses are impaired for reaches of waterbodies and in some cases the potential sources of impairment. As part of this report process, an IWQR 305(b) cycle assessment was not completed for the small stream adjacent to the site of the proposed action, but an assessment was completed for the nearby segment of the Housatonic River located in southern Kent. This assessment determined that Aquatic

Life Attainment Use was "Supporting," Recreation Use was "Not Assessed," and Fish Consumption was "Not Supporting."

During construction, the proposed action will include a Storm Water Pollution Prevention Plan with various BMPs for controlling stormwater and any potential spills. A Discharge of Stormwater and Dewatering Wastewater Associated with Construction Activities – General Permit Registration will also be obtained. Compliance with the requirements and conditions of the Individual NPDES Wastewater Permit for Discharge of Leachate or Co-Mingled Stormwater during the operations phase of the proposed action will ensure that storm water run-off impacts from the proposed action will be less than significant. Based on this, short-term and long-term impacts from the proposed action to surface waters and water quality are anticipated to be less than significant.

Estuaries: The site of the proposed action is not in close proximity to any identified estuary areas.

Freshwater Lakes and Reservoirs: No freshwater lakes or reservoirs are located in close proximity to the site of the proposed action.

Wild and Scenic Rivers: National Wild and Scenic Rivers System mapping shows that the portion of the Housatonic River that is near the project area is designated as a wild and scenic river. The identified "Outstandingly Remarkable Values" of this river segment are "Ecology," "History," "Recreation," and "Scenery." These values are further described on the National Wild and Scenic Rivers website:[3]

> ***Ecology***
> The Housatonic Valley is a unique ecosystem that is home to a variety of plants and animals, some not found in other parts of the state. Much of this is owed to the diverse habitats of the area's agricultural lands, woodlands, wetlands, and overgrown abandoned fields. The ecological resources of the river valley include calcareous wetlands whose vegetation is uniquely suited to the marble or carbonate rocks that occur in the Housatonic Valley yet are of extremely restricted occurrence in the rest of the state. Several of these sites have been proposed for Connecticut's Critical Biological Area status. Numerous threatened, endangered, or special concern species inhabit the riverine habitats including several salamander, turtle, snake, bird, and bat species.
>
> ***History***
> The Housatonic River Valley was first occupied by paleo-Indians in approximately 10,000 BC, and since that time has been occupied by three distinctive Native

[3] https://rivers.gov/carp/river/housatonic.

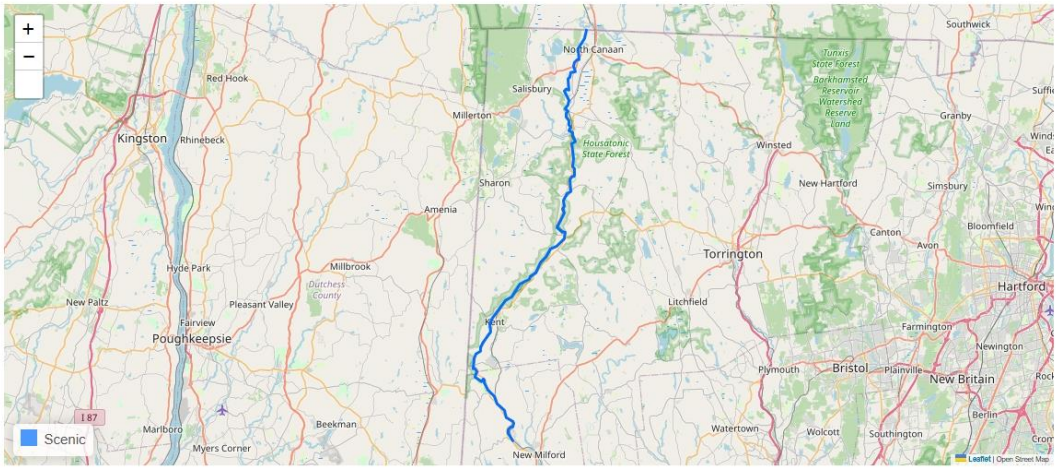
American cultures before the first Europeans explored the area. The Schaghticokes still have a reservation along the river in Kent.

Included on the designated river segment are two wooden covered bridges, West Cornwall and Bulls Bridge, and one wrought iron bridge, Boardman Bridge, are listed on the National Register of Historic Places for their engineering significance. In addition, the National Register includes the 19th Century Railroad Station at Cornwall Bridge on the east bank of the Housatonic River, and the Union Depot in North Canaan. The state has also given recognition to a 60-acre historical district in the town of Kent which borders on the river.

Housatonic River

Connecticut

The Housatonic River Basin lies principally in western Connecticut and southwestern Massachusetts, with small sections extending into southeastern New York. This area is well known for its charming rural character, historical heritage, and natural beauty, which is remarkable considering its proximity to large urban centers in the northeast. The Housatonic River supports outstanding scenic beauty, recreational opportunities, historic value, and wildlife/vegetation.



Recreation

This segment of the Housatonic River is a frequently visited area due to its many recreational offerings in a picturesque setting. The Housatonic supports a wide range of river-oriented activities and is a well-known destination for canoeing, kayaking, and fly fishing. State park and forest lands in the area provide public access to the river and accommodations for boating, fishing, camping, hiking, and hunting. A section of the Appalachian National Scenic Trail runs for five miles along the west side of the Housatonic River between Kent and Cornwall Bridge. In addition to the many scenic paved and dirt roads that can be biked on, the planned HouBike Trail proposes to link existing river roads next to or near the Housatonic to produce a continuous 45-mile multi-use biking and hiking route from the Massachusetts/Connecticut border to the center of New Milford. The proposed HouBike Trail route includes approximately 35 miles of existing publicly maintained paved and dirt roads directly adjacent to the Housatonic River.

Scenery

The bucolic scenery of the Housatonic River Valley is highly diverse as the river flows through areas of steep forested mountains with prominent bedrock outcroppings near their summits, to areas of gently rolling hills and broad floodplains covered with agricultural fields and dotted with small villages. Portions of Route 4 and Route 7 have been designated scenic roads by the state and afford views of the river. Several towns within the Housatonic corridor, including Canaan, Kent, New Milford, and Sharon, have a local scenic road ordinance.

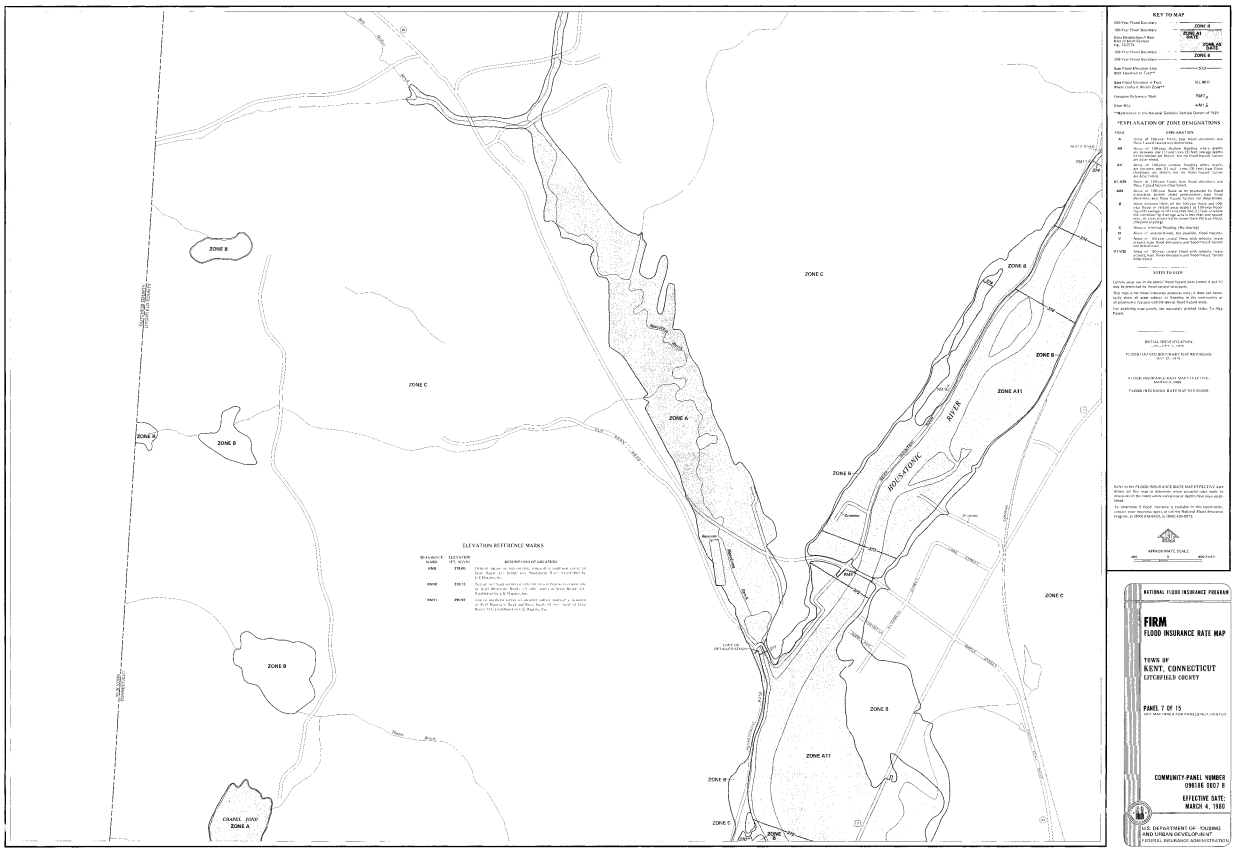
Given the very small size of the proposed action's footprint of land disturbance and the distance to the Housatonic River, any impacts on wild and scenic rivers are anticipated to be less than significant.

Aquifers: According to the state's Aquifer Protection Area Map, there are no aquifer protection areas identified within the Town of Kent.

Wetlands: The site of the proposed action does not include any inland wetland soils or delineated wetland areas.

Coastal Area Management: The site of the proposed action is not included in any designated Coastal Management Area for the State of Connecticut, and the site of the proposed action is not located within any Coastal Boundary Area.

Floodplains: The Federal Emergency Management Agency (FEMA) Flood zone data shown of FIRM Panel number 0901860007B indicates that the site of the proposed action does not intersect with any designated floodplains and lies within a "Zone C" (area of minimal flooding) area.



The proposed action avoids impacting water resources to the maximum extent practical. The implementation of BMPs will include measures to reduce or eliminate sedimentation and manage stormwater at the site. Therefore, any impacts resulting from the proposed action are anticipated to be short-term and less than significant.

4.8 Biological Resources

Impacts to biological resources resulting from the proposed action are anticipated to be less than significant and further mitigated through the implementation and use of BMPs and SOPs, appropriate construction phasing/timing, and site design measures. The subsections below discuss specific potential impacts for various components of the site area's biological resources.

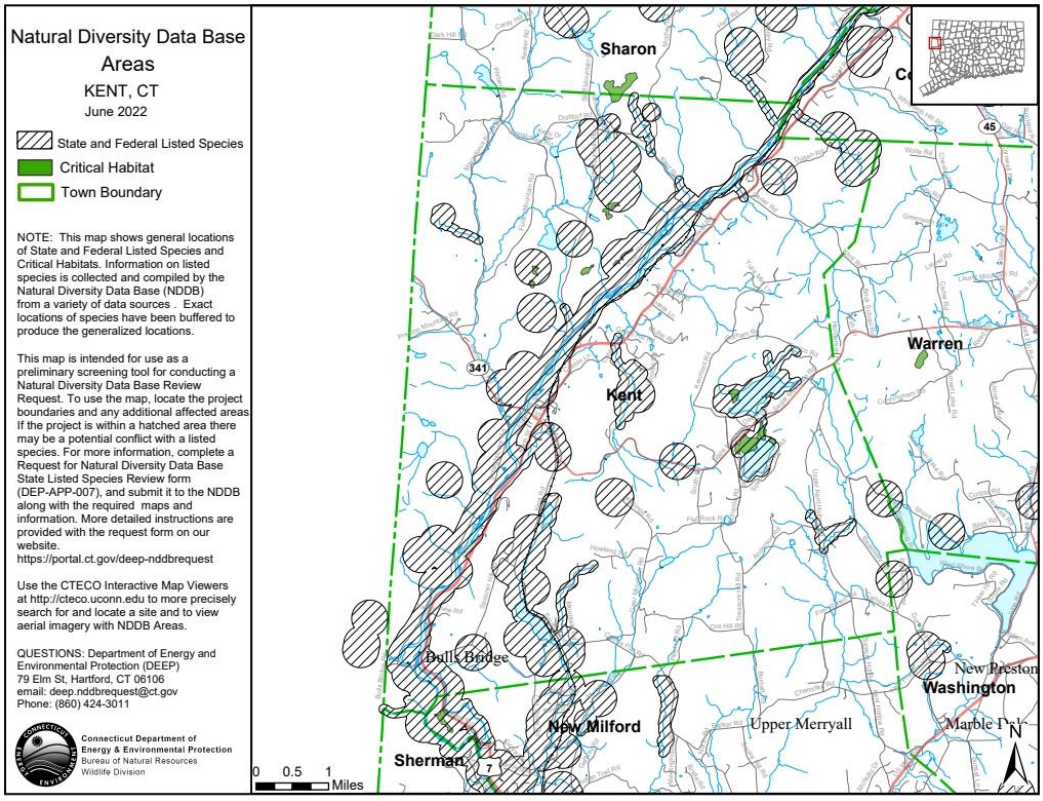
Vegetation/Flora: Implementation of the proposed action would not include any removal of trees or brush, and is not likely to cause disturbance to vegetation in adjacent areas. The site of the proposed action is located within a Natural Diversity Area that is closely associated with the nearby Housatonic River. It is not clear what species and how many species, if any, are associated with the proposed site, and HRRA will be required to submit an NDDB Review Request (endangered, threatened, and special concern species and habitats) prior to receiving a solid waste permit to construct and operate an in-vessel composting facility. However, the fact that the proposed site has been previously disturbed and developed as the Town's municipal

transfer station, and that the exact area of construction work is currently clear of vegetation, leads to the conclusion that there are unlikely to be protected species of vegetation that are impacted by the proposed action.

Wildlife/Fauna: A report generated through the U.S. Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (IPaC) website identified that there are no migratory birds with potential to occur in the project area. Since the project site is relatively small and has been disturbed previously, no impacts to migratory birds or their nesting sites are anticipated.

Rare, Threatened and Endangered Species: The State Natural Diversity Data Base (NDDB) map for the Town of Kent shows the project area and its proximity to areas where state and federal listed species and significant natural communities may exist. Three (3) species of note are indicated as intersecting with the site of the proposed action, although the species themselves are not identified by name. No impacts to these species by the proposed action are expected as the project activities are occurring in a previously developed area of an actively utilized site. Also, there is no designated critical habitat within the project area. As noted previously, an NDDB Review Request would need to be submitted as part of the permitting process and the proposed action would comply with requests from the NDDB program to the extent practicable. If the proposed impacted area is altered during design, DEEP/NDDB program staff would be consulted for additional measures that may be necessary to provide the required protection for these species.

According to the National Marine Fisheries Service's (NMFS) Marine Mammal Species Range and Critical Habitat Mapper, no Critical Habitat was mapped that would be directly affected by the proposed action. The NMFS Essential Fish Habitat Mapper determined that there are no essential fish habitats in the project area.



The proposed action would have no effect on essential fish or shellfish habitat provided that stormwater runoff is properly managed through adherence to the requirements of the Discharge of Stormwater Associated with Commercial Activity – General Permit Registration and the Discharge of Stormwater and Dewatering Wastewater Associated with Construction Activities – General Permit Registration that will be required for the proposed action.

A report generated through the USFWS IPaC website identified that there are three (3) species potentially impacted that are listed as threatened, endangered, or candidate species in the area of the site of the proposed action. They are:

- Northern Long-eared Bat (Endangered)
- Bog Turtle (Threatened)
- Monarch Butterly (Proposed Threatened)

Additional information for each species from the USFWS is provided below:[4]

[4] The three subsequent paragraphs are provided from the USFWS website at https://ipac.ecosphere.fws.gov/location/ENOPU6FOIFGRXATI7MTYVUA6OE/resources.

Northern Long-eared Bat

The northern long-eared bat is a medium-sized bat about 3 to 3.7 inches in length but with a wingspan of 9 to 10 inches. As its name suggests, this bat is distinguished by its long ears, particularly as compared to other bats in its genus, Myotis, which are actually bats noted for their small ears (Myotis means mouse-eared). The northern long-eared bat is found across much of the eastern and north central United States and all Canadian provinces from the Atlantic coast west to the southern Northwest Territories and eastern British Columbia. The species' range includes 37 states. White-nose syndrome, a fungal disease known to affect bats, is currently the predominant threat to this bat, especially throughout the Northeast where the species has declined by up to 99 percent from pre-white-nose syndrome levels at many hibernation sites. Although the disease has not yet spread throughout the northern long-eared bat's entire range (white-nose syndrome is currently found in at least 25 of 37 states where the northern long-eared bat occurs), it continues to spread. Experts expect that where it spreads, it will have the same impact as seen in the Northeast.

Bog Turtle

This is the smallest emydid turtle, and one of the smallest turtles in the world. Adult carapace length is 7.9 to 11.4 cm (3.1 to 4.5 inches). The dark brown or black carapace may be marked with radiating light lines or a light blotch on the vertebral and pleural scutes. Scute annuli are usually prominent in juvenile and young adult specimens, but the carapace may be nearly smooth in old adults. The head, neck, and limbs are typically dark brown with variable reddish to yellow spots and streaks. A large reddish-orange to yellow blotch is visible behind and above each tympanum, sometimes merging into a continuous band on the neck. The upper jaw is weakly notched. (Ernst, Lovich, and Barbour, 1994; Harding, 1997) The plastron is also brown or black, but often with lighter yellow blotches towards the medial and anterior scute edges. A mature male bog turtle has a concave plastron and a long, thick tail, with the vent posterior to the rear edge of the carapace with tail extended. The female has a flat plastron and a thinner, smaller tail, with the vent at or beneath the rear carapace edge.

Monarch Butterfly

Adult monarch butterflies are large and conspicuous, with bright orange wings surrounded by a black border and covered with black veins. The black border has a double row of white spots, present on the upper side of the wings. Adult monarchs are sexually dimorphic, with males having narrower wing venation and scent patches. The bright coloring of a monarch serves as a warning to predators that eating them can be toxic.

During the breeding season, monarchs lay their eggs on their obligate milkweed host plant (primarily Asclepias spp.), and larvae emerge after two to five days. Larvae develop through five larval instars (intervals between molts) over a period of 9 to 18 days, feeding on milkweed and sequestering toxic chemicals (cardenolides) as a defense against predators. The larva then pupates into a chrysalis before emerging 6 to

14 days later as an adult butterfly. There are multiple generations of monarchs produced during the breeding season, with most adult butterflies living approximately two to five weeks; overwintering adults enter into reproductive diapause (suspended reproduction) and live six to nine months.

In many regions where monarchs are present, monarchs breed year-round. Individual monarchs in temperate climates, such as eastern and western North America, undergo long-distance migration, and live for an extended period of time. In the fall, in both eastern and western North America, monarchs begin migrating to their respective overwintering sites. This migration can take monarchs distances of over 3,000 km and last for over two months. In early spring (February-March), surviving monarchs break diapause and mate at the overwintering sites before dispersing. The same individuals that undertook the initial southward migration begin flying back through the breeding grounds and their offspring start the cycle of generational migration over again.

Given the very small relative size of the site area and the prior disturbance and development of the site, it is not expected that significant potential habitat for any of the three identified species of concern will occur. The IPaC report also indicates that there are no critical habitats that intersect the site of the proposed action. In addition, observation data and mapping from DEEP indicates that as of July 2023, there have been no reporting sightings of the Northern Long-eared Bat in the Town of Kent. Therefore, the impacts from the proposed action on biological resources are anticipated to be minimal and less than significant.

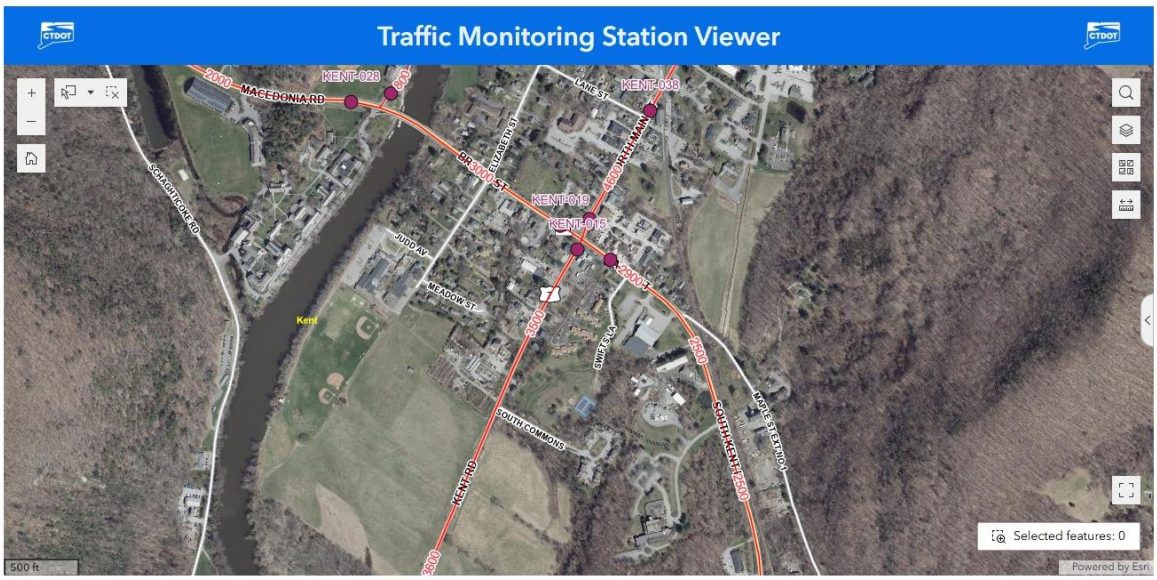
4.9 Hazardous and Toxic Materials and Waste

Construction activities associated with the proposed action could involve equipment that utilizes hazardous materials such as petroleum-based fuels and oil. Accidental spills of such materials are always a concern during construction work. HRRA will be responsible for ensuring that any contractors or subcontractors working on the site of the proposed action are properly maintaining construction vehicles and equipment, along with any hazardous and toxic materials used in their operation, per applicable state and federal laws and regulations. This responsibility further extends to any disposal of hazardous waste generated as part of the construction phase and operational phase of the proposed action, and the requirement that all such materials and wastes be handled according to safety data sheet instructions. The implementation and use of BMPs and standard operating procedures for preventing and responding to spills and contamination, impacts are anticipated to be less than significant. In addition, the operation of the in-vessel composter is not expected to generate any significant hazardous waste or toxic materials.

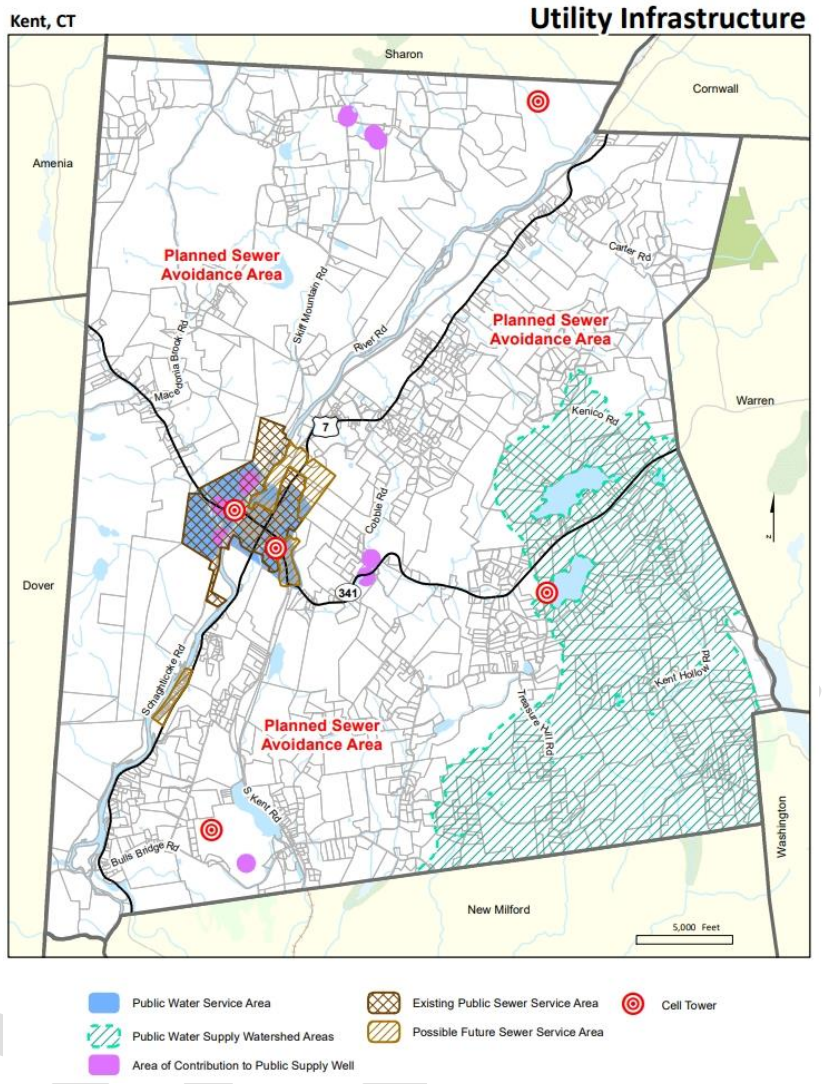
4.10 Transportation Resources

Access to the site of the proposed action is provided by way of Maple Street, also identified as State Route 341. Although the potential traffic generated by the implementation of the proposed action will be entering and exiting the site via Route

341, the proposed action is not large enough to trigger the need for review by the Office of the State Traffic Administration. According to CTDOT's most recent traffic data for Kent from 2023, the segment of Route 341 that runs past the site of the proposed action experiences 2,500 average daily trips (ADT). Given this level of existing traffic, the relatively small size of the proposed composting facility, and the significant amount of traffic already accessing the adjacent municipal transfer station and Kent Highway Department, impacts on the traffic levels and roadway system connecting the site of the proposed action to the regional transportation network are expected to be less than significant.



Presently, the Northwestern Connecticut Transit District (NWCTD) operates a Dial-A-Ride service for elderly (60+) and disabled residents in Kent and 13 other municipalities in the Litchfield Hills region. Given the characteristics of the proposed action, impacts to the regional mass transit system are expected to be less than significant.



4.11 Community Services and Utility Resources

The proposed action will not require new infrastructure to be constructed at, or connecting to, the site. Roads and utilities will extend from existing rights-of-way adjacent to the site. There are no anticipated interruptions in service to residents in the surrounding area that will occur during construction. The proposed action will not impact community services or utilities in the immediate area, with the exception of providing the infrastructure needed for citizens to divert food scraps from their household trash, reducing the amount of overall MSW produced and the cost of disposal, and having bagged compost conveniently available for purchase. The project will not cause an increase in monthly service rates for public utilities. The proposed action will not impact recreational and park resources, nor will it impact other general local governmental functions or services. Given these findings, impacts on community services and utility resources as a result of the proposed action are expected to be less than significant.

4.12 Environmental Justice

There are 25 Environmental Justice Block Groups in the HRRA region according to the 2023 dataset from DEEP. These Block Groups are located in Bethel, Danbury, New Fairfield and Ridgefield. The two predominant drivers for the designation in these Neighborhoods are being within 200% of the Federal Poverty Level (FPL) and high concentrations of limited English proficiency (LEP) minority populations living there.

The Town of Kent itself is neither categorized by the State of Connecticut as an Environmental Justice Community nor is it currently considered a "distressed municipality." As a component of the Proposed Action, HRRA should continually engage with residents to ensure their meaningful participation by:

- providing project information and updates online, on our website and through social media platforms, with pathways for residents to ask questions and receive answers;
- providing information and resources in several languages; and
- holding public forums as necessary.

4.13 Discussion of Committed Resources

The implementation of the proposed action will consume nonrenewable resources during the construction of the composting facility (i.e., construction supplies, fuel, etc.), which are considered irreversibly and irretrievably committed. Additionally, the irreversible and irretrievable expenditure of over $423,000 is expected for the construction and fit-out of the proposed in-vessel composting facility. After construction, maintenance and labor resources will be required long-term to operate and maintain the facility. There will be no irreversible or irretrievable impact to wild and scenic rivers, coastal zone management, endangered species, aesthetics, traffic, noise, air quality, water quality/quantity, or the above-referenced resources.

4.14 Mitigation Measures for Potential Adverse Impacts

The following mitigation measures are recommended for implementation to address any potential adverse impacts from the establishment and operation of the proposed action, based upon the analysis conducted in this EIE:

- In order to mitigate any potential impacts from odors, effective odor control must be included in the proposed action, involving a combination of preventative and treatment measures:
    - Optimizing the Composting Process:
        - Maintaining proper carbon-to-nitrogen ratios to ensure efficient decomposition and minimize the release of nitrogen-based odors.

        - Adequate aeration to ensure aerobic conditions, preventing the accumulation of foul-smelling compounds that thrive in anaerobic environments.
        - Controlling moisture levels to optimize microbial activity and prevent both excessively wet and excessively dry conditions.
        - Regulating pile temperature to maximize decomposition and minimize the volatilization of odorous compounds.

    - Feedstock Management:
        - Prompt processing of incoming feedstocks, particularly those with high odor potential, such as food waste or manure.
        - Mixing odorous materials with porous bulking agents like wood chips or leaves immediately upon arrival to promote aeration and reduce initial odor emissions.

    - Odor Treatment Technologies:
        - Biofilters: These systems use layers of porous materials (e.g., cured compost, shredded yard waste) to biologically degrade odor compounds in the exhaust air.
        - Biocovers: Applying a layer of mature compost over fresh composting piles can help adsorb and biologically degrade odors before they are released into the atmosphere.
        - Chemical Treatment: Oxidizing chemicals like hydrogen peroxide or potassium permanganate can be used to chemically neutralize odors, though careful application is needed to avoid harming beneficial microorganisms.
        - Enzymatic Catalysts and Neutralizers: These products aim to break down or mask odorous compounds, though independent research on their effectiveness varies.
        - High Carbon Wood Ash: Studies have shown that adding high carbon wood ash can significantly reduce odor emissions.

- During operation of the compost facility, there will be noise from equipment, such as from an industrial grinder and front-end loaders. Noise from vehicular traffic created by operation and maintenance of the facility, in most cases, will be incidental in relation to the existing traffic use of surrounding roadways. With the implementation of proper mitigation measures in compliance with local ordinances, the potential operational noise impacts will be less than significant.
- Compliance with the required Storm Water Pollution Prevention Plan and its associated BMPs, as well as with the Discharge of Stormwater Associated with Commercial Activity – General Permit Registration, during the operations phase of the proposed action must occur to mitigate any potential impacts to surface water, water quality, fish and marine life, estuaries, and soil resources.

- Erosion occurring after construction prior to site stabilization may require the implementation of BMPs such as seeding or planting stabilizing vegetation after disturbance, and silt fencing.

Adverse impacts related to construction activities will be short-term and can be mitigated to a large extent by including proper control measures in all construction contract documents, and enforcing said requirements as well as any permit conditions and requirements. Control measures may include: control of dust pollution by wetting the ground surface periodically to reduce dust dispersion; requiring a traffic control plan to re-route traffic in the impacted areas to minimize traffic disruption, particularly the traffic flowing in and out of the municipal transfer station and Kent Highway Department facility; appropriate signage and traffic control personnel to route traffic in the impacted areas; and minimization of erosion through the use of hay bales and silt fences in strategic areas, such as around storm drains and the boundaries of the project site. In addition, the following mitigation measures have been identified:

- In order to mitigate any potential impacts to air quality, all construction equipment must have appropriate emission controls. Contractors working on the project must implement appropriate best management practices to reduce construction impacts, including reducing vehicle speeds and adhering to anti-idling requirements.
- In order to mitigate any potential impacts from noise, construction activities should be limited to between 8:00am and 5:00pm, Monday through Friday.
- In order to mitigate any potential impacts from soil erosion, excavation, and site grading, contractors must utilize erosion control BMPs such as the use or installation of sandbags, silt fences, earthen berms, fiber rolls, sediment traps, and/or erosion control blankets.
- The proposed action must include a Storm Water Pollution Prevention Plan with various BMPs for controlling stormwater and any potential hazardous materials spills. Compliance with the requirements and conditions of the Construction General Permit for Storm Water Discharges for Large and Small Construction Activities must occur so that storm water run-off impacts from the proposed action will be less than significant.
- In order to mitigate any potential impacts to biological resources, HRRA and its subcontractors must utilize site design, timing of construction activities, and implementation of best management practices and standard operating procedures (SOPs) to minimize noise, traffic, and natural landscape disturbance to the greatest extent feasible.

5.0 Comments Received Pursuant to RSCA Section 22a-1a-6

On May 20, 2025 the Connecticut Department of Energy and Environmental Protection (DEEP) published a Notice of Scoping in the Environmental Monitor to solicit comments for the proposed a Notice of Scoping for Regional Composting Facility and Recycling

Infrastructure projects in Kent, CT and Ridgefield, CT. No comments were received during the public comment period.