ENVIRONMENTAL IMPACT EVALUATION

FOR THE BUILDING OF A

REGIONAL COMPOSTING FACILITY FOR SOUTHEASTERN CONNECTICUT

TOWN OF PRESTON – SCRRRA

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 Southeastern Connecticut Regional Resource Recovery Authority (SCRRRA) to construct the first large-scale aerobic food waste composting facility in southeastern Connecticut, fulfilling an infrastructure need in a historically underserved region. The facility will utilize an innovative hybrid compost system, combining aerated static pile (ASP) processing with open windrows for curing, resulting in quicker composting times and reduced operational costs. The facility will be situated on approximately six (6) acres of land owned by the SCRRRA at 132 Military Highway (Route 12) in the Town of Preston.

With this facility, SCRRRA 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 – compost – for farmers and gardeners. Creation of this facility will save towns 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 the Contractor and further described in a Grant Assistance Agreement to be executed by and between DEEP and SCRRRA.

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.

The agency contact for this project is:

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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 Building a Regional Composting Facility for Southeastern Connecticut was published. The public comment period concluded on June 19,2025, and one comment was submitted to DEEP during that timeframe. The comment was made by the State Historic Preservation Office (SHPO) about possible archaeological impacts from the proposed action. After being provided with site location and information, and evidence of previous site disturbance, SHPO indicated that they had no concerns about archaeological impacts and that further analysis was not warranted.

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). On May 20, 2025, DEEP published a Notice of Scoping in the Environmental Monitor to solicit public comments. During the scoping period, one comment was received regarding clarification of the location of the project; please see Section 5.0 for a summary of this comment and response. In the August 5, 2025 issue of the Environmental Monitor, a Post-Scoping Notice for Building a Regional Composting Facility for Southeastern Connecticut 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 Draft EIE is available for public review and comment.

2.0 ALTERNATIVES

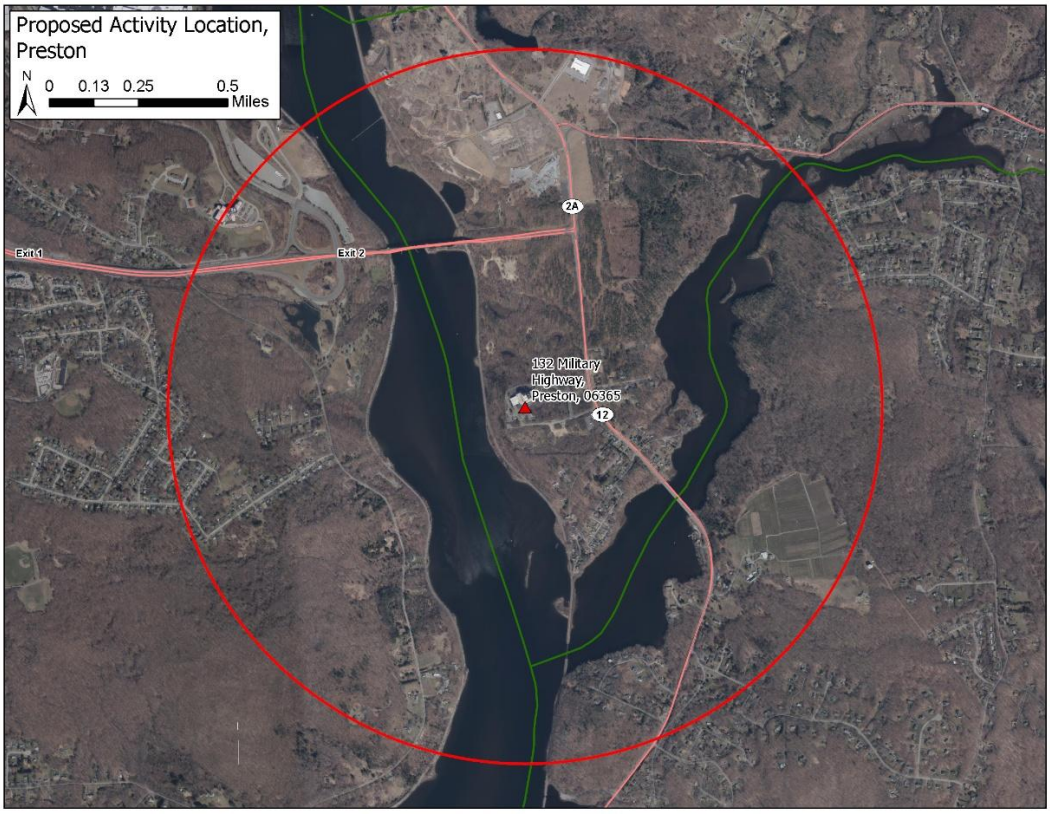
This section describes the alternatives considered for the regional compost facility. DEEP has evaluated the following alternatives as part of its grant action:

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

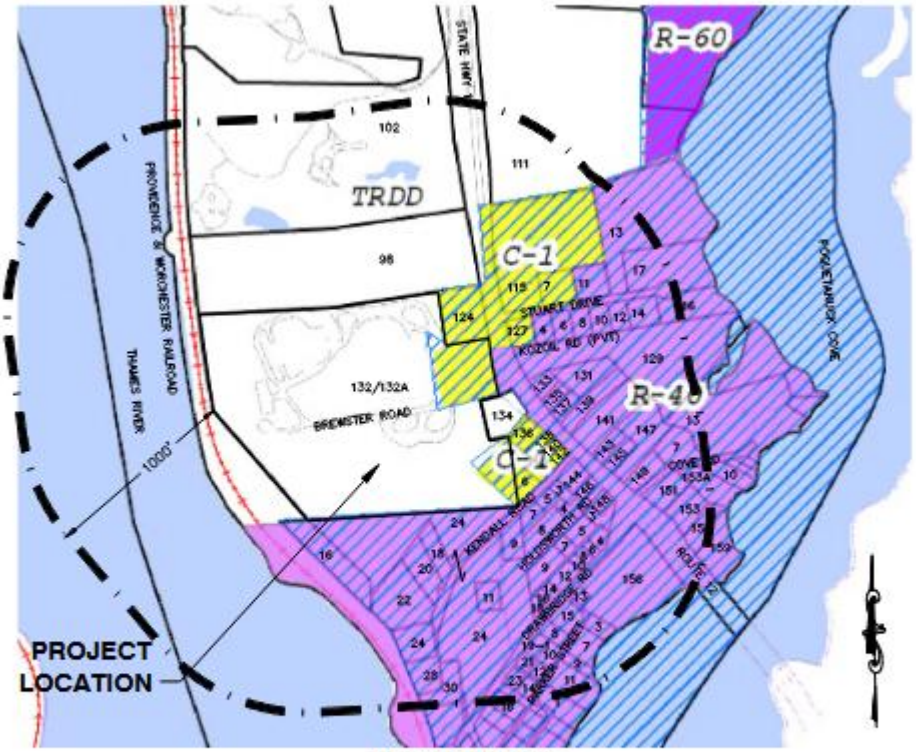
- **No Action:** Not execute the grant for the SCRRRA Regional Composting Facility.

2.1 Alternative 1 – The Proposed Action

SCRRRA proposes to construct and operate southeastern Connecticut's first commercial-scale food waste composting facility. The facility will utilize an innovative hybrid compost system, combining aerated static pile (ASP) processing with open windrows for curing, resulting in quicker composting times and reduced operational costs. The facility will be situated on approximately six (6) acres of land owned by the Authority at 132 Military Highway (Route 12) in the Town of Preston. Local zoning approval for the facility has been acquired and the required state-level solid waste permit application is currently under review by DEEP. A robust environmental justice public participation plan has also been developed and approved by DEEP, in consideration of Preston's status as a distressed municipality, and all twelve of the member municipalities are in full support of the project, as evidenced by their letters of support which were submitted with the grant application.



PROJECT ADDRESS:
132 ROUTE 12
PRESTON, CONNECTICUT 06365



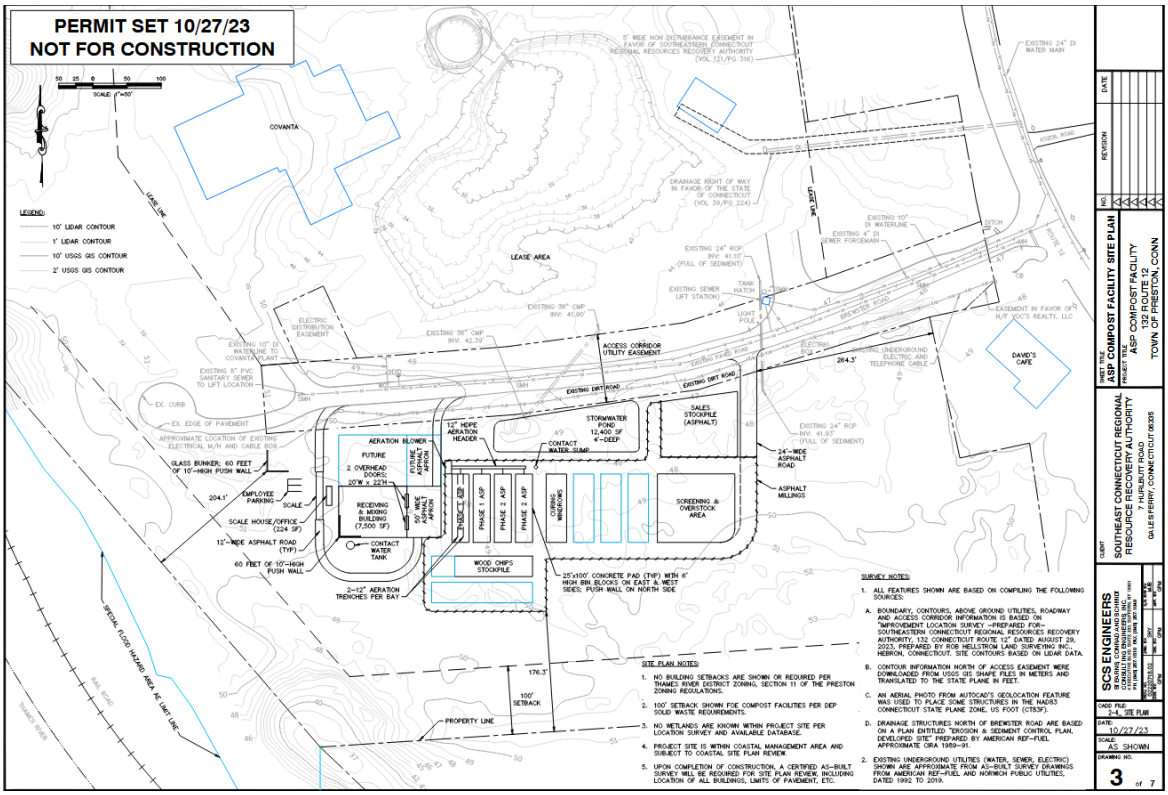
KEY/ZONING MAP

SOURCE: TOWN OF PRESTON
GEOGRAPHIC INFORMATION SYSTEM
(GIS) 8/18/23

500 250 0 500 1000
SCALE: 1"=500'

ZONING LEGEND
- Commercial District
- Residential-40
- Residential-60
- Thames River Design District
- Special Resource Protection Overlay

The facility will include a receiving area, a processing area, and a storage/sales area. The receiving area will be located on the west side of the property and will consist of a covered building on a concrete slab with a roll-up door. Upon receipt, the food scraps will be blended with a carbon source (mulch, leaf waste) and water as necessary. This immediate, daily step of processing incoming feedstock, undertaken inside a closed receiving building, will minimize odors. The blended mixture will then be placed in a concrete ASP bay, complete with forced aeration, temperature monitoring, and the provision of moisture as determined via continuous data inputs. Each bay will be operated at sufficient temperatures to sterilize the compost, rendering any pathogens inert and killing any unwanted seeds.



After two to three weeks in the ASP bay, the mixture will be moved to open windrows to further cure. By this stage, the compost will look and feel like rich, black soil. After about two months of curing, the finished compost product will be moved to the designated area for screening, storage, and sale to the public. The finished compost will be sold at market prices and will greatly benefit local farmers and gardeners, who currently source their fertilizers and compost from out of region and/or out of state. A portion will be designated for disadvantaged communities at a reduced price, including free compost for a limited quantity, to be used for community gardens and beautification projects.

Based on state and locally generated data, it is anticipated that most of the facility's feedstocks will be sourced within the region or New London County. SCRRRA's twelve municipal transfer stations have an abundance of yard and wood waste which SCRRRA will grind for use in the facility. SCRRRA will collaborate with experienced organics haulers like Black Earth Compost and Blue Earth Compost to collect source-separated organics (SSO), targeting larger institutional, commercial, and residential SSO generators, as well as smaller generators, such as municipal transfer stations and curbside pickup.

The proposed project will:

- establish compost infrastructure that will facilitate diversion of approximately 5,500 tons annually of food waste from the MSW stream for 25+ years;

- save towns money by lowering waste disposal costs, forecasted to reach an estimated annual savings of $850,000 annually;
- establish large-scale capacity for organics recycling;
- reduce greenhouse gas emissions created by incineration, trucking of ash out of the region, and trucking of purchased soil amendments into the region;
- sequester carbon in the natural process of composting;
- provide a local source of soil amendment/fertilizer alternative, some of which will be provided free to disadvantaged communities for their community gardens;
- reduce the amount of waste being sent to incinerators and landfills; and
- educate local communities about organics recycling and compost.

2.2 Alternative 2 – No Action

The No Action Alternative consists of not constructing the proposed regional 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 stagnate 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 southeastern 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.

Additionally, being unable to utilize the MMI grant would have negative impacts on both the Town of Preston and the SCRRRA region. First, if the 14,000 tons of food scraps and wood waste that will be processed through the proposed action needed to be incinerated instead of being composted, residents of the town and region would be impacted by the additional emissions from the WTE plant, especially particulate matter PM 10 and PM 2.5. Second, the towns within the SCRRRA region would be financially impacted by the differential between the higher cost of disposing of the food scraps via incineration versus the lower cost of composting.

Utilizing the MMI grant now for this infrastructure project is important and essential to enhancing the waste management system in southeastern Connecticut and prevent negative impacts from additional incineration of waste, and missing this opportunity would be a significant financial and public health setback. 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 Preston, SCRRRA 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 will be required prior to site disturbance and construction activities commencing. Land use/zoning permits for the project have already been obtained by SCRRRA.

4.0 Affected Environment and Environmental Consequences

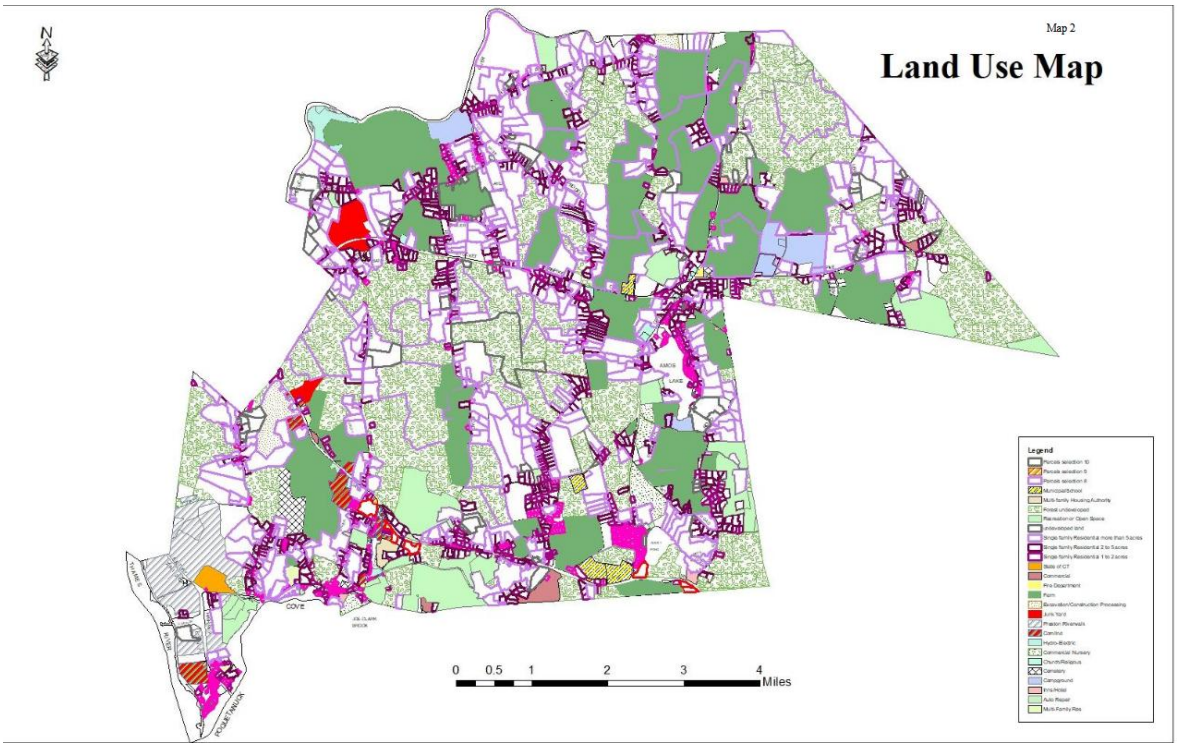
This section summarizes the physical, biological, social and development environments of the affected project area and the potential changes to those environments due to implementation of the proposed action. Identification and description of any mitigation measures considered, including any mitigation 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 Thames River District (TRD) zone under the Town's Zoning Regulations. The Zoning Regulations note that "the purpose of this district is to promote an energy efficient, pedestrian friendly, planned mixed-use development that includes a variety of commercial uses and will in its design consider the zones' unique locational features such as the campus setting, historic assets, and proximity to State Highways, rail line, the Thames River, natural resources, public utilities, and area attractions."[1] As such, these existing land use regulations provide significant control over potential areas of environmental impact as a result of the proposed action.

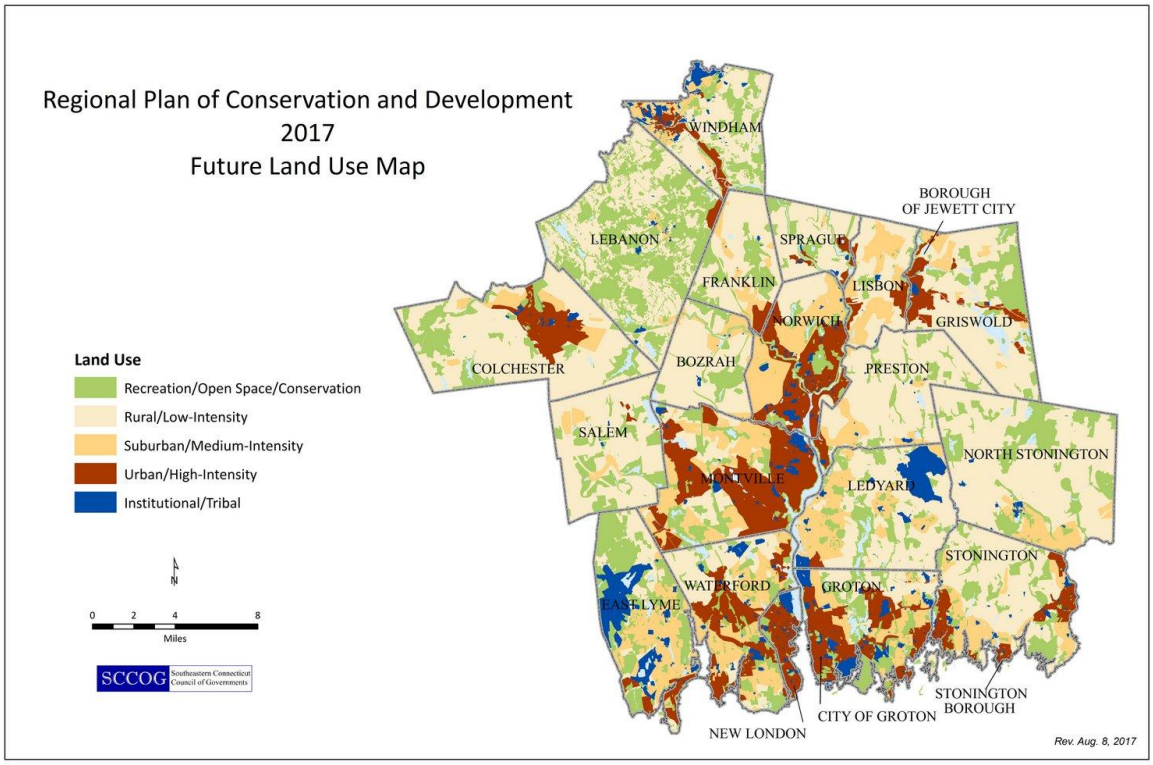
In the Town of Preston's 2024 Plan of Conservation and Development, the Existing Land Use Map has the site of the proposed action identified as "Commercial/Industrial," as proposed site shares a parcel with the existing ReWorld waste to energy plant. In reviewing the Goals & Objectives of the Plan of Conservation Development, the proposed action is consistent with the Plan and its recommendations for the future of the Town, with one specific action item related to the Coastal Management Area that is directly applicable to the site of the proposed action (discussed further in Section 4.7 – Water Resources below.)

[1] Town of Preston Zoning Regulations, Section 11.1, pg. 38.



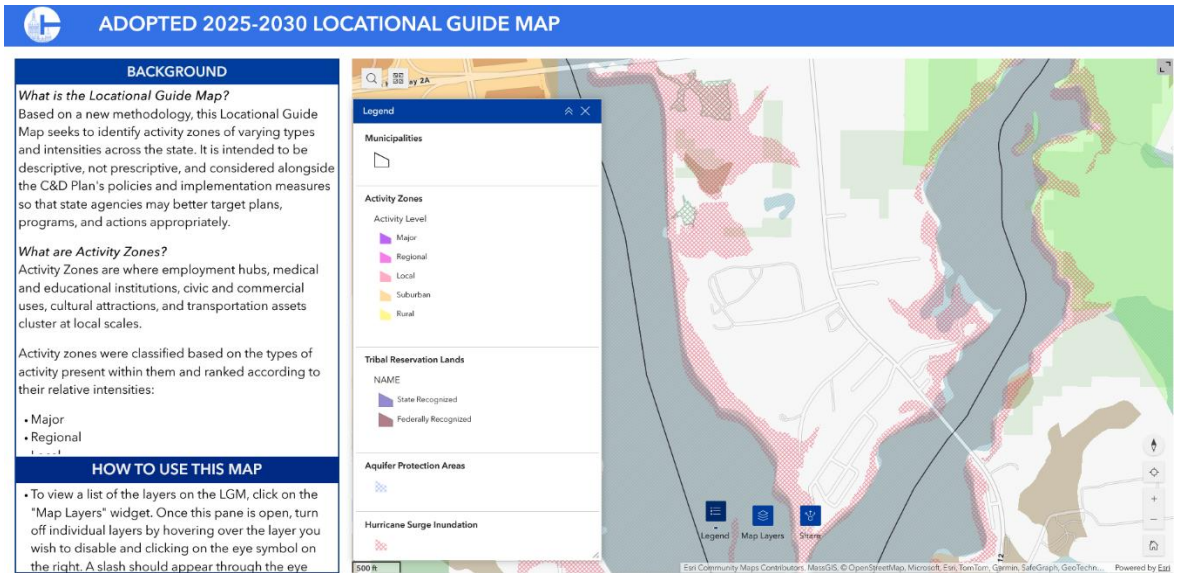
The 2017 Southeastern Connecticut Council of Governments (SECOG) Regional Plan of Conservation and Development (POCD) is the regional planning document that provides guidance to the Town of Preston and impacts the development of the site of the proposed action. Under the 2017 Regional POCD, the Future Land Use Map identifies the site of the proposed action as "Institutional/Tribal" and the surrounding area as "Urban/High-Intensity." As a point of reference, "Institutional/Tribal" is defined in the POCD as *"lands that belong to federally-recognized sovereign tribal nations, federal, state, or local governments, or educational institutions. They are categorized together here because these properties have similar characteristics – they are often extremely large parcels used for many different uses, and are often owned by the same entity for multiple decades."*[2] This designation is reflective of the parcel underlying the site of the proposed action being owned by SCRRRA and the future use being in alignment with SCRRRA waste management operations. As such, 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.

[2] 2017 Southeastern Connecticut Council of Governments Regional Plan of Conservation and Development, pg. 149.



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 does not indicate any specific Activity Zone designation for the site of the proposed action. In the associated text section, the Plan notes that *"it is important to note that areas falling outside of these activity zones are not devoid of activity – rather, that the activity present there may be of a different nature, density, and/or intensity. For example, areas outside of activity zones may be more lightly developed and/or consist of mostly residential or agricultural uses. As this iteration of the LGM is not intended to be used for site-specific decision-making, and is meant to be descriptive, rather than prescriptive, location outside of an activity zone does not preclude state investment. Rather, it should merely help agencies contemplate the appropriateness of certain actions, such as large-scale development, in places that may not have the density of resources to support such development in a sustainable manner."*[3] Given the fact that the site of the proposed action shares a parcel with a pre-existing waste-to-energy plant and is relative 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 Preston where public sewer service and public water service are available, further supporting the location as an appropriate location for development in the Town.

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



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

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 Preston is not in a Class I Protected Area under the Clean Air Act, nor are there any Class I areas within the larger SCRRRA region.

The construction of the regional compost 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 5,500 tons of source-separated organic material (SSOM) and 8,500 tons of wood waste per year from the incinerator in Preston. To the extent that the region ships its municipal solid waste to out-of-state landfills, the composting of food scraps 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	(1,216.33)
Proposed Action (Composting)	(1,736.94)
Incremental GHG Emissions ($MTCO_2E$):	**(520.61)**
*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 520 metric tons annually as compared to incineration of the food scraps and wood waste, and by over 1,736 metric tons annually as compared to landfilling out of state.

The Town of Preston is home to two stationary source air emitters: the Tunnel Hydroelectric Station and the ReWorld Southeastern Connecticut Resource Recovery waste to energy (WTE) facility, which is located directly across the street from the site of the Proposed Action. Table 2 below illustrates the air emission characteristics of these two facilities.

TABLE 2

Facility	VOC	NOx	CO	PM10-PRI	PM2.5-PRI	SO2	NH3	Lead
Tunnel Station	0.00	0.91	0.00	0.02	0.02	0.14	0	0.0000
ReWorld WTE Plant	0.36	367.29	69.87	1.21	0	24.47	5.01	0.0271

Source: CT DEEP, 2017 Periodic Emissions Inventory, Table C-1: 2017 Annual Emissions of Connecticut Point Sources.

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 on air quality in the Town of Preston 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.

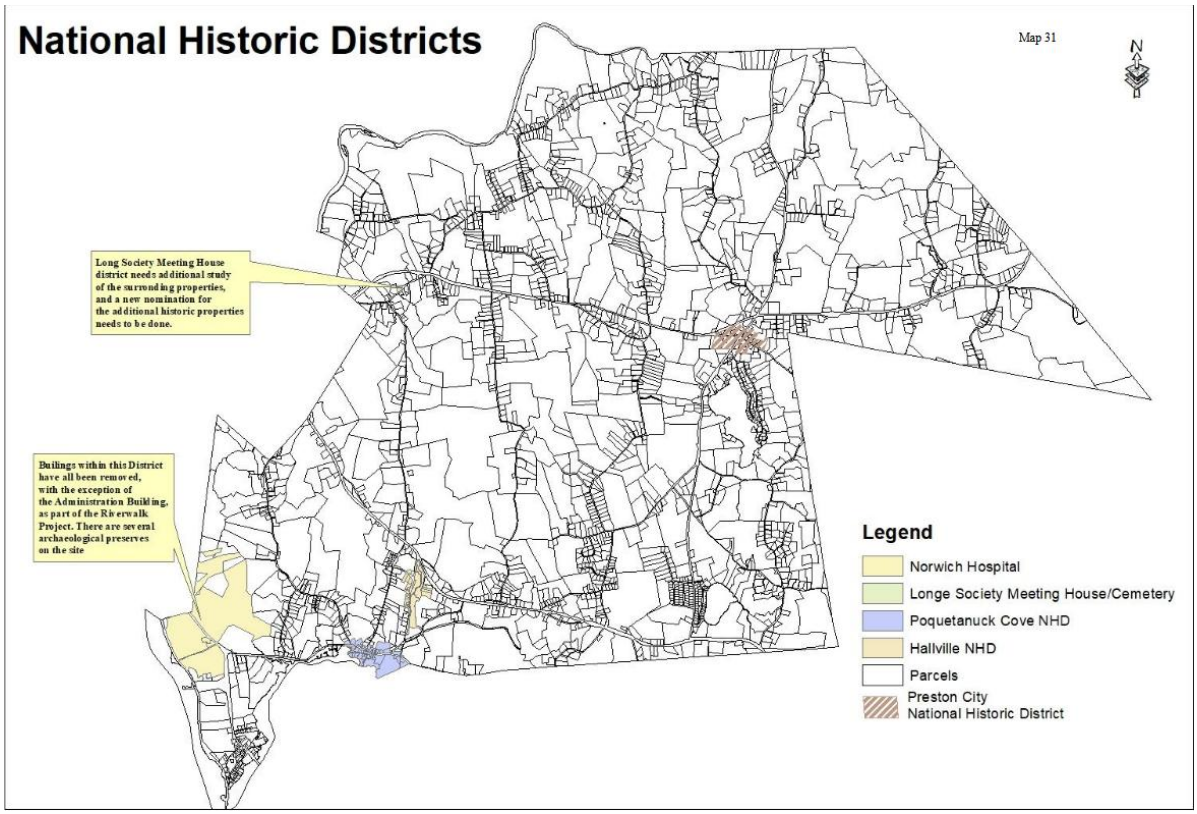
One study estimated the total energy requirements for ASP composting at 18.3 kWh per ton of feedstock, which included 15.00 kWh/ton for fuel and 3.3 kWh/ton for electricity.

Other studies have reported figures ranging from 25.2 kWh per metric ton to 30-60 kWh per metric ton. Using the first metric, at 14,000 tons of annual feedstock, the proposed action would draw approximately 256,200 kWh annually. This figure is equivalent to the energy required to power roughly 24 single family homes per 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.

ASP (Aerated Static Pile) composting facilities like the one in the proposed action generally have lower power consumption compared to other methods like turned windrow composting due to reduced need for turning the piles. Such facilities can also focus on energy efficiency through controlled aeration, efficient duct design, and appropriate fan selection.

4.4 Cultural, Historic, and Archaeological Resources

Portions of the Town of Preston are designated as historical areas; however, the site of the proposed action is outside of these areas and would not impact historical or cultural resources. The Historic and Archaeological Resources section of the 2024 Town of Preston Plan of Conservation and Development identifies these areas as further north and east from the site of the proposed action, specifically in Hallville, Preston City, Poquetanuck Cove, and the area around the former Norwich Hospital campus, which all have National Historic District designations. All of the proposed work would be outside of these areas and in relatively recently disturbed areas of the subject property.



From an archaeological standpoint, the 2024 POCD identifies the areas in Preston that have the highest archaeological sensitivity as being in close proximity Poquetanuck Cove; Dickerman's Brook; Hallville and Gay Ponds; and Shewville Brook. According to the POCD, *"Eighteen (18) prehistoric Native American camp and village sites have been discovered in areas near Poquetanuck Cove and have been recorded in the Connecticut Archaeological Site Files and Maps. Discoveries of Native American artifacts also have been reported on the Norwich State Hospital site eastward along Poquetanuck Cove and northward along Dickerman's Brook. Types of artifacts recovered from these sites include stone axes for felling trees and adzes for making dugout canoes from large logs. Remnants of larger village sites are also located in this area."*[4]

Consideration was given to the location of the site of the proposed action being in a part of Connecticut that has a long history of indigenous people's settlement, activity, and distribution of artifacts. During the pre-scoping public comment phase of the CEPA process, a comment was made by the State Historic Preservation Office (SHPO) about possible archaeological impacts from the proposed action. After being provided with site location and information, and evidence of previous site disturbance, SHPO indicated that they had no concerns about archaeological impacts and that further

[4] 2024 Town of Preston Plan of Conservation and Development, pg. 161.

analysis was not warranted. 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 composting facility 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 is co-located with an existing WTE incinerator plant 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 compost facility, there will be noise from equipment, such as from an industrial grinder and 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 “Zp” and “Zw” bedrock geology typologies. The “Zp” category is defined as the Plainfield Formation consisting of interlayered thinly bedded quartzite, mica schist, and dark-gray gneiss. The “Zw” category is defined as the Waterford Group Formation consisting of light to dark medium-grained gneiss. The quaternary geology mapping indicates that the site of the proposed action includes “Sediment Dammed Lake and Pond Deposits” consisting of sand and gravel overlying sand overlying fines. No apparent geological hazards are apparent 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 "36A – Windsor loamy sand, 0 to 3 percent slopes" and "38A – Hinckley gravelly sandy loam, 0 to 3 percent slopes." Windsor loamy sand offers advantages for development due to its well-drained nature, but it is important to address the potential for groundwater contamination and the need for proper soil management to prevent erosion and ensure long-term stability. Hinckley gravelly sandy loam soils do not have many inherent limitations for building foundations, but their rapid permeability, droughtiness, and potential for erosion, especially on slopes, 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, 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" in the Soil Survey Geographic (SSURGO) database for the State of Connecticut' geographic data layer. Such 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 does not include any 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 ReWorld waste-to-energy plant, 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 WTE plant 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 site of the proposed action going forward.

In terms of impacts as from the proposed action, construction will involve soil-disturbing activities, including some excavation and grading necessary to establish level surfaces and tree and vegetation removal. Approximately 6 acres will be affected by the soil-disturbing activities for the development of the composting facility. 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 of applicable permits and implementation of BMPs to control stormwater runoff.

4.7 Water Resources

Surface Water and Water Quality: Per Connecticut Water Quality mapping, the Thames River adjacent to the site of the proposed action is designated Class SB waters, meaning its water quality is not appropriate for direct human consumption. Class SB waters are saline, and their designated uses are habitat for marine fish and aquatic life and wildlife; commercial shellfish harvesting, recreation, industrial water supply, and navigation. 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 completed for the segment of the Thames River Estuary adjacent to the site of the proposed action. This assessment determined that Aquatic Life Attainment Use and Recreation Use were "Not Supporting" and Fish Consumption was "Insufficient Information."

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. This project will include stormwater controls to be added to the site, which will be beneficial for the adjacent segment of the Thames River. 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 Thames River adjacent to the site of the proposed action is a tidal estuary flowing south for 15 miles through eastern Connecticut, from Norwich to the Long Island Sound at New London and Groton. It is the southern end of the third largest watershed in Connecticut. The river is formed by the confluence of the Yantic and Shetucket rivers in Norwich. The river's estuary is a popular area for recreation, commerce, and defense, with historical sites like Fort Trumbull and Fort Griswold, and

active waterfronts in New London and Groton. As an estuary, it is where saltwater from Long Island Sound mixes with freshwater from the watershed. This mixing creates a unique environment that supports diverse marine life and allows for recreational activities like kayaking and fishing.

Adherence to the Storm Water Pollution Prevention Plan and its associated BMPs during construction and compliance with the requirements of the storm water general permit during the operations phase of the composting facility will ensure that any potential impacts to the Thames River estuary will be less than significant.

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 project area contains no wild and scenic rivers.

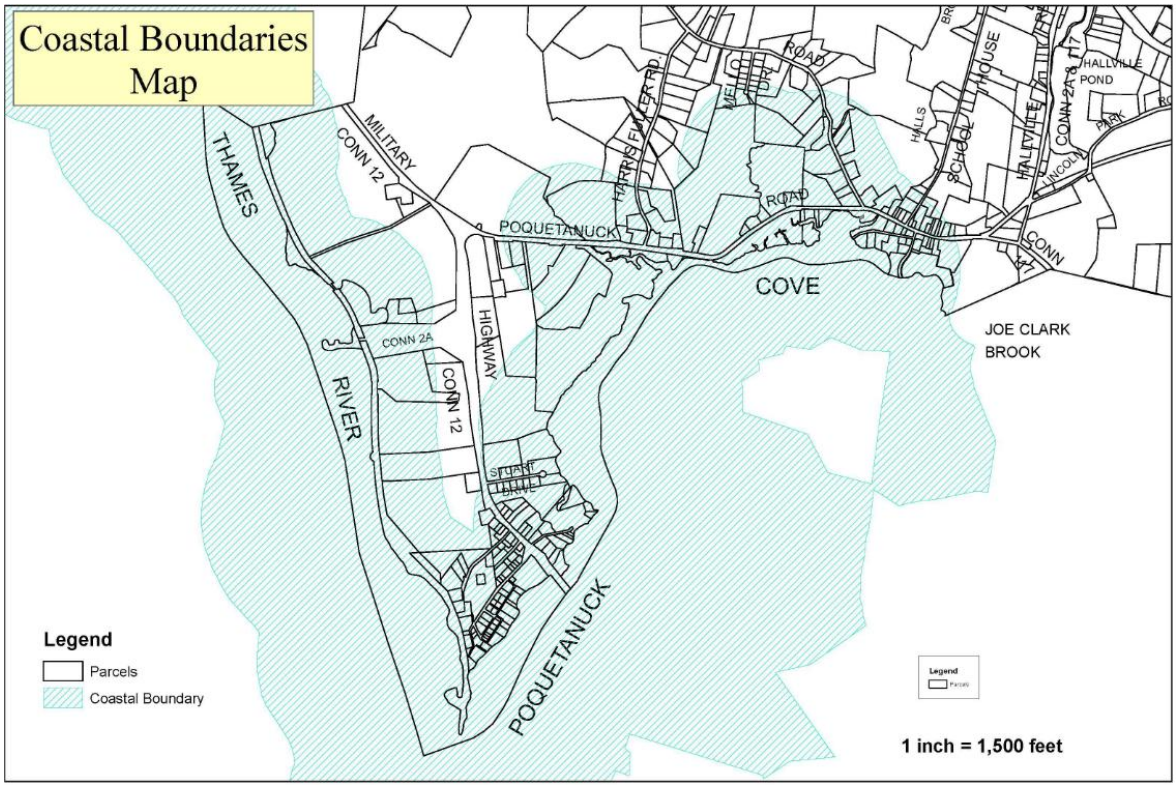
Aquifers: According to the state's Aquifer Protection Area Map, there are no aquifer protection areas identified within the Town of Preston. Surficial aquifer potential mapping indicates that the site of the proposed action is categorized as "Other Glacial Meltwater Deposits with lower potential yield." As such, the site does not have substantial potential as an aquifer area. Based upon Aquifer Protection Area Maps available from DEEP, the area of the project does not include aquifer protection areas. Furthermore, since the proposed action has access to public water service infrastructure, it is not anticipated to result in increased demand for existing potable groundwater supplies.

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

Coastal Area Management: The entire Town of Preston is included in the designated Coastal Management Area for the State of Connecticut, and the site of the proposed action is located within the Coastal Boundary Area. In addition, the 2024 Town POCD includes a specific objective and action item related to coastal area management:

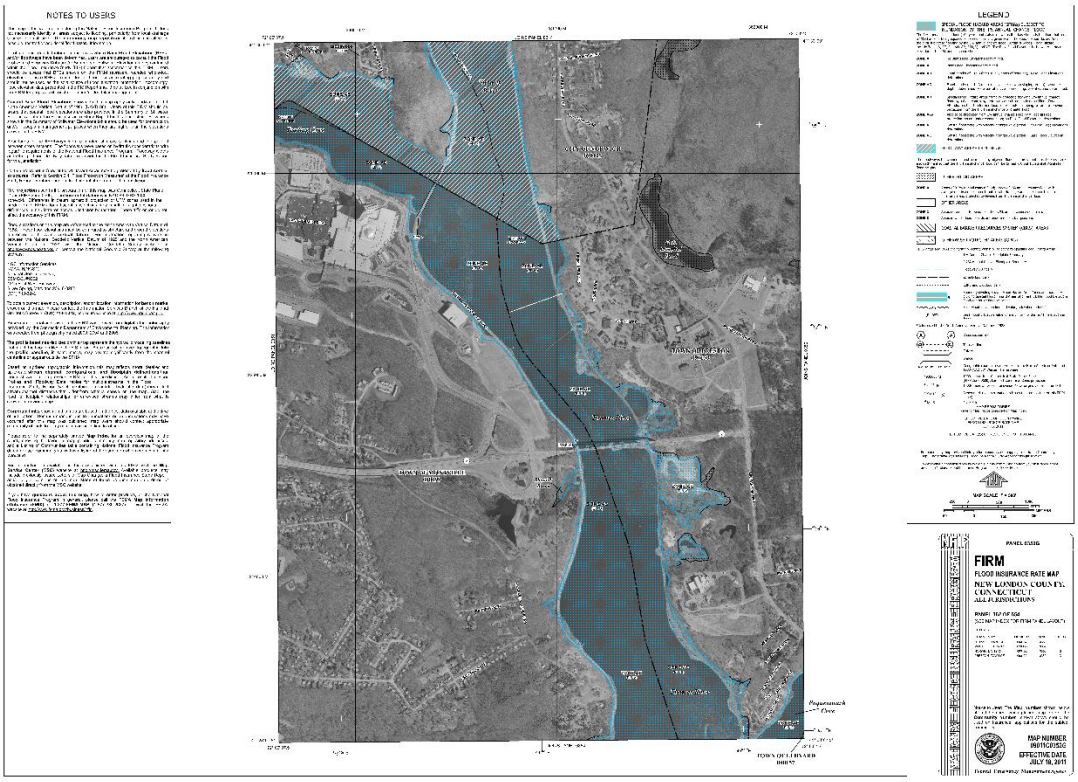
> *"Objective. Continue to meet the goals of Connecticut Coastal Management Act.*
>
> *Action #1 Whenever activities occur or are proposed within or affecting Preston's coastal area, reasonable consideration should be given for the restoration and protection of the ecosystems and habitat of Long Island Sound, and require designs for structures and other features that reduce hypoxia, pathogens, toxic contaminants, and floating debris."*[5]

[5] 2024 Town of Preston Plan of Conservation and Development, pg. 223.



As a result of being located within the Coastal Boundary Area, the site of the proposed action is subject to the Connecticut Coastal Management Act. As part of the compliance with the Act, SCRRRA was required to submit a coastal site plan to the Town of Preston Planning & Zoning Commission for review, providing an additional opportunity for the Town and the public to assess and discuss any potential impacts from the proposed action with SCRRRA.

Floodplains: The Federal Emergency Management Agency (FEMA) Q3 Flood zone data shown on FIRM Panel number 09011C0352G indicates that the site of the proposed action does not intersect with any designated floodplain areas.



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 include some removal of a mix of trees and brush covering a significant portion of the roughly 6 acre development area, with some areas previously disturbed and already clear of vegetation. The proposed action will not likely cause disturbance to vegetation beyond the project site boundaries, and no protected species of vegetation have been identified on the site.

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 Preston shows the project area and its proximity to areas where state and federal listed species and significant natural communities may exist. No impacts to these species by the proposed action are expected as the project activities are not expected to impinge on the Thames River corridor. An NDDB request would 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.

The construction of the proposed composting facility would not occur on the habitat of nor impact any endangered or threatened species, and there is no designated critical habitat within the project area. 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 essential fish habitats in the project area for the following species:

- Atlantic Butterfish
- Atlantic Herring
- Atlantic Mackerel
- Black Sea Bass
- Bluefish
- Little Skate
- Longfin Inshore Squid
- Pollock
- Red Hake
- Scup
- Summer Flounder
- Windowpane Flounder
- Winter Flounder
- Winter Skate

In addition, approximately one-half mile south of the site of the proposed action, the neighboring Town of Ledyard maintains a roughly 4.2 acre managed shellfish bed at the entrance to Poquetanuck Cove. However, according to the IWQR 305(b) cycle assessment that was completed for the segment of the Thames River Estuary adjacent

to the site of the proposed action, it was determined that shellfishing was "Not Supported" in this particular location due to the quality of the water.

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)
- Tricolored Bat (Proposed Endangered)
- Monarch Butterly (Proposed Threatened)

Additional information for each species from the USFWS is provided below:[6]

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.

Tricolored Bat
The tricolored bat is a small insectivorous bat that is distinguished by its unique tricolored fur and often appears yellowish to nearly orange. The once common species is wide ranging across the eastern and central United States and portions of southern Canada, Mexico and Central America. During the winter, tricolored bats are often found

[6] The three subsequent paragraphs are provided from the USFWS website at https://ipac.ecosphere.fws.gov/location/YFJBIBDI7VCGPIEIPW7XCYBWS4/resources.

in caves and abandoned mines, although in the southern United States, where caves are sparse, tricolored bats are often found roosting in road-associated culverts where they exhibit shorter torpor bouts and forage during warm nights. During the spring, summer, and fall, tricolored bats are found in forested habitats where they roost in trees, primarily among leaves of live or recently dead deciduous hardwood trees, but may also be found in Spanish moss, pine trees, and occasionally human structures. Tricolored bats face extinction due primarily to the range-wide impacts of white-nose syndrome, a deadly disease affecting cave-dwelling bats across the continent. White-nose syndrome has caused estimated declines of more than 90 percent in affected tricolored bat colonies across the majority of the species' range. To address the growing threat of white-nose syndrome to the tricolored bat and other bats across North America, the U.S. Fish and Wildlife Service is leading the White-nose Syndrome National Response Team, a coordinated effort of more than 150 non-governmental organizations, institutions, Tribes, and state and federal agencies. Together they are conducting critical white-nose syndrome research and developing management strategies to minimize impacts of the disease and recover affected bat populations.

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.

The proposed action will involve the removal of a significant number of trees within the approximately 6 acres of site disturbance for construction of the proposed composting facility. However, given the small relative size of the site area and the evidence of prior disturbance 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 Preston. Therefore, the impacts from the proposed action on biological resources are anticipated to be minimal and less than significant.

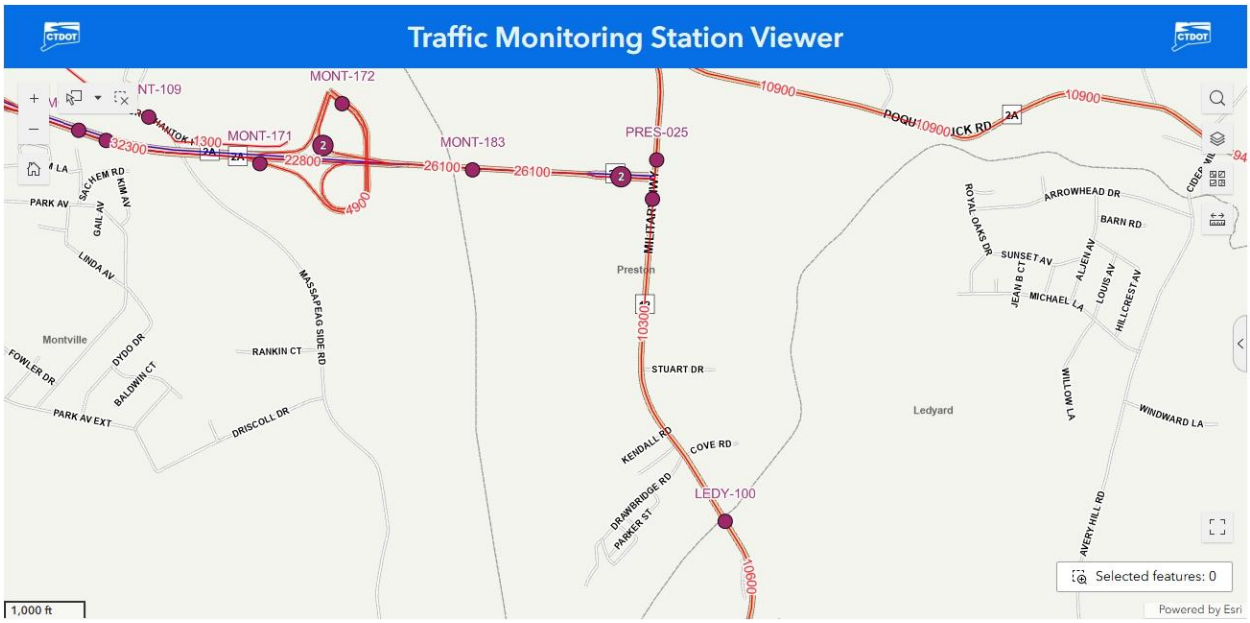
4.9 Hazardous and Toxic Materials and Waste

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. SCRRRA 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 compost facility 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 Military Highway, also identified as State Route 12. Although the potential traffic generated by the implementation of the proposed action will be entering and exiting the site via Route 12, 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 Preston from 2011, the segment of Route 12 that runs past the site of the proposed action experiences between 10,300 average daily trips (ADT).[7] Given this level of existing traffic, the relatively small size of the proposed composting facility, and the significant amount of truck traffic already accessing the adjacent ReWorld waste-to-energy plant, impacts to 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.

[7] https://portal.ct.gov/dot/travel-gateway/roads-and-highways/traffic-monitoring-data/traffic-monitoring?language=en_US.



Presently, the Southeast Area Transit District (SEAT) operates two bus routes that utilize the portion of Route 12 that is adjacent to the site of the proposed action: the 980 Norwich – EB route and the 2 Norwich/New London Via Rt.12 & Groton route. The 2 Norwich/New London Via Rt.12 & Groton route has its nearest stop to the site located at the CTDOT Park & Ride Lot approximately 0.70 miles north of the site of the proposed action. The 980 Norwich – EB route only has stops in Norwich and Groton as it provides regional express service for riders. 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. 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

The Proposed Action will uphold and promote environmental justice within the SCRRRA region. The twelve SCRRRA member municipalities are demographically, linguistically, and socioeconomically unique and diverse; Norwich, New London, and Groton, for example, have significant minority and immigrant populations. Several areas have

been identified as “disadvantaged” by the United States’ Climate and Economic Justice Screening Tool (CEJST). The SCRRRA region also encompasses two tribal nations, both identified as disadvantaged: the Mohegan of Connecticut and the Mashantucket Pequot.

The Town of Preston itself was formerly categorized by the State of Connecticut as an Environmental Justice Community and is currently considered a “distressed municipality.” The Proposed Action is sensitive to this in all aspects of the project and approach. A robust public participation plan was developed and approved by DEEP, including a public informational session held on November 25, 2024; a letter to all residents within a half-mile radius of the property; easy public access to all relevant project documents, and means to submit comments and questions.

The Proposed Action will promote environmental justice and benefit the region’s historically disadvantaged communities by:

- providing a Payment in Lieu of Taxes (PILOT) to the municipality. Currently, the property is not subject to the local property tax. included in the Proposed Action’s business plan is a PILOT, which partially returns the property to the tax rolls.

- providing finished compost to the regional communities, as requested and at a reduced price, including free compost, which can be used for community gardens and beautification. SCRRRA has done this in previous projects; as part of SCRRRA’s 2021 pilot project, SCRRRA provided finished compost to several community gardens in New London that promote food justice and youth empowerment, as well as to the Ledyard Garden Club, which donates all produce grown to local food banks.

- 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.

- providing an affordable, locally sourced high-quality soil amendment in support of organic farming and gardening, making for healthier and more sustainable communities.

- increasing awareness and understanding of environmental issues and recycling options.

- helping to shift mindsets to be more aware of what materials are used and what materials are wasted, creating more sustainability and environmentally-minded communities.

As a component of the Proposed Action, SCRRRA will continually engage with residents to ensure their meaningful participation by:

- providing project information and updates online, on our website and social media platforms, with pathways for residents to ask questions and get answers;

- providing information and resources in several languages; and

- holding public forums as required.

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 $4.5 million is expected for the construction of the proposed 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 ReWorld waste-to-energy plant; 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, site grading, and/or the removal of trees and vegetation, 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, SCRRRA 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 Building a Regional Composting Facility for Southeastern Connecticut project in Preston, CT. One (1) comment was received during the public comment period from the State of Connecticut Historic Preservation Office (SHPO):

“I saw the Scoping Notice for the referenced project on the Environmental Monitor. This location is very sensitive for archaeological resources. Can you share a project map of where impacts are being proposed. I don’t think we would have concerns with activities

within previously disturbed areas, but we likely would want to see an archaeological survey completed for areas that would be impacted and consist of intact soils."

DEEP's response to the comment received is here:

"The proposed site is immediately south of the Covanta plant in Preston on the other side of Brewster Road. Looks like the site has been previously disturbed with clearing of trees, dirt roads for truck traffic, and someone (sic) material laydown areas. See attached site plan and Google Earth image below."

In reply, the original commenting party stated:

"Very helpful – thank you! No need to discuss it further, our office has no concerns. I understand that a concerned citizen contacted the applicant (SCRRRA) about potential archaeology. Should you speak with them, let them know that we would not request a survey."