

# DRAFT ENVIRONMENTAL IMPACT EVALUATION

May 5, 2009

## A. Project Identification

Town of Old Saybrook  
Decentralized Wastewater Management District  
Middlesex County, Connecticut  
Project Number: CWF-116

## B. Summary of Environmental Review

The engineering report entitled Old Saybrook Wastewater Management Study (August 13, 2008) was prepared to summarize the major alternatives for managing wastewater in Old Saybrook. This engineering report, which developed recommendations for addressing the environmental issues caused by failing and substandard sewage disposal systems, was submitted to and reviewed by the Department of Environmental Protection (DEP). As a result of this investigation, the establishment of a Decentralized Wastewater Management District (DWMD) has been recommended by the consultant. The proposed district will require the upgrade of as many as 1,900 existing subsurface sewage disposal systems. All system upgrades will be meet a remediation standard which must be adopted by the town and approved by DEP, with concurrence by the Department of Public Health (DPH). 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. Project Description

The Town of Old Saybrook is acting under a court order, issued in 1997, to abate community pollution problems identified in previous engineering studies.

That court order required the town to implement structural solutions to address the long-term wastewater needs. The series of engineering reports prepared by the town's consultant (Fuss & O'Neill, Inc), culminating in the August 2008 report entitled Old Saybrook Wastewater Management Study, is the first step in addressing the requirements of that court order.

The proposed project consists of construction of upgrades to existing onsite wastewater treatment systems. These upgrades will vary from the installation of an effluent filter (on those systems already consistent with the proposed remediation standards), to full-scale replacement of the onsite system with an alternative treatment (AT) technology. The planning period for this project is 20 years.

As currently estimated, roughly one quarter of the 1,900 residential properties will require the replacement of the existing onsite system with an AT system. Another quarter will require the replacement of the existing onsite system with a Public Health Code compliant septic tank and leaching system. The remainder will require either replacement of the septic tank, expansion of the leaching system, or other minor upgrades. Systems which have been recently repaired or replaced, and now meet the requirements of the proposed remediation standards (referred to hereafter as the Upgrade Program Standards), will require no action. While the engineering report has prepared maps showing the estimated upgrade for each property, final determination of need will be made during the design phase, which will include a detailed site and record review for each property.

The implementation of the required upgrades are proposed to take place over a period of seven years, under contracts issued for public bid in a manner similar to conventional sewer system contracts. As such, the necessary upgrades for neighborhoods or sections of neighborhoods would be completed all at once, limiting the construction related impacts to a relatively short period in any given area. To further

reduce the impacts to the public, no construction activities are proposed during the summer months, when seasonal occupancy is at its peak.

The capital cost of a decentralized wastewater management district to serve all 15 focus area is estimated at \$40,171,000. The cost per unit will vary based on the level of upgrade required on each property. A limited number of properties are expected to be classified as fully compliant with the Upgrade Program Standards, and will have no cost other than administrative and permitting costs. Properties being upgraded with AT systems can expect to see a cost for the upgrade in the \$28,000 range, before grants and local contributions are deducted. The town has indicated that the general tax base will contribute 25% of the total cost. The project is eligible for Clean Water Fund assistance out of the Small Community Reserve. This program provides a grant of up to 25% of the project costs, and a loan for the balance at a 2% interest rate, with a 20 year term. The average cost per residential unit, prior to grants and local contributions, is estimated at \$21,100.

## **2. Existing Conditions**

As shown in the attached map, there are 15 areas of town which this project will address (referred to hereafter as focus areas). These areas have been identified in one or more wastewater studies conducted over the past four decades

In general, the focus areas consist of properties developed at very high densities (averaging ¼ acre but with significant numbers of properties at 1/10 acre or less). Many of the smallest lots, with the least room for adequate onsite treatment, are adjoining surface waters. Compounding the challenge of limited lot size is the high groundwater elevation found on many of the properties, which limits the ability of an onsite system to effectively renovate wastewater. In addition, some of the existing onsite systems utilize designs that are no longer considered appropriate for protection of public health and the environment (for instance: cesspools are no longer approved, drywells which extend into the groundwater do not provide separating distances for disinfection).

The size of the lots also makes the proper treatment of nitrogen compounds a challenge. According to DPH Circular Letter 2000-01, the use of onsite systems in existing high density development (1/8 to 1/10 acre per

lot) will adversely impact groundwater quality due to nitrogen loading. The Circular Letter also states that new development at densities of greater than 3 bedrooms per one-half acre (0.167 acres/bedroom) should be reviewed for proper nitrogen renovation.

Most of the identified focus areas are served by public water supply, although there are scattered individual properties which still rely on onsite water supply wells. There are no plans to extend or modify the water service areas at this time.

The focus areas are zoned primarily single family residential. Wastewater needs and demands are based on the existing zoning. No intensification of use, in terms of number of units per acre, is being planned as a result of the establishment of a Decentralized Wastewater Management District (DWMD).

The Conservation and Development Policies Plan of Connecticut, 2005-2010 (C&D Plan) contains multiple classifications for the project area. Neighborhood conservation is the predominant category, followed by Conservation. A limited percentage (estimated at less than 5%) of the focus areas are categorized as Growth Areas or Preservation Areas. Efforts have been made to exclude most vacant land from the DWMD through judicious drawing of the boundaries. Virtually all of the properties in the focus areas are single family residential structures, except for a handful of structures owned by beach associations and used in support of recreational purposes.

The implementation of a DWMD will not allow for the development of properties at a greater density than could otherwise be accommodated by the CT Public Health Code. Since the intention is to resolve all wastewater treatment and dispersal needs on the property where the wastewater is generated, there is no potential for induced growth due to this project. The town has stated their intention to allow the conversion of properties from seasonal to year-round occupancy only where AT systems have been installed and all other building code and zoning requirements for year-round occupancy have been met.

## **3. Purpose and Need**

The town of Old Saybrook has been the subject of wastewater studies since the early 1970s. High density residential development combined with a growing summer tourism industry led local and state officials to

be concerned about the long-term environmental effects of such high density uses on the resources of the area. The challenges facing the community include:

- high density development, including entire neighborhoods where the typical lot size was 5000 square feet,
- high groundwater conditions, since many neighborhoods were built on filled wetlands,
- inadequate subsurface sewage systems, since many of the original lots were developed in the 1940s and 1950s, well before the current codes.

Engineering reports developed in the late 1970s recommended a regional wastewater treatment approach with a treatment facility in the nearby town of Clinton, and a discharge to Long Island Sound. This report was rejected by all of the member communities, and the consultant was instructed to re-develop those reports to focus on small community solutions and sewer avoidance programs, where appropriate. The report for Old Saybrook prioritized areas for either community solutions or sewer avoidance programs. It also identified several potential community system sites for treatment and disposal of effluent. However, the town did not act on the community system approach, and the sites were either acquired and developed by private entities, or further investigated by developers and shown to be inadequate for use as an effluent disposal site.

In the mid-1980s, Old Saybrook, in conjunction with the adjoining town of Westbrook, hired another firm to evaluate other options for addressing their long-term wastewater needs. The result of this four year study, which evaluated sewer avoidance, community system approaches, and conventional sewers, was the recommendation to provide sanitary sewers to limited portions of both towns, with a treatment facility in Old Saybrook and a discharge to the Connecticut River. While this report was in development, the town of Clinton also indicated interest in such an approach and was allowed to join the project. This was brought to the voters in November 1989 and was defeated in Old Saybrook.

The towns of Old Saybrook and Westbrook had been preparing this joint report under the requirements of DEP Pollution Abatement Orders issued to each community. When Old Saybrook declined to either develop a revised project or bring the project back to the voters in 1990, the DEP took enforcement action

and brought the town to court. A final ruling of the Connecticut Superior Court in 1997 ruled against Old Saybrook. The judgment required the town to evaluate and implement structural solutions to the identified community pollution problems.

The town contracted with the firm of Fuss & O'Neill (Manchester, CT) to develop a revised report which would address the wastewater management needs of Old Saybrook. Over the next decade, the consultant developed a number of reports to refine and update the areas of concern and the potential options available to address those areas. Initially, a number of community system options were evaluated, but were found to be unworkable due to a combination of technical and administrative constraints. The centralized sewer alternative (for Old Saybrook only) continued to be updated in reports to maintain a reference point against which other alternatives could be measured, and to provide a fall-back alternative should no other option prove to be implementable.

In 2002, local and state officials began working with the consultant on an alternative which would upgrade most of the onsite systems in the study areas. While this approach showed promise, several technical and administrative issues separated the parties and prevented agreement on an approach. To clear this impasse, a mediator was retained in 2004. Over the next year, dozens of meetings of technical and managerial staff took place. These meetings resulted in the announcement of an agreement in concept in December 2005.

Another event which cleared the way for this new alternative was the legislative enabling, in 2003, of Decentralized Wastewater Management Districts. Prior to that time, a number of regulatory hurdles limited the ability of the state or town to successfully implement a program of large-scale onsite repairs and upgrades. With this new legislation, a clearer path was established to allow such an approach.

During the time after the December 2005 announcement, state and local officials worked to craft the framework of the decentralized program, including a detailed local ordinance (required by the statute) and minimum remediation standards for the program, which came to be known as the Upgrade Program Standards. Those documents are now complete and are being brought before the public for their consideration and approval during the spring and summer of 2009.

#### **4. Discussion of Alternatives**

##### **a. No Action**

This is not an acceptable option because it would result in the continued degradation of the environment.

Without any actions taken to mitigate or eliminate the pollution sources, threats to public health and safety and to the environment will increase with time. In addition, failure to take any action would be contrary to the Superior Court's decision in this matter, and would result in further legal action.

##### **b. On-Site Subsurface Disposal Systems**

Rehabilitation of existing traditional on-site systems, without upgrading those systems to current standards, does not offer a comprehensive solution for the project area, as many of the existing lots through the focus areas are not suitable for on-site disposal using the currently installed systems. Site limitations due to inadequate lot size, soils which are unsuitable for wastewater treatment and renovation, shallow depth to bedrock or other impermeable soil structures, and/or shallow depth to groundwater require more extensive efforts than simple rehabilitation would encompass. Many lots within the project area are subject to at least one of these limitations, and some focus areas are subject to all of these limitations. Since characteristics for favorable on-site treatment and disposal do not consistently exist throughout the focus areas, an alternative that relies solely on the rehabilitation and continued use of existing on-site systems is not considered a viable alternative.

##### **c. Community Sewage Disposal Systems**

This option considered the construction of one or more large septic systems sized for the focus areas or an advanced treatment system with a subsurface effluent discharge. This option requires a substantial amount of land to accommodate the hydraulic needs of disposing of large volumes of effluent. An evaluation of the large parcels within and in close proximity to the focus areas did not reveal any properties possessing the proper soil characteristics to allow such a discharge. Conveyance to a more remote site was not considered, because the development of a remote treatment site would be substantially more expensive than advanced treatment with a discharge to the Connecticut River.

##### **d. Conventional Treatment**

This option involves the construction of a

wastewater collection system, a conveyance system to a treatment site, and a wastewater treatment system.

The construction of a wastewater treatment facility with a surface water discharge was identified as an option available for consideration. However, in order to accommodate a discharge of treated effluent in Connecticut, the receiving water body must be designated as a water quality classification B. The closest Class B water is the Connecticut River. This alternative, and the impacts and ramifications of a surface water discharge, were exhaustively evaluated in previous studies, and summarized in this Department's Environmental Impact Evaluation (EIE) issued June 20, 1990. The only substantive change since that time has been the further quantification of the need for denitrification of any effluent prior to discharge to surface waters.

The current study evaluates solely the needs of the town of Old Saybrook, as compared to the wastewater needs for three towns evaluated under the 1990 EIE. As such, the flows expected from Old Saybrook during the 20 year design life of the project are expected to be approximately 502,000 gallons per day (gpd), which includes 124,000 gpd of flow from the commercial areas, as compared to the approximately 1.4 million gallons per day under the 1990 EIE. Given that the flows for the current project would be substantially less than those anticipated in 1990, it is reasonable to assume that the impacts of such a discharge would be less than those projected in the previous EIE.

The conclusion of the 1990 EIE was that the discharge of treated effluent to the Connecticut River would be consistent with DEP water quality standards, and that such a discharge would have no deleterious effect on the water quality or uses of the river. This 2009 EIE re-affirms that evaluation for a similar discharge with reduced volume and increased levels of treatment as evaluated in the current engineering report.

Collection and conveyance of wastewater to an off-site treatment facility can take one of two basic forms: gravity sewers and pressure sewers. Each has its benefits and limitations, as discussed below.

Gravity sewers come in two forms: conventional and small diameter. Conventional gravity sewers consist of pipes of a minimum of 8" diameter buried beneath roadways at a sufficient depth that most properties adjoining the sewer can drain wastewater

from the lowest level of the structure by gravity to the sewer line. This typically results in construction depths of at least 8'. Neighborhoods are served in such a manner that the sewers all drain to a low point, where a pump station is located to lift the wastewater into the next drainage area toward the treatment facility. Because of the depth, this type of sewer generally has the highest construction cost, but a relatively low maintenance cost and a high degree of reliability.

Similar in concept is the small diameter gravity sewer. In this type of system, homeowners retain their septic tanks, and the sewer conveys septic tank effluent. This allows more flexibility in design and installation of the sewers, since the concern of maintaining minimum velocities to transport solids is no longer a major design factor. The pipe can be smaller, and installed at a somewhat shallower depth, thus reducing the cost of installation. Maintenance costs are somewhat higher, due to the need to pump the solids and scum from the septic tank at regular intervals, and the greater need to keep the pipes clear of accumulations of grease that might impede the flow more readily in a smaller diameter environment.

Pressure sewers also have multiple forms. Septic tank effluent pumps are quite similar in effect to small diameter gravity sewers in that the homeowner retains the septic tank, and primary treatment (solids settling) is performed on the individual property. Small submersible pumps are placed in the septic tank to transport the clarified wastewater into the collection system.

Grinder pumps forego the use of a septic tank; instead using the grinding action of the pump mechanism to transform the wastewater into a thin slurry, and using the pump's energy to give the wastewater enough velocity to keep the smaller particles in suspension until they reach the treatment facility.

A third type of pressure sewer is the vacuum sewer. This technology uses a negative pressure, or vacuum system, to draw the wastewater from the small holding tank onsite to a large central facility, where it is then conveyed by further vacuum pressure, or by the other means described earlier, to the treatment system.

Each of these systems has the advantage of low installation cost in the public right-of-way, but higher costs on the property to install the pumps, valving,

and/or holding tank to facilitate the use of the appropriate technology. Pressure systems also have more applicability where uneven terrain makes the siting of gravity systems difficult. Pressure systems also have some applicability where there is a desire to limit growth resulting from the provision of sanitary sewers in a community. Since pressure sewers are designed to operate within a specific range of pressures and conveying a specific volume of wastewater, they are not generally amenable to significant expansions of the system beyond the originally designed endpoints.

The estimated capital cost for a conventional wastewater collection and treatment system to serve only the more critical focus areas and the commercial corridor along Route 1 and Main Street (excluding lower priority areas formerly referred to as Group C: Fenwood, Ingham Hill, Meadowood, Oyster River East, Saybrook Acres, Saybrook Point, and Thompson) would be about \$55,345,000, or about \$26,600 per EDU before grants and other contributions.

The estimated capital cost of a conventional wastewater collection and treatment system to serve all 15 focus area plus the commercial areas along Route 1 and Main Street, optimized for the characteristics of each focus area, is estimated at \$71,290,000, or approximately \$28,000 per equivalent dwelling unit (EDU) before grants and other contributions.

### **e. Decentralized Wastewater Management**

As previously pointed out, the simple rehabilitation of existing traditional onsite systems is not a feasible alternative, due to limitations (inadequate lot size, poor soil conditions, shallow depth to groundwater) on many of the properties within the focus areas. In 2002, however, evaluations began in earnest about the potential of a decentralized program which would upgrade the onsite wastewater treatment systems on properties to the maximum extent possible, including the use of Alternative Treatment (AT) technologies on properties in closer proximity to sensitive environmental receptors, (surface water bodies), as well as those properties for which a public health code compliant system could not be installed on the site due to the previously mentioned restrictions.

To establish the criteria for determining the level of upgrade required on a property, and to determine whether a property would be required to install and

operate an AT system, state and local government jointly developed a document referred to as the Upgrade Program Standards. This document requires that all properties within each focus area must be upgraded to the standards identified, including properly sized septic tank, leaching systems with adequate separating distances from groundwater, and installation of effluent filters for all septic tanks. Some minor flexibility in leaching system size is allowed, but if the property is unable to install a leaching system which provides at least 2/3 of the effective leaching area required by the Public Health Code, then an AT system is required to be installed. In addition, certain types of existing onsite treatment systems, such as cesspools and deep drywells, will not be permitted to remain in the focus areas, and must be replaced by a system in conformance with the Upgrade Program Standards.

The current proposal calls for the installation of roughly 450 AT units within the focus areas. To provide the maximum protection to surface waters, all properties within the focus areas with boundaries adjoining a surface water body are being designated "Water Proximity" lots, and will require the installation of AT systems to reduce the nitrogen loading which those systems would otherwise place on the environment. Water Proximity lots account for slightly more than one-half of the expected AT system installations. The remainder will be installed on interior lots, where such lots cannot meet the minimum requirements established by the Upgrade Program Standards; that is, construction of a leaching system which meets at least 2/3 of the effective leaching area of the Public Health Code.

The capital cost of a decentralized wastewater management district to serve all 15 focus area is estimated at \$40,171,000. The cost per unit will vary based on the level of upgrade required on each property. A limited number of properties are expected to be classified as fully compliant with the Upgrade Program Standards, and will have no cost other than administrative and permitting costs. Properties being upgraded with AT systems can expect to see a cost for the upgrade in the \$30,000 range, before grants and local contributions are deducted. The town has indicated that the general tax base will contribute 25% of the total capital cost, primarily in engineering services and other support functions. The project is eligible for Clean Water Fund assistance out of the Small Community Reserve. This program provides a grant of up to 25% of the project costs, and a loan for

the balance at a 2% interest rate, with a 20 year term. The average cost per residential unit, prior to grants and local contributions, is estimated at \$21,100.

## **5. Impact of Proposed Project on the Environment**

### **a. Direct Impacts**

#### **i. Air Quality**

Short-term adverse air-quality impacts may occur due to noise and exhaust emissions caused by construction activity. Also, dust particles in excess of normal may also result due to construction. Any noise pollution due to construction can be minimized by limiting construction to normal working hours. Exhaust emissions should be negligible compared to normal traffic emissions. Dust particles should be noticeable only in the immediate construction area and dust pollution in surrounding areas can be minimized by including dust control requirements in the contract. Construction is currently proposed to be limited to spring and fall seasons, to minimize the impacts of summer residents and tourism. The factors are all short-term and will not conflict with Connecticut's State Air Quality Management Plan.

Noise impacts due to the operation of small pumps and motors in some of the upgraded system are expected to be unnoticeable more than a few feet from the source, since the treatment systems and pumps will generally be installed in underground vaults.

#### **ii. Water Quality**

The proposed project will have a direct positive impact on the region's water quality. The upgrading of the level of treatment for individual onsite systems will result in a reduction in pollutant load to the groundwater. Surface waters which receive the flows from the groundwater system will also benefit by the implementation of this project.

#### **iii.a. Environmentally Sensitive Areas: Wetlands**

A significant number of the properties in the focus areas either contain or adjoin land designated as wetlands. However, no construction is anticipated on land designated as wetlands (since onsite system, by their very nature, cannot operate under such conditions). In areas where wetlands adjoin construction sites, proper mitigative measures, including all necessary erosion and sedimentation controls, will be required. Surface restoration will be completed soon as possible after construction.

iii.b. Environmentally Sensitive Areas: Floodplains

Portions of the focus areas are within the 100 year floodplain. Since the residential development already exists, there are no feasible alternatives which would avoid construction in these areas. Construction of the proposed upgrades will not increase flood hazards or flood elevations and will not decrease flood storage. All repaired and upgraded structures will be designed in accordance with FEMA flood standards

iv. Socio-Economic Impacts

The estimated project costs are shown below:

Design & Construction	\$	35,712,000
Construction Engineering		3,571,200
Contingency & Admin		<u>888,000</u>
<b>Total</b>	<b>\$</b>	<b>40,171,200</b>

The project is considered eligible for funding under DEP’s Clean Water Fund as a small community project. This category of funding provides a grant of 25% of eligible project costs, and a loan for the balance at a 2% interest rate with a loan term of 20 years.

<u>Funding Source</u>	<u>Estimated Contribution</u>
CT DEP CWF Grant	\$ 10,042,800
CT DEP CWF Loan	<u>\$ 30,128,400</u>
<b>Total</b>	<b>\$ 40,171,200</b>

The facilities plan currently estimates that the project will serve approximately 1,900 residential units. The town’s current plan to recover the capital costs is to assess each property based on the cost of construction to bring that property into compliance with the Upgrade Program Standards. The town plans to subsidize a portion of the project costs (roughly 25%) through general taxation.

Because of the wide variability of upgrade costs, an average cost per EDU would be less representative. However, using the data from Table 7-5 of the engineering report, several typical scenarios can be projected:

- For an AT system with a new leaching system: The estimated capital cost including engineering and contingencies is \$28,600. After grants and local contributions, the benefit assessment to the property owner would be approx. \$14,300. With a 20 year repayment at 2% interest, this would result in an annual cost of \$875, or about \$72 per month.

- For a new mounded leaching system, with pumping: The estimated capital cost including engineering and contingencies, is \$16,700. After grants and local contributions, the benefit assessment to the property owner would be approx. \$8,350. With a 20 year repayment at 2% interest, this would result in an annual cost of \$511, or \$42 per month.
- For a new septic tank: The estimated capital cost including engineering and contingencies, is \$4,900. After grants and local contributions, the benefit assessment to the property owner would be approx. \$2,450. With a 20 year repayment at 2% interest, this would result in an annual cost of \$150, or about \$12.40 per month.

Operation and maintenance costs for AT systems are estimated at between \$400 and \$800 per year, depending on monitoring requirements and type of technology used. Operation and maintenance costs for subsurface sewage disposal systems will average \$50 per year (assuming a septic tank pump-out once every five years at \$250 per pump-out) plus the cost of renewing the subsurface permit with the Connecticut River Area Health District.

The implementation of the required upgrades are proposed to take place over a period of seven years, under contracts issued for public bid in a manner similar to conventional sewer system contracts. As such, the necessary upgrades for neighborhoods or sections of neighborhoods would be completed all at once, limiting the construction related impacts to a relatively short period in any given area. To further reduce the impacts to the public, no construction activities are proposed during the summer months, when seasonal occupancy is at its peak.

v. Historical / Archaeological Sites and National Landmarks

This project is going to take place exclusively on private residential property which has already been disturbed by both the construction of the structure, construction of the existing onsite system and in some cases, by filling of wetlands prior to the structure’s construction. It is not anticipated that any impacts on historical/archaeological sites will be realized. If such resources are located or discovered during construction, local and state officials with responsibility for such matters will be consulted prior to resuming activities on such sites.

vi. Endangered Species

No endangered, threatened, or species of special concern have been identified in the project area. All construction is expected to take place on densely developed residential properties, so any impacts if such species were present are expected to be minimal.

vii. Coastal Zone Management

A substantial portion of this project will take place within the coastal zone. This project is purely remedial in nature; that is, it is addressing wastewater discharges from existing structures whose wastewater disposal methods have been deemed inadequate to protect human health and the environment. These upgrades are expected to occur on the individual properties where the wastewater is generated. No vacant land which is currently undevelopable will be enabled to be developed as a result of this project.

viii. Wild and Scenic Rivers

This project area contains no designated wild or scenic rivers.

ix. Prime Farmlands

This project is solely affecting properties which are already fully developed and in use as residential or institutional structures. No lands currently in use or with the potential for future use in agriculture will be affected by this project.

**b. Indirect Impacts**

There will be no long-term adverse environmental impacts on air or water quality due to this project. There will be no change in flood elevations or long-term erosion patterns. There is no developable land within areas characterized as wetlands or floodplains which will be impacted by this project. This project will not result in any displacement of homes or businesses.

**c. Irreversible and Irretrievable Commitment of Resources**

Resources being committed to the implementation of the project include all fuel, labor and materials necessary to construct the subsurface sewage disposal systems and AT systems required in accordance with the Upgrade Program Standards. This project also requires a long-term commitment on the part of the town to provide labor and management resources to properly operate and maintain the decentralized wastewater management district, including monitoring of system operations, issuance and reissuance of

discharge permits for AT systems, and submission of an annual report to DEP. Individual property owners with AT systems will be required to obtain and maintain a contract with a properly qualified vendor for operation and maintenance of their treatment system.

**d. Relationship of Project to Approved Land Use Plans**

As previously discussed in section 2 of this EIE (Existing Conditions), the proposed project is consistent with the Conservation and Development Policies Plan for Connecticut 2005-2010 (C&D Plan). It provides for addressing existing and potential future wastewater problems without extending infrastructure which might accelerate or expand use of land in areas designated as Conservation or Preserved. It is also consistent with the local plan of conservation and development, which advocates a sewer avoidance policy wherever practical. It is the most cost-effective alternative to remediate the identified community pollution problem in the focus areas.

**e. Unavoidable Adverse Impacts**

Unavoidable adverse impacts are limited to short-term impacts directly related to construction operations. Dust and noise will be present during construction operations. Erosion may occur in or adjacent to areas where excavation is required to install, upgrade or replace existing subsurface sewage disposal systems, or install AT system components. Due to the nature of the focus areas, this construction will often be adjacent to wetlands or surface waters. All these adverse impacts can be minimized, as shown below.

**f. Mitigation of Adverse Environmental Impacts**

In terms of air quality, dust pollution resulting from construction activities can be controlled by dust control measures such as calcium chloride or sprinkler trucks that minimize dust dispersion. Disruption due to noise can be minimized by restraining construction to normal working hours only. To minimize impacts on tourism and summer vacation populations, no construction will be allowed in the project area during summer months.

To avoid any adverse water quality impacts, sediment and erosion control measures such as haybale barriers and silt fences shall be used when construction is adjacent to wetlands areas or surface waters. No equipment or material storage will be allowed in the wetlands area. If any vegetative clearing is necessary, it should be minimized and should be immediately replaced after the end of construction.

### **g. Energy Considerations**

Energy expenditure for this project falls into two categories: construction and operation. In terms of construction, energy consumption will be primarily that needed to power construction vehicles and produce construction materials. These expenditures are considered relatively minor. In terms of operation, the energy expenditures will be those needed to power the AT systems, and pumps for pressure distribution systems.

for current maps, evaluations and discussion regarding this proposed project.

### **6. Licenses, Permits, & Certifications Needed**

DEP's approval will be needed for the establishment of a Decentralized Wastewater Management District. DPH's concurrence with the DEP approval will also be needed. DEP will need to delegate authority to the town of Old Saybrook for the permitting of AT systems. Old Saybrook WPCA will be required to issue individual permits for each AT system installed. Connecticut River Area Health District will be required to permit all upgraded subsurface sewage disposal systems within the DWMD.

### **7. Summary of Agency and Public Consultations**

A number of public informational workshops have been held beginning in August 2008, with neighborhood informational sessions beginning January 2009 and continuing through the summer of 2009. These sessions will be supplemented by a townwide public hearing on June 17, 2009.

A townwide public meeting is currently scheduled for July 29, 2009, to be followed by a referendum on August 11, 2009. The referendum will be both to approve the adoption of an ordinance establishing the Decentralized Wastewater Management District, and to authorize the expenditure of funds to implement the system upgrades required by that ordinance.

A scoping notice for this project was prepared by DEP and first published in the CEQ Environmental Monitor on June 3, 2003. This notice generated no public comments.

### **8. Reference Documents**

For more detailed information about this project, go to:

[www.oswpca.org](http://www.oswpca.org)

Distribution List : Draft Environmental Impact Evaluation:  
Old Saybrook Decentralized Wastewater Management District  
Old Saybrook, CT

STATE AGENCIES

Department of Environmental Protection, 79 Elm Street, Hartford, CT

Office of Policy and Management, 450 Capitol Ave, MS #52ASP, Hartford, CT

Council on Environmental Quality, 79 Elm Street, 6th Floor, Hartford, CT

Connecticut Commission on Culture and Tourism, One Constitution Plaza, 2<sup>nd</sup> Floor, Hartford, CT

Department of Public Health, 450 Capitol Ave, Hartford, CT

Water Supply  
Environmental Health

Department of Transportation

MUNICIPAL BOARDS AND COMMISSIONS

Old Saybrook Town Hall, Old Saybrook, CT, 06475

Town Clerk  
First Selectman  
Board of Finance  
Conservation Commission  
Inland Wetlands & Watercourses Commission  
Planning Commission  
Zoning Commission  
Water Pollution Control Authority

REGIONAL PLANNING AGENCIES

Connecticut River Estuary RPA, 455 Boston Post Road, P.O. Box 778, Old Saybrook, CT 06475

REGIONAL HEALTH DISTRICT

Connecticut River Area Health District, 166 Main Street, Unit 2, Old Saybrook, CT 06475