


# **Old Saybrook Wastewater Management District Septic System Upgrade Process for Fenwood**

**Presented by the  
Old Saybrook Water Pollution Authority  
November 2013**

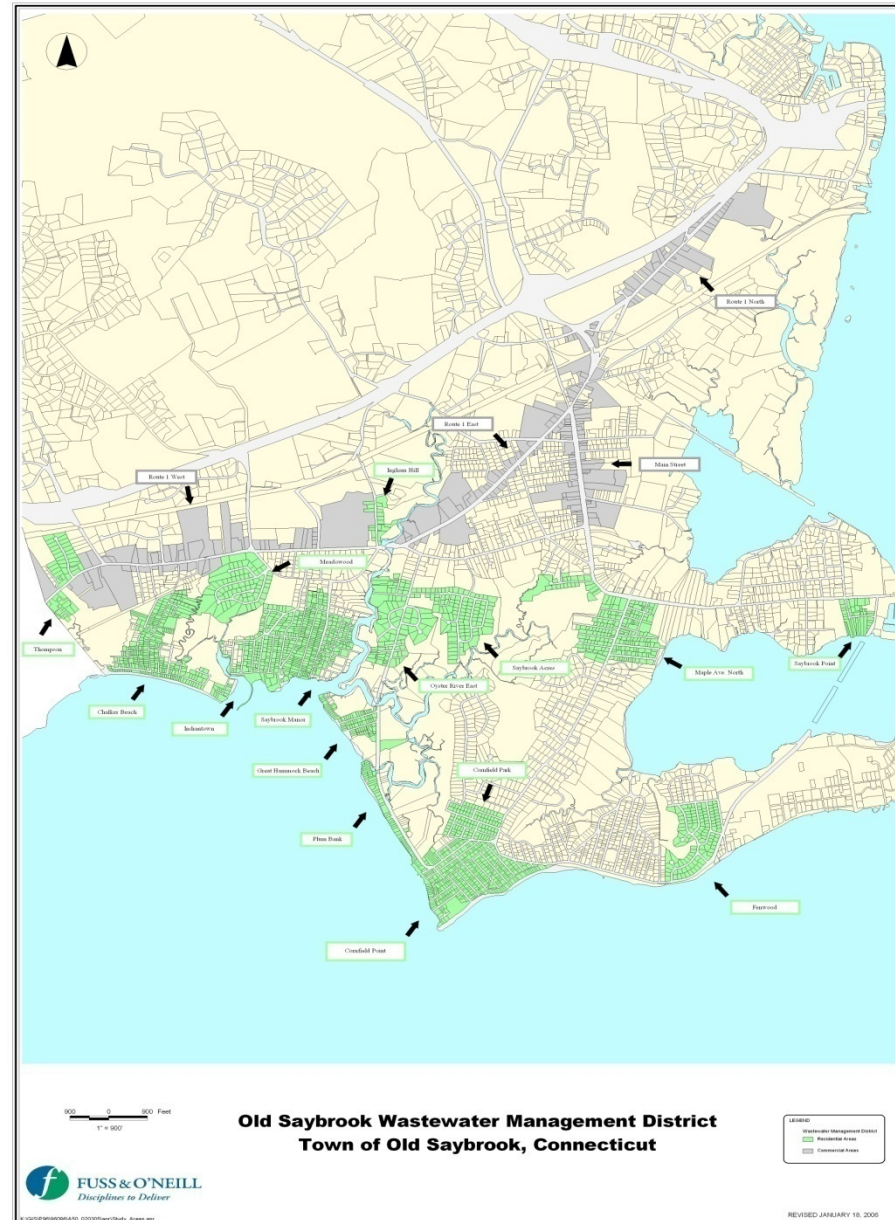
**(This PowerPoint Presentation is available online at  
[www.oswpca.org](http://www.oswpca.org))**

# Agenda

- ▶ Introduction
  - ▶ Brief Overview of Project
  - ▶ Implementation Process
    - With Clean Water Fund grants and loans
    - Expected Upgrades for Fenwood
    - Self-funded Option
    - Comparison of Approaches
  - ▶ Preliminary Schedule
  - ▶ Questions
- 

# Wastewater Management District (WWMD)

- Approximately 1900 Lots
- 15 Focus Areas
- Based on preliminary information, approx 16% of existing septic systems may be compliant, but still require confirmation
- Approx. 300 Advanced Treatment systems required
- 9 Year Build-out



# WWMD Implementation Process

## Using Clean Water Fund Grants and Loans

1. Property Owner Application Process
2. Initial Investigation
3. Determine Upgrade Requirements
4. Bidding and Contractor Selection
5. Order to Upgrade
6. Design of Upgrades
7. Construction
8. Permit to Discharge
9. Operate & Maintain System
10. Benefit Assessment over 20-years

## Self-Funded Option

1. Property Owner Application Process
2. Order to Upgrade
3. HO hires installer to Design Upgrades
4. Applies for permit
5. Construction
6. Permit to Discharge
7. Operate & Maintain system
8. Cost paid upon completion

# 1. Application Process

- ▶ CRAHD and WPCA conduct file review
  - If system is Upgrade Compliant; permit to discharge issued
  - If not U/C or need more info; application package is prepared
- ▶ All homeowners with non-compliant systems receive application package
  - Available tonight: Contents of Package
- ▶ Sign application for entry into the CWF program
  - Or waive Clean Water Fund grant and loan monies
- ▶ Caveat is placed on land records when homeowner opts to receive Clean Water funding
- ▶ All Applications must be returned to the WPCA office in Town Hall within 30 days
- ▶ Include Access Letter and Exhibit B if corrections are necessary
- ▶ Failure to return application will invoke enforcement

# Exhibit A

**YOU MUST CHECK ONE OF THE FOLLOWING BOXES REGARDING CLEAN WATER FUND PARTICIPATION. CHECKING BOX A MEANS YOU WILL ACCEPT CLEAN WATER FUNDS. CHECKING BOX B MEANS YOU WAIVE CLEAN WATER FUNDS .**

Box A. ☐ I **accept** Clean Water Funds to investigate and implement upgrades as necessary on my property. By signing and checking Box A you are giving the WPCA and its agents permission to access your property for the purpose of site evaluation and soil testing. Implementation of any necessary upgrades may require construction by the Town to meet Town Ordinance requirements. I understand an assessment will be made against my property in accordance with § 7-249 et. seq. of the Connecticut General Statutes. **A 25% grant from the CWF and a matching 25% from the Town is applied to the cost of the upgrade, with the remaining 50% payable by the homeowner as a 20-year loan at 2%.**

Box B. ☐ I **decline** Clean Water Funds to implement and pay for upgrades to my septic/sewerage system under Town Ordinances. **I acknowledge that I will not be eligible for the Clean Water Fund grant and loan program** and will undertake to pay for and implement all required upgrades. The Director of Health or the Water Pollution Control Authority will issue an order with a schedule to implement the upgrades, as applicable.

Applicant Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Print Name: \_\_\_\_\_





# Exhibit B – Example Data Form

## EXHIBIT B: SEPTIC SYSTEM DATA ON FILE PRELIMINARY

Homeowner: Please make corrections if information appears inaccurate.

CONTRACT	MAP/LOT	PROPERTY ADDRESS	PROPERTY OWNER(S)	DESIGNATION
FENWOOD (FW1)	005/000	10 BEACH STREET	SEAGULL JONATHAN L	<input type="checkbox"/> UPGRADE COMPLIANT <input type="checkbox"/> NEEDS TANK UPGRADE <input type="checkbox"/> NEEDS NEW LEACHING UPGRADE <input checked="" type="checkbox"/> NEEDS TANK AND LEACHING <input type="checkbox"/> NEEDS ADDED LEACHING <input type="checkbox"/> NEEDS FURTHER INVESTIGATION <input type="checkbox"/> CONFIRM UPGRADE COMPLIANT
WATER SOURCE	# OF BEDROOMS	MAILING ADDRESS		
<input checked="" type="checkbox"/> PUBLIC <input type="checkbox"/> WELL	3			
	LAST PUMPOUT	SEPTIC TANK SIZE & TANK MATERIAL		LEACHING SYSTEM
	6/23/2009	1000 GALLON CONCRETE		<input checked="" type="checkbox"/> DRY WELLS <input type="checkbox"/> GALLERIES <input type="checkbox"/> TRENCHES <input type="checkbox"/> PROPRIETARY <input type="checkbox"/> UNKNOWN <input type="checkbox"/> OTHER
NOTES FROM PROPERTY OWNER:		ADDITIONAL INFORMATION: [Check all that apply]		
<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>		<input type="checkbox"/> Group Home: <input type="checkbox"/> Multi-Family: # of Units ____ <input type="checkbox"/> Rental Property <input type="checkbox"/> Garbage Disposal <input type="checkbox"/> Oversized Bathtub <input type="checkbox"/> Single Family <input type="checkbox"/> Single Family with In-law Apartment		

FOR OFFICE USE ONLY:

# Access Letter

## EXHIBIT E

Location: \_\_\_\_\_

Dear Property Owner:

You are receiving this letter because you own the property listed above which is in the Wastewater Management District (WWMD). As you know, the septic systems in the WWMD require upgrading.

By signing this letter, you grant the WPCA the right, to enter the listed property to inspect it and to conduct any necessary upgrades and related activities. You also grant the WPCA the right to allow its agents and contractors to enter the property for the described purposes. These agents and contractors may include the Connecticut River Area Health District and any other governmental entity inspecting, or conducting an upgrade on, the property. Unless an emergency requires immediate access, the WPCA will contact you 7-14 days before the property is entered.

Anyone who the WPCA allows on the property will be covered by the customary types and amounts of insurance and will agree to indemnify and hold the undersigned harmless from and against any and all liability, damages, costs, and expenses that are caused by the negligence of such person or entity. However, such people or entities will not agree to indemnify and hold the undersigned harmless to the extent any liability, damages, costs, and expenses are caused by the negligence of one or more of the undersigned or any such undersigned's agent or contractor.

When any upgrade on the property is complete, the WPCA will restore the property, as nearly as is reasonable and practicable, to the condition it was in before the upgrade was conducted. The material and equipment installed on the property shall become the owners' once the WPCA or other governmental agency delivers notice to that effect. All manufacturer and contractor warranties shall be for the benefit of the owner.

By signing this letter, you represent that no one other than those signing this letter as property owners own any interest in the property. If more than one individual or entity owns an interest in the property, all should sign. If less than all owners have signed this form, the signatories represent that they have authority to sign on behalf of all parties, and will hold the Town of Old Saybrook and its Water Pollution Control Authority harmless from any claims made by owners of this property who have not signed this agreement. By signing this letter you also agree to notify the WPCA at least thirty days before conveying any interest in the property. Any conveyance or grant of an interest or right in the property after the date you sign this letter is subject to this letter.

This letter constitutes an agreement between the WPCA and the undersigned property owners regarding the above matters. It may be executed in counterparts and a facsimile signature shall be deemed an original. The invalidity or invalid application of one provision of this letter agreement shall not affect the validity of any other provision, or any other application of any provision of this letter agreement. Once fully executed, this letter agreement may only be modified by a written agreement between all those undersigned.



# Clean Water Fund Program Termination Policy

**Conditions under which Termination of CWF Program **Waiver** can be executed: (Property **enters** CWF Program)**

- ▶ If a owner declined the CWF Program, but decides to accept the funding, they will be assessed a fee under Schedule A.
- ▶ If a property has been sold, and the previous owner had declined the funding, the new owner may choose to accept CWF monies and be assessed fees as listed in Schedule A.

**Conditions under which Termination of CWF Program **Acceptance** can be executed: (Property **exits** CWF Program)**

- ▶ If owner chooses to terminate the CWF agreement within **30 days** of executing it **and** the WPCA has not initiated any physical site evaluation the owner is responsible for fees listed in Schedule A
- ▶ If owner chooses to terminate the CWF agreement **after** the site investigation has begun, the owner is responsible for fees listed in Schedule A.
- ▶ If owner chooses to terminate the CWF agreement after the contract drawings and bid package have been prepared, the property owner is responsible for fees listed in Schedule A.
- ▶ If a property has been sold, and the previous owner had accepted the funding, the new owner may decline CWF monies and assessed a fee according to the progress on the bid contract, per Schedule A.

**Conditions under which Termination of CWF Program **Application** cannot be executed:**

- ▶ It is the sole discretion of the WPCA to allow a homeowner to “break its contract” with the WPCA, and change funding option. A property owner **cannot** terminate or enter the CWF option after a contract has been released to bid that includes such property.
- ▶ If the original CWF Program Application has been terminated and re-executed, it cannot be reversed a second time (nor can any subsequent owners of the property choose to accept or decline the funding.)

## 2. Initial Investigation

- ▶ WPCA prepared topographic mapping
- ▶ CRAHD and WPCA use data from file review to determine system Designation (Exhibit B)
  - Identify existing conditions to extent possible
  - Potentially Upgrade Compliant lots may need confirmatory test pit(s)
- ▶ WPCA Conducts Interior and Exterior Inspections
  - Field personnel visit to document and photograph; property, electrical panel, and house sewer outlet
  - Collects other relevant info that impacts flows and usage
    - Homeowner should divulge: Group home; rental property
- ▶ CRAHD and WPCA Conduct Site investigation
  - WPCA provides backhoe for test pits and restoration
  - CRAHD conducts soil testing: examines test pits; perc test
  - Ground Penetrating Radar used to locate utilities, existing system components, and unknown underground structures
  - Document location and elevation of house sewer outlet









# Re-seed and Straw



### **3. Determine Upgrade Criteria**

- ▶ **CRAHD reviews site investigation data**
  - If system is Upgrade Compliant permit to discharge is issued
  - If conventional system upgrade is needed major upgrade elements will be identified
  - In sensitive areas “engineered” septic design is required
- ▶ **WPCA collects Upgrade criteria data for bid package preparation**

# Upgrade Program Standards

- ▶ Replace cesspools, dry wells
- ▶ Septic Tank
  - Size must meet Public Health Code
  - Install larger 2-compartment tank with baffles & effluent filter
- ▶ Leaching System
  - Vertical separation of at least 24 inches to groundwater
  - Effective area of leaching system maximized to meet Public Health Code (may have to add to leaching system)
  - Raise elevation or add pump where necessary
- ▶ Copies of Upgrade Program Standards available tonight and on website

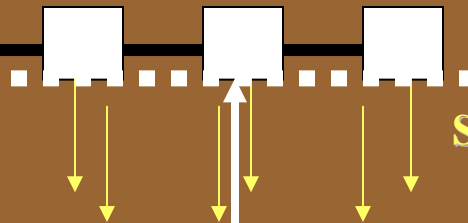


Basement



Septic Tank

Leaching Trenches



Septic System  
Effluent

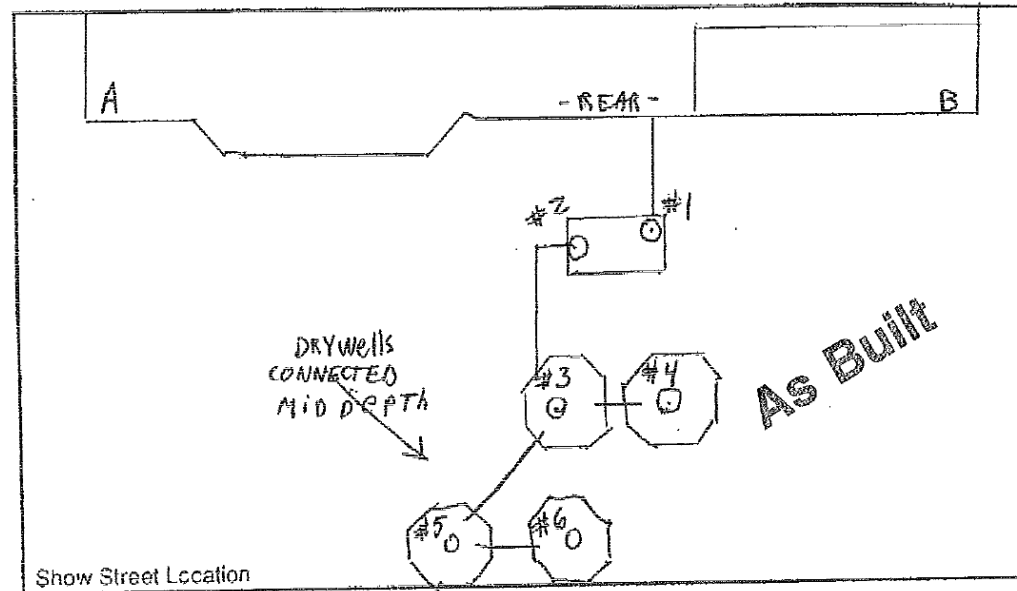
**24 Inches Minimum Vertical  
Separation Distance Required**

**Ground Water**



# Characteristics of Septic Systems & Lots in Fenwood

- ▶ Undersized tanks: 400–750 gallons
- ▶ 1-compartment tanks (installed before 1991)
- ▶ Multiple 6 – 8' deep dry wells; do not meet 24" separation distance to groundwater
- ▶ Large lots; ample room for septic components
- ▶ Good soils



# What is expected in Fenwood? (116 Properties)

- ▶ Preliminary estimates from files indicate:
  - 23 Upgrade Compliant
  - 1 New Tank
  - 12 Leachfield upgrades
  - 75 New tanks and Leaching
  - 5 Require Additional Leaching
  - 0 Advanced Treatment Systems



## 4. Bidding Process

- ▶ WPCA assembles groups of upgrades (20–30 lots) into contracts
- ▶ WPCA's engineer prepares bid packages
  - Must meet Clean Water Fund procurement requirements
- ▶ Contractors encouraged to submit bids
- ▶ WPCA awards contract to lowest responsive, responsible bidder per engineer's recommendation and WPCA/DEEP concurrence



## 5. Order to Upgrade

- ▶ **CRAHD issues Orders to Upgrade when contract is signed**
  - Everyone receives Order regardless if they chose to upgrade on their own and self-fund
  - Signals that system design and construction will begin soon
  - Timeline for Construction in the Order
    - Usually 90 – 100 days
    - Residents who hire their own contractor must adhere to construction completion date
  - Homeowner may appeal Order







## Connecticut River Area Health District

455 Boston Post Rd. Suite 7 Old Saybrook, CT 06475

Phone 860-661-3300 Fax 860-661-3333

*Serving Old Saybrook, Clinton and Deep River*

ISSUED TO: OWNER  
ADDRESS  
Old Saybrook, CT 06475

DATE:

This is an Order of the Director of Health to upgrade an existing Sewerage System under § 173-26.A of the Code of the Town of Old Saybrook (The Decentralized Wastewater Management District Ordinance, (the "Ordinance").

You are hereby notified of the existence of a public health law violation and an Ordinance violation upon the premises owned by you, or under your charge, located at ADDRESS in the Town of Old Saybrook and described as follows:

After an Initial Investigation of the subsurface sewage disposal system it has been determined that the system does not meet the requirements of Exhibit A to the Ordinance; the Town of Old Saybrook Upgrade Program Standards (the "Standards"). Specifically, the existing septic tank serving the property and the existing leaching system do not meet the requirements of the Standards

**LAW VIOLATIONS:** Town of Old Saybrook Wastewater Upgrade Program Standards Sections 3Ai, 3Ci,ii and iii, 3A iii. and 3D i and ii.). The Connecticut Public Health Code Section 19-13-B103c(f).

**AUTHORITY:** Connecticut General Statutes Sections 19a-206, 19a-207, 19a-244; Code of the Town of Old Saybrook Chapter 173-25A (2), 173-25C (2) and 173-26A.

**PENALTY:** Connecticut General Statutes Sections 19a-36, 19a-206, 19a-230. Code of the Town of Old Saybrook Chapter 173-35.

It is hereby ordered that said upgrade be made and such violation be removed, abated or corrected as follows:

Abandonment of the existing septic tank and leaching system and installation of a new subsurface sewage disposal system meeting the requirements of the Connecticut Public Health Code and the Town of Old Saybrook Wastewater Upgrade Program Standards on or before the before the Xth day of MONTH, YEAR.


Please see enclosed right of appeal. If you wish to discuss this matter, you may contact me or Scott Martinson, R.S. of this department.

Our records indicate that you will be accepting Clean Water Act funds for the work. Therefore, the staff of the Water Pollution Control Authority will be in contact with you to schedule the work.

Signed:

Jim Monopoli, MPH  
DIRECTOR OF HEALTH, Connecticut River Area Health District

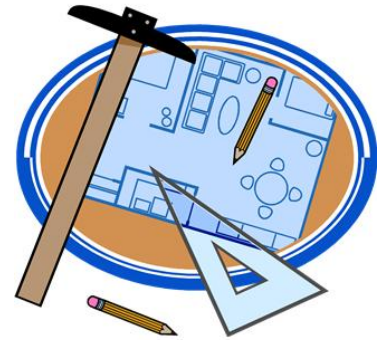
# Appeals

- ▶ The WWMD Ordinance allows for the right to appeal the order issued by the Health District.
  - ▶ Loss of Appeal will result in enforcement of compliance with the Ordinance.
  - ▶ Failure to comply with the WWMD Ordinance is a violation and subject to fines of \$100 per day.
- 



# 6. Design of Upgrades

- ▶ The WPCA's contractor or engineer designs required upgrades
  - Must meet Upgrade Program Standards
  - Uses design criteria provided in bid package unless engineered design is necessary
- ▶ Designs reviewed and approved
  - Conventional and engineered upgrades by CRAHD
- ▶ WPCA provides Upgrade Packages
  - WPCA staff meets with homeowners to review design, preliminary construction costs, and benefit assessment program





## 7. Construction

- ▶ Selected Contractor pulls Permit to Construct
- ▶ Contractor installs upgrades
- ▶ WPCA Field personnel observe/document quality control of contract requirements
- ▶ CRAHD approves installation and inspects connection
- ▶ Contractor adheres to schedule to construct within contract timeframe
- ▶ Contractor or engineer submits “As-built” drawings
- ▶ Contractor submits invoices to WPCA for processing and payment
- ▶ WPCA provides invoices to homeowner for review



# Yard Restoration




2010/06/17



2010/05/21

# Yard Restoration

- ▶ Contractor must restore yard according to the specifications in project manual
  - ▶ Photographs taken before and after to document site conditions
  - ▶ WPCA field personnel will discuss what homeowner can expect to occur on their property
  - ▶ WPCA field personnel work with contractor and homeowner to ensure that landscaping and property features are satisfactorily accounted for
- 

## 8. Permit to Discharge

- ▶ CRAHD issues WWMD Permit following:
  - Approval of installation
  - Filing of as-built drawing
- ▶ Completion kit: As-built, permit, operation and maintenance, and lawn care guidelines sent to homeowners
- ▶ Permits renewed by homeowner every 5 years





# 9. Operation and Maintenance

- ▶ Conventional System Homeowner Responsibility:
  - Pump septic tank every 5 years
  - Renew permit every 5 years
  - Operate and Maintain system according to Septic System Guidelines and Equipment Manuals provided
- ▶ 1-year warranty provided by contractor



# 10. Benefit Assessments

- ▶ Project funding from DEEP's Clean Water Fund:  
Grants and Loans
  - DEEP grant – 25%
  - Town contribution – 25%
  - Owner portion – 50%
- ▶ Owner costs levied as Benefit Assessments
  - Can pay off all at once
  - Can pay over 20 years at 2% interest rate
    - Town will lien property
  - There is an Elderly/Disabled Relief component
  - Public Hearing held prior to Assessments levied

# Benefit Assessment Includes:

## ▶ Construction Costs (Examples)

- Design (installer)
- Installation, plumbing, and components
- Site work, removal of old system, and restoration


## ▶ Construction Management Costs (Examples)

- Design (engineer)
- Design data collection for site plans
- Bid document preparation
- Plan and design review
- Contract and construction administration
- Construction monitoring
- Permits and inspections
- Legal consultants

\*Benefit assessment payments are calculated upon determination of all costs

# WWMD Implementation Process

## Using Self-Funding Approach

- ▶ 1. Property owner application process
  - ▶ 2. Order to Upgrade
  - ▶ 3. Homeowner hires installer to design upgrade
  - ▶ 4. Installer applies for permit
  - ▶ 5. Construction
  - ▶ 6. As-built and Permit to Discharge
  - ▶ 7. Operate and Maintain System
  - ▶ 8. Cost paid upon completion
- 

# Self-Funded Approach

- ▶ Owners have the option to waive the Clean Water Fund assistance
- ▶ The same upgrades must be made as the CWF approach – On same timeline
  - Construction completion date same as CWF-funded process
- ▶ Homeowner would be responsible for hiring designer and installer and filing forms
- ▶ CRAHD and WPCA still involved with site testing and approval steps
- ▶ Financing would be owner's responsibility

# TOWN UPGRADES

# OWNER UPGRADES

## COST

**Advantages:** The property owner will pay 50% of the cost of the upgrade.

Town will make loan available so property owner can pay cost over 20 years at 2% interest.

**Disadvantage:** The property owner isn't involved with negotiating cost of the upgrade

**Advantages:** The contractor is not required to pay federal prevailing wage rates, so construction may be less expensive.

Property owner may "shop around" for a contractor.

**Disadvantages:** The property owner has to arrange for their own financing.

Won't be eligible for the 25% CWF grant and 2% loan, or partial subsidy (25%) from the Town's funds.

# TOWN UPGRADES

# OWNER UPGRADES

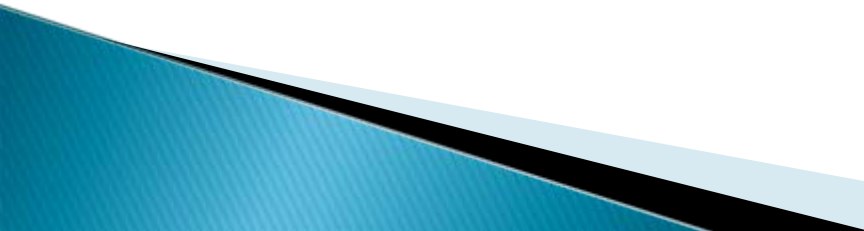
## CONTROL

**Advantage:** The contractor is bound by a contract requiring specific performance standards, enforced by the Town and its consultants.

**Disadvantage:** The property owner has no say in the selection of the contractor, though Town will try to work with property owner.

**Advantage:** The property owner can negotiate the terms of the upgrade to meet their specific needs rather than relying on a general contract document covering dozens of properties.

**Disadvantage:** Managing on-site upgrades may be difficult and time-consuming if the property owner is not skilled in either contracting or septic system installation.





# TOWN UPGRADES

# OWNER UPGRADES

## CONVENIENCE


**Advantage:** The Town will handle the hiring and the scheduling of the contractor, and will have engineers and inspectors under contract to assure that the upgrade is properly done.

**Disadvantage:** The property owner has limited input on the timing of their upgrade.

**Advantage:** The property owner has some flexibility in the timing of the upgrade (subject to the time constraints in the CRAHD Order to Upgrade).

**Disadvantage:** The property owner has to hire their own contractor, and possibly an engineer, to design and install the upgrade and file forms. The responsibility for compliance with the Standards is on the property owner.

# Fenwood – Tentative Schedule:

- ▶ Notice of Entry Letters: November 2013
  - ▶ Applications due: 30 days after receipt
  - ▶ Site Investigations as CWF Applications are returned: Fall 2013/Winter 2013/2014
  - ▶ Design and Bid Process: Winter 2014
  - ▶ Construction: January 2014 – October 2014
  - ▶ Benefit Assessment Payment begins: May 2015
- 

# Access Info at [www.oswpca.org](http://www.oswpca.org)

Town of Old Saybrook  
WPCA Home Page  
302 Main Street  
OLD SAYBROOK, CT  
06475-2369



OLD SAYBROOK

WATER POLLUTION  
CONTROL AUTHORITY

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Maps: Wastewater Mgt. District  
Wastewater Mgt. Program  
Check Pumpout Status

[Agenda](#)

[Minutes](#)

[Oyster River East & Saybrook Pt](#)

[Cornfield Park & Thompson](#)

[Septic Service Providers](#)

Contact Us

WPCA Members and Staff

Chairman: Elsa Payne  
Vice Chairman: Ian Featherstone  
Secretary: George Gwizd  
Member: Nelson Engborg  
Member: Doris Zumbroski  
Member: John F. Claffey, Jr.  
Member: Chuck Wehrly  
Alternates: Jason Becker, 1 Opening  
Coordinator/Webmaster: Robbie Marshall  
Financial Manager: Gratia Lewis  
WWMD Program Manager: Stephen Mongillo  
Inspector: Cameron Evangelisti  
Inspector: Scott Brinard  
Inspector: Ray Lebert

[Bulletin Board](#)

[Maps & Assessment Data](#)

site designed by robbie marshall 2005

# Questions?

**And for further info -**

**Please contact us!**

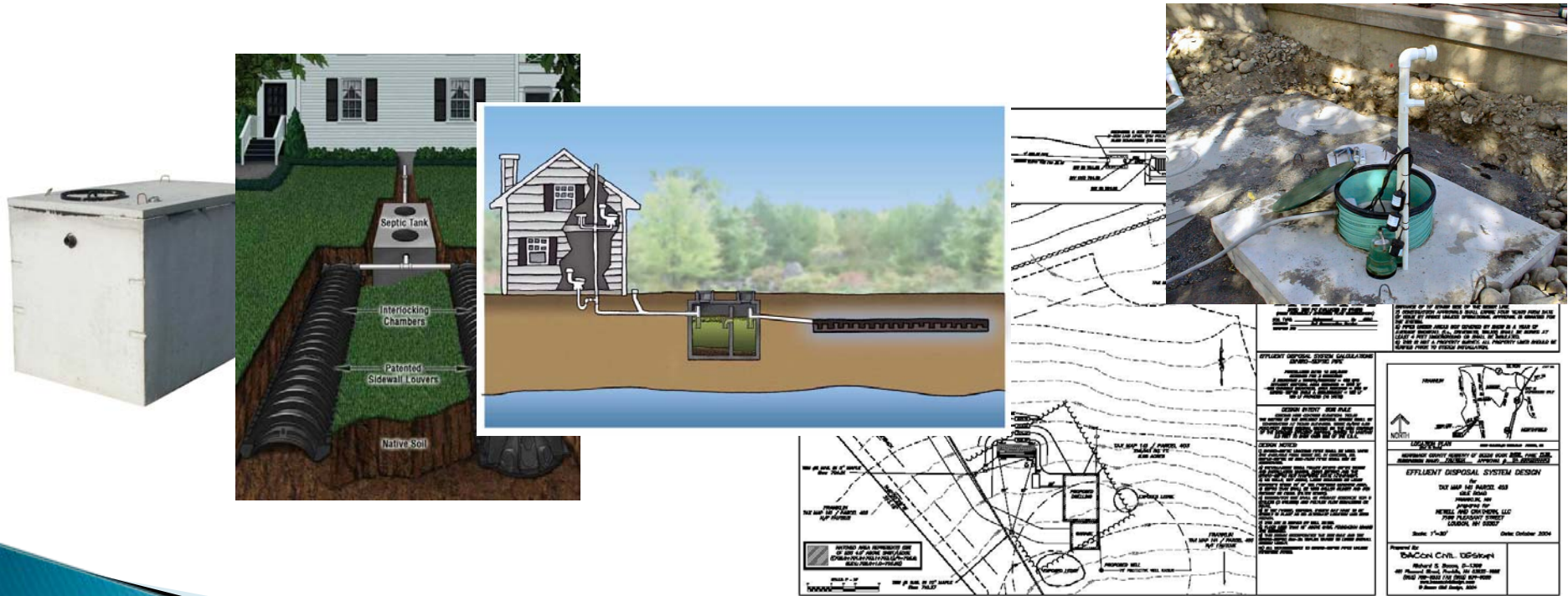
**WPCA office 395-2876**

**302 Main Street Town Hall**

**[admin@oswpca.org](mailto:admin@oswpca.org)**


## Why Upgrade Costs are not Available

- ▶ Each property's characteristics (soil) and needs (size) are different. Some require: Minimal investigation, only a tank, additional leaching, a complete system, plumbing adjustments, a pump, removal of extra components, or an engineered design.





# Wastewater Management District Program

- ▶ Town ordered by DEP and court to improve on current septic systems
  - ▶ Developed on-site wastewater management program instead of installing sewers
  - ▶ Approved by voters in August 2009
  - ▶ Established a Decentralized Wastewater Management District (WWMD)
  - ▶ Authorized \$42 million in funding
  - ▶ First program of its kind in Connecticut
  - ▶ Have installed 250 systems since 2010
- 

# Implementation Schedule

## WWMD 2010-2018

<b><u>Phase I</u></b>	<b><u>Phase II</u></b>	<b><u>Phase III</u></b>	<b><u>Phase IV</u></b>
Saybrook Acres	Indiantown	Chalker Beach	Cornfield Point
Oyster River East	Meadowood	Plum Bank	Saybrook Manor
Cornfield Park	Ingham Hill	Maple Avenue North	
Saybrook Point	Great Hammock		
Thompson			
Fenwood			

\* Order of areas subject to movement based on construction schedules, seasons, program approach, etc.


# Community Pollution Problem

## Connecticut General Statutes


**Sec. 22a-427.** No person or municipality shall cause pollution of any of the waters of the state.

**Sec. 22a-428.** If the commissioner finds a municipality is causing pollution of the waters of the state, or that a **\*community pollution problem** exists, or that pollution by a municipality can reasonably be anticipated in the future, he may issue to the municipality an order to abate pollution.

**\*The existence of pollution which, in the sole discretion of the commissioner, can best be abated by the action of a municipality.**



# According to the EPA:

- ▶ Onsite and clustered wastewater treatment systems serve approx. 25% of U.S. households (25 million.)
  - ▶ Approximately 33% of new development uses onsite treatment.
  - ▶ More than ½ the onsite systems are over 30 years old
  - ▶ Surveys indicate that at least 10% of systems back up onto the surface or into the home each year.
  - ▶ Data has shown that at least 20% of systems are malfunctioning to some degree.
  - ▶ The second most frequently cited contamination source of ground water is septic systems.
- 

# “My system is working – Why upgrade?”

- ▶ Even if not breaking out or backing up, it may not be functioning properly because:
  - Many systems in Fenwood are over 40 years old
  - Many do not meet current Public Health Code:
    - Single compartment and undersized tanks; improperly sited/inadequate leaching components
  - Some are built too close to (or into) groundwater
  - Dense development results in high nitrogen loading
- ▶ The Town and State are providing opportunity to help homeowners replace their systems using grant and loan money.
- ▶ Upgrading the system will increase the value of property, and allow smoother turnover if sold.



# Tank Collapse





# Broken Pipe





# Tank under Walk

