ON-SITE WASTEWATER MANAGEMENT MODEL ORDINANCE
DRAFT

INTRODUCTION

This model ordinance provides for the periodic inspection of all onsite wastewater treatment systems within a community. Its purpose is to ensure the proper function of onsite wastewater systems to protect water quality and ensure maximum system longevity. Rather than mandating scheduled tank pumpouts, systems are placed on an inspection schedule. The inspection frequency is based on the type of use, system condition, and location in an environmentally sensitive area. Maintenance, pumping and repair are then conducted as needed based on inspection results. The inspections required under this ordinance enable towns to keep track of onsite systems in a community and their condition. It supports homeowners in meeting their maintenance responsibilities. And it identifies failing systems and cesspools and targets them for upgrading.

The authority for this ordinance is based on RI State enabling legislation and the RI Department of Environmental Management (RIDEM) Individual Sewage Disposal System regulations. RIDEM establishes minimum standards for siting, design, and installation of onsite systems but specifically assigns responsibility for maintenance to the homeowner. In RI, almost all new construction is occurring in unsewered areas where onsite systems are the only waste disposal option. Onsite technologies are now recognized to be a cost effective and, by maintaining groundwater recharge, an environmentally sound treatment option. But this is true only when systems are properly designed, installed, used, and maintained.

Until recently, most towns have been faced with two very different choices for wastewater management: central collection and treatment of wastewater carefully controlled and monitored by sewer districts vs. totally unmanaged individual systems with maintenance completely up to the homeowner. This ordinance enables towns to adopt a more balanced approach through centralized management of individual systems. It represents a basic element of a comprehensive local wastewater management program. Other elements would include: evaluating wastewater treatment needs; developing a wastewater management plan; offering financial incentives for system repair and upgrading such as low-interest loans; establishing town wastewater treatment performance standards based on the need to protect local resources; and public education.

Important considerations in developing the ordinance are: the likely staffing requirements for the various requirements of the ordinance; selecting the department best suited to oversee the day to day operation of the program; and the need for special training, additional personnel, or equipment. The program can be phased, with inspections and pumpouts first implemented in a pilot area such as a groundwater recharge area or critical watershed area.

ON-SITE WASTEWATER MANAGEMENT (OWM) ORDINANCE

DRAFT September, 2000

COMMENTS

SECTION 1.0 AUTHORITY

This ordinance has been drafted in accordance with and under the authority of the State of Rhode Island General Laws, Title 45, Chapter 24.5 of the General Laws entitled "Towns and Cities: Wastewater Management Districts." The authorizing State chapter shall be known and cited as the "Rhode Island Septic system Maintenance Act of 1987."
Nothing in this act replaces or precludes any obligation of the owner to notify the RI Department of Environmental Management, the RI Department of Health, the Coastal Resources Management Council, or their successors of ISDS failures.

SECTION 2.0 FINDINGS

*Specific **findings** tie the ordinance to the comprehensive plan and reference wastewater needs assessment results to demonstrate need for the ordinance.*

The *town name* Town Council hereby finds the following evidence in support of the establishment of an On-Site Wastewater Management Plan and Ordinance. All documentation and findings included in the *town name* Onsite Wastewater Management Plan are incorporated herein by reference:

The Comprehensive Plan mandates the adoption of a town-wide wastewater management district that would allow the Town to inspect ISDS and ensure maintenance. Such a program would decrease the amount of ground and surface water contamination from ISDS that did not function properly. The plan further states that the district shall first be implemented in the *critical area.*

Other findings might include:

the need to protect particular local water resources, including sole source aquifers, surface waters, and shellfishing

Undersized, grandfathered, non-conforming lots present a problem in terms of increased nutrient and pathogen levels associated with high-density residential development. The report, _____ found that septic systems in high-density areas of the town threaten groundwater quality and recommends the creation of a Wastewater Management District.

ISDS can provide a viable, cost-effective and environmentally sound alternative to sewers in those portions of Town that are outside the designated sewer area as shown in the Comprehensive Plan. This is dependent on proper ISDS design, siting, installation and maintenance, use of appropriate enhanced on-site wastewater treatment technologies.

areas;

water quality goals of comprehensive plans, groundwater protection plans, and wastewater management plan; and

results of studies that document actual or threatened impact to water quality by onsite systems.

The Comprehensive Plan recognizes that in *town name* almost *XX* percent of the unsewered, residentially zoned land under two acres has constraints relative to the proper functioning of ISDS.

In *200X* there were an estimated ## individual sewage disposal systems. Of these ## percent or approximately ## systems predated ISDS regulations.

In *200X XX* percent of the residents relied on ISDS. Due to a limited sewer expansion plan and the location of potentially developable land outside expansion areas, the percentage of ISDS users relative to sewer users will continue to increase.

Town name's ground and surface waters are important natural and recreational resources that are vital to the Town's economic and environmental health.

The people of *town name* rely on groundwater for a safe drinking water supply. Approximately 80 percent of the population rely on private wells and 20 percent public wells. No feasible supply alternatives are available. Certain land uses, including substandard, improperly functioning and poorly maintained ISDS pose a threat to the quality of ground and surface waters.

ISDS located in sandy soils with fast percolation rates, particularly in areas of high water tables, pose a significant threat to groundwater and receiving surface waters.

In some areas of Town, such as the *watershed or neighborhood* area, slowly permeable soils, high watertables and improperly designed**,** installed and maintained ISDS result in surface breakouts of sewage and threaten public health and the quality of receiving surface waters.

Many of the ISDS in coastal portions of the Town were initially designed for smaller summer homes that were subsequently expanded and converted to year round use, without the necessary improvements to the ISDS.

The Town currently has two public supply wells located in the glacial outwash deposits around *water resource* , which is located in the watershed of *critical area*.

Sensitive coastal area has been closed to shellfishing due to high levels of indicator fecal coliform. At times coliform levels have exceeded levels designated as safe for swimming.

ISDS and cesspools are estimated to contribute *XX* percent of nitrates in recharge water in the *critical area* Watershed. Roughly the same proportion can be expected on other unsewered areas with similar land use, geology and soils.

SECTION 3.0 PURPOSE

The Town Council hereby finds that Individual Sewage Disposal Systems are prone to failure with age, out-moded design, overuse, or improper installation, repair and maintenance. ISDS

failure poses a risk to public health and is a source of contamination to surface and groundwater. The purpose of this ordinance is to establish an On-Site Wastewater Management District (OWMD). Under this program, all ISDS in *town name* shall be properly operated, regularly inspected, and routinely maintained in order to prevent system malfunction and insure maximum system longevity.

This program provides a framework for the efficient inspection, repair and maintenance of ISDS in the Town of *town name* and recognizes the homeowner's responsibility to ensure that their system is well maintained and properly functioning.

SECTION 4.0 DEFINITIONS

Any term not defined herein, and pertaining to septic systems shall be governed by the definition as it appears in the current Rhode Island Rules and Regulations governing Individual Sewage Disposal Systems. Any other term not defined herein shall be governed by the definition as it appears in the *town name* Zoning Ordinance.

*Guidelines for installing **access risers** are available through the URI Cooperative Extension Onsite Training Center.*

Access Riser: A structurally sound and water tight inspection port, which at its lowest point attaches to a septic tank or other component of an ISDS and extends upward to the ground's surface, allowing visual inspection and where necessary physical access to the ISDS for the purposes of maintenance and repair.

Alteration: Any modernization, modification or change in the size or type of an existing sewage disposal system, including but not limited to, any work performed with a building renovation and/or change of use of that building; also including any work performed to accommodate any increase in sewage flow to that system.

ASTM: American Society for Testing and Materials

*RIDEM considers **cesspools** as substandard but does not require its replacement unless there is a serious failure. The town under section 7.9 of this model requires elimination of cesspools.*

Cesspool: Any buried chamber including but not limited to any metal tank, perforated concrete vault or covered hollow or excavation, which receives discharges or sanitary sewage from a building sewer for the purpose of collecting solids or discharging liquids to the surrounding soil. Under this ordinance and the RI ISDS regulations, existing cesspools are considered sub-standard.

Contaminant: Any physical, chemical, biological or radiological substance which enters the hydrological cycle through human action and may cause a deleterious effect on ground and/or surface water resources; it shall include but not be limited to hazardous waste, nutrients, pathogens and sanitary sewage.

Critical Resource Area: Sensitive land and water resources that provide unique habitat and/or important ecological or economic function(s). Such areas include, but are not necessarily limited to coastal and freshwater wetlands, coastal ponds and estuaries, aquaculture areas, watersheds of drinking water reservoirs and habitat for rare threatened or endangered species.

DEM: DEM is defined as the State of Rhode Island, Department of Environmental Management or its successor organization.

Director: The Director of the RI Department of Environmental Management or any subordinate(s) to whom the Director has delegated the powers and duties vested in her/him pursuant to RI General Laws, Chapters 46-12 and 42-17.1, as amended, or any other duly authorized agent.

Effluent: Sewage, water or other liquid, partially or completely treated or in its natural state, flowing out of any component of an ISDS or flowing over the ground's surface or beneath the ground in groundwater.

Enhanced Treatment Systems: On-site wastewater treatment that utilize advanced treatment technologies, which provide for enhanced removal of one or more contaminants (e.g. nutrients, microorganisms, BOD, TSS) as compared to conventional ISDS.

Failed or Malfunctioning Septic System: Any ISDS or cesspool that does not adequately treat and dispose of sewage that consequently creates a public or private nuisance or threat to public health and/or environmental quality, as evidenced by, but not limited to, one or more of the following conditions;

(1) Failure to accept sanitary sewage into the building sewer.

(2) Discharge of wastewater either directly or indirectly to a subsurface drain, surface drain, wetland, or surface water body.

(3) Effluent rising to the surface of the ground over or near any part of an ISDS or seeping down-gradient from the absorption area at any change in grade, bank or road cut.

(4) Discharge of improperly treated effluent to ground or surface waters resulting in contamination of ground and/or surface waters due to contaminants.

(5) Inadequate treatment and disposal of wastewater due to deterioration, damage, improper or substandard design of any ISDS. (For example inadequate separation distance from the bottom of the leaching system to groundwater or impervious layer, damage from a vehicle driven over a leachfield, etc.)

(6) Pumping records that indicate very frequent septic tank pumping. A system shall be considered in need of repair or alteration if the system has been pumped or been in need of pumping two or more times in a calendar year.

(7) Any ISDS that does not have a watertight septic tank.

Groundwater Protection Overlay District (GPOD): The area defined by lots of record which are indicated as the GPOD on the official zoning map of the town of *town name.* The GPOD is superimposed over any other zoning district established under the Zoning Ordinance

of the Town of *town name.*

Handbook: The Rhode Island Department of Environmental Management's *Septic System Check-Up: The Rhode Island Handbook for Inspection.*

Hazardous Waste: (1) Wastes which include, but are not limited to, those which are toxic, corrosive, flammable, or reactive; and/or (2) Wastes as defined in the RI Hazardous Waste Management Act, Section 23-19.1-4 or in any regulation or amendment adopted pursuant thereto; and/or (3) as defined under section 3.25 of the R.I. Department of Environmental Management "Rules and Regulations for Hazardous Waste Generation, Transportation, Treatment, Storage and Disposal."

Individual Sewage Disposal System (ISDS): A system installed to provide sanitary sewage disposal by means other than discharge into a public sewer system. ISDS shall be synonymous with on-site wastewater treatment system OWTS. It includes, but is not necessarily limited to, septic systems, cesspools and enhanced treatment systems.

ISDS Inspections: One of four types of ISDS inspections undertaken to gather baseline information, assess maintenance needs and to determine the condition of an ISDS at the point of home sale or the cause of septic system failure.

1. *First Maintenance Inspection:* The initial inspection performed on an ISDS and site. The tank is usually pumped as part of this inspection to better evaluate the current condition of the system. First Maintenance inspections involve the location of system components and more detailed data gathering that is not usually necessary for subsequent routine inspections.

2. *Routine Maintenance Inspection:* An inspection of an ISDS and system site to determine the need for pumping, establish future inspection schedules and to assess whether any repairs are necessary.

3. *Functional Inspection:* Inspection of an ISDS that typically takes place at the point of sale. It may include, but is not limited to, an assessment as to whether or not the system conforms to current design standards, an evaluation of in-home plumbing, and an analysis of ISDS components including flow trial and dye tracing as appropriate.

4. *Diagnostic Inspection:* A detailed inspection the purpose of which is to determine the reasons why a particular ISDS has failed.

Maintenance: The regular cleaning of any leaching chamber, cesspool, septic tank, building sewer, distribution lines, or any other component of an ISDS for the purpose of removing any accumulated liquid scum and/or sludge. The term "maintenance" shall also mean any regularly required servicing or replacement of related mechanical, electrical or other equipment.

On-Site Wastewater Management Program (OWMP) A town-wide program of various zoning and subdivision regulations, ordinances, educational programs, management practices

and financial incentives that are designed to help protect the integrity of the *town name* 's ground and surface water reservoirs through the proper management, design, maintenance and installation of ISDS.

Owner: Any person who alone, or jointly, or severally with others: (a) has a legal title to any premises, or (b) has control of any premises, such as agreement of purchase, agent, executor, executrix, administrator, trustee, or guardian of the estate or a holder of a legal title. Each such person is bound to comply with the provisions of this ordinance.

Package Treatment Plant: A modular treatment facility of State approved design and construction. For purposes of this ordinance package treatment plants are incorporated into the Town On-Site Wastewater Management Program.

Person: Any individual, group of individuals, firm, corporation, association, partnership, or private entity, including a district, county, city, town, or other government unit or agent thereof, and in the case of a corporation, any individual having active and general supervision of the properties of such corporation.

Repair: Any work performed on an ISDS in order to mend or renovate a specific defect or deficiency after the failure, injury, deterioration or partial destruction of a previously existing ISDS or component thereof. A repair shall not include any work performed on an existing ISDS that increases the flow capacity of the system.

Septic system: See ISDS

Septic Tank: A watertight receptacle which receives the discharge of sewage and is designed and constructed to permit the deposition of settled solids, the digestion of the matter deposited, and the discharge of the liquid portion into a leaching system.

Wastewater: Any human or animal excremental liquid or substance, putrescible animal or vegetable matter, garbage, or filth, including the discharge of toilets, laundry tubs, washing machines, sinks, dishwashers, and the contents of septic tanks, cesspools, or privies.

*Many septic **tanks** are not watertight when installed. Vacumn-testing or other simple methods are available to verify watertightness at the installation site. To prevent contamination, town standards should specific that only field-tested and certified water-tight tanks be installed.*

Wastewater Commission: The Commission established to oversee implementation of this ordinance and the Onsite Wastewater Management Program.

Wastewater Management District (WMD): The entire unsewered portion of the Town where the inspection and maintenance of ISDS shall be required.

Wellhead Protection Area: The critical portion of a three dimensional zone surrounding a public well or well field, through which water will move towards and reach such well or well field as designated by the Director of RIDEM or as adopted by the Town.

*Jurisdiction: Some town ordinances establish a **Wastewater Management District** and then designate the full extent of the Town as within area encompassed by the District. A section on applicability might be*

SECTION 5.0 THE WASTEWATER COMMISSION AND PROGRAM

ADMINISTRATION

5.1 The Wastewater Commission: The *town name* Conservation Commission, or designated sub committee thereof, shall serve as the Wastewater Commission. The Wastewater Commission shall develop the qualification requirements of the individual in charge of the day to day operation of the Onsite Wastewater Management Program. The Town Manager shall be responsible for hiring said individual. At a minimum, the person must have a demonstrated competency in the area of soils, ISDS functioning, inspection and repair procedures, including innovative and alternative technology.

included, to state that the ordinance applies to every owner or premises that has a septic system within the district.

- Or can be run by employee under Public Works Department with some oversight by Conservation Commission

The Onsite Wastewater Management District shall be overseen by the Public Services Director who shall serve as Program Administrator. The Onsite Wastewater Specialist may serve as the Program Administrator's designee and is responsible for the day to day operation of the program. (SK)

Where the town does not have a sewer commission or water utility, at least one RI town as authorized a ***volunteer*** *Wastewater Management Commission to oversee administration of the wastewater management program.*

The Onsite Wastewater Specialist shall prepare a monthly report for the Program Administrator and the ISDS Commission regarding program implementation including progress and problematic situations. It shall include items such as the status of any associated grants, consent agreements, notice of violations, number of inspections, number of retrofits, septic system repairs, and other pertinent information. Duties of Program Administrator and ISDS Commission different - SK

5.2 Power and Duties of Wastewater Commission under this Ordinance: Meetings of the Wastewater Commission shall be held at the call of the chair or vice-chair or by the vote of a majority of its members. The chair, or in the absence of the chair, the acting chair shall be empowered to administer oaths and compel the attendance of witnesses. It shall be the duty of the Wastewater Commission, without limitation, to:

a. Supervise the administration of a program of surface water and groundwater protection through maintenance and inspection of ISDS as authorized by this ordinance and Title 45, chapter 24.5 of the Rhode Island General Laws.
b. Develop rules and regulations for the implementation of this ordinance for review and approval by the Town Council.
c. Render declaratory rulings regarding their rights and obligations of any person or owner of property that is subject to the requirements of this ordinance.
d. Hear and decide appeals from any violation notice issued pursuant to this ordinance.
e. Levy fines for violations pursuant to this ordinance.
f. Contract for services with ISDS inspectors, installers, maintenance providers and others as necessary.
g. Order the maintenance of ISDS systems based upon inspection results.
h. Provide technical assistance to property owners on all matters pertaining to ISDS maintenance, repair, upgrade and replacement.

5.3 Administration: The Wastewater Commission shall be responsible for the overall administration of the program. The Planning Department shall provide technical and administrative support to the Wastewater Commission. The Tax Collector shall be responsible for collecting fees from residences, businesses, and other properties regulated under this ordinance. The Building Official shall serve as the enforcement agent.

5.4 Jurisdiction: The OWMD shall encompass the entire Town. Under this ordinance the Town, through the Wastewater Commission, shall have jurisdiction to ensure the operation and maintenance of all existing and future ISDS within the Town. When necessary, and with proper notification, this ordinance authorizes the passage of authorized representatives of the Town, the Wastewater Commission or their designees and licensed septage haulers onto private property for the periodic inspection, pumping, maintenance and repair of ISDS.

SECTION 6.0 ISDS INSPECTION AND MAINTENANCE

*Here under Section 6, a private, State-certified and **town-registered contractor** hired directly by a homeowner does the inspection.*

*Towns may wish to consider **financial incentives** to homeowners, especially those in environmentally critical areas or with low-moderate income, to speed the initial inventory process.*

In New Shoreham, town staff will conduct at least the first maintenance inspection. Another option would be for the town to put out a bid for a contractor to conduct inspections at a reduced rate in return for high volume.

6.1 Purpose of ISDS Inspections

The purpose of ISDS inspections is to assess the **current** condition of the ISDS in order to determine a) what maintenance is required, b) when the maintenance should be undertaken, c) the date of the next inspection, and d) the need for system upgrade or replacement. Maintenance requirements shall be based upon inspection results. Information from the inspections will also be used to complete a town-wide ISDS inventory and to track system inspections, maintenance and upgrades.

6.2 Who May Inspect

All ISDS shall be subject to inspections by a private, town-approved ISDS inspector. Where appropriate, an inspector may also be a designee of the Wastewater Commission or Public Works Department (Town Employee) or a contract inspector who agrees to work for the Town or for a set price. Town-approved ISDS inspector(s) shall determine the maintenance and pumping requirements for each ISDS based upon criteria outlined in The Rhode Island Department of Environmental Management's *Septic System Check-Up: The Rhode Island Handbook for Inspection* (hereinafter referred to as The Handbook). In order to be approved by the Town, an inspector must satisfactorily complete a training course in the use of The Handbook through the University of Rhode Island's Onsite Wastewater Training (OWT) Center or similar program approved by the Wastewater Commission. The Wastewater Commission shall maintain a list of town-approved inspectors and make such list available to property owners for the purpose of arranging the inspection of their own ISDS.

A property owner who completes the homeowner maintenance workshop offered through the University of Rhode Island's Onsite Wastewater Training Center or other program approved by the Town may conduct Routine Maintenance Inspections on their own conventional ISDS.

To inspect alternative and innovative systems an inspector, in addition to the above, must also have demonstrated knowledge in alternative and innovative technology and must satisfactorily complete the course in alternative and innovative system operation and maintenance offered through the University of Rhode Island's Onsite Wastewater Training

(OWT) Center or similar program approved by the Town.

Pros/Cons

Private town-approved inspectors must pass the URI 100/200 course or equivalent to be eligible to inspect standard ISDSs/I & A systems. The Town must keep an up-to-date list of approved inspectors who apply annually with proof of liability insurance.

Town employees may find it difficult to inspect systems and manage the wastewater program.

If a Town want quality and cost control of inspections, a contract inspector may be the way to go.

6.3 Type of Inspections

At a minimum, all inspections shall follow the criteria outlined in The Handbook or any town-approved inspection manual. There shall be four types of ISDS inspections: a) First Maintenance Inspection, b) Routine Maintenance Inspection, c) Functional Inspection, and d) Diagnostic Inspection.

a) A First Maintenance Inspection of each ISDS in Town shall be conducted in order to obtain baseline information and to determine maintenance and upgrade requirements. **The ISDS is pumped as part of this inspection to better evaluate the condition of the system**. First Maintenance inspections involve some data gathering and location of system components that is not usually necessary for subsequent routine inspections.

b) Routine Maintenance Inspections are generally conducted after the first Maintenance Inspection and may occur between pump-outs. Where appropriate, Routine Maintenance Inspections for any given ISDS may be limited to sludge and scum measurements. A property owner, with proper training through the University of Rhode Island's Onsite Wastewater Training Center or other program approved by the Wastewater Commission, may conduct Routine Maintenance Inspections on their own ISDS.

c) Functional Inspection typically takes place upon the sale of a home or business and includes an analysis of ISDS components including flow trial and dye tracing as appropriate

d) A Diagnostic Inspection is used where it is necessary to determine the cause of system failure. The purpose of this type of inspection is to determine the *specific* cause of system failure so that a cost-effective repair solution can be developed.

*The **inspection schedule** will be established based on the size of the system, it's condition and expected use. Other factors would include use as a rental and other high-flow systems, high-strength waste such as restaurants, and location in critical area such as high water table or wetland seasonal buffer in watershed of sensitive receiving waters.*

6.4 Inspection Frequency and Notification

*How will the pumping frequency affect the ability of the town to handle septage? The **septage receiving capacity** must be addressed.*

In general, inspection frequency shall be based on the procedures outlined in The Handbook (need) and shall consider, but not be limited to, system age, household occupancy, tank size, sludge and scum measurements and when the system was last pumped. The Wastewater Commission shall send written notice to ISDS owners of the need to schedule an inspection of their septic system. This inspection must be scheduled within forty-five days of the date of notice. After a system has been inspected the owner will receive notification of the maintenance requirements and the timeframe for the next inspection.

Or Inspection schedule every 3 years or 1-5 years

Pros/Cons

Inspections based on need reduce redundancy. This may be more cumbersome to keep track of if you do not have the right database tools.

Inspections schedules may over do it in some cases but some time frame assures septic system maintenance.

6.5 Inspection Reports

*How will the town keep track of inspection results? A **computerized database** is needed to record inspection results, generate inspection reminders and enforcement notices to homeowners, and otherwise maintain inspection and administrative records. In most towns this is linked to the tax assessor's **parcel** database and where available, the town GIS.*

Standard inspection forms shall be available through the Department of Public Works and shall be based on the forms in the Handbook. The homeowner shall provide the ISDS inspector with any pertinent information, including but not limited to, the use, age, location, maintenance history and design of the ISDS. The completed form shall detail the results of the inspection and provide sufficient information upon which to base the pumping, maintenance and/or upgrade requirements for the ISDS. It shall also include information as to when each system has been inspected, pumped or otherwise maintained and when these activities are next required. The inspector shall provide the Wastewater Commission and the homeowner with a written copy of the inspection form. The Utilities Department shall maintain said records for the Wastewater Commission.

Such maintenance requirements shall supersede any town-imposed, pre-existing, lot-specific maintenance agreements that may be in effect due to such things as the granting of variances or special use permits.

Or Carmody/electronic database and no paper forms.

Pros/Cons

Paper inspection forms may be useful for legal reasons
Lack of paper eliminates record storage and filing woes

6.6 ISDS Maintenance Schedule and ISDS Owner's Responsibility

The schedule and activities for ISDS maintenance shall be described on the ISDS inspection

report that the ISDS inspector gives to the property owner and the Town. Such maintenance requirements shall complement and may supersede any town-imposed, pre-existing, lot-specific maintenance agreements due to such things as the granting of variances or special use permits. The ISDS owner(s) shall assume all responsibility for hiring a septage hauler or maintenance contractor to complete the maintenance and inspection requirements contained in the ISDS inspection report within the time frame required. As proof of compliance, the property owner shall submit a receipt for pumping and other system maintenance to the Wastewater Commission within thirty (30) days of the date stipulated in the ISDS inspection report.

All owners of I & A systems are required to have annual maintenance contracts and submit these to the Town.

6.7 Change in Inspection or Maintenance Schedule

The Wastewater Commission upon written notification to the landowner, and the appropriate ISDS inspector, shall have the power to change the inspection schedule and/or maintenance requirements of an ISDS, where such a change is deemed necessary for the proper functioning of the system. This may occur due to circumstances including, but not limited to, proximity to critical resource site characteristics and/or change in household occupancy, seasonal use, rental status, water consumption or system functioning. Likewise, the homeowner may petition the Wastewater Commission to alter the inspection and/or maintenance schedule. The owner must demonstrate, through the use of appropriate site data

and household information, that such a change in the requirements would still ensure the proper operation of the ISDS and fulfill the intent of this ordinance. Information to be used by a homeowner in the petition may include, but is not limited to, ISDS inspection records and site data such as soils, water table, household information, seasonal use, water use and proximity to a critical resource.

6.8 Immediate Need to Pump

If an inspection reveals that an ISDS requires immediate pumping, the ISDS Inspector shall immediately notify the homeowner and the Wastewater Commission. The Wastewater Commission will attempt to contact the owner by phone and send the owner a written notice by certified mail, allowing the owner five (5) working days to pump the system, and to present evidence of such pumping to the Town in the form of a receipt from an approved septage hauler or pumper. In the event of a system failure that poses an immediate and obvious public health and/or environmental hazard, and where Wastewater Commission has been unable to contact the owner by phone, the Wastewater Commission may arrange for the system to be pumped immediately and at the owner's expense.

6.9 Standard Pumping Requirements

Based on need as outlined in RI Septic System Handbook
Based on a schedule of 1-6 years

Annual pumping for cesspools

Pros/Cons

Pumping based on need eliminates unnecessary effort and expense
Pumping based on a schedule ensures systems get pumped
Annual pumping for cesspools is a smart precaution until removal

SECTION 7.0 MISCELLANEOUS REGULATIONS FOR ISDS OPERATION AND SITING

*Because of the difficulty in enforcing prohibitions on **garbage disposals**, they are permitted but such systems will be placed on a more frequent (and in the long run, more costly) inspection and pumpout schedule.*

7.1 Septage Disposal

Septage or contents pumped from an ISDS shall be discharged at the town Wastewater Treatment Facility or other State-approved septage receiving facility.

7.2 Septic Tank Additives and Improper Discharges to ISDS

The use of septic tank additives shall follow RIDEM's policy, which prohibits the use of chemical additives. The use of biological additives does not relieve a homeowner from the obligations of this ordinance. The disposal of hazardous wastes to an ISDS is prohibited. Backwash from a water filtration system into a septic tank is harmful to the operation of the ISDS and is best discharged to a separate infiltration line wherever possible. There shall be no discharge of rainspouts, basement sumps, floor drains, or any other drains, other than those carrying household wastewater, to an ISDS

7.3 Garbage Disposal

Garbage disposal discharges to a new ISDS shall be permitted only on systems that are equipped with an oversized tank, capable of handling the excess solids, and with an effluent filter located on the tank's outlet. Existing ISDS that are linked to garbage disposals may require more frequent maintenance.

7.4 Water Saving Devices

Water saving devices shall be required on all appropriate fixtures as per the RI State Building Code, including 1.5 gallon flush toilets on new or remodeled construction.

*Wastewater **treatment standards** and conditions for approval of special use permits for septic systems within town-established **wetland buffers** and other critical areas can be specified in the zoning ordinance, as currently adopted by*

7.5 Location, Setbacks and the Need for Enhanced Onsite Wastewater Treatment

Location of ISDS, setbacks from critical resource areas, treatment goals and standards for various resource areas and requirements for innovative and alternative systems are governed by the *town* Zoning Ordinance.

7.6 Occupancy and Use

New Shoreham.

In order to ensure proper treatment of effluent an ISDS must be sized to handle the number of persons living in the house as calculated using RIDEM standards. This includes properties that are rented in excess of 1 week per year.

7.7 Accessibility, Effluent Filters and Inspection Ports

*Guidelines for installing access **risers**, information on **filters**, and **tank testing** procedures are available through the URI Cooperative Extension, Onsite Wastewater Training Center.*

All ISDS installed, repaired, upgraded or altered after the effective date of this ordinance, shall be equipped with access risers to grade located at the inlet and outlet ends of the septic tank and an effluent filter located at the outlet end of the septic tank. Access risers shall be watertight and a minimum of fifteen inches in diameter. These measures will help locate ISDS, facilitate the inspection and pumping of a septic tank and ultimately the longevity of the ISDS. Center access tanks shall not be used for new ISDS or for systems where the septic tank is being replaced.

New ISDS installations must also include a tipping d-box or similar device approved by RIDEM for the purpose of equalizing flow distribution to all lines of the leachfield.

*New Shoreham currently requires **retrofitting** of all **tanks** by 2005 to include access risers (where physically feasible as noted here) and effluent filters.*

Where **technically** feasible, all ISDS installed prior to the effective date of this ordinance shall be retrofitted with these devices by December 31, 2005. These items shall be installed in accordance with specifications available from the Planning Department. The Wastewater Commission will provide technical information and support regarding the installation of these structures on both new and existing ISDS.

7.8 Watertight Septic Tanks

This requirement for a water tight tank does not apply to existing systems except where the leakage is so great that the system is considered to be failing.

Any existing tank that leaks may be declared a failed system. All septic tanks installed after the effective date of this ordinance shall be certified watertight in accordance with RIDEM minimum standards or those developed by the Wastewater Commission. Tank installation must be done in accordance with manufacturer's requirements. In addition, tanks must be site tested to ensure that they are watertight. The accepted procedure(s) for site testing tanks as watertight shall be available from the *town* Planning Department.

7.9 Cesspools

Cesspools have been prohibited by RI DEM since adoption of State ISDS standards in 1969, so all cesspools are at least 30 year old. Given that the expected useful life of a conventional system built according to code is 25 yeas, cesspool replacement

Cesspools are a sub-standard and inadequate means of on-site wastewater treatment. All cesspools are considered to be malfunctioning systems and shall be brought into conformance with current state and local standards by December 31, 2005. Any residence or business that is sold prior to December 31, 2005 and has a cesspool must upgrade their onsite wastewater treatment system to current state and local standards prior to sale.

SECTION 8.0 ENFORCEMENT

The purpose of this subsection is to provide an efficient means of alleviating the public health and environmental problems associated with failed ISDS and non-compliance with the inspection and maintenance requirements of this ordinance. It is also designed to provide the owners of failed systems with the opportunity for technical and administrative assistance in repairing their failed systems.

is well justified, especially in critical resource areas. At least two RI towns currently require ***phase out of cesspools*** *by 2005 and at least two other towns have drafted ordinances to that effect. In New Shoreham this requirement for cesspool replacement is a wastewater treatment performance standard in the zoning ordinance.*

8.1 Technical Assistance

All persons applying to RIDEM for new ISDS installations, repairs or alterations are encouraged to meet with the Town's Wastewater Management Coordinator prior to beginning system design in order to ensure that the design is consistent with Town policy regarding treatment standards.

8.2 Failure to Pump, Inspect, or Maintain

If a system has not been pumped maintained or inspected within 30 days of the time frame within which the required activity was scheduled to occur**,** the Wastewater Commission depending on the circumstances, may hire a private contractor to complete the required activity and the owner will be billed by the Commission. The bill will include the actual cost of pumping, maintenance or inspection as well as associated administrative costs. The owner will be notified in writing of the intended date and time of such actions.

Some municipalities have found that placing a lien on a property has little effect until such time that the owner wishes to sell the property.

8.3 Failure to Pay Bill

Failure to pay a bill incurred by the Wastewater Commission for the pumping, inspection, or maintenance of the ISDS or the annual fee assessed by the Commission, shall constitute a lien on the owners property. In addition to the fine, the ISDS owner shall be responsible for any associated interest, administrative and court costs.

8.4 Notice of Violation

If upon inspection any owner of an ISDS is determined to be in violation of these regulations, the Wastewater Commission shall issue a written notice of violation. The notice shall explain the nature of the violation, required actions, any assistance that is available from the Wastewater Commission, a reasonable time frame for compliance, and the possible consequences for noncompliance. In the case of a failed system the Building Inspector shall issue the notice of violation with a copy to the Wastewater Commission.

8.5 Failed ISDS

If an inspection reveals a malfunctioning or failed ISDS, the Town-approved inspector shall immediately notify the Wastewater Commission and owner and send a copy of the inspection report to both parties. In the event that pumping records indicate a failed system, the Wastewater Commission shall notify the owner in writing. Technologies selected to replace failed systems shall be consistent with Town policy regarding treatment standards. At the

owner's request, and in order to facilitate the ISDS repair application with RIDEM, the Wastewater Commission or their designee will meet with the owner to provide technical and administrative assistance regarding ISDS repairs**.** Such assistance shall be designed to help the owner through the application process, to understand technical issues and appropriate system choices and to solve the problem in a fair and expeditious manner. It does not preclude the owner's responsibility to hire needed professional assistance.

The Wastewater Commission shall give a copy of any inspection reports regarding a failed or malfunctioning system shall be sent to the Building Inspector. The Building Inspector shall give the owner a written Notice of Violation to repair the system. A copy of said notice shall also be sent to the Department of Environmental Management Division of Groundwater and ISDS. The owner shall be given thirty (30) days to contact RIDEM and apply for a permit to repair or replace the system as necessary. A copy of the application to RIDEM shall be provided to the Building Inspector and Wastewater Commission. Notification of RIDEM by the Building Inspector does not replace or preclude the obligation of the owner to notify RIDEM. The property owner shall notify the Town as to the expected timetable for repairs to be completed.

In Ohio, the state environmental agency found that fines were sometimes ineffective and litigation to promote ISDS repairs was extremely expensive and time consuming.

8.6 Failure to Repair

In the case of a failed or malfunctioning system, if the owner of an ISDS fails to accomplish the repairs within the time schedule established, the Building Inspector will take the enforcement action provided for in this ordinance and in the RI State Building Code.

*They now turn over unpaid violations to a private **collection agency**. The threat of a poor credit rating results in almost full compliance, and in a more timely fashion than placing a lien on the property.*

8.7 Penalties

Any person neglecting or refusing to comply with a written Notice of Violation issued under the provisions of this ordinance may be fined not more than $500 per violation. Each day of a continuing violation may be construed to constitute a separate and distinct violation. All fees/fines shall be returned to the Wastewater Commission for the administration and implementation of the OWMP.

Since the collection agency keeps a percent of the fine as payment, there is no additional expense to the State.

8.8 Administrative Meeting

Persons are encouraged to resolve issues on the administrative level before requesting an official hearing. Any owner of an ISDS who is aggrieved by any action or finding of the Wastewater Commission or its designee, shall have the right to an administrative meeting before the Commission, or its designee. An administrative meeting shall be convened within 10 workdays following the request, and earlier whenever possible. A written consent agreement, signed by the Town and the ISDS owner, shall outline the specifics of any agreement developed as a result of an administrative meeting.

8.9 Hearing

The town may wish to consider establishing a

(1) Except in the case of a failed ISDS any owner of a septic system who is cited for a violation of this ordinance shall have the right to a hearing before a quorum of Wastewater Commission. A request for such a hearing must be made within thirty (30) days of receipt of the Violation Notice.

*different commission to deal with **appeals**, complaints, and implementation of the program. Should this be an existing group or new one?*

(2) The Wastewater Commission shall schedule a hearing on such an appeal within thirty (30) days. Notice of the hearing shall be sent to the appellant at least ten (10) days prior to the date set.

(3) A quorum of the Commission is necessary to hear and decide any such appeal. A quorum is hereby defined as three commissioners.

(4) At the hearing, the appellant and any other interested party shall be permitted to present evidence and argument on all relevant issues.

(5) The Wastewater Commission shall cause minutes to be kept of each hearing. Hearings may be stenographically recorded at the request of any party, provided that said party pays for the stenographer and the transcript.

(6) The decision of the Wastewater Commission shall be stated on the record at the conclusion of the hearing or shall be in writing, and shall be rendered no more than thirty (30) days after the hearing is closed. Said decision shall contain findings of fact and conclusions of law.

(7) An appeal of a Violation Notice may be disposed of by stipulation, agreed settlement, consent order or default.

(8) Under the provisions of the Rhode Island Administrative Procedure Act, an aggrieved party shall have the right to appeal the decision of the Wastewater Commission to the District Court. Under no circumstances, however, shall an ISDS that presents an immediate public health and/or environmental threat be allowed to continue to do so during the appeal process.

After Public Works Administrative Hearing – appeal

8.6 Appeals: Any party aggrieved by a decision of the administrative officer shall have the right to appeal that decision to the Zoning Board sitting as the Building Code Board of Appeals by the following procedure:
a) The appeal must be taken within twenty (20) days of notification of the decision.
b) The appeal shall be in writing and shall state clearly the factual and/or legal issue(s) or decision that is being appealed, the reason for the appeal, and the relief sought.
c) The appeal shall be filed with the Office of the Town Clerk.
d) Upon receipt of an appeal, the Building Code Board of Appeals shall require the administrative officer to transmit forthwith to the Building Code Board of Appeals all papers, documents and plans, or a certified copy thereof, constituting the record of the action which is being appealed.

SECTION 9.0 FINANCING

The Town Council shall have the authority to raise funds for the administration, operation, contractual obligations, and services of the On-Site Wastewater Management Program (OWMP).

9.1 Fee Structure

The Wastewater Commission shall establish a fee schedule, for approval by the Town Council, to be assessed each owner of an ISDS. Said fee shall be based on the total number of ISDS in the OWMP and the administrative and technical costs associated with providing the services herein. Any funds collected or raised for purposes of implementing the OWMP shall be kept as an enterprise account separate from the Town's general fund.

9.2 Grant and Loan Program

The Town under the authority of the State Legislature shall have the authority to issue bonds or notes, to receive grants or to assess ISDS owners for the purpose of establishing a revolving fund to make low interest loans or grants available to qua ISDS lified property owners for the improvement, correction, or replacement of a failed septic systems. The Town and/or Wastewater Commission shall establish specific criteria to define eligibility for grants or loans.

*Which town group should be responsible for continued public participation and education? Should it be the same commission administering the ordinance? A strong **public education** strategy is needed during development of the ordinance to provide timely and factual information and to build support for its approval. Information to landowners on how to comply and how to obtain technical and financial assistance is an ongoing need well after adoption of the ordinance.*

SECTION 10.0 EDUCATION

A public education program shall be established and overseen by the Wastewater Commission, to inform people about the benefits and goals of the OWMP. The educational program shall include, but not be limited to the following:

(1) Proper operation and maintenance of ISDS.
(2) Proper disposal of hazardous waste, including household hazardous waste.
(3) Water conservation and the development of a water conservation program.
(4) Operation and management framework of the program**.**
(5) Protection of critical resource areas.
(6) Use of environmentally sensitive cleaning products.
(7) Use of alternative and innovative ISDS and associated technology.

SECTION 11.0 PHASED IMPLEMENTATION

The implementation of this ordinance shall be phased over a period of three years in accordance with a schedule developed by the Wastewater Commission and approved by the Town Council. In order of implementation the four phased areas shall be as follows:

Where time is needed to prepare for administration of the ordinance i.e., hire

1) *critical coastal* Watershed
2) *other critcal watersheds*
3) Groundwater Protection Overlay District
4) Remainder of Town

Or phased in with more districts in more populated towns

Pros/Cons

Phasing in over 3 years with 3-4 districts is simple but may make for cumbersome mailings and extra work near deadlines
Phasing in ordinance with more districts spreads out the work of mailings and paperwork near inspection deadlines.

staff, set up loan programs, or simply to improve public acceptance of the ordinance, the implementation of the ordinance may be delayed to a specified date.

SECTION 12.0 SEVERABILITY

If any provision of this ordinance or any rule or determination made hereunder, or application hereof to any person, agency, or circumstances is held invalid by a court of competent jurisdiction, the remainder of this ordinance and its application to any person, agency, or circumstance shall not be affected thereby. The invalidity of any section or sections of this ordinance shall not affect the validity of the remainder of this ordinance.

SECTION 13.0 EFFECTIVE DATE

This ordinance shall take effect upon its passage.