Legislative Task Force

Meeting #13

Friday September 26, 2014
8:00 – 10:00 AM

Room 300, 3rd Floor
Department of Environmental Management
235 Promenade Street Providence, RI

Agenda

8:00 Welcome and Overview of Agenda – *Kevin Flynn, DOP*

8:05 OWTS & Biomat Function – Task Force Member – L. Joubert & *All*

8:15 Topics and Presentations:

A. Statewide E-Permitting – *Derrick Pelletier & Patrick Marr – DOA, Office of Management & Budget* (added 9.23.14)

9:00 Task Force Discussion – *All - moderated by Kevin Flynn*

A. Review of Homework Assignment: Identifying Adequate Protection and Gaps

B. Addressing Gaps & Formulating Recommendations

1. Ensure Protection
2. Eliminate Duplication of Effort
3. Clarify Terminology

9:55 Next Steps– *Nancy Hess, DOP*

A. Request for Comments & edits on Report
B. Next meeting October 31, 2014

10:00 Adjourn

Prepared by the Rhode Island Department of Environmental Management for the Department of Administration Legislative Task Force meeting #1 on 9/26/2013

FRESHWATER WETLAND TYPE		50 FOOT PERIMETER WETLAND	100 FOOT RIVERBANK WETLAND	200 FOOT RIVERBANK WETLAND	NO PERIMETER OR RIVERBANK
Regulatory Term	Applicable Size				
Vegetated Wetlands					
Swamp	3 or more acres	✓			
Forested Wetland (dominant veg. >20')	Less than 3 acres				✓
Shrub Wetland (dominant veg. <20')	Less than 3 acres				✓
Marsh	1 or more acres	✓			
Emergent Plant Community	Less than 1 acre				✓
Bog	Any size	✓			
Flowing And Standing Water Wetlands					
Pond	1/4 acre or larger	✓			
Submergent Plant Community	Less than 1/4 acre				✓
Special Aquatic Site (a vernal pool)					✓
Stream/Intermittent Stream	Less than 10 feet wide		✓		
Stream/Intermittent Stream	10 feet wide or greater			✓	
River	Less than 10 feet wide		✓		
River	10 feet wide or greater			✓	
Area Subject to Storm Flowage					✓
Area Subject to Flooding					✓
Flood Plain Wetlands					
Floodway					✓
Flood Plain					✓

CM/092013

OWTS Setbacks from Water Resources
RI DEM OWTS Rules (July 2012)

"Watercourse" means any river, stream, brook, pond, lake, swamp, marsh, bog, fen, wet meadow, area subject to storm flowage, or any other standing or flowing body of water, including such watercourses that may be affected by the tides.

From: Table 22.1
For areas <u>not</u> located within a Critical Resource Area:

	All other OWTS Components		Leachfield	
	Design Flow <5000 gpd	Design Flow ≥5000 gpd	Design Flow <5000 gpd	Design Flow ≥5000 gpd
Coastal Shoreline Feature (Note 11) not in a Critical Resource Area, Flowing Water (Rivers and Streams), Open Bodies of Water (Lakes and Ponds), Other Watercourses Not Mentioned Above, and Any Stormwater Management Structure That Potentially Intercepts Groundwater	25	50	50	100

Note (11): The minimum setback distance from the inland edge of the coastal shoreline feature of the ocean or Narragansett Bay is either fifty (50) feet or twenty five (25) feet plus the CRMC calculated shoreline change setback pursuant to the CRMP Section 140, whichever is greater. Shoreline change rates and maps are available on CRMC's web site. This setback distance is doubled for OWTSs with design flow greater than five thousand (5000) gallons per day.

Table 22.2 Minimum Setback Distances from Drinking Water Supply Watershed Critical Resource Area Features (distances in feet from all OWTS components). See also Figure 2. If it is shown to the Department's satisfaction by clear and convincing evidence that the feature of concern in this table is upgradient (for both groundwater and surface water flow) of the OWTS, the minimum setback distance will be determined from Table 22.1. Subsurface drains to lower the seasonal high groundwater table are not permitted in accordance with Rule 40.2.

Feature	**OWTS Design Flow < 5000 gpd**	**OWTS Design Flow ≥5000 gpd** (Note 1)
Impoundment with Intake for Drinking Water Supply and Adjacent Wetlands (Note 2)	200	400
Subsurface Drains and Foundation Drains that Discharge Directly to the Impoundment	200	400
Subsurface Drains and Foundation Drains that Discharge to a Drainage Swale that Subsequently Discharges to the Impoundment: Paved Swale Unpaved Swale <200 feet long Unpaved Swale ≥200 feet long	 200 200 100	 400 400 200
Tributaries, Tributary Wetlands, Swales, and Storm Drains that Discharge Directly to the Impoundment	100 Note (3)	200 Note (3)
Subsurface Drains, Foundation Drains, and Storm Drains that Discharge to Tributaries and Tributary Wetlands	100 Note (3)	200 Note (3)
Any other Watercourse in the Drinking Water Supply Watershed (Not Connected to the Impoundment) or Areas Subject to Storm Flowage	50	100

Notes:

(1) As defined in Rule 35.1.1.

(2) Distances measured from the yearly high water mark.

(3) The distance between the building sewer or septic tank effluent pipe and a drain may be reduced and the building sewer or effluent pipe may cross the drain provided that the building sewer or septic tank effluent pipe is sleeved whenever they are within twenty-five (25) feet of the drain. The sleeve shall be seamless or schedule 40 PVC or equivalent with watertight joints, and it shall have a watertight seal that is fastened to the pipes with a stainless steel retractable clamp.

Figure 2

Minimum Setback Distances in Drinking Water Supply Watershed Critical Resource Areas

Note: The setback distances in Figure 2 are for OWTS with design flow less than 5000 gpd. For OWTS with design flow greater than 5000 gpd, the setback distances are doubled. See Table 22.2.

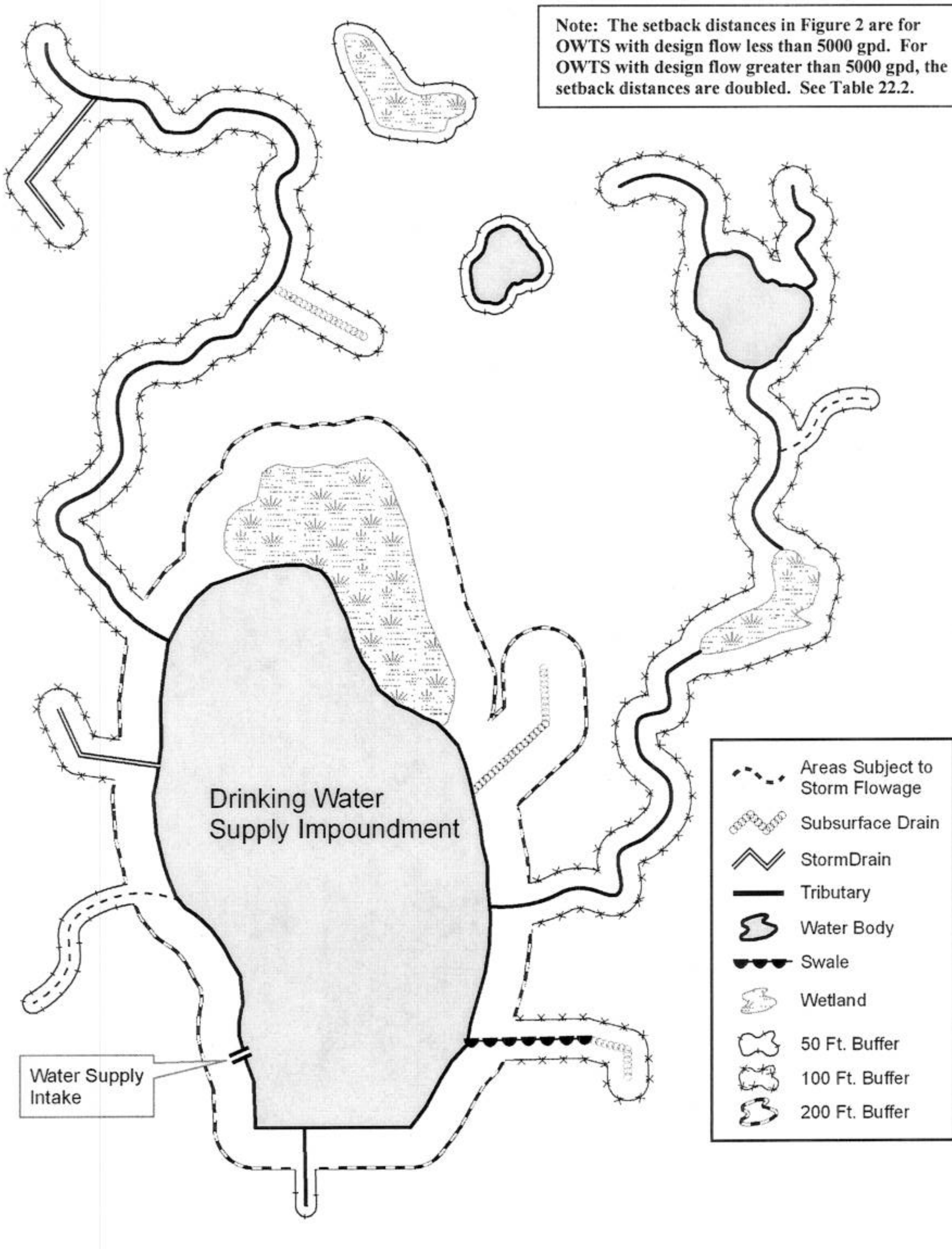

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Table 22.3 Minimum Setback Distances from Features in the Salt Pond and Narrow River Critical Resource Area (distances in feet from all OWTS components). See also Figure 3. If it is shown to the Department's satisfaction by clear and convincing evidence that the feature of concern in this table is upgradient (for both groundwater and surface water flow) of the OWTS, the minimum setback distance will be determined from Table 22.1. Applications for an OWTS permit that are approved by DEM are subject to the requirements of CRMC.

Feature	**OWTS Design Flow < 5000 gpd**	**OWTS Design Flow ≥5000 gpd** (Note 1)
Salt Pond/Narrow River Coastal Shoreline Features, excluding the ocean	200	400
Subsurface Drains and Foundation Drains that Discharge Directly to the Salt Pond/Narrow River	200	400
Subsurface Drains and Foundation Drains that Discharge to an open Drainage Swale that Subsequently Discharges to the Salt Pond/Narrow River:		
Paved Swale	200	400
Unpaved Swale <200 feet long	200	400
Unpaved Swale ≥200 feet long	150	300
Tributaries, Tributary Wetlands, Swales, and Storm Drains that Discharge Directly to the Salt Pond/Narrow River	150 Note (2)	300 Note (2)
Subsurface Drains, Foundation Drains, and Storm Drains that Discharge to Tributaries and Tributary Wetlands	150	300
Any Other Watercourse in Salt Pond/Narrow River Critical Resource Area (Not Connected to Salt Pond/Narrow River), Areas Subject to Storm Flowage, or the inland edge of the coastal shoreline feature of the ocean. (Note 3)	50	100

Notes:

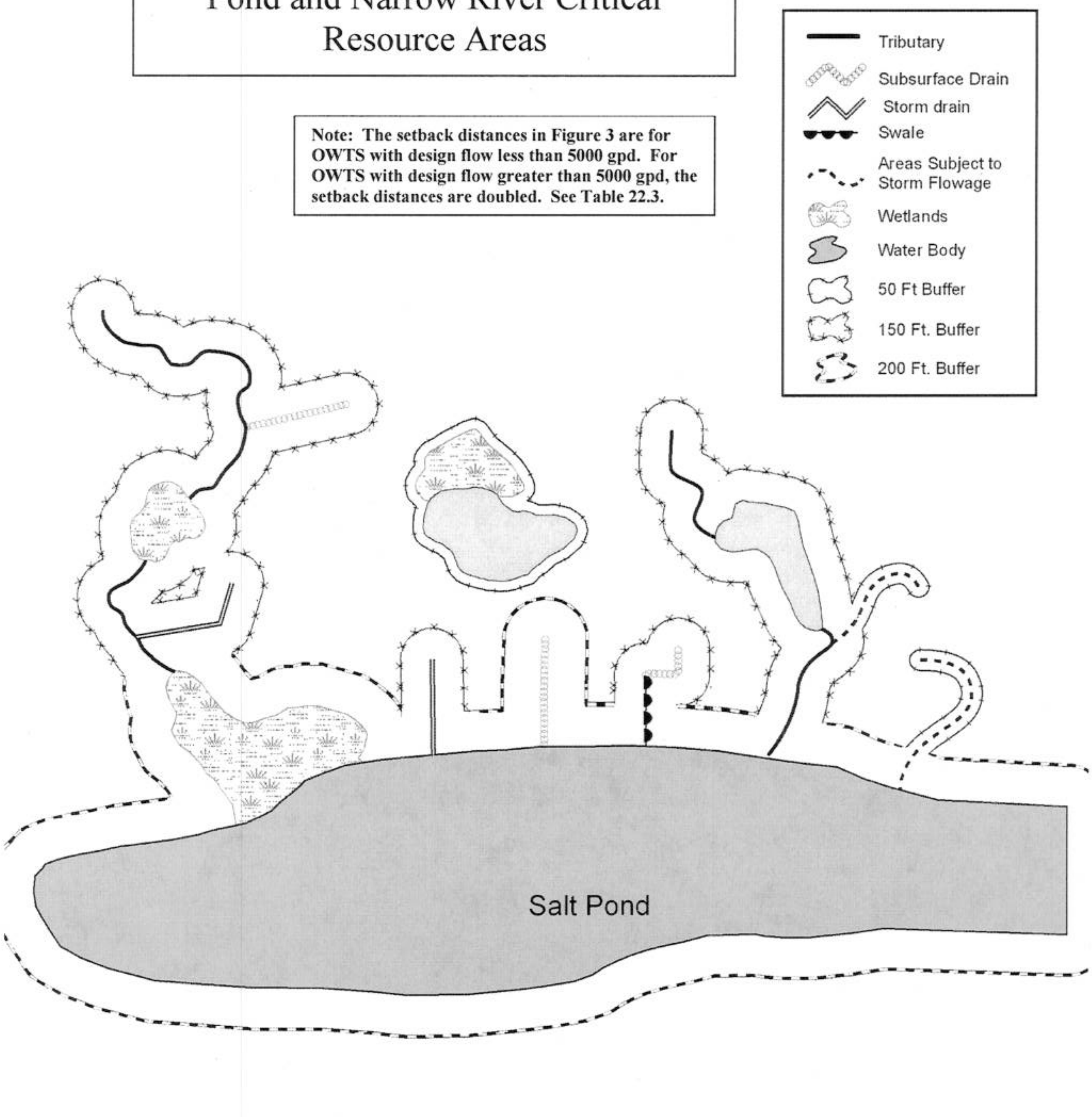
(1) As defined in Rule 35.1.1.

(2) The distance between the building sewer or septic tank effluent pipe and a drain may be reduced and the building sewer or effluent pipe may cross the drain provided that the building sewer or septic tank effluent pipe is sleeved whenever they are within twenty-five (25) feet of the drain. The sleeve shall be seamless or schedule 40 PVC or equivalent with watertight joints, and it shall have a watertight seal that is fastened to the pipes with a stainless steel retractable clamp.

(3) The minimum setback distance from the inland edge of the coastal shoreline feature of the ocean is either fifty (50) feet or twenty-five (25) feet plus the CRMC calculated shoreline change setback pursuant to CRMP Section 140, whichever is greater. Shoreline change rates and maps are available on CRMC's web site. This minimum setback distance is doubled for OWTSs with design flow greater than five thousand (5000) gallons per day.

Figure 3
Minimum Setback Distances in the Salt Pond and Narrow River Critical Resource Areas

Note: The setback distances in Figure 3 are for OWTS with design flow less than 5000 gpd. For OWTS with design flow greater than 5000 gpd, the setback distances are doubled. See Table 22.3.



DRAFT for LTF Meeting #12 September 16, 2014
DRAFT Key Scientific Findings Wetland Buffers

- RI freshwater wetlands perform specific functions and support specific values:
  - Flood protection;
  - Water quality protection;
  - Wildlife and wildlife habitat;
  - Surface water and groundwater; and
  - Recreation and aesthetics. (Rule 2.00)

- The need for vegetated buffer zones adjacent to wetlands and surface waters is well supported in the literature to protect the functions and values, to minimize effects of nearby land uses on wetlands, and to provide additional benefits.

- The minimum buffer widths and the ranges presented in or recommended in the summary reports, are varied depending upon what was studied, i.e., the wetland type, the wetland function, the wildlife group, and other factors.

<u>Regarding flood protection</u>:

- A vegetated buffer zone may assist with flood storage by intercepting precipitation and runoff, allowing for infiltration, and reducing flow to a wetland or water resource.
- Climate change will lead to the increased frequency, intensity, and duration of storm events in this region. Buffer zones may moderate the effects of climate change and protect property.

- Buffer widths for flood attenuation provided in two reports range from 66 feet to 492 feet. (Fischer and Fischneich 2000, Environmental Law Institute 2003)
- One paper recommended a 25 foot buffer adjacent to the 100-year floodplain elevation.

<u>Regarding water quality protection</u>:

- Buffer zones may do the following to protect water quality: 1) remove sediment from water flowing through them; 2) treat water by plant uptake and by transformation of nutrients into other forms; 3) allow for infiltration; 4) bind pollutants onto soil particles; and they 5) maintain water temperatures. (Hruby 2013)

- Factors that influence buffer zone effectiveness are: width, slope, slope length, soil type, surface roughness, and adjacent land uses. (Hruby 2013)

- Buffer distances that "may most effectively" perform water quality protection are:
  - For sediment removal = 30 feet to >100 feet;
  - For phosphorous removal = 30 feet to >100 feet; and
  - For nitrogen removal = 100 feet to >160 feet. (Environmental Law Institute 2008)

- A number of studies recommend a minimum buffer width of 100 feet for water quality purposes.

Regarding wildlife and wildlife habitat:

- Buffer zones may reduce disturbances to wetland-dependent wildlife caused by noise, lights, and pets; they provide areas for nesting, breeding, and foraging; they are corridors for dispersal and travel; and they may be areas for wildlife to escape from flooding. (Groffman et al. 1991)

- Factors that contribute to a buffer zones effectiveness for habitat protection are: width, vegetation, and adjacent land uses.

- Ranges of distances
  - The summary reports present upland requirements for wildlife of *vegetated wetlands* that range from 43 feet (noise attenuation) to >5000 feet (birds)
  - Following is a summary on the usage of upland areas adjacent to wetlands and waters by wildlife groups:
    Birds from 49 feet to >5000 feet; Mammals from 93 feet to 600 feet; Reptiles core terrestrial habitat from 417 to 948 feet; and Amphibians core terrestrial habitat 521 to 951 feet. The recommended buffer on the core habitat is an additional 164 feet. (Environmental Law Institute 2003, Semlitsch and Bodie 2003)

  - While a 100 feet minimum provides some habitat needs for some species, recommended widths of >328 feet or >100 meters are common.

- The summary reports provide upland distances for wildlife of *riparian habitat* for that range from 10 feet (detrital input) to >3 miles (large predator mammals).
- Buffer widths to support physical functions: noise reduction; stream stabilization; water temperature; and providing woody debris, are smaller than those necessary for support of the wildlife itself.

Other:

- The summary reports recommend situations where larger buffers may be appropriate, including at:
  - drinking water reservoirs (RI ponds);
  - tributaries to drinking water reservoirs;
  - rare wetland types;
  - wetlands that are known to have rare plants or rare animals;
  - streams that support cold water fisheries; and
  - sensitive wetlands, such as bogs, fens, Atlantic white cedar swamps, vernal pools, and scenic rivers.

- Buffers that are larger than 50 feet wide are "likely necessary" to be effective over time. (ELI 2008)
- Draftcm/09152014

<u>DRAFT</u> Key Scientific Findings:
Onsite Wastewater Treatment System (OWTS) and Wetland Setbacks
September 16, 2014 Revised 9-17-14

Wastewater from an OWTS moves downward through the soil carrying pollutants into groundwater which can transport the pollutants to wetlands and waterbodies. Primary pollutants of concern from OWTSs are pathogens and nutrients.

Pathogens:

- Pathogenic bacteria and viruses can cause human sickness from ingestion of contaminated drinking water, recreational contact or the consumption of contaminated shellfish.

Nutrients:

- Nitrogen and phosphorus have a fertilizing effect on surface waters providing nutrients that if present in sufficient quantities can fuel excess algae growth resulting in adverse water quality impacts. Nitrogen has the most impact on salt waters, whereas phosphorus will impact freshwaters. Of growing concern are algal blooms of cyanobacteria (blue-green algae) from excess nutrients in freshwater, which release toxins that are harmful to humans, pets and livestock.

- Nitrogen is also a potential contaminant in drinking water supplies with a federal drinking water standard set at 10 mg/l nitrate.

- The impacts of increased nutrients on vegetated wetland systems are not as well documented. Nutrients transported into wetlands will be utilized by the plant community with the result that over time there are likely to be changes in the community structure reducing species richness and often favoring non-native species (Wetlands in Washington State, March 2005).

The characteristics of the subsurface through which the groundwater flows will greatly influence the contamination risk. Sands and gravels will generally have high flow rates, while compact till soils will have slower flow rates. Subsurface characteristics are highly variable across the state. “Characterizing subsurface flow requires extensive (and expensive) field work” (Dr. Gold).

The primary factor controlling removal of pathogens in the groundwater is filtration by the soil and time in aerobic soils to facilitate pathogen die off.

Nitrogen (in the form of nitrate-NO_3) is very soluble in groundwater and does not adsorb onto soils and can travel hundreds of feet with groundwater. The mechanisms for removal are plant uptake and denitrification. Denitrification is a microbial process that converts nitrate to nitrogen gas.

- Denitrification requires an environment with a lack of oxygen and organic matter. These conditions are typical of wetland (hydric) soils and may also occur in riparian areas bordering wetlands and waterbodies.

Phosphorus in the subsurface can bind to soil particles in aerobic soils – more removal will occur in finer soils. However, there is concern that the sites for soil adsorption can reach capacity allowing continued transport of phosphorus. A more permanent removal mechanism for phosphorus is precipitation out of the flow system into a mineral form.

OWTS derived nitrogen impacts are a more significant concern in RI than phosphorus impacts from OWTSs.

Impacts from OWTS on water quality and wetlands are in most instances the result of cumulative loadings from many individual OWTSs.

Increased separation distances between an OWTS and wetlands and waterbodies will allow for more opportunities for pollutant interactions in the soil and greater treatment potential.

Overview of Wetland Setbacks in Feet

		DEM Existing	RI Muncipal Range (average= 100 feet)	New England Range (average =100feet)	TF Member	Task Force Consensus
Freshwater Wetland Types:						
Vegetated wetlands:			50 -200	25-500		
Swamp (3 or + acres)		50	100			
Forested Wetland (<3 acres)		0	0			
Shrub Wetland (<3 acres)		0	0			
Marsh (1 or + acres)		50	100			
Emergent Plant Community (< 1 acre)		0	0			
Bog (any size)		50	50-100			
Flowing/Standing Water Wetlands:						
Pond (1/4 acre or +)		50	50- 100	50-150		
Submergent Plant Community (<than 1/4 acre)		0	0			
Special Aquatic site **(Vernal Pool)**		0	0	100-500		
Stream/ Intermittent (<10 feet wide)		100	100			
Stream/ Intermittent (10 feet wide or +)		200	200			
River (< 10 feet wide)		100	50-100	150-200		
River (10feet wide or +)		200	50-100	150-200		
Area Subject to Storm Flowage		0	0			
Area Subject to Flooding		0	0			
Flood Plain Wetlands:						
Floodway		0	0			
Flood Plain		0	0			
		CRMC Existing	(Coastal Average =200 feet)			
Coastal feature /wetland (Residential only)			75-200	100-150		
	Water Use Category					
Residential Lot Size (sq. ft.)	Type 3,4,5&6	Type 1 & 2				
<10,000	15	25				
10,000 – 20,000	25	50				
20,001 – 40,000	50	75				
40,001 – 60,000	75	100				
60,001 – 80,000	100	125				
80,001 – 200,000	125	150				
>200,000	150	200				
Salt Pond /Narrow River Special Area Management Plans			200			
Tributary wetlands abutting:						
Self-Sustaining Lands		200				
Lands of Critical Concern		225				

RHODE ISLAND DIVISION OF PLANNING

Overview of OWTS setbacks in Feet

DEM OTWS Existing Protection to "watercourse"				RI Muncipal Range (average = 150feet)	New England Range (from leachfield)	TF Member	Task Force Consensus
	< 5000 gpd	≥5000 gpd					
from a watercourse				75 -200	50-300		
Coastal Feature (not in critical resource area)				50-200			
Leachfield	50						
Leachfield		100					
All other Components	25						
All other Components		25					
Drinking Water Supply Critical Resourse Area (all OWTS features)				(average = 200feet)			
Impoundment w/ intake & adjacent wetlands	200	400		95-200	75-400		
Subsurface /foundation drains discharge to impoundment	200	400					
Subsurface /foundation drains discharge to drainage swale to impoundment:							
paved swale	200	400					
unpaved swale ≤200 feet long	200	400					
unpaved swale ≥200 feet long	100	200					
Tributaries, tributaries wetlands, swales, storm drains discharge to impoundment	100	200		95-200	200		
Subsurface/foundation/ storm drains discharge to tributaries& tributary wetlands	100	200					
Any other watercourse in DWS watershed or areas subject to storm flowage	50	100		95-200			
Salt Pond/ Narrow River Critical Resource Area (all OWTS features)				200			
Salt Pond/Narrow River Coastal Shoreline Features excluding ocean	200	400		100	50-125		
Subsurface /foundation drains discharge to Salt Pond/Narrow River (SP/NR)	200	400					
Subsurface /foundation drains discharge to drainage swale to SP/NR							
paved swale	200	400					
unpaved swale ≤200 feet long	200	400					
unpaved swale ≥200 feet long	150	300					
Tributaries, trinbutaries wetlands, swales, storm drains discharge to SP/NR	150	300					
Subsurface/foundation/ storm drains discharge to tributaries& tributary wetlands	150	300					
Any other watercourse in DWS watershed or areas subject to storm flowage	50	100					
Drinking Water Wells							
	Leachfield/Septic Tank Effluent Pipe, Tanks/Building Sewer	Distance From All OWTS Components					
OWTS Design Flow:	Private Drinking Water Well	Public Well – Drilled (rock), Driven, or Dug	Public Well- Gravel Packed, Gravel Developed		75-400 (depending on type/yeild)		
<1000	100/75/50	200	400				
1000-<2000	150/75/50	200	400				
2000 - <5000	200/75/50	200	400				
5000- <10000	300/75/50	300	400				
≥10000	400/75/50	400	400				

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September 18, 2014

Office of the State Planner
Attn: Kevin Flynn
1 Capitol Hill
Providence, RI 02908

RE: My July 17, 2014 Testimony; ALWI Project No RI3Z186

Dear Chairman Flynn:

This letter is to express gratitude for the time, courtesy and attention afforded us at the July 17, 2014 meeting of the legislative subcommittee on Single Environmental Standards.

I appreciate the time, interest and thoughtful communications on behalf of the committee members. On that day I offered to remain available to the committee for the purpose of answering questions related to my testimony that may come to arise thereafter so please do not hesitate to contact me if needed.

Thank you again for your attention and for the opportunity to have presented.

Sincerely,

MARK W. EISNER, P.G.
President

MWE/tib

URI Comments on OWTS Biomat Function in Response to the Sept. 2014 RI Builder Report

Lorraine Joubert, Jose A. Amador and George W. Loomis

The concept that the biomat formed in a conventional OWTS drainfield can remove pathogens is not new but the statement made by RIBA consultants that "A 50-foot setback with biomat will work just as well (to protect sensitive environmental features from OWTS effluent) as an engineered denitrification system would, depending on soil conditions." is not substantiated by current research.

A recent URI study by J. Cooper et al. (in review) evaluated the treatment potential of a conventional OWTS drainfield (with a biomat) compared to pressurized shallow narrow drainfields (PSND; without a biomat). The conventional, pipe and stone drainfield received septic tank effluent. Two different types of PSNDs received treated effluent from a single-pass sand filter, which is designed to remove BOD, TSS and pathogens. The single pass sand filter removes about 22% total nitrogen but does meet the DEM standard for a nitrogen removal technology.

Results

- Both the conventional and PSND drainfields removed 97.1 and 100% of fecal coliform bacteria and total phosphorus.
- Nitrogen removal averaged 12% for the conventional drainfield and 4.8% to 5.4% for the PSNDs.
- When the whole treatment train was taken into account, the advanced treatment system with PSND removed 26-27% of the total nitrogen (TN) inputs, whereas the conventional drainfield with a biomat removed only 12% of the TN inputs.
- Even more N removal would occur when a state-approved N removal technology with a PSND is utilized and meeting the state required minimum of 50% TN reduction. The single-pass sand filter used in the Cooper et al. study is not on the state list of N removal technologies.

Findings

The authors conclude that pre-treatment using advanced treatment systems results in better N removal than in conventional treatment systems with a biomat; and that using pressurized shallow narrow drainfields provides additional TN removal. This is important because nitrogen is a drinking water contaminant affecting groundwater wells. Excess nitrogen causes over-fertilization of Narragansett Bay and other coastal waters, leading to excessive growth of algae, degradation of fish and shellfish habitat, and fish kills.

Summary of factors affecting biomat formation and wastewater treatment:

- Conventional OWTS
  - Biomats form in conventional drainfields receiving septic tank effluent.
  - Biomats are less likely to form in sandy soils.

- Biomats are less likely to form with seasonal or intermittent use.

- Advanced treatment OWTS
  - Biomats do not form in drainfields receiving treated effluent, whether the drainfield is conventional, PSND or BSF.
  - Removal of bacteria, phosphorus and nitrogen in in pressurized shallow narrow drainfields results from placement in upper, biologically active soils. Bottomless sand filter drainfields commonly used with advanced treatment systems are not likely to have the same treatment capabilities.
  - Understanding pollutant removal capabilities of various OWTS technologies is important since advanced technologies account for more than 30% of all OWTS permits issued.

References

Cooper, J.A., G.W. Loomis, D.V. Kalen, and J.A. Amador. 2014. Evaluation of Water Quality Functions of Conventional and Advanced Soil-Based Onsite Wastewater Treatment System. Laboratory of Soil Ecology and Microbiology and New England Onsite Wastewater Training Center, University of Rhode Island, Kingston, RI. (Journal of Environmental Quality, In review).

Authors:

Lorraine Joubert is Director of the Nonpoint Education for Municipal Officials (NEMO) program at the URI Cooperative Extension

Jose A. Amador is a Professor of Soil Science and Microbial Ecology at the URI Department of Natural Resources Science.

George W. Loomis is Director of the New England Onsite Wastewater Training Center at the URI Cooperative Extension

STATUS REPORT - E-PERMITTING

SEPTEMBER 23, 2014

SUMMARY:

Throughout Rhode Island, permitting departments are confronted with overextended staff, increased demands, and pressure to improve the taxpayer experience. This project will establish a streamlined, uniform web-based system to be used by the State, its municipalities and taxpayers for statewide permit management, inspection management, and electronic plan review.

PROJECT STRUCTURE:

The project will be structured in two Phases:

- Phase I will include permits from State Building Commissioner, the State Fire Marshal, and up to 10 pilot municipalities.
- Phase II will include additional municipalities and an opportunity for a state-wide roll out.

FINANCING:

Governor Lincoln D. Chafee's FY 2013 through FY 2015 budgets include $900,000 in general revenue to fund consultant services and a technology provider to modernize building plans, permit management and building inspection methods through e-permitting. These funds are dedicated to fund the pilot program during Phase I.

PROJECT PRINCIPLES:

Since September 2012, the Office of Regulatory Reform, the Office of Digital Excellence, the State Building Commissioner, and the State Fire Marshal have developed program criteria that should include, but not be limited to:

- A user-friendly, web-based design that can track user activity and accept electronic signatures;
- Systems for internal and external users to create accounts with multiple security levels and possess;
- The ability to notify users via email of changes or the status of permits;
- Capability to handle prints, photos and plans, as well as process fees online;
- Ability to implement custom workflows by permit type/group and to generate corresponding reports;
- Ability to host a multi-tenant client structure on a single database; and
- Support appropriate associated/peripheral technology, including mobile technology/applications.

ACTIVITY TO DATE:

- Permits for the Building Commissioner and Fire Marshal have been process mapped;
- Participated in user demonstrations of active e-permitting systems;
- Surveyed communities on current/upcoming plans for online permitting;
- Secured support from the Rhode Island Foundation to purchase and upgrade technology used by the Building Commissioner and Fire Marshal;
- Issued RFP, bids opened Thursday, April 3, 2014;
- The RFP review team evaluated and received demonstrations from three vendors as finalists; and
- Issued a tentative letter of award.
- Vendor evaluations and demonstrations for the three finalists were completed during the months of May/June 2014.