

Harding Township Health Department

*The importance of waste water
disposal in lake communities
or*

Care and Feeding of Your Septic



Most important factors in determining the value of real estate:

1. Location

2. Location

3. Location

4. Water

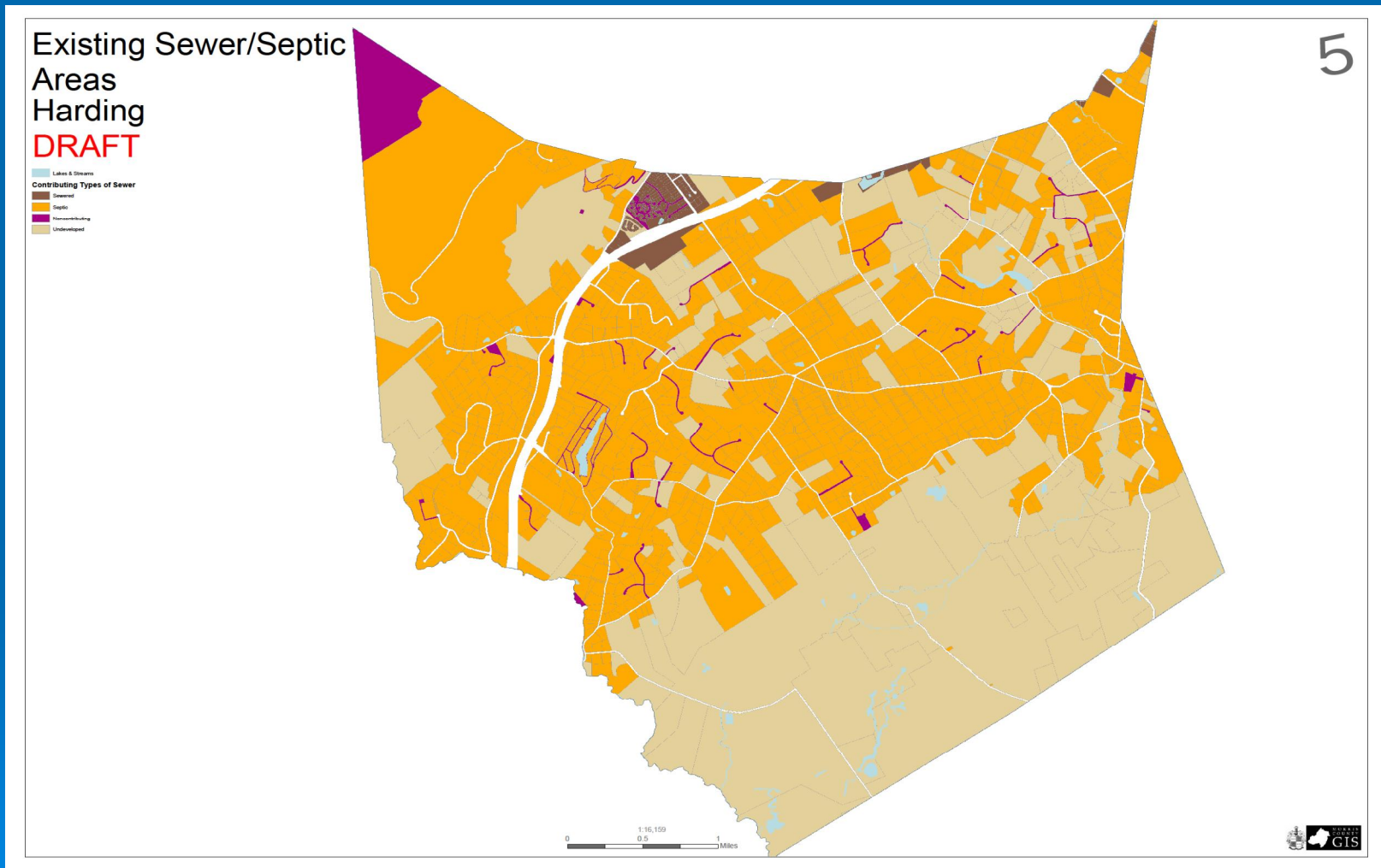
5. Water

6. Water





Sewer Service Area



Waste water disposal

Woodland
Treatment
Plant
(Florence Ave)

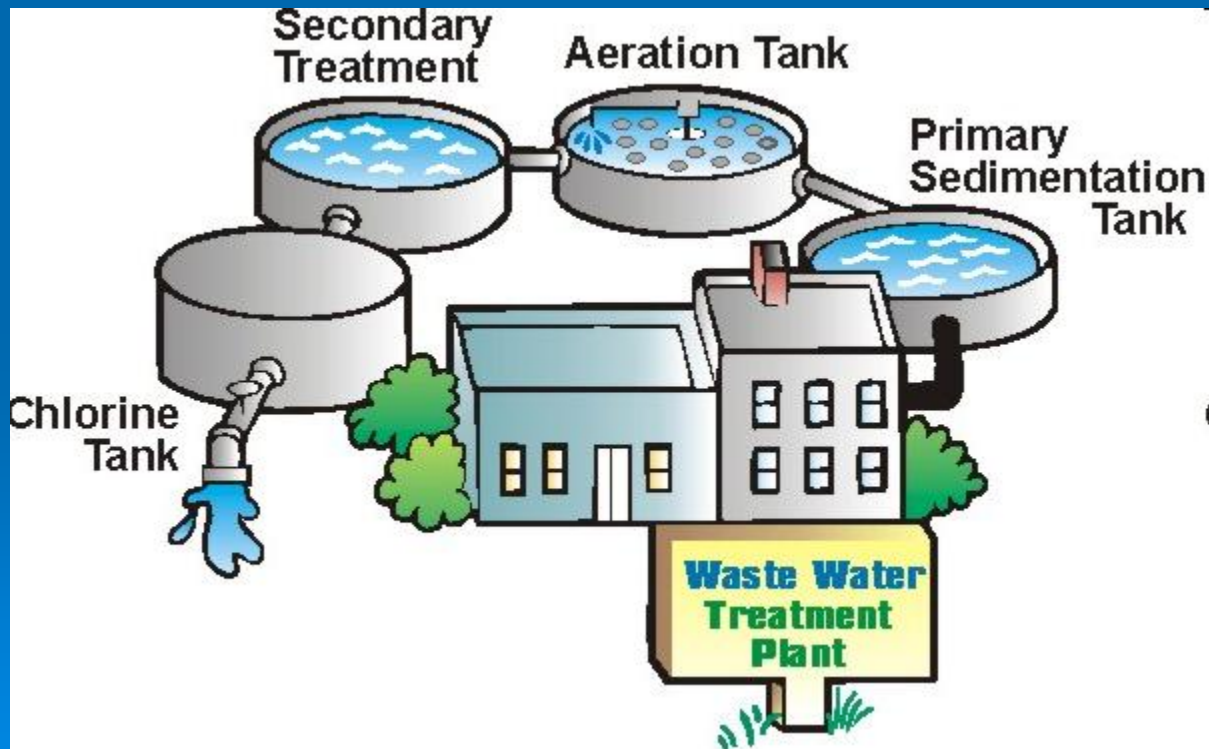
Google

To see all the details that are visible on the screen, use the "Print" link next to the map.



Waste water disposal

Publically Owned Treatment Works (POTW) Sewage Treatment Plant



Centralized vs. On-site

➤ Centralized:

- Monitored
- Managed
- Versatile

- Concentrated
- Expensive

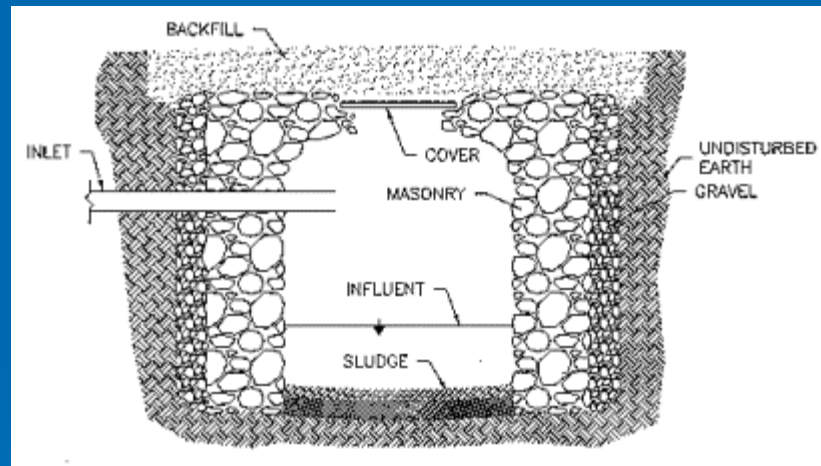
➤ On-site

- Not monitored
- Not managed
- Restricted

- Re-generates
groundwater!

Conventional On-site Disposal

Cesspools



Conventional On-site Disposal

Cesspools

New Rules (NJAC 7:9A-3.16)

Effective April 9, 2012

Upon transfer of property served by a cesspool a new compliant septic system must be installed.

Seepage Pit

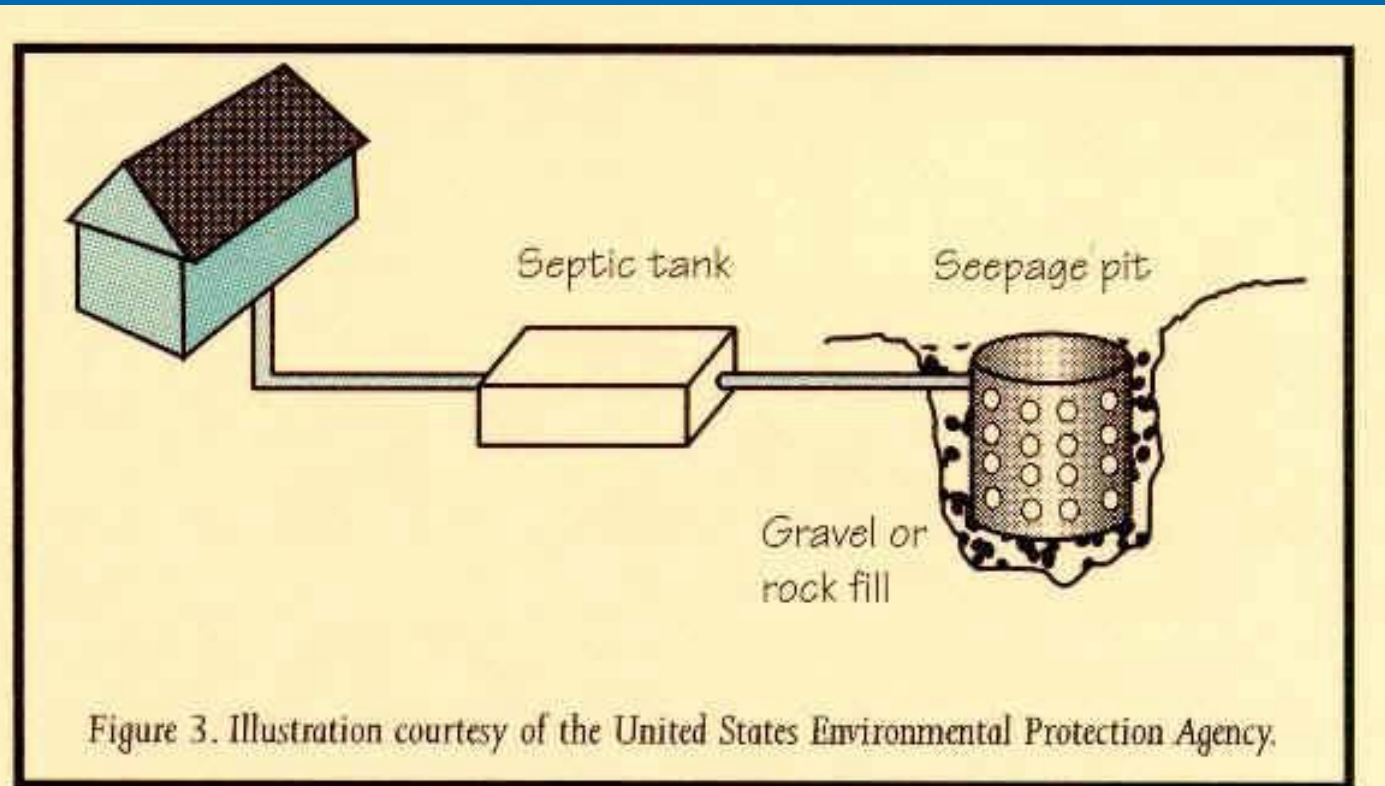
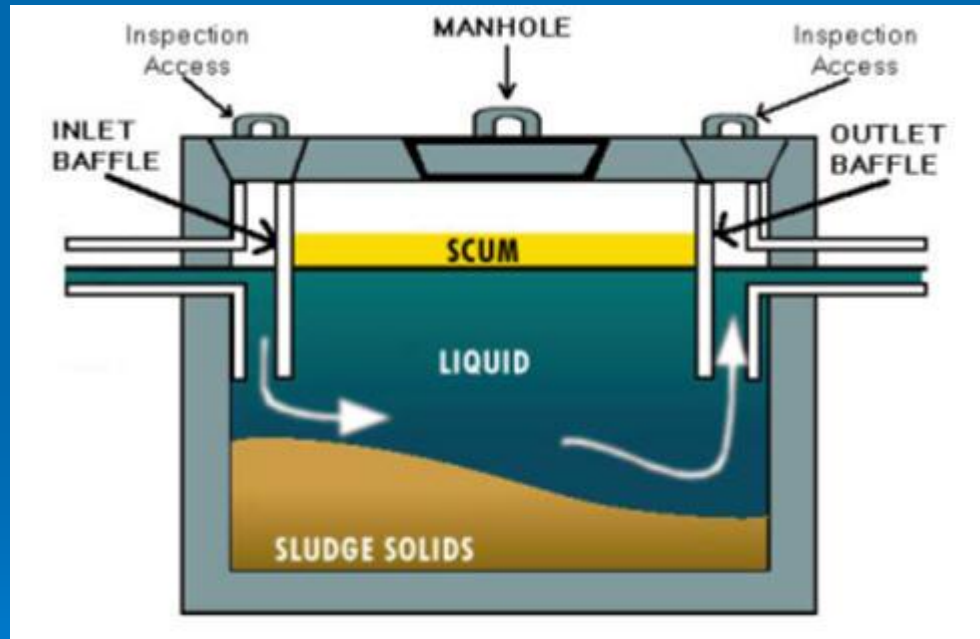


Figure 3. Illustration courtesy of the United States Environmental Protection Agency.

Schematic of a Seepage Pit (Dry Well)

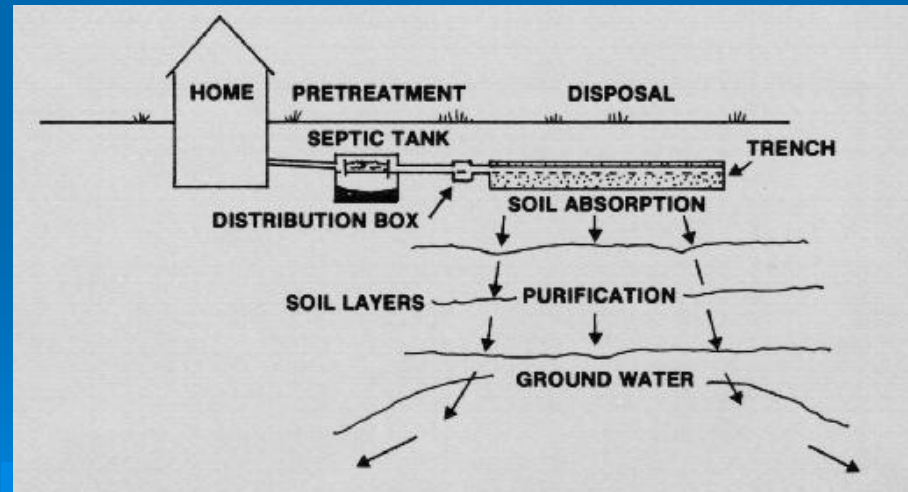
itional On-site Treatment and Disposal

➤ Septic Tank(s)



ional On-site Treatment and Disposal

- Septic Tank(s)
- (Pump Pit) . maybe
- Disposal Area . gravity or pressure
 - Beds
 - Trenches
 - Infiltrators



ional On-site Treatment and Disposal

➤ Septic Tank(s)

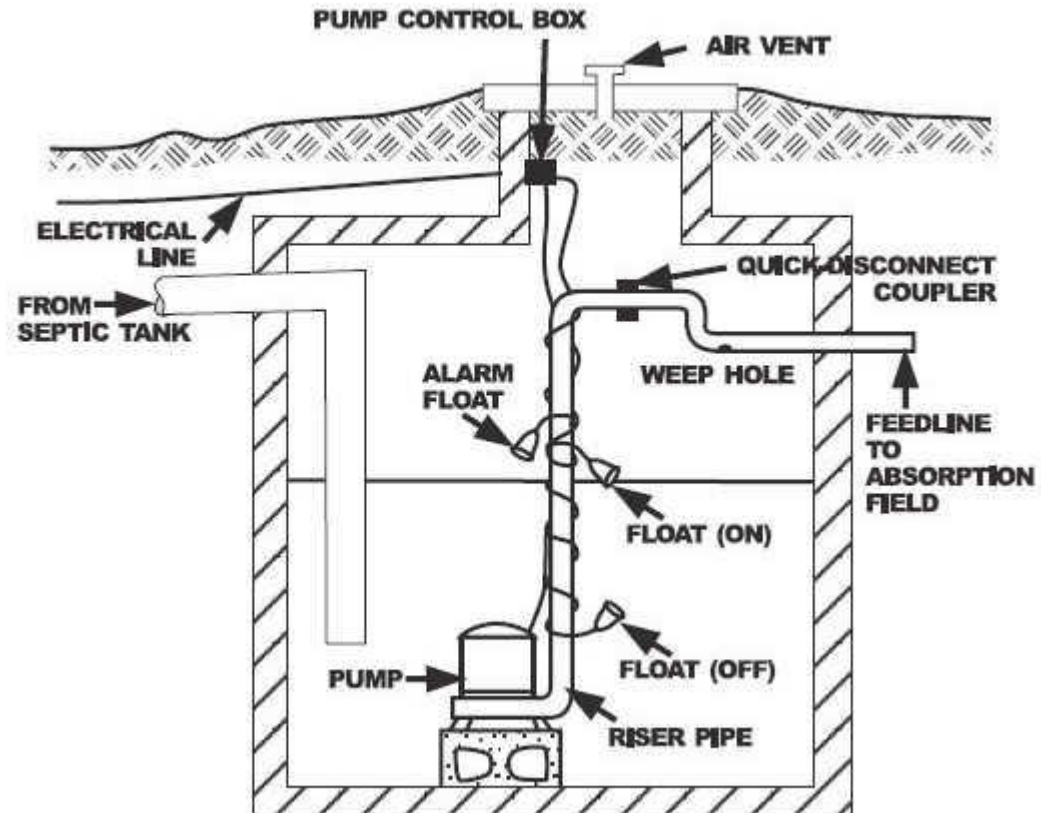


June 21, 2012

ional On-site Treatment and Disposal

➤ Pump Pit

Pumping tank (generic)



Source: US EPA, Purdue University 1990

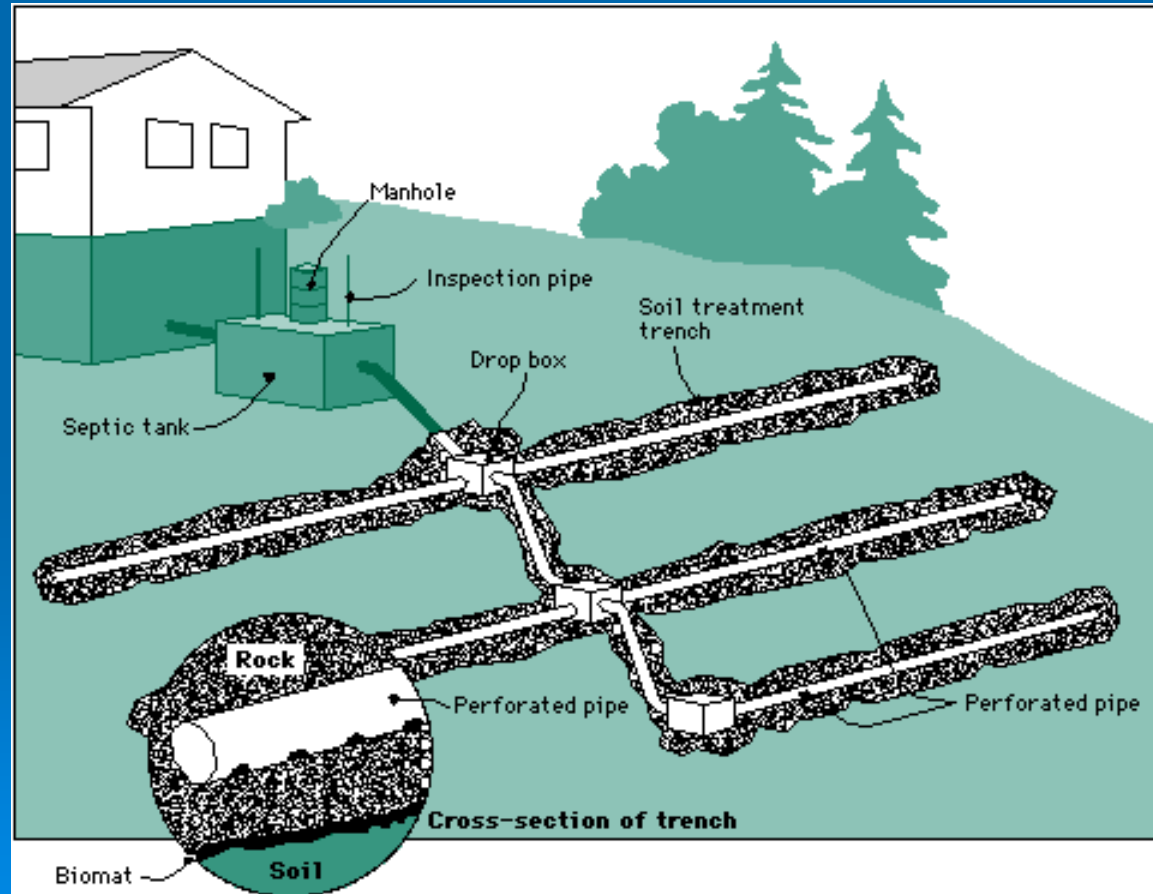
itional On-site Treatment and Disposal

➤ Disposal Area



ional On-site Treatment and Disposal

➤ Trenches



ional On-site Treatment and Disposal

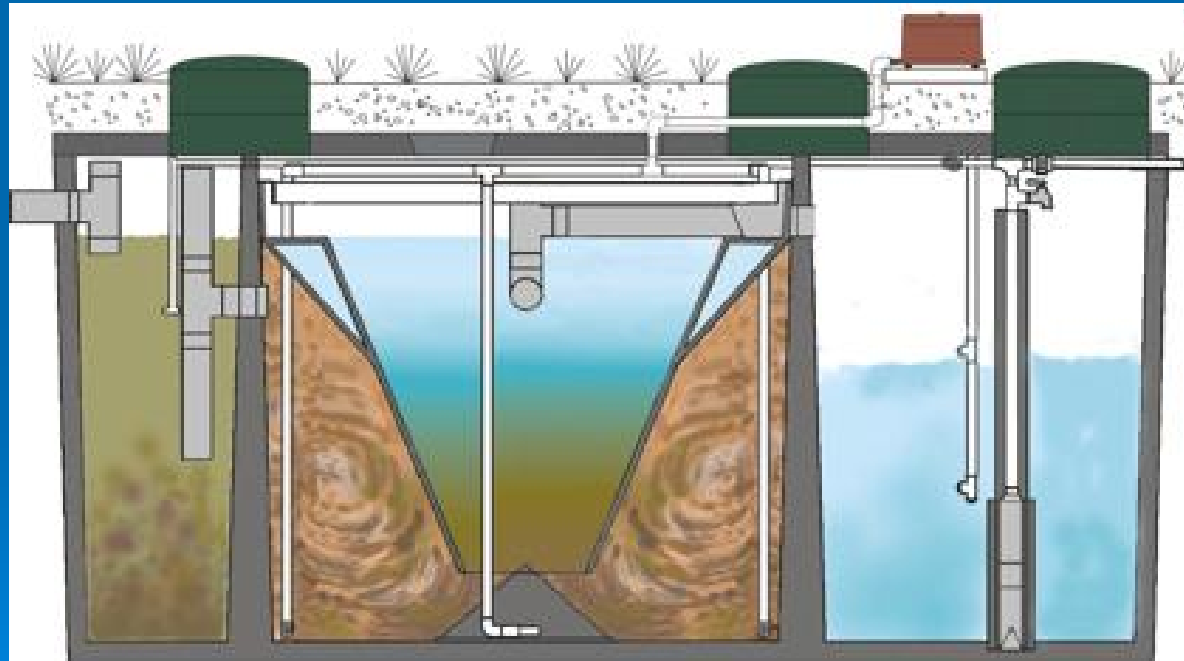
➤ Disposal Area . Infiltrators



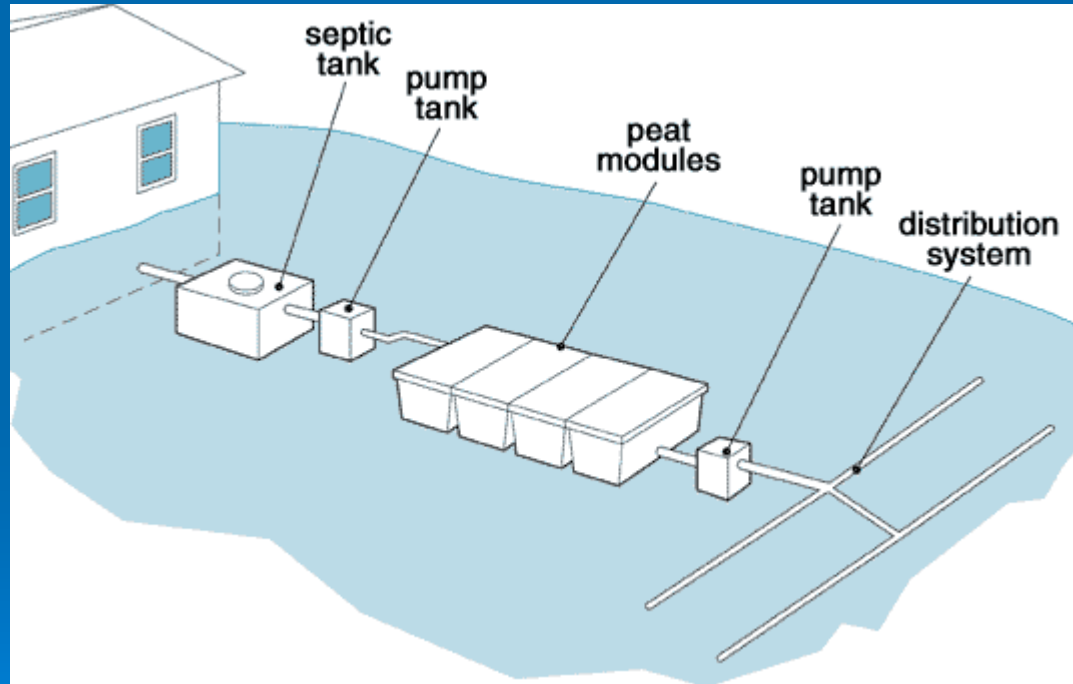
June 21, 2012

Alternative and Innovative Treatment and Disposal

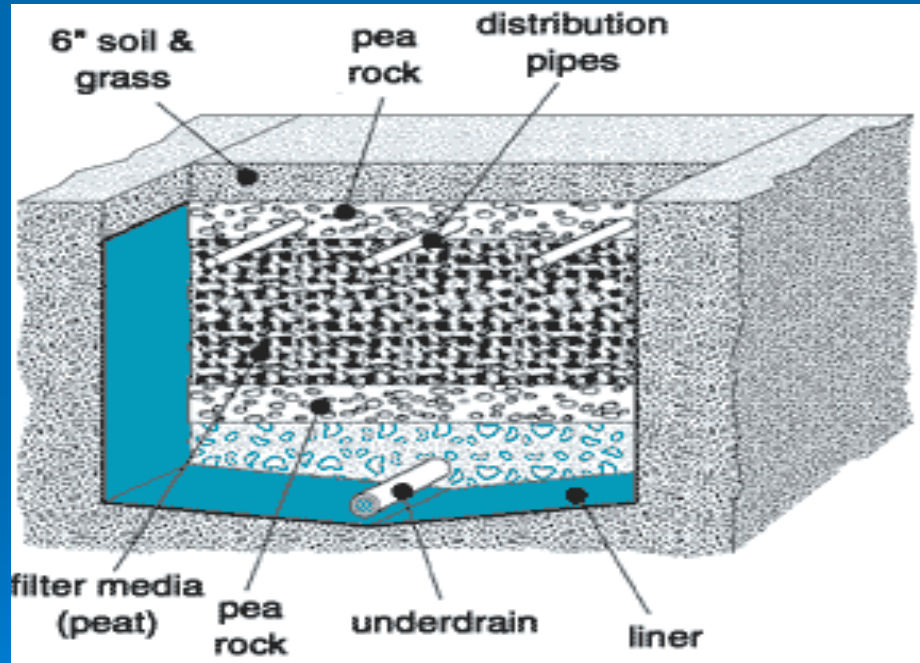
Aerobic Treatment Tank (Hoot System or EcoPod)



Alternative and Innovative Treatment and Disposal Peat System



Alternative and Innovative Treatment and Disposal Peat System



Alternative and Innovative Treatment and Disposal

Drip Dispersal



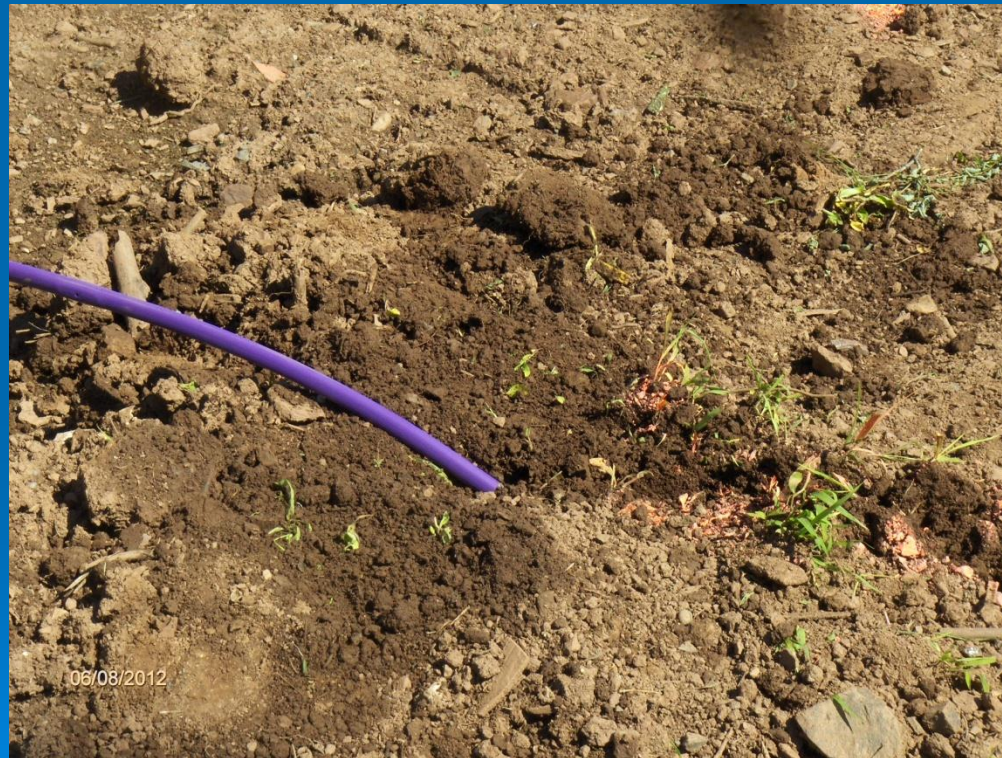
Alternative and Innovative Treatment and Disposal Drip Dispersal



Alternative and Innovative Treatment and Disposal Drip Dispersal

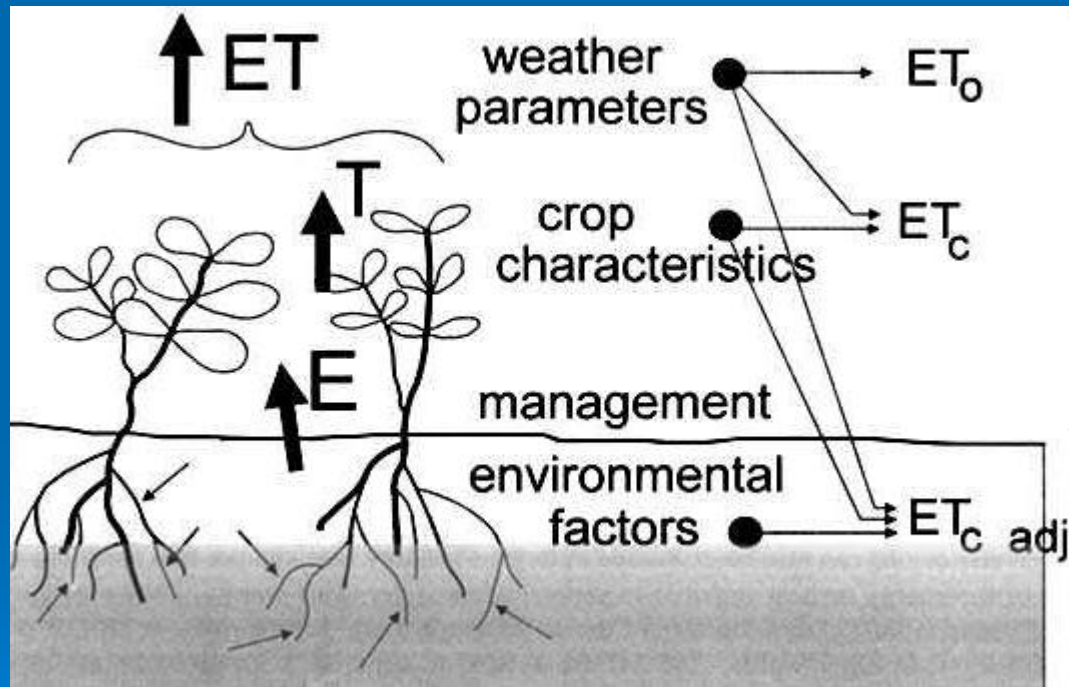


Alternative and Innovative Treatment and Disposal Drip Dispersal



Alternative and Innovative Treatment and Disposal

Evapo-transpiration



Land Use

- Environmental limitations
waste water disposal systems
 - Depth to bedrock
 - Depth to groundwater
 - Proximity to wetlands and surface water
 - Steep Slopes

Land Use

Distance to Structures

NJ Code v. Harding Code

Size of Components

twice the tank volume

disposal field: 25% larger

reserve disposal field required

Land Use

Nitrate Dilution

Household effluent contains 10 to 20 mg/l NO_3 below the level of infiltration

Target value is 2.0 mg/l in the groundwater (DWL is 10 mg/l)

Septic density based on the amount of space needed to provide dilution to target value.



06/27/2011



06/27/2011



06/27/2011

Size of System

- Commercial . based on code
- Residential . based on bedrooms
 - 1st Bedroom . 200 gallons
 - Each additional bedroom . 150 gallons
- Minimum - 250 gallons
- Maximum . 2000 gallons

What's a bedroom?



Q. What is a bedroom?

- A: $\% \approx$ any room...which may be reasonably be expected to serve primarily as a bedroom (NJAC 7:9A-2.1)
- A: a room with privacy, two means of egress and access to a full bathroom.

Care and Feeding

- Nothing goes into the system that hasn't gone through you first.
 - No kitty litter
 - No plastic
 - No chemicals
 - No disposable diapers
 - No coffee grounds
 - No cigarette butts
 - No need for septic tank additives

Care and Feeding

➤ Maintenance

- Scheduled pump outs
 - “ Q: How often? A: Depends . 3 to 5 yrs.
- Keep disposal area clear of trees & structures
- Service contracts on alternative designs

Septic Inspections

- Not just for house sales anymore.
 - Part of routine maintenance

- For house sales
 - Appendix E %System Inspection Protocol+
 - “ Describes procedure
 - “ Requires copy sent to health department
 - “ Inspector cannot say system is %malfunctioning+
%failing+or %non-compliant+

Questions???

