

Watershed Training Workshop

Identifying Problems and Solutions

October 2019

Subsurface Sewage Disposal System
Design and Function

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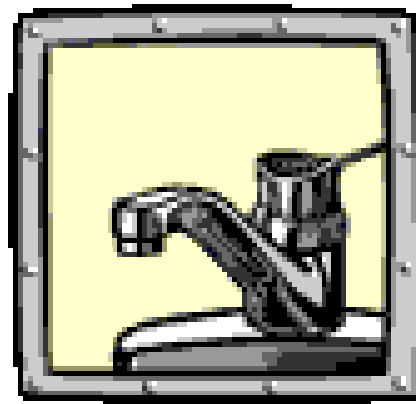
Septic 101

- What is sewage?
 - Domestic Sewage
- Where does it go?
 - Different options for disposal
- What is a septic system?
 - System components and function
- How is a system located?
 - New and Repair
 - Vertical and horizontal distances

Septic 101 cont.

- What happens when my system stops working?
 - System Repair
 - Malfunctioning and failed system
 - Pollutants in domestic sewage
- How do I know my system is not working properly?
 - Signs of failure and malfunction

What is Sewage? Domestic Sewage



Domestic Sewage

- Water and human excretions
 - Toilets
 - Bathing water
 - shower
 - tub
 - Cooking and cleaning
 - Laundry
- Waste from restaurants and commercial buildings

Where does it go?

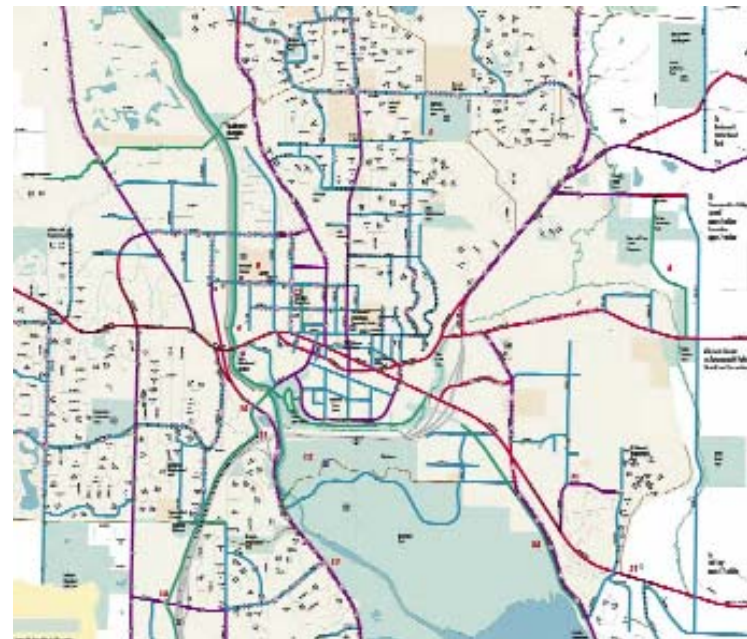
What happens when we flush?

Methods of Sewage Disposal

- Public Sewers: municipal treatment plant
- Conventional “Septic Systems”

Public Sewers

- Serves approximately 70 percent of the CT population
- Predominantly in urban areas and area of high density development



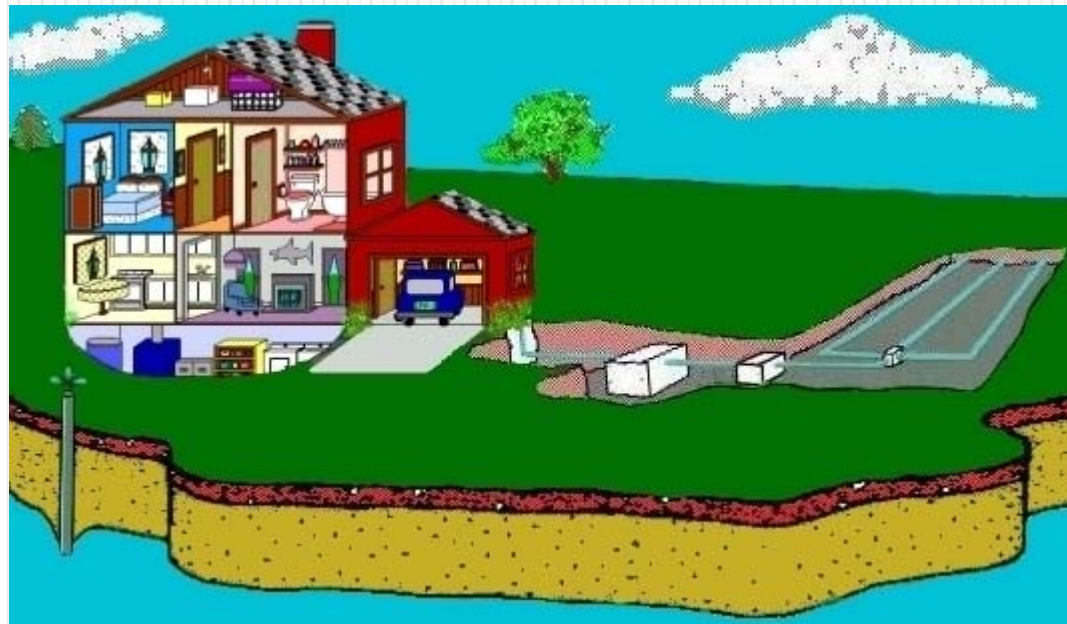
Conventional “Septic Systems”

- Served approximately 1 million people in CT
- Subsurface Sewage Disposal Systems



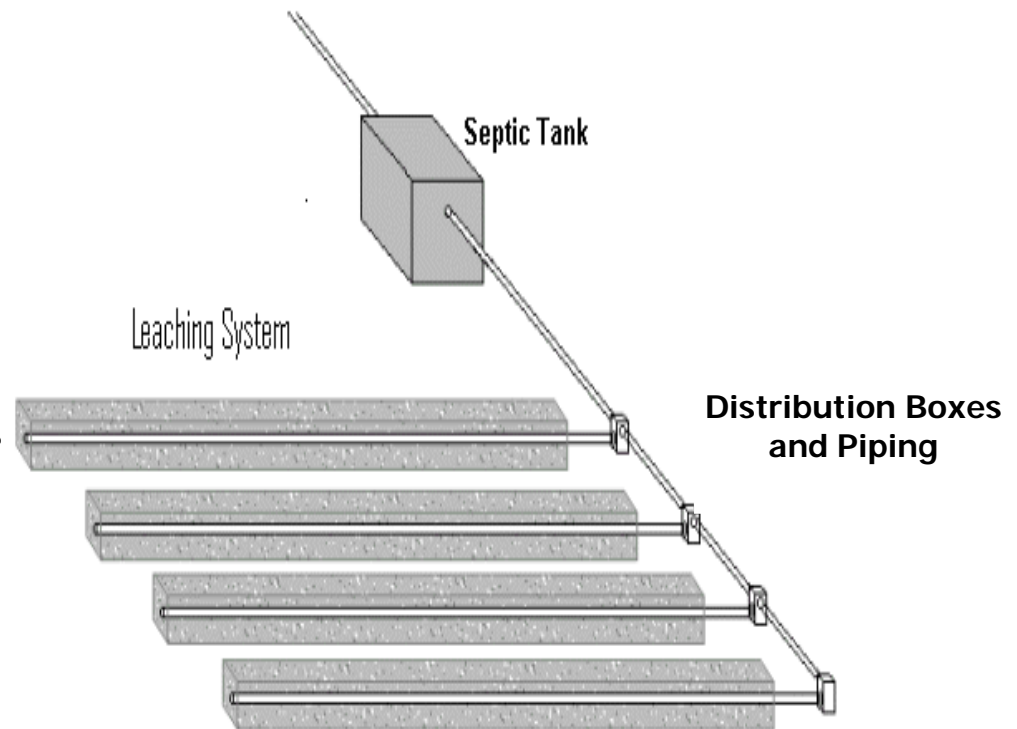


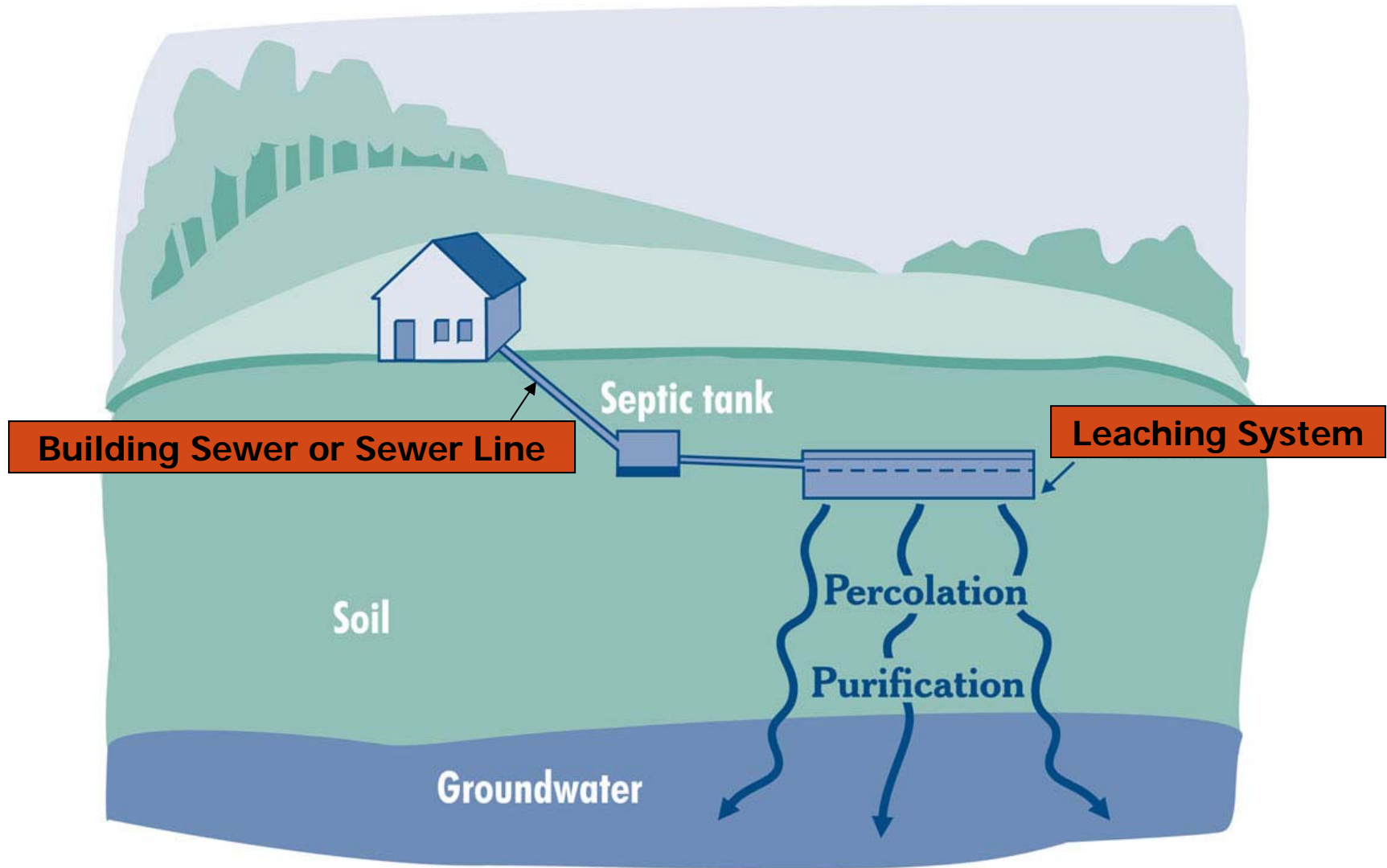
What is a Septic System?



System Components

- Building Sewer
- Septic Tank
- Distribution Piping
- Leaching System
- Necessary pumps, grease traps and groundwater control systems

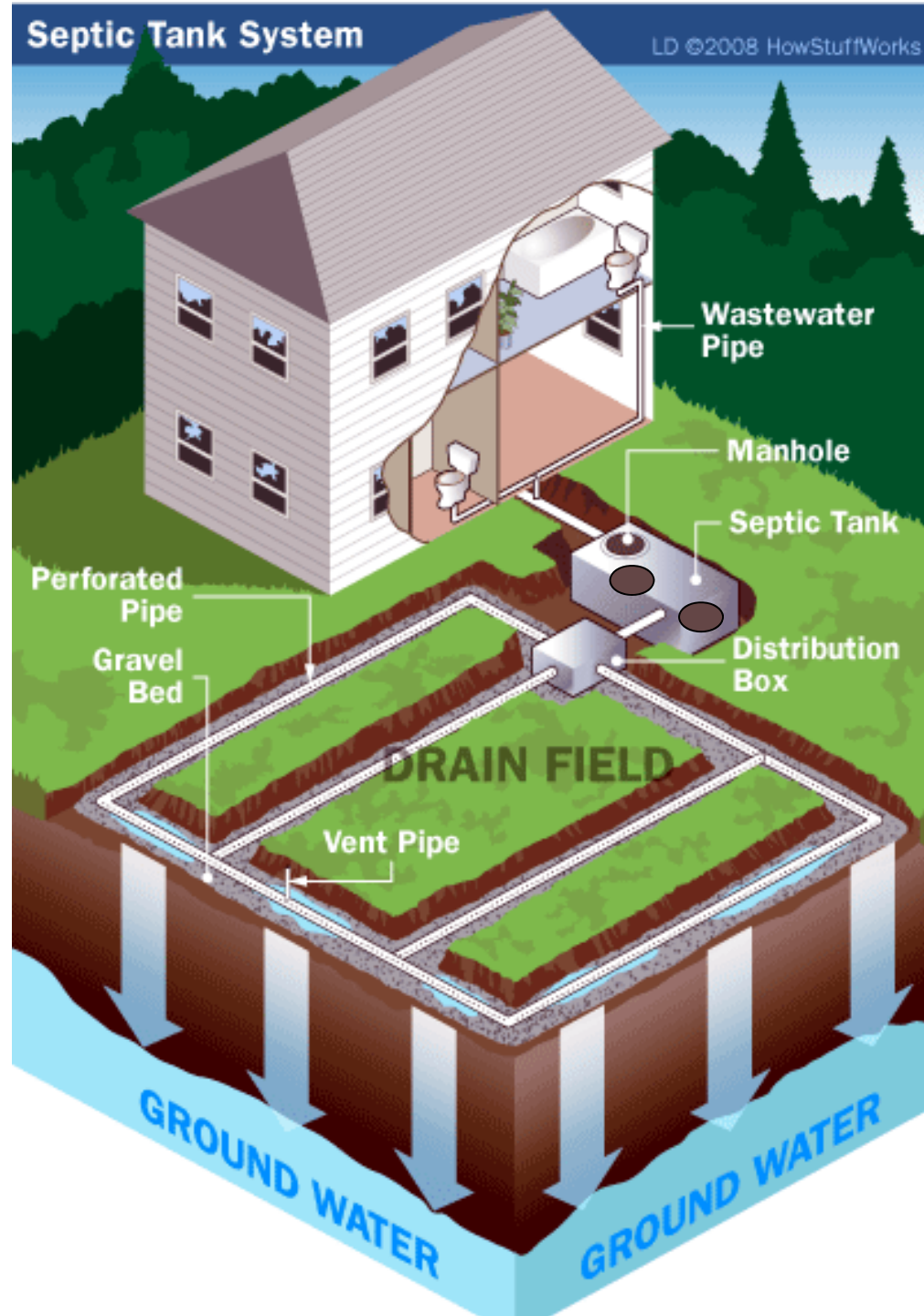






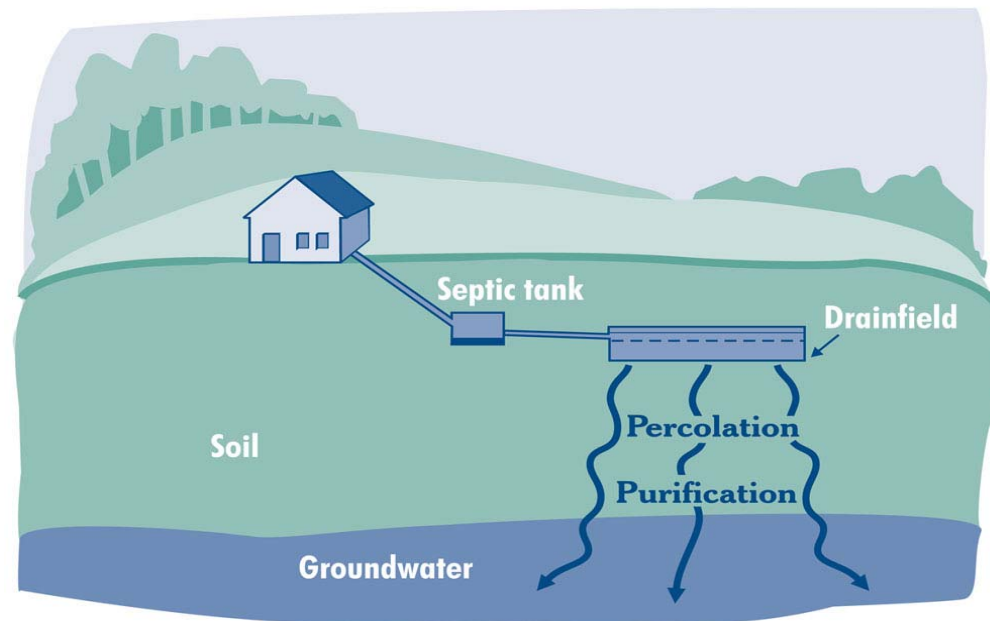
Septic Tank System

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Building or House Sewer

- Refers to the pipe located between the building served connecting to the septic tank



Septic Tank

- Provides the primary treatment: separates, settles and digests



Septic Tank



Distribution Piping

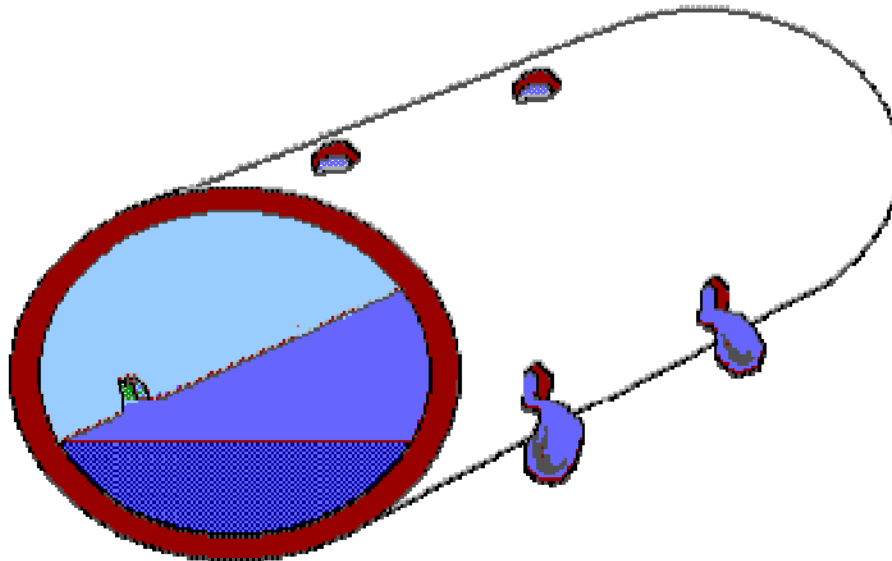
- Consists of the piping leading from the septic tank to the leaching system.



Distribution Box



Perforated Piping



**4" Diameter
Distribution
Piping**

Leaching System

- Properly functioning leaching system should disperse effluent (liquid from the septic tank) into the surrounding soils without breaking out on the ground surface or polluting the groundwater.

Leaching Types

- Trench
- Pits
- Galleries
- Proprietary products
 - Plastic chamber
 - Mats
 - Forms
 - Cardboard

Stone Trenches



Leaching Pit or Dry Well





Galleries - 12-inch high





What You May See (OK)

- Components at Grade
 - Risers on Tank or Pump Chambers
 - Cleanouts
 - Vent Pipes
 - Electrical Box for Pump
 - SoilAir™ Blower



If You See These, There is a Problem

- Soggy Grass
- Liquid effluent (grey and smell)
- Pooled water around a risers, vents or cleanouts
- Exposed tank or leaching system (not being installed)
- Water lines <10' to septic components



What if There is a Problem? Call the Local Health Department/District

State of Connecticut - Local Health Departments and Districts, June 2019

