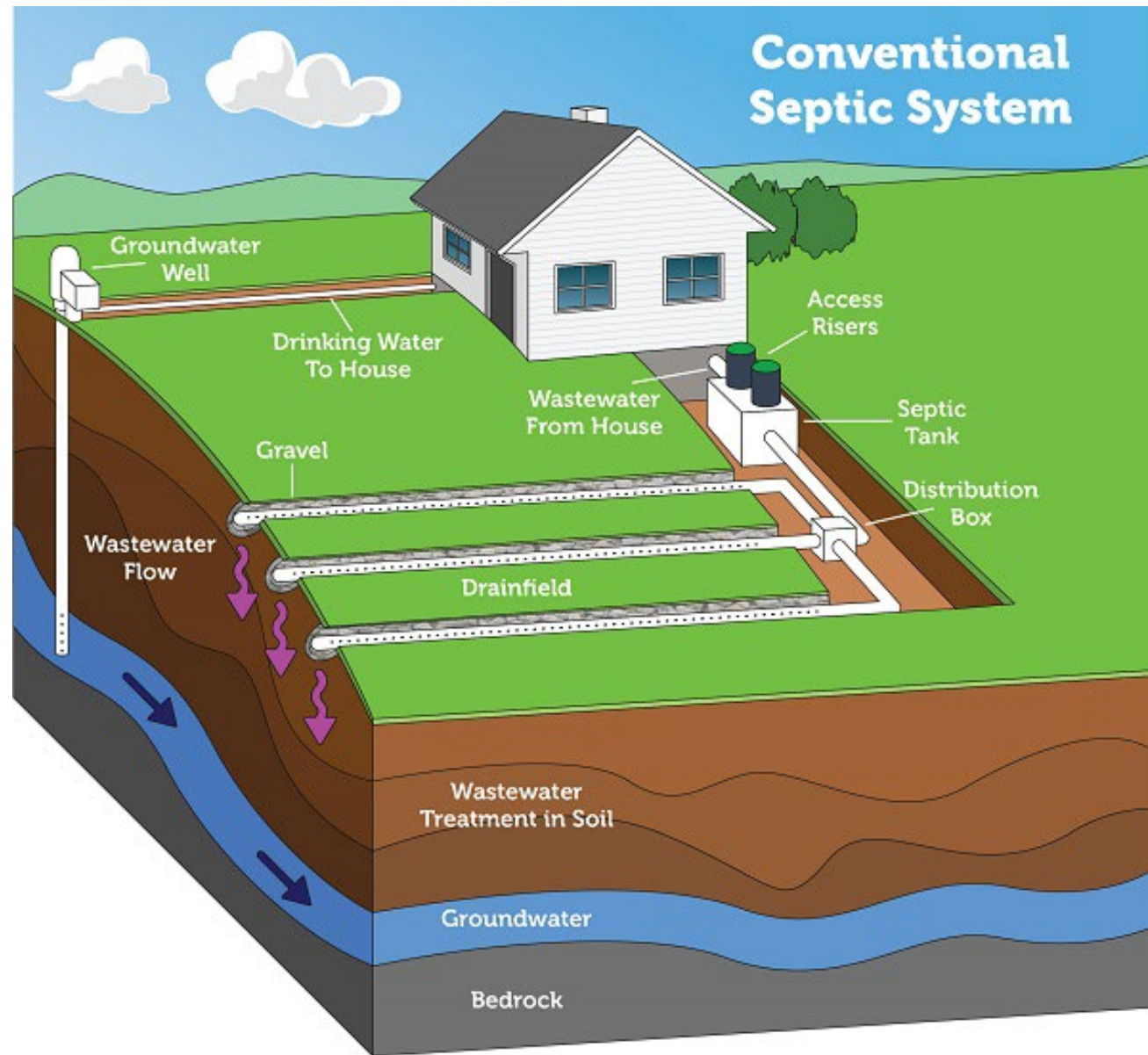


Septic Systems 101

BRIAN BAUMGAERTEL
BARNSTABLE COUNTY

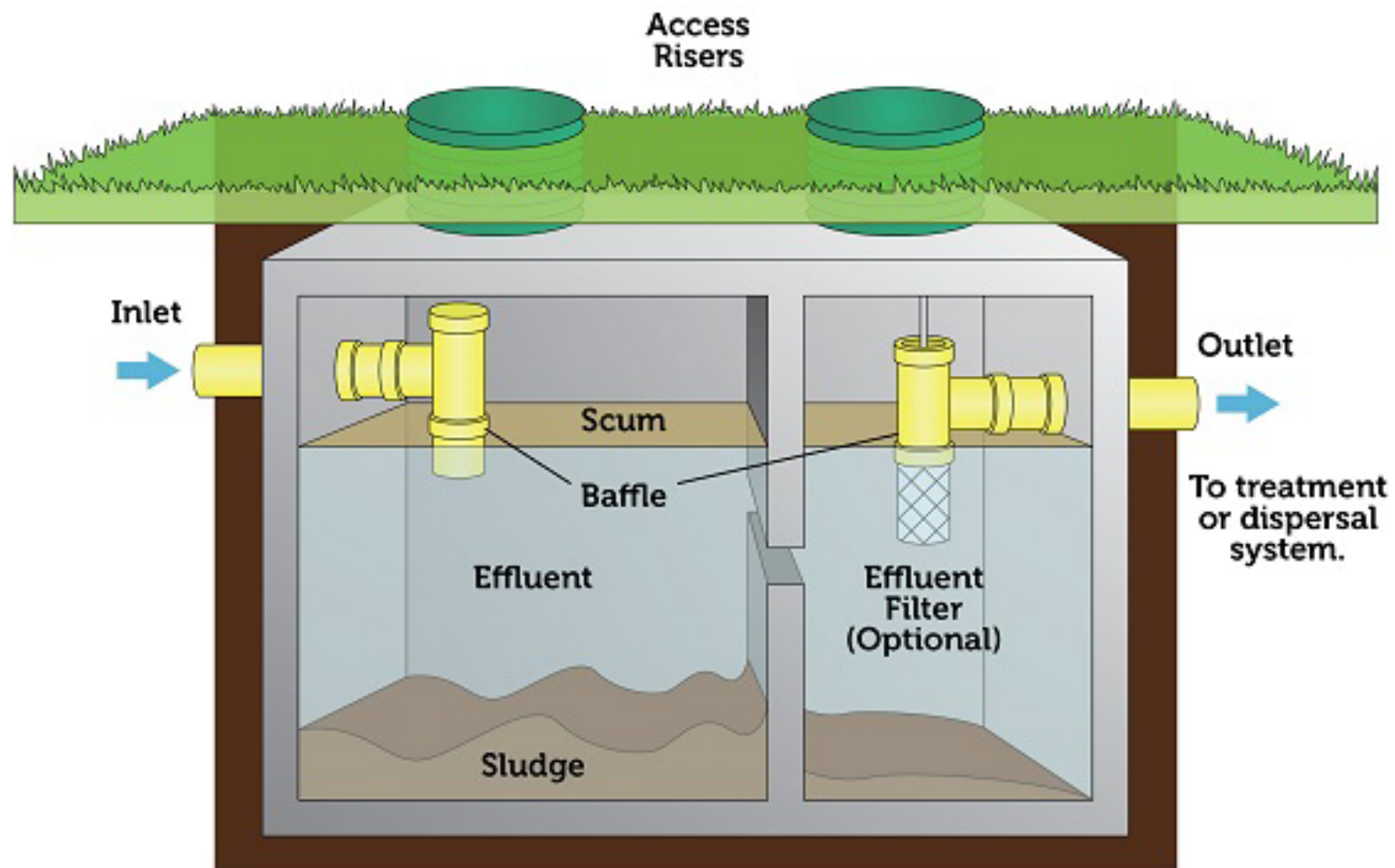
What's a Septic System?



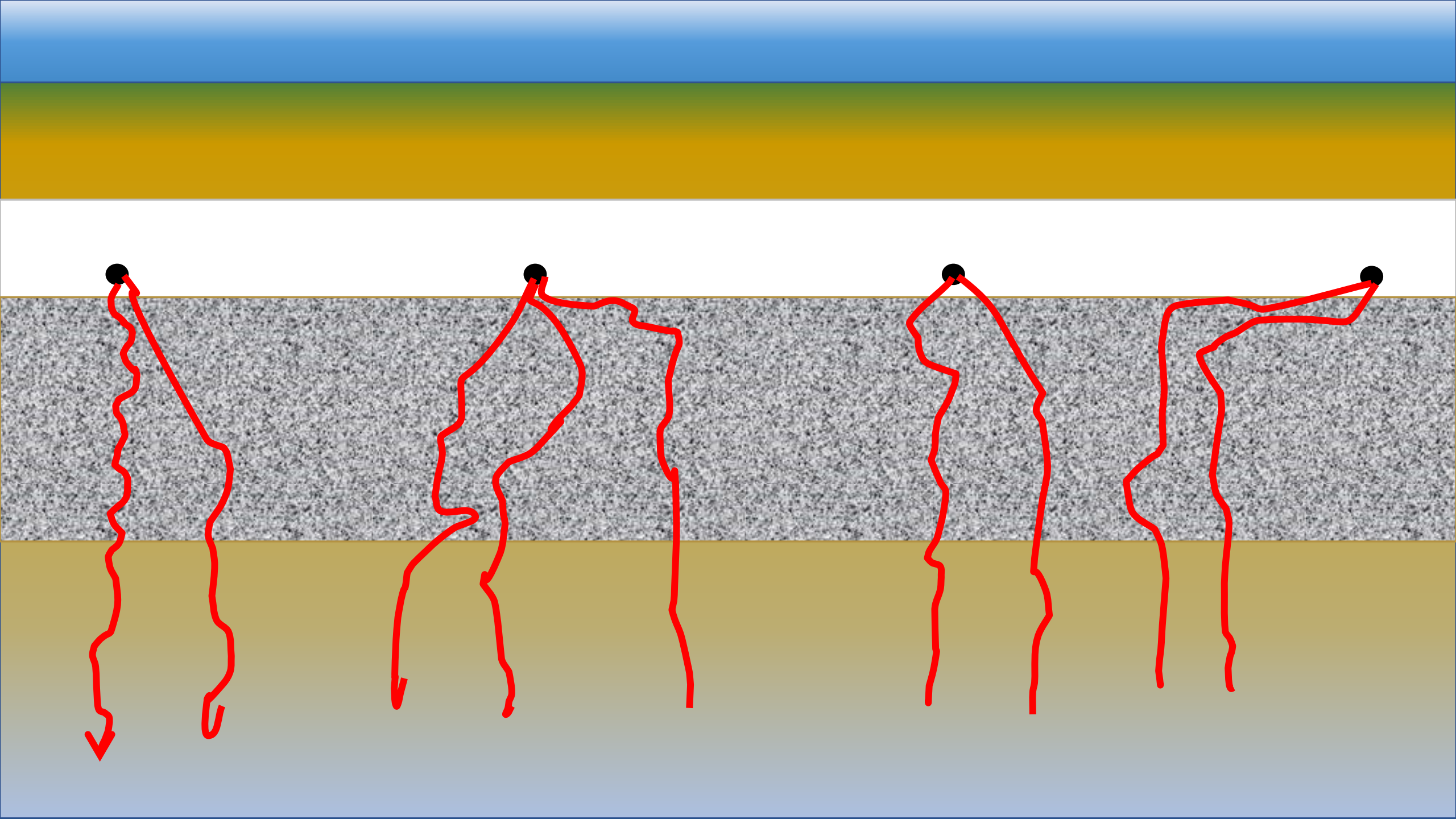


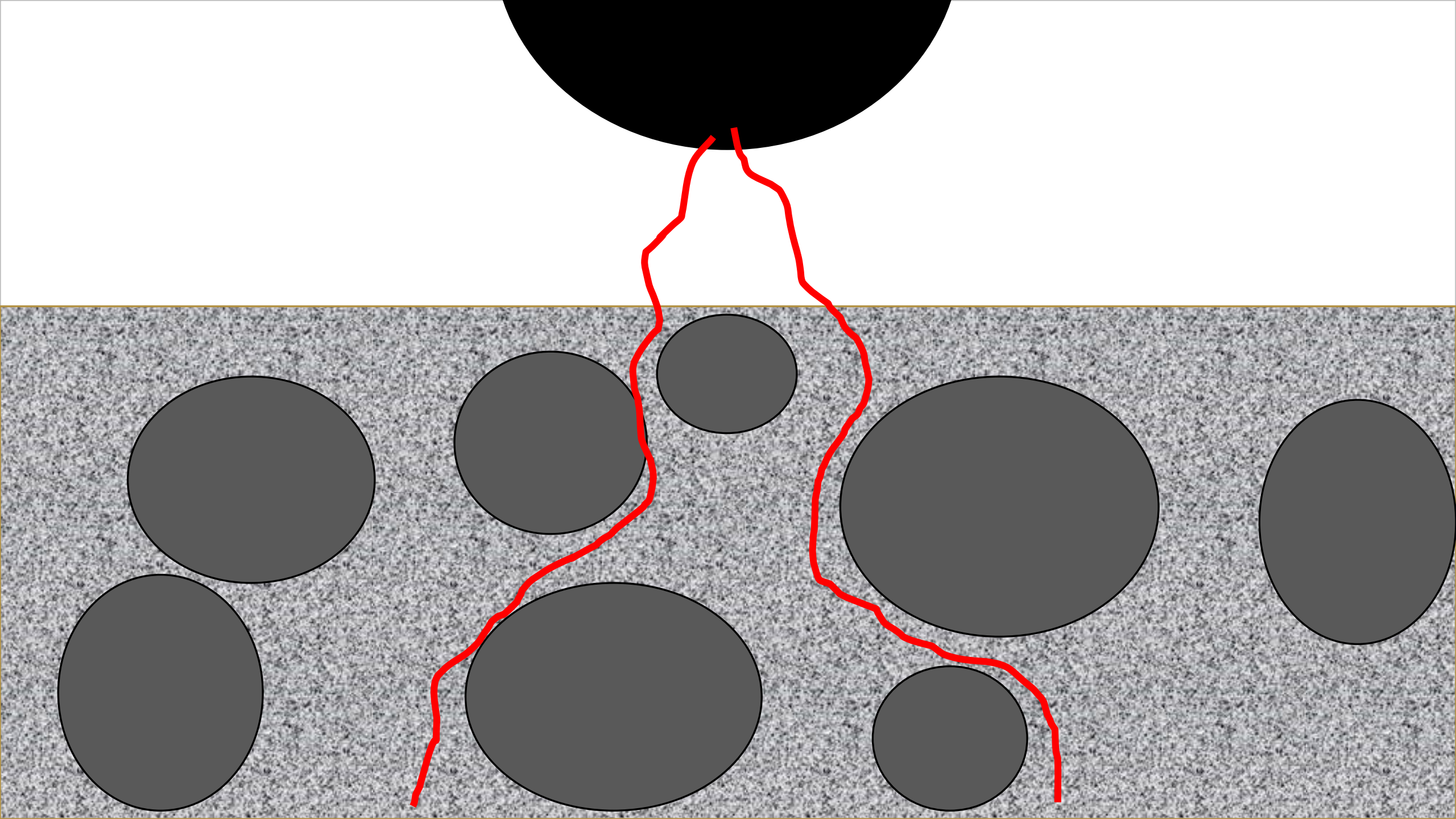
Please note: Septic systems vary. Diagram is not to scale.

Septic Tank



Please note: The number of compartments in a septic tank vary by state and region.

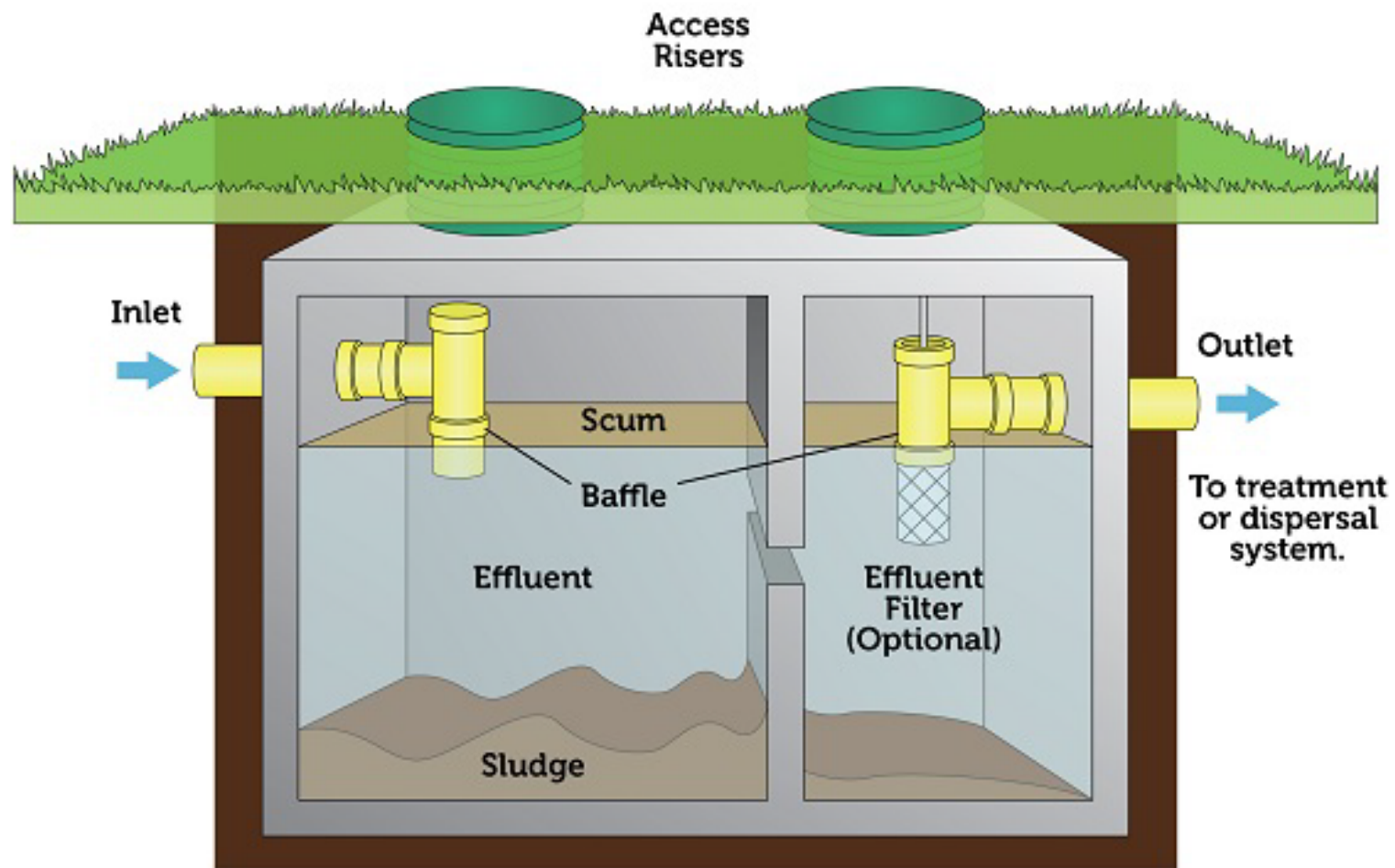




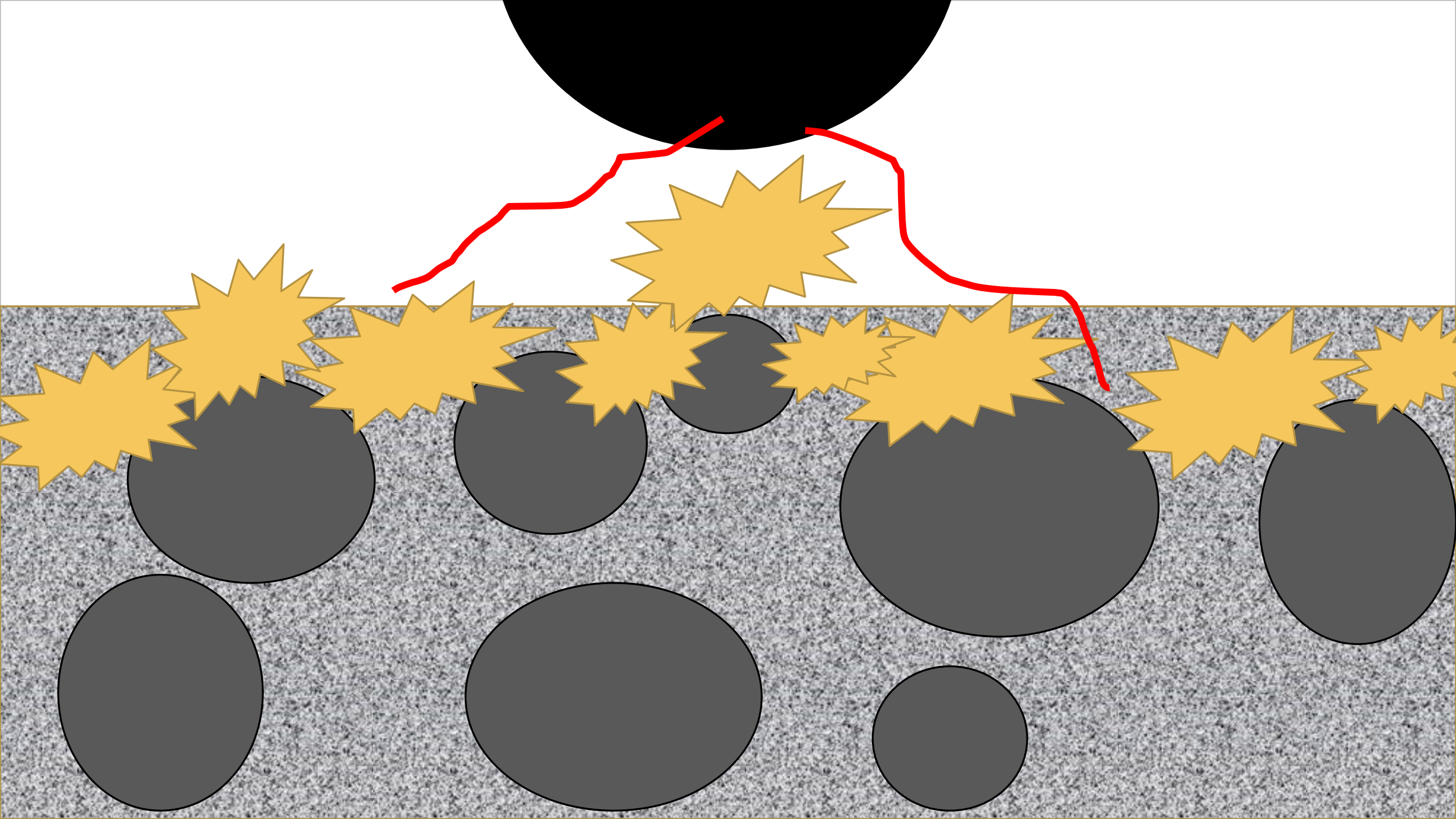
Why Do I Need to Pump my Septic Tank?



Septic Tank



Please note: The number of compartments in a septic tank vary by state and region.



What can go Down the
Drain?

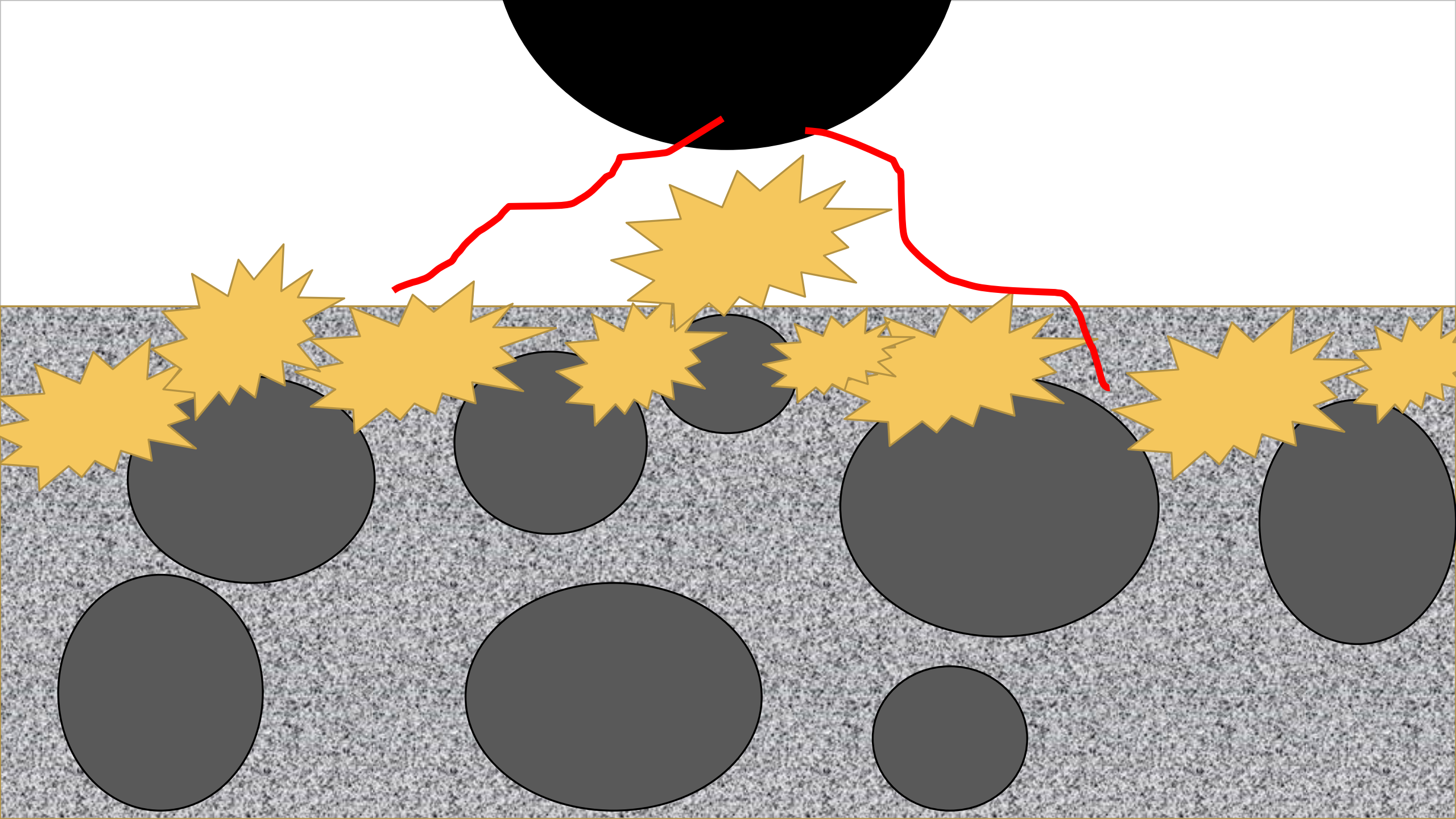


The Four P's

- Pee
 - Poop
 - Puke
 - Toilet Paper
-

You Can't Flush This

- Food scraps (Garbage Grinders)
 - Cooking Grease
 - Leftover Medicines
 - “Flushable” Wipes (Public Enemy #1)
 - Lots of Paint
 - Lots of Cleaners (Particularly “Quats”)
-



What's all this about
Nitrogen and Phosphorus?



Disposition of Nutrients in a "Standard" System



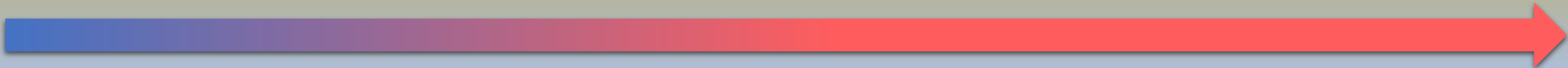
~8-10 mg/L P influent
Septic Tank
~25% Phos in Solids

Soil Absorption Area

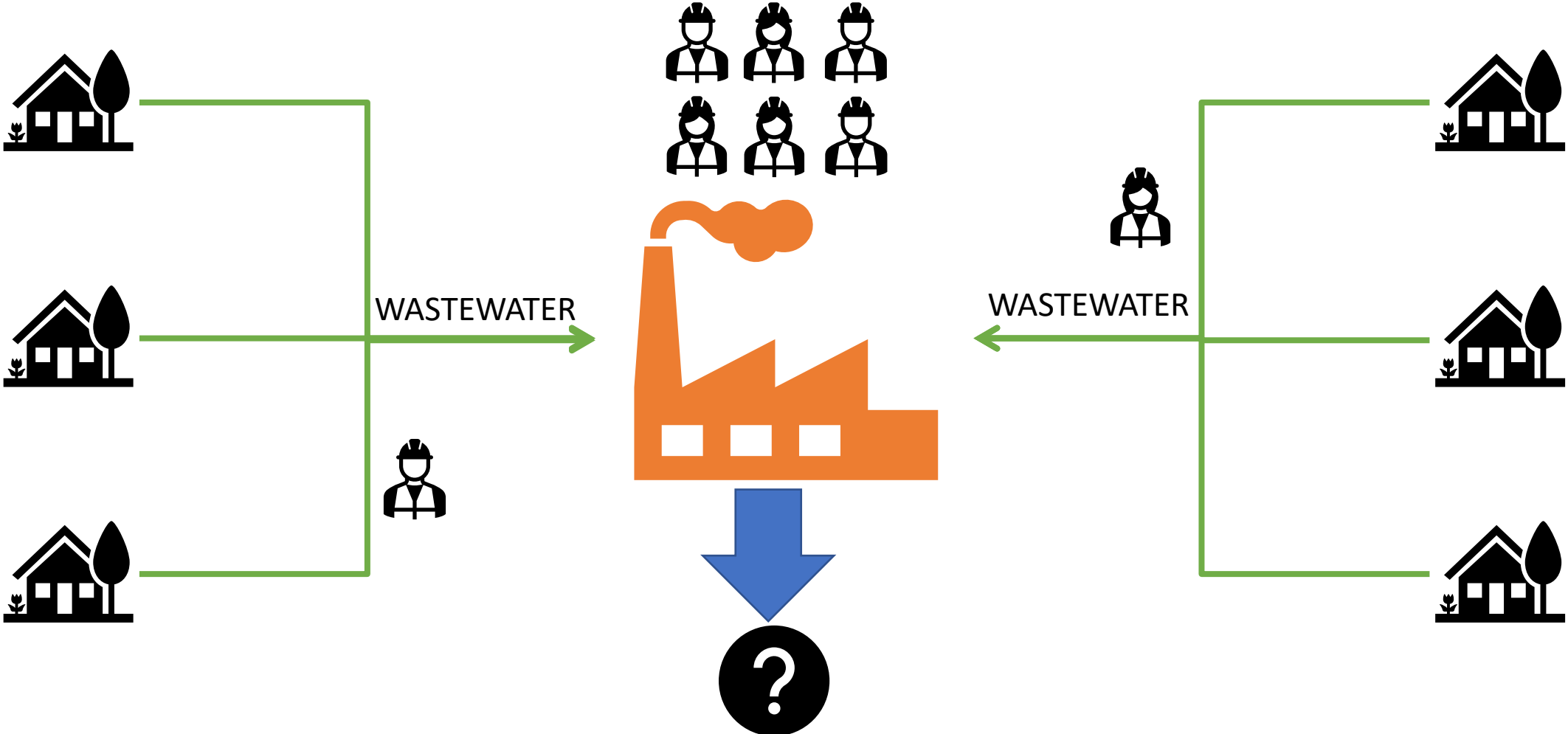
~35% Nitrogen Gas

~65% Nitrogen
~75% Phosphorus

Groundwater

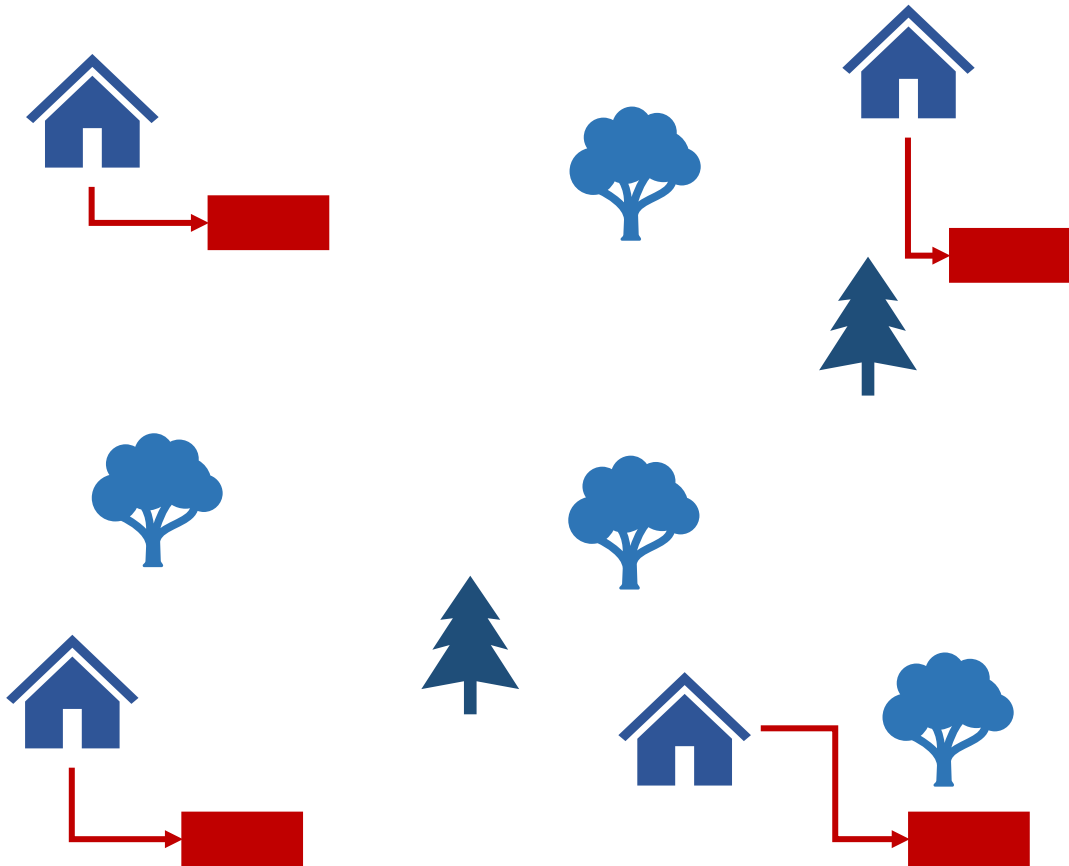


Centralized Treatment Infrastructure

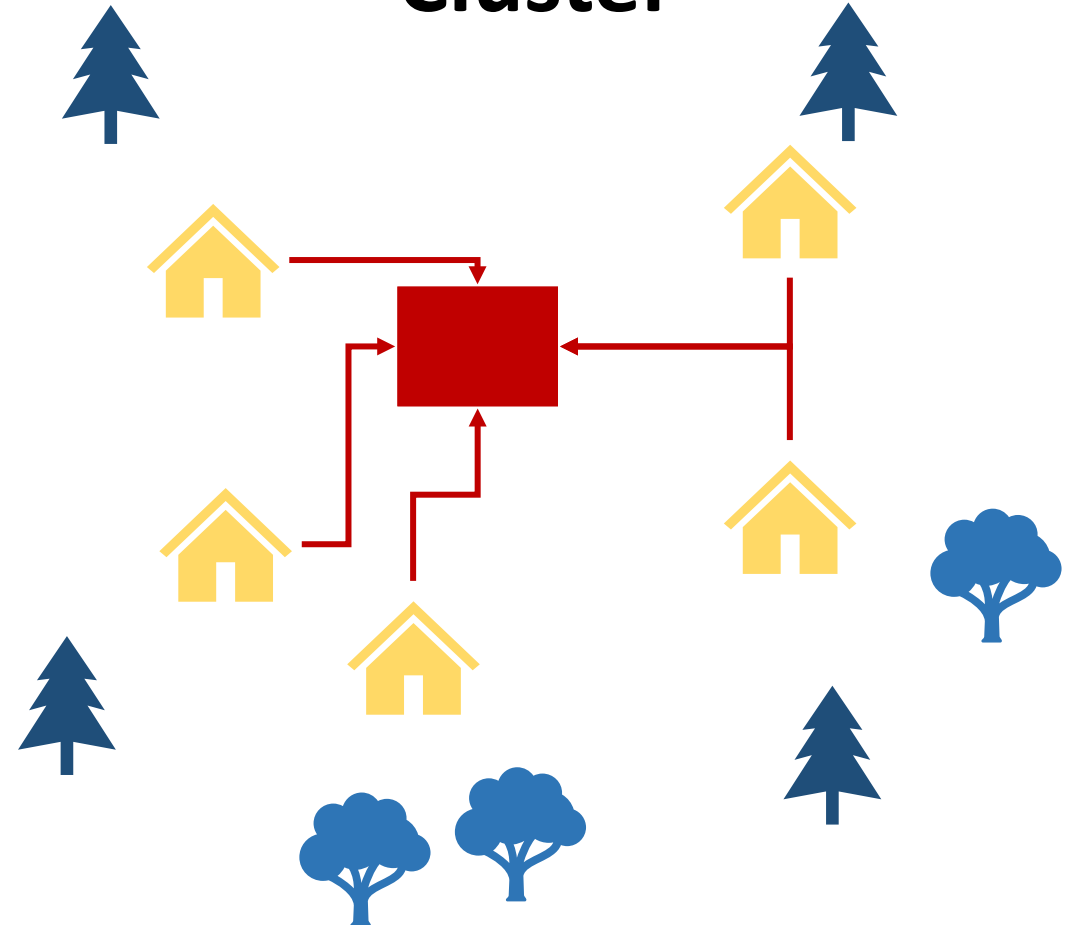


Decentralized Treatment Infrastructure

Onsite



Cluster



What else is in
wastewater?

Medications

- Caffiene
 - Ibuprophen/Acetaminophen
 - Carbamazepene (Seizures)
 - Sulfamathoxazole (Antibiotic)
 - Edocrine Disruptors (Homones, etc)
-

Chemicals and Other

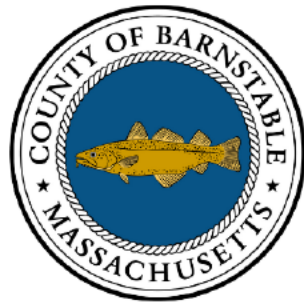
- PFOS
 - DEET
 - Sunscreen
 - Parabens
 - Solvents and Cleaners
 - Plastics
-

Learn More:

- www.capecod.gov
 - www.masstc.gov
 - www.capecodgroundwater.org
 - Love your Local Water
-



ONE DROP LEADS TO ANOTHER



AmeriCorps



**MASSACHUSETTS
SERVICE ALLIANCE**

There is only ONE Water.
Take Care of it.

