# Septic System Vulnerability Assessments

*Helping communities understand threats to their shellfishing resources*

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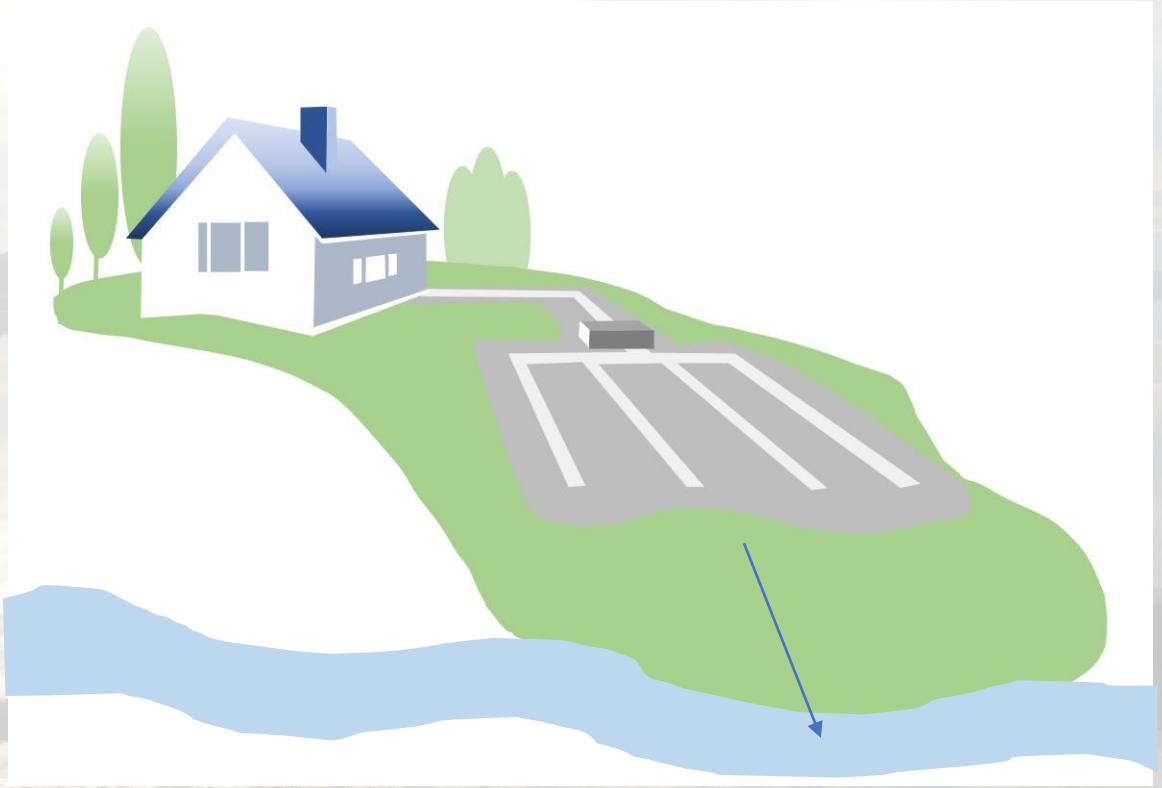
Maine Coastal Communities Grant: *Septic System Vulnerability Assessment Guidance Document Development and Case Study in Waldoboro, ME*

# Overview

- Septic systems & their impact on water quality
- System malfunctions and contamination
- Pollution affecting shellfish growing areas
- Helping communities identify pollution problems
- Guidance Document

# Septic Systems: Impact on Water Quality



- Septic systems prevent nutrients, bacteria, and other pollutants from entering waterbodies
- Malfunctioning systems can pollute local waterbodies

# Septic System Malfunctions: Sometimes Visible, Sometimes Invisible

- Signs of a malfunctioning septic system:
  - Slow drainage
  - Gurgling in plumbing
  - The leach field has dying, spongy, or bright green grass,
  - Foul odors
- Signs may be invisible

# Pollution Affecting Growing Areas

- Shellfish are filter feeders, meaning they feed by straining the surrounding water in order to collect food particles;
- These particles (including bacteria) can then become concentrated in their guts.

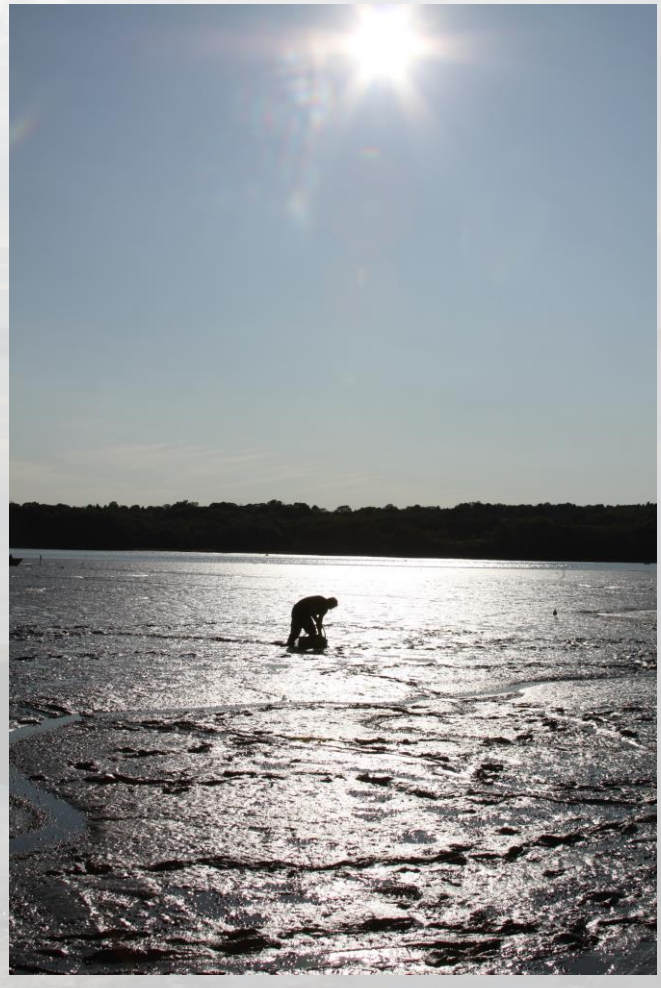
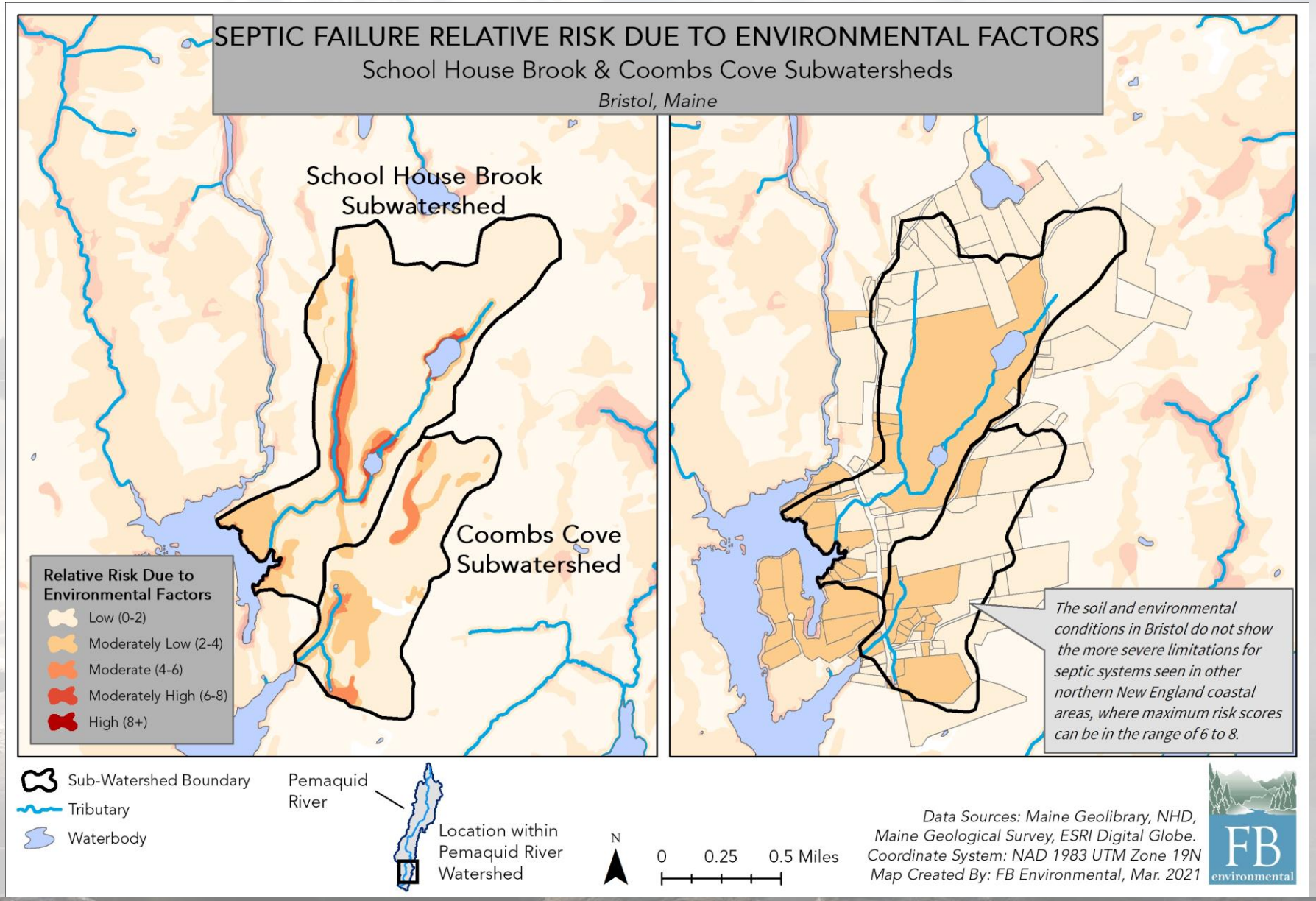


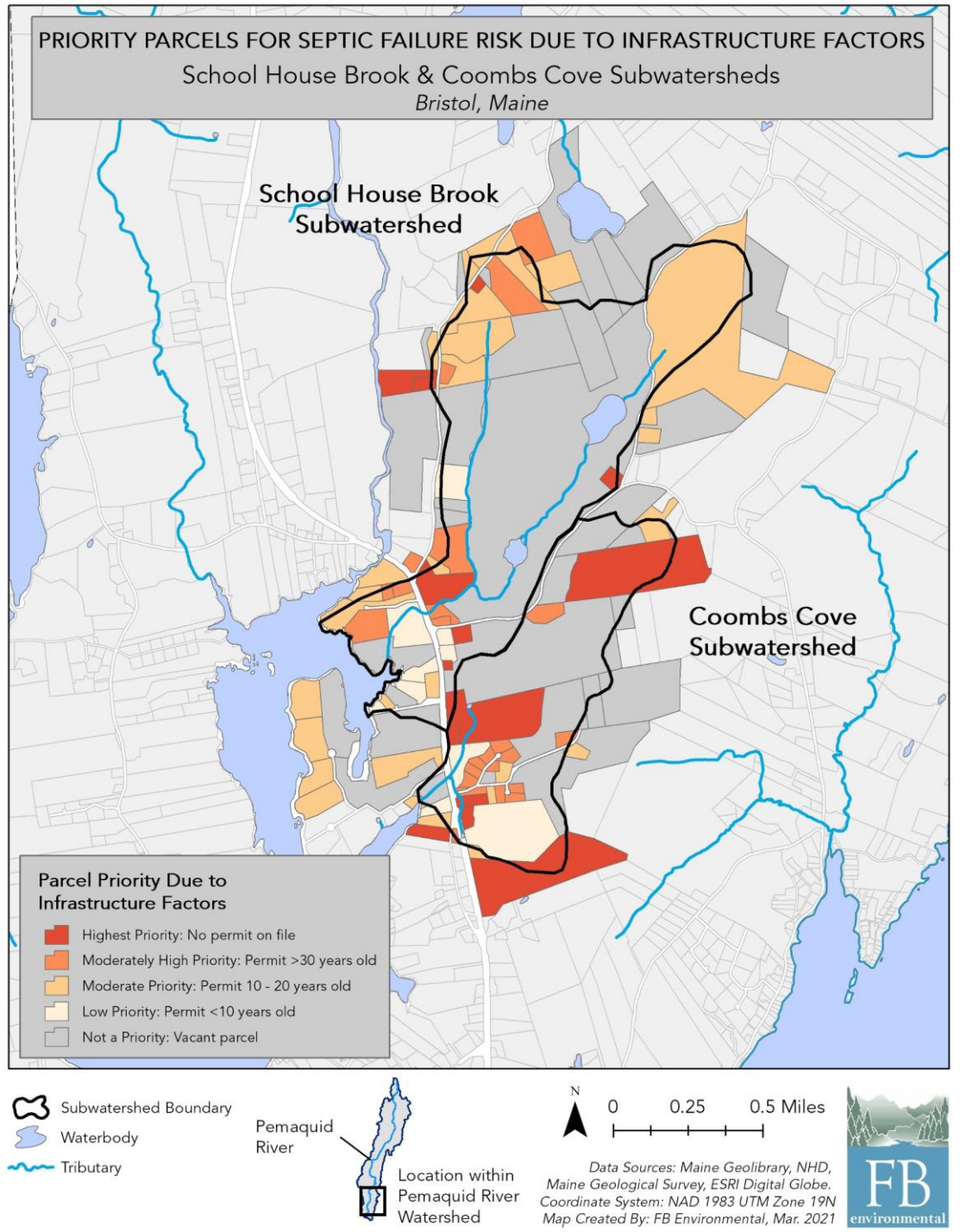
*Photo: Julie Keizar*

# Septic System Vulnerability Guidance Document

- This guidance document:
  - Introduces the threat of failing septic systems to the environment.
  - Presents a septic system vulnerability assessment as a way to identify potential risk.
  - Provides resources for communities to take the next steps towards protecting and restoring water quality.

# Septic System Vulnerability Guidance Document




PRIORITY PARCELS FOR SEPTIC FAILURE RISK DUE TO INFRASTRUCTURE FACTORS
School House Brook & Coombs Cove Subwatersheds
Bristol, Maine
School House Brook Subwatershed
Coombs Cove Subwatershed
Parcel Priority Due to Infrastructure Factors
Highest Priority: No permit on file
Moderately High Priority: Permit >30 years old
Moderate Priority: Permit 10 - 20 years old
Low Priority: Permit <10 years old
Not a Priority: Vacant parcel
Subwatershed Boundary
Waterbody
Tributary
Pemaquid River
Location within Pemaquid River Watershed
N
0
0.25
0.5 Miles
Data Sources: Maine Geolibrary, NHD, Maine Geological Survey, ESRI Digital Globe.
Coordinate System: NAD 1983 UTM Zone 19N
Map Created By: FB Environmental, Mar. 2021
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# Septic System Vulnerability Guidance Document

- Currently: Guidance document under review
- Outreach and Education
  - Maine Shellfish Learning Network
  - Maine Fishermen's Forum

- Questions?