

# **Bacterial Monitoring and Shellfish Growing Area Classification in Casco Bay**

**Anna Bourakovsky**  
**Growing Area Classification Program Manager**  
**Division of Public Health, Maine DMR**



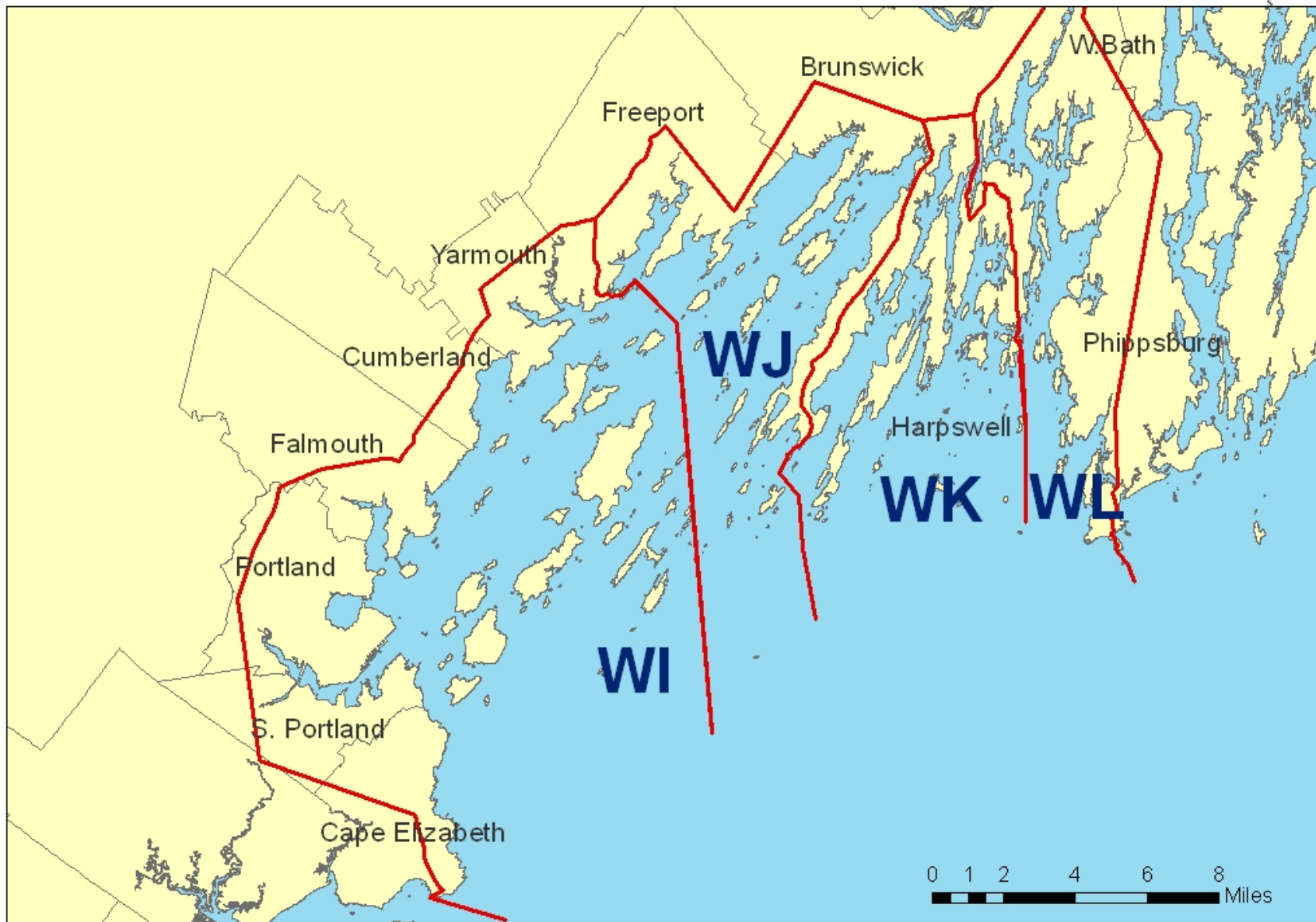
# Program Background

- Public Health Division of DMR- keep molluscan shellfish safe for human consumption
- Oversee the application of National Shellfish Sanitation Program (NSSP) in Maine
- Growing Area Classification Program- water quality monitoring and pollution identification

# Casco Bay



# Casco Bay- Shellfish Growing Areas

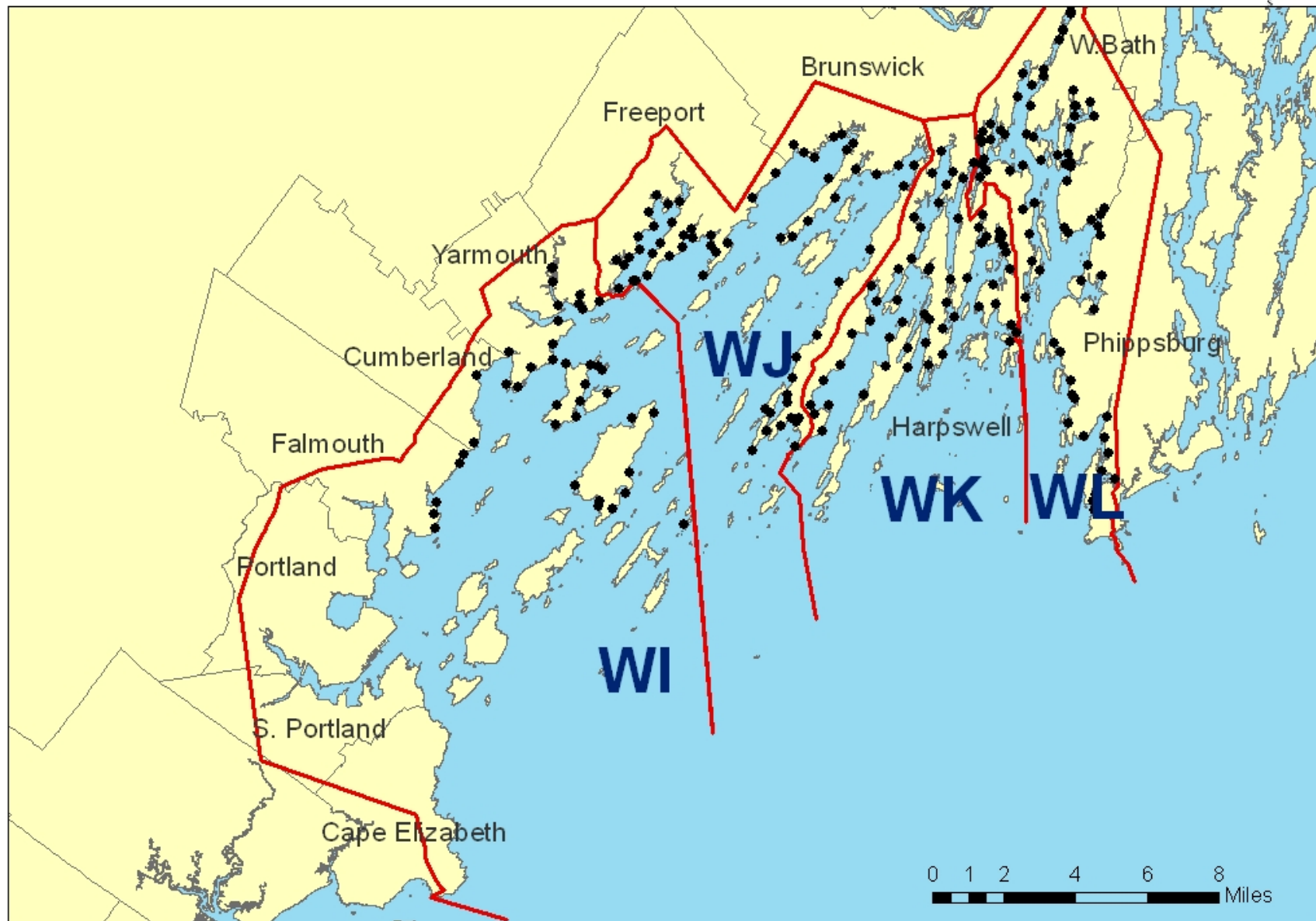


# Water Quality Monitoring

- Water Sample Collection (234 Sample Stations)
- Testing for presence of fecal coliform bacteria (MF method)
- Year round sampling using predetermined schedule AND targeted sampling
- Data used for establishing and maintaining growing area classifications



# Casco Bay- Active Water Quality Monitoring Stations



# Pollution Sources

- Effective management surrounding known pollution sources
- Actual and Potential Pollution
  - Waste Water Treatment Facilities (WWTP)
  - Over Board Discharges (OBD)
  - Domestic Waste Disposal Systems
  - Stormwater Discharge
  - Farms/Agricultural Activity
  - Marinas (presence of boats with on-board toilets)

# **NSSP Classifications**

**Approved: Areas open for direct market harvest**

**Conditionally Approved: Areas that meet approved area criteria under certain predetermined conditions**

**Restricted: Areas closed to harvest except for purposes of relay or depuration**

**Conditionally Restricted: Areas that meet restricted area criteria except under certain predetermined conditions**





**Prohibited: Areas closed to harvesting except for seeding**

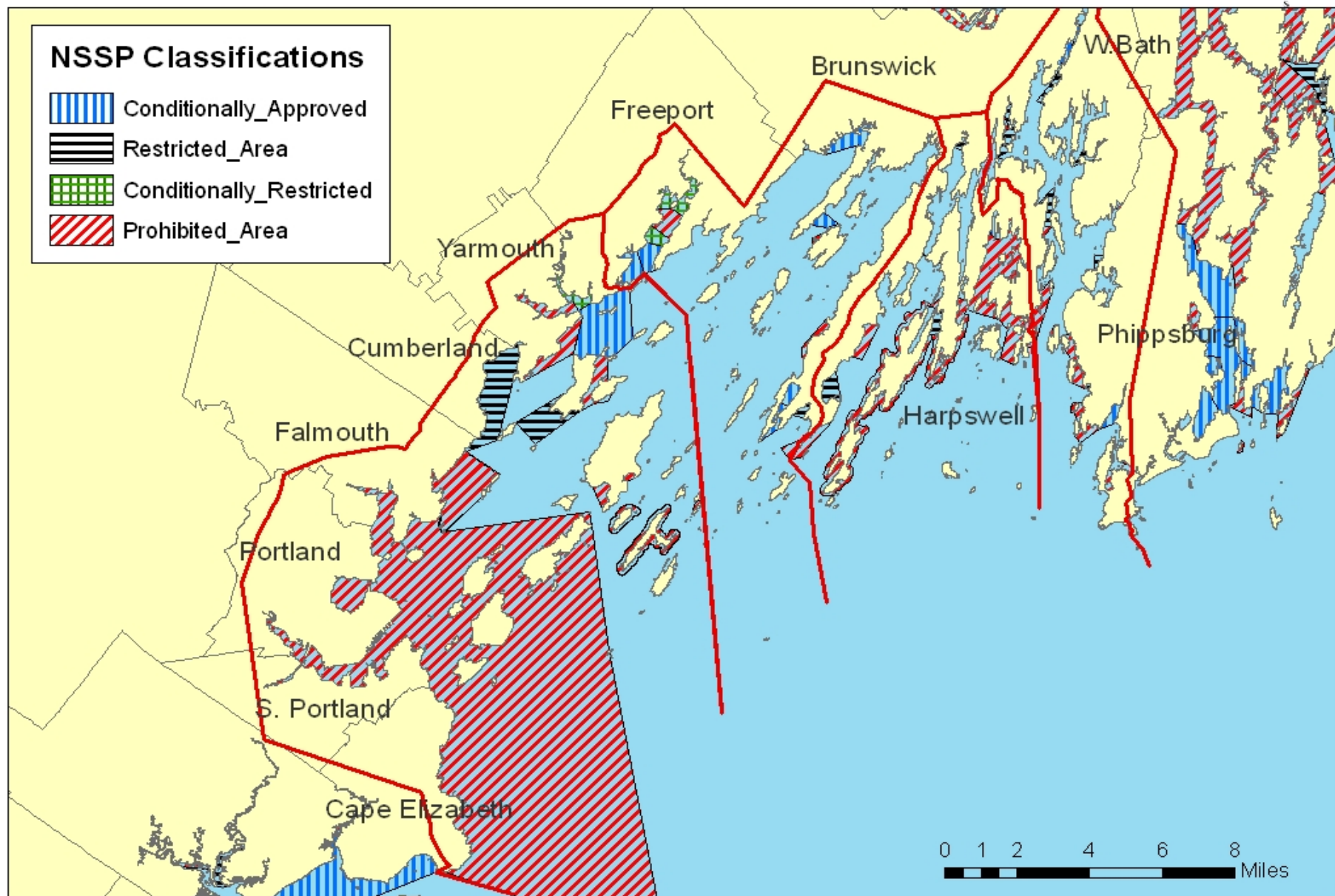


# Casco Bay- NSSP Classifications



## NSSP Classifications

-  Conditionally\_Approved
-  Restricted\_Area
-  Conditionally\_Restricted
-  Prohibited\_Area

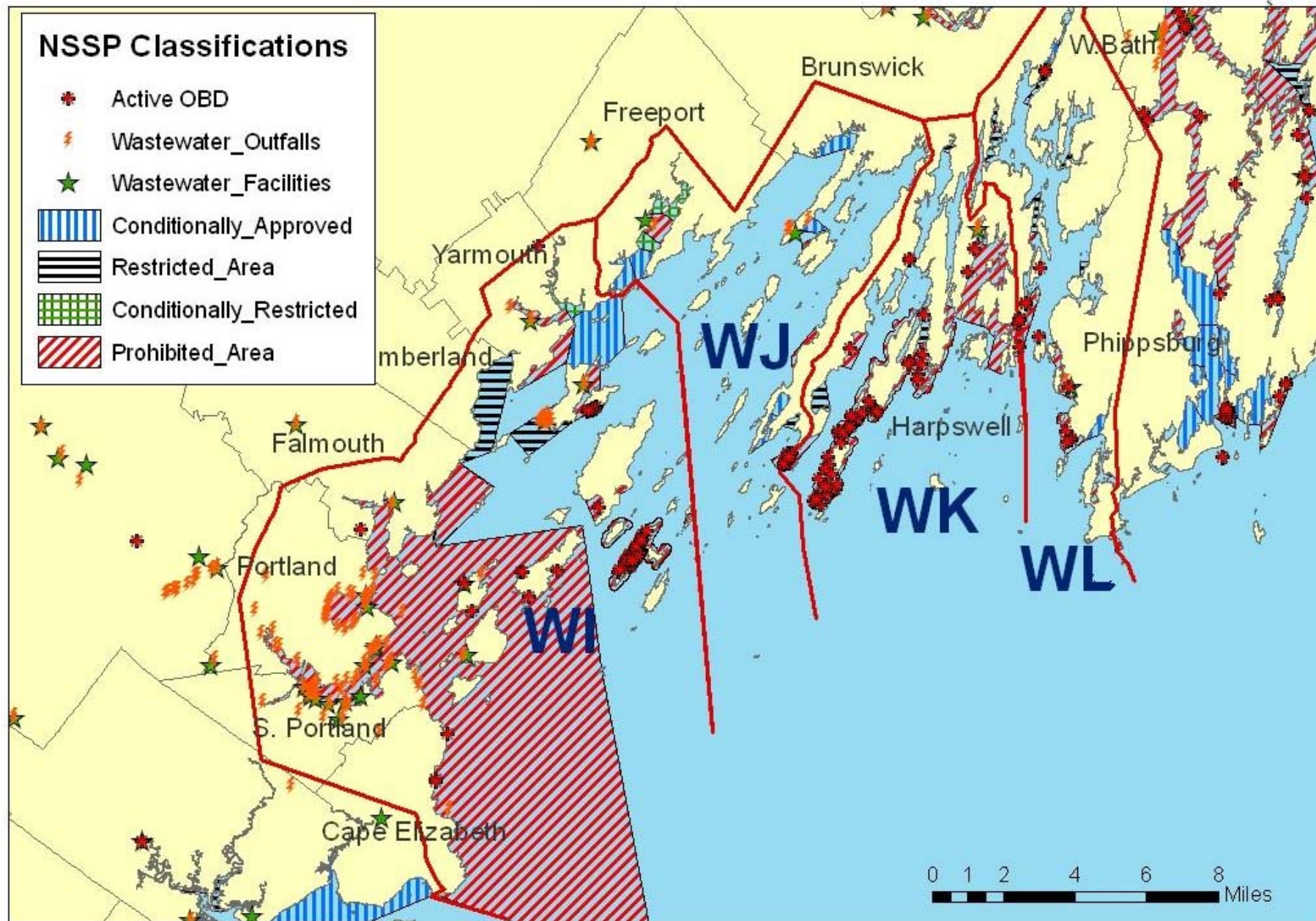


# Casco Bay- Licensed Discharges



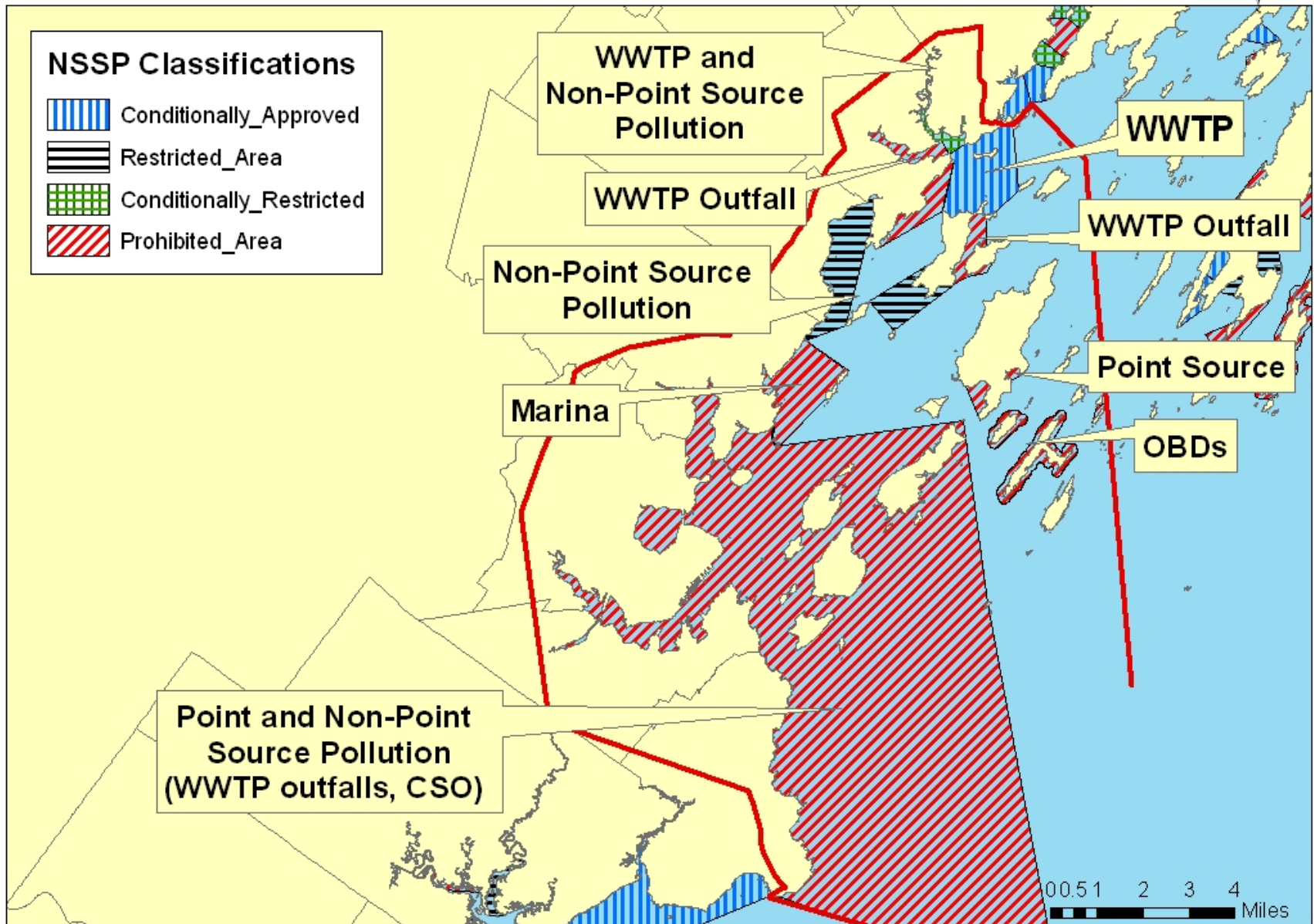
## NSSP Classifications

- Active OBD
- Wastewater\_Outfalls
- Wastewater\_Facilities
- Conditionally\_Approved
- Restricted\_Area
- Conditionally\_Restricted
- Prohibited\_Area

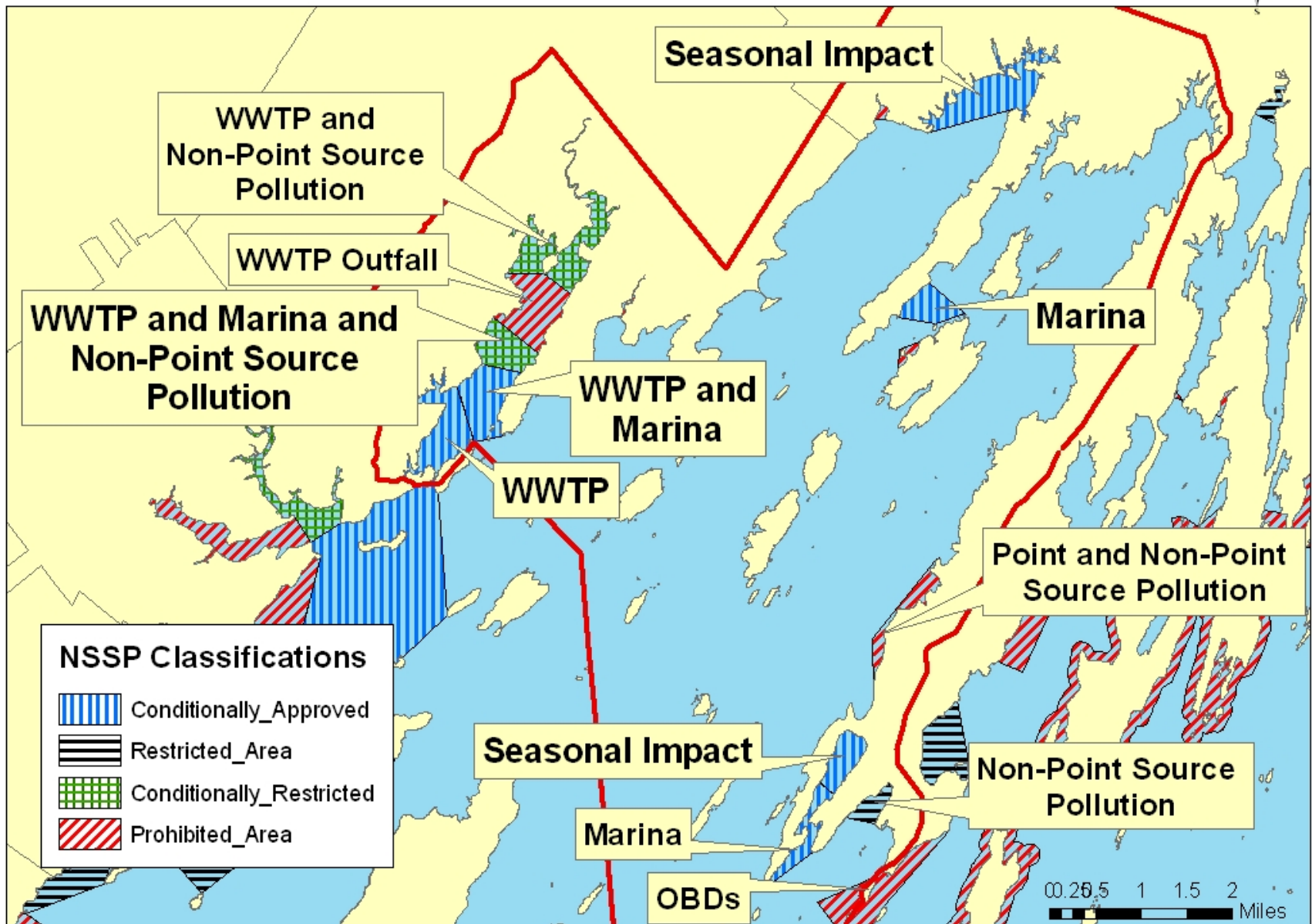




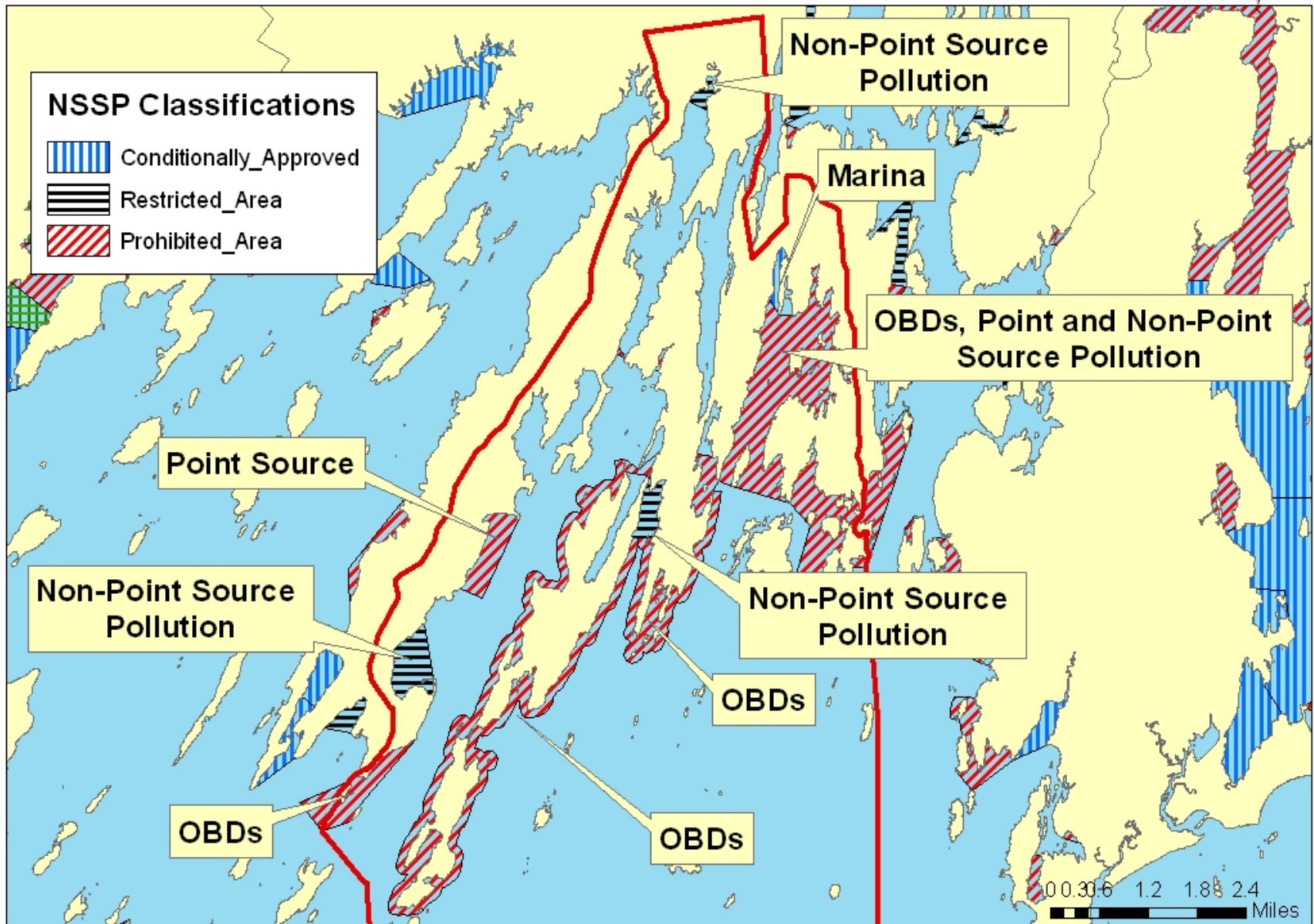
# Casco Bay- Growing Area WI



# Casco Bay- Growing Area WJ

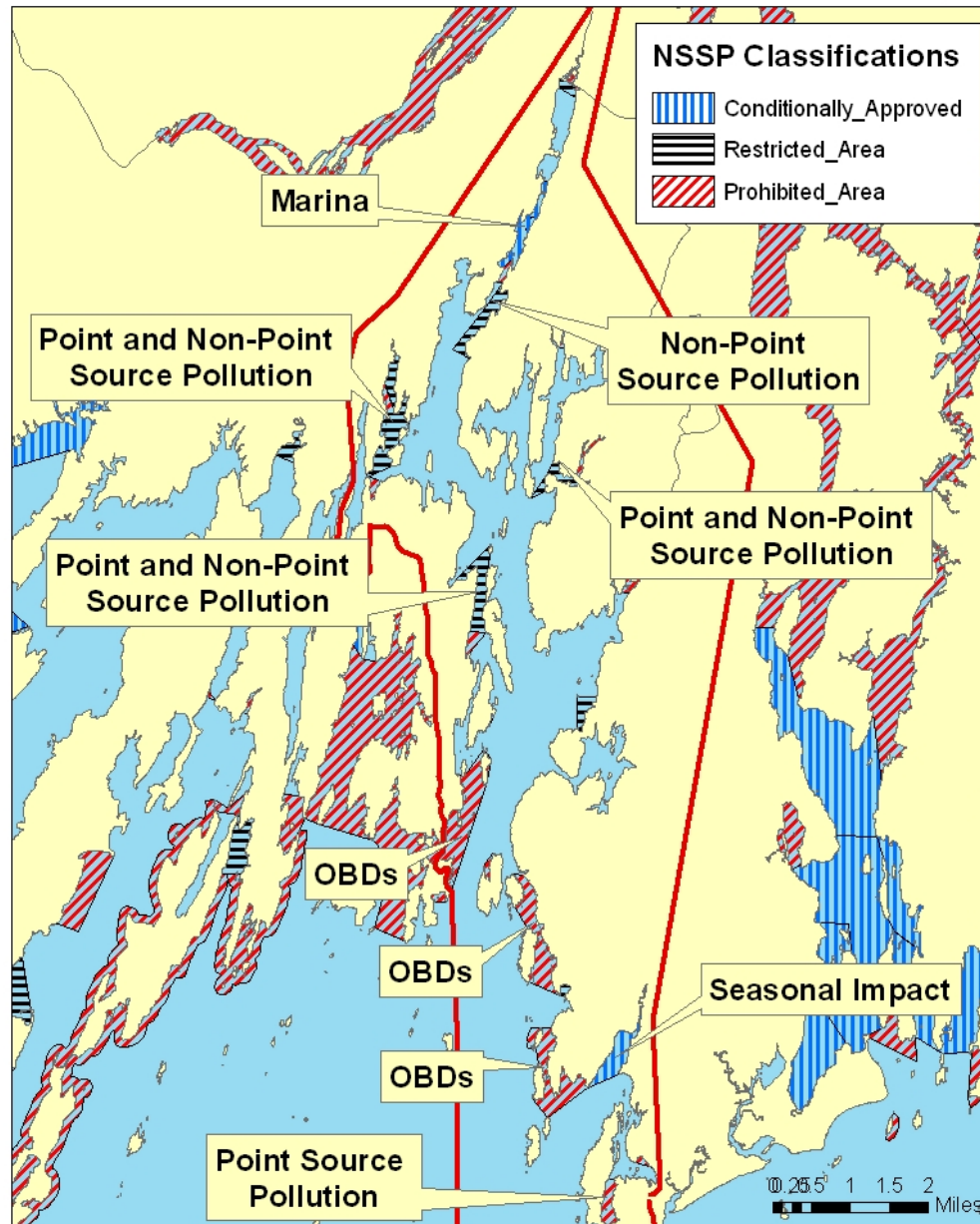


# Casco Bay- Growing Area WK





# Casco Bay- Growing Area WL





# Future Classification Work

## Periodic Review of Pollution Sources

- Remediation Efforts

- Management Strategies

- Seasonal Impact
- Rainfall Impact
- Dilution Zones





**Thank You!**