



TOWN OF MASHPEE SELECT BOARD

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REGULATORY BACKGROUND

- Rachael Carson:
 - Wrote Silent Spring in 1962 = Environmental Epiphany
 - “One way to open your eyes is to ask yourself, ‘What if I had never seen this before?, What if I knew I would never see it again?’”
- EPA
 - Agency created in 1970: Uniform regulation
 - Clean Water Act of 1972 : Wastewater
 - Safe Drinking Water Act of 1974: Potable water
- ***PPCP issue transcends both CWA & SDWA***

FUTURE REGULATORY DILEMMA

- Paradigm shift:
 - Current structure: Bee sting nuisance for most, fatal for some
 - Future structure: Protective of most sensitive sub-populations
 - Immuno-compromised
 - Fetal or DNA level (proverbial 3-legged frog)
- Protect public health – protect eco-health
 - Eco-health *is* public health: we eat the critters that eat the critters, that eat the stuff
- Issues ripe for EPA lead

MUTUALLY BENEFICIAL REWARDS

Future Environmental Need

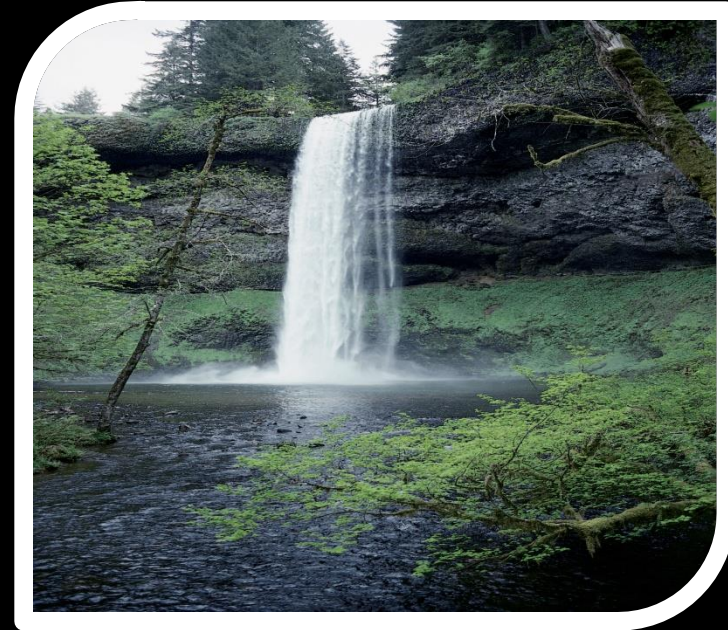


Future Human Need



ISSUE IS WATER QUALITY

- “Tragedy of the Commons”
- “What is common to the greatest number gets the least amount of care”
 - **ARISTOTLE, (384-322 B.C.)**



Trivia: Hippocrates (460-377 B.C. founded the concept of “Healthy” water.

MASSDEP – JULY 11, 2022

What

Proposed Nitrogen Sensitive Area / Watershed Permitting Regulatory Framework

Changes to Nitrogen Sensitive Area (NSA) provisions of Title V

Creates new Natural Resource Area NSA's (NRC NSA's)

- Watershed to embayment w/TMDL and
- Under 208 Plan (Clean Water Act)
- Effective on date of final regs

BAT Nitrogen systems (I/A's) **OR**

Watershed Permit

When

BAT Nitrogen systems:

- Within 5 years

Watershed Permit:

- 20 year Permit
- Issued to government unit(s)
- Permit based on approved "Watershed Management Plan"
- 75% TMDL reduction w/in 20 years
- Permit components enforceable
- Annual report required
- 5 year evaluation & review

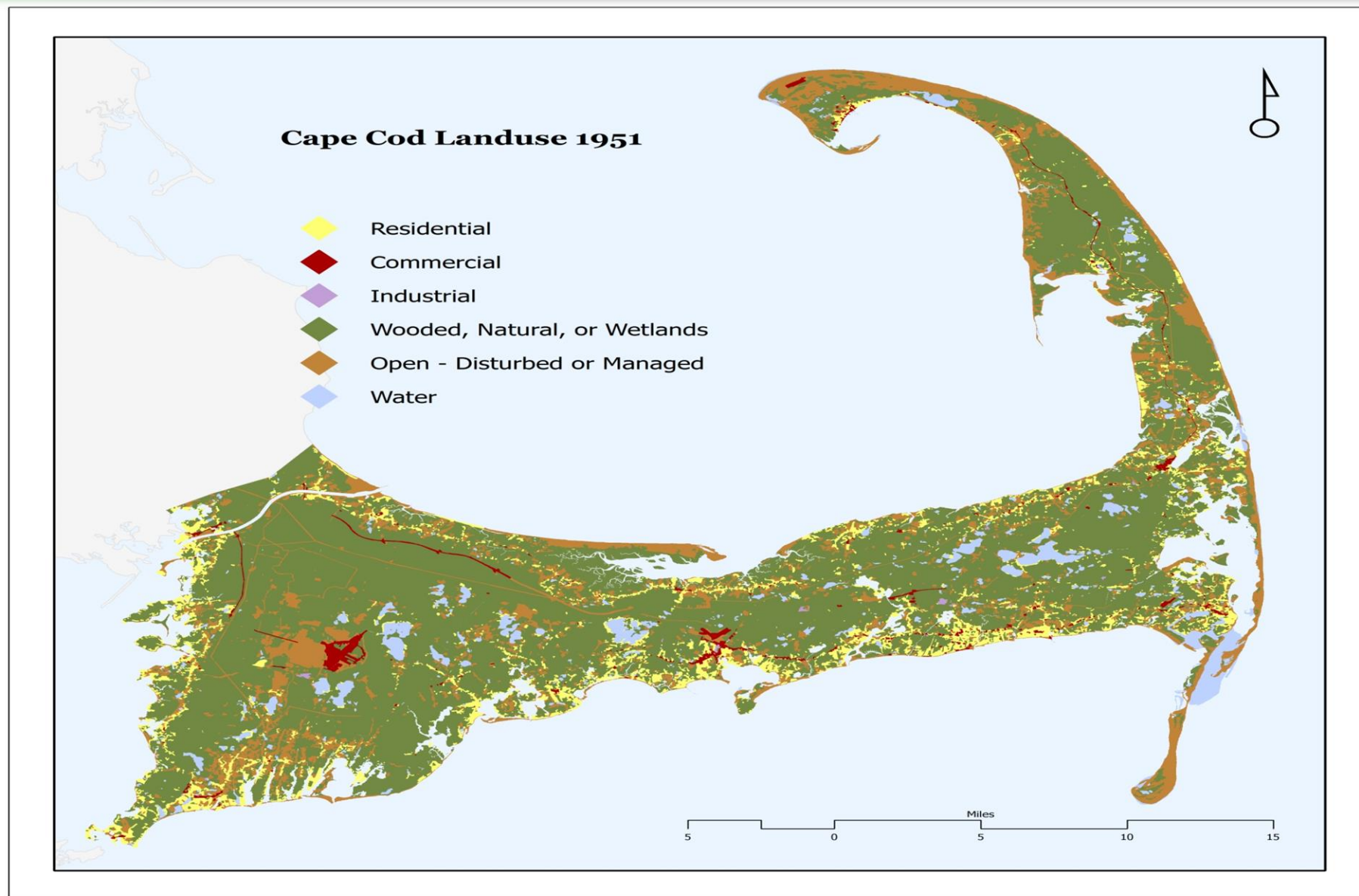
Why

Degradation surpasses Cape Town's abilities to achieve TMDL reduction

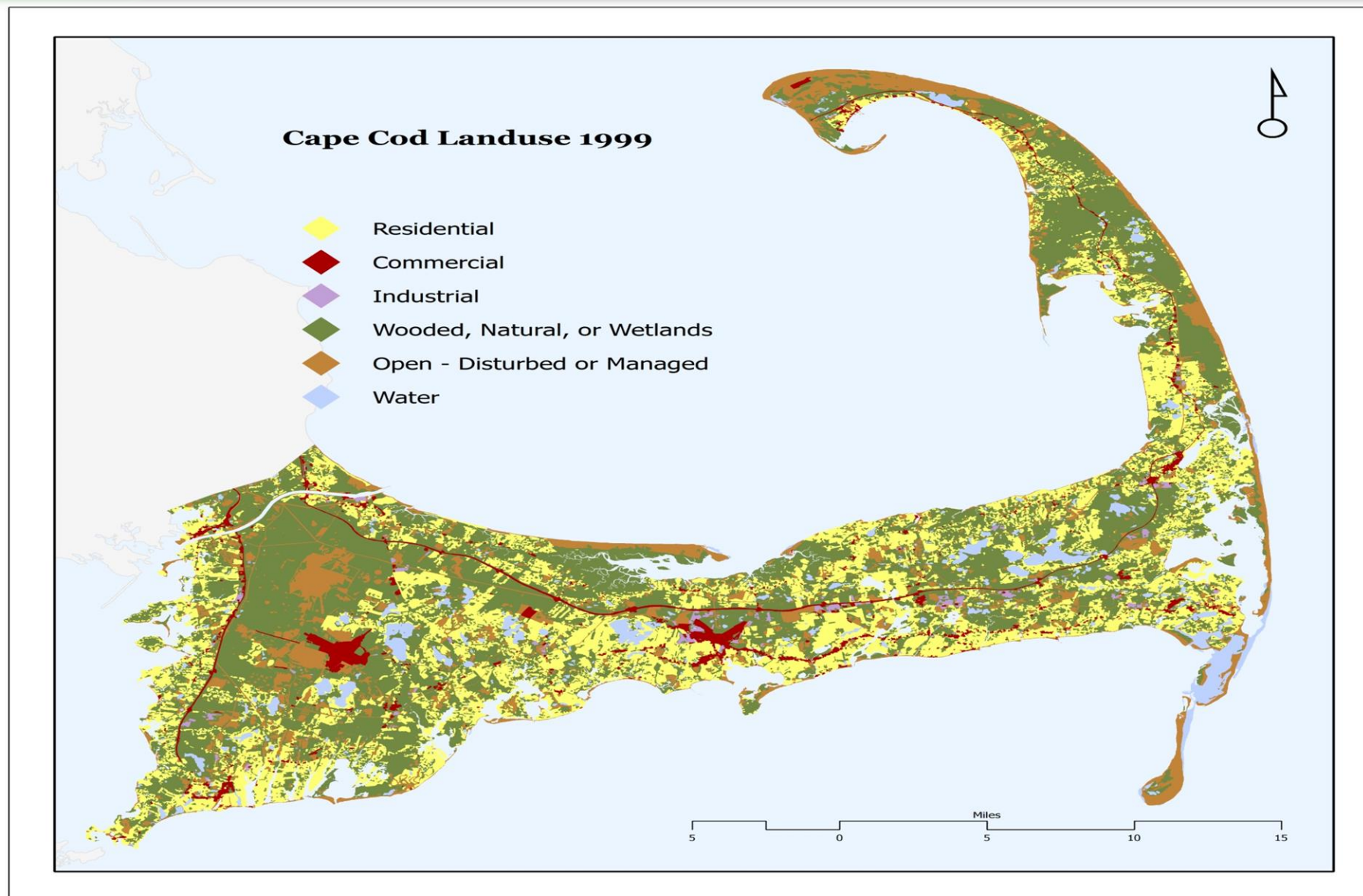
Draft regs this Fall

Promulgate Spring 2023

WHAT HAPPENED ?



WE HAPPENED!



WATER FACTS

97% of all water is in oceans

2% in ice caps

<1% available as fresh

Great lakes = 20% of world's freshwater

77,407 dams in US (1/3rd recreational), 2,882 in MA



WATER FICTIONS

- Groundwater is pure (filtered)
 - Can have contaminants
- “Clean” water is safe to drink
 - It’s what you can’t see that is harmful: microbes, chemicals & nutrients
- “Pure & Natural” is best
 - “Pure” doesn’t exist and “Natural” can be harmful
- Contaminants are generally microbiological, chemical or elemental

Coliform



Cryptosporidium



Cyanobacteria



A SYMPTOM

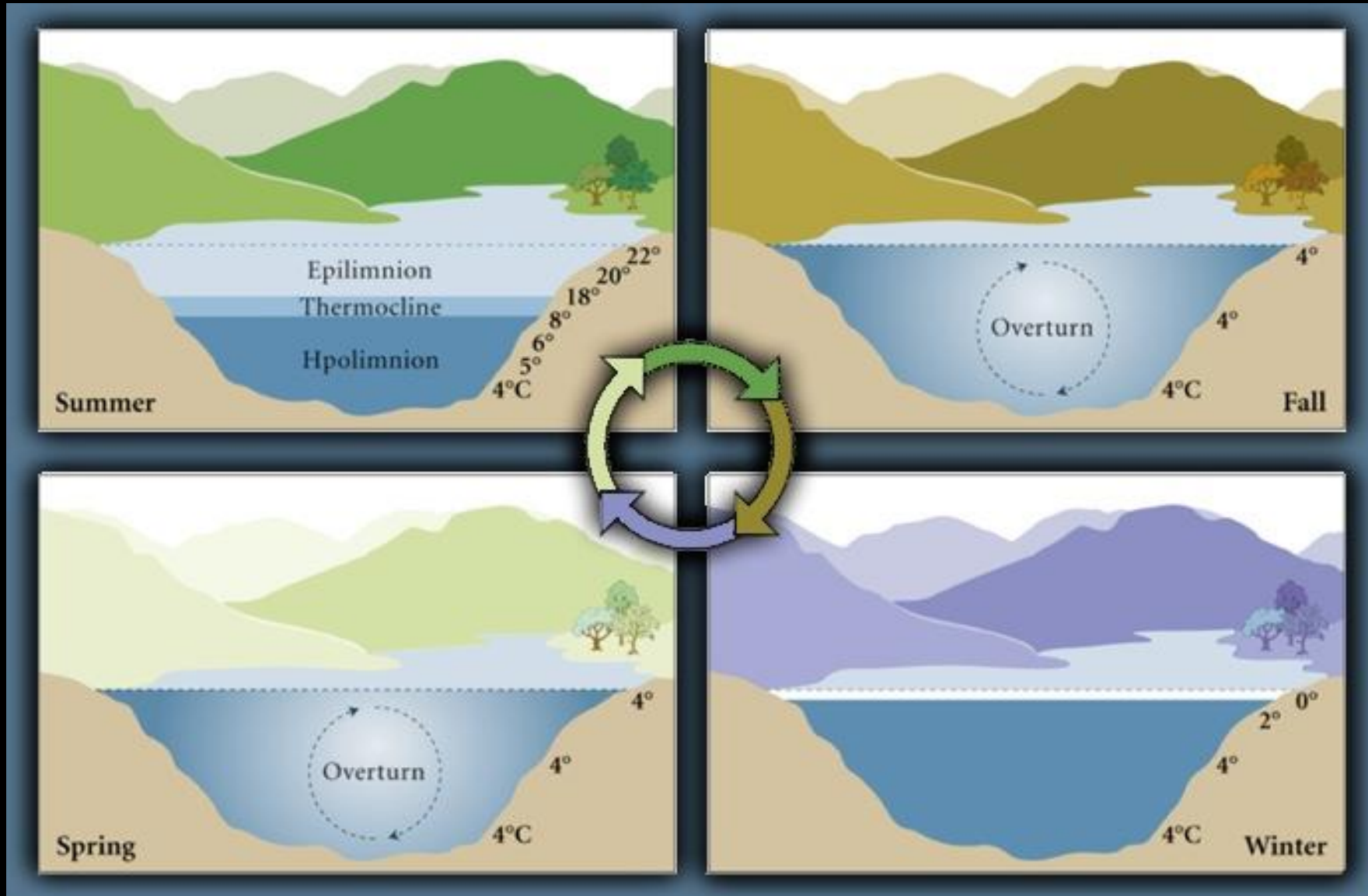


SOLE SOURCE AQUIFER LENSES

- 7 Lenses
- 1 Aquifer
- Drinking water for all Cape Towns
- Designated by EPA in 1982 (SDWA)



SEASONAL TURNOVER

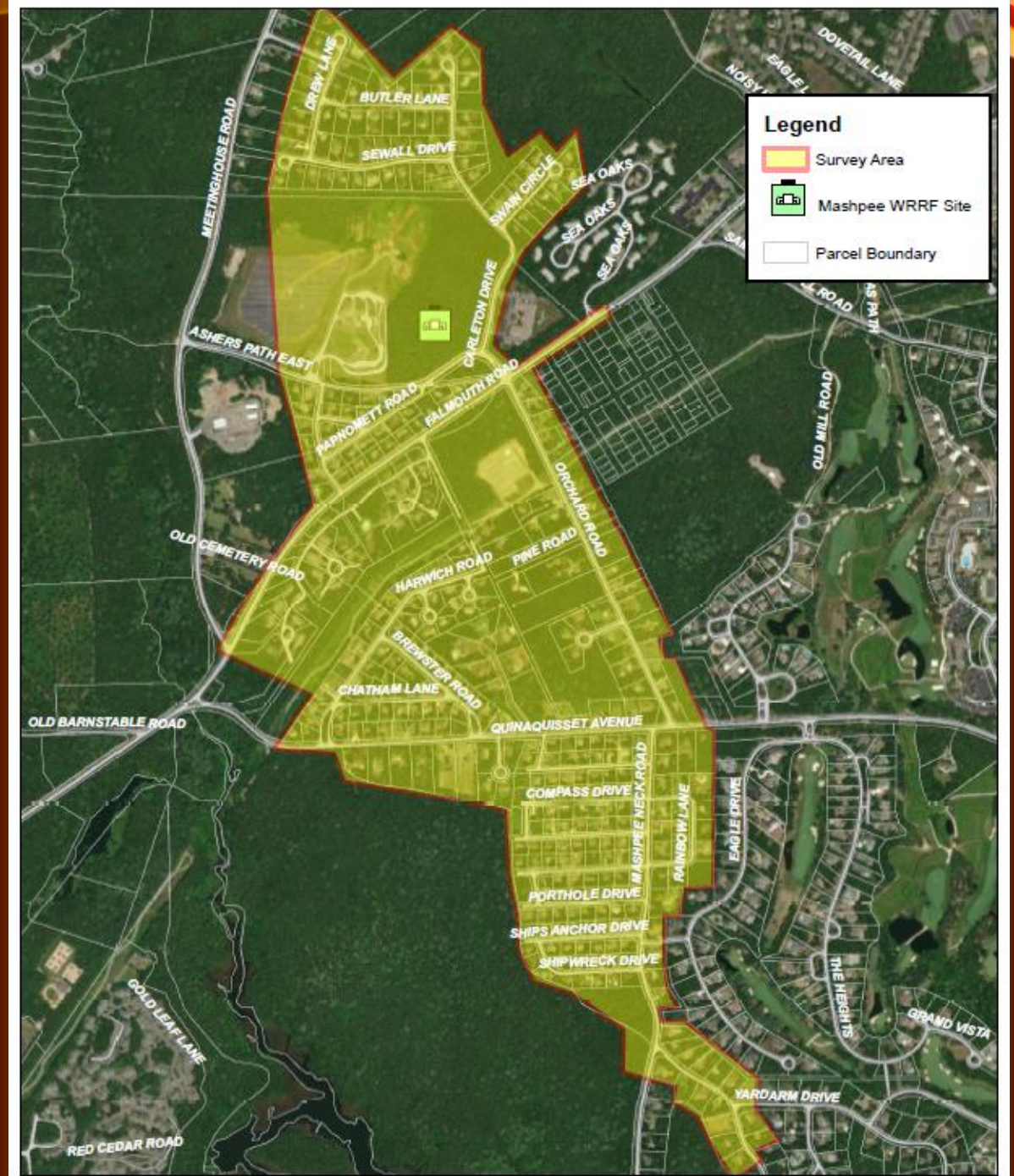


WHERE ARE WE?

- 3 Contracts:
 - Contract 1: WRRF (Plant) located at transfer Station
 - Contract 2: Collection System north of Rt. 28 (Falmouth Rd.)
 - Contract 3: Collection System south of Rt. 28 (Falmouth Rd.)
- Advertising & Pre-Bid Meetings – Completed
- Last bid due: August 9th
- Contract execution: mid-late September
- Construction: This Fall
- Completion: 2024
- Next steps: Prepare for Watershed Permit *or not*
- Public Information

COLLECTION SYSTEM

LIFT STATIONS:
FALMOUTH RD
BREWSTER RD
MASHPEE NECK RD



COMING SOON

- Developing Public Information
 - Parcel Maps – show progress
 - Photos
 - Updated Status Reports
 - Contact information
 - School bus route info
- Homeowner Information:
 - Service connection
 - Septic System abandon (BOH)
 - LUI's
 - Loan programs



QUESTIONS?

