

Martha's Vineyard Coastal Ponds - Status Report - 2017 DRAFT

| System | Pond/ Watershed | | | Land Use | | | total houses | Water Quality | | | Nitrogen Load Limits | | | | Mass Estuaries Project | | | | Remediation efforts | |
|----------------------|-------------------|------------------------|-----------------------------------|---------------------------------|--------------------------------|----------------------------|--------------|--|------------------------------------|-----------------------------|--------------------------------|-----------|--|----------|------------------------|---------------|--------------|----------------|-----------------------|---|
| | Pond Area (acres) | Watershed Area (acres) | Towns contributing to Watershed | Current Houses (at time of MEP) | Projected Houses (at buildout) | Present Eelgrass Condition | | Other Conditions/ Symptoms | Overall Rating | Nitrogen Load (kilos/year) | | | Load Reduction Required Current (as of MEP completion) | Status * | Year MEP completed | Key Data | | | | |
| | | | | | | | | | | Limit | Current (as of MEP completion) | Projected | | | | TMDL (kg/day) | TMDL (kg/yr) | TMDL (lbs/day) | | TMDL (lbs/yr) |
| Cape Poge | 1560 | 816 | Edgartown | 45 | 54 | 99 | Fair | Eelgrass coverage fluctuating. | Good | 45,500 | 11,200 | 12,600 | 0% | | | | | | shellfish aquaculture | |
| Chilmark Pond | 241 | 3137 | Chilmark | 452 | 228 | 680 | None | Poor tidal exchange. Over its nitrogen limit. No historical eelgrass presence, goal is to restore infaunal habitat | Impaired | 5,653 | 6,241 | 6,389 | Chilmark East requires 22% | | Apr-15 | 15.50 | 5657.50 | 34.14 | 12461.45 | |
| Edgartown Great Pond | 890 | 4505 | Edgartown West Tisbury | 910 | 1059 | 1969 | Variable | Eelgrass coverage fluctuates. Poor tidal exchange. Oyster disease. Over its nitrogen limit | Impaired | 11,053 | 7,686 | 17,763 | 18% | | Dec-08 | 46.06 | 16812.63 | 101.46 | 37032.22 | upgraded sewage treatment plant, some residences in watershed connected to sewer shellfish aquaculture regularly scheduled inlet openings |
| Farm Pond | 42 | 402 | Oak Bluffs | 213 | 37 | 250 | Fair | Eelgrass declining. Poor tidal exchange. Over its nitrogen limit | Impaired | 1,604 | 2,179 | 2,610 | 26% | | Nov-10 | 4.13 | 1508.55 | 9.10 | 3322.79 | plans underway to replace culvert to improve flushing |
| James Pond | 40 | 400 | West Tisbury | 63 | 61 | 124 | None | Periodic blue-green algae. Excess algae. Poor tidal exchange. Over its nitrogen limit | Impaired | 200 | 600 | 1,050 | 67% | | | | | | | |
| Katama Bay | 1700 | 4500 | Edgartown | 1610 | 657 | 2267 | Patchy | New breach, better flushing. Large mooring fields. | Compromised | 54,700 | 23,200 | 30,800 | 0% | | | | | | | shellfish aquaculture |
| Lagoon Pond | 573 | 3889 | Oak Bluffs Tisbury West Tisbury | 2089 | 1011 | 3100 | Poor | Deep water hypoxia. Southern end is eutrophic. Over its nitrogen limit | Impaired | 11,177 | 17,081 | 24,062 | 35% | | Jun-10 | 74.07 | 27034.09 | 163.14 | 59546.45 | shellfish aquaculture goose egg adding |
| Menemsha Pond | 670 | 1840 | Aquinnah Chilmark | 392 | 165 | 557 | Good | Eelgrass cover decreases in Stonewall. | Good | 31,600 | 12,950 | 16,860 | 0% | | March-17? | | | | | |
| Oak Bluffs Harbor | 36.3 | 382 | Oak Bluffs | 1069 | 165 | 1234 | None | Heavy recreational boat use. Stormwater discharges. Sunset Lake over its nitrogen limit | Impaired (Sunset Lake) | 6,026 | 4,834 | 5,926 | 25% | | May-13 | 22.63 | 8259.59 | 49.84 | 18192.92 | sewered downtown channel dredging |
| Oyster Pond | 200 | 2800 | Edgartown West Tisbury | 137 | 209 | 346 | None | Poor tidal exchange. Oyster disease. Over its nitrogen limit | Compromised | 1,800 | 3,600 | 5,200 | 50% | | | | | | | |
| Pocha Pond | 115 | 900 | Edgartown | 139 | 68 | 207 | None | Highly organic bottom sediment. | Compromised | 5,680 | 2,500 | 3,300 | 0% | | | | | | | shellfish aquaculture |
| Sengekontacket Pond | 716 | 4440 | Edgartown Oak Bluffs West Tisbury | 1628 | 554 | 2182 | Poor | Excess large drift algae. Eelgrass not re-colonizing. At nitrogen limit. | Impaired (Major's Cove and Trapps) | 11,051 | 13,713 | 18,306 | 19.41% overall | | Jan-11 | 34.56 | 12612.58 | 76.11 | 27781.00 | shellfish aquaculture |
| Squibnocket Pond | 600 | 1229 | Aquinnah Chilmark | 85 | 211 | 296 | None | Poor tidal exchange. Over its nitrogen limit | Compromised | 3,400 | 3,920 | 4,400 | 13% | | March-17? | | | | | |
| Tashmoo Pond | 269 | 2658 | Oak Bluffs Tisbury West Tisbury | 963 | 494 | 1457 | Poor | Southern basin is eutrophic. Large mooring fields. Under nitrogen limit. | Impaired | 6,244 | 9,163 | 13,203 | 32% | | Feb-15 | 35.55 | 12975.75 | 78.30 | 28580.95 | regular inlet dredging proposed sewer expansion BOH regulations requiring I/A systems in new development, upgrades |
| Tisbury Great Pond | 845 | 11102 | Chilmark West Tisbury | 1101 | 689 | 1790 | None | Poor tidal exchange. Oyster disease. Over its nitrogen limit | Impaired | 13,578 | 16,783 | 19,325 | 19% | | May-13 | 62.78 | 22916.16 | 138.29 | 50476.12 | shellfish aquaculture regular pond openings |

current houses- number of houses in the watershed presently, determined from aerial photograph interpretation,Mass GIS included all structures over 400 sq ft, MVC data only included buildings assumed to be primary structures.

projected houses at buildout- estimated based on parcel's current use code, conservation status, pesence of wetlands, lot size relative to min. zoning, and presence of buildings

eel grass- indicator species, trends in distribution to assess habitat stability related to water quality

overall rating- Index measures the nutrient-related health of the pond it is the sum of five health indicators: nitrogen (organic and inorganic), dissolved oxygen, algal pigments, and water clarity

nitrogen load limit- nitrogen level at which pond can maintain eelgrass or healthy benthic habitat. Taken from MEP if available, estimated by MVC using Buzzard's Bay index if MEP not available

nitrogen current- the present nitrogen load taken from MEP if available, estimated by MVC using Buzzard's Bay index if MEP not available

Nitrogen projected- nitrogen load projected to be added by additional buildout

load reduction- amount of nitrogen needed to be reduced to return pond to healthy state and meet water quality standards

TMDL- (Total Maximum Daily Load) the maximum amount of a pollutant that a body of water can receive while still meeting water quality standards

- *status key
- 1 preliminary data collected
 - 2 report in progress
 - 3 draft report
 - 4 final report completed

MEP completed