## Orleans Ponds Profile

### A RESOURCE OF THE CAPE COD FRESHWATER INITIATIVE



Water quality is critical to the vitality of the region's pond ecosystems and coastal embayments. Yet pollutants found in stormwater runoff, and in groundwater by which ponds are recharged, threaten the region's freshwater quality. Understanding the broad issues that impact Cape Cod's freshwater ponds, characteristics of the region's ponds, and actions at the local level all help set a baseline for understanding and action.

# **Orleans** TOWN AREA 9,248 acres POND AREA 222 acres of total town area is comprised of or total town area is defined freshwater ponds and lakes

### **Top 5 Largest Ponds**

POND	AREA
1. Pilgrim Lake	43.7 acres
2. Crystal Lake	39.3 acres
3. Bakers Pond	31.1 acres
4. Cedar Pond	16.1 acres
5. Shoal Pond	11.2 acres

## **Top 5 Deepest Ponds**

POND	DEPTH
1. Bakers Pond	54 ft.
2. Crystal Lake	44 ft.
3. Pilgrim Lake	28 ft.
4. Bolands Pond	21 ft.
5. Twinings Pond	14 ft.



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**Ponds** 

Fish Stocked

State Listed

**Great Ponds** 

10+ Acre

Ponds Adjacent to

Impervious Surfaces

in Pond 300ft Buffer

Cranberry Bogs

Named **Ponds** 

Average Pond Size

Average Pond Depth

Ponds that Cross **Town Boundaries**  Ponds with **Public Access** 

Ponds with Coastal Plain Pondshores

Ponds with Rare Species Habitat

## **Pond Monitoring**

Of the town's 49 ponds, 10 have three consecutive years of recent monitoring data and only 41% of all the ponds have available monitoring data. The data record for this monitoring spans 18 years with an average of 1 sampling event at each monitored pond per year.

18 🖟 Ponds Monitored

10 C/

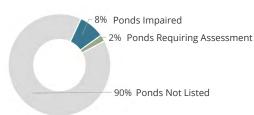
Ponds with 3 Consecutive Years of Recent Data (2016-2021)

## Water Quality Impairments

A lack of consistent and available monitoring data for all ponds means that we may be underestimating threats to waterbody health.

Harmful Algal Bloom Advisories Since 2017 (DPH Reported)

Ponds listed on MassDEP's Draft 2022 Integrated List of Waters







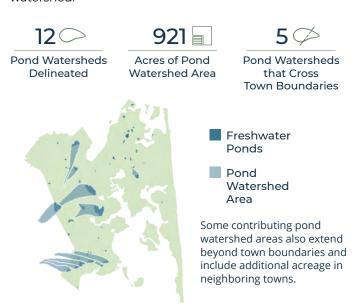
Freshwater Bathing Beaches with Sampling Failures for Fecal Coliform in 2022

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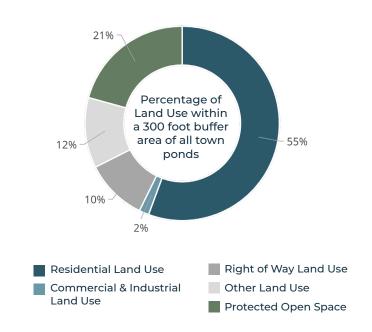
#### **Pond Watersheds**

The land area that contributes to freshwater ponds and lakes is referred to as a pond watershed. Relatively few pond watersheds have been delineated across the Cape. Land area within pond watersheds is much larger than the water bodies themselves. In Orleans, 10% of the town's total land area is within a delineated pond watershed.



#### Land Use in Pond Buffer Area

Understanding the way that land is used around our freshwater ponds contributes to a better understanding of potential pond impacts, stressors, and viable strategies to protect or restore pond health. **767** acres (or **8%**) of the town's total land area is within 300 feet of a freshwater pond.



### **Documented Town Reports and Actions**

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Town Specific
Freshwater Reports

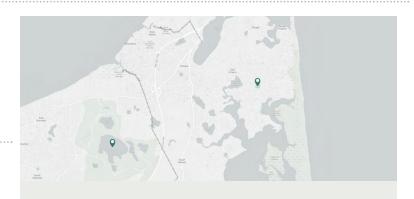
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Pond Specific Freshwater Reports

## **Local Pond Organizations**

Independent groups, organizing around a single or multiple ponds, voluntarily conduct educational and advocacy efforts and collect water quality monitoring data, which is not always available or sufficient for regional analysis.

Friends of Baker's Pond Friends of Crystal Lake Orleans Pond Coalition



## **Pond Strategies Implemented**

Updates and additional projects will be added as information becomes available. Review project details at: <a href="mailto:cccom.link/pond-restoration-projects">cccom.link/pond-restoration-projects</a>

- Uncle Harvey's Pond, Alum Treatment
- Sarah's Pond, Oxygenation
- **♀** Town Wide, Education & Outreach
- Pleasant Bay Watershed, Watershed Permit