



2023 Coastal Beach Water Quality Monitoring Efforts in Casco Bay

Sarah Gensel

Program Specialist

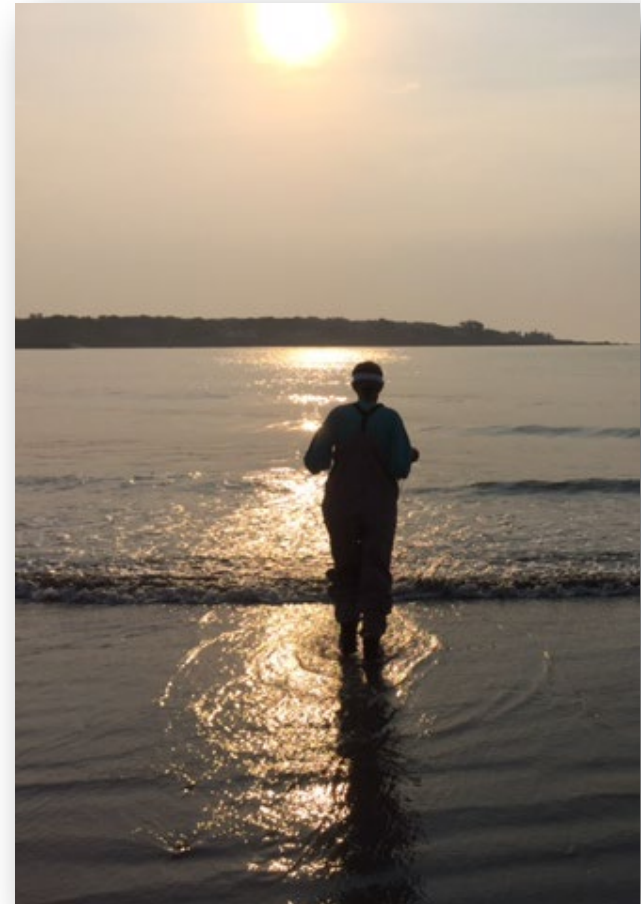
Maine Healthy Beaches Program

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

Protecting Maine's Air, Land and Water

Coastal Water Quality Monitoring

- **Area of focus:** Coastal, saltwater beaches; intersection of freshwater and marine environments
- **Participants:** municipalities, state parks, volunteers
- **Partners:** state and federal agencies, universities, conservation districts, consultants, conservation commissions, etc.



MHB Purpose

Implement a coastal, marine beach monitoring and public notification program.

Monitoring
Assessment
Public Notification



MHB Program Staff

Vacant
MHB Program
Coordinator

Sarah Gensel
MHB Program
Specialist



Robbie Denegre
Maine Conservation Corps
Environmental Steward



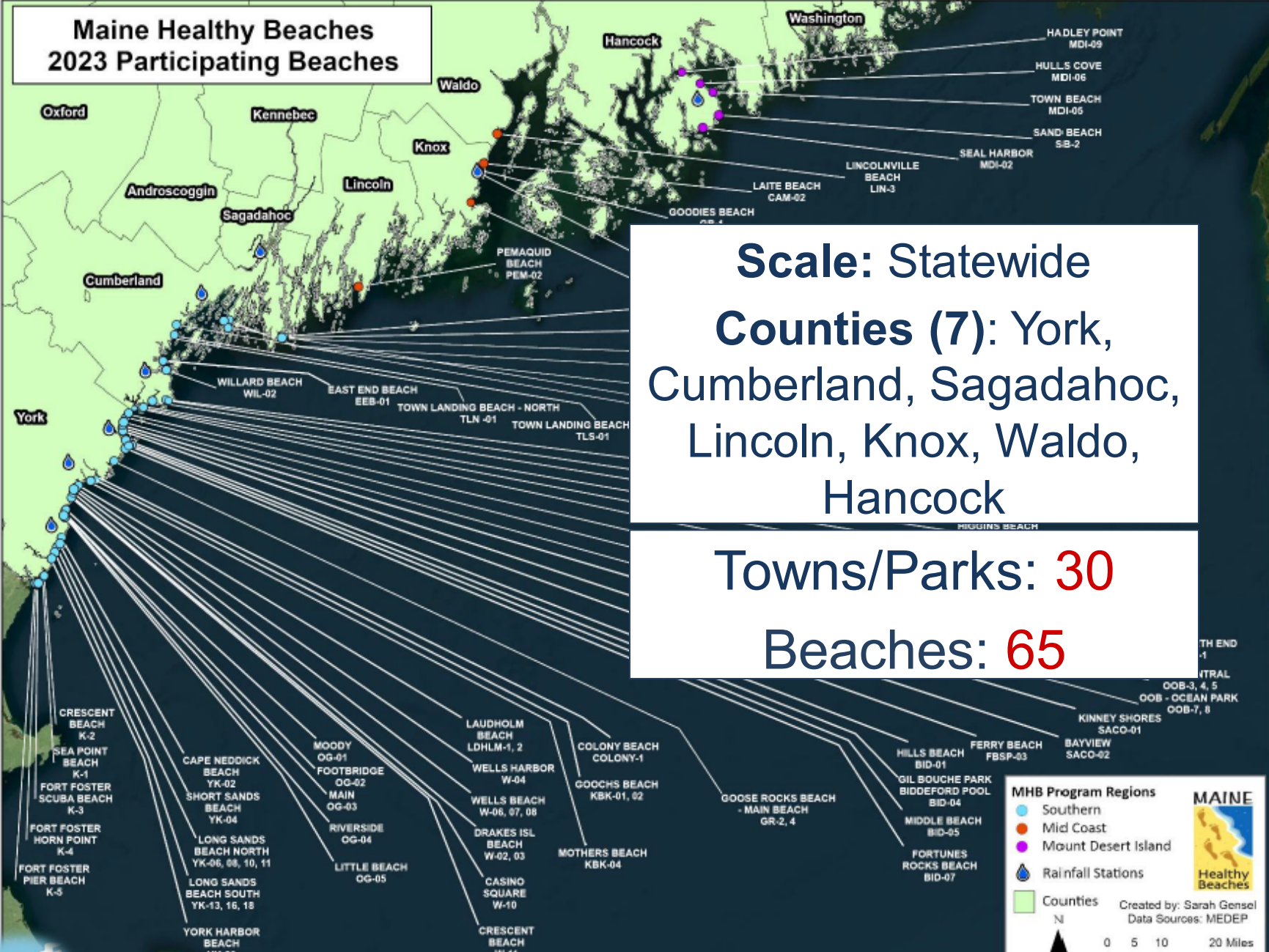
Meagan Sims
WQS Coordinator
& Unit Leader



Monitoring



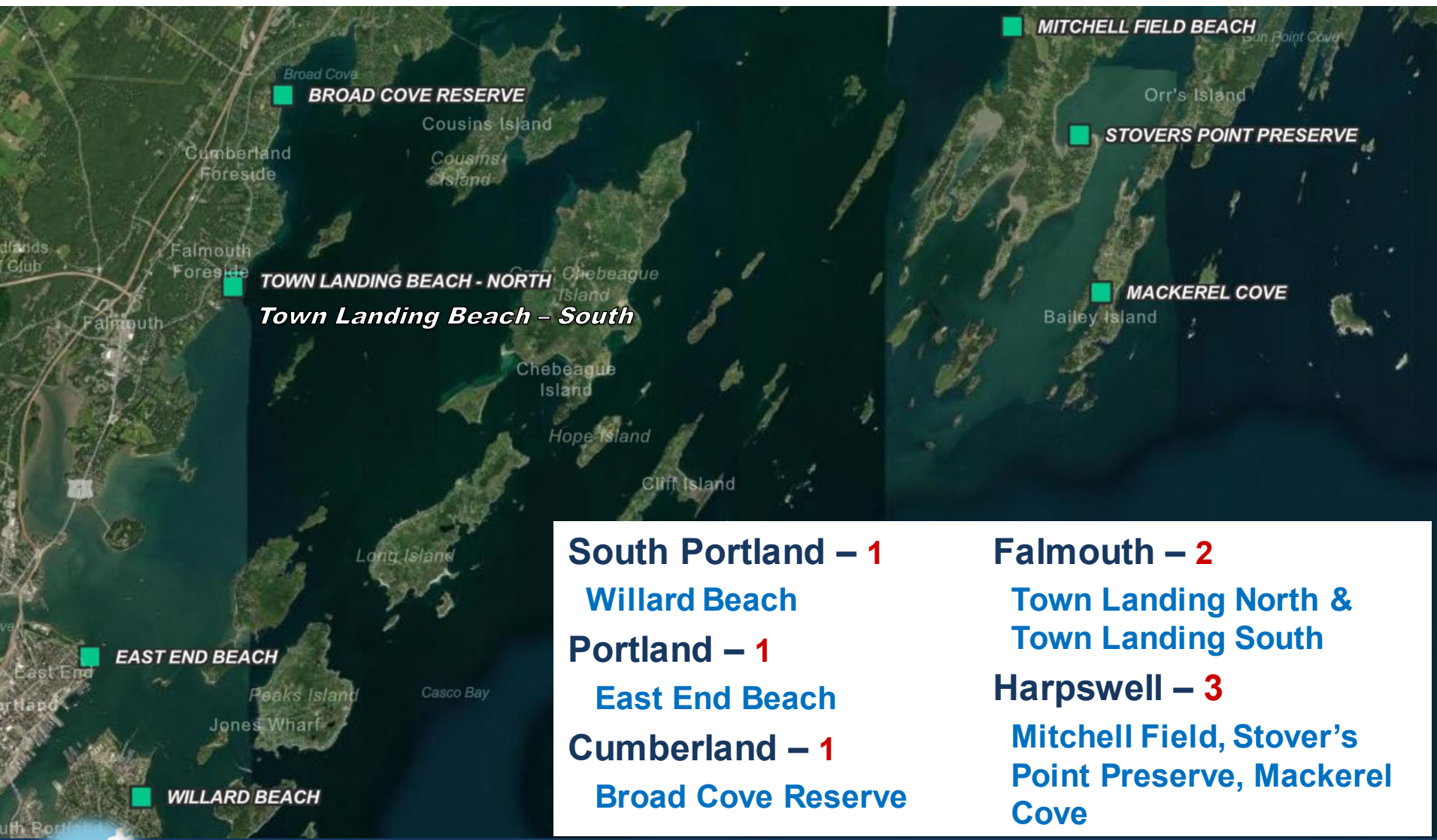
Maine Healthy Beaches 2023 Participating Beaches



Scale: Statewide
Counties (7): York, Cumberland, Sagadahoc, Lincoln, Knox, Waldo, Hancock

Towns/Parks: 30
Beaches: 65

Casco Bay



- | | |
|---------------------------------------------|--------------------------------------------------------------------------------------|
| South Portland – 1
Willard Beach | Falmouth – 2
Town Landing North &
Town Landing South |
| Portland – 1
East End Beach | Harpswell – 3
Mitchell Field, Stover's
Point Preserve, Mackerel
Cove |
| Cumberland – 1
Broad Cove Reserve | |

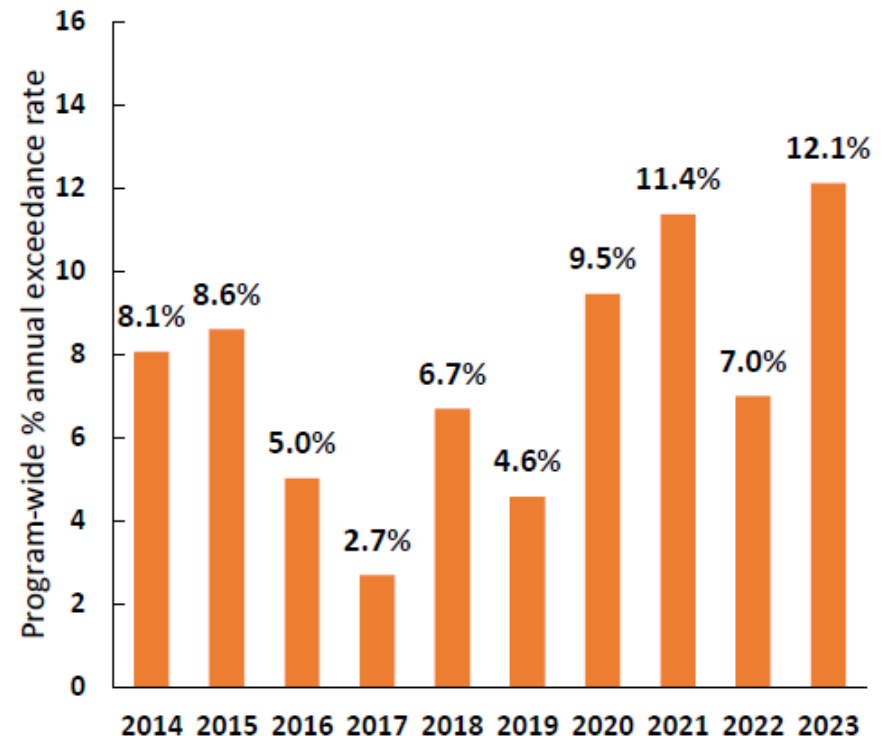
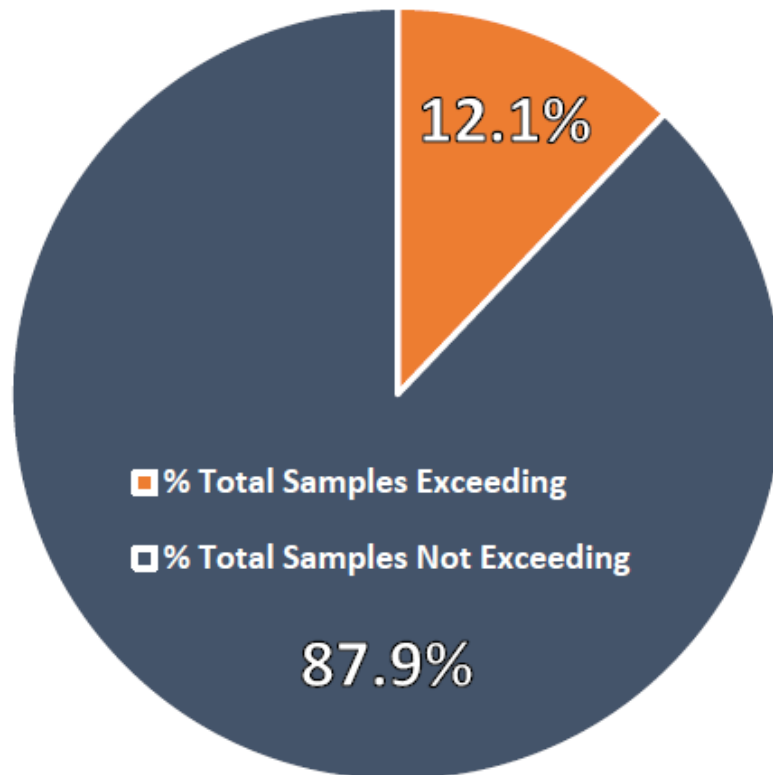


Assessment



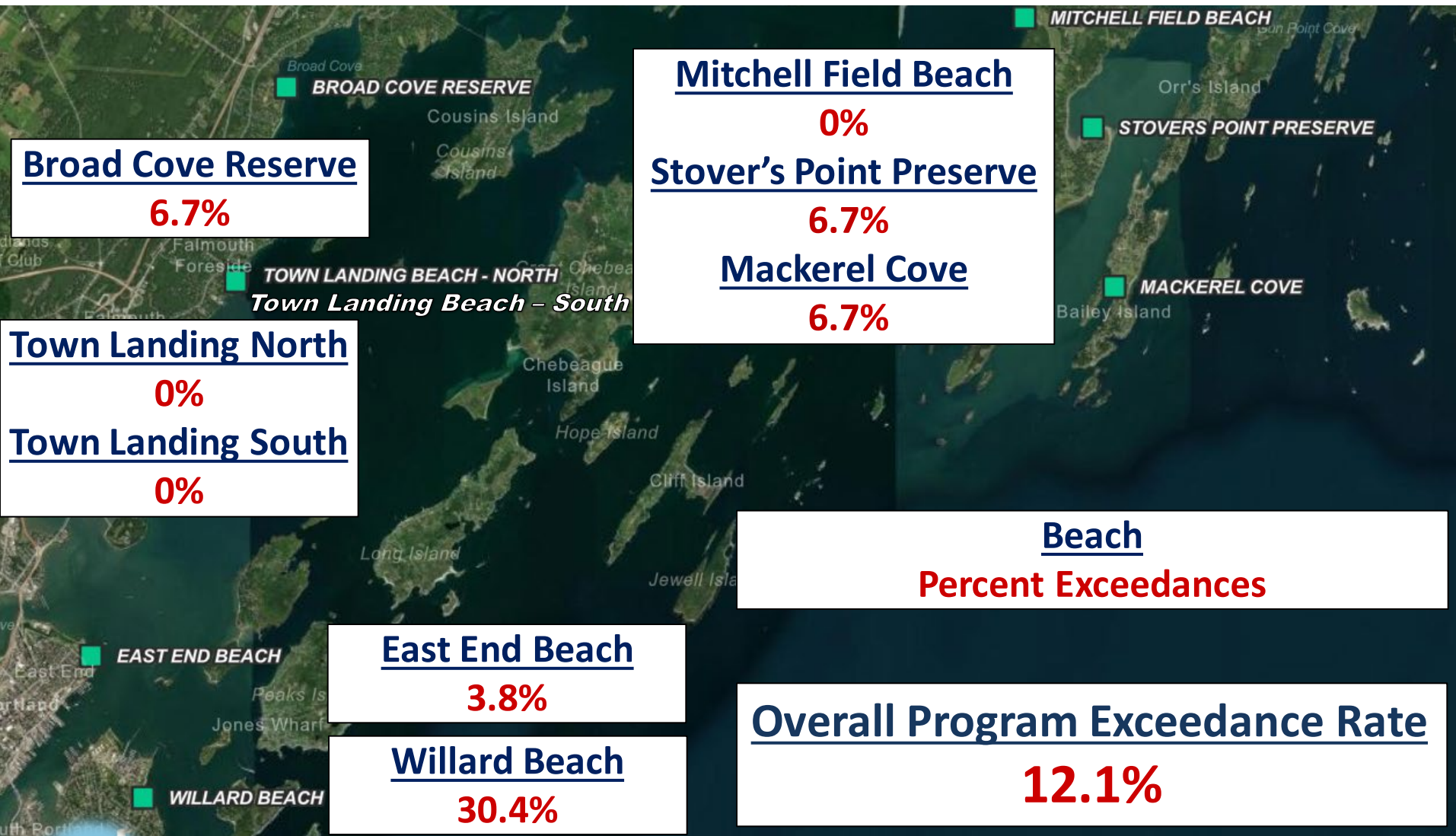
Assessment – Program Wide

Maine's Single Sample Safety Threshold
for Enterococci = **104 MPN/100ML**



Figures 2-3. The 2023 total % annual exceedance rate of Maine's BAV (104 MPN/100mL) and MHB's program-wide annual exceedance rate for the past ten monitoring seasons (2014-2023).

Assessment – Casco Bay

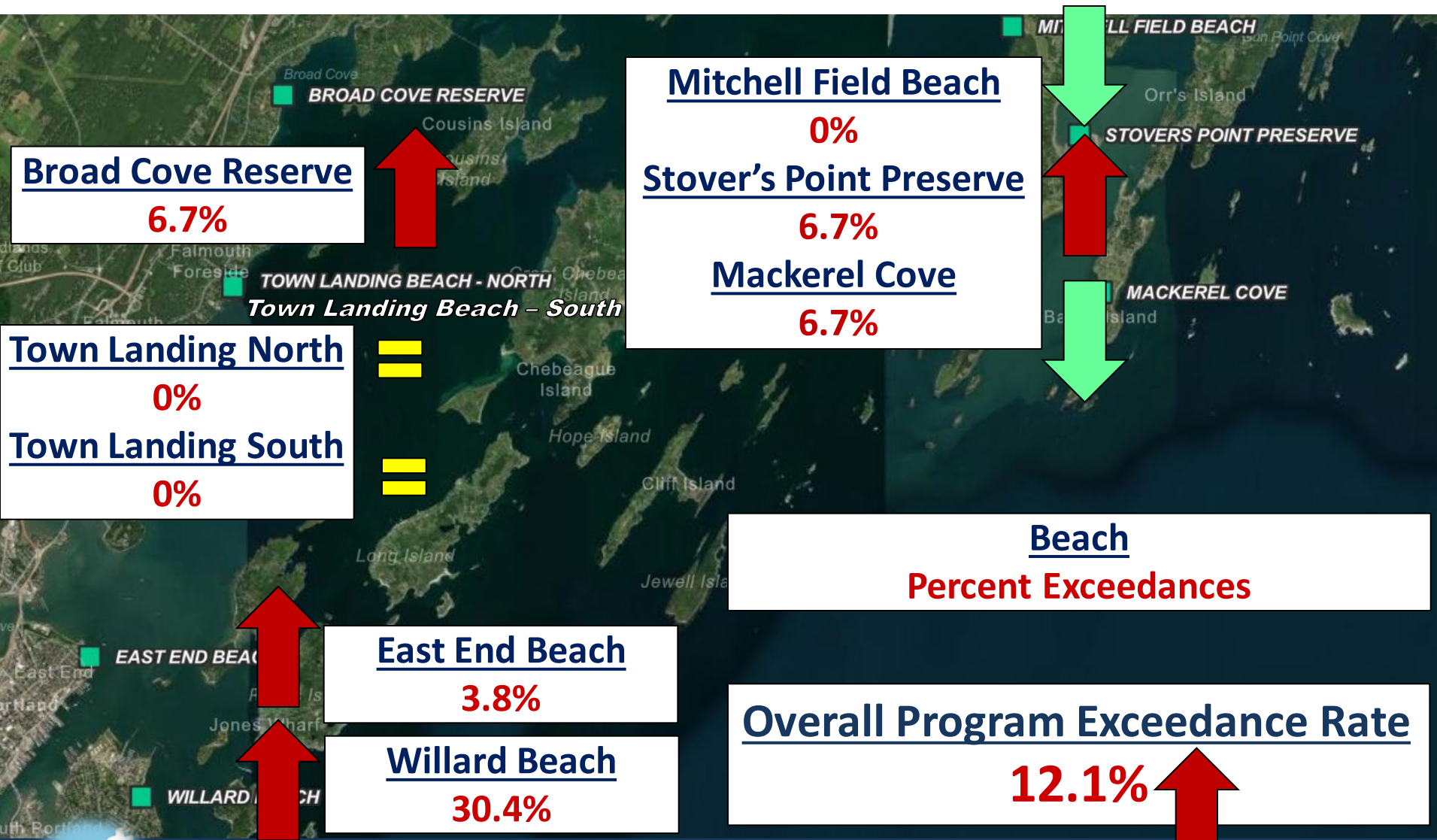


Beach
Percent Exceedances

Overall Program Exceedance Rate
12.1%



Assessment – Casco Bay



Prioritization of Resources

Maine's Integrated Report

- Impaired beaches prioritized

Environmental Justice

- Future considerations
- Monitoring & assessment for beaches serving disadvantaged communities

Local Interest or Existing Project

- Need local support

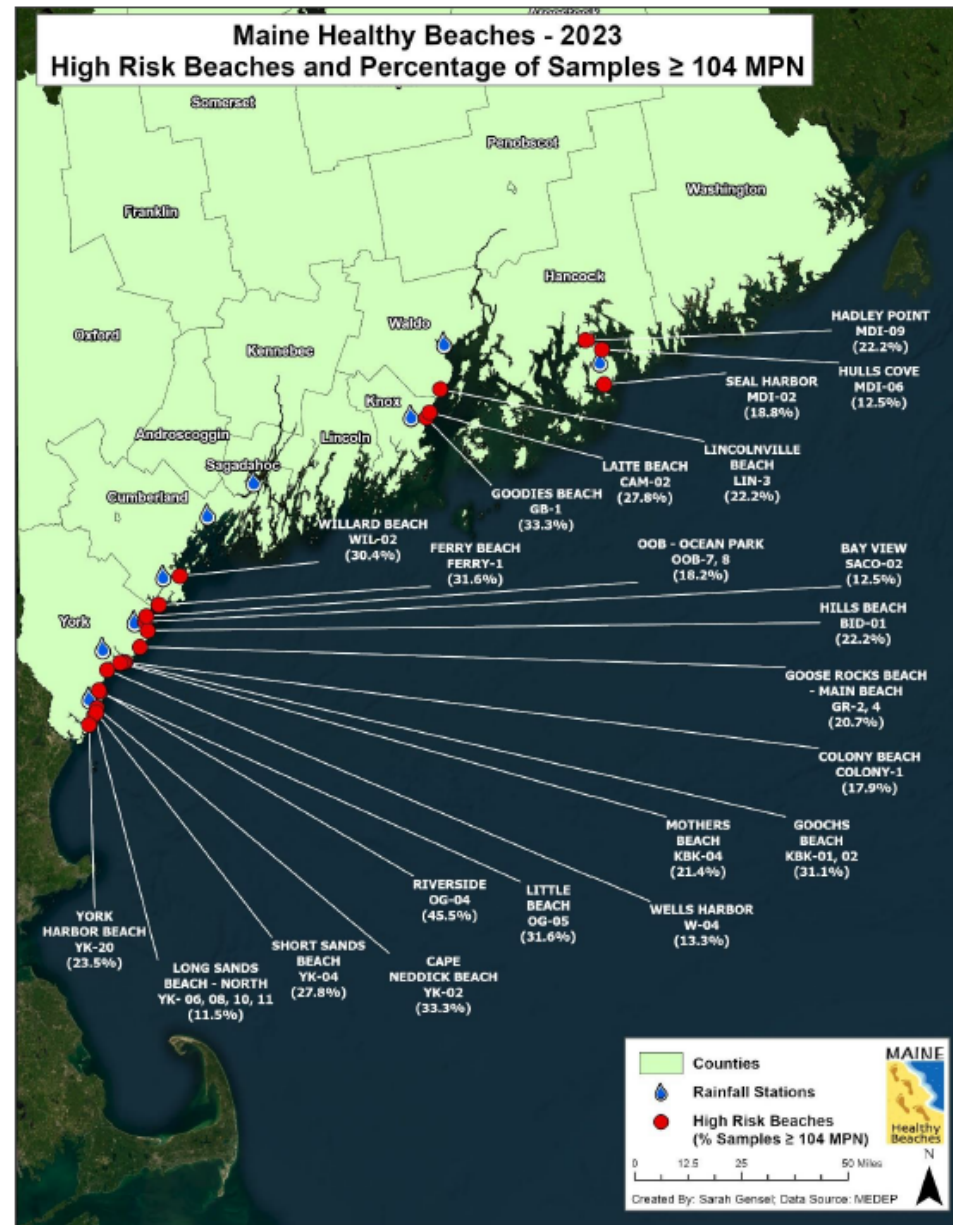


Figure 7. BMAs for which \geq 10% of samples exceeded Maine's single sample maximum BAV for enterococci in marine waters (104 MPN/100mL) in 2023.

Notification



New MHB Program Database

Home → Water Quality → Healthy Beaches

- Contacts
- Permits, Licenses, Certifications
- Laws
- Monitoring and Reporting
- Programs
- Rules
- Publications and Resources

Maine Healthy Beaches

Home | Monitoring, Notifications and Illness | Resources and Advice | **Check Beach Status**



The Maine Healthy Beaches Program (MHB) is a partnership between the Maine Department of Environmental Protection and local municipalities/state parks. The program

Contact Information:

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<https://www.maine.gov/dep/water/beaches/index.html>

New MHB Program Website



MAINE DEPARTMENT OF
Environmental Protection

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SEARCH

About ▾ Air Quality ▾ Land Resources ▾ Spills & Site Cleanup ▾ Sustainability ▾ Waste Management ▾ Water Quality ▾

Home → Water Quality → Healthy Beaches → Beach Advisory Status



Maine Healthy Beaches Portal

Water Quality Monitoring and Beach Status

Beach Monitoring Season is from Memorial Day to Labor Day

[Internal Site Sign In](#)

Sign Up for Beach
Advisory Alerts



Welcome to the Maine Healthy Beaches Portal

This is a public resource provided by the Maine Department of Environmental Protection for Maine's coastal beach monitoring results and advisories and closures. [Learn more about the MHB Program.](#)

Maine's Beach Action Value (BAV or safety threshold) for Enterococcus bacteria in marine waters is **104**




MPN/100mL. MHB recommends posting an Elevated Bacteria Advisory when results are \geq BAV.

Posting decisions are made by participating Management Entities, which are the towns, parks, or associations responsible for managing the beach.

View Individual Beach Page:

Select a Beach ▾

View

 ELEVATED BACTERIA ADVISORIES 6	 PRECAUTIONARY RAINFALL ADVISORIES 2	 CLOSURES 1	SITES WITH ELEVATED BACTERIA 10	View Beach Advisory Status Table
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www.mainehealthybeaches.org

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

www.maine.gov/dep



Maine Healthy Beaches Portal

Water Quality Monitoring and Beach Status

Beach Monitoring Season is from Memorial Day to Labor Day

[Return to Map Homepage](#)

[View Beach Status Table](#)

Water Quality Monitoring Data

Crescent Beach (Wells)

Filter

Site: Date Collected Start Date: Date Collected End Date:

[Clear Filters](#)

Maine's Beach Action Value (BAV or safety threshold) for *Enterococcus* bacteria in marine waters is **104 MPN/100mL**.

Show entries

Site Name	Date Collected	Enterococcus (MPN/100mL)
W-11	06/28/2022	10
W-11	06/21/2022	10
W-11	06/14/2022	10
W-11	06/07/2022	10
W-11	05/31/2022	10

Showing 1 to 5 of 5 entries

Previous Next

Download Data: Water quality data are available for download using the buttons below. This download will include date collected, Enterococcus, salinity, water temperature, and air temperature.

[Download Excel](#)

[Download CSV](#)

[Download XML](#)



New MHB Program Database

Maine Healthy Beaches Internal Dashboard

Welcome to the Maine DEP's Maine Healthy Beaches Internal Dashboard.

This resource provides water quality monitoring and public notification information for participating program beaches.

Enter Data View/Edit Data Data Summary Alerts Post Advisory Beach Advisory Status

- Dashboard Home
- Manage Profile
- Manage Alerts
- Manage Users
- Manage Management Entities
- Manage Beach Management Areas
- Manage Sites
- Public Webpage

Enter Data

View/Edit Data

Data Summary

Alerts

Beach Advisory Status

Post Advisory

Sign Out

InforME Test Beach

Advisories

There is no active advisory.

Most Recent Bacteria Results

- INF-01: 05/30/2024 (105 MPN/100ml) - Elevated
- INF-01: 04/11/2024 (398 MPN/100ml) - Elevated
- INF-01: 02/06/2024 (450 MPN/100ml) - Elevated
- INF-01: 01/01/2024 (10 MPN/100ml) - Not Elevated

This beach was last sampled on: 05/30/2024.

- 3 - Beach Management Areas
- 1 - Active Advisories
- 0 - Closures
- 1 - Elevated Bacteria Advisories
- 0 - Precautionary Rainfall Advisories

Laite Beach

Advisories

- There is an active Elevated Bacteria advisory beginning on 04/17/2024.

New MHB Beach Signs

Maine Healthy Beaches Program

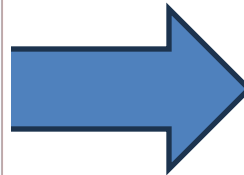


Welcome! We monitor bacteria levels routinely at this beach for your safety and health.



Water quality can change unexpectedly.
Rainfall can increase bacteria levels.
Swim, surf, and wade at your own risk.

For beach status updates, visit
MaineHealthyBeaches.org



Maine Healthy Beaches Program



Bacteria levels are routinely monitored at this beach.



**No Water Quality Advisory
At This Time**



For beach status updates and water quality data visit
mainehealthybeaches.org



No Water
Quality
Advisory



Elevated
Bacteria
Advisory



Precautionary
Rainfall
Advisory



Beach
Closed

Water quality can change unexpectedly.
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New MHB Beach Signs


Maine Healthy Beaches Program

MAINE Healthy Beaches





Bacteria levels are routinely monitored at this beach.

DEPARTMENT OF ENVIRONMENTAL PROTECTION STATE OF MAINE

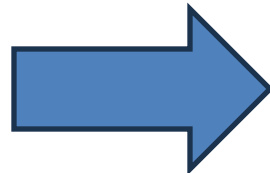

No Water Quality Advisory At This Time



For beach status updates and water quality data visit mainehealthybeaches.org

			
No Water Quality Advisory	Elevated Bacteria Advisory	Precautionary Rainfall Advisory	Beach Closed

Water quality can change unexpectedly.
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Maine Healthy Beaches Program


MAINE Healthy Beaches

Bacteria levels are routinely monitored at this beach.





DEPARTMENT OF ENVIRONMENTAL PROTECTION STATE OF MAINE

ELEVATED BACTERIA ADVISORY


Bacteria levels may be unsafe.
Water contact is not advised.



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No Water Quality Advisory	Elevated Bacteria Advisory	Precautionary Rainfall Advisory	Beach Closed

Water quality can change unexpectedly.
Rainfall can increase bacteria levels.
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New MHB Beach Signs

Maine Healthy Beaches Program



Bacteria levels are routinely monitored at this beach.



**No Water Quality Advisory
At This Time**



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mainehealthybeaches.org



No Water
Quality
Advisory



Elevated
Bacteria
Advisory

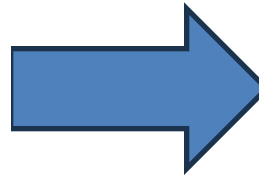


Precautionary
Rainfall
Advisory



Beach
Closed

Water quality can change unexpectedly.
Rainfall can increase bacteria levels.
Swim, surf, and wade at your own risk.



Maine Healthy Beaches Program



Bacteria levels are routinely monitored at this beach.



**PRECAUTIONARY RAINFALL
ADVISORY**

Rainfall can increase
bacteria levels.
Water contact
is not advised.



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No Water
Quality
Advisory



Elevated
Bacteria
Advisory



Precautionary
Rainfall
Advisory



Beach
Closed

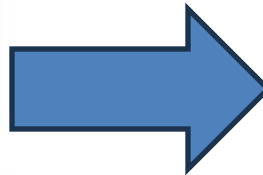

Water quality can change unexpectedly.
Rainfall can increase bacteria levels.
Swim, surf, and wade at your own risk.



New MHB Beach Signs

CONTAMINATION ADVISORY


Bacteria levels may be unsafe. Water contact is not advised.



ELEVATED BACTERIA ADVISORY

Bacteria levels may be unsafe. Water contact is not advised.

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RAINFALL ADVISORY


Rainfall can increase bacteria levels. Water contact is not advised.



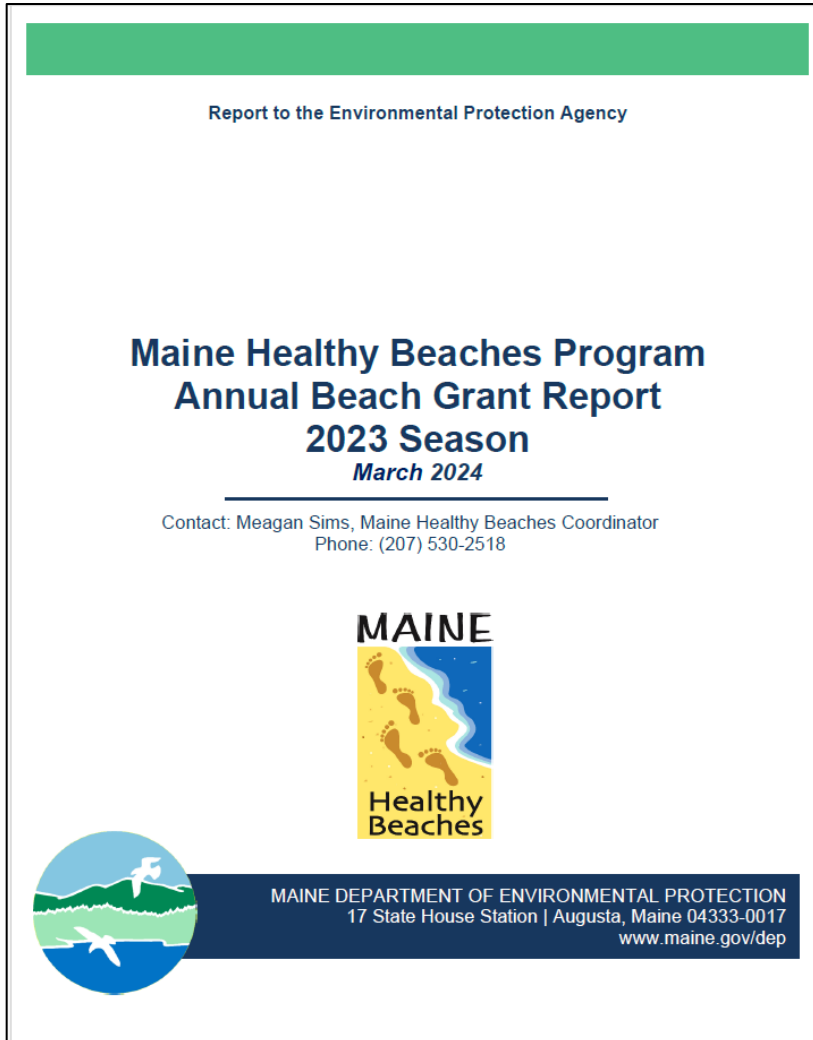
PRECAUTIONARY RAINFALL ADVISORY

Rainfall can increase bacteria levels. Water contact is not advised.

For beach status updates and water quality data visit mainehealthybeaches.org



2023 Final Report to EPA



www.mainehealthybeaches.org

Maine Healthy Beaches



Program Documents

- [EPA Grant Report](#)
- [Risk Assessment Matrix](#)
- [Program Brochure](#)
- [Boating Brochure](#)
- [MHB Program Advisory Fact Sheet](#)
- [MHB Program Quick Facts](#)
- [MHB Poster](#)
- [Think Healthy Swim Healthy Act Healthy Poster](#)



Contact:

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[*www.maine.gov/dep*](http://www.maine.gov/dep)



Integrated Report

Coastal Designated Beaches

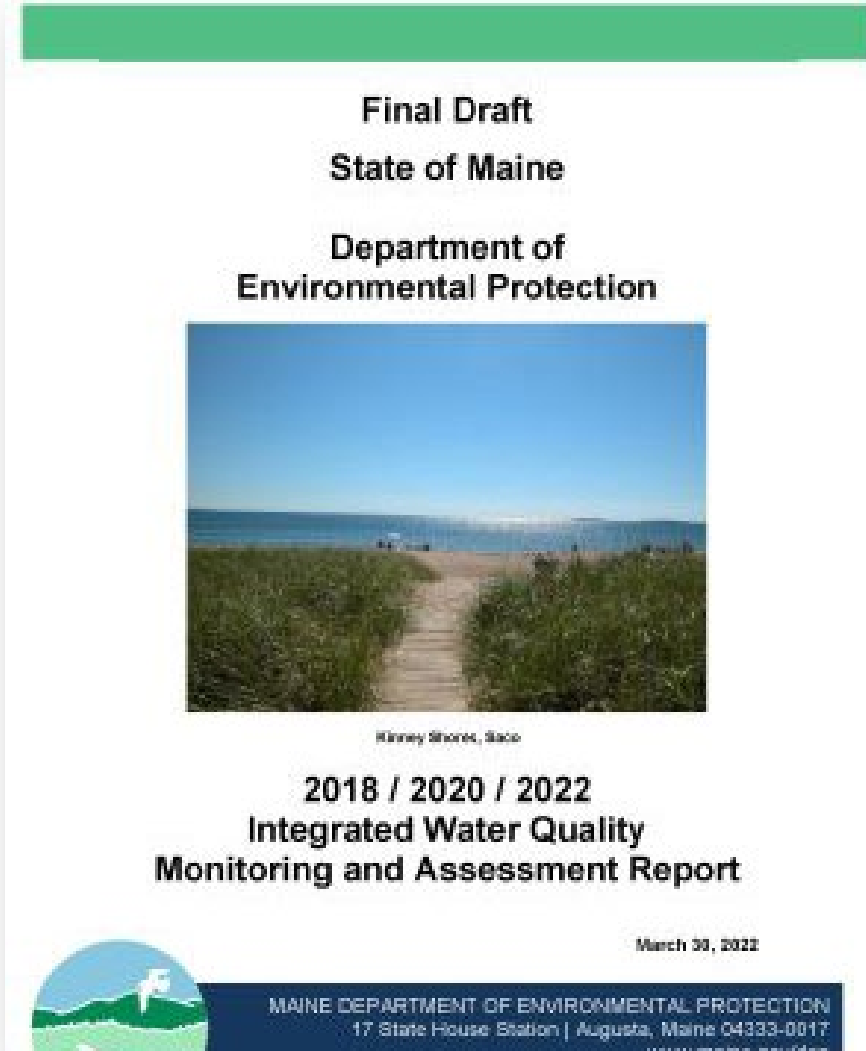
- 68 beaches assessed (2018-2022)
- % of monitoring season a beach is under recommended contamination notification

Categories Assigned

Category 2 – No threatened use

Category 3 – Some uses may not be attained. Insufficient data.

Category 5 – Impaired or threatened for 1 or more designated use.



Integrated Report

Coastal Designated Beaches

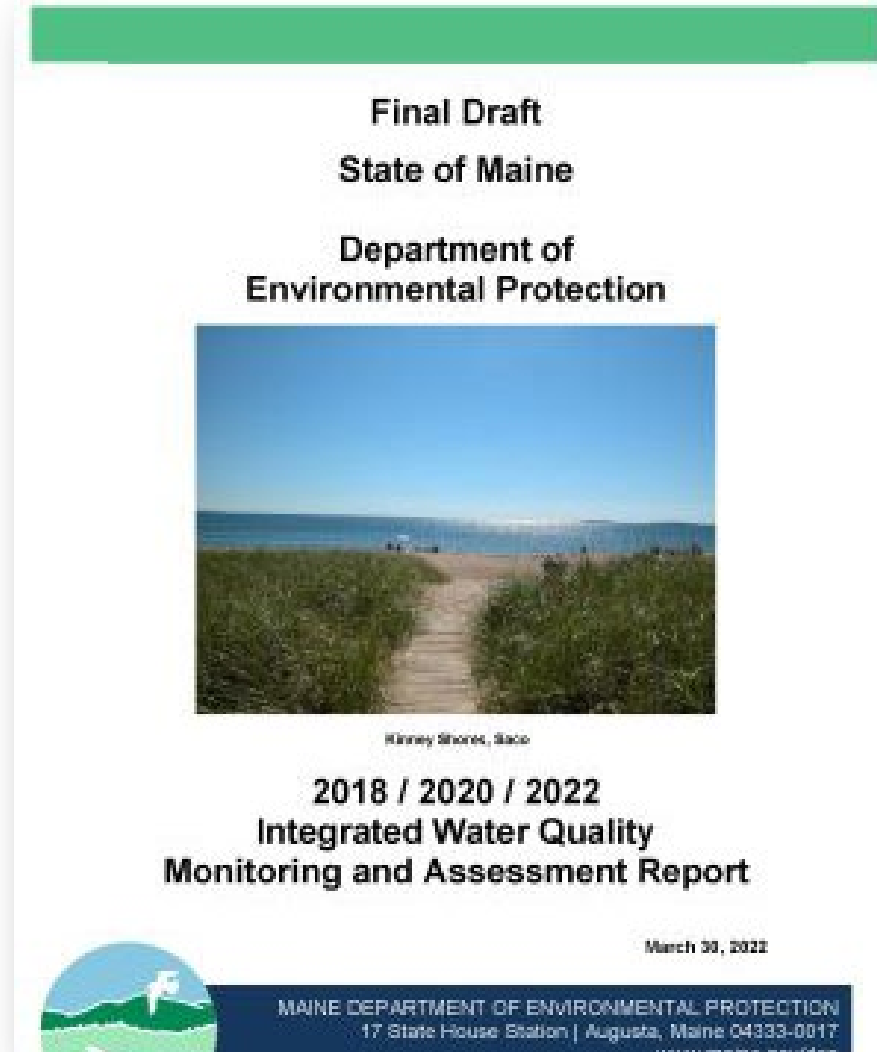
- 65 beaches assessed (2018-2022)
- % of monitoring season a beach is under recommended notification

Categories Assigned

Category 2 – 59 beaches

Category 3 – 5 beaches

Category 5 – 4 beaches



Integrated Report

Category 5: 4 Beaches

- **Willard Beach** (South Portland)
- **Goose Rocks Beach – Little River** (Kennebunkport)
- **Goose Rocks Beach – Batson River** (Kennebunkport)
- **Riverside Beach** (Ogunquit)

Category 3: 5 Beaches

- **Mackerel Cove** (Harpswell)
- **Goochs Beach** (Kennebunk)
- **Little Beach** (Ogunquit)
- **East End Beach** (Portland)
- **Lincolnville Beach** (Lincolnville)

<https://www.maine.gov/dep/water/monitoring/305b/>

