BEACH Act Grant

Monitoring & Notifications Report

2026



Monroe County Department of Public Health

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Background

On October 10, 2000 the Beaches Environmental Assessment and Costal Health Act of 2000 (BEACH Act) was signed into law.

The BEACH Act amended the Clean Water Act (CWA) in part by requiring the United States Environmental Protection Agency (USEPA) to complete studies to provide additional information for use in developing (1) an assessment of potential human health risks resulting from exposure to pathogens in costal recreation waters, (2) appropriate and effective indicators for improving detection of pathogens, (3) accurate and cost effective methods (including predictive models) for detecting the presence of pathogens, and (4) guidance for state application of water quality standards. The BEACH Act further required each State having coastal recreation waters to adopt water quality standards for pathogens and pathogen indicators.

Under authority of the BEACH Act, the USEPA awards grants to eligible states, territories, and tribes to aid in the development and implementation of programs to monitor coastal recreation waters and notify the public of the potential for exposure to disease causing pathogens or pathogen indicators.

Beaches included under the BEACH Act are classified as Tier 1, Tier 2, or Tier 3 to rank the potential risk of disease to swimmers (high risk, medium risk, or low risk respectively). Characteristics used to classify a beach under a specific Tier include factors such as historic rainfall, potential for pollution, bather usage, previous water quality monitoring data, and public comment/perception. The Tier identified for a beach then corresponds to standards identifying when and where water sampling for pathogen indicators should be conducted.

Monroe County, NY and the BEACH Act

There are two beaches located in Monroe County, NY which are included under the BEACH Act: Ontario Beach and Durand Eastman Beach.

Ontario Beach: Ontario Beach (EPA ID# NY501691) is located in the City of Rochester on Beach Avenue at the north end of Lake Avenue (43.260418, -77.608497). The designated swimming area includes a 1,000 foot wide section of the beach. Ontario Beach is designated as a Tier 1 beach (high risk).

Durand Eastman Beach: Durand Eastman Beach (EPA ID# NY412748) is located in the City of Rochester on Lake Shore Boulevard (43.241520, -77.573290). The designated swimming area includes a 300 foot wide section of the beach. Durand Eastman Beach is also designated as a Tier 1 beach (high risk).

The Monroe County Department of Public Health (MCDPH) implements a Beach Program which fulfills monitoring and notification requirements of the BEACH Act Grant work plan for both of these beaches. Program updates for the 2026 operating season are described below.

Staff / Training

Staff responsibilities were split into two groups: (1) field monitoring, and (2) modeling/notifications. Field monitoring staff are responsible for collecting water samples at each beach as well as recording observations of beach conditions. Modeling staff evaluate field observations, run models to predict potential exceedances of water quality standards and make public notifications to inform the public whether each beach is open or closed based on model predictions.

All staff involved with the beach program were trained in accordance with the NYSDOH Quality Assurance Project Plan (QAPP). Training began roughly four weeks prior to start of the beach operating season and consisted of both a review of the QAPP as well as hands-on training of responsibilities such as sample collection, field observations, and predictive modeling.

Monitoring

Monitoring consisted of water sample collection as well as making field observations on environmental conditions.

Beginning on May 26, 2026, preseason monitoring was conducted twice a week at both Ontario Beach and Durand Eastman Beach.

Beginning on June 25, 2026 (the day before the scheduled opening of Ontario Beach), and June 21, 2026 (the day before the scheduled opening of Durand Eastman Beach) monitoring began on a daily basis at each respective beach. Monitoring was continued at this frequency until each beach closed for the season.

Sample Collection

E. Coli samples were collected from each beach every morning between 7:30 AM and 8:30 AM. Samples were collected from two pre-designated locations in the swimming area of Ontario Beach and one pre-designated location in swimming area of Durand Eastman Beach. Samples were collected in sealed sterile whirlpac plastic bags. Method of sample collection included the following steps: (1) wade out into the lake in the pre-designated area until water depth is roughly waste deep, (2) unseal the sterile whirlpac sample bag, (3) submerge the sample bag to a depth roughly knee deep while keeping a bag closed, (4) open the sample bag allowing it to fill with water while walking forward to avoid influence of disturbed sediment, (5) quickly remove the sample bag from below the surface to avoid collection of surface water, (6) completely seal the sample bag.

A turbidity sample was also collected at each beach using a 250 mL plastic bottle. Method of sample collection included the following steps: (1) wade out into the lake in the pre-designated area until water depth is roughly waste deep, (2) remove the cap from the sample bottle, (3) rinse the sample bottle with lake water, (4) completely empty the sample bottle, (5) submerge the sample bottle to a depth roughly knee deep while keeping the bottle upside down to avoid collection of surface water , (6) turn the bottle right-side-up allowing it to fill with water while walking forward to avoid influence of any disturbed

sediment, (7) quickly remove the sample bottle from the water to avoid collection of surface water, (8) put the cap back on the sample bottle.

Samples were transported in a cooler filled with ice packs to the Monroe County Department of Environmental Services Environmental Laboratory (NYSDOH ELAP# 10373) for analysis using the IDEXX Quanti-Tray system (Standard Methods 18th edition #9223).

Turbidity samples were analyzed using a HACH 2100Q portable turbidity meter.

Field Observations

Additional on-site observations were recorded daily on field data sheets. These observations included, but were not limited to, (1) secchi disk measurements, (2) wave height, (3) water/air temperatures, (4) bird counts, (5) algae accumulation, (5) wind speed/direction, (6) shoreline debris accumulation, (7) Genesee River flow direction, and (8) odor. These observations were then used in predictive modeling.

Predictive Modeling

Due to the time required for analysis, results from sampling are not available until the day after sample collection. To address this limitation, MCDPH uses two predictive models to aid in making daily open/closed decisions for each beach. These models are identified as the Monroe County Model and the NowCast / Virtual Beach Model. Both models predict whether water quality standards will be exceeded for the day based on field observations. When predictive modeling indicates water quality standards will be exceeded for the day, that beach is closed for swimming. Water samples collected at each beach then serve to either validate model predictions or can lead to model refinements over time. The Monroe County Model acts as the primary model; the NowCast/Virtual Beach Models is used as a secondary model.

Monroe County Model

The Monroe County Models for Ontario Beach and Durand Eastman Beach identify conditions which may lead to a potential health hazard, warranting closure of the beach for public swimming. Potential health hazards may include exceedance of bacteriological standards (E. Coli: 235 MPN/100mL) or poor water clarity. These models are based on the four basic conditions noted below. A more detailed outline of the models along with closure thresholds can be found in Appendix A.

(1) **Rainfall:** The amount and intensity of rainfall as measured at rain gauges located adjacent to each beach and the Genesee River in the prior 24-hours (6:00 AM to 6:00 AM). Rainfall has shown through the years to contribute to high bacteria counts in the nearshore swimming areas.

(2) **Genesee River Flow:** Volume and direction of flow in the Genesee River, which enters Lake Ontario adjacent to Ontario Beach Park. High flows from the Genesee River, combined with a clear observation of the plume heading directly towards one of the beaches, has shown to affect the bacteria count in the designated swimming areas.

(3) **Water Clarity:** As measured with a secchi disk of the water in the designated swimming areas. The NYS Sanitary Code, Subpart 6-3 *"Bathing Beaches"* states that the water shall be free of deposits and substances capable of creating a health or safety hazard. The MCDPH has historically enforced this by setting a secchi disk threshold of 0.6 meters to protect the safety of the swimmers. In addition, poor water clarity has also shown to be an indicator of bacterial presence.

(4) **Algae:** Amount of algae or other foreign organic matter along the shoreline or suspended in the swimming areas. Algae accumulation along the beach has shown to promote bacterial growth.

NowCast / Virtual Beach Model

MCDPH also utilizes a computer model for each beach using the USGS NowCast system and Virtual Beach software from the USEPA. This model is run alongside the Monroe County Model for both Ontario Beach and Durand Eastman Beach.

The current model for Ontario Beach utilizes the following parameters:

(1) **Field Data (collected by Monroe County field monitoring staff):** Wave height, secchi disk measurement, local rainfall (24-hour).

(2) **USGS NowCast system reported data:** Day of year, multiple components of wind speed and direction (measured at the Greater Rochester International Airport) and changes in lake levels.

The current model for Durand Eastman Beach utilizes the following parameters:

(1) **Field Data (collected by Monroe County field monitoring staff):** Wave height, swimming area turbidity, secchi disk measurement, local rainfall (24-hour).

(2) **USGS NowCast system reported data:** Multiple components of wind speed and direction (measured at the Greater Rochester International Airport), rainfall (measured at the Greater Rochester International Airport over a 48-hour period) and changes in lake levels.

After entering all required data and running the model, an estimated E. Coli count is returned as well as a probability of exceedance (% chance that the E. Coli limit would be exceeded). When the probability of exceedance exceeds 28% for Ontario Beach or 30% for Durand Eastman Beach, the model recommends closure of the beach. While secchi disk measurements are incorporated into model calculations, this model does not determine closure strictly due to poor water clarity.

Public Notification

Notifications of open/closed status for each beach were issued daily during the operating season. Methods of communication to the public, beach operators, and other government agencies include the following:

(1) Recorded message on the Monroe County Beach Information Hotline: 585-753-5887.
(2) Closure notifications entered on the NYSDOH Coastal Beach Water Quality Status system. These entries are viewable by the public on the NYSDOH Coastal Beach Water Quality website: https://beachadvisory.health.ny.gov/#/tab/map. A list of notifications made using this system can be found in Appendix D.
(3) Staff stationed at each beach to alert patrons when the beach is closed.
(4) Signage of beach closure.
(5) Daily emails and text messages to individuals on the MCDPH Beach Notification Distribution List. This distribution list is updated yearly at the beginning of each operating season and includes officials and key staff at County Departments of Public Health, Parks, Communications, Sheriff and Environmental Services, as well as key staff at the City of Rochester.

Season Summary & Analysis

Ontario Beach

The 2026 operating season for Ontario Beach ran from June 26th to September 7th for a total of 74 days.

The beach was open for swimming for 59% of the operating season (44 days out of the 74 day operating season) and closed for 41% of the operating season (30 days of the 74 day operating season). A complete beach open/closed summary can be found in Appendix B.

A total of 168 samples were collected from the swimming area of Ontario Beach (20 during the pre-season and 148 during the operating season) - *2 samples collected daily: 1 from the West section of the beach; 1 from the East section of the beach*. Of the 74 samples collected from each section of the beach during the operating season, 35 (47%) collected from the West section of the beach and 31 (42%) collected from the East section of the beach exceeded water quality standards for E. Coli (sample results above 235 MPN/100mL). While samples were collected from two sections of the beach, model accuracy was evaluated based on the average of the daily samples. When averaged, water quality standards for E. Coli were exceeded on 31 days (42%). Results for all sampling days can also be found in Appendix B.

The Monroe County Model for Ontario Beach accuracy rate when the beach was OPEN was 70% (correct decision made for 31 out of the 44 days that the beach was open). This means that the beach was open on 13 days in which the average of both daily E. Coli samples collected exceeded 235 MPN/100mL.

The Monroe County Model for Ontario Beach accuracy when the beach was CLOSED was 97% (correct decision made for 29 out of the 30 days the beach was closed). This means that the beach was closed on 1 day in which water quality standards were not exceeded.

The Monroe County Model for Ontario Beach had an OVERALL accuracy rate of 81% (correct model decision was made for 60 out of the 74 operating days).

NOTE that closure due to a low secchi disk measurement (less than 0.6 meters) was always considered the correct decision when evaluating model accuracy regardless of the E. Coli sample result for that day, as poor water clarity is a safety issue for emergency response. Closure due to prior consecutive days with E. Coli water quality exceedances (greater than 235 MPN/100mL) was also always considered the correct decision regardless of the E. Coli sample results for that day.

Results from the NowCast / Virtual Beach Model can be found in APPENDIX B.

When looking strictly at model accuracy in terms of predicting an exceedance of water quality standards for E. Coli, the Monroe County Model for Ontario Beach had a 66% overall accuracy rate (49 correct predictions out of the 74 day operating season). This compares to an 81% overall accuracy rate of the NowCast/Virtual Beach Model for Ontario Beach (56 correct predictions out of the 74 day operating season). NOTE that the NowCast/Virtual Beach Model failed to run on 5 of the days. The NowCast/Virtual Beach Model accuracy is based off of 69 days the model successfully ran without error.

Durand Eastman Beach

The 2026 operating season for Durand Eastman Beach ran from June 25th to September 7th for a total of 75 days.

The beach was open for swimming for 84% of the operating season (63 days out of the 75 day operating season) and closed for 16% of the operating season (12 days of the 75 day operating season). A complete beach open/closed summary can be found in Appendix C.

A total of 87 samples were collected from the swimming area of Durand Eastman Beach (12 during the pre-season and 75 during the operating season). Of the 75 samples collected during the operating season, 14 (19%) exceeded water quality standards for E. Coli (sample results above 235 MPN/100mL). Results for all sampling days can also be found in Appendix C.

The Monroe County Model for Durand Eastman Beach accuracy when the beach was OPEN was 90% (correct decision made for 57 out of the 63 days that the beach was open). This means that the beach was open on 6 days in which E. Coli samples collected exceeded 235 MPN/100mL.

The Monroe County Model for Durand Eastman Beach accuracy when the beach was CLOSED was 92% (correct decision made for 11 out of the 12 days the beach was closed). This means that the beach was closed on 1 day in which water quality standards were not exceeded.

The Monroe County Model for Durand Eastman Beach had an OVERALL accuracy rate of 91% (correct model decision was made for 68 out of the 75 operating days).

NOTE that closure due to a low secchi disk measurement (less than 0.6 meters) was always considered the correct decision when evaluating model accuracy regardless of the E. Coli sample result for that day, as poor water clarity is a safety issue for emergency response. Closure due to prior consecutive days with E. Coli water quality exceedances (greater than 235 MPN/100mL) was also always considered the correct decision regardless of the E. Coli sample results for that day.

Results from the NowCast / Virtual Beach Model can be found in APPENDIX C.

When looking strictly at model accuracy in terms of predicting an exceedance of water quality standards for E. Coli, the Monroe County Model for Durand Eastman Beach had an 87% accuracy rate (65 correct predictions out of the 75 day operating season). This compares to an 86% accuracy rate of the NowCast/Virtual Beach Model for Durand Eastman Beach (54 correct predictions out of the 75 day operating season). NOTE that the NowCast/Virtual Beach Model failed to run on 12 of the days. The NowCast/Virtual Beach Model accuracy calculation is based off of 63 days the model successfully ran without errors.

Model Review

Rainfall: Rainfall continues to be an accurate indicator used in predictive models. Local rainfall contributed to 6 closure days at Ontario Beach (5 of which were accurate), and 6 closure days at Durand Eastman Beach (5 of which were accurate).

Genesee River Flow: Flow from the Genesee River did not result in any closure days for the 2026 season. During the operating season, flow from the Genesee River ranged between 400 – 3,250 cubic feet per second daily, with an average flow rate of roughly 1,175 cubic feet per second daily for the entire beach operating season.

Secchi Disk Measurement: Water clarity, as measured with a secchi disk, proved to be a good indicator of exceeding bacteriological standards and contributed to 15 closure days at Ontario Beach (12 of which were accurate based on e. coli results) and 5 closure days at Durand Eastman Beach (4 of which were accurate based on e. coli results). Poor water clarity also remains a safety factor warranting closure of a beach.

Algae: Algae continues to be a accurate factor used in models to predict exceedances of water quality standards. High levels of algae were observed at Ontario Beach throughout the operating season. Historically, high levels of algae have not been an issue at Durand Eastman Beach. It is important to note that on many days high algae levels were observed nearshore only and cleared after wading 5-10 feet into the water. While nearshore algae impacts everyone who swims at the beach, it is not always reflected in sample results as samples are collected in further out in deeper water.

Reported Illnesses

MCDPH did not receive any reports of illness due to water quality during the 2026 beach operating season.

Quality Assurance

Information and electronic records were assessed using procedures prescribed in the QAPP. Identified errors were documented in order to prevent similar errors in the future.

Appendix A: Monroe County Predictive Model Closure Criteria

ONTARIO BEACH: 2026 OPERATING CRITERIA (rev. 6/23/2020)		
CRITERIA	**Information Needed / Source**	**ACTION**
Genesee River: Rainfall CS41 (Control Structure 41) rain gauge (Lake Ave near Tops) Station 243(zoo) rain gauge	Peak rainfall and intensity (0600-0600) Rain gauge data from daily e-mail from DES (FEV operator 753-[redacted]) Field Observation: River Flow direction into Lake	If rainfall is > 0.7" and peak rainfall intensity is > 0.4”/hr The beach is closed if the Genesee River flows west
Genesee River: Flow	Average flow (0600-0600) USGS gauge at Ford Street http://waterdata.usgs.gov/nwis/uv?04231600 (estimate 24 hour average using discharge graph)	**If flow is greater than 3500cfs and less than 5000cfs** The beach is closed when the river flows west **If flow is greater than 5000 cfs** The beach is closed until flow decreases to < 3500cfs
Local Stormwater: Rainfall Charlotte pump station gauge	24 hour rainfall (0600-0600) Rain gauge data from daily e-mail from DES – Call the Van Lare operator @ 753-[redacted] if there is a question on the data	If rainfall is > 0.7" The beach is closed for 24 hours If rainfall is greater than or equal to 1.5" The beach is closed for 48 hours
Algae or other organic debris	Field Observation: Debris volume	If algae exceeds 1500 cubic feet the beach is closed
Secchi disk reading	Field Observation: Disk reading	If reading is < 0.6 m the beach is closed

DURAND EASTMAN BEACH: 2026 OPERATING CRITERIA (rev. 6/7/19)		
CRITERIA	**Information Needed / Source**	**ACTION**
Genesee River: Rainfall CS41 (Control Structure 41) rain gauge (Lake Ave near Tops) Station 243(zoo) rain gauge	Peak rainfall and intensity (0600-0600) Rain gauge data from daily e-mail from DES (FEV operator 753-[redacted]) Field Observation: River Flow direction into Lake	If rainfall is > 0.7" and peak rainfall intensity is > 0.4”/hr The beach is closed if the Genesee River flows east
Genesee River: Flow	Average flow (0600-0600) USGS gauge at Ford Street http://waterdata.usgs.gov/nwis/uv?04231600 (estimate 24 hour average using discharge graph)	**If flow is greater than 3500cfs and less than 5000cfs** The beach is closed if the Genesee River flows east **If flow is greater than 5000 cfs** The beach is closed until flow decreases to < 3500cfs
Local Stormwater: Rainfall Van Lare (FEV) gauge	24 hour rainfall (0600-0600) Rain gauge data from daily e-mail from DES – Call the Van Lare operator @ 753-[redacted] if there is a question on the data	If rainfall is > 0.5" the beach is closed for 24 hours If rainfall is greater than or equal to 1.5" the beach is closed for 48 hours If rainfall is greater than or equal to 3" the beach is closed for 72 hours
Algae or other organic debris	Field Observation: Debris volume	If algae exceeds 1500 cubic feet the beach is closed
Secchi disk reading	Field Observation: Disk reading	If reading is < 0.6 m the beach is closed

Appendix B: Ontario Beach Sampling & Model Data

Sampling Date	Operating Day	Ontario E. Coli (West)	Ontario E.Coli (East)	Ontario E. Coli (Average)	MC Model Open/Closed	MC Model Closure Reason	MC Model Correct (Base on ALL Observations)	MC Model Correct (Based on E. Coli Counts)	Virtual Beach Model Prediction	Virtual Beach Estimated E. Coli	Virtual Beach Exceedance Probability	Virtual Beach Model (Open/Closed)	Virtual Beach Model Correct (Based on E. Coli Counts)
May 26, 2026	Pre-Season	5.2	4.1	5									
May 28, 2026	Pre-Season	51.2	37.9	45									
June 1, 2026	Pre-Season	6.3	3.1	5									
June 2, 2026	Pre-Season	14.8	78	46.4									
June 8, 2026	Pre-Season	45	48	46.5									
June 11, 2026	Pre-Season	2	7.4	4.7									
June 15, 2026	Pre-Season	770.1	468.4	619.25									
June 16, 2026	Pre-Season	56.5	203.5	130									
June 23, 2026	Pre-Season	131.3	105	118.15									
June 25, 2026	0	1	4.1	2.55									
June 26, 2026	1	4.1	22.8	13.45	Open		Yes	Yes	1.883	76	15.930	Open	Yes
June 27, 2026	2	11	12	11.5	Open		Yes	Yes	1.904	80	16.900	Open	Yes
June 28, 2026	3	157.6	18.7	88.15	Open		Yes	Yes	1.546	35	4.550	Open	YES
June 29, 2026	4	7.4	83.3	45.35	Open		Yes	Yes	1.5	32	3.724	Open	Yes
June 30, 2026	5	3.1	4.1	3.6	Open		Yes	Yes	1.466	29	3.184	Open	Yes
July 1, 2026	6	410.6	172.3	291.45	Open		No	No	Virtual Beach failed to run				
July 2, 2026	7	93.2	235.9	164.55	Open		Yes	Yes	2.068	117	26.740	Open	Yes
July 3, 2026	8	11	8.6	9.8	Open		No	No	2.151	142	32.650	Closed	No
July 4, 2026	9	114.5	435.2	274.85	Open		No	No	2.019	104	23.460	Open	No
July 5, 2026	10	344.8	228.2	286.5	Open		No	No	1.989	97	21.690	Open	No
July 6, 2026	11	381.5	79	230.25	Closed	E. Coli (prior consecutive days) & Secchi	No	No	1.925	84	18.330	Open	Yes
July 7, 2026	12	66.9	21.6	44.25	Open		Yes	Yes	1.59	39	5.602	Open	Yes
July 8, 2026	13	2	5.2	3.6	Open		Yes	Yes	1.508	32	3.857	Open	Yes
July 9, 2026	14	6.3	9.5	7.9	Open		Yes	Yes	1.825	67	13.100	Open	Yes
July 10, 2026	15	129.6	128.9	159.25	Open		Yes	Yes	2.186	153	35.330	Closed	No
July 11, 2026	16	547.5	326.5	436.5	Closed	Secchi	Yes	Yes	2.101	126	29.040	Closed	Yes
July 12, 2026	17	20.3	9.7	15	Open		Yes	Yes	1.777	19	1.286	Open	Yes
July 13, 2026	18	24	28.8	26.4	Open		Yes	Yes	1.977	75	15.570	Open	Yes
July 14, 2026	19	579.4	234.9	435.15	Open		No	No	2.179	151	34.620	Closed	Yes
July 15, 2026	20	1413.6	547.5	980.55	Open		No	No	2.517	329	61.960	Closed	Yes
July 16, 2026	21	126.7	137.6	132.15	Closed	E. Coli (prior consecutive days)	No	No	1.955	80	16.630	Open	Yes
July 17, 2026	22	547.5	613.1	580.3	Closed	Secchi	Yes	Yes	2.50	318	60.610	Closed	Yes
July 18, 2026	23	104.6	45.2	74.9	Open		Yes	Yes	1.76	58	10.530	Open	Yes
July 19, 2026	24	2586	2737.5	2661.75	Closed	Beach Rainfall & Secchi	Yes	Yes	3.39	2466	98.090	Closed	Yes
July 20, 2026	25	435.2	344.8	390	Open		No	No	1.889	77	16.120	Open	No
July 21, 2026	26	62.7	53.8	58.25	Closed	E. Coli (prior consecutive days)	Yes	No	Virtual Beach failed to run				
July 22, 2026	27	7765.5	1538	4651.75	Closed	Secchi	Yes	Yes	3.276	1888	96.670	Closed	Yes
July 23, 2026	28	240	177.5	208.75	Closed	Secchi	Yes	No	2.659	456	72.220	Closed	No
July 24, 2026	29	178.2	131.4	154.8	Open		Yes	Yes	2.05	112	25.430	Open	Yes
July 25, 2026	30	70.3	59.4	64.85	Open		Yes	Yes	1.797	63	11.950	Open	Yes
July 26, 2026	31	165.8	156.5	161.15	Open		Yes	Yes	1.949	89	19.370	Open	Yes
July 27, 2026	32	29.8	50.4	40.1	Open		Yes	Yes	1.959	91	19.850	Open	Yes
July 28, 2026	33	816.4	1119.9	968.15	Closed	Beach Rainfall	Yes	Yes	2.529	338	61.350	Closed	Yes
July 29, 2026	34	2586	2897	2741.5	Closed	Secchi	Yes	Yes	2.988	973	88.630	Closed	Yes
July 30, 2026	35	4703.5	4212	4457.75	Closed	E. Coli (prior consecutive days) & Secchi	Yes	Yes	2.98	955	88.310	Closed	Yes
July 31, 2026	36	43	67	55	Closed	E. Coli (prior consecutive days)	Yes	No	2.025	106	23.860	Open	Yes
August 1, 2026	37	43	67	55	Open		Yes	Yes	1.897	79	16.460	Open	Yes
August 2, 2026	38	275.5	248.1	261.8	Open		No	No	1.919	83	17.740	Open	No
August 3, 2026	39	825	1724	1274.5	Closed	Beach Rainfall & Secchi	Yes	Yes	3.001	1002	89.840	Closed	Yes
August 4, 2026	40	248.1	547.5	397.8	Closed	E. Coli (prior consecutive days)	Yes	Yes	2.512	325	61.350	Closed	Yes
August 5, 2026	41	54.6	44.8	49.7	Closed	E. Coli (prior consecutive days)	Yes	No	2.039	109	24.790	Open	Yes
August 6, 2026	42	325.5	127.4	226.45	Open		Yes	Yes	2.055	114	25.780	Open	Yes
August 7, 2026	43	88.6	38.4	63.5	Open		Yes	Yes	1.979	95	21.000	Open	Yes
August 8, 2026	44	137.4	275.5	206.45	Open		Yes	Yes	2.05	112	25.470	Open	Yes
August 9, 2026	45	2419.6	2419.6	2419.6	Open		No	No	2.683	482	73.870	Closed	Yes
August 10, 2026	46	344.8	248.1	296.45	Open		No	No	1.971	94	20.540	Open	No
August 11, 2026	47	261.3	261.3	261.3	Closed	E. Coli (prior consecutive days)	Yes	Yes	2.21	162	37.030	Closed	Yes
August 12, 2026	48	240	155.3	197.65	Closed	E. Coli (prior consecutive days)	Yes	No	2.076	119	27.210	Open	Yes
August 13, 2026	49	1413.6	1413.6	1413.6	Closed	Beach Rainfall	Yes	Yes	2.403	253	57.610	Closed	Yes
August 14, 2026	50	1203.3	365.4	784.35	Open		No	No	2.122	132	30.470	Closed	Yes
August 15, 2026	51	55.4	67	61.2	Closed	E. Coli (prior consecutive days)	Yes	No	Virtual Beach failed to run				
August 16, 2026	52	21.1	40.4	30.75	Open		Yes	Yes	Virtual Beach failed to run				
August 17, 2026	53	248.9	57.3	153.1	Open		Yes	Yes	Virtual Beach failed to run				
August 18, 2026	54	435.2	325.5	380.35	Open		No	No	2.241	174	39.900	Closed	Yes
August 19, 2026	55	156.5	99.9	128.2	Open		Yes	Yes	2.124	133	30.600	Closed	No
August 20, 2026	56	395	508.5	451.75	Closed	Secchi	Yes	Yes	3.039	1094	91.300	Closed	Yes
August 21, 2026	57	48.7	50.4	49.55	Open		Yes	Yes	1.931	85	18.320	Open	Yes
August 22, 2026	58	56.3	9.7	33	Open		Yes	Yes	1.871	74	15.340	Open	Yes
August 23, 2026	59	47.9	63.8	55.85	Open		Yes	Yes	1.973	94	20.730	Open	Yes
August 24, 2026	60	1046.2	648.8	847.5	Open		No	No	2.335	216	47.050	Closed	Yes
August 25, 2026	61	275.5	364.4	319.95	Closed	Secchi	Yes	Yes	2.788	614	80.350	Closed	Yes
August 26, 2026	62	105.4	137.4	121.4	Closed	E. Coli (prior consecutive days)	No	No	2.015	104	23.310	Open	Yes
August 27, 2026	63	27.5	19.5	23.5	Open		Yes	Yes	1.836	69	13.650	Open	Yes
August 28, 2026	64	2419.6	2419.6	2419.6	Closed	Secchi	Yes	Yes	3.05	1122	91.640	Closed	Yes
August 29, 2026	65	410.6	488.4	449.5	Open		No	No	2.076	119	27.320	Open	No
August 30, 2026	66	63.1	29.2	46.15	Closed	E. Coli (prior consecutive days)	Yes	No	2.001	100	22.390	Open	Yes
August 31, 2026	67	32.7	12.1	22.4	Open		Yes	Yes	2.146	140	32.200	Closed	No
September 1, 2026	68	60.2	90.8	75.5	Closed	Beach Rainfall	No	No	2.234	171	39.370	Closed	No
September 2, 2026	69	77.1	50.4	63.75	Open		Yes	Yes	1.815	65	12.740	Open	Yes
September 3, 2026	70	2419.6	2419.6	2419.6	Closed	Beach Rainfall	Yes	Yes	2.921	834	86.030	Closed	Yes
September 4, 2026	71	5231	3055.5	4143.25	Closed	Secchi	Yes	Yes	2.96	912	88.400	Closed	Yes
September 5, 2026	72	1261.5	1455	1408.25	Closed	E. Coli (prior consecutive days) & Secchi	Yes	Yes	3.058	1143	91.890	Closed	Yes
September 6, 2026	73	247.5	266.5	307	Closed	E. Coli (prior consecutive days)	Yes	Yes	2.746	557	77.710	Closed	Yes
September 7, 2026	74	45.7	35.5	40.6	Closed	E. Coli (prior consecutive days) & Secchi	Yes	No	2.085	122	28.050	Closed	No
TOTAL ABOVE 235		35	31										
PERCENT SAMPLES ABOVE 235		47%	42%										

Appendix C: Durand Eastman Beach Sampling & Model Data

Sampling Date	Operating Day	Durand Eastman E. Coli	MC Model Open/Closed	MC Model Closure Reason	MC Model Correct (Base on ALL Observations)	MC Model Correct (Based on E. Coli Counts)	Virtual Beach Model Prediction	Virtual Beach Estimated E. Coli	Virtual Beach Exceedance Probability	Virtual Beach Model (Open/Closed)	Virtual Beach Model Correct (Based on E. Coli Counts)
May 26, 2026	Pre-Season	224.7									
May 28, 2026	Pre-Season	44.8									
June 1, 2026	Pre-Season	1									
June 2, 2026	Pre-Season	32.3									
June 8, 2026	Pre-Season	101.7									
June 11, 2026	Pre-Season	91									
June 15, 2026	Pre-Season	261.3									
June 16, 2026	Pre-Season	307.6									
June 21, 2026	Pre-Season	17.1									
June 22, 2026	Pre-Season	1									
June 23, 2026	Pre-Season	108.6									
June 24, 2026	0	11									
June 25, 2026	1	11	Open		Yes	Yes	1.189	15	1.302	Open	Yes
June 26, 2026	2	14.6	Open		Yes	Yes	2.11	129	31.400	Closed	No
June 27, 2026	3	6.3	Open		Yes	Yes	1.451	28	4.234	Open	Yes
June 28, 2026	4	4.1	Open		Yes	Yes	1.024	11	0.559	Open	Yes
June 29, 2026	5	5.2	Open		Yes	Yes	1.07	12	0.714	Open	Yes
June 30, 2026	6	2	Open		Yes	Yes	1.012	10	0.523	Open	Yes
July 1, 2026	7	96	Open		Yes	Yes	Virtual Beach failed to run				
July 2, 2026	8	5.1	Open		Yes	Yes	Virtual Beach failed to run				
July 3, 2026	9	3.1	Open		Yes	Yes	Virtual Beach failed to run				
July 4, 2026	10	26	Open		Yes	Yes	1.595	39	7.221	Open	Yes
July 5, 2026	11	328.2	Closed	Beach Rainfall	Yes	Yes	2.321	209	46.270	Closed	Yes
July 6, 2026	12	177	Closed	Secchi	Yes	No	2.136	137	33.180	Closed	No
July 7, 2026	13	686.7	Open		No	No	1.663	46	9.316	Open	No
July 8, 2026	14	111.2	Open		Yes	Yes	1.221	17	1.558	Open	Yes
July 9, 2026	15	7.4	Open		Yes	Yes	1.136	14	0.994	Open	Yes
July 10, 2026	16	1	Open		Yes	Yes	1.458	29	4.248	Open	Yes
July 11, 2026	17	28.1	Open		Yes	Yes	1.753	57	12.290	Open	Yes
July 12, 2026	18	14.4	Open		Yes	Yes	1.33	21	2.457	Open	Yes
July 13, 2026	19	25	Open		Yes	Yes	1.02	10	0.543	Open	Yes
July 14, 2026	20	3	Open		Yes	Yes	1.46	29	4.357	Open	Yes
July 15, 2026	21	63.7	Open		Yes	Yes	1.757	57	12.530	Open	Yes
July 16, 2026	22	13.4	Open		Yes	Yes	1.374	24	2.999	Open	Yes
July 17, 2026	23	1046.2	Open		No	No	1.889	77	18.230	Open	Yes
July 18, 2026	24	16.1	Open		Yes	Yes	1.114	13	0.892	Open	Yes
July 19, 2026	25	1049	Closed	Beach Rainfall & Secchi	Yes	Yes	3.451	2835	97.690	Closed	Yes
July 20, 2026	26	228.2	Open		Yes	Yes	1.728	52	11.160	Open	Yes
July 21, 2026	27	50.4	Open		Yes	No	Virtual Beach failed to run				
July 22, 2026	28	613.1	Open		No	No	Virtual Beach failed to run				
July 23, 2026	29	21.1	Open		Yes	Yes	Virtual Beach failed to run				
July 24, 2026	30	20.1	Open		Yes	Yes	1.369	23	2.915	Open	Yes
July 25, 2026	31	7.5	Open		Yes	Yes	1.248	18	1.702	Open	Yes
July 26, 2026	32	8.5	Open		Yes	Yes	1.331	21	2.487	Open	Yes
July 27, 2026	33	8.5	Open		Yes	Yes	1.311	20	2.305	Open	Yes
July 28, 2026	34	218.7	Open		Yes	Yes	1.975	94	22.840	Open	Yes
July 29, 2026	35	1377.5	Closed	Secchi	Yes	Yes	2.895	785	83.540	Closed	Yes
July 30, 2026	36	115.5	Closed	Secchi	Yes	No	2.976	946	86.920	Closed	No
July 31, 2026	37	14.4	Open		Yes	Yes	1.672	47	9.370	Open	Yes
August 1, 2026	38	14.4	Open		Yes	Yes	1.099	13	0.826	Open	Yes
August 2, 2026	39	4.1	Open		Yes	Yes	1.211	16	1.429	Open	Yes
August 3, 2026	40	866.4	Closed	Beach Rainfall & Secchi	Yes	Yes	2.792	619	78.180	Closed	Yes
August 4, 2026	41	172.5	Open		Yes	Yes	2.152	142	34.040	Closed	No
August 5, 2026	42	9.8	Open		Yes	Yes	1.444	28	4.029	Open	Yes
August 6, 2026	43	10.9	Open		Yes	Yes	1.36	23	2.355	Open	Yes
August 7, 2026	44	68.3	Open		Yes	Yes	1.449	28	4.121	Open	Yes
August 8, 2026	45	12	Open		Yes	Yes	1.58	38	6.815	Open	Yes
August 9, 2026	46	77.1	Open		Yes	Yes	2.079	120	29.060	Open	Yes
August 10, 2026	47	52.9	Open		Yes	Yes	1.472	30	4.480	Open	Yes
August 11, 2026	48	39.5	Open		Yes	Yes	1.471	30	4.470	Open	Yes
August 12, 2026	49	21.6	Open		Yes	Yes	1.473	30	4.506	Open	Yes
August 13, 2026	50	387.3	Closed	Beach Rainfall	Yes	Yes	2.081	121	29.370	Closed	Yes
August 14, 2026	51	18.9	Open		Yes	Yes	1.725	53	11.170	Open	Yes
August 15, 2026	52	25.9	Open		Yes	Yes	Virtual Beach failed to run				
August 16, 2026	53	47.1	Open		Yes	Yes	Virtual Beach failed to run				
August 17, 2026	54	26.5	Open		Yes	Yes	Virtual Beach failed to run				
August 18, 2026	55	65.7	Open		Yes	Yes	Virtual Beach failed to run				
August 19, 2026	56	44.1	Open		Yes	Yes	Virtual Beach failed to run				
August 20, 2026	57	307.6	Open		No	No	Virtual Beach failed to run				
August 21, 2026	58	16.1	Open		Yes	Yes	1.221	17	1.524	Open	Yes
August 22, 2026	59	10.8	Open		Yes	Yes	1.298	20	2.154	Open	Yes
August 23, 2026	60	52	Open		Yes	Yes	1.163	15	1.149	Open	Yes
August 24, 2026	61	517.2	Open		No	No	1.396	25	3.352	Open	No
August 25, 2026	62	62.4	Open		Yes	Yes	2.042	110	26.790	Open	Yes
August 26, 2026	63	12.2	Open		Yes	Yes	1.527	34	5.571	Open	Yes
August 27, 2026	64	9.8	Open		Yes	Yes	1.213	16	1.463	Open	Yes
August 28, 2026	65	19.5	Open		Yes	Yes	1.813	65	14.650	Open	Yes
August 29, 2026	66	6.3	Open		Yes	Yes	1.396	25	3.284	Open	Yes
August 30, 2026	67	12.1	Open		Yes	Yes	1.25	18	1.716	Open	Yes
August 31, 2026	68	9.8	Open		Yes	Yes	1.45	28	4.108	Open	Yes
September 1, 2026	69	131.4	Closed	Beach Rainfall	No	No	2.036	109	26.480	Open	Yes
September 2, 2026	70	272.3	Open		No	No	1.344	22	2.760	Open	No
September 3, 2026	71	1203.3	Closed	Beach Rainfall	Yes	Yes	1.985	97	25.060	Open	No
September 4, 2026	72	1119.9	Closed	E. Coli (prior consecutive days) & Secchi	Yes	Yes	2.252	179	41.230	Closed	Yes
September 5, 2026	73	266	Closed	E. Coli (prior consecutive days)	Yes	Yes	2.591	390	65.880	Closed	Yes
September 6, 2026	74	172.5	Closed	E. Coli (prior consecutive days)	Yes	No	2.348	223	48.270	Closed	No
September 7, 2026	75	12	Open		Yes	Yes	1.035	11	0.594	Open	Yes
TOTAL ABOVE 235		14									
PERCENT SAMPLES ABOVE 235		19%									

Appendix D: Notifications Made Using the NYSDOH Beach Data System

BEACH NAME	NOTIFICATION START	NOTIFICATION END	ACTIVITY TYPE	ACTIVITY NAME	REASON	DESCRIPTION	INDICATOR	SOURCE
DURAND BEACH	07/05/2026 08:00:00 AM	07/07/2026 08:00:00 AM	CLOSURE	Preemptive for Rainfall	RAINFALL		Rain Gauge Measurement	STORM
DURAND BEACH	07/19/2026 08:00:00 AM	07/20/2026 08:00:00 AM	CLOSURE	Preemptive for Rainfall	RAINFALL		Rain Gauge Measurement	STORM
DURAND BEACH	07/29/2026 08:00:00 AM	07/31/2026 08:00:00 AM	CLOSURE	Preemptive for Clarity	OTHER	Poor Water Clarity	Secchi Disk Measurement	UNKNOWN
DURAND BEACH	08/03/2026 08:00:00 AM	08/04/2026 08:00:00 AM	CLOSURE	Preemptive for Rainfall	RAINFALL		Rain Gauge Measurement	STORM
DURAND BEACH	08/13/2026 08:00:00 AM	08/14/2026 08:00:00 AM	CLOSURE	Preemptive for Rainfall	RAINFALL		Rain Gauge Measurement	STORM
DURAND BEACH	09/01/2026 08:00:00 AM	09/02/2026 08:00:00 AM	CLOSURE	Preemptive for Rainfall	RAINFALL		Rain Gauge Measurement	STORM
DURAND BEACH	09/03/2026 08:00:00 AM	09/07/2026 08:00:00 AM	CLOSURE	Preemptive for Rainfall	RAINFALL		Rain Gauge Measurement	STORM
ONTARIO BEACH	07/06/2026 08:00:00 AM	07/07/2026 08:00:00 AM	CLOSURE	E. coli Sample Exceedance	ELEV_BACT			UNKNOWN
ONTARIO BEACH	07/11/2026 08:00:00 AM	07/12/2026 08:00:00 AM	CLOSURE	Preemptive for Clarity	OTHER	Poor Water Clarity	Secchi Disk Measurement	UNKNOWN
ONTARIO BEACH	07/16/2026 08:00:00 AM	07/18/2026 08:00:00 AM	CLOSURE	E. coli Sample Exceedance	ELEV_BACT			UNKNOWN
ONTARIO BEACH	07/19/2026 08:00:00 AM	07/20/2026 08:00:00 AM	CLOSURE	Preemptive for Rainfall	RAINFALL		Rain Gauge Measurement	STORM
ONTARIO BEACH	07/21/2026 08:00:00 AM	07/24/2026 08:00:00 AM	CLOSURE	E. coli Sample Exceedance	ELEV_BACT			UNKNOWN
ONTARIO BEACH	07/28/2026 08:00:00 AM	08/01/2026 08:00:00 AM	CLOSURE	Preemptive for Rainfall	RAINFALL		Rain Gauge Measurement	STORM
ONTARIO BEACH	08/03/2026 08:00:00 AM	08/06/2026 08:00:00 AM	CLOSURE	Preemptive for Rainfall	RAINFALL		Rain Gauge Measurement	STORM
ONTARIO BEACH	08/11/2026 08:00:00 AM	08/14/2026 08:00:00 AM	CLOSURE	E. coli Sample Exceedance	ELEV_BACT			UNKNOWN
ONTARIO BEACH	08/15/2026 08:00:00 AM	08/16/2026 08:00:00 AM	CLOSURE	E. coli Sample Exceedance	ELEV_BACT			UNKNOWN
ONTARIO BEACH	08/20/2026 08:00:00 AM	08/21/2026 08:00:00 AM	CLOSURE	Preemptive for Clarity	OTHER	Poor Water Clarity	Secchi Disk Measurement	UNKNOWN
ONTARIO BEACH	08/25/2026 08:00:00 AM	08/27/2026 08:00:00 AM	CLOSURE	Preemptive for Clarity	OTHER	Poor Water Clarity	Secchi Disk Measurement	UNKNOWN
ONTARIO BEACH	08/28/2026 08:00:00 AM	08/29/2026 08:00:00 AM	CLOSURE	Preemptive for Clarity	OTHER	Poor Water Clarity	Secchi Disk Measurement	UNKNOWN
ONTARIO BEACH	08/30/2026 08:00:00 AM	08/31/2026 08:00:00 AM	CLOSURE	E. coli Sample Exceedance	ELEV_BACT			UNKNOWN
ONTARIO BEACH	09/01/2026 08:00:00 AM	09/02/2026 08:00:00 AM	CLOSURE	Preemptive for Rainfall	RAINFALL		Rain Gauge Measurement	STORM
ONTARIO BEACH	09/03/2026 08:00:00 AM	09/08/2026 08:00:00 AM	CLOSURE	Preemptive for Rainfall	RAINFALL		Rain Gauge Measurement	STORM