

BEACH ADVISORY AND CLOSING ONLINE NOTIFICATION (BEACON) 2.0

User's Guide

Prepared for:

Bill Kramer U.S. EPA Office of Water

Prepared by:

IntePros Federal 501 School St SW 6th Floor Washington, DC 20024

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BEACON 2.0 CONTACTS

For questions about the BEACON 2.0 application, please use the contact listed in **BEACON User Support** item under Support on Submitting Beach Data to EPA page.

Additional information about the data available in BEACON 2.0 is available at Submitting Beach Data to EPA.

The data available through BEACON have been provided to EPA by the coastal and Great Lakes states, tribes and territories that receive grants under the BEACH Act. For the most up-to-date information, contact the state or local beach program manager using the contact information at: https://www.epa.gov/beaches/state-territorial-tribal-and-epa-beach-program-contacts.

KNOWN ISSUES

There are a number of known data processing and report performance issues that have not been resolved and prevent certain reports from fully functioning. Users are encouraged to report any issue that are not already recognized and reported in this list.

- Beach Days Report is missing information for some jurisdictions.
- Advisory and Monitoring report has duplicate rows.
- Count of Beach Act Beach varies between all reports and the Jurisdiction Summary Report.

REVISION HISTORY

User Guide	Date	Description of Changes
Version		
1.0	1/24/2012	Initial draft
1.1	11/29/2012	National List of Beaches report - Added a new section to the User's Guide describing how to use the new National List of Beaches report.
1.1	11/29/2012	Detailed Revision History - Refer to Appendix B for a more detailed revision history.
1.2	05/09/2013	Several bug fixes and minor changes were made to the BEACON 2.0 reports. Refer to APPENDIX B — Detailed Revision History for more details.
1.3	07/26/2013	Some text and screenshots were updated to document minor updates to the National List of Beaches report and the BEACON 2.0 reports. Refer to APPENDIX B – Detailed Revision History for more details.
1.4	11/20/2014	Some text and screenshots were updated to document minor updates to the National List of Beaches report and the BEACON 2.0 reports. Refer to APPENDIX B – Detailed Revision History for more details.
1.5	5/20/2015	Some text and screenshots were updated to document the BEACON 2.0 reports. Refer to APPENDIX B – Detailed Revision History for more details.
1.6	8/18/2015	Some text and screenshots were updated to document the BEACON 2.0 reports. Refer to APPENDIX B – Detailed Revision History for more details.
1.7	2/2/2016	Some text and screenshots were updated to document changes made to BEACON 2.0 reports in Releases 1.13.9, 1.14 and 1.14.1. Refer to APPENDIX B – Detailed Revision History for more details.
1.8	5/19/2016	Some text and screenshots were updated to document the changes made to BEACON 2.0 reports in Releases 1.14.3. Refer to APPENDIX B — Detailed Revision History for more details.
1.9	11/16/2016	Some text and screenshots were updated to document changes made to BEACON 2.0 reports in Release 1.14.4. Refer to APPENDIX B – Detailed Revision History for more details.
2.0	3/17/2017	Some text and screenshots were updated to document changes made to BEACON 2.0 and National List of Beaches reports in Release 1.14.5. Refer to APPENDIX B – Detailed Revision History for more details.
2.1	12/13/2017	Some text and screenshots were updated to document changes made to BEACON 2.0 and National List of Beaches reports in Releases 1.14.6 and 1.14.8. Refer to APPENDIX B – Detailed Revision History for more details.
2.2	12/18/2018	Some text and screenshots were updated to document map interface and BEACON 2.0 report changes in Releases 1.14.9, 1.15.1 and 1.15.2. Refer to APPENDIX B – Detailed Revision History for more details.
2.3	11/15/2019	Some text and screenshots were updated to document map interface and BEACON 2.0 report changes in Releases 1.15.3 and 1.15.4. Refer to APPENDIX B – Detailed Revision History for more details.
2.4	6/22/2020	Some text and screenshots were added/updated to document map interface changes, BEACON report changes, NLB report changes, addition of Dynamic National Report and trend charts in releases 1.15.5, 1.15.6, 1.15.7. Refer to APPENDIX B – Detailed Revision History for more details.
2.5	8/24/2020	Some text and screenshots were updated to document the changes made to BEACON 2.0 reports in Release 1.15.8. Refer to APPENDIX B — Detailed Revision History for more details.

User Guide Version	Date	Description of Changes
2.6	11/30/2020	Some text and screenshots were updated to document the changes made to BEACON 2.0 reports and DNR in Release 1.15.9. Refer to APPENDIX B – Detailed Revision History for more details.
2.7	1/26/2021	Some text and screenshots were updated to document the changes made to BEACON 2.0 in Release 1.16.0. Refer to APPENDIX B — Detailed Revision History for more details.
2.8	6/16/2021	Updated screenshot to document the changes made to BEACON 2.0 in Release 1.16.1. Refer to APPENDIX B — Detailed Revision History for more details.
2.9	9/15/2021	Updated screenshot to document the changes made to BEACON 2.0 in Release 1.16.2. Refer to APPENDIX B – Detailed Revision History for more details.
3.0	11/29/2021	Updated screenshot to document the changes made to BEACON 2.0 in Release 1.16.3. Refer to APPENDIX B – Detailed Revision History for more details.
3.1	10/11/2022	Updated screenshots to document the changes made to BEACON 2.0 in Release 1.16.4. Refer to APPENDIX B – Detailed Revision History for more details.
4.0	09/17/2024	Updated screenshots to document the changes made to BEACON 2.0 in Release 24.1.9. Refer to APPENDIX B – Detailed Revision History for more details.

A. INTRODUCTION

The U.S. Environmental Protection Agency (EPA) created the BEach Advisory and Closing Online Notification (BEACON) system to meet the Agency's requirement to provide to the public a database of pollution occurrences for coastal recreation waters. EPA's response to this requirement, BEACON, contains state-reported beach monitoring and notification data and is available online. The "States" (including Tribes and Territories) are not required to submit their beach season data to EPA until the beginning of the following calendar year and then we work with them to verify that the data is presented accurately on EPA's BEACON website. For links to state webpages, please see: https://www.epa.gov/beaches/state-territorial-tribal-and-epa-beach-program-contacts. This User's Guide describes how to use the online BEACON 2.0 system to obtain state-reported beach monitoring and notification data.

A.1 BEACON 2.0 Features

The revised BEACON system includes several enhancements from the previous version and now provides several ways to access beach monitoring and notification data. Enhancements include:

- Mapping interface: The new BEACON map includes many new features and has greater functionality.
- **Report creation wizard:** This tool walks users through three steps to select beaches, set search filters and view BEACON reports.

Each feature is accessible from the BEACON 2.0 interface.

BEACON 2.0 reports have the functionality to accommodate a wide range of users. These user roles include:

- Basic: You can access reports via the map interface. Only five BEACON reports are available from the map interface, however, and selecting the reports via the map will return data for the select beach only.
- Intermediate: You can use the report creation wizard to select data by any combination of state/tribe/territory, county, and/or beach. The complete list of BEACON reports is available in the wizard.
- Advanced: Once a report is opened, you can use the filtering tools available on the report page to modify previously selected filters and/or add new, more advanced filters, as well as change the look and feel of a report.

A.2 What are the sources of BEACON information?

The data available through BEACON have been provided to EPA by multiple jurisdictions, including coastal and Great Lakes states, tribes and territories that receive grants under the BEACH Act. For the most up-to-date information, contact the jurisdiction beach manager using the contact information provided at the State, Territorial, Tribal and EPA Beach Program Contacts.

The jurisdiction-reported data found in BEACON come from the following EPA databases:

- EPA's Reach Address Database (RAD). RAD contains geographic data that define each beach's
 location and the location of water quality monitoring stations. BEACON pulls this data to display
 the beaches and stations on a map. For more information on RAD, see EPA's Reach Address
 Database page.
- **EPA's Water Quality Exchange (WQX)**. WQX is the framework by which organizations submit data to the US EPA. BEACON pulls water quality monitoring data from WQX. For more information on WQX/WQP, see <u>Water Quality Data (WQX)</u> page.
- PRogram tracking, beach Advisories, Water quality standards, and Nutrients (PRAWN).
 PRAWN stores beach administrative, advisory, and closing data. For more information on PRAWN, see Submitting Beach Data to EPA page.

B. How to use the "FIND A BEACH" BEACON 2.0 MAP TOOL

The BEACON 2.0 "Find a Beach" mapping interface includes several improvements over the original version. Features include dynamic maps, search tools to find the beach of interest, and several options for basemaps. The map tool can be accessed by clicking the "Find a Beach" tab on the BEACON 2.0 interface.

B.1 About the Map Tool Interface

This section describes the layout and components of the map interface (i.e., the "Find a Beach" tab).

B.1.1 Default View

As shown in Exhibit 1 below, the default view (or, extent) shows the "lower 48" view of the United States, with States in the Beach Program colored green and Tribes in blue. The view also contains several boxes and map elements, which are described in the following sections.



Exhibit 1. BEACON 2.0 Map Tool Default View.

B.1.2 "Go To" Search Fields

For more information on these fields, see Section B.3.5 – Using the "Go To" Search Fields.

B.1.3 View Navigation Buttons

The right side of the top toolbar contains 3 buttons (see Exhibit 2) for basic view navigation.

Exhibit 2. View Navigation Buttons.



- Back: Navigates to a previous selection.
- U.S. View: Returns to the default view.
- **Forward**: If the Back button has been used, the Forward button will go back to the previous selection.

B.1.4 Coordinates Box

The coordinates box at the top-left side of the screen contains the geographic coordinates (longitude and latitude) of the current map location based on the position of the mouse pointer.

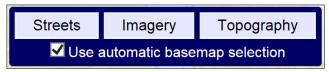
Exhibit 3. Coordinates Box.

Latitude: 49.0945 Longitude: -95.5449

B.1.5 Basemap Selector Box

The basemap selector box (see Exhibit 4) allows you to change the map style. This feature is similar to options available in many popular online mapping services. BEACON 2.0 offers three map styles (Streets, Imagery, and Topography), which can be changed at any time. Each style is described below.

Exhibit 4. Basemap Selector Bar.



B.1.5.1 STREETS BASEMAP

The **Streets** basemap is a graphical map that shows a variety of location features (e.g., state borders, street lines, natural features). The level of detail and types of features that are viewable will change depending on the zoom level. This basemap is provided via the Microsoft Bing Map service.

B.1.5.2 IMAGERY BASEMAP

The **Imagery** basemap consists of a patchwork of aerial photographs, with location feature information superimposed on the images. As with the other basemaps, zooming in will reveal a greater level of detail. The aerial images are provided via the Microsoft Bing Map service.

B.1.5.3 TOPOGRAPHY BASEMAP

The **Topography** basemap also is a graphical map, but, as the name implies, this map includes more topographical information than the other maps. This basemap includes administrative boundaries, cities, water features, physiographic features, parks, landmarks, highways, roads, railways, airports, and buildings overlaid on land cover and shaded relief imagery for added context. This basemap is hosted by ArcGIS Online.

B.1.5.4 AUTOMATIC BASEMAP SELECTION ENABLED BOX

When this option is selected, the basemap will change depending on the map scale. For example, the default Streets basemap will be switched with the Imagery basemap at a map scale of 1:1,155,583.42, which is approximately the spatial extent of a county boundary. Deselecting this option will maintain the currently selected basemap at any scale.

B.1.6 Pan and Zoom Tools

The pan and zoom tools are located on the left side of the map, just below the coordinates box. You also can pan and zoom using a mouse (as described below).

To pan (i.e., to move across the map):

- Click a directional arrow on the pan cross. The map will shift in the selected direction.
- Alternatively, use a mouse to pan by left clicking anywhere on the map (holding the left mouse button down) and dragging in the desired direction. Release the left mouse button to stop panning.

Zoom methods:

- Double-click the left mouse button to zoom in; hold the control key (Ctrl) and double-click the left mouse button to zoom out.
- Use the mouse wheel button. Rolling the wheel forward will zoom in; rolling the wheel backwards will zoom out.
- Use the slider bar just under the pan tool. Zoom in a single zoom level by clicking the plus sign at the top of the vertical slider; zoom out a single level by clicking the minus sign at the bottom of the slider. Or, left click and drag the arrow to the desired zoom level. When grabbing the slider, the scale name will appear to the right of the slider if using a mouse,
- You also can use the Shift key and drag the mouse to define a zoom extent. The zoom extent displays as a red rectangle. This area will be enlarged and centered in the new view.

B.1.7 Legend

The legend pane is located at the bottom left of the screen. This box is open at the default map view, and will collapse upon zooming in. Refer to Section B.2 for more information about the legend.

B.1.8 Alaska, Hawaii, US Territories and Tribes box

This box, located at the bottom-right corner, contains links for zooming to the other states, tribes and territories in the Beach Program. This box is open at the default map view, and will collapse upon zooming in.

B.1.9 Scale Bar

The scale bar is located at the bottom center of the View Frame. The scale bar relates inches on the map to both miles and kilometers on the ground. So, when opening the application, the entire United States is shown, and the scale bar shows that roughly 2 inches on the screen equals 1000 miles on the map. The scale bar is approximate and depends upon many factors including the resolution of the screen but it is helpful in determining distances on the ground.

B.2 Symbology for BEACON 2.0 Elements

This section describes the map symbology for BEACON 2.0 map elements. Exhibit 5 below shows the map legend. **Note**: Map elements may take time to load and, therefore, may not be immediately viewable.



Exhibit 5. Map Legend.

B.2.1 Jurisdictions with beach data: States, Counties, and Tribes

As noted in Section B.1.1 above, States with available beach data are colored green. Similarly, counties with available beach data are also colored green. Tribes with available beach data are colored blue.

B.2.2 Beaches (by last reported Status)

Beaches with available beach data appear as colored line segments on the map. The segment color depends on the most recent beach status reported to EPA. The beach status and associated colors are:

- Green No advisory or closure; Beaches that are open,
- Grey Dormant or Non-Reporting; Beaches that have not been reported on, or are not
 expected by the state to be reported on for up to two years are classified as dormant or nonreporting, and
- Khaki **Historical**; Historical beaches.

Clicking a beach will highlight the beach segment and reveal the beach's information and links to reports for the selected beach, as shown in Exhibit 6 below.

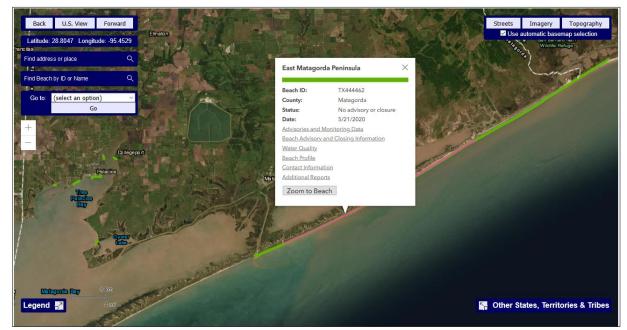


Exhibit 6. Beach Segment Appearance in BEACON 2.0.

B.2.3 Water Quality Monitoring Stations (WQX Stations)

Monitoring stations appear as small red squares on the map. You must be zoomed in below the County level before stations will appear on the map. Clicking on a monitoring station will display a details pop-

up displaying Station ID, Station Name, Organization ID, and Organization Name. The details pop-up also contains a link to view more details on this monitoring station. The Station ID shown in the details pop-up is a concatenation of Organization ID - Station ID, which is the format used by the National Water Quality Council's Water Quality Portal (WQP) for monitoring location identifiers. For more information please visit the Water Quality Portal at https://www.waterqualitydata.us/.

B.3 Finding a Beach

This section describes different methods for locating beach information using the BEACON 2.0 map.

Notes:

• If beach is not located but is listed in BEACON reports, the beach has not been indexed and, therefore, is not yet available on the map.

B.3.1 Simple Zoom

If the location (or general location) of the desired beach is known, simply use the zoom tool or mouse to zoom to the beach area. At the county level scale (approximately), beach segments will appear. Clicking a beach will highlight the beach and show the beach's information and links to reports for the selected beach.



B.3.2 Using the Map to "Zoom to" Features.

Follow the below steps for a point-and-click approach to zooming to features:

- 1. Click any jurisdiction with beaches in the Beach Program (i.e., those colored green, or in the box). Then, in the pop-up, either click on the link to the "state" beach website or click "Zoom to State" (or "Zoom to Tribe") to stay on the EPA website and zoom to the counties in that "state" that contain active or historical beaches.
- 2. Click any county or county equivalent that is colored green. Then, in the pop-up, click "Zoom to [County Name]" to zoom to the active beaches and monitoring stations in that county. Clicking a beach segment or station will reveal the beach's information and links to reports for the selected beach or station (see Section B.4.—Beach Details Pop-ups).
- 3. Optionally, after clicking on a beach line location, click "Zoom to Beach" in the pop-up to zoom to the beach.

B.3.3 Using the Map to "Find address or place" Features.

Use the address or place search box below the coordinates box at the top-left side of the screen to enter a state name, zip code, or street address in the text field to zoom to the respective location. After entering the information, hit Enter or click the button to zoom. If using a street address, also include a zip code. Do not use Rural Routes or P.O. Box numbers.

B.3.4 Using the Map to "Find Beach by ID or Name" Features

Use the Beach ID or Name search box below the address or place search box to search by **Beach ID** or **Name**. Beach IDs are unique identifiers assigned by EPA. Beach IDs are found in BEACON 2.0 reports and other Program materials. This option will zoom to the extent of the selected beach. After entering the Beach ID, hit enter or click the button. A list of beaches matching the search text will be displayed. Select the beach to zoom.

If searching using a Beach Name, enter the name in the text field. After entering the Beach Name, hit enter or click the beach to zoom. Note: Only beaches with available beach data will be listed.

B.3.5 Using the "Go To" Search Fields

Below the Beach ID or Name search box is the **Go to** tool. Selecting any of the options from the drop-down menu will display a corresponding text field.

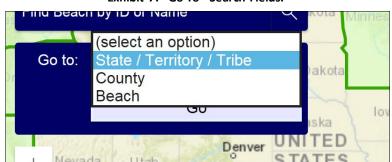


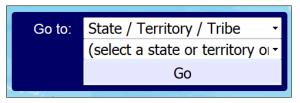
Exhibit 7. "Go To" Search Fields.

There are several ways to use this tool:

B.3.5.1 "STATE/TERRITORY/TRIBE" OR "COUNTY" OPTIONS

If the **State/Territory/Tribe** option is selected from the **Go To** drop-down menu (see Exhibit 8), a new drop-down menu will appear. This menu contains a list of states, territories and tribes that have available beach data. Select an item from the list, and then click the **Go** button to zoom to the selected location.

Exhibit 8. "State/Territory/Tribe" Go to Option.

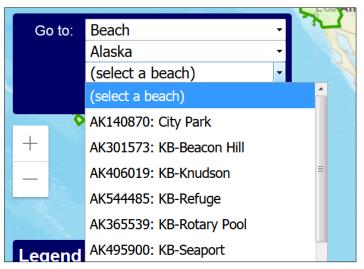


Similarly, selecting the **County** option will reveal a new a state drop-down menu and a county drop-down menu. To use this search method, first select a state or territory, and then select a county. Click the **Go** button to zoom to the selected county.

B.3.5.2 "BEACH" OPTION

From the **Go To** drop-down, you also can choose to search by **Beach**. Selecting the **Beach** option will reveal a new a state drop-down menu and a beach drop-down menu. To use this search method, first select a state, territory, or tribe, and then select a beach. Click the **Go** button to zoom to the selected beach.

Exhibit 9. "Beach" Go to Option.



B.4 Beach Details Pop-ups

This section describes the pop-up menus that appear when clicking on a beach.

B.4.1 Beach Details Pop-up

When clicking on a beach segment, a beach details pop-up box will appear (see Exhibit 10). This box contains:

- **Beach ID:** A unique identifier for the beach.
- County: Identifies the county that the beach resides in.
- Date: Date when advisory and monitoring data were last reported to EPA.
- **Beach Profile:** Click this link to find administrative information, e.g., how frequently this beach is monitored and information about the swim season. See Appendix A for an example report.
- Advisories and Monitoring: This link provides advisories and water quality data in most cases, this will only return data during the beach season if the jursidiction reports to EPA frequently.
- **Beach Actions (Advisory and Closures)**: Click this link to see dates of advisories and closures for the selected beach. See Appendix A for an example report.
- Monitoring (Water Quality Data): Click this link to view the water quality report for the selected beach. See Appendix A for an example report.
- **Beach Contact Information:** Click this link to get contact information for the selected beach (this is a section in the Beach Profile).
- Additional Reports: Click this link to access more BEACON 2.0 reports in a new webpage. See Appendix A for additional example reports.

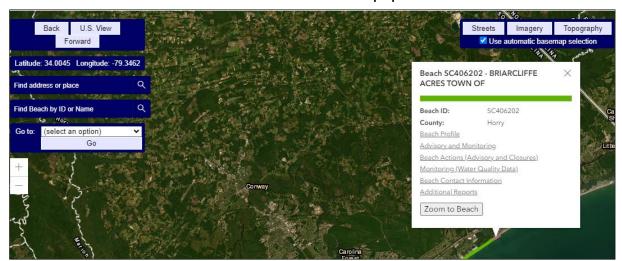


Exhibit 10. Beach Details Pop-up.

B.5 How to Find beaches by Hydrologic Unit Code (HUC)

BEACON 2.0 does not currently support searches by HUC. To look up beach names grouped by HUC, go to <u>WATERS GeoViewer</u> (https://www.epa.gov/waterdata/waters-geoviewer) application, make note of the Beach Identifier (and/or names) for the beach(es) in the HUC(s) of interest, as described in the next to last step below, then return to BEACON 2.0 to view beach data for those beaches:

- 1. Click on the WATERS GeoViewer map to launch the application. You will see a Welcome Screen, click OK.
- 2. In the upper left corner of the map, in the "Find surface water or place" box, enter the state or area of interest. Or drag the map, or zoom in or out using the "+" and "-"icons.
- 3. On the left, click on the twisty for "Feature Layers". In the list, click on the box and twisty "EPA Linked Data". Under EPA linked data, click in the box "Beaches."
- 4. To add a HUC boundary layer from the Layers Menu to the map
 - a. In the Layers menu, click the check box and twisty next to Surface Water Features.
 - b. At the bottom of the list click in the box by Hydrologic Units
 - c. Click on the map in the HUC boundary to see a popup containing the HUC code; copy the code
- 5. Click on the three dots to the right of Beaches, then select "View in Attribute Table". The attribute table will open below the map.
- 6. In the Attribute Table at the upper left, click on Options then chose "Filter" to select beaches by HUC,
- 7. In the filter box, click on "Add expression". In the "ObjectID (Number)" dropdown box, choose WBD HUC12 (String), in the box to the right, leave "is" selected and in the right-most box, add the HUC 12 value you copied in step 4.c (also found in but not copy-able from the Attribute Table Reach Code column) (e.g. 020600040203). Click OK.
- 8. The attribute table will be filtered to show the beaches located in the HUC 12 you selected. Pull up on the top frame of the Attribute Table to expand the window showing the list (e.g. MD751497, MD854428, MD254131)

C. How to use the BEACON 2.0 Reports Wizard

Beach advisory and closing reports can be generated using the Reporting tool in BEACON 2.0. This tool can be accessed by clicking the "Reports" tab.

The Reports tool is a 'wizard' that allows you to create BEACON 2.0 reports in three steps. Step 1 allows you to select the beaches for a report pre-grouped by EPA Region or Great Waterbody, or to select by a combination of state/tribe/territory, county, and/or beach. Step 2 allows you to add filtering by date and alter other miscellaneous filters. Step 3 displays a list of available reports for use with the filters selected from the first two steps.

Note: If too many filters are applied, the application will return an error message indicating that fewer selections should be made. If the filters return too many rows, then a different error message is displayed.

C.1 Location Filters

The Location Filters tab allows for selection of one of three location filter types. Each location filter is described in the sections below.

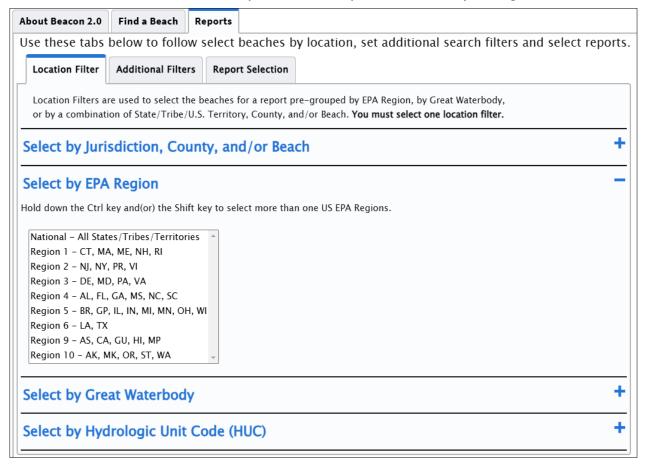
Note:

- At least one location should be selected before generating reports however, only one location filter group can be used at a time.
- Only EPA Regions, jurisdictions, and counties with beaches in the Beach Program are listed as
 options in the location filters.

C.1.1 Select by National or EPA Region

EPA Regions are made up of 2 to 8 jurisdictions, and there are 8 EPA Regions with jurisdictions that participate in the Beaches program. Use this option to filter for beaches in the selected EPA Region(s). Multiple regions can be selected by holding the control (CTRL) key. To <u>select all beaches in the Beach Program</u>, select the "National – All states/tribes/territories" option from the list (see Exhibit 11. BEACON 2.0 Reports Wizard – Step 1: Location Filter by EPA Region.). **Note**: Hold down the control key to deselect an entry.

Exhibit 11. BEACON 2.0 Reports Wizard - Step 1: Location Filter by EPA Region.



C.1.2 Select by Great Waterbody

You also can filter for beaches by Great Waterbody, as seen in the image below (see Exhibit 12). This filter will return beaches from multiple states, tribes, territories, and/or counties that are on the selected Great Waterbody. Multiple Great Waterbodies can be selected by holding the control (Ctrl) key. Note: Hold down the control key to deselect an entry. The Great Waterbody list includes the Great Lakes, the Chesapeake Bay, and the Gulf of Mexico. It does not include either the Atlantic or Pacific Ocean or any sub-area of these 'great waterbodies' such as the Caribbean.

Additional Filters Location Filters are used to select the beaches for a report pre-grouped by EPA Region, by Great Waterbody, or by a combination of State/Tribe/U.S. Territory, County, and/or Beach. You must select one location filter Select by Jurisdiction, County, and/or Beach + Select by EPA Region **Select by Great Waterbody** Hold down the Ctrl key and(or) the Shift key to select more than one Water body Chesapeake Bay Great Lakes Gulf of Mexico Lake Erie Lake Huron Lake Michigan Lake Ontario Lake Superior Long Island Sound

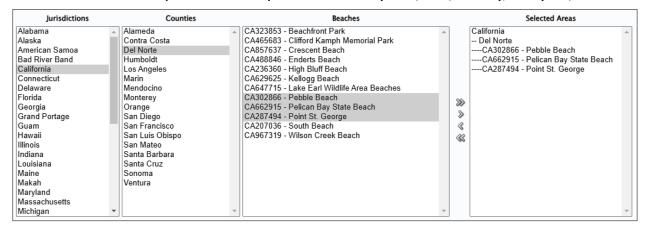
Exhibit 12. BEACON 2.0 Reports Wizard - Step 1: Location Filter by Great Waterbody.

C.1.3 Select by Jurisdiction, County, and/or Beach

Select by Hydrologic Unit Code (HUC)

The third location filter option will filter for beaches by the jurisdiction and can be used to drill down by selecting from states, tribes, territories, and then counties, and then beaches. This method involves using the selection tool shown in Exhibit 13 below.

Exhibit 13. BEACON 2.0 Reports Wizard – Step 1: Location Filter by state/tribe/territory, county and/or beach.



Select beaches to include in the BEACON 2.0 reports by moving selections from the **States** (includes States/Tribes/Territories), **Counties** and/or **Beaches** boxes on the left side to the **Selected Areas** box on the far right.

How to add items to the Selected Areas box:

- All beaches in a state/tribe/territory can be added to the Selected Areas box by selecting the state/tribe/territory and using the single right arrow. Multiple jurisdictions can be added but must be added one at a time.
- All beaches in a county can be moved to the Selected Areas box selecting a jurisdiction, then
 county, and then using the single right arrow. Multiple counties can be added but must be
 added one at a time. This is equivalent to selecting the county and then clicking the single right
 arrow.
- Find a <u>single beach</u> by clicking on the state/tribe/territory, county, and then Beach ID and Name. Add the beach to the **Selected Areas** box by clicking on a beach name and clicking the single right arrow.
- <u>Multiple beaches</u> can be selected by holding the control key and clicking on each beach name.
 After the beaches have been selected the single right arrow can be used to move the beaches to the **Selected Areas** box.

How to remove items from the Selected Areas box:

- To remove <u>specific beaches or groups</u>, use the single left arrow to remove the selections one at a time. See Section G.4 Removing selections from the Selected Beaches box for additional information on removing items.
- To clear the Selected Beaches box, click the double left arrow.

C.2 Additional Filtering

The additional filter tab allows you to add filtering by date and alter other miscellaneous filters.

C.2.1 Select by Date

There are 3 options for filtering by date (see Exhibit 14 below). **Note:** Only one option group can be used when using the Select by Date filter.

Location Filter Additional Filters Report Selection The Additional Filters can be used to filter by date or date range, and to filter by miscellaneous beach characteristics. Instructions: There are three mutually exclusive date filter options. Calendar Year option finds all data for one or more selected years. All reports can be filtered by the Calendar Year option. Alternatively, you can use a Start Date and End date (Grouping A) to filter reports for a specific date range. The Start End Date filter only applies to reports with discreet dates - including "Advisory and Monitoring", "Beach Actions (Advisories and Closures)", and "Water Quality Data (Monitoring)." It will not be applied to other reports. To enter a date range click the calendar icon beside the input field to use a calendar widget or type in the date using the format: mm-dd-yyyy, E.g. 12-11-2024. For example, if you enter both a start and end date you will pick up any data in that date range inclusive. Alternatively, you can filter by Rolling Year (previous 12 months), or Year to Date (Grouping B). To clear a selection from Grouping B, use the Clear button next to the radio button group. Calendar Year 2024 ^ (Grouping C) 2023 Use the Ctrl key 2022 or the Shift key to 2021 select more than one year. 2020 V Start Date (Grouping A): mm-dd-vvvv e.g. 11-11-2024 End Date (Grouping A) mm-dd-yyyy e.g. 12-11-Other Date Options O Rolling Year (12 Months) (Grouping B): \bigcirc Year to Date

Exhibit 14. BEACON 2.0 Reports Wizard – Step 2: Additional Filtering by Date.

Select one of the options listed below:

- Calendar Year (Grouping C): The calendar year option displays a list of years where data may be available. When one or more years are selected, the reports are filtered for that data. The clear button may be used to clear the currently selected option(s) under Grouping C. All reports apply this filter.
- Start/End Dates (Grouping A): Enter a date range to filter reports for beach activity and action data falling within the selected range. This option is only applied to reports containing data that has specific dates not summaries of data for a calendar year. The reports that apply this filter include Actions (Advisories and Closures) and Monitoring (Water Quality Data).
- Other Date Options (Grouping B): You can only select one of these "Other" options. The rolling year select will return any records in the preceding 12 months. The year-to-date option will return any records since January 1st of the current year. The clear button may be used to clear the currently selected option under Grouping B. The reports that apply this filter include Actions (Advisories and Closures) and Monitoring (Water Quality Data).

C.2.2 Selecting by Miscellaneous Filters

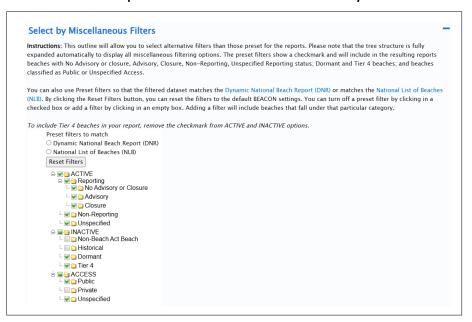
The Miscellaneous Filters allow you to select alternative filters than those preset for the reports. The preset filters show a green checkmark and include the following: No Advisory or closure, Advisory,

Closure, Non-Reporting, Unspecified Reporting status; Dormant and Tier 4 beaches; and beaches classified as Public or Unspecified Access. Please note that the tree structure is fully expanded automatically to display all miscellaneous filtering options. You can turn off a preset filter by clicking in a checked box or add a filter by clicking in an empty box. To include Dormant beaches in reports, keep the box for Reporting filter unchecked. To include Tier 4 beaches in your report, keep the Tier 4 option selected. This method involves using the miscellaneous filters selection tool shown in Exhibit 15 below.

Note:

- These automatic filters are not applied when reports are accessed from the mapping portion of the application. These filters can be adjusted directly on the report after it is opened (see Section D About BEACON 2.0 Reports for more information).
- These filters can be auto set so that the dataset matches the Dynamic National Report (DNR) by selecting the DNR radio button or matches the National List of Beaches (NLB) by selecting the NLB radio button. By clicking the Reset Filters button, you can reset the filters to its default settings.
 - Default filters are shown below and are the same as the Dynamic National Report (DNR) filters. National List of Beach (NLB) filters differ in that 'Tier 4' is toggled on.
- Historical beaches are sometimes flagged as private beaches and sometimes the Reported flag is not Y. To see the Historical beaches, unselect both ACTIVE and INACTIVE filters and select Private under ACCESS filter.

Exhibit 15. BEACON 2.0 Reports Wizard - Additional Filters: Select by Miscellaneous Filters.



C.3 Step 3 – Report and Trend Chart Selections

The report selection page displays a list of available reports for use with the filters selected from the first two steps. Exhibit 16 below shows the Report Name and Description for each available BEACON 2.0

report. On the BEACON 2.0 web page, click on a report name to open the report in a new window. Report rows are sorted or grouped by Jurisdiction, Calendar Year, County, and Beach Name. The sorting and grouping can be adjusted by the user by clicking on any column header or using the Actions menu available above each report. Examples of each report and trend charts are available in Appendix A.

Exhibit 16. BEACON 2.0 List of Reports.

Report	Description
Name	
Action Duration	For each beach with an action: Each action for each beach is sorted into one of five action duration groups (1 day duration, 2 days duration, 3-7 days duration, 8-30 days duration, or greater than 30 days duration). Note: A Beach Action can be based on a model or policy and not be a monitored beach.
Advisory and Monitoring	<u>For each beach:</u> Presents a condensed combination of the "Beach Action" and "Monitoring (Water Quality)" reports submitted data (most recent to older order) including: dates, duration of actions, basis for action, possible cause and source, monitoring results.
Beach Actions (Advisories and Closures)	For each beach action: Presents details of each beach action (for example an Advisory or Closure). Information includes type of action (e.g., closure, rain advisory, contamination advisory), starting and ending date and time, duration of the action in days, and the indicator used to trigger the action. Note: An action can be based on a model or policy and not be a monitored beach. Use the 'Detailed Report' button to see a detailed listing, containing additional information.
Beach Attributes	For each beach: Identifies attributes of each beach including: (1) beach tier ranking, (2) beach length, and (3) latitude/longitude.
Beach Days	For each beach: The number of beach days in the swimming season (based on swimming season length) is presented for each beach. If the beach had an action (1) the total number of action days and (2) the percentage of "beach days" the beach was under an action are also presented. The list is sorted by county and beach name. Note: This report includes monitored and non-monitored beaches. An action can be based on a model or policy and not be a monitored beach.
Swim Season and Water Quality Monitoring	For each beach: Presents information about the swim season, water quality monitoring, and frequency of reporting data to the EPA.
Beach Monitoring Frequency	For each beach: Identifies swim season and monitoring attributes of each beach including: (1) swimming season length and (2) in- and off-season monitoring frequency.
Beach Profile List	<u>For each beach:</u> Presents beach administrative information including beach name, beach ID, location, contact information, public access, Tier, swim season, monitoring and reporting frequency, possible pollution sources.

Report Name	Description
Beach Contact Information	Presents contact information for each beach. Refer questions about current conditions at beaches to the Agency shown in the report.
Local Action Decision Procedures	<u>For each beach:</u> Identifies Local Action Decision Procedures (LADP) used to notify the public of beach actions. The list is sorted by county and beach name. For details on a particular beach see the Beach Profile report.
Possible Pollution Sources	<u>For each beach:</u> Identifies any possible pollution sources have been investigated or associated with a Beach Action and, if so, what are the possible sources that might affect beach water quality.
Jurisdiction Summary	<u>For each county:</u> Displays key summary statistics concerning beaches including: (1) number and length of monitored beaches, (2) number of monitored Tier 1 beaches, (3) number and durations of monitored beach actions, and (4) the number of monitored beach days and/or hours under an action.
Tier 1 Stats	For each beach designated as Tier 1: Presents beach attributes and action information including: (1) beach length, (2) swim season monitoring frequency, (3) number of beach days, and (4) number of days under an action.
Water Quality Data (Monitoring)	For each monitored beach: Presents details of water quality monitoring results collected for the beach program and provided through the U.S. EPA Water Quality Exchange (WQX) including beach ID, beach name, sampling station ID, date/time of sample, collection method, characteristic(s) (e.g., pathogen indicator) sampled, results, analytical method, statistic type (e.g. geometric mean).
WQS Criteria	For each beach: Presents details of the water quality standards that apply to the water accessible from the beach. Includes Indicator Name, Water Type, Measure Type, Measure Value, Measure Unit, Criteria Comment. The list is sorted by state, year, and beach by default. The "WQS Criteria" column can be used to sort records by unique criteria records. Note: This report includes monitored and non-monitored beaches because all waters have WQS.

C.3.1 Trend Charts

The reports "Action Duration", "Possible Pollution Sources", and "Jurisdiction Summary" each have trend charts based on the jurisdictions and Calendar years selected in Step 1 and Step 2 available from buttons on the open reports.

The "Action Duration" and "Possible Pollution Sources" have charts that can be plotted with following filters.

- one jurisdiction from Step 1 and one Calendar year from Step 2 (Pie chart)
- multiple jurisdictions from Step 1 and one Calendar year from Step 2 (horizontal Bar chart)
- one jurisdiction from Step 1 and <u>multiple</u> Calendar years from Step 2 (vertical Bar chart)

The "Jurisdiction Summary" charts have three charting options, 1) Monitored/total number of beaches, 2) Overall amount of time beaches were open and 3) Number of notification actions. These charts can be plotted with any of the following selections.

- one jurisdiction from Step 1 and one Calendar year from Step 2 (Pie chart)
- multiple jurisdictions from Step 1 and one Calendar year from Step 2 (horizontal Bar chart)
- one jurisdiction from Step 1 and multiple Calendar years from Step 2 (vertical Bar chart)
- <u>multiple</u> jurisdictions from Step 1 and <u>multiple</u> Calendar years from Step 2 (line chart)

Note:

- For hard to read numbers on the chart, hover cursor over the chart segment to see the value.
- In bar charts, some layers might be too small and therefore hard to see. In that case, hover cursor over the chart segment to determine if a value exists.
- Selecting more the 10 years and multiple jurisdictions will generate a cumbersome chart. The smaller the number of Calendar years and fewer jurisdictions creates a more readable chart.

D. ABOUT BEACON 2.0 REPORTS

BEACON 2.0 reports are interactive reports, which means you can further customize the reports manually from the report screen. Some of the available features allow you to:

- Alter the layout of report data by selecting columns, applying filters, highlighting, and sorting.
- Define breaks, aggregations, charts, group data based on the values in one or more columns, and add user-defined computations.
- Download report data (multiple formats available).

The following section outlines the process for customizing reports.

D.1 Report Page Elements

Exhibit 17 below shows the layout and elements of the BEACON 2.0 reports pages. Each page element is described below the exhibit.

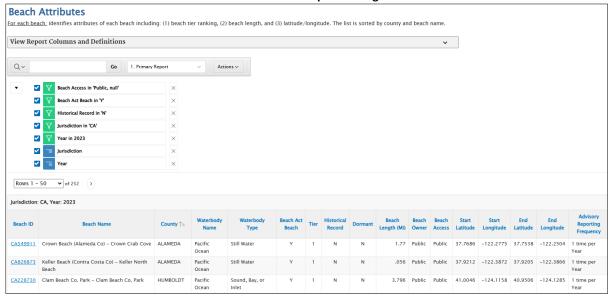


Exhibit 17. BEACON 2.0 Reports - Page Elements.

- **Report toolbar** See Section D.2 for information about the report toolbar.
- **Report filters** List of filter values currently applied to the report. These filters can be toggled on and off using the checkboxes; to delete a filter, click the red x on the filter icon. Filter settings can be changed by clicking the filter name. See Section D.2.1.2 for further information about customizing filters. **Note:** Some of the filters cannot be changed in the State Summary report.
- **Control break** The values the data are grouped together in the report. Most reports are grouped together by state and year. See Section D.2.1.4.2 for more information about control breaks.
- Report headers The report headers for each column. You can select these column headers to
 further filter the report by values in the column. Note: If the report contains a lot of data, it may
 take extra time for the filter selection to appear when you select the header.
- **Report data** The returned data for the report based on the filters currently applied for the selected columns. **Note** A '-' in the column data indicates no data was submitted yet for that data element.
- **Report pagination** The reports contain the ability to navigate to next or previous pages in the report using the pagination widget at the top of the report, and the arrow buttons at the bottom of the report. You can also go directly to a page containing a specific row range using the widget box. Additionally, the report pagination information is displayed in a button that floats at the bottom of the page when the report is scrolled down more than ½ of a page.

D.2 Report Toolbar

Exhibit 18 below shows the layout and elements of the BEACON 2.0 Report Toolbar. Each page element is described below.

Exhibit 18. Report Toolbar.



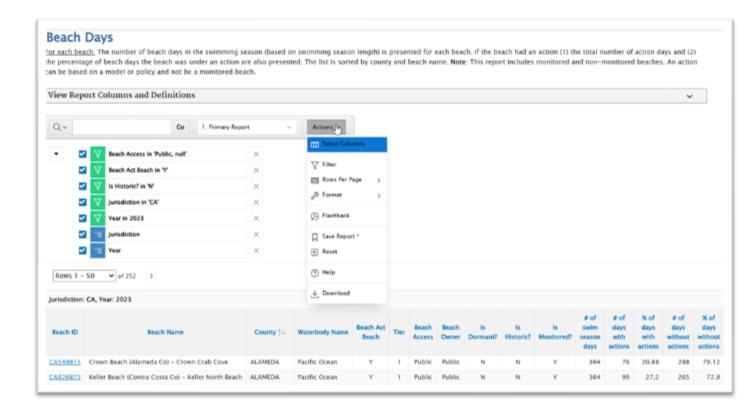
At the top of each report page is a tool bar that provides the following features:

- **Search columns icon (magnifying glass):** Specifies which report/data column will be searched (based on the text field entry).
- **Text search field:** Enables you to enter search criteria. You can use wildcards by entering the "%" sign. For example, select the beach name field from the magnifying glass and enter the characters "%beach%" to return any records with the word "beach" in them. Each new search field entry applies a new filter to the report. These text filters can be toggled on or off, or deleted.
- 'Go' button: Executes the search.
- **Reports:** Enables you to select between the various versions of the report. The "Primary Report" is the default selection and groups the data by state (except for the beach actions report, which is grouped by beach). Some reports have additional other options include "Total by County", which groups the data by county, and "Total of all Jurisdictions", which groups all jurisdictions (when multiple jurisdictions are selected) in order to provide a multi-jurisdictional count total for most data columns. **Note:** Not all reports have these additional report options.
- 'Actions' Menu: Provides report customization options (see the next section for more details).
 Anytime an option from the action menu is used to change the report filter, the entire page is refreshed with the new dataset. To remove new filters from the report and restore the default settings, click the Reset button.

D.2.1 'Actions' Menu

The Actions menu appears to the right of the **Go** button on the search bar. You can use this menu to customize an interactive report. Each customization option is described below.

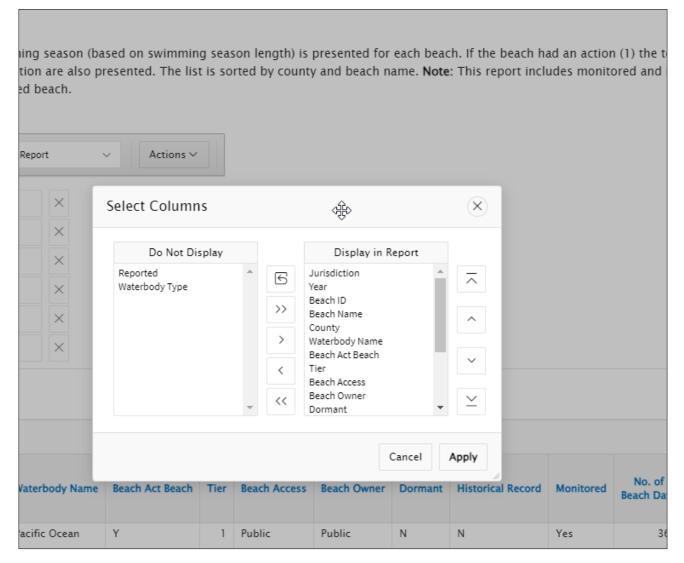
Exhibit 19. Actions Menu Overview.



D.2.1.1 SELECT COLUMNS

This feature allows you to modify which data columns are shown in the report. Selecting this option will reveal a new box that contains a list of columns not currently displayed (left-hand box) and a list of columns displayed (right-hand box) in the report. Move columns to either list using the single and double arrows. In the displayed columns list, you can change the column order by selecting an item and using the up or down arrows. **Note:** Computed columns are prefixed with "**" in the list. Click the Apply button to refresh the report with the selected modifications.

Exhibit 20. Actions Menu > Select Columns.



D.2.1.2 FILTER

This feature allows you to create a data filter to apply for the report. Selecting this option will reveal a new box that contains options for two filter types (column and row), as described below.

D.2.1.2.1 Column filter

This filter option contains a column selector, operator selector, and expression text field.

Operator Expression

AK

AL

AS

BR

BR

CA

Exhibit 21. Actions Menu > Column Filter.

To filter by column:

- 1. Select a column (does not need to be one that is displayed in the report).
- 2. Select an operator (e.g., =, !=, not in, between). The operator/condition options available in the drop-down list are explained with greater detail in Oracle reference materials. The list below gives the section where each operator/condition can be found:
 - i. Oracle Database SQL Language Reference
 (https://docs.oracle.com/en/database/oracle/oracle-database/19/sqlrf/)
 - "LIKE" and "matches regular expression" are covered under the <u>Pattern-matching Conditions section</u>
 (https://docs.oracle.com/cd/B28359_01/server.111/b28286/conditions 007.htm#SQLRF52121).
 - Equals (=) and Does not Equal (!=) are covered under the <u>Comparison</u> <u>Conditions section</u> (https://docs.oracle.com/en/database/oracle/oracle-database/19/sqlrf/Comparison-Conditions.html).
 - 3. "Is Null" and "Is Not Null" are covered under the <u>Null Conditions section</u> (https://docs.oracle.com/en/database/oracle/oracle-database/19/sqlrf/Null-Conditions.html).
 - 4. "IN" and "NOT IN" are covered in the "IN" Condition section (https://docs.oracle.com/en/database/oracle/oracle-database/19/sqlrf/IN-Condition.html).

- ii. Oracle Text Reference (https://docs.oracle.com/en/database/oracle/oracle-database/19/ccref/)
 - The "CONTAINS" filter performs a string comparison on each of the column values returned. Further information regarding CONTAINS can be found in the <u>CONTAINS section</u> of the Oracle Text Reference (https://docs.oracle.com/en/database/oracle/oracledatabase/19/ccref/oracle-text-SQL-statements-andoperators.html#GUID-827A6E7D-106E-4341-9398-2FF6ABB05E59).
- 3. Enter an expression or value in the text field.
 - i. Expression: Enter a search expression in the text field (note: expressions are case sensitive). For example, using the wildcard character (%) in the expression "STATE_NAME like A %" will return all states and territories beginning with the letter "A" (note: only locations with BEACON data would be returned).
 - ii. Value: Type a value into the text box or click the arrow next to the text field to show a list of available values for the selected column.
- 4. Click the Apply button to apply the filter to the report.

The created filter will appear in the settings list below the tool bar. To modify the filter, click the filter name to open the filter options box. The filter can be turned off by un-checking the check box or deleted by clicking the red X icon.

D.2.1.2.2 Row filter

This filter option contains a column selector, function/operator selector, and filter naming field as shown in the filter expression window.

Beach Days For each beach: The number of beach days in the swimming season (based on swimming season length) is p the percentage of beach days the beach was under an action are also presented. The list is sorted by county can be based on a model or policy and not be a monitored beach. View Report Columns and Definitions Qv Go 1. Primary Report Actions v Filter 4 X Column Row Name Filter Expression Column Aliases Functions / Operators A. Beach ID B. Beach Name C. County D. Jurisdiction E. Waterbody Name F. Waterbody Type G. Is Historic? ABS

Exhibit 22. Actions Menu > Row Filter.

To filter by row:

- You can create complex WHERE clauses using column aliases and any Oracle functions or operators (for example, A = 'CA580154', where A is the alias for Beach Id).
- The created filter will appear in the filters list below the tool bar. To modify the filter, click the filter name to open the filter options box. The filter can be turned off by unchecking the check box or deleted by clicking the red X icon.

D.2.1.3 Rows PER PAGE

Sets the number of records to display per page.

D.2.1.4 FORMAT

Format enables you to customize the display of the report. Format contains the following options:

Exhibit 23. Actions Menu > Format. **Beach Days** For each beach: The number of beach days in the swimming season (based on swimming season length) is presented for each beac the percentage of beach days the beach was under an action are also presented. The list is sorted by county and beach name. Note: can be based on a model or policy and not be a monitored beach. **View Report Columns and Definitions** Qv 1. Primary Report Actions V Select Columns Beach Access in 'Public, null' √ Filter Beach Act Beach in 'Y' Rows Per Page Is Historic? in 'N' 𝒯 Format Jurisdiction in 'CA' Control (L) Flashback Year in 2023 Break Jurisdiction ☐ Save Report * ☆ Highlight Compute Reset ∑ Aggregate (?) Help Rows 1 - 50 **∨** of 252 <u>∏</u> Chart → Download (iii) Group By Jurisdiction: CA, Year: 2023 Beach Act Beach Beach ID County ↑= **Beach Name Waterbody Name** Access Owner CA549911 Crown Beach (Alameda Co) - Crown Crab Cove ALAMEDA Pacific Ocean Public Public

D.2.1.4.1 Sort

This feature allows you to sort the report data by defining sort criteria for up to six columns. The Sort tool options include:

• **Column:** Use the drop-down menu to select a column to sort. Up to six columns can be selected (note: the column order determines sort priority).

- **Direction:** Choose whether to sort in ascending or descending order.
- **Null Sorting:** Specify how to handle NULLs (i.e., empty fields). The default setting displays NULLs last. The selected sorting displays to the right of column headings in the report.

D.2.1.4.2 Control Break

Used to create a break group on one or several columns. This pulls the columns out of the interactive report and displays them as separate sections. Most reports are grouped by Jurisdiction and Year

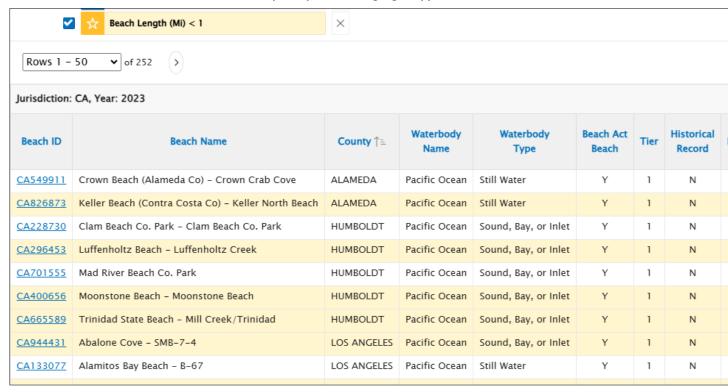
D.2.1.4.3 Highlight

Enables you to define a filter to highlight records and values in the report. The rows (or cells) that meet the filter criteria display as highlighted using the characteristics associated with the filter. Options include:

- Name is used only for display (the name will appear in the filters list after creating a filter).
- **Sequence** identifies the sequence in which the rules are evaluated.
- **Enabled** identifies if a rule is enabled or disabled.
- Highlight Type identifies whether the row or cell should be highlighted. If Cell is selected, the column referenced in the Highlight Condition is highlighted.
- Background Color is the new color for the background of the highlighted area.
- **Text Color** is the new color for the text in the highlighted area.
- Highlight Condition defines your filter condition.

Exhibit 24 below shows an example report with a highlight filter applied. Here, beaches with a Beach Length less than one mile are highlighted blue.

Exhibit 24. Example Report with Highlight applied.



Note: Click on the filter name in the filter list to change the filter settings.

D.2.1.4.4 Compute

Enables you to add computed columns to your report (see Exhibit 25 below). These can be mathematical computations (for example, $NBR_HOURS/24$) or standard Oracle functions applied to existing columns. Some display as examples and others (such as TO_DATE) can also be used). Options include:

- Computation drop-down menu enables you to select a previously defined computation to edit.
- Column Heading is the column heading for the new column.
- Format Mask is an Oracle format mask to be applied against the column (for example, \$9999).
- Computation text box is the computation to be performed. Within the computation, columns are referenced using the aliases displayed.

Below the **Computation** text box are the **Columns** (lists the columns in your query with their associated alias), **Keypad**, and **Functions** menus. Clicking any item in these menus will add the item to the Computation.

The options in the **Functions** menu are explained with greater detail in <u>About SQL Functions</u> section of the Oracle Database SQL Language Reference guide.

The following example computation demonstrates how to display the number of beach actions for a 1-day duration, plus the number of beach actions for a 2-day duration for each record:

N + 0 (where N is 1-day duration, 0 is 2-day duration)

Exhibit 25 shows an example with a new column heading entry and format mask selection.

Action Duration Note: For some users, depending on screen resolution, this report extends beyond the window's border to the right. Please use the browser's horizontal scroll-bar to scroll to the right, to access the vertical scroll-bar to scroll through the report vertically to see all the rows of data; or you can click in the body of the report and use your up and down arrow Q v 1. Primary Report Actions > Compute × Computation - New Computation - ▼ Format Mask Column Heading **v** \$5,234.10 Computation Expression 5,234.10 5.234.1000 5,234 Columns Keypad Functions / Operators A. Beach Id () ' II 1= B. Beach Name State: FL, Year: 20 C. County 5 6 + 1 2 3 D. State E. Waterbody Name F. Waterbody Type >= space Beach N Beach Id ABS G. Historical Record FL309173 Create a computation using column aliases. BECKF FL607825 Examples: FL311193 1. (B+C)*100 FL819911 2. INITCAP(B)||', '||INITCAP(C) FL131708 3. CASE WHEN A = 10 THEN B + C ELSE B END FL414684 FL888728 Cancel Apply FL869739

Exhibit 25. Actions Menu > Format > Compute.

Note: Click on the filter name in the filter list to change the filter settings.

D.2.1.4.5 Aggregate

Aggregates are mathematical computations performed against a column. Aggregates display after each control break and at the end of the report within the column they are defined. Options include:

- Aggregation enables you to select a previously defined aggregation to edit.
- Function is the function to be performed (for example, SUM, MIN).
 Column is used to select the column to apply the mathematical function to. Only numeric columns are displayed.

D.2.1.4.6 Chart

You can define one chart per saved report. Once a chart is defined, you can switch between the chart and report views using links below the Search bar. Options include:

- Chart Type identifies the chart type to include. Select from horizontal bar, vertical bar, pie, or line.
- Label enables you to select the column to be used as the label.
- **Axis Title for Label** is the title that displays on the axis associated with the column selected for Label. This is not available for pie chart.
- Value enables you to select the column to be used as the value. If your function is a COUNT, a Value does not need to be selected.
- Axis Title for Value is the title that displays on the axis associated with the column selected for Value. This is not available for pie chart.
- Function is an optional function to be performed on the column selected for Value.
- **Sort** allows you to sort your result set.

Exhibit 26 below shows an example chart.



Exhibit 26. Actions Menu > Chart.

D.2.1.4.7 Group By

You can define one Group By report per saved report. Once a Group By is defined, you can switch between the Group By and report views using links below the Search bar. To create a Group By report, select:

- the columns on which to group (up to 3 columns can be selected),
- the columns to aggregate along with the function to be performed (average, sum, count, etc.), and
- the columns to use for sorting (up to 3 columns can be selected along with direction and null sorting options).

D.2.1.5 FLASHBACK

A flashback query enables you to view the report data structure as it existed at a previous point in time. The default amount of time that you can flashback is 3 hours (or 180 minutes) but the actual amount will differ for each database.

D.2.1.6 RESET

Resets the report back to the default settings, removing any customizations that you have made.

D.2.1.7 DOWNLOAD

Enables the current result set to be downloaded. The download formats differ depending upon your installation and report definition but include comma-separated values (CSV), Hypertext Markup Language (HTML), or Email. It is recommended that when printing wide BEACON 2.0 reports to download the report in CSV to XLS and format the data to fit on one page before printing. You may also want to save a screen shot of your report settings and structure to aid in reproducing the report in the future.

D.2.2 Column Heading Menu

Clicking on any column heading exposes a column heading menu. Options include:

- Sort Ascending icon (up arrow) sorts the report by the column in ascending order.
- **Sort Descending** icon (down arrow) sorts the report by the column in descending order.
- **Hide Column** icon (red x box) hides the column. Not all columns can be hidden. If a column cannot be hidden, there will be no Hide Column icon.
- **Break Column** creates a break group on the column. This pulls the column out of the report as a master record. The master record is displayed at the top of the break group. For example, the default master record in the Tier 1 Stats report is the state and year values.
- Column Information displays help text about the column, if available.
- Text Area is used to enter case insensitive search criteria (no need for wild cards). Entering a value reduces the list of values at the bottom of the menu. You can then select a value from the bottom and the selected value will be created as a filter using '=' (for example, column = 'ABC'). Alternatively, you can click the Flashlight icon and enter a value to be created as a filter with the 'LIKE' modifier (for example, column LIKE '%ABC%').
- List of Unique Values contains the first 500 unique values that meet your filter criteria. If the column contains dates, a list of date ranges is displayed instead. If you select a value, a filter will be created using '=' (for example, column = 'ABC').

D.2.2.1 REPORT SETTINGS

If you customize an interactive report, the report settings display below the Search bar and above the report. This area can be collapsed and expanded using the icon on the left.

This section describes how to change the filters (or, selections) defined in Steps 1 and 2 from the report screen. For example, if a user originally decided (in Step 2) to include only publicly accessible beaches, the user can make a change from the report screen by clicking the X to delete the filter or the check

mark next to the "Beach Access in 'Public'" filter to turn off filter and return both public and private access beaches data.

For each report setting, you can:

- Edit a setting by clicking the name.
- Disable/Enable a setting by unchecking or checking the Enable/Disable check box. Use this control to temporarily turn a setting off and on.
- Remove a setting by clicking the Remove icon.
- If you have created a chart or group by, you can toggle between them and the base report using the Report View, Chart View, and Group By View links shown on the right. If you are viewing the chart or group by, you can also use the Edit link to edit the settings.

E. NATIONAL LIST OF BEACHES: INTERACTIVE VERSION

This section describes the layout and components of the National List of Beaches web pages.

A link to this report is in the About tab in BEACON

Related Topics: Technical Resources about Beaches National List of Beaches

Contact

BEACON 2.0 - Beach Advisory and Closing On-line Notification

BEACON 2.0 User's Guide (F

Use the tabs below to follow select beaches by location, set additional search filters and select reports.

About Beacon 2.0 Find a Beach Reports

Under the **Beaches Environmental Assessment and Coastal Health (BEACH) Act of 2000**, the EPA provides annual grants to coastal and Great Lakes states, territories, and eligible tribes to help local authorities monitor their coastal and Great Lakes beaches and notify the public of water quality conditions that may be unsafe for swimming. To learn more, visit the Beach Program Home Page.

About BEACON 2.0

The U.S. Environmental Protection Agency (EPA) created the BEach Advisory and Closing Online Notification (BEACON) system to meet the Agency's requirement to provide to the public a database of pollution occurrences for coastal recreation waters. The EPA's response to this requirement, BEACON, contains jurisdiction-reported beach monitoring and notification data and is available online. The jurisdictions (including States, Tribes, and U. S. Territories) are not required to submit their beach season data to the EPA until the beginning of the following calendar year and then we work with them to verify that the data is presented accurately on the EPA's BEACON website.

The BEACON 2.0 User's Guide (PDF) describes how to use the online BEACON 2.0 system to obtain jurisdiction-reported beach monitoring and notification data.

BEACON 2.0 Features

The revised BEACON 2.0 interface includes several enhancements from the previous version and now provides several ways to access beach monitoring and notification data. Enhancements include:

- Beach Profile Details: The Beach Profile Detail contains summary data about a single beach. This report has been updated to ensure that it works well on mobile and tablet platform.
- . Mapping interface: The BEACON map includes many tools for finding and accessing data.
- Report filter wizard: This tool walks users through three steps to select beaches, set search filters and view BEACON reports.
- National List of Beaches: Interactive Version: The report contains the most recent information reported to EPA by coastal and Great Lakes states, territories, and participating tribes.
- EPA's Beach Report: Swimming Season: This report summarizes information that states, territories, and tribes with coastal and Great Lakes beaches submitted to EPA reporting beach closings and advisories for the selected swimming season year.

E.1 What is the National List of Beaches?

EPA has published a list of coastal recreation waters adjacent to beaches (or similar points of access) used by the public in the U.S. The list, required by the <u>Beaches Environmental Assessment and Coastal Health Act (BEACH Act)</u>, includes **Program beaches** (waters that are subject to a state beach water quality monitoring and public notification program) and **Non-program beaches** (waters for which there is no monitoring and notification program) consistent with the National Beach Guidance and Required Performance Criteria for <u>BEACH Act Grants</u>.

EPA published the National List of Beaches every two years between 2004 and 2010, as a static PDF file. Starting with the 2011 swimming season, the list is available in a dynamic format (the <u>National List of Beaches: Interactive Version</u>) that links to <u>EPA's Beach Advisory and Closing On-line Notification</u>
(<u>BEACON</u>) system where further details about each beach can also be found. The list contains the most recent information reported to EPA by coastal and Great Lakes states, territories, and eligible tribes.

The list provides a national baseline of the extent of state, territorial and tribal beach monitoring across the country. It helps EPA measure improvements in monitoring and notification at all coastal and Great Lakes beaches and determine how to better implement the BEACH Act.

E.2 How did EPA get this information?

States, territories and tribes provide to EPA monitoring and notification data for each swimming season no later than January 31 of the following year. Several jurisdictions report data more frequently. The List of Beaches is updated automatically as new information is.

E.3 How do I find more information about beaches in my state?

Contact the state or local beach program manager using the contact information at: https://www.epa.gov/beaches/state-territorial-tribal-and-epa-beach-program-contacts.

For more information on the BEACH Act and the EPA Beach Program, visit our website at: https://www.epa.gov/beaches.

E.4 Viewing National List of Beaches Reports

This section describes the National List of Beaches: Interactive Version. As shown in Exhibit 27 below, the main page shows a national map with total BEACH Act Beaches and monitored beaches by jurisdiction. A national total of BEACH Act Beaches and monitored beaches is also included on top of the map. The page also includes reports in tabular form showing the Number of BEACH Act Beaches Reported national and jurisdiction totals (Note - the counts include private beaches but do NOT include historical beaches). This "current" list shows the most recent information reported to EPA by the states, tribes and U. S. territories that are subject to the BEACH Act.

Co

Exhibit 27. National List of Beaches Interactive Version Default View.

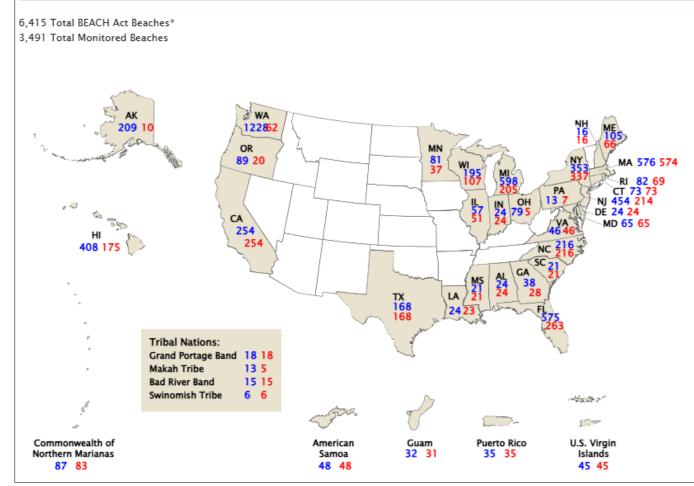
BEACON 2.0 - Beach Advisory and Closing On-line Notification

You are here: EPA Home » Beaches » About BEACON 2.0 » National List of Beaches: Interactive Version

National List of Beaches: Interactive Version

This interactive report contains data for 2024. Previous PDF only versions: 2010, 2008, 2004

Number of total and monitored coastal and Great Lake BEACH Act Beaches by Jurisdiction (state/tri



E.4.1 Number of BEACH Act Beaches Reported

The National List of Beaches report displays the "Current list of beaches". Reports for the 2004, 2008 and 2010 swimming seasons are available as links to static PDF files on the report. Starting with the 2011 swimming season, the reports are dynamically created. The "current" list shows the most recent

information reported to EPA by the states, tribes and territories that are subject to the BEACH Act and may include data submitted in prior years and partial data from the current year.

E.4.2 Select a State, Tribe or Territory

To view details for a state, tribe, or territory, click the name of the desired jurisdiction. The jurisdiction reports (described further in the next section) provide the list of beaches for the selected jurisdiction.

E.5 Jurisdiction Reports

The jurisdiction reports provide a state map that shows counties with BEACH Act beaches, summary data, and the list of beaches for the selected jurisdiction (see Exhibit 28).

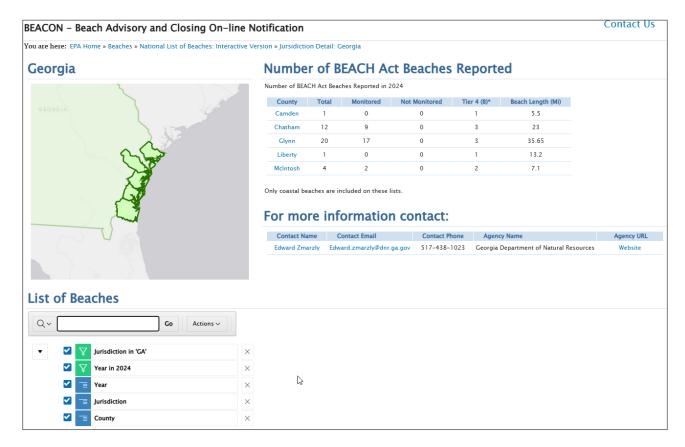


Exhibit 28. National List of Beaches -- Jurisdiction Detail.

Note: Clicking on the hyperlinked counties will take you to that county section in the List of Beaches report.

Each list is grouped by county. For some territories and Hawaii, the beaches are listed by island. Alaska's beaches are reported by community. Tribal beaches are listed by name. Beach names are listed with their monitoring status for the selected swimming season. We include only coastal and Great Lakes

beaches in these lists. The lists do not include beaches on inland waters because they are not subject to the BEACH Act.

Clicking a Beach ID in a jurisdiction report will open the Beach Profile for the beach in a new tab. The profile includes a map view that shows the extent of the beach, provides the most recent advisory or closure status and water quality monitoring data that the state has reported, and links to the state's website for the most up-to-date information. Those beach views, a national map of BEACH Act jurisdictions and 12 standard reports with information about water quality monitoring events and results, advisory and closure durations, and pollution sources are available in BEACON2.

E.5.1 State Map

Counties with available beach data are colored green. The map can be used to filter the List of Beaches section; to view data for a specific county, click the county on the map. To change the report to show all counties remove the county filter, click on the red 'X' next to the county name, which will appear underneath the map in the List of Beaches section.

E.5.2 Number of BEACH Act Beaches Reported

This table provides summary data for the jurisdiction. The Monitored Count figures are for beaches that are monitored regularly. The Unmonitored Count figures are for beaches that are not regularly monitored and are not marked historical. The Tier 4 figures are for beaches that are used by the public but are not in the monitoring and notification program and therefore Tier 4.

E.5.3 Contact Information

This section provides contact information for the jurisdiction's contact person(s) from whom you can obtain more information.

E.5.4 Organization Information

This section provides organization information like organization code, name and description. This section also contains the tribal ID and contact information for the jurisdiction's contact person. This section is only available for tribes.

E.5.5 List of Beaches

The List of Beaches section provides beach data by county (counties are listed in alphabetical order). The report contains four columns: Beach Name, Monitored, Not Monitored and Tier Rank. The totals for each column are reflected in the row titled "Count" at the bottom of each county.

E.5.5.1 Using the Report Query Toolbar

Please refer to Section D - About BEACON 2.0 Reports for more information on the report elements and query toolbar.

E.5.5.2 BEACH NAME LINKS

Clicking a beach name in a jurisdiction report will guide you to the Beach Profile Detail, which contains a map view of the selected beach. This page shows the extent of the beach, provides the most recent advisory status and water quality monitoring data that the state has reported, and links to the state's website for the most up-to-date information.

F. THE EPA'S BEACH REPORT

This section describes the layout and components of the **EPA's Beach Report**.

F.1 What is the EPA's Beach Report?

The EPA has published national summary reports about advisories and closings for beaches along the U.S. coasts and Great Lakes. This report summarizes information that states, territories, and tribes with coastal and Great lakes beaches submitted to the EPA each year. The Beaches Environmental Assessment and Coastal Health (BEACH) Act of 2000 authorizes EPA to provide grants to eligible states, territories, and tribes to monitor their coastal beach waters for bacteria that indicate the possible presence of disease-causing pathogens and to notify the public when there is a potential risk to public health. The EPA award grants each year and the BEACH Act requires that grant recipients report their coastal beach monitoring and notifications data to EPA and that EPA maintain an electronic database of that data, accessible to the public. This report is based on that data.

F.2 Viewing Dynamic National Reports

This section describes the <u>EPA's Beach Report</u>. As shown in Exhibit 30 below, the page allows users to select a year the dynamic report will be generated for. The page contains charts and trend charts of the notification actions, duration the actions lasted and sources that resulted in beach advisories or closures.

Exhibit 29. EPA's Beach Report – 1 of 2

EPA's Beach Report: 2023 Swimming Season

Select Reporting Year: 2023 v

(Note: For the current year, data might be available only for few jurisdictions that have submitted data. For preceding years, the DNR may reflect data differently than a previously published (Archived) Annual Report, because additional data and corrections based on verification may be submitted after the Annual Report is published.)

Introduction

This report summarizes information that states, territories, and tribes with coastal and Great Lakes beaches submitted to the EPA reporting beach closings and advisories for the 2023 swimming season. The information in this report will cover January 1 through December 31 and include data submitted to the EPA as of December 11, 2024.

The Beaches Environmental Assessment and Coastal Health (BEACH) Act of 2000 authorizes the EPA to provide grants to eligible states, territories, and tribes to monitor their coastal recreational waters adjacent to beaches used by the public for attainment of applicable water quality standards for pathogens or pathogen indicators, such as bacteria, that indicate the possible presence of disease-causing pathogens and to notify the public when there is a potential risk to public health. EPA awarded approximately \$10.1 million in grants in 2022 for the 2023 season. The BEACH Act requires that grant recipients report their monitoring and notifications data for coastal recreational waters to the EPA and that the EPA maintain a publicly accessible electronic database of those data. This report is based on those data. Information on grouped or individual jurisdictions or beaches can be found in the BEACON 2.0 web application.

2023 Swimming Season Results

States, territories, and tribes take water samples to monitor the water at swimming beaches to see if levels of specific indicator bacteria (e.g., enterococci) exceed the water quality standards that apply to that water. "Program beaches" have, at minimum, a program to notify the public if swimming in the coastal water is unsafe, and most also have a program to routinely monitor the water quality. In 2023, 70 percent of coastal and Great Lakes program beaches in the United States were monitored for pathogens or pathogen indicators. Chart 1 shows the number of beaches that were monitored and number of program beaches in each state, territory, and tribe in 2023. When monitoring results show exceedances for pathogens or pathogen indicators, states, territories, and tribes either issue a beach advisory that warns people of possible risks of swimming or a beach closing that closes the beach to public swimming. The states and local agencies that do not routinely monitor water quality use models or policies (e.g., advisory after a certain amount of rainfall) as a basis for issuing notification actions at beaches. These advisories or closures typically stay in effect until monitoring shows that levels of pathogens or pathogen indicators comply with applicable water quality standards.

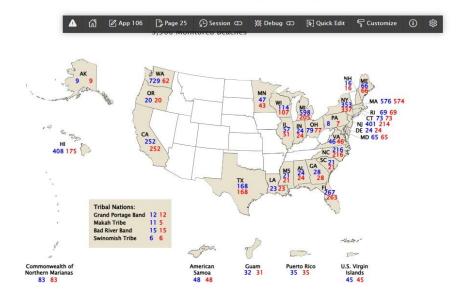


Chart 1: Number of total and monitored coastal and Great Lake program beaches by state/territory/tribe

How many beaches had notification actions?

In 2023, 31 percent of the nation's program beaches (1,598 out of 5,089) had at least one advisory or closing. Chart 2 shows the percent of program beaches with one or more advisories or closings in years 2019 through 2023.

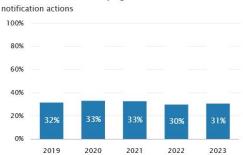
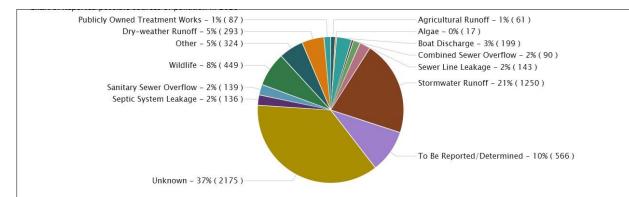


Chart 2: Percent of nation's program beaches with one or more

Exhibit 30. Dynamic National Report – 2 of 2

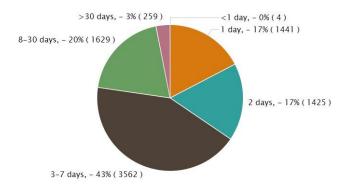


(Note: The percentages shown on the chart may not total 100 because they are rounded to the nearest whole number. The numbers in parentheses are the reported number of sources associated with advisories and closings.)

How many notification actions were issued and how long did they last?

States, territories, and tribes issued 8,320 beach notification actions (i.e., advisories or closings) during the 2023 swimming season. An advisory or closing is typically removed when follow-up water quality monitoring shows that pathogens or pathogen indicators comply with applicable water quality standards. For 77 percent of the notification actions in 2023, coastal recreational waters no longer exceeded applicable water quality standards and beaches were deemed safe for swimming within a week (Chart 4). In 2023, 17 percent of the notification actions lasted only one day, and 17 percent ended between one and two days.

Chart 4: Duration of beach notification actions in 2023

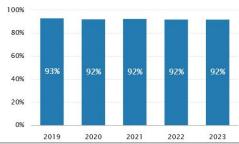


(Note: The percentages shown on the chart might not total 100 since only whole numbers are being shown.)

What percentage of days were beaches open and safe for swimming?

Program beaches on U.S. coasts and along the Great Lakes were open and safe for swimming 92 percent of the time in 2023. EPA calculates the total available beach days and the number of beach days with advisories or closings to better track trends over time. To calculate total available beach days, EPA adds the length of the beach season (in days) for every program beach in each state, territory, and tribe. For 2023, EPA determined that 775,813 beach days were associated with the swimming seasons of 5,089 beaches with monitoring and/or notification programs. Notification actions were reported on 62,668 days out of those 775,813 beach days. Chart 5 shows the percentage of beach days that the nation's program beaches were open and without any advisories in years 2019 through 2023.

Chart 5: Percent of days the nation's program beaches were open and safe for swimming



F.2.1 Number of total and monitored coastal and Great Lake program beaches by state/territory/tribe

The map chart shows number of Program beaches and of beaches that were monitored in each state, territory, or tribe for the selected year.

F.2.2 Beaches with notification actions

This section contains information regarding program beaches that had at least one advisory or closure. The chart in this section shows the percent of program beaches with advisories or closures over the past five years.

F.2.3 Possible pollution sources causing notification actions

This section contain a chart that shows information regarding the possible sources of pollution the states, territories, and tribes reported that either resulted in beach advisories or closures for a selected year.

F.2.4 Beach notification action duration

This section contains information regarding duration of notification actions (i.e., advisories or closings). The chart in this section shows the count and percent of notification actions that lasted 1 day, 2 days, 3-7 days, 8-30 days and more the 30 days for a selected year.

F.2.5 Percent of days beaches was open or closed due to notification actions

This section contains information regarding number of days beach was under advisory or closed and days beaches were open and without any advisories. The chart in this section shows the percentage of beach days that beaches were open and without any advisories over the past five years.

G. KNOWN ISSUES

G.1 Map Layers disappear after subsequent pan or zoom.

This happens because the layer is shown outside of its pre-set visibility scale. Every data layer (e.g., states, counties, tribes, and beaches) has a set scale level that determines layer visibility. This is done for performance reasons, and to show the more detailed data layers as you move from a national view.

When zooming to these features using either the **Go To** search tool or the Zoom button in the pop-up window on a feature, the feature's data layer will become visible automatically. The logic for when the data layers are shown using their set scale level is only overridden during this initial zoom from the pop-up window or from the search tool. When subsequently using the normal navigation functions of pan, zoom out, forward, back, and U.S. View, the data layers turn on and off at their set visibility scale levels.

As an example, if you are at the U.S. View and you click on the state of California, zooming to the state from the pop-up window will zoom to a view that shows all the counties in California with active beaches. In this case, because these counties span the length of California, the view is zoomed out farther than the preset scale at which county symbology is visible. Once you navigate using a pan or any other navigation, the normal visibility scales take over.

G.2 Beach features not visible when using Zoom to County.

The size of beach features varies, and some features can be very small. In counties with multiple beaches, the zoom is determined by the bounding box of all the features in that county boundary. If the beaches are spread out, the bounding box that contains these features is large and therefore the scale will be more zoomed out to be able to fit all the features in the map view. If there are very small features, they might not be viewable at the county extent.

G.3 Beach features are difficult to identify

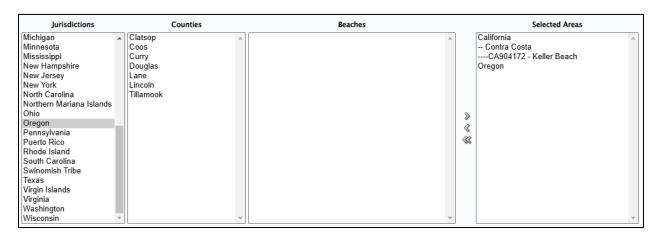
If the Imagery basemap is turned on, the green colored beach segments may blend into the background images. Zooming in closer will make the beaches more apparent on the map. Also, beach segments might be more visible if the Streets basemap is turned on instead.

G.4 Removing selections from the Selected Beaches box

Removing groups. Groups of beaches (e.g., a state or county) can be removed using the single arrow but note that this only applies if the group was added using an add group procedure. In the example below, "Oregon" was added as group; thus, all beaches in Oregon would be included in the report.

Removing "Oregon" from the Selected Beaches box using the single arrow will remove this group. Note that in this example, "Contra Costa" and "California" are not used in the filtering and are only shown to help the user identify the selected beach(es) within the Selected Beaches box.

Exhibit 31. Example Select by Jurisdiction, Counties, and/or Beaches tool.



G.5 Data found exceeds maximum row limit with most reports

For most reports, if the search returns more than 100,000 results, a message is shown to indicate that the filter returns too many rows to be presented in the report. Users are instructed to update the filters and split the retrieval – for instance select data for January – June, and then July – December.

G.6 Linking directly to BEACON reports

Advanced users may wish to link directly to BEACON reports that include desired filters. This can be accomplished by configuring a custom URL. Below is an example.

Custom URLs for BEACON APEX Reports - Example for Water Quality Report

This example will produce a URL that links to a filtered Water Quality report. A jurisdiction can, for example, embed the link in their webpage to display the real-time Water Quality report from BEACON. Other links to reports can also be constructed (see link to Oracle guidance at end of example).

Example URL:

https://beacon.epa.gov/ords/beacon2/r/beacon apex/beacon2/monitoring-wqx?state=VA&year=2023

Note: Paste the URL into a browser instead of opening from this document.

Explanation of URL construction:

The URL has been marked with colored highlight, which corresponds to details below.

https://beacon.epa.gov/ords/beacon2/r/beacon_apex/beacon2/monitoring-wqx? STATE=VA&Year=2023

- https://beacon.epa.gov/ords/beacon2/r/beacon apex/beacon2/ This is the BEACON application root URL (uniform resource locator).
- 'monitoring-wqx' This is the part of the URL that directs to a specific page. In this case, the Monitoring (Water Quality Data) page.
- **?STATE=VA** This is the Jurisdiction filter for Virginia— each Jurisdiction has a 2-character code. This is the same code used by the US Postal Service.
- &YEAR=2023- This is the Calendar Year filter. Most reports require filtering for a set time period between January 1, 2000 and the present. Note: Most jurisdictions only send data to the EPA at the end of each swimming season, so the current year will often not have any data.
- There is an exhaustive syntax for filtering reports. The syntax is part of the Oracle Apex framework that BEACON is built with. For additional information, contact the Beaches program, or consult the Oracle Apex online reference at http://www.oracle.com/technetwork/issue-archive/2010/10-mar/o20browser-098978.html.

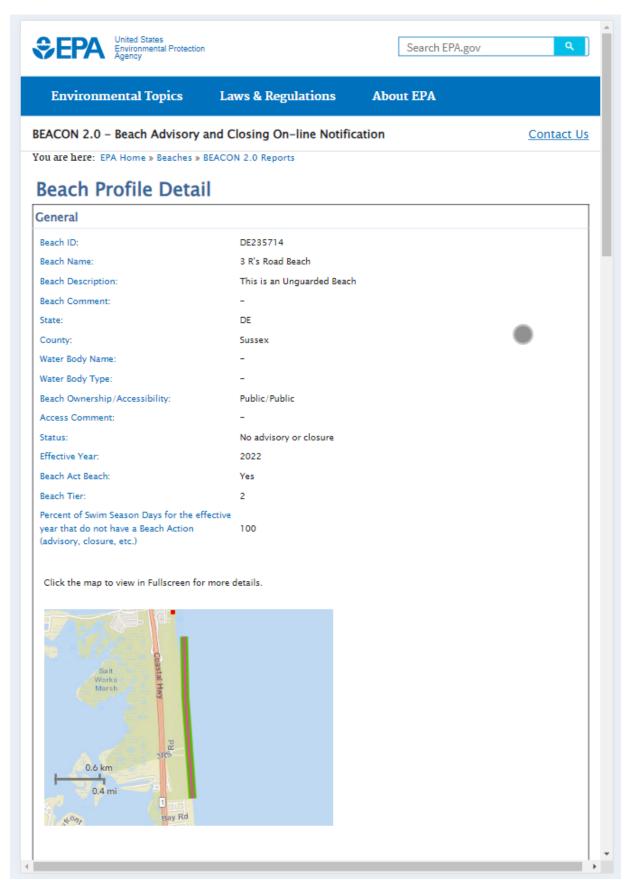
G.7 Station IDs submitted prior to 2015 not available.

Station IDs submitted prior to 2015 are not stored in PRAWN and therefore not available in BEACON; Query <u>WQP</u> using the Beach ID as the Project ID.

G.8 BEACON is not configured for mobile phones and tablet formats.

BEACON is not configured to be useable on small screens. Only the Beach Profile report is configured to display on mobile phone and tablet formats.

General Beach ID: DE235714 Beach Name: 3 R's Road Beach This is an Unguarded Beach Description: Beach Beach Comment: DE State: Sussex County: Water Body Name: Water Body Type: Beach Ownership/Accessibility: Public/Public Access Comment: No advisory or closure Status: Effective Year: 2022 Beach Act Beach: Yes 2 Beach Tier: Percent of Swim Season Days for the effective 100 year that do not have a Beach Action (advisory, closure, etc.) Click the map to view in Fullscreen for more details. Works Marsh 0.6 km 0.4 mi 1 **Back to Top** Bay Rd



H. DEFINITIONS

Action: An 'Action' is an advisory or closure based on a water quality monitoring result, a model, or a policy. This is also referred to as a 'Notification'

Action duration: Action duration is based on the times an action begins and ends. One "day" is considered the 24-hour period following the time an action is issued. Additional "days" are recorded when an action extends into any portion of subsequent 24-hour period(s). For example, an action that lasts 26 hours is recorded as a two-day action.

BEACH Act Beaches: BEACH Act refers to the Beaches Environmental Assessment, Closure, and Health Act of 2000 which focuses on coastal and Great Lakes recreational waters. States/Tribes/Territories provide EPA with a list of their coastal recreational beaches. Identifying BABs is discussed beginning on electronic page 35 (paper page 25)-- §3.2 "Step 1: Identify Coastal Recreation Waters" of: National Beach Guidance and Required Performance Criteria for Grants

Beach actions: Beach-specific advisories or closings issued by the reporting state or local governments. An action is recorded for a beach even if only a portion of the beach is affected.

Beach days: The number of days in the swim season.

Decision Procedure: Jurisdictions maintain protocols for when Notifications are issued and where the notifications are issued – for example via a website, or on the radio, or posting at the beach.

Dormant: The jurisdiction is not expecting to collect data at this beach for 1 to 2 years.

Historical: The jurisdiction no longer collecting data at this beach and is not expecting to resume in the future.

Monitoring: Beach water quality is collected as part of a beach quality 'Monitoring' program.

Monitored beaches: Beaches that have a reporting frequency greater than zero or has monitoring results in EPA Water Quality Exchange and the National Water Quality Monitoring Council's "Water Quality Portal".

Notification: Beach Actions are reported to the public based on systems set up and managed by Jurisdictions. The public reporting is referred to as Notification.

Program Beaches: BEACH Act Beaches (Coastal recreation waters adjacent to beaches or similar points of access including private beaches that are used by the public) that are subject to a monitoring and notification program.

Swim season: States indicate to EPA the period of time they consider to be the swim (or recreational) season for each beach.

Swim Day: Time beach is open to the public per day – used for partial day beach actions, i.e., "Time affected (in hours)" / "Time beach is open (in hours)" = "Percentage of time beach was affected during open hours". See Beach Actions (Advisories and Closures) report.

Tier 1 beaches: States and territories designate their significant public beaches as Tier 1 beaches (requirement of BEACH Act grant program). These are the beaches that have the highest risk.

Tier 4 beaches: States and territories designate public beaches that are not in the monitoring and notification program as Tier 4 beaches (also known as non-program or non-reporting beaches).

The following definitions are also displayed on the Possible Pollution Sources and Beach Actions (Advisories and Closures) BEACON 2.0 reports:

RUNOFF: Non-storm related, dry weather runoff **STORM:** Storm related, wet-weather runoff

AGRICULTURAL: Agricultural runoff

ALGAE: Algae Sources **BOAT:** Boat discharge

CAFO: Concentrated animal feeding operation

CSO: Combined sewer overflow **SSO:** Sanitary sewer overflow

POTW: Publicly-owned treatment works

SEWER LINE: Sewer line leak, blockage, or break

SEPTIC: Septic system leakage **WILDLIFE:** Wildlife pollution

OTHER: Other source known but not listed above **UNKNOWN:** Source exists but unidentified

E.COLI: The name of a microbiological indicator used in freshwater quality sampling to indicate possible fecal contamination.

PREEMPT: An abbreviation of "preemptory action" (advisory/closure) that some jurisdictions issue to inform the public of possible fecal contamination,

issued based on past experience, prior to receiving from the laboratory a confirming water quality sample.

ELEV_BACT (elevated bacteria – confirmed by a water quality sample)

ENTERO: ENTERO stands for enterococci (an indicator bacterium used in water quality sampling).

APPENDIX A – EXAMPLES OF BEACON 2.0 REPORTS

Note: Many of these reports were published in paper format for states from 1999 through 2012. Please see: Annual Swimming Season Statistics (1999-2012) [https://archive.epa.gov/epa/beach-tech/annual-swimming-season-statistics-1999-2012.html].)

State: MI, Year: 2018 No. of actions less actions of actions of actions of actions of actions greater No. of Days Under than 1 day 1 day 3 - 7 day 8 - 30 day than 30 day 2 day Beach Id **Beach Name** County ↑= beach actions Action duration duration duration duration duration duration 0 MI000373 Chrysler Park Beach ST. CLAIR 4 0 2 0 0 2 3 0 MI000409 Conger-Lighthouse Beach ST. CLAIR 0 0 0 Fort Gratiot County Park ST. CLAIR 2 0 0 0 0 0 MI819055 5 0 0 MI000408 Holland Road Beach ST. CLAIR 0 0 3 MI001382 Keewadhin Road Beach ST. CLAIR 2 0 0 0 0 0 0 MI000407 Lakeside Beach ST. CLAIR 0 0 0 2 0 0 0 0 MI000344 Pier Park WAYNE 0 101 378 54 12 Count: 57 18 15 Rows 51 - 57 ▼

Exhibit 32. Action Duration.

Navigation: The reports contain the ability to navigate to next or previous pages in the report using the arrow buttons. You can also go directly to a page containing a specific row range using the drop-down box.

Action Duration Chart button on the "Action Duration" report. The example Note: The exhibit below shows the Action Duration chart, shown by clicking the below is of a chart generated when one jurisdiction is selected from wizard Step 1 and one year is selected from Calendar Year (Grouping C) field from Step 2. Charts cannot be plotted when beach IDs or counties are selected under wizard Step 1.

Action Duration Chart Unchangeable Filters: The following filters (Jurisdiction, County, Beach IDs, Additional Filters, and Year) can't be altered in this report. Justisdiction(s): FL Additional Filters: · Historical: No · Beach Act Beach: Yes · Dormant: No, Yes · Beach Access: Public, Unspecified Year 2018 **Main Report** Action Duration in FL >30 days, - 3% (7) 1 day, - 5% (11) 2 days, - 13% (28) 8-30 days, - 34% (75) 3-7 days, - 45% (101)

Exhibit 33. Notification Action Duration Chart - 1 of 3

Note: The percentages shown on the chart might not total up to 100 since only whole numbers are being reported.

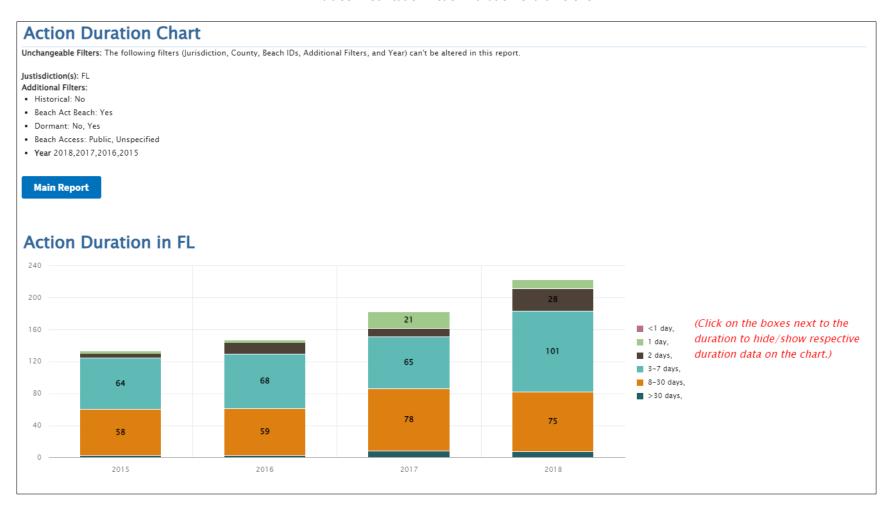
Note: The example below is of a chart generated when <u>multiple</u> jurisdictions are selected from wizard Step 1 and <u>one</u> year is selected from Calendar Year (Grouping C) field from Step 2. You can click on the boxes next to the durations in the legend to hide/show respective duration data on the chart. Charts cannot be plotted when beach IDs or counties are selected under wizard Step 1.

Action Duration Chart Unchangeable Filters: The following filters (Jurisdiction, County, Beach IDs, Additional Filters, and Year) can't be altered in this report. Justisdiction(s): NJ,NY,PR,VI Additional Filters: · Historical: No · Beach Act Beach: Yes · Dormant: No, Yes Beach Access: Public, Unspecified Year 2018 **Main Report** Action Duration in NJ,NY,PR,VI 149 NJ (Click on the boxes next to the <1 day,</p> 543 382 duration to hide/show respective 1 day, duration data on the chart.) 2 days, 3-7 days, 8-30 days, >30 days, 200 600 800 1,200 400 1,000

Exhibit 34. Notification Action Duration Chart - 2 of 3

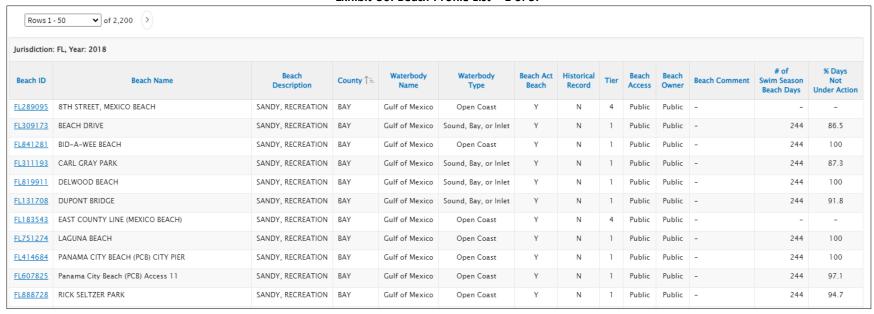
Note: The example below is of a chart generated when <u>one</u> jurisdiction is selected from wizard Step 1 and <u>multiple</u> years are selected from Calendar Year grouping C) field from Step 2. You can click on the boxes next to the durations in the legend to hide/show respective duration data on the chart. Charts cannot be plotted when beach IDs or counties are selected under wizard Step 1.

Exhibit 35. Notification Action Duration Chart - 3 of 3



Note: The exhibit below shows the default Beach Profile List. If the "Season and Monitoring Frequency Report" or the "Contact Information" reports are displayed, click the Beach Profile List button to return to this report.

Exhibit 36. Beach Profile List - 1 of 3.



Note: The exhibit below shows the Swim Season and Water Quality Monitoring report, shown by clicking the "Swim Season and Water Quality Monitoring" button on the default "Beach Profile List" or the "Beach Contact Information" reports.

Exhibit 37. Swim Season and Water Quality Monitoring - 2 of 3.

Jurisdiction: NY, Year: 2018																			
Beach Id	Beach Name	County Name	Station IDs	Waterbody Name	Beach Act Beach	Tier	Historical Record	Beach Length (MI)	Beach Owner	Beach Access	Dormant	# of Swim Season Beach Days	Swim Day Length (hours)	Swim Season Start Date	Swim Season End Date	Swim Season Monitoring Frequency	Swim Season Monitoring Count	Off Season Monitoring Frequency	Monitored Irregularly
NY617089	AMERICAN TURNERS	Bronx	NY617089-01, NY617089-02, NY617089-03	Long Island Sound	Y	1	N	.02	Private	Public	-	106	24	05-26-2018	09-09-2018	1 PER_WEEK	15	0	-
NY582799	DANISH AMERICAN BEACH CLUB	Bronx	NY582799-01, NY582799-02, NY582799-03	Long Island Sound	Y	1	N	.02	Private	Public	-	106	24	05-26-2018	09-09-2018	1 PER_WEEK	15	0	-
NY300205	LOCUST POINT YACHT CLUB	Bronx	NY300205-01, NY300205-02, NY300205-03	Long Island Sound	Y	1	N	.1	Private	Public	-	106	24	05-26-2018	09-09-2018	1 PER_WEEK	15	0	-
NY818686	MANHEM BEACH CLUB	Bronx	NY818686-01, NY818686-02, NY818686-03	Long Island Sound	Y	1	N	.01	Private	Public	-	106	24	05-26-2018	09-09-2018	1 PER_WEEK	15	0	-
NY549702	MORRIS YACHT AND BEACH CLUB	Bronx	NY549702-01, NY549702-02, NY549702-03	Long Island Sound	Y	1	N	.04	Private	Public	-	113	24	05-26-2018	09-16-2018	1 PER_WEEK	16	0	-
10/017400	00011100 001011	•	10/017/00 01		٠,	,		•				100	~ .	25 25 222	20 20 2010	1 000 111001	, -	^	

Note: The exhibit below shows the Beach Contact Information List report, shown by clicking the "Contact Information" button on the default "Beach Profile List" or the "Swim Season and Water Quality Monitoring" reports.

Exhibit 38. Beach Contact Information – 3 of 3.

Jurisdiction: NY, Year: 2018											
Beach ID	Beach Name	County ↑=	Website Address	Name	Agency	Phone	Email				
NY617089	AMERICAN TURNERS	BRONX	http://www1.nyc.gov/site/doh/health/health-topics/beach-homepage.page	-	-	-	-				
NY582799	DANISH AMERICAN BEACH CLUB	BRONX	http://www1.nyc.gov/site/doh/health/health-topics/beach-homepage.page	-	-	-	-				
NY300205	LOCUST POINT YACHT CLUB	BRONX	http://www1.nyc.gov/site/doh/health/health-topics/beach-homepage.page	-	-	-	-				
NY818686	MANHEM BEACH CLUB	BRONX	http://www1.nyc.gov/site/doh/health/health-topics/beach-homepage.page	-	-	-	-				
NY549702	MORRIS YACHT AND BEACH CLUB	BRONX	http://www1.nyc.gov/site/doh/health/health-topics/beach-homepage.page	-	-	-	-				
NY817429	ORCHARD BEACH	BRONX	http://www1.nyc.gov/site/doh/health/health-topics/beach-homepage.page	-	-	-	-				

Note: The exhibit below shows the default Beach Action (Advisories and Closures) report (one line per Action). If the Detailed Report is displayed, click the "Main Report" button to return to this report.

Exhibit 39. Beach Actions (Advisories and Closures) - 1 of 2.

Jurisdiction	NY, Year: 20	18																
County ↑=	Beach ID	Beach Name	Beach Act Beach	Tier	Station ID	Waterbody Name	Waterbody Type	Action ID	Action Type	Action Start Date	Action End Date	Action Reasons	Action Indicator	Action Possible Source	Action Duration Days	% of time beach was affected during open hours	Time affected (in hours)	Time beach is open (in hours)
BRONX	NY617089	AMERICAN TURNERS	Υ	1	21NYBCH NY617089- 01	Long Island Sound	Sound, Bay, or Inlet	524364	Rain Advisory	08-18-2018	08-18-2018	RAINFALL	PREEMPT	CSO, STORM	1	100	24	24
BRONX	NY617089	AMERICAN TURNERS	Y	1	21NYBCH NY617089- 01	Long Island Sound	Sound, Bay, or Inlet	524363	Rain Advisory	08-14-2018	08-14-2018	RAINFALL	PREEMPT	CSO, STORM	1	100	24	24
BRONX	NY617089	AMERICAN TURNERS	Y	1	21NYBCH NY617089- 01	Long Island Sound	Sound, Bay, or Inlet	524362	Rain Advisory	08-11-2018	08-12-2018	RAINFALL	PREEMPT	CSO, STORM	2	100	24	24
BRONX	NY617089	AMERICAN TURNERS	Y	1	21NYBCH NY617089- 01	Long Island Sound	Sound, Bay, or Inlet	524361	Rain Advisory	08-04-2018	08-05-2018	RAINFALL	PREEMPT	CSO, STORM	2	100	24	24
BRONX	NY617089	AMERICAN TURNERS	Y	1	21NYBCH NY617089- 01	Long Island Sound	Sound, Bay, or Inlet	524360	Rain Advisory	07-25-2018	07-26-2018	RAINFALL	PREEMPT	CSO, STORM	2	100	24	24
BRONX	NY617089	AMERICAN TURNERS	Y	1	21NYBCH NY617089- 01	Long Island Sound	Sound, Bay, or Inlet	524359	Rain Advisory	07-22-2018	07-23-2018	RAINFALL	PREEMPT	CSO, STORM	2	100	24	24
BRONX	NY617089	AMERICAN TURNERS	Υ	1	21NYBCH NY617089- 01	Long Island Sound	Sound, Bay, or Inlet	524358	Rain Advisory	07-18-2018	07-18-2018	RAINFALL	PREEMPT	CSO, STORM	1	100	24	24
BRONX	NY617089	AMERICAN TURNERS	Y	1	21NYBCH NY617089- 01	Long Island Sound	Sound, Bay, or Inlet	524357	Rain Advisory	07-15-2018	07-16-2018	RAINFALL	PREEMPT	CSO, STORM	2	100	24	24
BRONX	NY617089	AMERICAN TURNERS	Y	1	21NYBCH NY617089- 01	Long Island Sound	Sound, Bay, or Inlet	524356	Rain Advisory	06-28-2018	06-29-2018	RAINFALL	PREEMPT	CSO, STORM	2	100	24	24

Note: The exhibit below shows the Detailed version of the Beach Action (Advisories and Closures) report (multiple lines per Action if multiple sources were possible), shown by clicking the "Detailed Report" button on the default version (e.g. Main Report) of the Beach Action (Advisories and Closures) report.

Exhibit 40. Beach Actions (Details) - 2 of 2.

Beach Name ↑=	Station ID	Activity ID	Action Type	Action Start Date	Action End Date	Action Duration Days	Percentage of time beach was affected during open hours	Time affected (in hours)	Time beach is open (in hours)	Action Reasons	Action Reasons Comment	Action Indicator	Action Indicator Comment	Action Possible Source	Action Possible Source Comment
WEST FORDHAM STREET ASSOCIATION	21NYBCH NY176548-01	523760	Rain Advisory	08-18-2018	08-18-2018	1	100	24	24	RAINFALL	-	PREEMPT	-	CSO	-
WEST FORDHAM STREET ASSOCIATION	21NYBCH NY176548-01	523758	Rain Advisory	08-11-2018	08-12-2018	2	100	24	24	RAINFALL	-	PREEMPT	-	STORM	-
WEST FORDHAM STREET ASSOCIATION	21NYBCH NY176548-01	523758	Rain Advisory	08-11-2018	08-12-2018	2	100	24	24	RAINFALL	-	PREEMPT	-	CSO	-
WEST FORDHAM STREET ASSOCIATION	21NYBCH NY176548-01	523755	Rain Advisory	07-22-2018	07-23-2018	2	100	24	24	RAINFALL	-	PREEMPT	-	STORM	-
WEST FORDHAM STREET ASSOCIATION	21NYBCH NY176548-01	523755	Rain Advisory	07-22-2018	07-23-2018	2	100	24	24	RAINFALL	-	PREEMPT	-	CSO	-
WEST FORDHAM STREET ASSOCIATION	21NYBCH NY176548-01	523754	Rain Advisory	07-18-2018	07-18-2018	1	100	24	24	RAINFALL	-	PREEMPT	-	STORM	-
WEST FORDHAM STREET ASSOCIATION	21NYBCH NY176548-01	523754	Rain Advisory	07-18-2018	07-18-2018	1	100	24	24	RAINFALL	-	PREEMPT	-	CSO	-
WEST FORDHAM STREET ASSOCIATION	21NYBCH NY176548-01	523753	Rain Advisory	07-15-2018	07-16-2018	2	100	24	24	RAINFALL	-	PREEMPT	-	STORM	-
VEST FORDHAM STREET ASSOCIATION	21NYBCH NY176548-01	523750	Rain Advisory	06-04-2018	06-05-2018	2	100	24	24	RAINFALL	-	PREEMPT	-	CSO	-
WEST FORDHAM STREET ASSOCIATION	21NYBCH NY176548-01	523750	Rain Advisory	06-04-2018	06-05-2018	2	100	24	24	RAINFALL	-	PREEMPT	-	STORM	-
VEST FORDHAM STREET ASSOCIATION	21NYBCH NY176548-01	523752	Rain Advisory	06-28-2018	06-29-2018	2	100	24	24	RAINFALL	-	PREEMPT	-	STORM	-
VEST FORDHAM STREET ASSOCIATION	21NYBCH NY176548-01	523753	Rain Advisory	07-15-2018	07-16-2018	2	100	24	24	RAINFALL	-	PREEMPT	-	CSO	-
VEST FORDHAM STREET ASSOCIATION	21NYBCH NY176548-01	523752	Rain Advisory	06-28-2018	06-29-2018	2	100	24	24	RAINFALL	-	PREEMPT	-	CSO	-

Exhibit 41. Beach Attributes.

Jurisdiction:	AL, Year: 2016														
Beach ID	Beach Name	County ↑=	Waterbody Name	Waterbody Type	Beach Act Beach	Tier	Historical Record	Beach Length (Mi)	Beach Owner	Beach Access	Start Latitude	Start Longitude	End Latitude	End Longitude	Advisory Reporting Frequency
AL769933	ALABAMA POINT (GULF OF MEXICO)	BALDWIN	Gulf of Mexico	Open Coast	Y	2	N	1	Public	Public	30.275581	-87.542128	30.282278	-87.509106	1 time per Year
AL656449	BEAR POINT CIVIC ASSOCIATION	BALDWIN	Gulf of Mexico	Sound, Bay, or Inlet	Y	3	N	.1	Private	Public	30.308514	-87.526794	30.30985	-87.526844	1 time per Year
AL532350	BOGGY POINT	BALDWIN	Gulf of Mexico	Sound, Bay, or Inlet	Y	1	N	.1	Public	Public	-	-	-	-	Unknown
AL854232	CAMP BECKWITH	BALDWIN	Gulf of Mexico	Sound, Bay, or Inlet	Y	1	N	.25	Private	Public	30.389919	-87.844722	30.385636	-87.841589	1 time per Year
AL497694	CAMP DIXIE	BALDWIN	Gulf of Mexico	Sound, Bay, or Inlet	Y	1	N	.25	Public	Public	30.325714	-87.516525	30.327347	-87.515953	1 time per Year
AL711135	COTTON BAYOU	BALDWIN	Gulf of Mexico	Open Coast	Y	1	N	.2	Public	Public	30.268031	-87.585228	30.271758	-87.559089	1 time per Year
<u>AL432101</u>	ESCAMBIA AVENUE	BALDWIN	Gulf of Mexico	Sound, Bay, or Inlet	Y	3	N	.01	Public	Public	30.340925	-87.502606	30.341453	-87.501581	1 time per Year
AL824748	FAIRHOPE PUBLIC BEACH	BALDWIN	Gulf of Mexico	Sound, Bay, or Inlet	Y	1	N	.25	Public	Public	30.522611	-87.913272	30.531408	-87.908361	1 time per Year
AL548743	FLORIDA POINT	BALDWIN	Gulf of Mexico	Open Coast	Y	1	N	.75	Public	Public	30.277942	-87.267244	30.274333	-87.279381	1 time per Year
AL069764	FORT MORGAN PUBLIC BEACH	BALDWIN	Gulf of Mexico	Open Coast	Υ	3	N	1	Public	Public	30.230472	-88.023883	30.231875	-87.927839	1 time per Year

User's Guide, v4.0 Date: 09/13/2024

Exhibit 42. Beach Days.

Jurisdiction:	: AL, Year: 2016														
Beach ID	Beach Name	County ↑=	Waterbody Name	Beach Act Beach	Tier	Beach Access	Beach Owner	Dormant	Historical Record	Monitored	# of Beach Days	# of Beach Days With Actions	% of Beach Days With Actions	# of Beach Days With no Actions	% of Beach Days With no Actions
AL769933	ALABAMA POINT (GULF OF MEXICO)	BALDWIN	Gulf of Mexico	Υ	2	Public	Public	N	N	Yes	152	0	0	152	100
AL656449	BEAR POINT CIVIC ASSOCIATION	BALDWIN	Gulf of Mexico	Υ	3	Public	Private	N	N	Yes	152	0	0	152	100
AL532350	BOGGY POINT	BALDWIN	Gulf of Mexico	Υ	1	Public	Public	N	N	Yes	120	0	0	120	100
AL854232	CAMP BECKWITH	BALDWIN	Gulf of Mexico	Υ	1	Public	Private	N	N	Yes	152	8	5.26	144	94.74
AL497694	CAMP DIXIE	BALDWIN	Gulf of Mexico	Υ	1	Public	Public	N	N	Yes	152	0	0	152	100
AL711135	COTTON BAYOU	BALDWIN	Gulf of Mexico	Υ	1	Public	Public	N	N	Yes	152	0	0	152	100
AL432101	ESCAMBIA AVENUE	BALDWIN	Gulf of Mexico	Υ	3	Public	Public	N	N	Yes	152	0	0	152	100
AL824748	FAIRHOPE PUBLIC BEACH	BALDWIN	Gulf of Mexico	Υ	1	Public	Public	N	N	Yes	152	0	0	152	100
AL548743	FLORIDA POINT	BALDWIN	Gulf of Mexico	Υ	1	Public	Public	N	N	Yes	152	0	0	152	100
AL069764	FORT MORGAN PUBLIC BEACH	BALDWIN	Gulf of Mexico	Υ	3	Public	Public	N	N	Yes	152	0	0	152	100
AL368349	GULF SHORES PUBLIC BEACH	BALDWIN	Gulf of Mexico	Υ	1	Public	Public	N	N	Yes	152	0	0	152	100

Note:

- To get counts for monitored beaches, filter the Monitored column for Yes values and check the count at the bottom of the column.
- Filter out the Tier 4 beaches when using this report for analysis. To exclude Tier 4 beaches from the report, go to Actions menu on the report toolbar and select Filter. In the pop-up dialog box, select "Tier" from under Column, "not in" from under Operator, "4" from under Expression and click on Apply. The report will refresh with Tier 4 beaches filtered out.

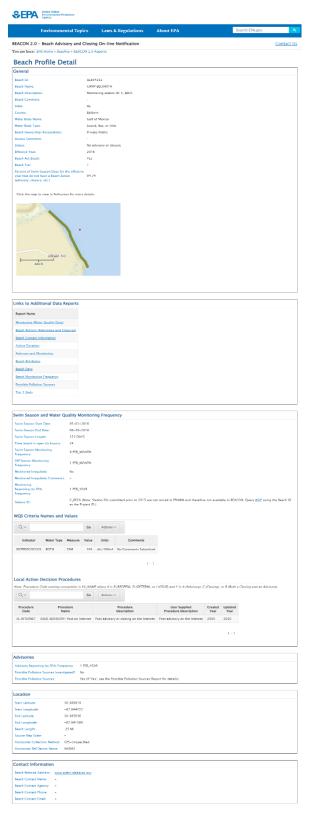
Exhibit 43. Beach Monitoring Frequency.

Jurisdiction	AL, Year: 2016																				
Beach ID	Beach Name	County ↑=	Waterbody Name	Beach Length (MI)	Beach Act Beach	Tier	Historical Record	Beach Access	Beach Comment	# of Beach Days	Swim Season Start Date	Swim Season End Date	Swim Season Monitoring Count	Swim Season Monitoring Frequency	Swim Season Monitor Frequency Units	Off Season Monitoring Frequency	Off Season Monitor Frequency Units	Monitoring Reporting Frequency (to EPA)	Monitoring Reporting Frequency Units	Monitored Irregularly Flag	
AL769933	ALABAMA POINT (GULF OF MEXICO)	BALDWIN	Gulf of Mexico	1	Υ	2	N	Public	-	152	05-01-2016	09-30-2016	22	4	PER_MONTH	1	PER_MONTH	1	PER_YEAR	-	-
AL656449	BEAR POINT CIVIC ASSOCIATION	BALDWIN	Gulf of Mexico	.1	Υ	3	N	Public	-	152	05-01-2016	09-30-2016	11	2	PER_MONTH	1	PER_MONTH	1	PER_YEAR	-	-
AL532350	BOGGY POINT	BALDWIN	Gulf of Mexico	.1	Υ	1	N	Public	-	120	-	-	1	8	PER_MONTH	1	PER_MONTH	-	-	-	-
AL854232	CAMP BECKWITH	BALDWIN	Gulf of Mexico	.25	Υ	1	N	Public	-	152	05-01-2016	09-30-2016	43	8	PER_MONTH	1	PER_MONTH	1	PER_YEAR	-	-
AL497694	CAMP DIXIE	BALDWIN	Gulf of Mexico	.25	Υ	1	N	Public	-	152	05-01-2016	09-30-2016	22	4	PER_MONTH	1	PER_MONTH	1	PER_YEAR	-	-
AL711135	COTTON BAYOU	BALDWIN	Gulf of Mexico	.2	Υ	1	N	Public	-	152	05-01-2016	09-30-2016	22	4	PER_MONTH	1	PER_MONTH	1	PER_YEAR	-	-
AL432101	ESCAMBIA AVENUE	BALDWIN	Gulf of Mexico	.01	Y	3	N	Public	-	152	05-01-2016	09-30-2016	11	2	PER_MONTH	1	PER_MONTH	1	PER_YEAR	-	-
AL824748	FAIRHOPE PUBLIC BEACH	BALDWIN	Gulf of Mexico	.25	Υ	1	N	Public	-	152	05-01-2016	09-30-2016	43	8	PER_MONTH	1	PER_MONTH	1	PER_YEAR	-	-
AL548743	FLORIDA POINT	BALDWIN	Gulf of Mexico	.75	Υ	1	N	Public	-	152	05-01-2016	09-30-2016	22	4	PER_MONTH	1	PER_MONTH	1	PER_YEAR	-	-
AL069764	FORT MORGAN PUBLIC BEACH	BALDWIN	Gulf of Mexico	1	Υ	3	N	Public	-	152	05-01-2016	09-30-2016	11	2	PER_MONTH	1	PER_MONTH	1	PER_YEAR	-	-
AL368349	GULF SHORES PUBLIC BEACH	BALDWIN	Gulf of Mexico	1	Y	1	N	Public	-	152	05-01-2016	09-30-2016	22	4	PER_MONTH	1	PER_MONTH	1	PER_YEAR	-	-
AL726329	GULF STATE PARK - PAVILION	BALDWIN	Gulf of Mexico	1	Υ	1	N	Public	-	152	05-01-2016	09-30-2016	22	4	PER_MONTH	1	PER_MONTH	1	PER_YEAR	-	-

Note: You can also view the Beach Comment column in "Beach Profile List" and "Swim Season and Water Quality Monitoring" reports. The column is hidden by default. To expose the column, click on Actions menu > Select Columns and move the Beach Comment column to the right-hand side.

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Exhibit 44. Beach Profile Detail.



Note: You may find that some fields have a dash "-" (as shown above); this dash appears for data elements where no data has been submitted yet.

Exhibit 45. Possible Pollution Sources.

Beach ID	Beach Name	County ↑=	Waterbody Name	Beach Act Beach	Tier	Historical Record	Dormant	Beach Access	Beach Owner	Poll. Sources Investi- gated?	Poll. Sources Found?	Runoff	Storm	Agri- cultural	Algae	Boat	CAFO	CSO	SSO	POTW	Sewer Line	Septic	Wildlife	Other	Unknown
ME438327	BROAD COVE RESERVE	CUMBERLAND	-	Υ	1	N	N	Public	Public	Yes	Yes	Yes	Yes	-	-	Yes	-	-	-	-	-	-	Yes	-	-
ME187302	CRESCENT BEACH	CUMBERLAND	-	Υ	1	N	N	Public	Public	Yes	Yes	-	Yes	-	-	-	-	-	-	-	-	-	Yes	Yes	-
ME712895	EAST END BEACH	CUMBERLAND	-	Υ	1	N	N	Public	Public	Yes	Yes	-	Yes	-	-	Yes	-	Yes	-	Yes	-	-	Yes	Yes	Activity SOUR
ME275080	FERRY BEACH (SCARBOROUGH)	CUMBERLAND	-	Υ	1	N	N	Public	Public	Yes	Yes	Yes	-	-	-	Yes	-	-	-	-	-	-	Yes	-	-
ME226383	HIGGINS BEACH	CUMBERLAND	-	Υ	1	N	N	Public	Private	Yes	Yes	Yes	Yes	Yes	-	-	-	-	-	-	-	-	Yes	Yes	Activity SOUR
ME399101	KETTLE COVE BEACH	CUMBERLAND	-	Υ	1	N	N	Public	Public	Yes	Yes	Yes	Activity Source	-	-	-	-	-	-	-	-	-	Yes	Yes	Activity SOUR
ME800164	PINE POINT	CUMBERLAND	-	Υ	1	N	N	Public	Private	Yes	Yes	Yes	Yes	-	-	Yes	-	-	-	-	-	-	Yes	Yes	-
ME428165	SCARBOROUGH BEACH	CUMBERLAND	-	Υ	1	N	N	Public	Public	Yes	Yes	-	-	-	-	-	-	-	-	-	-	-	Yes	Yes	Activity SOUR
ME875929	WILLARD BEACH	CUMBERLAND	-	Υ	1	N	N	Public	Public	Yes	Yes	-	Yes	-	-	Yes	-	-	-	-	-	-	Yes	Yes	Activity SOUR
ME774235	WINSLOW PARK	CUMBERLAND	-	Υ	3	N	N	Public	Public	No	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-	Yes
ME786048	EMERY COVE BEACH	HANCOCK	-	Υ	3	N	N	Public	Public	No	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-	Yes
ME806573	HADLEY POINT	HANCOCK	-	Υ	1	N	N	Public	Public	Yes	Yes	-	-	-	-	Yes	-	-	-	-	-	-	Yes	-	-

Note: You can now hover over the green "Yes" text and the comment will pop up. The 'Activity SOURCE' listed under the pollution source columns is a new BEACON way of letting the viewer know that the value came from a Beach Activity report record rather than an investigation, like a sanitary survey.

Note: The exhibit below shows the Possible Pollution Sources chart, shown by clicking the report. The example below is of a chart generated when <u>one</u> jurisdiction is selected from wizard Step 1 and <u>one</u> year is selected from Calendar Year (Grouping C) field from Step 2. Charts cannot be plotted when beach IDs or counties are selected under wizard Step 1.

Exhibit 46. Pollution Sources Chart - 1 of 3 **Pollution Sources Chart** . For hard to read numbers on the chart, hover cursor over the chart segment to see the value. Unchangeable Filters: The following filters (State, County, Beach IDs, Additional Filters, and Year) can't be altered in this report. · Jurisdiction(s): FL · Historical: No · Beach Act Beach: Yes · Dormant: No, Yes · Beach Access: Public, Unspecified Year 2016 **Main Report** Pollution Sources in FL AGRICULTURAL - 1% (19) BOAT - 12% (194) WILDLIFE - 16% (264) OTHER - 3% (48) POTW - 3% (45) RUNOFF - 8% (128) UNKNOWN - 20% (333) SEPTIC - 5% (82) SEWER_LINE - 9% (143) SSO - 7% (110) STORM - 17% (278)

Note: The percentages shown on the chart might not total upto 100 since only whole numbers are being reported.

Note: The example below is of a chart generated when <u>multiple</u> jurisdictions are selected from wizard Step 1 and <u>one</u> year is selected from Calendar Year (Grouping C) field from Step 2. You can click on the boxes next to the sources in the legend to hide/show respective source data on the chart. Charts cannot be plotted when beach IDs or counties are selected under wizard Step 1.

Pollution Sources Chart Note: . For hard to read numbers on the chart, hover cursor over the chart segment to see the value. Unchangeable Filters: The following filters (State, County, Beach IDs, Additional Filters, and Year) can't be altered in this report. Jurisdiction(s): NJ,NY,PR,VI Historical: No · Beach Act Beach: Yes · Dormant: No, Yes · Beach Access: Public, Unspecified Year 2016 **Main Report** Pollution Sources in NJ,NY,PR,VI AGRICULTURAL 357 ALGAE BOAT CAFO CSO 212 88 78 OTHER POTW RUNOFF SEPTIC SEWER_LINE SSO STORM UNKNOWN WILDLIFE 0 100 200 300 400 500 600

Exhibit 47. Pollution Sources Chart - 2 of 3

Note: The example below is of a chart generated when <u>one</u> jurisdiction is selected from wizard Step 1 and <u>multiple</u> years are selected from Calendar Year rouping C) field from Step 2. You can click on the boxes next to the sources in the legend to hide/show respective source data on the chart. Charts cannot be plotted when beach IDs or counties are selected under wizard Step 1.

Exhibit 48. Pollution Sources Chart - 3 of 3

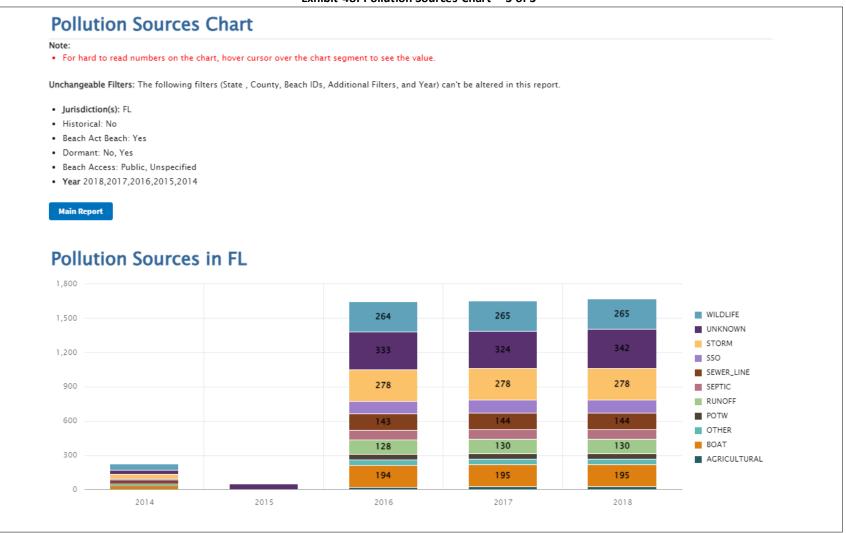


Exhibit 49. Example RSS Feed.

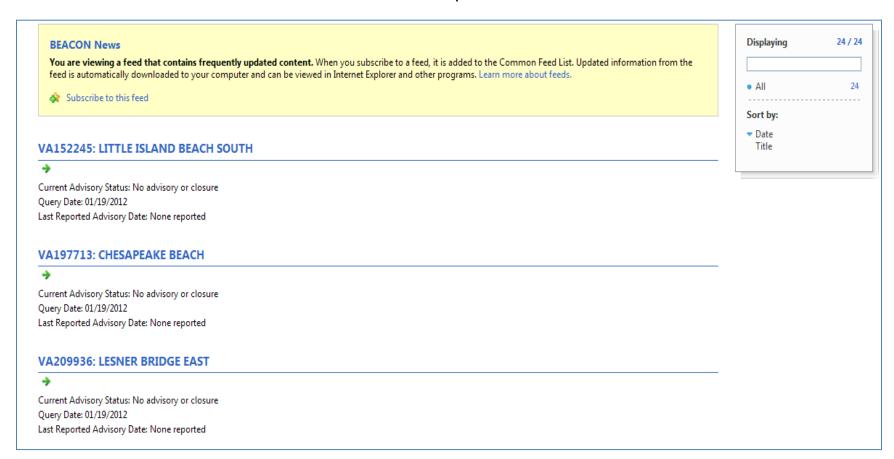


Exhibit 50. Jurisdiction Summary - 1 of 2.

Year	Jurisdiction	# of Beach Act Beaches	# of Monitored Beaches	% of Beach Act Beaches Monitored	# of Tier 1 Beaches	# of Tier 1 Beaches Monitored	% of Tier 1 Beaches Monitored	Miles of Monitored Beaches	# of Beach Actions	# of Beaches With Actions	# of Beaches With no Actions	% of Beaches With Actions	# of Beach Days	# of Beach Days With Actions	# of Beach Days With no Actions	% of Beach Days With Actions	% of Beach Days With no Actions
2018	AK	19	19	100	17	17	100	7	28	11	8	57.89	1815	244	1308	13.44	72.07
2018	AL	26	26	100	9	9	100	28	15	7	19	26.92	3888	57	3591	1.47	92.36
2018	AS	48	48	100	17	17	100	7	574	40	8	83.33	17472	3946	13526	22.58	77.42
2018	BR	9	9	100	9	9	100	7	16	5	4	55.56	1764	51	1713	2.89	97.11
2018	CA	256	256	100	256	256	100	395	2264	210	46	82.03	85637	13265	66884	15.49	78.1
2018	СТ	73	72	98.63	48	48	100	15	92	39	34	53.42	7161	131	6925	1.83	96.7
2018	DE	21	21	100	12	12	100	20	3	3	18	14.29	2560	3	354	.12	13.83
2018	FL	570	258	45.26	260	258	99.23	512	227	112	458	19.65	82407	2113	78957	2.56	95.81
2018	GA	42	28	66.67	18	18	100	37	18	12	30	28.57	12960	1132	11840	8.73	91.36
2018	GP	13	12	92.31	9	9	100	2	14	9	4	69.23	1452	52	1400	3.58	96.42
2018	GU	32	31	96.88	31	31	100	15	557	31	1	96.88	11649	3853	7796	33.08	66.92
2018	HI	404	122	30.2	46	46	100	88	3105	404	0	100	147056	23882	108253	16.24	73.61

Note: Multiple actions occurring at the same time (overlapping) can cause increased percentages on this and related reports.

Note: The below exhibit shows the columns you would see when scrolling to the right for this report.

Exhibit 51. County Beaches Summary (left most report columns) – 1 of 2.

County	# of Beach Act Beaches	# of Monitored Beaches	% of Beach Act Beaches Monitored	Miles of Monitored Beaches	# of Beach Actions	# of Beaches With Actions	# of actions of 1 day duration	% of all actions of 1 day duration	# of actions of 2 day duration	% of all actions of 2 day duration	# of actions of 3 - 7 day duration	% of all actions of 3 - 7 day duration	# of actions greater than 30 day duration	% of all actions of greater than 30 day duration	# of actions of 8 – 30 day duration	% of all actions of 8 – 30 day duration
KENAI PENINSULA	3	3	100	2	6	2	0	0	0	0	3	50	0	0	3	50
KETCHIKAN GATEWAY	13	13	100	3	22	9	0	0	0	0	15	68.18	0	0	7	31.82
PETERSBURG	1	1	100	1	0	0	0	0	0	0	0	0	0	0	0	0
WRANGELL	2	2	100	2	0	0	0	0	0	0	0	0	0	0	0	0
	19	19		8	28	11										

Exhibit 52. County Beaches Summary (right most report columns) – 2 of 2.

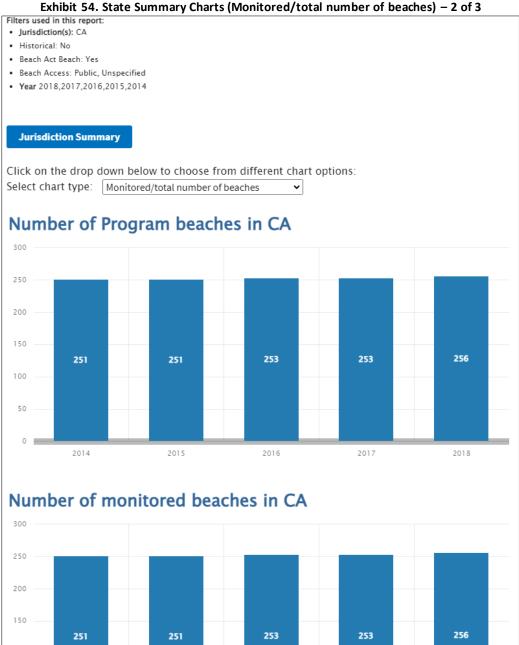
# of actions of less than 1 day duration	% of all actions of less than 1 day duration	# of Beach Days With no Actions	# of Beach Days With Actions	# of Beaches With no Actions	% of Beach Days With no Actions	% of Beaches With Actions	# of Beach Days	% of Beach Days With Actions
0	0	117	53	1	59.09	66.67	198	26.77
0	0	1191	191	4	86.18	69.23	1382	13.82
0	0	0	0	1	-	-	133	0
0	0	0	0	2	-	-	102	0
		1308	244	8			1815	

Note: Multiple actions occurring at the same time (overlapping) can cause increased percentages on this and related reports.

Note: The exhibit below shows the State Summary chart, shown by clicking the "Jurisdiction Summary Charts" button on the "Jurisdiction Summary" report and then selecting **Monitored/total number of beaches** chart type. The example below is of a chart generated when <u>multiple</u> jurisdictions are selected from wizard Step 1 and <u>one</u> year is selected from **Calendar Year (Grouping C)** field from Step 2. Charts cannot be plotted when beach IDs or counties are selected under wizard Step 1.

Exhibit 53. Jurisdiction Summary Charts - 1 of 3

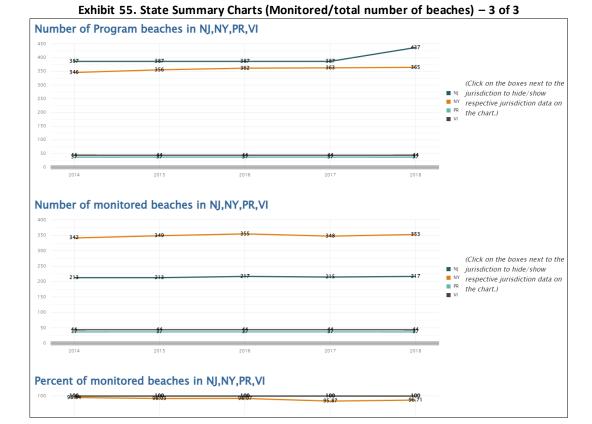
Note: The example below is of a chart generated when <u>one</u> jurisdiction is selected from wizard Step 1 and <u>multiple</u> years are selected from **Calendar Year (Grouping C) field** from Step 2. Charts cannot be plotted when beach IDs or counties are selected under wizard Step 1.



Note: The example below is of a chart generated when multiple jurisdictions are selected from wizard Step 1 and

multiple years are selected from Calendar Year (Grouping C) field from Step 2. You can click on the boxes next to

the jurisdictions in the legend to hide/show respective jurisdiction data on the chart. Charts cannot be plotted when beach IDs or counties are selected under wizard Step 1.



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Note: The exhibit below shows the State Summary chart Overall amount of time beaches were open chart type. The example below is of a chart generated when <u>multiple</u> jurisdictions are selected from wizard Step 1 and <u>one</u> year is selected from Calendar Year (Grouping C) field from Step 2. Charts cannot be plotted when beach IDs or counties are selected under wizard Step 1.

Unisdiction Summary

Click on the drop down below to choose from different chart options:

Select chart type: Overall amount of time beaches were open ▼

Percent of days beaches not under a beach action in NJ,NY,PR,VI (Program Beaches)

NJ

99.53

99.53

88.76

VI

94.24

Exhibit 56. Jurisdiction Summary Charts (Overall amount of time beaches were open)

Note: The exhibit below shows the State Summary chart Overall amount of time beaches were open chart type. The example below is of a chart generated when <u>multiple</u> jurisdictions are selected from wizard Step 1 and <u>one</u> year is selected from Calendar Year (Grouping C) field from Step 2. Charts cannot be plotted when beach IDs or counties are selected under wizard Step 1.

Click on the drop down below to choose from different chart options:

Select chart type: Notification actions

Percent of beaches affected by a beach action in NJ,NY,PR,VI (Program Beaches)

NJ

17.16

NY

17.16

78.38

81.82

0 20 40 60 80 100

Exhibit 57 State Summary Charts (Notification Actions)

Note: The example below is of a chart generated when <u>one</u> jurisdiction is selected from wizard Step 1 and <u>multiple</u> years are selected from **Calendar Year** (**Grouping C**) field from Step 2. Charts cannot be plotted when beach IDs or counties are selected under wizard Step 1.

Exhibit 58. Tier 1 Stats – Main Report.

May to September. Samples are collected biweekly from October to February and in April. TX384318 Bryan Beach Brazoria 1 3.8 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April. TX646145 Follets Island Brazoria 1 10.28 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April. TX728060 Quintana Brazoria 1 1.23 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April. TX728060 Quintana Brazoria 1 1.23 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April. TX647885 Surfside Brazoria 1 3.82 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April. TX647885 Access Point #3 Cameron 1 .78 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April. TX147297 Access Point #3 Cameron 1 .78 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April. TX282282 Access Point #4 Cameron 1 .55 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April. TX810590 Access Point #6 Cameron 1 .3.05 Yes Yes Samples are collected biweekly from October to February and in April. Samples are collected biweekly in March and from May to September. Samples are collected biweekly from October to February and in April.	sdiction: TX,	Teal. 2010										
May to September. Samples are collected biweekly from October to February and in April. TX384318 Bryan Beach Brazoria 1 3.8 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April. TX646145 Follets Island Brazoria 1 10.28 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April. TX728060 Quintana Brazoria 1 1.23 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April. TX647885 Surfside Brazoria 1 3.82 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April. TX647885 Surfside Brazoria 1 3.82 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April. TX647885 Access Point #3 Cameron 1 .78 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April. TX282282 Access Point #4 Cameron 1 .78 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April. TX810590 Access Point #6 Cameron 1 .55 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April. Samples are collected biweekly from October to February and in April. Samples are collected biweekly from October to February and in April. Samples are collected biweekly from October to February and in April. Samples are collected biweekly in March and from May to September. Samples are collected biweekly from October to February and in April.	ach ID	Beach Name	County ↑=	Tier		Monitored		Irregularly				# of Beach Days with Actions
May to September. Samples are collected biweekly from October to February and in April. TX646145	748844	Rockport Beach Park	Aransas	1	.85	Yes	Yes	May to September. Samples are collected biweekly	38	PER_YEAR	364	37
May to September. Samples are collected biweekly from October to February and in April. TX728060 Quintana Brazoria 1 1.23 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April. TX647885 Surfside Brazoria 1 3.82 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April. TX147297 Access Point #3 Cameron 1 .78 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April. TX282282 Access Point #4 Cameron 1 .75 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April. TX80590 Access Point #6 Cameron 1 3.05 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April. TX810590 Access Point #6 Cameron 1 3.05 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April. TX810590 Access Point #6 Cameron 1 3.05 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April.	884318	Bryan Beach	Brazoria	1	3.8	Yes	Yes	May to September. Samples are collected biweekly	38	PER_YEAR	364	12
May to September. Samples are collected biweekly from October to February and in April. TX647885 Surfside Brazoria 1 3.82 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April. TX147297 Access Point #3 Cameron 1 .78 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April. TX282282 Access Point #4 Cameron 1 .55 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April. TX80590 Access Point #6 Cameron 1 3.05 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April. TX810590 Access Point #6 Cameron 1 3.05 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly in March and from May to September. Samples are collected biweekly in March and from May to September. Samples are collected biweekly in March and from May to September. Samples are collected biweekly in March and from May to September. Samples are collected biweekly in March and from May to September. Samples are collected biweekly in March and from May to September. Samples are collected biweekly	546145	Follets Island	Brazoria	1	10.28	Yes	Yes	May to September. Samples are collected biweekly	38	PER_YEAR	364	19
May to September. Samples are collected biweekly from October to February and in April. TX147297	728060	Quintana	Brazoria	1	1.23	Yes	Yes	May to September. Samples are collected biweekly	38	PER_YEAR	364	37
May to September. Samples are collected biweekly from October to February and in April. TX282282 Access Point #4 Cameron 1 .55 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April. TX810590 Access Point #6 Cameron 1 3.05 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April.	547885	Surfside	Brazoria	1	3.82	Yes	Yes	May to September. Samples are collected biweekly	38	PER_YEAR	364	58
May to September. Samples are collected biweekly from October to February and in April. TX810590 Access Point #6 Cameron 1 3.05 Yes Yes Samples are collected weekly in March and from May to September. Samples are collected biweekly	47297	Access Point #3	Cameron	1	.78	Yes	Yes	May to September. Samples are collected biweekly	38	PER_YEAR	364	0
May to September. Samples are collected biweekly	282282	Access Point #4	Cameron	1	.55	Yes	Yes	May to September. Samples are collected biweekly	38	PER_YEAR	364	0
from October to February and in April.	<u>810590</u>	Access Point #6	Cameron	1	3.05	Yes	Yes		38	PER_YEAR	364	2

Exhibit 59. Tier 1 Stats - Summary Report.

County	Total Beach	Beach Monitored	Percent of Beach Monitored
Fairfield	233	233	100
Middlesex	48	48	100
New Haven	348	320	92
New London	206	192	93
	835	793	

Note: In order to access the Tier 1 Stats – Summary Report, click the "Summary Report" button on the Tier 1 Stats – Main report. Once viewing the Tier 1 Stats – Summary Report, you may click the "Main Report" button to return to the Tier 1 Stats – Main report.

Exhibit 60. Monitoring (Water Quality Data) – leftmost columns - 1 of 2.

Jurisdiction:	OH, Year: 2021										
Beach ID	Beach Name	Station ID	Station Name	County	Activity ID	Sample Date	Sample Time	Characteristic Name	Result Number	Result Text	Result Units
OH882395	Lakeshore Park	OHLPAS01	Lakeshore Park	ASHTABULA	-2333909831717350897	06-30-2021	-	Escherichia coli	1119.9	-	cfu/100m
OH882395	Lakeshore Park	OHLPAS01	Lakeshore Park	ASHTABULA	-6846982036939756218	06-28-2021	-	Escherichia coli	238.2	-	cfu/100m
OH882395	Lakeshore Park	OHLPAS01	Lakeshore Park	ASHTABULA	-3271281532438692547	06-24-2021	-	Escherichia coli	214.3	-	cfu/100m
OH882395	Lakeshore Park	OHLPAS01	Lakeshore Park	ASHTABULA	1213920991346805393	06-22-2021	-	Escherichia coli	727	-	cfu/100m
OH882395	Lakeshore Park	OHLPAS01	Lakeshore Park	ASHTABULA	4636883795122314612	06-16-2021	-	Escherichia coli	816.4	-	cfu/100m
OH882395	Lakeshore Park	OHLPAS01	Lakeshore Park	ASHTABULA	3863902048117779979	06-14-2021	-	Escherichia coli	-	Present Above Quantification Limit	-
ОН882395	Lakeshore Park	OHLPAS01	Lakeshore Park	ASHTABULA	-3304642296898229158	06-01-2021	-	Escherichia coli	22.8	-	cfu/100m

The below exhibit shows the columns you would see when scrolling to the right for this report.

For more details on how to configure Water Quality reports directly from WQP, please see the guidance at: https://acwi.gov/monitoring/pubs/WIS 2017 fs/WQP Step by step.guide.pdf

Exhibit 61. Monitoring (Water Quality Data) – leftmost columns – 2 of 2.

Sample Collection Method ID	Sample Collection Method Name	Time Zone	Activity Depth	Activity Depth Unit	Activity Type	Analysis Date and Time	Analytical Method ID	Analytical Method Name	Detection Limit	Result Comment	Result Value Status	Result Value Type	Statisti Type
Grab	Grab Sample	-	-	-	Sample- Routine	06-30-2021	-	-	-	-	Final	Actual	-
Grab	Grab Sample	-	-	-	Sample- Routine	06-28-2021	-	-	-	-	Final	Actual	-
Grab	Grab Sample	-	-	-	Sample- Routine	06-24-2021	-	-	-	-	Final	Actual	-
Grab	Grab Sample	-	-	-	Sample- Routine	06-22-2021	-	-	-	-	Final	Actual	-
Grab	Grab Sample	-	-	-	Sample- Routine	06-16-2021	-	-	-	-	Final	Actual	-
Grab	Grab Sample	-	-	-	Sample- Routine	06-14-2021	-	-	Upper Quantitation Limit~2419.00~MPN	-	Final	Actual	-
Grab	Grab Sample	-	-	-	Sample- Routine	06-01-2021	-	-	-	-	Final	Actual	-

Note: To see criteria limits superimposed on the graph, navigate to the historical sampling results graph (Exhibit 71.) and follow the directions for a single station report.

Historical Sampling Results Beach Name: Beach at Piti Bay Beach ID: GU196164 Station ID: N-15 Note: Gaps in the result value line may be due to "non-detect" results. Please refer back to the results table by selecting the Water Quality Report. You can see the Geometric Mean or Single Sample Maximum value(s) by selecting the Beach Profile Report. Start Date (MON-DD-YYYY): Filter Chart End Date (MON-DD-YYYY): ;<u>=</u>; **ENTEROCOCCUS - MARINE** RESULT VALU — GEOMETRIC MEA — SINGLE SAMPLE MAXIM 160 140 120 Result Value 40 20 07-JAN-10 21-JAN-10 28-JAN-10 04-FEB-10 11-FEB-10 18-FEB-10 25-FEB-10 14-JAN-10 Sample Date

Exhibit 62. Historical Sampling Results Graph

Note: The horizontal lines representing the criteria limit values will only show if the jurisdiction has submitted information.

Exhibit 63. Beach WQS Criteria Names and Values

ear: 2023, WQS Criterion: ENTEROCOCCUS BOTH SSM 104 cfu/100 mL No Comments Submitted											
	Beach ID	Beach Name	County ↑=	Waterbody Name	Waterbody Type	Indicator Name	Water Type	Measure Type	Measure Value	Measure Unit	Criteria Comments
P	MS356172	Bay St. Louis Beach	HANCOCK	Gulf of Mexico	Sound, Bay, or Inlet	ENTEROCOCCUS	вотн	SSM	104	cfu/100 mL	No Comments Submitted
9	MS999656	Buccaneer State Park Beach	HANCOCK	Gulf of Mexico	Sound, Bay, or Inlet	ENTEROCOCCUS	вотн	SSM	104	cfu/100 mL	No Comments Submitted
P	MS447804	Lakeshore	HANCOCK	Gulf of Mexico	Sound, Bay, or Inlet	ENTEROCOCCUS	вотн	SSM	104	cfu/100 mL	No Comments Submitted
9	MS594393	Waveland Beach	HANCOCK	Gulf of Mexico	Sound, Bay, or Inlet	ENTEROCOCCUS	вотн	SSM	104	cfu/100 mL	No Comments Submitted
P	MS335067	Biloxi East Beach	HARRISON	Gulf of Mexico	Sound, Bay, or Inlet	ENTEROCOCCUS	вотн	SSM	104	cfu/100 mL	No Comments Submitted
9	MS444095	Biloxi Porter Avenue Beach	HARRISON	Gulf of Mexico	Sound, Bay, or Inlet	ENTEROCOCCUS	вотн	SSM	104	cfu/100 mL	No Comments Submitted
P	MS589107	Biloxi West Central Beach	HARRISON	Gulf of Mexico	Sound, Bay, or Inlet	ENTEROCOCCUS	вотн	SSM	104	cfu/100 mL	No Comments Submitted
0	MS665298	East Courthouse Road	HARRISON	Gulf of Mexico	Sound, Bay, or Inlet	ENTEROCOCCUS	вотн	SSM	104	cfu/100 mL	No Comments Submitte

Note: Because criterion records do not have a unique identifier in the PRAWN schema, the "WQS Criterion" column was added to allow a means of identifying like records. This field simply combines all the criterion data into one cell. This combined value can be used to more easily identify beaches that share criterion associations. From the toolbar, you can choose the "Grouped by Criterion" option to view this version of the report in which all beaches are grouped by the WQS Criterion values.

Exhibit 64. Local Action Decision Procedures

Beach ID	Beach Name	County	Beach Act Beach	Tier	Historical Record	Beach Access	Posted on Internet	Published in Newspaper	Sent to Phone List	Announced on Radio	Posted at the Beach	Announced on TV	Results on Request	Other
CT200292	BELL ISLAND BEACH	FAIRFIELD	N	-	N	Public	Yes	Yes	Yes	-	Yes	-	-	-
CT730976	BURYING HILL BEACH	FAIRFIELD	N	-	N	Public	Yes	Yes	-	Yes	Yes	Yes	-	-
CT872506	BYRAM BEACH	FAIRFIELD	N	-	N	Public	Yes	Yes	Yes	Yes	Yes	-	-	-
CT003939	CALF PASTURE BEACH	FAIRFIELD	N	-	N	Public	Yes	Yes	Yes	-	Yes	-	-	-
CT135112	COMPO BEACH	FAIRFIELD	N	-	N	Public	Yes	Yes	-	Yes	Yes	Yes	-	-
CT728213	CUMMINGS BEACH	FAIRFIELD	N	-	N	Public	Yes	Yes	Yes	Yes	Yes	-	-	-
CT085278	EAST (COVE ISLAND) BEACH	FAIRFIELD	N	-	N	Public	Yes	Yes	Yes	Yes	Yes	-	-	-
CT096148	GREAT CAPTAIN'S ISLAND BEACH	FAIRFIELD	N	-	N	Public	Yes	Yes	Yes	Yes	Yes	-	-	-
CT486090	GREENWICH POINT BEACH	FAIRFIELD	N	-	N	Public	Yes	Yes	Yes	Yes	Yes	-	-	-
CT010924	HICKORY BLUFF BEACH	FAIRFIELD	N	-	N	Public	Yes	Yes	Yes	-	Yes	-	-	-
CT101236	ISLAND BEACH	FAIRFIELD	N	-	N	Public	Yes	Yes	Yes	Yes	Yes	-	-	-
CT306507	JENNINGS BEACH	FAIRFIELD	N	-	N	Public	Yes	Yes	Yes	Yes	Yes	Yes	-	-
CT023928	MARVIN BEACH	FAIRFIELD	N	-	N	Public	Yes	Yes	Yes	-	Yes	-	-	-
CT080788	PENFIELD BEACH	FAIRFIELD	N	-	N	Public	Yes	Yes	Yes	Yes	Yes	Yes	-	-
CT202901	QUIGLEY BEACH	FAIRFIELD	N	-	N	Public	Yes	Yes	Yes	Yes	Yes	-	-	-
CT200291	ROWAYTON BEACH	FAIRFIELD	N	-	N	Public	Yes	Yes	Yes	-	Yes	-	-	-
CT634478	SASCO BEACH	FAIRFIELD	N	-	N	Public	Yes	Yes	Yes	Yes	Yes	Yes	-	-
CT404927	SEASIDE PARK BEACH	FAIRFIELD	N	-	N	Public	Yes	Yes	-	Yes	Yes	Yes	-	-
CT022992	SHADY BEACH	FAIRFIELD	N	-	N	Public	Yes	Yes	Yes	-	Yes	-	-	-

Note: To view the latest local action decision procedures added by a jurisdiction, search without specifying a year.

APPENDIX B – DETAILED REVISION HISTORY

User's		
Guide	Date	Description of Changes
Version 1.0	1/24/2012	Initial version.
1.1	11/29/2012	National List of Beaches report - Added a new section to the User's Guide
1.1	11/23/2012	describing how to use the new National List of Beaches report (refer to Section F).
1.1	11/29/2012	WQ report note about navigation to charts - Added a note to the Water Quality
	, ,	report that when clicking on a station ID, the Water Quality charts will show up
		next. Screenshots for Water Quality report were updated to reflect the change.
1.1	11/29/2012	BEACON 2.0 Report Description changes - Minor text changes to the Description
		for several of the BEACON Reports on Step 3.
1.1	11/29/2012	Fixed a typo on the About BEACON page (line 2 "state-reported2").
1.1	11/29/2012	Water Quality report filtering fix - There were a few states being filtered out of the
		Water Quality report that needed to be fixed, including NH, NY, FL and AS. This was fixed and removed from the User's Guide under the "Known Issues" section.
1.1	11/29/2012	Most recent report option - The most recent report option was updated to show
1.1	11/23/2012	the latest record for each beach id regardless of which year is selected. Text was
		updated to reflect this change in section D.2.
1.1	11/29/2012	Water Quality report date formats - Water Quality report date format was changed
		to year-month-day format. Screenshots for Water Quality report were updated to
		reflect the change.
1.2	02/14/2013	A new report option was added to several BEACON 2.0 reports, "Total of all
		Jurisdictions". Text was updated to reflect this change in Section D.2.
1.2	02/14/2013	Screenshot for Possible Pollution Sources report was updated to reflect addition of "Algae" column.
1.2	02/14/2013	Minor text additions were added to the User's Guide mentioning historical beaches
1.2	02/14/2013	in the Location Filters and Additional Filtering sections.
1.2	02/14/2013	Updated screenshot for National List of Beaches to reflect changes ("Year" filter
		was removed; scrollbar was added).
1.2	02/14/2013	Mapping for the GU, CNMI and AS jurisdictions was completed. Therefore, the text
		mentioning this issue was removed from the User's Guide under the "Known
		Issues" section.
1.2	02/14/2013	A larger loading icon was implemented for all BEACON 2.0 reports, which causes a
		minor bug in the Water Quality report. This is reflected in the User's Guide under the "Known Issues" section.
1.2	02/14/2013	Removed the following note located below the map on the "Find a Beach" tab -
1.2	02/17/2013	Note: Mapping is still in process for the following jurisdictions: GU, CNMI, AS. A
		new screenshot was added to reflect this change.
1.2	02/14/2013	Removed the following note located next to the list for "Select by Great
		Waterbody" under "Step 1 – Location Filter" tab – Note: Currently there are issues
		with data showing up for certain Great Waterbodies which will be fixed in an
1.7	02/14/2012	upcoming BEACON 2.0 patch.
1.2	02/14/2013	Added Screenshot to Appendix A to show the new Water Quality report chart.
1.2	02/14/2013	Added Note under the Water Quality report chart screenshot.

User's Guide	Date	Description of Changes
Version	Date	Description of Changes
1.2	02/14/2013	Removed "Not Reporting" option from "Select by Miscellaneous Filters" section under "Step 2 – Additional Filtering". The screenshot for Exhibit 15 was updated to reflect this change.
1.2	02/14/2013	Added 0 - Reselecting values from Step 2 filters under Known Issues section regarding the bug found while setting Beacon Report Step 2 filters.
1.3	07/01/2013	Added additional definitions from the Possible Pollution Sources and Beach Actions (Advisories and Closures) reports to Definitions section.
1.3	07/01/2013	Added screenshots to display the Tier 1 Stats – Summary Report.
1.3	07/01/2013	Revised note underneath Action Duration report screenshot to describe how to use the navigation arrows beneath the report to see the next and previous page of results.
1.3	07/01/2013	Updated screenshot and added note for the National List of Beaches county level page.
1.4	11/20/2014	Additional information was added at the end of the description for the Beach Actions (Advisories and Closures) report.
1.4	11/20/2014	Updated screenshot of map legend under "B.2 Symbology for BEACON 2.0 Elements"; changed "No report status" to "Dormant".
1.4	11/20/2014	Updated the definition of "Action Duration".
1.4	11/20/2014	Updated screenshot to display the new Tier 1 Stats Summary report.
1.4	11/20/2014	Updated screenshot to display added columns in Beach Profile report.
1.4	11/20/2014	Updated Known Issues regarding 50,000 record-limit for Water Quality report.
1.4	11/20/2014	Updated screenshots to reflect updated and removed columns in Water Quality report.
1.4	11/20/2014	Updated screenshot to reflect updated breadcrumb and removed pagination section in National List of Beaches County Level page.
1.4	11/20/2014	Updated screenshot to reflect updated breadcrumb, hidden fields (Season start and end dates) in Beach Profile details page.
1.4	11/20/2014	Updated screenshots to reflect updated page title and page template for National List of Beaches home page.
1.4	11/20/2014	Made text edits to National List of Beaches section.
1.4	11/20/2014	Updated screenshot for Beach Profile details report to reflect updated "WQS Criteria Names and Values", "Local Action Decision Procedures" and "Advisories" (Possible Pollution Sources field) sections.
1.4	11/20/2014	Updated screenshots to reflect updated Possible Pollution Sources report.
1.4	11/20/2014	Updated web page links.
1.4	11/20/2014	Added G.6- Linking directly to BEACON reports.
1.5	5/20/2015	Made text edits in "BEACON 2.0 CONTACTS" section.
1.5	5/20/2015	Made text edits in "B.2.2 - Beaches (by last reported Status)" section.
1.5	5/20/2015	Move contents of section "C.1.1.1 - HOW TO FIND BEACHES BY HYDROLOGIC UNIT CODE (HUC)" to new section "B.5 How to Find beaches by Hydrologic Unit Code (HUC)".
1.5	5/20/2015	Made text edits in "C.1 - Step 1 – Location Filters" section.

User's Guide Version	Date	Description of Changes
1.5	5/20/2015	Updated Exhibit 16 with new screenshot capturing updates to Step 2 Additional Filters.
1.5	5/20/2015	Made text edits in "C.2.1 - Select by Date" section.
1.5	5/20/2015	Updated description for Beach Days, Beach Actions (Advisories and Closures), Possible Pollution Sources and State Summary Reports under Exhibit 18. BEACON 2.0 Reports List.
1.5	5/20/2015	Updated Exhibit 19. BEACON 2.0 Reports – Page Elements with new screenshot to point out scrollbars.
1.5	5/20/2015	Made text edits in "D.1 - Report Page Elements" section.
1.5	5/20/2015	Made text edits in "H - DEFINITIONS" section.
1.5	5/20/2015	Updated Exhibit 42 capturing section header change in the Beach Profile details page.
1.5	5/20/2015	Updated Exhibits 46 and 47 capturing updates to State Summary report related to data calculations and column header.
1.5	5/20/2015	Updated Exhibits 37 and 38 capturing new columns and column header change in Beacon Action report.
1.6	8/18/2015	Updated Exhibit 53 with new screenshot capturing example of real data and also page changes.
1.6	8/18/2015	Note added under Exhibit 51 regarding SSM and GM values.
1.6	8/18/2015	Updated Exhibit 37 to point out that Description and Comments columns was removed.
1.6	8/18/2015	Updated Exhibit 38 capturing new columns in Beacon Action detailed report.
1.6	8/18/2015	Updated Exhibit 48 to point out that "Beach Action?" column was removed.
1.6	8/18/2015	Added definition for ENTERO from the Possible Pollution Sources and Beach Actions (Advisories and Closures) reports to "H - DEFINITIONS" section.
1.6	8/18/2015	Added a note under "C.2.2 - Selecting by Miscellaneous Filters" section regarding including Historical beaches to reports.
1.6	8/18/2015	Added a new bullet under "A.2 - What are the sources of BEACON information?" section.
1.7	2/2/2016	Updated Exhibit 30 to capture the new EPA template.
1.7	2/2/2016	Updated Exhibit 42 for Beach Profile details report changes – "Water Monitoring Locations", "Advisory Reporting Frequency", "Swim Season End Date" fields.
1.7	2/2/2016	Updated all the screenshots under Section D, Section F and Appendix A to reflect changes due to Apex 5 upgrade.
1.7	2/2/2016	Updated Exhibits 46 and 47 capturing updates to State Summary report – Respective percentage columns for all "No of Actions of X Day Duration" columns, "Number of days not under a Beach Action" and "Percent of days not under a Beach Action".
1.7	2/2/2016	Updated Exhibit 48 for Tier 1 Stats report changes – "Is Beach Monitored Irregularly" column.
1.7	2/2/2016	Added a section G.12 under Known Issues regarding report header freeze functionality not available.

User's		
Guide Version	Date	Description of Changes
1.8	5/19/2016	Updated Exhibits 37 and 38 capturing updates to Beach Actions (Advisories and Closures) report – new column "Monitoring Station ID".
1.8	5/19/2016	Updated Exhibits 43 and 44 capturing updates to Possible Pollution Sources. Added a rollover so a link pops up with the comment when mouse is over the 'Yes'.
1.8	5/19/2016	Updated Exhibits 50 and 51 capturing updates to Water Quality. – new column "Result Value Text"
1.9	11/16/2016	Updated Exhibit 17 capturing the change in pre-selected filters.
1.9	11/16/2016	Removed section G.13 (Water Quality report headers open STORET help page before expanding the Sort Menu) from under Known Issues section. Added updated instructions regarding links to the help page under Exhibit 51.
1.9	11/16/2016	Updated Exhibits 40, 45, 46 and 50 capturing the removal of "%" from percent columns
1.9	11/16/2016	Updated Exhibits 35, 37, 38, 45 ad 46 capturing changes based on partial day beach actions
1.9	11/16/2016	Updated Exhibits 37, 38, 42 capturing change in column header from "Monitoring Station" to "Station ID"
1.9	11/16/2016	Updated Exhibit 42 capturing field label updates – "Monitoring Reporting (to EPA) Frequency", "Advisory Reporting (to EPA) Frequency" and "Station ID"
1.9	11/16/2016	Updated Exhibits 43 capturing the inclusion of pollution sources data from the beach action report
1.9	11/16/2016	Added Exhibits 47 and 48 capturing new State Summary Report – Alternate Report with National Percentages
1.9	11/16/2016	Updated Exhibits 51 and 52 capturing updates to Water Quality. Added a clickable link in red that links the user to a page with definitions.
2.0	3/17/2017	Added a section G.13 under Known Issues regarding Station IDs submitted prior to 2015.
2.0	3/17/2017	Update Exhibit 30 showing the changes in NLB report (note above the Beach count report and removed "*" and the related disclaimer text)
2.0	3/17/2017	Updated Exhibit 18. BEACON 2.0 Reports List regarding description changes for Beach Actions and State Summary reports. Exhibit 18. BEACON 2.0 Reports List
2.0	3/17/2017	Updated Exhibit 35 with example showing the grouped Station ID and Activity ID data.
2.0	3/17/2017	Updated Exhibit 42 with example showing the note regarding Station IDs submitted prior to 2015 issue.
2.0	3/17/2017	Updated Exhibit 43 with example showing the POTW column.
2.0	3/17/2017	Added note under Exhibit 43 regarding Activity Source text in pollution source columns.
2.0	3/17/2017	Updated Exhibit 47 and 48 to show the new "No. of Tier 1 Monitored Beaches" column.
2.1	12/13/2017	Made text edits in "A. Introduction" section.
2.1	12/13/2017	Updated Exhibits 1, 13, 14, 15, 20, 21, 22, 23, 24, 25, 26, 27, 28, 30, 31, 53, 54 to reflect changes due to EPA redesign.
2.1	12/13/2017	Updated Exhibits 14 capturing the updated "Select by Great Waterbody" section.

User's Guide Version	Date	Description of Changes
2.1	12/13/2017	Updated Exhibits 18 capturing the new WQS Criteria report.
2.1	12/13/2017	Updated Exhibits 34 capturing new columns added in Beach Profile report.
2.1	12/13/2017	Added Exhibits 35 and 36 capturing new "Beach Profile (Season and Monitoring frequency) List" and "Beach Contact Information" reports.
2.1	12/13/2017	Updated Exhibit 37 capturing new column added in Beach Actions (Advisories and Closures) report.
2.1	12/13/2017	Updated Exhibit 39 capturing new columns added in Beach Attributes report.
2.1	12/13/2017	Updated Exhibit 41 capturing new columns added in Beach Monitoring Frequency report.
2.1	12/13/2017	Added note under Exhibit 45 regarding overlapping multiple actions.
2.1	12/13/2017	Added Exhibit 55 capturing new "Beach WQS Criteria Names and Values" report.
2.2	12/18/2018	Updated text and Exhibits under Section B capturing map interface changes.
2.2	12/18/2018	Removed all references to Water Quality Monitoring stations since the points are currently not being shown on the BEACON Map. These sections will be restored back once the functionality has been added to the map interface.
2.2	12/18/2018	Updated Exhibit 31 capturing the map change.
2.2	12/18/2018	Updated Exhibit 35 capturing new columns added in Beach Profile (Season and Monitoring frequency) List report.
2.2	12/18/2018	Updated Exhibit 42 capturing the map change.
2.3	11/15/2019	Updated section B.2.3 with instructions about monitoring stations added to the map tool.
2.3	11/15/2019	Updated Exhibit 5 and 6 to indicate the addition of WQX stations in the legend and on the map.
2.3	11/15/2019	Updated section C.2.2 with instructions to include Tier 4 beaches in reports.
2.3	11/15/2019	Updated section B.5 with instructions on how to find beaches HUCs.
2.3	11/15/2019	Updated Exhibit 13 capturing the addition of ST under Region 10.
2.3	11/15/2019	Updated Exhibit 17 capturing the addition of Non-Reporting and Unspecified options under ACTIVE.
2.3	11/15/2019	Updated Exhibit 30 capturing the updated note on the National List of Beaches page.
2.3	11/15/2019	Updated Exhibit 31 capturing the new report on organization details for tribes.
2.3	11/15/2019	Updated Exhibit 34 capturing the addition of Swim Status column in Beach Profile List report.
2.3	11/15/2019	Updated Exhibit 35 capturing the addition of Swim Status column in Beach Profile (Season and Monitoring frequency) List report.
2.3	11/15/2019	Updated Exhibit 37 capturing the addition of Swim Status column in Beach Actions (Advisories and Closures) report.
2.3	11/15/2019	Updated Exhibit 40 capturing the addition of Beach Status, Swim Status and Monitored columns Beach Days report.
2.4	6/22/2020	Updated the Notes section of C.2.2 with instructions to include Historical beaches in BEACON reports.
2.4	6/22/2020	Updated section C.3 with information regarding trend charts
2.4	6/22/2020	Updated section F.4 with changes to the NLB report.

User's Guide Version	Date	Description of Changes
2.4	6/22/2020	Updated Exhibit 28 capturing the changes to the NLB report main page.
2.4	6/22/2020	Updated Exhibit 29 capturing the changes to the NLB report jurisdiction level page.
2.4	6/22/2020	Added section F.5.4 with information regarding the Organization report on the NLB report jurisdiction level page.
2.4	6/22/2020	Added section G with information about the new Dynamic National Report. Previous section G.
2.4	6/22/2020	Updated section I with update definition for Beach Act Beaches and added new definition for Program Beaches.
2.4	6/22/2020	Added Exhibits 34, 35, 36 with screenshots for the Action Duration report trend charts.
2.4	6/22/2020	Updated Exhibits 43 capturing the changes to the Beach Days report and added note below the screenshot.
2.4	6/22/2020	Updated Exhibits 45 with screenshot capturing changes to the Local Action Decision Procedures report and the note above the map.
2.4	6/22/2020	Added Exhibit 47, 48, 49 with screenshots for the Possible Pollution Sources report trend charts.
2.4	6/22/2020	Updated Exhibits 51, 53, 55 with screenshots capturing the header change from "No. of BEACH Act Beaches" to "No. of Program Beaches".
2.4	6/22/2020	Added note under Exhibits 51, 53, 55 regarding exclusion of Tier 1 beaches that are temporarily "Dormant" and Tier 4 beaches from State Summary reports.
2.4	6/22/2020	Added Exhibits 57, 58, 59, 60, 61, 62, 63, 64, 65 with screenshots for the State Summary report trend charts.
2.5	8/24/2020	Updated text under BEACON 2.0 CONTACTS section.
2.5	8/24/2020	Added a note under Exhibit 43 regarding filtering out Tier 4 beaches.
2.5	8/24/2020	Updated Exhibit 45 to reflect the changes in Local Action Decision Procedures section.
2.5	8/24/2020	Updated Exhibit 51 – 56 and 60 – 65 to reflect the change in that data pool from monitored beaches to program beaches in State Summary reports and charts.
2.6	11/30/2020	Updated Exhibit 15 to reflect the addition of the new option Non-Beach Act Beach.
2.6	11/30/2020	Updated Exhibit 37 capturing updates to Beach Profile report – new column "Beach Act Beach"
2.6	11/30/2020	Updated Exhibit 16 capturing addition of the new report - Local Action Decision Procedures report.
2.6	11/30/2020	Added Exhibit 73 with screen capture of the new Local Action Decision Procedures report.
2.7	1/26/2021	Updated Exhibit 15 to capture the DNR and NLB preset filters selection option and the new miscellaneous filters option Tier 4.
2.8	6/16/2021	Updated Exhibit 44 capturing updates to Beach Monitoring Frequency report – new column "Beach Comment".
2.8	6/16/2021	Updated Exhibits 1 and 5 capturing updates to map legend – Text instances changed from STORET to WQX.
2.9	9/15/2021	Added a section H.14 under Known Issues regarding inconsistent or incorrect beach names in BEACON map.

User's Guide Version	Date	Description of Changes
2.9	9/15/2021	Updated Exhibit 38 capturing updates to Beach Profile (Season and Monitoring frequency) List report – new columns "Beach Comment" and "Monitored Irregularly Comment".
2.9	9/15/2021	Updated Exhibit 44 capturing updates to Beach Monitoring Frequency report – new column "Monitored Irregularly Comment".
3.0	11/29/2021	Updated Exhibit 45 capturing updates to Beach Profile Details report – new field "Time Beach is open (in hours)".
3.0	11/29/2021	Updated Exhibit 69 capturing updates to Water Quality report – new columns "Result Analytical Method Identifier Context", "Result Analytical Method Identifier" and "Result Analytical Method Name".
3.1	10/11/22	Updated Exhibit 44 capturing updates to Beach Monitoring Frequency report – new column "Monitored Irregularly".
3.1	10/11/22	Removed footnotes regarding Tier1 + Dormant and Tier 4 filters on the report below Exhibits 51, 53 and 55.
4.0	07/15/2024	Updated BEACON to use Oracle Apex 'Friendly URL' syntax which provides human-readable URLs and easier linking to reports
4.0	07/15/2024	Updates Report pagination to include floating button at bottom of page, and pagination at top and bottom of each report.
4.0	07/15/2024	Updated Water Quality backend management so that updates to Water Quality Exchange are reflected in BEACON within 10 minutes.
4.0	07/15/2024	Added 'View Report Columns and Definitions' to all reports in an open/close downloadable table located above the top of each report.
4.0	07/15/2024	Slightly modified the Beach Profile Detail report to make it work better on mobile devices.
4.0	08/15/2024	Updated column headers on many reports to improve report usability. Standardized names and abbreviations across reports.