

BEACH ADVISORY AND CLOSING ONLINE NOTIFICATION (BEACON) 2.0

User's Guide

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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 <u>Submitting Beach Data to EPA</u> page.

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

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

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.

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:

- **Revised mapping interface:** The new BEACON map includes many new features and has greater functionality.
- **New report creation wizard:** This tool walks users through three steps to select beaches, set search filters and view BEACON reports.
- **New RSS feed generator:** The BEACON RSS Generator provides you with the ability to generate an RSS feed for an area of interest.

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 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 manager using the contact information provided at the State, Territorial, Tribal and EPA Beach Program Contacts.

The state-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) and the USGS Water Quality Portal (WQP). WQX is the framework by which organizations submit data to the WQP. BEACON pulls water quality monitoring data from WQX/WQP. For more information on WQX/WQP, see Water Quality Data (WQX) 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 <u>Submitting Beach Data to EPA</u> page.

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

The new BEACON 2.0 "Find a Beach" mapping interface includes several improvements over the original version. New features include dynamic maps (as opposed to static), enhanced search tools to find the beach of interest, and several options for basemaps. The mapping 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. 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.

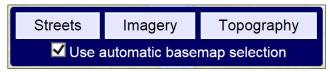
Exhibit 3. Coordinates Box.

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,
- Yellow Advisory; Beaches that are under advisory,
- Red Closure; Beaches that have been placed under a temporary closure action,
- Grey Dormant or Non-Reporting; Beaches that have not been reported on, or are not
 expected by the state to be reported on for upto 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.

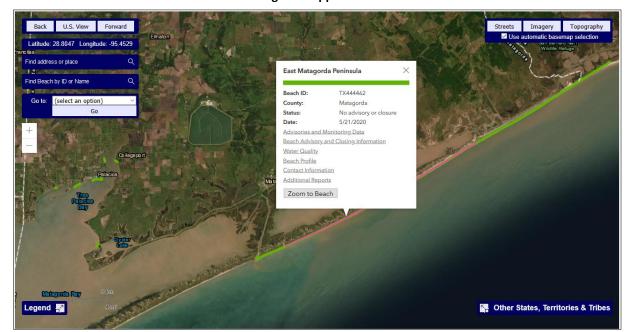


Exhibit 6. Beach Segment Appearance in BEACON 2.0.

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 popup displaying Station ID, Station Name, Organization ID, and Organization Name. The details popup also contains a link to view more details on this monitoring station. The Station ID shown in the details popup is a concatenation of Organization ID - Station ID, which is the format used by the USGS Water Quality Portal (WQP) for monitoring location identifiers. For more information on the dataset of WQX stations please visit the WQP.

B.3 Finding a Beach

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

Notes:

- Map elements may take time to load and, therefore, may not be immediately viewable.
- 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 state, territory, or tribe 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 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

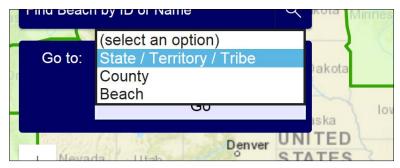
Use the Beach ID or Name search box below the address or place search box to search by **Beach ID** or **Name**. Beach IDs are unique identifiers assigned by EPA. Beach IDs will be familiar to more advanced users, and are found in BEACON 2.0 reports and other Program materials. This option will zoom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

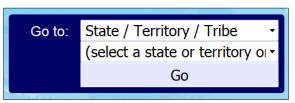


There are several ways to use this tool:

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.

Go to:

Beach

Alaska

(select a beach)

(select a beach)

AK140870: City Park

AK301573: KB-Beacon Hill

AK406019: KB-Knudson

AK544485: KB-Refuge

AK365539: KB-Rotary Pool

AK495900: KB-Seaport

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.
- **Status:** Current status of the beach.
- Date: Date when advisory and monitoring data were last reported to EPA.
- Advisories and Monitoring Data: This link provides advisories and water quality data submitted in the prior two weeks; in most cases, this will only return data during the beach season if the "state" reports to EPA frequently.
- **Beach Advisory and Closing Information**: Click this link to see dates of advisories and closures for the selected beach. See Appendix A for an example report.
- Water Quality: Click this link to view the water quality report for the selected beach. See Appendix A for an example report.
- **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.
- **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.

Back U.S. View Forward SULLIVANS ISLAND Streets Imagery Topography Latitude: 32.7697 Longitude: -79.8040 Beach ID: SC008405 County: Charleston Find address or place No advisory or o Status: Date: 11/12/2018 Find Beach by ID or Name Advisories and Monitoring Data ach Advisory and Closing Information Beach Water Quality Beach Profile SC008405: SULLIVANS ISL Contact Information Additional Reports Zoom to Beach Other States, Territories & Tribes Legend Alaska Hawaii American Samoa Guam Northern Mariana Islands

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> (<u>https://www.epa.gov/waterdata/waters-geoviewer</u>) 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 surfacewater 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.

C.1 Step 1 – Location Filters

Step 1 allows for selection of one of three location filter types. Each type is described in the sections below.

Note:

- At least one location must be selected in order to generate reports however, only one location filter group should be used. If multiple location filter groups are applied (e.g., Select by EPA Region and Select by state), only the first one listed on the Step 1 wizard page is applied.
- Only EPA Regions, states/tribes/territories, and counties with beaches in the Beach Program are listed as options in the location filters.
- Historical and Private beaches are not included in the report location filters; they are filtered out in the reports but are included in the map functionality. See Step 2 Additional Filtering for instructions on including historical and private beaches in the search criteria for the reports.

C.1.1 Select by National or EPA Region

Using this option will 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.

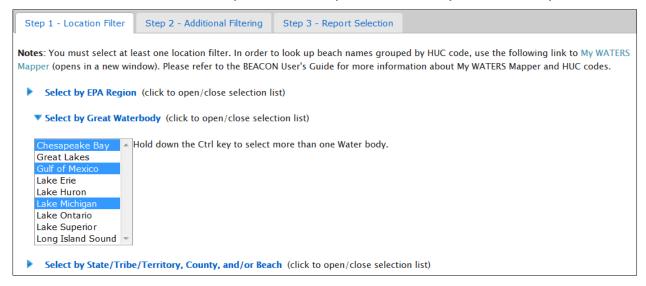
Exhibit 11. BEACON 2.0 Reports Wizard – Step 1: Location Filter by EPA Region.

```
Step 1 - Location Filter
                            Step 2 - Additional Filtering
                                                            Step 3 - Report Selection
Notes: You must select at least one location filter. In order to look up beach names grouped by HUC code, use the following link to My WATERS
Mapper (opens in a new window). Please refer to the BEACON User's Guide for more information about My WATERS Mapper and HUC codes.
   Select by EPA Region (click to open/close selection list)
                                              Hold down the Ctrl key to select more than one region.
    National - All States/Tribes/Territories
    Region 1 - CT, MA, ME, NH, RI
    Region 2 - NJ, NY, PR, VI
    Region 3 - DE, MD, PA, VA
    Region 4 - AL, FL, GA, MS, NC, SC
    Region 5 - BR, GP, IL, IN, MI, MN, OH, WI
    Region 6 - LA, TX
    Region 9 - AS, CA, GU, HI, MP
   Region 10 - AK, MK, OR, ST, WA
    Select by Great Waterbody (click to open/close selection list)
     Select by State/Tribe/Territory, County, and/or Beach (click to open/close selection list)
```

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.

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



C.1.3 Select by State/Tribe/Territory, County, and/or Beach

The third location filter option will filter for beaches by the selected states, tribes, territories, counties, and/or beaches. This method involves using the selection tool shown in Exhibit 13 below.

States/Tribes/Territories Counties Reaches Selected Beaches Alameda California Alabama Beachfront Park Alaska Clifford Kamph Memorial Park -- Del Norte Humboldt Crescent Beach ---- Pebble Beach American Samoa Bad River Band Los Angeles Enderts Beach ---- Pelican Bay State Beach Marin High Bluff Beach ---- Point St. George Connecticut Mendocino Kellogg Beach Delaware Monterey Lake Earl Wildlife Area Beaches Florida Orange 8 Pelican Bay State Beach Georgia San Diego ≫ Grand Portage San Francisco 8 Guam San Luis Obispo South Beach ≪3 Hawaii San Mateo Wilson Creek Beach Illinois Santa Barbara Indiana Santa Cruz Louisiana Sonoma Maine Ventura Makah Maryland Massachusetts Michigan

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 Beaches** box on the far right.

How to add items to the Selected Beaches box:

- Find a <u>single beach</u> by clicking on the state/tribe/territory, county, and then beach name. Add
 the beach to the **Selected Beaches** 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 Beaches** box.
- <u>All beaches in a state/tribe/territory</u> can be added to the **Selected Beaches** box by selecting the state/tribe/territory and using the single right arrow. Multiple groups can be added, but must be added one at a time.
- <u>All beaches in a county</u> can be moved to the **Selected Beaches** box selecting a county and then using the single right arrow. Multiple groups can be added, but must be added one at a time.

How to remove items from the Selected Beaches box:

- To remove <u>specific beaches or groups</u>, use the single left arrow to remove the selections one at a time. See Section H.6 Removing selections from the Selected Beaches box for additional information on removing items.
- To clear the Selected Beaches box, click the double left arrow.

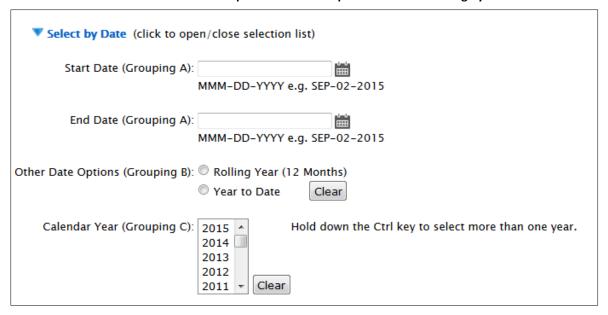
C.2 Step 2 – Additional Filtering

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

C.2.1 Select by Date

The date filter menu contains three options for filtering by date (see Exhibit 14 below). **Note:** Only one option group should be used when using the Select by Date filter.

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



Select **one** of the options listed below:

- **Start/End Dates Option (Grouping A):** Enter a date range to filter reports for beach activity and action data falling within the selected range.
- 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.
- Calendar Year Option (Grouping C): The calendar year option displays a list of years that can be selected. When one or more of these values are selected, then the reports are filtered to bring back data for this selection. The clear button may be used to clear the currently selected option(s) under Grouping C.

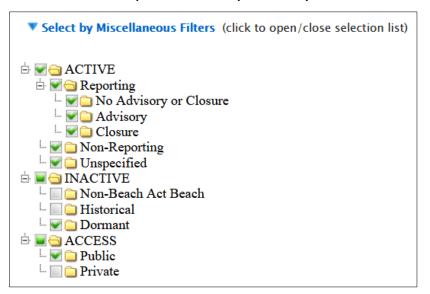
C.2.2 Selecting by Miscellaneous Filters

This outline will allow you to select alternative filters than those preset for the reports. The preset filters show a green checkmark and include the following: 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, remove the green checkmark from ACTIVE and INACTIVE options. 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 in the wizard and after a report is opened (see Section D About BEACON 2.0 Reports for more information).
- Historical beaches are sometimes flagged as private beaches and also sometimes the Reported flag is not Y. So to see the historical beaches, unselect both ACTIVE and INACTIVE filters and also select Private under ACCESS filter.

Exhibit 15. BEACON 2.0 Reports Wizard – Step 2: Select by Miscellaneous Filters.



C.3 Step 3 – Report and Trend Chart Selections

The report selection page displays a list of available reports and trend charts for use with the filters selected from the first two steps. The report selection page also includes a link to a Real Simple Syndication (RSS) generator for the beaches selected (for more information on using the RSS generator, see Section E – RSS Feeds). 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. For examples of the reports and trend charts, see Appendix A.

Exhibit 16. BEACON 2.0 Reports List.

Report	Description
Action Duration	For each BEACH Act 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). The list is sorted by county and beach name. Note : An action can be based on a model or policy and not be a monitored beach.
Advisory and Monitoring	<u>For each BEACH Act beach:</u> Presents a condensed combination of the "Action" and "Water Quality" Reports for the most recent 2 week period of submitted data (most recent to older order) including: dates, duration of actions, basis for action, possible cause and source, monitoring results. The list is sorted by "state", county, and beach name. Note: This report will not return data if none has been submitted in the prior two weeks.
Beach Actions (Advisories and Closures)	For each beach action at a BEACH Act beach: Presents details of each beach action including: (1) type of action (e.g., closure, rain advisory, contamination advisory), (2) starting and ending date and time (in the case of partial day actions) of the action, (3a) duration of the action in days ("day" is defined as: an action lasting less than 24 hours will have a duration of 1 day. Any action lasting 24 hours or more will have a duration equal to the number of days on which the action occurred), (3b) for jurisdictions using partial day actions, the action will be in hours and percentage of time the beach was affected is calculated against the beach day length), (4) action reason, source, and the indicator used to trigger the action. The list is sorted by county, beach name and action start date. The default "1. Primary Report" combines into one line all action Reasons, Indicators, and Possible Sources as a "Main Report". To see a detailed listing, move your cursor to the right and click on "Detailed Report". Note: An action can be based on a model or policy and not be a monitored beach.
Beach Attributes	For each BEACH Act beach: Identifies attributes of each beach including: (1) beach tier ranking, (2) beach length, and (3) latitude/longitude. The list is sorted by county and beach name.
Beach Days	For each BEACH Act 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.
Beach Monitoring Frequency	<u>For each BEACH Act beach:</u> Identifies swim season and monitoring attributes of each beach including: (1) swimming season length and (2) in- and off-season monitoring frequency. The list is sorted by county and beach name.
Beach Profile	<u>For each BEACH Act 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. The list is sorted by "state", county, and beach name.
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.

Report	Description
Possible Pollution Sources	For each BEACH Act beach: Identifies if 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. The list is sorted by county and beach name.
RSS Feed	News feed for Beaches: Brief news feed that links to the advisory and monitoring report for the selected beach. The RSS feed link can only display about 200 beaches at a time. If too many beaches are selected to display in the RSS feed, then any over the 200 limit will be excluded. In order to view an RSS feed, the user must have an RSS feed reader installed. Some browsers may come standard with feed readers but other browsers may require a separate download. More information about news feeds (also called "RSS") from USA.gov.
State Summary	For each county: Displays key summary statistics concerning BEACH Act 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. The list is sorted by county name. Please note: this report can take several minutes to load if only a few filters have been applied.
Tier 1 Stats	For each BEACH Act 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. The list is sorted by county and beach name. Please note: this report can take several minutes to load if only a few filters have been applied.
Water Quality	For each monitored BEACH Act beach: Presents details of water quality monitoring results collected for the beach program (from WQX/WQP) 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). The list is sorted by "state", county, and beach ID, station ID, date of sample (recent to older).
WQS Criteria	For each BEACH Act 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, and 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

Some reports (Action Duration, Possible Pollution Sources, State Summary) also include trend charts based on the jurisdictions and years selected in Step 1 and Step 2.

For Action Duration and Possible Pollution Sources, charts can be plotted with following selections

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

The State Summary charts has three charting options, Monitored/total number of beaches, Overall amout of time beaches were open and notification actions. State Summary charts can be plotted with following selections

- <u>one</u> jurisdiction from Step 1 and <u>one</u> year from Step 2 (Pie chart)
- <u>multiple</u> jurisdictions from Step 1 and <u>one</u> year from Step 2 (horizontal Bar chart)
- <u>one</u> jurisdiction from Step 1 and <u>multiple</u> years from Step 2 (vertical Bar chart)
- <u>multiple</u> jurisdictions from Step 1 and <u>multiple</u> 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 jurisdictions will generate a cumbersome chart. Please consider selecting shorter year range and fewer jurisdictions for a more readable chart.

D. ABOUT BEACON 2.0 REPORTS

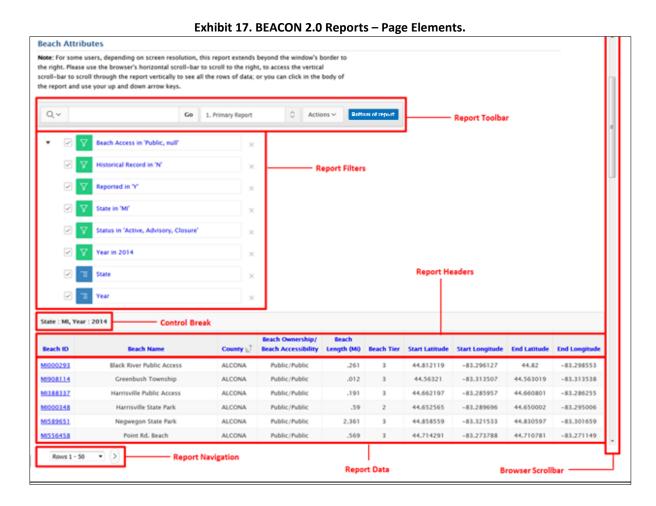
BEACON 2.0 reports are interactive reports, which means you can further customize the reports manually from the report screen. Some of the available features allow you to:

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

More information on customizing reports is provided in the following sections.

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.



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- **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 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.

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:

- **Select 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). Other options include "Most Recent", which displays only the most recent records available in the system, "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. Also, reports can take several minutes to load.

• 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.

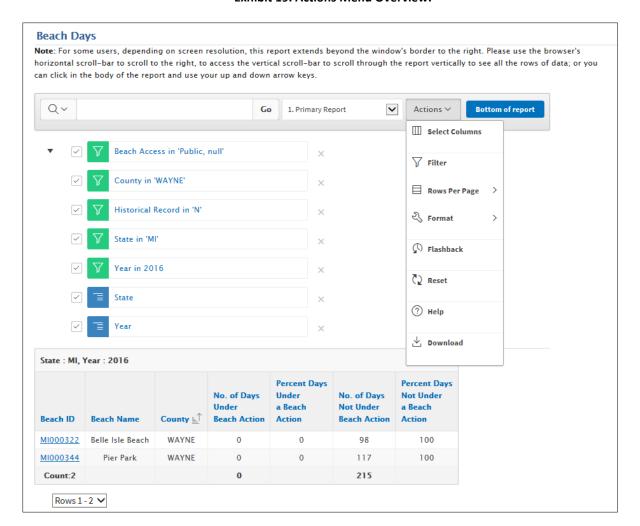


Exhibit 19. Actions Menu Overview.

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.

Beach Days 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 keys. Qv 1. Primary Report Actions ∨ **Bottom of report** Beach Access Select Columns ж County in 'WA Do Not Display Display in Report Beach Action in 2010? Beach ID Historical Rec $\overline{\Lambda}$ Beach Access Beach Name Beach Owner County Filter Waterbody State Λ State in 'MI' Historical Record No. of Days Under Beach Action No. of Beach Days Percent Days Under a Beach Action No. of Days Not Under Beach Action Reported Year in 2016 Status Percent Days Not Under a Beach Action Waterbody Name Year < $\overline{\Psi}$ Waterbody Type **«** State: MI, Year: 2016 Beach ID **Beach Name** Cancel Apply Belle Isle Beach MI000322 MI000344 Pier Park Count:2 0 215 Rows 1 - 2 V

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.

Beach Days 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 keys. Qv 1. Primary Report ♦ Actions ∨ **Filter** × ○ Column ○ Row Column Operator Expression Beach ID Cancel Apply State: MI, Year: 2016 **Percent Days**

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/cd/B28359 01/server.111/b28286/toc.htm)
 - "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/cd/B28359_01/server.111/b28286/conditions

- 3. "Is Null" and "Is Not Null" are covered under the <u>Null Conditions section</u> (https://docs.oracle.com/cd/B28359_01/server.111/b28286/conditions 008.htm#SQLRF52135).
- 4. "IN" and "NOT IN" are covered in the "IN" Condition section (https://docs.oracle.com/cd/B28359_01/server.111/b28286/conditions 013.htm#SQLRF52152).

ii. Oracle Text Reference

002.htm#SQLRF52085).

(https://docs.oracle.com/cd/B19306_01/text.102/b14218/toc.htm)

- 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/cd/B19306_01/text.102/b14218/csql.htm#sth ref122).
- 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.

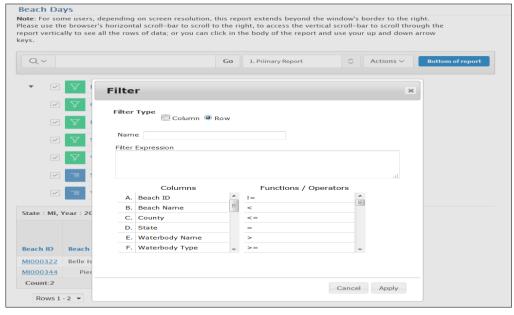


Exhibit 22. Actions Menu > Row Filter.

To filter by row:

- You can create complex WHERE clauses using column aliases and any Oracle functions or operators (for example, A = 'AL769933', 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:

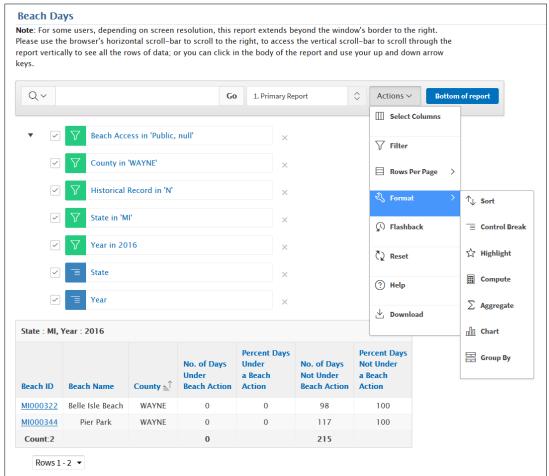


Exhibit 23. Actions Menu > Format.

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.

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.

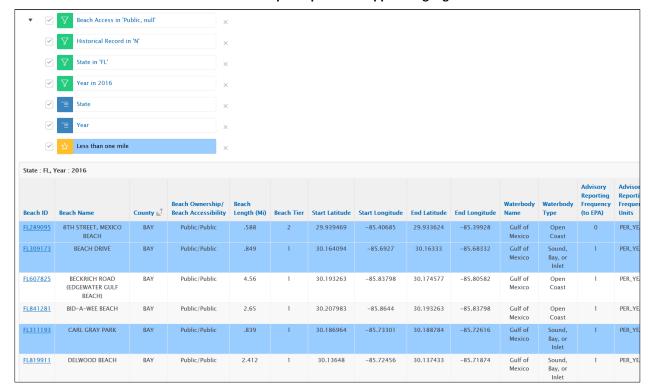


Exhibit 24. Example Report with Applied Highlight.

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 <code>TO_DATE</code>) 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 (https://docs.oracle.com/cd/B28359_01/server.111/b28286/functions001.htm#SQLRF51171).

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 Qv 1. Primary Report Actions ~ Compute × Computation - New Computation - ▼ Column Heading Format Mask V \$5,234.10 Computation Expression 5,234.10 5,234.1000 5,234 Functions / Operators Columns Keypad () ' | A. Beach Id != B. Beach Name 7 8 9 -State: FL, Year: 201 4 5 6 + C. County <= D. State 1 2 3 * > E. Waterbody Name F. Waterbody Type space Beach Id Beach N G. Historical Record ABS FL309173 Create a computation using column aliases. FL607825 BECKE 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 PANAMA 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.

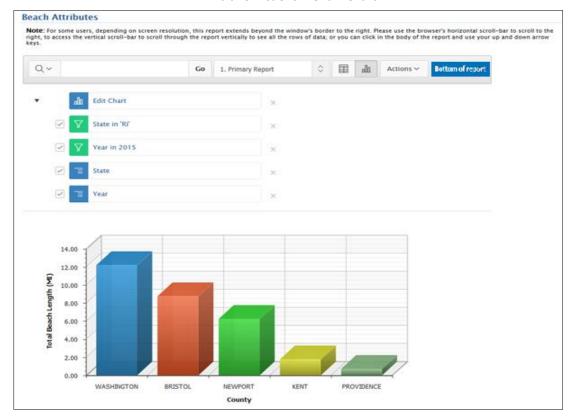


Exhibit 26. Actions Menu > Chart.

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 publically accessible beaches, the user can make a change from the report screen by clicking the red 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.

Note: Some reports may take a few minutes to load based on changes made to report filters.

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. RSS FEEDS

BEACON 2.0 also features a Really Simple Syndication (RSS) feed generator that allows you to receive BEACON data via an RSS feed. RSS feeds can be created in two ways:

E.1 Creating an RSS Feed using the RSS link on the Reports page.

To use this method, select any filter criteria as described in Section C – How to use the BEACON 2.0 Reports Wizard. Then, from the Report Selection tab, click on "RSS Feed." You can save the RSS generated link and/or add the feed to an RSS reader. The feed will provide updates of the latest advisory and monitoring data reported to EPA for the selected beach(es) and search criteria.

E.2 Creating an RSS Feed using the RSS Generator

This tool can be accessed by clicking the "RSS Generator" tab. The tool operates in the same manner as described in Section C.1.3 - Select by State/Tribe/Territory, County, and/or Beach You can save the RSS generated link and/or add the feed to an RSS reader. The feed will provide updates of the latest advisory and monitoring data reported to EPA for the selected beach(es) and search criteria.

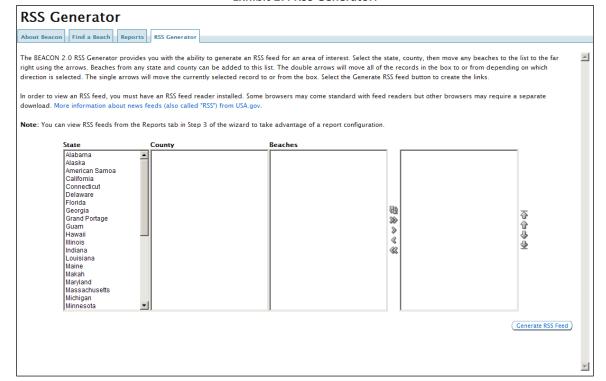


Exhibit 27. RSS Generator.

Note: In order to view an RSS feed, an RSS reader must be installed on the computer. For more information about RSS, see <u>USA.gov's "What is RSS?" page</u>.

F. THE NATIONAL LIST OF BEACHES

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

F.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.

F.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. Many jurisdictions report data more frequently. EPA updates the List of Beaches as we receive new information.

F.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.

F.4 Viewing National List of Beaches Reports

This section describes the <u>National List of Beaches: Interactive Version</u>. As shown in Exhibit 28 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 include 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 territories that are subject to the BEACH Act.

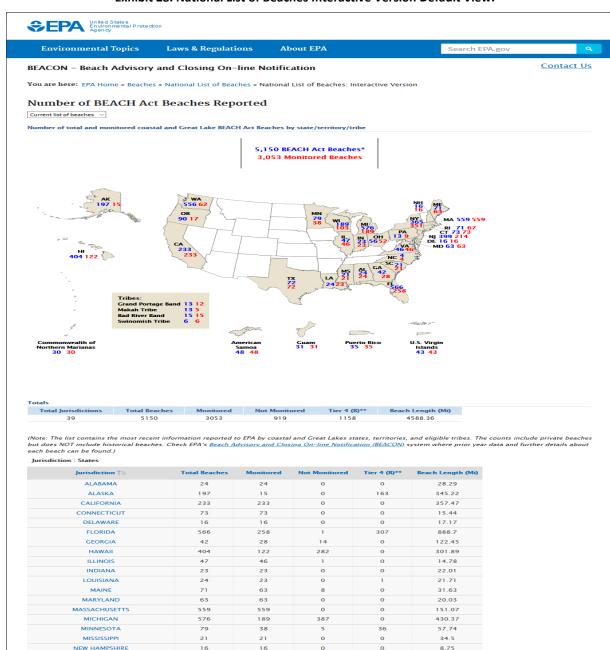


Exhibit 28. National List of Beaches Interactive Version Default View.

F.4.1 Number of BEACH Act Beaches Reported

To access a National List of Beaches report, select "Current list of beaches" (this is the default selection) or select an historic swimming season from the drop-down menu. Reports for the 2004, 2008 and 2010 swimming seasons are static PDF files. 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.

F.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.

F.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 **29**).

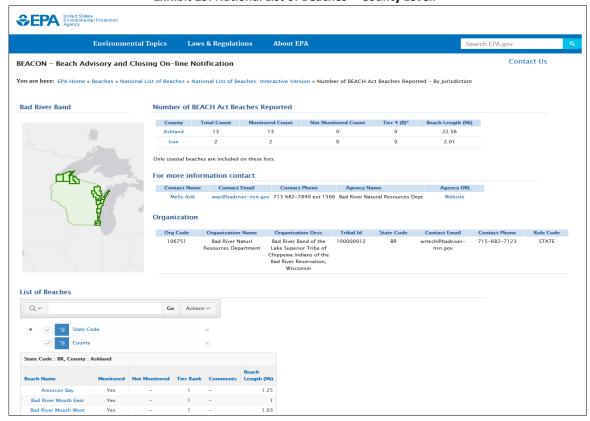


Exhibit 29. National List of Beaches -- County Level.

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

Each list is primarily organized 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 name in a jurisdiction report will guide you to a map view of the selected beach. That view 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 BEACON.

F.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.

F.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.

F.5.3 Contact Information

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

F.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.

F.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.

F.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.

F.5.5.2 BEACH NAME LINKS

Clicking a beach name in a jurisdiction report will guide you to 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. Those beach views, a national map of BEACH Act jurisdictions and 12 standard reports are available in BEACON (Beach Advisory and Closing On-line Notification) 2.0.

G. THE DYNAMIC NATIONAL REPORT

This section describes the layout and components of the **Dynamic National Report**.

G.1 What is the Dynamic National Report?

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 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. 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.

G.2 Viewing Dynamic National Reports

This section describes the <u>Dynamic National 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 souces that resulted in beach advisories or closures.

Exhibit 30. Dynamic National Report - 1 of 2

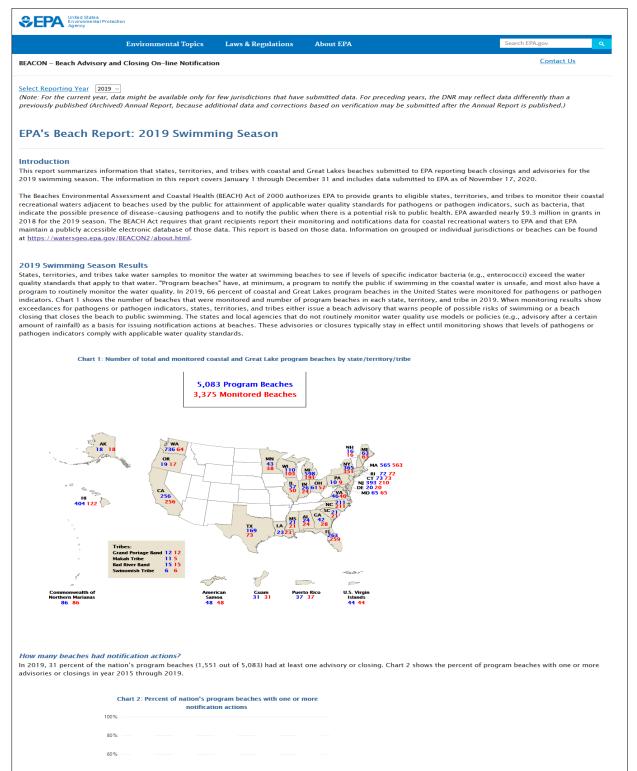
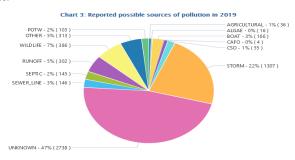


Exhibit 31. Dynamic National Report - 2 of 2

What are the possible pollution sources causing notification actions?

Beach advisories and closings can result from a variety of pollution sources: stormwater runoff after rainfall; pet and wildlife waste; waste from boats; leaking septic systems; malfunctions at wastewater treatment plants or broken sewer lines; overflows from sewer systems; or harmful algal blooms. To help minimize the risk to beachgoers, EPA is, for example, helping communities improve sewage treatment plants and reduce adverse impacts from rainfall as much as possible by providing water infrastructure investment loans.

States, territories, and tribes reported the possible sources of pollution shown in Chart 3 that resulted in beach advisories or closings or were identified in beach surveys at a program hearing the state of the possible sources of pollution shown in Chart 3 that resulted in beach advisories or closings or were identified in beach surveys at the possible sources of pollution shown in Chart 3 that resulted in beach advisories or closings or were identified in beach advisories.

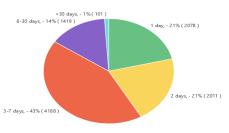


(Note: The percentages shown on the chart might not total 100 since only whole numbers are being shown.)

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

States, territories, and tribes issued 9,797 beach notification actions (i.e., advisories or closings) during the 2019 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 84 percent of the notification actions in 2019, coastal recreational waters no longer exceeded applicable water quality standards and beaches were deemed safe for swimming within a week (Chart 4). In 2019, 21 percent ended between one and two days.

Chart 4: Duration of beach notification actions in 2019



(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 93 percent of the time in 2019. 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 2019, EPA determined that 774,764 beach days were associated with the swimming seasons of 5,083 beaches with monitoring and/or notification programs. Notification actions were reported on 52,596 days out of those 774,764 beach days. Chart 5 shows the percentage of beach days that the nation's program beaches were open and without any advisories in years 2015 through 2019.

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



Where Can I Find More Information?

To find out more about what you can do to help protect beaches, visit https://www.epa.gov/beaches/act-beach.

To find out more about what affects beach health, visit https://www.epa.gov/beaches/learn-what-affects-beach-health.

For general information about beaches, visit https://www.epa.gov/beaches.

For current information about a specific beach, visit https://www.epa.gov/beaches/state-territorial-tribal-and-epa-beach-program-contacts.

For beach information that states, territories, and tribes have reported to EPA, visit http://watersgeo.epa.gov/beacon2.

↑ Top of Page

G.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.

G.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.

G.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.

G.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.

G.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.

H. KNOWN ISSUES

H.1 Delays in layer visibility

Map elements may take time to load and, therefore, may not be immediately viewable when first opening the map or upon zooming or panning.

H.2 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.

H.3 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.

H.4 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.

H.5 Too many filter values selected for reports

If too many filters are applied, the application will return an error message indicating that fewer selections should be made.

H.6 Removing selections from the Selected Beaches box

Removing single beaches. The single left arrow will remove the specific item you have added and any of the additional data pertaining to this item unless there is another item present that applies to the additional data. For example, if remove a single beach using the single arrow, the state, county, and beach name will be removed. In the below example, removing "Keller Beach" will also remove "Contra Costa" and "California". However, if two beaches in Contra Costa had been selected, and you then removed only one of the beaches, "Contra Costa" and "California" would remain.

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 "Contra Costa" and "California" have no bearing on data grouping and are only shown to help the user identify the selected beach(es) within the Selected Beaches box.

H.7 Reselecting values from Step 2 filters

When after running reports a user comes back to change filter values from under Step 2 - Additional filtering, but doesn't change anything under Step 1 Location Filter, the values selected before under Step 1 will be lost. The work around is to change selections under Step 2 but also click on Step 1 tab even though the user doesn't have anything to change and then re-run the reports.

States/Tribes/Territories Counties Beaches Selected Beaches Massachusetts Clatsop California Michigan Coos -- Contra Costa Minnesota Curry ---- Keller Beach Mississippi Douglas Oregon New Hampshire Lane Lincoln New Jersey New York Tillamook North Carolina Northern Mariana Islands Ohio 33 Pennsylvania Puerto Rico Rhode Island South Carolina Texas Virgin Islands Virginia Washington Wisconsin

Exhibit 32. Example Select by State/Tribe/Territory, County, and/or Beach tool.

H.8 Loading icon issue with Water Quality report

A larger loading icon has been implemented for all BEACON 2.0 reports and this has caused a minor bug when running the Water Quality report in certain browser versions. When manually changing the report filter settings or using pagination to view page results greater than fifty, the loading icon stays on the page.

If this occurs, it is recommended to try using a different browser when accessing the BEACON 2.0 reports for a better user experience. If trying a different browser is not a viable option, executing a page refresh will remove the loading icon from the page. To refresh the web page, press the F5 key or click the refresh icon (in Internet Explorer, the refresh icon is located to the right of the URL address in the top toolbar).

H.9 Data found exceeds maximum row limit with Water Quality report

For the Water Quality report, if the search returns more than 50,000 results, an error message is shown to filter data more to ensure complete results.

H.10 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://ofmpub.epa.gov/apex/beacon2/f?p=BEACON2:38:0:::RIR:IRIN_STATE_CODE,IRIN_YEAR,IRIN_STATUS:MD,2013,\Active,Advisory,Closure\

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://ofmpub.epa.gov/apex/beacon2/f?p=BEACON2:38:0:::RIR:IRIN_STATE_CODE,IRIN_YEAR,IRIN_STATUS:MD,2013,\Active,Advisory,Closure\

- https://ofmpub.epa.gov/apex/beacon2/f?p=BEACON2 Consider this portion standard.
- :38 The 38 represents the page number for the Water Quality report. You can see the page numbers for the other reports by looking at their URLs.
- :0:::RIR: This portion will remain the same for most cases.
- The next part lists all the desired filter fields, separated by commas, and then the filter values, separated by commas. The order of the values should correspond to the order of the fields. The list of fields and list of values are separated by a colon.
 - How to list the fields: IRIN STATE CODE, IRIN YEAR, IRIN STATUS
 - The "IR" part is standard. The <operator> used is "IN", which is used to specify multiple values. For simplicity, use this even when specifying only one value. Then, after the underscore, put the column name (note that an underscore should replace any spaces in a column name, and there is no space after the comma between column names).
 - How to list the values: MD,2013,\Active, Advisory, Closure\

The example specifies multiple values for the Status field; to do so in the URL, place "\" slashes before and after the values to group them.

Reference:

Advanced Interactive Reporting: http://www.oracle.com/technetwork/issue-archive/2010/10-mar/o20browser-098978.html.

H.11 Report header freeze functionality not available

Due to a change in the Apex software, the previous option to freeze headers of a report is now limited to reports without row groupings. Until we can create alternative reports you can either use a simpler query or keep the user guide headers page open (paper or split screen) for reference.

H.12 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.

H.13 BEACON is not useable on small screen devices

BEACON is not configured to be useable on small screens. Some features of the application may not work on mobile devices.

I. **DEFINITIONS**

The following definitions (except "Tier 4 beaches") are also displayed on the State Summary BEACON 2.0 report:

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.

Monitored beaches: Beaches that have a reporting frequency greater than zero or has monitoring results in WQX/WQP.

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, dryweather 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: Pubicly-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 for states from 1999 through 2012. Please see: Annual Swimming Season Statistics (1999-2012) [https://www.epa.gov/beach-tech/annual-swimming-season-statistics-1999-2012].)

Exhibit 33. Action Duration.

Beach Id	Beach Name	County ↑=	No. of beach actions	No. of Days Under Action	No. of actions less than 1 day duration	No. of actions of 1 day duration	No. of actions of 2 day duration	No. of actions of 3 - 7 day duration	No. of actions of 8 – 30 day duration	No. of actions greate than 30 day duration
11000373	Chrysler Park Beach	ST. CLAIR	3	4	0	2	1	0	0	0
MI000409	Conger-Lighthouse Beach	ST. CLAIR	2	3	0	1	1	0	0	0
11819055	Fort Gratiot County Park	ST. CLAIR	1	2	0	0	1	0	0	0
MI000408	Holland Road Beach	ST. CLAIR	5	6	0	4	1	0	0	0
MI001382	Keewadhin Road Beach	ST. CLAIR	2	3	0	1	1	0	0	0
MI000407	Lakeside Beach	ST. CLAIR	1	1	0	1	0	0	0	0
MI000344	Pier Park	WAYNE	1	2	0	0	1	0	0	0
Count: 57			101	378		54	18	15	12	2

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.

Note: The exhibit below shows the Action Duraton chart, shown by clicking the 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.

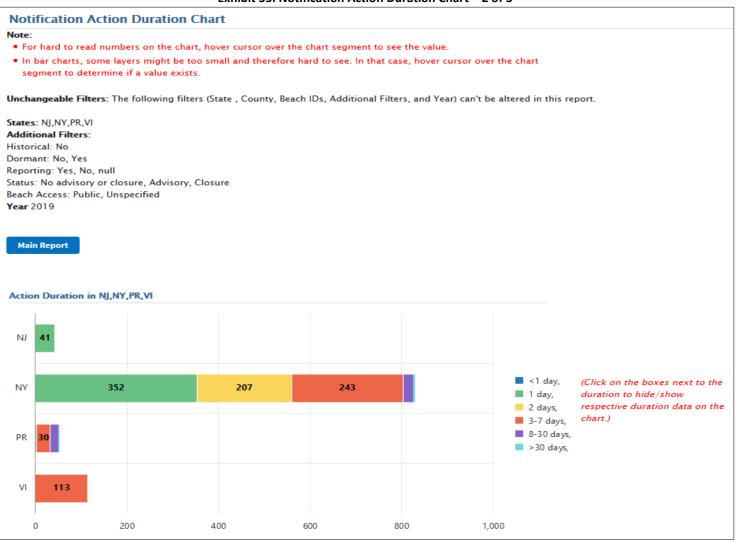
Notification Action Duration Chart • For hard to read numbers on the chart, hover cursor over the chart segment to see the value. • In bar charts, some layers might be too small and therefore hard to see. In that case, hover cursor over the chart segment to determine if a value exists. Unchangeable Filters: The following filters (State, County, Beach IDs, Additional Filters, and Year) can't be altered in this report. States: FL **Additional Filters:** Historical: No Dormant: No, Yes Reporting: Yes, No, null Status: No advisory or closure, Advisory, Closure Beach Access: Public, Unspecified Year 2019 **Main Report** Action Duration in FL >30 days, 2% (6) 1 day, 9% (23) 8-30 days, 27% (74) 2 days, 16% (44) 3-7 days, 46% (123)

Exhibit 34. Notification Action Duration Chart - 1 of 3

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

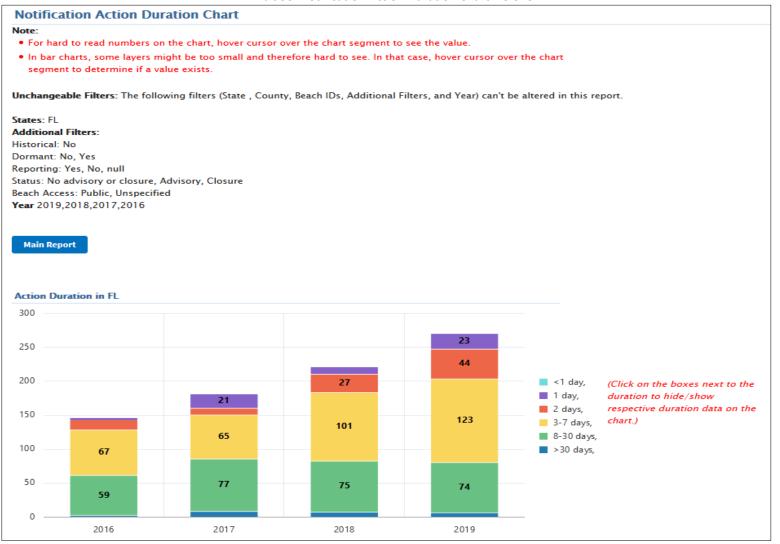
Note: The example below is of a chart generated when <u>multiple</u> jurisdictions are selected from wizard Step 1 and <u>one</u> year is selected from Calendar Year (Grouping C) field from Step 2. You can click on the boxes next to the durations in the legend to hide/show respective duration data on the chart.

Exhibit 35. 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 rouping 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.

Exhibit 36. Notification Action Duration Chart - 3 of 3



Note: The exhibit below shows the default Beach Profile. 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 37. Beach Profile List – 1 of 3.

Sta	ite Code : MI	, Year : 2019											
	Beach ID	Beach Name	Beach Description	County ↑=	Waterbody Name	Waterbody Type	Beach Status	Swim Status	Beach Access	Beach Owner	Beach Act Beach	Reported	Tier
P	MI000293	Black River Public Access	Alcona Township Park	ALCONA	Lake Huron	Still Water	Reporting	No advisory or closure	Public	Public	Υ	Y	3
٥	MI908114	Greenbush Township	Greenbush Township Road End	ALCONA	Lake Huron	Still Water	Reporting	No advisory or closure	Public	Public	Y	Y	3
P	MI388337	Harrisville Public Access	Harrisville	ALCONA	Lake Huron	Still Water	Reporting	No advisory or closure	Public	Public	Y	Y	3
P	MI000348	Harrisville State Park	Harrisville	ALCONA	Lake Huron	Still Water	Reporting	No advisory or closure	Public	Public	Y	Y	2
P	MI589651	Negwegon State Park	Alcona County	ALCONA	Lake Huron	Still Water	Reporting	No advisory or closure	Public	Public	Υ	Y	3
P	MI556458	Point Rd. Beach	Point Rd. end Beach	ALCONA	Lake Huron	Still Water	Reporting	No advisory or closure	Public	Public	Υ	Y	3
P	MI680454	Trask Lake Road Beach	Trask Lake Rd. end	ALCONA	Lake Huron	Still Water	Reporting	No advisory or closure	Public	Public	Υ	Y	3
۶	MI152478	Au Train Beach	Au Train Beach	ALGER	Lake Superior	Still Water	Reporting	No advisory or closure	Public	Public	Υ	Y	3
P	MI927757	Bay Furnace Recreation Area Beach	Bay Furnace Recreation Area Beach	ALGER	Lake Superior	Still Water	Reporting	No advisory or closure	Public	Public	Υ	Y	3
2	MI865512	Christmas Beach	Christmas Beach	ALGER	Lake Superior	Still Water	Reporting	No advisory or closure	Public	Public	Υ	Y	3

Note: Clicking on the magnifying glass shown in the above image will open the report shown in Exhibit 45.

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

Season and Monitoring Frequency Report

Exhibit 38. Beach Profile (Season and Monitoring frequency) List – 2 of 3.

Sta	te Code : AL,	Year : 2018												
	Beach Id	Beach Name	County ↑=	Beach Status	Swim Status	Beach Length (Mi)	Tier	Swim Season Start Date	Swim Season End Date	Swim Season Length	Length (in hours) of swim day	Monitoring Reporting (to EPA) Frequency	Station ID	Advisory Reporting (to EPA) Frequency
P	AL769933	ALABAMA POINT (GULF OF MEXICO)	BALDWIN	Reporting	No advisory or closure	2.04	2	01-MAY-18	30-SEP-18	152 DAYS	24	1 PER_YEAR	-	1 PER_YEAR
2	AL656449	BEAR POINT CIVIC ASSOCIATION	BALDWIN	Reporting	No advisory or closure	.1	3	01-MAY-18	30-SEP-18	152 DAYS	24	1 PER_YEAR	-	1 PER_YEAR
٦	AL854232	CAMP BECKWITH	BALDWIN	Reporting	No advisory or closure	.36	1	01-MAY-18	30-SEP-18	152 DAYS	24	1 PER_YEAR	C_BECK	1 PER_YEAR
2	AL497694	CAMP DIXIE	BALDWIN	Reporting	No advisory or closure	.12	1	01-MAY-18	30-SEP-18	152 DAYS	24	1 PER_YEAR	-	1 PER_YEAR
P	<u>AL711135</u>	COTTON BAYOU	BALDWIN	Reporting	No advisory or closure	1.56	1	01-MAY-18	30-SEP-18	152 DAYS	24	1 PER_YEAR	-	1 PER_YEAR
P	<u>AL432101</u>	ESCAMBIA AVENUE	BALDWIN	Reporting	No advisory or closure	.01	3	01-MAY-18	30-SEP-18	152 DAYS	24	1 PER_YEAR	ESC_AVE	1 PER_YEAR
٦	AL824748	FAIRHOPE PUBLIC BEACH	BALDWIN	Reporting	No advisory or closure	.71	1	01-MAY-18	30-SEP-18	152 DAYS	24	1 PER_YEAR	F_HOPE	1 PER_YEAR
2	AL548743	FLORIDA POINT	BALDWIN	Reporting	No advisory or closure	.93	1	01-MAY-18	30-SEP-18	152 DAYS	24	1 PER_YEAR	FL_PT	1 PER_YEAR
P	AL069764	FORT MORGAN PUBLIC BEACH	BALDWIN	Reporting	No advisory or closure	6.89	3	01-MAY-18	30-SEP-18	152 DAYS	24	1 PER_YEAR	-	1 PER_YEAR
P	AL368349	GULF SHORES PUBLIC BEACH	BALDWIN	Reporting	No advisory or closure	3.04	1	01-MAY-18	30-SEP-18	152 DAYS	24	1 PER_YEAR	-	1 PER_YEAR
P	<u>AL726329</u>	GULF STATE PARK - PAVILION	BALDWIN	Reporting	No advisory or closure	3.22	1	01-MAY-18	30-SEP-18	152 DAYS	24	1 PER_YEAR	-	1 PER_YEAR
P	AL261419	KEE AVENUE	BALDWIN	Reporting	No advisory or	.04	2	01-MAY-18	30-SEP-18	152 DAYS	24	1 PER_YEAR	KEE_AVE	1 PER_YEAR

Note: The exhibit below shows the Beach Contact Information List report, shown by clicking the or the "each Profile (Season and Monitoring frequency) List" reports.

Contact Information

button on the default "Beach Profile List"

Exhibit 39. Beach Contact Information – 3 of 3.

St	ate Code : AK	, Year : 2016						
	Beach Id	Beach Name	County <u></u>	Website Address	Name	Agency	Phone	Email
ρ	<u>AK551272</u>	North Kenai Beach	KENAI PENINSULA	http://dec.alaska.gov/water/wqsar /wqs/beachprogram.htm	Gretchen Pikul	Alaska Department of Environmental Conservation (BEACH)	907-465-5023	gretchen.pikul@alaska.gov
ρ	<u>AK488647</u>	South Kasilof River Beach	KENAI PENINSULA	http://dec.alaska.gov/water/wqsar /wqs/beachprogram.htm	Gretchen Pikul	Alaska Department of Environmental Conservation (BEACH)	907-465-5023	gretchen.pikul@alaska.gov
ρ	<u>AK802097</u>	South Kenai Beach	KENAI PENINSULA	http://dec.alaska.gov/water/wqsar /wqs/beachprogram.htm	Gretchen Pikul	Alaska Department of Environmental Conservation (BEACH)	907-465-5023	gretchen.pikul@alaska.gov
ρ	<u>AK605404</u>	Sandy Beach Park	PETERSBURG	http://dec.alaska.gov/water/wqsar /wqs/beachprogram.htm	Gretchen Pikul	Alaska Department of Environmental Conservation (BEACH)	907-465-5023	gretchen.pikul@alaska.gov
ρ	<u>AK140870</u>	City Park	WRANGELL	http://dec.alaska.gov/water/wqsar /wqs/beachprogram.htm	Gretchen Pikul	Alaska Department of Environmental Conservation (BEACH)	907-465-5023	gretchen.pikul@alaska.gov
ρ	AK866749	Petroglyph Beach	WRANGELL	http://dec.alaska.gov/water/wqsar /wqs/beachprogram.htm	Gretchen Pikul	Alaska Department of Environmental Conservation (BEACH)	907-465-5023	gretchen.pikul@alaska.gov

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 button to return to this report.

Exhibit 40. Beach Actions (Advisories and Closures) – 1 of 2.

State : PA, Count	ty : ERIE, Year : 2018	B, Beach Id : PA	102094													
Beach Name ↑=	Waterbody Name	Beach Status	Swim Status	Reported	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 Indicator	Action Possible Source
BEACH 11	Lake Erie	Reporting	No advisory or closure	Υ	21PABCH 31, 21PABCH 32, 21PABCH 33	526436	Contamination Advisory	03- JUN-18	04- JUN-18	2	100	24	7	MODEL	ECOLI	STORM
BEACH 11	Lake Erie	Reporting	No advisory or closure	Υ	21PABCH 31, 21PABCH 32, 21PABCH 33	526437	Contamination Advisory	10- JUL-18	25- JUL-18	15	100	24	7	ELEV_BACT	ECOLI	STORM
BEACH 11	Lake Erie	Reporting	No advisory or closure	Υ	21PABCH 31, 21PABCH 32, 21PABCH 33	526438	Contamination Advisory	27- JUL-18	29- JUL-18	3	100	24	7	MODEL	ECOLI	STORM
BEACH 11	Lake Erie	Reporting	No advisory or closure	Υ	21PABCH 31, 21PABCH 32, 21PABCH 33	526439	Contamination Advisory	31- JUL-18	01- AUG-18	2	100	24	7	ELEV_BACT	ECOLI	STORM
BEACH 11	Lake Erie	Reporting	No advisory or closure	Υ	21PABCH 31, 21PABCH 32, 21PABCH 33	526440	Contamination Advisory	01- AUG-18	04- AUG-18	3	100	24	7	MODEL	ECOLI	STORM
BEACH 11	Lake Erie	Reporting	No advisory or closure	Υ	21PABCH 31, 21PABCH 32, 21PABCH 33	526441	Contamination Advisory	06- AUG-18	17- AUG-18	11	100	24	7	ELEV_BACT	ECOLI	STORM
							Count: 6			36						
State : PA, Count	ty : ERIE, Year : 2018	B, Beach Id : PA	168215													
Beach Name	Waterbody Name	Beach Status	Swim Status	Reported	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 Indicator	Action Possible Source
BEACH 6	Lake Erie	Reporting	No advisory or closure	Υ	21PABCH 10, 21PABCH 11, 21PABCH 12	526442	Contamination Advisory	05- JUN-18	06- JUN-18	1	100	24	7	MODEL	ECOLI	STORM
BEACH 6	Lake Erie	Reporting	No advisory or closure	Υ	21PABCH 10, 21PABCH 11, 21PABCH 12	526443	Contamination Advisory	14- JUN-18	15- JUN-18	1	100	24	7	MODEL	ECOLI	STORM

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 41. Beach Actions (Advisories and Closures) – 2 of 2.

Beach Name <u>⊨</u> ↑	Beach Status	Reported	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
Crown Beach (Alameda Co)	Active	Y	CABEACH 759	484092	Rain Advisory	05-JAN-16	08-JAN-16	3	100	24	24	RAINFALL	Preemptive-Rainfall	ENTERO	Enterococci	STORM	Storm Related/Wet- WeatherRunoff
Crown Beach (Alameda Co)	Active	Υ	CABEACH 759	484092	Rain Advisory	05-JAN-16	08-JAN-16	3	100	24	24	ELEV_BACT	Monitoring that revealed elevated bacteria levels	ENTERO	Enterococci	STORM	Storm Related/Wet- WeatherRunoff
Crown Beach (Alameda Co)	Active	Υ	CABEACH 88	484093	Rain Advisory	05-JAN-16	11-JAN-16	6	100	24	24	RAINFALL	Preemptive-Rainfall	ENTERO	Enterococci	STORM	Storm Related/Wet- WeatherRunoff
Crown Beach (Alameda Co)	Active	Υ	CABEACH 88	484093	Rain Advisory	05-JAN-16	11-JAN-16	6	100	24	24	ELEV_BACT	Monitoring that revealed elevated bacteria levels	ENTERO	Enterococci	STORM	Storm Related/Wet- WeatherRunoff
Crown Beach (Alameda Co)	Active	Υ	CABEACH 92	484094	Rain Advisory	05-JAN-16	11-JAN-16	6	100	24	24	RAINFALL	Preemptive-Rainfall	ENTERO	Enterococci	STORM	Storm Related/Wet- WeatherRunoff
Crown Beach (Alameda Co)	Active	Υ	CABEACH 92	484094	Rain Advisory	05-JAN-16	11-JAN-16	6	100	24	24	ELEV_BACT	Monitoring that revealed elevated bacteria levels	ENTERO	Enterococci	STORM	Storm Related/Wet- WeatherRunoff
Crown Beach (Alameda Co)	Active	Υ	CABEACH 89	484095	Rain Advisory	05-JAN-16	13-JAN-16	8	100	24	24	RAINFALL	Preemptive-Rainfall	ENTERO	Enterococci	STORM	Storm Related/Wet- WeatherRunoff
Crown Beach (Alameda Co)	Active	Υ	CABEACH 89	484095	Rain Advisory	05-JAN-16	13-JAN-16	8	100	24	24	ELEV_BACT	Monitoring that revealed elevated bacteria levels	ENTERO	Enterococci	STORM	Storm Related/Wet- WeatherRunoff
Crown Beach (Alameda Co)	Active	Υ	CABEACH 82	484096	Rain Advisory	05-JAN-16	10-JAN-16	5	100	24	24	RAINFALL	Preemptive-Rainfall	ENTERO	Enterococci	STORM	Storm Related/Wet- WeatherRunoff
Crown Beach (Alameda Co)	Active	Υ	CABEACH 82	484096	Rain Advisory	05-JAN-16	10-JAN-16	5	100	24	24	ELEV_BACT	Monitoring that revealed elevated bacteria levels	ENTERO	Enterococci	STORM	Storm Related/Wet- WeatherRunoff
Crown Beach (Alameda Co)	Active	Υ	CABEACH 759	484097	Rain Advisory	09-JAN-16	12-JAN-16	3	100	24	24	RAINFALL	Preemptive-Rainfall	ENTERO	Enterococci	STORM	Storm Related/Wet- WeatherRunoff
Crown Beach (Alameda Co)	Active	Υ	CABEACH 759	484097	Rain Advisory	09-JAN-16	12-JAN-16	3	100	24	24	ELEV_BACT	Monitoring that revealed elevated bacteria levels	ENTERO	Enterococci	STORM	Storm Related/Wet- WeatherRunoff
Crown Beach (Alameda Co)	Active	Υ	CABEACH 92	484098	Rain Advisory	19-JAN-16	22-JAN-16	3	100	24	24	RAINFALL	Preemptive-Rainfall	ENTERO	Enterococci	STORM	Storm Related/Wet- WeatherRunoff
Crown Beach (Alameda Co)	Active	Υ	CABEACH 92	484098	Rain Advisory	19-JAN-16	22-JAN-16	3	100	24	24	ELEV_BACT	Monitoring that revealed elevated bacteria levels	ENTERO	Enterococci	STORM	Storm Related/Wet- WeatherRunoff
Crown Beach (Alameda Co)	Active	Υ	CABEACH 92	484099	Rain Advisory	01-FEB-16	03-FEB-16	2	100	24	24	RAINFALL	Preemptive-Rainfall	ENTERO	Enterococci	STORM	Storm Related/Wet- WeatherRunoff
Crown Beach (Alameda Co)	Active	Υ	CABEACH 92	484099	Rain Advisory	01-FEB-16	03-FEB-16	2	100	24	24	ELEV_BACT	Monitoring that revealed elevated bacteria levels	ENTERO	Enterococci	STORM	Storm Related/Wet- WeatherRunoff
Crown Beach (Alameda Co)	Active	Υ	CABEACH 757	484100	Rain Advisory	31-JAN-16	03-FEB-16	3	100	24	24	RAINFALL	Preemptive-Rainfall	ENTERO	Enterococci	STORM	Storm Related/Wet- WeatherRunoff
Crown Beach (Alameda Co)	Active	Υ	CABEACH 757	484100	Rain Advisory	31-JAN-16	03-FEB-16	3	100	24	24	ELEV_BACT	Monitoring that revealed elevated bacteria levels	ENTERO	Enterococci	STORM	Storm Related/Wet- WeatherRunoff
Crown Beach (Alameda Co)	Active	Υ	CABEACH 82	484101	Rain Advisory	31-JAN-16	03-FEB-16	3	100	24	24	RAINFALL	Preemptive-Rainfall	ENTERO	Enterococci	STORM	Storm Related/Wet- WeatherRunoff
Crown Beach (Alameda Co)	Active	Y	CABEACH 82	484101	Rain Advisory	31-JAN-16	03-FEB-16	3	100	24	24	ELEV_BACT	Monitoring that revealed elevated bacteria levels	ENTERO	Enterococci	STORM	Storm Related/Wet- WeatherRunoff

Exhibit 42. Beach Attributes.

State : AL,	Year : 2016												
Beach ID	Beach Name	County <u></u>	Beach Ownership/ Beach Accessibility	Beach Length (Mi)	Beach Tier	Start Latitude	Start Longitude	End Latitude	End Longitude	Waterbody Name	Waterbody Type	Advisory Reporting Frequency (to EPA)	Advisory Reporting Frequency Units
AL769933	ALABAMA POINT (GULF OF MEXICO)	BALDWIN	Public/Public	1	2	30.275581	-87.542128	30.282278	-87.509106	Gulf of Mexico	Open Coast	1	PER_YEAR
AL656449	BEAR POINT CIVIC ASSOCIATION	BALDWIN	Private/Public	.1	3	30.308514	-87.526794	30.30985	-87.526844	Gulf of Mexico	Sound, Bay, or Inlet	1	PER_YEAR
AL300816	BON SECOUR NATIONAL WILDLIFE REFUGE	BALDWIN	Public/Public	1	3	30.228961	-87.855719	30.231033	-87.801333	Gulf of Mexico	Open Coast	1	PER_YEAR
AL854232	CAMP BECKWITH	BALDWIN	Private/Public	.25	1	30.389919	-87.844722	30.385636	-87.841589	Gulf of Mexico	Sound, Bay, or Inlet	1	PER_YEAR
AL497694	CAMP DIXIE	BALDWIN	Public/Public	.25	1	30.325714	-87.516525	30.327347	-87.515953	Gulf of Mexico	Sound, Bay, or Inlet	1	PER_YEAR
<u>AL711135</u>	COTTON BAYOU	BALDWIN	Public/Public	.2	1	30.268031	-87.585228	30.271758	-87.559089	Gulf of Mexico	Open Coast	1	PER_YEAR
<u>AL432101</u>	ESCAMBIA AVENUE	BALDWIN	Public/Public	.01	3	30.340925	-87.502606	30.341453	-87.501581	Gulf of Mexico	Sound, Bay, or Inlet	1	PER_YEAR
AL824748	FAIRHOPE PUBLIC BEACH	BALDWIN	Public/Public	.25	1	30.522611	-87.913272	30.531408	-87.908361	Gulf of Mexico	Sound, Bay, or Inlet	1	PER_YEAR
AL548743	FLORIDA POINT	BALDWIN	Public/Public	.75	1	30.277942	-87.267244	30.274333	-87.279381	Gulf of Mexico	Open Coast	1	PER_YEAR
AL069764	FORT MORGAN PUBLIC BEACH	BALDWIN	Public/Public	1	3	30.230472	-88.023883	30.231875	-87.927839	Gulf of Mexico	Open Coast	1	PER_YEAR
AL368349	GULF SHORES PUBLIC BEACH	BALDWIN	Public/Public	1	1	30.2433	-87.717367	30.249636	-87.667278	Gulf of Mexico	Open Coast	1	PER_YEAR

Exhibit 43. Beach Days.

State: CT, Year: 2019												
Beach ID	Beach Name	County ↑=	Beach Status	Swim Status	Tier	Monitored	No. of Days Under Beach Action	Percent Days Under a Beach Action	No. of Days Not Under Beach Action	Percent Days Not Under a Beach Action		
CT200292	BELL ISLAND BEACH	FAIRFIELD	Reporting	No advisory or closure	2	Yes	11	11.22	87	88.78		
CT730976	BURYING HILL BEACH	FAIRFIELD	Reporting	No advisory or closure	2	Yes	8	8.16	90	91.84		
CT872506	BYRAM BEACH	FAIRFIELD	Reporting	No advisory or closure	3	Yes	37	37.76	61	62.24		
CT003939	CALF PASTURE BEACH	FAIRFIELD	Reporting	No advisory or closure	3	Yes	12	12.24	86	87.76		
CT135112	COMPO BEACH	FAIRFIELD	Reporting	No advisory or closure	2	Yes	8	8.16	90	91.84		
CT728213	CUMMINGS BEACH	FAIRFIELD	Reporting	No advisory or closure	3	Yes	12	12.24	86	87.76		
CT085278	EAST (COVE ISLAND) BEACH	FAIRFIELD	Reporting	No advisory or closure	3	Yes	12	12.24	86	87.76		
CT096148	GREAT CAPTAIN'S ISLAND BEACH	FAIRFIELD	Reporting	No advisory or closure	2	Yes	8	8.16	90	91.84		
CT486090	GREENWICH POINT BEACH	FAIRFIELD	Reporting	No advisory or closure	3	Yes	15	15.31	83	84.69		
CT010924	HICKORY BLUFF BEACH	FAIRFIELD	Reporting	No advisory or closure	2	Yes	11	11.22	87	88.78		
CT101236	ISLAND BEACH	FAIRFIELD	Reporting	No advisory or closure	1	Yes	0	0	98	100		
CT306507	JENNINGS BEACH	FAIRFIELD	Reporting	No advisory or closure	2	Yes	11	11.22	87	88.78		
CT449733	LONG BEACH (MARNICK'S)	FAIRFIELD	Reporting	No advisory or closure	2	Yes	15	15.31	83	84.69		
CT921236	LONG BEACH (PROPER)	FAIRFIELD	Reporting	No advisory or closure	1	Yes	9	9.18	89	90.82		

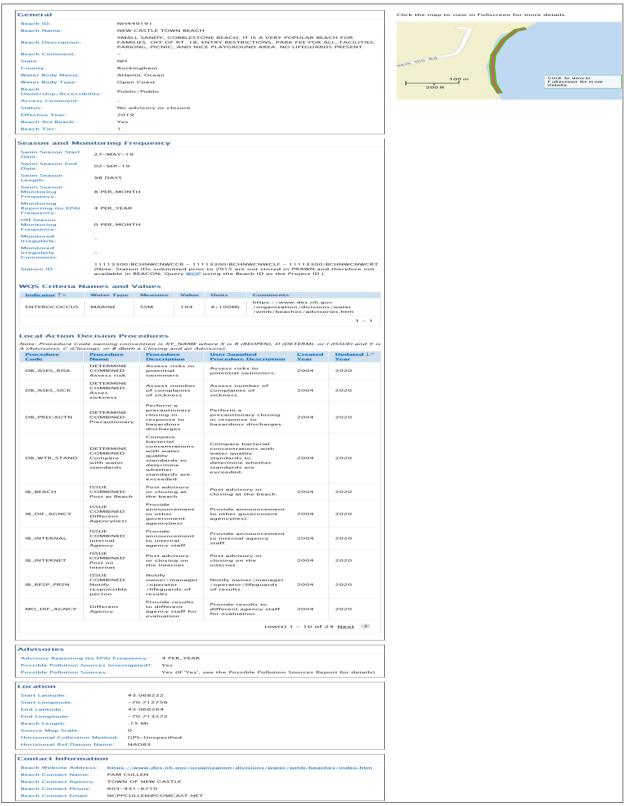
Note:

- 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 44. Beach Monitoring Frequency.

State : FL,	/ear : 2016										
Beach ID	Beach Name	County 🚉	Swim Season Length	Swim Season Length Units	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	Beach Length (Mi)
FL289095	8TH STREET, MEXICO BEACH	BAY	244	DAYS	0	PER_MONTH	0	PER_MONTH	0	PER_YEAR	.588
FL309173	BEACH DRIVE	BAY	244	DAYS	2	PER_MONTH	0	PER_MONTH	4	PER_YEAR	.849
FL607825	BECKRICH ROAD (EDGEWATER GULF BEACH)	BAY	244	DAYS	2	PER_MONTH	0	PER_MONTH	4	PER_YEAR	4.56
FL841281	BID-A-WEE BEACH	BAY	244	DAYS	2	PER_MONTH	0	PER_MONTH	4	PER_YEAR	2.65
FL311193	CARL GRAY PARK	BAY	244	DAYS	2	PER_MONTH	0	PER_MONTH	4	PER_YEAR	.839
FL819911	DELWOOD BEACH	BAY	244	DAYS	2	PER_MONTH	0	PER_MONTH	4	PER_YEAR	2.412
FL131708	DUPONT BRIDGE	BAY	244	DAYS	2	PER_MONTH	0	PER_MONTH	4	PER_YEAR	1.856
FL183543	EAST COUNTY LINE (MEXICO BEACH)	BAY	244	DAYS	0	PER_MONTH	0	PER_MONTH	0	PER_YEAR	.588
FL751274	LAGUNA BEACH	BAY	244	DAYS	2	PER_MONTH	0	PER_MONTH	4	PER_YEAR	.695
FL414684	PANAMA CITY BEACH PIER (EDGEWATER BEACH)	BAY	244	DAYS	2	PER_MONTH	0	PER_MONTH	4	PER_YEAR	5.405
FL888728	SELTZER PARK (SILVER SANDS BEACH)	BAY	244	DAYS	2	PER_MONTH	0	PER_MONTH	4	PER_YEAR	7.502
FL154538	SHELL ISLAND BEACH	BAY	244	DAYS	0	PER_MONTH	0	PER_MONTH	0	PER_YEAR	4.057
FL805924	SPY GLASS DRIVE (BILTMORE BEACH)	BAY	244	DAYS	2	PER_MONTH	0	PER_MONTH	4	PER_YEAR	9.214
FL173494	SUNSET PARK	BAY	244	DAYS	0	PER_MONTH	0	PER_MONTH	0	PER_YEAR	1.926
FL763253	TYNDALL BEACH	BAY	244	DAYS	0	PER_MONTH	0	PER_MONTH	0	PER_YEAR	.812
FL351066	WEST COUNTY LINE (CARRILON BEACH)	BAY	244	DAYS	0	PER_MONTH	0	PER_MONTH	0	PER_YEAR	1.432
FL033783	AQUARINA BEACH	BREVARD	244	DAYS	0	PER_MONTH	0	PER_MONTH	0	PER_YEAR	1.512
FL704382	BICENTENNIAL BEACH PARK	BREVARD	244	DAYS	0	PER_MONTH	0	PER_MONTH	0	PER_YEAR	.428
FL956721	BONSTEEL PARK	BREVARD	244	DAYS	0	PER_MONTH	0	PER_MONTH	0	PER_YEAR	.603
FL141824	CANAVERAL NATIONAL SEASHORE/PLAYALINDA BEACH	BREVARD	244	DAYS	0	PER_MONTH	0	PER_MONTH	0	PER_YEAR	1.557

Exhibit 45. Beach Profile - Details.



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 46. Possible Pollution Sources.

State : ME, Ye	ar : 2016																		
Beach Id	Beach Name	County <u>L</u>	Poll. Sources Investi- gated?	Poll. Sources Found?	Runoff	Storm	Agri- cultural	Algae	Boat	CAFO	CSO	SSO	POTW	Sewer Line	Septic	Wildlife	Other	Unknown	Tbd
ME438327	BROAD COVE RESERVE	CUMBERLAND	Yes	Yes	Yes	Yes	-	-	Yes	-	-	-	-	-	-	Yes	-	-	-
ME187302	CRESCENT BEACH	CUMBERLAND	Yes	Yes	-	Yes	-	-	-	-	-	-	-	-	-	Yes	<u>Yes</u>	-	-
ME712895	EAST END BEACH	CUMBERLAND	Yes	Yes	-	Yes	-	-	Yes	-	Yes	-	Yes	-	-	Yes	<u>Yes</u>	Activity SOURCE	-
ME275080	FERRY BEACH (SCARBOROUGH)	CUMBERLAND	Yes	Yes	Yes	-	-	-	Yes	-	-	-	-	-	-	Yes	-	-	-
ME226383	HIGGINS BEACH	CUMBERLAND	Yes	Yes	Yes	Yes	Yes	-	-	-	-	-	-	-	-	Yes	<u>Yes</u>	Activity SOURCE	-
ME399101	KETTLE COVE BEACH	CUMBERLAND	Yes	Yes	Yes	Activity Source	-	-	-	-	-	-	-	-	-	Yes	<u>Yes</u>	Activity SOURCE	-
ME800164	PINE POINT	CUMBERLAND	Yes	Yes	Yes	Yes	-	-	Yes	-	-	-	-	-	-	Yes	Yes	-	-
ME428165	SCARBOROUGH BEACH	CUMBERLAND	Yes	Yes	-	-	-	-	-	-	-	-	-	-	-	Yes	<u>Yes</u>	Activity SOURCE	-
ME875929	WILLARD BEACH	CUMBERLAND	Yes	Yes	-	Yes	-	-	Yes	-	-	-	-	-	-	Yes	<u>Yes</u>	Activity SOURCE	-
ME774235	WINSLOW PARK	CUMBERLAND	No	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-	Yes	-
ME786048	EMERY COVE BEACH	HANCOCK	No	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-	Yes	-
ME806573	HADLEY POINT	HANCOCK	Yes	Yes	-	-	-	-	Yes	-	-	-	-	-	-	Yes	-	-	-
ME209288	HULLS COVE	HANCOCK	Yes	Yes	Yes	Yes	-	-	-	-	Yes	-	Yes	-	-	Yes	<u>Yes</u>	-	-
ME313199	SAND BEACH	HANCOCK	Yes	Yes	Yes	-	-	-	-	-	-	-	-	-	-	Yes	<u>Yes</u>	-	-
ME280918	SEAL HARBOR	HANCOCK	Yes	Yes	Yes	Yes		-	Yes	-	=	-	Yes	-	-	Yes	<u>Yes</u>	Activity SOURCE	-
ME419870	TOWN BEACH	HANCOCK	Yes	Yes	-	Yes	-	-	Yes	-	Yes	-	Yes	-	-	Yes	Yes	-	-
ME900742	CLAM COVE	KNOX	No	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-	Yes	-
ME315104	GOODIES BEACH	KNOX	Yes	Yes	Yes	Yes	-	-	Yes	-	-	-	-	-	-	Yes	<u>Yes</u>	Activity SOURCE	-
ME309187	LAITE BEACH	KNOX	Yes	Yes	Yes	Yes	-	-	Yes	-	-	-	Yes	-	-	Yes	<u>Yes</u>	-	-
ME997054	SANDY BEACH	KNOX	Yes	Yes	-	Yes	-	-	Yes	-	-	-	Yes	-	-	Yes	-	Activity SOURCE	-
ME601876	PEMAQUID BEACH	LINCOLN	Yes	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.

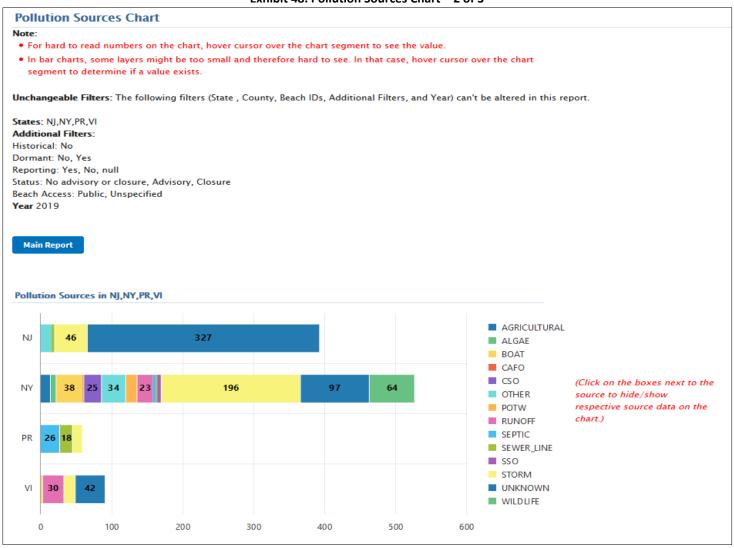
Pollution Sources Chart Note: · For hard to read numbers on the chart, hover cursor over the chart segment to see the value. • In bar charts, some layers might be too small and therefore hard to see. In that case, hover cursor over the chart segment to determine if a value exists. Unchangeable Filters: The following filters (State, County, Beach IDs, Additional Filters, and Year) can't be altered in this report. States: FL Additional Filters: Historical: No Dormant: No, Yes Reporting: Yes, No, null Status: No advisory or closure, Advisory, Closure Beach Access: Public, Unspecified Year 2019 **Main Report Pollution Sources in FL** AGRICULTURAL 1%... BOAT 10% (82) WILDLIFE 16% (134) OTHER 3% (25) POTW 3% (27) RUNOFF 9% (72) UNKNOWN 19% (161) SEPTIC 7% (55) SEWER_LINE 8% (69) STORM 17% (144) SSO 7% (61)

Exhibit 47. Pollution Sources Chart - 1 of 3

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.

Exhibit 48. 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.

Exhibit 49. Pollution Sources Chart - 3 of 3

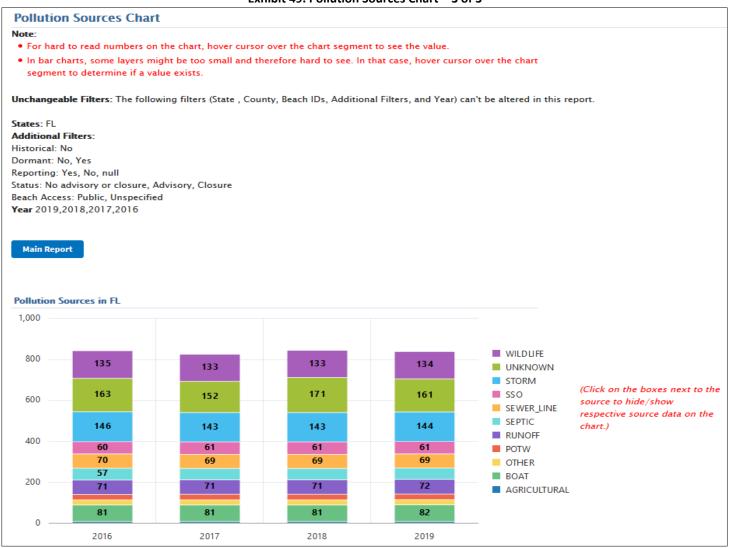


Exhibit 50. Example RSS Feed.

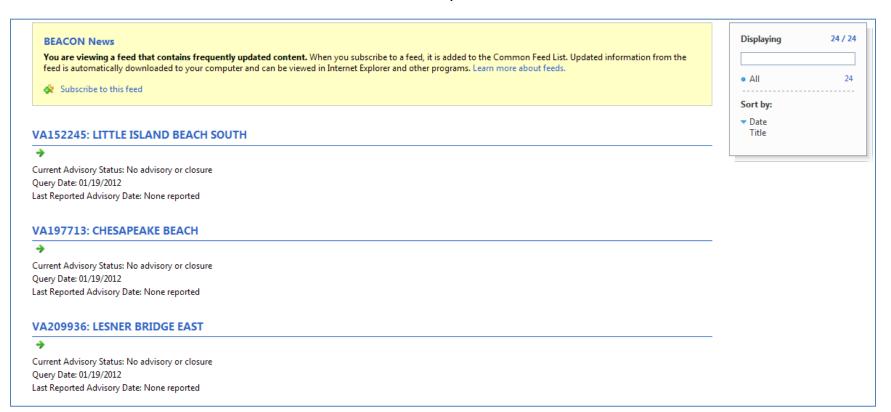


Exhibit 51. State Summary – 1 of 2.

State : Tily TV	ear : 2019														
County ↑≒	No. of Program Beaches	No. of Monitored Beaches	Percent of Total Beaches Monitored	Total Length of Monitored Beaches (Mi)	No. of Tier 1 Beaches	No. of Tier 1 Monitored Beaches	Percent of Tier 1 Beaches Monitored	No. of Program Beaches with Actions	No. of Program Beaches without Actions	Percent of Program Beaches Affected by a Beach Action	Total No. of Beach Actions	No. of Actions Less than 1 Day Duration	Percent of Actions Less than 1 Day Duration	No. of Actions of 1 Day Duration	Percent of Actions of 1 Day Duration
HAWAII	122	26	21.31	13	10	10	100	13	109	10.66	44	0	0	0	0
HONOLULU	135	23	17.04	12	22	22	100	135	0	100	382	0	0	136	35.6
KAUAI	63	23	36.51	28	5	5	100	63	0	100	248	0	0	4	1.61
MAUI	84	50	59.52	34	9	9	100	84	0	100	439	0	0	0	0
	404	122		87	46	46		295	109		1113	0		140	
State : HI, Ye	ear : 2018														
County	No. of Program Beaches	No. of Monitored Beaches	Percent of Total Beaches Monitored	Total Length of Monitored Beaches (Mi)	No. of Tier 1 Beaches	No. of Tier 1 Monitored Beaches	Percent of Tier 1 Beaches Monitored	No. of Program Beaches with Actions	No. of Program Beaches without Actions	Percent of Program Beaches Affected by a Beach Action	Total No. of Beach Actions	No. of Actions Less than 1 Day Duration	Percent of Actions Less than 1 Day Duration	No. of Actions of 1 Day Duration	Percent of Actions of 1 Day Duration
HAWAII	79	26	32.91	13	10	10	100	79	0	100	366	0	0	79	21.58
HONOLULU	135	23	17.04	12	22	22	100	135	0	100	977	0	0	8	.82
KAUAI	63	23	36.51	28	5	5	100	63	0	100	718	0	0	0	0
MAUI	84	50	59.52	34	9	9	100	84	0	100	915	0	0	85	9.29
	361	122				46		361							

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

Tier 1 beaches that are temporarily "Dormant" and Tier 4 beaches are not shown in this report.

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

Exhibit 522. State Summary (State/Tribe/Territory total) – 2 of 2.

No. of Actions of 2 Day Duration	Percent of Actions of 2 Day Duration	No. of Actions of 3 – 7 Day Duration	Percent of Actions of 3 – 7 Day Duration	No. of Actions of 8 – 30 Day Duration	Percent of Actions of 8 – 30 Day Duration	No. of Actions Greater than 30 Day Duration	Percent of Actions Greater than 30 Day Duration	No. of Beach Days (Program Beaches)	No. of Days Under a Beach Action (Program Beaches)	Percent Days Under a Beach Action (Program Beaches)	No. of Days Not Under a Beach Action (Program Beaches)	Percent Days Not Under a Beach Action (Program Beaches)
0	0	0	0	38	86.36	6	13.64	44408	803	1.81	43605	98.19
136	35.6	81	21.2	29	7.59	0	0	49140	1267	2.58	47873	97.42
10	4.03	220	88.71	13	5.24	1	.4	22932	1193	5.2	21739	94.8
2	.46	353	80.41	84	19.13	0	0	30576	2690	8.8	27886	91.2
148		654		164		7		147056	5953		141103	
No. of Actions of 2 Day Duration	Percent of Actions of 2 Day Duration	No. of Actions of 3 – 7 Day Duration	Percent of Actions of 3 – 7 Day Duration	No. of Actions of 8 – 30 Day Duration	Percent of Actions of 8 – 30 Day Duration	No. of Actions Greater than 30 Day Duration	Percent of Actions Greater than 30 Day Duration	No. of Beach Days (Program Beaches)	No. of Days Under a Beach Action (Program Beaches)	Percent Days Under a Beach Action (Program Beaches)	No. of Days Not Under a Beach Action (Program Beaches)	Percent Days Not Under a Beach Action (Program Beaches)
0	0	177	48.36	101	27.6	9	2.46	28756	2876	10	25880	90
	16.99	522	53.43	278	28.45	3	.31	49140	5897	12	43243	88
166				164	22.84	86	11.98	22932	7414	32.33	15518	67.67
166 126	17.55	342	47.63	164	22.01							
	17.55	342 589	47.63 64.37	235	25.68	0	0	30576	6964	22.78	23612	77.22

Exhibit 53. State Summary (State/Tribe/Territory total) – 1 of 2.

State :	СТ														
Year	No. of Program Beaches	No. of Monitored Beaches	Percent of Beaches Monitored	Total Length of Monitored Beaches (Mi)	No. of Tier 1 Beaches	No. of Tier 1 Monitored Beaches	Percent of Tier 1 Beaches Monitored	No. of Program Beaches with Actions	No. of Program Beaches without Actions	Percent of Program Beaches Affected by a Beach Action	Total No. of Beach Actions	No. of Actions Less than 1 Day Duration	Percent of Actions Less than 1 Day Duration	No. of Actions of 1 Day Duration	Percent of Actions of 1 Day Duration
2019	73	73	100	15	48	48	100	37	36	50.68	194	0	0	70	36.08
2018	72	72	100	15	48	48	100	39	33	54.17	92	0	0	59	64.13
2017	72	72	100	15	59	59	100	32	40	44.44	60	0	0	1	1.67
	217	217		45	155	155		108	109		346	0		130	
State :	FL														
Year	No. of Program Beaches	No. of Monitored Beaches	Percent of Beaches Monitored	Total Length of Monitored Beaches (Mi)	No. of Tier 1 Beaches	No. of Tier 1 Monitored Beaches	Percent of Tier 1 Beaches Monitored	No. of Program Beaches with Actions	No. of Program Beaches without Actions	Percent of Program Beaches Affected by a Beach Action	Total No. of Beach Actions	No. of Actions Less than 1 Day Duration	Percent of Actions Less than 1 Day Duration	No. of Actions of 1 Day Duration	Percent of Actions of 1 Day Duration
2019	253	252	99.6	491	253	252	99.6	98	155	38.74	270	0	0	23	8.52
2018	252	251	99.6	489	252	251	99.6	108	144	42.86	221	0	0	11	4.98
2017	253	252	99.6	497	253	252	99.6	77	176	30.43	181	0	0	21	11.6
	758	755		1477	758	755		283	475		672	0		55	

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

Tier 1 beaches that are temporarily "Dormant" and Tier 4 beaches are not shown in this report.

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

Exhibit 54. State Summary (State/Tribe/Territory total) – 2 of 2.

No. of Actions of 2 Day Duration	Percent of Actions of 2 Day Duration	No. of Actions of 3 – 7 Day Duration	Percent of Actions of 3 – 7 Day Duration	No. of Actions of 8 – 30 Day Duration	Percent of Actions of 8 – 30 Day Duration	No. of Actions Greater than 30 Day Duration	Percent of Actions Greater than 30 Day Duration	No. of Beach Days (Program Beaches)	No. of Days Under a Beach Action (Program Beaches)	Percent Days Under a Beach Action (Program Beaches)	No. of Days Not Under a Beach Action (Program Beaches)	Percent Days Not Under a Beach Action (Program Beaches)
85	43.81	38	19.59	1	.52	0	0	7154	383	5.35	6771	94.65
30	32.61	3	3.26	0	0	0	0	7056	131	1.86	6925	98.14
39	65	19	31.67	1	1.67	0	0	7056	154	2.18	6902	97.82
154		60		2		0		21266	668		20598	
No. of Actions of 2 Day Duration	Percent of Actions of 2 Day Duration	No. of Actions of 3 – 7 Day Duration	Percent of Actions of 3 – 7 Day Duration	No. of Actions of 8 – 30 Day Duration	Percent of Actions of 8 – 30 Day Duration	No. of Actions Greater than 30 Day Duration	Percent of Actions Greater than 30 Day Duration	No. of Beach Days (Program Beaches)	No. of Days Under a Beach Action (Program Beaches)	Percent Days Under a Beach Action (Program Beaches)	No. of Days Not Under a Beach Action (Program Beaches)	Percent Days Not Under a Beach Action (Program Beaches)
44	16.3	123	45.56	74	27.41	6	2.22	79488	2404	3.02	77084	96.98
27	12.22	101	45.7	75	33.94	7	3.17	79244	2078	2.62	77166	97.38
10	5.52	65	35.91	77	42.54	8	4.42	79488	2117	2.66	77371	97.34
81		289		226		21		238220	6599		231621	

Exhibit 55. State Summary – Alternate Report (National Percentage) – $\bf 1$ or $\bf 2$.

Year : 201	19													
State ↑=	No. of Program Beaches	No. of Monitored Beaches	Percent of Beaches Monitored	Total Length of Monitored Beaches (Mi)	No. of Tier 1 Beaches	Percent of Tier 1 Beaches Monitored	No. of Program Beaches with Actions	No. of Program Beaches without Actions	Percent of Program Beaches Affected by a Beach Action	Total No. of Beach Actions	No. of Actions Less than 1 Day Duration	Percent of Actions Less than 1 Day Duration	No. of Actions of 1 Day Duration	Percent of Actions of 1 Day Duration
AK	15	15	100	4	15	100	13	2	86.67	30	0	0	2	6.67
AL	24	24	100	28	8	100	4	20	16.67	5	0	0	2	40
AS	48	48	100	98	17	100	42	6	87.5	557	0	0	22	3.95
BR	2	2	100	1	2	100	1	1	50	1	0	0	0	0
CA	233	233	100	357	233	100	196	37	84.12	2902	0	0	322	11.1
СТ	73	73	100	15	48	100	37	36	50.68	194	0	0	70	36.08
DE	16	16	100	17	16	100	2	14	12.5	2	0	0	2	100
FL	253	252	99.6	491	253	99.6	98	155	38.74	270	0	0	23	8.52
GA	42	28	66.67	37	18	100	19	23	45.24	51	0	0	7	13.73
GP	12	12	100	2	9	100	0	12	0	0	0	0	0	0
GU	31	31	100	15	31	100	31	0	100	452	0	0	0	0
HI	404	122	30.2	88	46	100	295	109	73.02	1113	0	0	140	12.58
IL	47	46	97.87	15	44	97.73	40	7	85.11	140	0	0	111	79.29
IN	23	23	100	22	5	100	18	5	78.26	122	0	0	97	79.51
LA	23	23	100	20	14	100	23	0	100	58	0	0	1	1.72
MA	448	448	100	133	8	100	73	375	16.29	282	0	0	167	59.22
MD	32	32	100	17	20	100	2	30	6.25	2	0	0	0	0
ME	63	63	100	29	49	100	28	35	44.44	116	0	0	42	36.21
МІ	576	189	32.81	66	23	100	41	535	7.12	71	0	0	43	60.56
MK	11	5	45.45	6	5	100	1	10	9.09	2	0	0	0	0
MN	43	38	88.37	32	8	100	11	32	25.58	16	0	0	4	25
MP	75	75	100	29	75	100	50	25	66.67	210	0	0	3	1.43
MS	21	21	100	35	17	100	21	0	100	64	0	0	0	0
NC	206	206	100	384	133	100	4	202	1.94	5	0	0	5	100
NH	16	16	100	9	6	100	2	14	12.5	3	0	0	0	0
NJ	384	212	55.21	13	214	99.07	24	360	6.25	41	0	0	41	100
NY	346	338	97.69	115	82	100	144	202	41.62	829	0	0	352	42.46
ОН	56	52	92.86	39	39	100	51	5	91.07	330	0	0	96	29.09
OR	18	17	94.44	23	18	94.44	13	5	72.22	20	0	0	4	20
PA	9	9	100	2	8	100	6	3	66.67	12	0	0	10	83.33
PR	35	35	100	17	35	100	22	13	62.86	52	0	0	1	1.92
RI	38	38	100	16	12	100	13	25	34.21	24	0	0	12	50
SC	21	21	100	91	8	100	5	16	23.81	15	0	0	13	86.67
ST	3	3	100	1	3	100	0	3	0	0	0	0	0	0
TX	72	72	100	185	59	100	50	22	69.44	1372	0	0	323	23.54
VA	46	46	100	36	46	100	21	25	45.65	39	0	0	26	66.67
VI	42	42	100	3	34	100	30	12	71.43	113	0	0	0	0
WA	67	62	92.54	50	62	100	21	46	31.34	24	0	0	0	0
WI	110	103	93.64	38	24	100	62	48	56.36	191	0	0	134	70.16
	3984	3091		2579	1747		1514	2470		9730	0		2075	
Year : 201	18													
State	No. of Program Beaches	No. of Monitored Beaches	Percent of Beaches Monitored	Total Length of Monitored Beaches (Mi)	No. of Tier 1 Beaches	Percent of Tier 1 Beaches Monitored	No. of Program Beaches with Actions	No. of Program Beaches without Actions	Percent of Program Beaches Affected by a Beach Action	Total No. of Beach Actions	No. of Actions Less than I Day Duration	Percent of Actions Less than 1 Day Duration	No. of Actions of 1 Day Duration	Percent of Actions of Day
AK	15	15	100	4	15	100	11	4	73.33	28	0	0	0	0
AL	24	24	100	28	8	100	7	17	29.17	15	0	0	4	26.67
AS	48	48	100	7	17	100	40	8	83.33	574	0	0	0	0
BR	2	2	100	1	2	100	1	1	50	3/4	0	0	1	33.33
CA	240	240	100	355	240	100	210	30	87.5	2264	0	0		14.58
СТ	72	72	100	15	48	100	39	33	54.17	92	0	0	59	64.13
DE	3	3	100	3	3	100	3	0	100	3	0	0	39	100
FL	252	251	99.6	489	252	99.6	108	144	42.86	221	0	0	11	4.98
	232	231	55.0	709	232	33.0	100	177	12.00	221	0	0		1.50
	42	2.8	66.67	27	1.9	100	12	30	28 57	1.9	0	0	0	0
GA GP	42 12	28 12	66.67 100	37	18	100	12	30	28.57 75	18 14	0	0	0	0 42.86

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

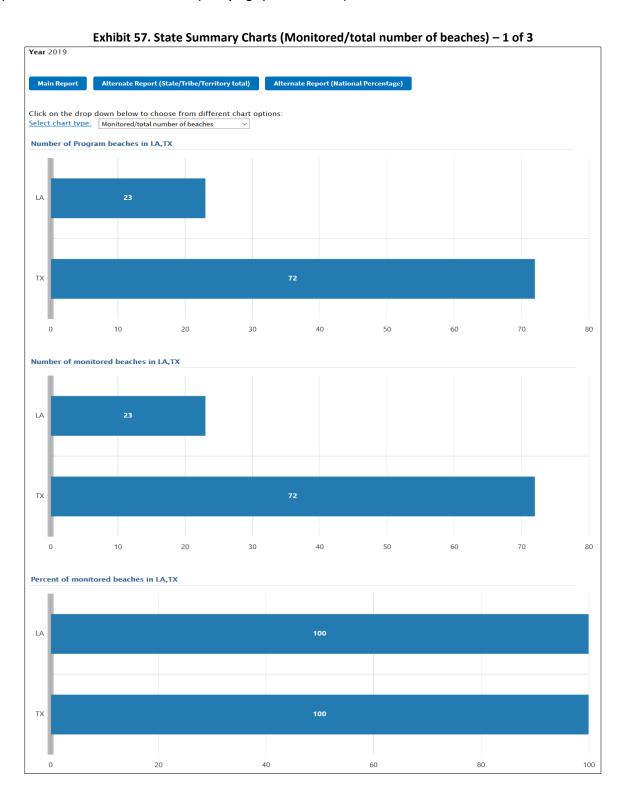
Tier 1 beaches that are temporarily "Dormant" and Tier 4 beaches are not shown in this report.

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

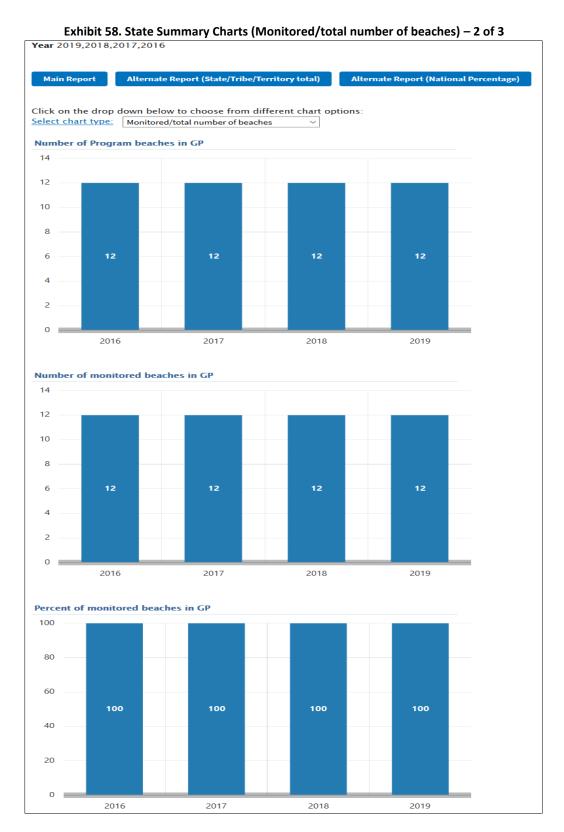
Exhibit 56. State Summary – Alternate Report (National Percentage) – 2 of 2.

			. State 3	•		<u> </u>	i t (ivatic) - 2 01 2		
No. of Actions of 2 Day Duration	Percent of Actions of 2 Day Duration	No. of Actions of 3 – 7 Day Duration	Percent of Actions of 3 – 7 Day Duration	No. of Actions of 8 – 30 Day Duration	Percent of Actions of 8 - 30 Day Duration	No. of Actions Greater than 30 Day Duration	Percent of Actions Greater than 30 Day Duration	No. of Beach Days (Program Beaches)	No. of Days Under a Beach Action (Program Beaches)	Percent Days Under a Beach Action (Program Beaches)	No. of Days Not Under a Beach Action (Program Beaches)	Percent Days Not Under a Beach Action (Program Beaches)
0	0	12	40	15	50	1	3.33	1870	275	14.71	1595	85.29
0	0	3	60	0	0	0	0	3648	15	.41	3633	99.59
0	0	498	89.41	36	6.46	1	.18	17472	3684	21.09	13788	78.91
1	100	0	0	0	0	0	0	252	2	.79	250	99.21
284	9.79	1400	48.24	874	30.12	22	.76	77413	18281	23.61	59315	76.62
85	43.81	38	19.59	1	.52	0	0	7154	383	5.35	6771	94.65
0	0	0	0	0	0	0	0	1904	2	.11	1902	99.89
44	16.3	123	45.56	74	27.41	6	2.22	79488	2404	3.02	77084	96.98
30	58.82	4	7.84	6	11.76	4	7.84	12960	1304	10.06	11668	90.03
0	0	0	0	0	0	0	0	1452	0	0	1452	100
0	0	361	79.87	91	20.13	0	0	11284	3155	27.96	8129	72.04
148	13.3	654	58.76	164	14.73	7	.63	147056	5953	4.05	141103	95.95
14	10	11	7.86	1	.71	3	2.14	4742	546	11.51	4241	89.43
18	14.75	7	5.74	0	0	0	0	2299	158	6.87	2141	93.13
0	0	24	41.38	15	25.86	18	31.03	4209	1564	37.16	2645	62.84
47	16.67	49	17.38	18	6.38	1	.35	43904	757	1.72	43147	98.28
0	0	2	100	0	0	0	0	2382	11	.46	2371	99.54
57	49.14	16	13.79	1	.86	0	0	6174	224	3.63	5950	96.37
7	9.86	15	21.13	4	5.63	2	2.82	60945	320	.53	60625	99.47
0	0	1	50	1	50	0	0	1820	18	.99	1802	99.01
10	62.5	1	6.25	1	6.25	0	0	3719	42	1.13	3677	98.87
207	98.57	0	0	0	0	0	0	27326	417	1.53	26909	98.47
0	0	15	23.44	26	40.63	23	35.94	4410	2618	59.37	1792	40.63
0	0	0	0	0	0	0	0	43971	5	.01	43966	99.99
2	66.67	1	33.33	0	0	0	0	1568	8	.51	1560	99.49
0	0	0	0	0	0	0	0	48384	41	.08	48343	99.92
207	24.97	243	29.31	23	2.77	4	.48	33378	2272	6.81	31107	93.2
62	18.79	140	42.42	32	9.7	0	0	5786	1140	19.7	4646	80.3
3	15	11	55	2	10	0	0	1851	81	4.38	1770	95.62
1	8.33	1	8.33	0	0	0	0	900	17	1.89	883	98.11
0	0	30	57.69	19	36.54	2	3.85	12740	607	4.76	12133	95.24
8	33.33	4	16.67	0	0	0	0	3496	45	1.29	3451	98.71
2	13.33	0	0	0	0	0	0	3213	17	.53	3196	99.47
0	0	0	0	0	0	0	0	273	0	0	273	100
687	50.07	360	26.24	2	.15	0	0	26208	2860	10.91	23506	89.69
11	28.21	2	5.13	0	0	0	0	7038	62	.88	6976	99.12
0	0	113	100	0	0	0	0	15288	361	2.36	14927	97.64
4	16.67	11	45.83	2	8.33	7	29.17	6873	2367	34.44	6061	88.19
27	14.14	25	13.09	5	2.62	0	0	10152	348	3.43	9804	96.57
1966		4175		1413		101		745002	52364		694592	
No. of Actions of 2 Day Duration	Percent of Actions of 2 Day Duration	No. of Actions of 3 - 7 Day Duration	Percent of Actions of 3 – 7 Day Duration	No. of Actions of 8 – 30 Day Duration	Percent of Actions of 8 – 30 Day Duration	No. of Actions Greater than 30 Day Duration	Percent of Actions Greater than 30 Day Duration	No. of Beach Days (Program Beaches)	No. of Days Under a Beach Action (Program Beaches)	Percent Days Under a Beach Action (Program Beaches)	No. of Days Not Under a Beach Action (Program Beaches)	Percent Days Not Under a Beach Action (Program Beaches)
0	0	18	64.29	10	35.71	0	0	1552	244	15.72	1308	84.28
0	0	11	73.33	0	0	0	0	3648	57	1.56	3591	98.44
6	1.05	568	98.95	0	0	0	0	17472	3946	22.58	13526	77.42
0	0	2	66.67	0	0	0	0	392	13	3.32	379	96.68
272	12.01	1347	59.5	274	12.1	41	1.81	79961	13265	16.59	66884	83.65
30	32.61	3	3.26	0	0	0	0	7056	131	1.86	6925	98.14
0	0	0	0	0	0	0	0	357	3	.84	354	99.16
	12.22	101	45.7	75	33.94	7	3.17	79244	2078	2.62	77166	97.38
27												
27 12	66.67	3	16.67	0	0	3	16.67	12960	1132	8.73	11840	91.36
		3	16.67 57.14	0	0	3	16.67	12960 1452	1132 52	8.73 3.58	11840 1400	91.36 96.42

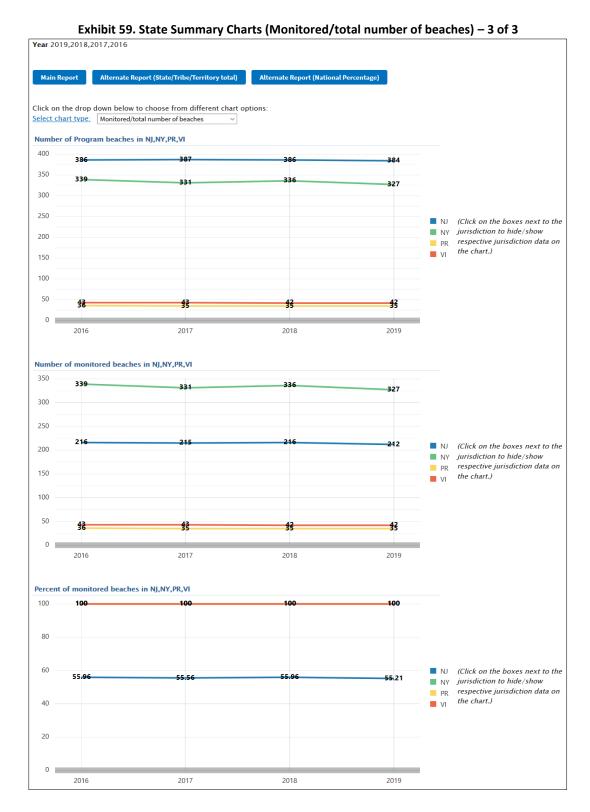
Note: The exhibit below shows the State Summary chart, shown by clicking the "State Summary" main and alternate reports and then selecting Monitored/total number of beaches chart type. The example below is of a chart generated when <u>multiple</u> jurisdictions are selected from wizard Step 1 and <u>one</u> year is selected from Calendar Year (Grouping C) field from Step 2.



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.



Note: The example below is of a chart generated when <u>multiple</u> jurisdictions are 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 jurisdictions in the legend to hide/show respective jurisdiction data on the chart.



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.

States: LA,TX Year 2019 Main Report Alternate Report (State/Tribe/Territory total) **Alternate Report (National Percentage)** Click on the drop down below to choose from different chart options: Select chart type: Overall amount of time beaches were open V Percent of days beaches not under a beach action in LA,TX (Program Beaches) 62.84 LA TX 89.69 0 20 40 60 80 100

Exhibit 60. State Summary Charts (Overall amount of time beaches were open) – 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.

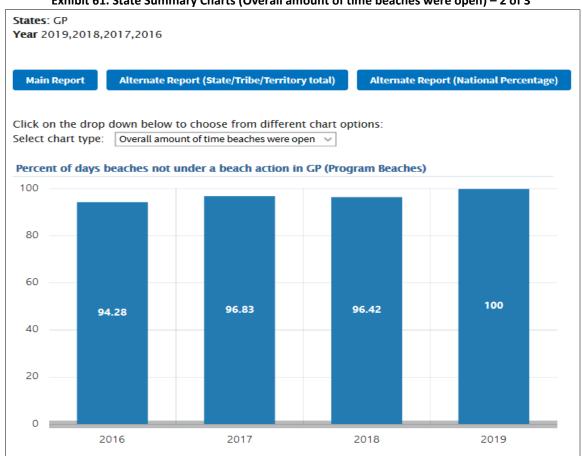
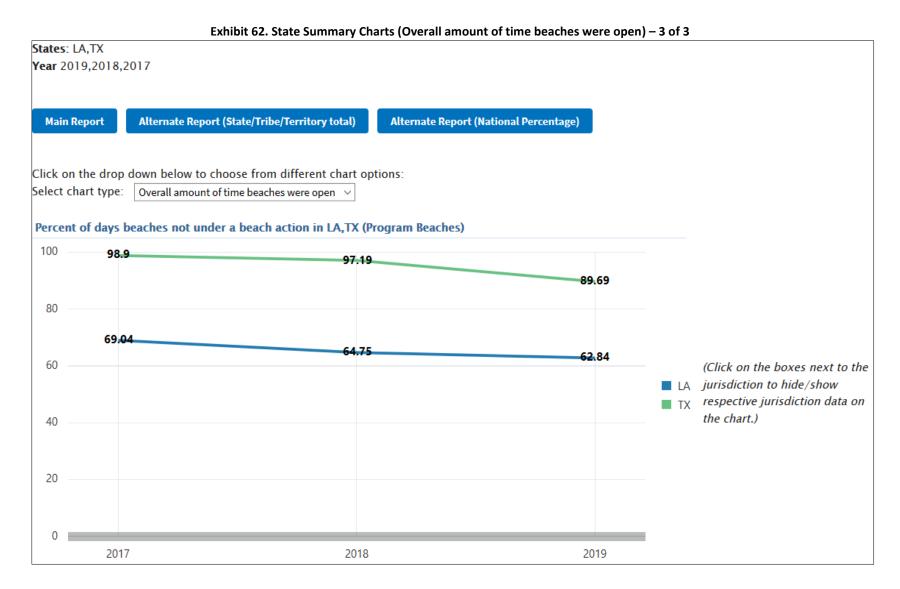


Exhibit 61. State Summary Charts (Overall amount of time beaches were open) - 2 of 3

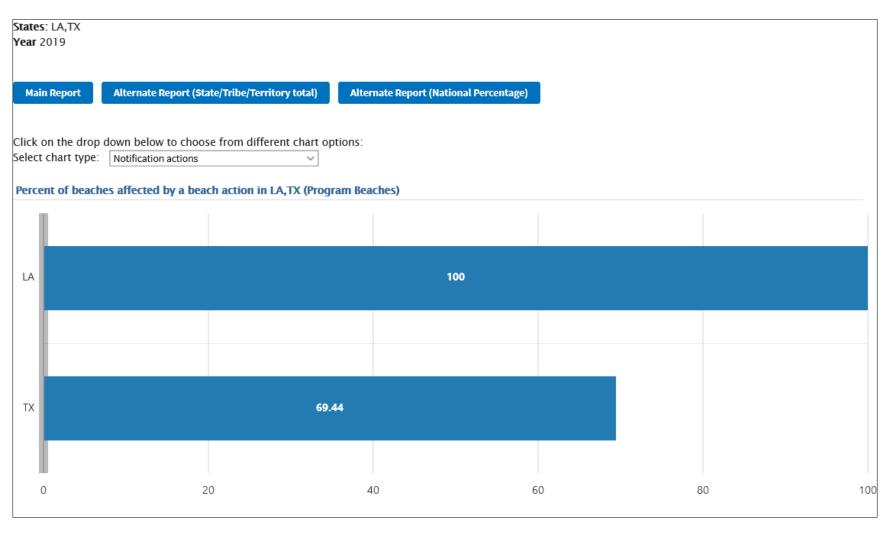
Note: The example below is of a chart generated when <u>multiple</u> jurisdictions are selected from wizard Step 1 and <u>multiple</u> years are selected from Calendar Year (Grouping C) field from Step 2. You can click on the boxes next to the jurisdictions in the legend to hide/show respective jurisdiction data on the chart.



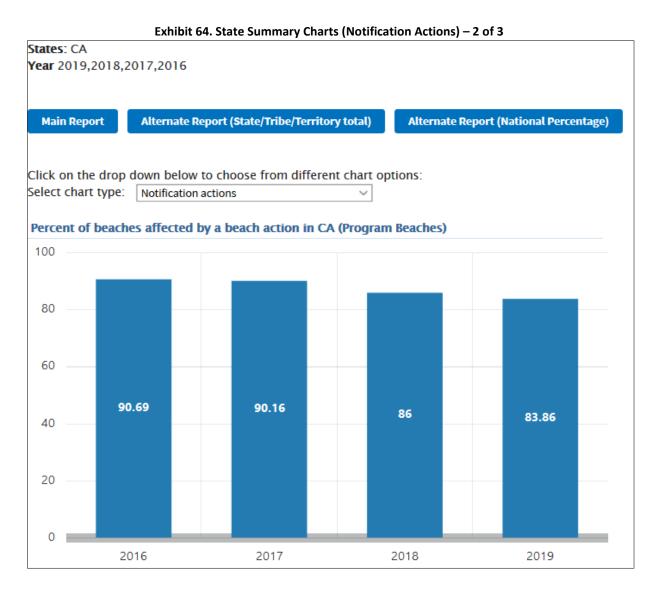
89

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.

Exhibit 63 State Summary Charts (Notification Actions) – 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.



Note: The example below is of a chart generated when <u>multiple</u> jurisdictions are 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 jurisdictions in the legend to hide/show respective jurisdiction data on the chart.

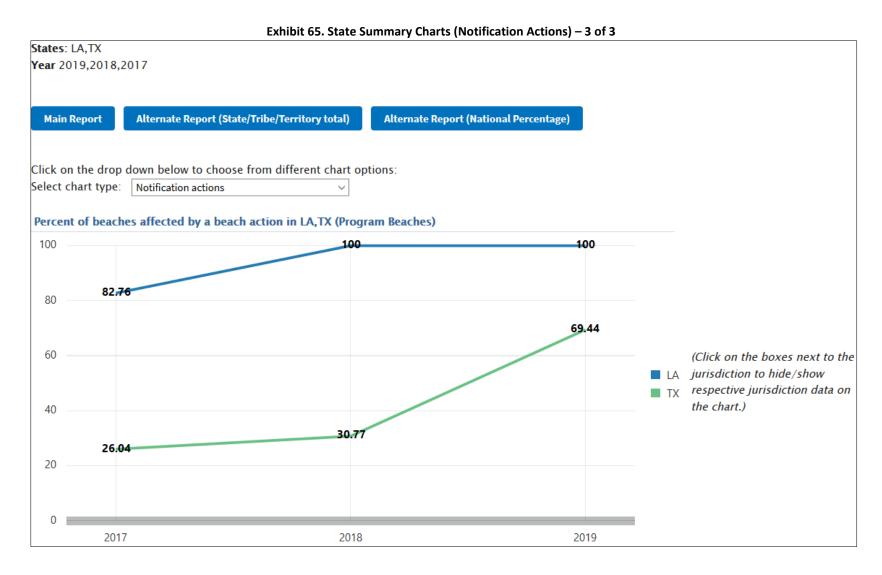


Exhibit 66. Tier 1 Stats – Main Report.

State : TX, Ye	ear : 2015										
Beach ID	Beach Name	County	Beach Tier Rank	Beach Length (Mi)	Is Beach Monitored?	Is Beach Monitored Irregularly?	Monitor Irregularly Comment	Swim Season Monitor Freq	Swim Season Monitor Units	Swim Season Beach Days	No. of Days Under Beach Action
TX396020	Mustang Island	Nueces	1	7.25	Yes	Yes	Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April.	37	PER_YEAR	364	-
TX551380	Mustang Island State Park	Nueces	1	4.56	Yes	Yes	Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April.	37	PER_YEAR	364	2
TX546628	North Beach - Main	Nueces	1	1.42	Yes	Yes	Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April.	37	PER_YEAR	364	24
TX227625	Packery Channel Park	Nueces	1	1.58	Yes	Yes	Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April.	37	PER_YEAR	364	1
TX314643	Padre Bali Park	Nueces	1	2.69	Yes	Yes	Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April.	37	PER_YEAR	364	7
TX682648	Poenisch Park	Nueces	1	.06	Yes	Yes	Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April.	37	PER_YEAR	364	12
TX315916	Port Aransas – South	Nueces	1	3.49	Yes	Yes	Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April.	37	PER_YEAR	364	3
<u>TX722300</u>	Port Aransas Park	Nueces	1	.68	Yes	Yes	Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April.	37	PER_YEAR	364	7
TX821303	Ropes Park	Nueces	1	.2	Yes	Yes	Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April.	37	PER_YEAR	364	114
TX149569	University Beach	Nueces	1	.24	Yes	Yes	Samples are collected weekly in March and from May to September. Samples are collected biweekly from October to February and in April.	37	PER_YEAR	364	13
Count:60				158.21				Count:60		21840	1369

Exhibit 67. Tier 1 Stats – Summary Report.

Year : 2015, 5	state : C1		
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 68. Water Quality - 1 of 2.

State Code : /	AK										
Beach ID	Beach Name	Station ID	Station Name	County Name	ldentifier	Start Date	Start Time	Zone Code	Activity Type Code	Characteristic Name	Result Value
(Def.)	(Def.)	(Def.)	(Def.)	(Def.)	(Def.)	(Def.)	(Def.)	(Def.)	(Def.)	(Def.)	(Def.)
AK551272	North Kenai Beach	AK551272- 002	North Kenai Beach site 2	KENAI PENINSULA	NKB2_20130811_Temp- A	08-11- 2013	05:44:00 AM	AKDT	Field Msr/Obs	Temperature, air	583
AK551272	North Kenai Beach	AK551272- 004	North Kenai Beach site 4	KENAI PENINSULA	NKB4_20130806_pH	08-06- 2013	11:10:00 AM	AKDT	Field Msr/Obs	рН	(4)
AK551272	North Kenai Beach	AK551272- 004	North Kenai Beach site 4	KENAI PENINSULA	NKB4_20130806_Turb	08-06- 2013	11:10:00 AM	AKDT	Field Msr/Obs	Turbidity	1970
AK551272	North Kenai Beach	AK551272- 004	North Kenai Beach site 4	KENAI PENINSULA	NKB4_20130806_FC- Rep	08-06- 2013	11:10:00 AM	AKDT	Quality Control Sample- Field Replicate	Fecal Coliform	1=1
AK551272	North Kenai Beach	AK551272- 004	North Kenai Beach site 4	KENAI PENINSULA	NKB4_20130804_pH	08-04- 2013	10:55:00 AM	AKDT	Field Msr/Obs	рН	-
AK551272	North Kenai Beach	AK551272- 004	North Kenai Beach site 4	KENAI PENINSULA	NKB4_20130804_Ent	08-04- 2013	10:55:00 AM	AKDT	Sample- Routine	Enterococcus	(4)

Note: Clicking on the red (Def.) text will open a new window with the definition of the data type or the STORET help page. Clicking on the headers of the report will expand the column Sort Menu.

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

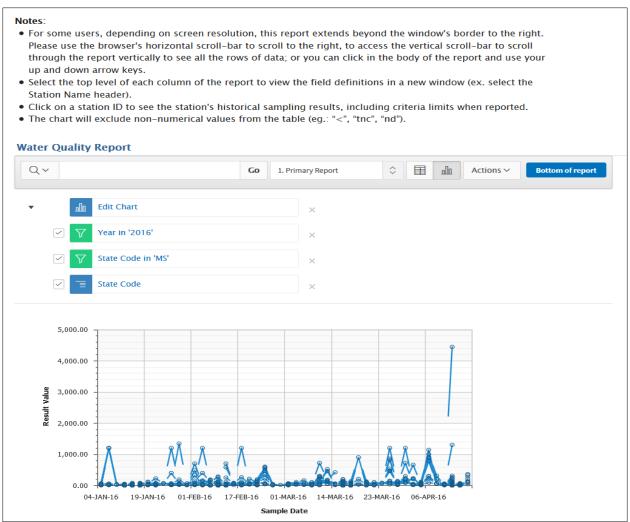
For more details on how to configure Water Quality reports directly from WQP, please see the guidance at: https://acwi.gov/monitoring/pubs/WIS 2017 fs/WQP Step by step.guide.pdf

Exhibit 69. Water Quality - 2 of 2.

Result Value	Result Measure Unit	Result Comment (Def.)	Activity Depth Value (Def.)	Activity Depth Unit Code (Def.)	Sample Collection Method Identifier (Def.)	Sample Collection Method Name (Def.)	Field Gear	Analysis Date Time (Def.)	Detection Quantitation Limit (Def.)
9	deg C	-	1	m	-	- de ciri	Probe/Sensor	-	-
8.06	None	-	1	m	=	-	Probe/Sensor	-	-
87.4	NTU	5	1	m	70	070	Probe/Sensor	-5	STN
54	cfu/100ml	÷	1	m	÷		Water Bottle	08-06- 2013	991
8.06	None	-	1	m	*	1-1	Probe/Sensor	-	=
75	MPN/100ml	2	1	m	-	-	Water Bottle	08-04- 2013	-

Note: In order to navigate to the historical sampling results graph (Exhibit 54.), for a single station report, you will need to click on the button once the report loads. For a multiple station report, you must click on the hyperlink in the Station ID column of this report for the station you want to chart. The next page will display graphs relating to a station ID's water quality data. Note that the chart will exclude non-numerical values from the table (eg. "<","tnc","nd").

Exhibit 70. Water Quality Chart.



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.

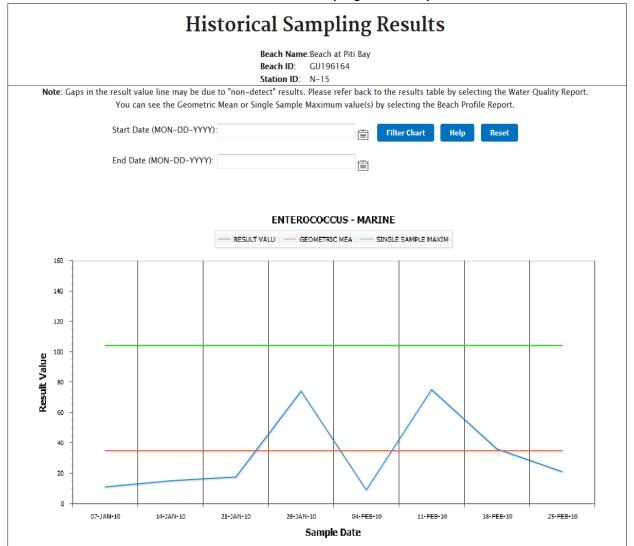


Exhibit 71. Historical Sampling Results Graph

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

Exhibit 72. Beach WQS Criteria Names and Values

tate : AK, Yea	ır : 2016											
Beach Id	Beach Name	County	Waterbody Name	Waterbody Type	Access	Indicator Name	Water Type	Measure Type	Measure Value	Measure Unit	Criteria Comments	WQS Criteria
AK605404	SANDY BEACH PARK	WRANGELL- PETERSBURG	Pacific Ocean	Open Coast	Public/Public	FECAL	MARINE	SSM	260	FC/100ml	260, 410 FC100/ml & no exceed on 9-11, 9-16 & 9-18, resp. Advisories issued on 9-18 & 9-21. Fecal coliform standard is in 18 AAC 70 for marine water contact recreation; http://dec.alaska.gov/water /wqsar/wqs/index.htm	FECAL MARINE SSM 260 FC/100ml 260, 410 FC100/m no exceed on 9-11, 9-16 & 9-18, resp. Advisories issu on 9-18 & 9-21. Fecal coliform standard is in 18 AAC for marine water contact recreation; http://dec.alaska.g/water/wqsar/wqs/index.htm
Count: 1												
tate : BR, Year	r : 2016											
Beach Id	Beach Name	County	Waterbody Name	Waterbody Type	Access	Indicator Name	Water Type	Measure Type	Measure Value	Measure Unit	Criteria Comments	WQS Criteria
<u>WI504827</u>	AMNICON BAY	ASHLAND	Lake Superior	Sound, Bay, or Inlet	Private/Public	OTHER	FRESH	GM	0	MPN/100mL	Preemptive advisory due to flood	OTHER FRESH GM 0 MPN/100mL Preemptive advisory of to flood
<u>WI432346</u>	SECOND LANDING	ASHLAND	Lake Superior	Sound, Bay, or Inlet	Private/Public	ECOLI	FRESH	GM	236	MPN/100mL	No Comments Submitted	ECOLI FRESH GM 236 MPN/100mL No Comments Submitted
<u>WI432346</u>	SECOND LANDING	ASHLAND	Lake Superior	Sound, Bay, or Inlet	Private/Public	OTHER	FRESH	GM	0	MPN/100mL	Preemptive advisory due to flood	OTHER FRESH GM 0 MPN/100mL Preemptive advisory of to flood
Count:3												
itate : CT, Yea	ır : 2016											
Beach Id	Beach Name	County	Waterbody Name	Waterbody Type	Access	Indicator Name	Water Type	Measure Type	Measure Value	Measure Unit	Criteria Comments	WQS Criteria
CT200292	BELL ISLAND BEACH	FAIRFIELD	Long Island Sound	Sound, Bay, or Inlet	Public/Public	ENTEROCOCCUS	MARINE	SSM	104	CFU/100ml	No Comments Submitted	ENTEROCOCCUS MARINE SSM 104 CFU/100ml No Comments Submitted
<u>CT730976</u>	BURYING HILL BEACH	FAIRFIELD	Long Island Sound	Sound, Bay, or Inlet	Public/Public	ENTEROCOCCUS	MARINE	MZZ	104	CFU/100ml	No Comments Submitted	ENTEROCOCCUS MARINE SSM 104 CFU/100ml No Comments Submitted
CT872506	BYRAM BEACH	FAIRFIELD	Long Island Sound	Sound, Bay, or Inlet	Public/Public	ENTEROCOCCUS	MARINE	SSM	104	CFU/100ml	No Comments Submitted	ENTEROCOCCUS MARINE SSM 104 CFU / 100 ml No Comments Submitted
CT003939	CALF PASTURE	FAIRFIELD	Long	Sound,	Public/Public	ENTEROCOCCUS	MARINE	SSM	104	CFU/100ml	No Comments Submitted	ENTEROCOCCUS MARINE SSM 104 CFU/100ml No

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. Additionally, from the toolbar, you can choose the "Grouped by Criterion" option to view an alternate version of the report in which all beaches re grouped by the WQS Criterion values.

Exhibit 73. Local Action Decision Procedures

Year : 2019														
State Code	Beach ID	Beach Name	County ↑=	Beach Status	Swim Status	Reported	Posted on Internet	Published in Newspaper	Sent to Phone List	Announced on Radio	Posted at the Beach	Announced on TV	Provided Results on Request	Other
MP	MP348167	DISTRICT #1 STORM DRAINAGE	ROTA	Reporting	No advisory or closure	Υ	Yes	-	-	Yes	-	Yes	-	-
MP	MP274563	DISTRICT #2 STORM DRAINAGE	ROTA	Reporting	No advisory or closure	Y	Yes	-	-	Yes	-	Yes	-	-
MP	MP822659	EAST HARBOR DOCK	ROTA	Reporting	No advisory or closure	Y	Yes	-	_	Yes	_	Yes	_	-
MP	MP132135	GUATA BEACH	ROTA	Reporting	No advisory or closure	Y	Yes	-	-	Yes	-	Yes	-	-
MP	MP142306	KOKOMO BEACH CLUB	ROTA	Reporting	No advisory or closure	Y	Yes	-	-	Yes	-	Yes	-	-
MP	MP168418	MOBILE STATION STORM DRAINAGE	ROTA	Reporting	No advisory or closure	Y	Yes	-	-	Yes	-	Yes	-	-
MP	MP549387	TALAKHAYA BEACH	ROTA	Reporting	No advisory or closure	null	Yes	-	-	Yes	-	Yes	-	-
MP	MP522915	ТЕТЕТО ВЕАСН	ROTA	Reporting	No advisory or closure	Y	Yes	-	-	Yes	-	Yes	-	-
MP	MP234908	TWEKSBERRY BEACH	ROTA	Reporting	No advisory or closure	Y	Yes	-	-	Yes	-	Yes	-	-
MP	MP396492	VETERANS MEMORIAL BEACH	ROTA	Reporting	No advisory or closure	Υ	Yes	-	-	Yes	-	Yes	-	-
MP	MP957808	WEST HARBOR MARINA	ROTA	Reporting	No advisory or closure	Y	Yes	-	-	Yes	-	Yes	-	-
MP	MP150267	AMERICAN MEMORIAL PARK DRAINAGE	SAIPAN	Reporting	No advisory or closure	Y	Yes	-	-	Yes	-	Yes	-	-
MP	MP795999	AQUA RESORT HOTEL	SAIPAN	Reporting	No advisory or closure	Υ	Yes	-	-	Yes	-	Yes	-	-
MP	MP621534	BIRD ISLAND BEACH	SAIPAN	Reporting	No advisory or closure	Υ	Yes	-	-	Yes	-	Yes	-	-
MP	MP555804	CENTRAL REPAIR SHOP	SAIPAN	Reporting	No advisory or closure	Υ	Yes	-	-	Yes	-	Yes	-	-
MP	MP890913	CHALAN LAULAU BEACH	SAIPAN	Reporting	No advisory or closure	Υ	Yes	-	-	Yes	-	Yes	-	-
MP	MP142032	CHALAN PIAO BEACH	SAIPAN	Reporting	No advisory or closure	Υ	Yes	-	-	Yes	-	Yes	-	-
MP	MP904488	CIVIC CENTER BEACH	SAIPAN	Reporting	No advisory or closure	Υ	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 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 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 in the Step 1 – Location Filters and Step 2 – 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 - 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 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.

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User's Guide 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 H.7 - 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 H.10- 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.

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User's Guide	Date	Description of Changes
Version	Date	Description of Changes
2.1	12/13/2017	Updated Exhibits 14 capturing the updated "Select by Great Waterbody" section.
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 (STORET 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.

User's Guide Version	Date	Description of Changes
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.
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.