



# EN2017

## **eBEACHES - QA** Bill Kramer, *U.S. EPA*

**2017 Exchange Network National Meeting**  
**Innovation and Partnership**

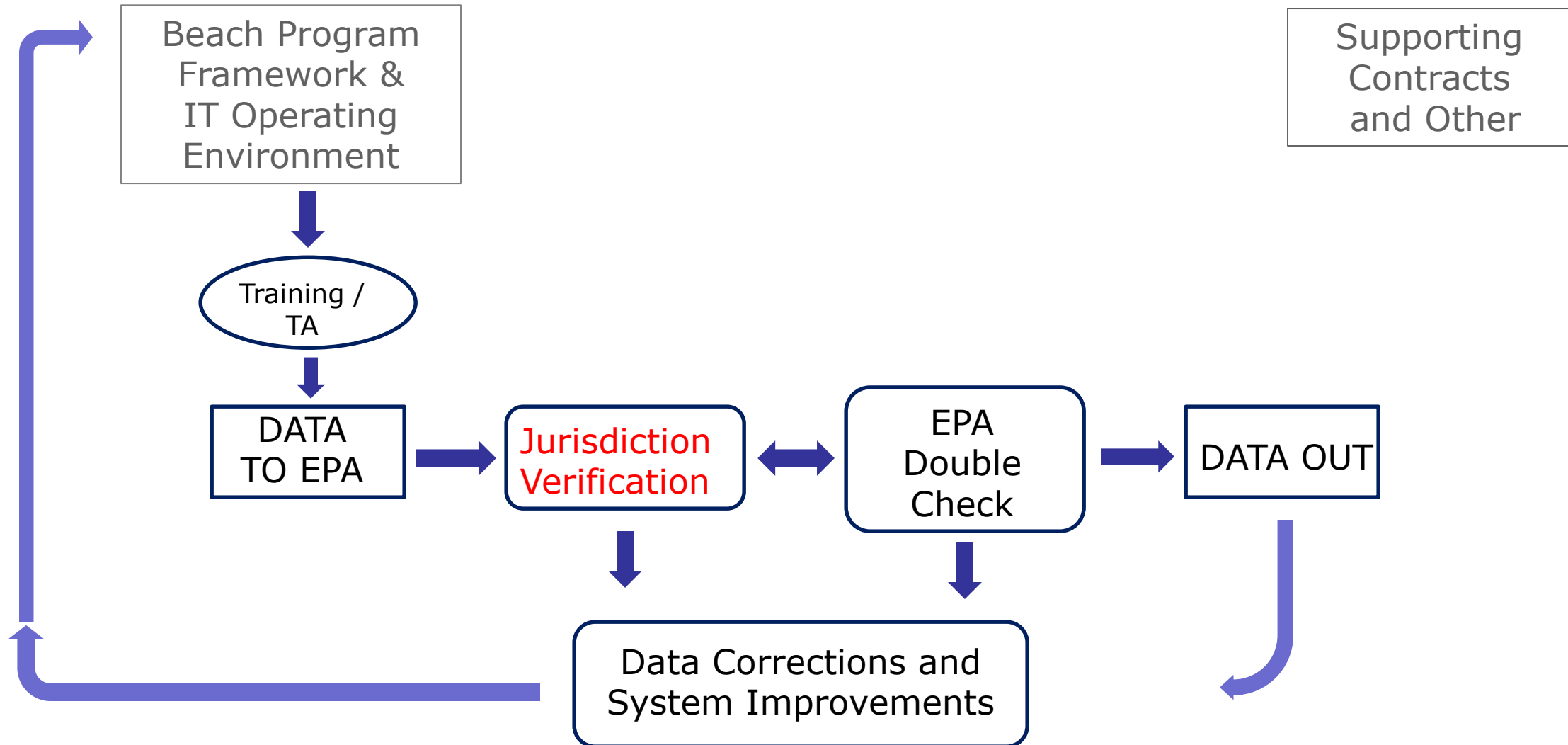
May 16-18, 2017  
Sheraton Philadelphia Society Hill Hotel  
Philadelphia, Pennsylvania

<http://www.exchangenetwork.net/en2017>

# ABSTRACT

This presentation describes how EPA uses Quality Assurance (QA) practices to **assure** that the Beach Program **data and information submitted by Jurisdictions retain their integrity in EPA data systems** and when viewed on, or downloaded from, EPA webpages. The presentation describes how, as resources and technology change, EPA and the Jurisdictions have assessed and adaptively managed our QA processes.

# eBeaches System Data Flow Adaptive Management for QA



# **EPA's eBeaches Data System and Verification Tool (vT)**

**The National Beach Program uses the EPA website **BEACON** to provide the public and beach managers **read-only access** to information provided by the states, tribes and territories.**

**This presentation demonstrates a **password-protected** web-based **Verification Tool (vT)** which jurisdictions can use to **submit, verify and edit** their submissions to EPA to assure the completeness and accuracy of their data.**

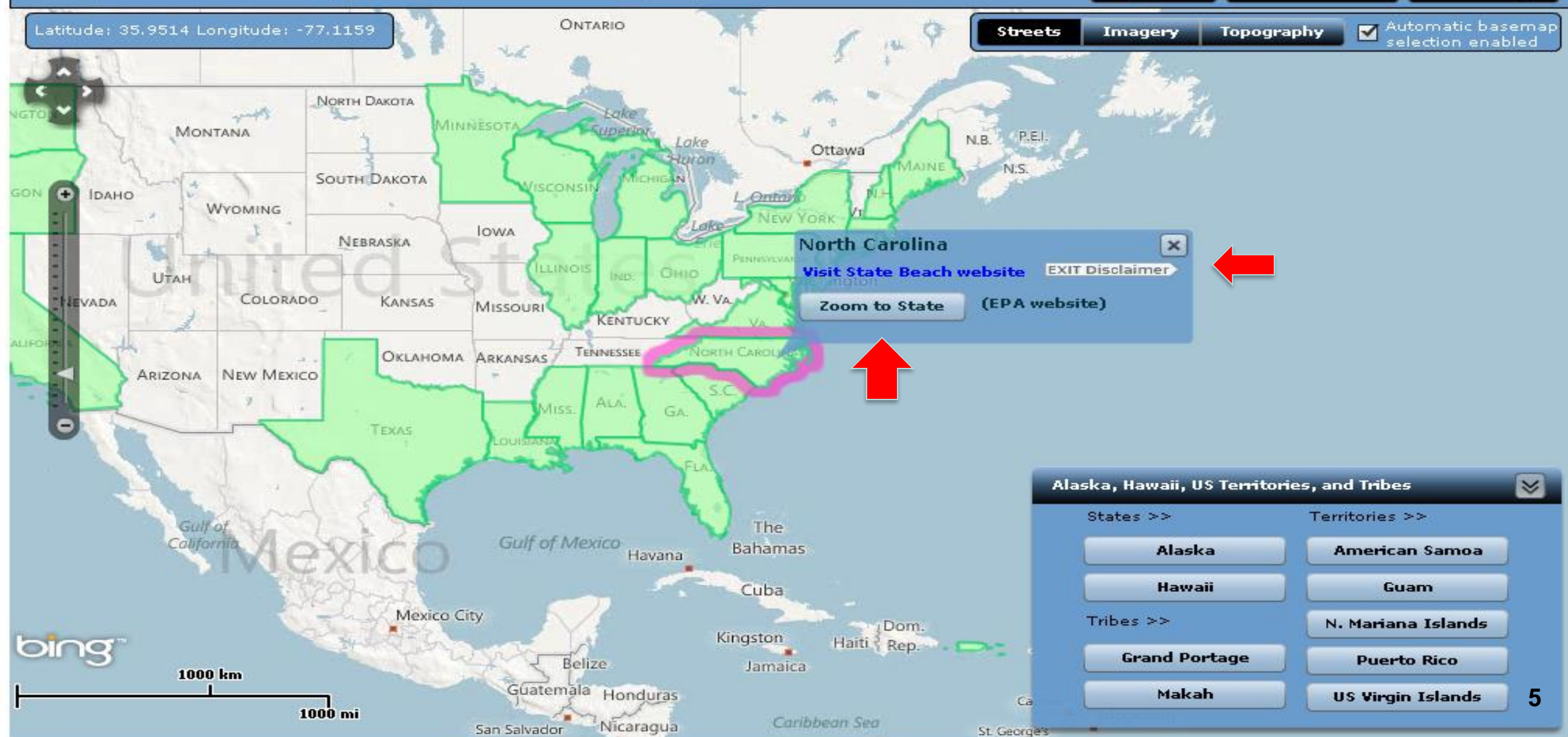
# BEACON – Beach Advisory and Closing On-line Notification

[About Beacon](#)[Find a Beach](#)[Reporting](#)[RSS Generator](#)

Go To:

[Back](#)[U.S. View](#)[Forward](#)

Latitude: 35.9514 Longitude: -77.1159

[Streets](#)[Imagery](#)[Topography](#)☒ Automatic basemap selection enabled

Alaska, Hawaii, US Territories, and Tribes

States >>

Territories >>

Alaska

American Samoa

Hawaii

Guam

Tribes >>

N. Mariana Islands

Grand Portage

Puerto Rico

Makah

US Virgin Islands

5



# Find a Beach

[BEACON 2.0 User's Guide \(PDF\)](#) (53 pp, 1.8MB, [About PDF](#))

[About Beacon](#) [Find a Beach](#) [Reports](#) [RSS Generator](#)

Go To: 

Address or Location

Type state, zip, or address

Go

Latitude: 41.6212 Longitude: -87.2484

M i c h i g a n

Back

U.S. View

Forward

Streets

Imagery

Topography

☒ Automatic basemap selection enabled

Marquette Park Beach

Beach ID:

IN924097

County:

LAKE

Advisories and Monitoring Data

No advisory or closure

Date:

Oct 9, 2012

Beach Advisory and Closing Information

Water Quality

Beach Profile

Contact Information

Additional Reports

Zoom to Beach

STORET Stations

0.5 km

0.5 mi

Legend

Alaska, Hawaii, US Territories, and Tribes

# eBEACHES 3 Data Types

- **Location data** (mapped – NHD/RAD)
  - Beach location (line)
  - Monitoring station (point)
- **Water Quality Monitoring Results** (WQX/STORET)
  - Pathogen Indicators (and other, e.g. algae)
- **Notification data** (advisory and/or closure - PRAWN)
  - When, how long, reason, possible sources
  - May be triggered by policy or model, not monitoring
- **Prior year** swim season data due to EPA by January 31
  - But BEACON website (APEX) updates on 2-hour cycle
- **Verification** by jurisdictions. (Double check by EPA)
- List of links to Jurisdiction Webpages

# BEACON Reports (11+)

- Standard and Custom
  - filter by: where, when, content; select and sequence columns
- Single Beach or
- Multiple Beaches and Jurisdictions e.g.:
  - ▶ EPA Region, GL, LIS, CB, GOM, Nationwide
- Variable Timeframes
- Multiple and Single Data Type Reports
  - ▶ Monitoring and Advisory or Closure data
  - ▶ Location of beaches and monitoring stations
- Downloadable, automatic update notification (RSS)



## BEACON – Beach Advisory and Closing On-line Notification

[Contact Us](#)

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You are here: [EPA Home](#) » [Beaches](#) » [BEACON 2.0](#) » [Reports](#) » [Report](#)

### Beach Monitoring Frequency



**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.



Go

1. Primary Report



Actions

Bottom of page




4 State, Historical Record, Beach Access, Year



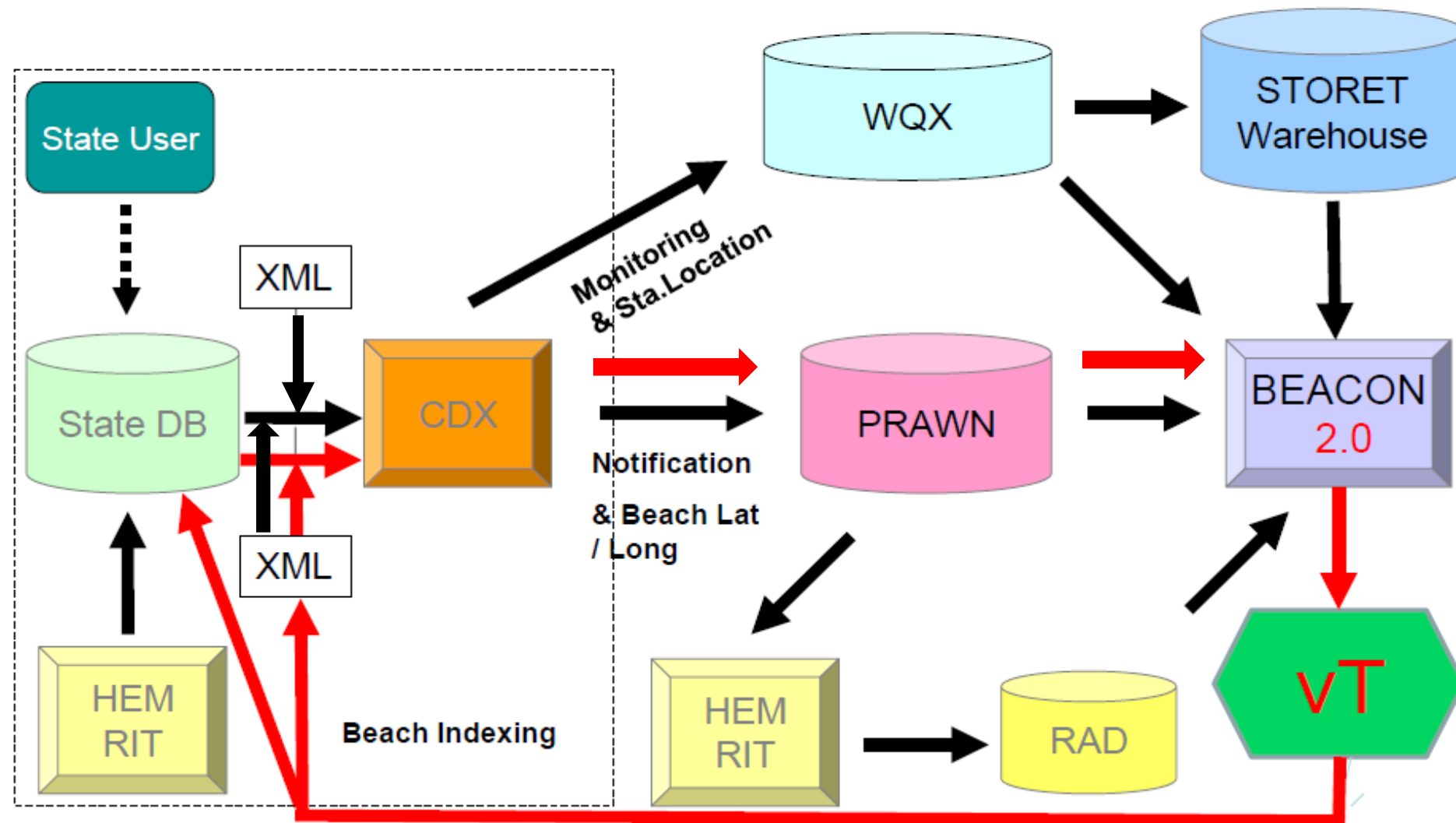
2 State, Year

State : AL, Year : 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	Beach Length (Mi)
<a href="#">AL769933</a>	ALABAMA POINT (GULF OF MEXICO)	BALDWIN	152	DAYS	4	PER_MONTH	1	PER_MONTH	1
<a href="#">AL656449</a>	BEAR POINT CIVIC ASSOCIATION	BALDWIN	152	DAYS	2	PER_MONTH	1	PER_MONTH	.1
<a href="#">AL300816</a>	BON SECOUR NATIONAL WILDLIFE REFUGE	BALDWIN	152	DAYS	2	PER_MONTH	1	PER_MONTH	1
<a href="#">AL854232</a>	CAMP BECKWITH	BALDWIN	152	DAYS	8	PER_MONTH	1	PER_MONTH	.25
<a href="#">AL497694</a>	CAMP DIXIE	BALDWIN	152	DAYS	4	PER_MONTH	1	PER_MONTH	.25
<a href="#">AL711135</a>	COTTON BAYOU	BALDWIN	152	DAYS	4	PER_MONTH	1	PER_MONTH	.2
<a href="#">AL432101</a>	ESCAMBIA AVENUE	BALDWIN	152	DAYS	2	PER_MONTH	1	PER_MONTH	.01
<a href="#">AL824748</a>	FAIRHOPE PUBLIC BEACH	BALDWIN	152	DAYS	8	PER_MONTH	1	PER_MONTH	.25
<a href="#">AL548743</a>	FLORIDA POINT	BALDWIN	152	DAYS	4	PER_MONTH	1	PER_MONTH	.75
<a href="#">AL069764</a>	FORT MORGAN PUBLIC BEACH	BALDWIN	152	DAYS	2	PER_MONTH	1	PER_MONTH	1

# eBeaches Data Flow

## Modernization Phase 2



## 2009 New York Beach Event Review

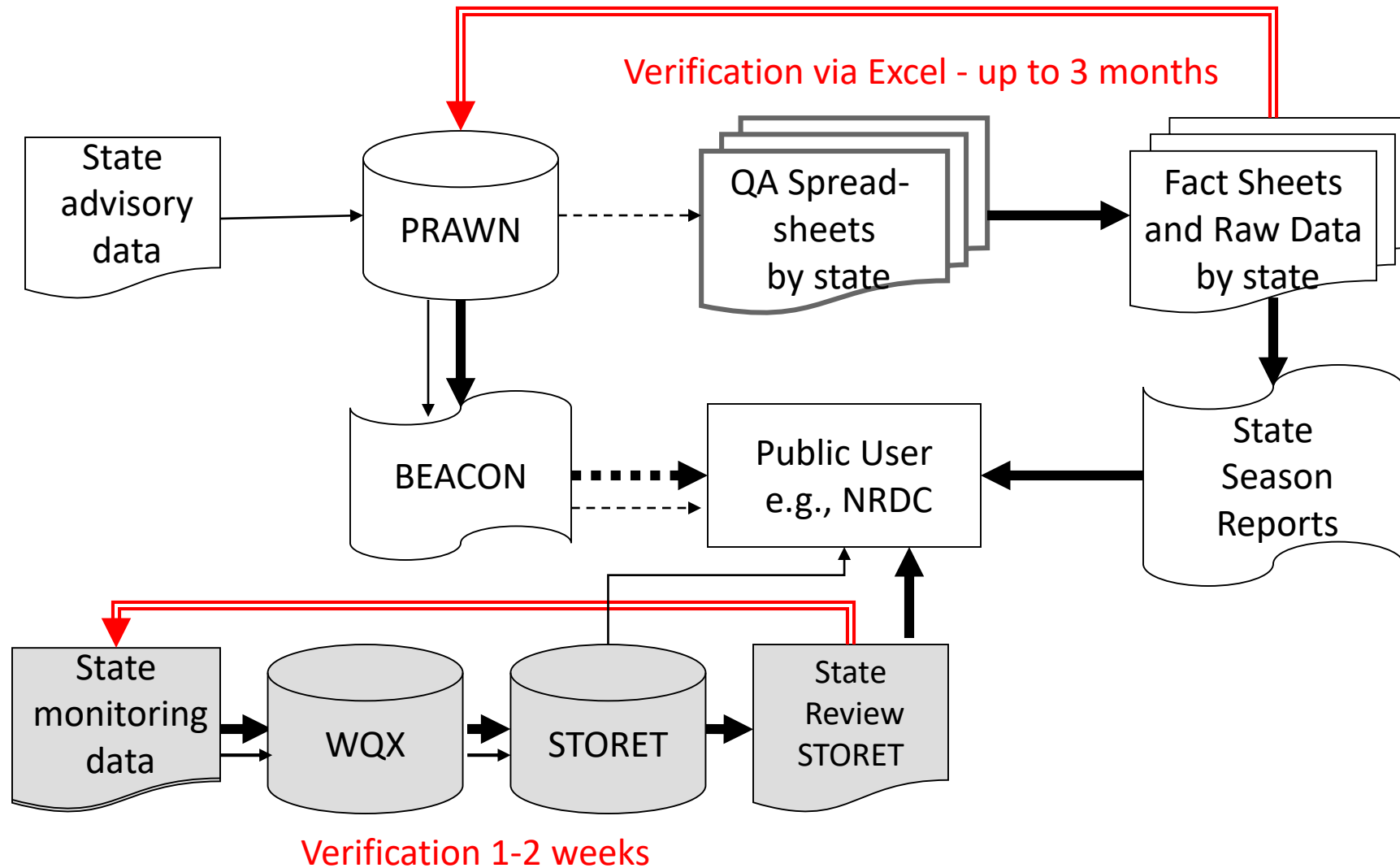


43.3121967057175, -78.84740709160934

Entity ID	Beach Name	County	Type	Reporting Yr	Reported Miles	Calculated Miles	Diff
NY388768	WHITE CROSS FISH CLUB	BRONX	L	2008	0.02	0.01	0.01
NY603914	WILDWOOD STATE PARK BEACH	SUFFOLK	L	2008	2.00	1.42	0.58
NY255107	WILSON - TUSCARORA STATE PARK BEACH	NIAGARA	L	2008	0.28	0.25	0.03
NY571635	WINCOMA BEACH	SUFFOLK	NA	2008	0.03	0.00	0.03
NY311083	WOLFE'S POND PARK	RICHMOND	CL	2008	0.06	0.13	0.07
NY635787	WOODCLIFF PARK POA	SUFFOLK	L	2008	0.03	0.02	0.01
NY687619	WOODHULL LANDING	SUFFOLK	L	2008	0.03	0.02	0.01
NY626819	WOODLAWN BEACH - WOODLAWN BEACH STATE PARK	ERIE	L	2008	0.83	0.93	0.10
NY635615	WRIGHT PARK EAST	CHAUTAUQUA	L	2008	0.10	0.06	0.04
NY129995	WRIGHT PARK WEST	CHAUTAUQUA	L	2008	0.25	0.07	0.18
Unique Entities: 362				Miles:	53.33	76.60	

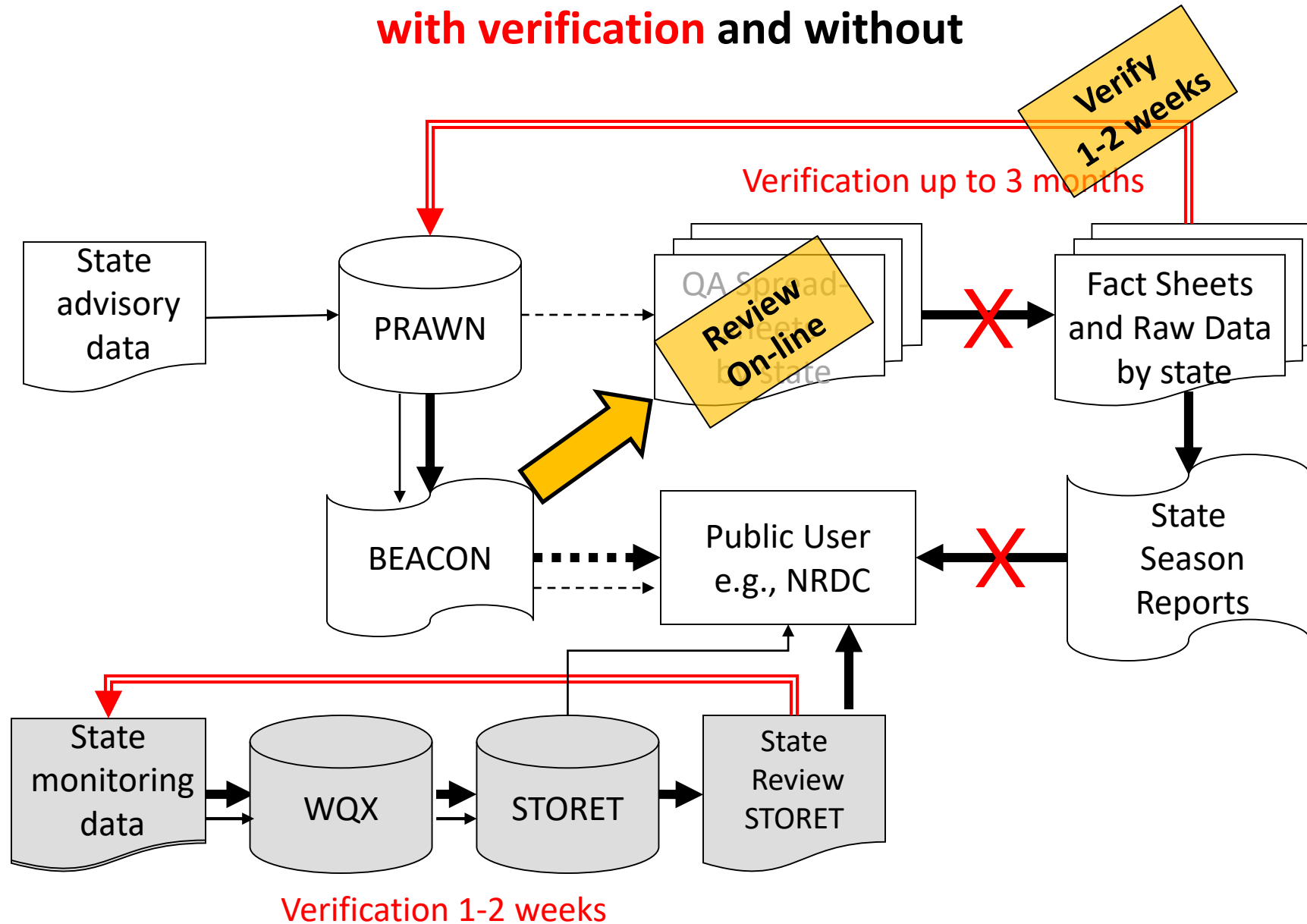
PRAWN Details (NY255107)

## Flows of State Beach Monitoring and Advisory Data with verification and without





## Flows of State Beach Monitoring and Advisory Data with verification and without





**BEACON Report Types to Expose PRAWN Data Elements**(ref. Beach Notification User Guide - **October 2016**)Beach  
AttributesPossible  
Pollution  
SourcesBeach  
ActionsBeach  
ProfileWater  
Quality**Required or Conditional are shown in Bold***Optional or Conditional are shown in italics*

Green = Query select parameter added to reports

**Bold Blue "Y" in box indicates the BEACON Report to use to verify the data element**Main and  
Detailed  
#3 shows  
CommentsClick on  
Beach ID  
for  
DetailsChart of  
Historical  
Sampling  
Results

Lower-case "y" are pulled from other reports

**BEACH INFORMATION FIELDS 3.1.3****Beach Identifier (not editable)****Y**

y

y

y

y

**Beach Name****Y**

y

y

y

y

**Beach Description****Y***Beach Comment***Y****State Code****Y**

y

y

y

**County Name (FIPS Code)****Y**

y

y

y

y

*Water Body Name (Required to support Great Waterbody Query)***Y***Water Body Type Code***Y****Accessibility Type (owner/access)****Y**

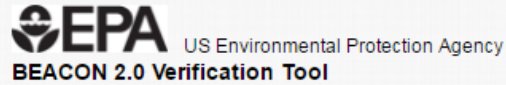
y

*Accessibility Comment***Y****ACTIVITY FIELDS 3.1.5****Activity Type Code****Activity Type Name****Y****Activity ID** (generated)**Y****Start Date/Hours****Y****Stop Date/Hours****Y**

# eBEACHES Verification Tool (vT)

- The vT is an **editable password-protected** site, separate from the public BEACON 2.0 site (accessed thru the EN Service Center).
- **Look and feel** – combination of the public BEACON 2.0 site and the MS Access databases.
- The vT may contain all of the reports on the public site, **plus administrative reports**.
- Possible future direction: incorporation of WQ Report (**WQX/STORET**) content and **map** (RAD) editing

# Verification Tool Login



An EPA Central Data Exchange (CDX) account with an eBeaches role is required to use this application. Please refer to the [CDX website](#) for registration and account instructions.

\* Username

\* Password

Login

Use your CDX credentials

This is a United States Environmental Protection Agency (EPA) computer system, which may be accessed and used only for official Government business. Unauthorized access or use of this computer system may subject violators to criminal, civil, and/or administrative action. All information on this computer system may be monitored, recorded, read, copied, and disclosed by and to authorized personnel for official purposes, including law enforcement. Access or use of this computer system by any person, whether authorized or unauthorized, constitutes consent to these terms.

# Homepage/Dashboard

**EPA** US Environmental Protection Agency  
**BEACON 2.0 Verification Tool**

CGLEATON-STAGE [Logout](#)  
[Shopping Cart \(contains items\)](#)

**Dashboard** Reports Notification \*Monitoring \*Geospatial About

\* These tabs are not functional for this release.

**Welcome to the BEACON 2.0 Verification Tool!**

The dashboard contains three sections displaying: your user account information and status, submission history and QA & administrative reports. For more information on the Verification Tool and a link the User Guide, please refer to the [About](#) tab.

**Key changes in this release:** Added ability to mass update selected Attribute fields (including WQS Criteria and Pollution Sources). Added new WQS Criteria report (accessed via Reports tab).

**Account Information**

For this release, this section contains only CDX account username. Future releases may contain additional details.

User ID CGLEATON-STAGE

**Submissions History Log**

For this release, this section includes basic details and a link to a report on each submission. Click on a Submission ID to open the Submission Details report

Submission ID	Submitted By	Submitted Date
<a href="#">1021</a>	CGLEATON-STAGE	27-MAR-17
<a href="#">1020</a>	CGLEATON-STAGE	14-MAR-17
<a href="#">1019</a>	CGLEATON-STAGE	14-MAR-17
<a href="#">1018</a>	CGLEATON-STAGE	13-MAR-17
<a href="#">1003</a>	CGLEATON-STAGE	09-MAR-17
<a href="#">1002</a>	CGLEATON-STAGE	08-MAR-17
<a href="#">1001</a>	CGLEATON-STAGE	08-MAR-17
<a href="#">988</a>	CGLEATON-STAGE	07-MAR-17
<a href="#">981</a>	CGLEATON-STAGE	06-MAR-17
<a href="#">966</a>	CGLEATON-STAGE	24-FEB-17

1 - 10 of 138

**QA & Administrative Reports**

For this release, this section is just a placeholder.

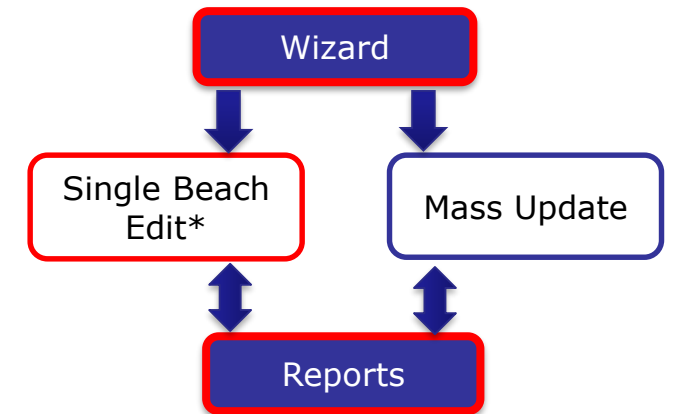
**Callouts:**

- 1: User name, logout link, and link to shopping cart (i.e., change log)
- 2: "Reports View" - similar to the public site Reports tab
- 3: "Data Type Views" - mimic the Access databases
- 4: This region contains your user information (more details to be added in future)
- 5: This region contains submission history
- 6: This region may contain administrative reports and "frequently used" or favorite reports.

# Ways to Edit Data

## ▪ Report View ←

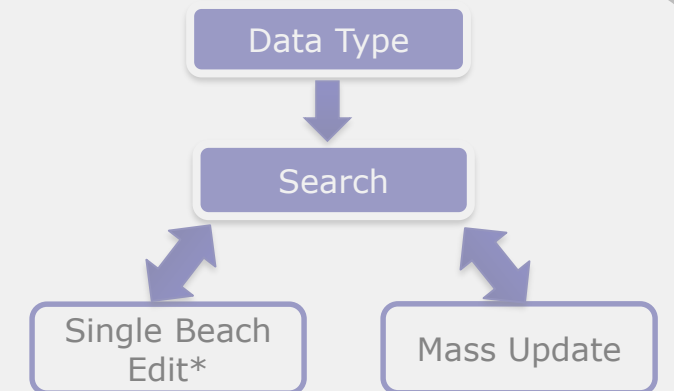
- Select beaches (using BEACON reports wizard)
- Select report
- Edit data:
  - Single beach (click value in report to go to data type view)
  - Mass update (select multiple beaches; goes to form with selected fields available)
  - Certain data types can be deleted via data type view or mass update form.



## ▪ Data Type Search


- Select data type (Notifications, Monitoring, or Geospatial)
- Search for records (beaches, organizations, persons, etc.)
- Use 2<sup>nd</sup>- and 3<sup>rd</sup>-level tabs to navigate to editable fields
- Edit single record using data type view.
- Edit multiple records using mass update form.
- Certain data types can be deleted via data type view or mass update form.

\*aka, Data Type View





# Reports View - Wizard



US Environmental Protection Agency  
BEACON 2.0 Verification Tool

CGLEATON-STAGE [Logout](#)  
[Shopping Cart \(contains items\)](#)

Dashboard **Reports** Notification \*Monitoring \*Geospatial About

Step 1 - Location Filter Step 2 - Additional Filtering Step 3 - Report Selection

\* These tabs are not functional for this release.

**Instructions:** Use this wizard to follow three steps to select beaches, set search filters and view BEACON 2.0 reports (i.e., Verification Tool versions, which are editable). Step 1 allows you to select the beaches for a report pre-grouped by EPA Region, or by 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.

**Notes:** You must select one of the Step 1 location filters to generate reports data. 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.

Clear Selections

>

Select by EPA Region (click to open/close selection list); --OR--

>

Select by Great Waterbody (click to open/close selection list); --OR--

▼

Select by State/Tribe/Territory, County, and/or Beach (click to open/close selection list)

States/Tribes/Territories	Counties	Beaches		Selected Beaches
Alabama	Indian River	BOYNTON BEACH MUNICIPAL		Florida
Alaska	Lee	CARLIN PARK		-- Palm Beach
American Samoa	Levy	CORAL COVE		----
Bad River Band	Manatee	DELRAY BEACH (AKA SANDOWAY F		PALM BEACH
California	Martin	DUBOIS PARK		
Connecticut	Miami-Dade	GULFSTREAM PARK		
Delaware	Monroe	JOHN D. MCARTHUR		
Florida	Nassau	JUNO BEACH PARK	»	
Georgia	Okaloosa	JUPITER BEACH PARK	»	
Grand Portage	Palm Beach	LAKE WORTH (AKA KREUSLER)	«	
Guam	Pasco	LANTANA MUNICIPAL	«	
Hawaii	Pinellas	LOGGERHEAD PARK	«	
Illinois	Santa Rosa	OCEAN INLET PARK		

User can only edit  
one jurisdiction and  
one year per session

# Reports View – Select Report

Same reports as public site. Additional reports might be added (e.g., WQS, administrative)

Step 1 - Location Filter

Step 2 - Additional Filtering

Step 3 - Report Selection

1

Reports

Notification

\*Monitoring

\*Geospatial

About

\* These tabs are not functional for this release.


REPORT NAME	DESCRIPTION
<a href="#">Action Duration</a>	<i>This report is temporarily deactivated but may be included in future releases.</i> 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. <b>Note:</b> An action can be based on a model or policy and not be a monitored beach.
<a href="#">Advisory and Monitoring</a>	<i>This report is temporarily deactivated but may be included in future releases.</i> For each BEACH Act beach: 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. <b>Note:</b> This report will not return data if none has been submitted in the prior two weeks.
<a href="#">Beach Actions (Advisories and Closures)</a>	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 of the action, (3) 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), (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". <b>Note:</b> An action can be based on a model or policy and not be a monitored beach.
<a href="#">Beach Attributes</a>	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.
<a href="#">Beach Days</a>	<i>This report is temporarily deactivated but may be included in future releases.</i> 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. <b>Note:</b> This report includes monitored and non-monitored beaches. An action can be based on a model or policy and not be a monitored beach.
<a href="#">Beach Monitoring Frequency</a>	For each BEACH Act beach: Identifies swim season and monitoring attributes of each beach including: (1) swimming season length, (2) in- and off-season monitoring frequency, and (3) monitoring reporting frequency. The list is sorted by county and beach name.
<a href="#">Beach Profile</a>	For each BEACH Act beach: Presents beach administrative information including: beach name, beach tier, location, public access, Tier, swim season, monitoring and reporting frequency, possible pollution sources. The list is sorted by "state", county, and beach name.
<a href="#">Possible Pollution Sources</a>	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. <b>Mass Update is enabled for this report.</b>
<a href="#">State Summary</a>	<i>This report is temporarily deactivated but may be included in future releases.</i> 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 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.
<a href="#">Tier 1 Stats</a>	<i>This report is temporarily deactivated but may be included in future releases.</i> 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.

2

Click report name to view and edit data

# Reports View – Interactive Report

## Edit e.g., (Monitoring Frequency)

 US Environmental Protection Agency  
BEACON 2.0 Verification Tool

CGLEATON-STAGE [Logout](#)  
[Shopping Cart \(contains items\)](#)

Dashboard **Reports** Notification \*Monitoring \*Geospatial About

\* These tabs are not functional for this release.

**Report**

Note: For some users, depending on screen resolution, this report extends beyond the window's border to the right. [Show more...](#)


**Beach Monitoring Frequency**

Items with a Record Status of Updated will be highlighted yellow.

Q Go 1. Primary Report Actions Mass Update

4 Beach Access, Beach Id, Historical Record, Year 2 State, Year Updated

State : FL, Year : 2015

Select Beach for Mass Update (check all <input type="checkbox"/> )	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)	Record Status
<input type="checkbox"/>	FL996489	<a href="#">BOYNTON BEACH MUNICIPAL</a>	<a href="#">PALM BEACH</a>	385	<a href="#">DAYS</a>	-	-	-	-	2	<a href="#">PER MONTH</a>	.637	Original
<input type="checkbox"/>	FL732971	<a href="#">CARLIN PARK</a>	<a href="#">PALM BEACH</a>	385	<a href="#">DAYS</a>	-	-	-	-	2	<a href="#">PER MONTH</a>	2.882	Original
<input type="checkbox"/>	FL727831	<a href="#">CORAL COVE</a>	<a href="#">PALM BEACH</a>	385	<a href="#">DAYS</a>	-	-	-	-	0	<a href="#">PER MONTH</a>	1.888	Original
<input type="checkbox"/>	FL278288	<a href="#">DELRAY BEACH (AKA SANDOWAY PARK)</a>	<a href="#">PALM BEACH</a>	385	<a href="#">DAYS</a>	-	-	-	-	2	<a href="#">PER MONTH</a>	2.622	Original
<input type="checkbox"/>	FL288828	<a href="#">DUBOIS PARK</a>	<a href="#">PALM BEACH</a>	385	<a href="#">DAYS</a>	-	-	-	-	2	<a href="#">PER MONTH</a>	.245	Original
<input type="checkbox"/>	FL153449	<a href="#">GULFSTREAM PARK</a>	<a href="#">PALM BEACH</a>	385	<a href="#">DAYS</a>	-	-	-	-	0	<a href="#">PER MONTH</a>	.458	Original
<input type="checkbox"/>	FL235675	<a href="#">JOHN D. MCARTHUR</a>	<a href="#">PALM BEACH</a>	385	<a href="#">DAYS</a>	-	-	-	-	0	<a href="#">PER MONTH</a>	1.572	Original
<input type="checkbox"/>	FL780281	<a href="#">JUNO BEACH PARK</a>	<a href="#">PALM BEACH</a>	385	<a href="#">DAYS</a>	-	-	-	-	0	<a href="#">PER MONTH</a>	3.873	Original
<input type="checkbox"/>	FL352535	<a href="#">JUPITER BEACH PARK</a>	<a href="#">PALM BEACH</a>	385	<a href="#">DAYS</a>	-	-	-	-	2	<a href="#">PER MONTH</a>	.938	Original
<input type="checkbox"/>	FL477884	<a href="#">LAKE WORTH (AKA WOODSIDE)</a>	<a href="#">PALM BEACH</a>	385	<a href="#">DAYS</a>	-	-	-	-	2	<a href="#">PER MONTH</a>	.027	Original

Click on any underlined value to edit the data for a single beach. You will go to the appropriate form for that field.

Example: click to change Monitoring Reporting Frequency for this beach (see next slide)

# Data Type View – from Interactive Report Example (Monitoring Frequency, cont.)

**EPA** US Environmental Protection Agency  
**BEACON 2.0 Verification Tool**

CGLEATON-STAGE [Logout](#)  
[Shopping Cart \(contains items\)](#)

[Dashboard](#) [Reports](#) **[Notification](#)** [Monitoring](#) [Geospatial](#) [About](#)

\* These tabs are not functional for this release.

**Beach** Procedure Organizations Person Mailing Address Electronic Address Telephone State Contact

**Beach Details**  
This page shows all the information for the selected beach and year. The beach details are grouped by category in the tabs below. [Show more...](#)

Beach ID (Beach Name): **FL732971 (CARLIN PARK)** Effective Year: **2015**

Profile **Attribute** Latitude/Longitude Activity WQS Criteria Pollution Sources Procedure Assign Organization Role Assign Person Role Assign

**Edit Beach Attribute**  
Use this form to enter/change the information for the beach, such as beach length, swim season details, monitoring details, and advisory reporting details, related to the beach.

Beach Attribute Data for Beach FL732971 for Year 2015

\* Beach Length / Extent Length: 4808 \* Length / Extent Units: Meters

\* Beach Act Beach: ☒ Yes ☐ No \* Beach Tier: 1

Beach Reporting Status: Active

Swim Season Start Date: 01/01/2012 Swim Season End Date: 12/31/2012

\* Length (in hours) of swim day: 24

Swim Season Length: 365 Swim Season Length Units: Days

Monitoring Reporting Frequency (to EPA): **3** Monitoring Reporting Frequency Units: PER\_MONTH

\* Swim Season Monitoring Frequency: \* Monitoring Frequency Units:

\* Off Season Monitoring Frequency:

\* Monitored Irregularly: ☐ Yes ☒ No

Monitored Irregularly Comments:

Advisory Reporting Frequency (to EPA): 2 Advisory Reporting Frequency Units: PER\_MONTH

\* Pollution Sources?: ☒ Yes ☐ No \* Pollution Sources Investigated?: ☒ Yes ☐ No

Beach Website URL:

**Save** **Reset** **Back**

**Include Edits in XML?**  
☒ Yes ☐ No

**1** You're now in the Data Type view for the selected beach

**2** Identifies the selected beach & year

**3** This is the field you clicked to edit; as it looks after you have changed the value to "3" from "2"

**4** Change any field(s), then click "Save". This will apply the same data change(s) to all selected beaches.

**5** Choose whether to include your current edits in the XML

**6** You can also edit other fields on this form, or go to other tabs to edit other data for this beach.



# Reports View – Interactive Report Example (Monitoring Frequency)

We returned to the interactive report view

\* These tabs are not functional for this release.

Note: For some users, depending on screen resolution, this report extends beyond the window's border to the right. [Show more...](#)


## Beach Monitoring Frequency

Items with a Record Status of Updated will be highlighted yellow.

1. Primary Report

☒ 4 Beach Access, Beach Id, Historical Record, Year ☒ 2 State, Year ☒ Updated

State : FL, Year : 2015

Select Beach for Mass Update (check all <input type="checkbox"/> )	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)	Record Status
<input type="checkbox"/>	FL996499	<a href="#">BOYNTON BEACH MUNICIPAL</a>	<a href="#">PALM BEACH</a>	<a href="#">385</a>	<a href="#">DAYS</a>	-	-	-	-	<a href="#">2</a>	<a href="#">PER MONTH</a>	<a href="#">.837</a>	Original
<input type="checkbox"/>	FL732971	<a href="#">CARLIN PARK</a>	<a href="#">PALM BEACH</a>	<a href="#">385</a>	<a href="#">DAYS</a>	<a href="#">2</a>	<a href="#">PER MONTH</a>	<a href="#">2</a>	<a href="#">PER MONTH</a>	<a href="#">3</a>	<a href="#">PER MONTH</a>	<a href="#">2.882</a>	Updated
<input type="checkbox"/>	FL727631	<a href="#">CORAL COVE</a>	<a href="#">PALM BEACH</a>	<a href="#">385</a>	<a href="#">DAYS</a>	-	-	-	-	<a href="#">0</a>	<a href="#">PER MONTH</a>	<a href="#">1.888</a>	Original
<input type="checkbox"/>	FL278288	<a href="#">DELRAY BEACH (AKA SANDOWAY PARK)</a>	<a href="#">PALM BEACH</a>	<a href="#">385</a>	<a href="#">DAYS</a>	-	-	-	-	<a href="#">2</a>	<a href="#">PER MONTH</a>	<a href="#">2.622</a>	Original
<input type="checkbox"/>	FL288828	<a href="#">DUBOIS PARK</a>	<a href="#">PALM BEACH</a>	<a href="#">385</a>	<a href="#">DAYS</a>	-	-	-	-	<a href="#">2</a>	<a href="#">PER MONTH</a>	<a href="#">.247</a>	Original
<input type="checkbox"/>	FL153449	<a href="#">GULFSTREAM PARK</a>	<a href="#">PALM BEACH</a>	<a href="#">385</a>	<a href="#">DAYS</a>	-	-	-	-	<a href="#">0</a>	<a href="#">PER MONTH</a>	<a href="#">.458</a>	Original
<input type="checkbox"/>	FL235675	<a href="#">JOHN D. MCARTHUR</a>	<a href="#">PALM BEACH</a>	<a href="#">385</a>	<a href="#">DAYS</a>	-	-	-	-	<a href="#">0</a>	<a href="#">PER MONTH</a>	<a href="#">1.572</a>	Original
<input type="checkbox"/>	FL780281	<a href="#">JUNO BEACH PARK</a>	<a href="#">PALM BEACH</a>	<a href="#">385</a>	<a href="#">DAYS</a>	-	-	-	-	<a href="#">0</a>	<a href="#">PER MONTH</a>	<a href="#">3.873</a>	Original
<input type="checkbox"/>	FL352535	<a href="#">JUPITER BEACH PARK</a>	<a href="#">PALM BEACH</a>	<a href="#">385</a>	<a href="#">DAYS</a>	-	-	-	-	<a href="#">2</a>	<a href="#">PER MONTH</a>	<a href="#">.938</a>	Original
<input type="checkbox"/>	FL477884	<a href="#">LAKE MOUTH (AKA KEBELI BEACH)</a>	<a href="#">PALM BEACH</a>	<a href="#">385</a>	<a href="#">DAYS</a>	-	-	-	-	<a href="#">2</a>	<a href="#">PER MONTH</a>	<a href="#">.077</a>	Original

Updated values shown and row highlighted



# Reports View – (Beach Actions, cont.)

## Add and Delete Data

**EPA** US Environmental Protection Agency  
BEACON 2.0 Verification Tool

Now we're at the Activity page for the selected beach

1

Dashboard Reports **Notification** Monitoring \*Geospatial About

\* These tabs are not functional for this release.

**Beach** Procedure Organizations Person Mailing Address Electronic Address Telephone State Contact

**Beach Details**  
This page shows all the information for the selected beach and year. The beach details are grouped by category in the tabs below: [Show more...](#)

Beach ID (Beach Name): NC748601 (Wrightsville Beach) Effective Year: 2012

Profile Attribute Latitude/Longitude **Activity** WQS Criteria Pollution Sources Procedure Assign Organization Role Assign Person Role Assign

**Activity**  
This page displays the Activity data for the selected beach and year. To edit a record, click the edit button next to the record you wish to edit. To add a new record, click the Add New button.

Activity Data for Beach NC748601 for Year 2012

Items with a Record Status of Deleted will be highlighted red.  
Items with a Record Status of Updated will be highlighted yellow.  
Items with a Record Status of New will be highlighted green.

Click Add → Goes to Add/Edit Activity form

3

4

Delete: Check one or more boxes, then click the Delete button to delete activity row(s)

Back

Activity ID

\* Activity Name

\* Action Type / Activity Code

\* Action/Actual Start Date

\* Action/Actual Stop Date

Partial Day Amount (in hours)

Description

Activity Comments

Extent Start Measure

Extent Length

Extent Unit of Measure

Percent Of Total Beach Length

Station ID(s)

Remember: The format for the field is "ChildStationID" where ChildID is the STOREE registration ID. To enter more than one value in this field, separate each with a comma.

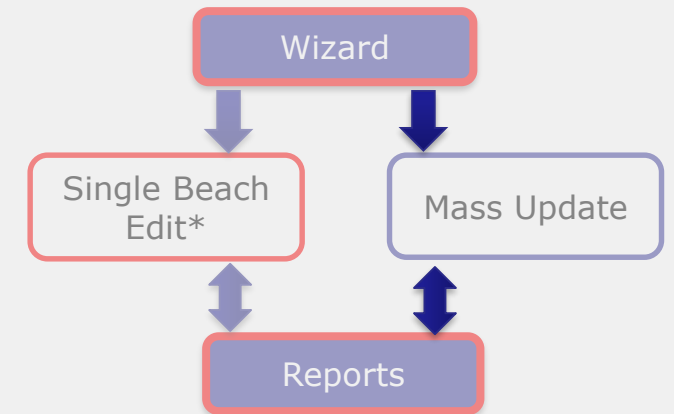
Delete	Activity ID	Activity Name	Activity Type	Actual Start Date	Actual Stop Date	Record Status
<input type="checkbox"/>	380332	S22B_SSM_POSTING20121002	Contamination Advisory	02-OCT-12	03-OCT-12	Original

1 - 1 of 1

# Ways to Edit Data

## ▪ Report View

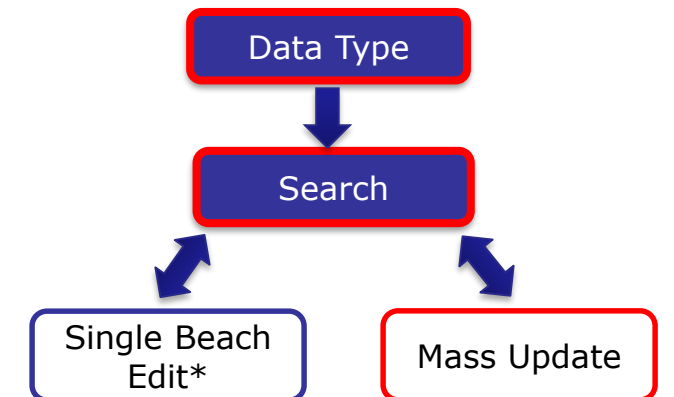
- Select beaches (using BEACON reports wizard)
- Select report
- Edit data:
  - Single beach (click value in report to go to data type view)
  - Mass update (select multiple beaches; goes to form with selected fields available)
  - Certain data types can be deleted via data type view or mass update form.



## ▪ Data Type Search ←

- Select data type (**Notifications**, Monitoring, or Geospatial)
- Search for records (beaches, organizations, persons, etc.)
- Use 2<sup>nd</sup>- and 3<sup>rd</sup>-level tabs to navigate to editable fields
- Edit single record using data type view.
- **Edit multiple records using mass update form.**
- Certain data types can be deleted via data type view or mass update form.

\*aka, Data Type View



# Data Type View – Search (Broad)



US Environmental Protection Agency  
BEACON 2.0 Verification Tool

CGLEATON-STAGE [Logout](#)

[Shopping Cart \(contains items\)](#)

[Dashboard](#) [Reports](#) [Notification](#) [\\*Monitoring](#) [\\*Geospatial](#) [About](#)

**Beach** Procedure Organizations Person Mailing Address Electronic Address Telephone State Contact

\* These tabs are not functional for this release.


## Beach Search Criteria

Enter search criteria into the form fields below and click the Search button. To remove search criteria from the form fields, click the Clear button.

Beach ID	<input type="text"/>
Beach Name	<input type="text"/>
State/Tribe/Territory	<input type="text" value="North Carolina"/>
County	<input type="text"/>
Year	<input type="text" value="2012"/>
<input type="button" value="Search"/>	<input type="button" value="Clear"/>

For the broad search example, we've selected a state (Year is required also). See next slide.

# Data Type View – Search Results (Broad)



US Environmental Protection Agency  
BEACON 2.0 Verification Tool

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[Shopping Cart \(contains items\)](#)

DashboardReportsNotificationMonitoringGeospatialAbout

\* These tabs are not functional for this release.

The results page shows all NC beaches for 2012

1

**Beach Search Results**  
This page shows all the beaches matching the search criteria. Note: beaches are repeated for each selected year. To edit beach information for a specific beach/year, click the respective Beach ID link. To edit multiple beaches at the same time, select the check box next to each beach you would like to edit then click the Mass Update button.\* To return to the Beach Search Criteria page, select the Back button.  
  
\*Note: Not all fields are available for Mass Update at this time.

Updated records appear first in the list.

Items with a Record Status of Updated will be highlighted yellow.

Go Actions Back Mass Update

☒ ☒ State Code = 'NC' X  
☒ ☒ Year = 2012 X

Select Beach for Mass Update (check all )	Beach ID	Name	State Code	County	Year	Historical	Record Status
<input checked="" type="checkbox"/>	<a href="#">NC813341</a>	1 1/2 Miles SW of RQ Plant	NC	Dare	2012	No	Original
<input checked="" type="checkbox"/>	<a href="#">NC120547</a>	1/2 mile W of Mile Marker 10, oceanside	NC	Carteret	2012	No	Original
<input checked="" type="checkbox"/>	<a href="#">NC568484</a>	1/4 Miles E of EMS Station	NC	Dare			
<input checked="" type="checkbox"/>	<a href="#">NC175988</a>	100 yds ENE of Little Bridge, Causeway, Nags Head	NC	Dare			
<input checked="" type="checkbox"/>	<a href="#">NC305162</a>	100 yds offshore at Island Creek Ct. - Avon	NC	Dare			
<input type="checkbox"/>	<a href="#">NC993056</a>	100 yds offshore at North Holiday Rd. - Rodanthe	NC	Dare			
<input type="checkbox"/>	<a href="#">NC983089</a>	100 yds offshore at Sunset Strip Dr. - Frisco	NC	Dare	2012	No	Original
<input type="checkbox"/>	<a href="#">NC830155</a>	100 yds offshore in sound near intersection of Hwy 12 and Al	NC	Currituck	2012	No	Original

2

From here, you can:  
1. Click a beach ID to edit a single beach

2. Check the boxes for two or more beaches, then click the "Mass Update" button (example on next slide)

3

# Mass Update

We're now at the Mass Update form. You can get here from Data Type search or Interactive Reports.

**EPA** US Environmental Protection Agency  
**BEACON 2.0 Verification Tool**

CGLEATON-STAGE [Logout](#)  
[Shopping Cart \(contains items\)](#)

Dashboard Reports **Notification** Monitoring Geospatial About

Beach Procedure Organizations Person Mailing Address Electronic Address Telephone State Contact

**Mass Update**  
Use this form to make bulk updates to beach data. A beach can only be updated once per day. Updates are available for mass updating at this time. Brief instructions are provided here (click "Show more"); please refer to the Verification Tool User Guide (see About tab) for complete instructions. [Show more...](#)

Mass Update Pre-check Beaches **Save** Back Error Report

**Profile**

\* Access Type

Beach Owner  Beach Address

Waterbody Name

Waterbody Type

**Attribute (includes WQS Criteria and Pollution Sources)**

\* Effective Year 2012

Beach Reporting Status

Swim Season Start Date MM/DD/YYYY

Length (in hours) of swim day

Swim Season Length

Monitoring Reporting Frequency (to EPA)

Swim Season Monitoring

Swim Season End Date MM/DD/YYYY

Swim Season Length Units

Monitoring Reporting Frequency Units

**List of Beaches selected**

Add More Remove Selected Beach(es) from List

Select All ☐

<input type="checkbox"/>	Beach ID	Beach Name
<input type="checkbox"/>	NC120547	1/2 mile W of Mile Marker 10, oceanside
<input type="checkbox"/>	NC175968	100 yds ENE of Little Bridge, Causeway, Nags Head
<input type="checkbox"/>	NC305162	100 yds offshore at Island Creek Ct. - Avon
<input type="checkbox"/>	NC566464	1/4 Miles E of EMS Station
<input type="checkbox"/>	NC613341	1 1/2 Miles SW of RO Plant

row(s) 1 - 5 of 5

**Include Edits in XML?**  
☐ Yes ☐ No

Pre-check will see if any of the selected beaches have data issues (e.g., missing parent) that must be resolved prior to doing a mass update

Change any field(s), then click "Save". This will apply the same data change(s) to all selected beaches.

Choose whether to include your current edits in the XML

These are the beaches we checked on the previous screen.

- Remove beaches by checking the boxes and clicking "Remove..."

- Click "Add More" to return to search results (or Interactive Report) to choose more beaches



# Shopping Cart (Summary View)

## Shopping Cart

The Shopping Cart contains your editing change log. It shows edits for records with the Include Edits in XML flag set to "Yes".

Submission to EPA and nodes is not enabled for records with Include Edits in XML flag set to "Yes". Changes will not show in the vT until added to the CDX.

2 You can download the changes in an XML or CSV file. The download includes only your edits and associated schema-required fields. Unlike the Access DB XML, the vT XML does not contain the full dataset (we may provide this in the future).

3 Note: Direct submission to CDX is not enabled at this time.

### Notification Data Change Log

[Download File \[XML\]](#)

— REMINDER: Clicking download will clear all edits for records with Include Edits in XML flag set to "Yes" from the Verification Tool. Also: make sure the change log below contains edits for a single year only.

Toggle: Show Edits Marked for Exclusion from XML



The change log below shows by default only those edits that are marked for inclusion in the XML. Check this box to also show edits currently marked for exclusion from the XML.

You can review your changes. The default view here is a Summary View.

### Notification - Beach

#### Summary Beach Data Report

1. Primary Report

Section Updated	Record Status	Beach ID	Beach Name	Year	Created/Updated /Deleted Date	Include Edits in XML?
Profile Data	Update	CA764999	Agate Beach	2016	17-APR-17	Yes
Attribute Data	Update	CA764999	Agate Beach	2016	17-APR-17	Yes
Criteria Data	New	CA764999	Agate Beach	2016	17-APR-17	Yes
Pollution Sources Data	New	CA764999	Agate Beach	2016	17-APR-17	Yes
Procedure Assign Data	New	CA307428	Albion River	2016	11-APR-17	Yes
Procedure Assign Data	New	CA764999	Agate Beach	2016	29-MAR-17	Yes

1 - 6 of 6

Also, the default view shows only vT edits where "Include in XML?" = "Yes"

Check this option to show vT edits where "Include in XML?" = "No"

Click "View Detailed..." button to see a full change log. See next slide.

# Shopping Cart (Detailed View)

Beach ID

Year

Changes are grouped by Beach

The type of change (Updated, New, Deleted) is shown here.

Beach ID : CA307428, Year : 2016

Beach Name	Activity ID	Activity Name	Action	Field	New Value	Old Value	Include Edits in XML?	Created/Updated /Deleted Date
Albion River	-	-	New - Procedure Assigned	Procedure	IA1   IA_BEACH   Post advisory at beach	-	Yes	11-APR-17

Beach ID : CA764999, Year : 2016

Beach Name	Activity ID	Activity Name	Action	Field	New Value	Old Value	Include Edits in XML?	Created/Updated /Deleted Date
Agate Beach	-	-	Updated - Profile	Access Type	PRV_PRV_ACC	PUB_PUB_ACC	Yes	17-APR-17
Agate Beach	-	-	Updated - Profile	Waterbody Name Comment	Pacific Ocean	-	Yes	17-APR-17
Agate Beach	-	-	Updated - Profile	Waterbody Type Comment	Open Coast	-	Yes	17-APR-17
Agate Beach	-	-	Updated - Attribute	Length (in hours) of swim day	15	-	Yes	17-APR-17
Agate Beach	-	-	Updated - Attribute	Swim Season Monitoring Frequency / Swim Monitor Freq	3 Per_Month	-	Yes	17-APR-17
Agate Beach	-	-	Updated - Attribute	Off Season Monitoring Frequency / Off Monitor Freq	2 Per_Month	-	Yes	17-APR-17
Agate Beach	-	-	New - Criterion	Indicator Name	FECAL	-	Yes	17-APR-17
Agate Beach	-	-	New - Criterion	Water Type Name	BOT	-	Yes	17-APR-17
Agate Beach	-	-	New - Criterion	Measure Type Name	CFU	-	Yes	17-APR-17
Agate Beach	-	-	New - Criterion	Measure Value	230000	-	Yes	17-APR-17
Agate Beach	-	-	New - Criterion	Criterion Comment	cfu	-	Yes	17-APR-17
Agate Beach	-	-	New - Criterion	Criterion Comment	-	-	Yes	17-APR-17
Agate Beach	-	-	New - Pollution Source	Pollution Source (COMMENT)	CSO ()	-	Yes	17-APR-17
Agate Beach	-	-	New - Procedure Assigned	Procedure	AS_1   IB_NEWSPAPER   Post advisory on the newspaper, broadcast advisory on the radio	-	Yes	28-MAR-17

1 - 15 of 15

Shows the old and new values

The field changed is shown here.

## CURRENT RELEASE SCHEDULE (Agile Design & Development – Thurs 8:30)

- **November 16-30, 2016. Test Release 1:** This is the first piece and covers **the vT Framework and Beach Actions Report**. This Release created a notification CSV and XML for download only (not yet submit to CDX via the Exchange Network (EN). 6 states tested, compiled and assessed comments for future releases. (11/15)
- **February 9, 2017. Release 2a:** This piece added the **other 3 non-WQ Reports** in the manual verification guidance (Beach Attributes, Possible Pollution Sources and Beach Profile), and adds the capability to **download an CSV or XML to update local database-of-record**, for subsequent BEACHES-flow submission to CDX via EN. (1/30)
- **March 15, 2017. Release 2b:** This piece adds **mass update (multiple beaches), pre-check, and error assessments** for several priority data elements and a **new** water quality criterion table. (1/28)
- **May, 2017. Release 3:** This piece is planned to add mass updates for more data elements, **new** ability to edit Organization, Person, and State Contact **data elements** (only in the vT not public BEACON), the procedures portion of the detailed Beach Profile report and possibly an **new** monitoring station look-up **feature**.
- **Jun, 2017. Release 4:** This could add the remaining editable non-WQ BEACON **reports, new** Administrative reports, and user account management functions.

### Future:

**WQ Report** (eBeaches flow to WQX / STORET) and beach **mapping** (NHDEvent flow to EPA-RAD) edit capability.



# EN2017

## **eBEACHES - QA** **Bill Kramer, USEPA**

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**2017 Exchange Network National Meeting**  
**Innovation and Partnership**

May 16-18, 2017  
Sheraton Philadelphia Society Hill Hotel  
Philadelphia, Pennsylvania

<http://www.exchangenetwork.net/en2017>