

eBeaches Locational Data Review Tool

The Beach program uses PRAWN to store beach location data (latitude and longitude), and the Reach Address Database (RAD) to generate nationally-normalized beach lengths for use in the Beach Program Grant allotment formula. (The methodology is explained in <https://www.epa.gov/beaches/submitting-beach-data-epa>) The eBeaches locational data review tool allows you to view your beach data mapped to the 1:100,000 scale National Hydrography dataset. You can use this review tool to verify the accuracy of the length and location of beaches that have been mapped to the NHD.

This user guide will show you step by step how to review your beach data. You will also be provided with tips and tricks to make the review and comment process more efficient.

Introduction

The eBeaches Locational Data Review Tool contains a map with a table underneath. The table contains information from PRAWN on the beach in the map.

2009 New York Beach Event Review



43.3121967057175, -78.84740709160934

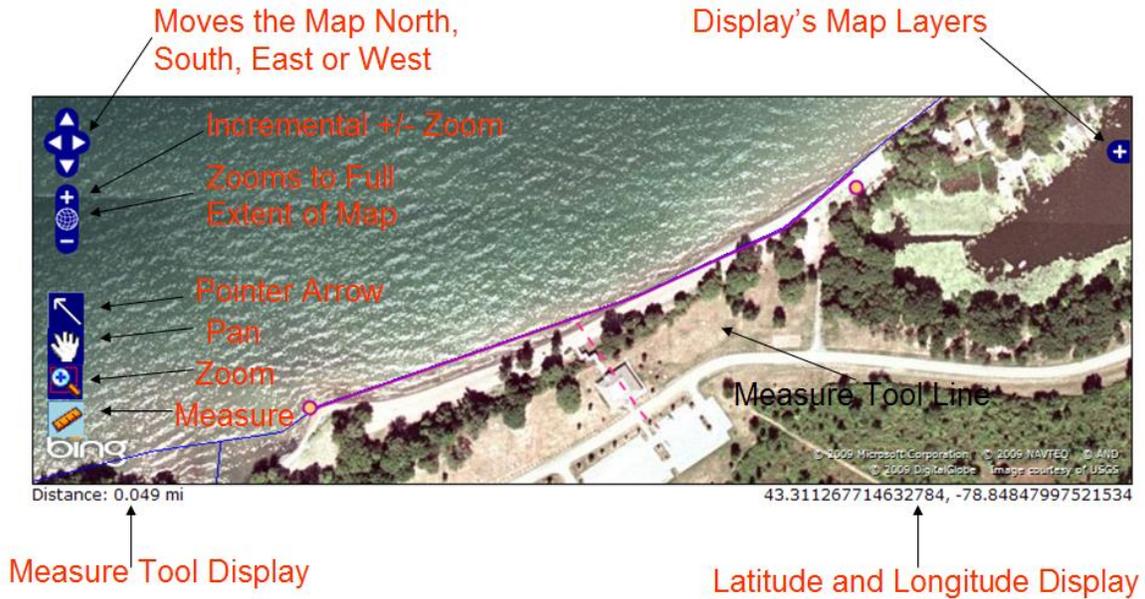
Entity ID	Beach Name	County	Type	Reporting Yr	Reported Miles	Calculated Miles	Diff
NY388768	WHITE CROSS FISH CLUB	BRONX	L	2008	0.02	0.01	0.01
NY603914	WILDWOOD STATE PARK BEACH	SUFFOLK	L	2008	2.00	1.42	0.58
NY255107	WILSON - TUSCARORA STATE PARK BEACH	NIAGARA	L	2008	0.28	0.25	0.03
NY571635	WINCOMA BEACH	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)

Start Lat/Lon:	43.311666,-78.853516	Source Map:	0
End Lat/Lon:	43.313,-78.848983	Collection Datum:	WGS84
Collection Method:	GPS-UNSPECIFIED		

What's in the Map?

The map contains tools that allow you to pan, zoom, measure and view satellite imagery. The image below shows the tools available on the map. When working in the map, the tool that is highlighted in light blue is active. A description of each of the tools is below the map.



The Pan tool allows you to click on the map and then drag it around to get a better view of your beach. The zoom tool allows you to draw a rectangle area to zoom in closer to an area of interest. The measure tool allows you to measure a beach by clicking points connected by a line following the shoreline. The results of the measure tool are displayed in the lower left hand corner of the map.

Map Layers

The map layers are displayed when you click on the plus sign located in the upper right hand corner of the map (see graphic above). The eBeaches Locational Data Review Tool opens with Microsoft Virtual Earth Hybrid (circle radio button with dot), the checked NHD and the Mapped events as the base layers. You can choose to look at Google physical, streets, satellite and hybrid images as well. To select or deselect a layer click the radio button next to the layer name. To hide the layer list from view, click the minus sign in the upper right hand corner of the blue box.



Tip: To improve map performance, you may need to DESELECT the flowlines layer, which appears in the Map Layers box as “NHDPlus v2.1”.

Main Map Table

The table below the map contains additional information on the beaches. A description of the column is given below the graphic. You can also use this table to zoom to the beach that you want to review. The row highlighted in blue will be the beach that is displayed in the map.

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	

Entity ID: This is the EPA Beach ID that is found in PRAWN.

Beach Name: Name of the beach as submitted to PRAWN.

County: County the beach is located in as submitted to PRAWN.

Type: L = Line, this mean the beach was mapped/indexed to NHD. NA=Not Applicable, this means the beach could not be indexed to NHD.

Reporting Year: Beach season year.

Reported Miles: Length of the beach in Miles as submitted to PRAWN.

NHD Miles: Length of the beach calculated from the NHD.

Diff: Difference between Reported Miles and the NHD Miles.

The columns can be sorted in ascending and descending order by clicking on the column name.

The last row of the main map table shows the number of “unique entities” which is just the number of beaches submitted to PRAWN. The total reported miles and NHD miles is also given.

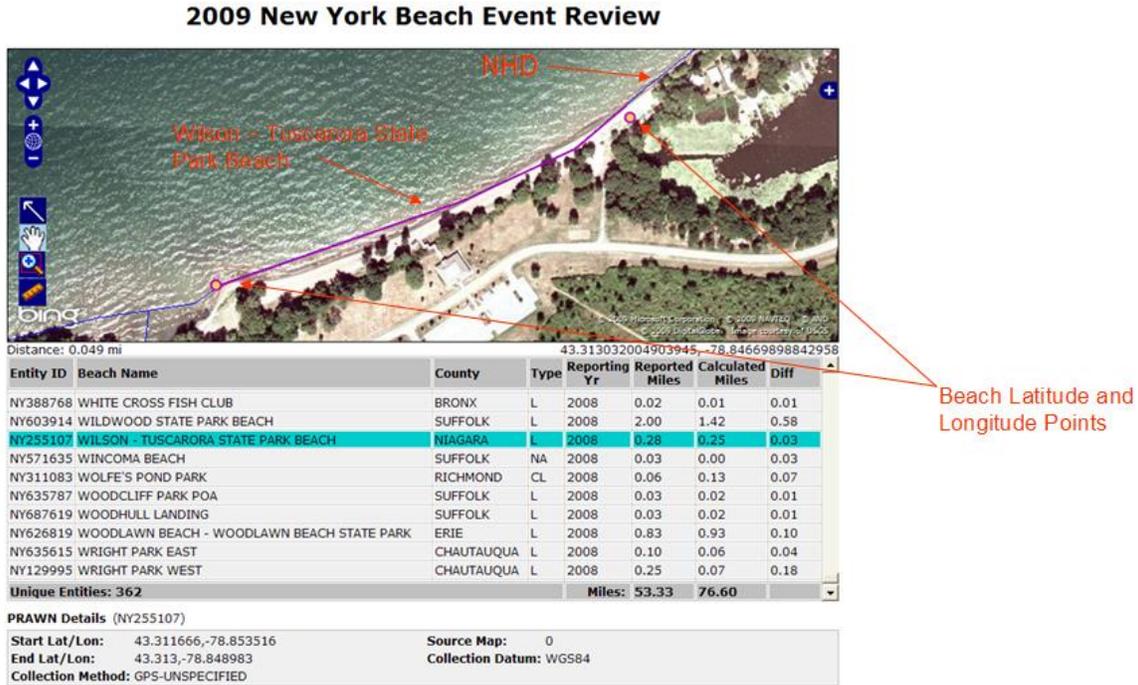
There is also another table under the Main Map table:

PRAWN Details (NY255107)	
Start Lat/Lon:	43.311666,-78.853516
End Lat/Lon:	43.313,-78.848983
Collection Datum:	GPS-UNSPECIFIED
Source Map:	0.0
Collection Method:	WGS84

This is the PRAWN Details table. It displays additional information from PRAWN for a selected beach.

How is my beach displayed on the map?

Beaches are displayed in the mapping tool as a solid purple line. The NHD is represented by a blue line. The latitude and longitude points are represented by the yellow dots with purple circles.



How to Complete the Review

Now that you are familiar with the review tool and its functionality, you're ready to begin reviewing beaches. The ebeaches Locational Data Review Tool will be sent to you via email as an attachment along with an Excel table that can be used to collect information during your review. You will send the Excel table back to RTI with your review comments.

The review should focus on fixing beaches with the greatest discrepancy between Reported Miles and NHD Miles. Try not to focus on beaches with small discrepancies. Remember that NHD miles will be used for the allotment formula, and that the NHD mile value will determine which "bin" (quintile) your jurisdiction is in (see full explanation in the Location SOP cited above).

Comments Table

The comments table will look like the table under the map in the review tool except that it will have extra columns for comments and any new “start” and “End” latitude/longitude data.

	A	B	C	D	E	F	G	H	I	J	K	L	M
	Entity_ID	Beach Name	County	Type	Reporting Yr	Reported Miles	NHD Miles	Diff	Comments	S_lat	S_lon	E_Lat	E_lon
1	NY764458	BAY HILLS POA	SUFFOLK	L	2008	0.03	0.03	0.00					
3	NY817008	BAYCREST ASSOCIATION BEACH	SUFFOLK	L	2008	0.03	0.04	0.01					
4	NY255107	WILSON - TUSCARORA STATE PARK BEACH	NIAGARA	L	2008	0.28	0.25	0.03					
5	NY603669	AMERICAN YACHT CLUB	WESTCH ESTER	NA	2008	0.03	0	0.03					
6	NY615377	PLAZA BEACH	NASSAU	NA	2008	0.01	0	0.01					
7	NY555335	SOUTH BEACH	RICHMOND	L	2008	0.11	0.36	0.25					
8	NY239050	JONES BEACH STATE PARK-CENTRAL	NASSAU	L	2008	4.5	11.7	7.19					
9	NY582799	DANISH AMERICAN BEACH CLUB	BRONX	L	2008	0.02	4.24	4.22					
10	NY798115	MATTITUCK BREAKWATER BEACH	SUFFOLK	L	2008	0.03	2.78	2.75					
11	NY588698	QUOGUE BEACH CLUB	SUFFOLK	L	2008	0.03	7.52	7.49					
12	NY465973	ALBERTS LANDING BEACH	SUFFOLK	L	2008	0.03	0.03	0.00					
13	NY735693	AMAGANSETT BEACH ASSOCIATION	SUFFOLK	L	2008	0.03	0.02	0.01					
14	NY617089	AMERICAN TURNERS	BRONX	L	2008	0.02	15.2	15.20					
15	NY689454	AMITYVILLE BEACH	SUFFOLK	L	2008	0.03	0.07	0.04					
16	NY689454	ASHAROKEN	SUFFOLK	L	2008	0.03	0.07	0.04					

Starting the review

To open the review tool, double click on the Swinomish.html file provided to you via email. The tool will work with both IE and Firefox. The beaches will be sorted by the Diff column by default. A good way to start the review would be to investigate the beaches with the greatest discrepancies. In the example shown below we see that the Fiddlers Green association beach shows a significant difference between reported miles and NHD miles (18.93).

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Distance: 0.049 mi 43.313032004903945, -78.84669898842958

Entity ID	Beach Name	County	Type	Reporting Yr	Reported Miles	Calculated Miles	Diff
NY696743	FIDDLERS GREEN ASSOCIATION	SUFFOLK	L	2008	0.03	18.91	18.88
NY798115	MATTITUCK BREAKWATER BEACH	SUFFOLK	L	2008	0.03	3.03	3.00
NY239050	JONES BEACH STATE PARK-CENTRAL	NASSAU	CL	2008	4.50	2.09	2.41
NY908578	SUNKEN MEADOW STATE PARK BEACH	SUFFOLK	L	2008	3.00	0.72	2.28
NY014761	ROBERT MOSES STATE PARK BEACH - SUFFOLK COUNTY	SUFFOLK	CL	2008	5.00	3.06	1.94
NY588698	QUOGUE BEACH CLUB	SUFFOLK	CL	2008	0.03	1.81	1.78
NY833282	JONES BEACH - WEST	NASSAU	CL	2008	2.00	0.24	1.76
NY713263	ROCKAWAY BEACH 126TH - 149TH	QUEENS	NA	2008	1.14	0.00	1.14
NY412748	DURAND BEACH	MONROE	L	2008	0.07	1.20	1.13
NY971813	HITHER HILLS STATE PARK BEACH	SUFFOLK	L	2008	0.28	1.35	1.07
Unique Entities: 362					Miles: 53.33	76.60	

PRAWN Details (NY696743)

Start Lat/Lon:	40.9356,-73.45175	Source Map:	0
End Lat/Lon:	40.90405,-73.38605	Collection Datum:	NAD83
Collection Method:	GPS-UNSPECIFIED		

Let's say that you know just from looking at the map that one of the end points for this beach is wrong. You know that this is supposed to be a small beach located by Caumsett State Park.

Use the tool to provide a new Latitude and Longitude end point for the fiddlers Green Association Beach. Let's say you know this beach's start point is ok, but it's supposed to end at oakwood drive. Use the direction below to gather the new endpoint.

- 1) Zoom into the area near Caumsett state park.
- 2) Place your cursor at the end of Oakwood drive.
- 3) The lat/long for this point is displayed below the map.



4) Type the new latitude/longitude point in the beach comments spreadsheet.

Microsoft Excel - NY_Beach_Comments_File.xls

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Entity ID	Beach Name	County	Type	Reporting Yr	Reported Miles	NHD Miles	Diff	Comments	S lat	S lon	E Lat	E lon	
2	NY764458	BAY HILLS POA	SUFFOLK	L	2008	0.03	0.03	0.00						
3	NY696743	FIDDLERS GREEN ASSOCIATION	SUFFOLK	L	2008	0.03	19	18.93	Wrong beach end point.	OK	OK	40 93491	-73.4478	
4	NY817008	BAYCREST ASSOCIATION BEACH	SUFFOLK	L	2008	0.03	0.04	0.01						
5	NY255107	WILSON - TUSCARORA STATE PARK BEACH	NIAGARA	L	2008	0.28	0.25	0.03						

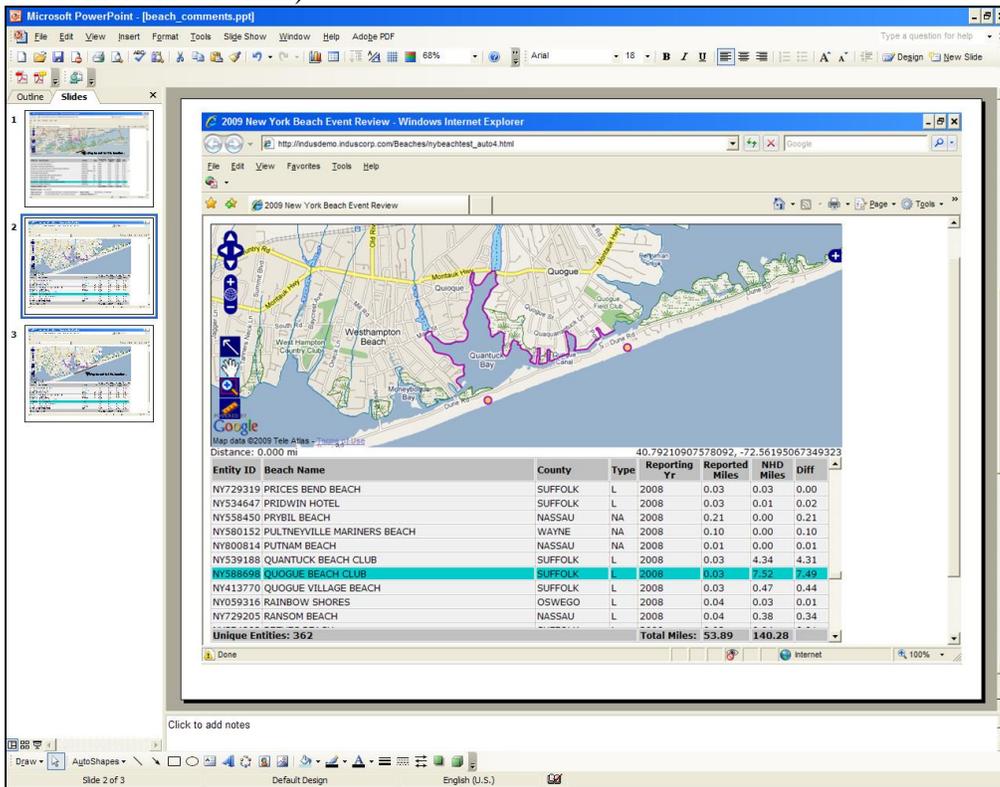
(Note: where NA appears in the table under the map, you may need to use this approach to identify beach endpoints and/or provide L/L data).

Let's look at another type of mapping error, for this example we'll also use the Virtual Earth Roads layer. This one has to do with the limitations of NHD. NHD does not always cover barrier islands, as is illustrated in the graphic below.

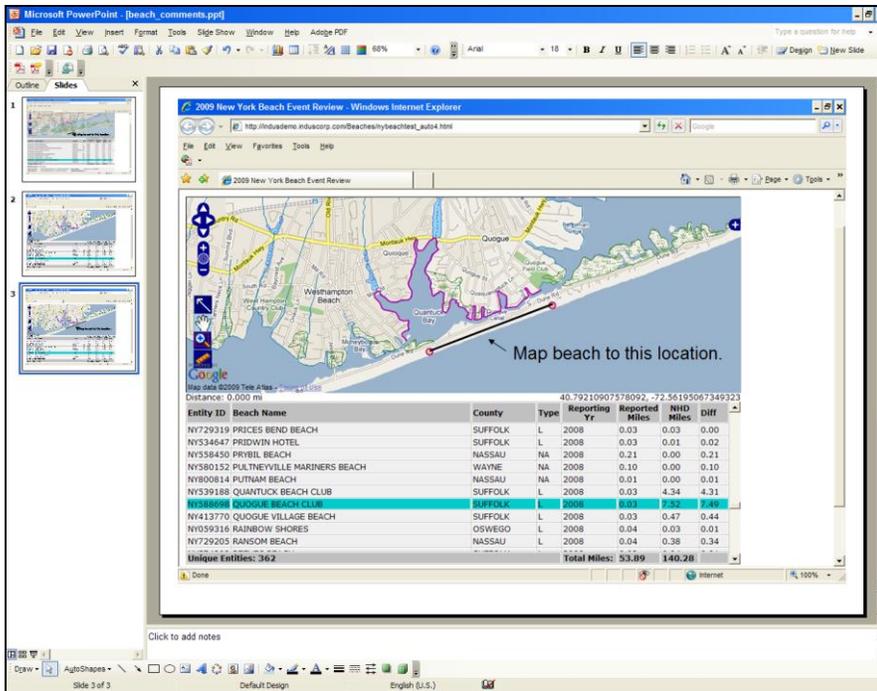


This beach, Quogue Beach Club, was indexed to the NHD for the Bay instead of on the barrier island. This situation can be fixed by RTI. In this case making a screen capture of the beach and marking it up in PowerPoint would be the best way for us to see how to fix this.

- 1) To make a screen capture, press the ctrl, alt and print screen buttons at the same time.
- 2) Open up PowerPoint, from the edit menu chose paste. A graphic of the beach review tool should appear on the screen. (Note: you may need to resize the graphic to fit on the slide by clicking on it to get the drag arrow and dragging a corner and/or sides)



- 3) Now you can use the drawing and editing tools in PowerPoint to draw a line between the end point circles on the map. (See bottom left, the line symbol to the right of "Auto Shapes"; and the text box to the right of the oval).



- 4) In the beach comment table, write a short description of how the issue should be resolved and note that a graphic of how the change should be made is attached.

	A	B	C	D	E	F	G	H	I	J	K	L	M
	Entity ID	Beach Name	County	Type	Reporting Yr	Reported Miles	NHD Miles	Diff	Comments	S_lat	S_lon	E_Lat	E_Ion
1	NY764458	BAY HILLS POA	SUFFOLK	L	2008	0.03	0.03	0.00					
2		FIDDLERS GREEN ASSOCIATION											
3	NY696743		SUFFOLK	L	2008	0.03	19	18.93	Wrong beach end point.	OK	OK	40.93491	-73.4478
4	NY588698	QUOGUE BEACH CLUB	SUFFOLK	L	2008	0.03	7.52	7.49	Incorrect mapping, the bay was mapped instead of the barrier island - see ppt slide	OK	OK	OK	OK
5	NY817008	BAYCREST ASSOCIATION BEACH	SUFFOLK	L	2008	0.03	0.04	0.01					
6	NY255107	WILSON - TUSCARORA STATE PARK BEACH	NIAGARA	L	2008	0.28	0.25	0.03					
7	NY603669	AMERICAN YACHT CLUB	WESTCH ESTER	NA	2008	0.03	0	0.03					

Once you have reviewed your beaches with the greatest length differences and filled out the Beach Comments table, send the table and any supporting graphics (i.e. PowerPoint slides, JPGs, etc) to Nathan Ellermeier at nellermeier@rti.org.

If you need help with the review tool, please also email Nathan Ellermeier.

If you have policy questions about what beaches should have locational data, please contact Bill Kramer, kramer.bill@epamail.epa.gov or 202-566-0385.