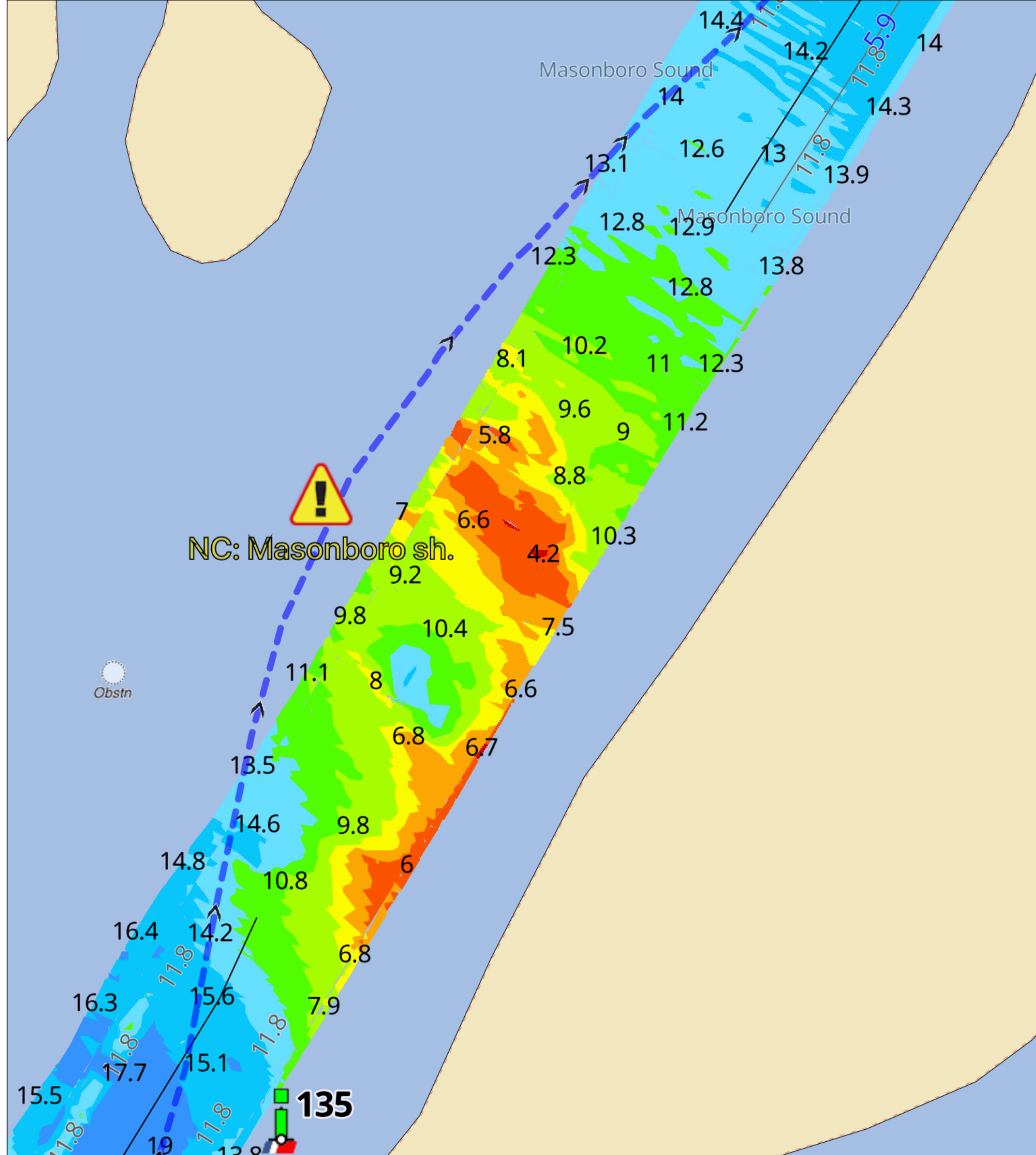


Bob423 Tracks

How to download and use in Aqua Map and Navionics



Bob423 5/7/2022



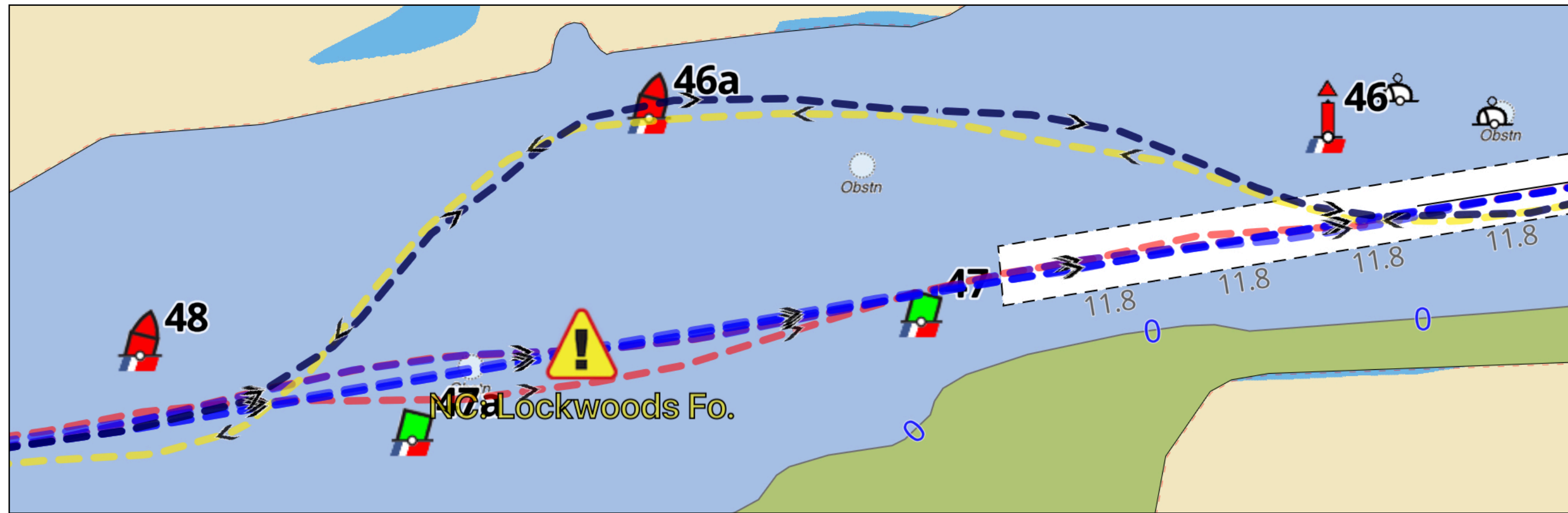
What are Bob423 Tracks?

- **GPX files containing tracks, routes, or markers.**
- **They can be shared between any recent (last 10 years) navigation app or program**
- **Four tracks have been developed by Bob423 for the Atlantic ICW that follow the deepest water**

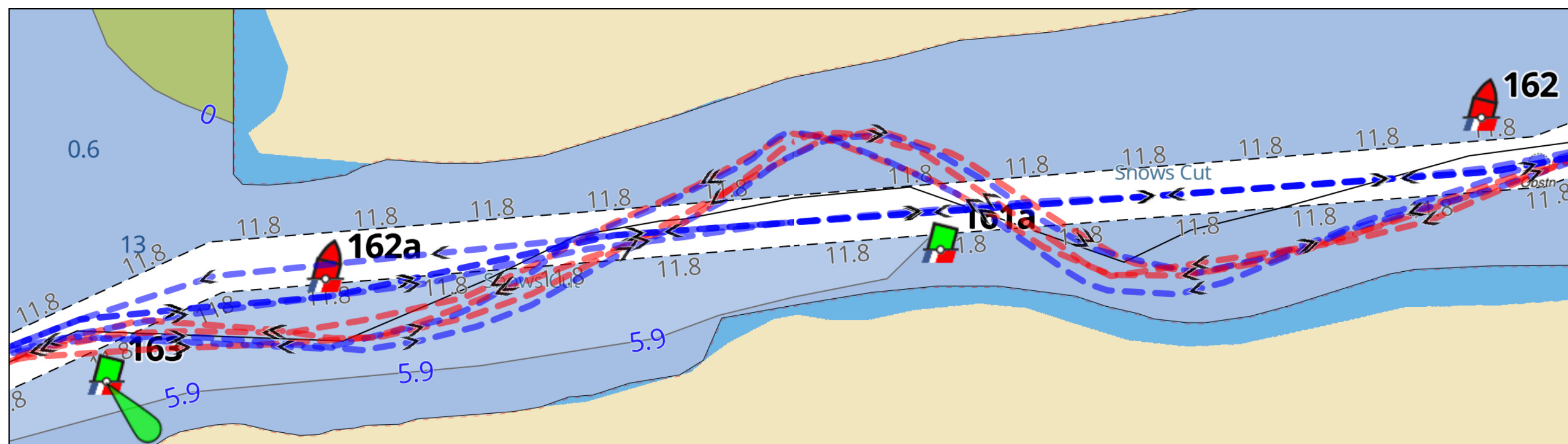
What's the source data?

- **Verified tracks based on 24 passages from Norfolk to Key West with depth data converted to MLLW**
- **USACE surveys for rapidly shoaling areas**
- **Dredging contracts detailing the width, depth, and path of dredging**
- **Bob423 Surveyors tracks**
- **Navionics SonarChart often used for stable areas**

Verified tracks based on 24 passages from Norfolk to Key West with depth data converted to MLLW

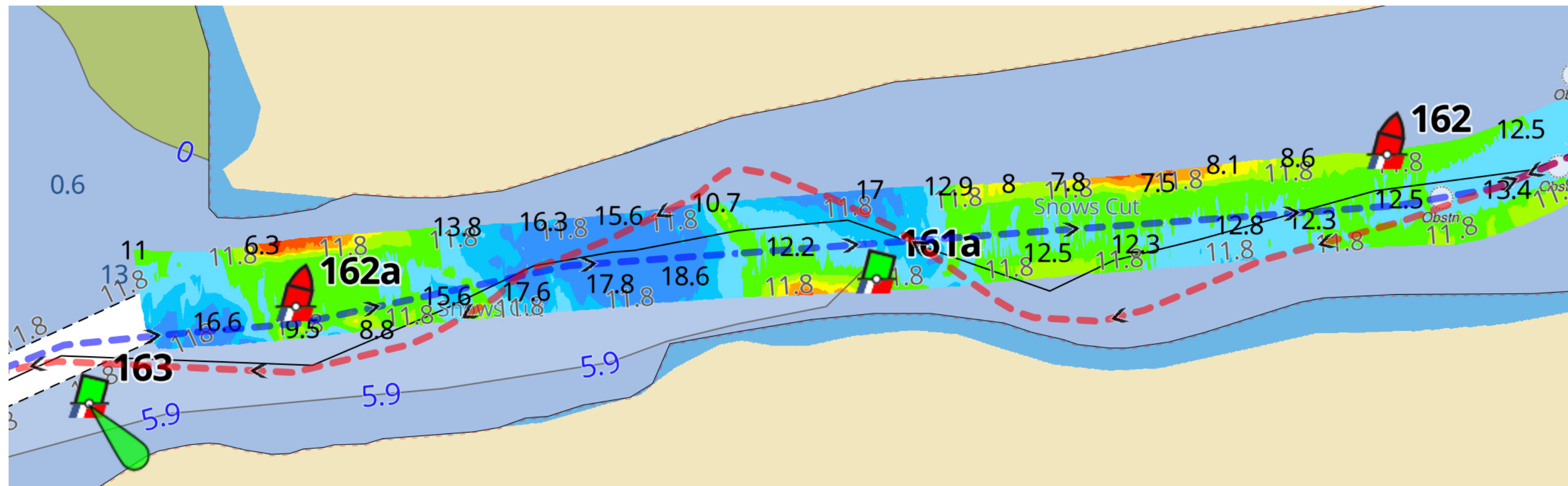
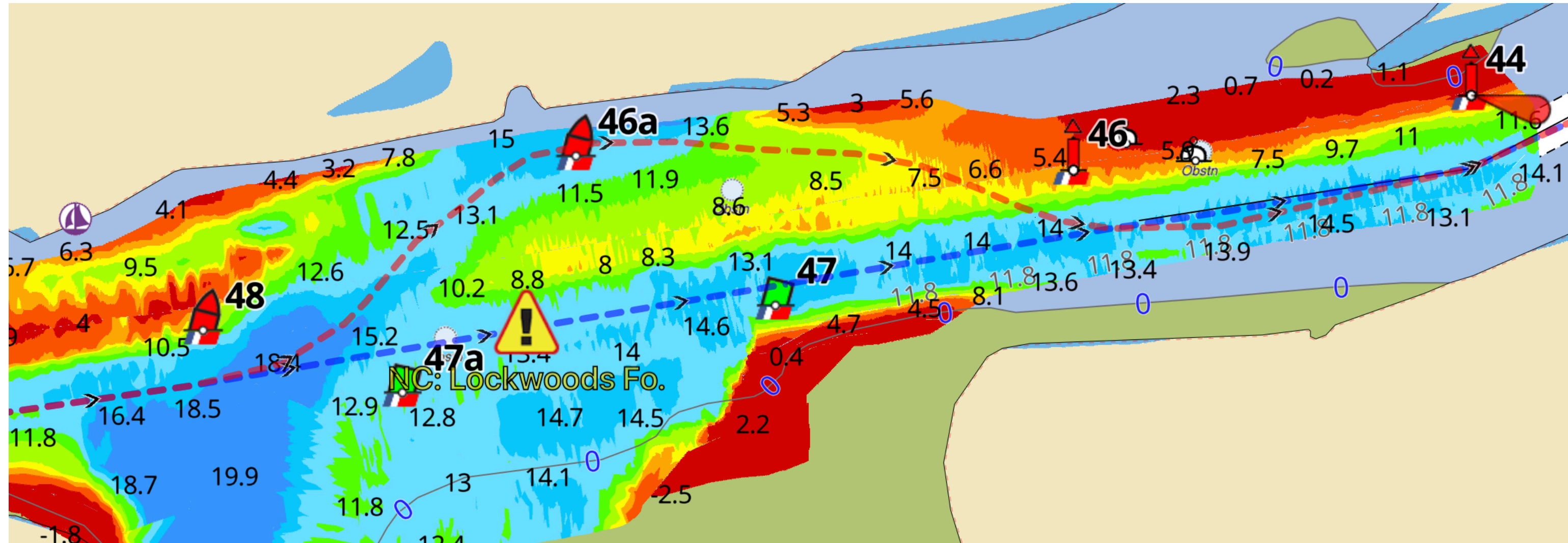


Lockwoods Folly has had two basic routes: straight after dredging and shore over the years.

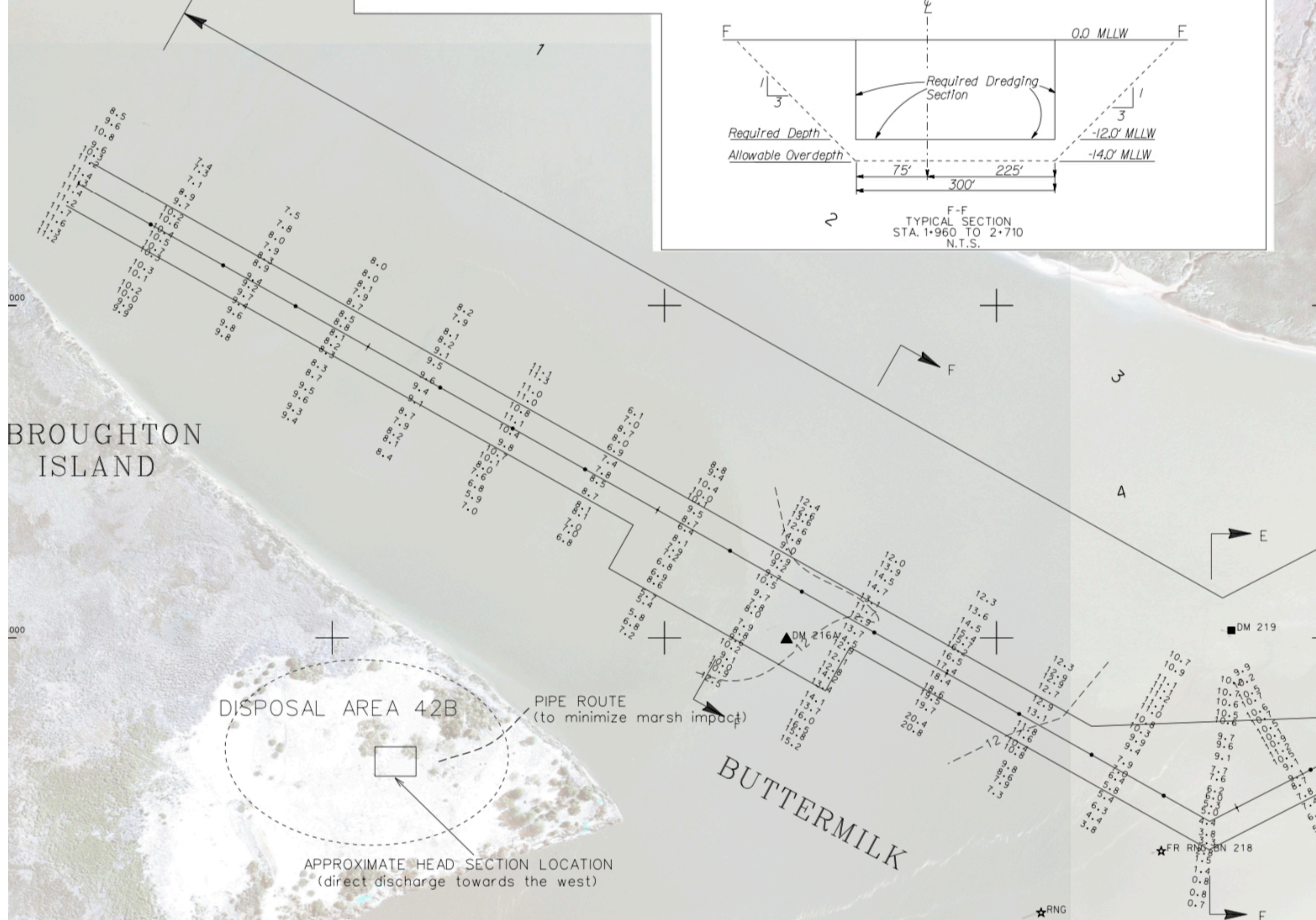


Snows Cut is either straight after dredging or a slalom run.

US Army Corps of Engineers (USACE) surveys



When a new USACE survey is completed, I adjust the Bob423 track to follow the newly dredged channel as verified by the survey.



Dredging Contracts

- Detailing the width, depth, and path of dredging
- 300 ft wide dredged channel for Buttermilk Sound

BUTTERMILK SOUND CHANNEL P.I'S		
Left Toe	Centerline	Right Toe
x-897431.833 y-477726.431	x-897366.497 y-477763.258	x-897301.160 y-477800.085
x-895733.609 y-474713.657	x-895447.305 y-474358.469	x-896339.547 y-476094.112
x-895764.540 y-473902.958	x-896673.244 y-471961.702	x-896208.824 y-476167.680
x-896743.044 y-471989.937	x-897041.524 y-470754.056	x-895840.592 y-475514.410
x-897106.875 y-470796.881	x-898075.001 y-469871.859	x-895971.217 y-475440.668
x-898121.993 y-469930.355	x-899905.118 y-468489.452	x-895362.180 y-474360.192
x-899966.397 y-468537.156	x-900310.975 y-467527.117	x-896603.443 y-471933.468
x-900380.082 y-467556.261		x-896976.172 y-470711.231
		x-898028.009 y-469813.362
		x-899843.838 y-468441.748
		x-900241.869 y-467497.972

- **The dredging contract uses State Plane coordinates**
- **They must be converted to Lat/Long for use in making a track**

Convert State Plane to Latitude and Longitude

Enter the Zone, Easting, and Northing. View the results on this web page
Google Earth.

Type in the zone number or select from the list.

X (US Survey Feet)

Y (US Survey Feet)

XY Unit of Measure



Meters



US Survey Feet (3913)



International Feet (1982)

Calc

Fly To On Google Earth

Free. User account is not needed.

Position 3402 460188.731826264 200808.212750826

Zone 3402 - Ohio South

	Meters	US Survey Feet	International Feet
X	460188.732	1509802.531	1509805.551
Y	200808.213	658818.278	658819.596

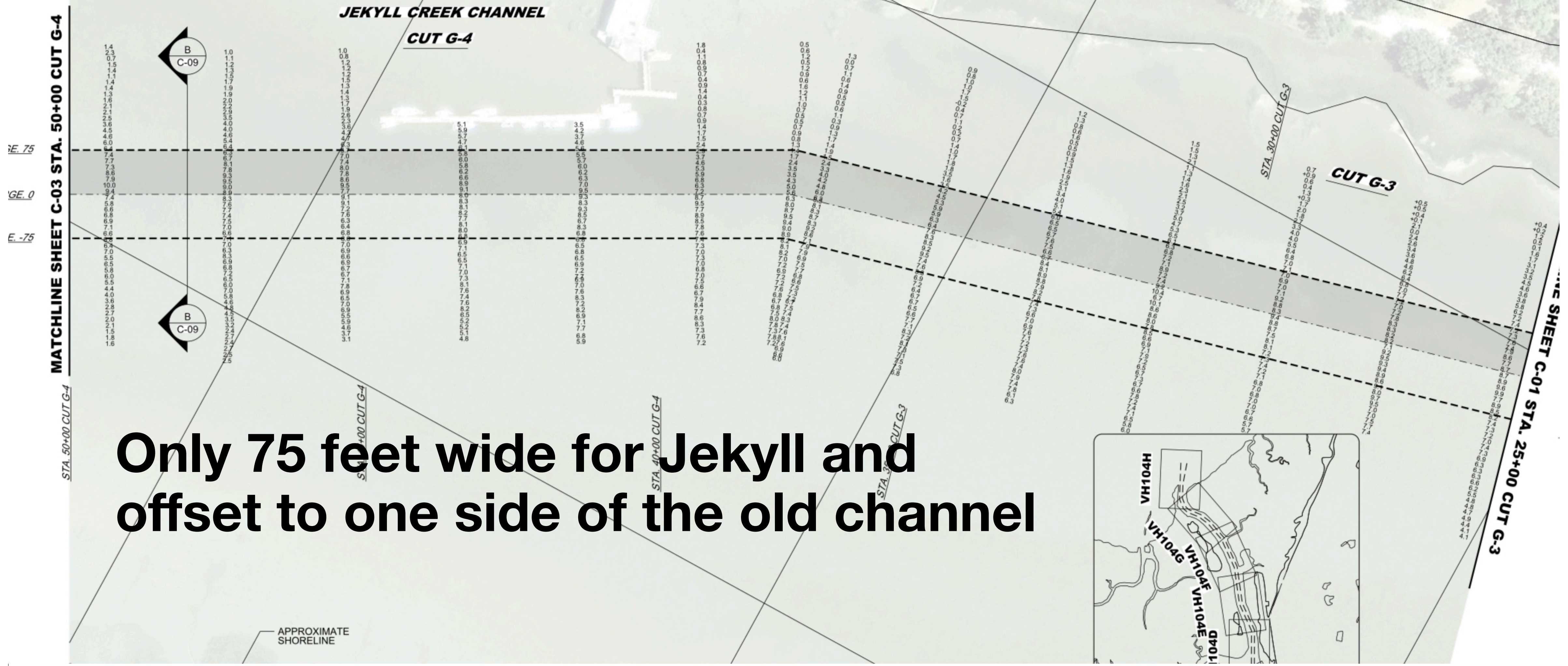
Calculated Values - based on Degrees Lat Long to seven decimal places.

Position Type	State Plane - Ohio South
Degrees Lat Long	39.7974546°, -084.1325903°
Degrees Minutes	39°47.84728', -084°07.95542'
Degrees Minutes Seconds	39°47'50.8367", -084°07'57.3252"

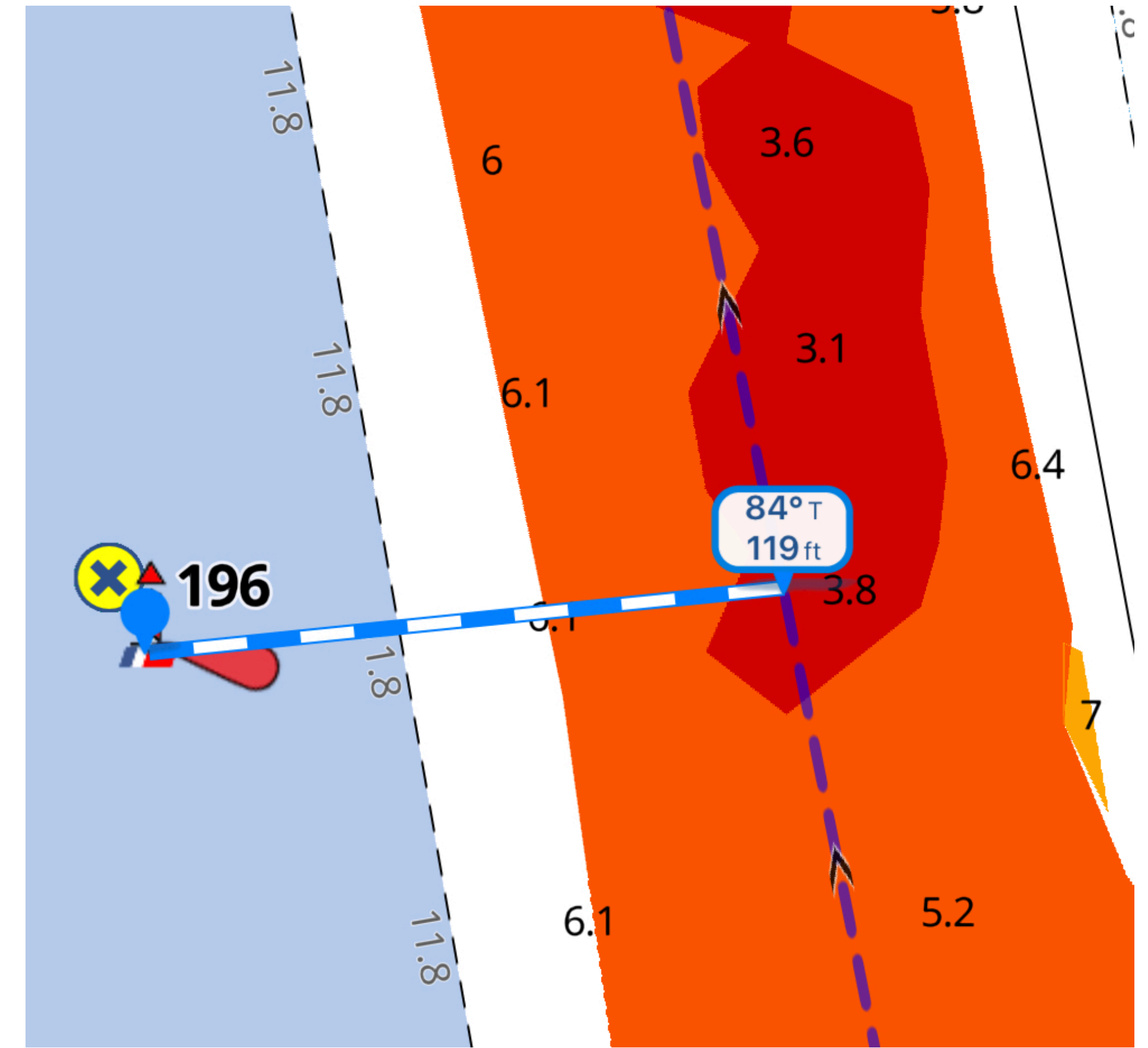
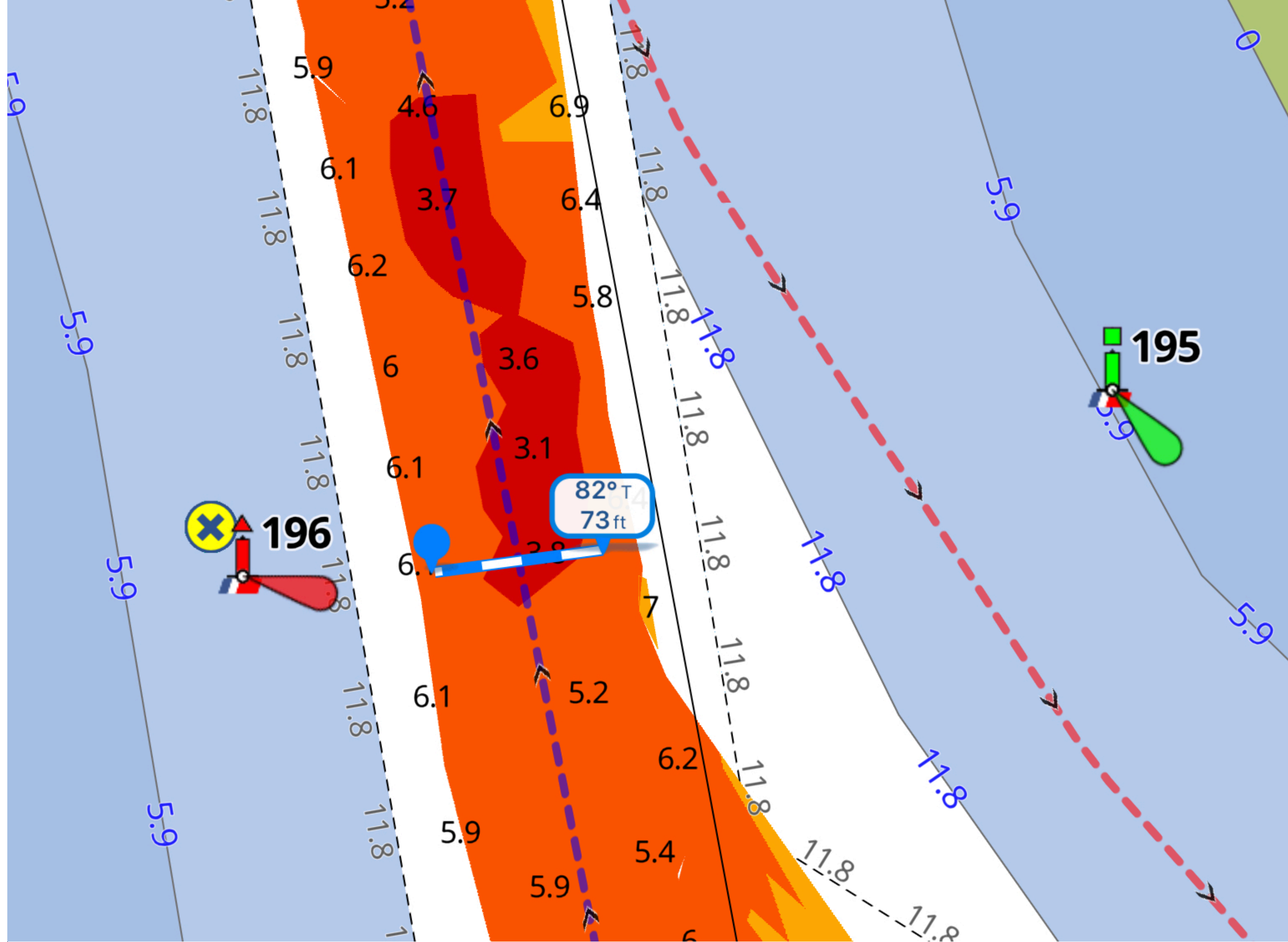
- **This on line tool is used to convert State Plane coordinates to Lat/Long.**
- **The dredging plans can be found at SAM.gov but it's not easy**
- **You must know the search terms**
- **You can do all this yourself if you want**

10-FOOT REQUIRED DEPTH
PLUS 2-FOOT ALLOWABLE OVERDEPTH

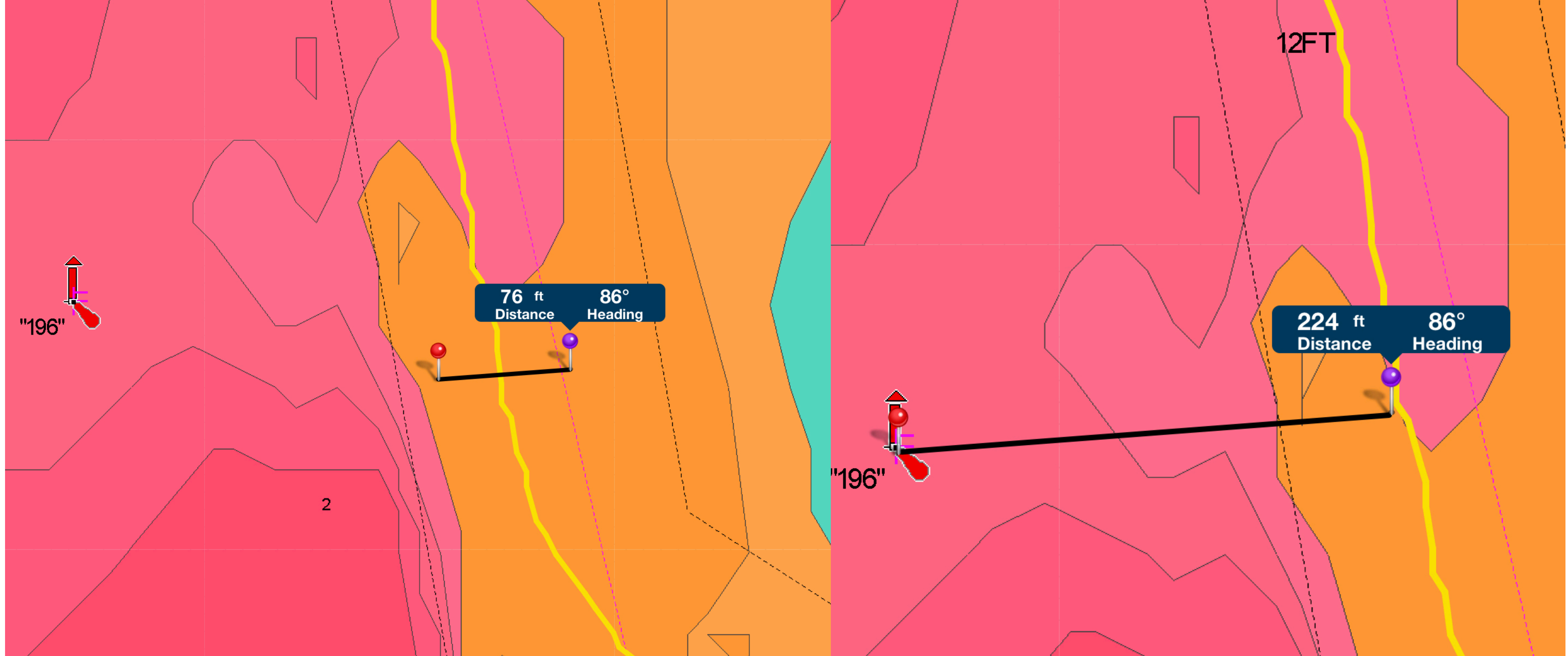
JEKYLL CREEK CHANNEL
CUT G-4



Only 75 feet wide for Jekyll and offset to one side of the old channel



- **The approach to Little Mud River. The blue dotted line is the Bob423 track down the centerline of the dredged channel, 75 ft wide.**
- **The red dotted line is the best water before dredging**



- **The Navionics SonarChart is shown for Little Mud River**
- **The yellow line is the centerline of the dredged channel**
- **The distance to R196 is incorrect (too far)**

What's the source data?

- **Other sources are also used such as from tracks sent in by Bob423 Surveyors with calibrated sounders and depth reading tied to their tracks.**
- **Navionics SonarChart is referenced for areas of the ICW that do not change much year to year.**
- **Data from all these sources are then evaluated for how they affect the Bob423 tracks. Adjustments will be made if warranted.**
- **The latest tracks are always available on the download site (to be covered next). Check each day before leaving harbor.**

Bob423 ICW Tracks and Routes

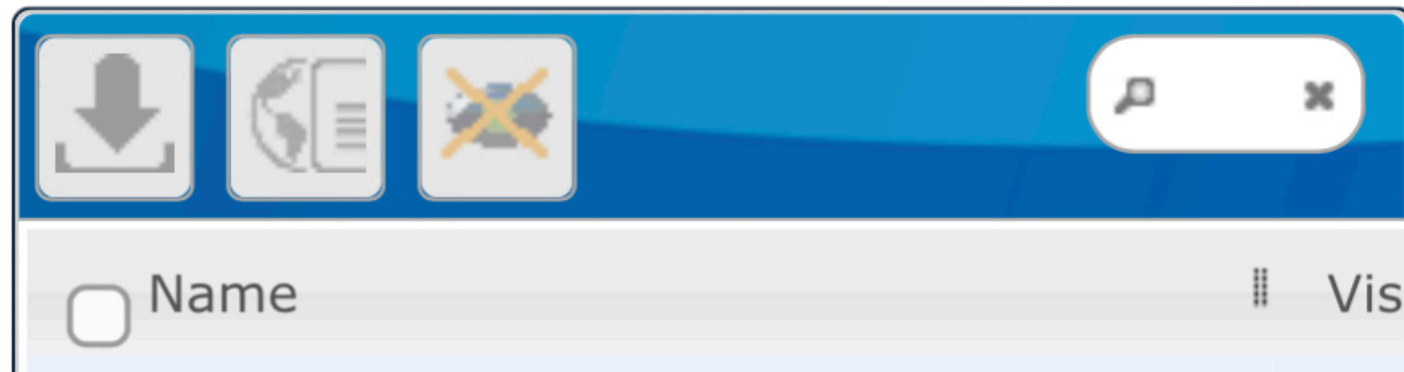
Tracks start with a "T" and have a time stamp. Routes start with a "B". Look at Tracks Descriptions for locations

Home 2021 ICW Cruising Guide Links How to Download Tracks and Routes Waterway Guide Alerts (hazards) List GPX Routes
How to Record and Share Tracks Bob423 Long Tracks Track Splitter Videos Wine Burgees Spiral Bound Guide

Monday, August 13, 2018

GEC Account

Welcome bob4



How to download?

- The starting point is the download site at
- <http://bobicw.blogspot.com/>

Bob423 ICW Tracks and Routes

Tracks start with a "T" and have a time stamp. Routes start with a "B". Look at Tracks Descriptions for locations

[Home](#)[2021 ICW Cruising Guide Links](#)[How to Download Tracks and Routes](#)[Waterway Guide Alerts \(hazards\) List](#)[GPX Routes](#)[How to Record and Share Tracks](#)[Bob423 Long Tracks](#)[Track Splitter](#)[Videos](#)[Wine](#)[Burgees](#)[Spiral Bound Guide](#)

How to Download Tracks and Routes

How to Download GPX Tracks and Routes

Click (PC) or tap (iPad) on the link below to play the video on how to download tracks to your iPad. instructions are also provided in text for a wider range of products Aqua Map, Navionics, Garmin Active Captain, and chartplotters. The use of both the Safari and Chrome browsers are covered for GPX file download. There is a video for those interested. The same steps are covered in the detailed text that follows.

[VIDEO ON HOW TO DOWNLOAD TRACKS for Apple Devices](#)

Text on How to Download Tracks and Routes (PDF File available for download)

When you're going down the Atlantic ICW, it's a great help to have a dotted line (a Bob423 Track) to follow along the ICW in finding the deepest water and avoiding shallow areas along the way such as Little Mud River, Lockwoods Folly, Ashepoo-Coosaw Cutoff, Watts Cut, and many others. The deep-water path changes from season to season through these areas and some resources are available, namely Bob423 Tracks and Routes, which are available for download for free at <http://bob423.blogspot.com/>. Be sure to join the only Facebook page devoted exclusively to the Atlantic ICW at

Bob423 ICW Tracks and Routes

Tracks start with a "T" and have a time stamp. Routes start with a "B". Look at Tracks Descriptions for locations

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Bob423 Long Tracks

UPDATED on 4/23/2022 with many minor changes to Titusville to Savannah track to include more depth through Ponce de Leon, Ft Matanzas, Hell Gate, and many other changes.

I've also included a package of 18 side trips that start adjacent to the blue-dotted Bob423 ICW track and show the way to marinas and anchorages that I use. The side trip tracks are in red to avoid confusion with the blue Bob423 ICW Track. All GPX files have been tested to load properly and display with Aqua Map and Navionics. Garmin Active Captain will load the files but won't display the entire length sometimes, use Track Splitter to cut them into smaller segments for Garmin products.

NOTE: I have not yet achieved infallibility (although it is one of my goals). The tracks are as good as I can make them but the ICW is always changing due to shoaling, dredging, barges pushing mud around (into channels), high winds pushing water out, and a number of other factors. As always, the captain takes full and sole responsibility for his vessel in using these files. Always use the latest file for a day's run.

Before following Bob 423 tracks, please see link: Bob423.com/fb/Rules%20of%20Road.pdf

1. A package of four GPX files for the ICW covering from Norfolk, VA to Ft Lauderdale, FL. ~~This file is currently not available due to updates to individual Long~~

2 - Norfolk, VA to Southport, NC updated to include all October Inlet, New River approach at G65A, New River, Topsail inlet (seve
[B423 Norfolk to Southport 032722](#)

3 - Southport, NC to Savannah, GA - Lockwoods Folly dredging
[B423 Southport to Savannah 041322](#)

4 - Savannah, GA to Titusville, FL updated to use the newly dre
Fernandina for 9.5 MLLW as well as many other changes to avoid
[B423 Savannah to Titusville 042522](#)

5 - Titusville, FL to Ft Lauderdale, FL
[B423 Titusville to Ft Lauderdale 032722](#)

6 - All 18 side trips for safe passage into Homer Smith Marina in
Anchorage, NC, Pungo River Anchorage, NC, Ft Matanzas Ancho
ICW Track.

[Bob423 All Side Tracks](#)

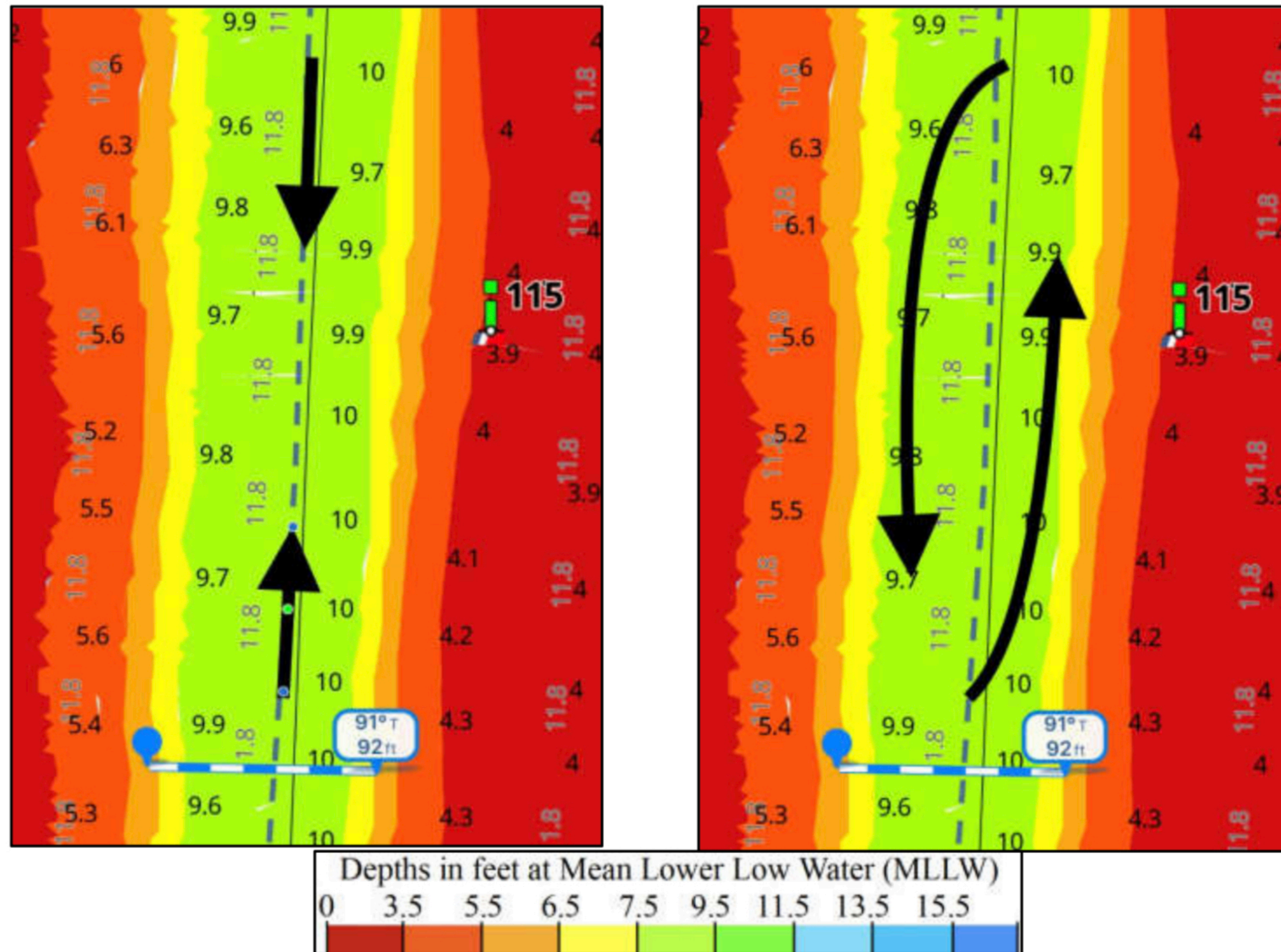
- **Shown are the four Atlantic ICW GPX files for tracks from Norfolk to Ft Lauderdale**
- **The last six numbers is the time stamp**
- **032722 equals 03/27/2022**
- **Always use the latest track**
- **There are side trips in red which load as a package**

NOTE: I have not yet achieved infallibility (although it is one of my goals).

The tracks are as good as I can make them but the ICW is always changing due to shoaling, dredging, barges pushing mud around (into channels), high winds pushing water out, and a number of other factors.

As always, the captain takes full and sole responsibility for his vessel in using these files. Always use the latest file for a day's run.

Important: both boats are to alter course to starboard as far as is safe and practicable, per the Coast Guard Navigation Rules, and pass each other port to port.

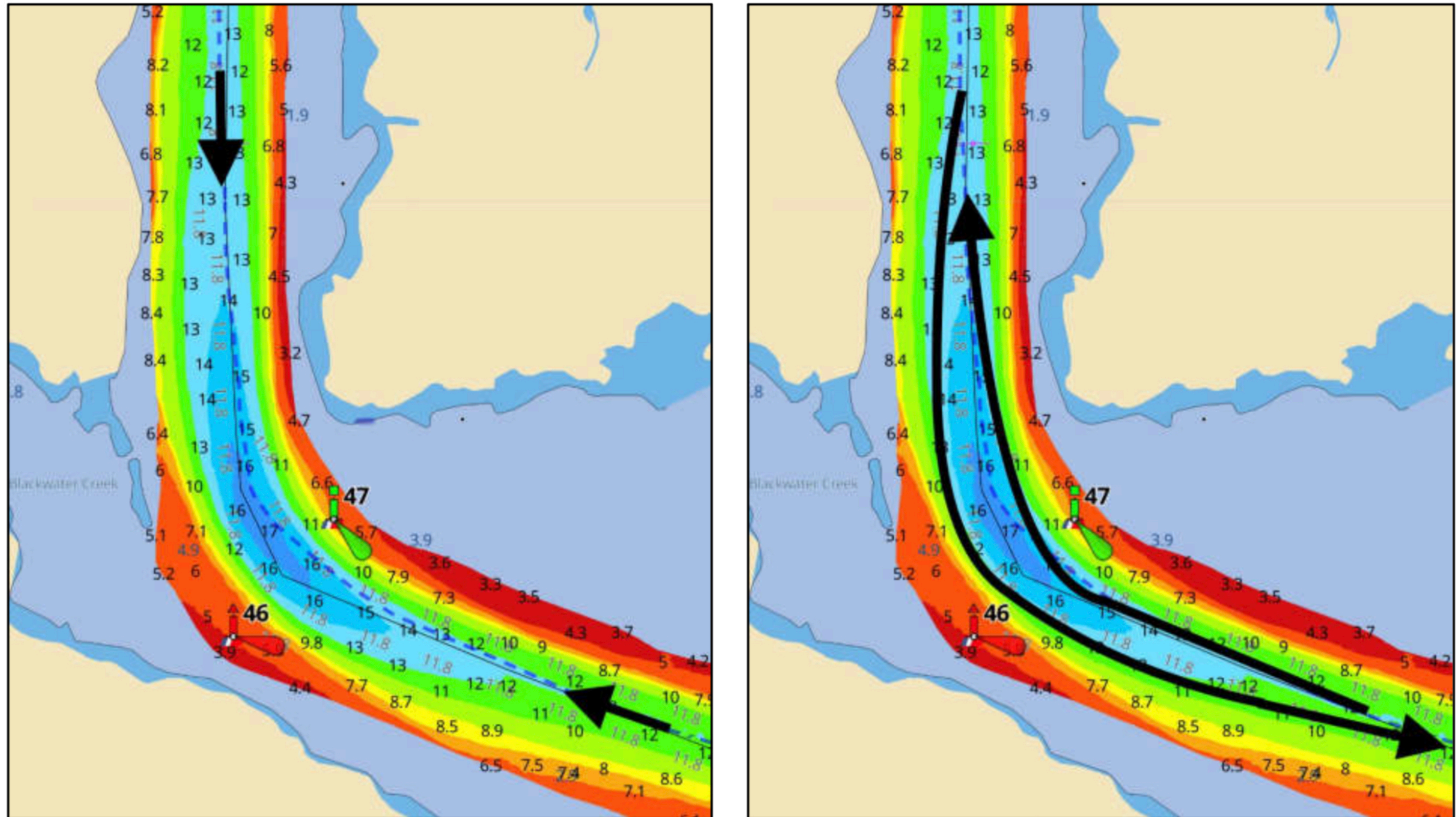


With the USACE survey displayed in Aqua Map, you can see how far it's safe for you to alter course to starboard. For a depth of 7.5 MLLW, the relatively narrow channel here is still 92 feet wide. Even with a 20 ft beam for each boat, that allows a passing distance of 70 feet.

Even in the notoriously narrow section known as the "Rock Pile" at MM 351.5 at Myrtle Beach in South Carolina, there is still a 90-foot wide channel. It's enough for two boats to pass safely.

Whether you're following the Magenta Line, a Bob423 track, or any other track or route – follow the rules of the road for passing in head-on situations.

Let's look at an example taken from another area north of Coinjock, Virginia at MM 30.3.



Depths in feet at Mean Lower Low Water (MLLW)
0 3.5 5.5 6.5 7.5 9.5 11.5 13.5 15.5

Bob423 ICW Tracks and Routes

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Track Splitter



Garmin chartplotters typically have a maximum trackpoint count of 5000. Garmin advertises up to a 50,000 trackpoint storage but that applies only to the active track, not imported tracks that have the 5000 point limit. Here's a program for use to easily split tracks that seem to work well with B423 Long Tracks in getting under the 5000 trackpoint limit. You do not need to use this program for loading Long Tracks into Aqua Map or Navionics apps, only for loading into Garmin chartplotters. Once the split tracks are un-zipped, they can be loaded to the Garmin Active Captain app too, and transferred to a chartplotter via the WiFi interface on chartplotters with that feature.

I spent the morning looking at ways to split long tracks into smaller segments that will load into Garmin Chartplotters. I've settled on the one at this site.

<https://simple-gpx.herokuapp.com/>

- **Aqua Map and Navionics will load all tracks but some chartplotters (notably Garmin) place limits on size of imported tracks.**
- **I provided a link to an app that will split a long track into smaller segments digestible by Garmin.**



- **If this boat can navigate the ICW, then you certainly can!**
- **However, if you happen to find yourself near low tide and approaching a shallow spot, the Bob423 track can help.**

**In the end, we only regret the chances we
didn't take,**

The relationships we were afraid to have,

The decisions we waited too long to make

Lewis Carroll

2021 ICW Cruising Guide

Bob 423

Available now on Amazon.com