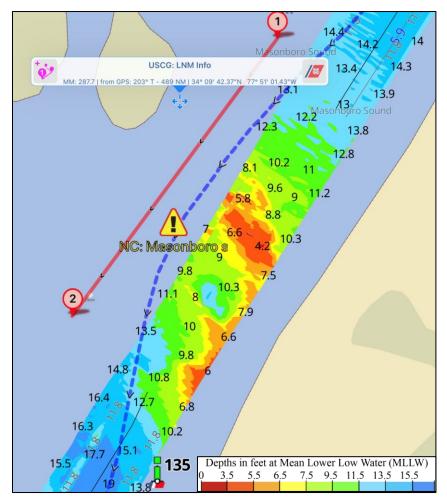
Proposal for Wider Surveys in Selected Areas of the Atlantic ICW (AIWA)

I'm known as Bob423 along the Atlantic ICW (AIWA) and I have a 17,000-member Facebook group (<u>ICW Cruising Guide</u>) focused just on the AIWA. The USACE surveys are outstanding in keeping boaters out of shallow waters. All USACE surveys are automatically downloaded into <u>Aqua Map</u>, an app for both <u>Apple</u> and <u>Android</u> devices. Thanks for all your efforts!

As we in the group watch shoals develop from daily feedback from boaters in our forum, I monitor the posts and note where problems arise. I've compiled four GPX tracks that follow the deepest water from Norfolk to Ft Lauderdale known as the <u>Bob423 Tracks</u> used by hundreds of boaters. In shallow areas, the tracks seldom follow the middle of the channel and in some cases go outside the charted channel. In several areas, the Bob423 Tracks have become the new Recommended Track shown on NOAA charts, most notably at Dawho River where the ICW channel was officially changed to follow the Bob423 Track which boaters have used successfully for several years before the channel change. The new channel saves several millions of dollars in dredging no longer needed.

To better find the deepest water path, selected areas of the ICW are shown in this document that would benefit from surveys covering small areas outside the charted channel. Each area is identified by a short GPX route marking where the additional survey would be most helpful. The GPX routes are ordered by mile marker and a small screenshot from Aqua Map is included to pinpoint the location of each GPX route segment (one short route segment per wider area to be surveyed).

Each survey request will be shown separately but before that, let's look at a couple of examples.



The 4/6/2022 USACE survey near Masonboro, NC at mile marker 288 is shown as it appears in Aqua Map.

You'll notice there's a 4.2 MLLW spot in the middle of the shallow area spanning the width of the channel. The blue dotted line is the Bob423 track downloaded by hundreds of boaters for navigation on the ICW (aka AIWA). It was found by trial and error and provides an 8.7 MLLW path around the shoal as of the spring of 2022.

The red line is the suggested survey area that would help boaters find the best path around the shoal. The request would be for USACE to survey the area between the old survey and the red line.

The red line is a GPX route, (USACE MM288 Masonboro by G135.gpx), available for download.

Most of the additional survey areas in this document are of this type, one-sided. Next comes an example of a request for a two-sided expanded survey.

	152 2 8 4 7.9
USCG: LNM Info	8.6/9.2/
MM: 292.8 from GPS: 203° T - 494 NM 34° 05	5' 30.72"N 77° 52' 49.42"W
1- 7. 7.1 NC: Myrtle Grove 61	$7.4 9 \infty \\8.1 7.4 \\7.8 7.2 1$

The 2/4/2022 USACE survey is shown as it appears in Aqua Map for an area near Myrtle Grove. NC at mile marker 293.

The shoal extends across the width of the channel. Perhaps there may be deeper water on either side of the channel. A survey covering the area between the two red lines would aid in the search.

The red lines are two GPX routes: - USACE MM293 Myrtle Grove 1 - USACE MM293 Myrtle Grove 2

Each chart has an overlay in white giving the mile marker and Lat/Long of the chart. If you have access to the Aqua Map app, then you can enter the mile marker and the app will jump to the location. Alternatively, just load the GPX routes and look through the route

list to find the one you're interested in. In Aqua Map, all routes will be visible at the same time. In Navionics and perhaps other apps, you may only see the one active route.

I've examined the ICW from Norfolk to Ft Lauderdale and compiled a list of areas that would benefit from additional surveys. Each area has either a red line (GPX route) on one side or the other or two red lines (two GPX routes like the ones in the photo above). Each red line is a GPX route that can be downloaded into any navigational program or app. Aqua Map works best for that since it also displays the USACE surveys but any program will do.

The GPX routes have been packaged into four groups, one for each of the USACE districts below. Norfolk is not included since there are no requested additional surveys in the district:

- <u>Wilmington</u>: 9 requests totaling 1.2 NM (0.4% more)
- <u>Charleston</u> 19 requests totaling 18.1 NM (8.2% more)
- Savannah 15 requests totaling 18.8 NM (13.3% more)
- Jacksonville 19 requests totaling 11.1 NM (2.0% more)

Link to <u>Wilmington.GPX</u> routes Link to <u>Charleston.GPX</u> routes Link to <u>Savannah.GPX</u> routes Link to <u>Jacksonville.GPX</u> routes

The document that follows is organized in the same way. Each USACE district has a chapter. Each request for additional survey areas is shown with a small chart and verbiage explaining the need. I understand resources are limited but I wanted to present the case that a small additional survey time may be offset by increased boater safety in shallow areas.

The GPX links lead to my download page for GPX tracks and routes used by hundreds of boaters. I only use HTTPS to ensure the security of the transaction. All tracks and routes are uploaded and checked by me before going active. The download page is unique to USACE but only stores the links to the GPX files at <u>USACE Survey Requests</u>.

The GPX routes themselves are stored on my server with <u>Plothost</u>, also with HTTPS security.

A list of the requested surveys defined by tracks is given below by the USACE district.

	Length of	USACE MM653 North L. Mud by R190	0.2
Name of GPX Route	Route (NM)	USACE MM654 L. Mud River 1	2.6
Wilmington USACE		USACE MM654 L. Mud River 2	2.6
USACE MM209 Peletier Creek	0.2	USACE MM659 Altamaha Sound by G211	0.8
USACE MM244 New River R66B	0.2	USACE MM662 Buttermilk Sound by	2.4
	0.1	R218 1	2.1
USACE MM273 Topsail by G105	0.2	USACE MM662 Buttermilk Sound by R218 2	2.1
USACE MM285 Masonboro by G129	0.1	USACE MM681 Jekyll Creek North 1	0.2
USACE MM288 Masonboro by G135		USACE MM681 Jekyll Creek North 2	0.2
USACE MM288 Masonboro by G137	0.2 0.1	USACE MM683 Jekyll Creek 1	2.3
USACE MM293 Myrtle Grove 1	0.1	USACE MM683 Jekyll Creek 2	2.3
USACE MM293 Myrtle Grove 2		USACE MM689 St Andrews Sound by	2.5
USACE MM297 Snows Cut by R162A	0.1	R321	0.5
Total	1.2	USACE MM689 St Andrews Sound by R32	0.5
Charleston USACE	0.2	2	0.5
USACE MM403 Georgetown 1	0.3	_ Total	18.8
USACE MM403 Georgetown 2	0.3	Jacksonville USACE	10.0
USACE MM411 Esterville Near R2	0.2	USACE MM719 Fernandina 1	2.3
USACE MM431 McClellanville 1	2.5	USACE MM719 Fernandina 2	2.3
USACE MM431 McClellanville 2	2.5	USACE MM721 Kingsley Creek	0.1
USACE MM439 Graham Creek by R64	0.1	USACE MM731 Sawpit Creek	0.4
USACE MM4d41 S. Graham Creek	1.0	USACE MM735 Sisters Creek 1	0.5
USACE MM448 Price Creek by R86	0.3	USACE MM735 Sisters Creek 2	0.6
USACE MM454 Dewees Creek 1	0.1	USACE MM744 Pablo Creek by G19	0.2
USACE MM454 Dewees Creek 2	0.1	USACE MM783 Matanzas River by R26	0.2
USACE MM460 Isle of Palms 1	1.5	USACE MM783 Matanzas River by R28.	0.5
USACE MM460 Isle of Palms 2	1.5	USACE MM792 Ft Matanzas 1	0.7
USACE MM480 Johns Is by R40	0.2	USACE MM792 Ft Matanzas 2	0.7
USACE MM501 McKinley Bridge	0.2	USACE MM795 Matanzas River 1	0.1
USACE MM503 Watts 1	2.2	USACE MM795 Matanzas River 2	0.1
USACE MM503 Watts 2	2.2	USACE MM838 Halifax River by G69	0.1
USACE MM511 Fenwick Cut	0.1	USACE MM840 Halifax River by R2	0.4
USACE MM516 Ashepoo 1	1.4	USACE MM966 Ft Pierce by G17	0.2
USACE MM516 Ashepoo 2	1.4	USACE MM966 Ft Pierce by R188A	0.1
Total	18.1	USACE MM985 Indian River by G229	0.6
Savannah USACE		USACE MMM1034 ICW by Boynton Inlet	0.0
USACE MM601 Hell Gate 1	1.1	Total	0.3 11.1
USACE MM601 Hell Gate 2	1.1	iotai	11.1
USACE MM653 North L. Mud by R188.	0.2		

If there are any questions or comments, I am available seven days a week via email at <u>423sail@gmail.com</u> or by telephone at 914-474-2547

My other activities include:

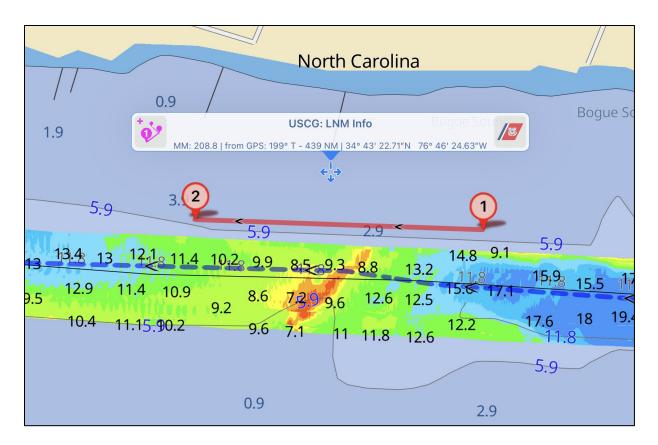
- Waterway Guide Contributing Editor

- Owner of the ICW Cruising Guide Facebook page with 17,000 members

- Publisher of the 2022 ICW Cruising Guide in paperback, Kindle, and on Waterway Guide digital app (8th edition)

- Provider of Bob423 tracks from Norfolk to Ft Lauderdale used by 100's of boaters (free for download).

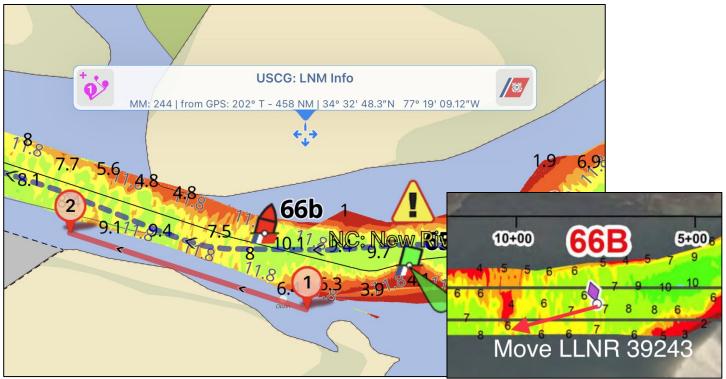
Now we will move on to the individual survey requests on the following pages.

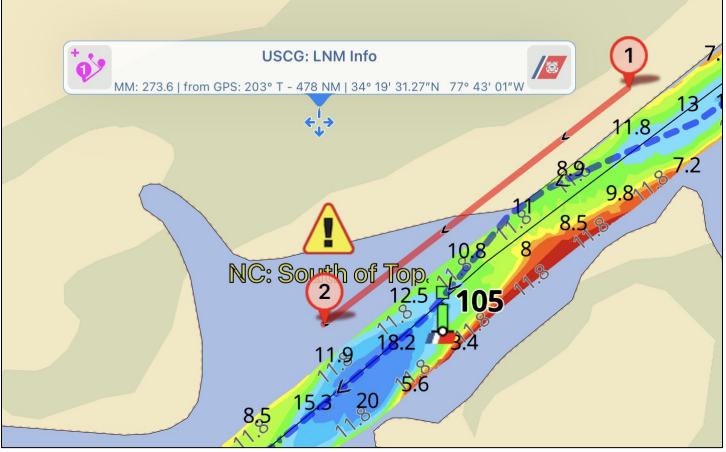


Wilmington USACE

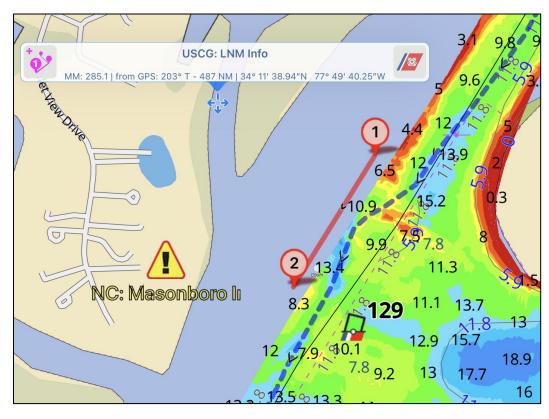
MM209 Peletier Creek. The shoal is across the width of the channel. There's an indication from boaters that the water is deeper towards the red line. A survey would settle the question.

MM244 just north of New River inlet. A 4 MLLW shoal (not shown on this chart yet) comes from the north side of the channel. There may be additional depth farther south. A survey to the red line would show that. R66B was moved as shown at right but the 4 MLLW shoal may grow, a survey would help.

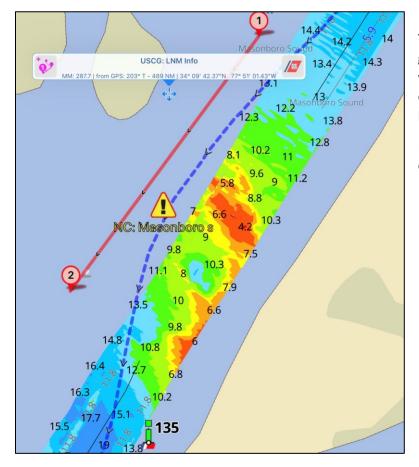




MM273 Topsail by G105 requires favoring the red side of the channel (the side of the channel with the red buoys). As the shoal grows, it would be helpful to know how far to the green side is safe for deep water. A survey to the red line would help.



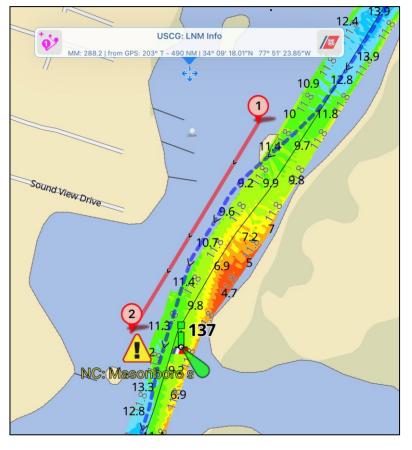
MM285 Masonboro by G129 The shoal continues to grow. A survey to show a safe way around would be helpful.



MM288 Masonboro by G135.

This was the example given earlier. Boats have been going around this shoal for years but in the last two years, it has grown to cover the entire width of the channel. Knowing how much leeway there is would help.

Note the 4.2 MLLW spot in the middle of the channel.



M288 Masonboro by G137. The shoal is not as bad here but it's growing larger.



MM293 Myrtle Grove.

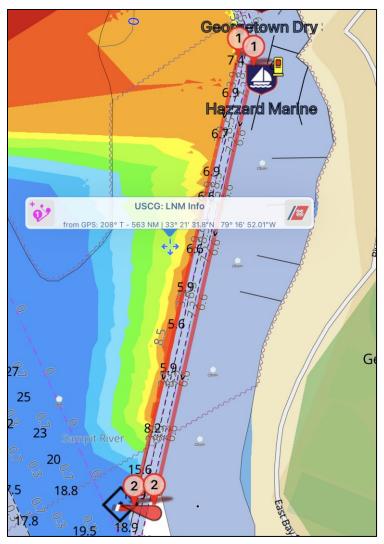
There is a shoal across the width of the channel. There may be deeper water on either side. A survey on both sides of the channel would help.



MM297 Snows Cut by R162A

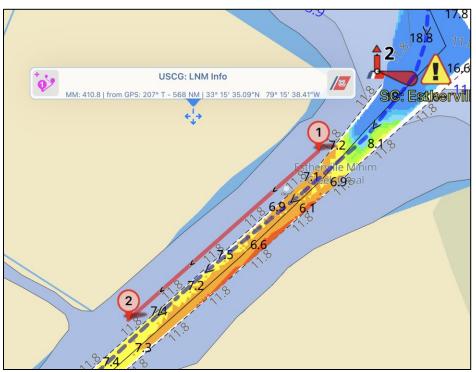
The last survey did not cover south of R162A. The boater does not know how far south he can go.

Charleston USACE



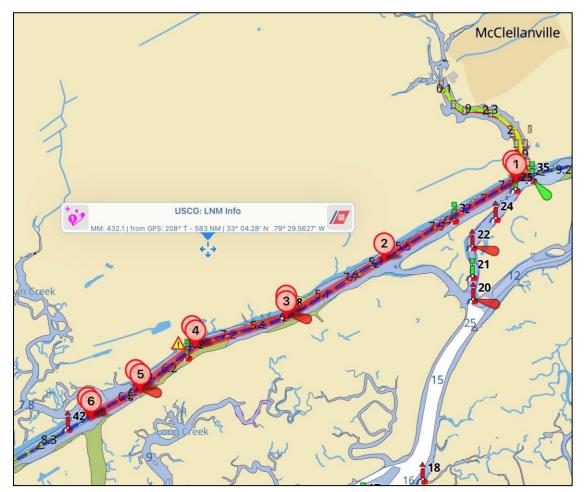
MM403 Georgetown, SC

The approach to Georgetown is very narrow and has shoaled to 6.3 MLLW. The chart shows two red lines. A survey is requested to fill in the area between the two lines so the deepest water track can be found.



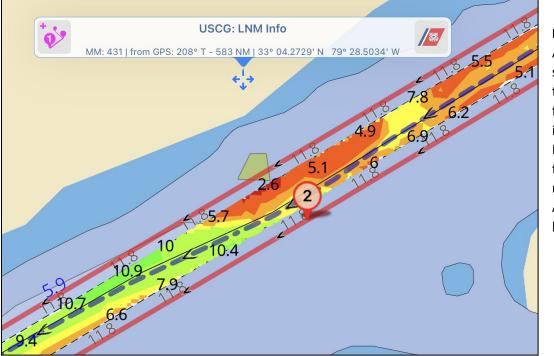
MM411 Esterville near R2

The area was dredged recently but it has started to shoal again. There is more water on the red side (northern shore) but a survey there would help locate it better.



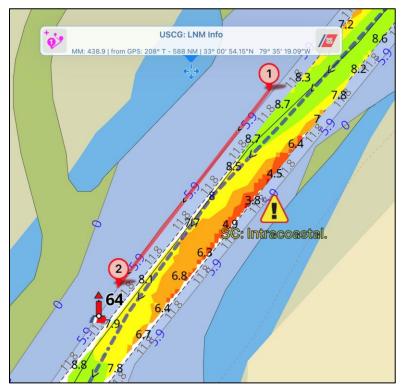
MM431 McClellanville

The area was dredged but has shoaled again. Another survey with an added area on both sides of the channel would help in dodging shoaling.



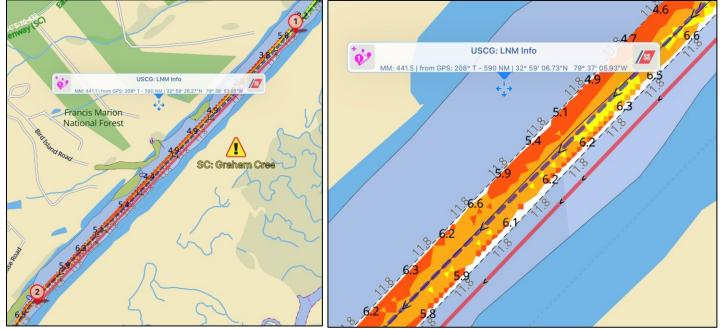
MM431 McClellanville

A zoomed-in view of the same chart as above shows the curving path required for best water. This section is right by Town Creek off Five Fathom Creek. The flow of water is pushing mud into the channel here. An additional survey area here would help.



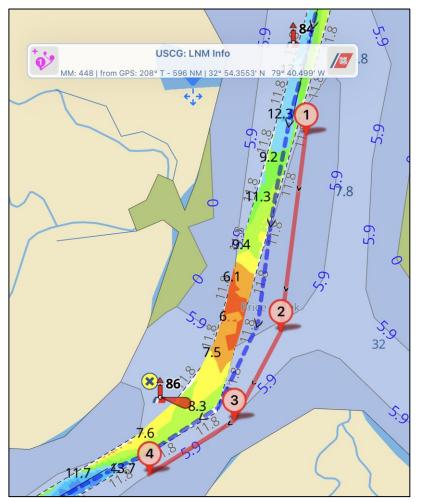
MM439 Graham Creek

A shoal is coming in from one side. A survey extension would help as it continues to intrude into the channel.



MM 441 South Graham Creek.

This is a long section of shallow water with the deeper water being on the southeast side (green side of the channel). An extension of a survey as shown may show if there's deeper water outside the channel through this area.



MM448 Price Creek by R86

Boaters have been avoiding the shoal in the middle of the channel for years by going outside the channel to the east as shown by the blue dotted line (Bob423 track).

An extension of a survey to the red line would help locate the deeper water to avoid a growing shoal.



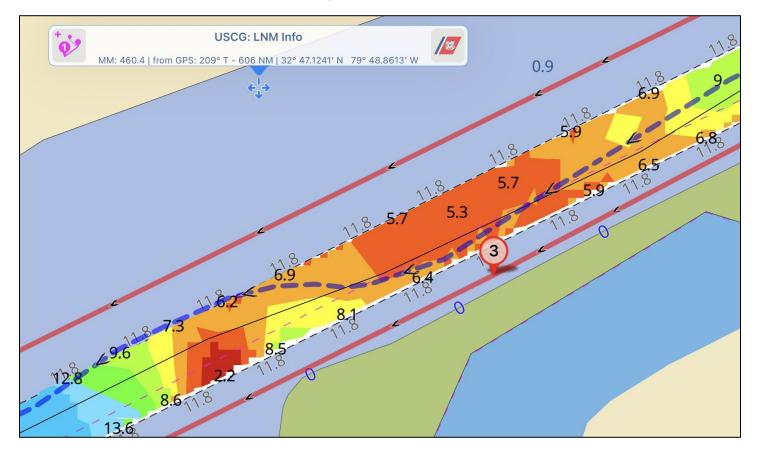
MM454 Dewees Creek

A shoal is developing at the northern entrance to Dewees Creek from the ICW. Additional surveying on both sides of the channel would help locate the best track.



MM460 Isle of Palms

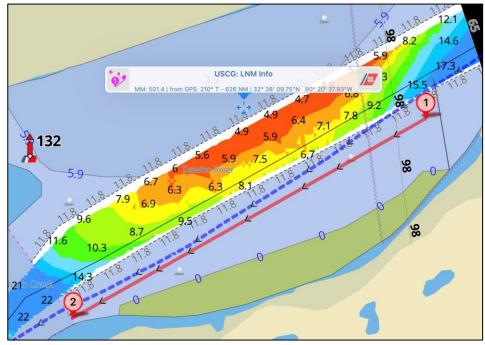
This area was dredged a couple of years ago but it's shoaling again. Additional survey areas on both sides of the existing survey would help boaters find a passage. The chart below is a zoomed-in view of a section south of Little Goat Island that is a growing shoal showing the serpentine path required to find the deepest water. There appears to be deeper water outside the channel on both sides but a survey is needed to find it.





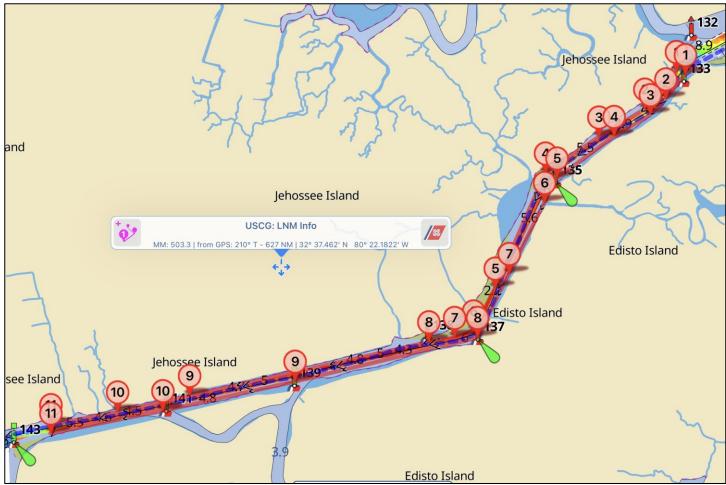
MM480 Johns Island by R40

The deepest water passage has always been south of the charted area. An extended survey to the red line would help.



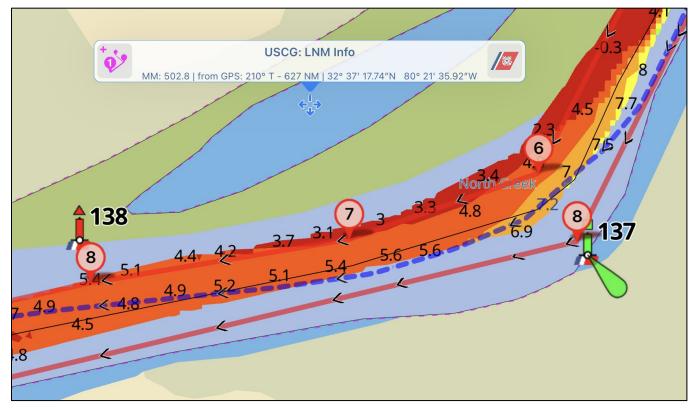
MM501 McKinley Washington Bridge

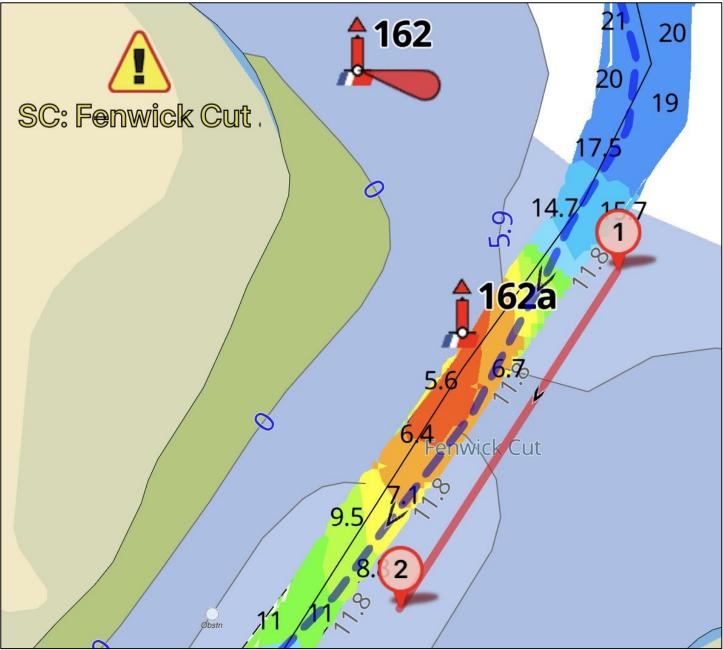
The deepest water path has always been south of the charted channel here too. A survey to the red line would help.



MM503 Watts Cut

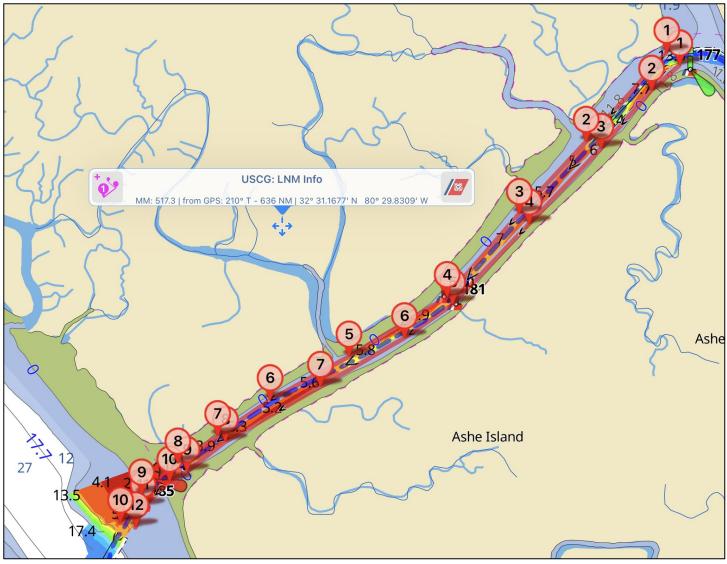
The path through Watts Cut varies from side to side. A wider survey would help find the deepest water. A zoomed-in view is shown below showing the deepest water path (blue dotted line) that goes outside the latest USACE survey. An extended survey to the red lines would help.





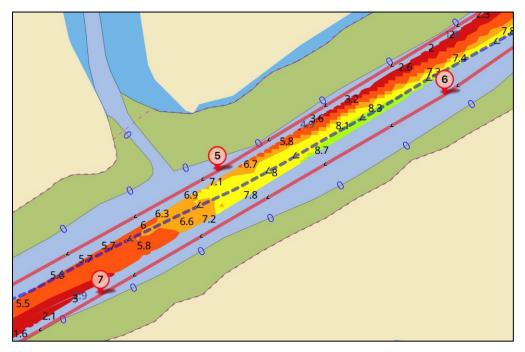
MM511 Fenwick Cut

The deeper water has always been away from R162A. An added area of survey to the red line would help find the deeper water.

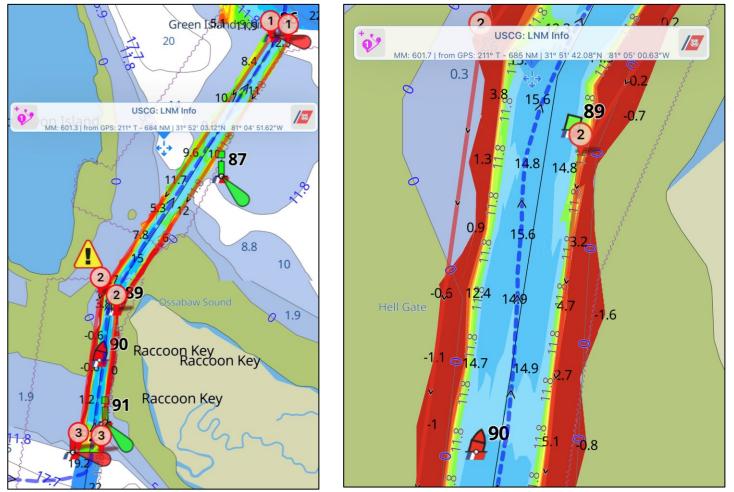


MM516 Ashepoo-Coosaw Cutoff

The path of the deepest water crosses from side to side. Additional survey areas on both sides of the channel would help find a path. A zoomed-in view of a section of the channel is shown below. Note the slalom course for deepest water.



Savannah USACE

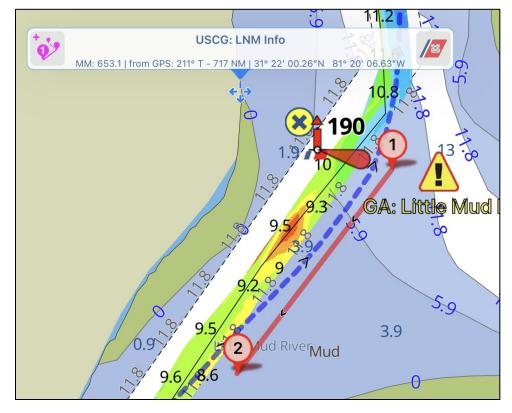


MM601 Hell Gate

Hell Gate needs to be surveyed. The turn by G89 is shoaling in. Notice the careful curve in the blue dotted line. At best, it's good for 7 MLLW in the spring of 2022 but it has shoaled more since then. A shoal is pushing out from G89 and finding how far one can go without running into a shoal on the other side is a trial-and-error affair. A new survey would help a lot. The most recent survey of 10/17/2019 is shown. Perhaps this has already been surveyed but not yet in eHydro since a recent survey was complete but stopped at the northern entrance to Hell Gate at R86.

This is not really a request for a wider survey but rather a request for an updated survey. Once a survey sees red depths (shallow water) on both sides of the channel like at Hell Gate, a wider survey is not warranted but it does need to be updated.



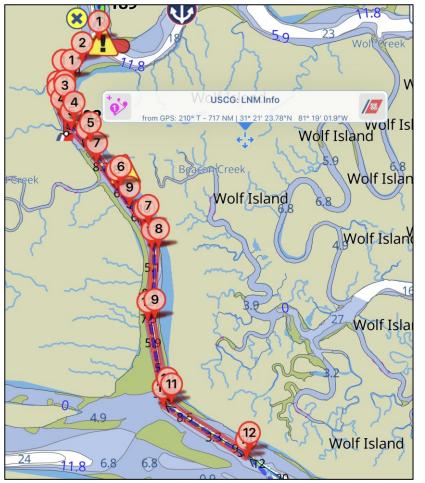


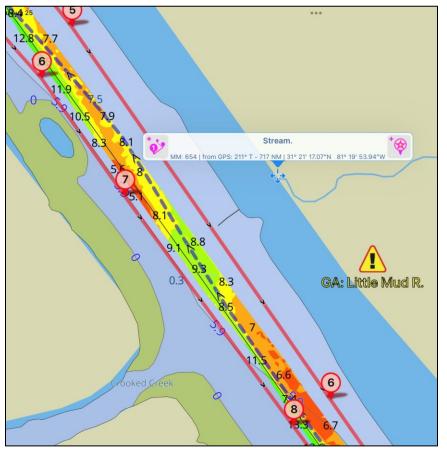
MM653 North Little Mud River by R188

Ever since I've been on the ICW, I've had to go outside the channel to avoid the shallow area in the middle of the channel. It would be nice to have a survey in the area taken by many boaters.

MM653 North Little Mud River by R190

This is another area where going outside the channel is needed to find deeper water. A survey to the red line would help guide boaters.





MM654 Little Mud River

Little Mud River was dredged a few months ago but only south of R194. The rest of Little Mud River was untouched.

A survey on both sides of the channel would help.

MM654 Little Mud River

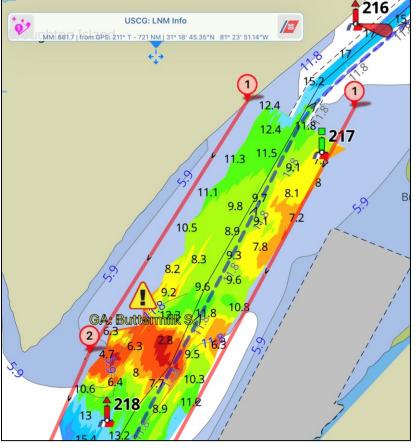
A zoomed-in view is shown of a section that was not dredged. Note how the deepest water path shifts from side to side. Having a survey extended to the two red lines would help find the deeper water.



MM659 Altamaha Sound by G211

Boaters have gone outside the channel here for years to avoid shoaling just south of G211. It would be nice to have a survey to help the boaters along. This area was scheduled to be dredged but when I talked to the dredge operator, he said they ran out of money (heading south from Little Mud River) and stopped dredging near R208.





MM652 Buttermilk Sound by R218

This area was dredged two years ago and is mostly fine except for an area of a creeping shoal by G217. This is not really a request for a wider survey, just an updated survey due to shoaling.

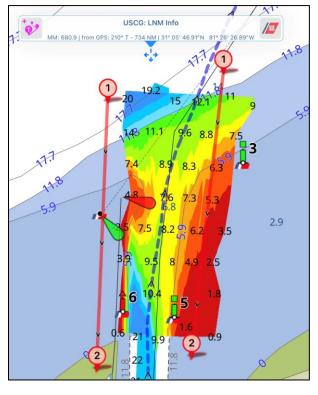
The latest USACE survey in eHydro is before the dredging so the survey shown does not reflect true depths.

A survey is needed here to establish the present state of shoaling.

MM652 Buttermilk Sound by R218

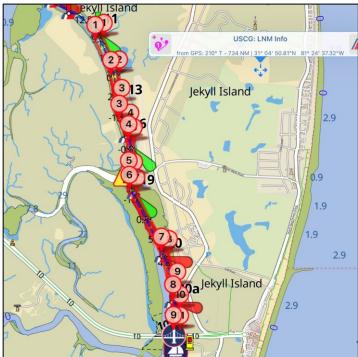
I received a report from a delivery captain of a 70 ft boat of shoaling to the northwest of G217. He reported the bow of his boat lifting as he neared the channel edge opposite G217, indicating shallow water. He backed off, moved over closer to G217, and proceeded without further problems.

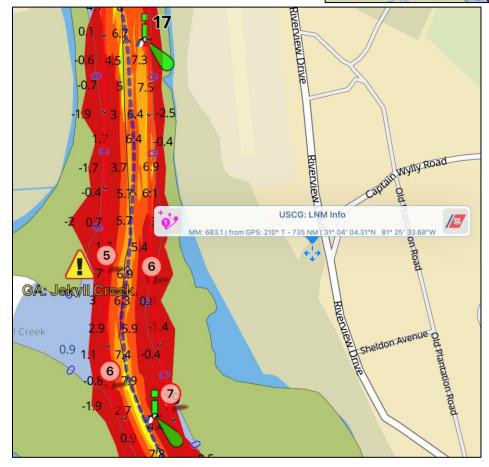
I suspect shoaling is coming in from the northwest into the channel and a survey of this area will provide boaters guidance on how to avoid groundings in this historically shoaling area.



MM681 Jekyll Creek North Entrance

Jekyll Creek was never surveyed after it was dredged several years ago. A new survey is needed due to shoaling at the northern entrance.





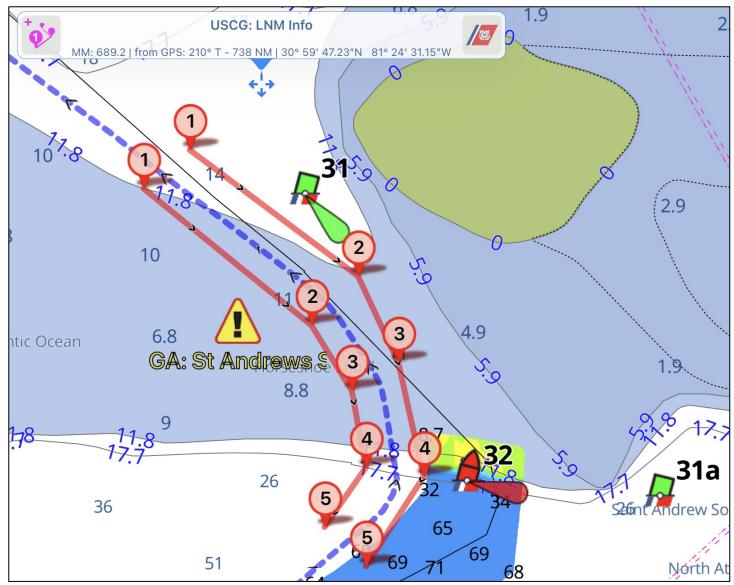
MM683 Jekyll Creek

The chart above is an overview of Jekyll Creek. It was also dredged several years ago but never resurveyed. This is not really a request for a wider survey, just an update.

At left is a zoomed-in image of the Jekyll Creek passage by G7. The blue dotted line is the trial-and-error path found for deepest water.

It would be a big help if the area was resurveyed to keep up with the shoaling that has occurred since the last dredging.

Note the curving path found by trying various ways through the shallows.



MM689 St Andrews Sound by R32

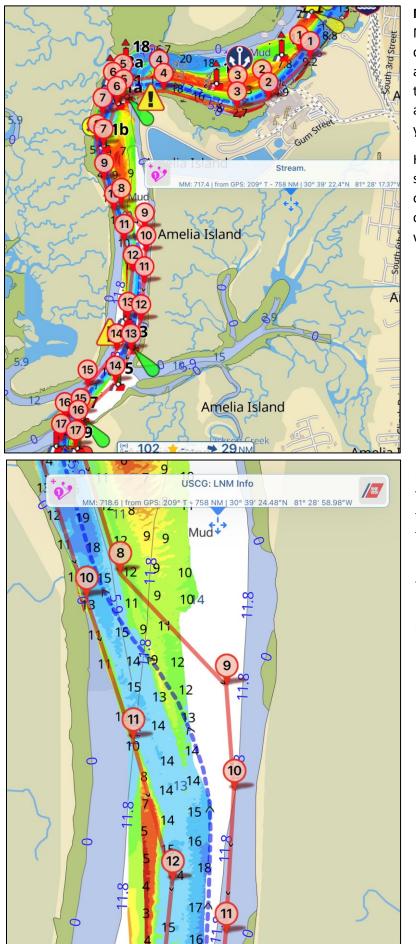
There is no shoaling on the track shown as a blue dotted line (8.7 MLLW for the last 10 years) but it would be helpful to have a short survey through the cut taken by hundreds of boaters. I have no idea why the two ATONs R32 and G31A have not been moved to mark the path taken by the vast majority of boaters and those that follow the Bob423 tracks.

In rough weather, splitting R32 and G31A is dangerous in a strong east wind with the waves breaking over the shallow area to the east. The path shown by the blue dotted line is safer and should be marked by ATONs.

R32 is LLNR 37385

G31A is LLNR 37384

Jacksonville USACE



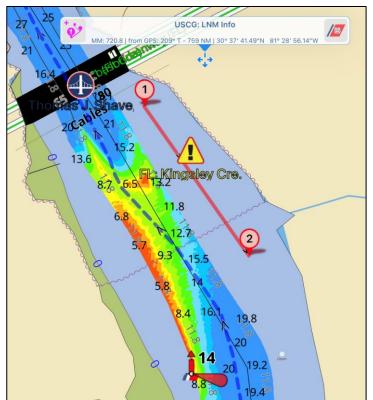
MM719 Fernandina Beach

Many kudos to the USACE for getting Fernandina dredged and the channel relocated several years ago. I participated with Taylor Engineering at the time through Bill Aley. It was a great success. An area that used to be the bane of boaters over the years was tamed.

However, a new survey is needed as shoaling is starting to creep back into the channel so I've outlined two red lines on either side of the dredged channel that would help in finding the deepest water path.

MM719 Fernandina Beach – Detail chart The locations of the present ATONs do not guide the boater in the transition from the west bank to the east bank.

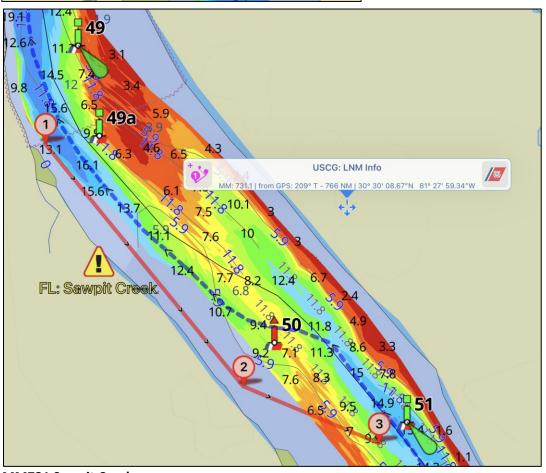
From trial and error, the blue dotted line was found to show the deepest water to 8.6 MLLW. Note that it does not follow the old survey taken on 2/29/2019. There has been shoaling in the area. A new survey would be helpful.



MM721 Kingsley Creek on the ICW

There is a shoal to 5.5 MLLW in the middle of the ICW channel. The blue dotted line (Bob423 track) shows a path around the shoal. However, shoals don't usually shrink and may continue to grow. It appears that there is a better path in the direction of the red line but a survey is needed to confirm.

Note that swerving to avoid the shoal to the west side of the channel is not the best strategy when heading north with opposing traffic – which is hugging the same side. A survey would help to find a better path on the northeast side of the channel and better avoid opposing traffic when going north.



MM731 Sawpit Creek

The natural channel is along the west bank but with a tricky transition to the east bank by R50. The area was recently dredged and was marked for a passage down the middle of the charted channel. As the middle course shoaled, boaters went back to the southwest shore route used before as shown by the blue dotted line (Bob423 Track). It would help find the best water if a survey included the area out to the solid red line.





MM735 Sisters Creek by G73

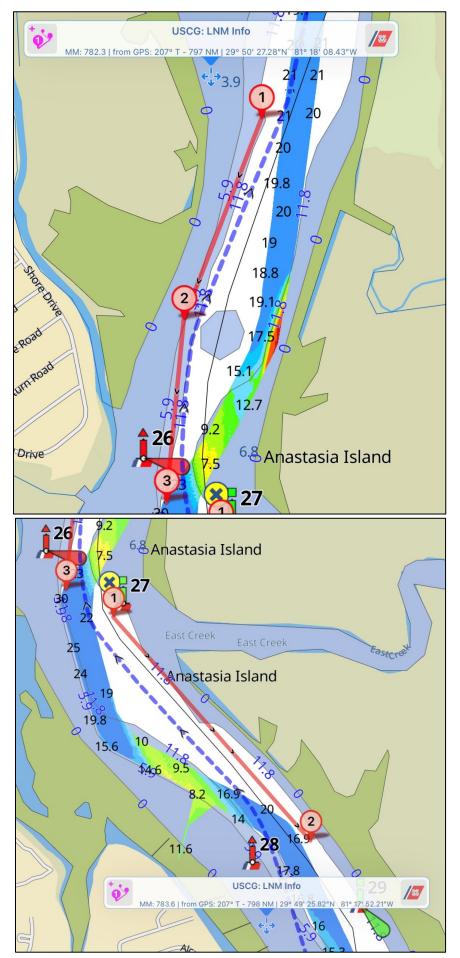
Shoaling has entered the ICW channel from the creeks on the east side of the ICW. ATONs are in place to guide boaters but it would be helpful to have extra survey area as outlined by the solid red lines.

Shoaling is probably increasing and having the extra soundings would aid in finding the best water.

MM744 Pablo Creek by G19

Boaters routinely veer to the west along here to avoid shoaling to 6.8 MLLW in the middle of the channel. The navigation is not helped by the placement of G19. It should be directly to the west of the shoal area to direct boaters away from the shallow water.

In the meantime, it would be helpful to survey the area out to the solid red line so boaters can keep track of the depths they can expect.



MM783 Matanzas River by R26

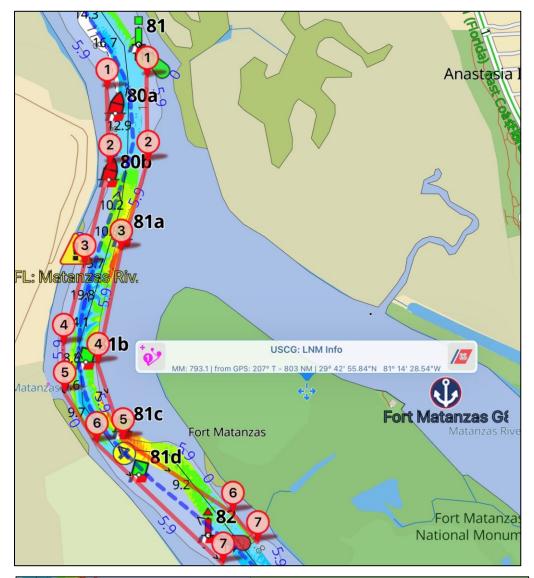
The survey veers to the east through here, into shallow water. A new survey should extend out to the solid red line where the deeper water resides.

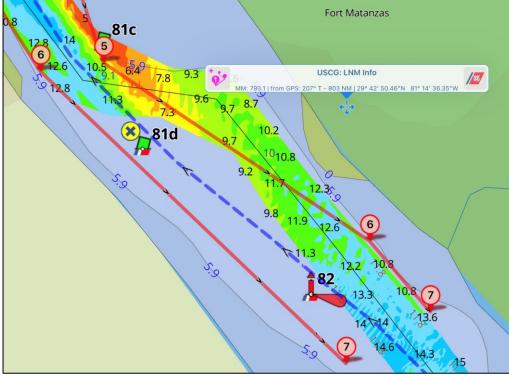
MM783 Matanzas River by R28

The survey veers off to the west through here. A new survey should extend out to the solid red line.

In both of these two examples, the Recommended Track by NOAA does not follow the survey. However, in the above chart, you'll note the Recommended Track goes over a 7.5 MLLW spot but deeper water over 20 MLLW exists nearby to the west.

A new survey as recommended would clarify all this.



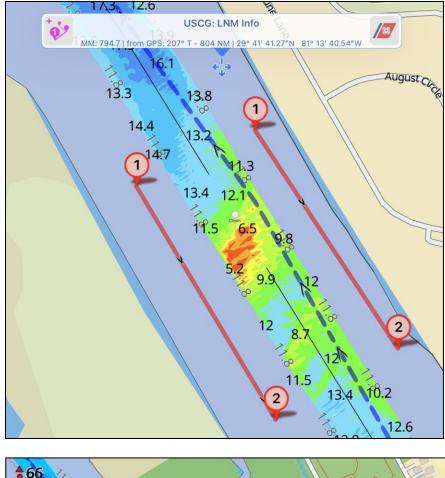


MM792 Ft Matanzas

Shoaling continues after recent dredging. The area needs a new survey, recommended out to the two solid red lines.

MM792 Ft Matanzas, detail chart

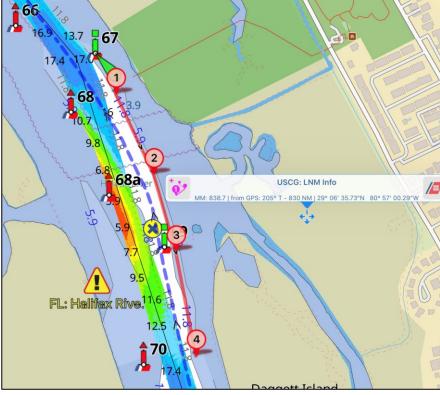
The deepest water path is shown by the blue dotted line (Bob423 track) to 8.0 MLLW as of 4/11/2022. The survey should be extended to the solid red lines so the deepest water path can be shown by the survey instead of trial and error by boaters.



MM795 Matanzas River between G83A and G85

There is s short stretch of shallow water down to 5.2 MLLW in the middle of the channel.

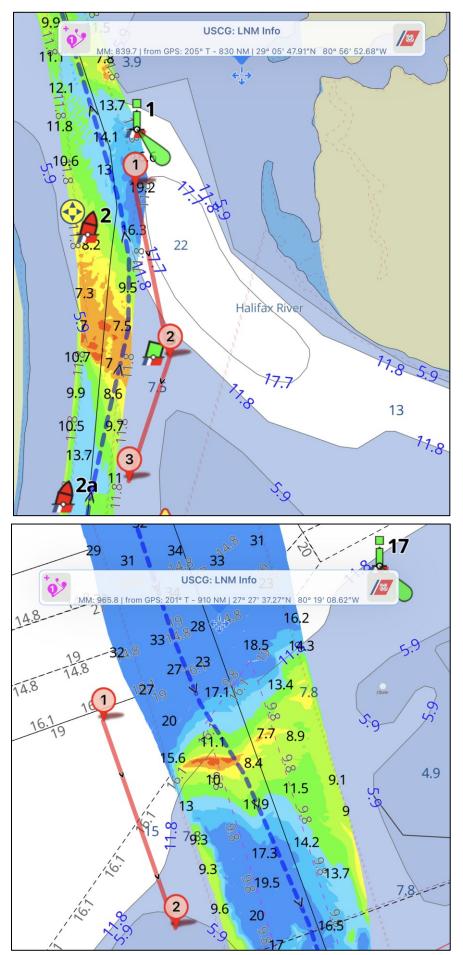
A wider survey is recommended to the two solid red lines so deeper water can be found as the shoal continues to grow.



MM838 Halifax River by G69

The most recent survey of 3/2/2022 does not show depths in the path taken by the majority of boaters as shown by the blue dotted line.

The ATONs do mark the path but one has to be careful to not hug R68A. A survey that includes the area to the solid red line would make the path clearer to all boaters. As the last survey stands now, they must trust that the east side of the channel is deep.

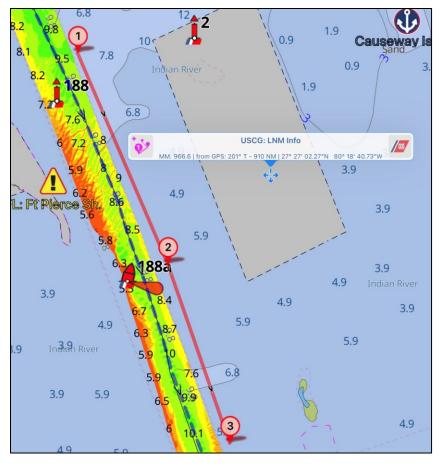


MM840 Halifax River by R2 near Ponce de Leon

A shoal is pushing out from the west into the channel. A survey that extends to the solid red line would help in finding a safe passage.

MM966 Ft Pierce by G17

The best path through here is unclear. A survey extended to the solid red line would help in finding the deepest water.



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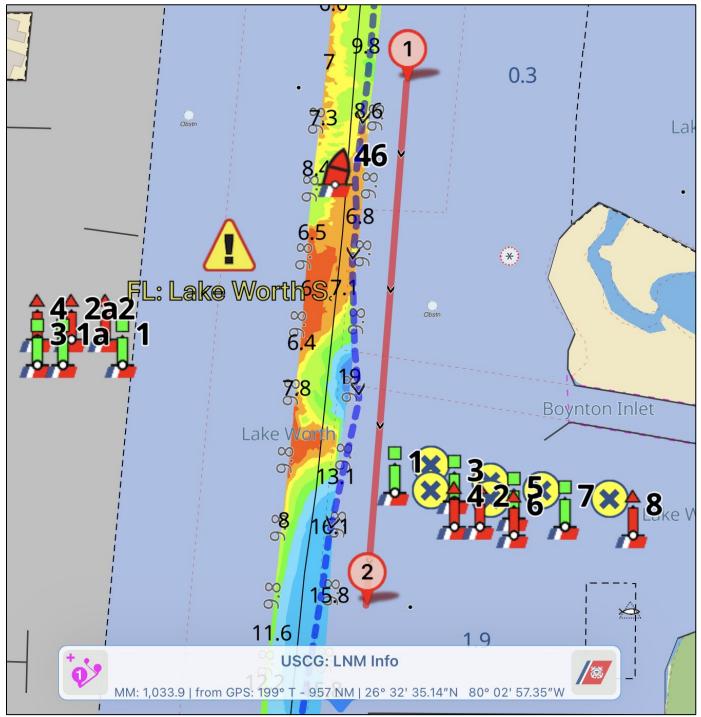
MM966 Ft Pierce by R188A

Shoaling continues to come from the west side of the channel. A survey extending to the solid red line would help in finding the deepest water passage.

MM985 Indian River by G229

Boaters often go aground here by passing too close to R228 and R230. A survey extending to the solid red line could show deeper water and provide boaters the confidence to stay farther away from the two red ATONs.





MM1034 ICW by Boynton Inlet

This area of the ICW is always changing, year to year. I never know what to expect. It can go from 6 MLLW to 20 MLLW in the space of a boat length. It would be most helpful if the survey for this area extended to the solid red line to give the boater more of a choice in avoiding shallow water.

Thanks for going through all the charts, if you see anything to improve upon or anything I've forgotten, please let me know. We're all in this together to improve boater safety and enjoyment on the ICW!

Bob423