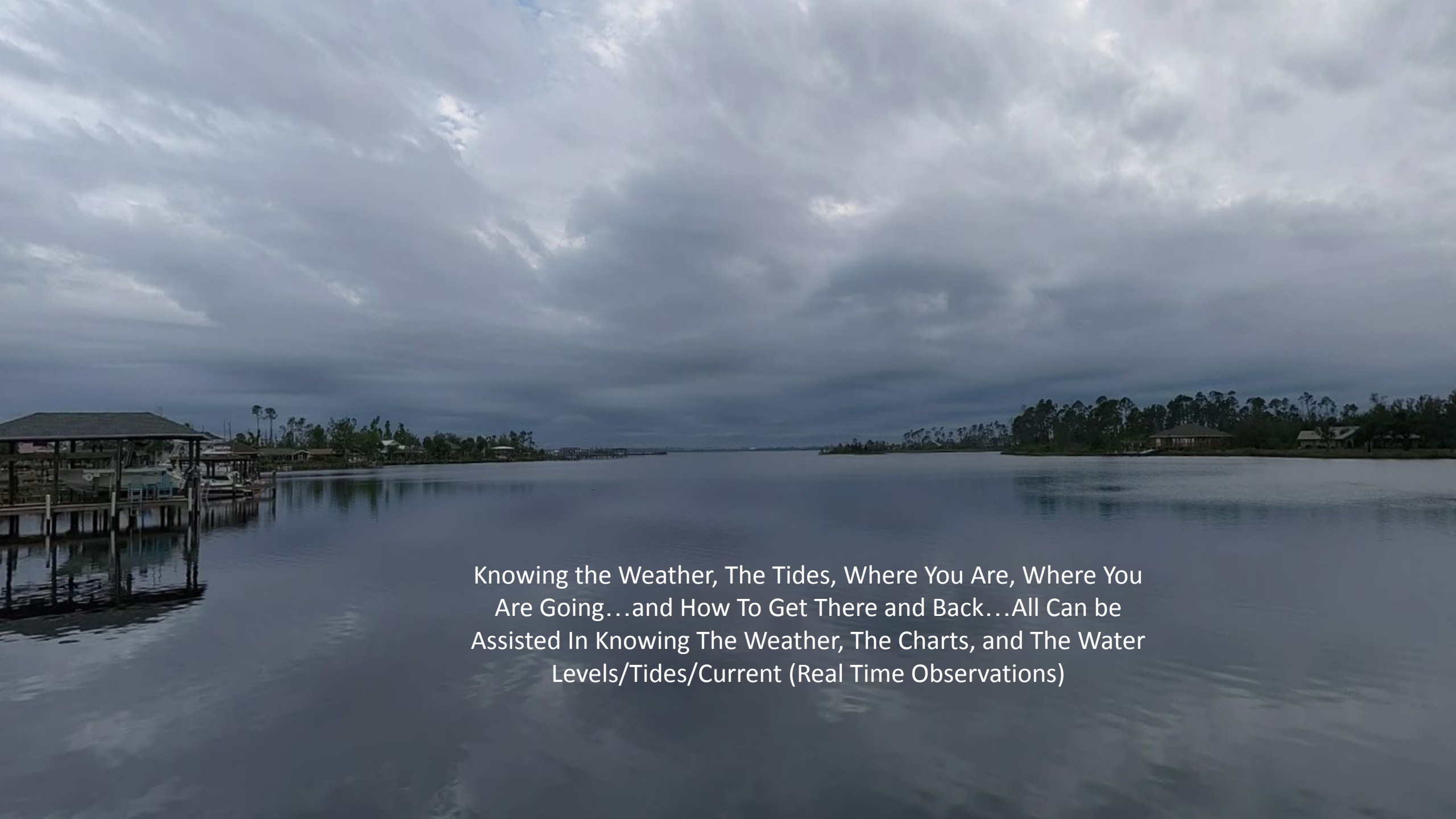


Weather and Navigation and Being On the Water NOAA





Knowing the Weather, The Tides, Where You Are, Where You
Are Going...and How To Get There and Back...All Can be
Assisted In Knowing The Weather, The Charts, and The Water
Levels/Tides/Current (Real Time Observations)



Economic Contributions of Recreational Fishing — Florida —

4,102,200 anglers spent \$4.3 Billion while fishing in Florida.

Statewide Contributions by Anglers in Florida



\$7.2 Billion
Economic Output



56,750
Jobs Supported



\$129 Billion
Economic Output

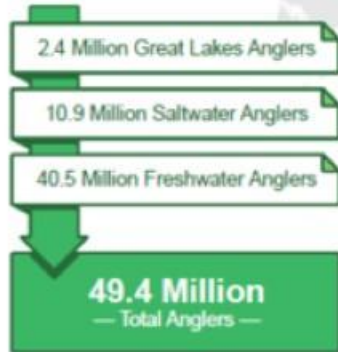


826,000
Jobs Supported

Annual U.S. Angler Contributions to Conservation



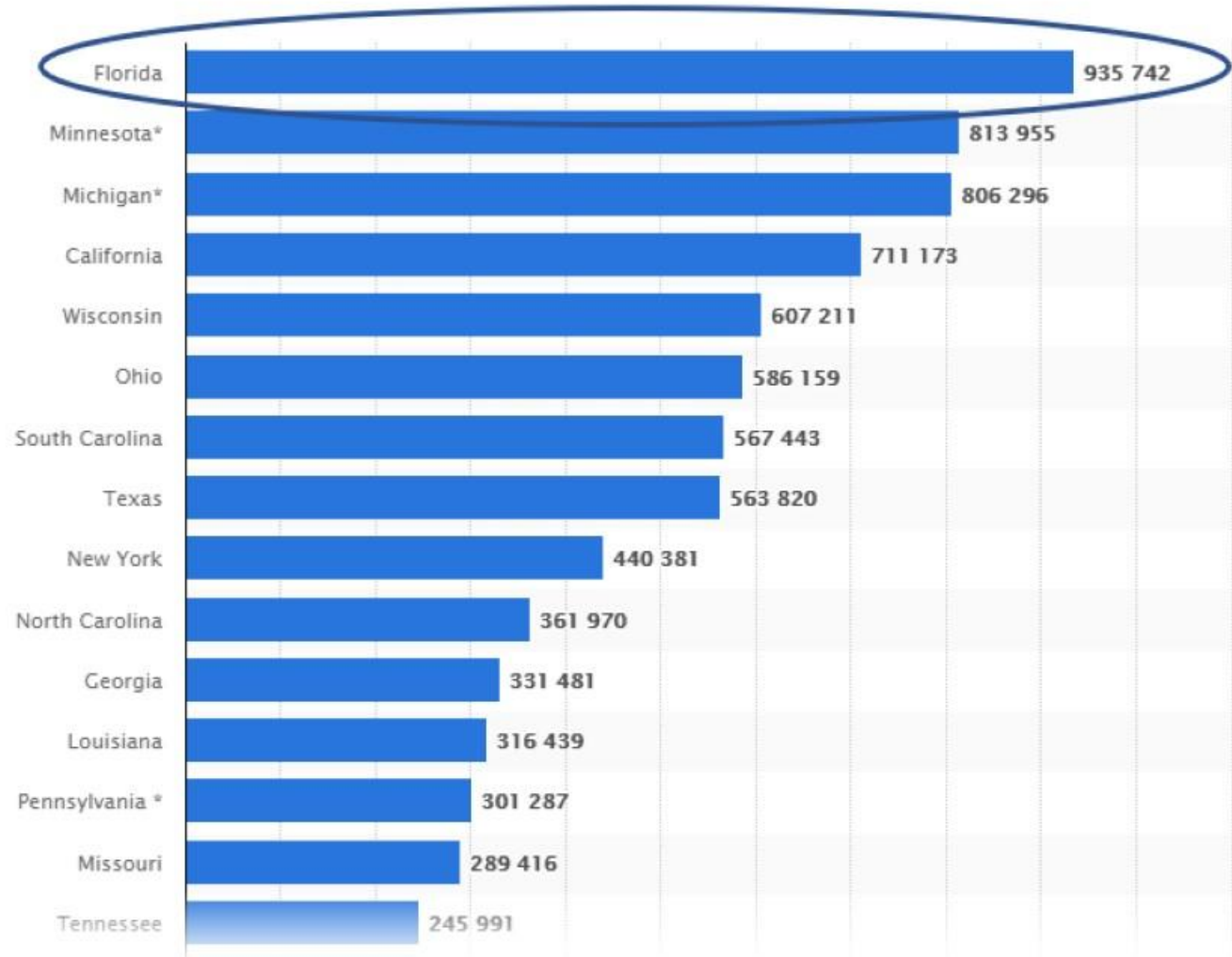
U.S. Anglers by the Numbers



Angler participation and spending presented here reflect 2018 estimates. The 13% increase in license sales in the U.S. through September 2020 compared to the year before, and 66% increase in excise tax collections since 2018 indicate economic contributions for 2020 could be significantly greater.



Number of Recreational Boating Vessels by State, 2019



Angler participation and spending presented here reflect 2018 estimates. The 13% increase in license sales in the U.S. through September 2020 compared to the year before, and 66% increase in excise tax collections since 2018 indicate economic contributions for 2020 could be significantly greater.



Sport Fishing and Recreational Boating is a Family and Friends Activity, Found in Bays, Passes, Nearshore and Offshore.



No- Not a Day for Boating or Fishing

Seminars Like These Provide You With
Resource Like-

-What Will the Day Be on the Water?

-How Do I get Notified of Severe
Weather Events

-I do I Know Offshore Wave and
Marine Conditions?

-Where Am I (in the use of Charts)?

-Where Do I Want to Go?

-How Do I Get There?

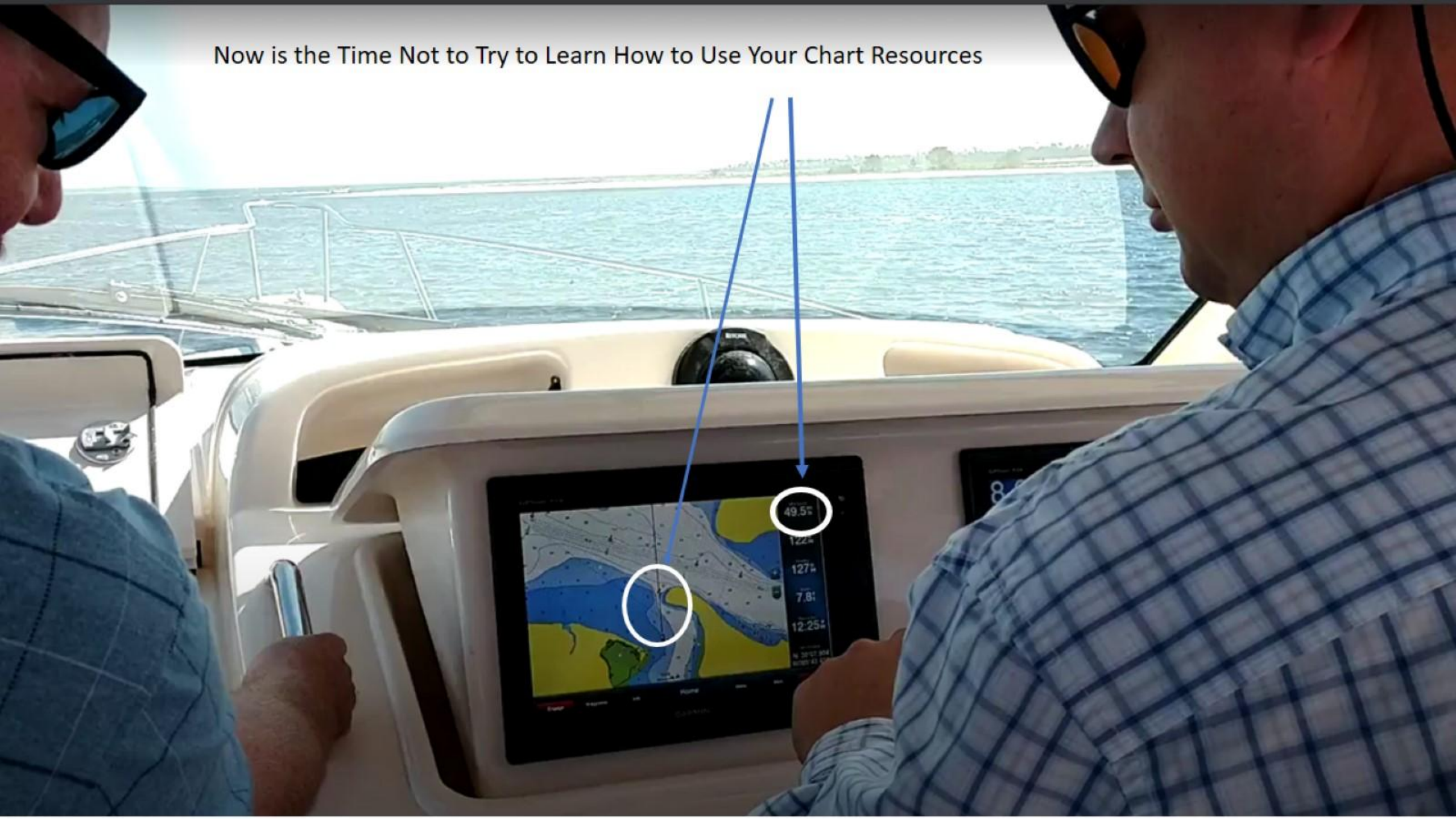
-Can I Get There (Fuel, Boat, Time?)





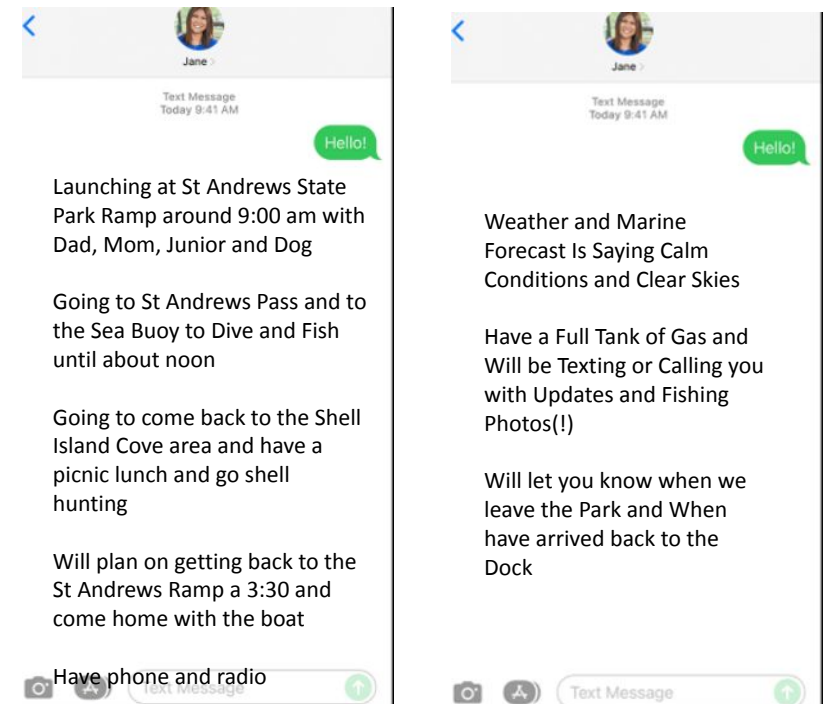
Everyone is Responsible for Being Safe On the Water...If You Go Out and See a Storm--- Turn Around and Stay Safe!

Now is the Time Not to Try to Learn How to Use Your Chart Resources



Starting Points

Where Are You Starting- St Andrews State Park- Do you have your PFDs, Radio, Phone (charged), and All Required Gear?
Where Do You Want to Go- Out to the Sea Buoy to Dive and Fish and the Shell Island for Picnic and Shell Collecting
What is the Weather and Marine Conditions and Forecasts- NOAA NWS Tallahassee
What Boat Are You Going to Be On?- Size, Fuel, General Condition, Range, What Sea State Can It Handle?
Setting Your Distance- 10, 20, 30 miles? Can you make the Outbound Trip and Return with half or a third of a tank of fuel?
Setting Your Time for the Day- Early Dawn(even Pre Dawn), later Morning, Lunch or Afternoon? An Evening Excursion
Making Your Trip Plan- And Making It Known!- Telling Someone, More Than One- Stick to the Plan and Check In with Family and Friends







Certified Charts & Products

These products meet U.S. Coast Guard carriage requirements for commercial vessels.

NOAA ENC®

NOAA's vector electronic navigational charts

NOAA Paper Charts

NOAA's traditional paper navigational charts

United States Coast Pilot®

Sailing Directions



General Use Charts

These products do not meet U.S. Coast Guard carriage requirements for commercial vessels.

NOAA Custom Chart

Create and download charts based on your own scale, extent, and paper size settings.

NOAA RNC®

NOAA's raster navigational charts.

Full-size Nautical Charts

Full-size images of nautical charts.

BookletCharts™

Page-size images of NOAA nautical charts.

Historical Charts

Images of maps and charts dating back to 1807.



Chart Viewers

Locate, view, and download various types of NOAA nautical charts and publications.

ENC Viewer

A seamless display of all NOAA electronic navigational charts using ECDIS symbology.

View Nautical Charts

Visit the **Dates of Latest Editions** list to view individual raster charts.

NOAA Chart Locator

Find, view, and download any NOAA nautical chart product.



Services & Publications

NOAA information, data services, and publications.

nowCOAST™

Real-time coastal observations, forecasts, and warnings.

U.S. Chart No. 1

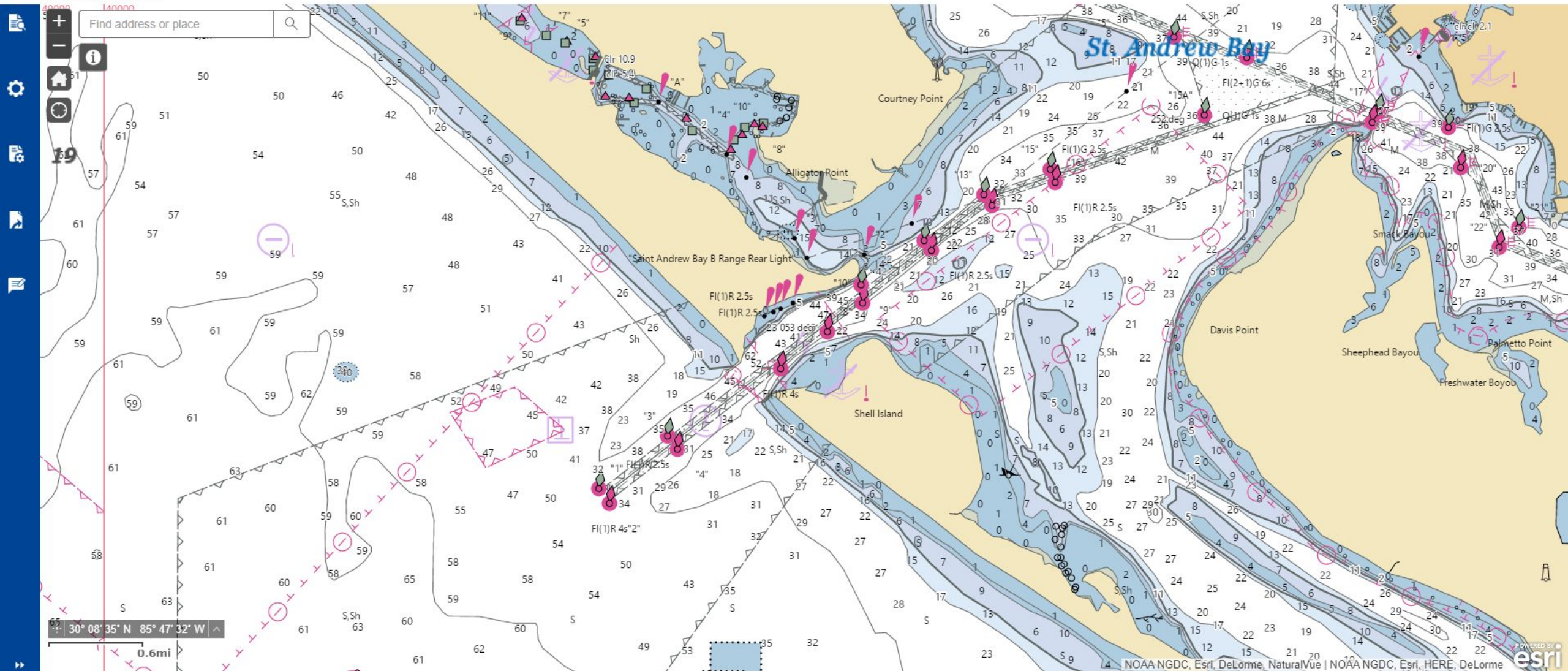
The guide to the symbols, abbreviations, and terms used on NOAA nautical charts and ENCs.

Chart Updates

Learn what has changed on NOAA nautical charts and ENCs since the last new edition.

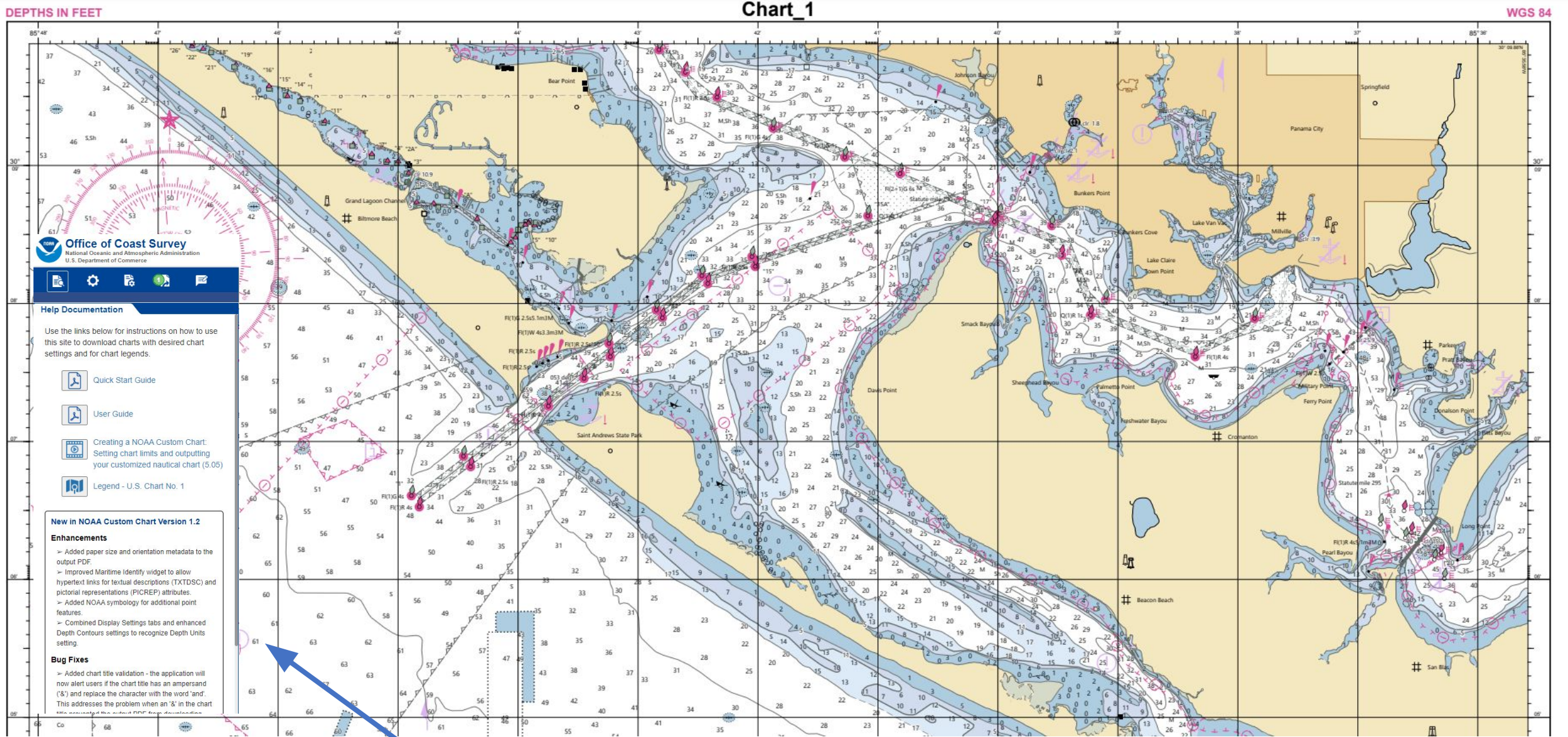


<https://nauticalcharts.noaa.gov/>

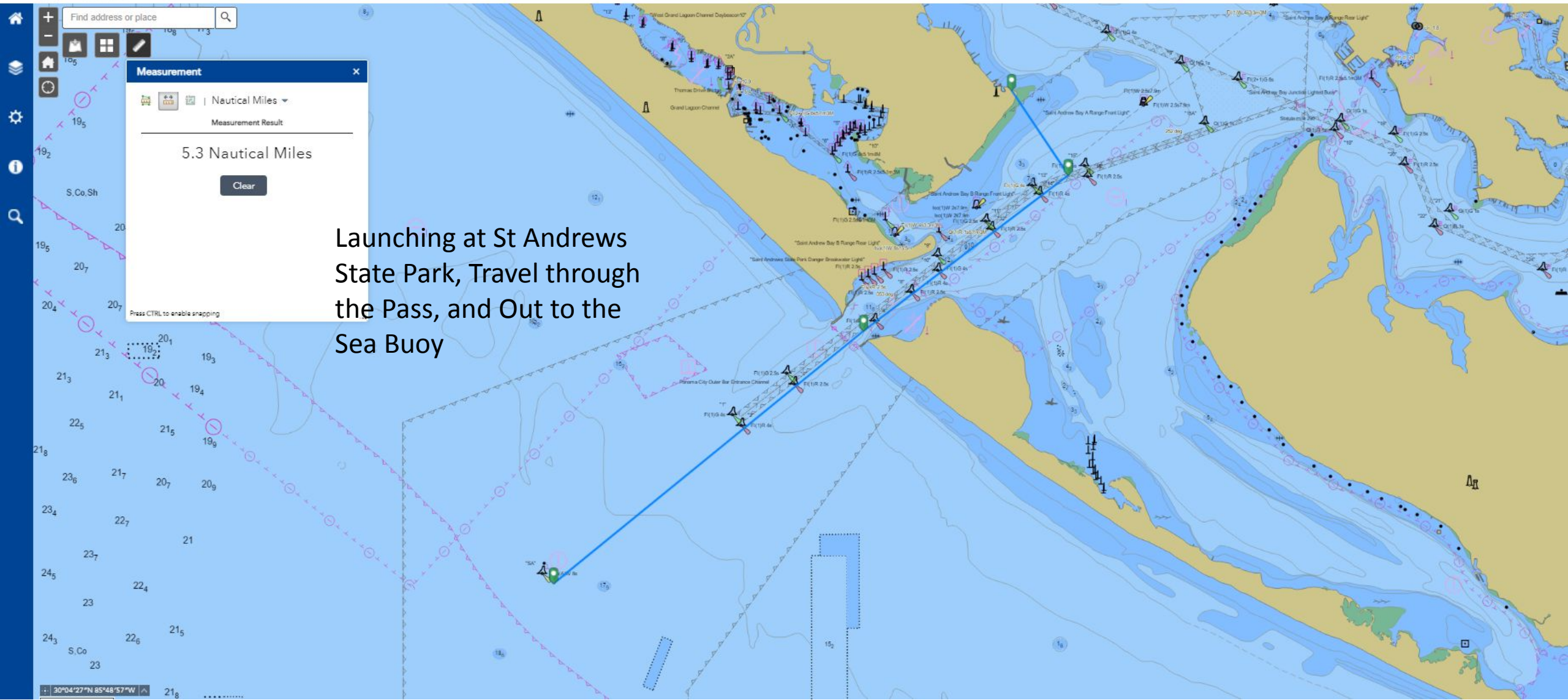


Start Where it Began- Panama City Beach and St Andrews Sound
Use of Coast Survey's Custom Chart Resource to Support a Good Day on Water
<https://devgis.charttools.noaa.gov/pod/>

Creating a Custom Chart – A very good way to acquaint you the area you are fishing- and to learn how to produce these custom resources for anywhere you may travel and go out on the water

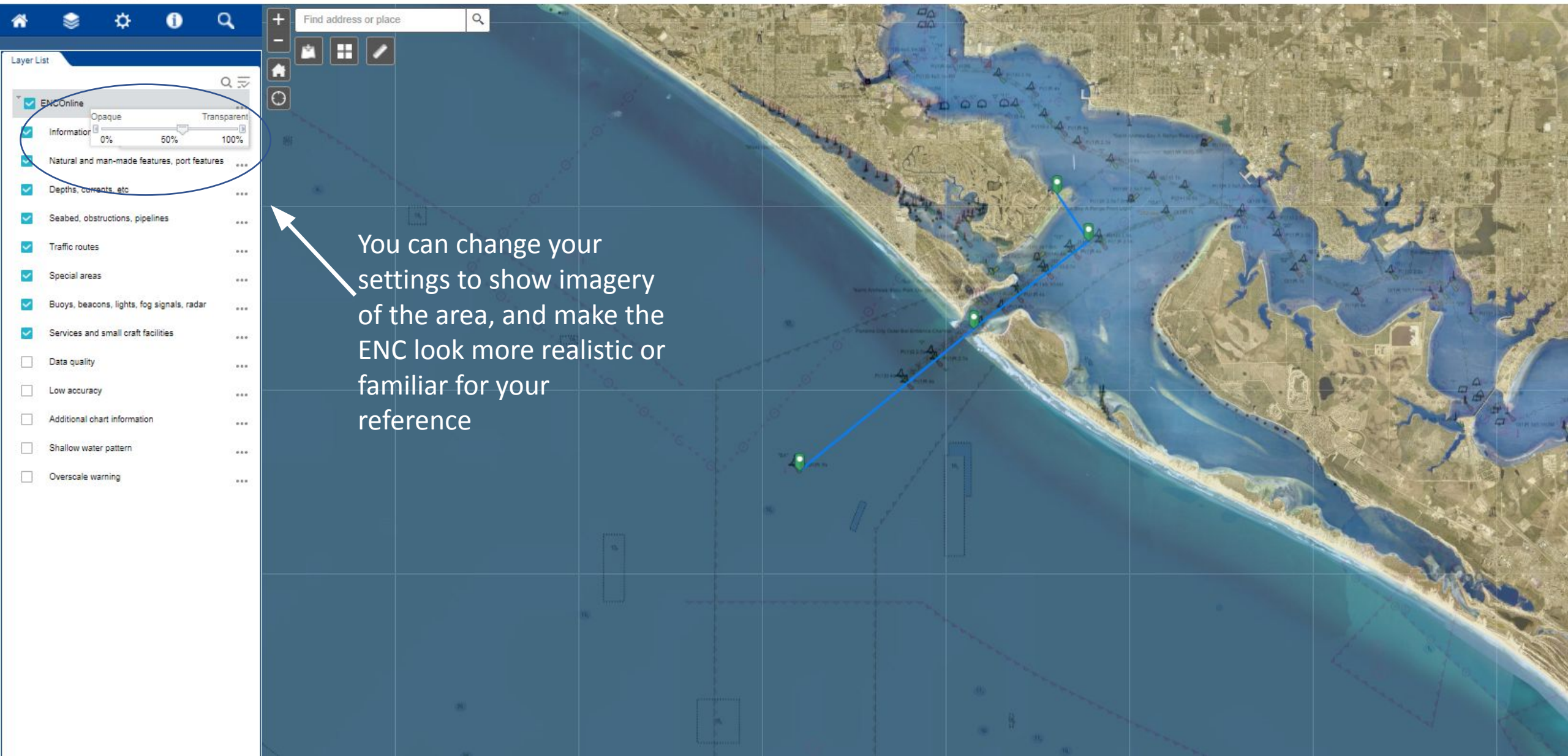


Follow the Tutorials- They really help!




Launching at St Andrews State Park, Travel through the Pass, and Out to the Sea Buoy

With the Online Viewer, You Can Look at Fishing Destinations and Plan Your Route, the Distances You Will Travel to, and Other Locations You Want to Travel To--- and Return Safely to the Dock



As We Move to ENC's the Future of Charting, Taking Time to Learn the Added Resources You Can Now Access and Use- Can Be Very Powerful

 **Office of Coast Survey**
National Oceanic and Atmospheric Administration
U.S. Department of Commerce

Home Layers Settings Info Search

Layer List

- ENOnline
- Information about the chart display
- Natural and man-made features, port features
- Depths, currents, etc
- Seabed, obstructions, pipelines
- Traffic routes
- Special areas
- Buoys, beacons, lights, fog signals, radar
- Services and small craft facilities
- Data quality
- Low accuracy
- Additional chart information
- Shallow water pattern
- Overscale warning



HOME » PUBLICATIONS » U.S. CHART No. 1 (CHART SYMBOLS)

U.S. Chart No. 1 (Chart Symbols)

More than 100 pages of information about nautical chart symbols



U.S. Chart No. 1
Certified Printers

Contact U.S.
Chart No. 1 Editor

U.S. Chart No. 1

Obtain a Paper Version of U.S. Chart No. 1
Paper copies of U.S. Chart No. 1 may be purchased from a NOAA-certified printer

Related Links
Changes Implemented in Edition 13 of U.S. Chart No. 1
Symbology Tips for:
AIS Aids to Navigation

The Symbol Legend for U.S. Nautical Chart Products

U.S. Chart No. 1 describes the symbols, abbreviations, and terms used on nautical charts. It is produced by NOAA and the National Geospatial-Intelligence Agency. The symbols for paper charts and their analogous digital products, such as NOAA raster navigational charts (NOAA RNC[®]) are shown, as well as the symbols used to portray NOAA electronic

The Symbols on the Charts are Not Random- The Link and the Guide Gives You a lot of Good Information to Understand the Charts

Q Buoy, Beacons

No.	INT	Description	NOAA	NSA	Other NSA	SCRS
124		Navigation buoy				
125		Navigation buoy				
130.4		Navigation buoys including red and white buoys, buoys with orange-red and green bands, buoys with red and white horizontal bands, buoys with black spheres, buoys with black spheres				
130.5		Navigation buoys including red and white vertical stripes, buoys with red and white vertical stripes, buoys with red and white vertical stripes, buoys with red and white vertical stripes				
130.6		Navigation buoys including red and white vertical stripes, buoys with red and white vertical stripes, buoys with red and white vertical stripes, buoys with red and white vertical stripes				
130.7		Navigation buoys including red and white vertical stripes, buoys with red and white vertical stripes, buoys with red and white vertical stripes, buoys with red and white vertical stripes				

<https://nauticalcharts.noaa.gov/publications/docs/us-chart-1/ChartNo1.pdf>

Understanding NOAA Chart Symbology

NOAChart1@noaa.gov Nautical Chart Symbology Tips from the Editor of U.S. Chart No. 1 February 2016

Fish Havens

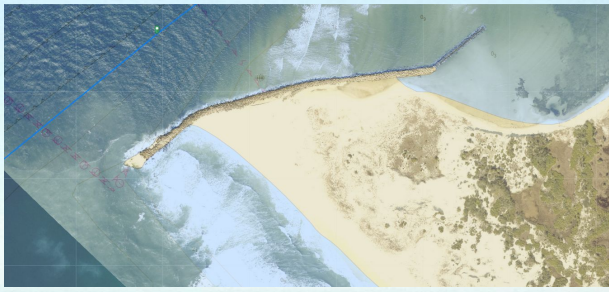
Fish havens are artificial shelters made up of rocks, rubble, subway cars, ships, airplanes, specially designed concrete structures, and other objects placed on the sea floor to attract fish and enhance their habitat. They are often located near fishing ports or major coastal inlets. Consisting of rigid materials and projecting above the bottom, they can impede surface navigation and foul anchors. Thus, all fish havens are labeled with the abbreviation "Obsta" for obstruction on NOAA charts.

Only fish havens authorized by the U.S. Army Corps of Engineers are shown on NOAA charts. The Corps specifies an "authorized minimum depth" for each, which is the shallowest depth to which objects may project toward the surface. For example, the decommissioned U.S. Coast Guard Cutter *Duane*, shown above, was intentionally sunk in 1987. It lies upright in 120 feet of water near Key Largo, Florida, but its superstructure rises to only 60 feet below the surface. The NOAA chart, shown at right, labels the fish haven with an "auth min 50 ft" (the minimum refers to the depth to which objects may be added, not necessarily the existing obstructions).

The three symbols used to represent fish havens on NOAA charts are shown in the table below.

Symbol listed in U.S. Chart No. 1	Symbol	Description
K 46.1		Fish Haven (auth min 42 ft)
K 46.2		Fish Haven (auth min 42 ft)
K 46.3		Fish Haven (auth min 66 ft)

Fishing prohibited or permitted? There is an international symbol to delineate areas where fishing is prohibited (at left and N 21.1 in U.S. Chart No.1). However, NOAA does not show federal, state or local fishing restrictions on its nautical charts. The fish haven symbols, shown in the table above, do not indicate whether fishing is allowed or not. Many fish havens were created to support and encourage recreational fishing, while others have been created specifically to protect fish and fishing may be restricted in these areas. Anglers should check with appropriate authorities before dropping a line within a fish haven to learn what restrictions, if any, may apply.



Understanding the Chart Makes For a Good Day on Water

Boats That You Have, May Be Equipped with Navigation Systems- Closely Tied to NOAA's Chart Resources
Learn How to Use Them and Learn What to Do if They Stop Working (!)





Observations

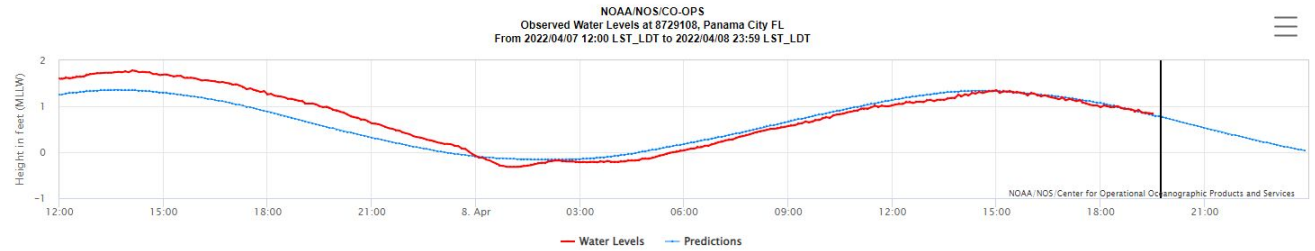
Turn off refresh:

Standard Metric

Water Levels

0.84 ft.

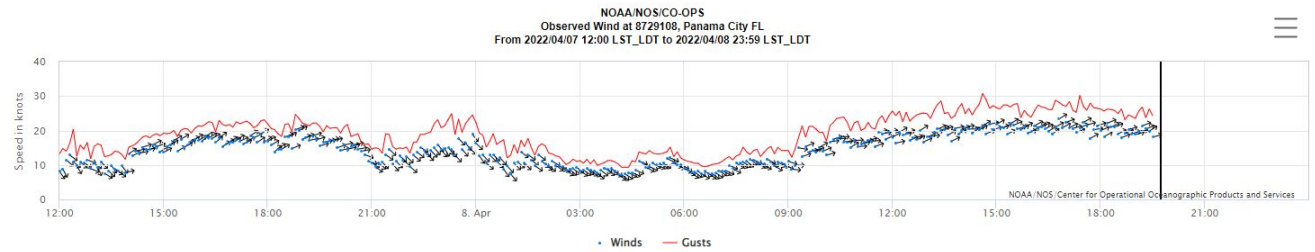
MLLW
as of 04/08/2022 19:30 LST/LDT



Winds

18.08kn.

from WSW
as of 04/08/2022 19:30 LST/LDT



<https://tidesandcurrents.noaa.gov/stationhome.html?id=8729108>

You Can Look at 48 Hour Forecasts, Using NOAA Operational Forecast Systems

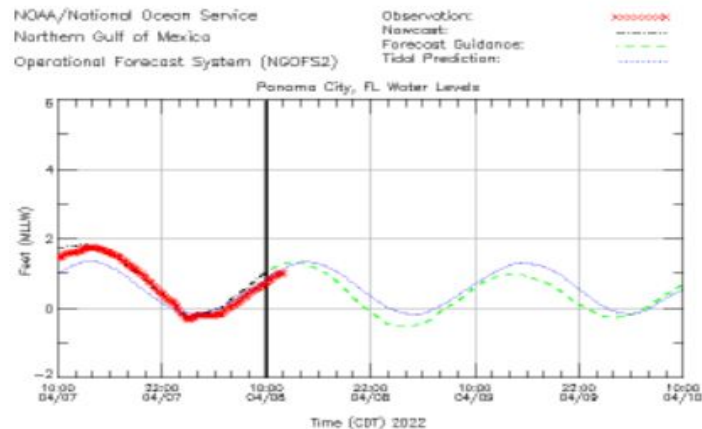
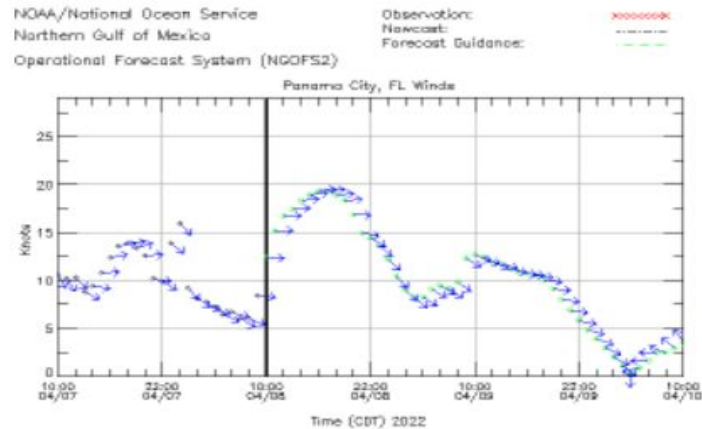
https://tidesandcurrents.noaa.gov/ofc/ofc_station.html?stname=Panama%20City&ofc=ng&stnid=8729108&subdomain=0

Northern Gulf of Mexico Operational Forecast System (NGOFS2)

Panama City (8729108)

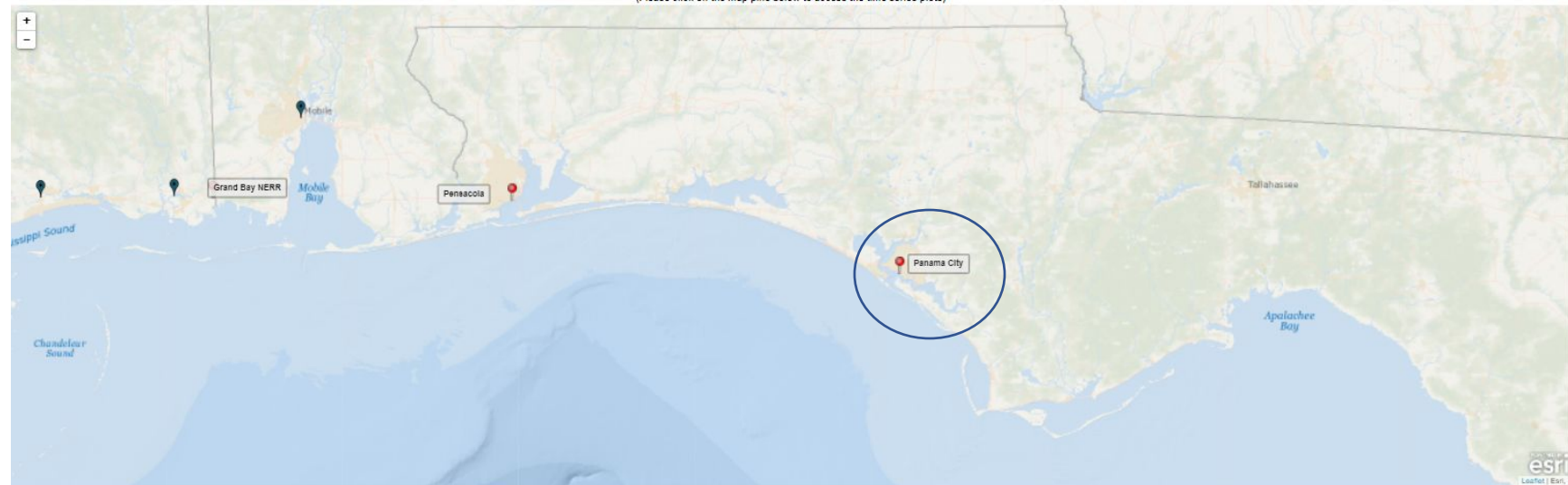
All model nowcast and forecast information is based on a hydrodynamic model and should be considered as computer-generated n

This wind time series was created from the surface forcing data of the latest NGOFS2 nowcast and forecast runs. The winds were created by s



Northern Gulf of Mexico Operational Forecast System (NGOFS2)

(Please click on the map pins below to access the time series plots)



- Water Level
 - Wind
 - Water Temperature
 - Salinity
 - Currents
- (Please click on the categories below to access animated map plots)
- Nowcast Nowcast Nowcast Nowcast Nowcast
- Forecast Guidance Forecast Guidance Forecast Guidance Forecast Guidance Forecast Guidance



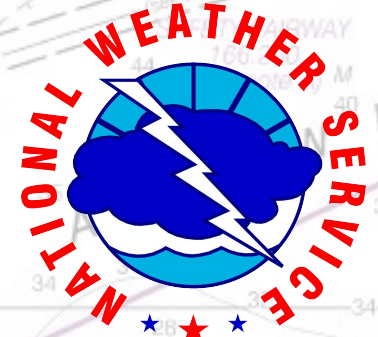
The End of the Day

Safe Back On Shore





NOAA/NWS Weather & Navigation Virtual Seminar



Thank You!

Presenters

Lance Franck – NOAA/NWS Tallahassee

Tim Osborn – NOAA Office of Coast Survey

Questions? Contact lance.franck@noaa.gov or tim.osborn@noaa.gov