

**Reef KAP
Contour Maps
User Manual**

**Contains
detailed
instructions on
how to use your
custom KAP
contour maps**

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INTRODUCTION

Over the years the State and County have been putting down concrete, steel and other material to form artificial reefs where fish can gather and populate. However, for many years the location of the deployment was recorded using Loran and GPS system where the accuracy was intentionally being decreased for national security. In addition, the tug boat, barge and crane offset distances contributed to the inaccuracies. When a deployment was made, the correct location typically was inaccurately recorded. In an effort to eliminate the wasted time and gas driving around looking for dive and fishing sites, we developed a method to visualize the bottom and provide an extremely accurate and detailed map of the bottom structures.

About Contour Charts

The contour maps we produce are a birds-eye (overhead, looking directly down) view of ocean topography (bottom contours or bathymetry). Typically, the closer the contour lines are the sharper the increase or decrease in depth which may indicate a wreck, ledge or reef which attract fish and the greater likelihood you will catch one. Scuba divers will love the ability to see the height and position of the structures and drop anchor, right “down the hatch”. Fisherman will love putting the hook right on the structure and “in the fish’s mouth”. The places to fish and dive are obvious on the charts and extremely accurate.

How the Data Was Collected

Three boats were used for the past 18 years in the collection of hundreds of thousands of sonar data points with the corresponding WAAS GPS Latitude and Longitude from each reef. All contour charts are created from sonar data while slowly “trolling” in a “mowing the lawn” pattern directly over each reef or wreck. For example, more than 25,000 samples were collected for just one area reef. Official county waypoints were used as a starting point and the entire area was scanned. When structures were detected, additional close-in scanning was performed to enhance detail.

How the Plots Were Created

The collected position and depth data is then adjusted for tides, interpolated to fill in uncollected data and analyzed to visualize the bottom. Official county waypoints were overlaid on the plot and the reef deployment data was correlated to nearest detected targets. In some cases, the sites were confirmed by an underwater camera or by scuba diving the site.

How To Use These Maps

For artificial reefs, look for concentric circular contour lines with decreasing depths and color changes per the scale on the right side. These are the structures put down to create the artificial reefs. For ledges and natural reefs look for long closely spaced lines that indicate the presence of a ledge or reef line. We continue to plot ledges and natural reefs until they run out. For example, the Cuda Ledge off of Sarasota is over a mile and a half long. If you move your GPS cursor over a contour chart you will see the exact GPS latitude (North-South) and GPS longitude (East-West) coordinates. A minute of latitude is 6,000 ft so 0.1 minute is 600 feet and 0.01 minute is 60 feet. If you are out on the water and over a reef or wreck, your boats position will be shown over the contour chart.

NOTE: All views on these charts should not be used for navigation.

Contacts

For additional information contact CSS Inc. at 941-739-8394 and please leave a message as I am usually out scanning new reefs and wrecks. Even better is to E-Mail us at Bob@reefsnwrecks.com and we will promptly return your Email. **Checkout our free reef offers for the Alan Fisher reef later in this manual.**

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About the KAP Format

The charts in the KAP format are just like the NOAA Raster format and can be viewed by any nautical program that can also support custom KAP format files.

For laptop PCs we recommend a nautical chart viewing program called OpenCPN. The OpenCPN program is an open-source program and it is completely free. The latest revision of the program is available at <http://opencpn.org/ocpn/>. Feel free to download it directly from the web site, install it and check frequently for updates.

For iPad, iPad Mini's, iPhones and Android devices we recommend a nautical chart viewing App called **SealQ Open**. Check the App stores and download for a nominal fee. Lifeproof makes water resistant cases for many of the portable devices as well as mounts for attaching them to your boat. Other companies like RAM make suction cup and permanent mounts that attach to the cases.

For Both Laptops and tablets - Along with our charts you will need to download a number of local NOAA charts. All charts are available for free on the NOAA web site: <http://www.charts.noaa.gov/RNCs/RNCs.shtml>. Select the state of Florida and download the entire state to your PC. Place it in a directory like C:\NOAA. Always download the latest NOAA charts before navigating in those areas. The OpenCPN program, custom reef maps and NOAA charts provide the framework for our custom contour reef maps which you have purchased.



HOME FUTURE OF NOAA CHARTS CHARTS PUBLICATIONS DATA LEARN
CUSTOMER SERVICE ABOUT US

Chart Downloader for NOAA RNC®

The Raster Navigational Charts are available in BSB format.

[User's Agreement to Terms and Conditions.](#)

There are several options for downloading:

1. Select a zip file of an **Individual RNC**.
2. Select up to twenty **Specific RNCs** that will be dynamically zipped and made available for download.
3. Write an application or script that uses the data in the **RNC Product Catalog**, an XML file that contains the status of the RNCs available for download.
4. Select one of the pre-packaged zip files below.

All RNCs:

Name	XML	Size	Zip File Date Time*
All	View	3025 MB	01/13/2022 16:04:53

RNCs by Coast Guard Districts (map):

Name	XML	Size	Zip File Date Time*	Name	XML	Size	Zip File Date Time*	Name	XML	Size	Zip File Date Time*
01 CGD	View	531 MB	01/13/2022 16:03:31	05 CGD	View	314 MB	01/13/2022 16:02:57	07 CGD	View	389 MB	01/13/2022 16:03:16
08 CGD	View	292 MB	01/13/2022 16:03:23	09 CGD	View	326 MB	01/13/2022 16:03:31	11 CGD	View	193 MB	01/13/2022 16:03:51
13 CGD	View	254 MB	01/13/2022 16:03:53	14 CGD	View	134 MB	01/13/2022 16:04:06	17 CGD	View	713 MB	01/13/2022 16:04:12

RNCs by States:

Name	XML	Size	Zip File Date Time*	Name	XML	Size	Zip File Date Time*	Name	XML	Size	Zip File Date Time*
AK	View	713 MB	01/13/2022 16:04:45	AL	View	33 MB	01/13/2022 16:04:51	CA	View	185 MB	01/13/2022 16:04:53
CT	View	87 MB	01/13/2022 16:04:55	DE	View	28 MB	01/13/2022 16:05:33	FL	View	280 MB	01/13/2022 16:05:37
GA	View	63 MB	01/13/2022 16:05:39	HI	View	86 MB	01/13/2022 16:05:43	ID	View	7 MB	01/13/2022 16:05:45
IL	View	29 MB	01/13/2022 16:05:46	IN	View	26 MB	01/13/2022 16:05:49	LA	View	141 MB	01/13/2022 16:05:49
MA	View	146 MB	01/13/2022 16:05:51	MD	View	99 MB	01/13/2022 16:05:53	ME	View	184 MB	01/13/2022 16:06:00
MI	View	167 MB	01/13/2022 16:06:01	MN	View	8 MB	01/13/2022 16:06:02	MS	View	40 MB	01/13/2022 16:06:04
NC	View	79 MB	01/13/2022 16:06:04	NH	View	38 MB	01/13/2022 16:06:08	NJ	View	99 MB	01/13/2022 16:06:12
NV	View	4 MB	01/13/2022 16:06:13	NY	View	223 MB	01/13/2022 16:06:13	OH	View	56 MB	01/13/2022 16:06:15
OR	View	92 MB	01/13/2022 16:06:15	PA	View	23 MB	01/13/2022 16:06:20	PO	View	66 MB	01/13/2022 16:06:20
PR	View	60 MB	01/13/2022 16:06:23	RI	View	59 MB	01/13/2022 16:06:23	SC	View	78 MB	01/13/2022 16:06:27
TX	View	112 MB	01/13/2022 16:06:29	VA	View	135 MB	01/13/2022 16:06:29	VT	View	12 MB	01/13/2022 16:06:31
WA	View	213 MB	01/13/2022 16:06:33	WI	View	46 MB	01/13/2022 16:06:34	Note:	PO = Pacific Ocean		

OpenCPN can be used as a chart viewer, route planner, and for navigation using traditional coastal and celestial techniques. The program allows you to connect your GPS to your PC and your boats position can be shown on the computer screen right over the NOAA or our custom contour chart. We recommend the Panasonic Toughbook series of laptop computers as they have a serial port, are water resistant, daylight viewable screen and can have a sealed and illuminated keyboard.

About other Formats

We are working hard to produce other formats for other devices. Please contact us if you need support for Raymarine. Check back often to the website as we will be adding additional formats as they are developed.

All the different formats will allow you to find the exact position for a perfect day of fishing or diving.

About the Areas

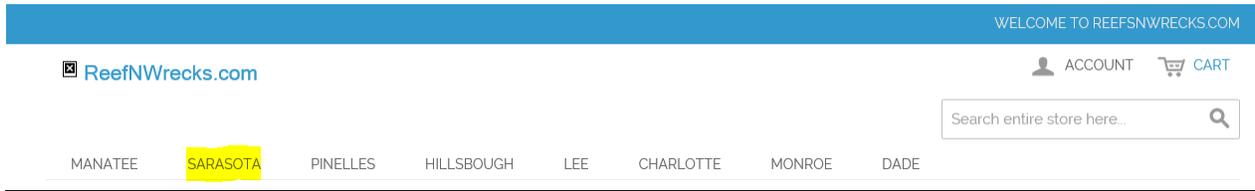
We are also working hard to expand our coverage area. We have scanned over 200 sites around Florida and have started to expand further north and south as well as adding reefs and wrecks on the east coast of Florida. Check back often to the website, as we will be adding additional reefs and wrecks on a weekly basis.

Contributions

If you have a boat, good quality GPS/Depth sounder and are interested in joining our data collection team, please contact us at Bob@ReefsnWrecks.com. If you have a favorite area that you would like scanned, let us know and you will receive the completed scan in the format of your choice for free and a promise to limit the sale of that site.

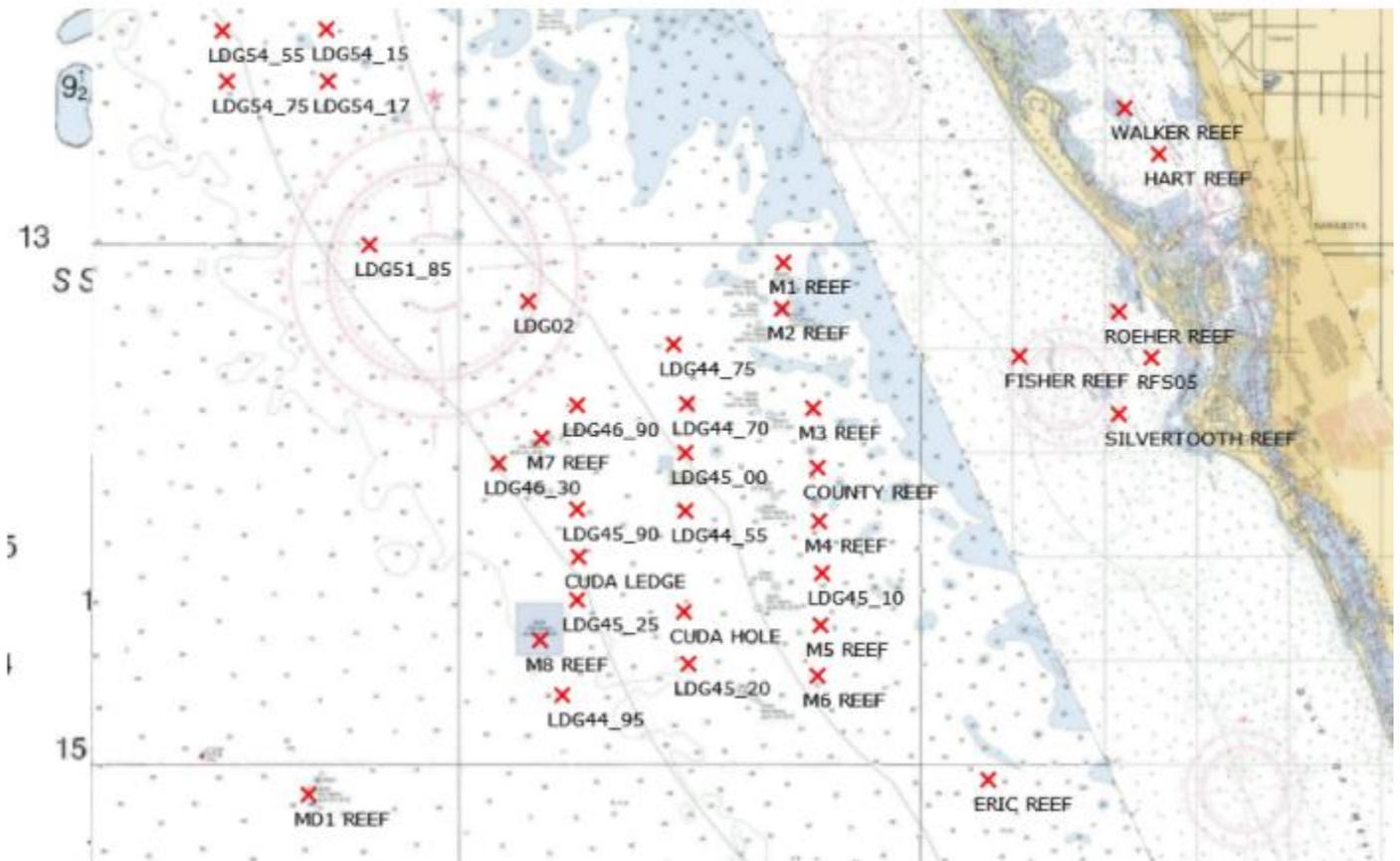
Reefsnwrecks Website

Below is a screen shot from the ReefsnWrecks home page. It has a series of tabs along the top row listing the Florida counties we have made custom contour maps for. In the following examples I have chosen the SARASOTA tab (yellow highlighted)



When that screen comes up, you will see an overall map of the Sarasota area showing the name and location of all the reefs, ledges and wrecks that we have available for you to purchase and download to your system for immediate use.

Sarasota



Scroll down the page and view the various reefs we have available. Selecting the left box in the Shopping Options section at the top of the page just under the county map. This view of the page gives you a little more detail and a description.

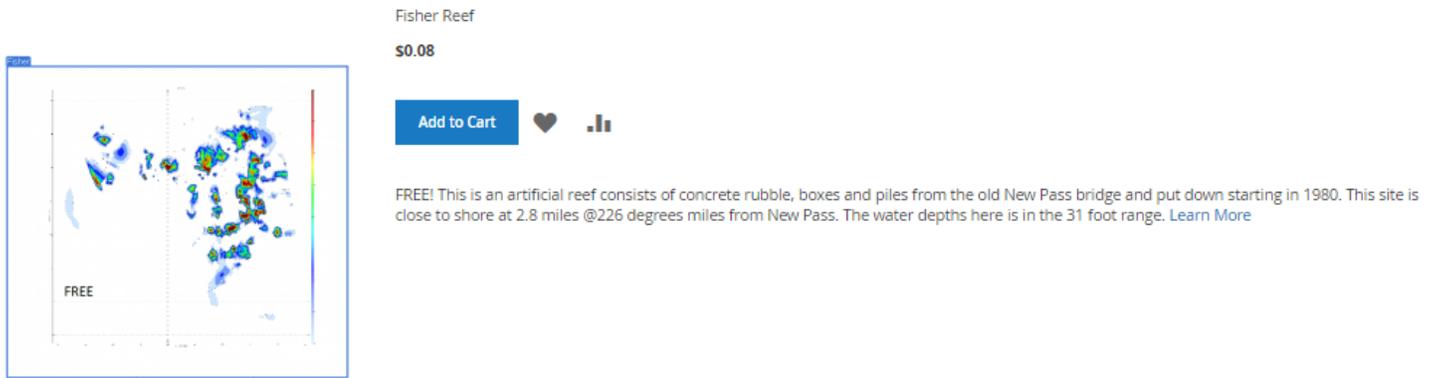
Shopping Options



Items 1-30 of 53

Sort By Product Name ↑

For example if you selected Sarasota, Fisher Reef, you will see the following screen:

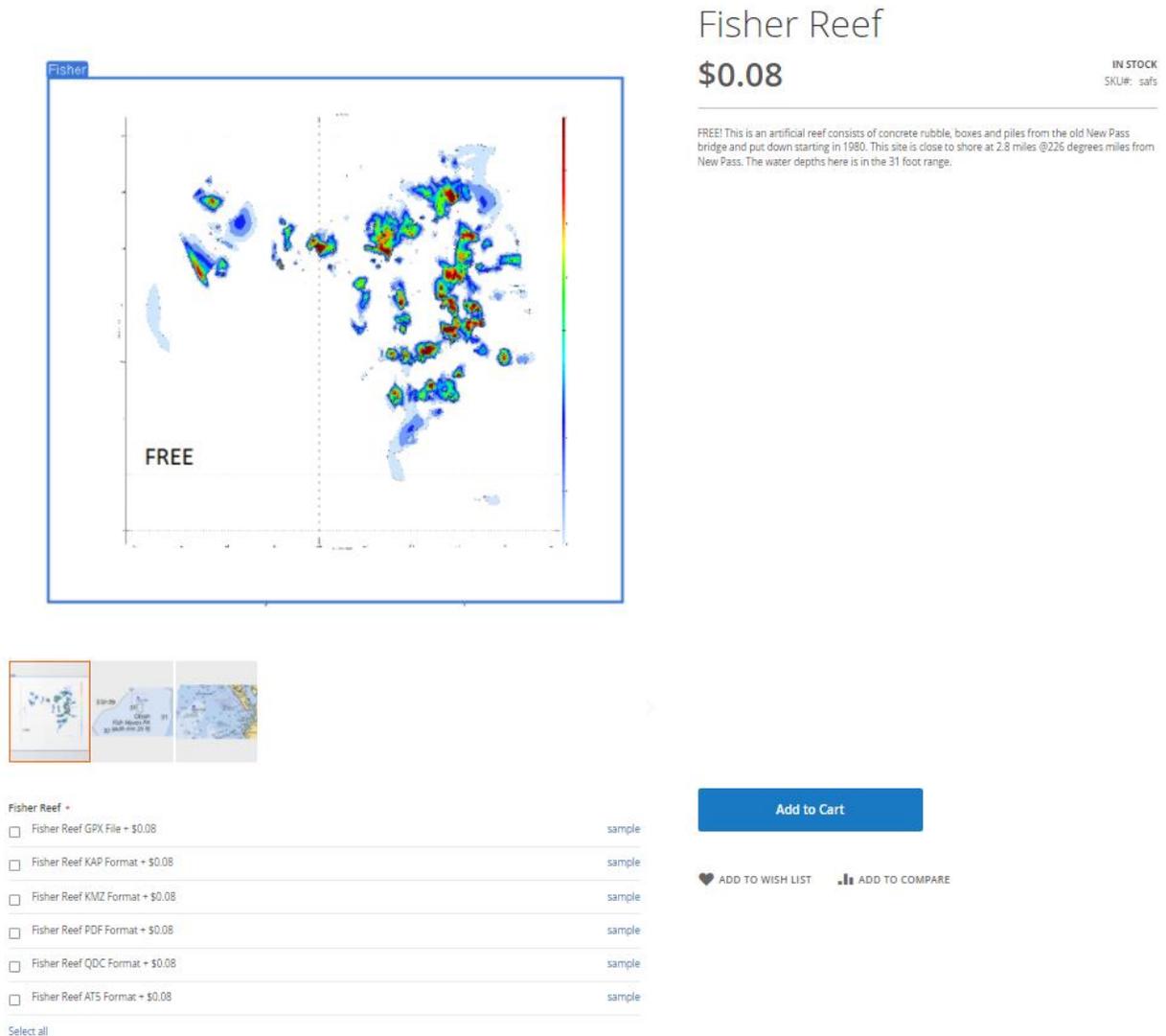


Fisher Reef
\$0.08

[Add to Cart](#)  

FREE! This is an artificial reef consists of concrete rubble, boxes and piles from the old New Pass bridge and put down starting in 1980. This site is close to shore at 2.8 miles @226 degrees miles from New Pass. The water depths here is in the 31 foot range. [Learn More](#)

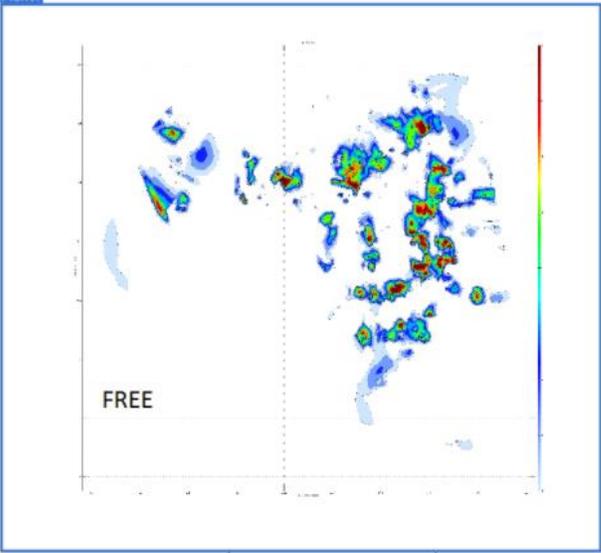
If you left mouse click on the reef chart or the reef name it will take you to the format selection and Add to cart page.



Fisher Reef

\$0.08 IN STOCK
SKU#: saf5

FREE! This is an artificial reef consists of concrete rubble, boxes and piles from the old New Pass bridge and put down starting in 1980. This site is close to shore at 2.8 miles @226 degrees miles from New Pass. The water depths here is in the 31 foot range.



[Add to Cart](#)

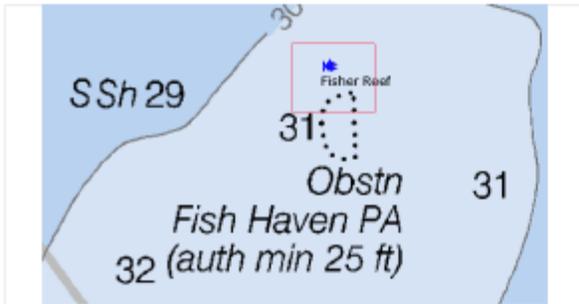
 ADD TO WISH LIST  ADD TO COMPARE

Fisher Reef

- Fisher Reef GPX File + \$0.08 sample
- Fisher Reef KAP Format + \$0.08 sample
- Fisher Reef KMZ Format + \$0.08 sample
- Fisher Reef PDF Format + \$0.08 sample
- Fisher Reef QDC Format + \$0.08 sample
- Fisher Reef AT5 Format + \$0.08 sample

[Select all](#)

On bottom left of the screen you will see *MORE VIEWS*. For each reef or wreck we have provided three views, a sample of the actual reef contour map, a close-up of the location on the NOAA chart showing the red custom contour reef map coverage and a third view zoomed out so you can get a better idea where the reef or wreck is located. The description will tell you the distance off shore and bearing from the nearest inlet or landmark.



FISHER REEF

IN STOCK

This site is close to shore at 2.8 miles @226 degrees miles from New Pass. The water depths here is in the 31 foot range. The reef consists of concrete rubble and piles from the old New Pass bridge and put down starting in 1980.

MORE VIEWS



FISHER REEF

IN STOCK

This site is close to shore at 2.8 miles @226 degrees miles from New Pass. The water depths here is in the 31 foot range. The reef consists of concrete rubble and piles from the old New Pass bridge and put down starting in 1980.

MORE VIEWS



On the right side you will see a description of the reef or wreck, the distance off shore and bearing from the nearest inlet or landmark, the typical depth in that area and the approximate area shown. On the bottom there is a list of file formats that you can select to purchase. You can select one or all depending on your needs and equipment.

If you select SAMPLE you will be able to download a copy of that format's user manual which has details on ordering, installing and using the selected format.

The GPX format is a file containing the latitude and longitude of points of interest for that reef. It includes all material drops made on an artificial reef, the center of a wreck or a few points along a ledge or drop-off. It is included in all the formats or is available by itself at the base price.

When you select other formats, it adds the additional cost indicated to the base price. For example, ordering the PDF format in the example above will cost \$2.99 (GPX) + \$1.99 (PDF) = \$4.98. Adding the KAP format to the order will cost \$4.98 + \$1.99 or \$6.97. The total price will be shown in the upper right corner.

SKYWAY BRIDGE REEF

\$6.97

IN STOCK

This site is directly south west of the old Sunshine Bridge approaches. The original two-lane bridge was completed in 1954. The main span of the northbound bridge was demolished in 1992 and the approaches for both old spans were made into the Skyway Fishing Pier State Park. It consists of concrete rubble lined up in rows put down in 1992. The water depths here are in the 12 - 22 foot range.

The KAP format contains the GPX file along with the custom contour chart for use on a PC using a full nautical navigation program named OpenCPN or on a smart phone or tablet like an iPad using a full nautical navigation app called SealQ.

The QDC format contains the GPX file along with the custom contour chart for use on a Garmin Depth sounder or Chartplotter compatible with Quickdraw Contours. (Please check your Garmin unit for compatibility with Quickdraw contours on the Garmin website.) If you have a Garmin Handheld GPS chose the KMZ format.

The PDF format contains the GPX file above with a PDF file containing pages of contour maps that can be printed out and brought with you. It contains a list of the various waypoints, their deploy dates and a brief description of the reef along with an overall view and individual zoomed in views of the reef or wreck. Each view contains a grid so you can determine the GPS location of any interesting point.

The KMZ format contains the GPX file along with the custom contour chart in viewable format on Google Earth or on a Garmin Handheld GPS unit. (Please check your Garmin hand held GPS compatibility for Custom Maps on the Garmin website.

The AT5 format contains the GPX file along with the custom contour chart in viewable format directly on a Lowrance, Simrad or B&G chartplotter. (Please check your Lowrance, Simrad or B&G chartplotter compatibility for Custom Charts on the Lowrance, Simrad or B&G website. I suggest you download the almost FREE Sarasota, Fisher Reef first and try it out on your unit.

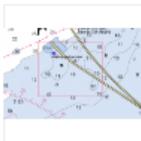
Also, on the right side you will see check boxes for your selection of the format you are purchasing. You can order one or all of the different formats. Each of the graphic chart formats contain the GPX file.

Once you have selected the format you want, select *ADD TO CART*. The following screen will be displayed:

SHOPPING CART

[PROCEED TO CHECKOUT](#)

Skyway Bridge Reef was added to your shopping cart.

PRODUCT	PRICE	QTY	SUBTOTAL	
 SKYWAY BRIDGE REEF <i>SKU: h1sw</i> <i>Download:</i> Skyway Bridge Reef in KAP Format Skyway Bridge Reef in PDF Format	\$6.97	1 Edit	\$6.97	

[EMPTY CART](#) [UPDATE SHOPPING CART](#) -OR- [CONTINUE SHOPPING](#)

DISCOUNT CODES [APPLY](#)

SUBTOTAL \$6.97

GRAND TOTAL EXCL TAX **\$6.97**

GRAND TOTAL INCL TAX **\$6.97**

[PROCEED TO CHECKOUT](#)

If you want to select additional reef or wrecks select [CONTINUE SHOPPING](#). If you are finished, select [PROCEED TO CHECKOUT](#).

If you select Proceed to Checkout you will go to the CHECKOUT screen. As a new customer, select *REGISTER* to create an account and complete the requested information. Please be careful when entering your Email address as all purchases you make will result in an Email to you with a link allowing you to download what you have ordered. Please use a strong password and record it for future use. We have no access to your passwords and they are stored in an encrypted format. If you are a returning customer, enter your Email address and Password on the right and select *LOGIN*.

CHECKOUT

CHECKOUT METHOD

REGISTER TO CREATE AN ACCOUNT

Register and save time!

Register with us for future convenience:

Fast and easy check out

Easy access to your order history and status

REGISTER

RETURNING CUSTOMERS

Sign in to speed up your checkout process

Email Address *

* Required Fields

Password *

[Forgot your password?](#)

LOGIN

Enter your name, address and Email address in the fields provided. Please be sure your Email address is correct, as any purchase you make will send a link to that address.

CHECKOUT

1 CHECKOUT METHOD

[Edit](#)

2 BILLING INFORMATION

YOUR CHECKOUT PROGRESS

BILLING ADDRESS

PAYMENT METHOD

First Name *

John

* Required Fields

Middle Name/Initial

Q

Last Name *

Public

Company

Email Address *

JQPublic@ABC.COM

Top section of the Register Form

Note: You must complete the ordering process to have your Email address and password registered. If you back out before ordering and return later, you will have to re-enter your complete ordering information again.

When complete, press *LOGIN* or *CONTINUE* and you will be directed to the CHECKOUT PAYMENT screen.

Select your payment method and select *CONTINUE*.

CHECKOUT

- CHECKOUT METHOD [Edit](#)
- BILLING INFORMATION [Edit](#)
- PAYMENT INFORMATION**

 [What is PayPal?](#)

You will be redirected to the PayPal website when you place an order.

Credit Card (saved)

[CONTINUE](#) [← Back](#)

- ORDER REVIEW**

YOUR CHECKOUT PROGRESS

[BILLING ADDRESS | CHANGE](#)

John Q Public
55 Main Street
Anytown, Florida, 34888
United States
T: 941-555-1212

[PAYMENT METHOD](#)

Complete the forms with the requested payment information and press *CONTINUE*.

CHECKOUT

- CHECKOUT METHOD [Edit](#)
- BILLING INFORMATION [Edit](#)
- PAYMENT INFORMATION [Edit](#)
- ORDER REVIEW**

PRODUCT	PRICE	QTY	SUBTOTAL
SKYWAY BRIDGE REEF <i>Download:</i> Skyway Bridge Reef in KAP Format Skyway Bridge Reef in PDF Format	\$6.97	1	\$6.97
	Subtotal		\$6.97
	Grand Total Excl. Tax		\$6.97
	Grand Total Incl. Tax		\$6.97

[PLACE ORDER](#) [Forgot an Item? Edit Your Cart](#)

YOUR CHECKOUT PROGRESS

[BILLING ADDRESS | CHANGE](#)

John Q Public
55 Main Street
Anytown, Florida, 34888
United States
T: 941-555-1212

[PAYMENT METHOD | CHANGE](#)

Credit Card (saved)
Credit Card Type: MasterCard
Credit Card Number: xxx-5642
Name on the Card: John Q Public

The last step is **ORDER REVIEW** where you can verify your order, billing address and payment method. When done, select **PLACE ORDER**.

In a few seconds you will receive an Email with a link back to the MY DOWNLOADABLE PRODUCTS screen. Select the blue "Reef XYZ" Format text (highlighted below) to start the download.

Note: You can download the files a maximum of three times.

ORDER #	DATE	TITLE	STATUS	REMAINING DOWNLOADS
100000007	5/3/2016	Cuda Ledge - CUDA LEDGE PDF FORMAT	Available	1

You may receive a download message like the one below. This is because the downloaded file is an .exe self-extracting zip file and for security reasons the operating system needs to ask you if you want to proceed. Select Run to continue. No software is installed, only files copied to the folder you select.



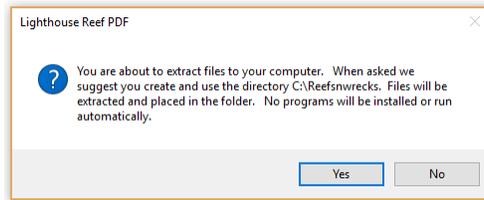
NOTE: We have set the price of Sarasota, Fisher Reef to \$0.08 so you can download a full reef package in any or all the available formats and try them out. Just follow all the instructions above to add it to your cart and checkout. Sorry I have to charge 8¢ because PayPal cannot accept a \$0 payment.

NOTE: All downloadable files are self-extracting .exe files and must be run on a Windows based computer or a computer with Windows compatibility. They cannot be downloaded directly to an Apple computer or tablet. When downloading the .exe files, Microsoft will warn you that the files may be dangerous. Select “Assume the Risk” to override the warning.

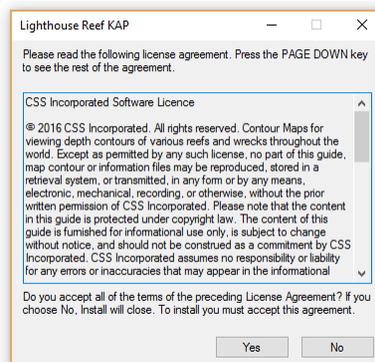
When activated, the files will automatically un-Zip the various files and place them in a folder of your chose. No programs will be run.

Reefsnwrecks Downloaded File Installation

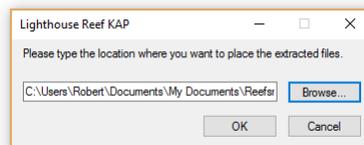
After you select Run the downloaded file will execute and it will give you directions on what to do and where to put the files. The process simply unzips a few files and places them in the folder you specify.



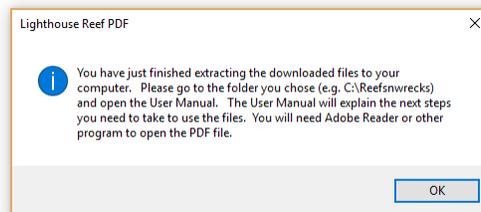
Please read and accept the license agreement.



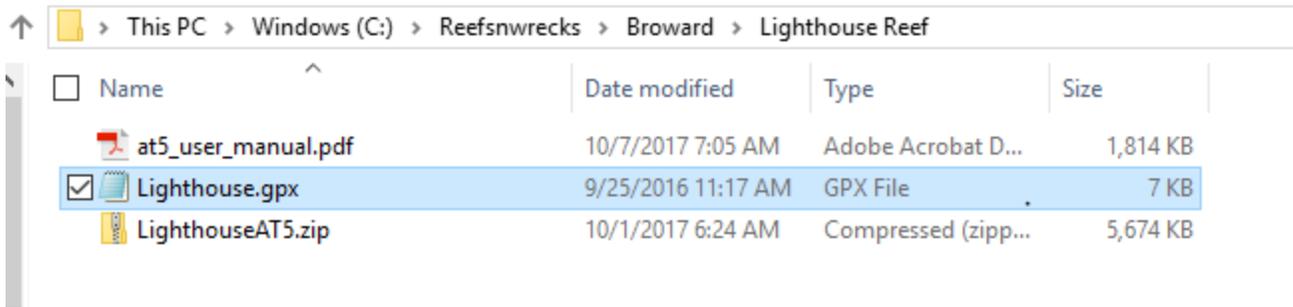
Browse to where you want to put the files. We recommend a dedicated folder called C:\Reefsnwrecks and a folder for each county and reef. For example, C:\Reefsnwrecks\Sarasota\Fisher.



When you are complete you will see this final screen.



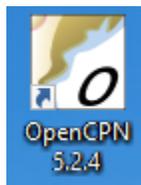
It will copy the KAP_User_Manual.pdf, "Reef".kap which contains the custom contour maps and "Reef".gpx file which contain all the waypoint for that reef to the folder you direct. We recommend a folder named C:\ReefsnWrecks\County\Reef but any folder will do. (Our instructions will assume C:\Reefsnwrecks.) Just be consistent and place all downloads into the appropriate folder. You should see a series of KAP and GPX files. If you have purchased contour charts in the past and are adding new ones, simply put the new ones in the existing folder.



OPENCNP Installation for Use On a PC (KAP Format)

Go to the <http://opencpn.org/ocpn/> website and download the installation program (.exe file) named OpenCPN_4.4.0_setup.exe (or higher). Run the file and it will install itself like any other Windows program.

The installation program will install a copy of OpenCPN and Help files on your hard disk.



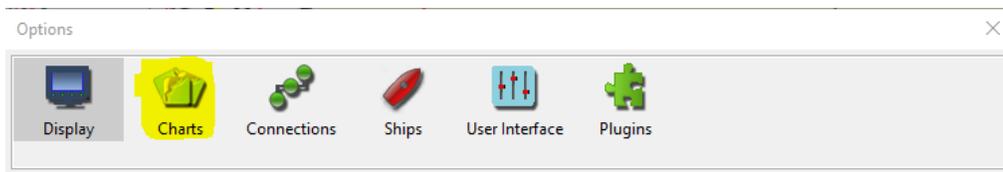
If you have not already done so, go to NOAA Chart website, <http://www.charts.noaa.gov/RNCs/RNCs.shtml> and download the latest Florida Raster charts to a new folder named C:\NOAA.

Every so often you should go to the NOAA website and download the most current charts, place the file in the C:\NOAA folder and unzip them to the folder.

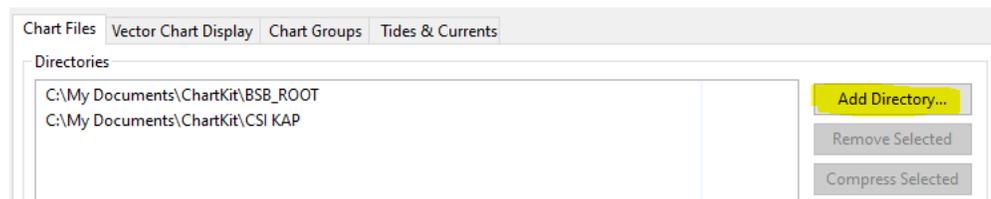
A Zip file is a way to pack and compress multiple files into one smaller file. To unzip a file, simply open the file in Windows Explorer and select **Extract** all files in the upper left corner. A window will open and suggest a new folder with the same name as the zip file. Edit the name back to the C:\NOAA folder and click Extract in the lower right corner. The files will separate and un-compress into the folder.

Getting Started

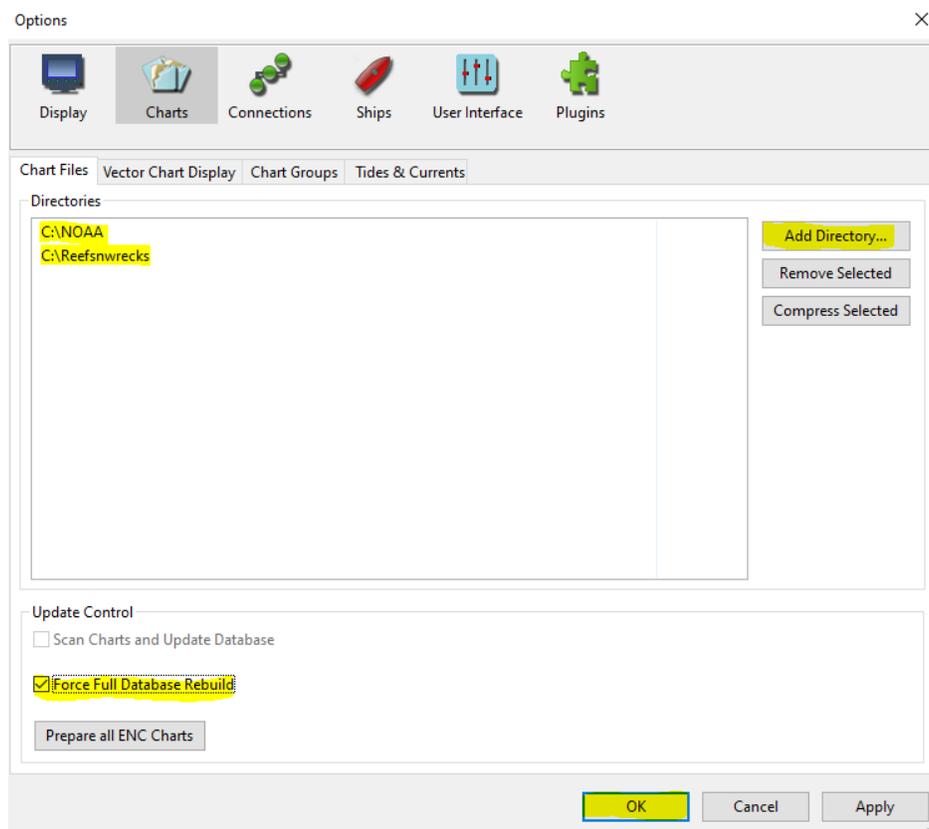
To launch OpenCPN select Start, All Programs, OpenCPN, and OpenCPN X.X.X. If you have selected to have a desktop icon simply double click on it. At this time the screen will show a map of the world. You now need to tell the program where your charts are. Select the gear icon on the top left of the screen. Select the Charts icon.



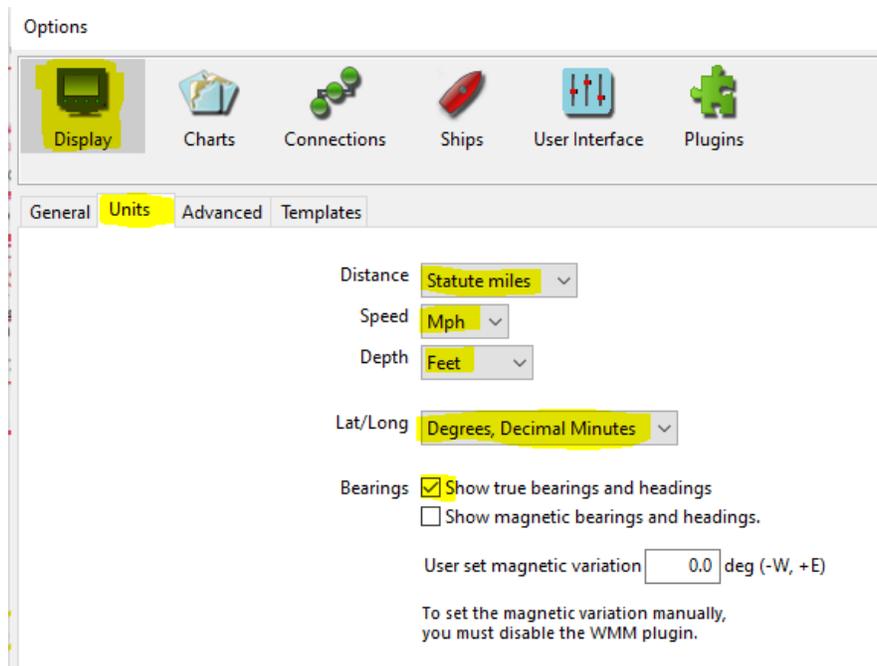
Click the button Add Directory... on the right side of the window.



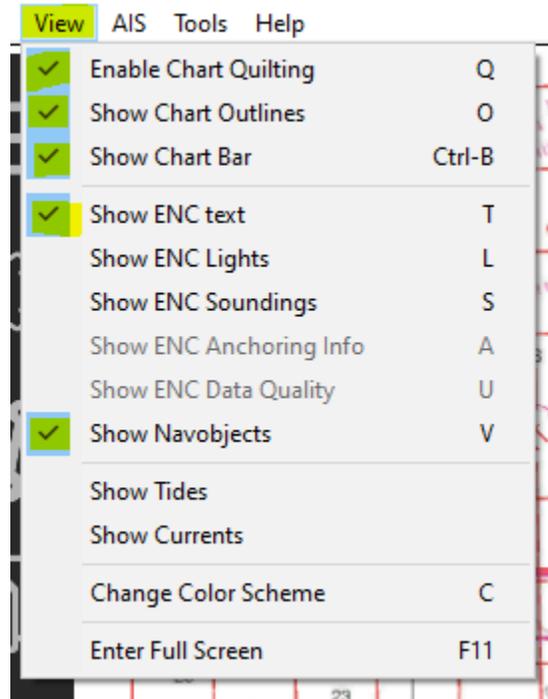
Browse to the C:\NOAA folder where you put the NOAA files into and click OK. Browse to the C:\Reefsnwrecks folder where you put the Custom reef charts and click OK. You should see the two folders on the left side list under Directories. Click the check box at the bottom, Force Full Database Rebuild then hit Ok.



The program will go to the chart folders and log each chart file. Select the gear icon again and select the Display Icon and select the Units tab. We recommend the highlighted settings shown below.



On the very top left corner of the screen select the View Menu. Select the Enable Chart Quilting, Show Chart Outlines, Show Chart Bar, Show ENC test and Show Navobjects options one at a time.

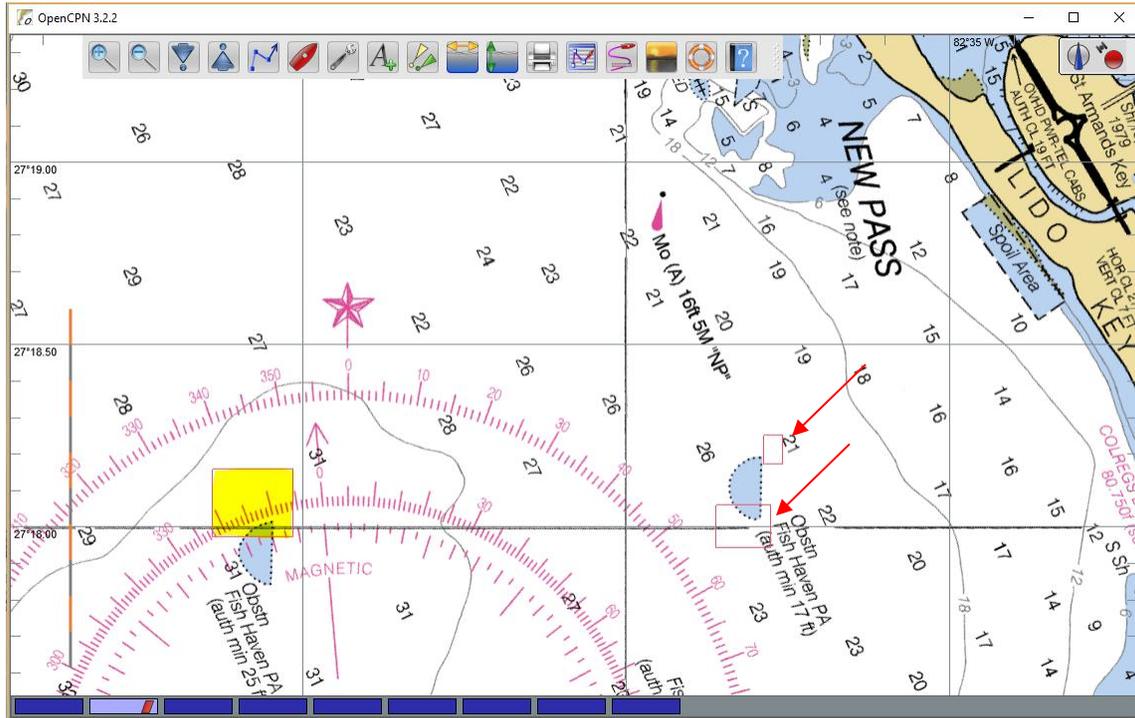


All chart boundaries are now shown on the map as a red border.

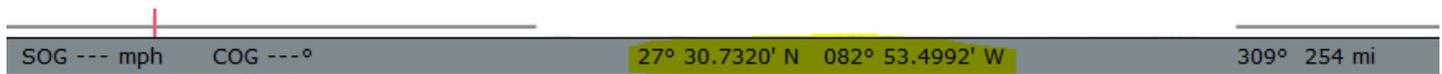


Scroll around holding down the left mouse button until the pointer is in the middle of one of the red boxes. Use the mouse wheel upwards to zoom in and the custom chart will appear as you zoom in and will show more and more detail as you continue to zoom in. You can also use the - (minus on the keyboard) to zoom out and + (plus on the keyboard) to zoom out. The custom contour charts are inside the small red chart boundaries typically over a fish haven or wreck symbol on the NOAA charts.

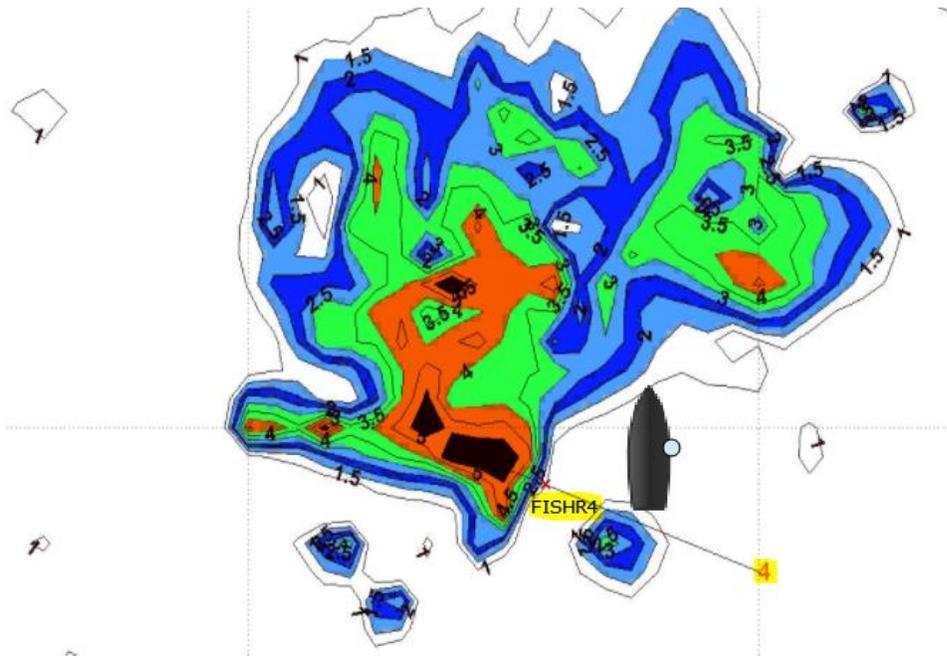
For example the chart below shows the NOAA chart near New Pass in Sarasota. The yellow highlighted box shown is the boundary of our Alan Fisher Reef custom contour map. (Yellow highlighting added for clarity in this manual.) Two other reefs are shown to the right as examples of how all the loaded custom charts will normally be displayed. (Red arrows)



Note that as you move the mouse cursor around the latitude and longitude will be displayed in the bottom middle of the screen.



By using the + or mouse wheel, you can continue to zoom in to see greater details. In the illustration below we have zoomed in on waypoint #4 which is designated as FISHR4 in the GPX file. If you connect your GPS to the PC, you will see your boats position right on the chart. (Boat is shown in the center just east of waypoint #4).



As time goes on you will like to explore additional features of the program. Waypoints are one example. We have provided a .GPX waypoint file that corresponds to each call out on our custom charts. Select the two page with bent corner icon to open up the Route & Mark Manager. Select the Waypoints tab (highlighted in yellow).



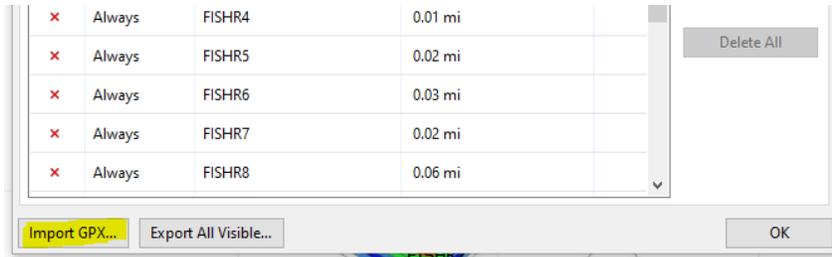
Route & Mark Manager
— □ ×

Routes
Tracks
Waypoints
Layers

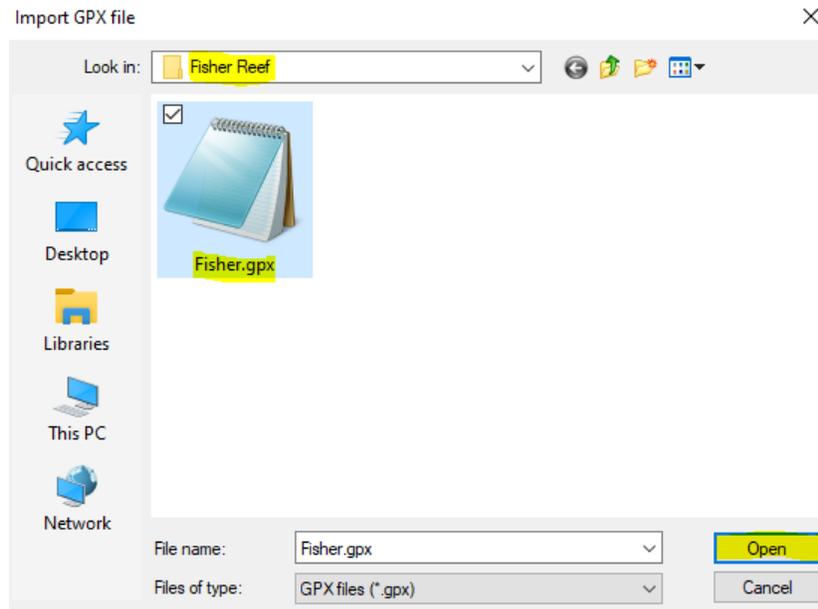
Icon	Scale	Waypoint Name	Distance from own ship
×	Always	FISHR1	0.04 mi
×	Always	FISHR2	0.09 mi
×	Always	FISHR3	0.09 mi
×	Always	FISHR4	0.01 mi
×	Always	FISHR5	0.02 mi
×	Always	FISHR6	0.03 mi
×	Always	FISHR7	0.02 mi

New
Properties
Center View
Delete
Go To
Export selected...
Send to GPS
Delete All

On the bottom left select Import GPX... (Highlighted in yellow)

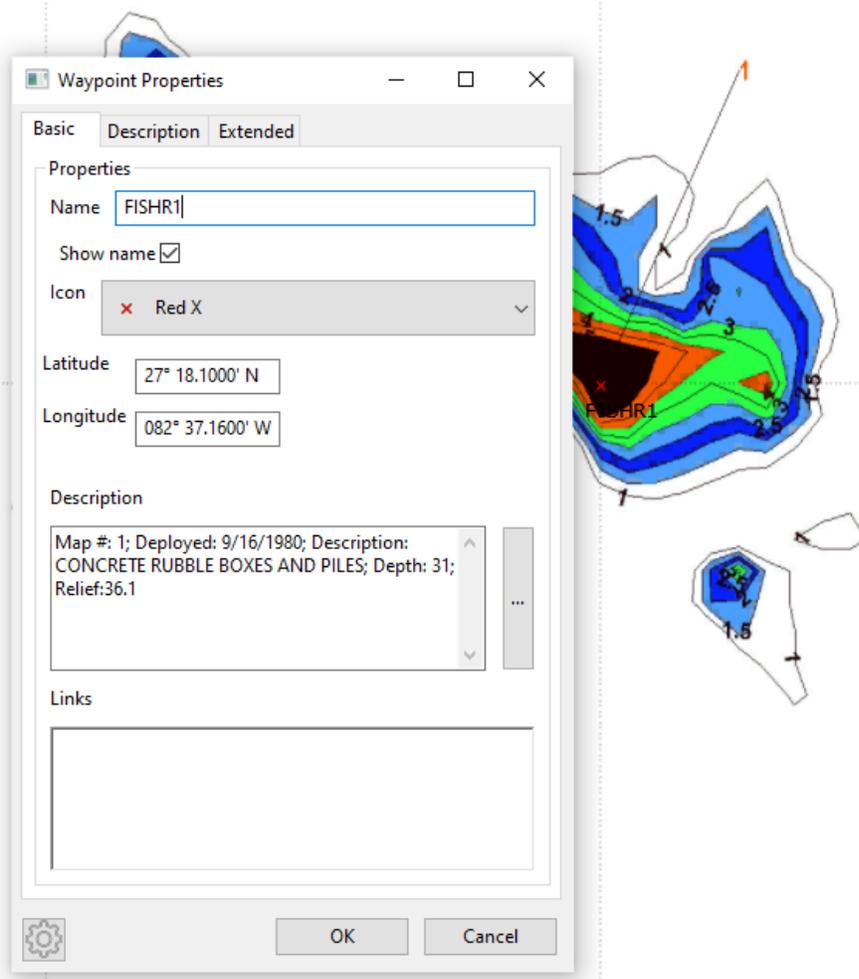


Browse to your Reefsnwrecks/Reef folder, select the Reef.GPX waypoint file you want to load and click Open in the lower right corner. The selected waypoint will be imported and displayed on the charts.



Waypoints are identified with a red x with the waypoint name below it. Load as many GPX files as you like now or just load the ones you will visit that day.

Zoom in and double click with your mouse on the **X** symbol, or highlight the waypoint in the Route manager list and select Properties and an information box will come up describing the waypoint. We have included a Name, and a brief description of the site, year of deployment, primary material, typical depth, maximum relief and the exact latitude and longitude. When you're done, select Ok to exit.



We strongly urge you to read the OpenCPN help file to become familiar with all the other features of the program.

Getting Help

Any support questions or problems associated with OpenCPN should be directed to them.

Updates and New Charts

Thank you for your purchase. Check back to the web site often as we are adding new areas and natural ledges to our inventory all the time. Remember, adding new charts are as simple as copying them to your Reefs wrecks and hitting "Force Full Database Rebuild" in OpenCPN.

SealQ Open Installation For Use on a Mobile Device (iPad, Android)

The same KAP files that can be seen on a PC using OpenCPN can also be seen and utilized on an iPad, iPhone, or Android device using a nautical chart viewing program called SealQ Open. The SealQ Open must be purchased and downloaded from the Apple App store or Google Play. Feel free to download it directly from Apple or Google and update when available. For best functionality, use it with a device with cellular capability because it has a built in GPS. (The GPS works even if you do not subscribe to cell service.) The process is quick and simple.

SEAIq also needs base NOAA RNC charts. These are available for free on the NOAA web site: <http://www.charts.noaa.gov/RNCs/RNCs.shtml> . Always download the latest NOAA charts before navigating in those areas. The SEAIq program, our custom charts and NOAA charts provide the framework for our custom contour reef maps which you have purchased. We recommend that you download the entire state of Florida (FL below). It is already in a ZIP file and will be downloaded to you iPad as is. Save the file FL_RNCs.zip to your C:\NOAA folder.

RNCs by States:

Name	XML	Size	Zip File Date Time*	Name	XML	Size	Zip File Date Time*	Name	XML	Size	Zip File Date Time*
AK	View	718 MB	04/07/2016 15:08:40	AL	View	34 MB	04/07/2016 15:08:47	CA	View	199 MB	04/07/2016 15:09:26
CT	View	88 MB	04/07/2016 15:09:43	DE	View	29 MB	04/07/2016 15:09:48	FL	View	274 MB	04/07/2016 15:10:39
GA	View	62 MB	04/07/2016 15:10:50	HI	View	86 MB	04/07/2016 15:11:07	ID	View	8 MB	04/07/2016 15:11:08
IL	View	31 MB	04/07/2016 15:11:14	IN	View	28 MB	04/07/2016 15:11:19	LA	View	141 MB	04/07/2016 15:11:45
MA	View	147 MB	04/07/2016 15:12:12	MD	View	99 MB	04/07/2016 15:12:32	ME	View	183 MB	04/07/2016 15:13:06
MI	View	194 MB	04/07/2016 15:13:42	MN	View	41 MB	04/07/2016 15:13:50	MS	View	40 MB	04/07/2016 15:13:57
NC	View	79 MB	04/07/2016 15:14:12	NH	View	38 MB	04/07/2016 15:14:18	NJ	View	101 MB	04/07/2016 15:14:37
NV	View	8 MB	04/07/2016 15:14:38	NY	View	227 MB	04/07/2016 15:15:21	OH	View	61 MB	04/07/2016 15:15:32
OR	View	92 MB	04/07/2016 15:15:50	PA	View	24 MB	04/07/2016 15:15:55	PO	View	66 MB	04/07/2016 15:16:08
PR	View	60 MB	04/07/2016 15:16:20	RI	View	60 MB	04/07/2016 15:16:32	SC	View	77 MB	04/07/2016 15:16:46
TX	View	113 MB	04/07/2016 15:17:07	VA	View	135 MB	04/07/2016 15:17:32	VT	View	12 MB	04/07/2016 15:17:34
WA	View	218 MB	04/07/2016 15:18:16	WI	View	57 MB	04/07/2016 15:18:27	Note: PO = Pacific Ocean			

SealQ can be used as a chart viewer, route planner, and for navigation using traditional coastal and celestial techniques. We are not affiliated with SealQ and only provide additional navigation charts that work with this App. Help with using the program should be directed to the manufacture at info@seaiq.com .

Installation

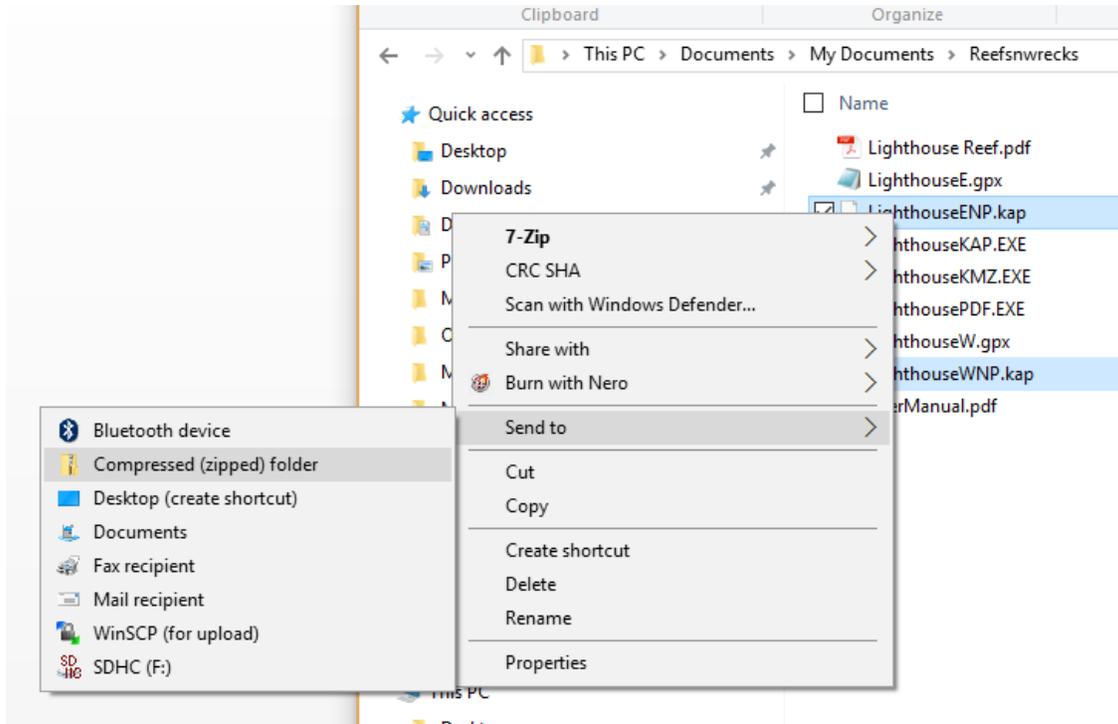
First you need to go to the Apple or Google App store and purchase SEAIq Open APP. Follow the standard procedures for paying for and downloading the APP.

App Store



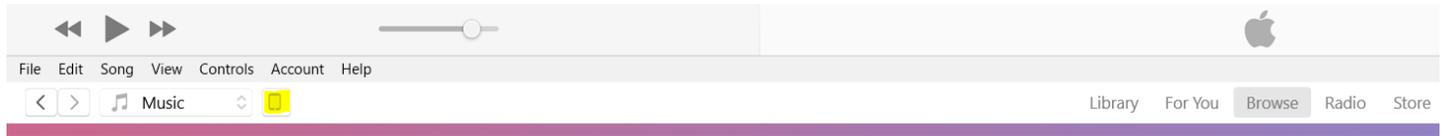
Go to www.seaiq.com and read about the Recreational version SealQ Open program and how it works. I do not want to repeat the help they supply as they may change or add features in the future. You can download the User Manual from the site. There is also help built into the App which you can review as well. It is well worth the time to read the help as there are many features of the App that will help while on the water.

The custom contour charts were downloaded and installed in the C:\Reefsnwrecks folder. SEAiQ needs to read a Zip file so you will need to Zip all the Custom KAP files into one ZIP file. A Zip file is a way to pack and compress multiple files into one smaller file. To zip a number of files, simply open the C:\Reefsnwrecks folder in Windows Explorer, select all the custom KAP files (*Reef*KAP.kap) (use CTRL and Left Mouse click), Right click on the selection group and chose Send To and then Zipped file. All the selected files will now be in a Zip file. Rename the file CustomMaps.zip.



Transfer files from your computer to your iPod touch, iPhone, or iPad:

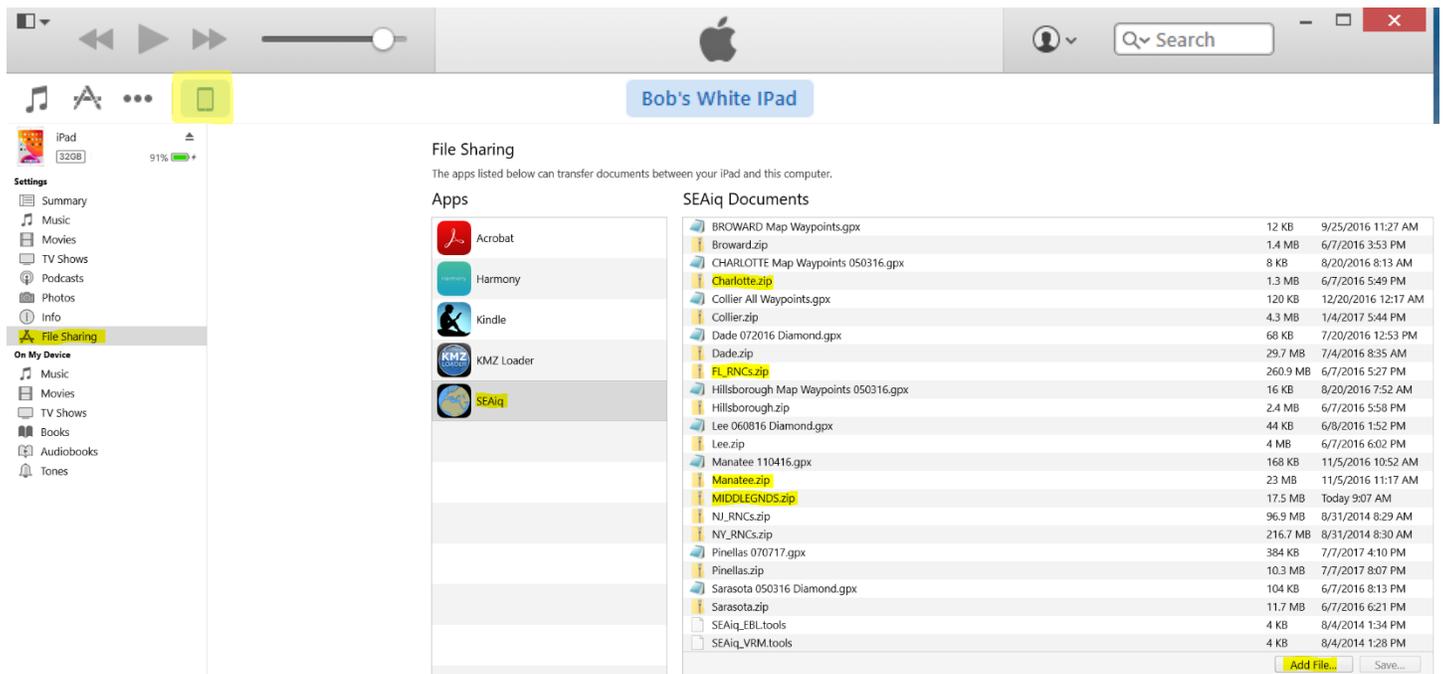
1. Download and install iTunes from www.Apple.com
2. Run Apple iTunes
3. Connect your iPod touch, iPhone, or iPad to your computer using a USB cable. Enter your password and accept connection to your PC. Select the little iPhone icon in the upper left command bar.



4. A set of windows will come up describing your iPad capacity, serial number and iOS.



5. Select the File Sharing item in the lower left bar. (Looks like an A)
6. On the right a window will open showing all the Apps that can accept downloaded files.

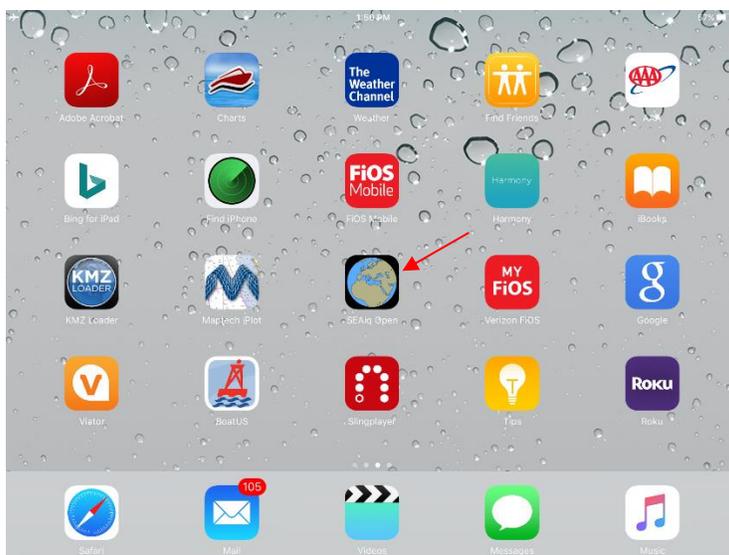


7. Select SEAiQ in the Apps section underneath File Sharing.
8. Press the **Add File...** button in the lower right side under the file size, date and time.
9. In the window that appears, navigate to the C:\NOAA folder, select the FL_RNCs.zip file and click the **Open** button.
10. The small activity window at the top of the screen should show the files being copied. Be sure to wait until the copy is complete before proceeding. The files are transferred to your device.
11. Click **Add files...** and navigate to the Reefsnwrecks folder and select the CustomMaps.zip file to transfer, and click Open.

12. Follow the same procedure with any of the .gpx files that were supplied. You do not need to zip the GPX files. The .gpx files contain the waypoints that match the call outs on the custom charts. This allows you to “Go To” that waypoint.
13. The charts should now be on your iPad/iPhone. All the Zip and GPX files you transferred should appear in the list on the right under SEAIq Open Documents.
14. The KAP files will automatically be opened in SEAIq when it runs. The GPX files need to be selected before using and will be described below.

Getting Started

To launch SEAIq select the SEAIq Open Icon on your iDevice. (Shown in the middle of the screen below)



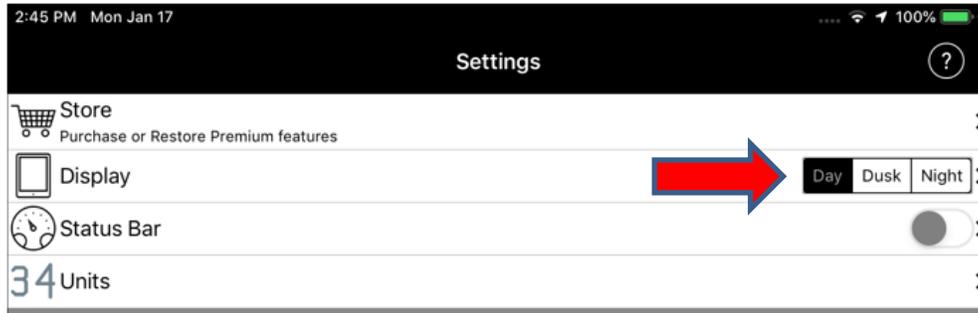
Touch **I Accept**. You should see the Florida NOAA charts on the screen.



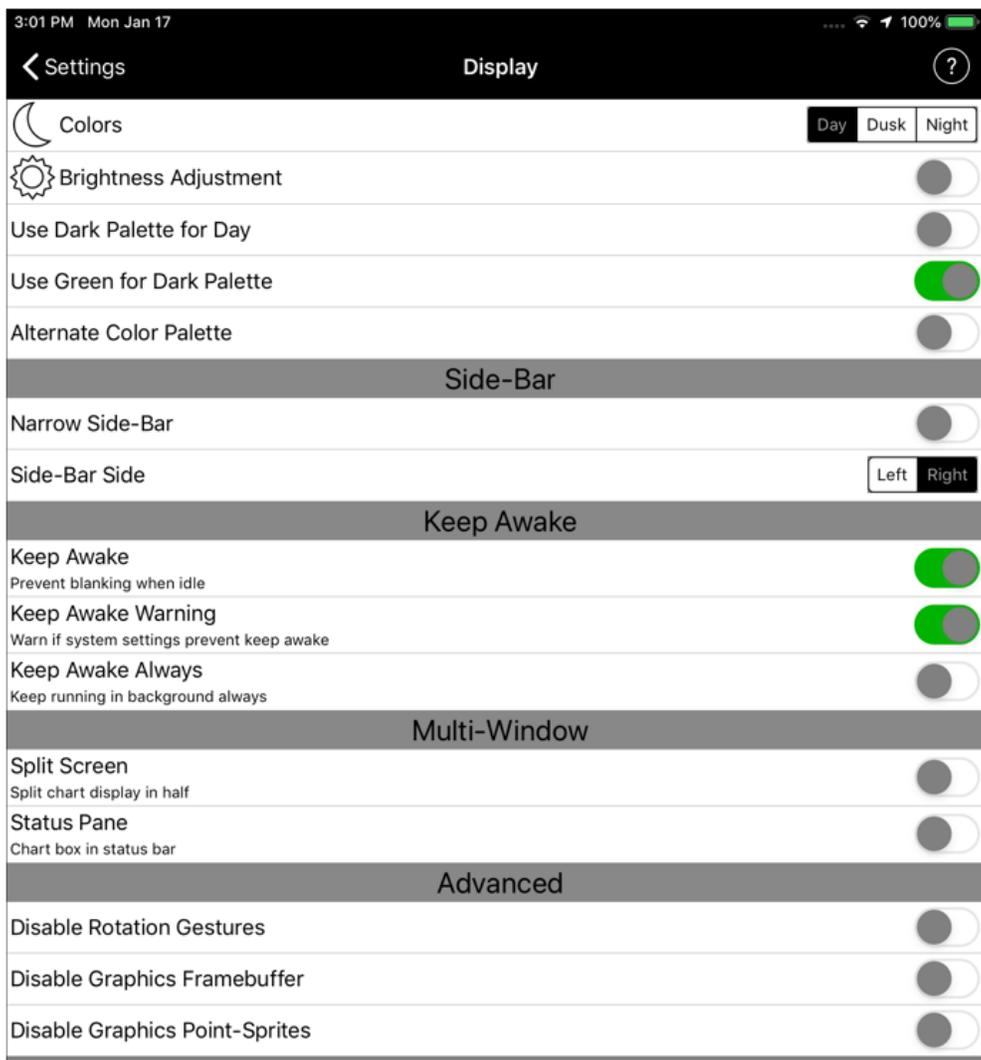
On the bottom menu select *Settings*,



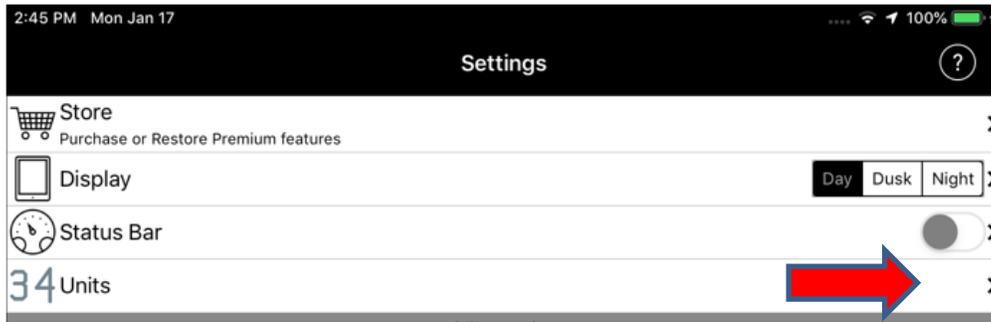
Then select Display:



Then make the following selections that are shown with the Green sliders and go back to Settings by pressing the left chevron (< Settings) in the upper left corner of the screen.



Then select Units:

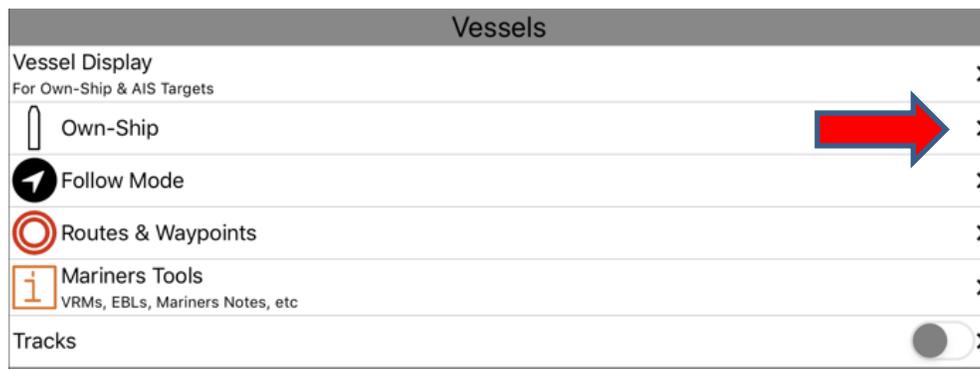


Select the Depth – FT, Horizontal lengths – FT, Distance-MI, Speed-MPH, Bearing-T, Latitude/longitude format DDMMFFFF, Date-MM/DD and Temperature-F.

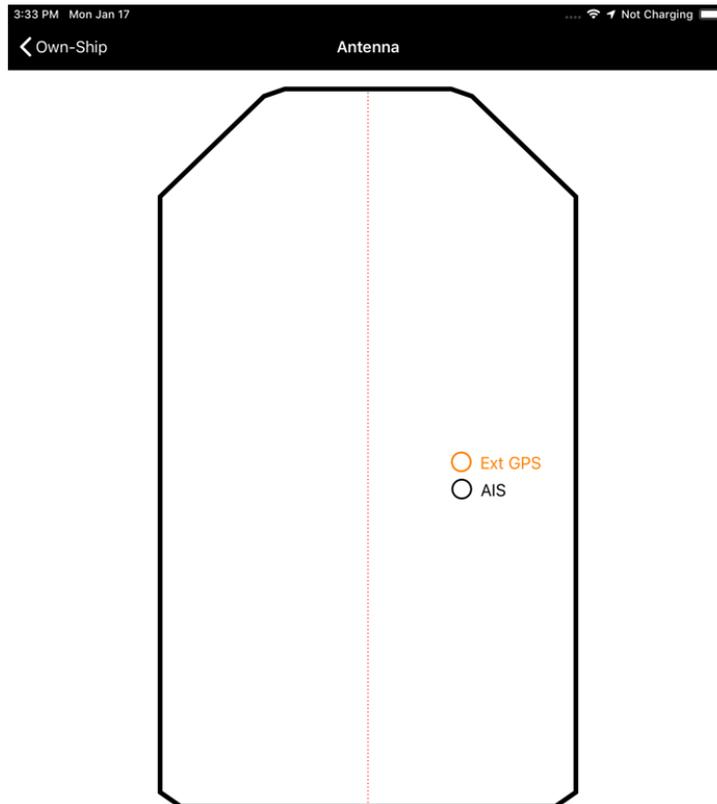
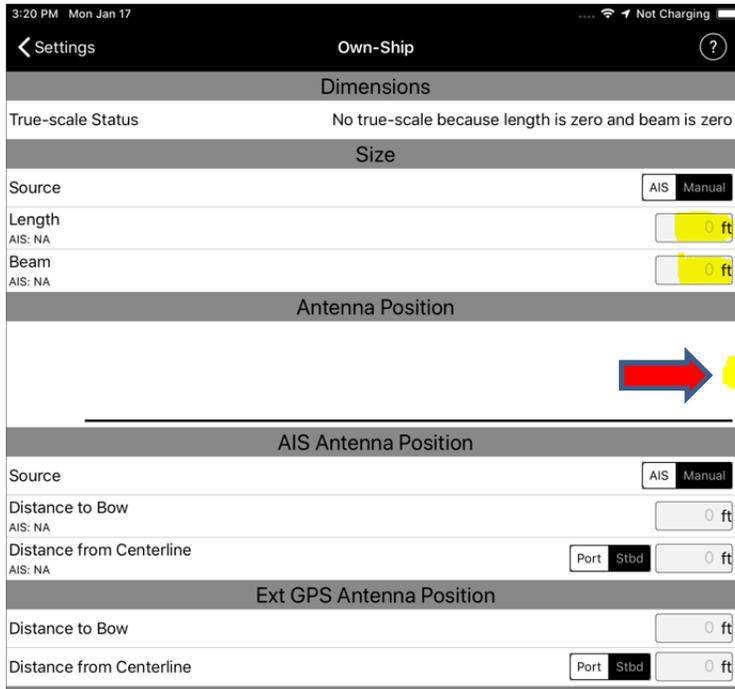


Go back to Settings by pressing the left chevron (< Settings) in the upper left corner of the screen.

Select Own-Ship in the Vessels menu:



Enter the length and beam of your boat. Select Antenna Position and drag and drop the two circle icons to the positions on your boat. The Distance from your helm to the Bow and Distance to Centerline will automatically be filled in.

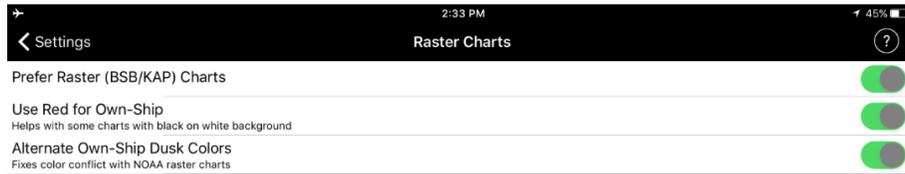


Size: 22.0x8.5ft
AIS: 12.3ft / STBD 1.9ft
Ext GPS: 11.4ft / STBD 1.9ft

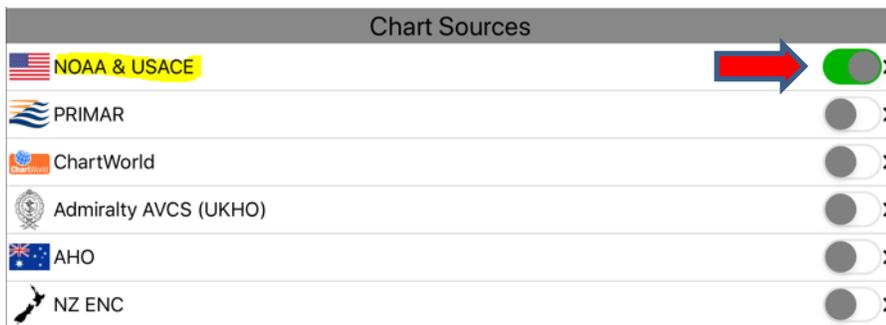
Go back to Settings and under Chart Settings turn on the Raster Chart green slider.



Next select Raster Charts > and turn on all three green option sliders on the far right side. The slide switch should turn green as shown below.



Go back to Settings and under Chart Sources turn on green option slider for NOAA & USACE

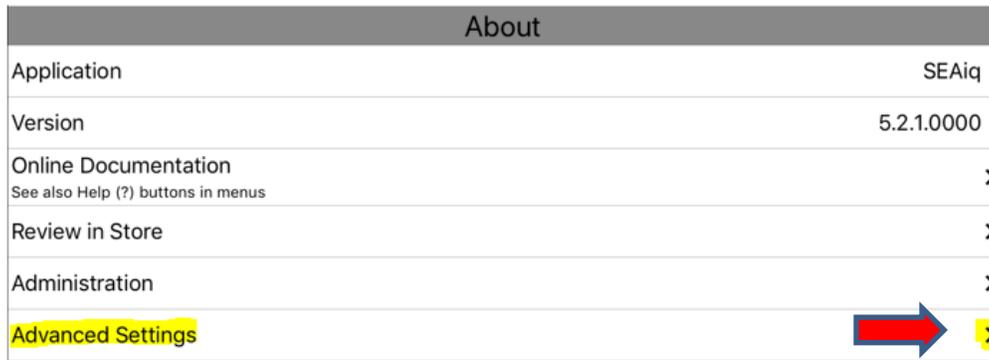


Then select NOAA & USACE chevron to open up the Charts menu:

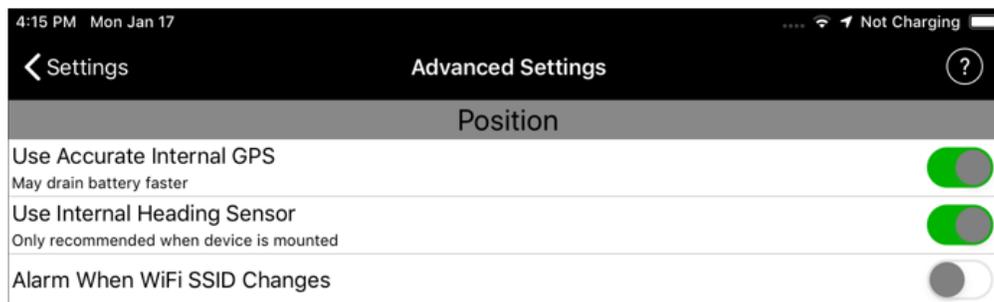


Turn on the Use NOAA Charts and Give NOAA Charts Priority green option sliders on the far right side. All the other sliders should be off.

Return to the main Settings screen and scroll all the way down to the bottom and select Advance Settings in the About menu.



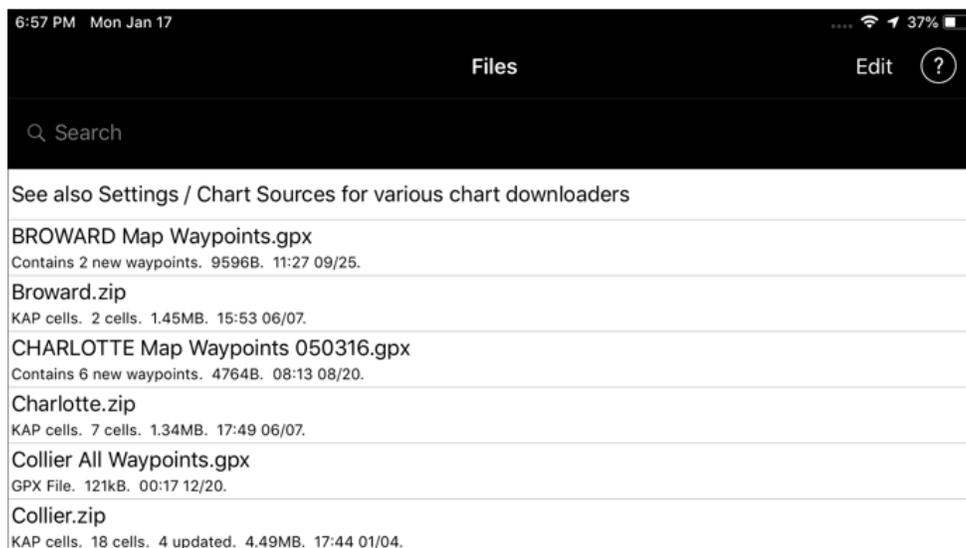
Select the green option sliders on the far right side for Use Accurate Internal GPS and Use Internal Heading Sensor.



Return to the main Settings menu select Files (file folder) at the very bottom right of the screen.



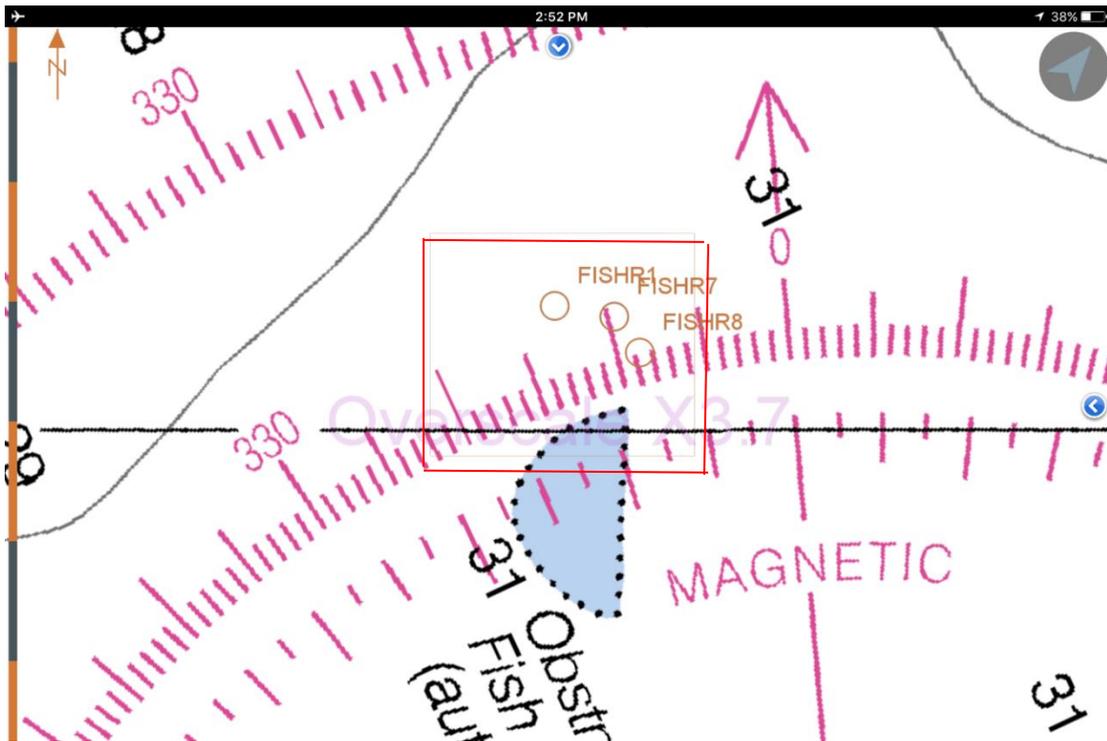
Verify that you have all the NOAA and Custom Charts along with any GPX files loaded into your iDevice. (e.g. FL_RNCs.zip and CustomMaps.zip files)



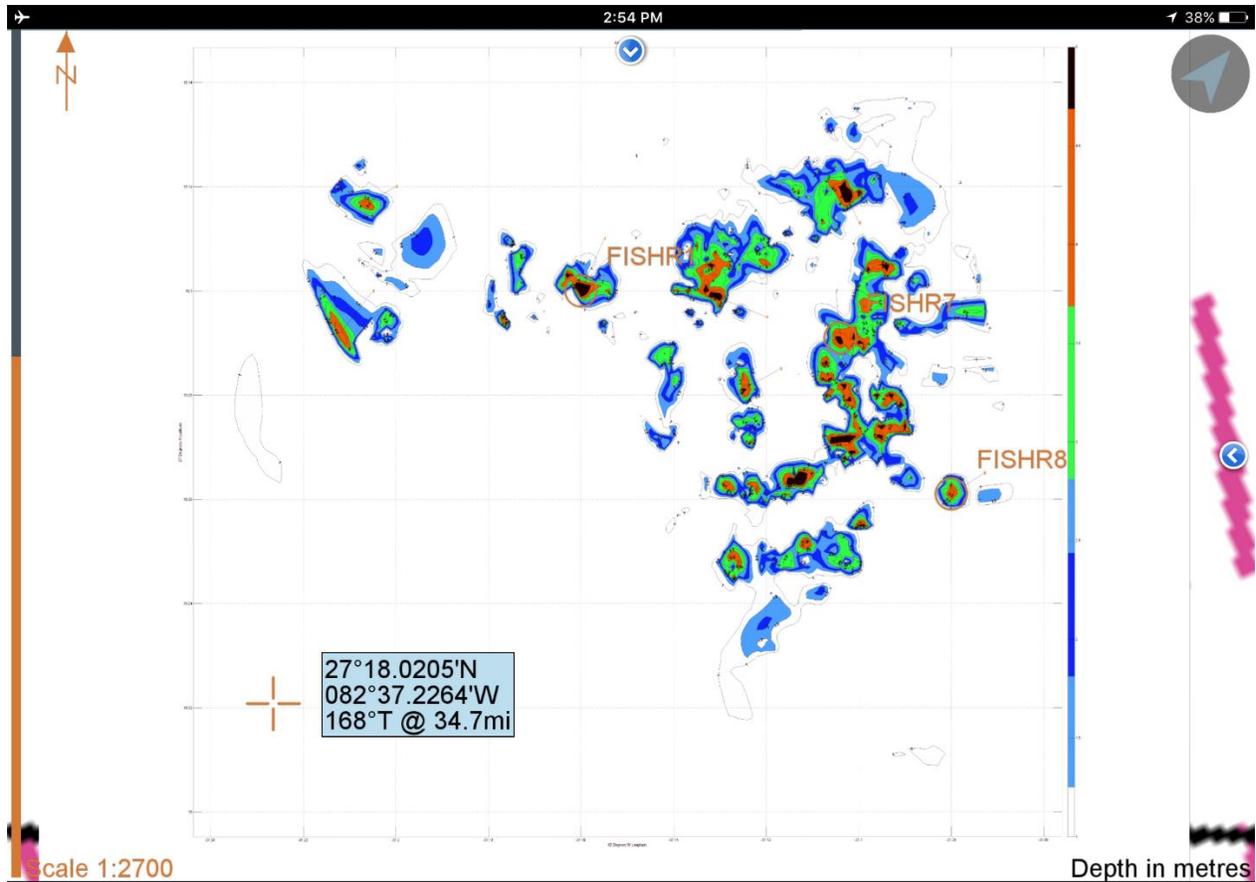
Select Navigate at the far bottom left of the screen. You will see the NOAA charts. Using the reverse pinch on the screen, zoom in to the areas of the custom charts.



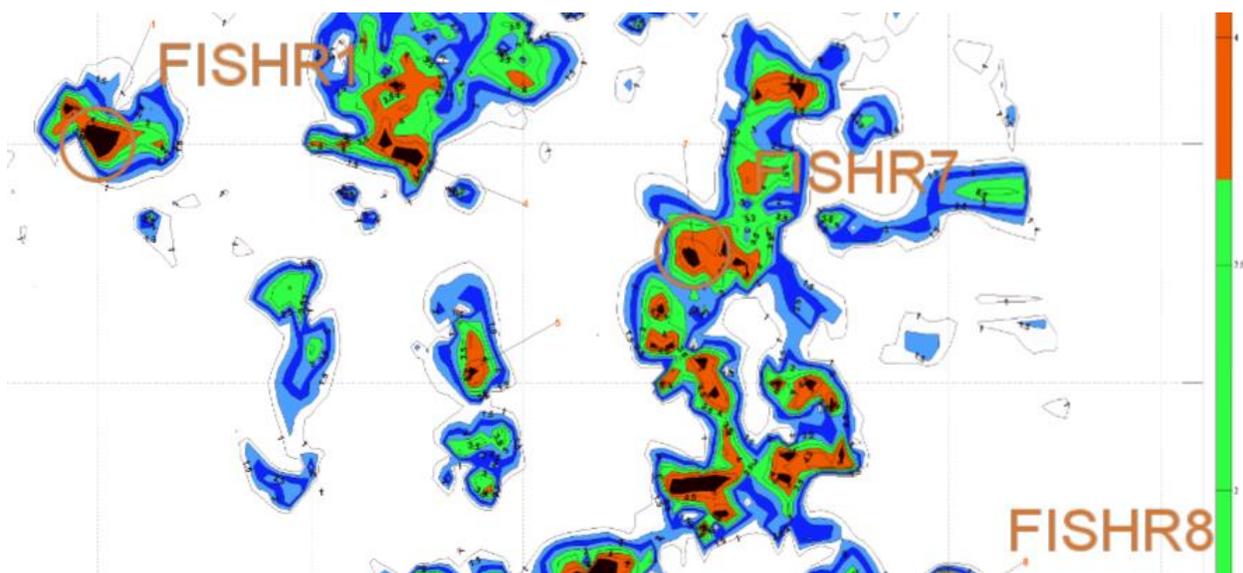
As you zoom in, you will see a light pink box around the custom chart areas.



Keep zooming in until the custom chart opens. Touch any spot on the display and the Latitude and Longitude will be displayed along with the bearing and distance from your current position.

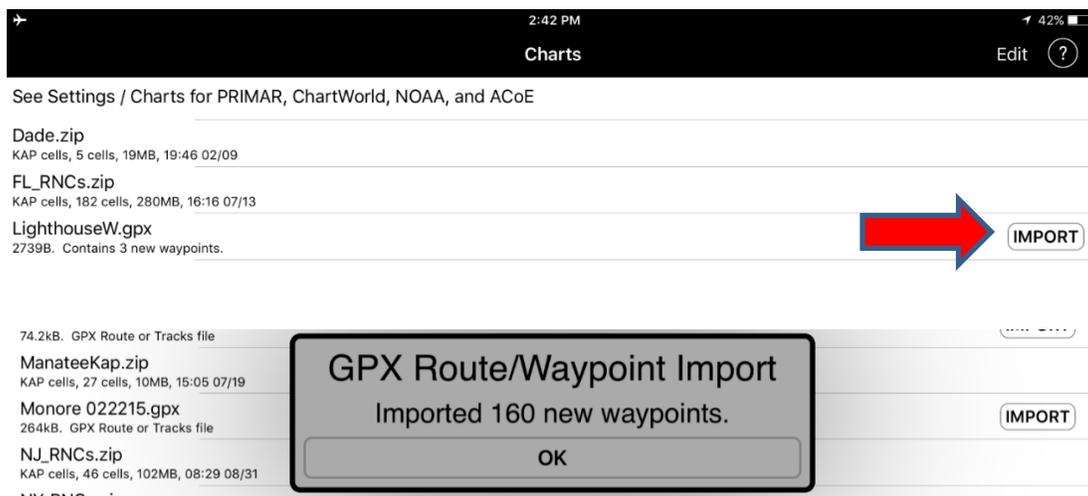


For artificial reefs on a flat bottom, brighter reds have greater profiles (peaks) while light blues have lower profile. For natural reefs and ledges higher areas are red, progress down the color spectrum of greens, yellows to the deepest areas in dark blue. The color key scale on the right indicates the respective heights.



Waypoints

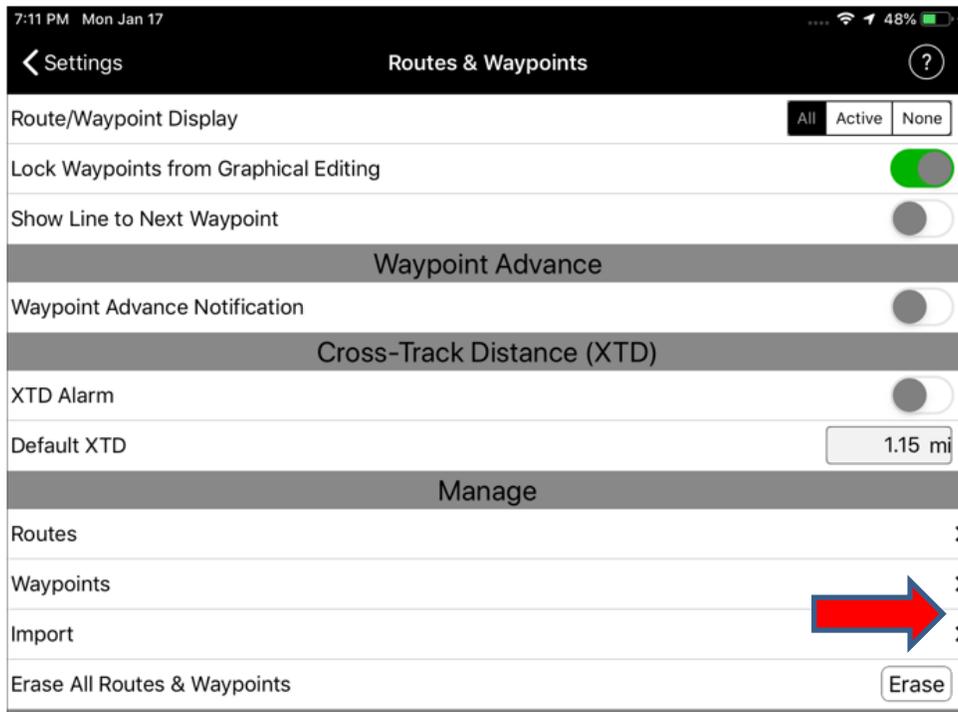
Many of the high interesting peaks are designated with a line and a number. You first need to Import the waypoints from the CHARTS menu. Select the Charts icon on the bottom right side of the screen. Next to each GPX file you will see an IMPORT button. Select the reef you want waypoints loaded for and press Import next to each. A window will come up. Press OK.



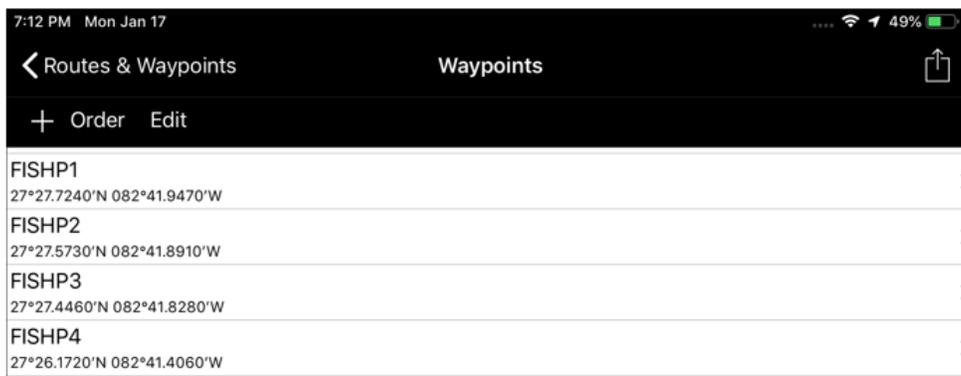
To verify or modify any of the waypoints select the Settings Icon on the bottom of the screen and select Routes & Waypoints under the Vessels menu



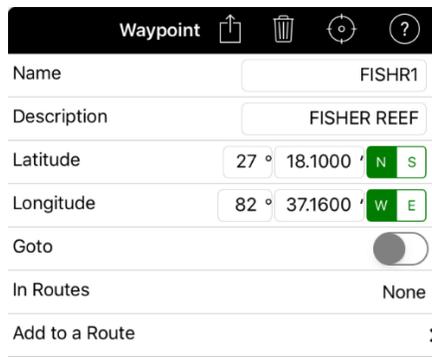
The Routes and Waypoints settings menu comes up. I suggest setting the green slider option for Lock Waypoints from Graphical Editing to prevent a waypoint from being accidentally moved. Select Waypoints.



A list of all the loaded waypoints will be displayed.



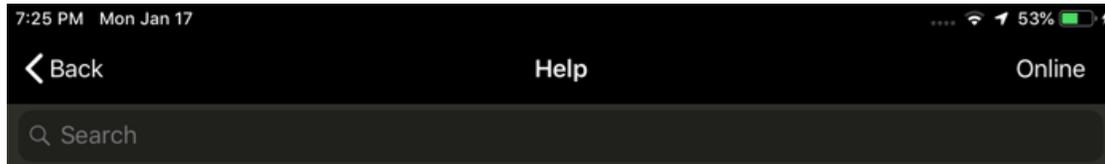
Select a waypoint and a window will open showing you the Name, Description, Latitude, Longitude, whether you want to Goto that waypoint, whether it is in a route or if you want to Add it to a route. Refer to the SealQ user manual for details on using Goto, Delete and adding waypoints to routes.



As time goes on you will like to explore additional features of the program. There are many additional features available with SEAIq so we strongly urge you to read the manual or Help to become familiar with the program and get the most out of the program.

Getting Help

The program user manual is always available by pressing Settings and selecting ? in the upper right corner. Any support questions or problems associated with SEAIq should be directed to www.SEAIq.com. Any questions about the Contour Charts should be directed to Bob@reefsnwrecks.com.



SEAIq Manual v5.1 (PDF)

Contents	Settings
<ul style="list-style-type: none"> • Overview • Navigate • Routes <ul style="list-style-type: none"> ◦ Import & Export ◦ Waypoint Edit ◦ Route Segment Edit (Pilot) • Settings <ul style="list-style-type: none"> ◦ Display ◦ Presets (Pilot) ◦ Status Bar ◦ Units ◦ Pilot <ul style="list-style-type: none"> ▪ Pilot Setup (Pilot) ▪ Logbook (Pilot) ▪ Sea Traffic Management (Pilot) <ul style="list-style-type: none"> ▪ Sea Traffic Management Login (Pilot) ◦ Vessels <ul style="list-style-type: none"> ▪ Vessel Display <ul style="list-style-type: none"> ▪ Predicted Positions (Pilot) ▪ Buffer Around Own-Ship (Pilot) ▪ Vessel History (Pilot) ▪ AIS Target Labels ▪ Own-Ship <ul style="list-style-type: none"> ▪ Heading Offset (Pilot) ▪ Barge (Pilot) ▪ Turbine Blades (Pilot) ▪ Follow Mode ▪ Routes & Waypoints ▪ Meeting Points (Pilot) ▪ Mariners Tools ▪ Tracks ▪ Docking (Pilot) ◦ Chart Settings <ul style="list-style-type: none"> ▪ Vector Charts <ul style="list-style-type: none"> ▪ Sounding Ranges (Pilot) ▪ Advanced Vector Chart Settings ▪ Raster Charts ▪ IHO S-63 Charts ▪ Bathymetry & Overlays (Pilot) ◦ Chart Sources <ul style="list-style-type: none"> ▪ OneOcean Charts (Pilot) ▪ NOAA & USACE Charts ▪ PRIMAR Charts 	<p>The Settings tab is used to control operation of SEAIq. Almost all settings can be accessed from this table and/or its sub-tables.</p> <ul style="list-style-type: none"> • <i>Store</i> : Select this to purchase an in-app Upgrade to enable premium features, or to restore the upgrade if already purchased. • <i>Display</i> : Settings related to display. • <i>Presets (Only SEAIq Pilot)</i> : Setup and manage preset buttons. • <i>Status Bar</i> : Control behavior and appearance of the status bar. • <i>Use Virtual Keyboard</i> : Turn this on to display virtual keyboard when you touch a text area. This is only used on Microsoft Windows touch devices, for which Microsoft does not automatically open the virtual keyboard. • <i>Units</i> : Select units to use for depth, distance, speed, degrees, etc. <h3>Pilot</h3> <ul style="list-style-type: none"> • <i>Pilot Setup (Only SEAIq Pilot)</i> : Settings to adjust when boarding vessel. • <i>Logbook (Only SEAIq Pilot)</i> : Maintain logbook. • <i>STM (Only SEAIq Pilot)</i> : Enable use of STM function. <p>This function is overridden (temporarily disabled) when playing back NMEA recordings (Settings / Record & Playback), Virtual Boarding (Settings / Virtual Board), or using the simulator (Settings / Simulator).</p> <h3>Vessels</h3> <ul style="list-style-type: none"> • <i>Vessel Display</i> : Settings for display of Own-Ship and AIS targets. • <i>Own-Ship</i> : Settings related to the display and size of Own-Ship. • <i>Follow Mode</i> : Follow Mode causes display to automatically track Own-Ship. • <i>Routes & Waypoints</i> : Settings related to use and display of Routes and Waypoints. • <i>Meeting Points (Only SEAIq Pilot)</i> : Control display and alarms for AIS Target Meeting Points. • <i>Mariners Tools</i> : Manage Mariners Tools. These include the following: Mariners Notes, Variable Range Markers, Electronic Bearing Lines, Clearing Lines, Fenders, Views, and Groups. • <i>Tracks</i> : Tracks record the movement of Own-Ship. • <i>Docking (Only SEAIq Pilot)</i> : Control display of Docking Aids to assist in docking large vessels. <h3>Chart Settings</h3> <ul style="list-style-type: none"> • <i>Vector Charts</i> : Manage appearance of vector charts. • <i>Raster Charts</i> : Control display of Raster Charts, BSB and KAP files. This includes charts based on satellite imagery. • <i>IHO S-63 Charts</i> : Set up and manage charts in the S-63 format. • <i>Bathymetry & Overlays (Only SEAIq Pilot)</i> : Control settings related to depth information and overlays. <h3>Chart Sources</h3> <ul style="list-style-type: none"> • <i>OneOcean (Only SEAIq Pilot)</i> : Download and update S-63 charts from OneOcean. Enabling this causes updates to be checked for your charts from OneOcean. When charts are

Updates and New Charts

Thank you for your purchase. Check back to the web site often as we are adding new areas and natural ledges to our inventory all the time. Remember, adding new charts are as simple as copying them to your Reefs wrecks folder and selecting all the ReefKAP.kap files, sending them to a zipped file and replacing the old CustomMaps.zip file with the new one in your iPad or Android.

Do not allow the SeaiQ software to automatically update NOAA charts as the custom charts will seem to disappear. We hope that the manufacture of SeaiQ corrects this problem in the future. For now, continue to download the FL.Zip file directly from NOAA.

Android Devices

There are many types of Android devices that SealQ can work with. Refer to the SealQ help files for details on how to download the NOAA and custom maps to the device.

Any questions about the Custom Contour Charts should be directed to Bob@reefsnwrecks.com.

NOTE: We have set the price of Sarasota, Alan Fisher Reef to \$0.08 so you can download a full reef package in any or all the available formats and try them out. Just follow all the instructions above to add it to your cart.

Sorry I have to charge 8¢ because PayPal cannot accept a \$0 payment.