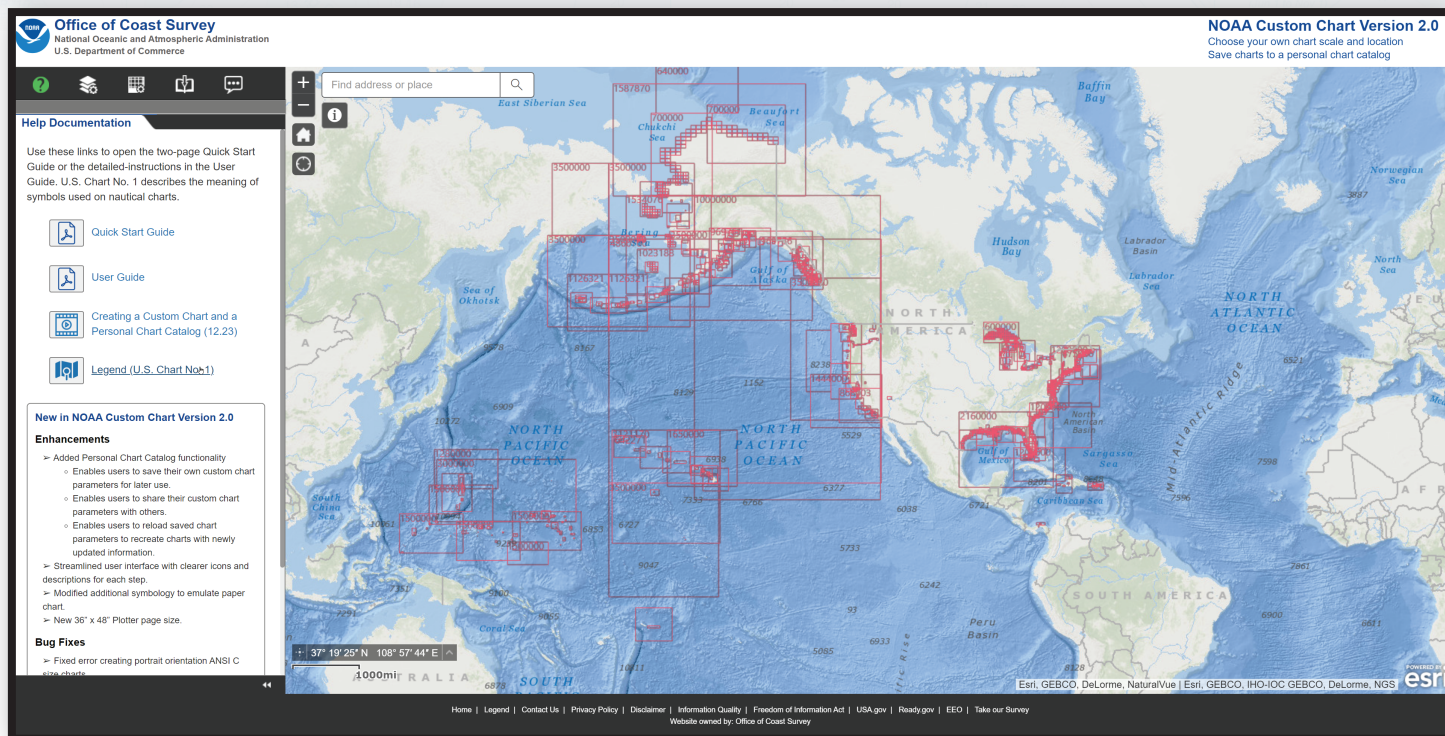




NOAA Custom Chart User Guide



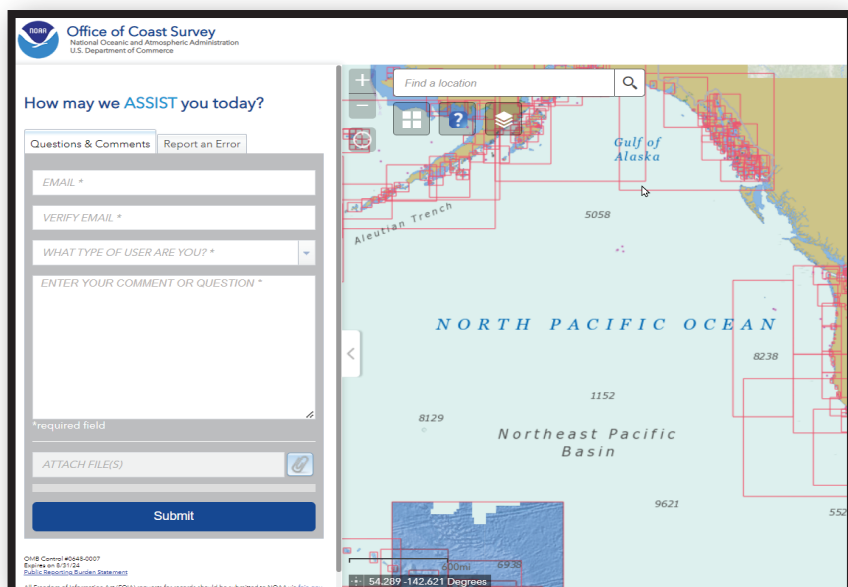
The NOAA Custom Chart launch page

NOAA will end production of its traditional paper nautical charts by January 2025. Although traditional paper nautical charts will no longer be available, chart users now have access to a new form of paper chart – the NOAA Custom Chart (NCC) – created directly from NOAA’s premier nautical chart product, the NOAA Electronic Navigational Chart (NOAA ENC®).

The online [NOAA Custom Chart](#) application creates customized charts as PDF files. Their appearance is different from traditional paper charts, but they have all the latest data found on ENCs. Using this approach ensures consistency between ENC and NCC.

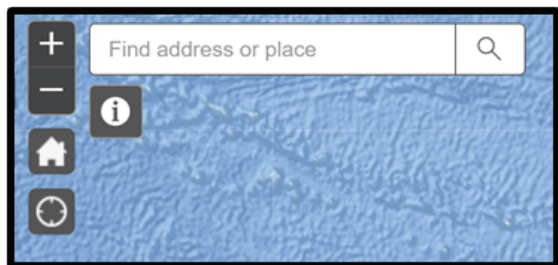
NOAA is actively making improvements to the NCC application and is interested in customer feedback. Suggestions for improvements can be provided through the NOAA Office of Coast Survey’s online feedback tool **ASSIST** at:

<https://www.nauticalcharts.noaa.gov/customer-service/assist>







Using the Web Map

Map Window Navigation







The controls in the upper-left corner of the map window allow you to move to the area for which you would like to create a chart.

Use the **Plus**  or **Minus**  icons, or roll the mouse wheel, to zoom the map in and out. The **Home**  icon will zoom out to the default display of North America. If you are using a GPS enabled device, clicking the **My Location**  icon will center the

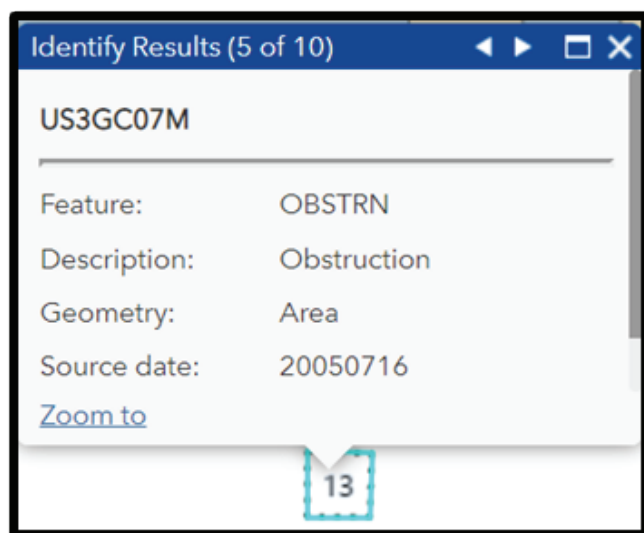
map at your current position. Typing into the **Find address or place** field will display a list of suggested locations to choose from. Click on a location to zoom to that spot. You may have to continue to zoom in to see chart features appear.

Identify Tool

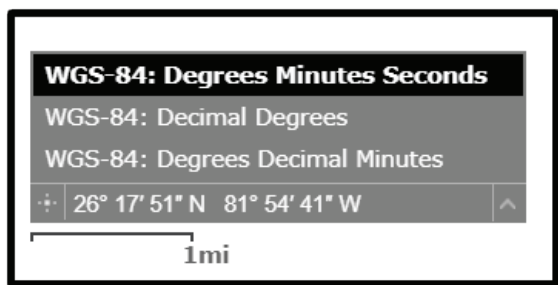
Once the chart data is displayed, you can click on the **Identify**  icon and then tap on the map to get more information about a particular feature. An **Identify Results** window will appear with a count of the number of features found at that location, such as (1 of 10). Use the arrows   at the top of the window to cycle through each of the features. The feature being described in the results window will be outlined in light blue. Click the **Identify**  icon again to deactivate it.






*It is best to deactivate the **Identify** tool before adding new chart extents to the map.*



Coordinate Display








A **Coordinate Display** and **Scale Bar** are in the lower-left corner of the map window. A value in feet or miles is displayed next to the bar to indicate the distance represented by the length of the bar. The running coordinate display shows the latitude and longitude of the mouse as it moves across the map. When you click on the  icon, the running coordinate display freezes. Click on the map to place a pin  and the coordinates of the position will be displayed. A second click of the  icon restores

the coordinate display. The default display is in degrees, minutes, and seconds. This can be changed to decimal degrees or degrees and decimal minutes by clicking on the up arrow on the right side of the display and selecting the desired format.

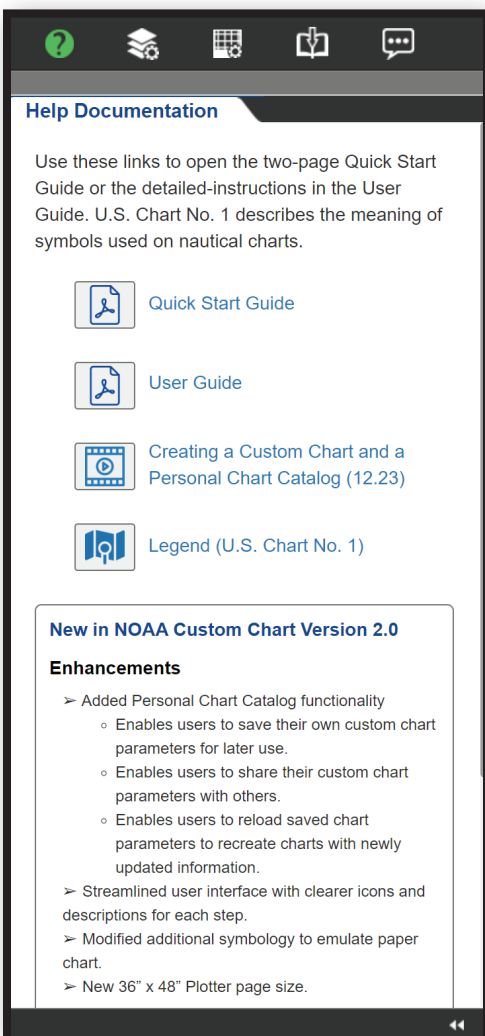
Accessing NCC Control Panels

Control Panels

When NCC opens, five icons are displayed at the top-left side of the application window. Clicking on an icon activates it, changing the white icon to green and revealing the associated control panel for that icon in the pane below. The function of these control panels is listed the following table, and described in detail in separate sections that follow.





	Help Documentation	Links to a two-page Quick Start Guide, this user guide, how-to video, the U.S. Chart No. 1 (chart symbology guide), and version updates.
	Layer Settings	Controls for the selection of ENC cells used to create the NCC.
	Chart Settings	Select chart scale, paper size and orientation, and center of the area to be charted.
	Export Functions	Tools for downloading custom charts and creating personal chart catalogs.
	Feedback	Provide suggestions for improving the NOAA Custom Chart.

Help Documentation



Help Documentation


Use these links to open the two-page Quick Start Guide or the detailed-instructions in the User Guide. U.S. Chart No. 1 describes the meaning of symbols used on nautical charts.


-  [Quick Start Guide](#)
-  [User Guide](#)
-  [Creating a Custom Chart and a Personal Chart Catalog \(12.23\)](#)
-  [Legend \(U.S. Chart No. 1\)](#)


New in NOAA Custom Chart Version 2.0


Enhancements


- Added Personal Chart Catalog functionality
 - Enables users to save their own custom chart parameters for later use.
 - Enables users to share their custom chart parameters with others.
 - Enables users to reload saved chart parameters to recreate charts with newly updated information.
- Streamlined user interface with clearer icons and descriptions for each step.
- Modified additional symbology to emulate paper chart.
- New 36" x 48" Plotter page size.

The **Help Documentation**  icon opens the panel containing links to a number of useful guides and a list of changes released in the latest version of the the NCC application.

The **Quick Start Guide**  provides a brief overview of the functionality of this application. The information found in the Quick Start Guide serves as a handy reminder for the NCC creation process, but not as a full set of instructions.

The **User Guide**  is a step-by-step guide on creating personalized NOAA Custom Charts, instructions on how to print those charts, how to create a personalized chart catalog to save and share charts, and a link to the NOAA ASSIST feedback website.

The **Creating a Custom Chart and a Personal Chart Catalog**  video is a 12-minute tutorial showing how to create a custom chart. At time signature 7:17, the video introduces the new Personal Chart Catalog functionality.

The **Legend (U.S. Chart No. 1)**  is the most recent edition of *U.S. Chart No. 1, Symbols, Abbreviations and Terms used on Paper and Electronic Navigational Charts*. Chart No. 1 serves as the legend for both NOAA paper charts and electronic charts, and thus as the legend for the NCC. Within its four sections, one will find all of the standards symbols used on NOAA charts.

The **New in NOAA Custom Chart Version X.X** box gives a synopsis of the changes that have occurred to this website over the course of its life, broken down into three categories.

Enhancements are improvements or modifications that have been made that improve functionality. For instance, this version has a new feature in the Personal Chart Catalog. **Bug Fixes** are corrections to errors in programming. **Updates** are changes that are often cosmetic, or might go unnoticed by the casual user, such as the stylistic changes that bring the site into compliance with current NOAA website design philosophies.

New in NOAA Custom Chart Version 2.0

Enhancements

> Added Personal Chart Catalog functionality

> Streamlined user interface with clearer icons and descriptions for each step.

> Modified additional symbology to emulate paper chart.

> New 36" x 48" Plotter page size.

Bug Fixes

> Fixed error creating portrait orientation ANSI C size charts.

> Fixed bug preventing the export of large datasets.

> Fixed bug where the newest data was exported instead of the largest scale data.

Updates

> Updated site design to match current NOAA branding.

Layer Settings

?

Layer Settings

Use these checkboxes to restrict the chart data used for your chart to specific intended use categories. Check "All Datasets" to allow the application to choose the best available data for your chart. For a detailed description of data extents and intended uses, please refer to the [User Guide](#).

Data extents:

On

Data extent text:

Scale

Intended uses:

☒All Datasets

☐Overview

☐General

☐Coastal

☐Approach

☐Harbour

☐Berthing

Compass roses:

On

Off

The **NCC Map Window** displays red rectangles representing the "minimum bounding rectangle" (MBR) of individual ENC cells. Clicking on the **Layer Settings** icon opens the control panel where the depiction of these ENC "minimum bounding rectangles" (MBR) may be manipulated.

The **Data extents** dropdown menu allows MBRs to be turned *On* or *Off*. Labels for the extents are found in the **Data extent text** dropdown. Four options are available: *Off* (no text), *Chart* (ENC cell number), *Scale* (ENC cell scale), *Chart and Scale* (both).

The **Intended uses** section shows a series of checkboxes labeled with a range of scale bands. This controls which ENC band extents are displayed in the NCC. The default is set to **All Datasets**, thus showing the entire suite of ENCs. Checking or unchecking a box toggles charts of the chosen band on and off. Data from the charts of the selected bands is used to create the NCC. Multiple boxes may be checked, e.g., both **Berthing** and **Harbour** checked will display the MBRs of largest and next largest scale cells.

When exporting a custom chart, it is best to recheck the **All Datasets** box to ensure the most appropriate data is shown on the chart.

Although most ENCs are rectangular and all reschemed ENCs are rectangular, be aware that some ENCs have irregular shapes and the data coverage for those cells does not completely fill their MBR.

"Legacy" ENC data, that is, data that has not yet been reschemed, was compiled in over 100 different scales and the range of scales for each intended use overlaps to some extent with the range of scales used in adjacent intended use categories. Reschemed ENCs are compiled in just 12 scales. The table below shows the scales for the **Intended uses**. The scale of the ENC data made available through NCC for custom charts depends on whether the underlying data is from a legacy or reschemed ENC.

4

Scale is the relationship between distance on a chart and the corresponding distance on the ground. This is often expressed as ratio, such as 1:10,000. Nautical charts and ENC's are broken into six categories, based on their scale. Small scale charts, such as Overview and General charts cover large areas – like the North Pacific Ocean – and show the least amount of detail. Large scale charts, such as Harbour or Berthing charts, cover small areas – like a harbor or even just a particular set of wharfs or piers – and show the greatest amount of detail. Coastal and Approach charts are in the middle. These categories are referred to as a chart's "Intended Use" in NCC and correspond to the six ENC "Usage Bands."

ENC Usage Band	Intended Use	Legacy NOAA ENC Scale Ranges	Reschemed NOAA ENC Scales	Level of Detail Shown on Charts
1	Overview	1:10,000,000 1:587,870	1:5,120,000 1:2,560,000	<div>Less</div> <div>↑</div> <div>↓</div> <div>More</div>
2	General	1:1,534,076 1:240,000	1:1,280,000 1:640,000	
3	Coastal	1:600,000 1:150,000	1:320,000 1:160,000	
4	Approach	1:150,000 1:25,000	1:80,000 1:40,000	
5	Harbour	1:51,639 1:5,000	1:20,000 1:10,000	
6	Berthing	1:12,000 1:2,500	1:5,000 1:2,500	

The **Compass roses** toggle controls the display of compass roses on custom charts. The default setting is *On*, which shows traditional NOAA compass roses with an outer circle oriented to true north and an inner circle rotated to show magnetic north. The labeling shows the magnetic variation rounded to the nearest whole minute, reference year, and annual change.

When the toggle is set to *Off*, the compass rose positions are shown as a small magenta arrows with the magnetic variation labels to the upper-right of the symbols. Variation to the east is indicated with a positive number (as shown below), variations to the west are indicated with a negative number. Users should be careful not to confuse this number with a sounding.

There are times when traditional compass roses may obscure important chart information, or may be cut off by other chart data, producing an incomplete symbol. Because of this, the mariner may turn off compass roses for better clarity and use a protractor aligned to the chart latitude/longitude grid to plot bearings.



NOAA is developing an enhancement to the NCC tool that will allow users to place their own compass rose symbols.

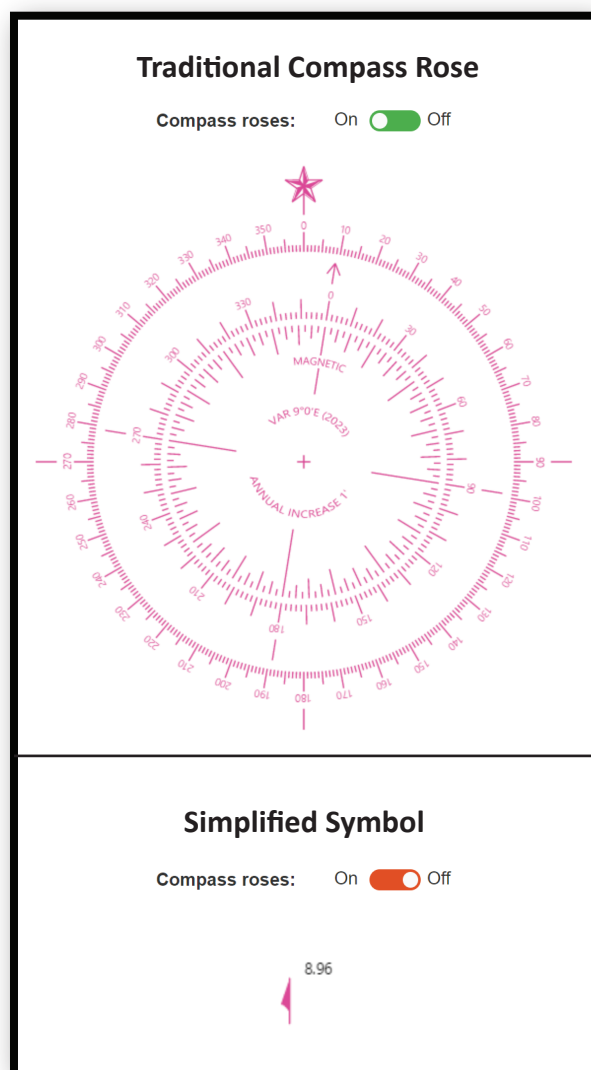


Chart Settings

Use these settings to enter your chart parameters. More information about chart scale, depth zone shades and other settings is in the [User Guide](#).

Name: Custom Chart

Scale: 25000

Page size: ANSI D (22in x 34in)

Orientation: Portrait

Depth units: Feet

Depth zones: Four

Depth zone shades: Shallow: 5, Safety: 11, Deep: 17

Depth zones shallower than the entered values are tinted in the shade of blue shown. If no contour for the value exists in the ENC data, the next deeper contour is used. Depth zones deeper than the "Deep" value are displayed as white.

Create New Chart Move Chart

After populating all fields, click Create New Chart, then click the map once at the center of your chart. Click Move Chart, then click and drag the chart outline to refine its position.

Click on the **Chart Settings** icon to open the control panel. Beneath the descriptive text are two large boxes. One asks for specifications for your custom chart, the other asks for depth value input.

The **Name** field allows you to create a name for your chart.

Scale is the scale your custom chart will be created at, to a minimum of 1:1000 (which would be entered as 1000 in the box). Unlike some online mapping tools that display greater detail nearly anywhere a user chooses to zoom in, some areas on nautical charts do not have larger scale coverage. When creating a custom chart, you must be aware of the scale of the underlying ENC data from which NCC charts are generated.



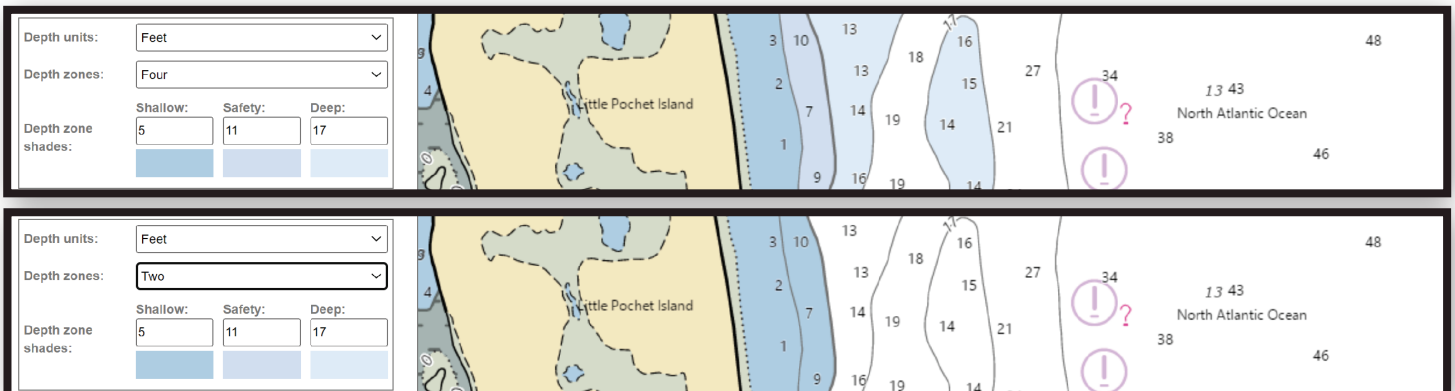
Attempting to make a large scale NCC chart where only small scale ENC data exists will yield poor results.

Page size defines the size of the paper at which the chart will print, from plotter size 36" x 56" to page sized 8.5" x 11". Several International (ISO 216) and North American (ANSI/ASME Y14.1) standard paper sizes may be selected from the menu. The proportions of these paper sizes are shown in Appendix A. The selection of an appropriate page size is an important factor in the printing of your chart.

Orientation allows a choice of *Portrait* (taller than it is wide) or *Landscape* (wider than it is tall).

The **Depth units** default is set to *Feet*, though the user may choose to display depths in *Fathoms* or *Meters*. Note, the native unit for ENC data is meters. When depth units are set to feet or fathoms, the values are rounded down to the next lesser whole depth when the values are converted.

The next dropdown menu is the **Depth zones** control. The default four shades setting will display sequential shades of blue, with the darkest blue showing the shallowest water. The fourth "shade" is not a shade, but is white, and shows deep water. When set at two shades, the dark blue extends to the safety tint contour. Any deeper water is shown as white. The values for the **Depth zone shades** default to 5, 11, and 17, and are customizable by the user. Two and four shade renderings for a chart with tint settings of 5, 11, and 17 feet are shown in the examples below.



Traditional NOAA charts often have depth contours at 6-foot intervals in shallow water and larger intervals in deeper water. For example: 6, 12, 18, 30, 60, 90, etc. Shallow water tint extents (showing one or two shades of blue) vary according to the slope of the bottom and the scale of the chart. Newly reschemed ENC cells have contour intervals that a metric units, with contour values in whole meters, the exact values determined by chart scale.

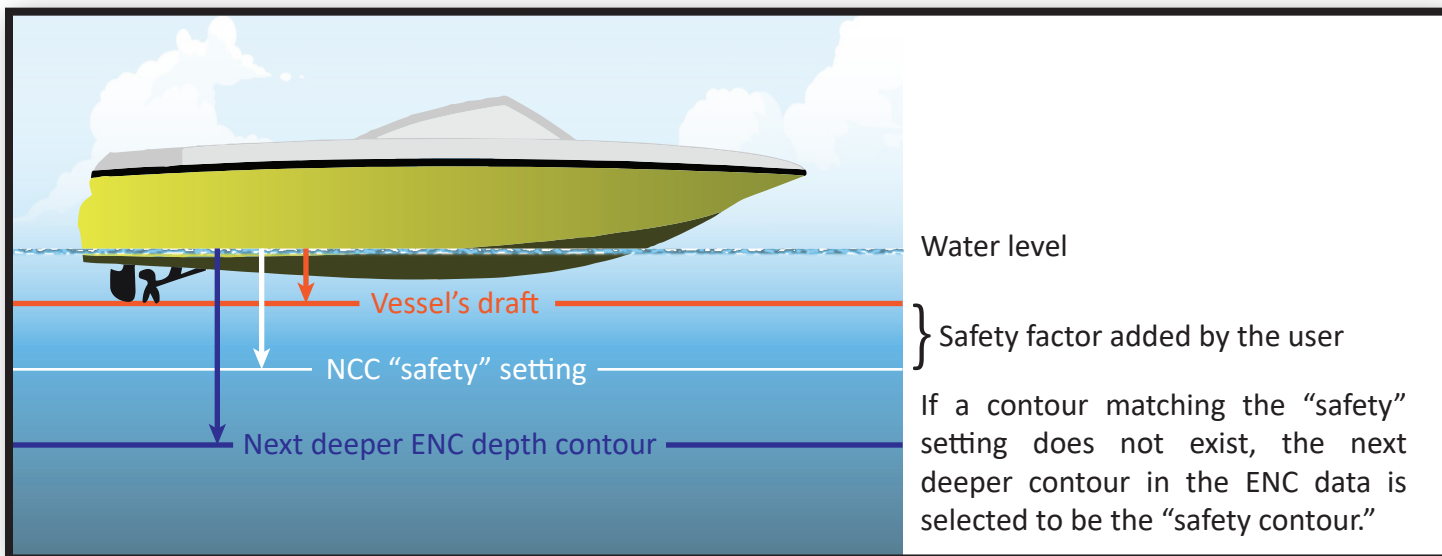
The Depth units default is Feet. Users may select depths to display in Fathoms or Meters. When feet or fathoms are selected, it is common for NCC to display soundings and depth contour values as one unit shallower than depths shown on the corresponding traditional paper or raster chart. This is a result of the rounding rules applied when depths that are stored in meters on ENCs are converted to feet or fathoms on NCC charts. **However, one cannot assume that the actual depths are one unit deeper than shown on the chart.**




*Be aware that NCC does not create new contour lines, it displays existing depth contours compiled into the ENC data that are used as the source to create NCC charts. Values entered by the user in the **Chart Settings** panel are used to select an existing depth areas to emphasize.*

NCC enables users to set a “safety” value that controls where blue shallow water tints are shown on the chart. Some electronic navigational systems that use ENCs can sound an alarm when a ship is heading towards shallow water, based on the safety contour value that has been entered into the system for the ship’s draft. NCC provides a similar awareness in an analog fashion by displaying a selected “safety contour” with a thick dark gray line. Generally, seaward of this line is “preferred underkeel clearance” and shoreward is “minimum underkeel clearance.”

As you consider the appropriate safety value to use for your custom chart, keep these factors in mind. Changes to a ship’s draft can result from its load, speed, and sea conditions. The changing nature of the seabed due to silting and other factors, as well as the relative accuracy of the hydrography in an area, contribute to the risk associated with any given transit. All of these factors should be considered when calculating your vessels draft plus a prudent additional cushion to use as the NCC safety setting.



Once the chart settings are established, with the desired depth units, zones, and shades in place, click on the **Create New Chart** [Create New Chart](#) button. When clicked, the button will turn green and a crosshair cursor  with a prompt to **Click to add an extent** will appear. The dimensions of the extent are determined by the values entered into **Chart Settings** fields. Clicking begins the process, and the prompt changes to **Extent is being created**. *Please be patient – this could take 10-15 seconds or more.*




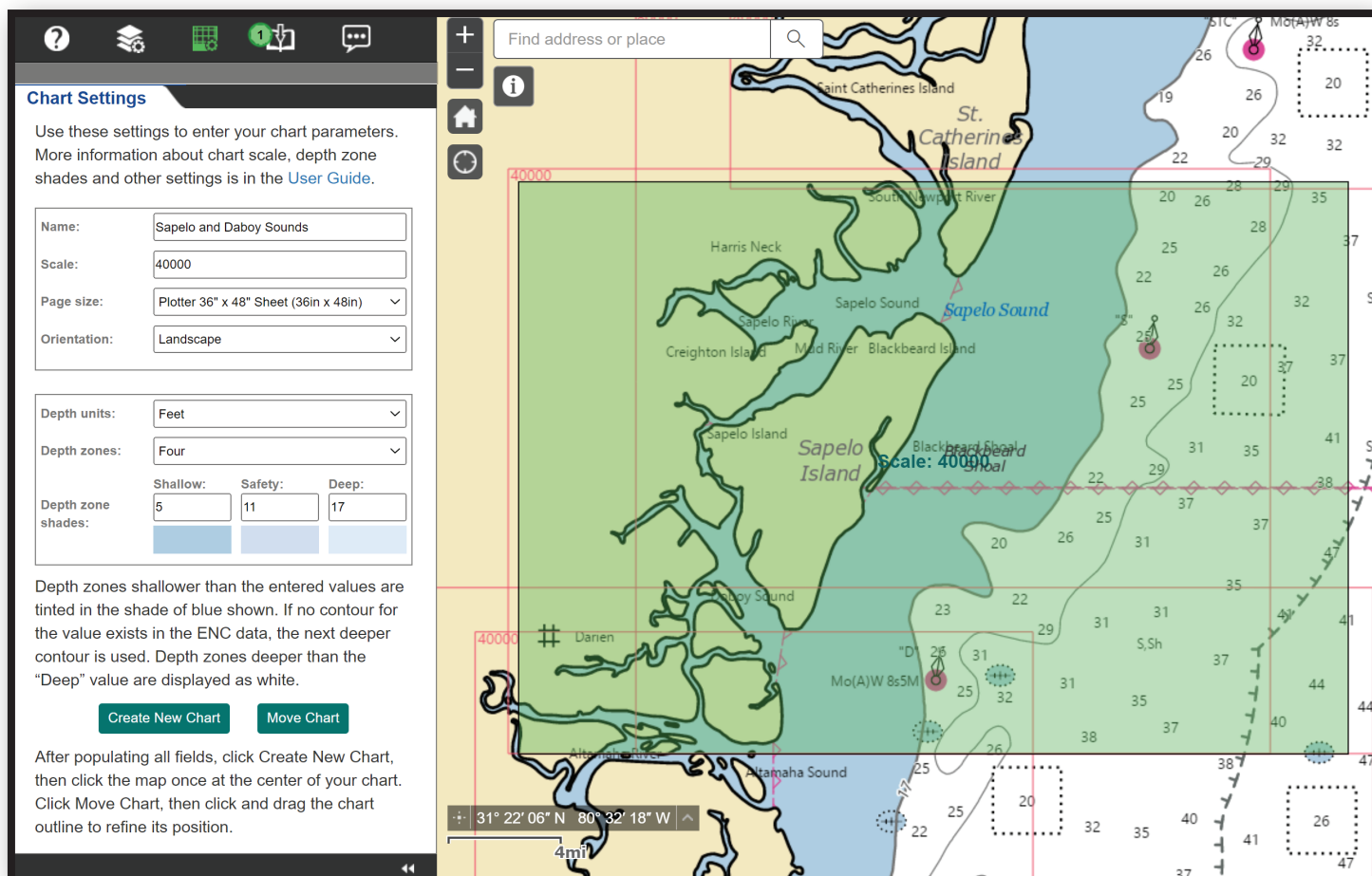
Click to
add an
extent



Extent is
being
created

Paper size and chart scale both affect the size of the area covered by your custom chart. Larger paper or a smaller scale will both increase the size of the chart's "footprint" on the ground, while use of smaller paper sizes or a larger scale will shrink the chart's footprint. Some experimentation may be necessary to find the balance of coverage (footprint size) and level of detail (scale) that you want.

After a few seconds, an outline of the extents appears in green, with a label showing the scale. Also note a green circle with a ① inside of it now appears to the left of the **Export Functions**  icon near the top of the tab, indicating there is now one chart ready for export.



The screenshot shows the 'Chart Settings' panel on the left and a map of Sapelo Sound on the right. The settings panel includes fields for Name, Scale, Page size, Orientation, Depth units, Depth zones, and Depth zone shades. The map shows a green extent outline with a scale label 'Scale: 40000'.

Chart Settings

Use these settings to enter your chart parameters. More information about chart scale, depth zone shades and other settings is in the [User Guide](#).

Name: Sapelo and Daboy Sounds

Scale: 40000

Page size: Plotter 36" x 48" Sheet (36in x 48in)

Orientation: Landscape

Depth units: Feet

Depth zones: Four


Depth zone shades:

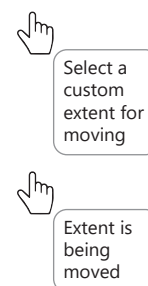
Shallow:	Safety:	Deep:
5	11	17

Depth zones shallower than the entered values are tinted in the shade of blue shown. If no contour for the value exists in the ENC data, the next deeper contour is used. Depth zones deeper than the "Deep" value are displayed as white.

Create New Chart Move Chart

After populating all fields, click Create New Chart, then click the map once at the center of your chart. Click Move Chart, then click and drag the chart outline to refine its position.


If the chart is not in the desired position it may be moved by clicking the **Move Chart**  button. Clicking **Move Chart** changes the text prompt next to the cursor to **Select a custom extent for moving**. Since more than one extent can be added at a time, this feature allows you to choose which extent to move. The extent outline changes to gray while it is being placed in its new location. While the application calculates the new extent, the rectangle changes to a darker green and the text prompt changes to **Extent is being moved**. *This may take a few seconds.*



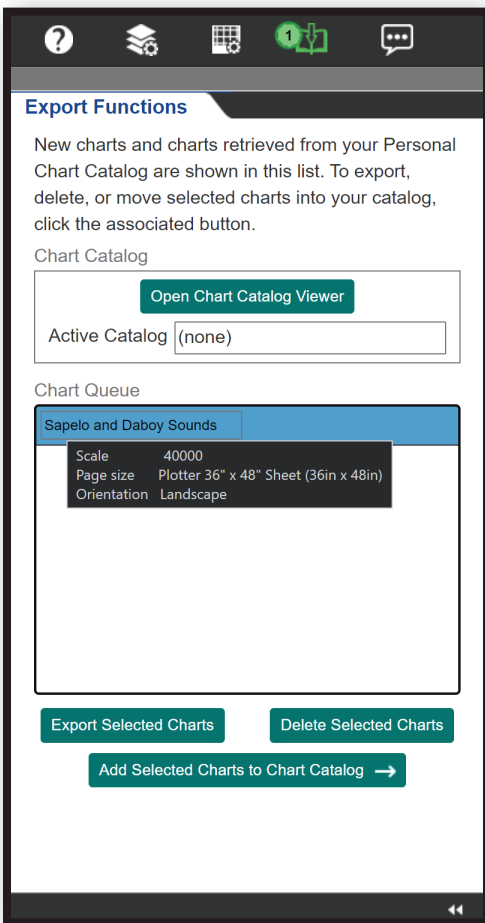
After processing, the final extent changes back to a lighter green, and the scale label returns to the middle of the area.




If trying to create multiple overlapping charts at the same time, it may become difficult to select the correct chart to move by clicking on it. It is recommended to create and position larger scale charts first and then create and position smaller, overlapping charts last.

With the extent in place, the next step in the process is to export the chart. To do this, click on the **Export Functions**  icon to open the **Export Functions** tab.

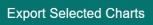
Export Functions




The **Export Functions**  tab contains two sections. The first is **Chart Catalog**, the second is **Chart Queue**.

The chart that was created in the **Chart Settings** tab appears in the **Chart Queue** with the name it was given. The name may be changed at any point by typing in a new name and hitting enter.

Hovering over the name reveals some details about the chart. "Sapelo and Dayboy Sounds" is 1:40000 scale, uses the Plotter 36" x 48" Sheet, and is Landscape-oriented.

This chart may now be exported, deleted, or added to a chart catalog. To export, click on the **Export Selected Charts**  button.

An export status bar appears in the **Chart Queue** field next to the chart box. The field displays elapsed time and percent complete for the export.

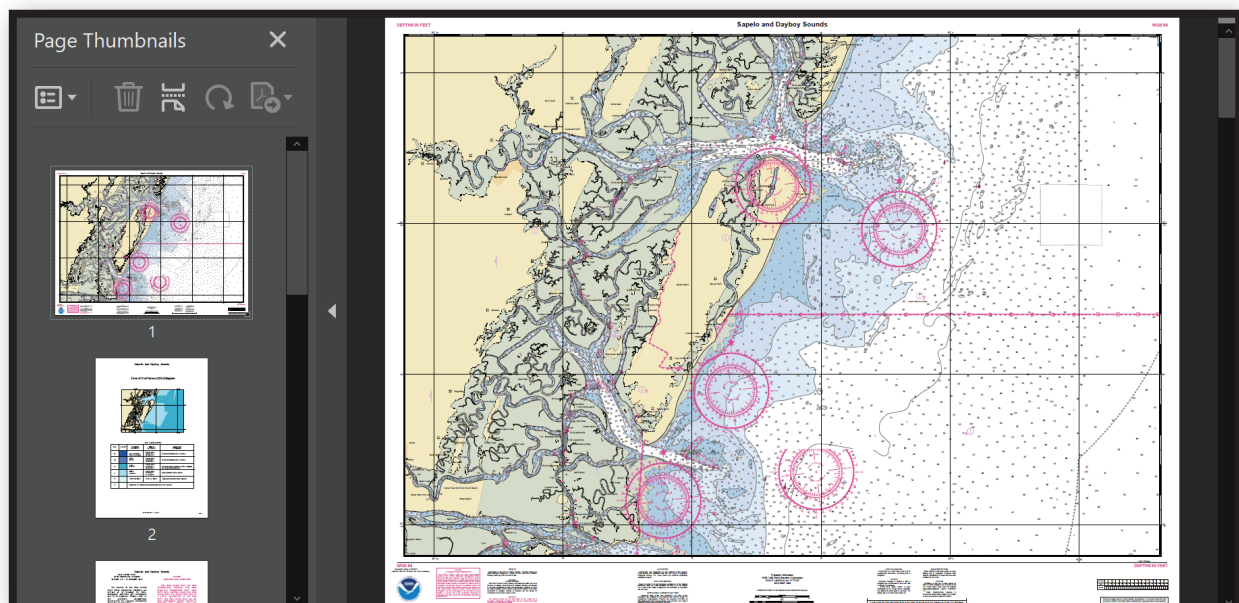
Once the export is completed, a button labeled **Open**  appears. Clicking **Open** loads the contents of the Custom Chart PDF.



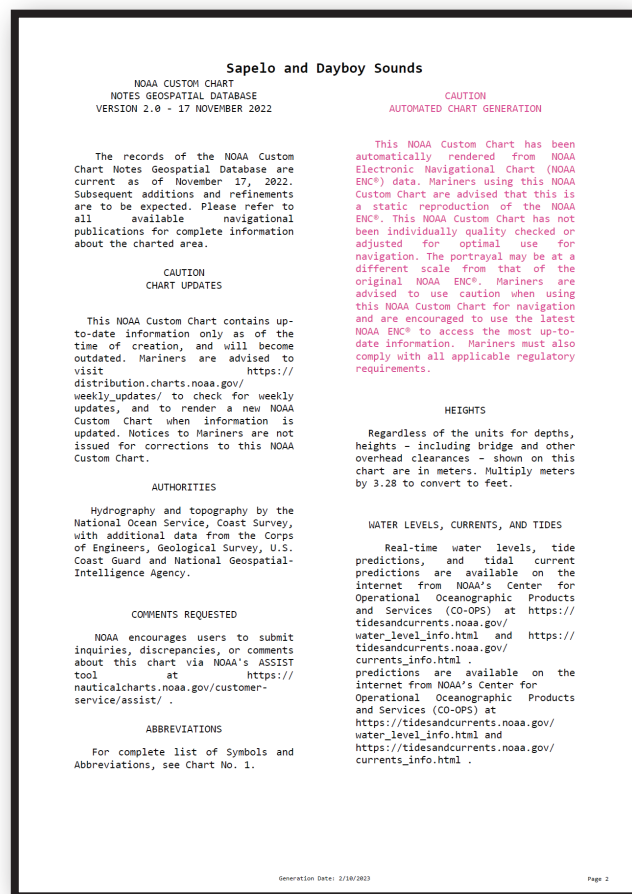
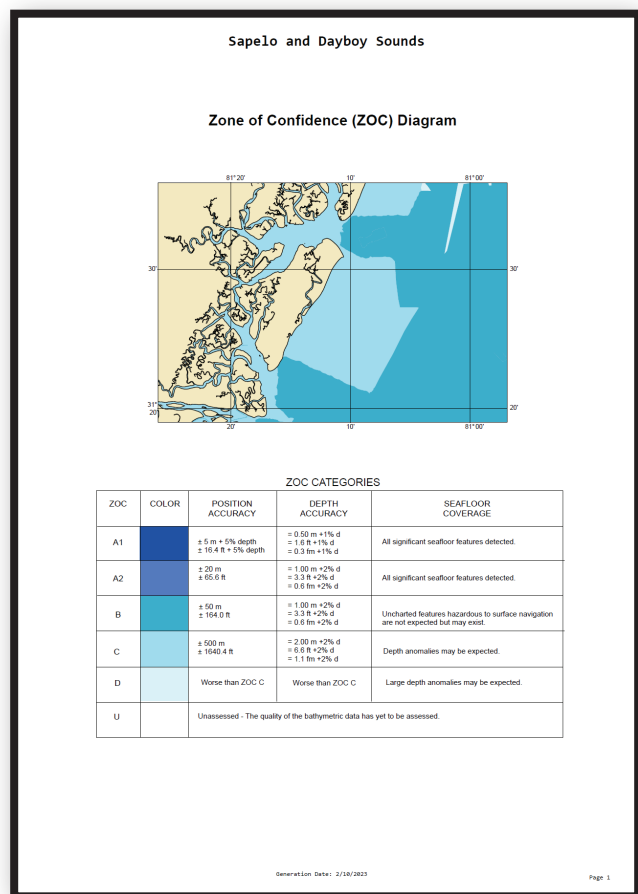
Most web browsers will open the Custom Chart PDF in a separate browser tab. If the file does not appear to open, check your browser settings.

Custom Chart Contents

The first page of the PDF file is the custom chart in the size and orientation that you selected. This may be printed to a printer or a plotter capable of handling the dimensions specified when creating the extent.



The second page of the PDF contains the Zone of Confidence Diagram formatted to 8.5" x 11" paper. Subsequent pages contain the notes that a traditional nautical chart would show within the body or around the margins of the chart, in a two-column format. The total number of pages for an NCC will depend on the total number of notes found on a chart.



Each page has a "Generation Date" that matches the date on which the NCC was exported. It is found on the lower-left side of the chart proper, just above the NOAA logo, and on the bottom-center of the remaining pages.


Generation Date: 2/10/2023

Zone of Confidence (ZOC) Diagrams are provided on NOAA Custom Charts to assist mariners in assessing hydrographic survey data and the associated level of risk to navigate in a particular area. The age and accuracy of hydrographic survey data used on nautical charts varies. Depth information is based on data from the latest available hydrographic survey, which in many cases may be quite old. ZOC diagrams show the extent the hydrographic surveys used to compile the ENC data used on the NCC chart. Different shades of blue are used to indicate one of five quality categories (A1, A2, B, C and D) assessed for the data in each "zone." Areas for which the data quality has not yet been assessed are shown as white. An accompanying table provides a description of each category.

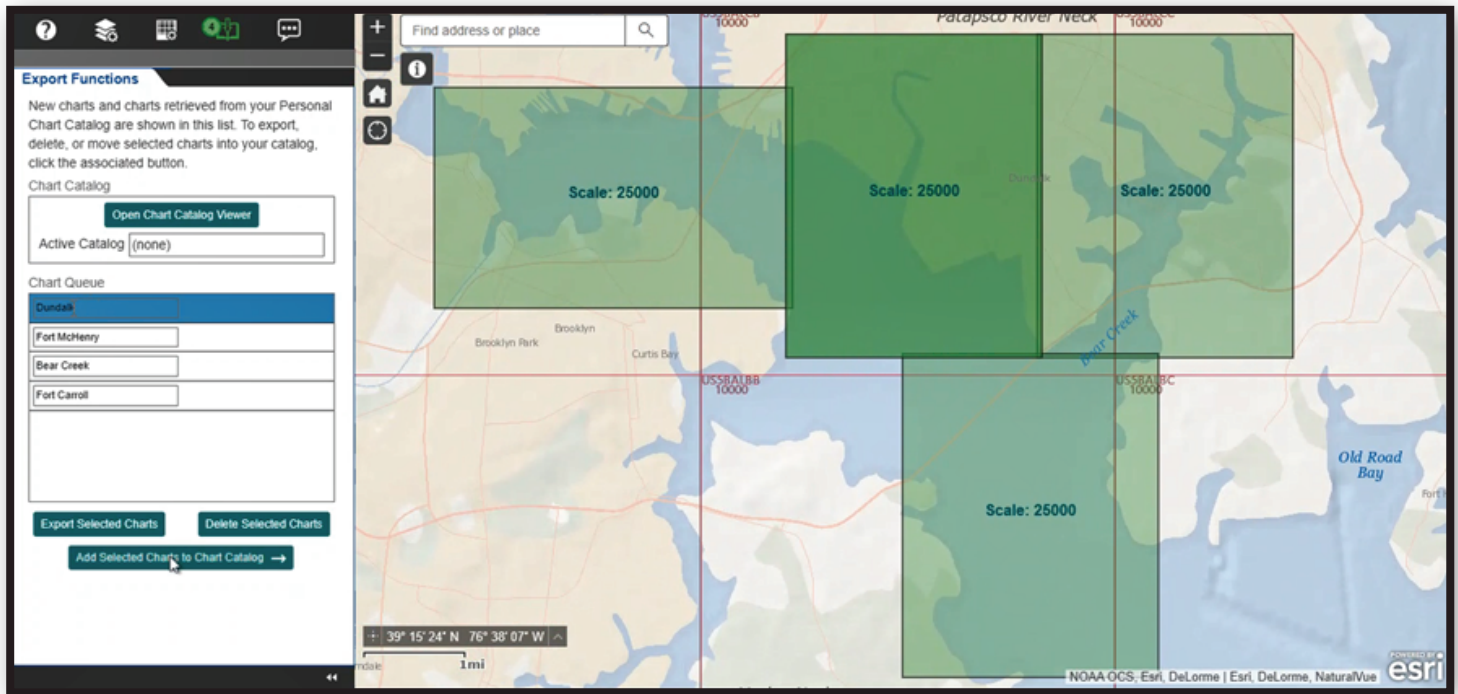


Chart notes provide information about the the chart or about features in the area. As a paper chart enters last edition status, the notes associated with the chart are captured in the NOAA Custom Chart notes database.

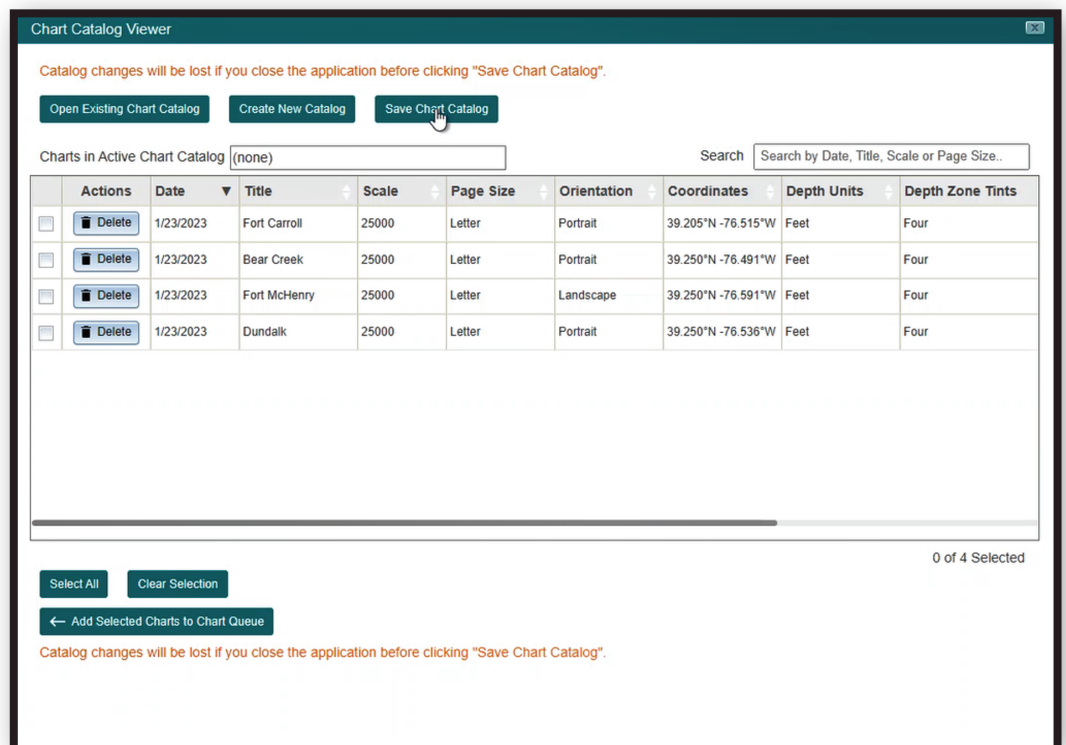
Personal Chart Catalog

The **Export Functions**  panel also enables users to create a **Personal Chart Catalog** to save their chart designs or to share them with others in a GeoJSON file. Charts saved may be reloaded, revisited, and restructured, thus speeding the process of creating future NCCs by bypassing the initial steps required to create a chart. Exporting the charts from a saved catalog generally takes about a minute, but times will vary based on the size of chart and processor speeds. To create a **Chart Catalog**, with a chart or charts in the **Chart Queue**, select a chart from the list, and click the **Add Selected Charts to Chart Catalog**



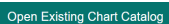
Add Selected Charts to Chart Catalog →



Clicking the button opens the **Chart Catalog Viewer**. The viewer has a field showing *Charts in Active Chart Catalog*. Buttons at the top can be used to **Open Existing Chart Catalog**, **Create New Catalog**, and **Save Chart Catalog**. Buttons on the bottom can be used to **Select All**, **Clear Selection**, and **Add Selected Charts to Chart Queue**. These buttons allow for the manipulation of charts contained in a custom catalog.



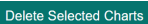
A warning in orange text at the top and bottom of the viewer windows states: **Catalog changes will be lost if you close the application before clicking “Save Chart Catalog”**. This is a friendly reminder to save your work for future use.

To save a **Personal Chart Catalog** GeoJSON, click **Save Chart Catalog**  button. A dialog will open to allow you to navigate to a folder on your device to save the file. If you wish to create a blank catalog file to save chart extents to later, click the **Create New Catalog**  button. To load an existing catalog file into the **Chart Catalog Viewer**, click the **Open Existing Chart Catalog**  button. Find the location on your device and click open to load the saved file.


Charts in an existing catalog may be returned to the **Chart Queue** by simply selecting the desired charts and clicking the **Add Selected Charts to Chart Queue**  button.



*The application will only allow five charts to be added to the **Export Queue** at a time.*

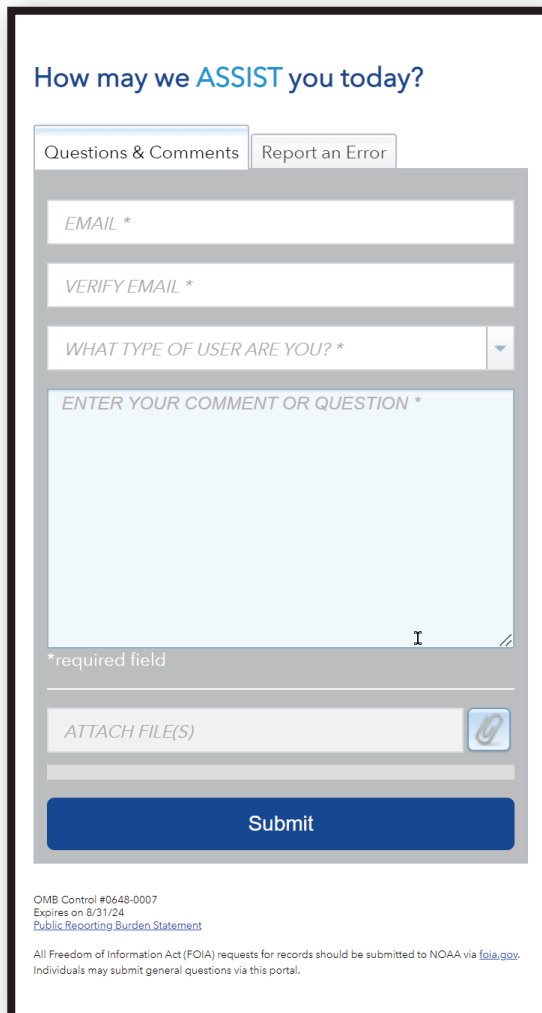
Charts in the **Chart Queue** may be deleted by highlighting the chart in the list and clicking the **Delete Selected Charts**  button. Charts in the **Chart Catalog Viewer** may be deleted by clicking on the **Delete**  button. The line will turn orange and a prompt asking “Are you sure you want to delete this row” will appear. Clicking “OK” will delete that row.

Feedback

For further assistance or to suggest improvements for the NOAA Custom Chart application, click the **Feedback**  icon. This opens the NOAA Office of Coast Survey’s online ASSIST customer feedback tool.

ASSIST is the Office of Coast Survey’s stakeholder engagement and feedback tool, which allows customers to submit questions and comments or to report an error with NOAA’s nautical charts and products.

If you have a question or suggestion concerning a particular NCC chart that you are trying to create, please tell us where the chart is of and attach the NCC chart PDF or a screenshot of the area, if possible.



The screenshot shows the NOAA ASSIST customer feedback form. At the top, it asks "How may we ASSIST you today?" with two tabs: "Questions & Comments" (selected) and "Report an Error". The form includes several input fields: "EMAIL *" (required), "VERIFY EMAIL *" (required), and a dropdown menu for "WHAT TYPE OF USER ARE YOU? *". Below these is a large text area for "ENTER YOUR COMMENT OR QUESTION *". A note indicates that fields with an asterisk are required. There is an "ATTACH FILE(S)" section with a file upload icon. At the bottom is a blue "Submit" button. Footer text includes OMB Control #0648-0007, expiration date 8/31/24, a link to the Public Reporting Burden Statement, and information about FOIA requests.

How may we ASSIST you today?

Questions & Comments Report an Error

EMAIL *

VERIFY EMAIL *

WHAT TYPE OF USER ARE YOU? *

ENTER YOUR COMMENT OR QUESTION *

*required field

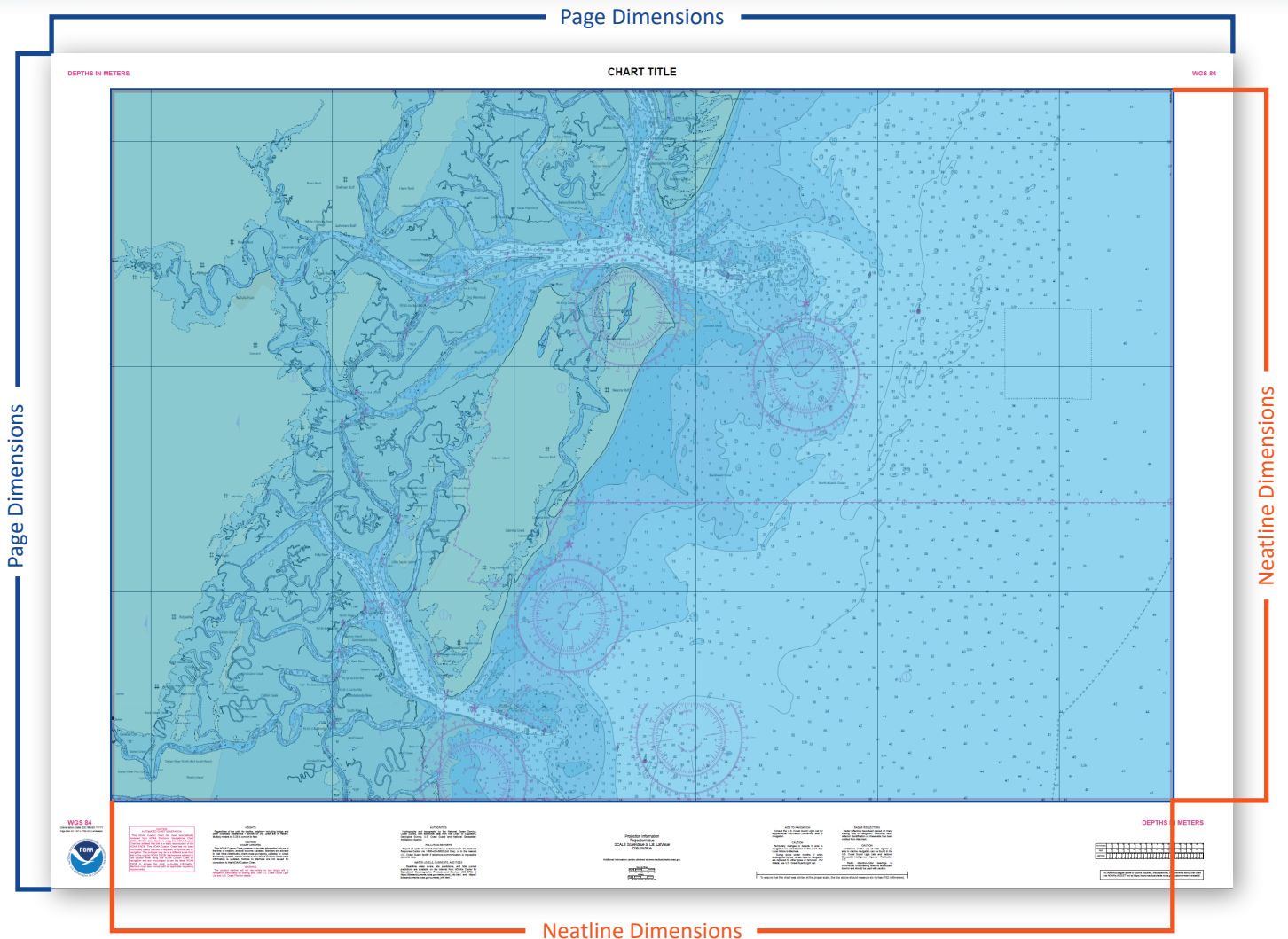
ATTACH FILE(S)

Submit

OMB Control #0648-0007
Expires on 8/31/24
[Public Reporting Burden Statement](#)

All Freedom of Information Act (FOIA) requests for records should be submitted to NOAA via [foia.gov](#).
Individuals may submit general questions via this portal.

Appendix A: Page Sizes



International (ISO 216)

Size	Landscape Page Dimensions	Landscape Neatline Dimensions	Portrait Page Dimensions	Portrait Neatline Dimensions
A0	46.81 x 33.11 inches 1,189.00 x 841.00 mm	42.00 x 30.70 inches 1,066.80 x 779.78 mm	33.11 x 46.81 inches 841.00 x 1,189.00 mm	30.70 x 42.00 inches 779.78 x 1,066.80 mm
A1	33.11 x 23.39 inches 841.00 x 594.00 mm	28.30 x 21.00 inches 718.82 x 533.40 mm	23.39 x 33.11 inches 594.00 x 841.00 mm	21.00 x 28.30 inches 533.40 x 718.82 mm
A2	23.39 x 16.54 inches 594.00 x 420.00 mm	18.50 x 14.10 inches 469.90 x 358.14 mm	16.54 x 23.39 inches 420.00 x 594.00 mm	14.10 x 18.50 inches 358.14 x 469.90 mm
A3	16.54 x 11.69 inches 420.00 x 297.00 mm	13.20 x 9.50 inches 335.28 x 241.30 mm	11.69 x 16.54 inches 297.00 x 420.00 mm	9.50 x 13.20 inches 241.30 x 297.00 mm
A4	11.69 x 8.27 inches 297.00 x 210.00 mm	8.40 x 6.10 inches 213.36 x 154.94 mm	8.27 x 11.69 inches 210.00 x 297.00 mm	6.10 x 8.40 inches 154.94 x 213.63 mm

North American (ANSI/ASME Y14.1)

Size	Landscape Page Dimensions	Landscape Neatline Dimensions	Portrait Page Dimensions	Portrait Neatline Dimensions
ANSI E	44.00 x 34.00 inches 1,117.60 x 863.60 mm	39.10 x 31.60 inches 993.14 x 802.64 mm	34.00 x 44.00 inches 863.60 x 1,117.60 mm	31.60 x 39.10 inches 802.64 x 993.14 mm
ANSI D	34.00 x 22.00 inches 863.60 x 558.80 mm	29.10 x 19.50 inches 739.14 x 495.30 mm	22.00 x 34.00 inches 558.80 x 863.60 mm	19.50 x 29.10 inches 495.30 x 739.14 mm
ANSI C	22.00 x 17.00 inches 558.80 x 431.80 mm	17.20 x 14.50 inches 436.88 x 368.30 mm	17.00 x 22.00 inches 431.80 x 558.80 mm	14.50 x 17.20 inches 368.30 x 436.88 mm
ANSI B	17.00 x 11.00 inches 431.80 x 279.40 mm	13.66 x 8.81 inches 346.96 x 223.77 mm	11.00 x 17.00 inches 279.40 x 431.80 mm	8.81 x 13.66 inches 223.77 x 346.96 mm
Legal	14.00 x 8.50 inches 355.60 x 215.90 mm	7.90 x 6.30 inches 200.66 x 160.02 mm	8.50 x 14.00 inches 215.90 x 355.60 mm	6.30 x 7.90 inches 160.02 x 200.66 mm
Letter	11.00 x 8.50 inches 279.40 x 215.90 mm	7.90 x 6.30 inches 200.66 x 160.02 mm	8.50 x 11.00 inches 215.90 x 279.40 mm	6.30 x 7.90 inches 160.02 x 200.66 mm

Plotter Sheets

Size	Landscape Page Dimensions	Landscape Neatline Dimensions	Portrait Page Dimensions	Portrait Neatline Dimensions
Plotter 36" x 56" Sheet	56.00 x 36.00 inches 1,422.40 x 914.40 mm	51.19 x 33.70 inches 1,300.23 x 855.98 mm	36.00 x 56.00 inches 914.40 x 1,422.40 mm	33.70 x 51.19 inches 855.98 x 1,300.23 mm
Plotter 36" x 48" Sheet	48.00 x 36.00 inches 1,219.20 x 914.40 mm	43.19 x 33.70 inches 1,097.03 x 855.98 mm	36.00 x 48.00 inches 914.40 x 1,219.20 mm	33.70 x 43.19 inches 855.98 x 1,097.03 mm