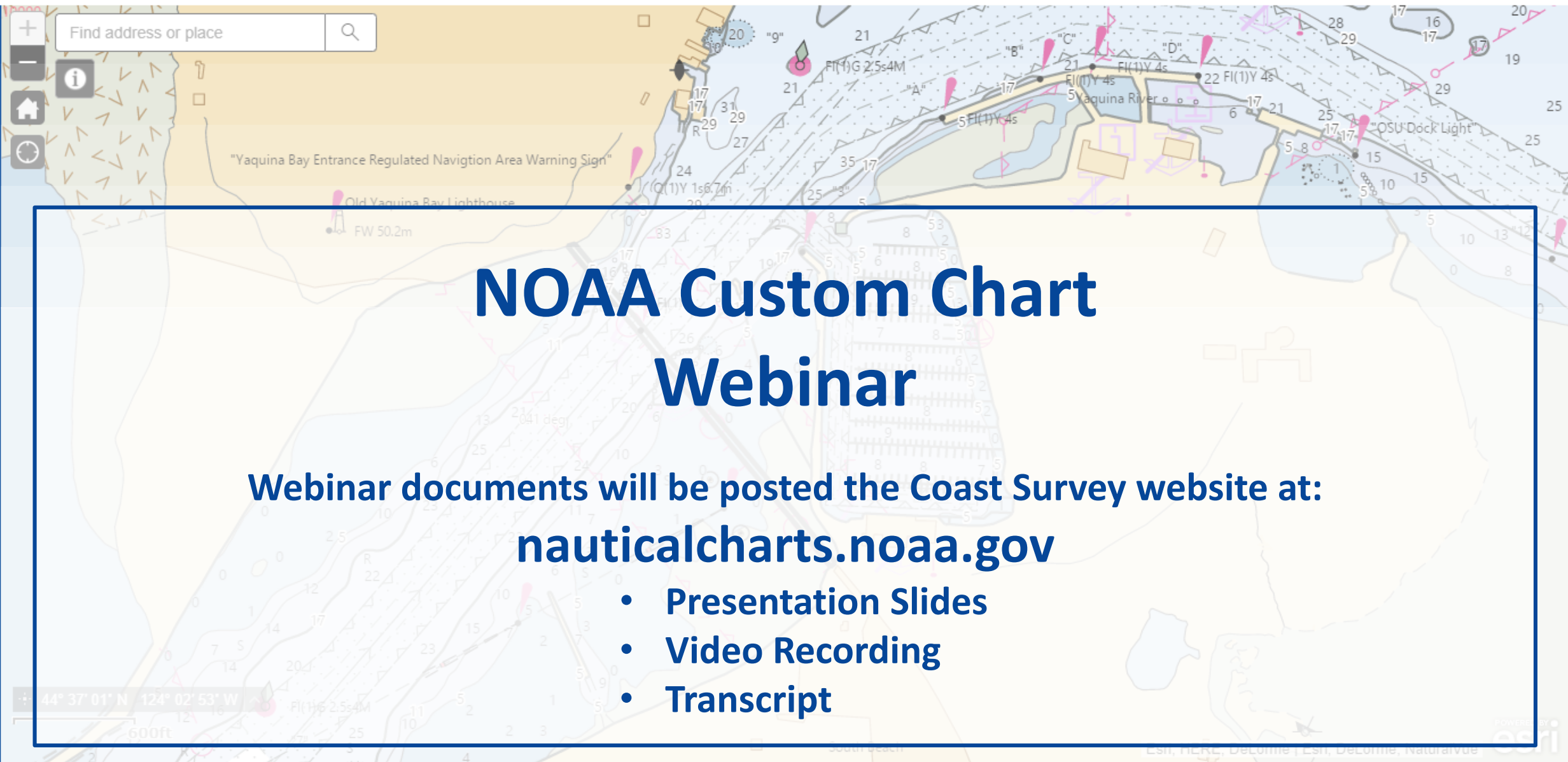


Online NOAA Custom Chart Application

May 20, 2021

Christie Ence – Chief, Chart Standards Group
Colby Harmon – Cartographer/ Project Manager
NOAA | Office of Coast Survey | Marine Chart Division





NOAA Custom Chart Webinar

Webinar documents will be posted the Coast Survey website at:

nauticalcharts.noaa.gov

- Presentation Slides
- Video Recording
- Transcript



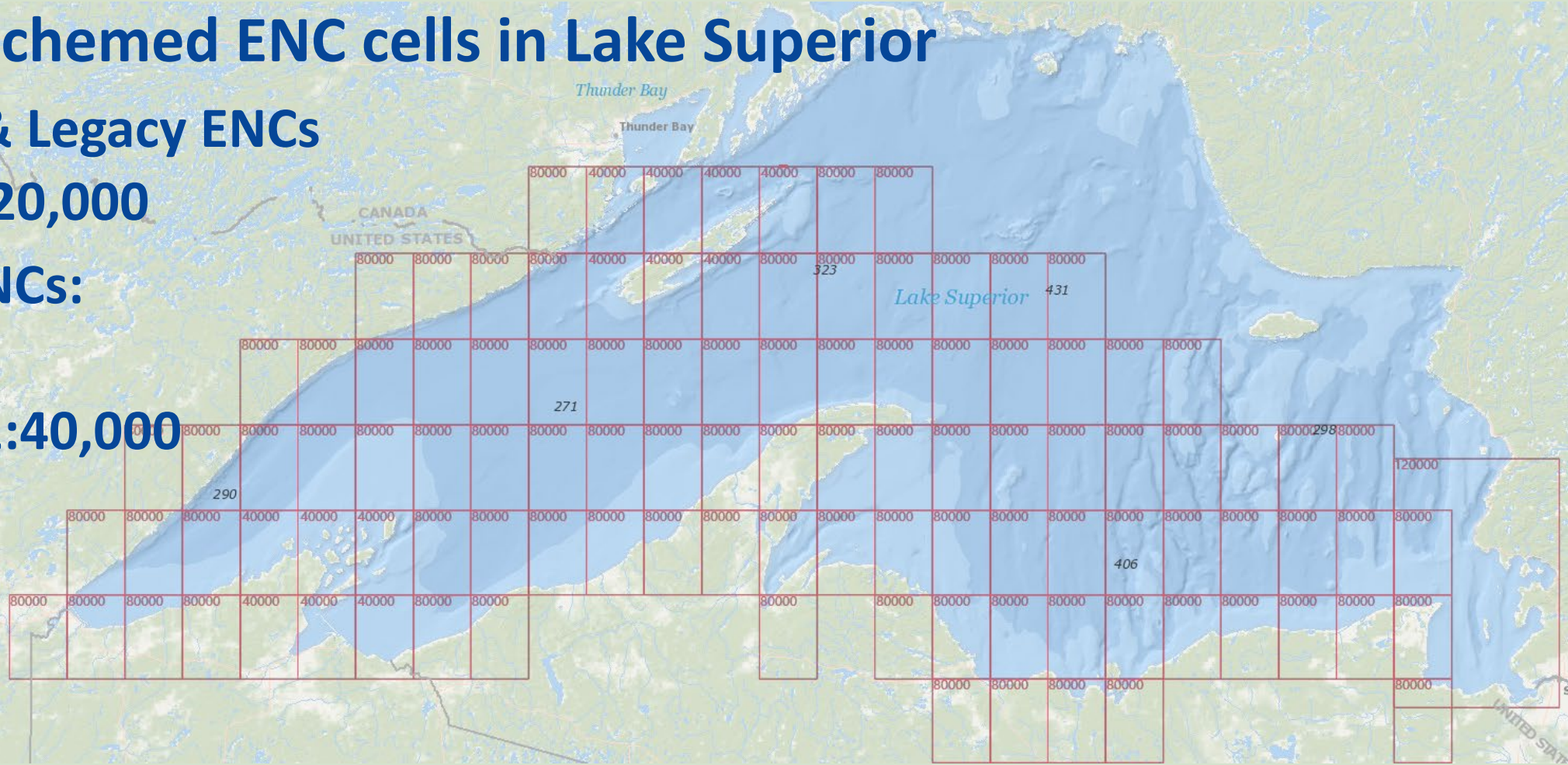
- Background and Related Programs
- Chart Fundamentals
- NCC Application Settings
- Demonstration: Making a Chart
- Future NCC Enhancements
- Components of a NCC Chart
- Questions



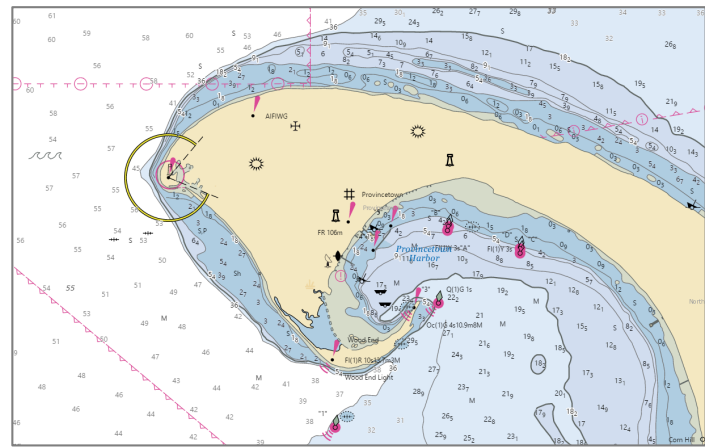
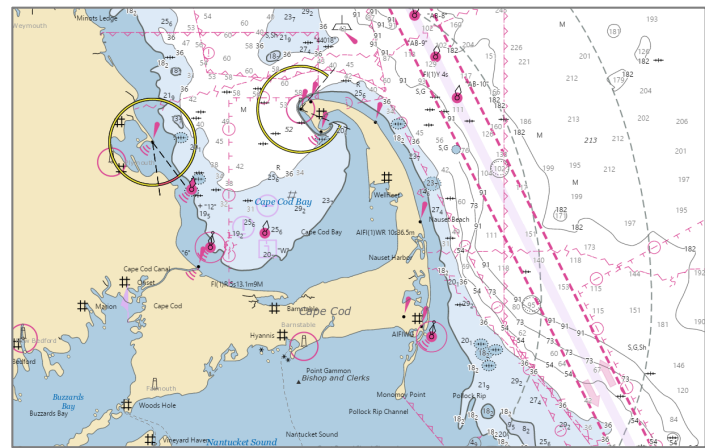
- Announced in Nov 2019
 - Scheduled to complete Jan 2025
- Products to be discontinued**
- Print-on-demand (POD) paper charts
 - Full-size chart PDFs
 - BookletChart™ PDFs
 - NOAA raster navigational charts (NOAA RNC®)
- Services to be shut down**
- NOAA RNC Tile Service (Oct 1, 2021)
 - Online RNC Viewer (Oct 1, 2021)
 - Seamless RNC Services (Jan 1, 2022)

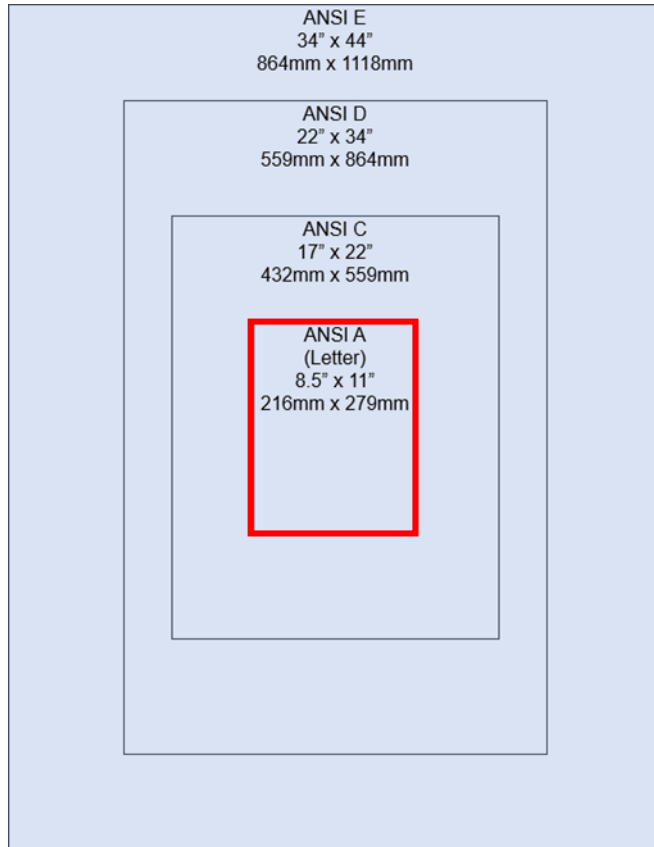
107 newly reschemed ENC cells in Lake Superior

- Paper charts & Legacy ENCs
 - Mostly 1:120,000
- Reschemed ENCs:
 - 1:80,000
 - Isle Royale 1:40,000



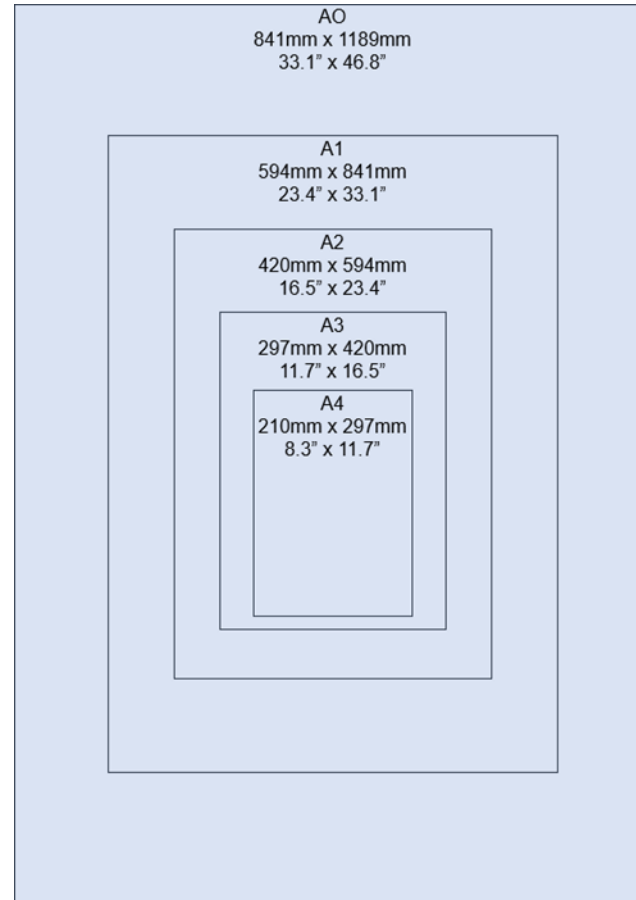
ENC Usage Band No.	Intended Use	Legacy NOAA ENC Scale Ranges	Reschemed NOAA ENC Scales	Scale	Detail Shown on Chart
1	Overview	1:10,000,000 1:587,870	1:5,120,000 1:2,560,000	Smaller Larger	Less More
2	General	1:1,534,076 1:240,000	1:1,280,000 1:640,000		
3	Coastal	1:600,000 1:150,000	1:320,000 1:160,000		
4	Approach	1:150,000 1:25,000	1:80,000 1:40,000		
5	Harbor	1:51,639 1:5,000	1:20,000 1:10,000		
6	Berthing	1:12,000 1:2,500	1:5,000		





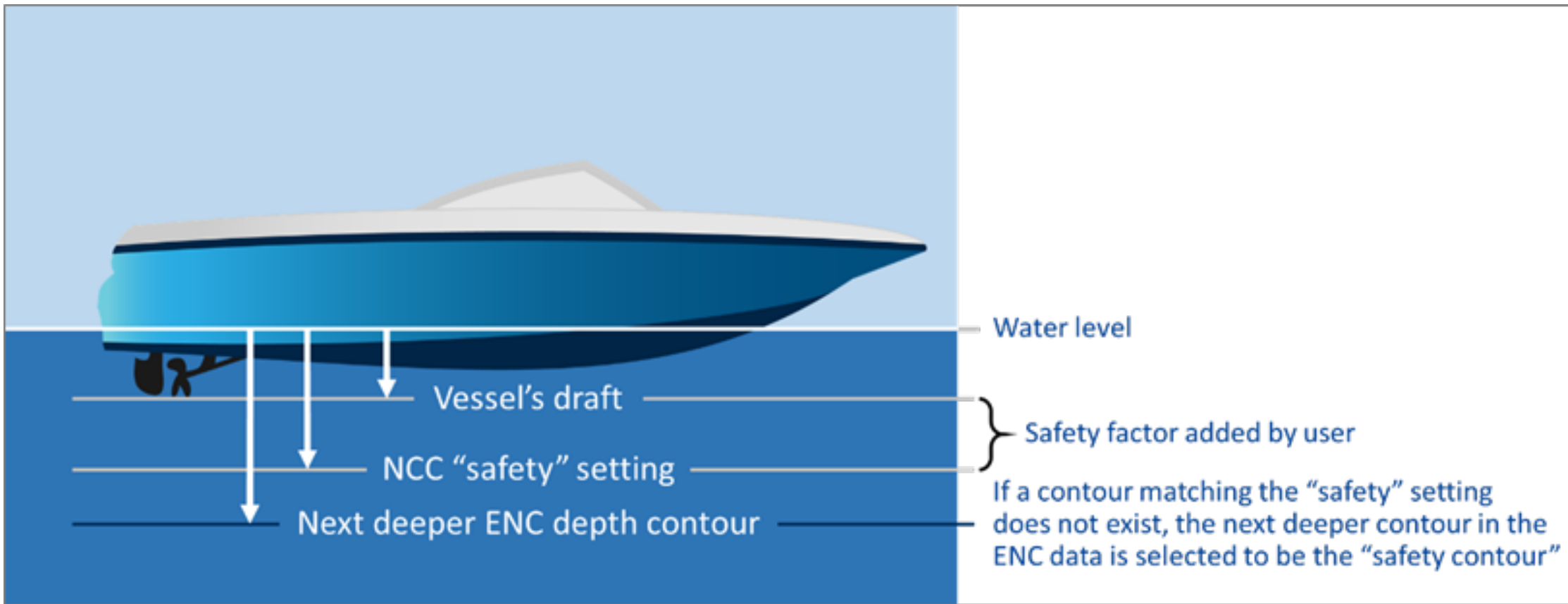
North American paper sizes

Letter size in red



International paper sizes

- Coming soon
 - Legal – 8.5" x 14"
 - Ledger/Tabloid – 11" x 17"



2 & 4 Depth Zone Shades

Display Settings

Depth Contour (Meters) Miscellaneous

Shallow:

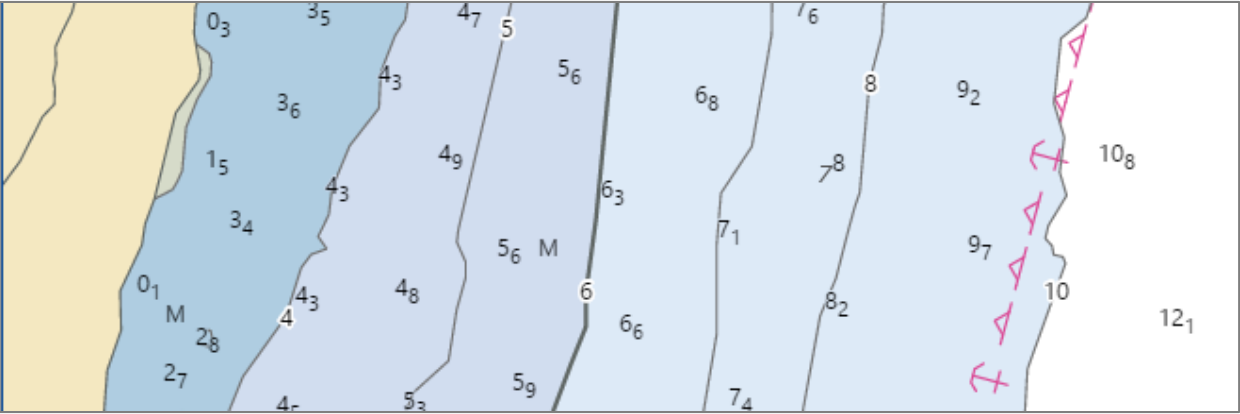
Safety:

Deep:

Label contours: On Off

Label safety contours: On Off

Depth zone shades: Four Two

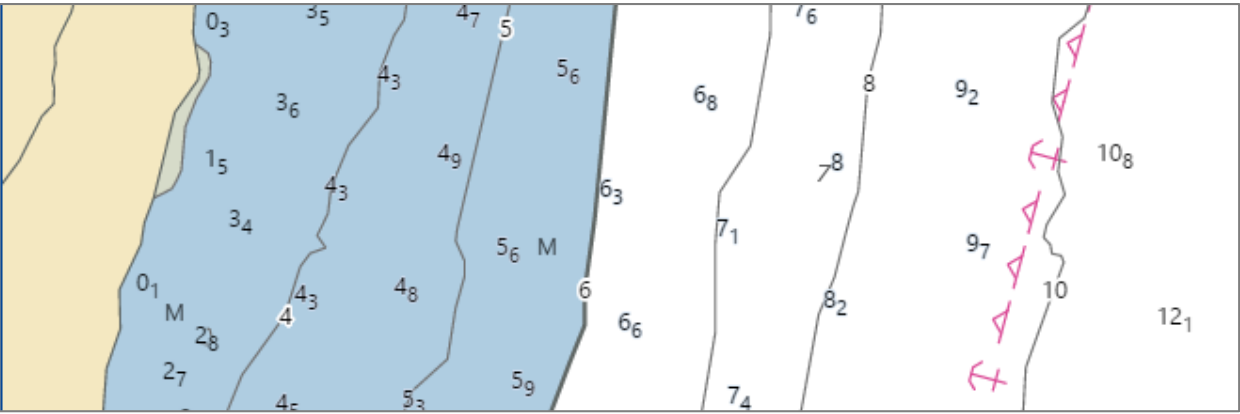


The map displays depth contours with numerical labels (e.g., 03, 35, 47, 5, 56, 68, 8, 92, 108, 121). Depth zone shading is applied in four distinct shades of blue, corresponding to the 'Four' selection in the dropdown menu. Safety contours are marked with pink dashed lines and arrows.

Label contours: On Off

Label safety contours: On Off

Depth zone shades: Four Two



The map displays the same depth contours and safety contours as the top panel. Depth zone shading is applied in two distinct shades of blue, corresponding to the 'Two' selection in the dropdown menu.

Help Documentation

Use the links below for instructions on how to use this site to download charts with desired chart settings and for chart legends.

- Quick Start Guide
- User Guide
- Creating a NOAA Custom Chart: Setting chart limits and outputting your customized nautical chart (5.05)
- Legend - U.S. Chart No. 1

Quick Start Guide

NOAA Custom Chart Quick Start Guide

- 1. Select display settings**
Click the **Display Settings** icon to set depth zone tint levels in the **Depth Contour** tab and other settings in the **Miscellaneous** tab.
- 2. Set chart scale and size**
Click the **Print Settings** icon to set scale, paper size, and orientation.
- 3. Move to your chart area**
Use these map navigation tools to move around the map to the area that you want to build a chart of.
- 4. Set and move chart extents**
Click the **Create new extent** icon, then click on the map to set the center of your chart. A red rectangle will appear. Click the **Move an extent** icon to move an existing extent.

Office of Coast Survey
National Oceanic and Atmospheric Administration

User Guide

NOAA Custom Chart User Guide

The NOAA Electronic Navigational Chart (NOAA ENC) is NOAA's premier nautical chart product. NOAA is focusing on improving and updating the content of its ENCs and providing larger scale, more detailed ENC coverage. Traditional paper and raster charts are still updated on a weekly basis with critical navigation changes that are released in U.S. Coast Guard Local Notice to Mariners. However, other changes, such as data from new shoreline and bathymetric surveys, and other non-critical changes – which are routinely applied to ENC charts – are no longer compiled onto traditional paper and raster charts.

NOAA will end all production of its traditional paper nautical charts by January 2025. More information about this is on the [Farwell to Traditional Nautical Charts](#) webpage. Although traditional paper nautical charts will no longer be available, NOAA will continue to provide users access to a new form of paper charts created directly from ENC data.

The online NOAA Custom Chart (NCC) application creates customized charts as PDF files. They look a bit different from traditional paper charts, but they have all the latest data found on ENCs. This approach ensures consistency between ENC and NCC charts and results in the best quality chart regardless of the final format.

NOAA is working with its current Print on Demand (POD) chart agents to provide the means for customers to obtain printed copies of their NCC charts, similar to how POD charts have been distributed in the past.

NOAA is actively making improvements to the NCC application and is interested in hearing about users' experiences using NCC and getting suggestions for additional enhancements. You can provide your input through the NOAA Office of Coast Survey's online [ASST](#) customer feedback tool.

April 12, 2021

Video Tutorial

Creating a NOAA Custom Chart

Setting chart limits and outputting your customized nautical chart

Chart Symbology Guide

U.S. Chart No. 1
Symbols, Abbreviations and Terms
used on Paper and Electronic Navigational Charts

13th Edition
April 15, 2019

Prepared Jointly by
Department of Commerce
National Oceanic and Atmospheric Administration
Department of Defense
National Geospatial-Intelligence Agency

N Areas, Limits

No.	INT	Description	NOAA	NGA	Other NGA	ECDIS
General *						
Dredged and Swept Areas → I		Submarine Cables, Submarine Pipelines → L		Tracks, Routes → M		
On multi-colored charts, symbols in Section N may be in green when associated with environmental areas.						
1.1		Maritime limit in general usually implying permanent physical obstructions (tint band for emphasis)				
1.2		usually implying no permanent physical obstructions (tint band for emphasis)				
2.1		Limit of restricted area (tint band for emphasis)				
2.2		Limit of area into which entry is prohibited				
Anchorage, Anchorage Areas						
10		Reported anchorage (no defined limits)				
11.1		Anchor berths				
11.2		Anchor berths with swinging circle				

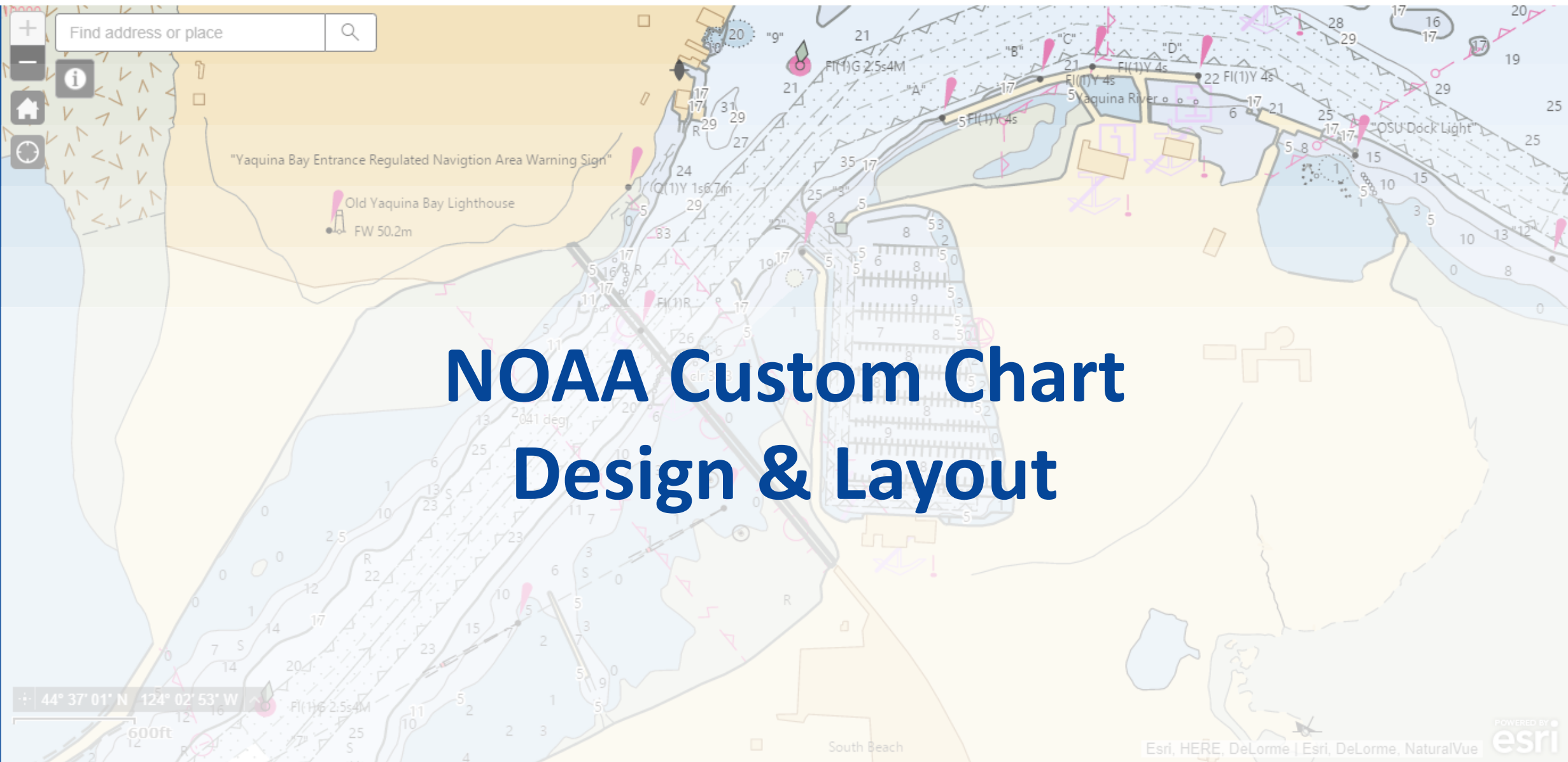
* ECDIS represents many types of area limits with just a few different symbols. Information about the type of area and its associated restrictions or prohibitions may be obtained by cursor pick.

Yaquina Bay, Oregon



Application Settings & Demonstration





NOAA Custom Chart Design & Layout

44° 37' 01" N 124° 02' 53" W

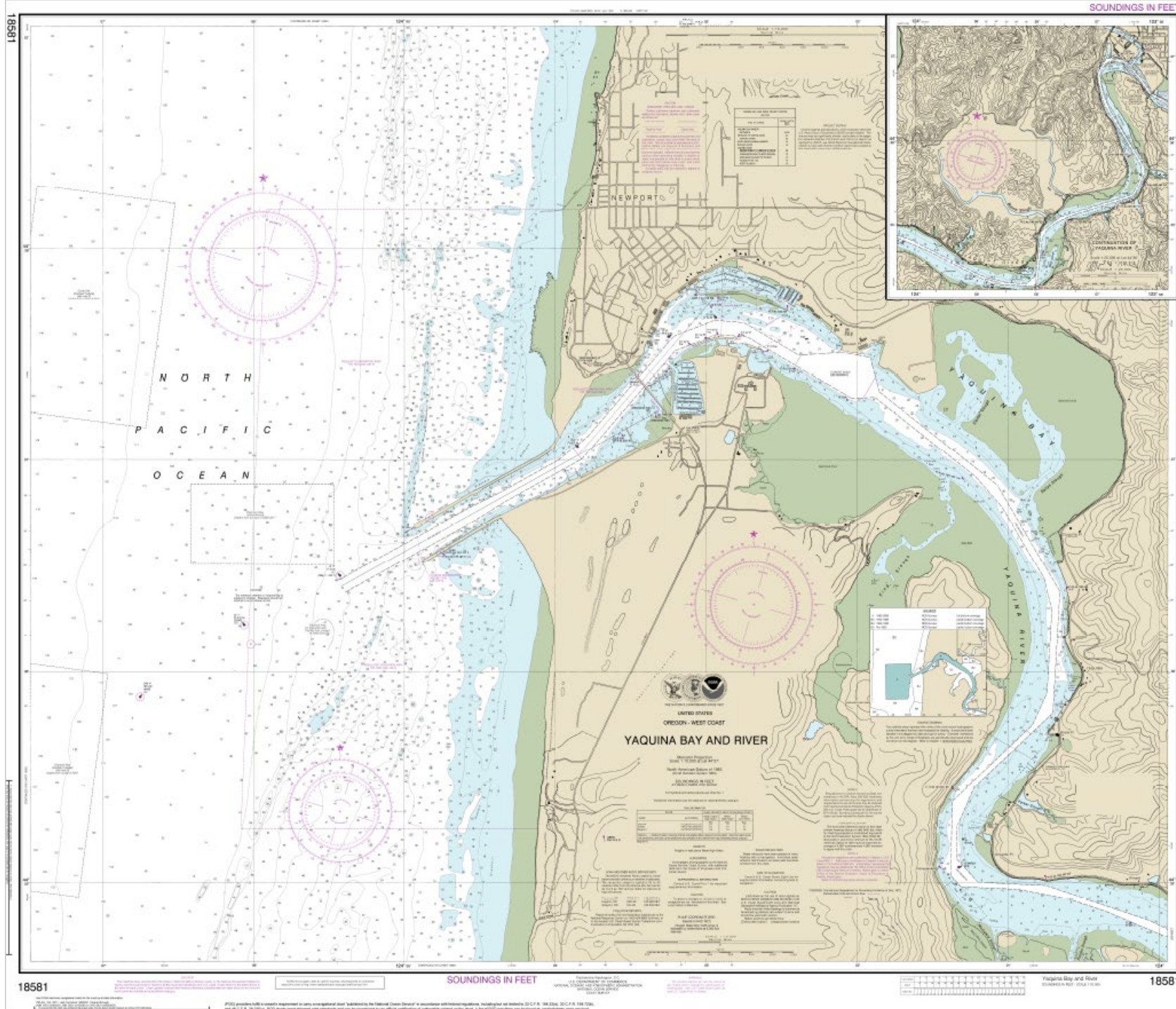
600ft

South Beach

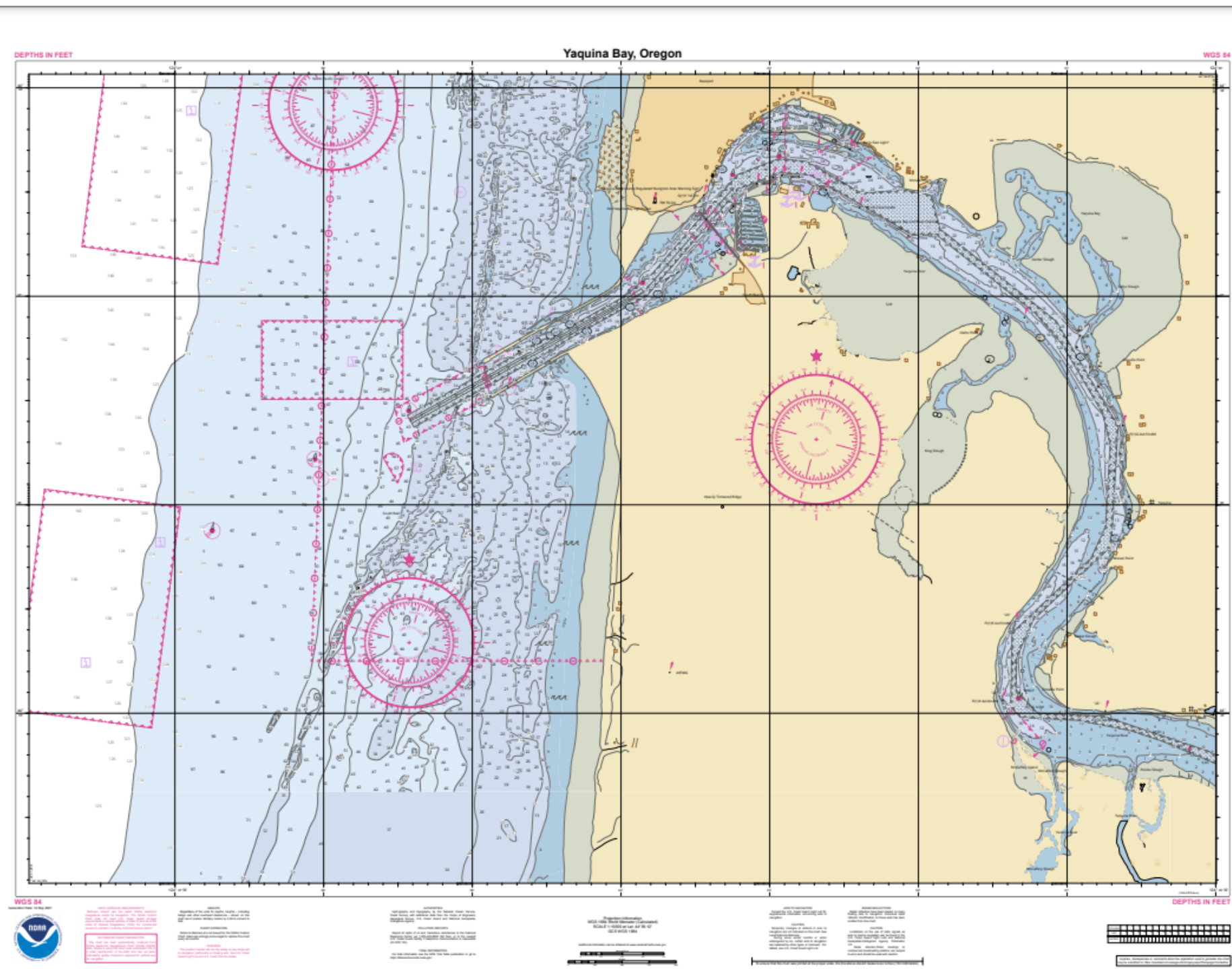
POWERED BY
Esri, HERE, DeLorme | Esri, DeLorme, NaturalVue

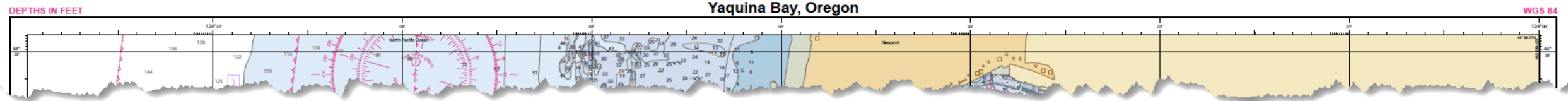


NOAA Traditional Chart 18581



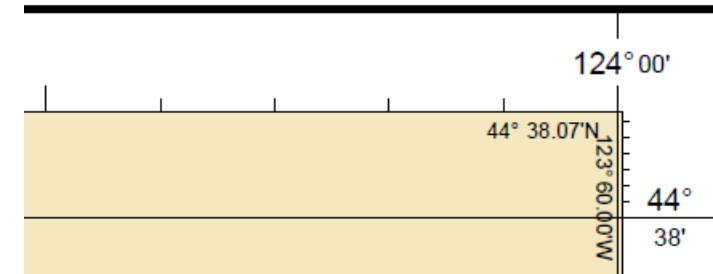
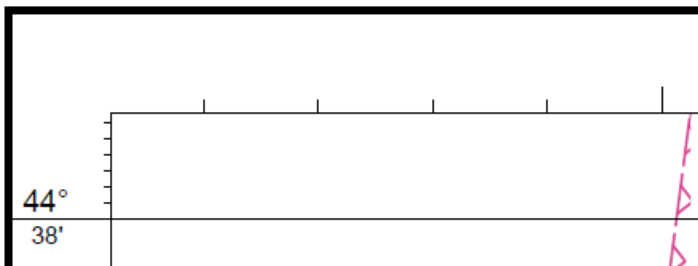
NOAA Custom Chart Yaquina Bay



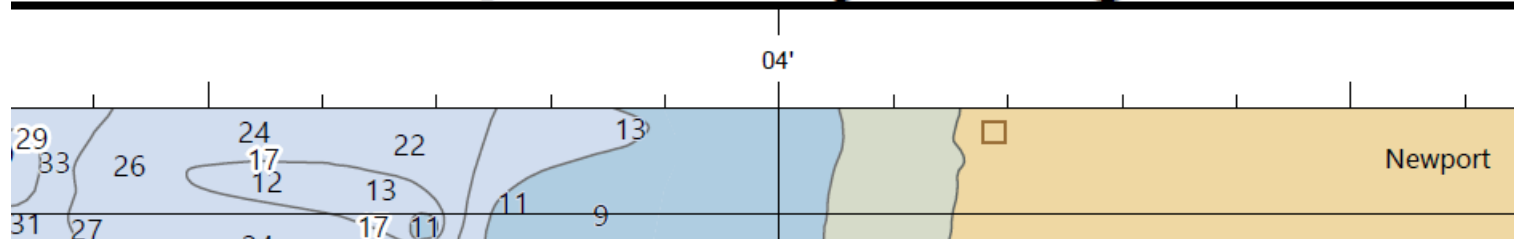


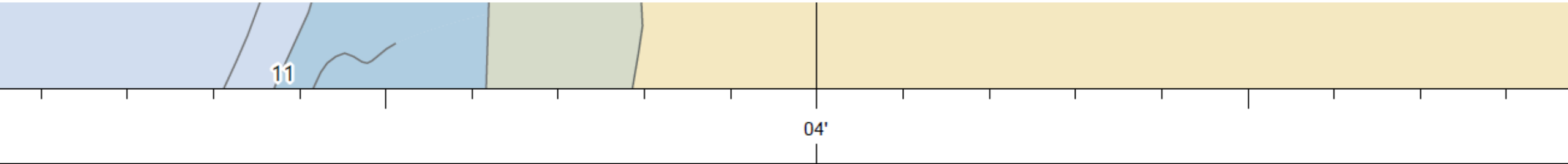
DEPTHS IN FEET

WGS 84



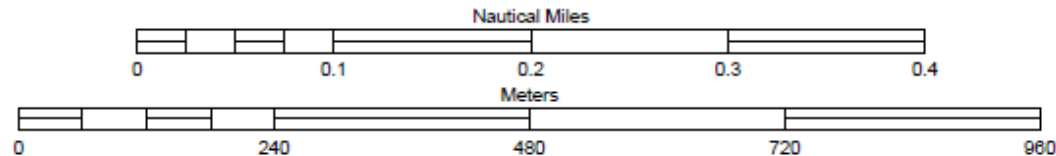
Yaquina Bay, Oregon

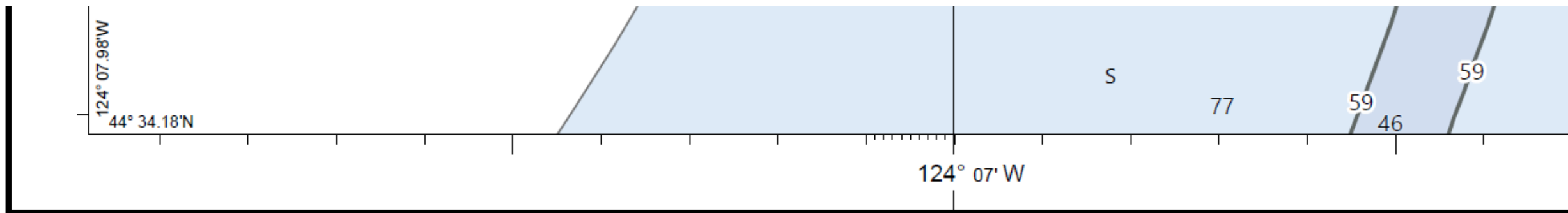




Projection Information
WGS 1984 World Mercator (Calculated)
SCALE 1:10000 at Lat. 44°36.12'
GCS WGS 1984

Additional information can be obtained at www.nauticalcharts.noaa.gov.





WGS 84

Generation Date: 14 May 2021



USCG CARRIAGE REQUIREMENTS

Mariners should use the latest NOAA electronic navigational charts for navigation. This NOAA Custom Chart does not meet U.S. Coast Guard carriage requirements in several sections of titles 33 and 46 of the Code of Federal Regulations (CFR) for commercial vessels to maintain "currently corrected marine charts."

AUTOMATED CHART GENERATION

This chart has been automatically rendered from NOAA Electronic Navigational Chart (NOAA ENC®) data. Mariners using this chart must understand this is a static reproduction of the ENC and has not been individually quality checked or adjusted for optimal use for navigation.

HEIGHTS

Regardless of the units for depths, heights – including bridge and other overhead clearances – shown on this chart are in meters. Multiply meters by 3.28 to convert to feet.

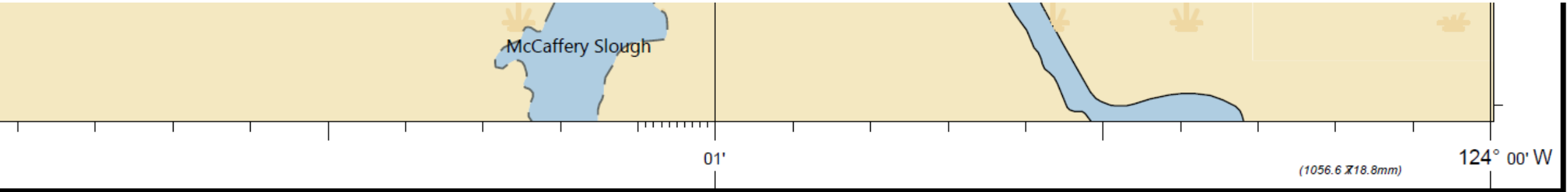
CHART EXPIRATION

Notice to Mariners are not issued for this NOAA Custom Chart. Users are strongly encouraged to replace this chart every six months.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

Chart Lower Right Margin



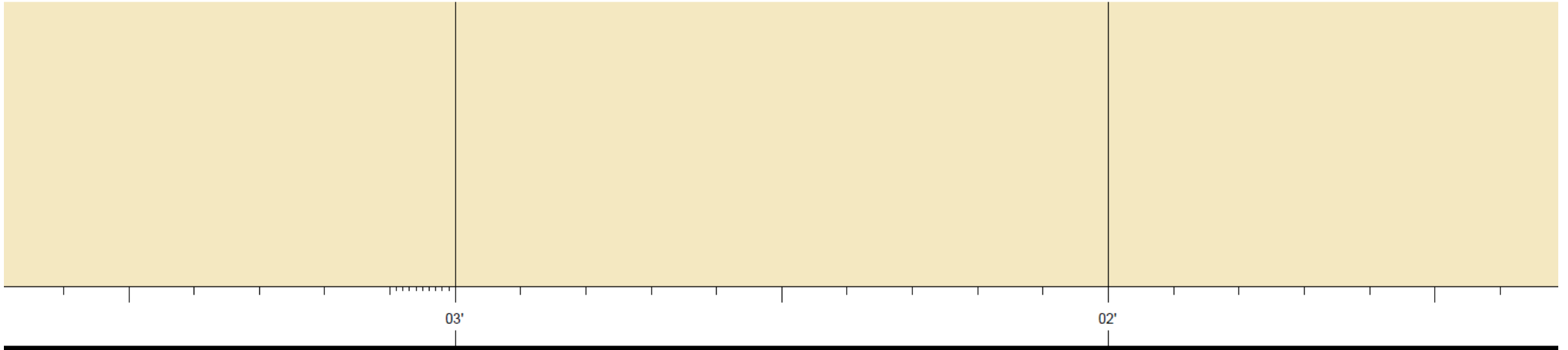
DEPTHS IN FEET

FATHOMS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
FEET	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102
METERS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

Inquiries, discrepancies or comments about the application used to generate this chart may be submitted to: <https://ocsddata.ncd.noaa.gov/ids/inquiry.aspx?frompage=ContactUs>



Scale Verification Bar



AIDS TO NAVIGATION

Consult the U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details, see U.S. Coast Guard Light List.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

CAUTION

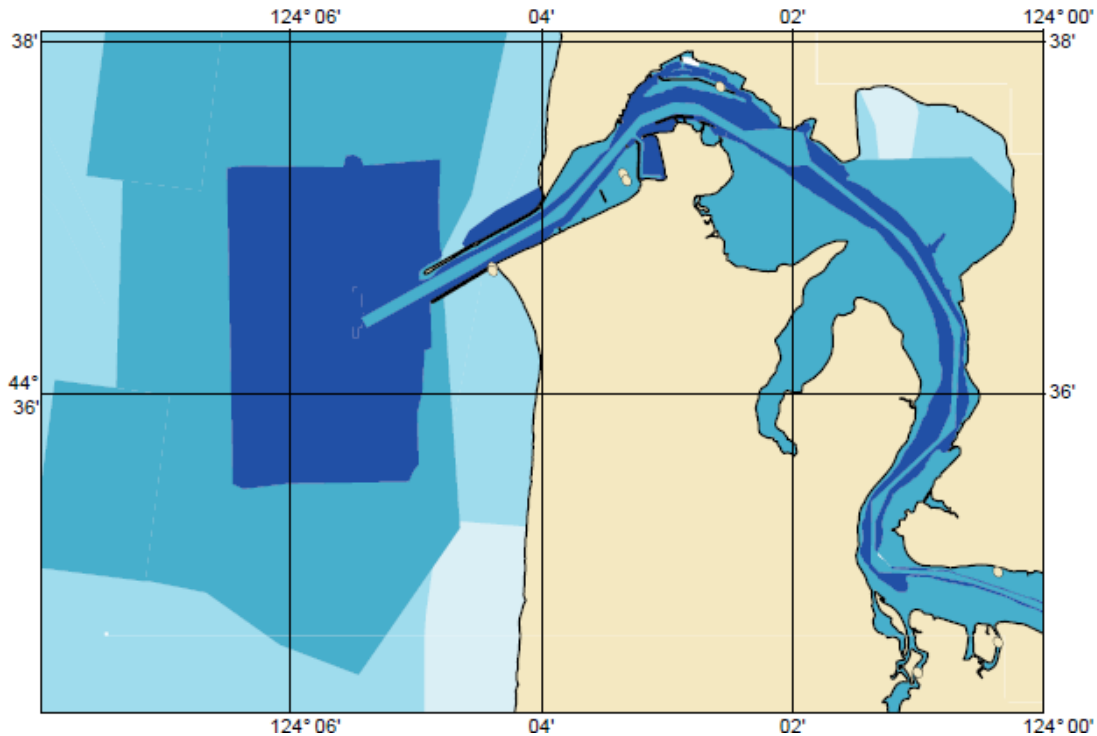
Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

To ensure that this chart was printed at the proper scale, the line above should measure six inches (152 millimeters).



Zone of Confidence (ZOC) Diagram



Darker blue shows areas surveyed with more precise methods

ZOC CATEGORIES

ZOC	COLOR	POSITION ACCURACY	DEPTH ACCURACY	SEAFLOOR COVERAGE
A1		± 5 m ± 16.4 ft	= 0.50 m +1% d = 1.6 ft +1% d = 0.3 fm +1% d	All significant seafloor features detected.
A2		± 20 m ± 65.6 ft	= 1.00 m +2% d = 3.3 ft +2% d = 0.6 fm +2% d	All significant seafloor features detected.
B		± 50 m ± 164.0 ft	= 1.00 m +2% d = 3.3 ft +2% d = 0.6 fm +2% d	Uncharted features hazardous to surface navigation are not expected but may exist.
C		± 500 m ± 1640.4 ft	= 2.00 m +2% d = 6.6 ft +2% d = 1.1 fm +2% d	Depth anomalies may be expected.
D		Worse than ZOC C	Worse than ZOC C	Large depth anomalies may be expected.
U		Unassessed - The quality of the bathymetric data has yet to be assessed.		

Notes shown within a traditional chart are placed on separate 8.5" x 11" sheets after the NCC chart image.

Yaquina Bay, Oregon

NOAA CUSTOM CHART
NOTES GEOSPATIAL DATABASE
VERSION 1.0 - 30 MARCH 2021

The records of the NOAA Custom chart Notes Geospatial Database are current as of March 30, 2021. Subsequent additions and refinements are to be expected. Please refer to all available navigational publications for complete information about the charted area.

CHART EXPIRATION

Notice to Mariners are not issued for this NOAA Custom Chart. Users are strongly encouraged to replace this chart every six months.

HEIGHTS

Regardless of the units for depths, heights - including bridge and other overhead clearances - shown on this chart are in meters. Multiply meters by 3.28 to convert to feet.

TIDAL INFORMATION

For tidal information see the NOS Tide Table publication or go to <https://tidesandcurrents.noaa.gov>.

ABBREVIATIONS

For complete list of Symbols and Abbreviations, see Chart No. 1.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

USCG CARRIAGE REQUIREMENTS

Mariners should use the latest NOAA electronic navigational charts for navigation. This NOAA Custom Chart does not meet U.S. Coast Guard carriage requirements in several sections of Titles 33 and 46 of the Code of Federal Regulations (CFR) for commercial vessels to maintain "currently corrected marine charts."

AUTOMATED CHART GENERATION

This chart has been automatically rendered from NOAA Electronic Navigational Chart (NOAA ENC) data. Mariners using this chart must understand this is a static reproduction of the ENC and has not been individually quality checked or adjusted for optimal use for navigation.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard and National Geospatial-Intelligence Agency.

COMMENTS REQUEST

Inquiries, discrepancies or comments about the application used to generate this chart may be submitted to: <https://ocdata.ncd.noaa.gov/ldrs/inquiry.aspx?frompage=contactus>

SOUNDING DATUM

Soundings referred to Mean Lower Low Water (MLLW).

VERTICAL DATUM

Overhead clearances are referred to Mean High Water (MHW).

Page 1

Yaquina Bay, Oregon

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details, see U.S. Coast Guard Light List.

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 10. Additions or revisions to Chapter 2 are published in the notices to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 13th Coast Guard District in Seattle, WA or at the Office of the District Engineer, Corps of Engineers in Portland, OR. Refer to charted regulation section numbers.

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

CAUTION

USACE conducts hydrographic surveys to monitor navigation conditions. These surveys are not intended to detect underwater features. Uncharted features hazardous to surface navigation are not expected but may exist in federal channels. For more information visit <https://navigation.usace.army.mil/survey/hydro>.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

CAUTION

LIMITATIONS ON THE USE OF RADIO SIGNALS

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117. Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

COLREGS DEMARCATION LINE

The Inland Navigational Rules Act of 1980 is in effect for vessels transiting this area. The seaward boundaries of this area are the COLREGS demarcation lines. In the area seaward of the COLREGS demarcation lines, vessels are governed by COLREGS: International Regulations for Preventing Collisions at Sea, 1972. The COLREGS demarcation line is defined in COLREGS 33 CFR 80.1340.

Page 2

Yaquina Bay, Oregon

CAUTION

SUBMERGED CABLES AND PIPELINES

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging or trawling. Covered wells may be marked by lighted or unlighted buoys.

FLOAT AREA

A float area is found in the vicinity of The Bend in the Yaquina River. Its position is approximate.

CHANGEABLE AREA

The entrance channel to Yaquina Bay is subject to change. Strangers to the area should not attempt to enter without a pilot.

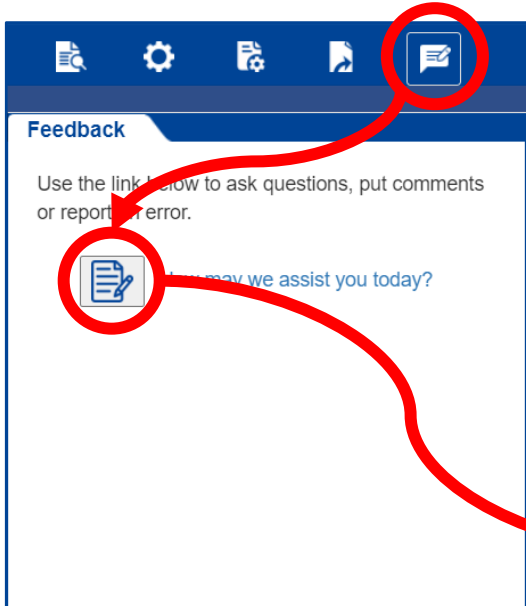
NOAA WEATHER RADIO BROADCASTS


The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Newport, OR K1N-33 162.55MHz

Page 4





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

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

Use Coast Survey's online ASSIST feedback tool to:

- Ask a question
- Make a suggestion
- Report an error

concerning the NOAA Custom Chart tool, or any other NOAA nautical product or service.

Please include:

- Location that the chart covers
- Scale you have selected for the chart
- Attach the NCC chart PDF or a screenshot

- Additional paper sizes
- Means for Print on Demand (POD) Agents to provide NCC charts
- Improved symbology (lines, areas), and Labels
- Improved display of text
- Improved display of compass roses
- Subscription service
 - Enable chart extents to be saved
 - Enable notifications when relevant chart data changes



Questions

NOAA Custom Chart

Webinar documents will be posted at: <https://nauticalcharts.noaa.gov>

Presentation Slides

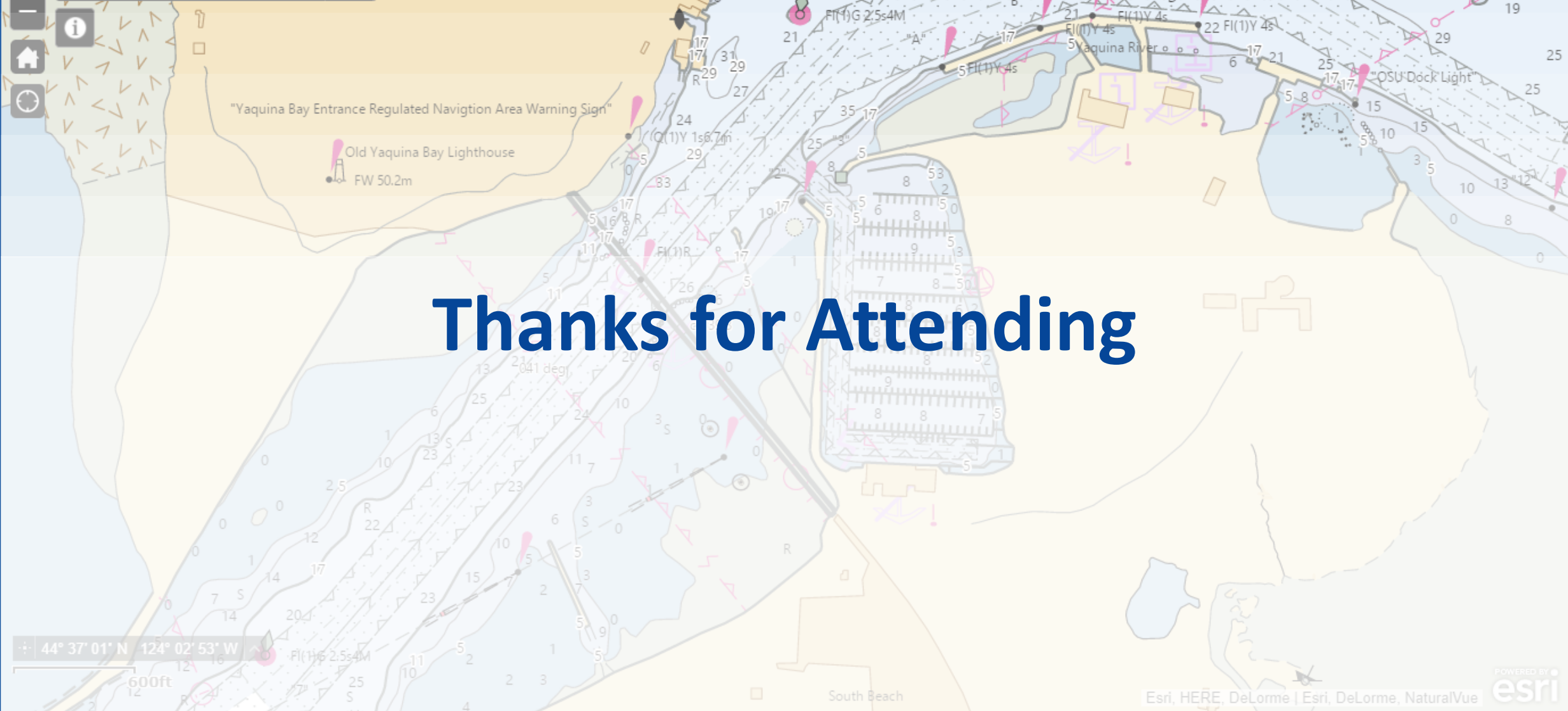
Video Recording

Transcript





Find address or place



44° 37' 01" N 124° 02' 53" W

600ft

South Beach

