

BookletChart™



Lake Erie

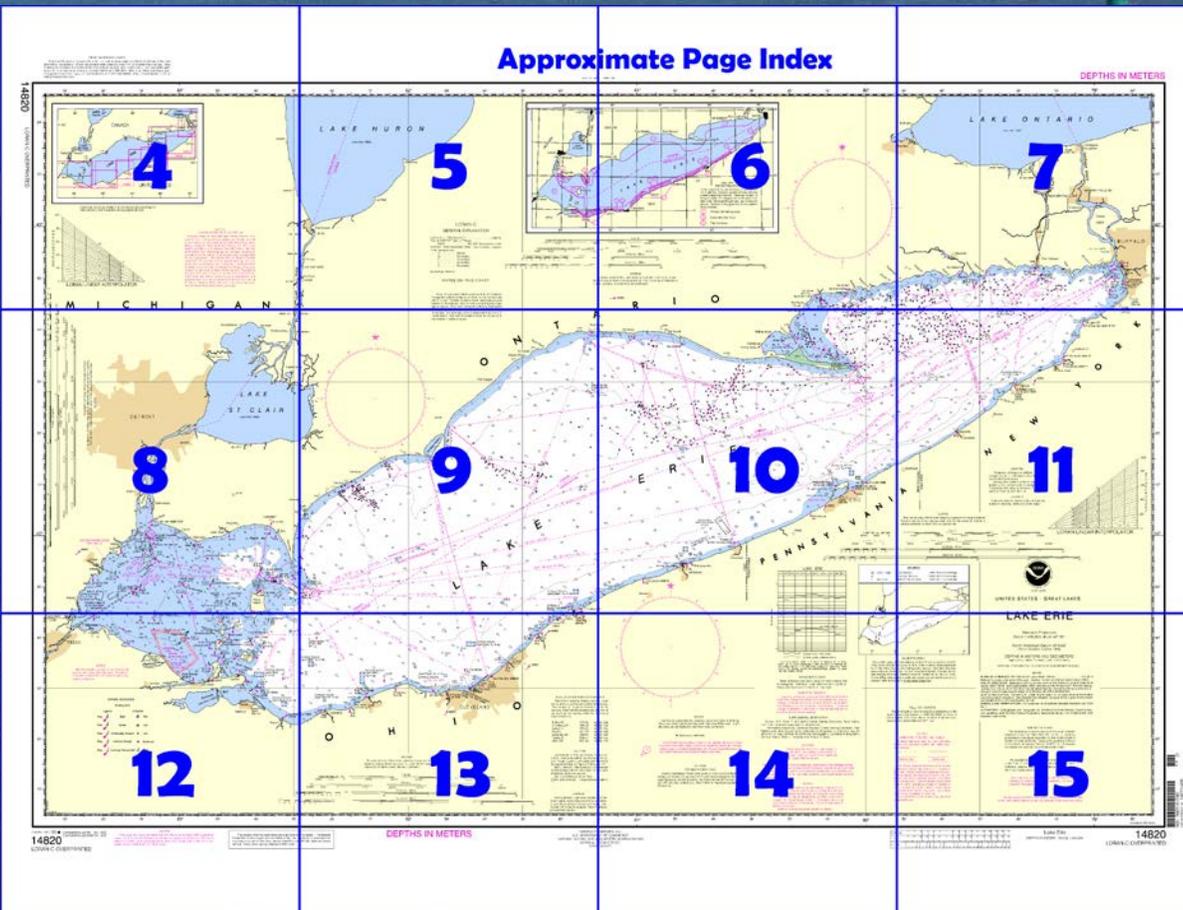
NOAA Chart 14820

A reduced-scale NOAA nautical chart for small boaters

When possible, use the full-size NOAA chart for navigation.



- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



**Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA**

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

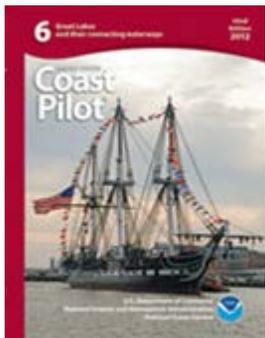
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at <http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=14820>



(Selected Excerpts from Coast Pilot)

Lake Erie is the southeasternmost and fourth largest of the five **Great Lakes**. With a greatest depth of 210 feet, it is the shallowest of the lakes and the only one with a floor above sea level. The deepest part of the lake is generally at the E end, while the island region in the W part of the lake is the shallowest. The lake has an average depth of 62 feet. The lake is fed at the NW end by water from Lake Huron via St. Clair River, Lake St. Clair, and Detroit

River. The only natural outlet of the lake is at the NE end through Niagara River. **Welland Canal** bypasses the falls and rapids of Niagara River and provides a navigable connection to Lake Ontario.

For about 25 miles W from a line between Point Marblehead on the S shore and Point Pelee on the N shore, Lake Erie is rendered foul by a group of islands and shoals. The main route for large vessels is through Pelee Passage in the N part of the area, but other passages of limited capacity are also available to the S. Submerged fish net stakes may be encountered throughout the W end of Lake Erie. The **International boundary** between the United States and Canada extends through this area in a series of straight lines bearing from the E into the NW.is in Canada going back to the head of the St. Lawrence River.

**U.S. Coast Guard Rescue Coordination Center
24 hour Regional Contact for Emergencies**

RCC Cleveland Commander
9th CG District (216) 902-6117
Cleveland, OH

Navigation Managers Area of Responsibility



NOAA's navigation managers serve as ambassadors to the maritime community.

They help identify navigational challenges facing professional and recreational mariners, and provide NOAA resources and information for safe navigation. For additional information, please visit nauticalcharts.noaa.gov/service/navmanagers

To make suggestions or ask questions online, go to nauticalcharts.noaa.gov/inquiry.

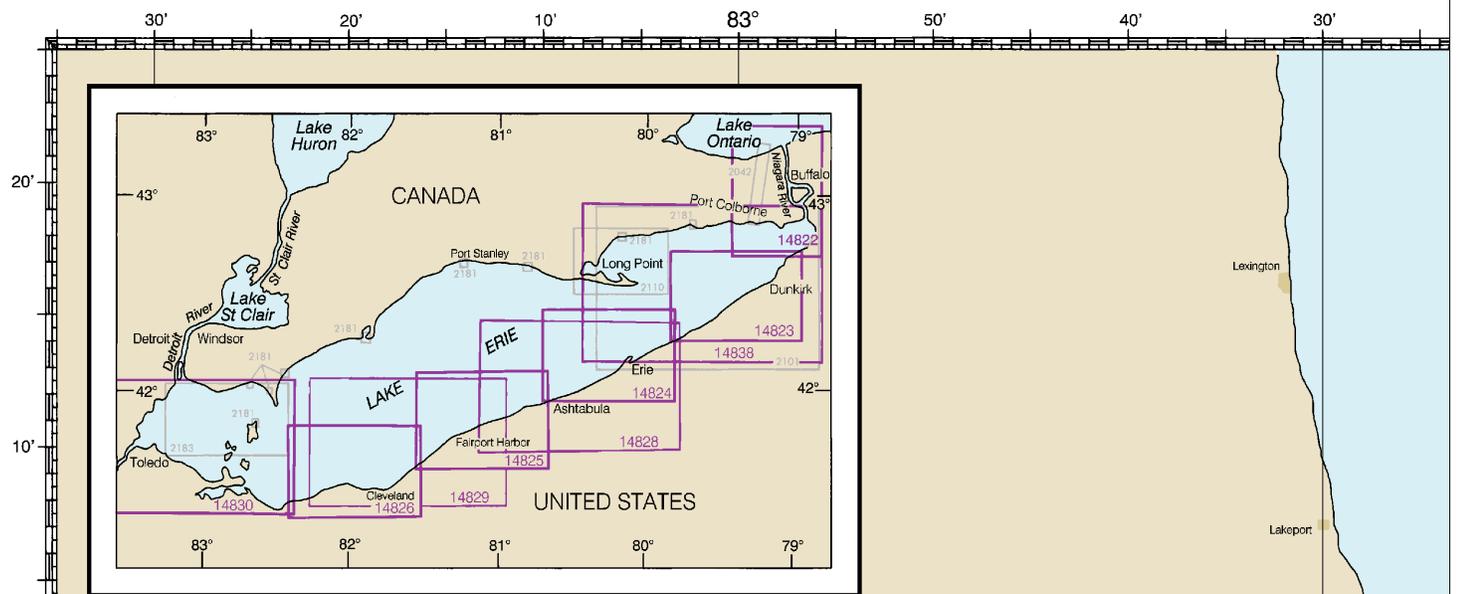
To report a chart discrepancy, please use ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx.

Lateral System As Seen Entering From Seaward

on navigable waters except Western Rivers

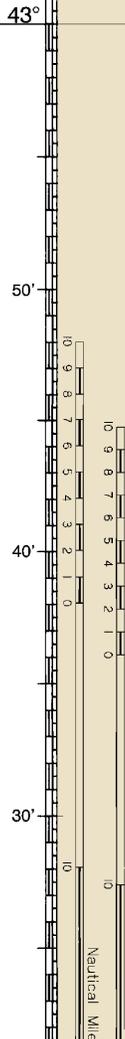


For more information on aids to navigation, including those on Western Rivers, please consult the latest USCG Light List for your area. These volumes are available online at <http://www.navcen.uscg.gov>



Canadian charts are outlined in screened black and may be obtained from the Canadian Hydrographic Service

NOTE Z
NO-DISCHARGE ZONE, 40 CFR 140
 Michigan waters of Lakes Michigan, Huron, Superior, Erie and St. Clair, all waterways connected thereto, and all inland lakes are designated as a No-Discharge Zone (NDZ). Under the Clean Water Act, Section 312, all vessels operating within a No-Discharge Zone (NDZ) are completely prohibited from discharging any sewage, treated or untreated, into the waters. Commercial vessel sewage shall include graywater. All vessels with an installed marine sanitation device (MSD) that are navigating, moored, anchored, or docked within a NDZ must have the MSD disabled to prevent the overboard discharge of sewage (treated or untreated) or install a holding tank. Regulations for the NDZ are contained in the U.S. Coast Pilot. Additional information concerning the regulations and requirements may be obtained from the Environmental Protection Agency (EPA) web site: http://www.epa.gov/owow/oceans/regulatory/vessel_sewage/.

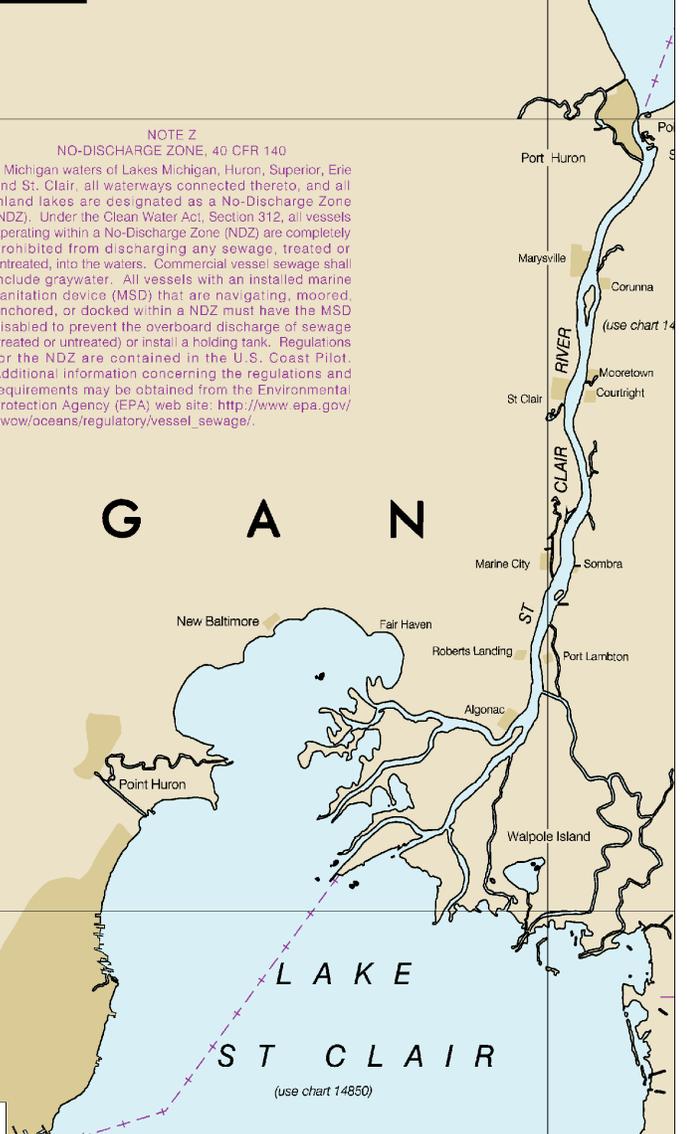


CAUTION
 The natural scale of this chart varies by 3 percent for graphic scales shown are accurate only for the farthest closest proximity to where they are positioned.

M I C H I G A N

DETROIT

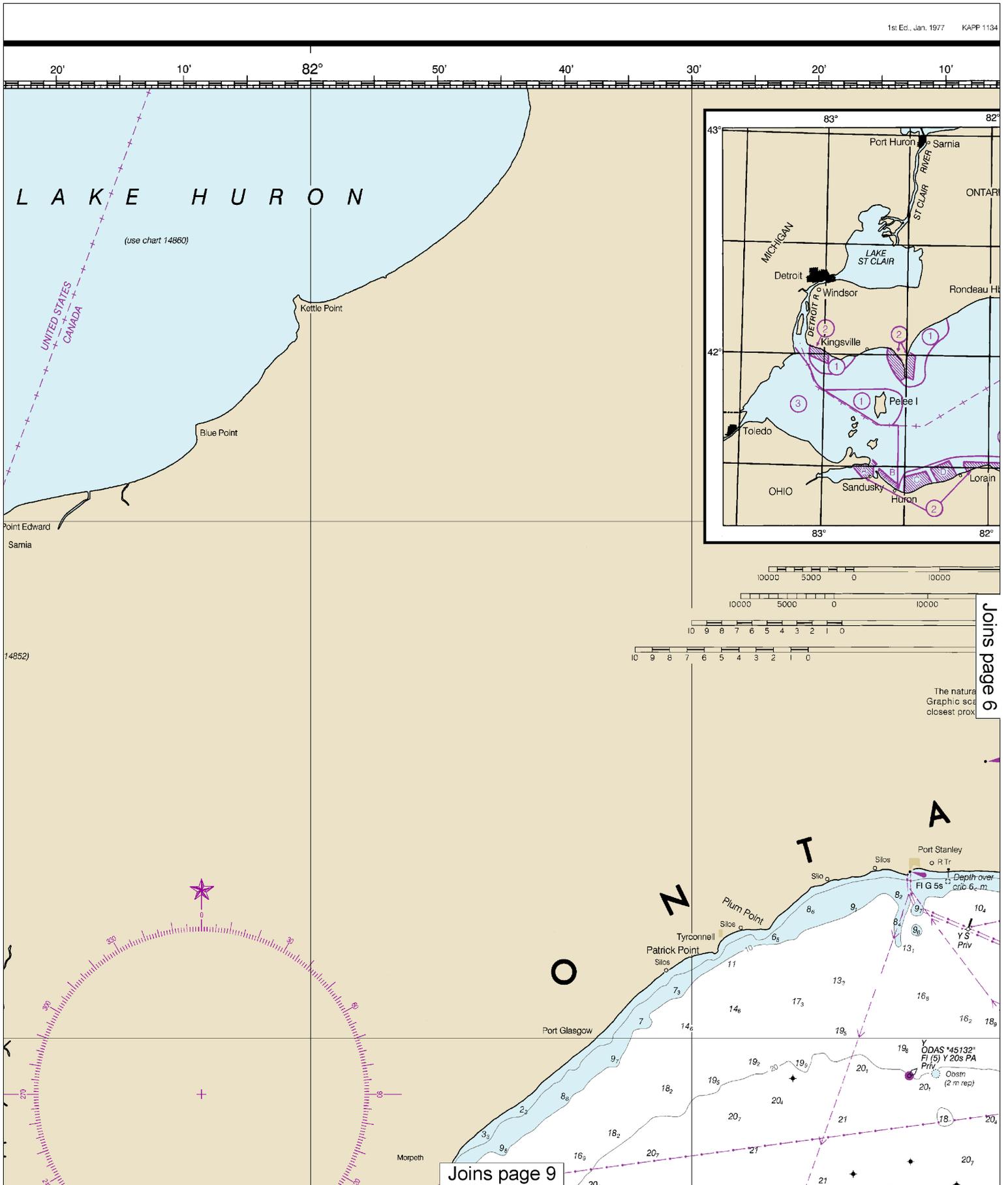
Joins page 8



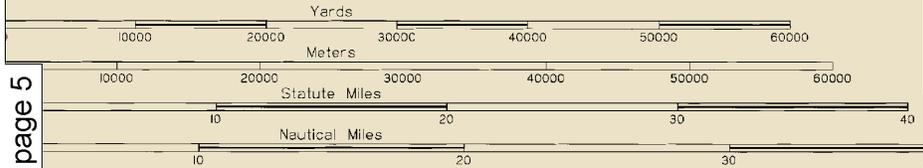
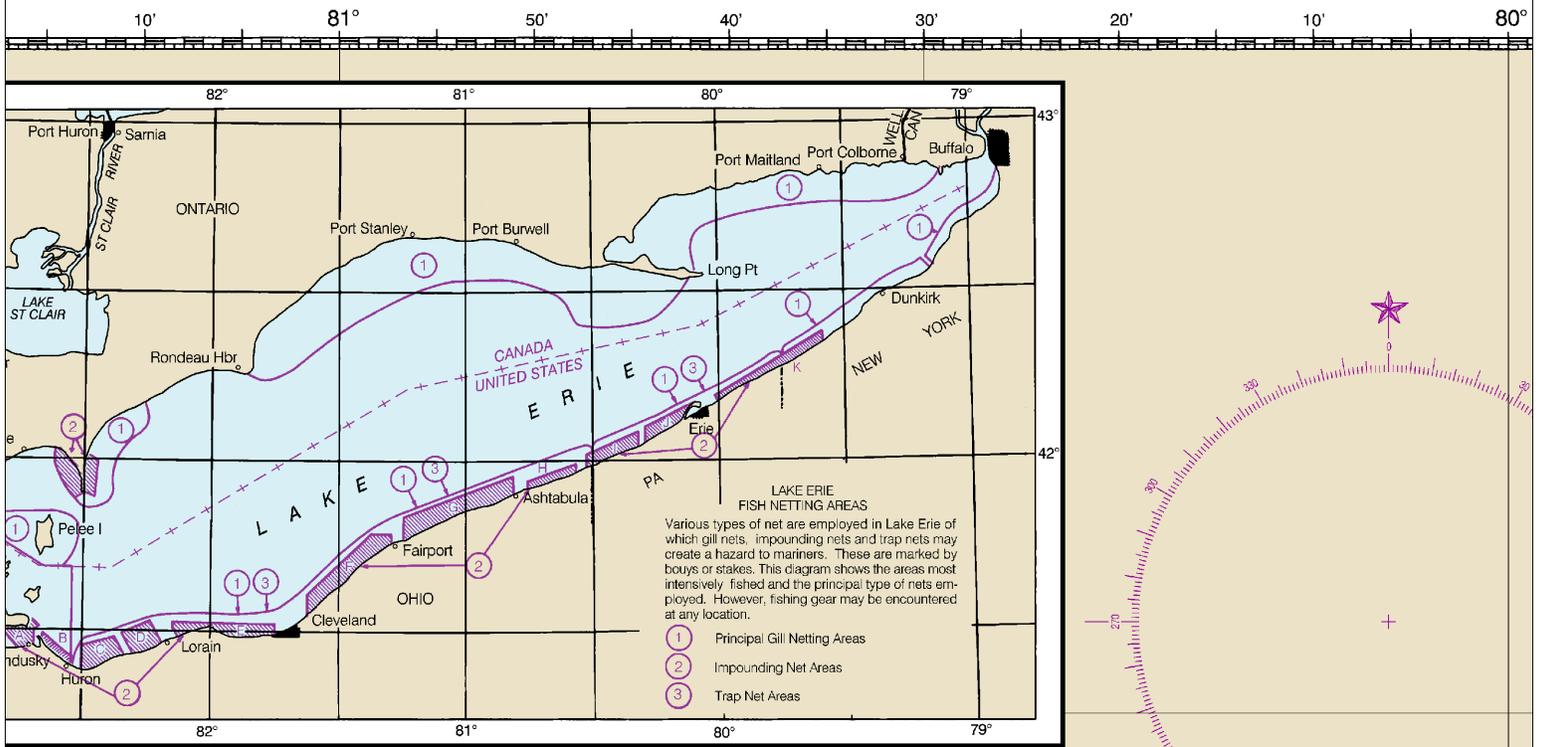
LAKE ST CLAIR

(use chart 14850)

Note: Chart grid lines are aligned with true north.

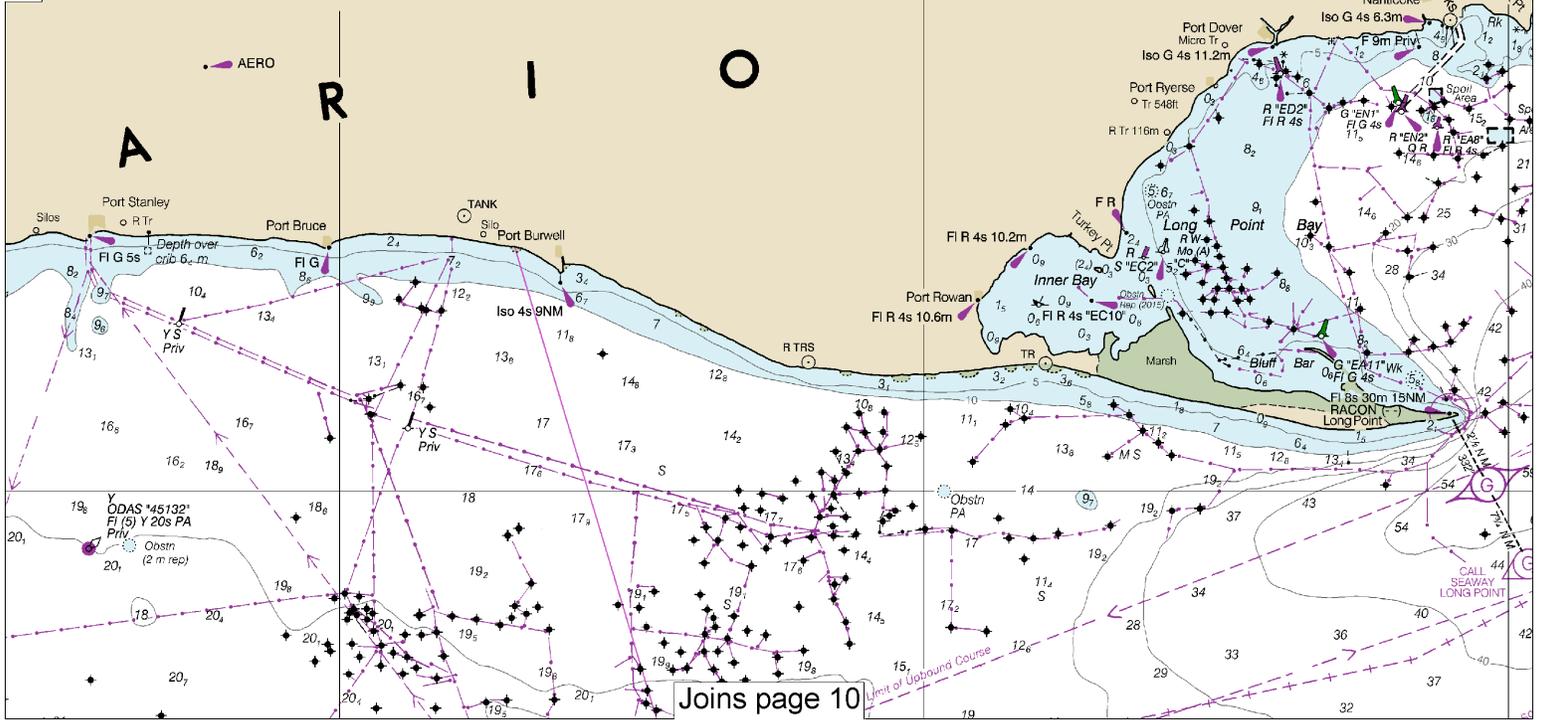


This BookletChart was reduced to 75% of the original chart scale. The new scale is 1:533333. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.



Joins page 5

CAUTION
The natural scale of this chart varies by 3 percent from top to bottom. Graphic scales shown are accurate only for the range of latitude in closest proximity to where they are positioned.

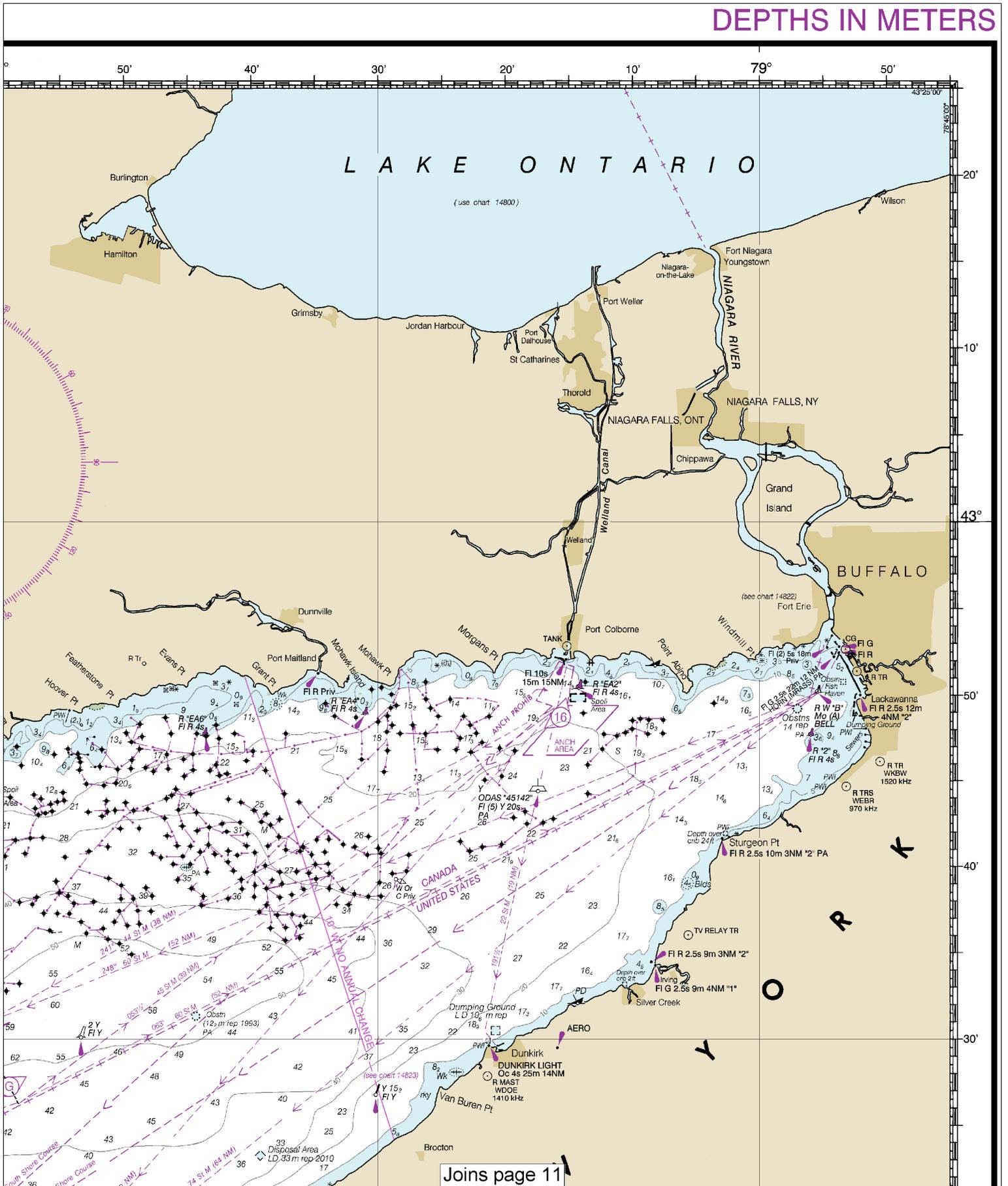


Joins page 10

6

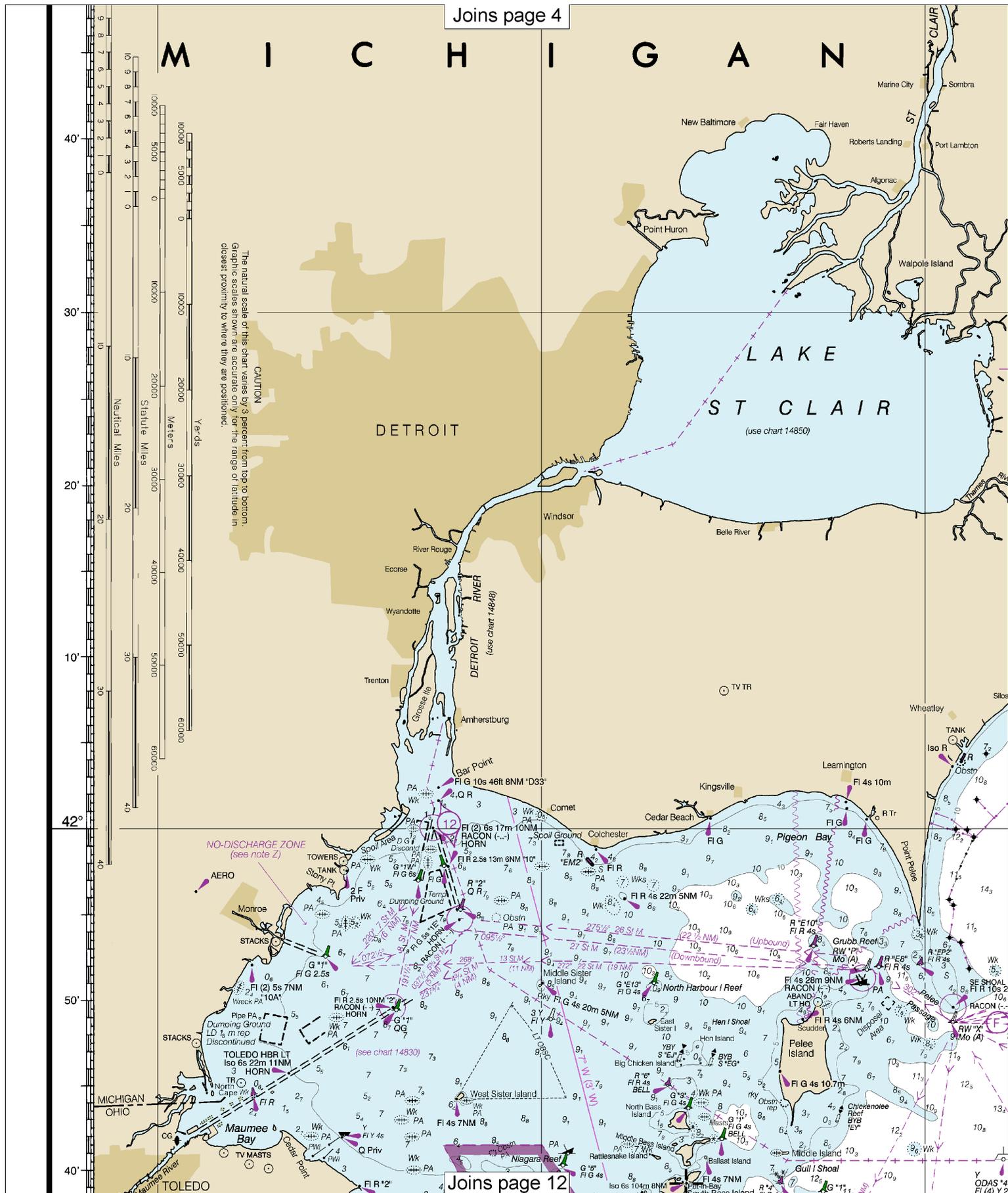
Note: Chart grid lines are aligned with true north.

DEPTHS IN METERS



21st Ed., Oct. 2005. Last Correction: 6/16/2016. Cleared through:
LNM: 4816 (11/29/2016), NM: 4916 (12/3/2016), CHS: 1116 (11/25/2016)

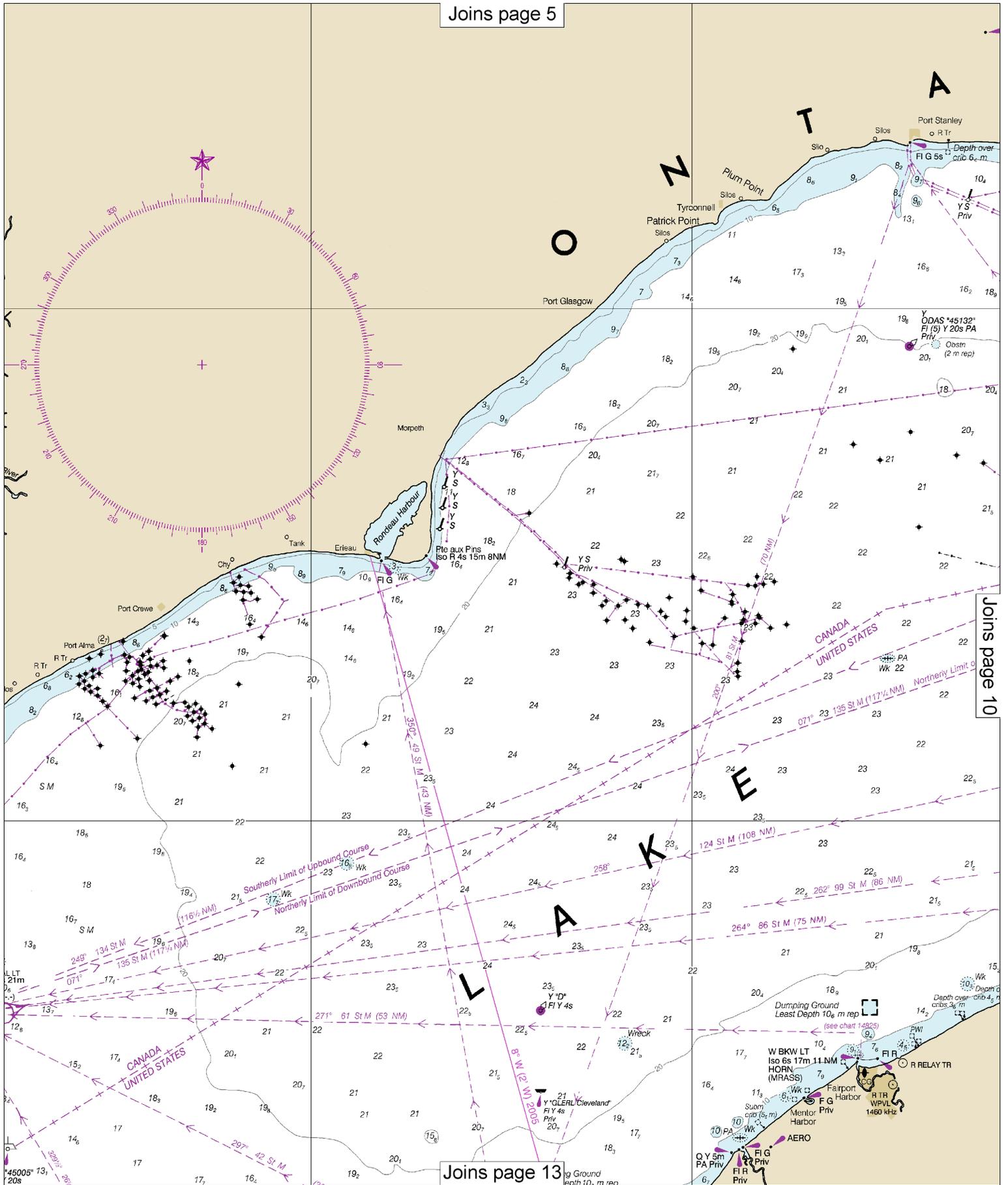
M I C H I G A N



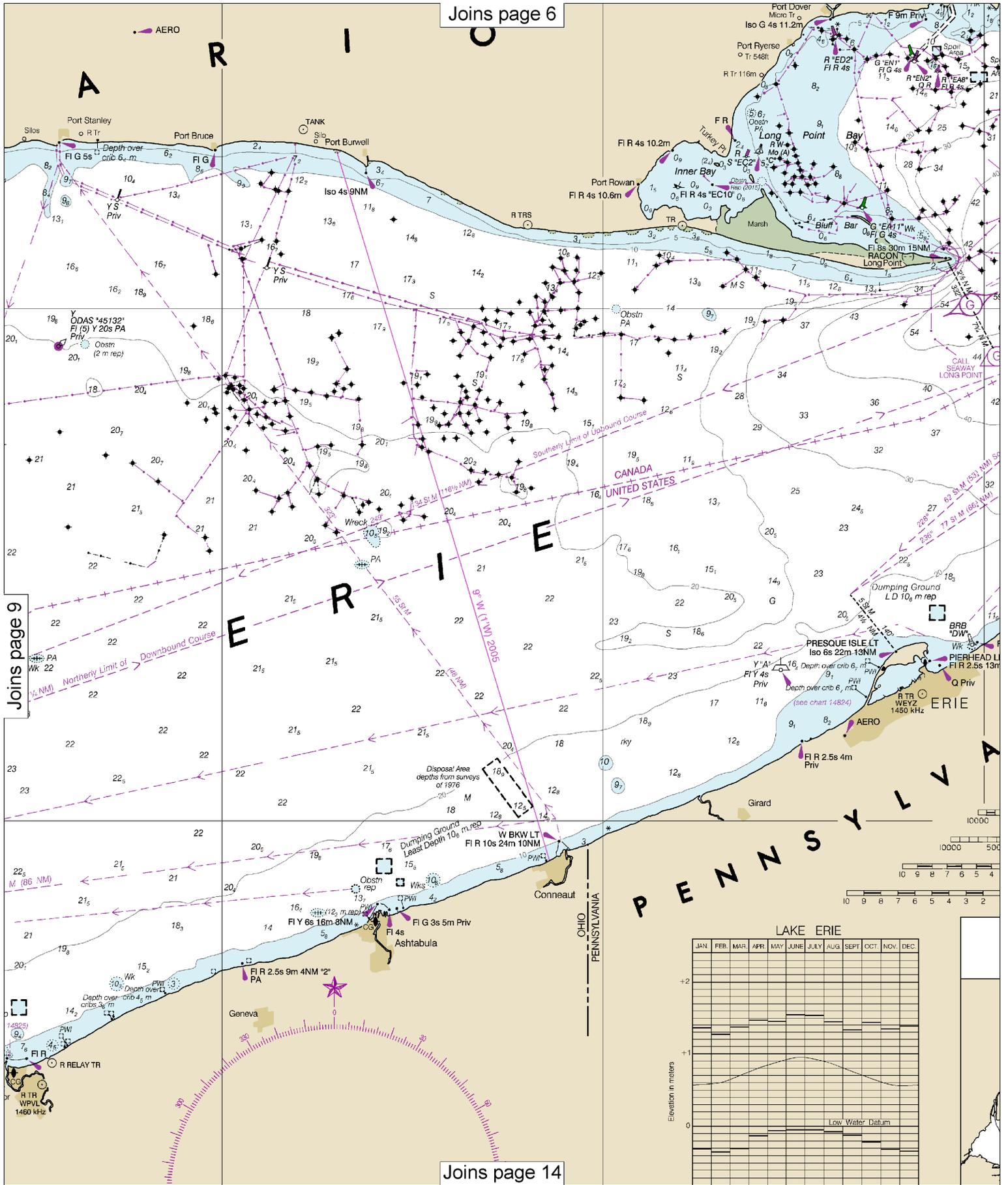
CAUTION
 The natural scale of this chart varies by 2 percent from top to bottom.
 Graphic scales shown are accurate only for the range of latitude in
 closest proximity to where they are positioned.



Note: Chart grid lines are aligned with true north.

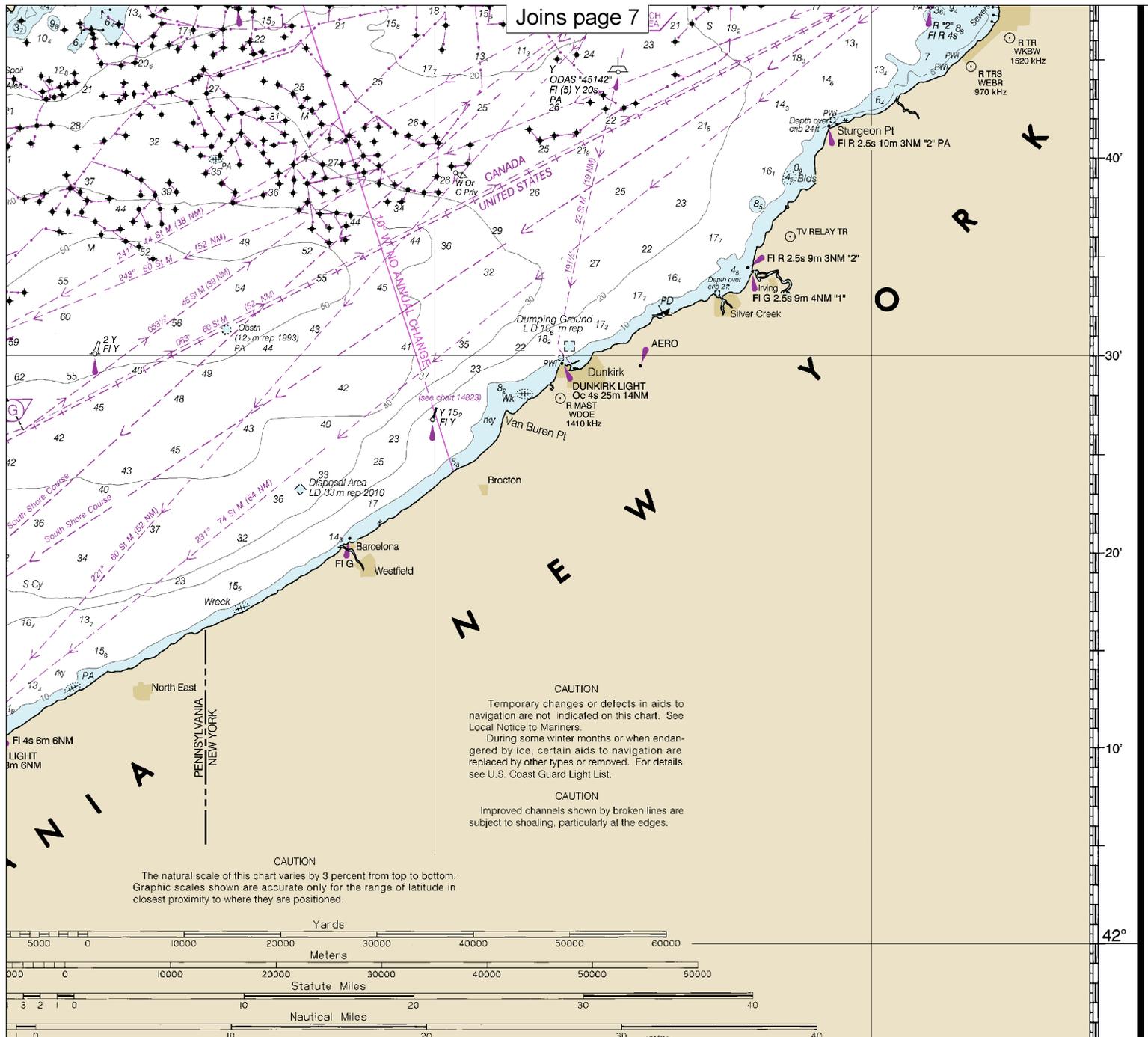


Joins page 10



Joins page 9

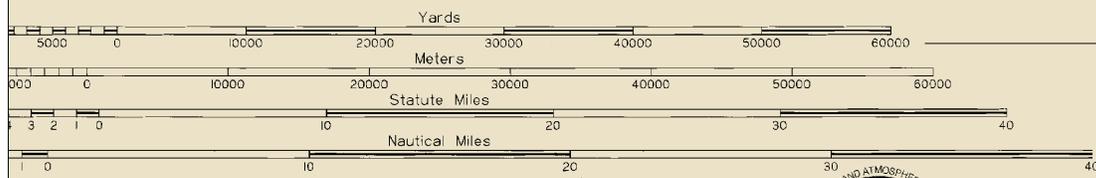
Joins page 14



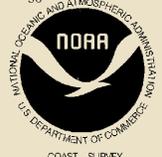
CAUTION
 Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.
 During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

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

CAUTION
 The natural scale of this chart varies by 3 percent from top to bottom. Graphic scales shown are accurate only for the range of latitude in closest proximity to where they are positioned.



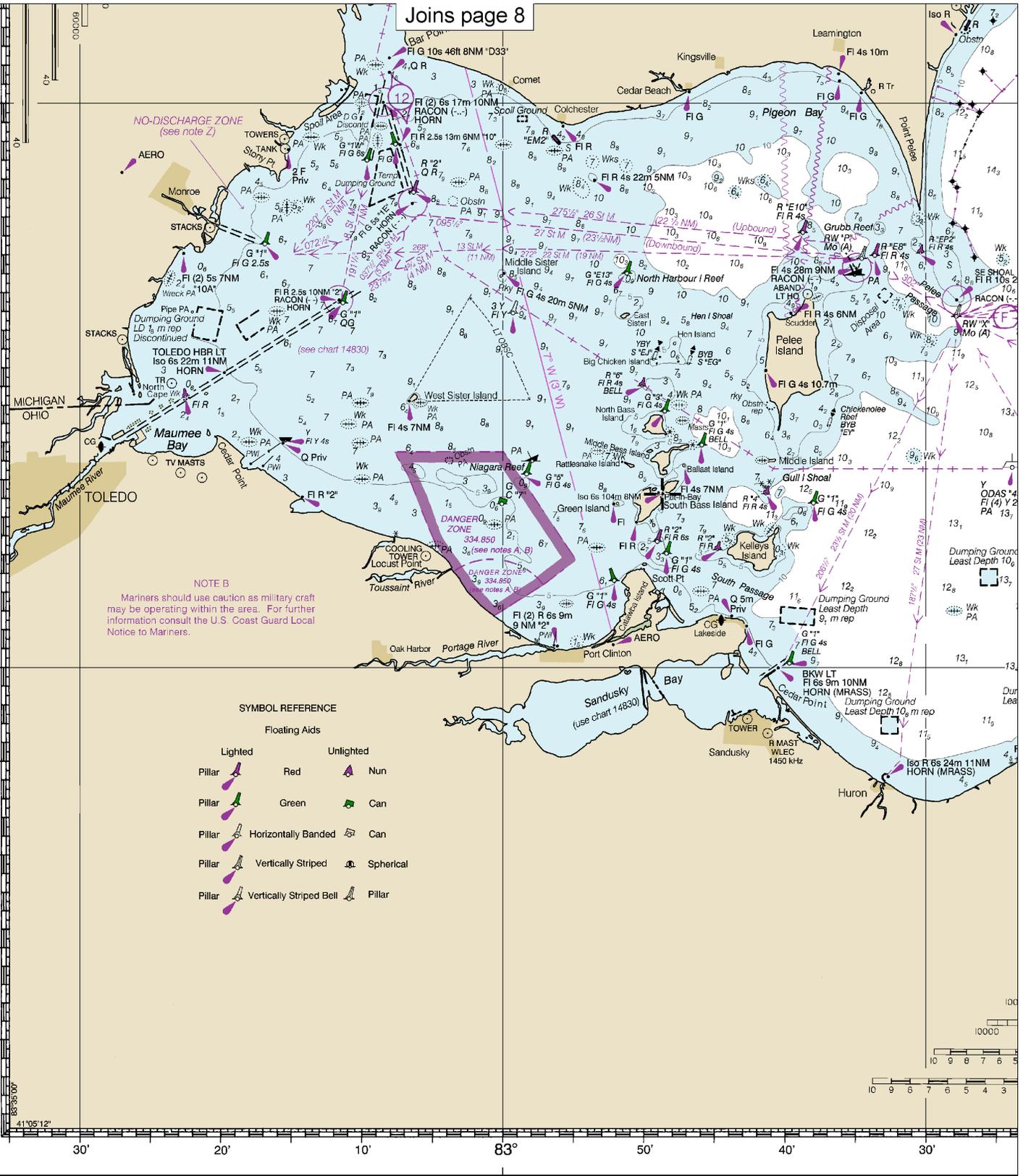
SOURCE		
B2	1970 - 1989	NOS Surveys partial bottom coverage
g	Canadian Surveys	partial bottom coverage
j	pre-1974	Lake Survey Surveys partial bottom coverage



UNITED STATES - GREAT LAKES
LAKE ERIE

Mercator Projection
 Scale 1:400,000 at Lat 42° 00'

42°
50'
40'
30'
20'
10'



NOTE B
 Mariners should use caution as military craft may be operating within the area. For further information consult the U.S. Coast Guard Local Notice to Mariners.

SYMBOL REFERENCE

Floating Aids			
Lighted	Red	Unlighted	Nun
Pillar	Green	Can	Can
Pillar	Horizontally Banded	Can	Can
Pillar	Vertically Striped	Spherical	Spherical
Pillar	Vertically Striped Bell	Pillar	Pillar

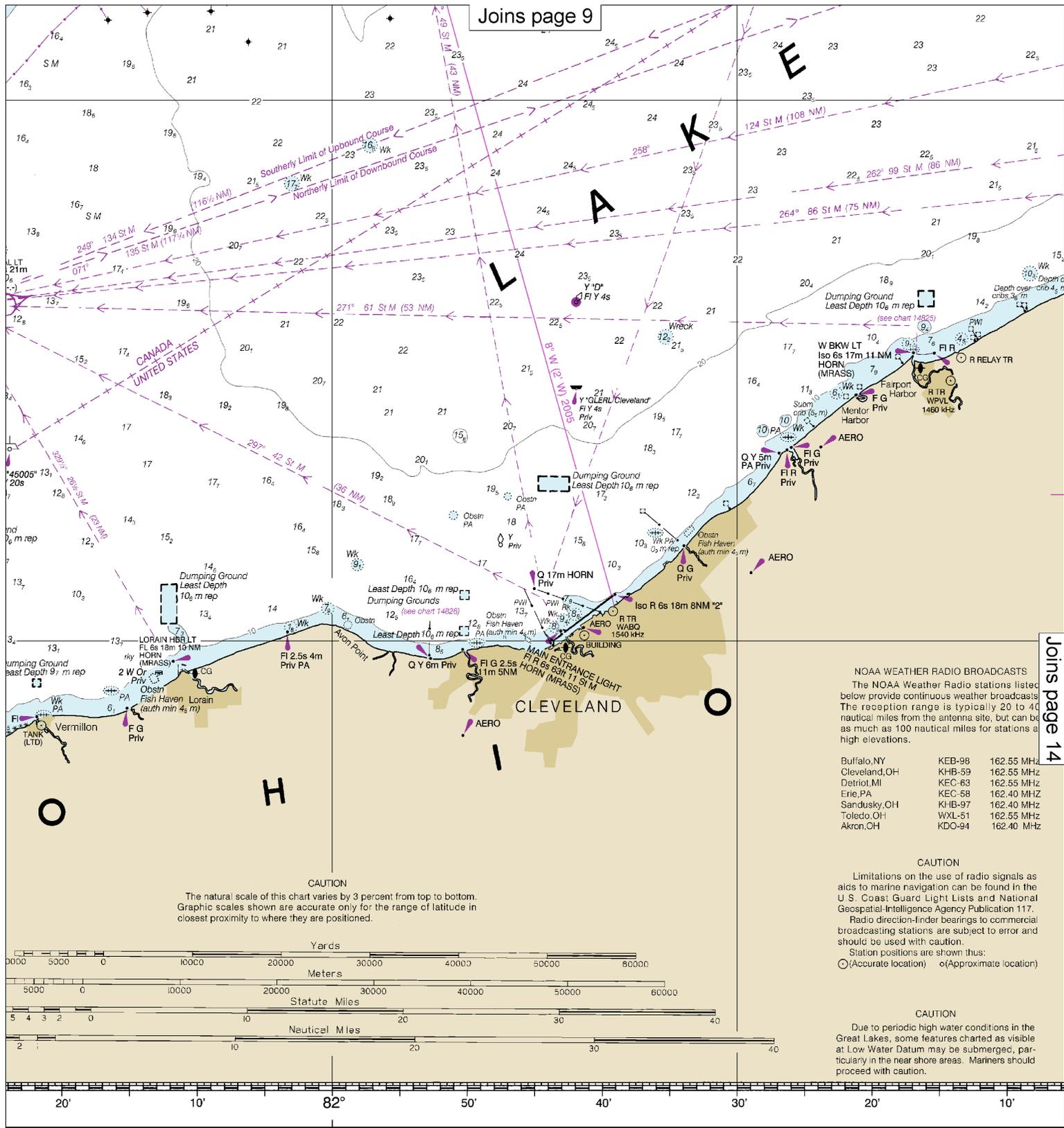
14820

21st Ed., Oct. 2005. Last Correction: 6/16/2016. Cleared through:
 LNM: 4816 (11/29/2016), NM: 4916 (12/3/2016), CHS: 1116 (11/25/2016)

This nautical chart has been designed to promote safe navigation. The Ocean Service encourages users to submit corrections, additions, or comments to the Chief, Marine Chart Division (N/C2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3262.



Note: Chart grid lines are aligned with true north.



DEPTHS IN METERS

The National Oceanic and Atmospheric Administration

Published at Washington, U.S. DEPARTMENT OF COMMERCE, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, NATIONAL OCEANIC SURVEY COAST SURVEY

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed below provide 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.

Buffalo, NY	KEB-98	162.55 MHz
Cleveland, OH	KHB-59	162.55 MHz
Detroit, MI	KEC-63	162.55 MHz
Erie, PA	KEC-58	162.40 MHz
Sandusky, OH	KHB-97	162.40 MHz
Toledo, OH	WXL-51	162.55 MHz
Akron, OH	KDO-94	162.40 MHz

CAUTION

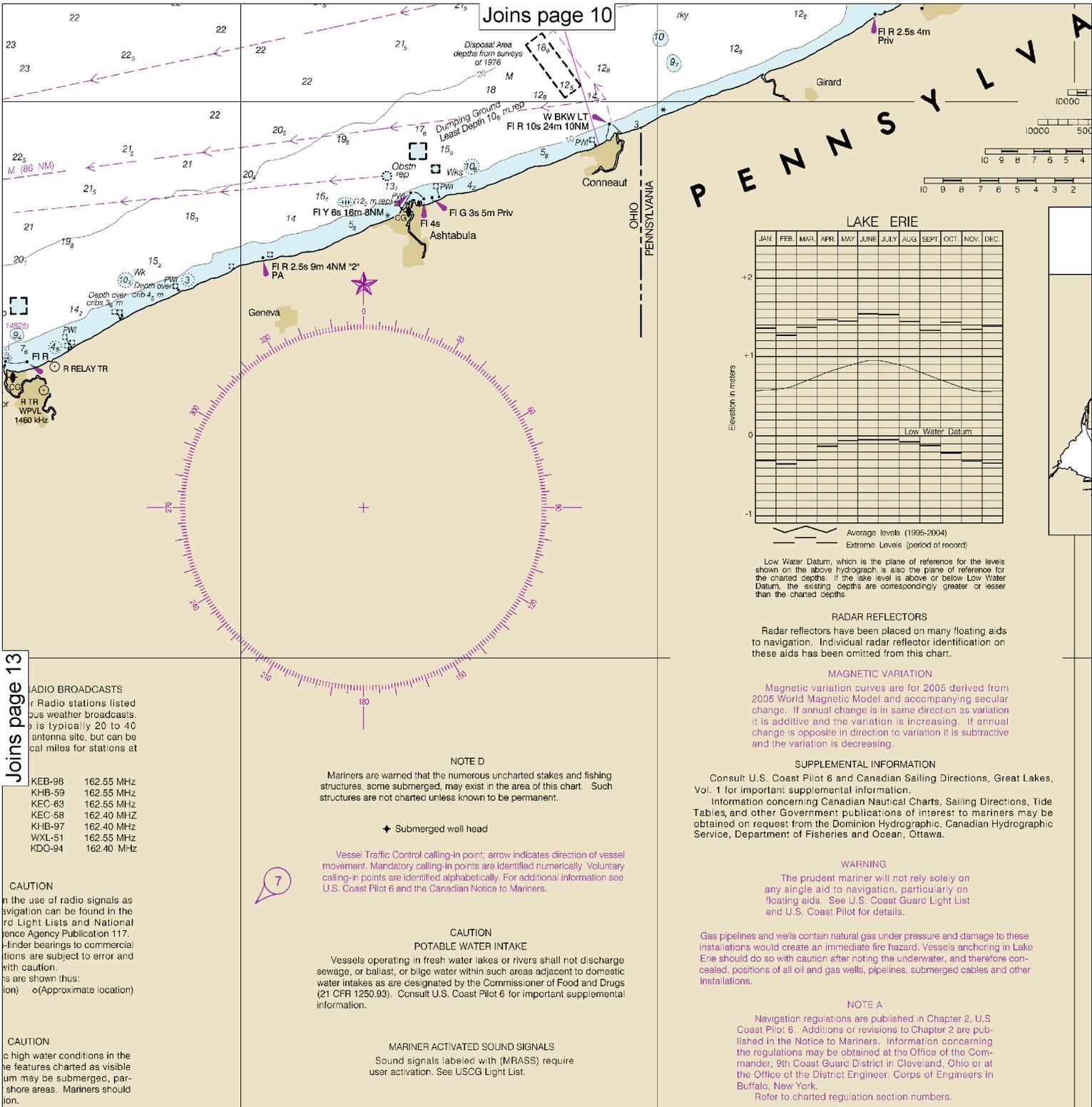
The natural scale of this chart varies by 3 percent from top to bottom. Graphic scales shown are accurate only for the range of latitude in closest proximity to where they are positioned.

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. Station positions are shown thus:
 ○ (Accurate location) ◐ (Approximate location)

CAUTION

Due to periodic high water conditions in the Great Lakes, some features charted as visible at Low Water Datum may be submerged, particularly in the near shore areas. Mariners should proceed with caution.



Joins page 13

RADIO BROADCASTS
 Radio stations listed on this chart are typically 20 to 40 miles from the antenna site, but can be as close as a few miles for stations at the shore.

KEB-98	162.55 MHz
KHB-59	162.55 MHz
KEC-63	162.55 MHz
KEC-58	162.40 MHz
KHB-97	162.40 MHz
WXL-51	162.55 MHz
KDO-94	162.40 MHz

CAUTION
 The use of radio signals for navigation can be found in the Radio Light Lists and National Buoyage Agency Publication 117. Bearings to commercial vessels are subject to error and should be used with caution. Bearings are shown thus: (Approximate location)

CAUTION
 In high water conditions in the features charted as visible in low water may be submerged, particularly in the near-shore areas. Mariners should exercise caution.

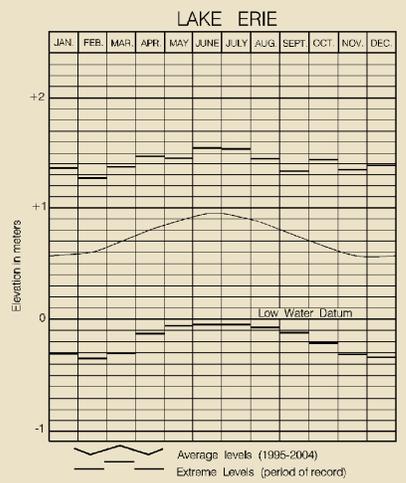
NOTE D
 Mariners are warned that the numerous uncharted stakes and fishing structures, some submerged, may exist in the area of this chart. Such structures are not charted unless known to be permanent.

◆ Submerged well head

Vessel Traffic Control calling-in point; arrow indicates direction of vessel movement. Mandatory calling-in points are identified numerically. Voluntary calling-in points are identified alphabetically. For additional information see U.S. Coast Pilot 6 and the Canadian Notice to Mariners.

CAUTION
POTABLE WATER INTAKE
 Vessels operating in fresh water lakes or rivers shall not discharge sewage, or ballast, or bilge water within such areas adjacent to domestic water intakes as are designated by the Commissioner of Food and Drugs (21 CFR 1250.93). Consult U.S. Coast Pilot 6 for important supplemental information.

MARINER ACTIVATED SOUND SIGNALS
 Sound signals labeled with (MRASS) require user activation. See USCG Light List.



Low Water Datum, which is the plane of reference for the levels shown on the above hydrograph, is also the plane of reference for the charted depths. If the lake level is above or below Low Water Datum, the existing depths are correspondingly greater or lesser than the charted depths.

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.

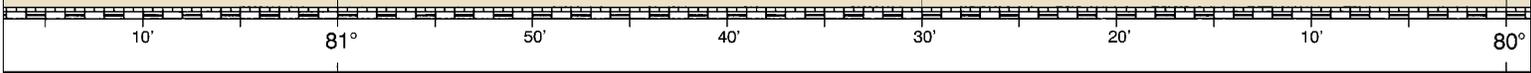
MAGNETIC VARIATION
 Magnetic variation curves are for 2005 derived from 2005 World Magnetic Model and accompanying secular change. If annual change is in same direction as variation it is additive and the variation is increasing. If annual change is opposite in direction to variation it is subtractive and the variation is decreasing.

SUPPLEMENTAL INFORMATION
 Consult U.S. Coast Pilot 6 and Canadian Sailing Directions, Great Lakes, Vol. 1 for important supplemental information. Information concerning Canadian Nautical Charts, Sailing Directions, Tide Tables, and other Government publications of interest to mariners may be obtained on request from the Dominion Hydrographic, Canadian Hydrographic Service, Department of Fisheries and Ocean, Ottawa.

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.

Gas pipelines and wells contain natural gas under pressure and damage to these installations would create an immediate fire hazard. Vessels anchoring in Lake Erie should do so with caution after noting the underwater, and therefore concealed, positions of all oil and gas wells, pipelines, submerged cables and other installations.

NOTE A
 Navigation regulations are published in Chapter 2, U.S. Coast Pilot 6. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 9th Coast Guard District in Cleveland, Ohio or at the Office of the District Engineer, Corps of Engineers in Buffalo, New York. Refer to charted regulation section numbers.



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 U.S. DEPARTMENT OF COMMERCE
 OCEANIC AND ATMOSPHERIC ADMINISTRATION
 NATIONAL OCEAN SERVICE
 COAST SURVEY

Note: Chart grid lines are aligned with true north.



EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!



NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

<http://www.nws.noaa.gov/nwr/>

Quick References

- Nautical chart related products and information — <http://www.nauticalcharts.noaa.gov>
- Interactive chart catalog — <http://www.charts.noaa.gov/InteractiveCatalog/nrnc.shtml>
- Report a chart discrepancy — <http://ocsddata.ncd.noaa.gov/idrs/discrepancy.aspx>
- Chart and chart related inquiries and comments — <http://ocsddata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs>
- Chart updates (LNM and NM corrections) — http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html
- Coast Pilot online — <http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm>
- Tides and Currents — <http://tidesandcurrents.noaa.gov>
- Marine Forecasts — <http://www.nws.noaa.gov/om/marine/home.htm>
- National Data Buoy Center — <http://www.ndbc.noaa.gov/>
- NowCoast web portal for coastal conditions — <http://www.nowcoast.noaa.gov/>
- National Weather Service — <http://www.weather.gov/>
- National Hurricane Center — <http://www.nhc.noaa.gov/>
- Pacific Tsunami Warning Center — <http://ptwc.weather.gov/>
- Contact Us — <http://www.nauticalcharts.noaa.gov/staff/contact.htm>



— For the latest news from Coast Survey, follow @NOAAcharts



This Booklet chart has been designed for duplex printing (printed on front and back of one sheet). If a duplex option is not available on your printer, you may print each sheet and arrange them back-to-back to allow for the proper layout when viewing.