

BookletChart™

Upper Niagara River

NOAA Chart 14832

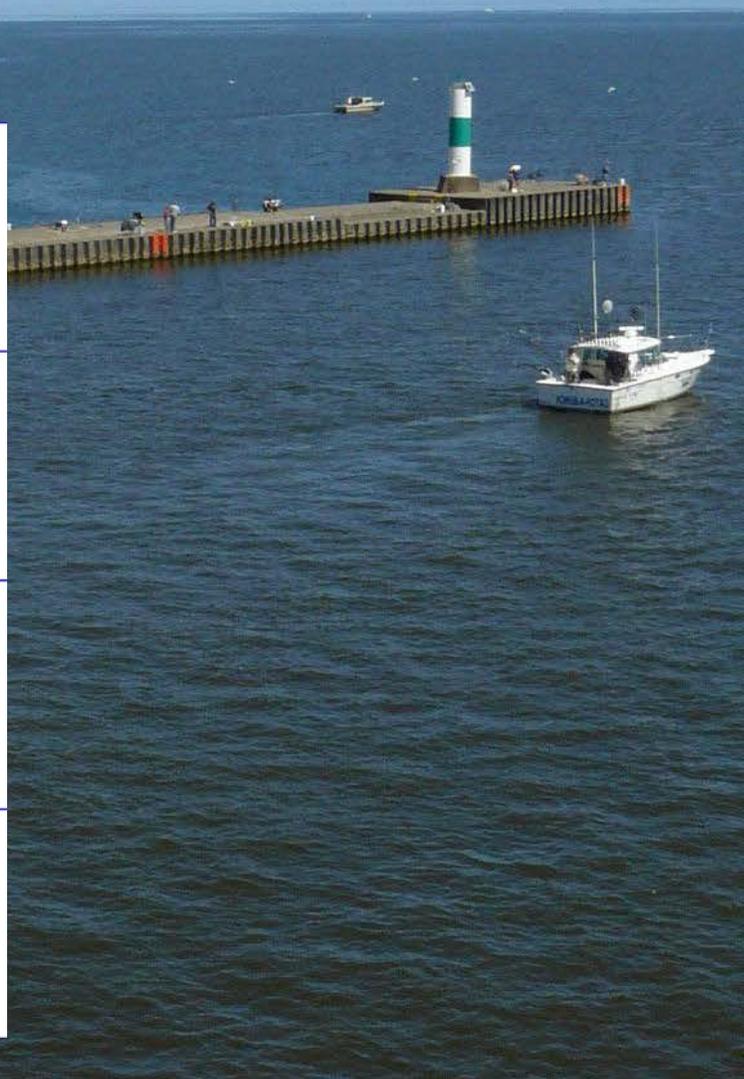
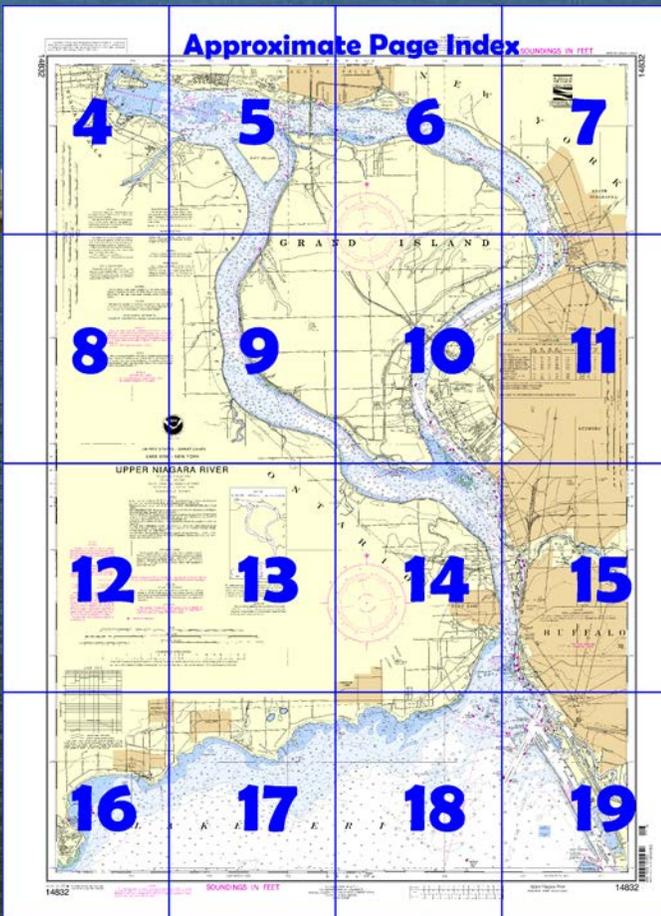


A reduced-scale NOAA nautical chart for small boaters

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.

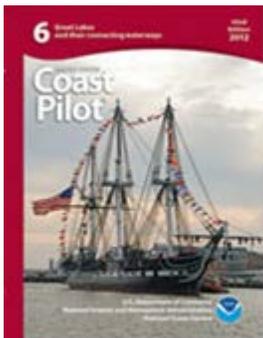
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

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=14832>.



**(Selected Excerpts from Coast Pilot)
Niagara River above Niagara Falls-** At its east end, Lake Erie becomes comparatively narrow and has its outlet in the Niagara River. From the head of the river, it is about 20 miles to the falls and rapids of **American Falls** and **Horseshoe Falls**. About 5 miles below the head, the river is divided into two channels by **Strawberry Island** and **Grand Island**. **Tonawanda Channel** and **Niagara River Channel**, the U.S. channels, lead to the east of these

islands, and **Chippawa Channel**, the Canadian channel, leads to the west of these islands. At the lower end of Grand Island, the channels rejoin and lead for about 3.5 miles to the falls.

The **International boundary** between the United States and Canada follows a general middle of the river course in the upper Niagara River from the head of the river downstream to the head of Grand Island where the river forks around the island. The boundary then follows Chippawa Channel and is generally less than 1,000 feet off the west shore of Grand Island until Chippawa Channel and Niagara River Channel join at the northwest end of Grand Island. The boundary again follows a general middle of the river course around the south side of **Goat Island** and over Niagara Falls.

Chart Datum, Upper Niagara River.—Depths and vertical clearances under overhead cables and bridges in the Niagara River from its confluence with Lake Erie to the head of navigation, the turning basin at Niagara Falls, NY, is as follows: from Lake Erie to the Black Rock Canal Lock is the Low Water Datum of Lake Erie, 569.2 feet (173.5 meters); from just below the Black Rock Canal Lock to the south end of Grand Island is the sloping surface of the river, when the water surface just below the lock is at 564.4 feet (172.03 meters) and the Huntley Station gauge (at Niagara Mohawk Power Corporation plant) reads 563.8 feet (171.85 meters); from the south end of Grand Island to the south end of Tonawanda Island is the sloping surface of the river, when the Huntley Station gauge reads 563.8 feet (171.85 meters) and the gauge at Tonawanda Island reads 563.4 feet (171.73 meters); from the south end of Tonawanda Island to the turning basin at Niagara Falls, NY, is the sloping surface of the river, when the gauge at Tonawanda Island reads 563.4 feet (171.73 meters) and the gauge at Power Plant Intakes reads 561.5 feet (171.13 meters). All elevations are above mean water level at Rimouski, QC, on International Great Lakes Datum 1985 (IGLD 1985). (See Chart Datum, Great Lakes System, indexed as such, chapter 1.)

Fluctuations of Water Level.—Variations in Lake Erie levels above or below Low Water Datum are reflected in Niagara River levels. The amount of the variation ranges from the full Lake Erie variation at the head of the river and gradually diminishes downstream to the vicinity of Chippawa, ON, just above Niagara Falls.

From Lake Erie, the fall of the Niagara River is about 10 feet to the head of the upper rapids near the junction with the Welland River. Just below the Welland River entrance, about 1.2 miles east of Goat Island, the Niagara waters begin their rapid descent to the level of Lake Ontario through the rapids above the falls, the great falls themselves, and the rapids below the falls.

Currents.—For about 1.7 miles, from its head to just above Peace Bridge, the river is wide, shallow, and rocky, and the current is from 2 to 3 mph. Just above the Peace Bridge, the river becomes a narrow gorge for about 2 miles to the lower end of Squaw Island. In the upper part of this gorge, the river is shallow, and the currents are about 8 mph at low to mean river stages and 9 mph at high stages. In the lower part of the gorge, the river is deeper and somewhat wider.

In 1986, with water level at 4.8 feet above low water datum, speed of the current was 7.7 to 9.7 knots.

Currents just below the International Bridge have speeds of 4 mph at low to mean river stages and 4.75 to 5 mph at high stages. In Tonawanda and Chippawa Channels, the currents vary from 1 to 4 mph.

Channels.—Black Rock Canal is the recommended route from Lake Erie to facilities in the Niagara River below **Squaw Island**. The channel formerly dredged in the open river west of Bird Island and Squaw Island has shoaled to depths of 10 feet or less. Great care should be exercised in navigating this section of the river.

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

RCC Cleveland

Commander

9th CG District
Cleveland, OH

(216) 902-6117

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.

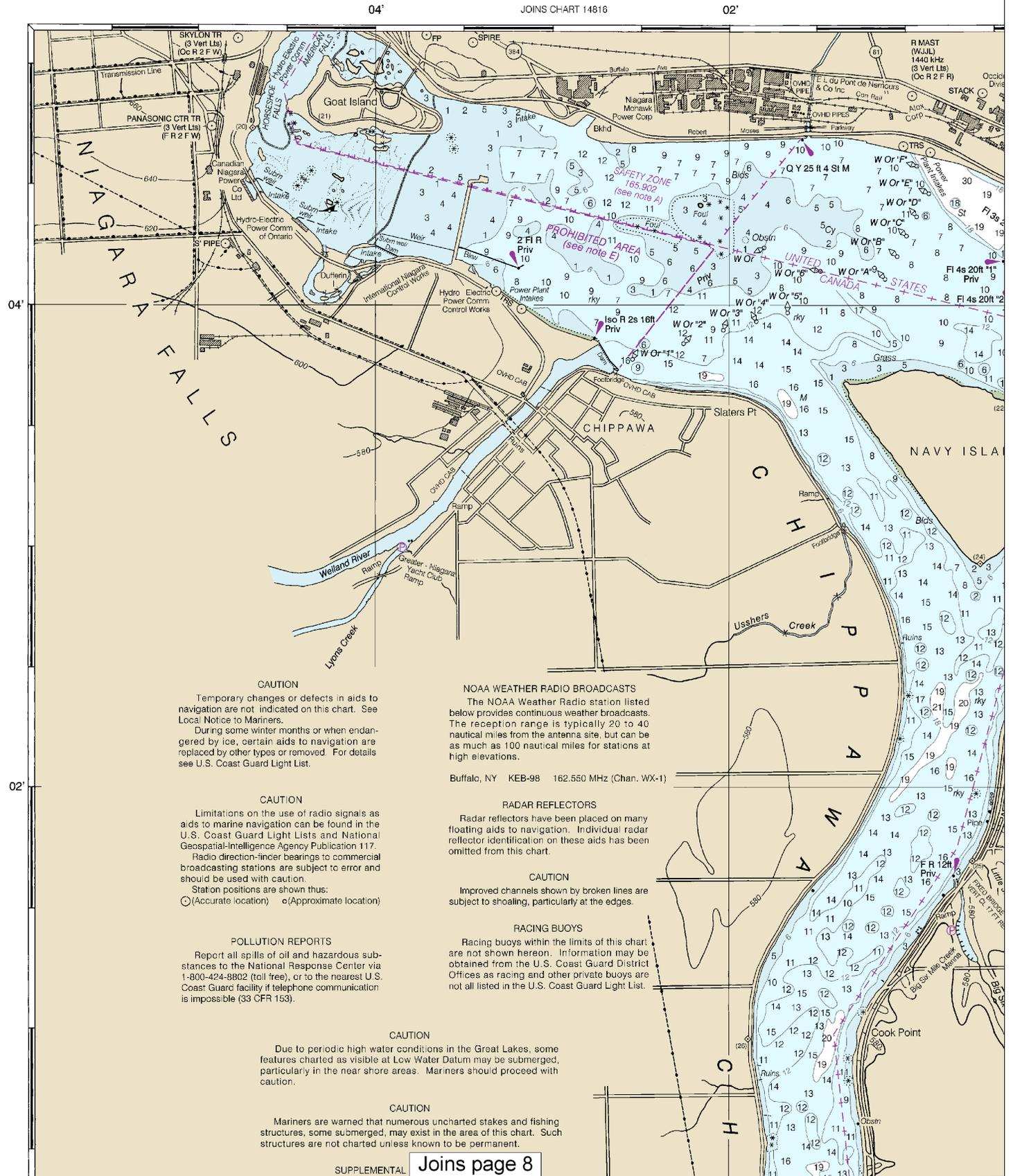
Lateral System As Seen Entering From Seaward

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>

14832



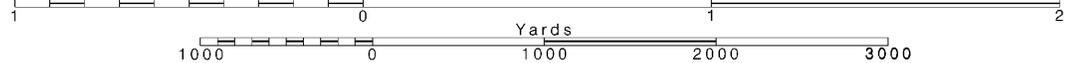
4

Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:30,000
Nautical Miles

See Note on page 5.





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)

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).

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.

CAUTION
 Mariners are warned that 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.

SUPPLEMENTAL INFORMATION
 Consult U.S. Coast Pilot 6 for important supplemental information.

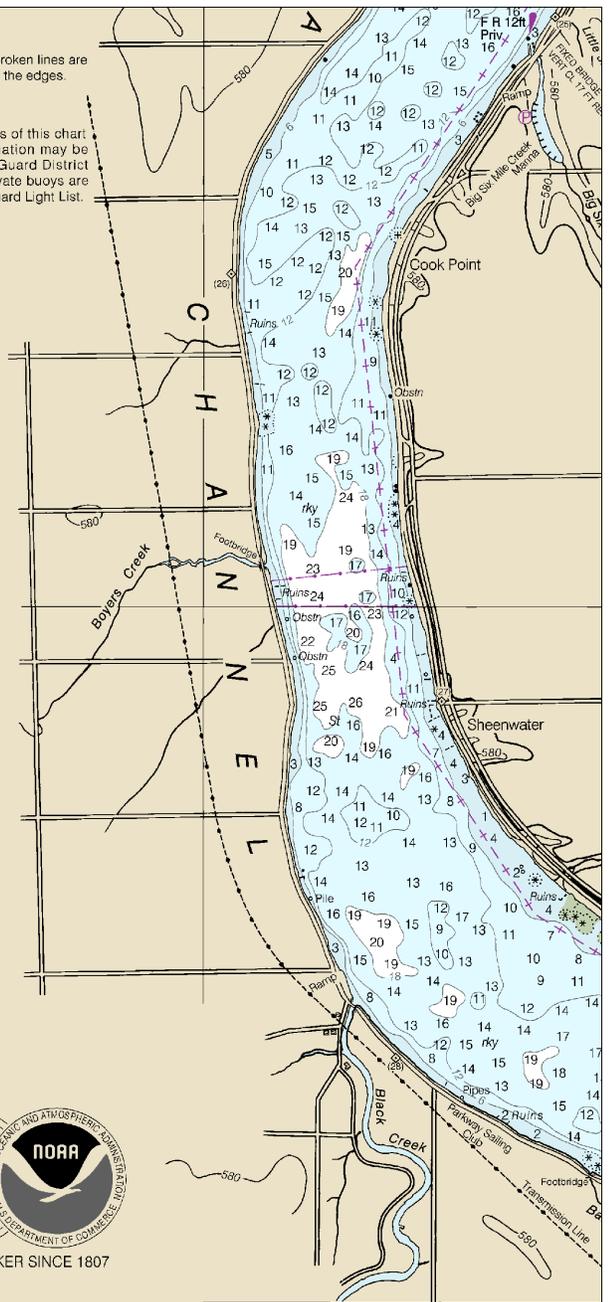
NOTE A
 Navigation regulations are published in Chapter 2, U.S. Coast Pilot 6. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 9th Coast Guard District in Cleveland, Ohio or at the Office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

**NOTE E
 PROHIBITED AREA**
 Do not enter without authorization from the Federal Minister of Transport.

Joins page 4

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

RACING BUOYS
 Racing buoys within the limits of this chart are not shown hereon. Information may be obtained from the U.S. Coast Guard District Offices as racing and other private buoys are not all listed in the U.S. Coast Guard Light List.



THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES - GREAT LAKES

LAKE ERIE - NEW YORK

UPPER NIAGARA RIVER

Polyconic Projection
 Scale 1:30,000

North American Datum of 1983
 (World Geodetic System 1984)

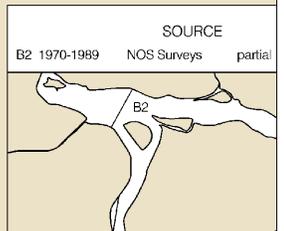
SOUNDINGS IN FEET

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

NOTES

PLANE OF REFERENCE OF THIS CHART (Low Water Datum) Depths are referred to the sloping surface of the river when Lake Erie is at elevation 569.2 feet. Referred to mean water level at Rimouski, Quebec, International Great Lakes Datum (1985). SAILING DISTANCES courses are true and distances given thereon are in statute miles.

Joins page 12



43° 00'

58'

45'

30'

15'

57'

50'

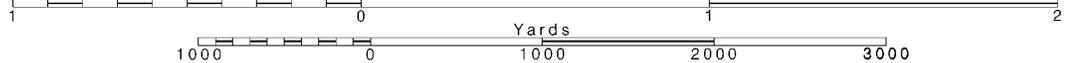


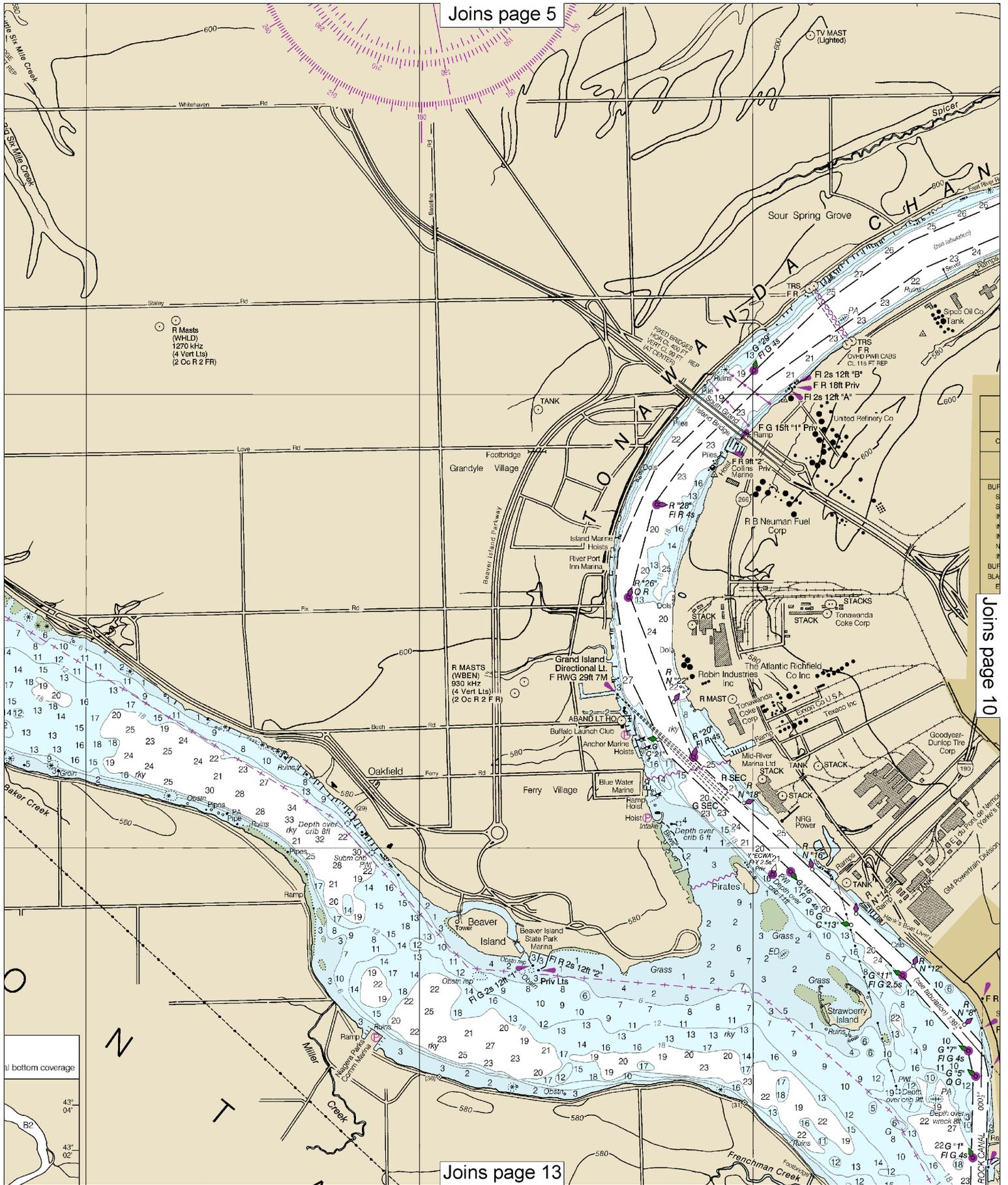
Note: Chart grid lines are aligned with true north.

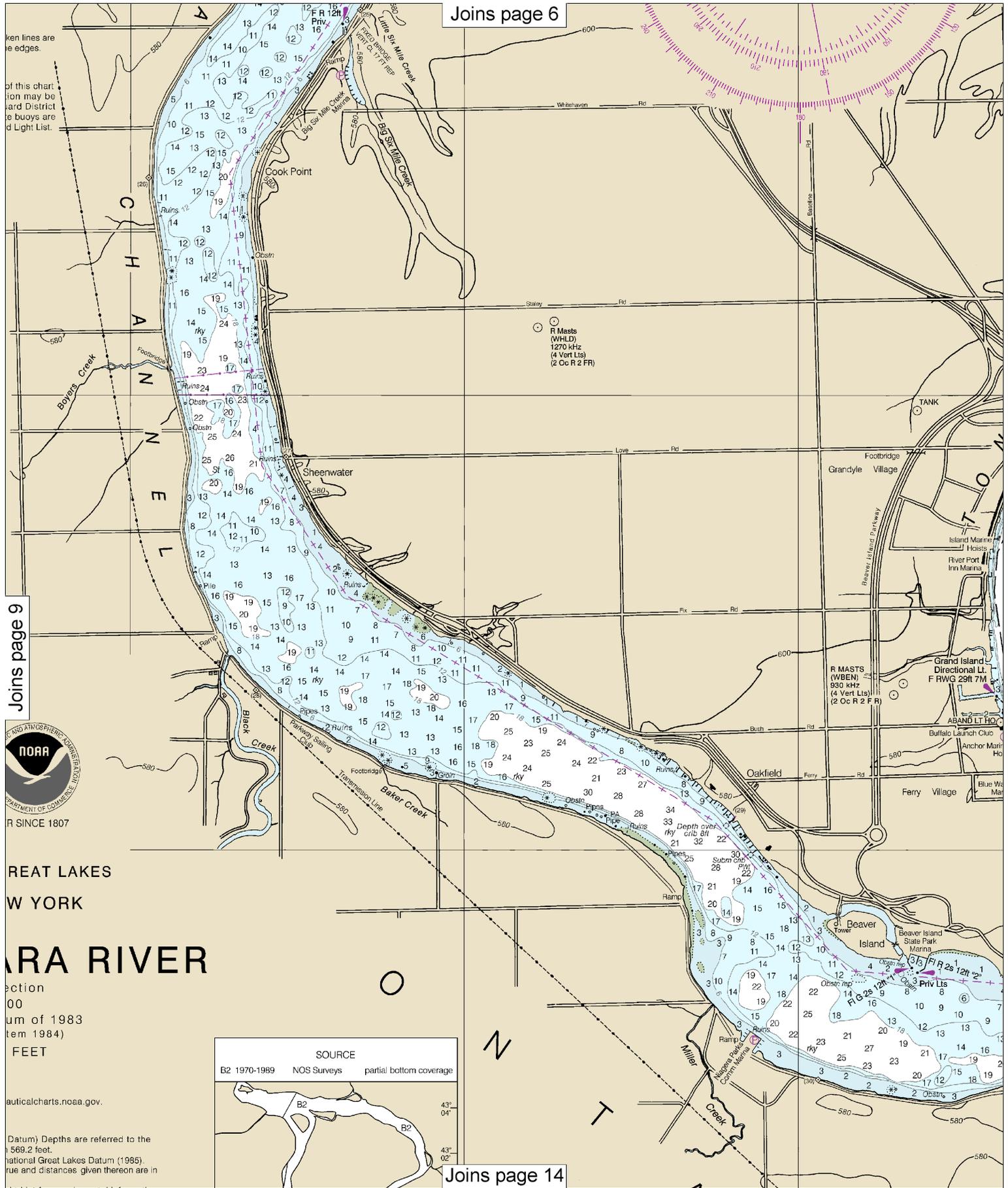
Printed at reduced scale.

SCALE 1:30,000
 Nautical Miles

See Note on page 5.







Joins page 6

Joins page 9

Joins page 14



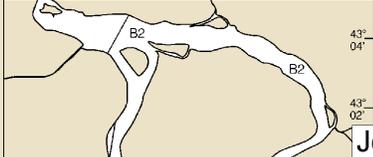
NIAGARA RIVER

Section 00
 Datum of 1983
 (International Datum of 1984)
 in FEET

nauticalcharts.noaa.gov

Datum) Depths are referred to the
 569.2 feet.
 International Great Lakes Datum (1985).
 True and distances given thereon are in

SOURCE		
B2 1970-1989	NOS Surveys	partial bottom coverage

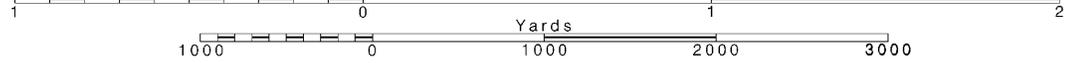


Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:30,000
 Nautical Miles

See Note on page 5.



UPPER NIAGARA RIVER

Polyconic Projection
 Scale 1:30,000
 North American Datum of 1983
 (World Geodetic System 1984)
 SOUNDINGS IN FEET

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

NOTES

PLANE OF REFERENCE OF THIS CHART (Low Water Datum) Depths are referred to the sloping surface of the river when Lake Erie is at elevation 569.2 feet. Referred to mean water level at Rimouski, Quebec, International Great Lakes Datum (1985).
 SAILING DIRECTIONS. Bearings of sailing courses are true and distances given thereon are in statute miles between points of departure.
 AIDS TO NAVIGATION. Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation. See Canadian List of Lights, Buoys and Fog Signals for information not included in the U.S. Coast Guard Light List.
 SYMBOLS AND ABBREVIATIONS. For complete list of symbols and abbreviations see Chart No. 1.
 BRIDGE AND OVERHEAD CABLE CLEARANCES. When the water surface is above Low Water Datum, bridge and overhead clearances are reduced correspondingly. For clearances see U.S. Coast Pilot 6.
 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 Canadian authorities.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System of 1984 (WGS 84). Geographic positions referred to the North American Datum of 1922 must be corrected an average of 0.219' northward and 0.799' eastward to agree with this chart.

Sailing courses and limits indicated in magenta are recommended by the Lake Carriers Association and the Canadian Shipowners Association.

CAUTION

POTABLE WATER INTAKE

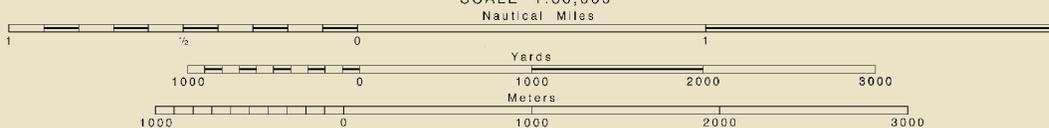
Vessels operating in fresh water lakes or rivers shall not discharge sewage, or ballast, or bilge water within such areas adjacent to domestic water intakes as are designated by the Commissioner of Food and Drugs (21 CFR 1250.93). Consult U.S. Coast Pilot 6 for important supplemental information.

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.

Pump-out facilities

SCALE 1:30,000



SOURCE DIAGRAM

The outlined areas represent the limits of the most survey information that has been evaluated for charting banded in this diagram by date and type of survey, by the U.S. Army Corps of Engineers are periodically shown on this diagram. Refer to Chapter 1, Un

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MARINER ACTIVATED SOUND SIGNAL
 BUFFALO HARBOR LIGHT - (MRASS) Horn is activated by keying mic 5 times on VHF-FM Ch 83A.

NOTE C CAUTION

Cables for an Ice Boom are permanently attached to anchors on the lake bottom. They are submerged and not buried. Floating steel pontoons are attached to these cables between December 15 and April 1.

CAUTION

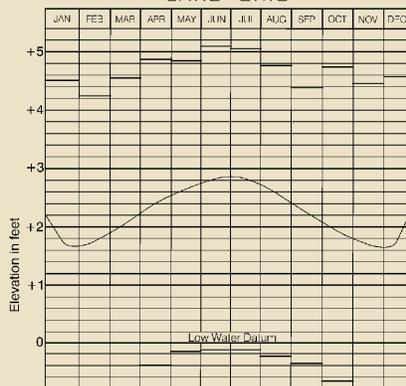
SUBMARINE PIPELINES AND CABLES
 Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:



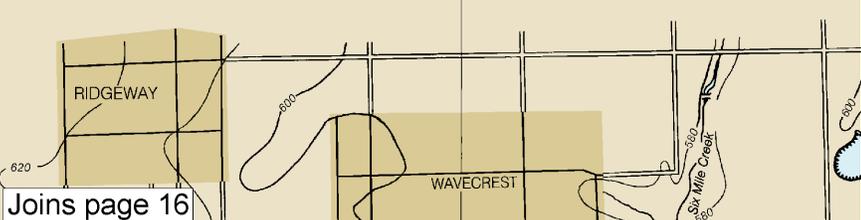
Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels 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.

LAKE ERIE



Joins page 16

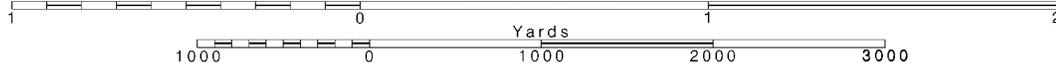


Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:30,000
 Nautical Miles

See Note on page 5.



NEW YORK

ARA RIVER

Section
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um of 1983
tem 1984)
FEET

nauticalcharts.noaa.gov.

Datum) Depths are referred to the
569.2 feet.
national Great Lakes Datum (1985).
true and distances given thereon are in

ght List for supplemental information
s, Buoys and Fog Signals for information

symbols and abbreviations see Chart

the water surface is above Low Water
respondingly. For clearances see U.S.

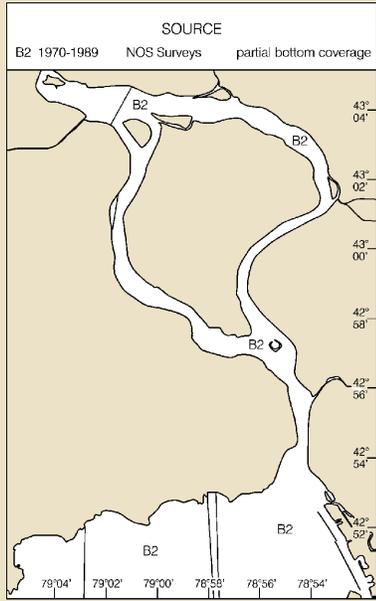
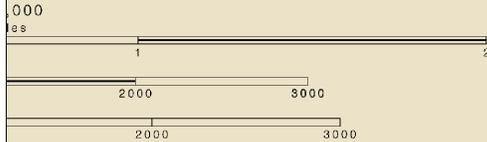
ational Ocean Service, Coast Survey,
gical Survey, U.S. Coast Guard, and

is chart is North
rich for charting
World Geodetic
ositions referred
ust be corrected
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are recommended by
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jacent to domestic
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single aid
J.S. Coast



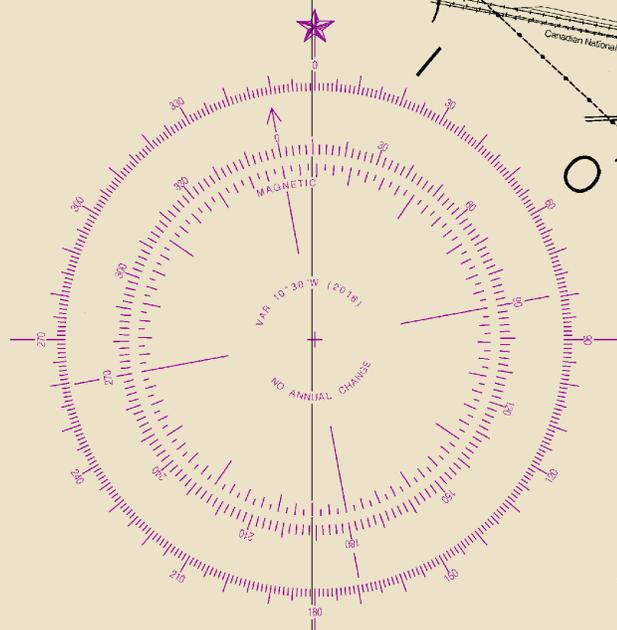
The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

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Joins page 10

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Joins page 13

Joins page 18

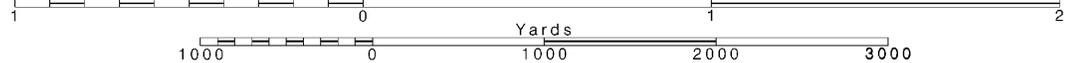
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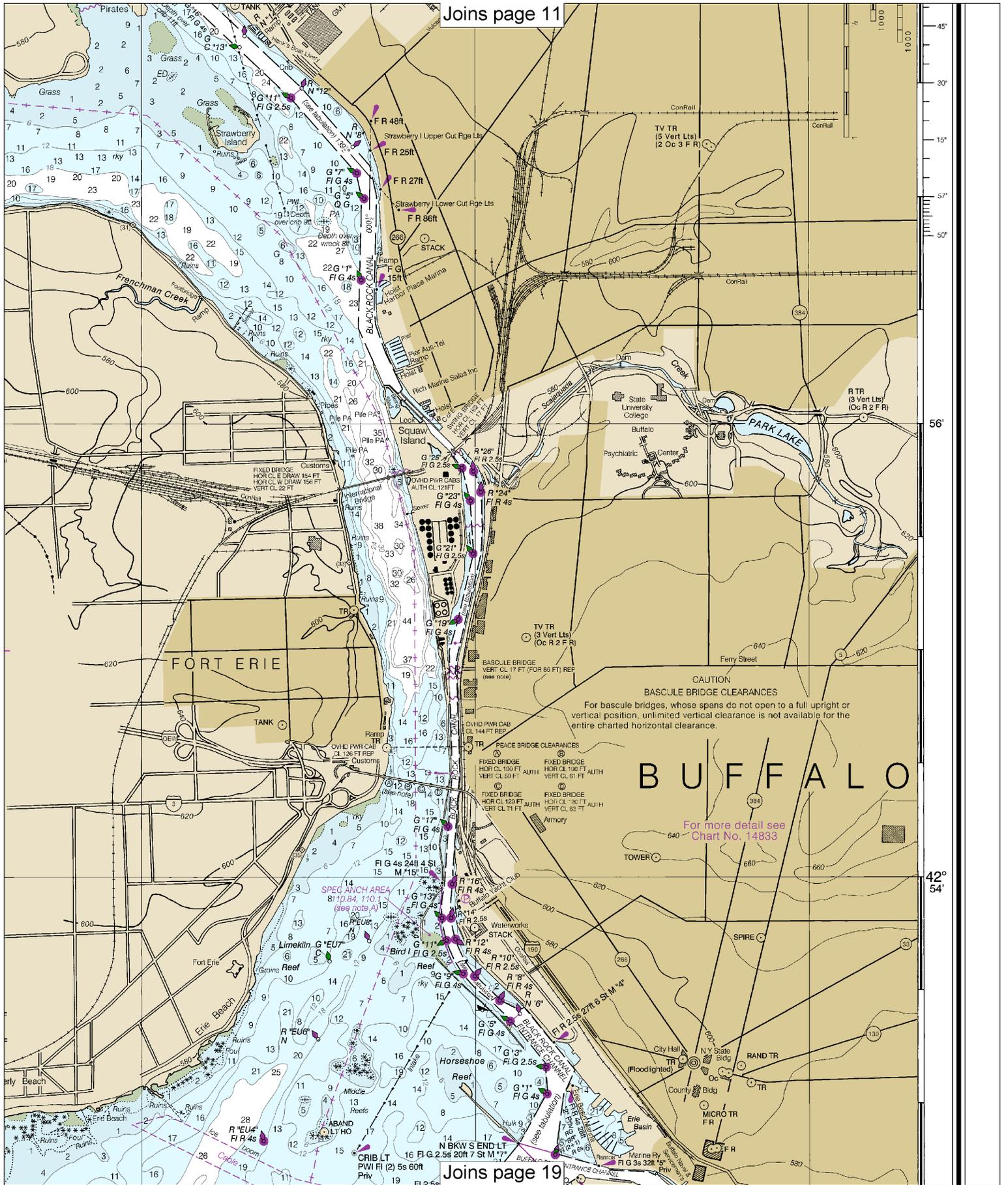
Note: Chart grid lines are aligned with true north.

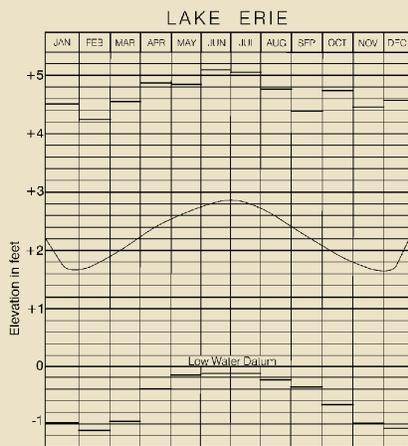
Printed at reduced scale.

SCALE 1:30,000
Nautical Miles

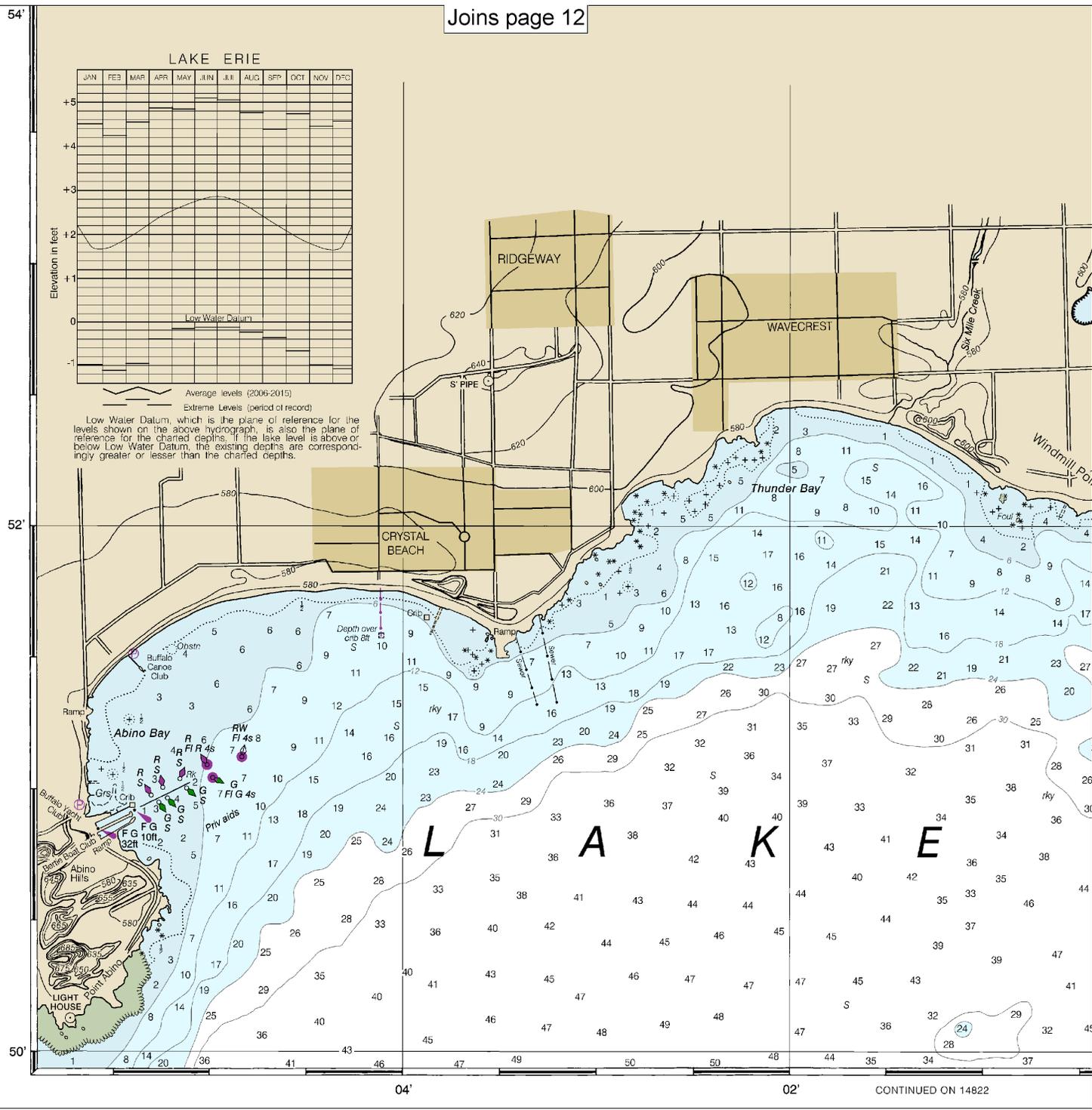
See Note on page 5.







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.



CONTINUED ON 14822

14832

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

SOUNDINGS IN FEET

35th Ed., Mar. 2013. Last Correction: 10/18/2016. Cleared through:
LNM: 4816 (11/29/2016), NM: 4916 (12/3/2016), CHS: 1116 (11/25/2016)

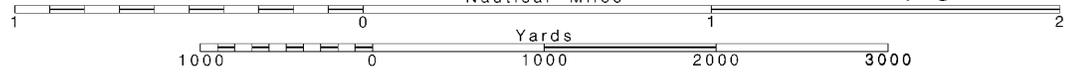
16

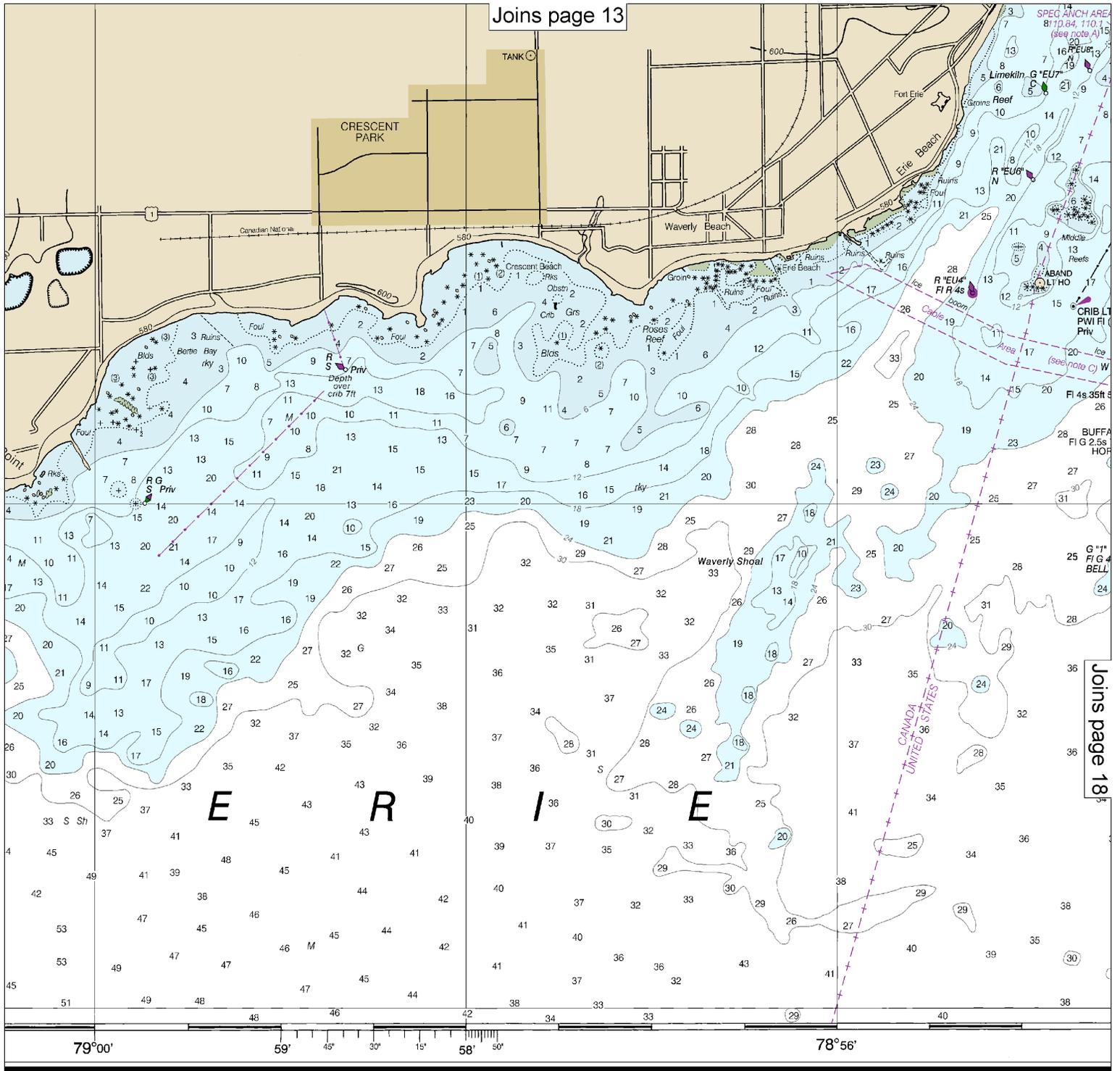
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:30,000
Nautical Miles

See Note on page 5.

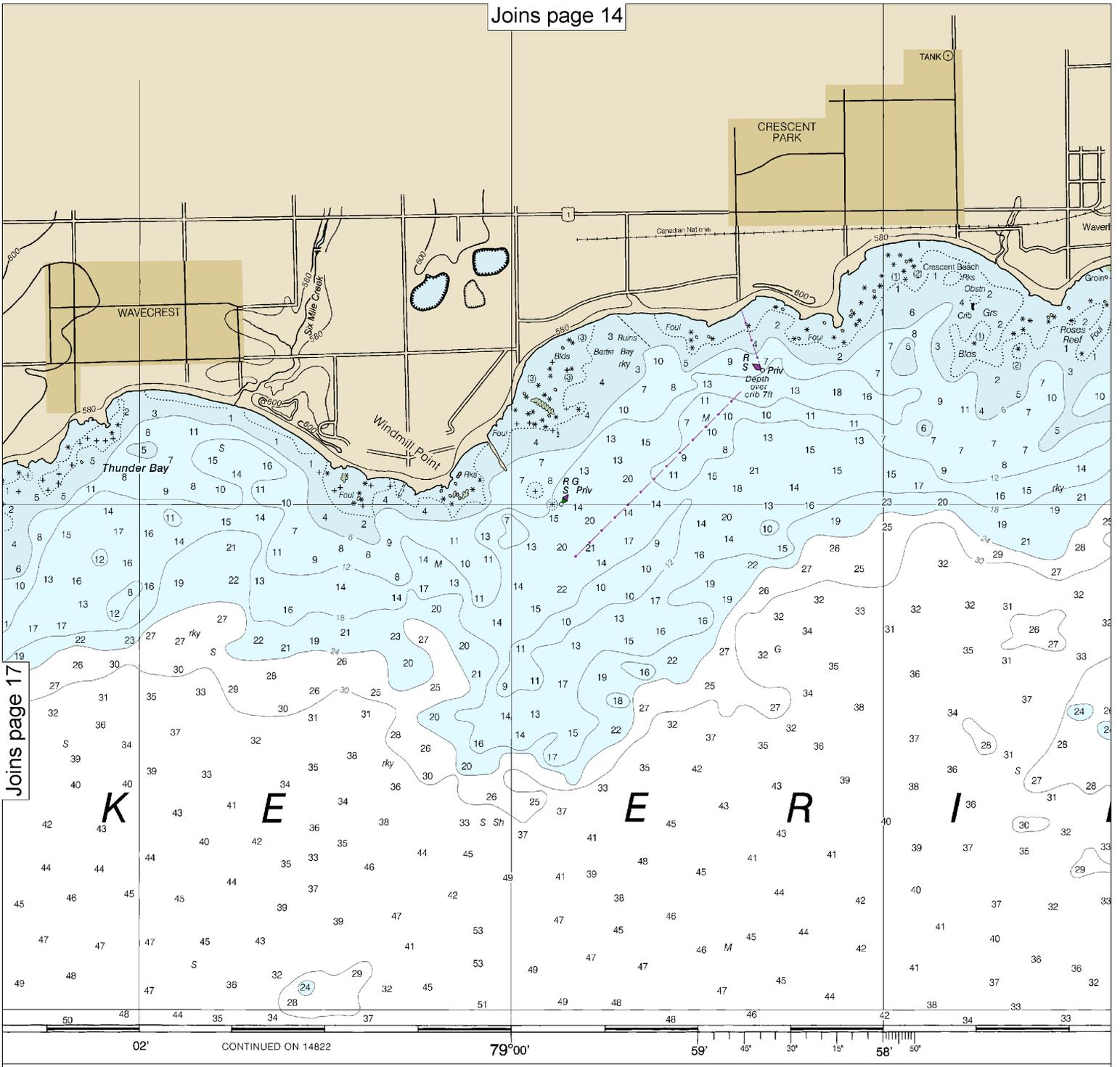




NET

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

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



Joins page 17

SOUNDINGS IN FEET

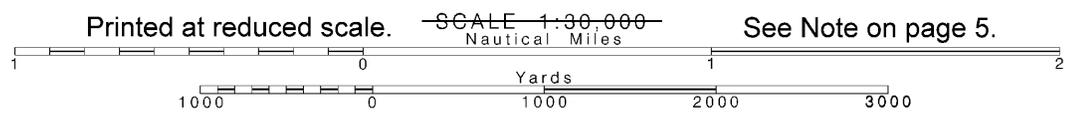
Published at Washington, D.C.
 U.S. DEPARTMENT OF COMMERCE
 NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
 NATIONAL OCEAN SERVICE
 COAST SURVEY

Intelligence sites shown in the lower left

016)

18

Note: Chart grid lines are aligned with true north.



See Note on page 5.



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>
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- 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.