

BookletChart™

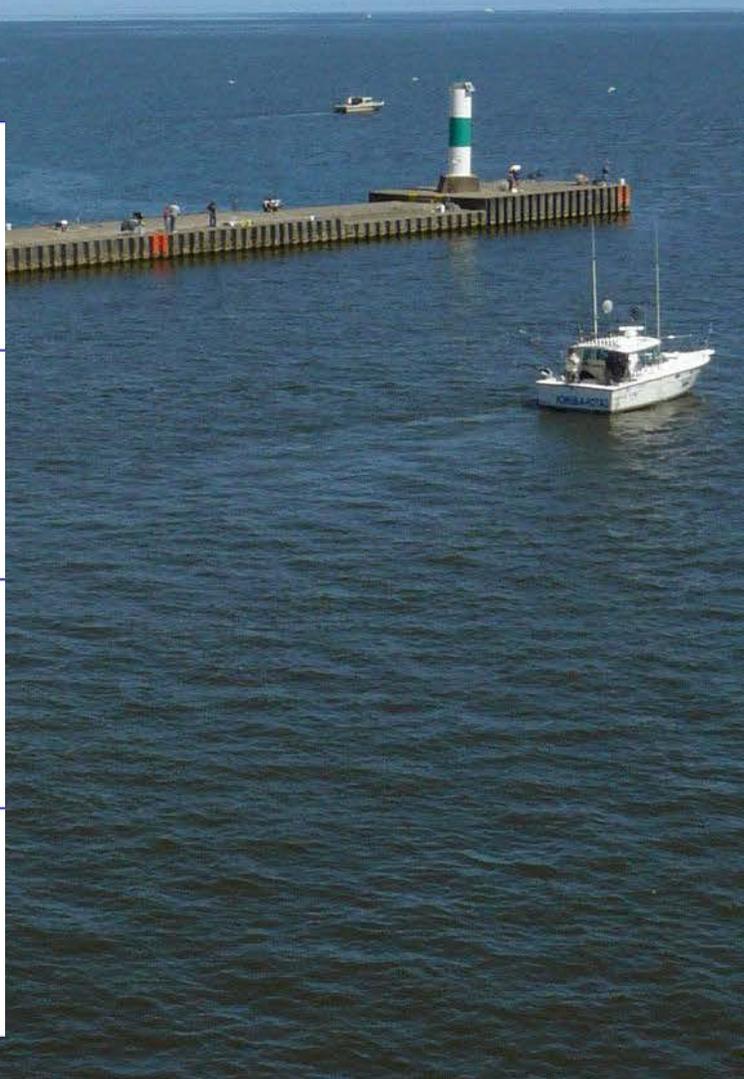
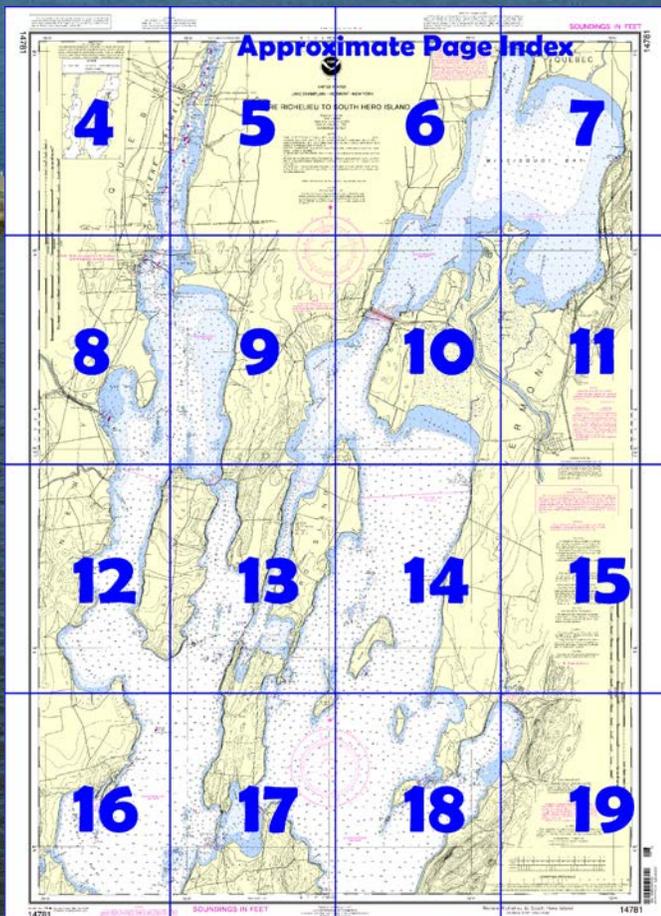
Riviere Richelieu to South Hero Island NOAA Chart 14781



*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=14781>



(Selected Excerpts from Coast Pilot)

Dangers.—Several detached shoals are in the approach to **Lorain Harbor**. A shoal with least depths of 22 feet extends 1.4 miles from shore within 2 miles E of the harbor entrance. Several shoal spots with depths of 24 to 28 feet are from 1.4 to 2.4 miles N of Lorain Harbor Light.

Lorain is a **customs station**.

Quarantine is enforced in accordance with regulations of U.S. Public Health Service. (See Public Health Service, chapter 1.)

Harbor regulations.—A speed limit of 6 mph (5.2 knots) is enforced in the harbor except in the outer harbor where it is 10 mph (8.7 knots). (See 33 CFR 162.160 and 207.570, chapter 2, for regulations.)

Lake Champlain extends from the lower end of Champlain Canal at Whitehall, NY, north for about 112 miles to the International boundary at Rouses Point, NY. The north end of the lake outlets north through Riviere Richelieu and Canal de Chambly to the St. Lawrence River. The principal ports on the lake are Port Henry, NY, at the south end, Burlington, VT, and Plattsburgh, NY, near midlake, and Rouses Point, NY, at the north end. The lake is used extensively by pleasure craft, and marinas are found on both sides throughout its length.

A **special anchorage** is on the west side of the lake in **Deep Bay**. (See **33 CFR 110.1 and 110.8(i)**, chapter 2, for limits and regulations.)

Channels.—The south 37 miles of Lake Champlain, from Whitehall north to **Crown Point** (44°01.8'N., 73°25.8'W.), is a narrow arm. The south 13 miles of this arm, from Whitehall north to **Benson Landing**, is filled with a marshy flat traversed by a narrow channel of open water. A Federal project provides for a 12-foot channel through this reach. In September 2008, the controlling depths in the channel were 2 feet (7½ feet at midchannel) to Benson Landing. Above Benson Landing, natural deep water is available to Crown Point. The entire narrows, from Whitehall to Crown Point is well marked by lights and buoys.

North from Crown Point for about 75 miles to Rouses Point, Lake Champlain is deep and wide. Prominent points and shoals throughout the lake are marked by lights and buoys.

Following is a description of the principal ports and tributaries of Lake Champlain.

Grand Isle or South Hero Island, North Hero Island, and Alburg Tongue divide the north part of Lake Champlain into two arms. **Missisquoi Bay** is at the north end of the east arm, and Riviere Richelieu flows north from the west arm.

Lamoille River, 2.8 miles north of Mallets Bay, is navigable at low stages only by motorboats drawing 1 to 2 feet. The channel through the fixed span of the bridge that connects the south end of Grand Isle with the mainland had a reported controlling depth of less than 2 feet in 1977.

Missisquoi River, flowing into the south side of Missisquoi Bay, is navigable at low stages by motorboats drawing 1 to 2 feet for about 6 miles to Swanton. **Dead Creek**, the alternate entrance to the river, has depths of 2 to 12 feet.

Marinas are in the east arm of the north end of Lake Champlain on the southeast side of Grand Isle, at the northeast end of **Burton Island** on the west side of **St. Albans Bay**, in **City Bay** on the east side of North Hero Island, and on the east side of **Alburg Passage**. Lifts handling boats to 25 feet are available.

A **special anchorage** is at the head of St. Albans Bay. (See **33 CFR 110.1 and 110.8(f)**, chapter 2, for limits and regulations.)

Great Chazy River flows into the west side of Lake Champlain about 4 miles south of Rouses Point, NY. The entrance to the river is marked by private lighted and unlighted buoys. The river is navigable at low stages by small boats drawing 2 to 3 feet for about 6 miles to Champlain. In 2003, the controlling depth in the entrance channel was 1.2 feet. In 1977, a depth of 5 feet was reported to be available to the marina 0.5 mile above the mouth.

Marinas are: on the west side of **Treadwell Bay** in the small bight **Bay St Armand** (44°44'54"N., 73°24'50"W.); in **Mooney Bay** opposite the south end of North Hero Island (44°47'13"N., 73°21'55"W.); and 0.5 mile above the mouth of the Great Chazy River. Gasoline, transient berths, pump-out, and lifts to 50 tons are available.

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>

NOAA encourages users to submit inquiries, discrepancies or comments about this chart at <http://www.nauticalcharts.noaa.gov/staff/contact.htm>.

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No copyright is claimed by the United States Government under Title 17 U.S.C. However, other nations may claim intellectual property rights on the compilation of data depicting the foreign waters shown on this chart.

14781

73°25'

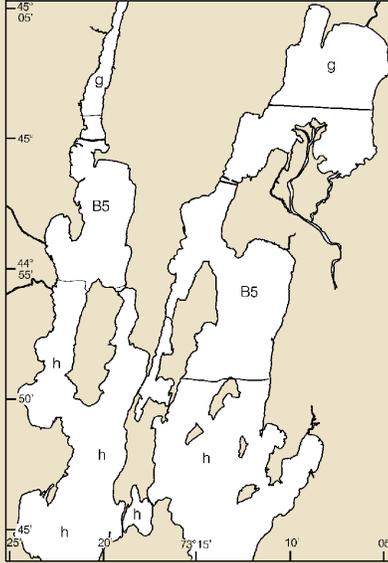
73°20'

CONTINUED ON CANADIAN CHART 1351

45° 05'

SOURCE DIAGRAM
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.

SOURCE	
B5	1834 - 1899 NOS Surveys Partial bottom coverage
g	Canadian Surveys
h	Miscellaneous Surveys



45° 00'



SCALE 1:40,000

CANADA
UNITED STATES

Note: Boats can report to U.S. Customs and Immigration at marina docks.

Joins page 8

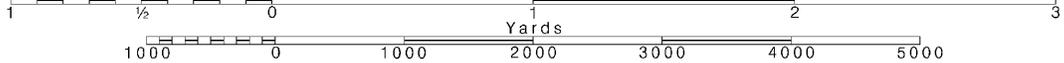
4

Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:40,000
Nautical Miles

See Note on page 5.



16' 45' 30' 15' 73°15' 50'

73°10'



THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES
LAKE CHAMPLAIN - VERMONT - NEW YORK

Noyan

RIVIERE RICHELIEU TO SOUTH HERO ISLAND

Polyconic Projection
Scale 1:40,000
North American Datum of 1983
(World Geodetic System 1984)
SOUNDINGS IN FEET

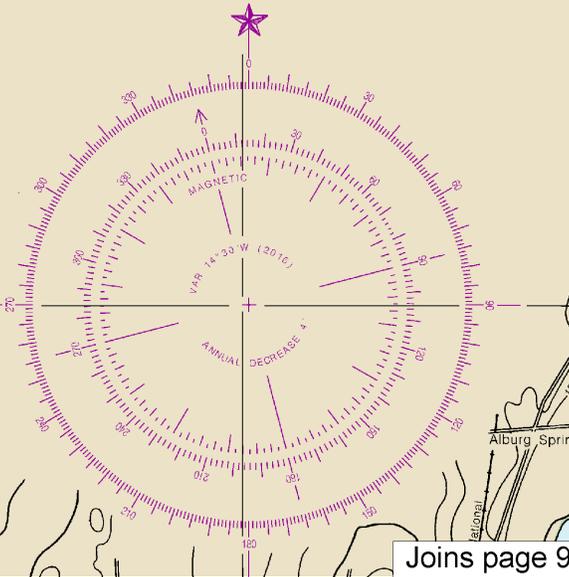
NOTES

PLANE OF REFERENCE OF THIS CHART (Low Water Datum).....93.0ft.
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.
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.

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

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.



NOTE Z
NO-DISCHARGE ZONE, 40 CFR 140
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. All vessels with an installed marine sanitation device (MSD) that are navigating, motored, anchored, or docked within a NDZ must have the device 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/oceans/regulatory/vessel_sewage/.

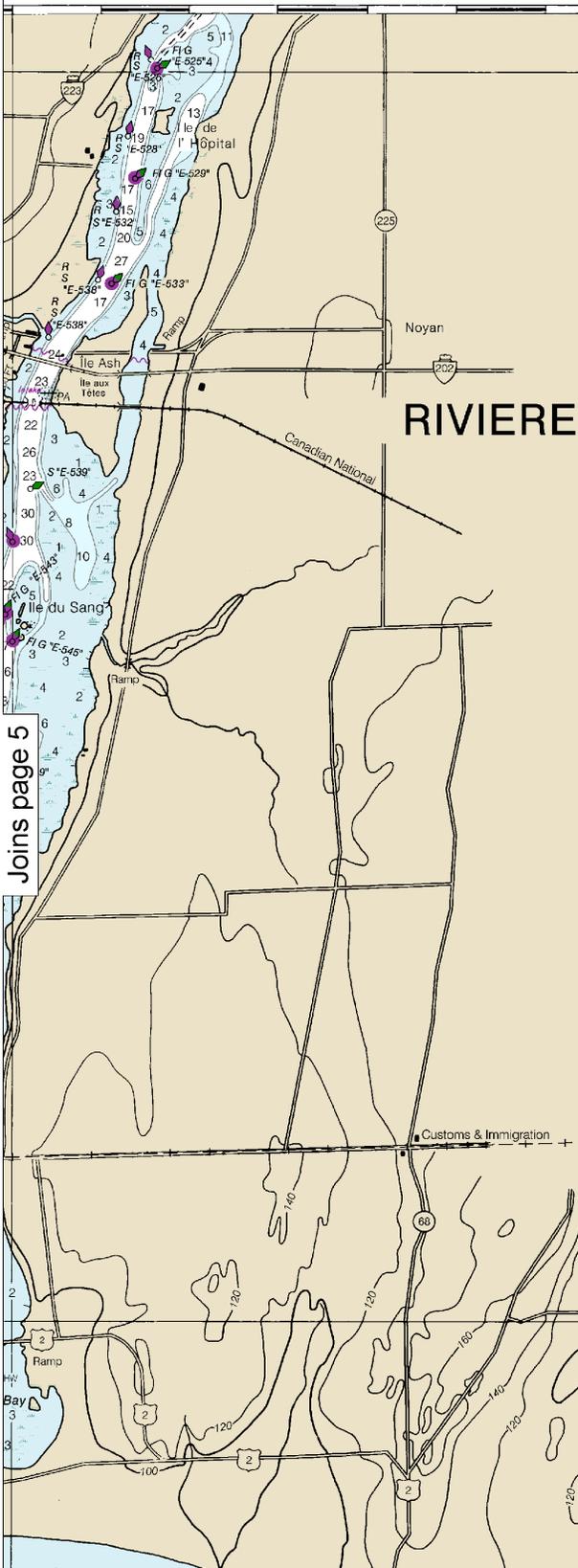
Joins page 6

Joins page 9

This BookletChart was reduced to 75% of the original chart scale. The new scale is 1:53333. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.



3°20' CONTINUED ON CANADIAN CHART 1351 16' 45' 30' 15' 73°15' 50'



THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES LAKE CHAMPLAIN - VERMONT - NEW YORK

RIVIERE RICHELIEU TO SOUTH HERO ISLAND

Polyconic Projection
Scale 1:40,000
North American Datum of 1983
(World Geodetic System 1984)
SOUNDINGS IN FEET

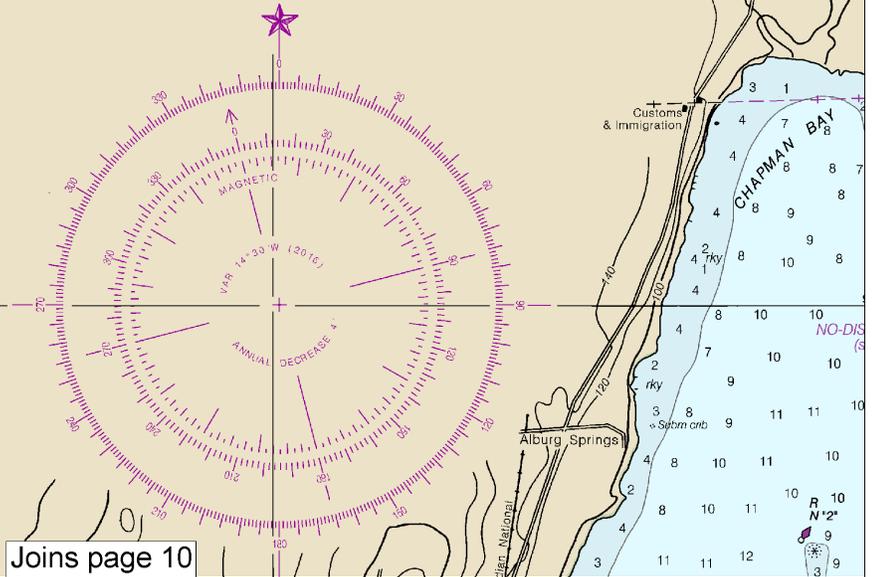
NOTES

- PLANE OF REFERENCE OF THIS CHART (Low Water Datum).....93.0ft. 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.
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- 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.

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CAUTION POTABLE WATER INTAKE

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Joins page 5

Joins page 10

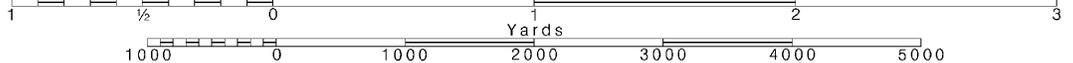


Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:40,000
Nautical Miles

See Note on page 5.



73°10'

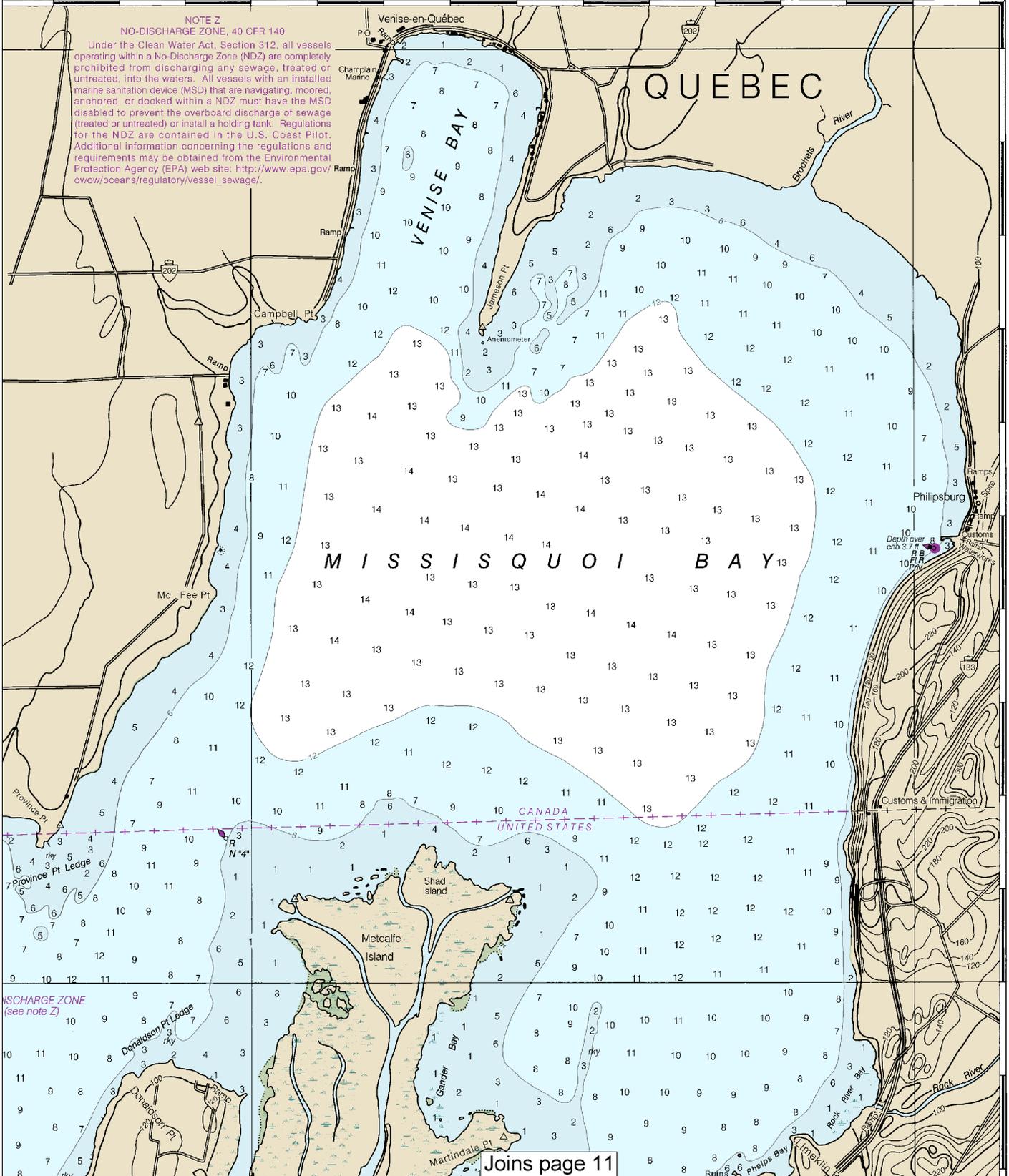
73°05'

45° 05'

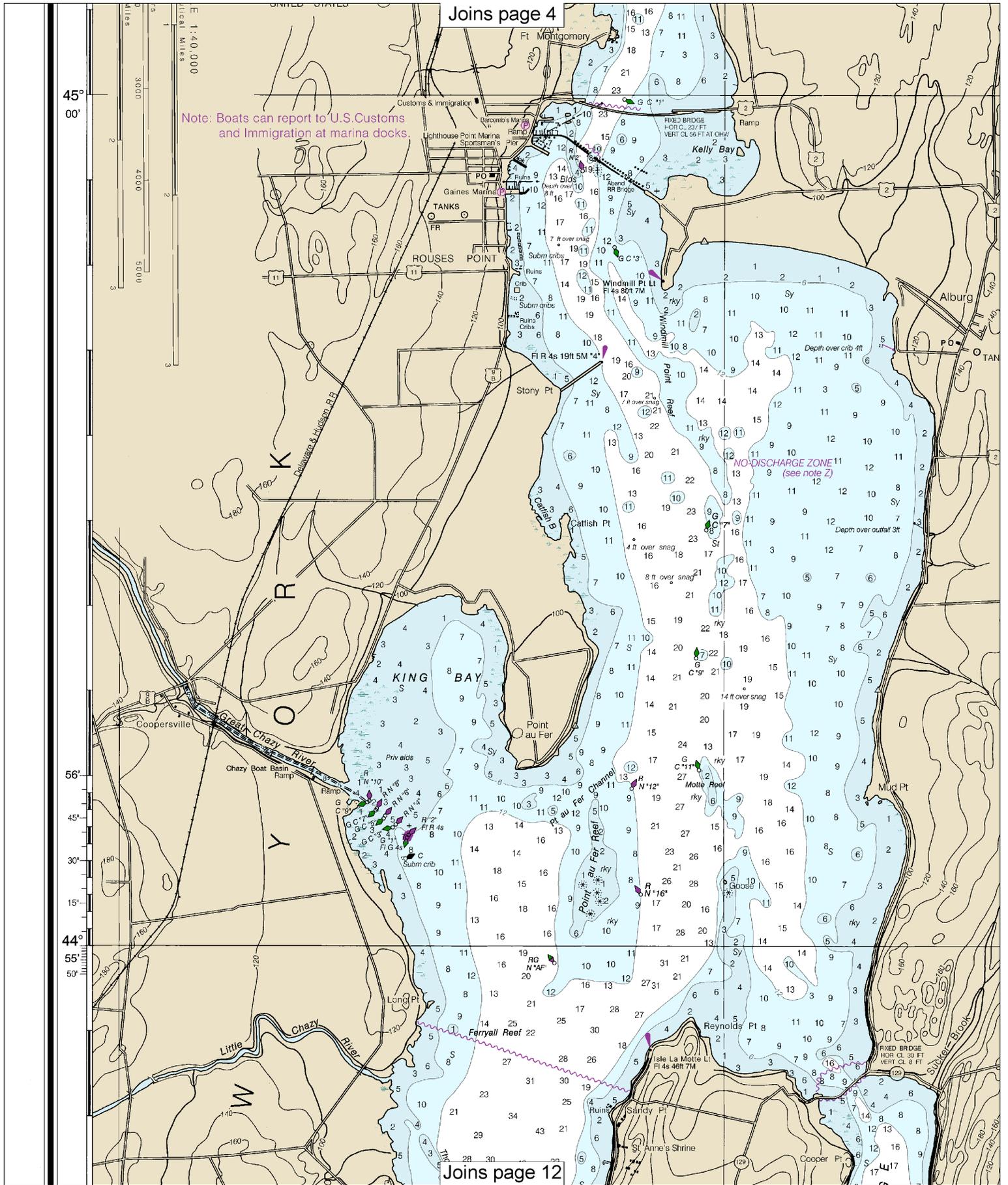
45° 00'

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Joins page 11

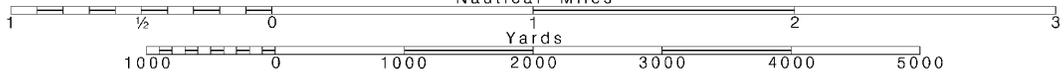


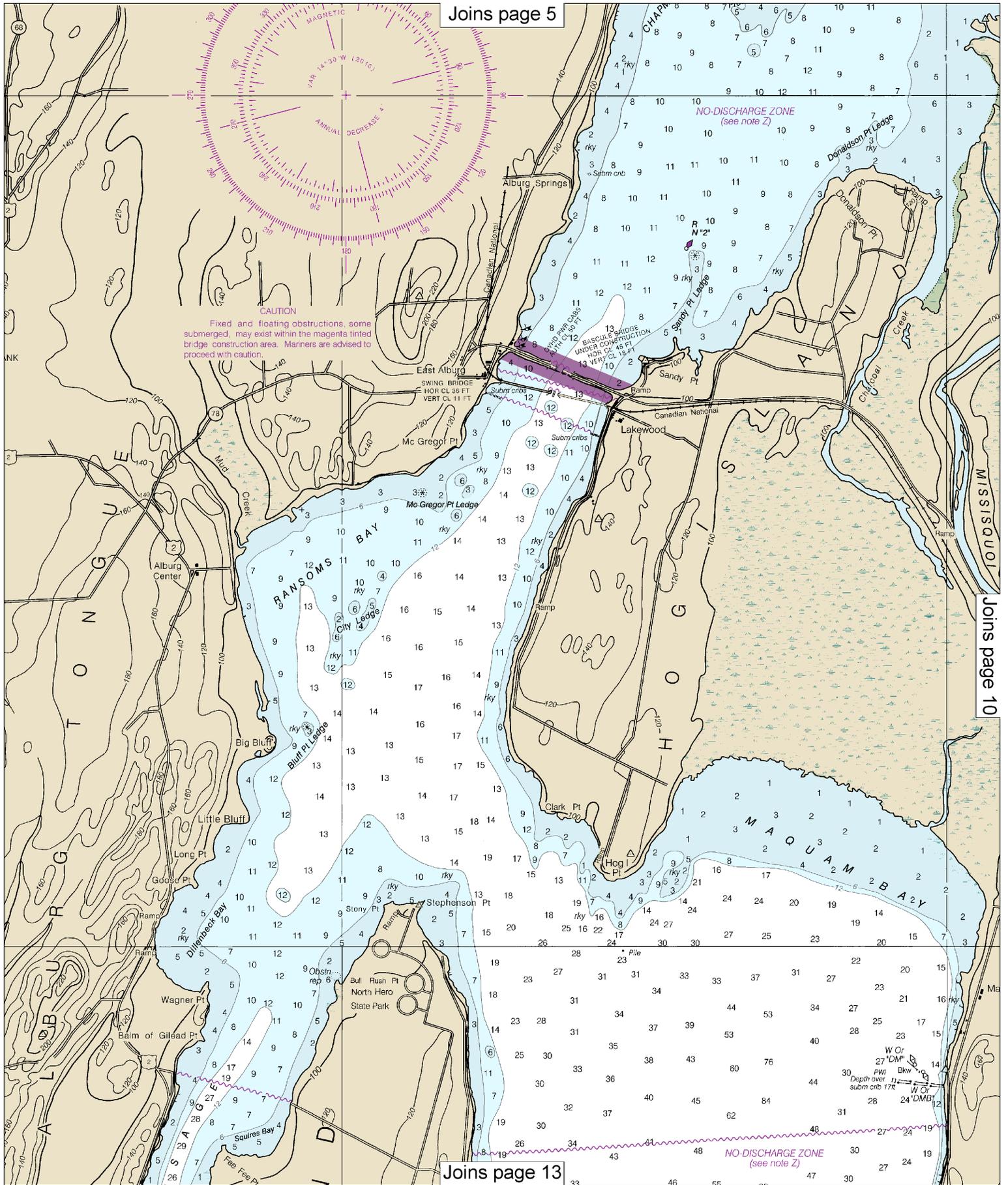
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Printed at reduced scale.

SCALE 1:40,000
Nautical Miles

See Note on page 5.

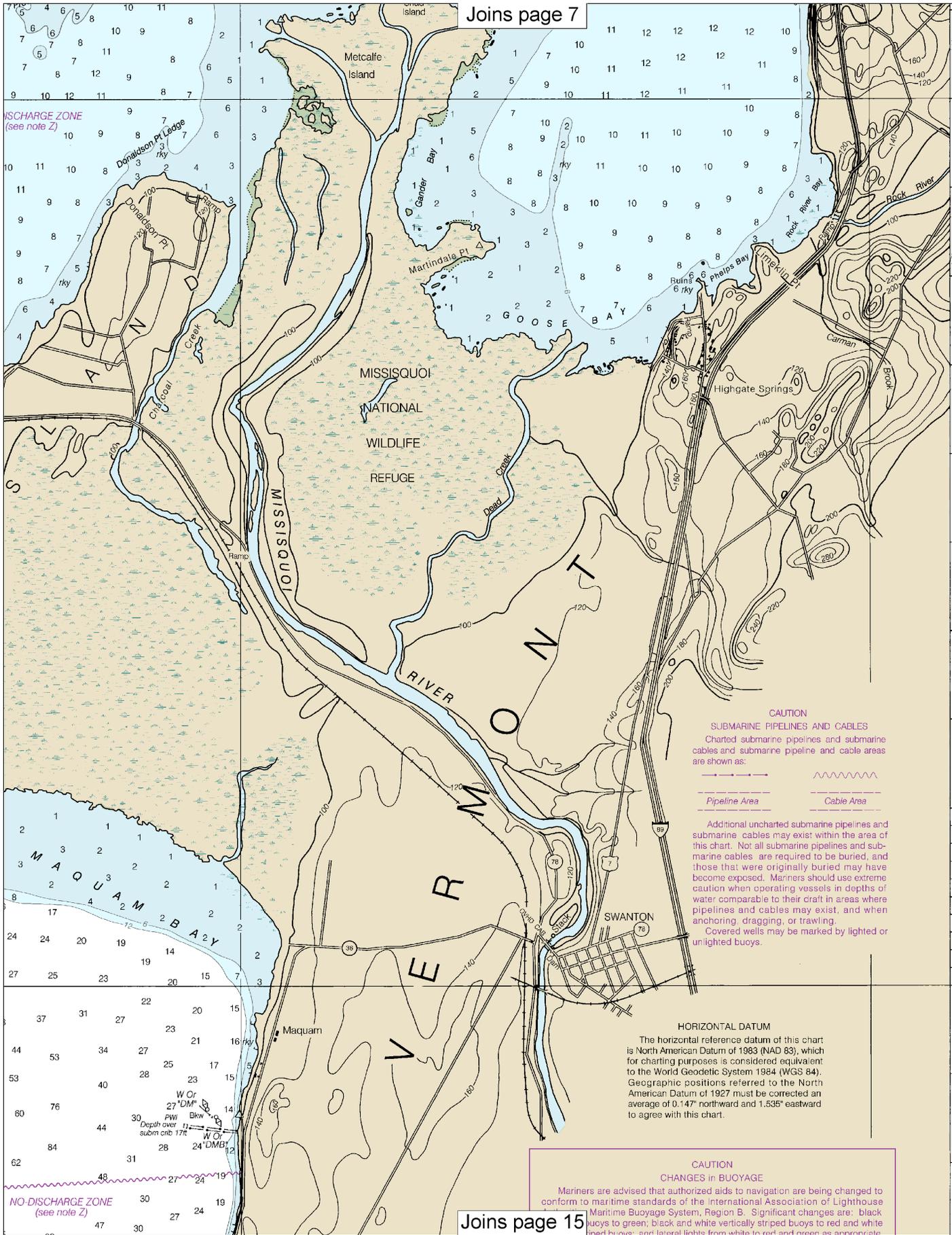




CAUTION
 Fixed and floating obstructions, some submerged, may exist within the magenta limited bridge construction area. Mariners are advised to proceed with caution.

45° 00'

NO-DISCHARGE ZONE (see note Z)



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.

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 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.147' northward and 1.535' eastward to agree with this chart.

CAUTION
CHANGES in BUOYAGE

Mariners are advised that authorized aids to navigation are being changed to conform to maritime standards of the International Association of Lighthouse Maritime Buoyage System, Region B. Significant changes are: black buoys to green; black and white vertically striped buoys to red and white lined buoys; and lateral lights from white to red and green as appropriate.

56'

45'

30'

15'

44°

55'

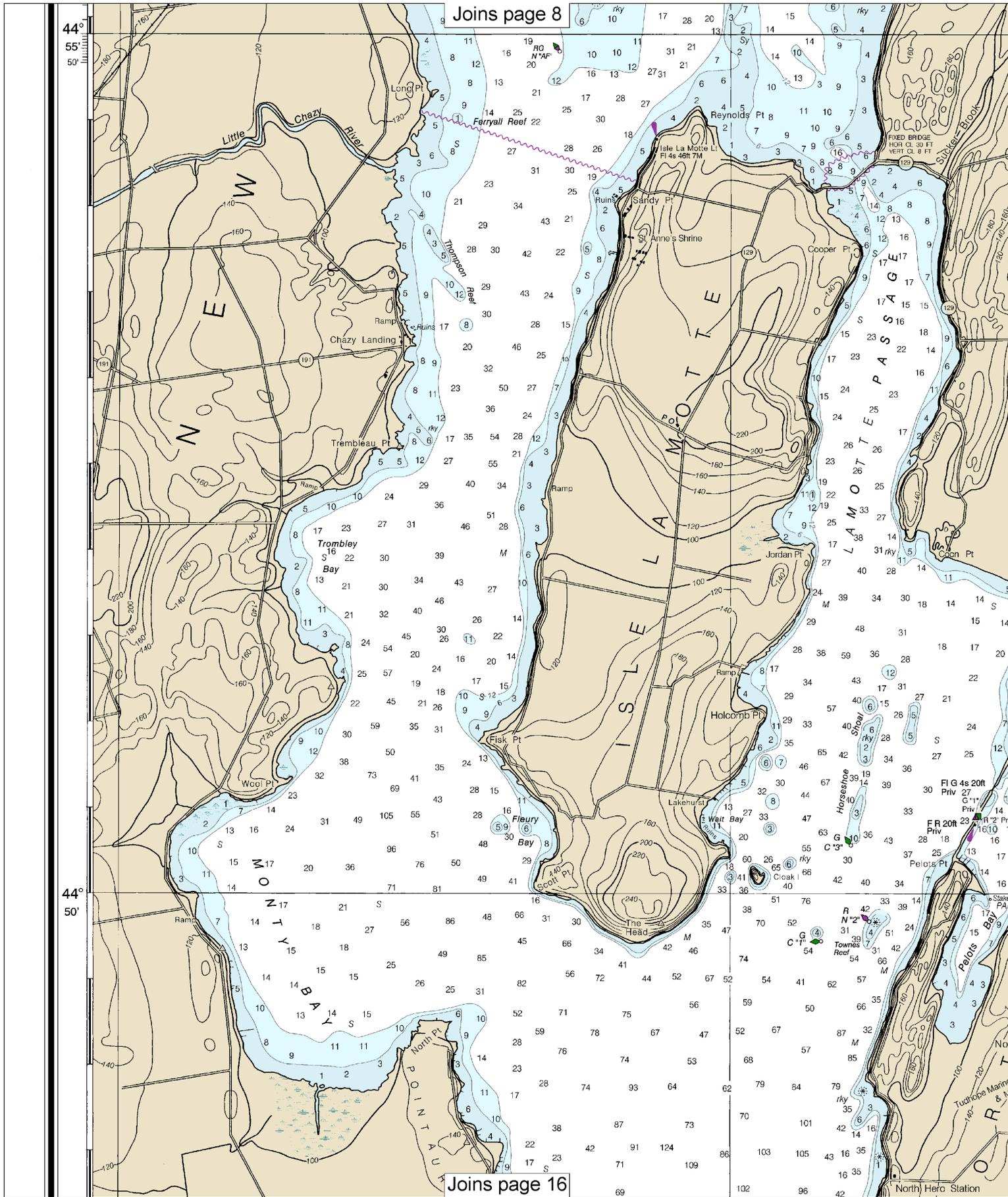
50'

44°

55'

44°

50'



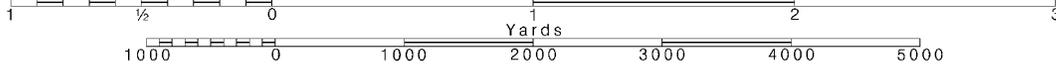
12

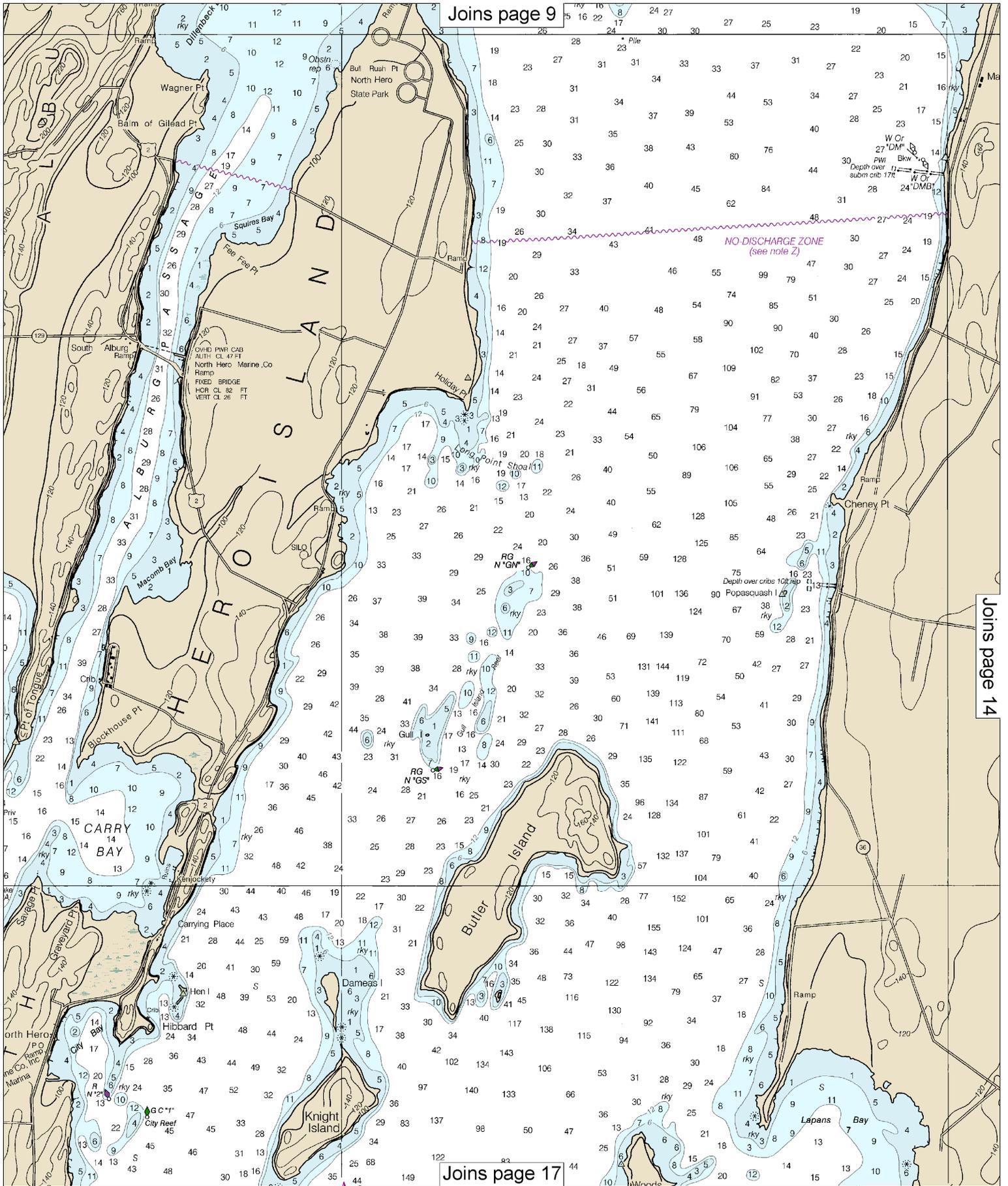
Note: Chart grid lines are aligned with true north.

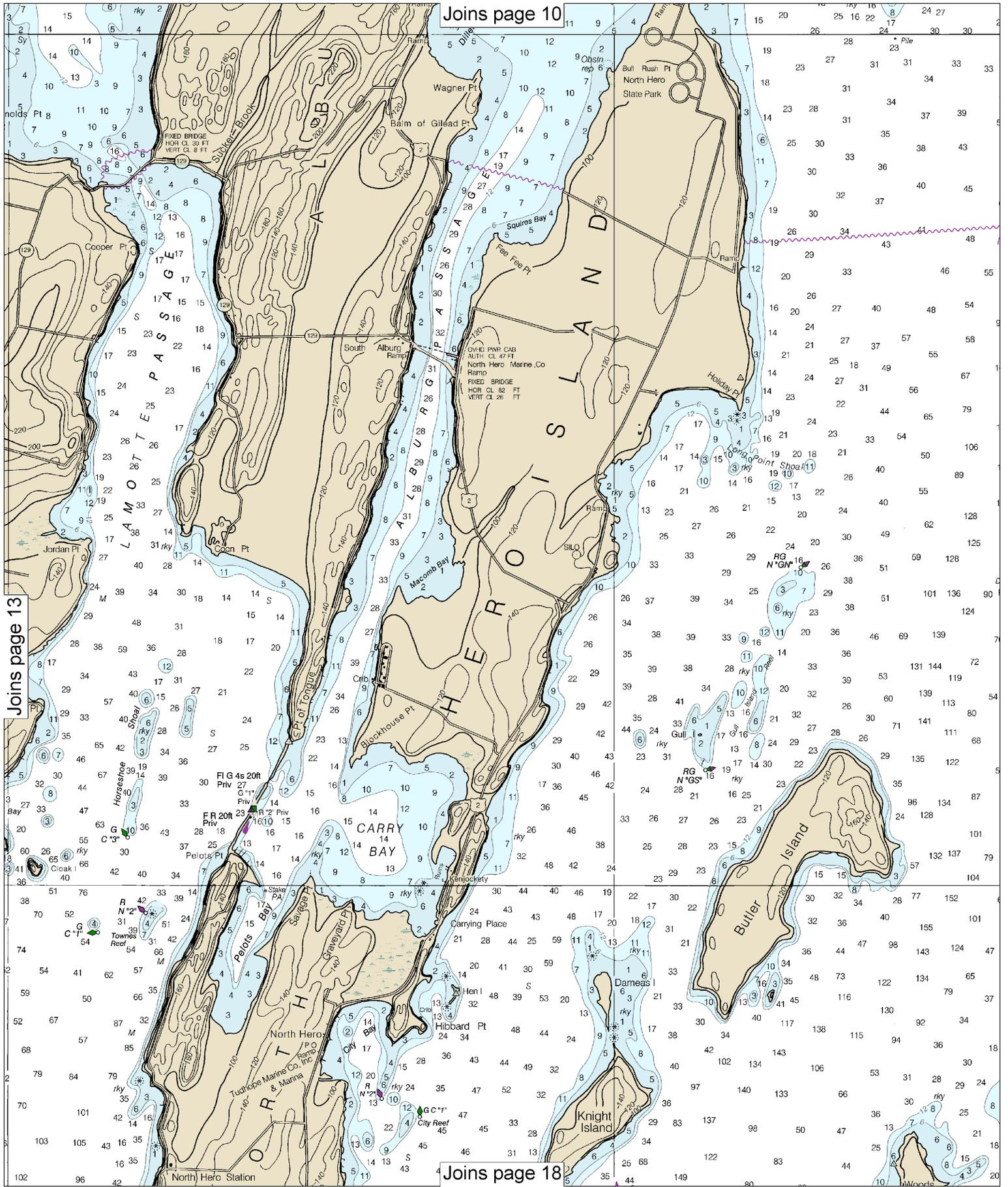
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SCALE 1:40,000
Nautical Miles

See Note on page 5.







Joins page 10

Joins page 13

Joins page 18

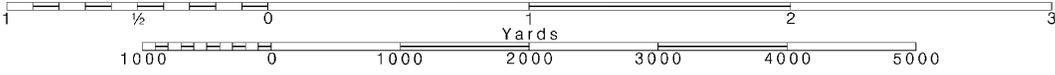
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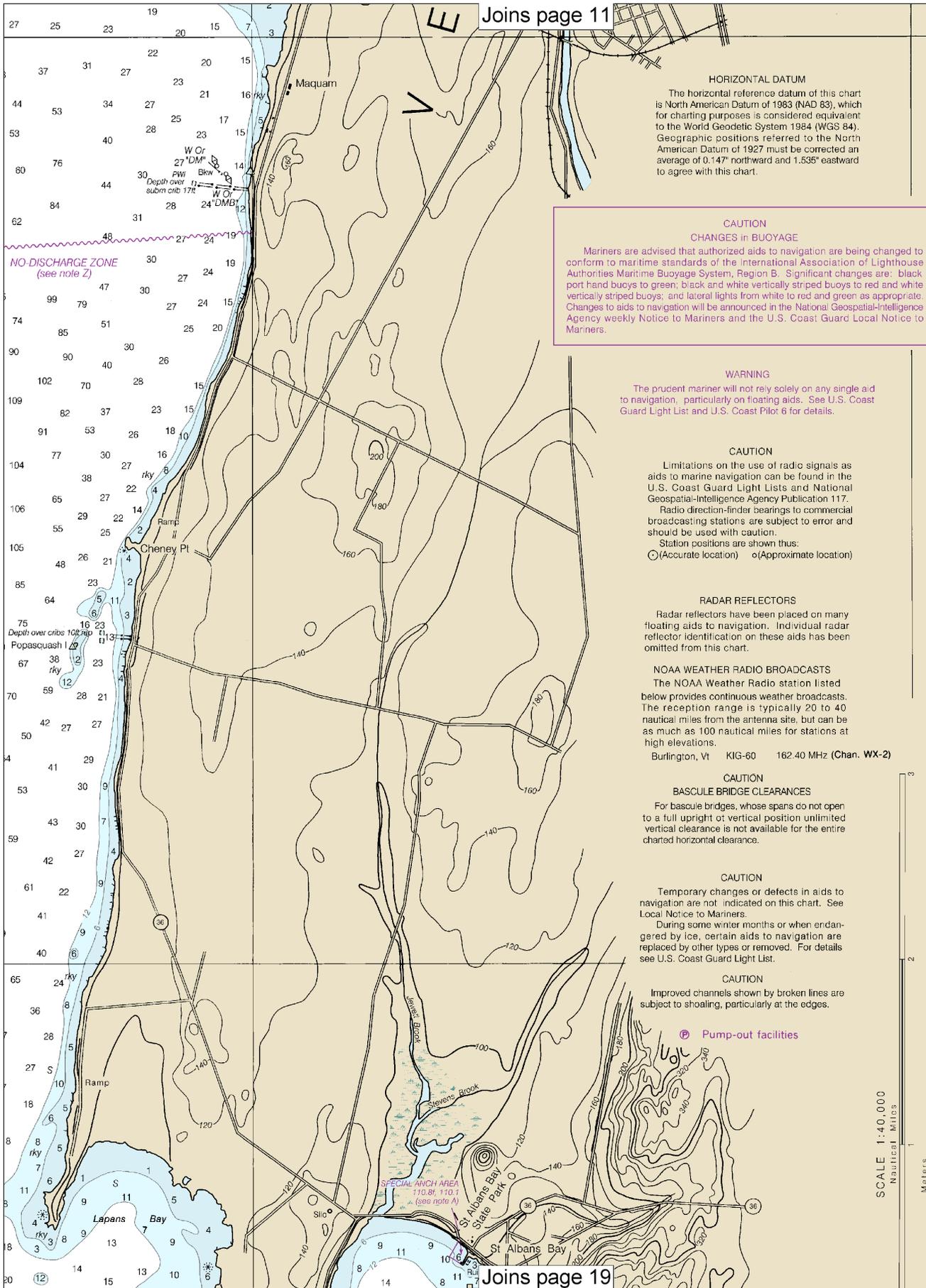
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:40,000
Nautical Miles

See Note on page 5.





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CAUTION
CHANGES in BUOYAGE

Mariners are advised that authorized aids to navigation are being changed to conform to maritime standards of the International Association of Lighthouse Authorities Maritime Buoyage System, Region B. Significant changes are: black port hand buoys to green; black and white vertically striped buoys to red and white vertically striped buoys; and lateral lights from white to red and green as appropriate. Changes to aids to navigation will be announced in the National Geospatial-Intelligence Agency weekly Notice to Mariners and the U.S. Coast Guard Local Notice to Mariners.

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 6 for details.

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)

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.

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.
 Burlington, Vt KIG-60 162.40 MHz (Chan. WX-2)

CAUTION

BASCULE BRIDGE CLEARANCES

For bascule bridges, whose spans do not open to a full upright or vertical position unlimited vertical clearance is not available for the entire charted horizontal clearance.

CAUTION

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

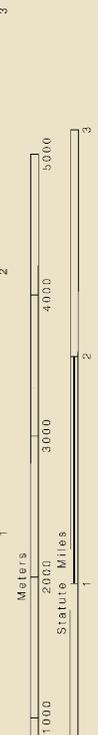
During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

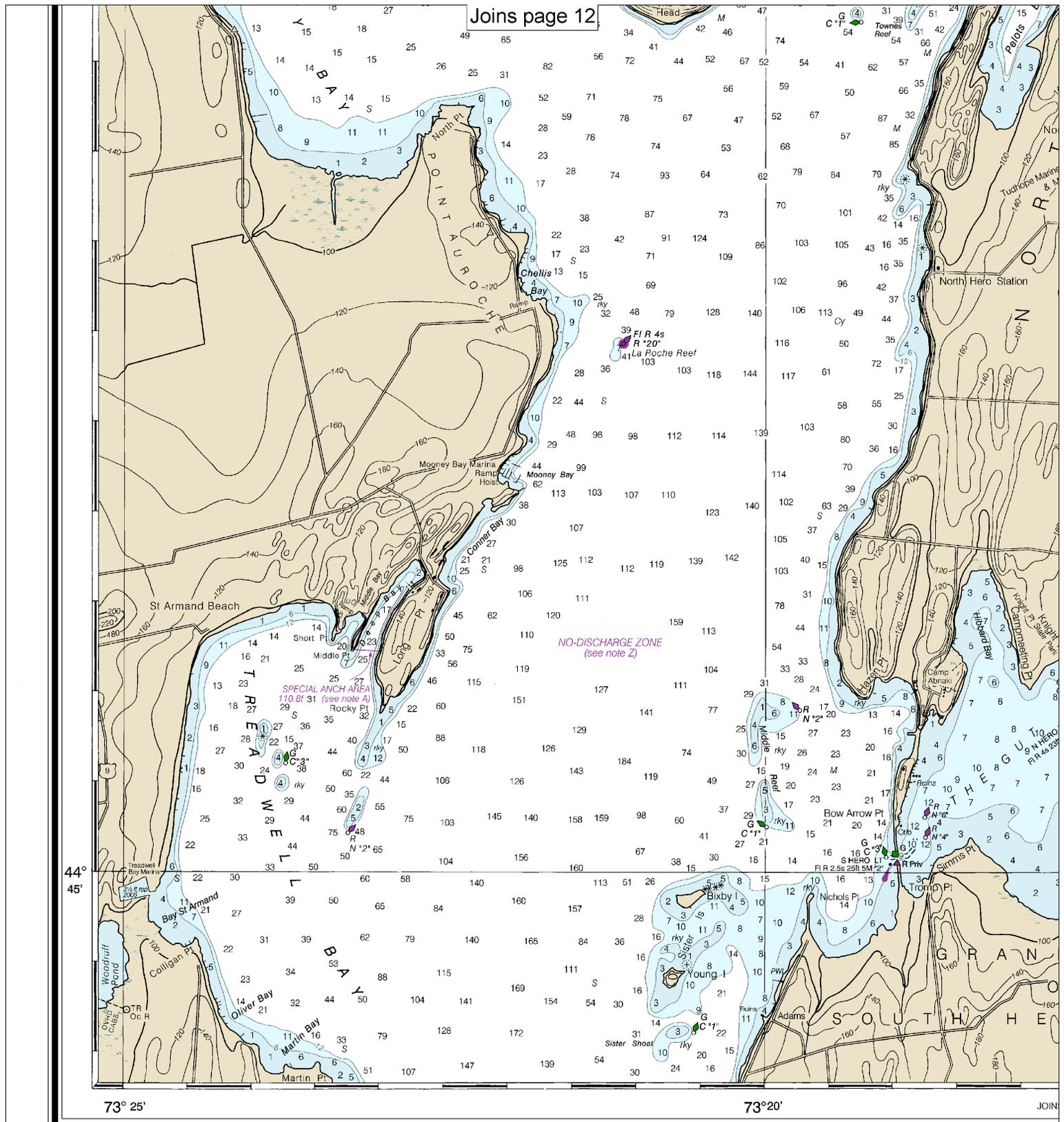
CAUTION

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

Pump-out facilities

SCALE 1:40,000
Nautical Miles





14781

CAUTION

SOUNDINGS IN F

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.

20th Ed., Nov. 2004. Last Correction: 11/29/2016. Cleared through:
 LNM: 4816 (11/29/2016), NM: 5016 (12/10/2016), CHS: 1116 (11/25/2016)

16

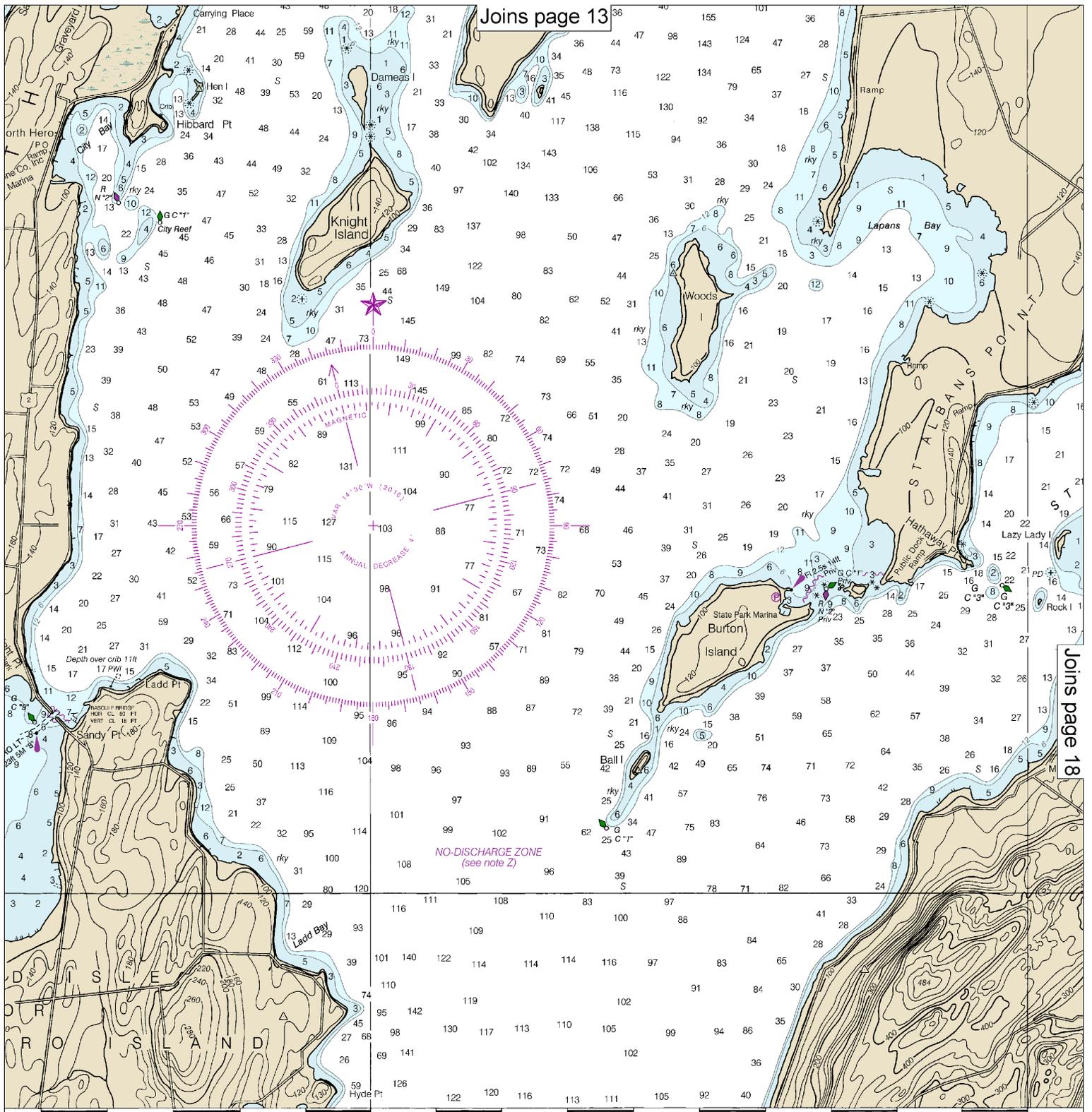
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:40,000
 Nautical Miles

See Note on page 5.





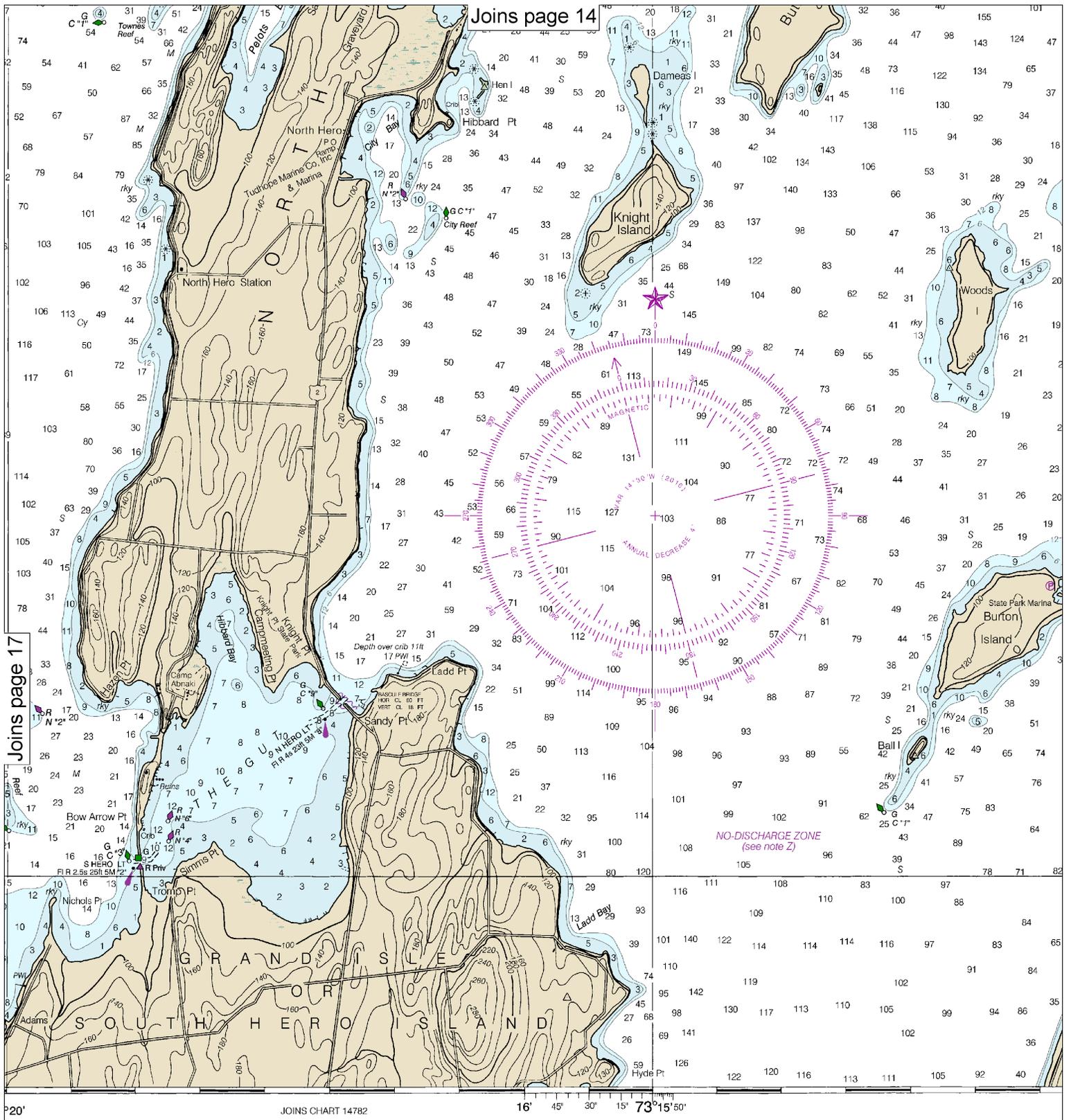
Joins page 13

Joins page 18

NS CHART 14782

FEET

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



Joins page 14

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

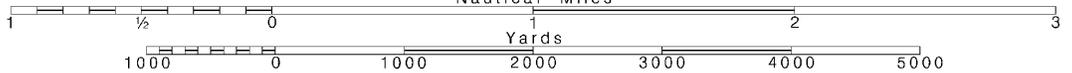
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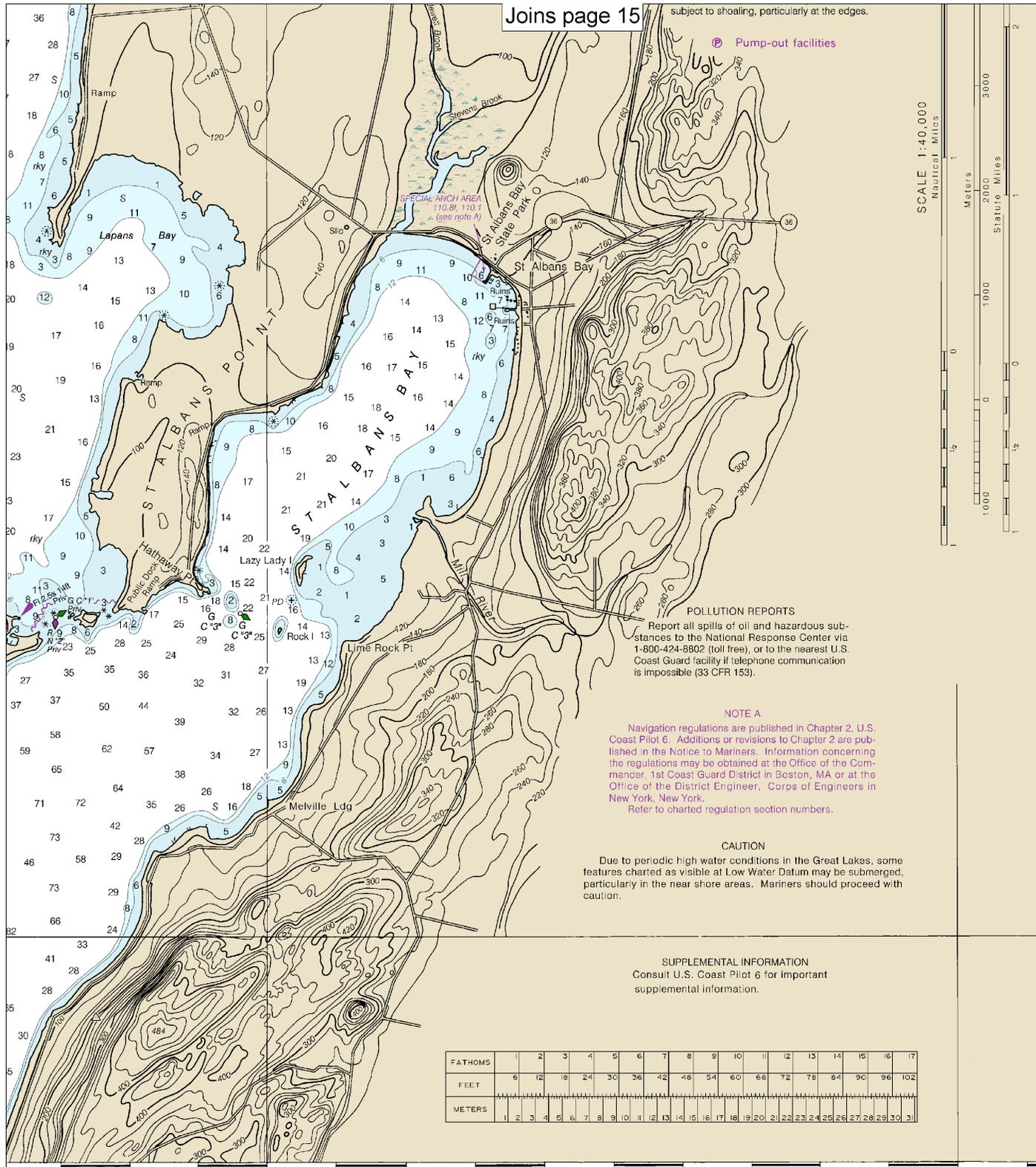
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:40,000
 Nautical Miles

See Note on page 5.





Pump-out facilities

SCALE 1:40,000



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).

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, 1st Coast Guard District in Boston, MA or at the Office of the District Engineer, Corps of Engineers in New York, New York.
 Refer to charted regulation section numbers.

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.

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

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

73°10'

73°05'

44°45'

Riviere Richelieu to South Hero Island
 SOUNDINGS IN FEET - SCALE 1:40,000

14781



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>



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