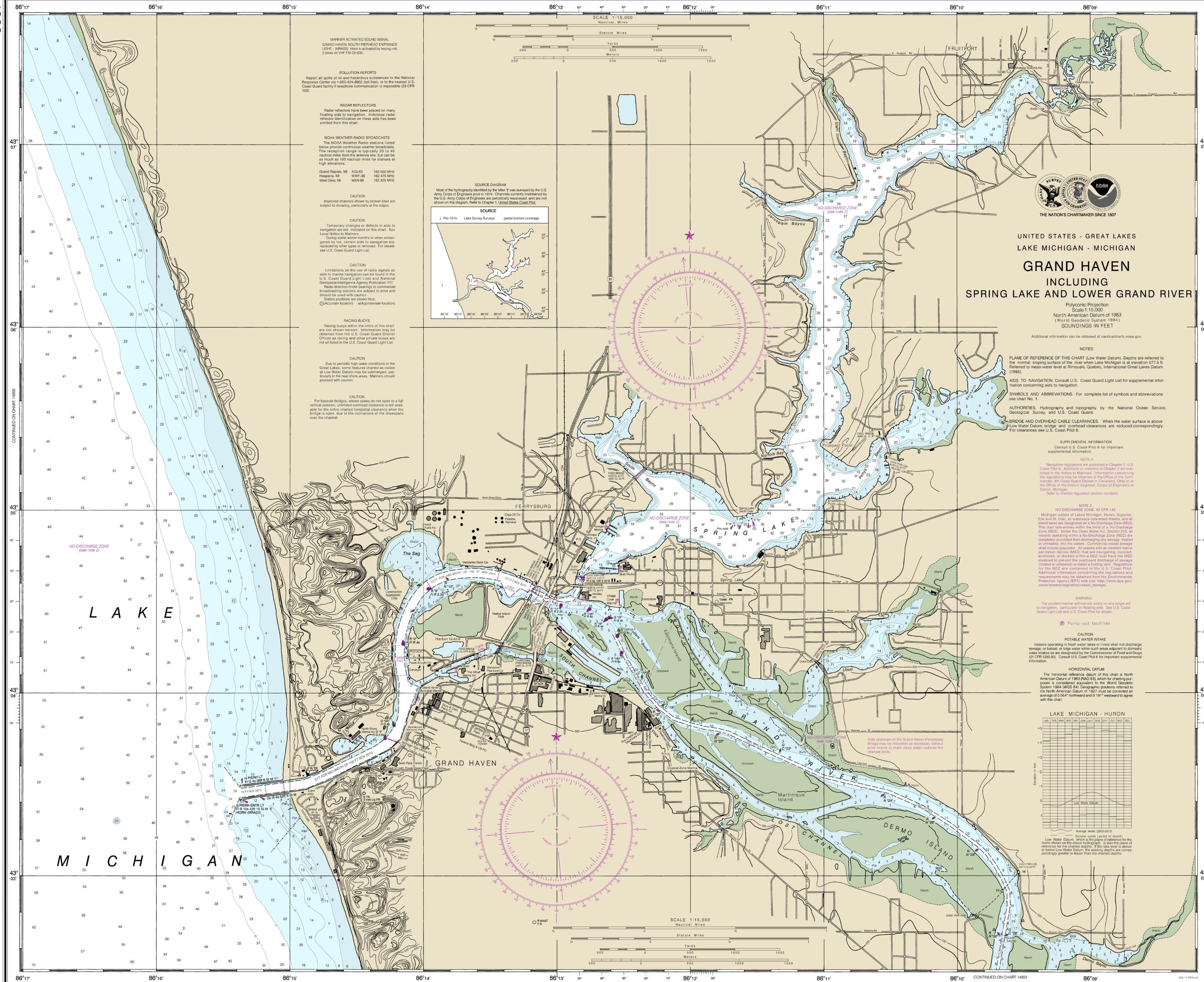


14933

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

Formerly LS 765A, 1st Ed. Nov. 1907 KAPP 1488

SOUNDINGS IN FEET



**MARINE ACTIVATED SOUND SIGNAL**  
GRAND HAVEN SOUTH PIERHEAD ENTRANCE LIGHT - (MFRSS) Horn is activated by keying mic 5 times on VHF-FM CH 13A.

**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).

**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 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.

Grand Rapids, MI KIG-63 162.550 MHz  
Hesperia, MI WVF-38 162.475 MHz  
West Olive, MI WOX-99 162.425 MHz

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

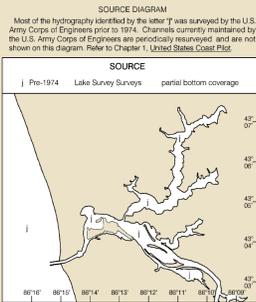
**CAUTION**  
Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notices to Mariners.  
During some water months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

**CAUTION**  
Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light List 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)

**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.

**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**  
For bascule bridges, whose spans do not open to a full vertical position, unlimited overhead clearance is not available for the entire charted horizontal clearance when the bridge is open, due to the inclinations of the drawspans over the channel.



UNITED STATES - GREAT LAKES  
LAKE MICHIGAN - MICHIGAN  
**GRAND HAVEN**  
INCLUDING  
SPRING LAKE AND LOWER GRAND RIVER

Polyconic Projection  
Scale 1:15,000  
North American Datum of 1983  
(World Geodetic System 1984)  
SOUNDINGS IN FEET

Additional information can be obtained at [nauticalcharts.noaa.gov](http://nauticalcharts.noaa.gov).

**NOTES**

- PLANE OF REFERENCE OF THIS CHART (Low Water Datum). Depths are referred to the normal sloping surface of the river when Lake Michigan is at elevation 577.5 ft. Referred to mean water level at Rimouski, Quebec, International Great Lakes Datum (1985).
- 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.
- AUTHORITIES: Hydrography and topography by the National Ocean Service, Geological Survey, and U.S. Coast Guard.
- 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.

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

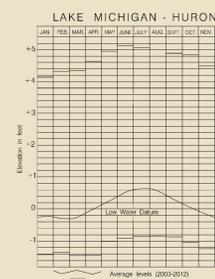
**NOTE A**  
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 6. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 5th Coast Guard District in Cleveland, Ohio or at the Office of the District Engineer, Corps of Engineers in Detroit, Michigan.  
Refer to charted regulation section numbers.

**NOTE 2**  
**NO-DISCHARGE ZONE, 40 CFR 140**  
Michigan waters of Lakes Michigan, Huron, Superior, Erie and St. Clair, all waters connected thereto, and all inland lakes are designated as a No-Discharge Zone (NDZ). This chart falls entirely within the limits of 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 closed 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/cwa/cwa/regulation/vessel\\_sewage/](http://www.epa.gov/cwa/cwa/regulation/vessel_sewage/)

**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**  
**POTABLE WATER INTAKE**  
Vessels operating in fresh water lakes or rivers shall not discharge sewage, or ballast, or other water which such areas adjacent to domestic water intakes as are designated by the Commissioner of Food and Drugs (21 CFR 125.810). Consult U.S. Coast Pilot 6 for important supplemental information.

**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 1983 must be corrected an average of 0.044' northward and 0.191' westward to agree with the chart.



25th Ed., Sep. 2013  
**14933**

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 consisted from Notices to Mariners published after dates shown in the lower left hand corner are available at [nauticalcharts.noaa.gov](http://nauticalcharts.noaa.gov).

Last Correction: 7/18/2016. Cleared through:  
LNM: 4616 (11/15/2016), NM: 4616 (11/12/2016), CHS: 1016 (10/28/2016)

To ensure that this chart was printed at the proper scale, the line below should measure 10 inches (252 millimeters).  
The above stated measures are inches (252 millimeters). This space is not certified as to accuracy.

**SOUNDINGS IN FEET**

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NATIONAL OCEAN SERVICE  
COAST SURVEY



Grand Haven  
SOUNDINGS IN FEET - SCALE 1:15,000  
**14933**