

# BookletChart™

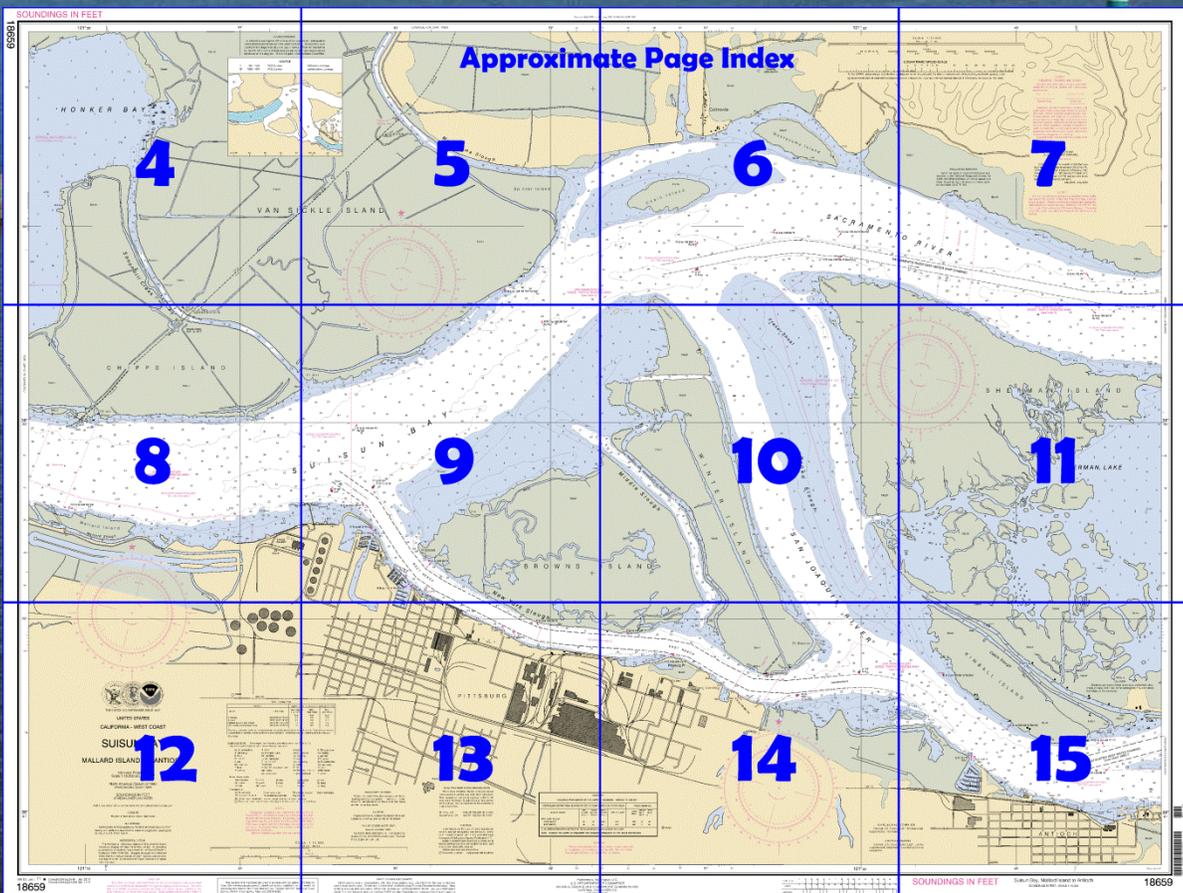
## Suisun Bay – Mallard Island to Antioch NOAA Chart 18659



*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](http://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.

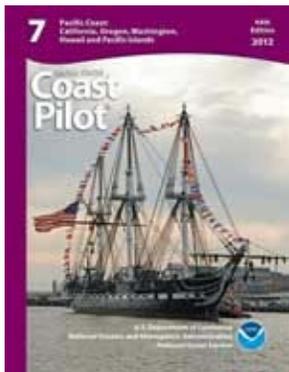
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

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=18659>.



**(Selected Excerpts from Coast Pilot)**

**Pittsburg**, on the S side of New York Slough 12 miles E of Suisun Point bridges, is a manufacturing city with several deepwater berths.

The PGE-Pittsburg Fuel Pier, about 0.3 mile W of **New York Point**, is an offshore wharf with 1,070 feet of berthing space, 35 feet alongside, and a deck height of 14 feet. It is used for receiving and transshipping petroleum products.

The Diablo Service Corp. Wharf, about 0.6 mile E of New York Point is an offshore wharf with 1,154 feet of berthing space with dolphins, 35 feet alongside, and deck height of 12

feet. There is a conveyer system and crawler tractors. Rail and highway connections, and water and electrical shore-power connections are available. It is owned by Tosco Corp. and is used for the receipt of petroleum coke.

USS-Posco Industries, Pittsburg Wharf, about 1.3 mile E of New York Point, is a 891-foot marginal wharf with depths of 33 feet alongside and a deck height of 11 feet. Three 37½-ton cranes are available, and there are rail and highway connections, and water and electrical shore power connections. It is used for receipt of semi-finished steel.

The Dow Chemical Co., Pittsburg Plant Wharf, about 2 miles E of New York Point, is an offshore wharf with 672 feet of berthing space with dolphins, 40 feet alongside and a deck height of 20 feet. It is used for shipment and receipt of caustic soda.

**Antioch** on the S side of San Joaquin River 16 miles E of Suisun Point bridges, is a manufacturing city with waterborne commerce.

Georgia-Pacific Corp., Antioch Plant Wharf, about 38°00'56"N., 121°47'08"W., is a 197-foot offshore wharf, 780 feet usable with dolphins, with 31 feet alongside and a deck height of 11 feet. A conveyer system is available for the receipt of gypsum rock. Highway connections, and water and electrical shore power connections are available. Gaylord Container Corp., California Mill Wharf, about 0.5 mile E of Kaiser Gypsum Co. Pier, is a 291-foot offshore wharf, 766 total berthing space, with depths of 35 feet alongside. Receipt of miscellaneous dry bulk commodities.

There are also barge facilities at Antioch.

The Fulton Shipyard, on the E edge of the city, has a marine railway that can haul out vessels up to 350 tons for general repairs. The yard repairs auxiliary vessels such as towboats and barges.

Several small-craft facilities are at Pittsburg and Antioch. (See the small-craft facilities tabulation on chart 18652 for services and supplies available.)

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

RCC Alameda      Commander  
11<sup>th</sup> CG District      (510) 437-3700  
Alameda, CA

# Table of Selected Chart Notes

**HEIGHTS**  
Heights in feet above Mean High Water.

**Mercator Projection**  
Scale 1:10,000 at Lat. 38°03'

**North American Datum of 1983**  
(World Geodetic System 1984)

**SOUNDINGS IN FEET**  
AT MEAN LOWER LOW WATER

**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.

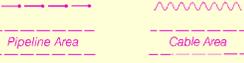
**CAUTION**  
Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

**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).

**SACRAMENTO RIVER**  
**DEEP WATER SHIP CHANNEL**  
162.205 (see note A)

Controlling depth for a width of 200 feet was 26.0 feet from the channel entrance (38°03'46.7"N, 121°51'17"W) to Lt. '40', thence 27.6 feet to Lt. '52', thence 30.9 feet to Lt. '60', thence 27.5 feet to Lt. '70', thence 18.4 feet to Lt. '86' and 29.4 feet in the turning basin at West Sacramento.  
May 2005 - May 2006

**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**  
**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.

**AIDS TO NAVIGATION**  
Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

**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.  
Mt. Plise, CA   KHB-49 162.400 MHz WX2  
Sacramento, CA   KEC-57 162.550 MHz WX1

**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 1927 must be corrected an average of 0.288' southward and 3.843' westward to agree with this chart.

**NOTE B**  
**CAUTION**  
Mariners are warned that numerous uncharted piles, snags, pumps, and pipes, some submerged, may exist along the edges of the waterway.

**NOTE C**  
The U.S. Coast Guard operates a mandatory Vessel Traffic Services (VTS) system in the San Francisco Bay and surrounding areas. Vessel operating procedures and designated radiotelephone frequencies are published in 33 CFR 161, the U.S. Coast Pilot, and/or the VTS User's Manual. The entire area of the chart falls within the Vessel Traffic Services (VTS) system.

**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.

**NOTE A**  
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7. 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, 11th Coast Guard District in Alameda, California or at the Office of the District Engineer, Corps of Engineers in Sacramento, California. Refer to charted regulation section numbers.

**AUTHORITIES**  
Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

**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.

**ABBREVIATIONS** (For complete list of Symbols and Abbreviations, see Chart No. 1.)  
Aids to Navigation (lights are white unless otherwise indicated):  
AERO aeronautical   G green   N nun   R TR radio tower  
Al alternating   IQ interrupted quick   OBSC obscured   Rot rotating  
B black   Iso isophase   Oc occulting   s seconds  
Bn beacon   LT LC lighthouse   Or orange   SEC sector  
C can   M nautical mile   Osc oscillating   St M statute miles  
DIA diaphone   m minutes   Q quick   VO very quick  
F fixed   MICHO TR microwave tower   R red   W white  
Fl flashing   Mkr marker   Ra Ref radar reflector   WHIS whistle  
Bottom characteristics:   Mo Morse code   R Bn radiobeacon   Y yellow  
Blks boulders   Co coral   gy gray   Oys oysters   so soft  
bk broken   G gravel   h hard   Rk rock   Sh shells  
Cy clay   Grs grass   M mud   S sand   sy sticky  
Miscellaneous:  
AUTH authorized   Obstr obstruction   PD position doubtful   Subm submerged  
ED existence doubtful   PA position approximate   Rep reported  
(1) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.  
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

**TIDAL INFORMATION**

| PLACE   | Height referred to datum of soundings (MLLW) | Mean Higher High Water (MLLW) |                 |                |
|---|--|-------------------------------|-----------------|----------------|
|   |  | Mean Higher High Water        | Mean High Water | Mean Low Water |
| NAME (LAT/LONG)                                   | feet   | feet                          | feet            | feet           |
| Pittsburg (38°02'N/121°53'W)                      | 4.1  | 3.6                           | 0.6             | 0.6            |
| Antioch (38°01'N/121°49'W)                        | 3.9  | 3.4                           | 0.6             | 0.6            |
| Mallard Island Ferry Wharf (38°03'N/121°55'W)     | 4.1  | 3.6                           | 0.6             | 0.6            |
| Collinsville, Sacramento River (38°04'N/121°51'W) | 4.0  | 3.5                           | 0.6             | 0.6            |

Dashes (---) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from <http://tidesandcurrents.noaa.gov>. (Dec 2010)

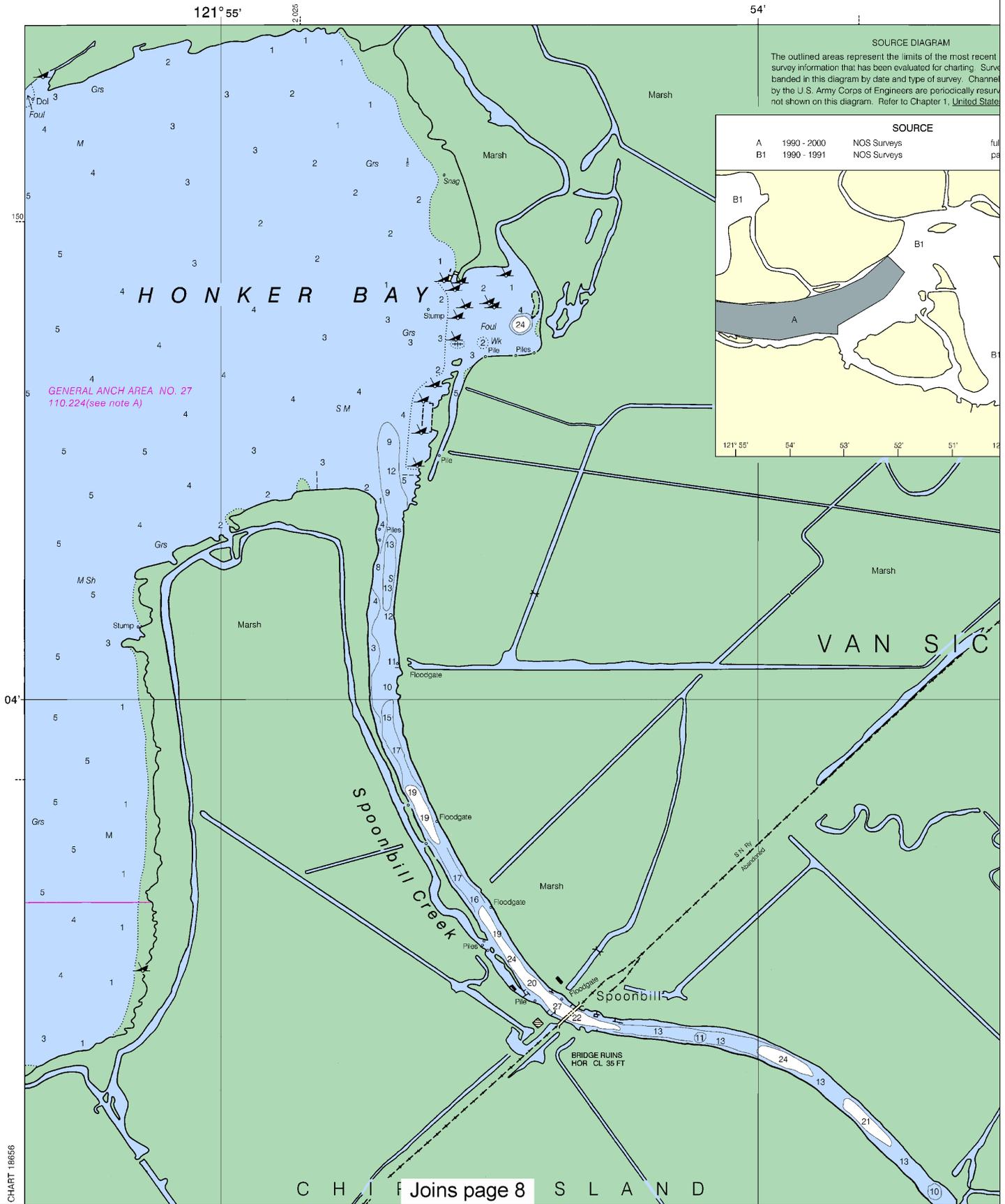
**SUISUN BAY**  
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO AUG 2011

| NAME OF CHANNEL | CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW) |                        |                       | DATE OF SURVEY | PROJECT DIMENSIONS |                      |              |
|-----------------|--|------------------------|-----------------------|----------------|--------------------|----------------------|--------------|
|                 | LEFT OUTSIDE QUARTER   | MIDDLE HALF OF CHANNEL | RIGHT OUTSIDE QUARTER |                | WIDTH (FEET)       | LENGTH (NAUT. MILES) | DEPTH (FEET) |
| NEW YORK SLOUGH |  |                        |                       |                |                    |                      |              |
| WEST REACH      | 34   | 34                     | 35 A                  | 8-11           | 400                | 1.3                  | 35           |
| EAST REACH      | 32   | 35                     | 34                    | 8-11           | 400                | 1.7                  | 35           |

A. AN OBSTRUCTION WITH A DEPTH OF 36 FEET IS LOCATED AT 38° 02' 41.2"N 121° 53' 21.32"W.  
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

# SOUNDINGS IN FEET

18659

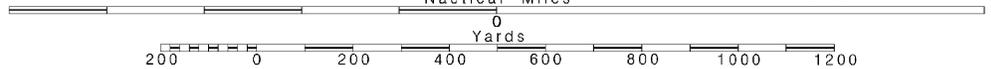


**4**

Note: Chart grid lines are aligned with true north.

Printed at reduced scale. SCALE 1:10,000

See Note on page 5.



53' CONTINUED ON CHART 18656

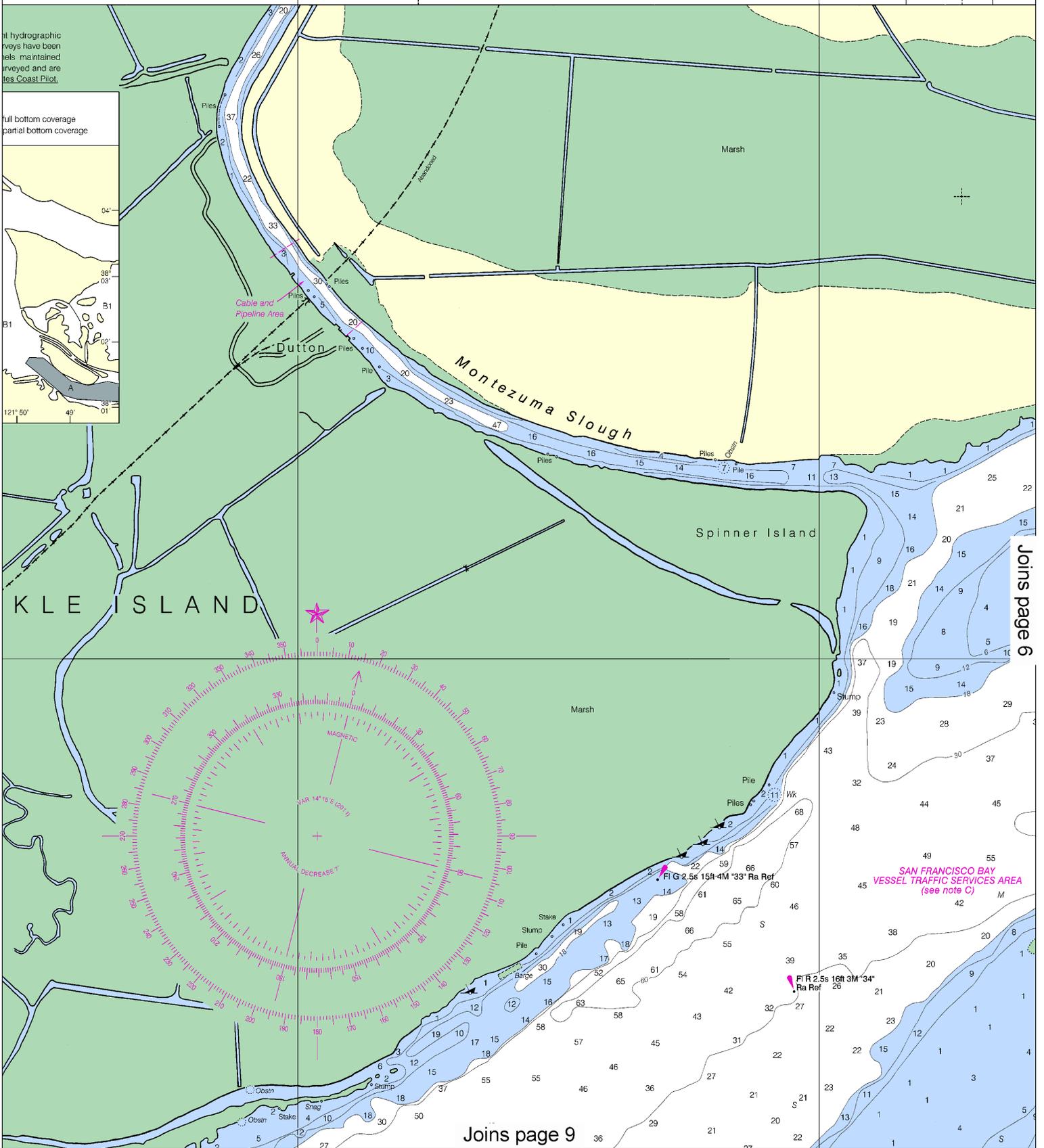
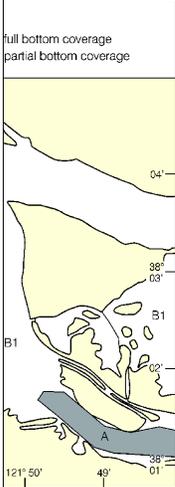
52'

50'

40'

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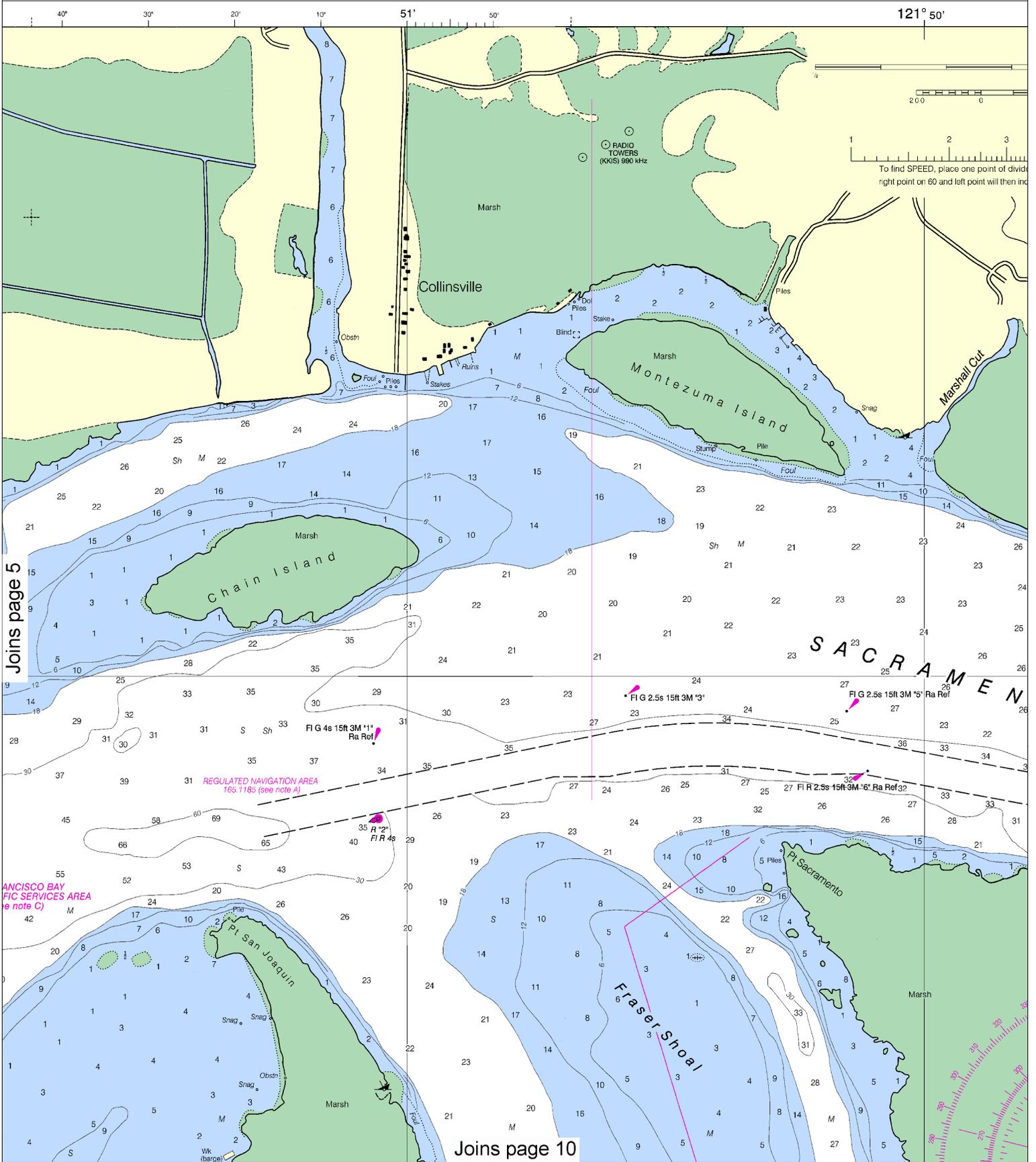
Joins page 6

Joins page 9

SAN FRANCISCO BAY  
VESSEL TRAFFIC SERVICES AREA  
(see note C)

This BookletChart was reduced to 70% of the original chart scale.  
The new scale is 1:14286. Barscales have also been reduced and  
are accurate when used to measure distances in this BookletChart.





Joins page 5

Joins page 10

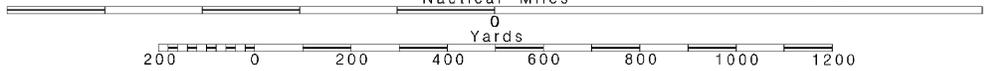


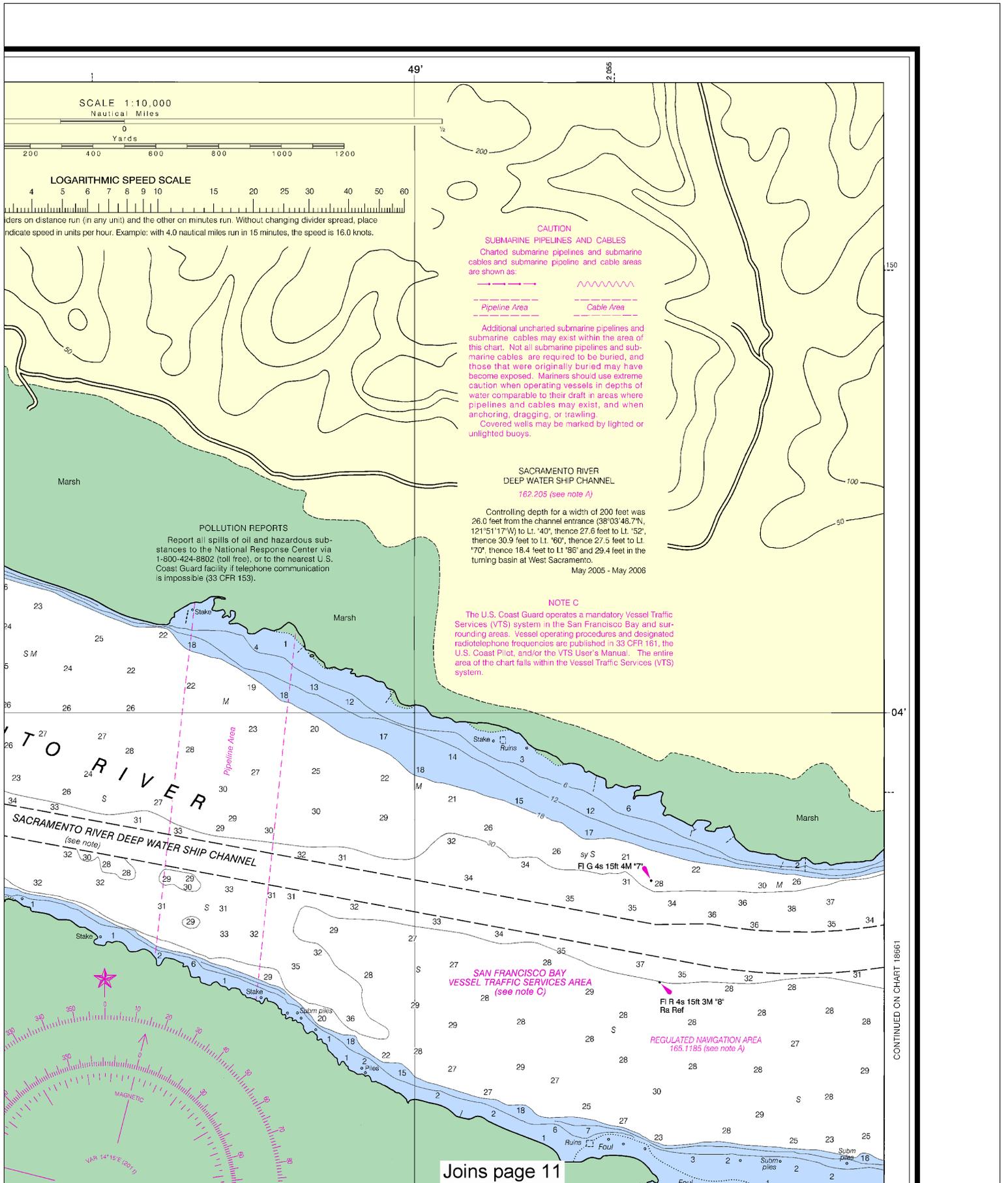
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:10,000

See Note on page 5.





This BookletChart has been updated through: Coast Guard Local Notice To Mariners: 4612 11/13/2012,  
 NGA Weekly Notice to Mariners: 4812 12/1/2012,  
 Canadian Coast Guard Notice to Mariners: n/a.

Joins page 4

CONTINUED ON CHART 18656

38° 03'

50'

40'

30'

20'

10'

02'

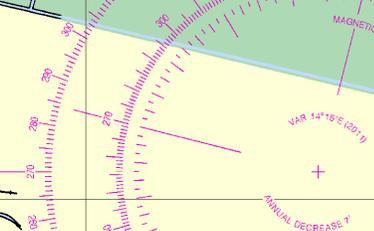
# CHIPPIS ISLAND

Joins page 12

SAN FRANCISCO BAY  
VESSEL TRAFFIC SERVICES AREA  
(see note C)

REGULATED NAVIGATION AREA  
165.1185 (see note A)

Fl R 2.5s 20ft 3M \*28\*

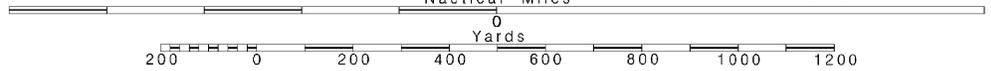


Note: Chart grid lines are aligned with true north.

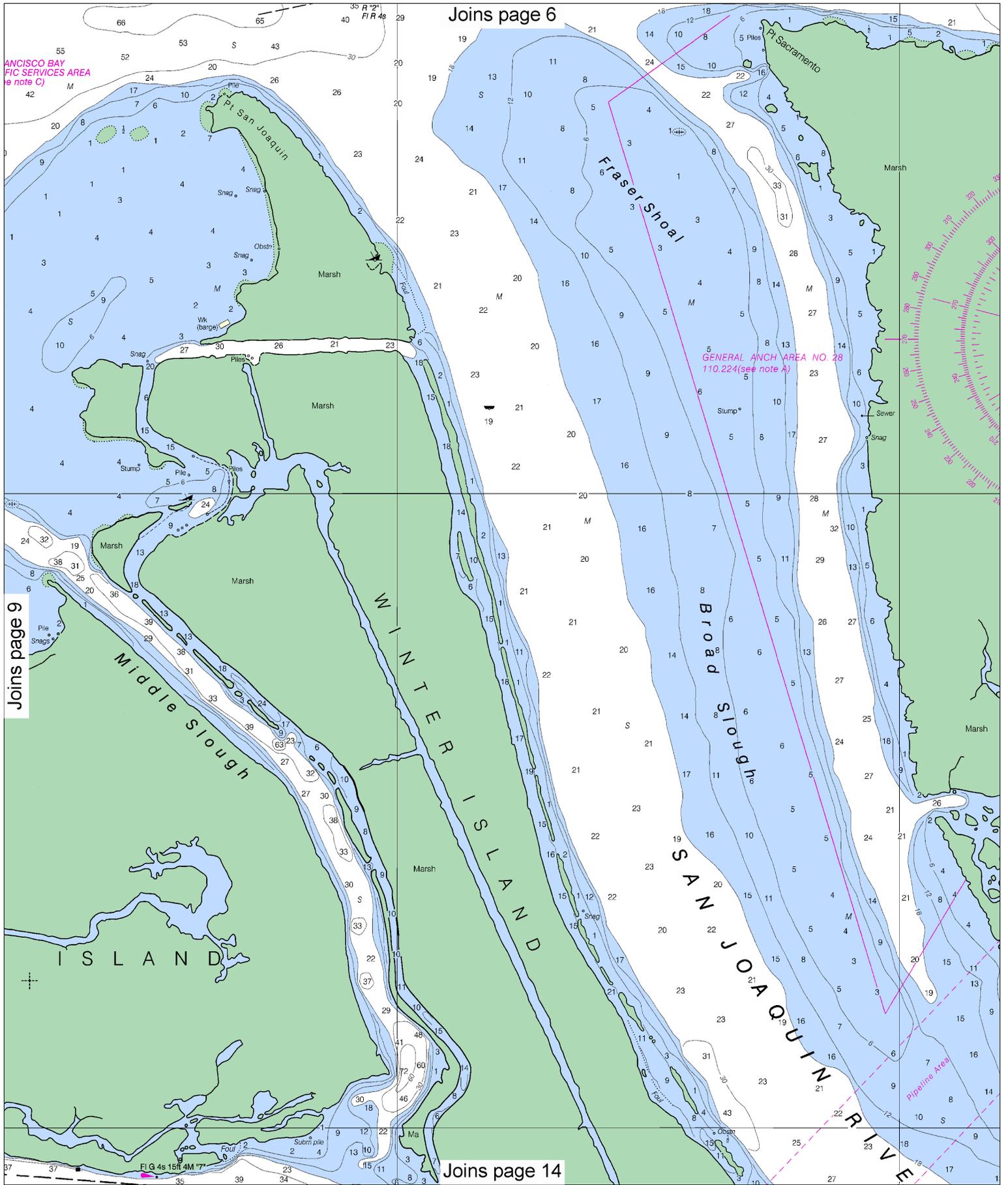
Printed at reduced scale.

SCALE 1:10,000

See Note on page 5.





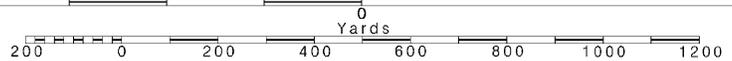


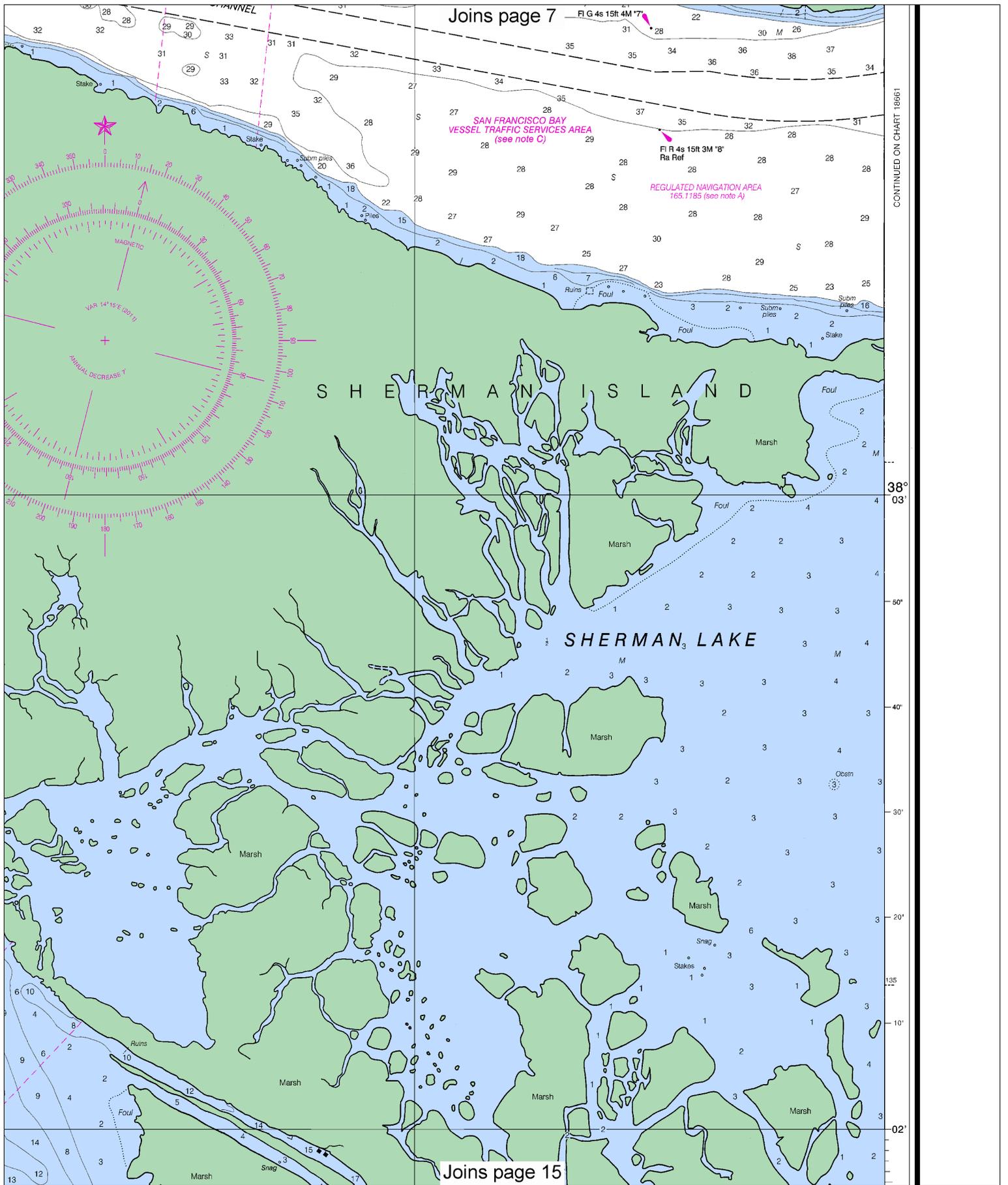
**10**

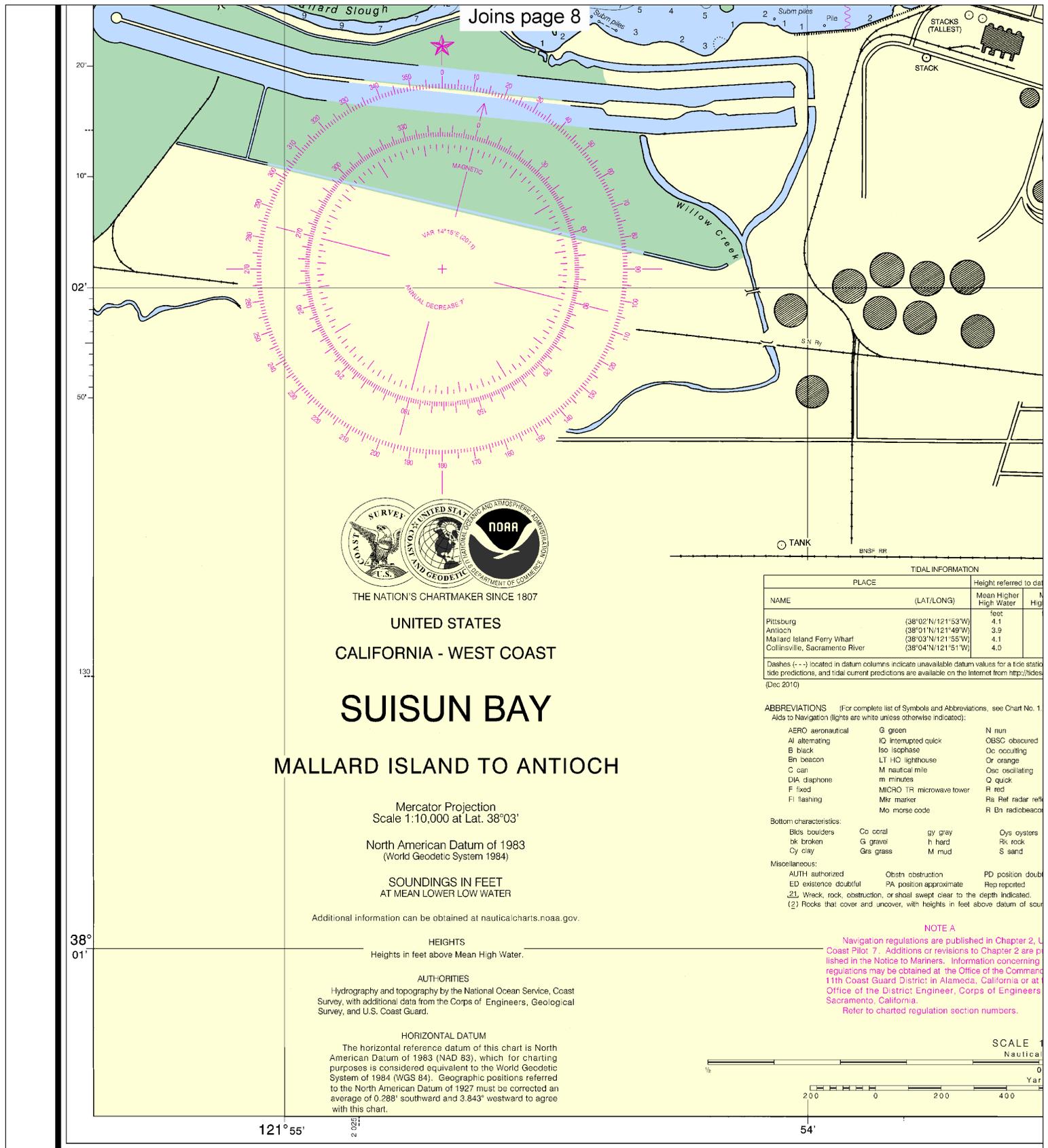
Note: Chart grid lines are aligned with true north.

Printed at reduced scale. — SCALE 1:10,000 —  
Nautical Miles

See Note on page 5.







THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES  
CALIFORNIA - WEST COAST

**SUISUN BAY**  
**MALLARD ISLAND TO ANTIOCH**

Mercator Projection  
Scale 1:10,000 at Lat. 38°03'

North American Datum of 1983  
(World Geodetic System 1984)

**SOUNDINGS IN FEET**  
AT MEAN LOWER LOW WATER

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

**HEIGHTS**  
Heights in feet above Mean High Water.

**AUTHORITIES**  
Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

**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 1927 must be corrected an average of 0.288' southward and 3.843' westward to agree with this chart.

TIDAL INFORMATION

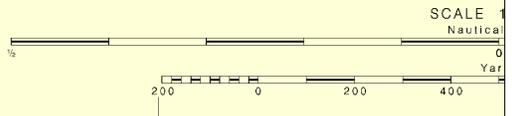
| NAME                           | PLACE (LAT/LONG)   | Height referred to datum |                      |
|--------------------------------|--------------------|--------------------------|----------------------|
|                                |                    | Mean Higher High Water   | Mean Lower Low Water |
| Pittsburg                      | (38°02'N/121°53'W) | 4.1                      |                      |
| Antioch                        | (38°01'N/121°49'W) | 3.9                      |                      |
| Mallard Island Ferry Wharf     | (38°03'N/121°55'W) | 4.1                      |                      |
| Collinsville, Sacramento River | (38°04'N/121°51'W) | 4.0                      |                      |

Dashes (---) located in datum columns indicate unavailable datum values for a tide station. Tide predictions, and tidal current predictions are available on the Internet from <http://tides.noaa.gov> (Dec 2010).

**ABBREVIATIONS** (For complete list of Symbols and Abbreviations, see Chart No. 1. Aids to Navigation (lights are white unless otherwise indicated):

|  |                          |                   |
|--|--------------------------|-------------------|
| AERO aeronautical  | G green                  | N nun             |
| Al alternating   | IQ interrupted quick     | OBSC obscured     |
| B black  | Isb isophase             | OC occulting      |
| Bn beacon  | LT lighthouse            | Or orange         |
| C can  | M nautical mile          | Osc oscillating   |
| DIA diaphone   | m minutes                | Q quick           |
| F fixed  | MICRO TR microwave tower | R red             |
| Fl flashing  | Mkr marker               | Ra Ref radar refl |
|  | Mo morse code            | R Bn radiobeacon  |
| <b>Bottom characteristics:</b>   |                          |                   |
| Bls boulders   | Co coral                 | gy gray           |
| bk broken  | G gravel                 | h hard            |
| Cy clay  | Gr grass                 | M mud             |
| <b>Miscellaneous:</b>  |                          |                   |
| AUTH authorized  | Obst obstruction         | PD position doubt |
| ED existence doubtful  | PA position approximate  | Rep reported      |
| (1) Wrack, rock, obstruction, or shoal swept clear to the depth indicated.       |                          |                   |
| (2) Rocks that cover and uncover, with heights in feet above datum of soundings. |                          |                   |

**NOTE A**  
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning regulations may be obtained at the Office of the Commandant, 11th Coast Guard District in Alameda, California or at the Office of the District Engineer, Corps of Engineers, Sacramento, California.  
Refer to charted regulation section numbers.



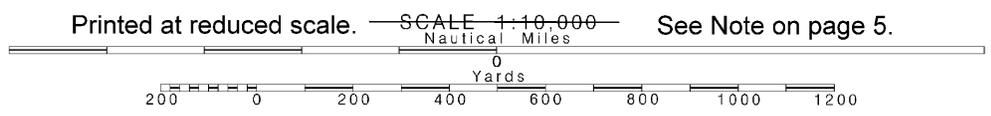
16th Ed., Jan. / 11  
 ■ Corrected through NM Jan. 22/11  
 ■ Corrected through LNM Jan. 11/11  
**18659**

**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](http://nauticalcharts.noaa.gov).

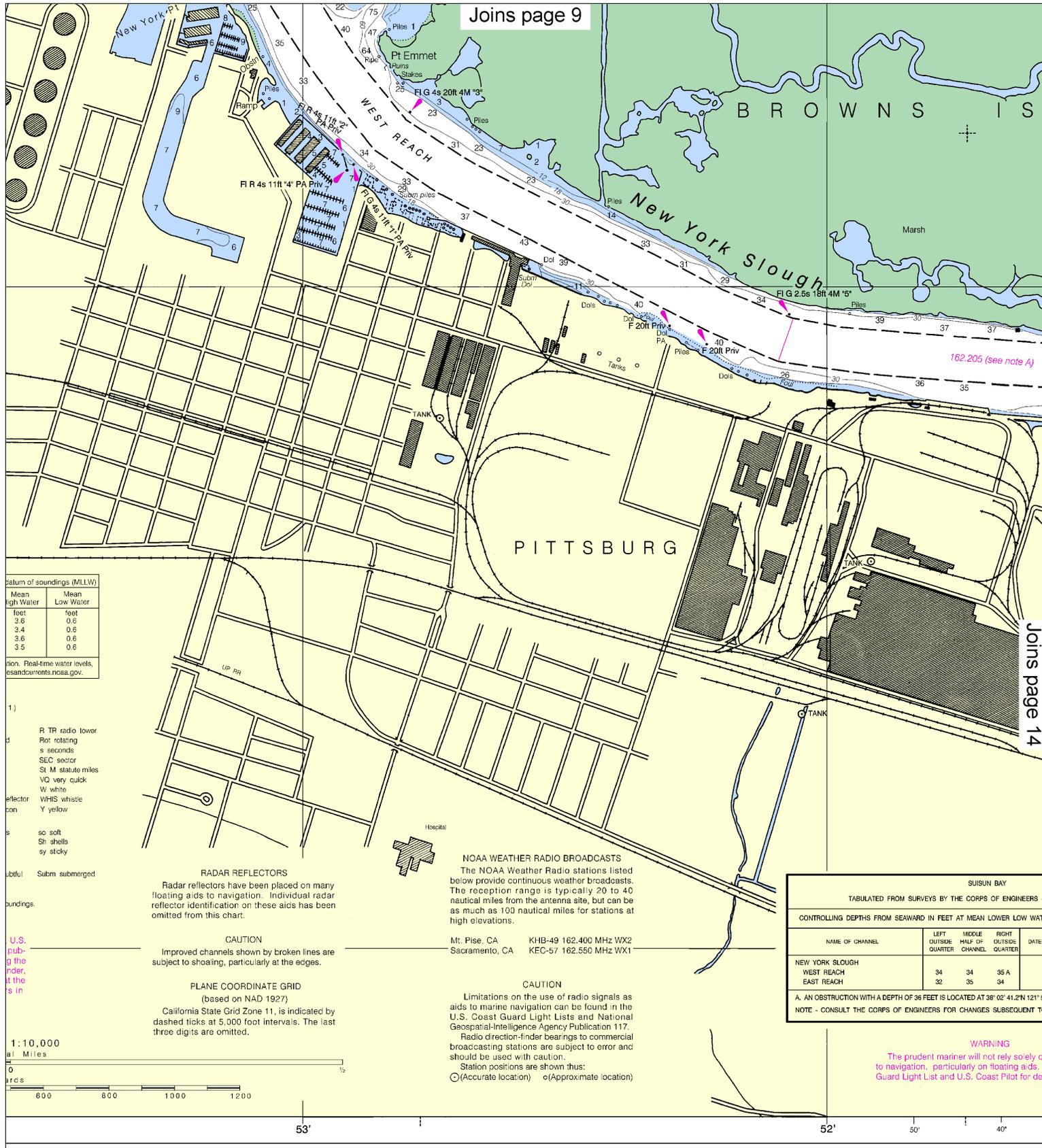
This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.



Note: Chart grid lines are aligned with true north.



See Note on page 5.



datum of soundings (MLLW)

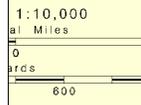
| Mean High Water | Mean Low Water |
|-----------------|----------------|
| foot            | foot           |
| 3.6             | 0.6            |
| 3.4             | 0.6            |
| 3.6             | 0.6            |
| 3.5             | 0.6            |

Real-time water levels, see soundings.noaa.gov.

- 1) R TR radio tower
- Rot rotating
- s seconds
- SEC sector
- St M statute miles
- VO very quick
- W white
- reflector WHIS whistle
- con Y yellow
- so soft
- Sh shells
- sy sticky
- Subm submerged

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

**PLANE COORDINATE GRID**  
(based on NAD 1927)  
California State Grid Zone 11, is indicated by dashed ticks at 5,000 foot intervals. The last three digits are omitted.



U.S. publishing the under the s in

**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.

- Mt. Pise, CA KHB-49 162.400 MHz WX2
- Sacramento, CA KEC-57 162.550 MHz WX1

**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)

| SUISUN BAY  |                      |                        |                       |      |
|---|----------------------|------------------------|-----------------------|------|
| TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS                |                      |                        |                       |      |
| CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER |                      |                        |                       |      |
| NAME OF CHANNEL   | LEFT OUTSIDE QUARTER | MIDDLE HALF OF CHANNEL | RIGHT OUTSIDE QUARTER | DATE |
| NEW YORK SLOUGH   |                      |                        |                       |      |
| WEST REACH  | 34                   | 34                     | 35 A                  |      |
| EAST REACH  | 32                   | 35                     | 34                    |      |

A. AN OBSTRUCTION WITH A DEPTH OF 36 FEET IS LOCATED AT 38° 02' 41.2"N 121° 5'

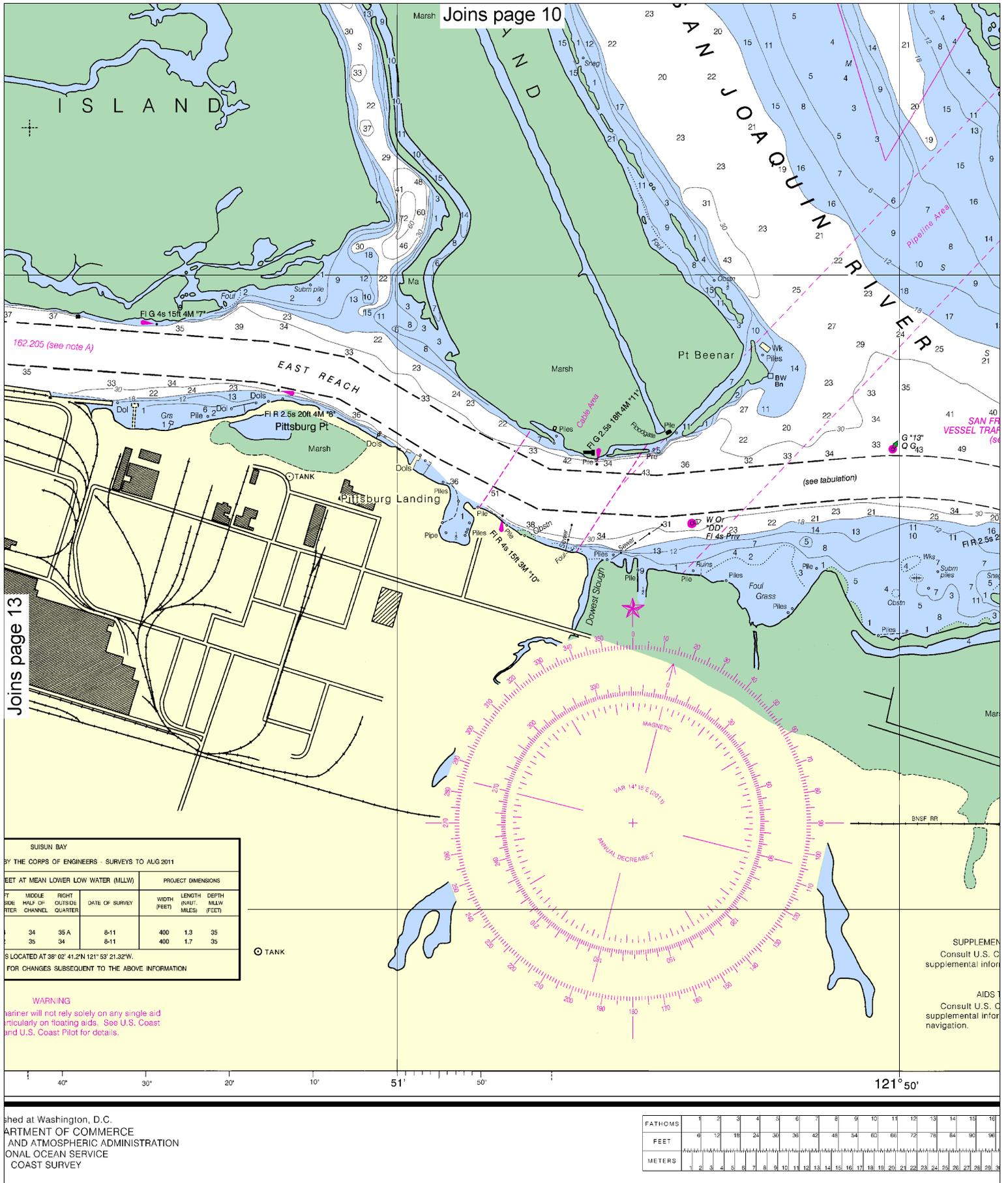
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO

**WARNING**  
The prudent mariner will not rely solely on navigation, particularly on floating aids. Guard Light List and U.S. Coast Pilot for de

ational hts for Ocean

**PRINT-ON-DEMAND CHARTS**  
NOAA and its partner, OceanGrafix, offer this chart updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 2-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at <http://ocsdta.nocd.noaa.gov/idsr/inquiry.aspx>, or OceanGrafix at 1-877-56CHART or <http://www.oceangrafix.com>.

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



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Joins page 13

SUISUN BAY  
 BY THE CORPS OF ENGINEERS - SURVEYS TO AUG 2011

| DEPTH AT MEAN LOWER LOW WATER (MLLW) |                        |                       | PROJECT DIMENSIONS |              |                        |              |
|--------------------------------------|------------------------|-----------------------|--------------------|--------------|------------------------|--------------|
| TIDE GAGE                            | MIDDLE HALF OF CHANNEL | RIGHT SIDE OF CHANNEL | DATE OF SURVEY     | WIDTH (FEET) | LENGTH (STATUTE MILES) | DEPTH (FEET) |
| 34                                   | 35 A                   | 34                    | 8-11               | 400          | 1.3                    | 35           |
| 35                                   | 34                     | 34                    | 8-11               | 400          | 1.7                    | 35           |

LOCATED AT 38° 02' 41.2" N 121° 53' 21.32" W.  
 FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

**WARNING**  
 mariner will not rely solely on any single aid particularly on floating aids. See U.S. Coast and U.S. Coast Pilot for details.

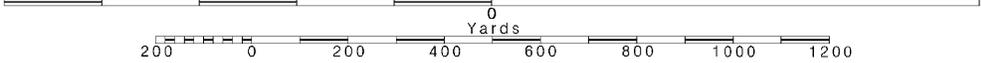
Printed at Washington, D.C.  
 DEPARTMENT OF COMMERCE  
 NAUTICAL AND ATMOSPHERIC ADMINISTRATION  
 NATIONAL OCEANIC AND ATMOSPHERIC SERVICE  
 COAST SURVEY

|         |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|---------|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 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 |

**14**

Note: Chart grid lines are aligned with true north.

Printed at reduced scale. SCALE 1:10,000 See Note on page 5.



SUPPLEMENTAL  
 Consult U.S. Coast and U.S. Coast Pilot for supplemental information.  
 AIDS TO NAVIGATION  
 Consult U.S. Coast and U.S. Coast Pilot for supplemental information.





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>
- Online chart viewer — <http://www.nauticalcharts.noaa.gov/mcd/NOAChartViewer.html>
- 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](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 @nauticalcharts



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.

