H12259

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT

Type of Survey Hydrographic Survey

Field No. N/A

Registry No. H12259

LOCALITY

State Maine

General Locality Eastport

Sublocality Eastern Cobscook Bay and Friar Roads

2010

CHIEF OF PARTY

LTJG Matthew Nardi

LIBRARY & ARCHIVES

DATE

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

HYDROGRAPHIC TITLE SHEET

REGISTRY No

H12259

INSTRUCTIONS – The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

FIELD No: N/A

State **Maine**

General Locality **Eastport**

Sub-Locality **Eastern Cobscook Bay and Friar Roads**

Scale **1:10,000** Date of Survey **06/10/2010 to 10/26/2010**

Instructions dated **05/27/2010, revisions 09/21/2010** Project No. **OPR-A375-NRT5-10**

Vessel **NOAA NRT-5, S3002**

Chief of party **LTJG Matthew Nardi**

Surveyed by **Nick Forfinski, Matt Andring, David McIntire**

Soundings by **Kongsberg Simrad EM 3002 multibeam echosounder**

SAR by **Kurt Mueller** Compilation by **Martha Herzog**

Soundings compiled in **Meters**

REMARKS: **All times are UTC. UTM Zone 19**

The purpose of this survey is to provide contemporary surveys to update National Ocean Service (NOS) nautical charts. All separates are filed with the hydrographic data. Revisions and end notes in red were generated during office processing. The processing branch concurs with all information and recomendations in the DR unless otherwise noted. Page numbering may be interrupted or non sequential.

All pertinent records for this survey, including the Descriptive Report, are archived at the National Geophysical Data Center (NGDC) and can be retrieved via http://www.ngdc.noaa.gov/.

DESCRIPTIVE REPORT

to accompany
HYDROGRAPHIC SURVEY 12259
OPR-A375-NRT5-10
Scale of Survey: 1:10,000
Year of Survey: 2010
NOAA Navigation Response Team 5
Matthew Nardi, Team Lead for Final Processing
Nick Forfinski, Team Lead for Acquisition

A. AREA SURVEYED

This hydrographic survey was conducted in accordance with Hydrographic Survey Project Instructions for project OPR-A375-NRT5-10, H12259, Eastport, Maine. The original instructions are dated May 27, 2010.

This Descriptive Report pertains to an area of 10.94 square nautical miles, around Eastport, Maine from Pleasant Point in the north to the entrance of Cobscook Bay with the US-Canada Border providing the eastern boundary. The assigned registry number for this sheet is H12259, as prescribed in the Project Instructions.

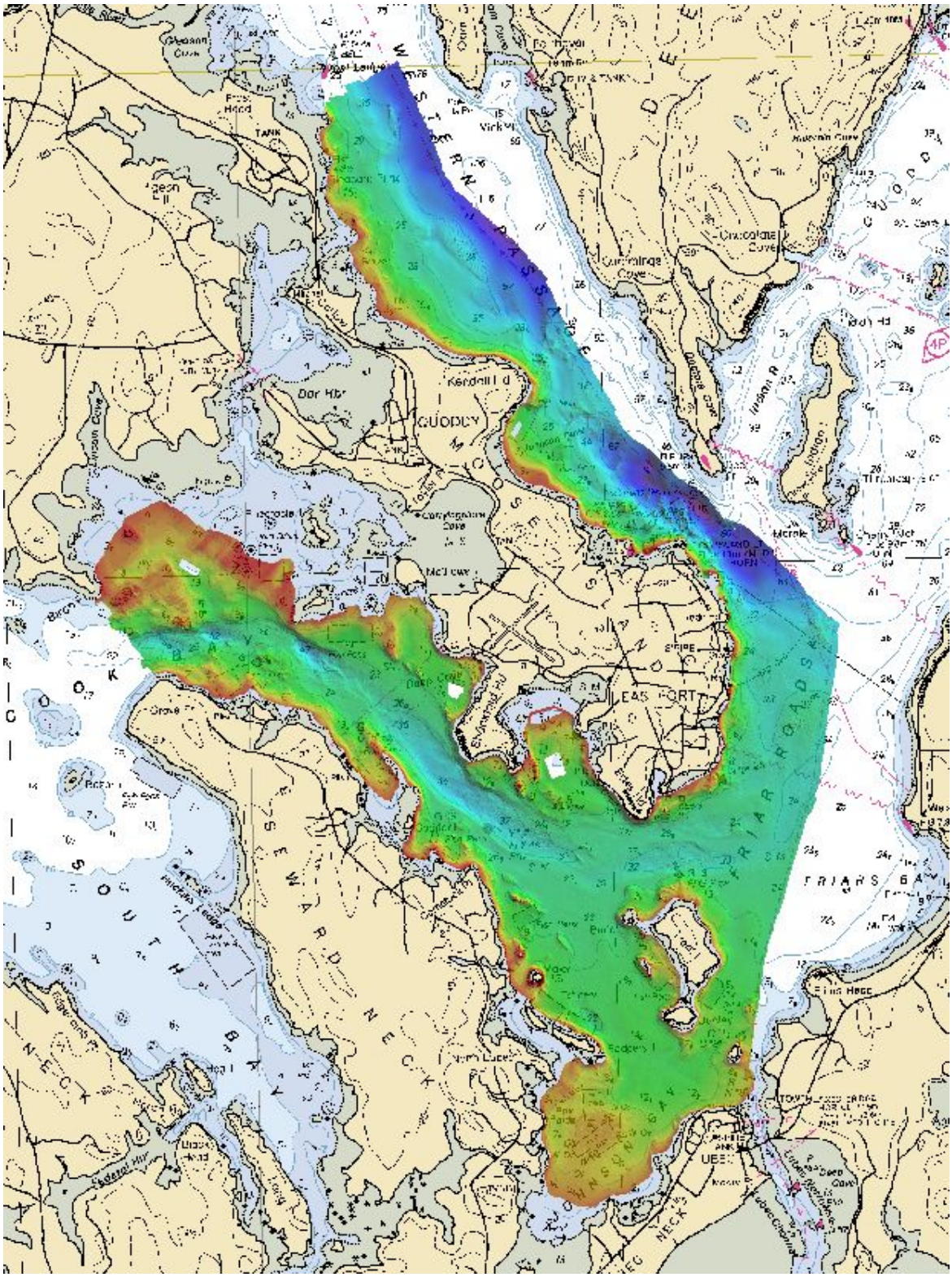
The purposes of the CY 2010 operations in this area were to provide contemporary surveys to update National Oceanic and Atmospheric Administration (NOAA) nautical charts.

For complete survey limits, see figure A-1 on the following page.

Table A-1: Line and area statistics for H12259. Dates of acquisition: June 10, 2010 to October 26, 2010

Linear nautical miles of multi-beam only sounding lines - mainscheme	324.92
Linear nautical miles of single beam only sounding lines - mainscheme	0
Linear nautical miles of side scan sonar only lines - mainscheme	0
Linear nautical miles of any combination of the above techniques	324.92
Linear nautical miles of crosslines	14.75
Linear nautical miles of developments other than mainscheme lines	0
Linear nautical miles of shoreline/nearshore investigation	0
Number of bottom samples collected	16
Total square nautical miles	10.94

Figure A-1: Overview of survey H12259.



B. DATA ACQUISITION AND PROCESSING

B.1 EQUIPMENT

Data were acquired by NOAA NRT-5 S3002. NOAA Survey Vessel S3002 is a 9.8 meter aluminum SeaArk outboard driven vessel with a nominal multibeam transducer draft of 0.6 meters.

NOAA S3002 acquired 100% multibeam coverage in the project area as per the project instructions. Bathymetry data were acquired with a Kongsberg Simrad EM 3002 multibeam echosounder (MBES). Positioning and attitude data were acquired with a POS/MV 320 (version 4) GPS aided inertial navigation system. Further information on the equipment used may be found in the *OPR-A375-NRT5-10 Data Acquisition and Processing Report (DAPR)* submitted with this project.

B.2 QUALITY CONTROL

B.2.1 Multibeam Echosounder Quality Control

Multibeam echosounder data were acquired at 100% coverage for the entire survey area. Sound speed casts were manually entered into the SIS program as an ASVP file, which is a Simrad format created by Velocwin. The information from that cast was applied real time to all multibeam data collected after the cast until a new cast was entered into SIS. Surface sound velocity was provided by a 2nd Odom Digibar and fed directly into the SIS program in real time. There were no systematic faults with the MBES system that adversely effected data integrity. Navigation data were reviewed only when abnormalities were observed in the CARIS computed surfaces. Least depths were taken from the shoalest soundings on prominent features. For a detailed discussion of MBES system calibrations, data acquisition, and data processing refer to this project's DAPR.

During final processing, it was revealed that the dynamic draft values for 2008 were initially applied to all data in H12259. Dynamic draft values were not available for 2010 due to the survey schedule, as detailed in the *OPR-A375-NRT5-10 DAPR*. When it was recognized that 2009 values for dynamic draft were available, NRT 5 personnel applied the new values to all data. Although the actual configuration aboard vessel S3002 did not change between 2008 and 2009, the measured values during the respective Hydrographic Survey Readiness Reviews (HSRR) were different, as detailed in Table 2. The total effect on individual soundings did not exceed 10 cm. The H12259 Danger to Navigation report, contained in Appendix I, was produced with data that had 2008 dynamic draft values applied. As a result, the feature that was submitted must be corrected with the appropriate bathymetry derived depths. The small variance and the change to 6 cm deeper depths on this feature did not necessitate an additional DToN report.[1]

Table B-1: Dynamic Draft from 2008 and 2009

	2008		2009	
RPM	Speed(kts)	Dynamic Draft (m)	Speed(kts)	Dynamic Draft(m)
Idle	0.00	0.00	0.00	0.00
900 (1 engine)	2.63	-0.01	2.07	-0.05
900 (both engines)	3.21	-0.03	3.40	-0.04
2000 (Both)	6.08	-0.04	6.50	-0.04
2200 (Both)	6.96	-0.05	6.55	-0.03

B.2.2 Multibeam coverage

Several coverage gaps of more than three adjacent nodes remained in the finalized Bathymetry Associated with Statistical Error (BASE) surfaces for H12259. The holidays are due to dangerous conditions, seasonal obstructions, and strong tidal currents that prevented the field party from safely acquiring data. Figures B-2, B-3, and B-4 below depict representative holidays seen in the finalized BASE surfaces. For all instances of gaps in coverage, the Hydrographer examined backscatter data to detect any shoaling trends or features in the area and none were observed.[2]

Several areas contained numerous mooring chains or lines in the water that appear in the sonar data. In these cases the data representing the chains or lines were rejected and the backscatter of the area was examined for shoaling trends.[3] Figure B-5 below depicts the typical visible signature of one such mooring chain.

Figure B-1: Holidays in vicinity of Clark Ledge. Hazardous conditions and strong tidal currents prevented acquisition of the 4m curve inshore of Clark Ledge.

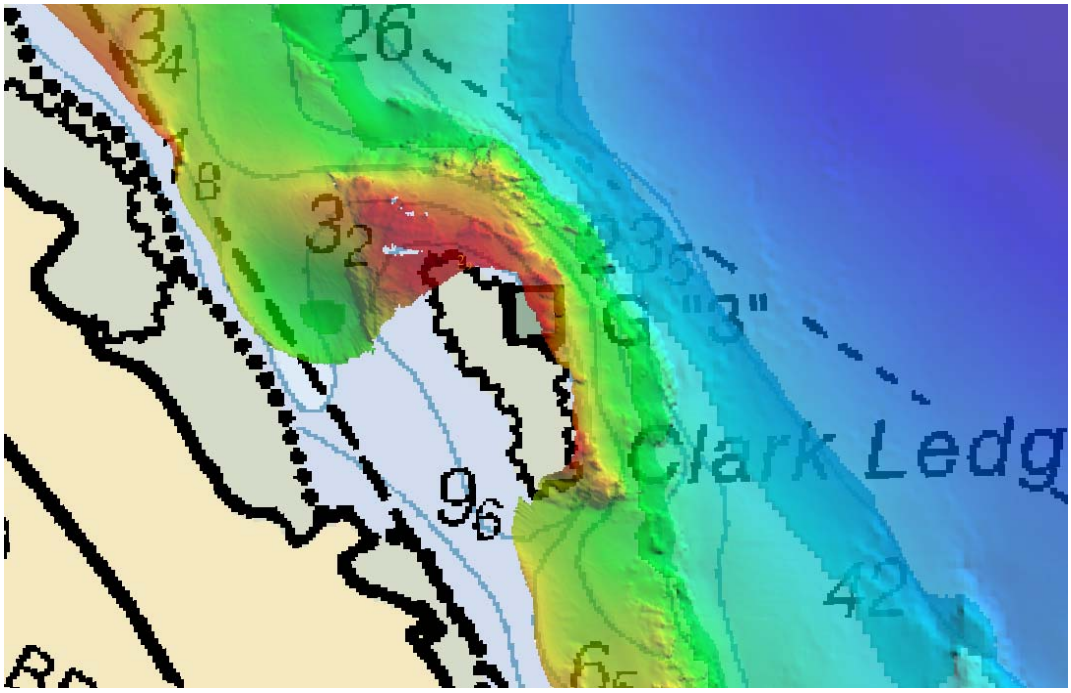


Figure B-2: Holiday in Broad Cove. The holiday is representative of several holidays due to fish pen obstructions.

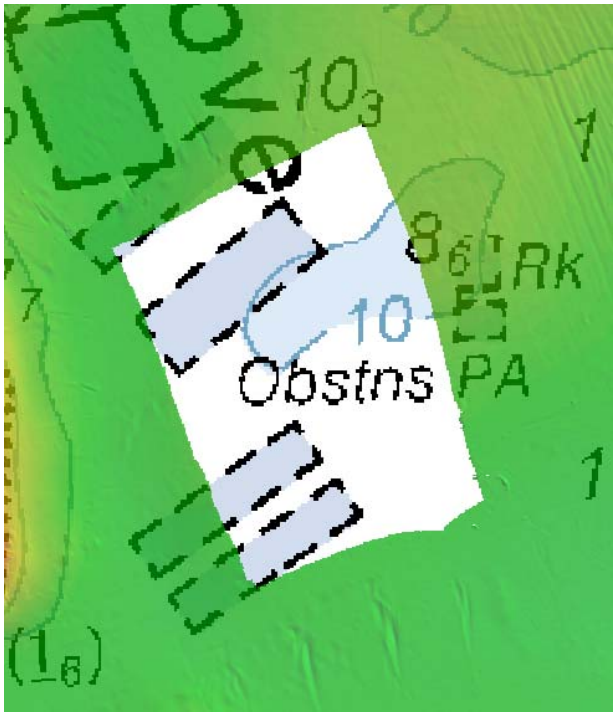


Figure B-3: Coverage Holiday in Broad Cove. Tidal conditions allowed an initial line further inshore than the 4m curve.

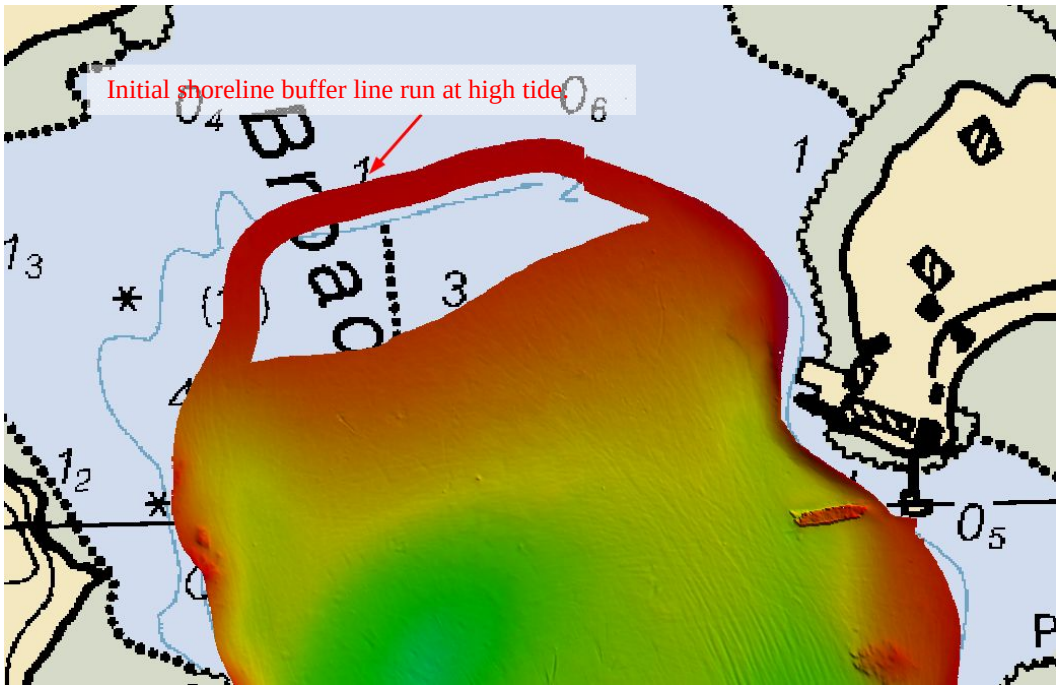


Figure B-4: Two holidays in southwestern Johnson Bay.

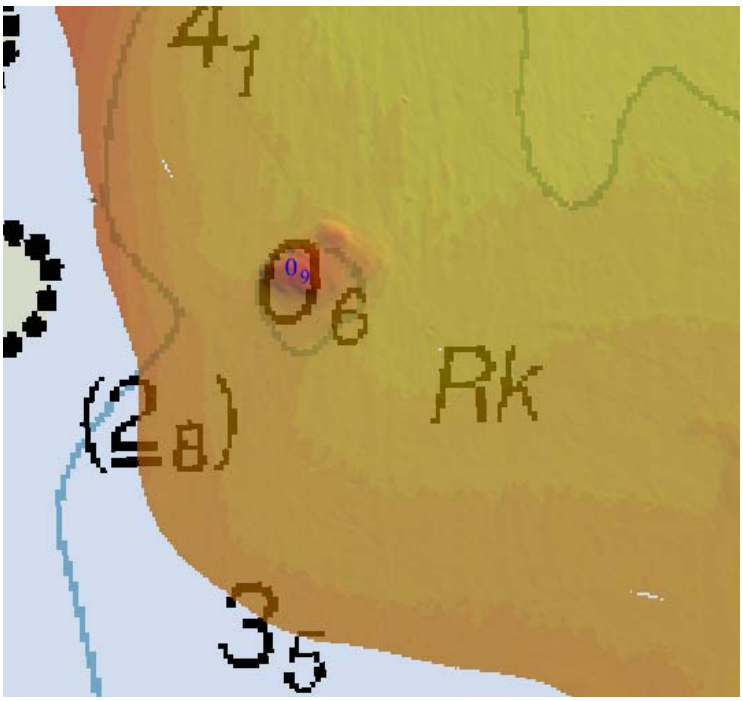
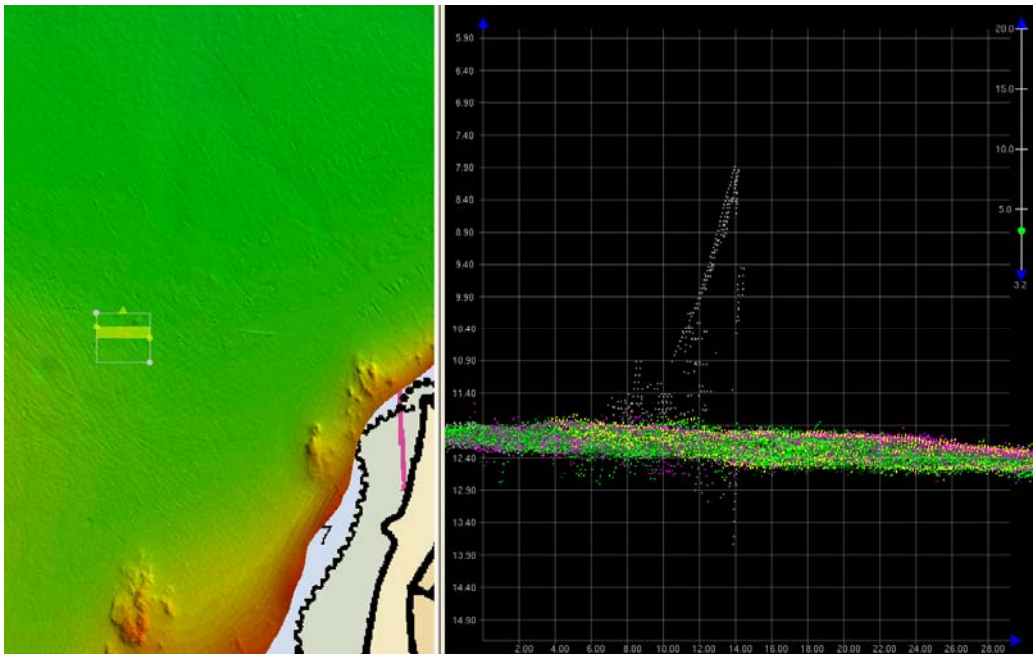


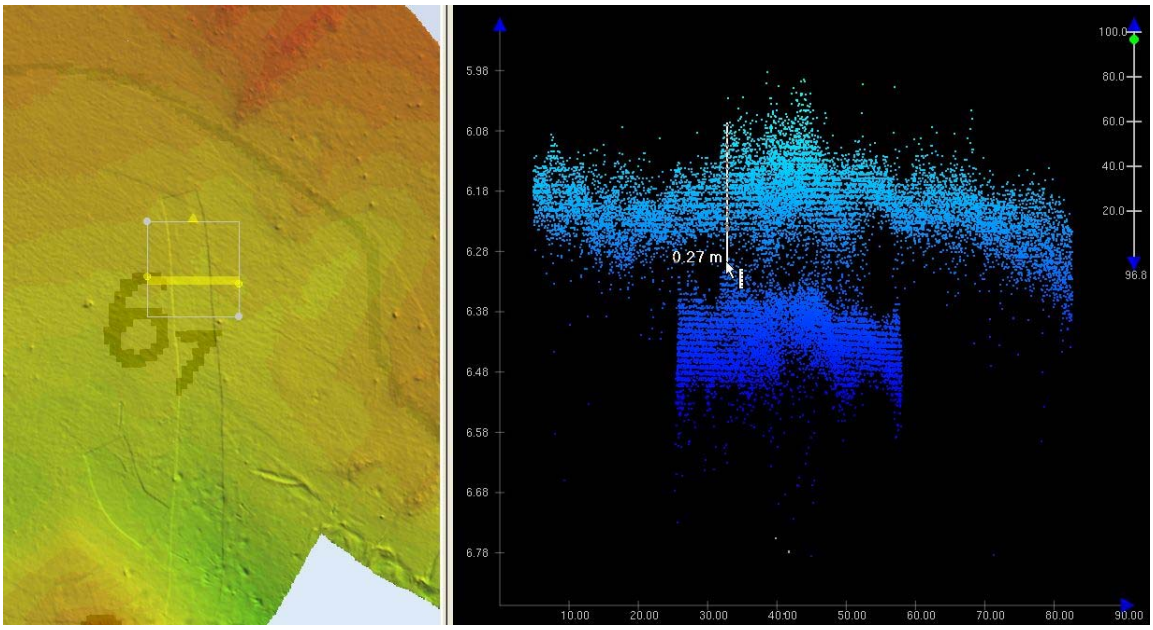
Figure B-5: Rejected soundings from a chain in Johnson Bay.



B.2.2 Tidal Artifacts

Erroneous modeling of the extreme tidal range of the survey area (MHW is 5.729m above MLLW) resulted in several tidal artifacts evident in the data. Figure B-6 below depicts an area where these errors were most evident. In the most extreme cases, as in figure B-6, the maximum vertical offsets were up to 0.5 meters.[4] To eliminate these tidal data artifacts for future surveys in the Cobscook Bay area, additional subordinate tide gauges and TCARI tidal zoning grids should be considered.

Figure B-6: Tide artifact in entrance to Cobscook Bay. Minor tide artifacts are noticeable in the surface. All artifacts inspected fall within specifications. This particular artifact has 0.27 meters of vertical offset.



B.2.2 Total Propagated Uncertainty

Total Propagated Uncertainty (TPU) parameters for sound speed and tide data for H12259 are shown in table B-2. Sound speed TPU values were used in accordance with HSTP guidelines regarding frequency of surface and water column sound speed measurements. The TPU parameters pertaining to the vessel and the related survey equipment are contained in the HVF.

Table B-2. Total propagated uncertainty parameters as applied in Caris.

	Measured	Zoning (tides) / Surface (Sound Speed)
Tide Values	0.01 m	0.11 m
Sound Speed Values	0.5 m/s	0.5 m/s

B.2.3 Fieldsheets and CUBE Surfaces

The survey area is addressed with three fieldsheets. Fieldsheet H12259 covers the entire survey area. Fieldsheets H12259_North and H12259_South cover the north and south halves of the survey area respectively. The north and south fieldsheets were created due to Caris crashing when trying to finalize a 1m surface that covered the whole survey area.

Combined Uncertainty and Bathymetry Estimator (CUBE) surfaces were created for this project at 1, 2, 4, and 8 meter resolutions. Despite collecting data above the 0 meter curve in a small number of areas, finalized depth ranges were limited to positive values due to a limitation of the

Caris software (Reference Caris HelpDesk request #01100287). When addressing features in the H-Cell process it is recommended to use the un-finalized 1 m surfaces for 0 m contour creation.[5] The finalized surface depth ranges have been expanded from those required in the Hydrographic Survey Specifications and Delevierables (HSSD) section 5.2.2.2 in order to ensure no gaps in coverage exist between depth grids per HSSD section 5.2.1.2. Table B-3 lists all surfaces submitted with this survey.

Table B-3: H12259 Bathymetry surfaces.

H12259 Bathymetry Surfaces				
Fieldsheet	Surface/Mosaic Name	Grid Type	Resolution	Depth Range
H12259_North	H12259_N_1m	CUBE	1m	N/A
H12259_North	H12259_N_1m_Final_0-25	CUBE	1m	0m to 25m
H12259_South	H12259_S_1m	CUBE	1m	N/A
H12259_South	H12259_S_1m_Final_0-25	CUBE	1m	0m to 25m
H12259	H12259_2m	CUBE	2m	N/A
H12259	H12259_4m	CUBE	4m	N/A
H12259	H12259_8m	CUBE	8m	N/A
H12259	H12259_2m_Final_18-50	CUBE	2m	18m to 50m
H12259	H12259_4m_Final_40-100	CUBE	4m	40m to 100m
H12259	H12259_8m_Final_80-120	CUBE	8m	80m to 120m
H12259_Combined	H12259_Combined_8m	CUBE	8m	N/A

B.2.4 Crosslines

For this survey 14.75 nautical miles of crosslines (4.3% of mainscheme lines) were acquired. A visual examination of approximately 20% of common areas showed general agreement between crosslines and mainscheme lines of 0.1 to 0.2 meters and never exceeding 0.5 meters. For a list of all crosslines acquired for this project, please refer to the processing logs located in the separates section of the DR submission package.

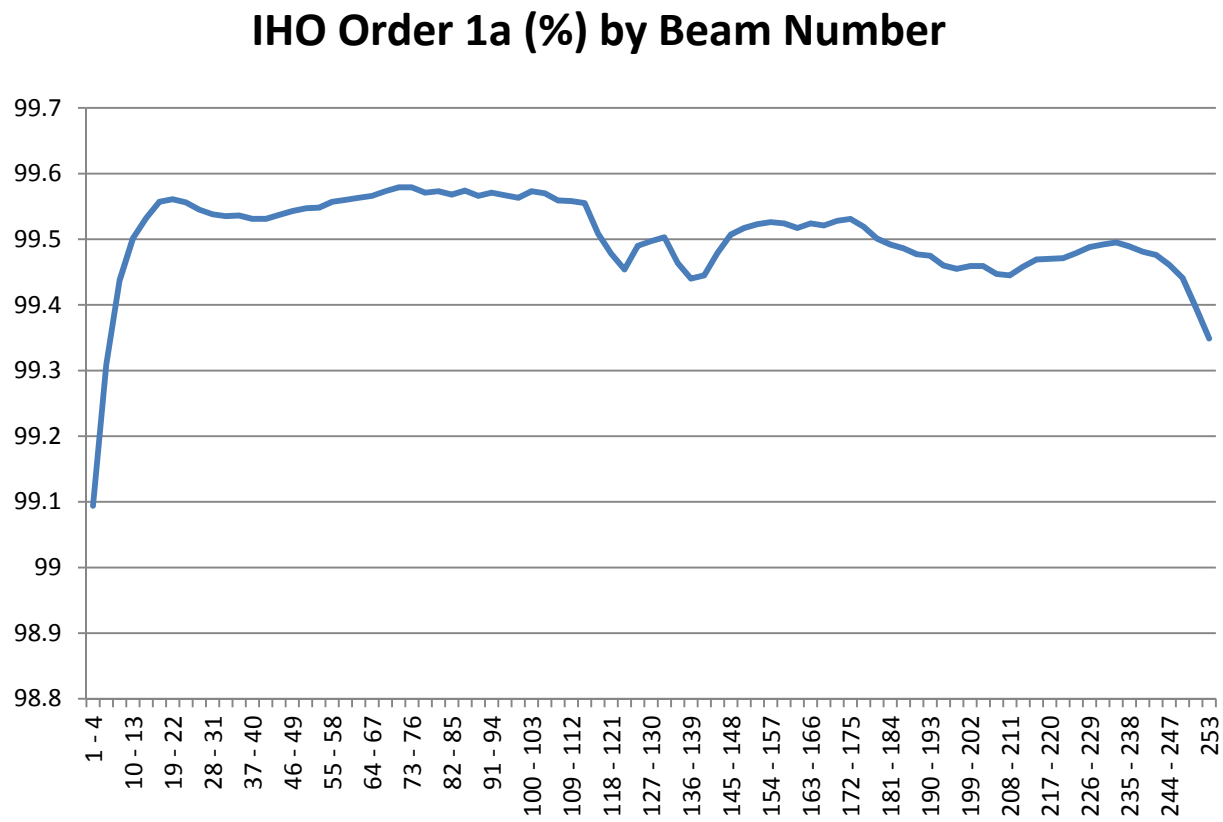
B.2.5 Junctions

Survey H12259 junctions with contemporary surveys H12258 and H12270 (Sheets B and D of the same project).[6] Visual examination of the junction with H12258 showed agreement between bathymetry data within 0.3 m. Visual examination of the junction with H12270 showed agreement between bathymetry data within 0.2 m inshore and 0.5 m in depths greater than 50 m.

B.3 CORRECTIONS TO ECHO SOUNDINGS

All methods or instruments used were as described in the project DAPR.

Figure B-7: Caris QC report, IHO Order 1 vs. Beam Number. Greater than 99% IHO Order 1a compliance was achieved across the entire swath.



B.4 DATA PROCESSING

Data processing procedures for survey H12259 conform to those detailed in the DAPR. Data were processed using CARIS HIPS & SIPS v7.0, Service Pack 2, and Hotfix 6. Additional processing details regarding TPU and CUBE surfaces and parameters utilized, along with any the deviations from the processing procedures outlined in the DAPR are discussed in section B.2.3.

The BASE surfaces delivered with H12259 and their associated resolutions are listed in Table B-2. All field sheet extents were adjusted using the *Base 16 Calculator* tool to ensure coincident nodes among all bathymetric surfaces regardless of the fieldsheet in which they are contained given the standard surface resolutions of one, two, four, eight, and sixteen meters.[7] The NOAA CUBE parameters mandated in HSSD were used for the creation of all CUBE surfaces in Survey H12259.

The surfaces have been reviewed where noisy data, or 'fliers' are incorporated into the gridded solution causing the surface to be shoaler than the true seafloor. Where these spurious soundings cause the gridded surface to be shoaler than the reliably measured seabed by greater than the

maximum allowable TVU at that depth, the noisy data have been rejected and the surface recomputed.

C. VERTICAL AND HORIZONTAL CONTROL

C.1 VERTICAL CONTROL

The tidal datum for this project is Mean Lower Low Water (MLLW).[8] The operating National Water Level Observation Network (NWLON) station at Eastport, ME (841-0140) served as datum control for the survey area including determination at each subordinate station. The operating stations at Pettegrove, Point, Dochet Island, ME (841-0834) and Gravelly Point, ME (841-0864) provided residuals for this project, though Gravelly Point data was only available after June 18, 2010. A Request for Approved Tides was sent to N/OPS1 on November 3, 2010 (Appendix IV). Verified water levels from the N/OPS1 CO-OPS website were downloaded and applied to all sounding data via a tidal zoning model provided by CO-OPS.[9]

C.2 HORIZONTAL CONTROL

The horizontal datum used for this survey is the North American Datum of 1983 (NAD 83), projected using UTM zone 19.

Sounding positional control was determined using the Global Positioning System (GPS) corrected by U.S. Coast Guard differential GPS (DGPS) beacon stations. The DGPS beacon used for this survey is located in Penobscot, ME frequency 290 kHz. Additionally data from a Continuously Operating Reference Station (CORS) located in Eastport, Maine (EPRT) was used to post-process position data when available. Due to POS data-logging issues not all bathymetry was corrected with Smoothed Best Estimate of Trajectory (SBET) files. Information on which lines were processed using PPK techniques can be found in: …\H12259\Descriptive_Report\Separates\IAcquisition_&_Processing_Logs\H12259_POSPAC_Precessing_Log.xlsx. No horizontal control stations were established for this survey.

D. RESULTS AND RECOMMENDATIONS

D.1 CHART COMPARISON

Table D-1: Charts affected by survey H12259.

Chart Number	*Edition*	*Edition Date*	*Local Notice to Mariners*	*Scale*
13396	5th	05/01/2010	04/16/2011	1:20000, 1:5000 inset
13394	3rd	07/01/2002	04/16/2011	1:50000
13398	3rd	03/02/2002	04/16/2011	1:50000

ENC Cell Name
US5ME55M
US5ME56M

D.1.1 General Agreement with Charted Soundings

Sounding data generally agreed with charted depths to within 2 meters with few notable exceptions. The 0, 2, 5, 10, 20, 30, and 50 meter contours are represented by color changes in the following figures. Navigationally significant differences from charted depths are addressed in Appendix II of this report.[10]

Figure D-1: West of Spectacle Island, no contour marks an area 0 to 2 m in depth. (Left) South of Shackford Head is a charted 8.5 m sounding in an area outside the surveyed 10 m contour. (Right)

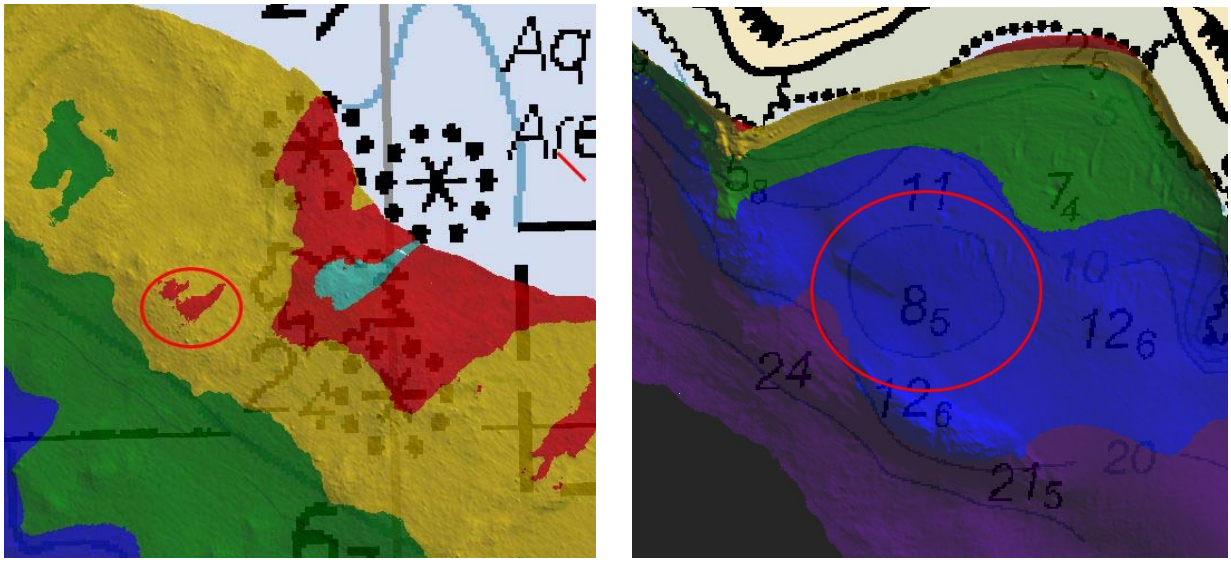
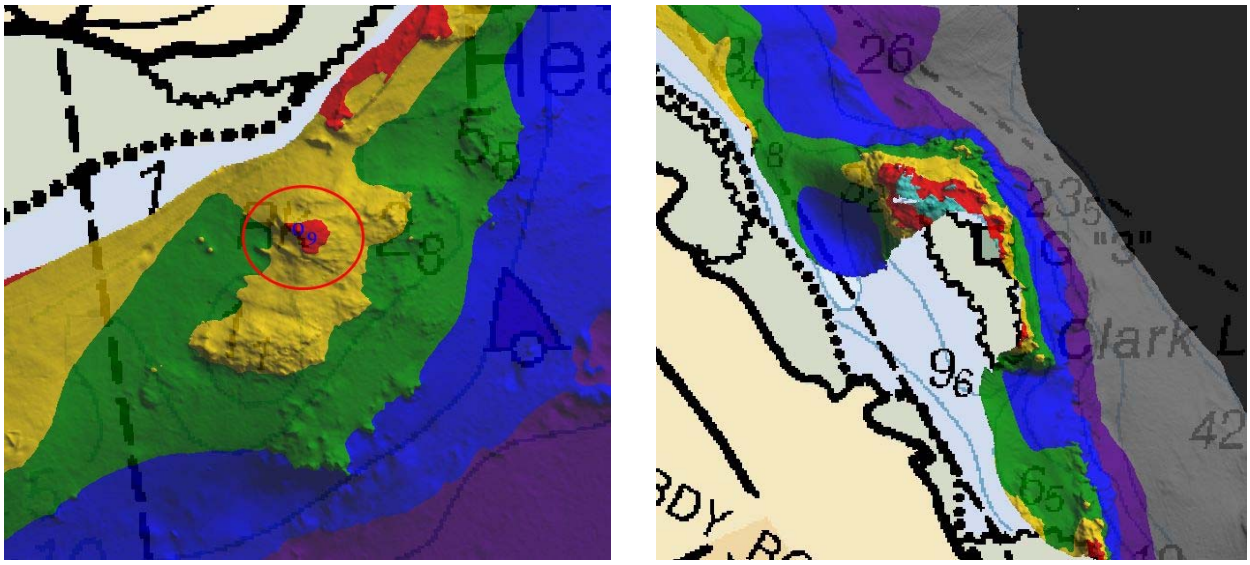


Figure D-2: Southwest of Buckman Head the shoal depth and contours of a rocky area are mischarted. The rock is addressed in Appendix II Survey Features Report. (Left) Clark Ledge is charted southeast of its true position based on bathymetry. (Right)



D.1.2 AWOIS Items and Significant Contacts

There were sixteen AWOIS items within the survey limits of H12259. Not all AWOIS items were able to be addressed due to accessibility.[11] The Hydrographer's remarks and recommendations can be found in H12259.pss and the Survey Features Report (Appendix II).

D.1.3 Dangers to Navigation

One DToN was submitted for this project. The DToN report can be found in Appendix I and was reported to the Marine Chart Division on May 06, 2011. Due to the dynamic draft issues discussed in section B.2.1.1 the feature will require additional correction as per the digital data and the information in H12257.pss.[12]

D.1.4 Charted Features

Changes to charted items are listed in Appendix II of this report as well as in the PSS. All charted items not specifically addressed in Appendix II are recommended to be retained as charted by the Hydrographer.

Many charted underwater rocks are recommended to be removed from the chart due to the general rocky nature of the area. The 'Rk' designation often did not give useful information beyond that which the soundings and contours themselves gave.

Several inshore areas of H12259 have charted fish pens that were not observed by the field party during data acquisition. Although these charted fish pens were not observed, seasonal removal and reinstallation of the fish pens is common in the area, as per Maine state law. In areas where the fish pen was not observed, the Hydrographer recommends that the fish pen be retained as charted, as detailed in H12259.pss. In areas where the fish pen was observed in a different location, the hydrographer has redigitized the new location of the pen and recommends they be charted as depicted in the file H12259_Area_Features.000.[13] Hypack ENC Editor was utilized for the creation of these specific area features due to the inability to properly depict these features in Pydro. See Appendix V for correspondence related to the practice of leaving fish pens fallow every other season.[14]

D.1.5 Charting Recommendations

Hydrographer recommendations for discrete items are included in the Survey Features Report (Appendix II) as well as in H12259.pss.[15] Survey H12259 is complete and adequate to supersede prior surveys and charted depths in their common areas.

D.2 ADDITIONAL RESULTS

D.2.1 Aids to Navigation

All AToNs within the survey limits of H12259 were visually verified and found to be serving their intended purpose. See Appendix V, section V.3.[16]

D.2.2 Bridges and Overhead Cables

There are no bridges or overhead cables in the survey area and none were observed in the field.

D.2.3 Submarine Cables and Pipelines

There is a charted cable area between Seward Neck and Deep Cove and another charted cable SE of Eastport. The digital data were examined and no navigational hazards were found in the

cable area. Several sections of the cable area are above the 4 m contour and were not surveyed. The Hydrographer recommends retaining the cable area as charted. There were no charted pipelines in the survey area and none were detected in the digital data.

D.2.4 Bottom Samples

16 bottom samples were collected during the survey.[17] Details and photos can be found in the Survey Features Report (Appendix II) and in H12259.pss.

E. APPROVAL SHEET

OPR-A375-NRT5-10
Eastport
Maine

Friar Roads and East Cobscook Bay
Survey Registry No. H12259

Field operations for this survey were conducted under my daily supervision with frequent checks of progress and adequacy. All fieldsheets, bathymetry models, this Descriptive Report, and all accompanying records and data are approved.

Submitted in association with this descriptive report has been a series of reports and data:

- 2010 Data Acquisition and Processing Report (submitted with this report)
- 2010 HSRR Memo (submitted with this report)
- Tides and Water Levels Package for OPR-A375-NRT5-10 (submitted 11/03/2010 under separate cover)
- Coast Pilot Report for OPR-A375-NRT5-10 (submitted 4/25/2011 under separate cover)

This survey is adequate to supersede all prior surveys in common areas, and for application to the relevant NOS nautical charts.

Respectfully,

Matt Andring
2011.05.17 15:42:55
-04'00'

Matt Andring / NOAA PST
NRT-5

Matthew Nardi
I have reviewed this document
2011.05.17 18:28:39 -04'00'

Matthew Nardi, LTJG
Team Lead NRT-5

Revisions Compiled During Office Processing and Certification

[1] All data has been corrected with the proper draft value. The DTON Report depicts the pre-corrected draft value. The correct values are represented in the chart update product. The data is adequate to supersede charted data.
[2] The data is adequate to supersede charted data.
[3] The data is adequate to supersede charted data.
[4] That data is within specifications and is adequate to supersede charted data.
[5] Survey H12259 and chart 13396 encompass two tidal datums. H12259_8m_Combined_Office was used for cartographic compilation of the Mean Lower Low Water area. H12259_1m_LLWLT was used for cartographic compilation of the Lower Low Water Large Tide area.
[6] Common junctions were made with H12258 and H12270 during compilation.
[7] No 16-meter surfaces were necessary for the survey depth range nor were any submitted with this survey.
[8] Survey H12259 and chart 13396 encompass two tidal datums Mean Lower Low Water for the majority of the survey and Lower Low Water Large Tide in the vicinity of Lubec Channel and south of Quoddy Narrows near Popes Folly. The data used for compilation were reduced to the appropriate tidal datum for each area.
[9] Tides notes for both MLLW and LLWLT are appended to this report.
[10] All significant features have been addressed in the chart update product.
[11] The AWOIS report is appended to this report. The two AWOIS items that were not addressed because of vessel accessibility are recommended to be retained. The other 14 AWOIS items are addressed with recommendations in the chart update product.
[12] The DTON Report is appended to this report. The DTON with corrected depth is included in the chart update product.
[13] The fish pens are included in the chart update product.
[14] The correspondence is appended to this report.
[15] Discrete items are addressed in H12259_CS.000.
[16] Four private ATONs were imported into the chart update product to be retained.
[17] Sixteen surveyed bottom samples as well as four charted bottom types to be retained are included in the chart update product. Chart per H12259_CS.000.

H12259 DToN Report

Registry Number: H12259

State: Maine

Locality: Eastport, ME

Sub-locality: Eastern Cobscook Bay and Friar Roads

Project Number: OPR-A375-NRT5-10

Survey Dates: 20100610 - 20101026

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
13396	5th	05/01/2010	1:20,000 (13396_1)	USCG LNM: 5/4/2010 (4/5/2011) CHS NTM: 11/26/2010 (11/26/2010) NGA NTM: 3/29/2008 (4/16/2011)
13394	3rd	07/01/2002	1:50,000 (13394_1)	USCG LNM: 03/02/2010 (04/13/2010) CHS NTM: 07/31/2009 (03/26/2010) NGA NTM: 03/29/2008 (04/24/2010)
13398	3rd	03/02/2002	1:50,000 (13398_1)	[L]NTM: ?
13003	49th	04/01/2007	1:1,200,000 (13003_1)	[L]NTM: ?

* Correction(s) - *source: last correction applied (last correction reviewed--"cleared date")*

Features

No.	Feature Type	Survey Depth	Survey Latitude	Survey Longitude
1.1	Rock	1.73 m	44° 57' 41.6" N	067° 02' 10.9" W

1 - Danger To Navigation

1.1) Profile/Beam - 6695/100 from h12259 / nrt5_s3002_em3002_mbes / 2010-162 / 000_1402

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 57' 41.6" N, 067° 02' 10.9" W
Least Depth:	1.73 m (= 5.69 ft = 0.948 fm = 0 fm 5.69 ft)
TPU (±1.96σ):	**THU (TPEh)** ±1.967 m ; **TVU (TPEv)** ±0.273 m
Timestamp:	2010-162.14:17:48.333 (06/11/2010)
Survey Line:	h12259 / nrt5_s3002_em3002_mbes / 2010-162 / 000_1402
Profile/Beam:	6695/100
Charts Affected:	13396_1, 13394_1, 13398_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h12259/nrt5_s3002_em3002_mbes/2010-162/000_1402	6695/100	0.00	000.0	Primary

Hydrographer Recommendations

Recommend charting underwater rock. Area covered with 100% multibeam. Final tides have been applied.

Cartographically-Rounded Depth (Affected Charts):

1fm (13003_1)

1.7m (13396_1, 13394_1, 13398_1)

S-57 Data

Geo object 1:	Underwater rock / awash rock (UWTROC)
Attributes:	SORDAT - 20101026
	SORIND - US,US,nsurf,H12259
	TECSOU - 3:found by multi-beam
	VALSOU - 1.734 m

WATLEV - 3:always under water/submerged

Feature Images

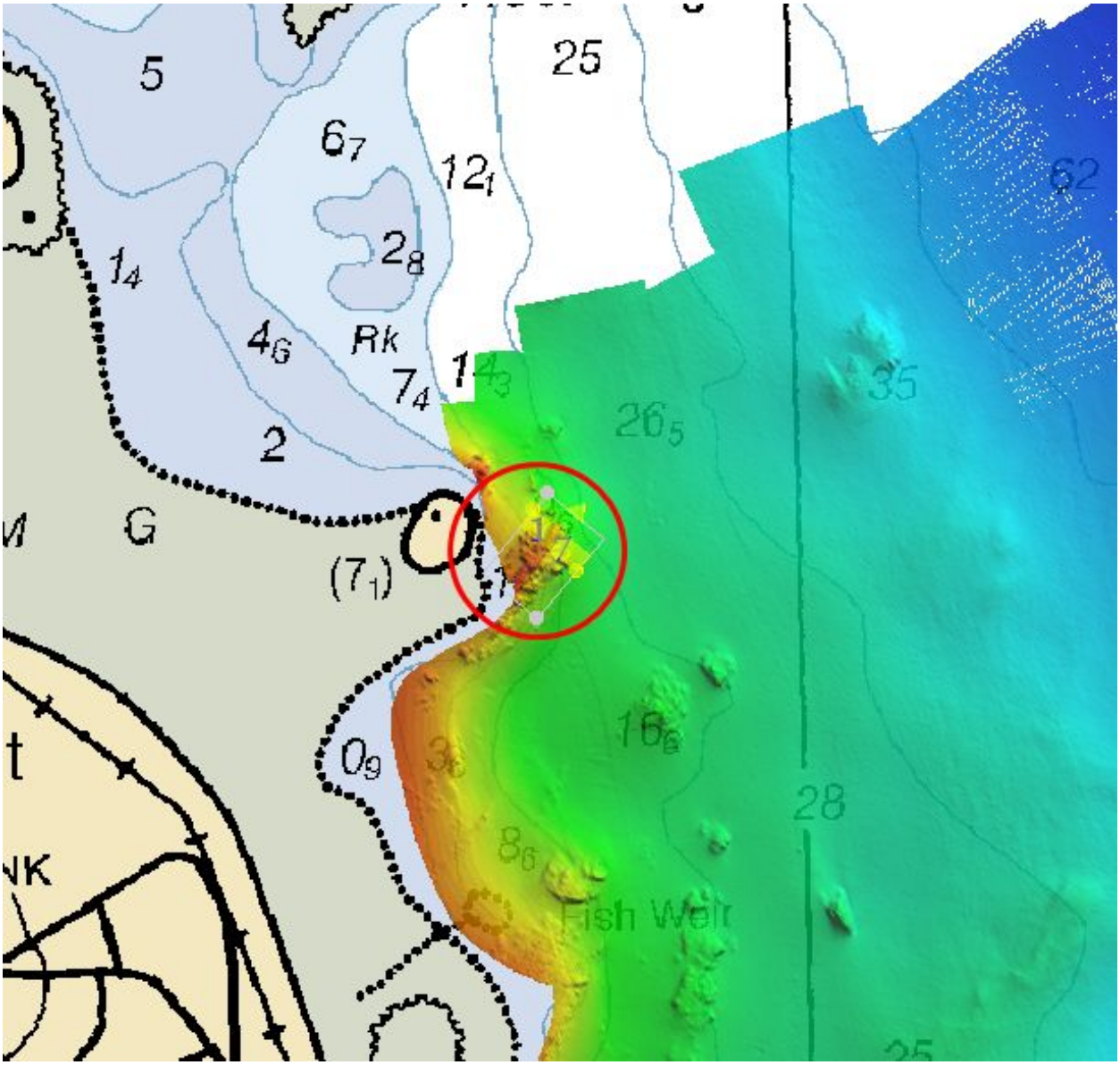


Figure 1.1.1

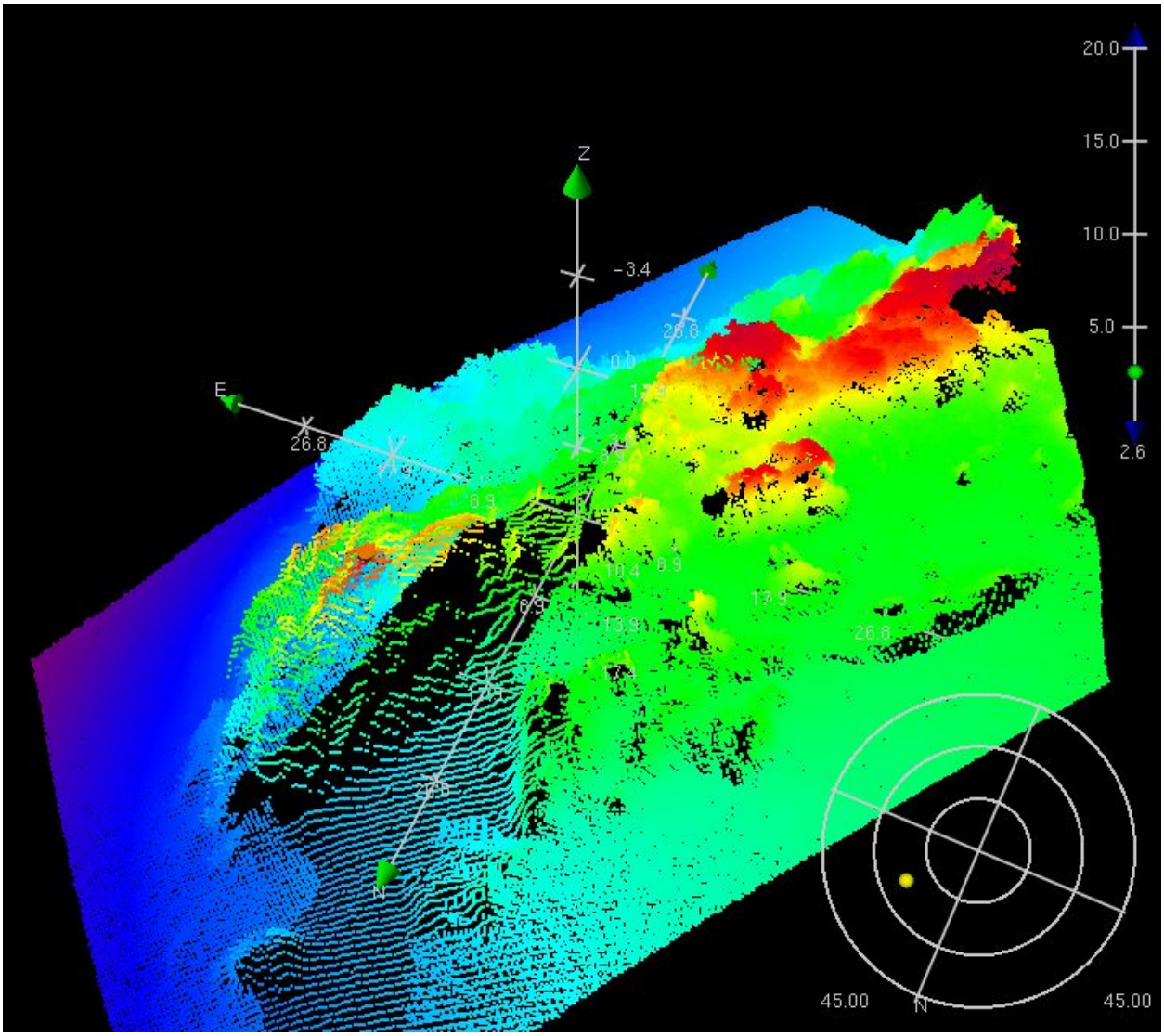


Figure 1.1.2

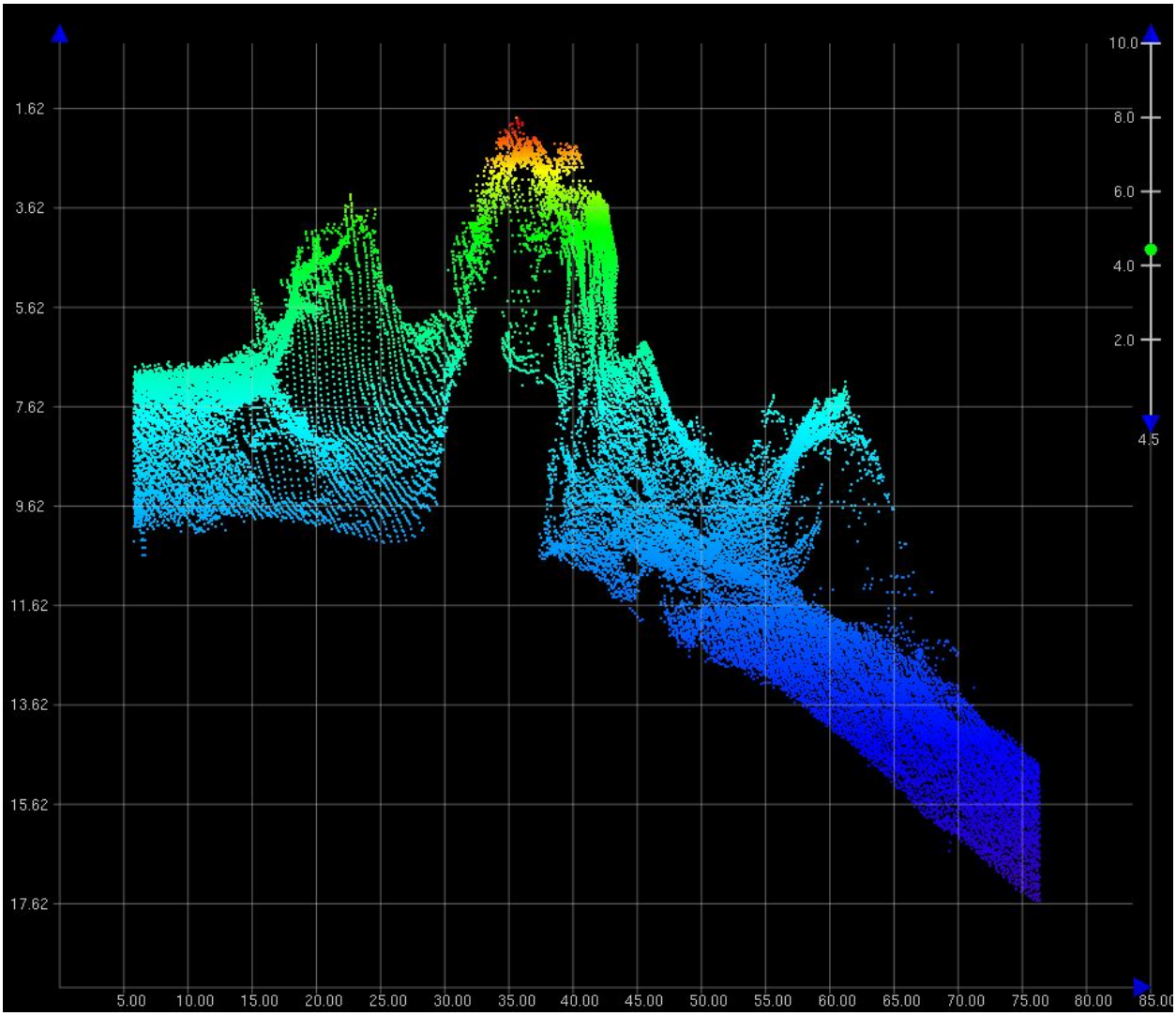

1.62
3.62
5.62
7.62
9.62
11.62
13.62
15.62
17.62
5.00
10.00
15.00
20.00
25.00
30.00
35.00
40.00
45.00
50.00
55.00
60.00
65.00
70.00
75.00
80.00
85.00
10.0
8.0
6.0
4.0
2.0
4.5

Figure 1.1.3

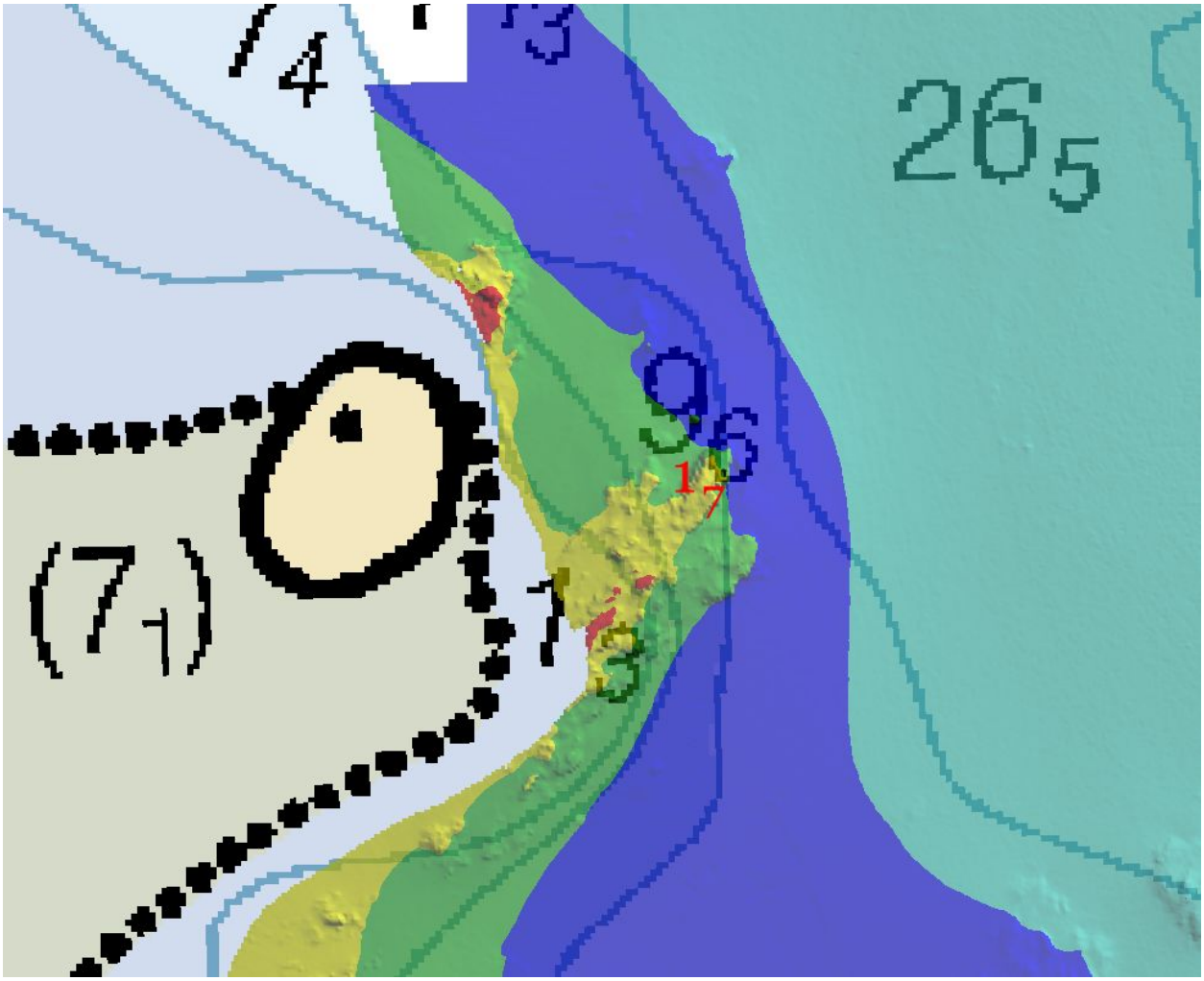


Figure 1.1.4

1.1) AWOIS #781 - UNKNOWN

No Primary Survey Feature for this AWOIS Item

Search Position: 44° 53' 52.3" N, 066° 58' 44.9" W

Historical Depth: [None]

Search Radius: 0

Search Technique: [None]

Technique Notes: [None]

History Notes:

00781

HISTORY

H4031WD/18--1:10,000; 47 FOOT SOUNDING OBTAINED ON A HANG, LEAD LINE. "WRECKAGE" NOTATION FROM UNKNOWN SOURCE BUT MAY HAVE BEEN FORM LOCAL INFORMATION.

H9037/68--(BP75361); RECONNAISSANCE SURVEY, 1:2,500. WRECK NOT FOUND. RETAINED AS CHARTED IN LAT. 44-53-52.0N, LONG. 66-58-45.0W.

Survey Summary

Charts Affected: 13396_1, 13394_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 781	0.00	000.0	Primary

Hydrographer Recommendations

Recommend AWOIS item for removal from database. Covered with 100% multibeam.

S-57 Data

[None]

Office note: concur.

Feature Images

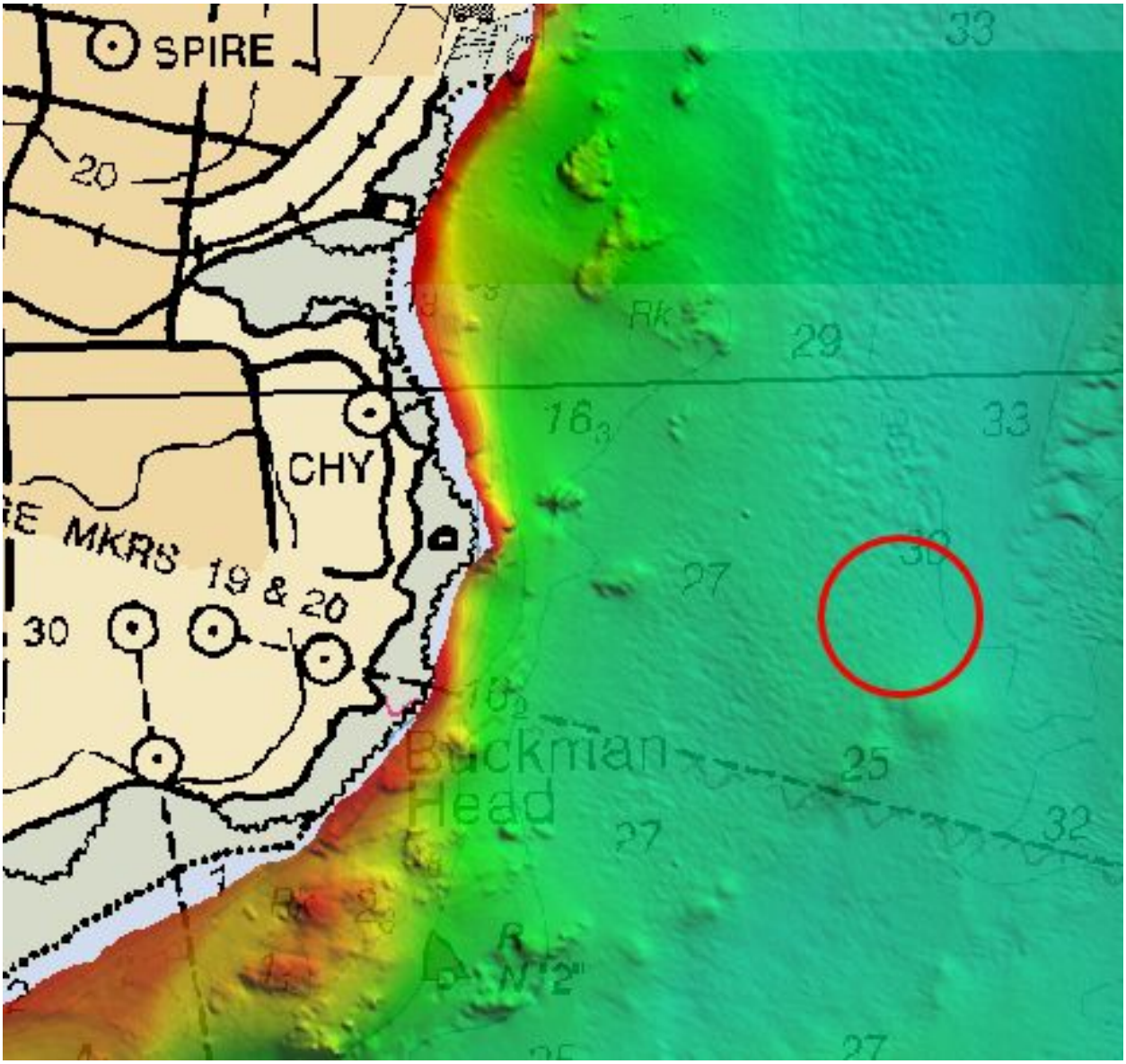


Figure 1.1.1

1.2) AWOIS #782 - UNKNOWN

No Primary Survey Feature for this AWOIS Item

Search Position: 44° 55' 35.1" N, 067° 03' 45.3" W

Historical Depth: [None]

Search Radius: 0

Search Technique: [None]

Technique Notes: [None]

History Notes:

00782

HISTORY

T8791/46-46--PH-11(46), WRECK SCALED AT 1:10,000 IN POS. LAT. 44-55-34.80N,

LONG. 67-03-47.40W. CHARTED AS NONDANGEROUS SUBMERGED WRECK ABOVE SOUNDING

DATUM. BARES 14 FEET AT SOUNDING DATUM.

Survey Summary

Charts Affected: 13394_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 782	0.00	000.0	Primary
ChartGPs - ENC H12259_Features	Danger 179	71.34	047.1	Secondary (grouped)

Hydrographer Recommendations

Not seen during survey and unable to approach area with boat. Recommend retain as charted and retain in database.

S-57 Data

[None]

Office Note: Concur. Retain as charted.

1.3) AWOIS #784 - OBSTRUCTION

No Primary Survey Feature for this AWOIS Item

Search Position: 44° 54' 12.8" N, 066° 58' 56.0" W

Historical Depth: [None]

Search Radius: 0

Search Technique: [None]

Technique Notes: [None]

History Notes:

00784

HISTORY

H847/1861--1:10,000; 16 FOOT ROCK LABELED "PAGE'S ROCK". CHARTED AS PAGES ROCK COVERED 14 FT. ON 1936 EDITION OF CHART 13328 IN APPROX. POS. LAT. 44-54-12.5N, LONG. 66-58-58.1W.

H9037/68--RECONNAISSANCE SURVEY (BP75361) FOUND NO INDICATION OF ROCK. DELETED FROM CHART. REMAINS CHARTED ON CANADIAN CHART 4343 (NEW EDITION DEC. 2, 1966, REPRINT JULY 15, 1983) FRIAR ROADS. (CORRECTIONS FROM CANADIAN NOTICES TO MARINERS TO: 1983/575.)

Survey Summary

Charts Affected: 13396_2, 13396_1, 13394_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 784	0.00	000.0	Primary

Hydrographer Recommendations

Recommend removal of AWOIS item from database. Area covered with 100% multibeam.

Office Note: concur.

S-57 Data

[None]

Feature Images

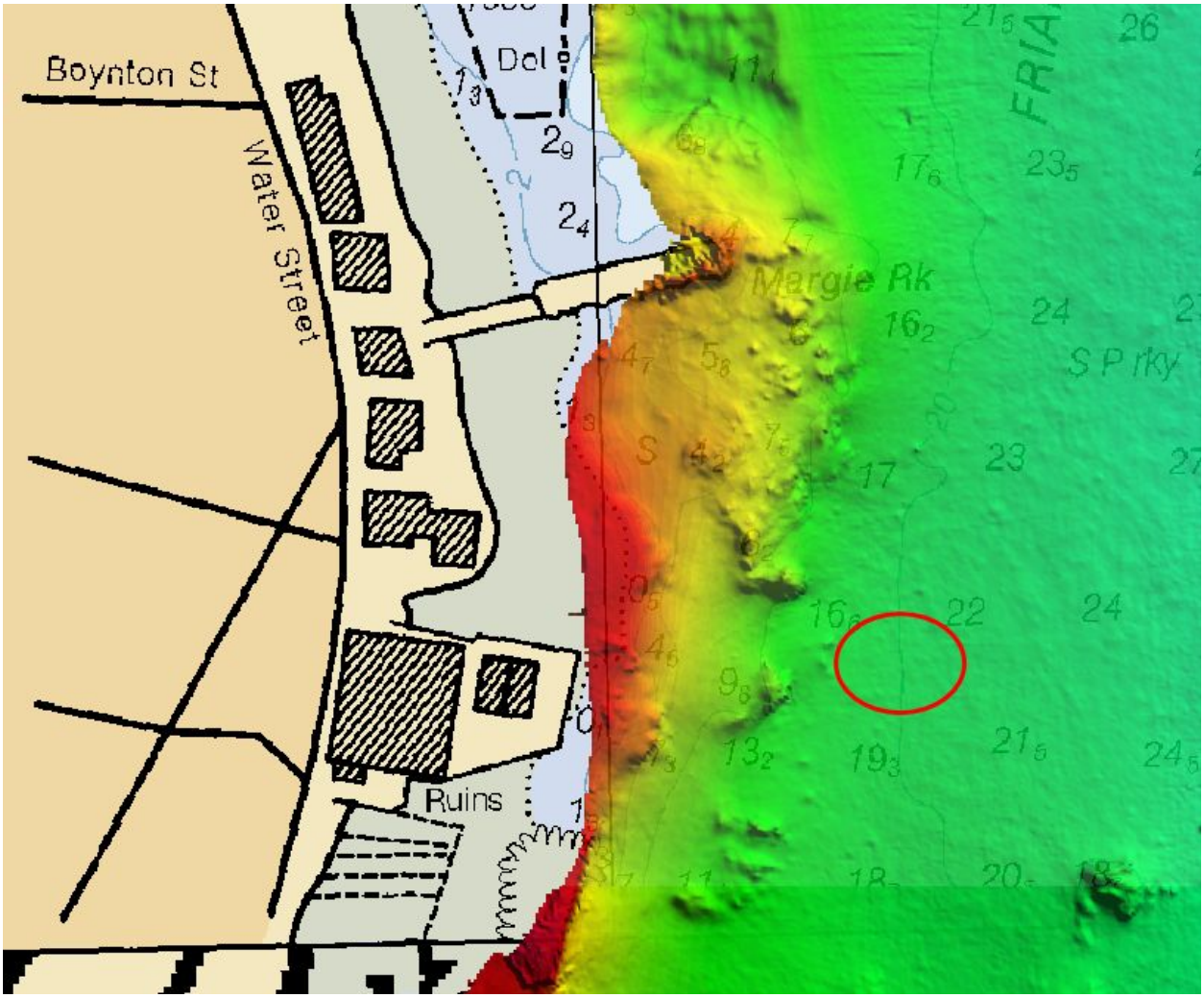


Figure 1.3.1

1.4) AWOIS #10040 - OBSTRUCTION

No Primary Survey Feature for this AWOIS Item

Search Position: 44° 53' 55.3" N, 067° 00' 33.9" W

Historical Depth: [None]

Search Radius: 0

Search Technique: VS

Technique Notes: Visual search for floating fish pens for verify the existence of pens. If the fish pens are there, take DPs for the position.

History Notes:

AWOIS ITEM 10040

SURVEY REQUIREMENTS COMMENT

SEARCH THE CHARTED AREA COVERED BY THIS FEATURE.

HISTORY

C.H.S. FIELD SHEET # 9147 (1986)--LOCATED AN AQUACULTURE ì

FACILITY MEASURING APPROXIMATELY 230 FT. BY 340 FT. CENTERED ON ì

LAT. 44/53/55N, LONG. 067/00/36W (NAD27). THIS FACILITY WAS NOT ì

DESCRIBED. (ENTERED 9/98 BY MBH)

F00446/98--OPR-A353-AHP-98; A VISUAL SEARCH OF THE AREAS OF AWOIS ITEMS 10040, 10042-10049 AND ALL NINE ITEMS WERE FOUND TO BE COMMERCIAL , FLOATING FISH PENS. THREE DETACHED POSITIONS WERE TAKEN ALONG THE EASTERN PERIMETER AND TWO DP'S WERE TAKEN ALONG THE SOUTHERN PERIMETER OF THE FISH PENS. THE WESTERN AND NORTHERN PERIMETERS COULD NOT BE LOCATED BECAUSE OF NUMEROUS BUOYS ALONG THESE AREAS, WHICH WERE STRUNG TOGETHER. THESE APPEARED TO BE ANCHORS FOR ADDITIONAL PENS. (UPDATED 10/99 BY MBH)

Survey Summary

Charts Affected: 13396_1, 13394_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 10040	0.00	000.0	Primary
ChartGPs - ENC H12259_Features	Danger 36	53.54	321.2	Secondary (grouped)

Hydrographer Recommendations

Recommend removal of obstruction/fish pen from chart and AWOIS database. Area covered with 100% multibeam.

S-57 Data

[None]

Office Note: concur.

Feature Images

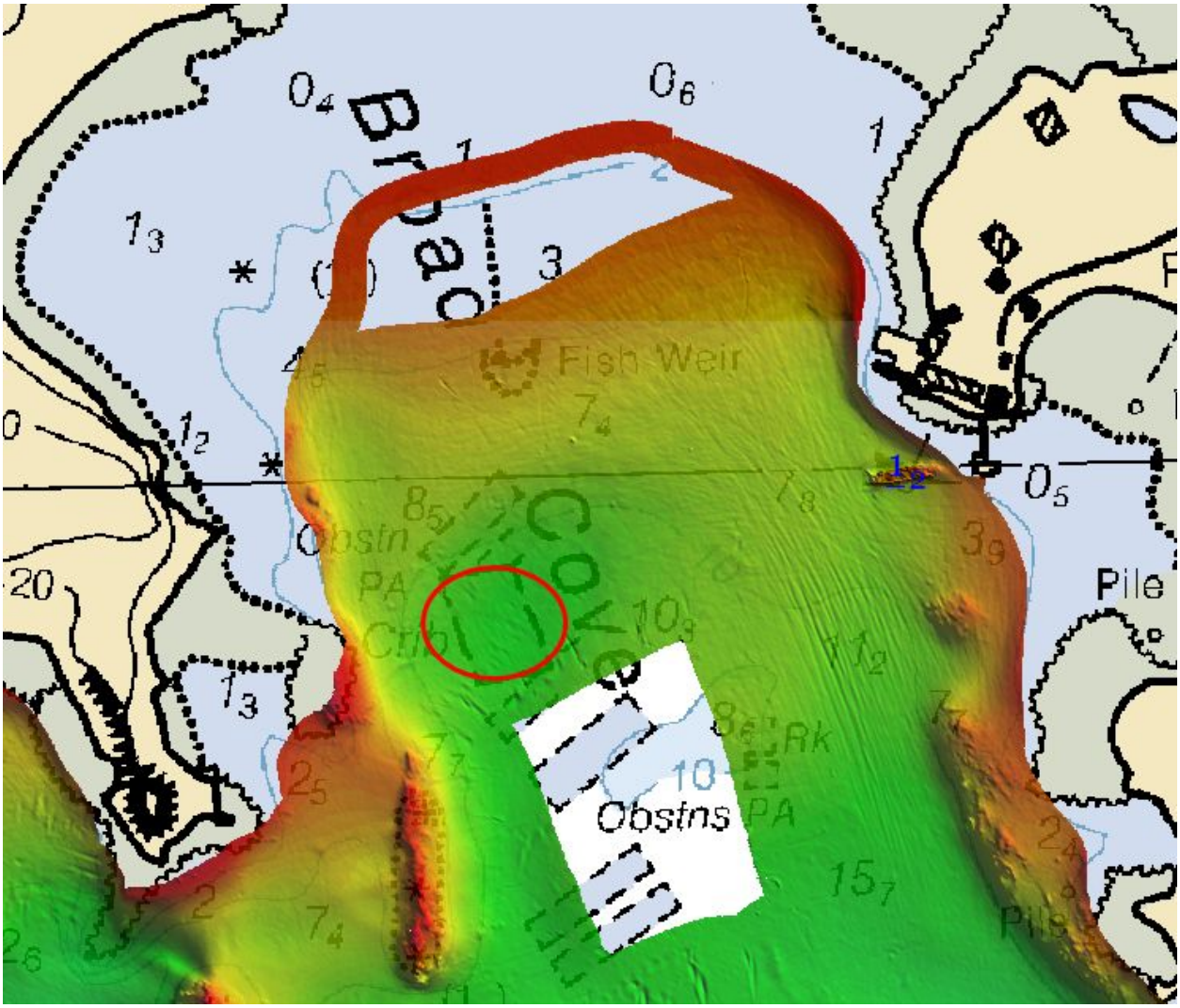


Figure 1.4.1

1.5) AWOIS #10042 - OBSTRUCTION

No Primary Survey Feature for this AWOIS Item

Search Position:	44° 53' 58.4" N, 067° 00' 35.3" W
Historical Depth:	[None]
Search Radius:	0
Search Technique:	VS
Technique Notes:	Visual search for floating fish pens for verify the existence of pens. If the fish pens are there, take DPs for the position.

History Notes:

AWOIS ITEM 10042

SURVEY REQUIREMENTS COMMENT

SEARCH THE CHARTED AREA COVERED BY THIS FEATURE.

HISTORY

BP141442--1990 SOURCE NANCI-CRS#002390; PHOTO REVISORY SURVEY ì

IS SOURCE FOR THIS CHARTED OBSTRUCTION. THIS OBSTRUCTION MOST ì

LIKELY IS A FLOATING FISH PEN (FROM DOCUMENTATION OF SIMILAR ì

FEATURES CHARTED IN THE SAME MANNER) AND MEASURES 100 FT. BY 350 ì

FT. CENTERED ON LAT. 44/53/58.4N, LONG. 067/00/35.3W (NAD83). ì

(ENTERED 9/98 BY MBH)

F00446/98--OPR-A353-AHP-98; A VISUAL SEARCH OF THE AREAS OF AWOIS ITEMS 10040, 10042-10049 AND ALL NINE ITEMS WERE FOUND TO BE COMMERCIAL , FLOATING FISH PENS. THREE DETACHED POSITIONS WERE TAKEN ALONG THE EASTERN PERIMETER AND TWO DP'S WERE TAKEN ALONG THE SOUTHERN PERIMETER OF THE FISH PENS. THE WESTERN AND NORTHERN PERIMETERS COULD NOT BE LOCATED BECAUSE OF NUMEROUS BUOYS ALONG THESE AREAS, WHICH WERE STRUNG TOGETHER. THESE APPEARED TO BE ANCHORS FOR ADDITIONAL PENS. (UPDATED 10/99 BY MBH)

Survey Summary

Charts Affected: 13396_1, 13394_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 10042	0.00	000.0	Primary
ChartGPs - ENC H12259_Features	Danger 10	20.23	008.8	Secondary (grouped)

Hydrographer Recommendations

Recommend removal of obstruction/fish pen from chart and AWOIS database. Area covered with 100% multibeam.

S-57 Data

[None]

Office Note: Concur.

Feature Images

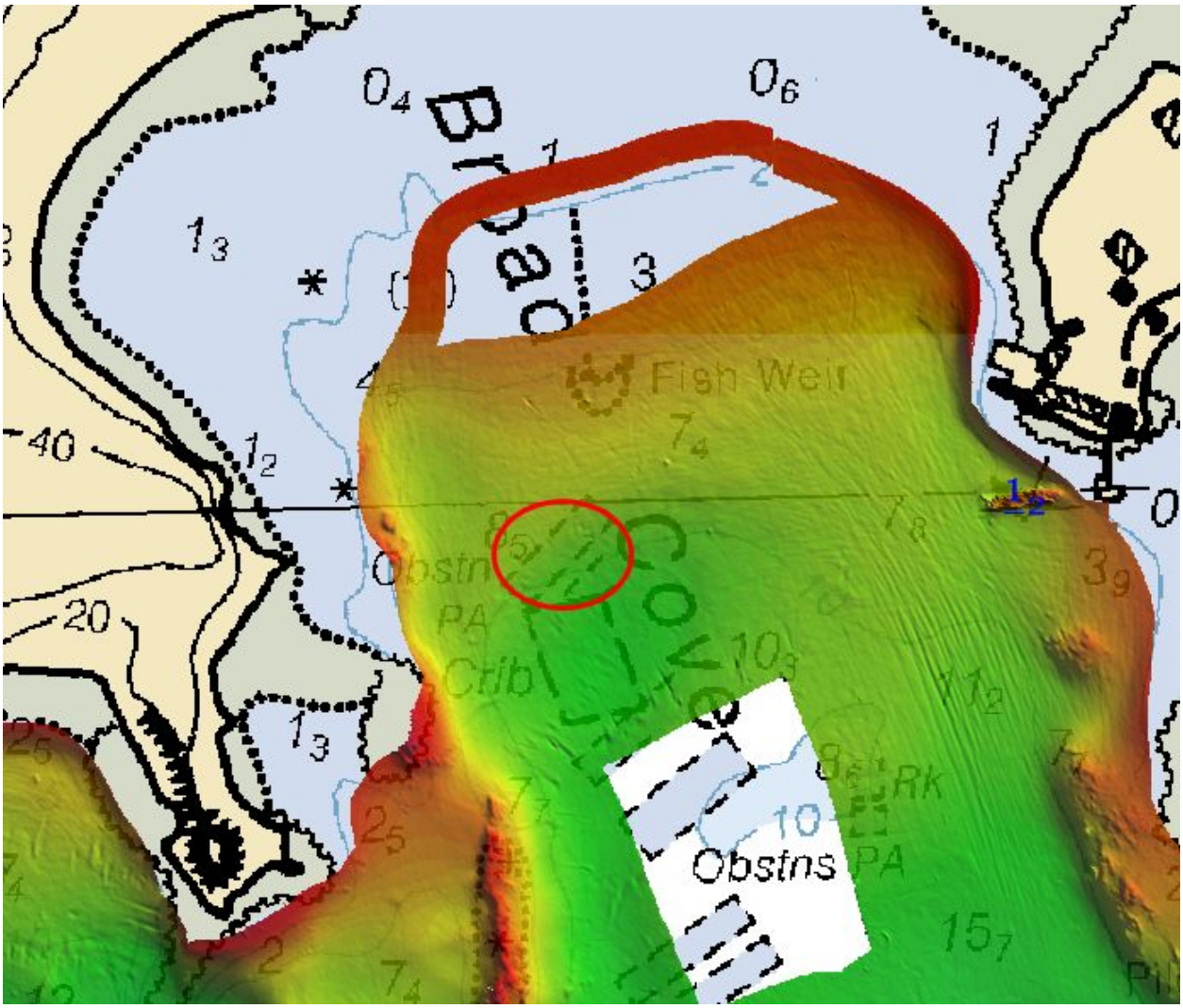


Figure 1.5.1

1.6) AWOIS #10043 - OBSTRUCTION

No Primary Survey Feature for this AWOIS Item

Search Position:	44° 53' 57.6" N, 067° 00' 33.7" W
Historical Depth:	[None]
Search Radius:	0
Search Technique:	VS
Technique Notes:	Visual search for floating fish pens for verify the existence of pens. If the fish pens are there, take DPs for the position.

History Notes:

AWOIS ITEM 10043

SURVEY REQUIREMENTS COMMENT

SEARCH THE CHARTED AREA COVERED BY THIS FEATURE.

HISTORY

BP141442--1990 SOURCE NANCI-CRS#002390; PHOTO REVISORY SURVEY ì

IS SOURCE FOR THIS CHARTED OBSTRUCTION. THIS OBSTRUCTION MOST ì

LIKELY IS A FLOATING FISH PEN (FROM DOCUMENTATION OF SIMILAR ì

FEATURES CHARTED IN THE SAME MANNER) AND MEASURES 100 FT. BY 350 ì

FT. CENTERED ON LAT. 44/53/57.6N, LONG. 067/00/33.7W (NAD83). ì

(ENTERED 9/98 BY MBH)

F00446/98--OPR-A353-AHP-98; A VISUAL SEARCH OF THE AREAS OF AWOIS ITEMS 10040, 10042-10049 AND ALL NINE ITEMS WERE FOUND TO BE COMMERCIAL , FLOATING FISH PENS. THREE DETACHED POSITIONS WERE TAKEN ALONG THE EASTERN PERIMETER AND TWO DP'S WERE TAKEN ALONG THE SOUTHERN PERIMETER OF THE FISH PENS. THE WESTERN AND NORTHERN PERIMETERS COULD NOT BE LOCATED BECAUSE OF NUMEROUS BUOYS ALONG THESE AREAS, WHICH WERE STRUNG TOGETHER. THESE APPEARED TO BE ANCHORS FOR ADDITIONAL PENS. (UPDATED 10/99 BY MBH)

Survey Summary

Charts Affected: 13396_1, 13394_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 10043	0.00	000.0	Primary
ChartGPs - ENC H12259_Features	Danger 28	14.80	341.4	Secondary (grouped)

Hydrographer Recommendations

Recommend removal of obstruction/fish pen from chart and AWOIS database. Area covered with 100% multibeam.

S-57 Data

[None]

Office Note: Concur.

Feature Images

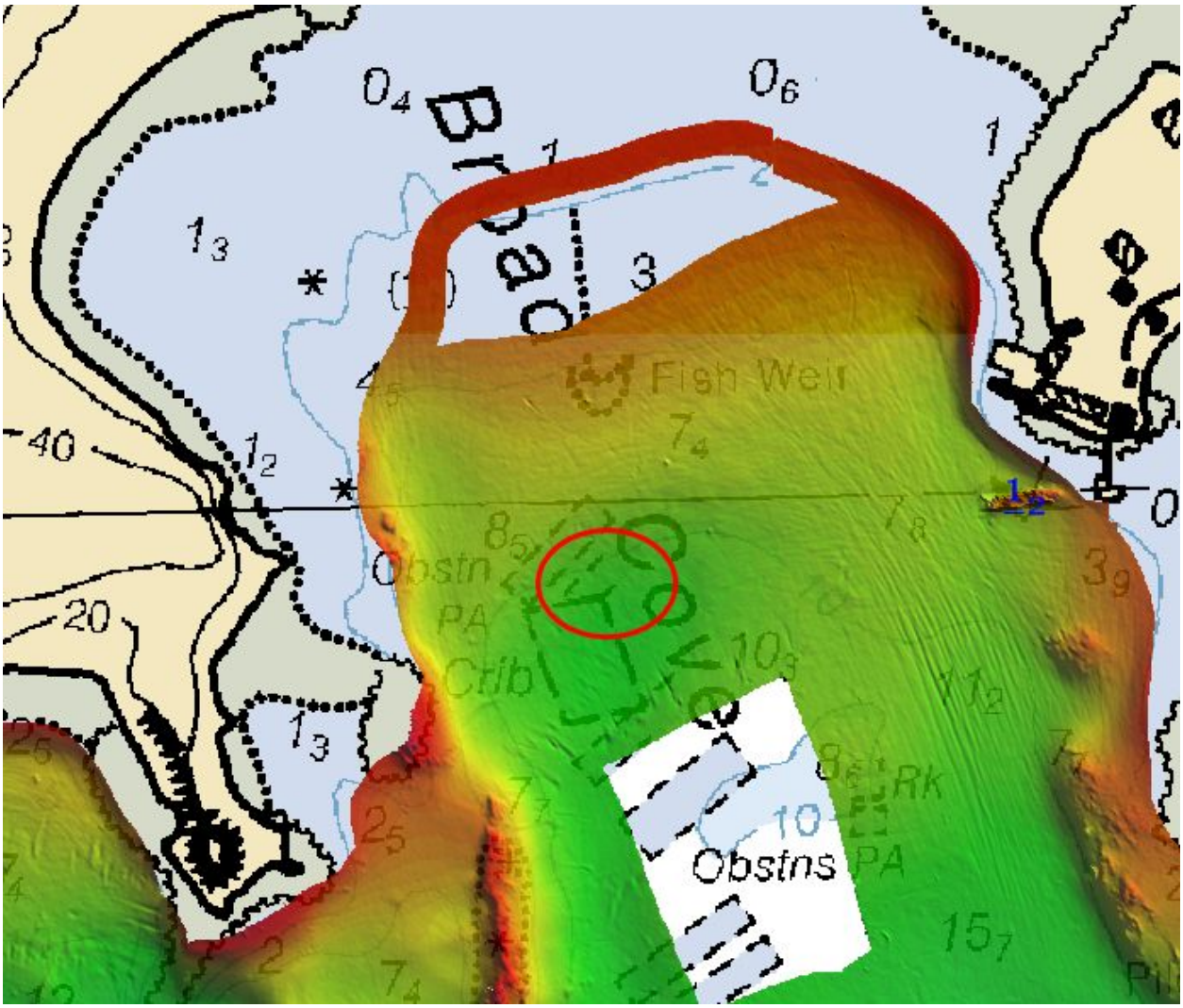


Figure 1.6.1

1.7) AWOIS #10044 - OBSTRUCTION

No Primary Survey Feature for this AWOIS Item

Search Position:	44° 53' 53.3" N, 067° 00' 32.2" W
Historical Depth:	[None]
Search Radius:	0
Search Technique:	VS
Technique Notes:	Visual search for floating fish pens for verify the existence of pens. If the fish pens are there, take DPs for the position.

History Notes:

AWOIS ITEM 10044

SURVEY REQUIREMENTS COMMENT

SEARCH THE CHARTED AREA COVERED BY THIS FEATURE.

HISTORY

BP141442--1990 SOURCE NANCI-CRS#002390; PHOTO REVISORY SURVEY ì

IS SOURCE FOR THIS CHARTED OBSTRUCTION. THIS OBSTRUCTION MOST ì

LIKELY IS A FLOATING FISH PEN (FROM DOCUMENTATION OF SIMILAR ì

FEATURES CHARTED IN THE SAME MANNER) AND MEASURES 100 FT. BY 400 ì

FT. CENTERED ON LAT. 44/53/53.3N, LONG. 067/00/32.2W (NAD83). ì

(ENTERED 9/98 BY MBH)

F00446/98--OPR-A353-AHP-98; A VISUAL SEARCH OF THE AREAS OF AWOIS ITEMS 10040, 10042-10049 AND ALL NINE ITEMS WERE FOUND TO BE COMMERCIAL , FLOATING FISH PENS. THREE DETACHED POSITIONS WERE TAKEN ALONG THE EASTERN PERIMETER AND TWO DP'S WERE TAKEN ALONG THE SOUTHERN PERIMETER OF THE FISH PENS. THE WESTERN AND NORTHERN PERIMETERS COULD NOT BE LOCATED BECAUSE OF NUMEROUS BUOYS ALONG THESE AREAS, WHICH WERE STRUNG TOGETHER. THESE APPEARED TO BE ANCHORS FOR ADDITIONAL PENS. (UPDATED 10/99 BY MBH)

Survey Summary

Charts Affected: 13396_1, 13394_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 10044	0.00	000.0	Primary
ChartGPs - ENC H12259_Features	Danger 27	19.92	168.1	Secondary (grouped)

Hydrographer Recommendations

Recommend removal of obstruction/fish pen from chart and AWOIS database. Area covered with 100% multibeam.

S-57 Data

[None]

Office Note: concur.

Feature Images

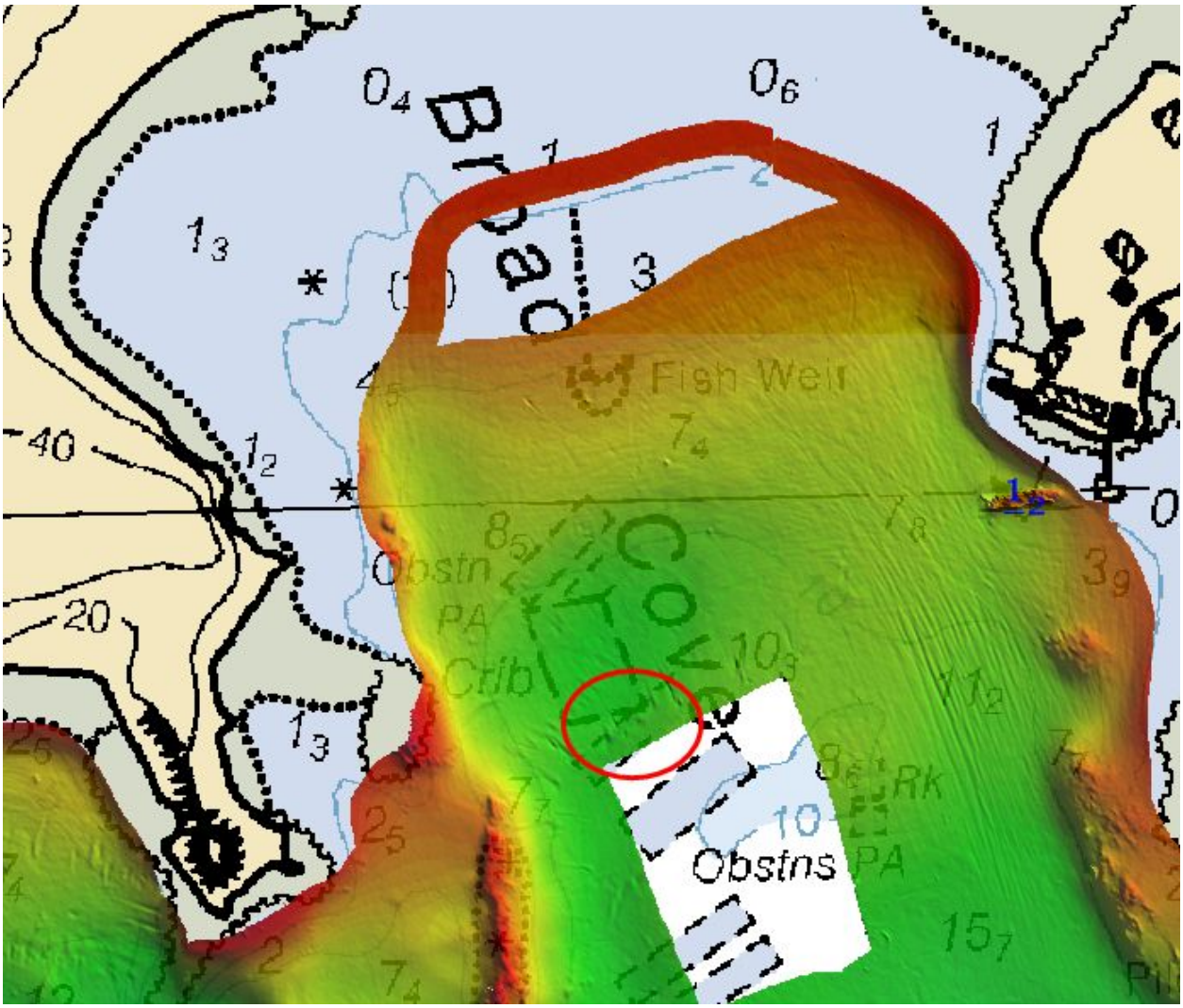


Figure 1.7.1

1.8) AWOIS #10045 - OBSTRUCTION

No Primary Survey Feature for this AWOIS Item

Search Position:	44° 53' 51.3" N, 067° 00' 30.1" W
Historical Depth:	[None]
Search Radius:	0
Search Technique:	VS
Technique Notes:	Visual search for floating fish pens for verify the existence of pens. If the fish pens are there, take DPs for the position.

History Notes:

AWOIS ITEM 10045

SURVEY REQUIREMENTS COMMENT

SEARCH THE CHARTED AREA COVERED BY THIS FEATURE.

HISTORY

BP141442--1990 SOURCE NANCI-CRS#002390; PHOTO REVISORY SURVEY ì

IS SOURCE FOR THIS CHARTED OBSTRUCTION. THIS OBSTRUCTION MOST ì

LIKELY IS A FLOATING FISH PEN (FROM DOCUMENTATION OF SIMILAR ì

FEATURES CHARTED IN THE SAME MANNER) AND MEASURES 150 FT. BY 400 ì

FT. CENTERED ON LAT. 44/53/51.3N, LONG. 067/00/30.1W (NAD83). ì

(ENTERED 9/98 BY MBH)

F00446/98--OPR-A353-AHP-98; A VISUAL SEARCH OF THE AREAS OF AWOIS ITEMS 10040, 10042-10049 AND ALL NINE ITEMS WERE FOUND TO BE COMMERCIAL , FLOATING FISH PENS. THREE DETACHED POSITIONS WERE TAKEN ALONG THE EASTERN PERIMETER AND TWO DP'S WERE TAKEN ALONG THE SOUTHERN PERIMETER OF THE FISH PENS. THE WESTERN AND NORTHERN PERIMETERS COULD NOT BE LOCATED BECAUSE OF NUMEROUS BUOYS ALONG THESE AREAS, WHICH WERE STRUNG TOGETHER. THESE APPEARED TO BE ANCHORS FOR ADDITIONAL PENS. (UPDATED 10/99 BY MBH)

Survey Summary

Charts Affected:	13396_1, 13394_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 10045	0.00	000.0	Primary
ChartGPs - ENC H12259_Features	Danger 26	18.07	330.9	Secondary (grouped)

Hydrographer Recommendations

Recommend updating the size of the fish pen on chart. Additionally, the position should be noted as approximate. The holiday in the surface is where the boat could not go due to the pens. No DPs were taken on the corner moorings.

Refer to ...\H12259\PSS\H12259_Area_Features.000 for the new area feature.

S-57 Data

[None]

Office Note: concur. Chart per H12259_CS.000.

Feature Images

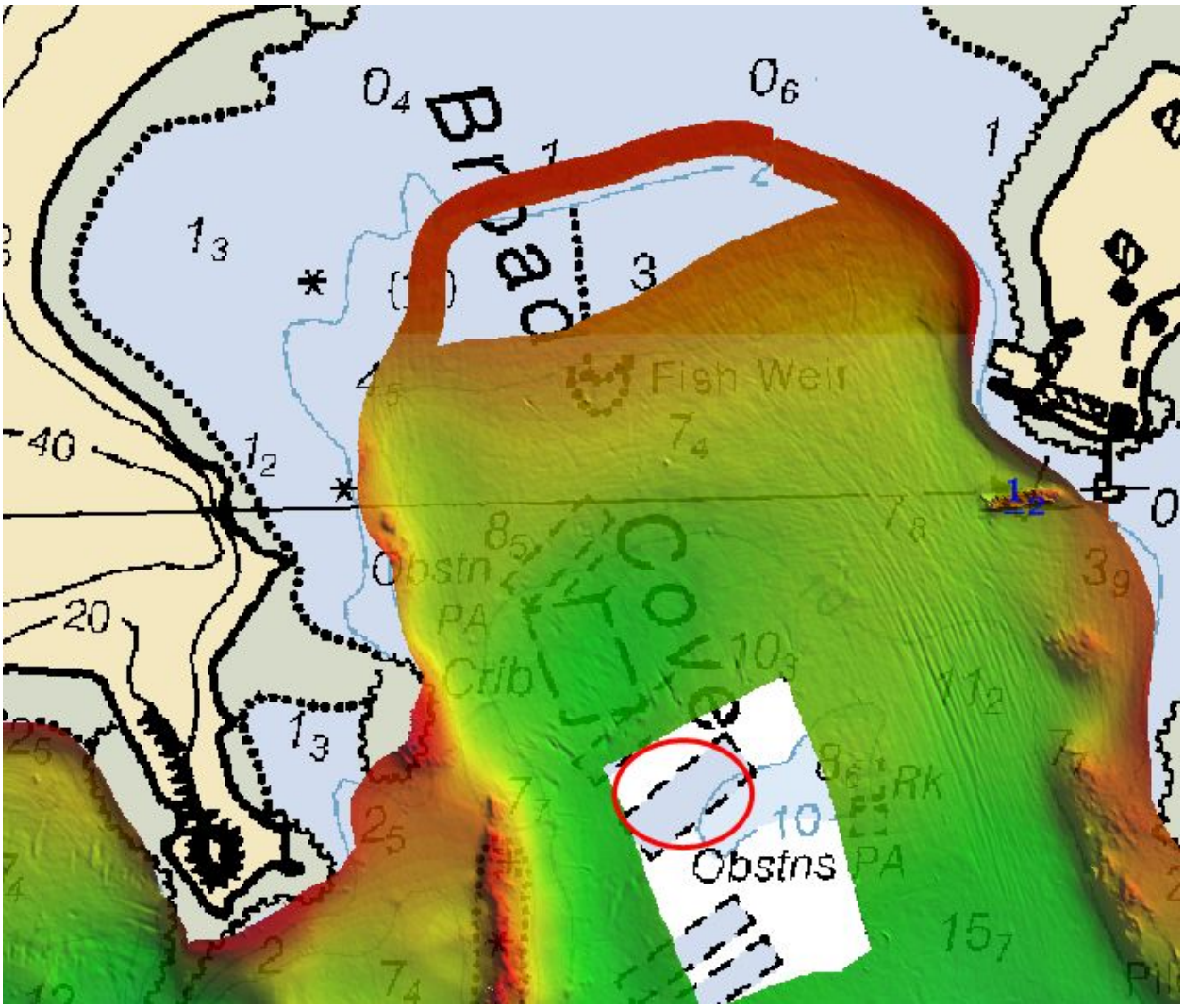


Figure 1.8.1

1.9) AWOIS #10046 - OBSTRUCTION

No Primary Survey Feature for this AWOIS Item

Search Position:	44° 53' 51.6" N, 067° 00' 22.9" W
Historical Depth:	[None]
Search Radius:	0
Search Technique:	VS
Technique Notes:	[None]

History Notes:

AWOIS ITEM 10046

SURVEY REQUIREMENTS COMMENT

SEARCH THE CHARTED AREA COVERED BY THIS FEATURE.

HISTORY

BP141442--1990 SOURCE NANCI-CRS#002390; PHOTO REVISORY SURVEY ì

IS SOURCE FOR THIS CHARTED OBSTRUCTION. THIS OBSTRUCTION MOST ì

LIKELY IS A FLOATING FISH PEN (FROM DOCUMENTATION OF SIMILAR ì

FEATURES CHARTED IN THE SAME MANNER) AND MEASURES 100 FT. BY 100 ì

FT. CENTERED ON LAT. 44/53/51.6N, LONG. 067/00/22.9W (NAD83). ì

(ENTERED 9/98 BY MBH)

F00446/98--OPR-A353-AHP-98; A VISUAL SEARCH OF THE AREAS OF AWOIS ITEMS 10040, 10042-10049 AND ALL NINE ITEMS WERE FOUND TO BE COMMERCIAL , FLOATING FISH PENS. THREE DETACHED POSITIONS WERE TAKEN ALONG THE EASTERN PERIMETER AND TWO DP'S WERE TAKEN ALONG THE SOUTHERN PERIMETER OF THE FISH PENS. THE WESTERN AND NORTHERN PERIMETERS COULD NOT BE LOCATED BECAUSE OF NUMEROUS BUOYS ALONG THESE AREAS, WHICH WERE STRUNG TOGETHER. THESE APPEARED TO BE ANCHORS FOR ADDITIONAL PENS. (UPDATED 10/99 BY MBH)

Survey Summary

Charts Affected:	13396_1, 13394_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 10046	0.00	000.0	Primary
ChartGPs - ENC H12259_Features	Danger 25	11.91	357.2	Secondary (grouped)

Hydrographer Recommendations

Recommend removal of obstruction/fish pen from chart and AWOIS database. Area covered with 100% multibeam.

S-57 Data

[None]

Office Note: concur.

Feature Images

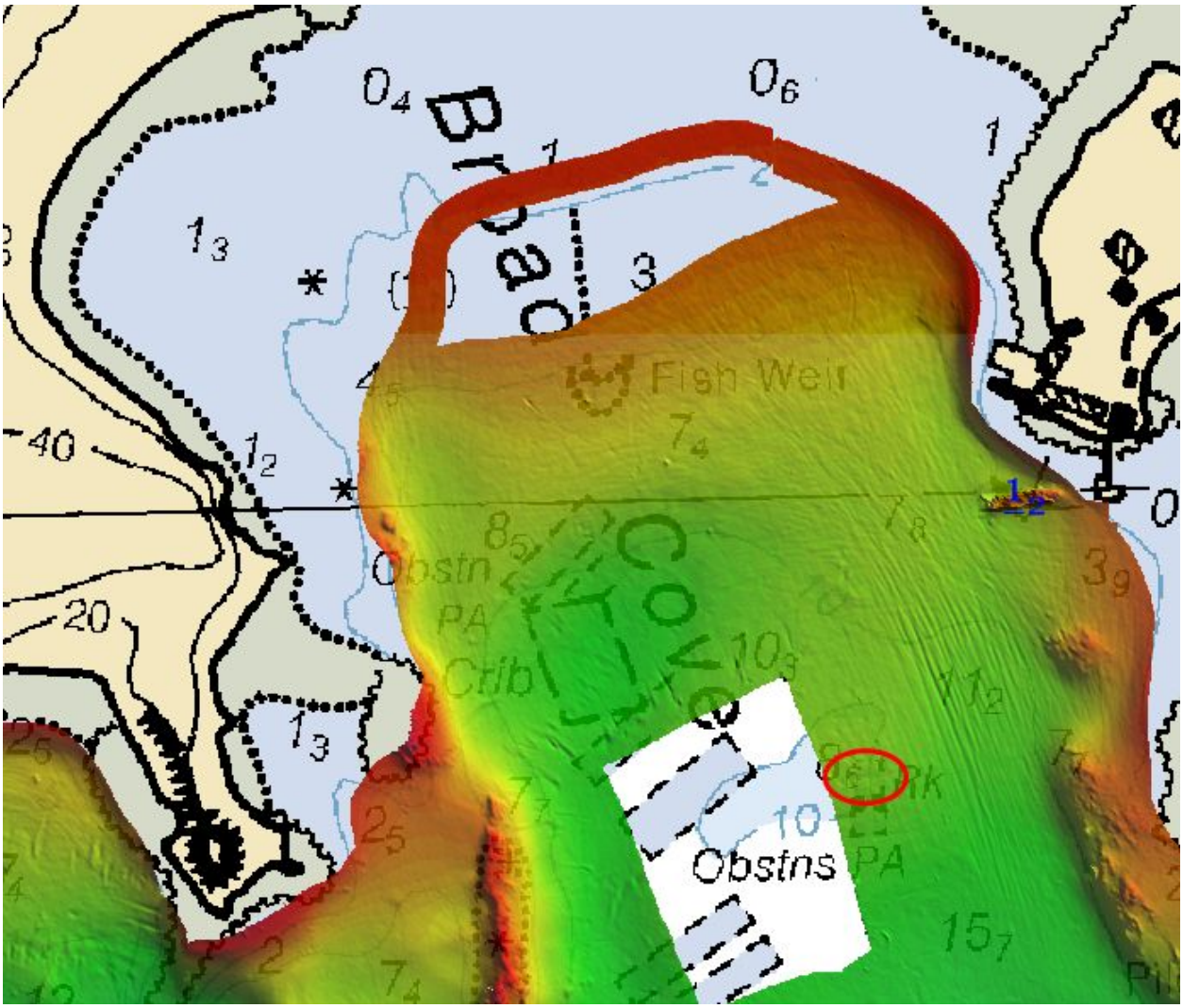


Figure 1.9.1

1.10) AWOIS #10047 - OBSTRUCTION

No Primary Survey Feature for this AWOIS Item

Search Position:	44° 53' 50.5" N, 067° 00' 22.9" W
Historical Depth:	[None]
Search Radius:	0
Search Technique:	VS
Technique Notes:	Visual search for floating fish pens for verify the existence of pens. If the fish pens are there, take DPs for the position.

History Notes:

AWOIS ITEM 10047

SURVEY REQUIREMENTS COMMENT

SEARCH THE CHARTED AREA COVERED BY THIS FEATURE.

HISTORY

BP141442--1990 SOURCE NANCI-CRS#002390; PHOTO REVISORY SURVEY ì

IS SOURCE FOR THIS CHARTED OBSTRUCTION. THIS OBSTRUCTION MOST ì

LIKELY IS A FLOATING FISH PEN (FROM DOCUMENTATION OF SIMILAR ì

FEATURES CHARTED IN THE SAME MANNER) AND MEASURES 100 FT. BY 100 ì

FT. CENTERED ON LAT. 44/53/50.5N, LONG. 067/00/22.9W (NAD83). ì

(ENTERED 9/98 BY MBH)

F00446/98--OPR-A353-AHP-98; A VISUAL SEARCH OF THE AREAS OF AWOIS ITEMS 10040, 10042-10049 AND ALL NINE ITEMS WERE FOUND TO BE COMMERCIAL , FLOATING FISH PENS. THREE DETACHED POSITIONS WERE TAKEN ALONG THE EASTERN PERIMETER AND TWO DP'S WERE TAKEN ALONG THE SOUTHERN PERIMETER OF THE FISH PENS. THE WESTERN AND NORTHERN PERIMETERS COULD NOT BE LOCATED BECAUSE OF NUMEROUS BUOYS ALONG THESE AREAS, WHICH WERE STRUNG TOGETHER. THESE APPEARED TO BE ANCHORS FOR ADDITIONAL PENS. (UPDATED 10/99 BY MBH)

Survey Summary

Charts Affected: 13396_1, 13394_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 10047	0.00	000.0	Primary
ChartGPs - ENC H12259_Features	Danger 24	14.69	147.8	Secondary (grouped)

Hydrographer Recommendations

Recommend removal of obstruction/fish pen from chart and AWOIS database. Area covered with 100% multibeam.

S-57 Data

[None]

Office Note: concur.

Feature Images

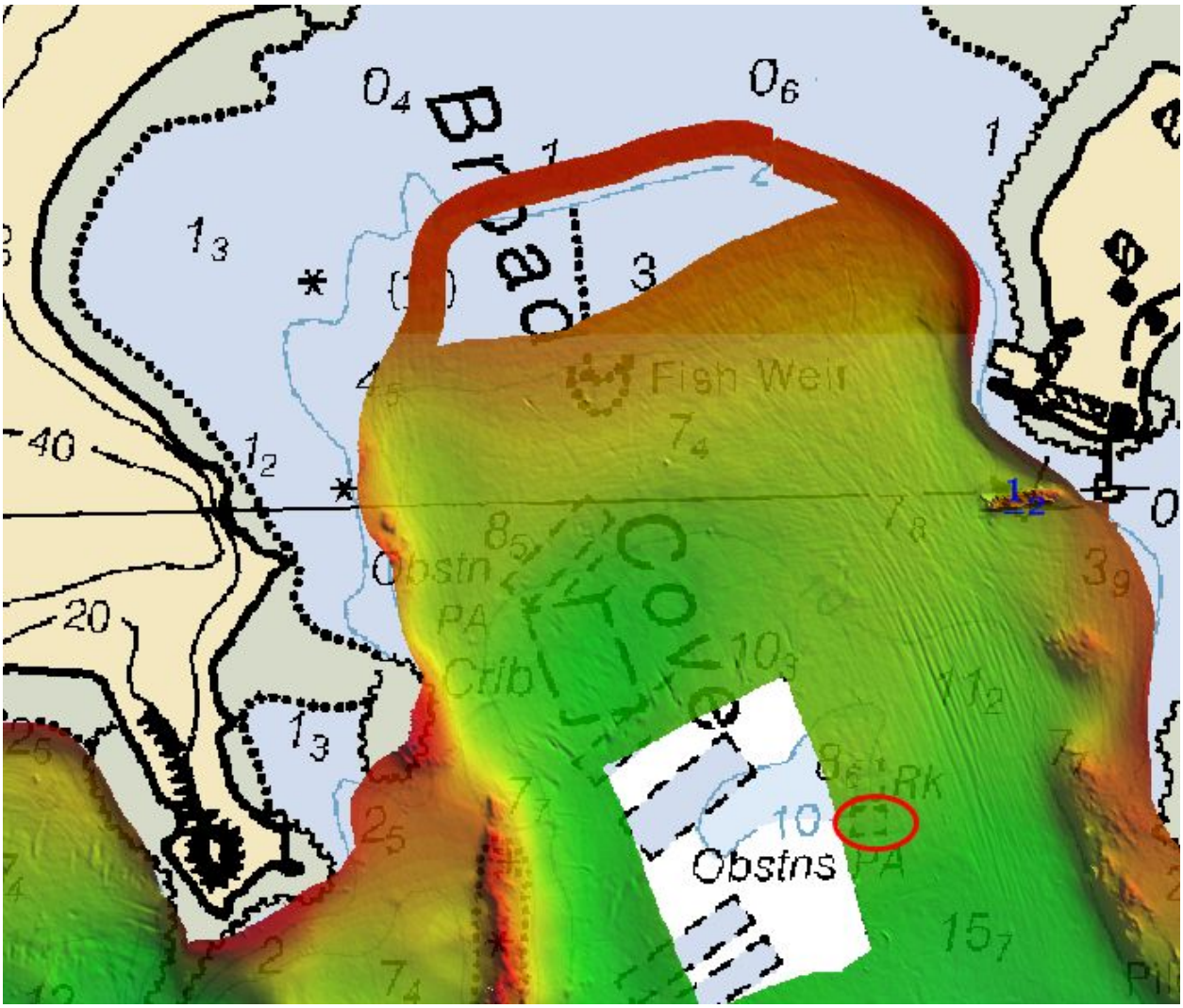


Figure 1.10.1

1.11) AWOIS #10048 - OBSTRUCTION

No Primary Survey Feature for this AWOIS Item

Search Position:	44° 53' 46.7" N, 067° 00' 30.6" W
Historical Depth:	[None]
Search Radius:	0
Search Technique:	VS
Technique Notes:	Visual search for floating fish pens for verify the existence of pens. If the fish pens are there, take DPs for the position.

History Notes:

AWOIS ITEM 10048

SURVEY REQUIREMENTS COMMENT

SEARCH THE CHARTED AREA COVERED BY THIS FEATURE.

HISTORY

BP141442--1990 SOURCE NANCI-CRS#002390; PHOTO REVISORY SURVEY ì

IS SOURCE FOR THIS CHARTED OBSTRUCTION. THIS OBSTRUCTION MOST ì

LIKELY IS A FLOATING FISH PEN (FROM DOCUMENTATION OF SIMILAR ì

FEATURES CHARTED IN THE SAME MANNER) AND MEASURES 100 FT. BY 400 ì

FT. CENTERED ON LAT. 44/53/46.7N, LONG. 067/00/30.6W (NAD83). ì

(ENTERED 9/98 BY MBH)

F00446/98--OPR-A353-AHP-98; A VISUAL SEARCH OF THE AREAS OF AWOIS ITEMS 10040, 10042-10049 AND ALL NINE ITEMS WERE FOUND TO BE COMMERCIAL , FLOATING FISH PENS. THREE DETACHED POSITIONS WERE TAKEN ALONG THE EASTERN PERIMETER AND TWO DP'S WERE TAKEN ALONG THE SOUTHERN PERIMETER OF THE FISH PENS. THE WESTERN AND NORTHERN PERIMETERS COULD NOT BE LOCATED BECAUSE OF NUMEROUS BUOYS ALONG THESE AREAS, WHICH WERE STRUNG TOGETHER. THESE APPEARED TO BE ANCHORS FOR ADDITIONAL PENS. (UPDATED 10/99 BY MBH)

Survey Summary

Charts Affected: 13396_1, 13394_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 10048	0.00	000.0	Primary
ChartGPs - ENC H12259_Features	Danger 23	61.53	045.1	Secondary (grouped)

Hydrographer Recommendations

Recommend removal of obstruction/fish pen from chart and AWOIS database. Area partially covered with 100% multibeam. See AWOIS item 10045 for more information.

S-57 Data

[None]

Office Note: concur.

Feature Images

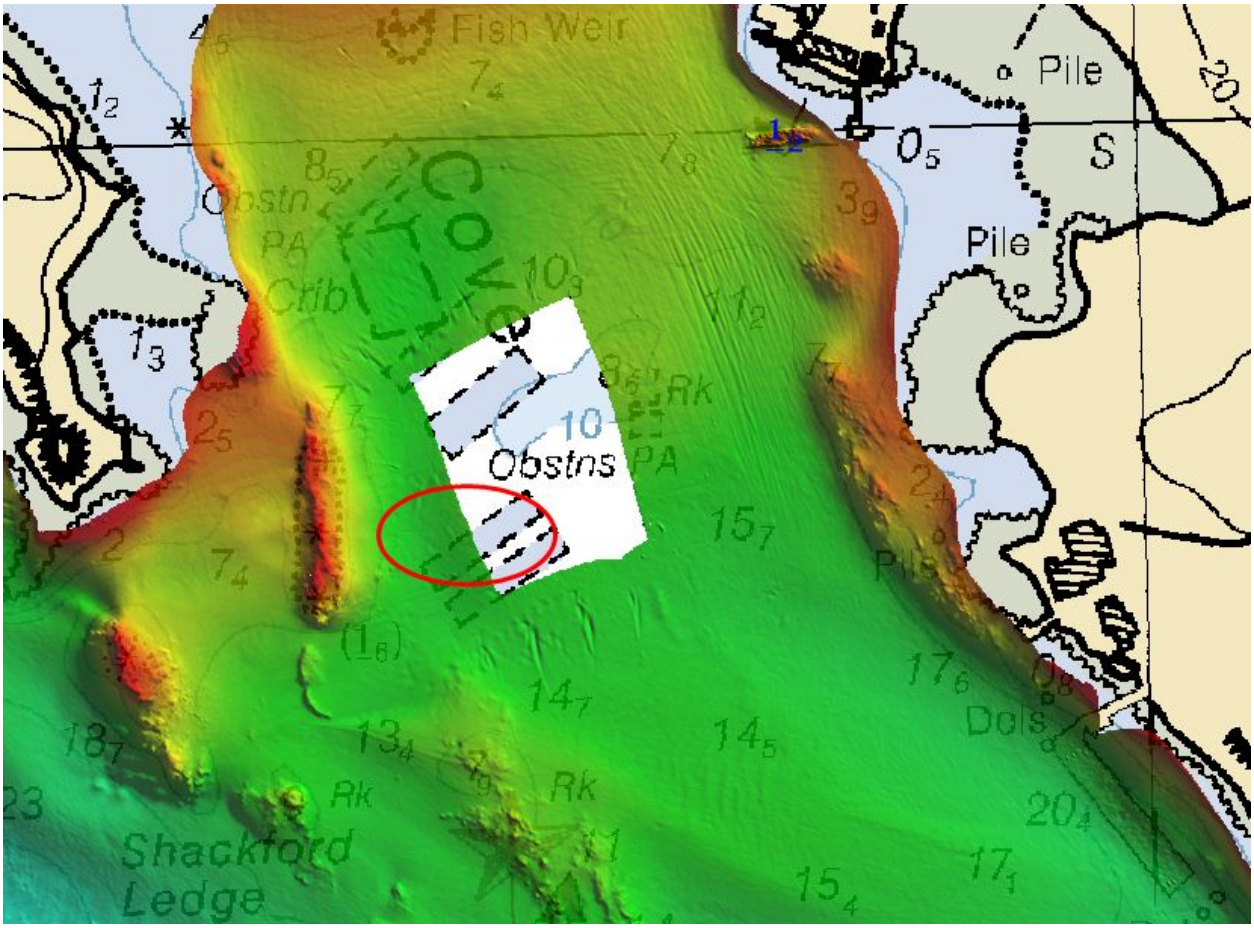


Figure 1.11.1

1.12) AWOIS #10049 - OBSTRUCTION

No Primary Survey Feature for this AWOIS Item

Search Position: 44° 53' 45.6" N, 067° 00' 29.4" W

Historical Depth: [None]

Search Radius: 0

Search Technique: VS

Technique Notes: Visual search for floating fish pens for verify the existence of pens. If the fish pens are there, take DPs for the position.

History Notes:

AWOIS ITEM 10049

SURVEY REQUIREMENTS COMMENT

SEARCH THE CHARTED AREA COVERED BY THIS FEATURE.

HISTORY

BP141442--1990 SOURCE NANCI-CRS#002390; PHOTO REVISORY SURVEY ì

IS SOURCE FOR THIS CHARTED OBSTRUCTION. THIS OBSTRUCTION MOST ì

LIKELY IS A FLOATING FISH PEN (FROM DOCUMENTATION OF SIMILAR ì

FEATURES CHARTED IN THE SAME MANNER) AND MEASURES 100 FT. BY 400 ì

FT. CENTERED ON LAT. 44/53/45.6N, LONG. 067/00/29.4W (NAD83). ì

(ENTERED 9/98 BY MBH)

F00446/98--OPR-A353-AHP-98; A VISUAL SEARCH OF THE AREAS OF AWOIS ITEMS 10040, 10042-10049 AND ALL NINE ITEMS WERE FOUND TO BE COMMERCIAL , FLOATING FISH PENS. THREE DETACHED POSITIONS WERE TAKEN ALONG THE EASTERN PERIMETER AND TWO DP'S WERE TAKEN ALONG THE SOUTHERN PERIMETER OF THE FISH PENS. THE WESTERN AND NORTHERN PERIMETERS COULD NOT BE LOCATED BECAUSE OF NUMEROUS BUOYS ALONG THESE AREAS, WHICH WERE STRUNG TOGETHER. THESE APPEARED TO BE ANCHORS FOR ADDITIONAL PENS. (UPDATED 10/99 BY MBH)

Survey Summary

Charts Affected: 13396_1, 13394_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 10049	0.00	000.0	Primary
ChartGPs - ENC H12259_Features	Danger 22	63.90	045.3	Secondary (grouped)

Hydrographer Recommendations

Recommend removal of obstruction/fish pen from chart and AWOIS database. Area partially covered with 100% multibeam. See AWOIS item 10045 for more information.

S-57 Data

[None]

Office Note: concur.

Feature Images

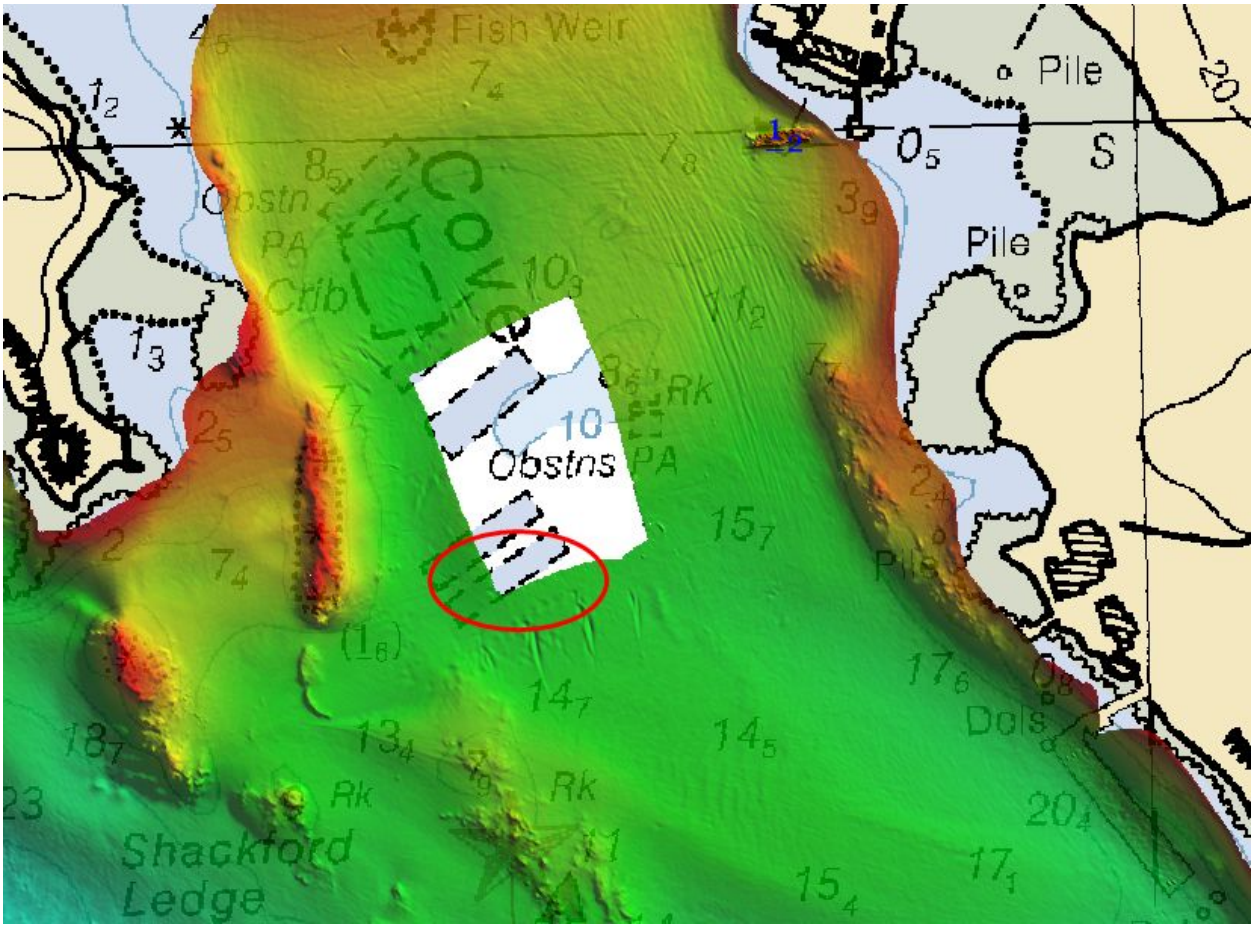


Figure 1.12.1

1.13) AWOIS #14794 - UNKNOWN

No Primary Survey Feature for this AWOIS Item

Search Position: 44° 54' 15.6" N, 067° 00' 41.2" W

Historical Depth: [None]

Search Radius: 0

Search Technique: VS

Technique Notes: [None]

History Notes:

UNKNOWN SOURCE-- A visible wreck is charted at 44/54/15.6 - 067/00/41.2. (entered CEH 5/2010)

Survey Summary

Charts Affected: 13396_1, 13394_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 14794	0.00	000.0	Primary

Hydrographer Recommendations

Recommend retain in AWOIS database and on chart. Wreck not able to be reached by boat but was visually confirmed to be present from the shore.

S-57 Data

[None]

Office Note: concur.

1.14) AWOIS #14795 - OBSTRUCTION

No Primary Survey Feature for this AWOIS Item

Search Position: 44° 53' 37.0" N, 066° 59' 31.7" W

Historical Depth: [None]

Search Radius: 0

Search Technique: VS, MB

Technique Notes: Visual search for floating fish pens for verify the existence of pens. If the fish pens are there, take DPs for the position.

History Notes:

**UNKNOWN SOURCE-- A obstruction PA is charted at 44/53/37.0 - 66/59/31.7. This obstn could be fish pens. (entered CEH 5/2010)

Survey Summary

Charts Affected: 13396_1, 13394_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 14795	0.00	000.0	Primary
ChartGPs - ENC H12259_Features	Danger 30	11.28	040.4	Secondary (grouped)

Hydrographer Recommendations

Recommend removal of obstruction/fish pen from chart and AWOIS database. Area covered with 100% multibeam.

S-57 Data

[None]

Office Note: concur.

Feature Images

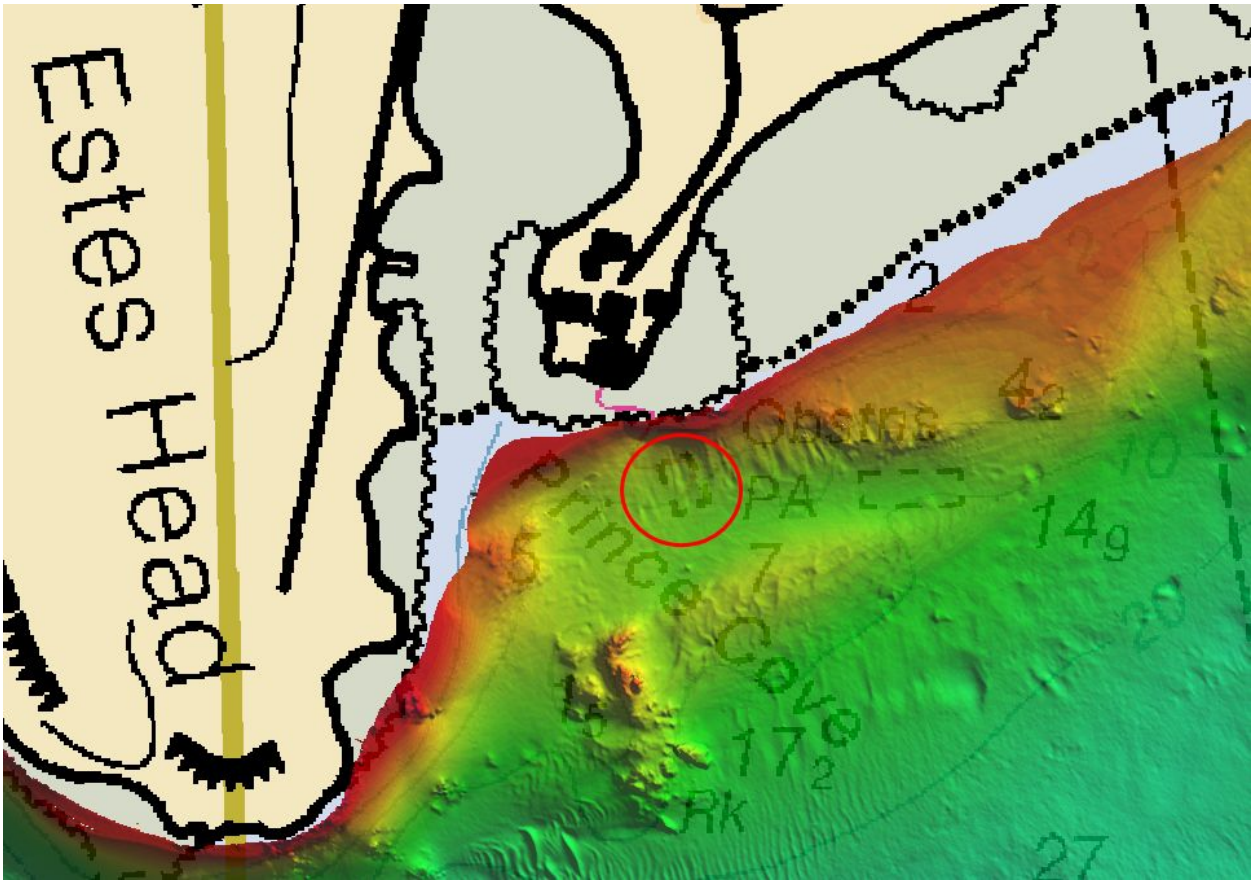


Figure 1.14.1

1.15) AWOIS #14796 - OBSTRUCTION

No Primary Survey Feature for this AWOIS Item

Search Position: 44° 53' 36.7" N, 066° 59' 24.8" W

Historical Depth: [None]

Search Radius: 0

Search Technique: VS, MB

Technique Notes: Visual search for floating fish pens for verify the existence of pens. If the fish pens are there, take DPs for the position.

History Notes:

**UNKNOWN SOURCE-- A obstruction is charted at 44/53/36.74 - 66/59/24.82. This could be a fish pen. (entered CEH 5/2010)

Survey Summary

Charts Affected: 13396_1, 13394_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 14796	0.00	000.0	Primary
ChartGPs - ENC H12259_Features	Danger 29	16.09	060.3	Secondary (grouped)

Hydrographer Recommendations

Recommend removal of obstruction/fish pen from chart and AWOIS database. Area covered with 100% multibeam.

S-57 Data

[None]

Office Note: concur.

Feature Images

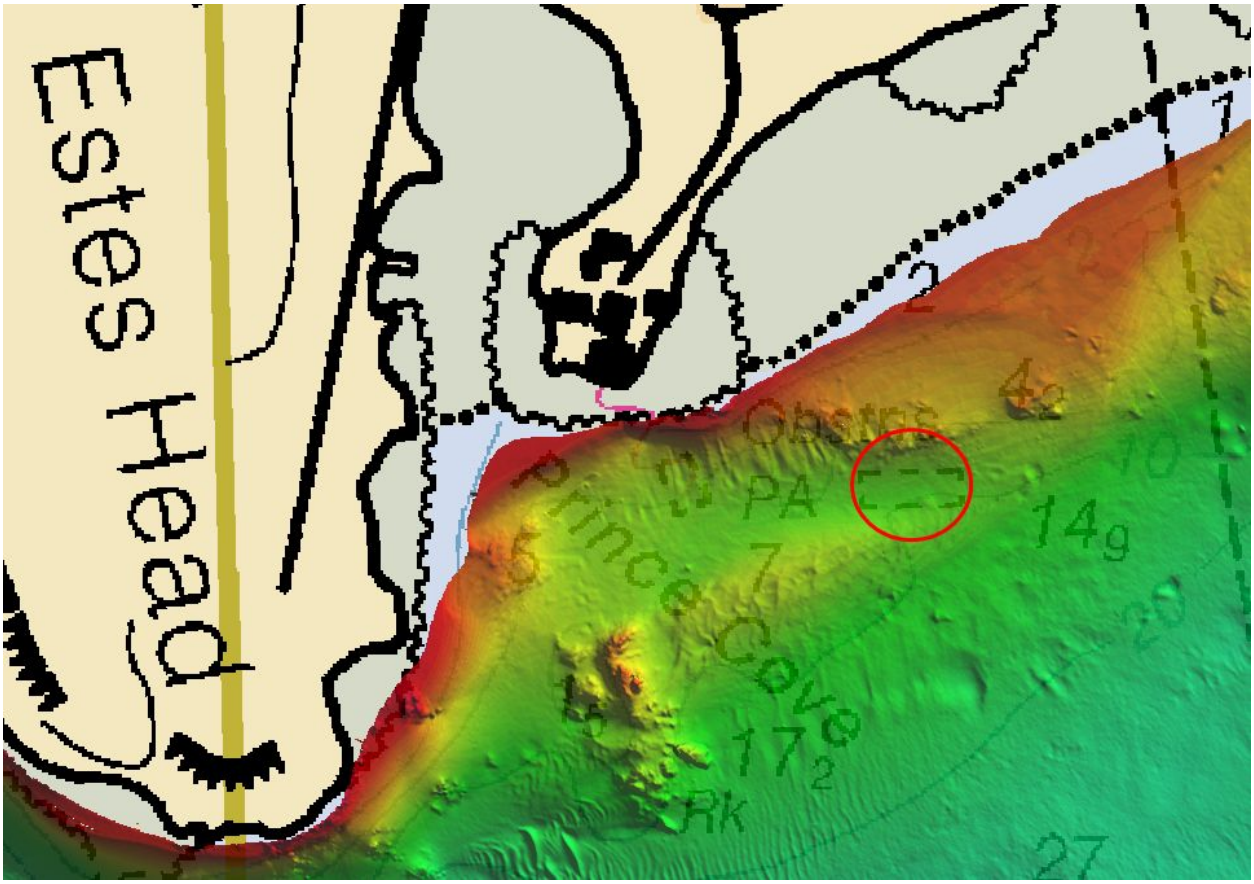


Figure 1.15.1

1.16) AWOIS #14797 - OBSTRUCTION

No Primary Survey Feature for this AWOIS Item

Search Position: 44° 55' 40.0" N, 067° 00' 36.8" W

Historical Depth: [None]

Search Radius: 150

Search Technique: VS,MB, S2

Technique Notes: [None]

History Notes:

**UNKNOWN SOURCE-- An obstruction is charted at 44/55/39.96 - 67/00/36.78. This may be a fish pen. (entered ceh 5/2010)

Survey Summary

Charts Affected: 13396_1, 13394_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 14797	0.00	000.0	Primary
ChartGPs - ENC H12259_Features	Danger 11	14.44	030.1	Secondary (grouped)
ChartGPs - ENC H12259_Features	Other 8	149.53	081.0	Secondary (grouped)

Hydrographer Recommendations

Recommend removal of obstruction/fish pen from chart and AWOIS database. Area covered with 100% multibeam.

S-57 Data

[None]

Office Note: concur.

Feature Images

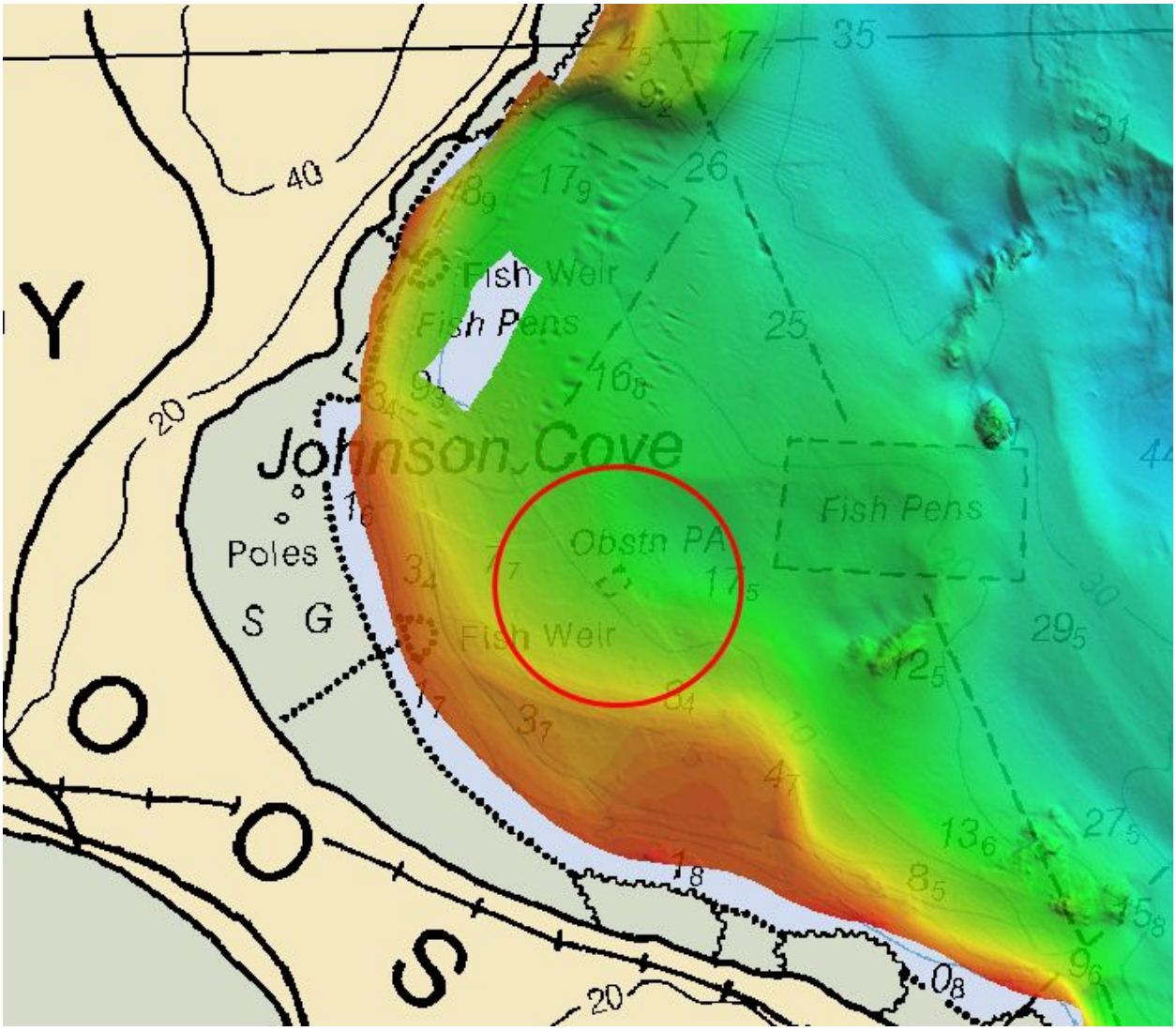


Figure 1.16.1

1.17) GP No. - 1 from ChartGPs - ENC H12259_Features

Survey Summary

Survey Position: 44° 54' 18.8" N, 067° 01' 13.4" W

Least Depth: [None]

TPU (±1.96σ): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]

Timestamp: [None]

GP Dataset: ChartGPs - ENC H12259_Features

GP No.: Danger 1

Charts Affected: 13396_1, 13394_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - ENC H12259_Features	Danger 1	0.00	000.0	Primary

Hydrographer Recommendations

Recommend removal of obstruction/fish pen from chart. Area covered with 100% multibeam.

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 2:depth unknown

SORDAT - 20101026

SORIND - US,US,survy,H12259

WATLEV - 3:always under water/submerged

Office Note: concur.

Feature Images

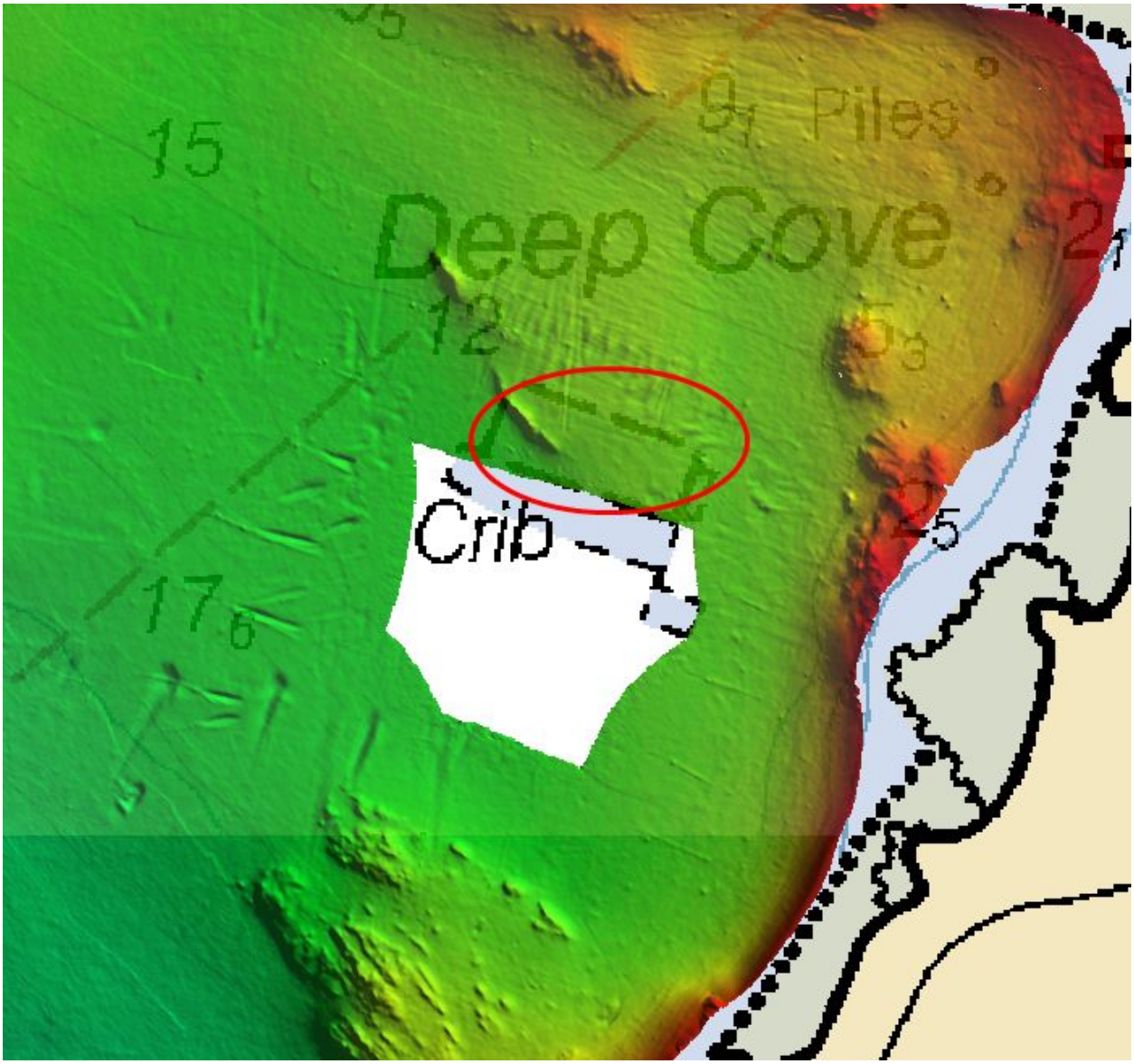


Figure 1.17.1

Gmail by Google

Matt Andring <andrinma@gmail.com>

Harris Cove fish pen

2 messages

Matt Andring <andrinma@gmail.com> **Wed, May 4, 2011 at 12:10 PM**
To: Bob Peacock <qpilot@maineline.net>

Hi Bob,

I'm trying to determine if the fish pens in Harris Cove next to Dog Island are still active. They are marked on charts 13396 and 13394, but the corner lights are only shown on 13396. The lights are additionally on the US Coast Guard Light List. When we surveyed the area we did not observe any lighted buoys. They are listed as belonging to 'Moose Island Aquaculture', though I've not been able to look up any contact info for them online. If you have any information about that site it would be very helpful in determining how to address that location.

Thank you,
Matt Andring

PS Is your daughter still working for NOAA? How is she liking it?

Capt. Bob Peacock <qpilot@maineline.net> **Wed, May 4, 2011 at 2:36 PM**
Reply-To: qpilot@maineline.net
To: Matt Andring <andrinma@gmail.com>
Cc: Dave Morang <dave.morang@cookeaqua.com>

Matt,

Harris Cove is still an active legal site for at least 5 years.

Due to the “fallowing” requirement of the State, the sites

are left empty every other crop rotation.

During your survey period the site was empty, but may well have fish

(with pens and buoys) again next spring, the decision has not been

completed at this time.

The contact person locally is Mr. David Morang at Cooke’s

office in Eastport (207-853-6081 ext. 1).

Hope this is helpful. Ansley is currently walking dogs in Manchester,

Mass, waiting for her boyfriend to ship out.

Hope all is well with you. Are you in NYC?

Bob

Capt. Bob Peacock

Mobile 207-263-6403

Office 207-733-5556

qpilot@maineline.net

Quoddy Pilots **USA**

From: Matt Andring [mailto:andrinma@gmail.com]
Sent: Wednesday, May 04, 2011 12:11 PM
To: Bob Peacock
Subject: Harris Cove fish pen

[Quoted text hidden]

UNITED STATES DEPARMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Ocean Service
Silver Spring, Maryland 20910

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE : December 8, 2010

HYDROGRAPHIC BRANCH: Atlantic
HYDROGRAPHIC PROJECT: OPR-A375-NRT5-2010
HYDROGRAPHIC SHEET: H12259

LOCALITY: Eastern Cobscook Bay and Friar Roads, ME
TIME PERIOD: June 10 - October 26, 2010

TIDE STATION USED: 841-0140 Eastport, ME
Lat. 44° 54.3'N Long. 66° 59.0' W
PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 5.729 meters

REMARKS: RECOMMENDED ZONING

Preliminary zoning is accepted as the final zoning for project OPR-A375-NRT5-2010, H12259, during the time period between June 10 and October 26, 2010.

Please use the zoning file "A375NRT52010CORP" submitted with the project instructions for Easport, ME. Zones ME1,ME2,ME3,ME4,ME5, ME6,ME7,ME13,ME14,ME15,&M17 are the applicable zones for H12259.

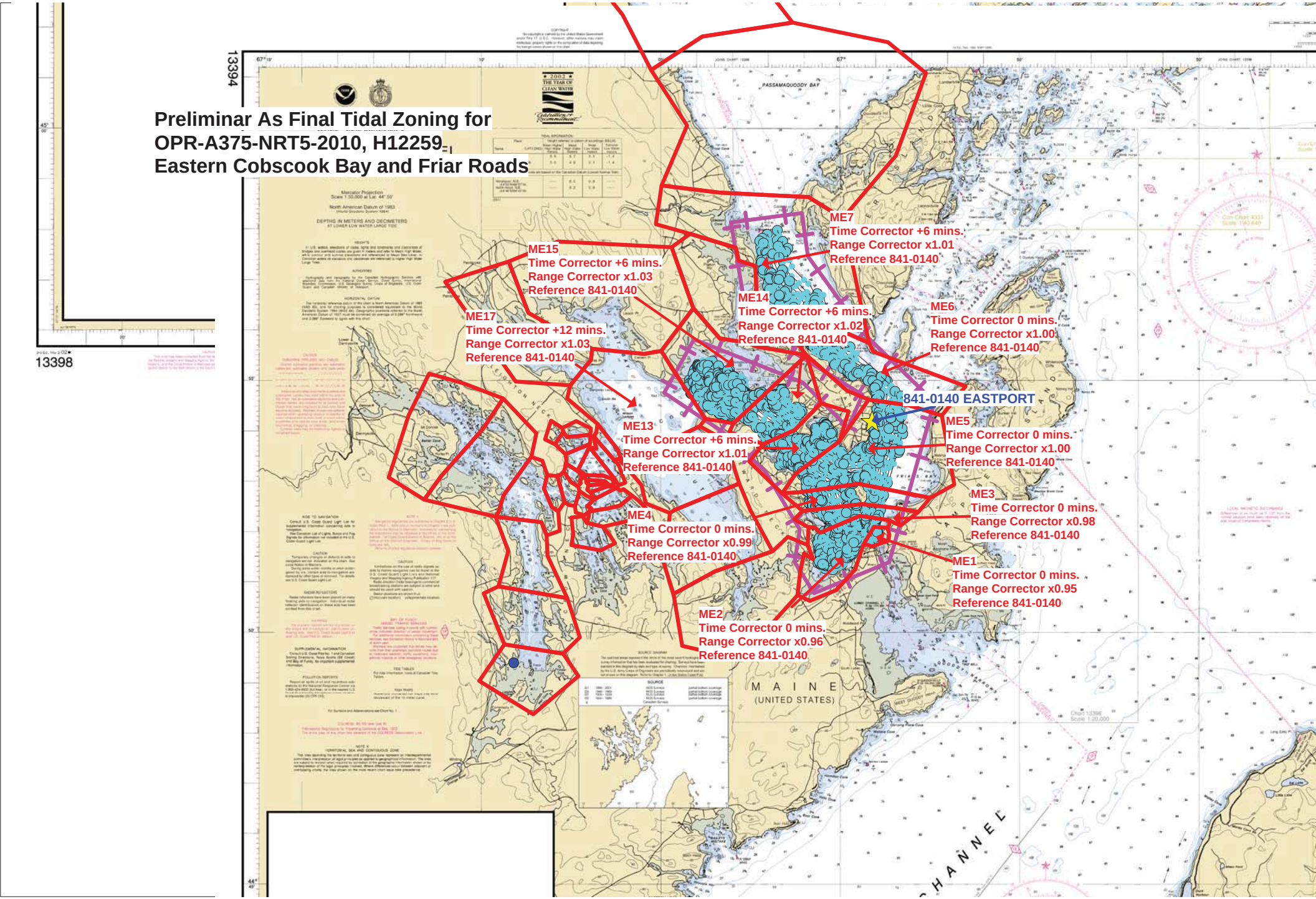
Refer to attachments for zoning information.

Note 1: Provided time series data are tabulated in metric units (meters), relative to MLLW and on Greenwich Mean Time on the 1983-2001 National Tidal Datum Epoch (NTDE).

Peter J. Stone

Digitally signed by Peter J. Stone
DN: cn=Peter J. Stone, o=NOAA/NOS/CO-OPS, ou=Oceanographic Division, email=peter.stone@noaa.gov, c=US
Date: 2010.12.13 17:37:20 -05'00'

CHIEF, OCEANOGRAPHIC DIVISION


Preliminar As Final Tidal Zoning for
OPR-A375-NRT5-2010, H12259
Eastern Cobscook Bay and Friar Roads
13394
13398
ME7
Time Corrector +6 mins.
Range Corrector x1.01
Reference 841-0140
ME15
Time Corrector +6 mins.
Range Corrector x1.03
Reference 841-0140
ME14
Time Corrector +6 mins.
Range Corrector x1.02
Reference 841-0140
ME6
Time Corrector 0 mins.
Range Corrector x1.00
Reference 841-0140
ME17
Time Corrector +12 mins.
Range Corrector x1.03
Reference 841-0140
841-0140 EASTPORT
ME5
Time Corrector 0 mins.
Range Corrector x1.00
Reference 841-0140
ME13
Time Corrector +6 mins.
Range Corrector x1.01
Reference 841-0140
ME3
Time Corrector 0 mins.
Range Corrector x0.98
Reference 841-0140
ME4
Time Corrector 0 mins.
Range Corrector x0.99
Reference 841-0140
ME1
Time Corrector 0 mins.
Range Corrector x0.95
Reference 841-0140
ME2
Time Corrector 0 mins.
Range Corrector x0.96
Reference 841-0140
MAINE
(UNITED STATES)
PASSAMAQUODDY BAY
CHANNEL

UNITED STATES DEPARMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Ocean Service
Silver Spring, Maryland 20910

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE : December 8, 2011

HYDROGRAPHIC BRANCH: Pacific
HYDROGRAPHIC PROJECT: OPR-A375-NRT5-2011
HYDROGRAPHIC SHEET: H12259 LLWLT edition

LOCALITY: Eastern Cobscoook Bay and Friar Roads, ME
TIME PERIOD: June 10 - October 26, 2010

TIDE STATION USED: 841-0140 Eastport, ME
Lat. 044° 54.3'N Long. 066° 59.0' W
PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters
HEIGHT OF LLWLT BELOW PLANE OF REFERENCE: -0.940 meters

REMARKS: RECOMMENDED ZONING

Please use the zoning file "A375NRT52010CORP" submitted with the project instructions for Easport, ME. Zones ME1,ME2,ME3,ME4,ME5, ME6,ME7,ME13,ME14,ME15,&M17 are the applicable zones for H12259.

Add the Height of LLWLT below plane of reference to the observed water levels. Then apply the tide correctors for each zone to the vertically corrected water levels.

The LLWLT is determined from the average of the lowest low waters, one from each of 19 years of predictions. It is determined by predicting the tide for each year over a 19-year time period, selecting the individual lowest water elevation predicted during that year, and averaging the individual lowest predicted tide each year for 19 years.

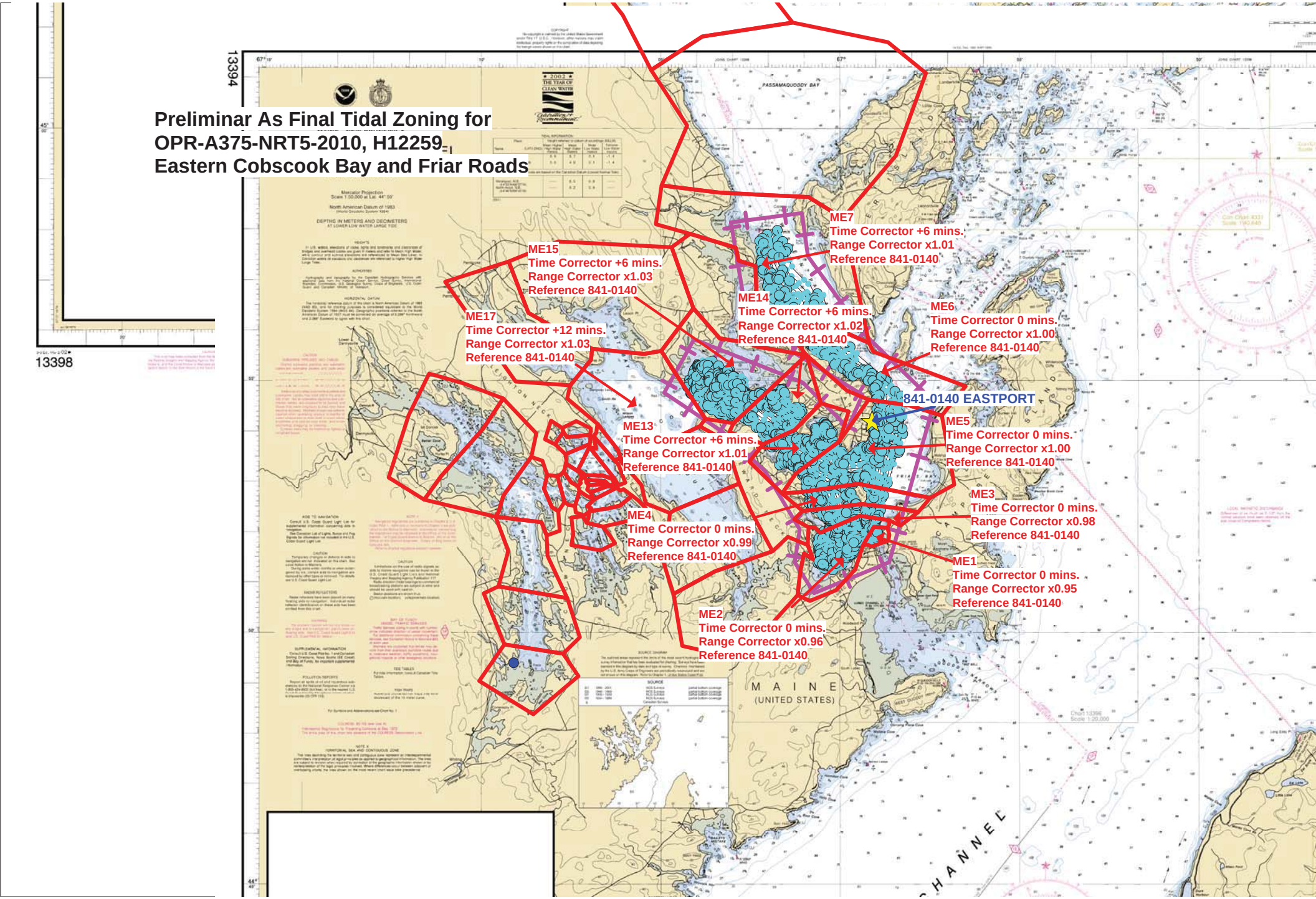
Refer to attachments for zoning information.

Note 1: Provided time series data are tabulated in metric units (meters), relative to MLLW and on Greenwich Mean Time on the 1983-2001 National Tidal Datum Epoch (NTDE).

Gerald Hovis

Digitally signed by Gerald Hovis
DN: cn=Gerald Hovis, o=Center for Operational Oceanographic Products and Services, ou=NOAA/NOS/CO-OPS/OD/PSB, email=gerald.hovis@noaa.gov, c=US
Date: 2011.12.21 15:57:55 -05'00'

CHIEF, PRODUCTS AND SERVICES BRANCH


Preliminar As Final Tidal Zoning for
OPR-A375-NRT5-2010, H12259
Eastern Cobscook Bay and Friar Roads
13394
13398
ME7
Time Corrector +6 mins.
Range Corrector x1.01
Reference 841-0140
ME15
Time Corrector +6 mins.
Range Corrector x1.03
Reference 841-0140
ME14
Time Corrector +6 mins.
Range Corrector x1.02
Reference 841-0140
ME6
Time Corrector 0 mins.
Range Corrector x1.00
Reference 841-0140
ME17
Time Corrector +12 mins.
Range Corrector x1.03
Reference 841-0140
841-0140 EASTPORT
ME5
Time Corrector 0 mins.
Range Corrector x1.00
Reference 841-0140
ME13
Time Corrector +6 mins.
Range Corrector x1.01
Reference 841-0140
ME3
Time Corrector 0 mins.
Range Corrector x0.98
Reference 841-0140
ME4
Time Corrector 0 mins.
Range Corrector x0.99
Reference 841-0140
ME1
Time Corrector 0 mins.
Range Corrector x0.95
Reference 841-0140
ME2
Time Corrector 0 mins.
Range Corrector x0.96
Reference 841-0140
MAINE
(UNITED STATES)
PASSAMAQUODDY BAY
CHANNEL

PHB Compilation Log

General Survey Info

Survey Number	H12259	Field Unit	NRT-5	State	Maine	UTM Zone	19N
Project Date	OPR-A375-NRT5-10	Project Name (Locality)	Eastport				
Start Date	06/10/2010	Sublocality	Eastern Cobscook Bay and Friar Roads				
End Date	10/26/2010	Survey Scale	1:10,000	Compilation Scale	1:20,000		

Affected Raster Charts

Chart	KAPP	Scale	Edition	Date	NTM Date
13394	2895	50,000	3	07/01/2002	02/25/2012
13396	2248	20,000	5	05/01/2010	02/25/2012
13396	2249	5,000	5	05/01/2010	02/25/2012

Add Chart | Remove Chart

Affected Electronic Charts

ENC	Scale
US5ME55M	1:50,000
US5ME56M	1:20,000

Add ENC | Remove ENC

Spatial Refrence

Horizontal Datum	WGS84
Coordinate System	LLDG
Sounding Datum	MLLW
Vertical Datum	MHW

Junction Surveys

Survey Number	Survey Date	Location Relative to Current Survey
H12258	10/13/2010	East
H12270	10/25/2010	North

Add Survey | Remove Survey

PHB Compilation Log

Processing Info

SAR Reviewer Mueller **HCell Compiler** Herzog **HCell Reviewer** Holmberg

Source Surfaces

Resolution	File Name
8m	H12259_8m_Combined_Office.csar
1m	H12259_1m_LLWLT.csar

Add Surface | Remove Surface

Supporting Documents

Name	Version
Specs and Deleverables	April 2011
HCell Specs	6.1

Add Doc | Remove Doc

Select Software Used HydroService, dKart Inspector

Software	Version, Hot Fix	Used For
CARIS HIPS	7.1	SAR Review. Inspection of Combined BASE Surfaces.
Pydro	11.8	SAR Review. Generation of Features Reports.
CARIS BASE Editor	3.2 SP2	Creation of soundings and bathy-derived features, meta area object, and Blue Notes; Survey evaluation and verification; Initial HCell assembly.
CARIS S-57 Composer	2.2 HF3	Final compilation of the HCell, correct geometry and build topology, apply final attributes, export the HCell, and QA.
CARIS Plot Composer	5.1 SP2	Generate plots of CARIS Session files used for QC.
HydroService, dKart Inspector	6.0	Validation check of the base cell file.

Reset Table

Product Info

Deleverables

Survey Scale HCell	H12259_CS.000
HCell Report for MCD	H12259_HR.pdf
Feature Listing	N/A
Descriptive Report	H12259_DR.pdf
Survey Outline	H12259_Outline.gml and .xsd
Chart Scale HCell	H12259_SS.000

Horizontal and Vertical Units

During creation of the HCell all soundings and features are maintained in metric units with as high precision as possible. Depth units for soundings measured with sonar maintain millimeter precision. Depths on rocks above MLLW and heights on islets above MHW are typically measured with range finder, so precision is less.

Depth Units (DUNI)	Meters
Positional Units (PUNI)	Meters
Height Units (HUNI)	Meters

PHB Compilation Log

Radius Setting

A survey-scale sounding (SOUNDG) feature object layer was built from the Combined Surface in CARIS BASE Editor. A shoal-biased selection was made at survey scale using a Radius Table file with values shown below.

Radius (mm)	Min. Depth (m)	Max Depth
2	0	10
3	10	20
3.5	20	50
4	50	100

Contours

Depth contours at the intervals on the largest scale chart are included in the SS HCell for MCD raster charting division to use for guidance in creating chart contours. With the exception of the zero contours included in the *_CS file, contours have not been deconflicted against shoreline features, soundings and hydrography.

Charted Contours	Metric Equivalent	Metric NOAA Rounded	Charted NOAA Rounded
0	0	0.075	0.075
2	2	2.075	2.075
5	5	5.075	5.075
10	10	10.075	10.075
20	20	20.075	20.075
30	30	30.75	30.75
50	50	50.75	50.75
100	100	100.75	100.75

Add Contour | Remove Contour

Additional Info

Contact Information

Inquiries regarding this HCell content or construction should be directed to:

HCell Compiler: Martha Herzog

Phone Number: 206 526-6730

Email: martha.herzog@noaa.gov

Compilation Comments

This survey was compiled in metric units.

This survey contains a section of data compiled to LLWLT. A M_VDAT meta object was used to identify the area in the chart update product.

A geospatial PDF is submitted with this survey.

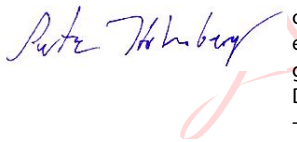
APPROVAL SHEET
H12259

Initial Approvals:

The survey evaluation and verification has been conducted according to branch processing procedures and the HCell compiled per the latest OCS HCell Specifications.

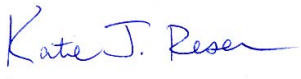
Martha Herzog
2012.07.26
09:19:09 -07'00'

The survey and associated records have been inspected with regard to survey coverage, delineation of the depth curves, development of critical depths, S-57 classification and attribution of soundings and features, cartographic characterization, and verification or disproval of charted data within the survey limits. The survey records and digital data comply with OCS requirements except where noted in the Descriptive Report and are adequate to supersede prior surveys and nautical charts in the common area.



Digitally signed by Peter S. Holmberg
DN: cn=Peter S. Holmberg, o, ou, email=peter.holmberg@noaa.gov, c=US
Date: 2012.07.26 10:31:22 -07'00'

I have reviewed the HCell, accompanying data, and reports. This survey and accompanying digital data meet or exceed OCS requirements and standards for products in support of nautical charting except where noted in the Descriptive Report.



Katie Reser
2012.07.26
07:50:02 -07'00'