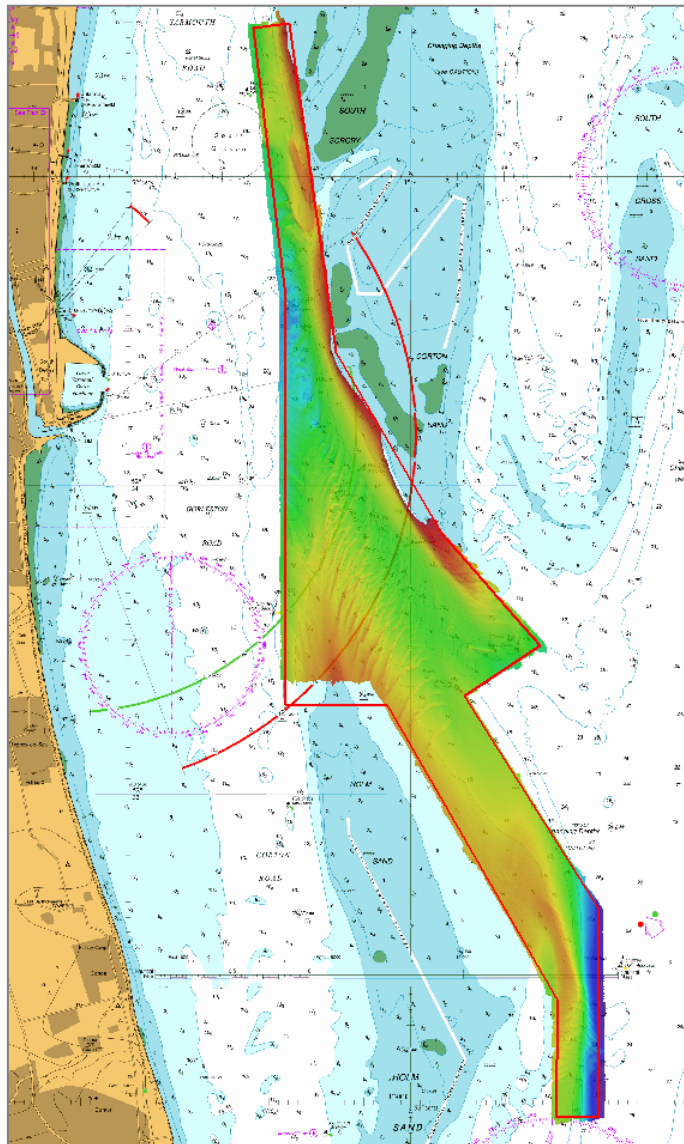




United Kingdom
Hydrographic Office

EAST ANGLIA HOLM CHANNEL

SUMMARY ASSESSMENT ON THE ANALYSIS OF
ROUTINE RESURVEY AREA EA9
FROM THE 2012 SURVEY



May 2013

EAST ANGLIA

HOLM CHANNEL

Summary Assessment EA9/2012

A summary assessment of the 2012 hydrographic survey of the area: to monitor recent seabed movement; to identify any implications for shipping; and to make recommendations for future surveys.

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HOLM CHANNEL, 2012

1 Introduction

- 1.1 The full area of EA9 is re-surveyed every 3 years; within which a focused area is surveyed annually (as shown on the front of this report). This focused area concentrates on the area of greatest concern, taking into account sediment mobility, depth of water and draught of shipping using the areas.
- 1.2 This summary report looks at the latest focused survey of EA9 and compares it against the previous survey. For more details on the area, including long term changes, the more detailed report on the last full 3-year survey (conducted in 2011) should be consulted.

2 Description of the Area

- 2.1 The focused area covers a buoyed approach to Great Yarmouth through Holm Channel. Good depth of water is available through the buoyed route in Holm channel. Sandwaves exist along the western side of Holm Channel, extending across the northern end of Holm sand.
- 2.2 Vessels drawing up to 7.4 metres are known to use the route. East Port Great Yarmouth can accommodate vessels up to 10.0 metres draught, with development and use including general cargo and the various offshore sectors.

3 Survey Data

- 3.1 The 2011 survey was conducted from 29 May to 26 June. Weather in the area was generally good throughout the survey period, with slight to smooth sea states. The 2012 survey was conducted on 21 and 22 September, when up to Sea State 4 was experienced. In both surveys, the Vertical Offshore Reference Frame (VORF) and GPS heighting were used to reduce depths to Chart Datum.

4 Changes since the 2011 Survey

- 4.1 Changes are shown in the Surface Difference plot at [Annex A](#) and 5 and 10 metre contour comparisons at Annexes [B](#) and [C](#) respectively.

Holm Sand

- 4.2 The northern end of Holm Sand has receded slightly, continuing a trend seen in previous analysis. In the south of the survey area the 10 metre contour has extended out into Holm Channel by around 150 metres.

Corton Sand

- 4.3 The southern extent of Corton Sand has receded, with the 5 metre contour receding 250 metres and the 10 metre contour receding 210 metres. This reflects an ongoing retreat of Corton Sand, the southern limit of which now lies 4.6 km north-northwest of its position 11 years ago. Within Holm Channel, the bank has extended into the channel slightly, with the 5 and 10 metre contours migrating up to 60 metres.

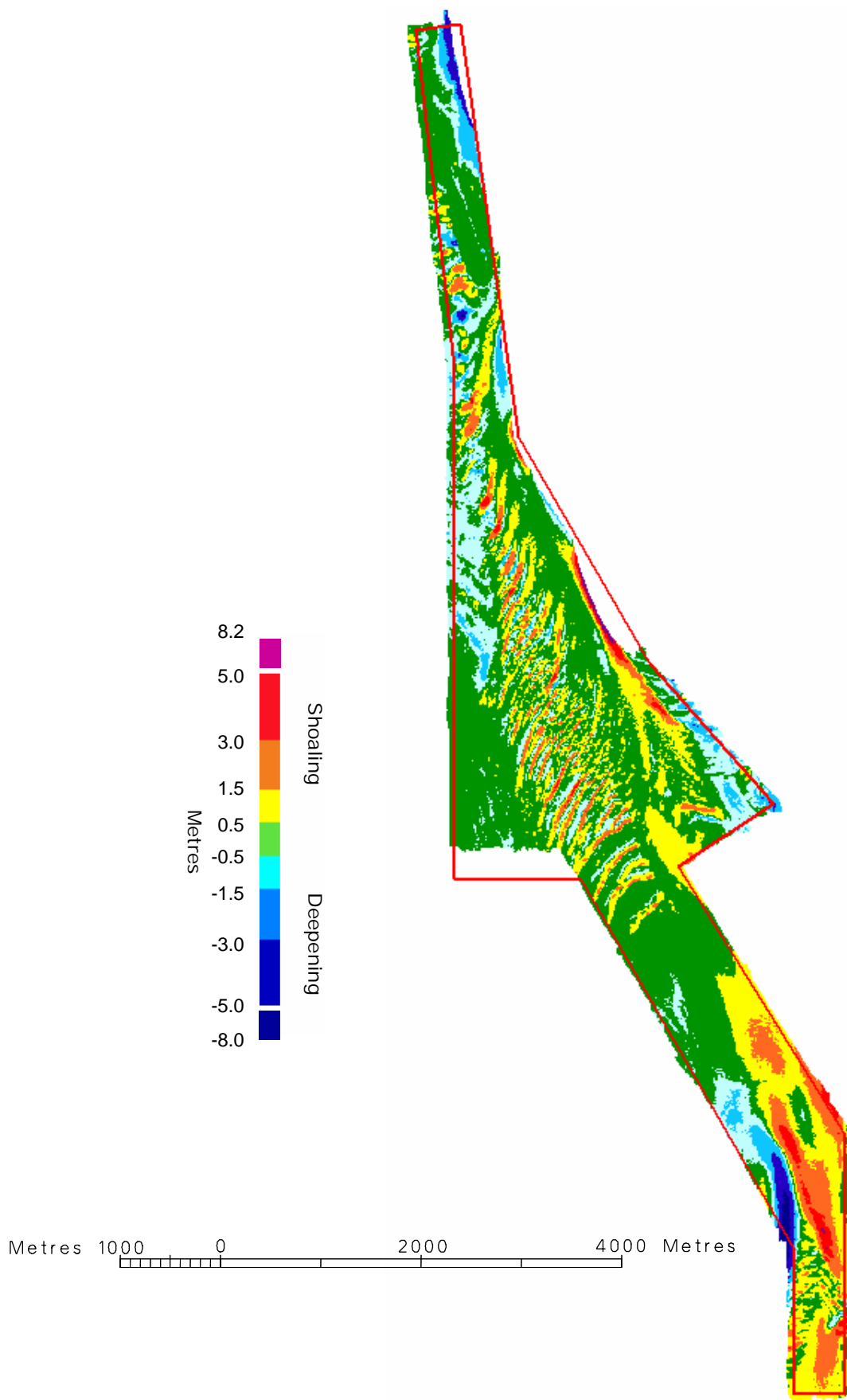
5 Implications for Shipping

- 5.1 The shoal areas are adequately marked by the current buoyage, and changes are of no direct concern to the vessels keeping to the buoyed route. The expansion of Corton Sand towards Mid Corton buoy needs careful monitoring.
- 5.2 Vessels are understood to track south of the buoyed route across the northern end of Holm Sand where draught permits; in this area depth of water has increased slightly since the 2011 survey.

6 Recommendations

- 6.1 Although good depth of water is available in the buoyed route through Holm Channel, changes to sandwaves and the banks just outside of the route support annual resurveying, particularly in the areas west of Holm Approach buoy and east of Mid Corton buoy. Additionally, there is the potential for the rate of change to increase over a short period of time.

SURFACE DIFFERENCE LAYER SHOWING BATHYMETRIC CHANGES
BETWEEN THE 2011 AND 2012 SURVEYS



COMPOSITE DIAGRAM OF THE 5 METRE CONTOUR
FROM THE 2011 AND 2012 SURVEYS



COMPOSITE DIAGRAM OF THE 10 METRE CONTOUR
FROM THE 2011 AND 2012 SURVEYS

