

THAMES ESTUARY

FISHERMAN'S GAT

Summary Assessment TE19/2013

A summary assessment of the 2013 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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FISHERMAN'S GAT, 2013

1 Introduction

- 1.1 The full area of TE19 is re-surveyed every 12 years; within that area a focused area in the approach to Fishermans Gat (shown on the front of this report) is scheduled to be surveyed every 6 years. The frequency of the focused survey was extended from 3 to 6 years after reviewing the 2008 survey, with the latest survey brought forward by 1 year to better position it between the 2008 focused survey and next full survey due in 2017.
- 1.2 This summary report looks at the latest focused survey and compares it against the previous focused survey. For more details on the area, including long-term changes, the more detailed full report on the 2008 survey should be consulted.

2 Description of the Areas

- 2.1 The area covers the eastern approach to Fisherman's Gat, east of the Port of London Authority (PLA) limits.
- 2.2 The PLA mini-plot of a December 2013 survey of Fisherman's Gat shows the ruling depth as 8.7 metres, found at the inner northwest end of the gat.

3 Survey Data

- 3.1 The 2008 survey was conducted on 8 and 9 September. The 2013 survey was conducted over 3 days from 16 to 24 October. Slight to moderate sea states were experienced while surveying in 2013, but with interruptions in surveying due to poor weather. In both surveys the Vertical Offshore Reference Frame (VORF) and GPS heighting were used to reduce depths to Chart Datum.

4 Changes since the 2008 Survey

- 4.1 The surface difference plot at [Annex A](#) shows the changes in depth that have occurred since last surveyed.
- 4.2 Depths are broadly similar or slightly deeper than those found in the 2008 survey.
- 4.3 A sounding plot produced from the 2013 survey is at [Annex B](#).

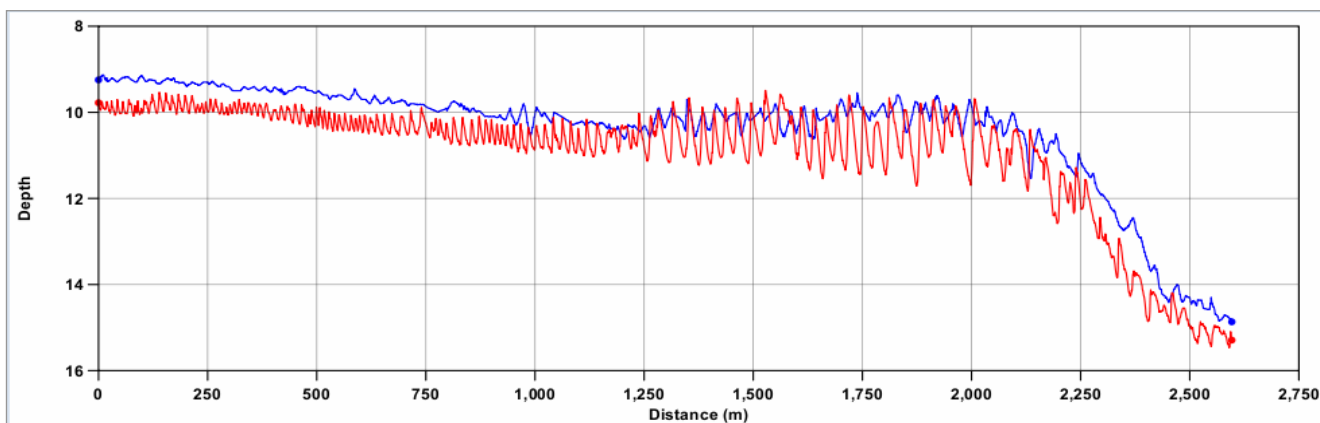
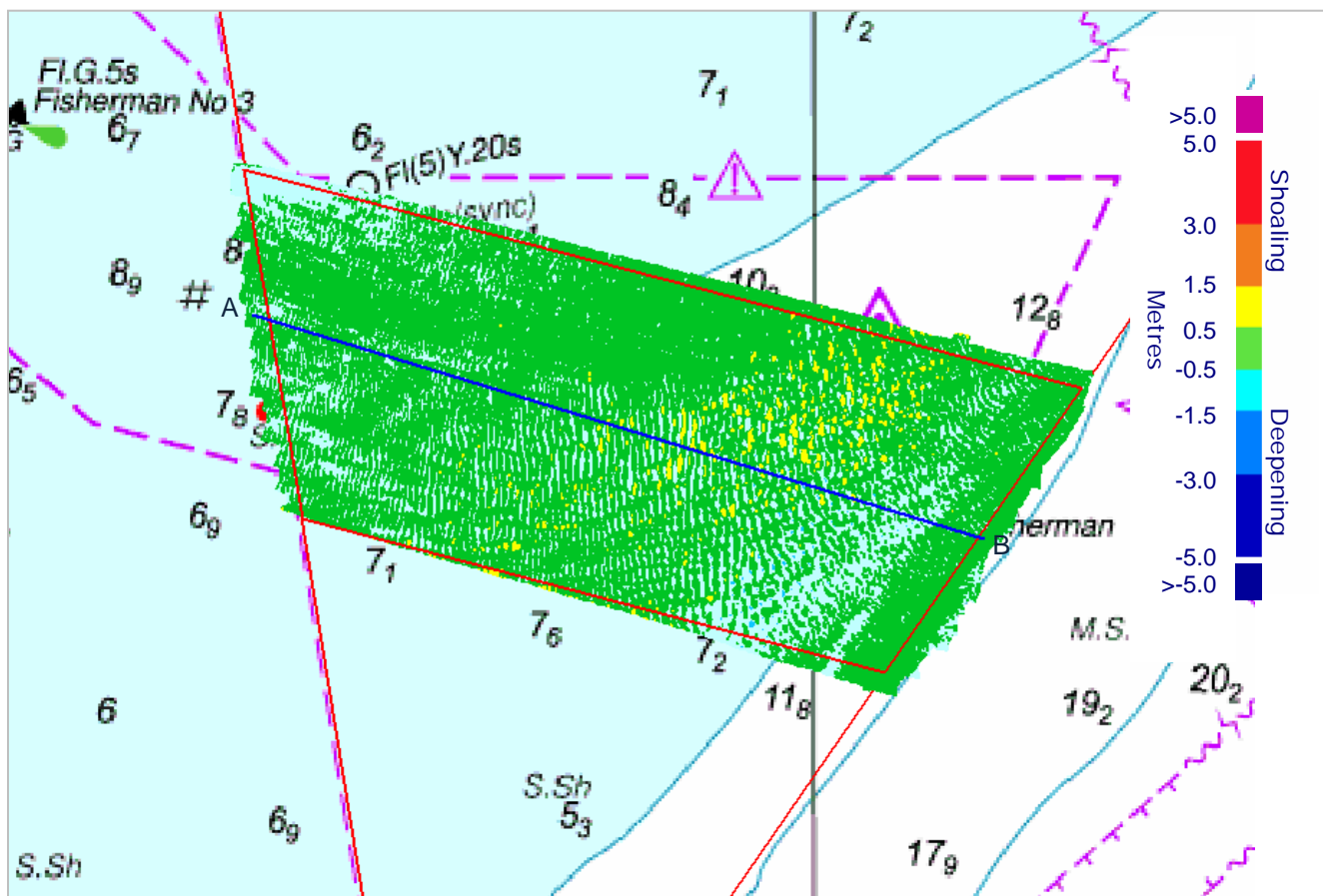
5 Implications for Shipping

- 5.1 The ruling depth of 8.7 metres in Fisherman's Gat limits its use, although AIS data shows vessels drawing up to 10.8 metres using the channel with the aid of the tide.
- 5.2 Good depth of water is available in the approach to Foulger's Gat, although an 8.6 metre depth on the southern side of the approach is 0.5 metres shallower than depths found in the area in the 2008 survey. Depths of 8.8 metres exist close to Fisherman No 1 buoy in the northwest of the area.

6 Recommendations

- 6.1 Considering the depth of water and importance of the area to shipping, the focused area should be retained with the same limits and survey frequency.

SURFACE DIFFERENCE LAYER SHOWING BATHYMETRIC CHANGES
BETWEEN THE 2008 AND 2013 SURVEYS



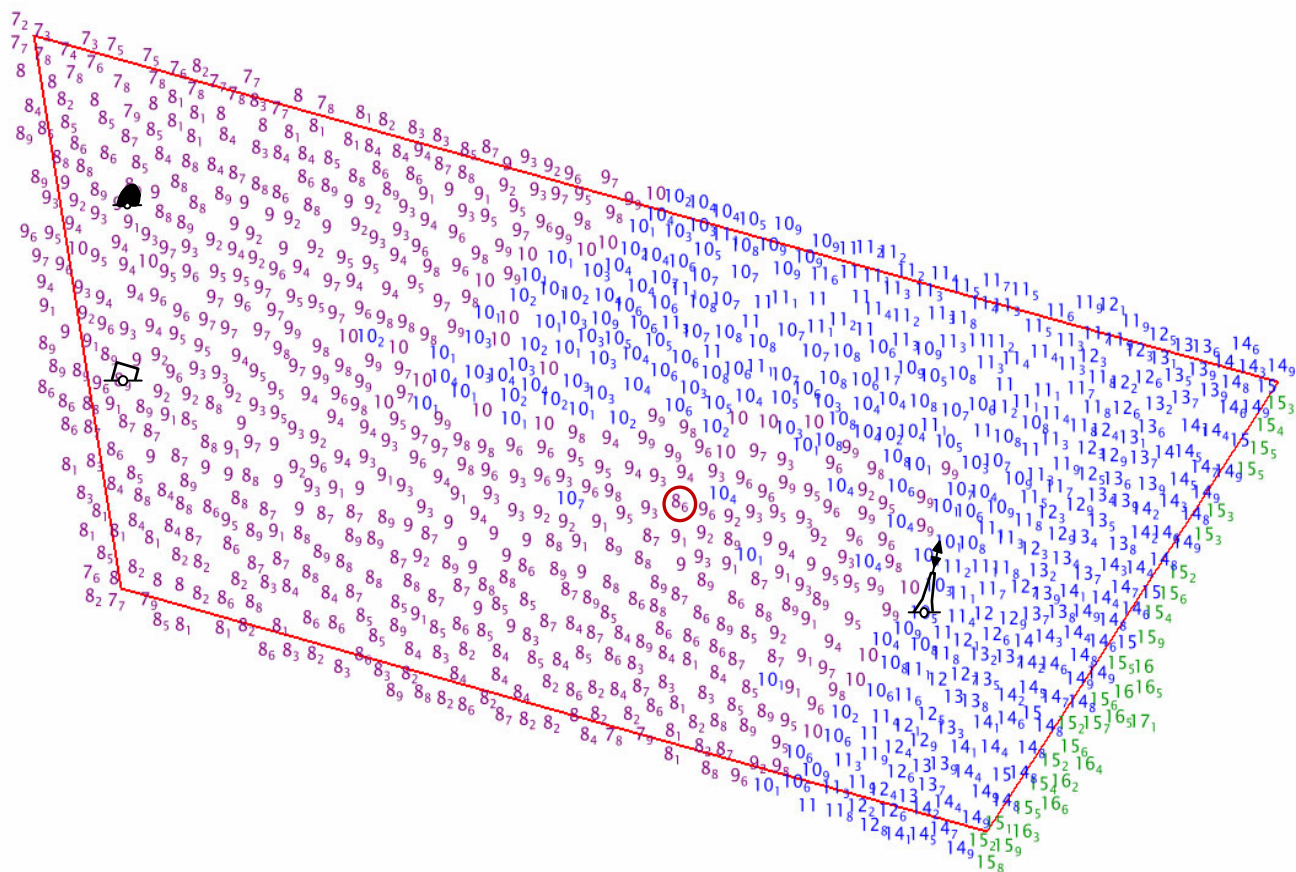
A

Blue = 2008, Red = 2013

B

Note: the 2008 surface has been created from 10 metre density shoal biased points. The 2013 surface is a 1 metre resolution CUBE surface, with better definition of small scale features.

SELECTED DEPTHS FROM THE 2013 SURVEY



Note: the highlighted depth of 8.6m is 0.5m shallower than in the 2008 survey