Centre for Environment Fisheries & Aquaculture Science

Cefas

**RESEARCH VESSEL PROGRAMME**

**RV CEFAS ENDEAVOUR**
**Survey: C END 17 - 2020**

**STAFF:**

| Name | Role | Cabin | Shift |
|---|---|---|---|
| Daniel Wood | SIC | B2 | 0600 – 1800 |
| Sara Stones | 2IC | B1 | 0600 – 1800 |
| Gemma Kiff | Data Manager | C1 | 0600 – 1800 |
| | | | |
| Ross Bullimore | Day Shift Lead | C6 | 1200- 0000 |
| John Sperry | MBES | C7 | 1200- 0000 |
| Bryan Goodsir-Thompson | MIST | C2 | 1200- 0000 |
| Martin Cliffen | Survey Scientist | C4 | 1200- 0000 |
| Brian Kneafsey | Survey Scientist | C3 | 1200- 0000 |
| Danja Hoehn | Smart Buoy | C8 | 1200- 0000 |
| | | | |
| Stefan Bolam | Night Shift Lead | D4 | 0000-1200 |
| Alison Pettafor | MBES | D3 | 0000-1200 |
| Axayacatl Molina-Ramirez | MIST | D2 | 0000-1200 |
| Eleanor Haigh | Smart Buoy | D5 | 0000-1200 |
| Sam Roslyn | Survey Scientist | C5 | 0000-1200 |
| Anna Downie | GIS | D6 | 0000-1200 |

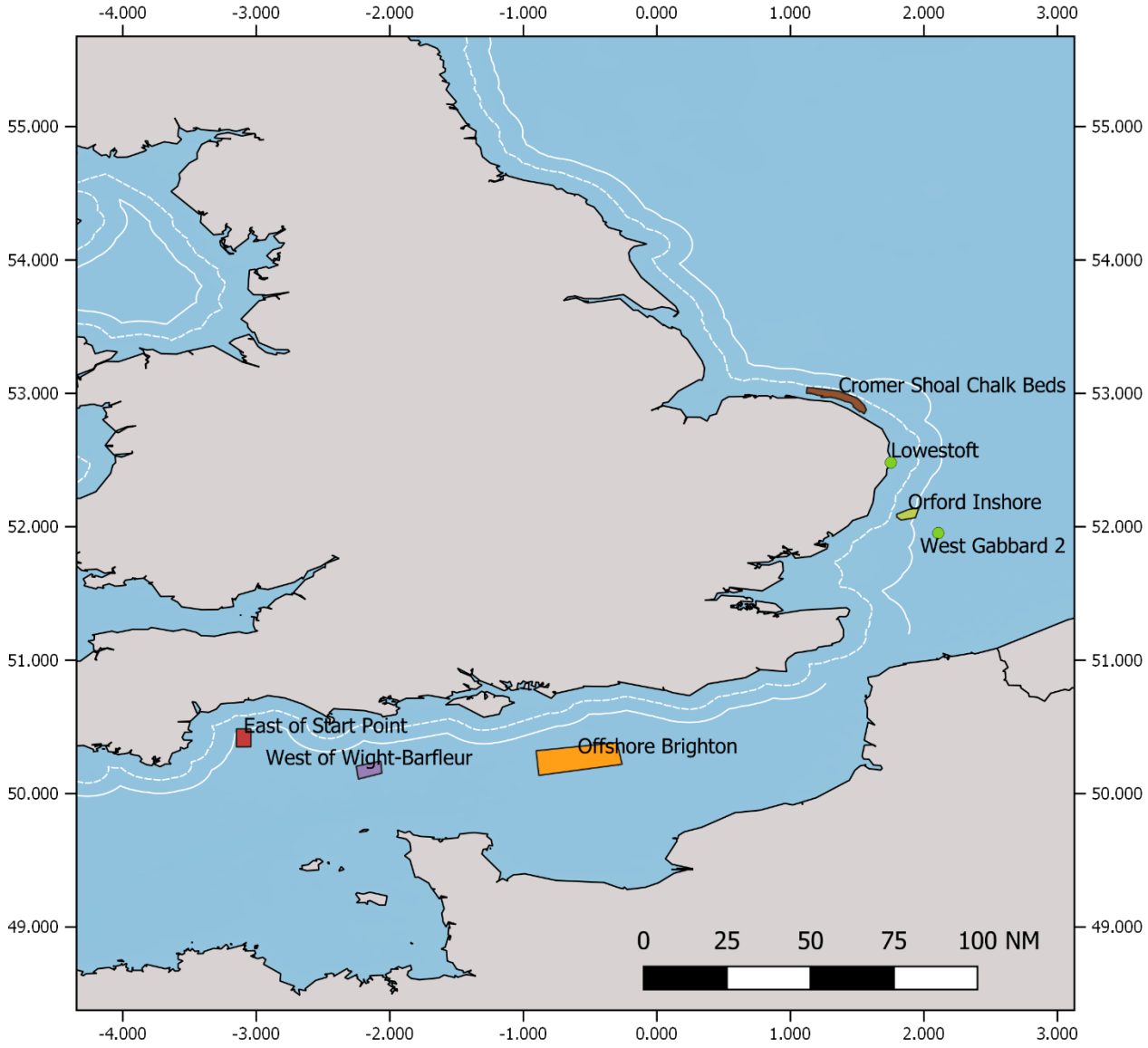
**DURATION: 08th November 2020 – 2nd December 2020**

**Please note:** that this is two survey back to back with no port call in between surveys. Part 1 is for Smart Buoys, Part 2 is for MPAs.



Pakefield Road, Lowestoft NR33 0HT | www.cefas.co.uk | +44 (0) 1502 562244

**MPA LOCATIONS:**




**AIMS:**

**Part 1 - SmartBouy**

1. Service Noise Landers at Dowsing and Warp (SLA20A)
2. Service SmartBuoys at West Gabbard and Warp (SLA25D)
3. Continuous flow and CTD Rosette water sampling as required
4. Collection of zooplankton sample at West Gabbard

**Part 2 - MPA**

5. Replace Smart Buoys and noise recorders.
6. Survey of Cromer Shoal Chalk Beds MCZ
7. Survey of Orford Inshore MCZ
8. Survey of West of Wight Barfleur Reef MCZ

9. Survey of East of Start Point MCZ
10. Survey of Offshore Brighton MCZ
11. CTD dips at historic sites

**PLAN – Part 1 - SmartBuoys:**

| | |
|---|---|
| WGab1 | Pre-recovery CTD, |
| WGab2 | Recover and deploy SmartBuoy (51° 57'.256N, 002° 06'.677E) |
| WGab3 | Post-deployment CTD |
| WGab4 | Zooplankton net haul sample (in area of 51° 57'.2N, 002° 07'.2E). |

During transit 2 hourly underway water samples will be taken.

Endeavour will then transit to the Warp site and carry out the following activities:

| | |
|---|---|
| Warp1 | Pre-recovery CTD, |
| Warp2 | Recover and deploy SmartBuoy (51° 32'.010N - 001° 02'.896E) |
| Warp3 | Recover and deploy Noise Lander (51° 31'.946N - 001° 02'.804E) |
| Warp4 | Post-deployment CTD. |

During transit 2 hourly underway water samples will be taken.

Overnight transit to the Dowsing site will be through two waypoints in the Thames plume:

| | |
|---|---|
| TP1 | Underway sample-steam through (51° 54'.430N 001° 31'.355E) |
| TP2 | Underway sample-steam through (52° 11'.560N 001° 41'.075E) |

2 hourly underway water sampling will then continue to the Dowsing site.

At the Dowsing site Endeavour will carry out the following activities:

| | |
|---|---|
| Dow1 | Recover and deploy Noise Lander (53° 31'.737N, 001° 03'.208E) |
| Dow2 | CTD |

Once the mooring work is complete, Endeavour will then make its way back south towards Lowestoft, carrying out additional CTDs at the following sites, time permitting:

| | |
|---|---|
| Humb1 | CTD (53° 32'.0N, 000° 20'.0E) |
| Wash1 | CTD (53° 3'.50N, 000° 28'.5E) |

**PLAN – Part 2 – MPA Tour:**

1. Transit to Cromer Shoal Chalk Beds MCZ. Collect mini Hamon grab samples at 50 stations.
2. Transit to Orford Inshore MCZ. Collect drop camera imagery at 40 stations.
3. Transit to West of Wight Barfleur Reef MCZ. Collect MBES data.

4. Transit to East of Start Point MCZ. Collect Camera Sledge imagery at 14 stations and mini Hamon grab samples at 3 stations.
5. Transit to West of Wight Barfleur Reef MCZ. Collect drop camera imagery at 46 stations and mini Hamon grabs samples at 20 stations.
6. Transit to Offshore Brighton MCZ. Collect MBES data.
7. Transit to Orford inshore MCZ. Collect MBES data and drop camera imagery at 100 stations.
8. CTD dips at the stations listed below.
9. Return to Lowestoft.

| CTD Station Name | Latitude | Longitude |
|---|---|---|
| South Varne | 50.9333 | 1.28 |
| Selsey Bill | 50.6783 | -0.8267 |
| Central Channel | 50.0833 | -3 |

**Note running order of survey operations may change in the event of weather or other delays. Revisions to be agreed with Master.**

**GEAR:**

Drop Camera, mini Hamon grab, Camera Sledge, Multibeam, CTD and Smart Buoys (see gear list).

Daniel Wood and Sara Stones
Scientist in Charge and 2IC
23 October 2020

DISTRIBUTION:

BODC
AWSM



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