DREDGING & DISPOSAL AT BRIGHTON MARINA

WHO IS RESPONSIBLE FOR DREDGING AT BRIGHTON MARINA?

BRIGHTON MARINA GROUP LTD

- Long term Head Lease holder from Brighton & Hove City Council (BHCC) to December 2270
- Have responsibility under the Brighton Marina Act 1968 and fulfil the statutory role of Harbour Master
- Obligated by BHCC Head Lease and Brighton Marina Act to keep harbour properly dredged at all times
- Landlord to Premier Marinas

PREMIER BRIGHTON

- Long term tenant of Brighton Marina Group Ltd and current operator of Brighton Marina
- Hold site lease until 2155
- Obligated to deliver both the terms of the Brighton Marina Act and the BHCC Head Lease
- Responsible for the upkeep and safe haven status of the site, including ensuring that the harbour is properly dredged

SUPPORTED BY

MARINA PROJECTS

- Independent consultancy appointed by the Premier Marinas Group to oversee all marine licences and ensure ongoing compliance across all Premier Marina sites
- The Brighton appointment includes ongoing review of dredge operations, project management, contract administration and compliance inspections

WHAT IS DREDGING?

Dredging involves the use of any device to move material (whether or not suspended in water) from one part of the sea or sea bed to another part. It includes the removal of material from the sea bed entirely. It is a routine necessity in waterways and man-made harbours to maintain depths.

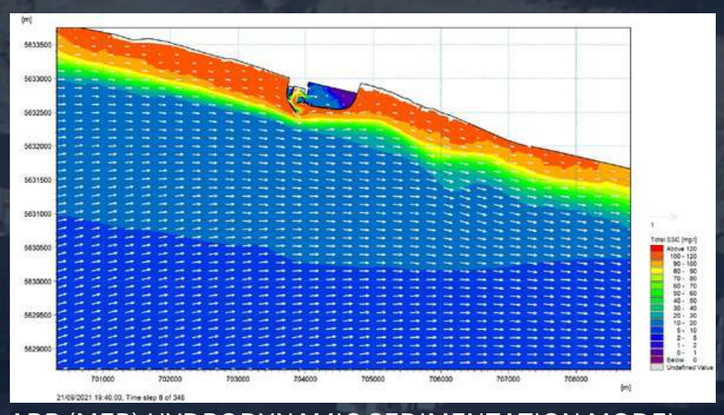
Two types of dredging are established under the statutory consents process;

- Capital dredging is dredging to a depth not previously dredged, or to a depth not dredged within the last 10 years
- Maintenance dredging is undertaken to keep channels, berths and other areas at their designed depths. It involves removing recently accumulated sediments such as mud, sand and gravel

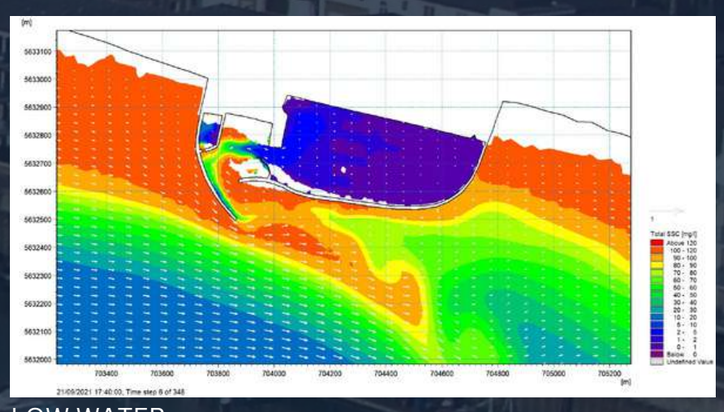
As an ongoing dredging process the work within Brighton Marina is **maintenance dredging**.

WHY IS DREDGING NEEDED IN BRIGHTON MARINA?

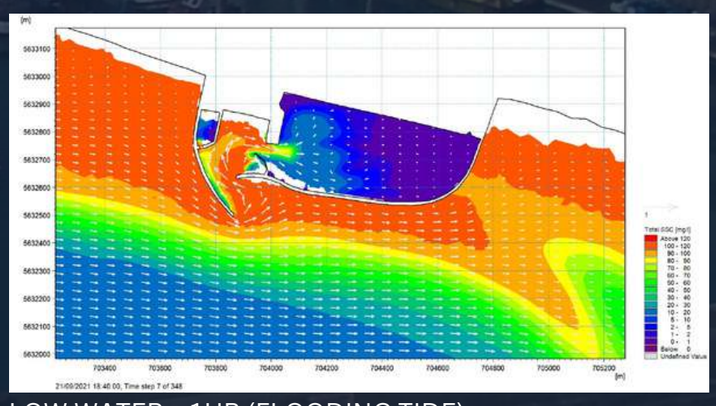
- The marina has always suffered from extensive siltation within its access channels and berthing areas
- Siltation occurs because of longshore drift and natural material movement during the tidal cycle along the south coast, west to east
- The tidal flows and waterbody movements effectively bring suspended sediment into the site where the lower energy within the breakwaters causes it to settle and accumulate
- Hydrodynamic modelling has confirmed the general sedimentation deposition model and is used to help inform dredge campaign planning and minimise the extent of dredging and disposal



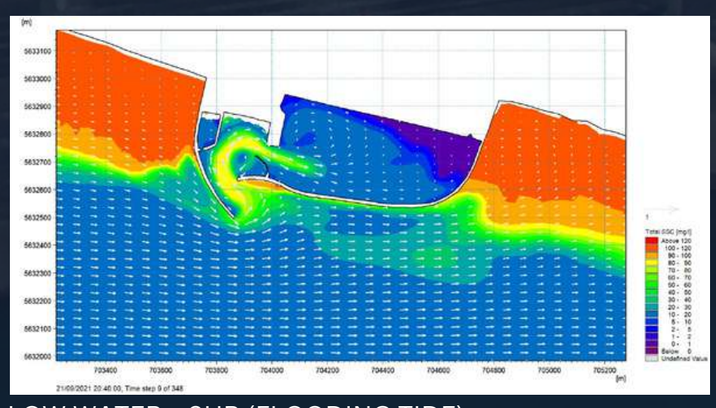
ABP (MER) HYDRODYNAMIC SEDIMENTATION MODEL



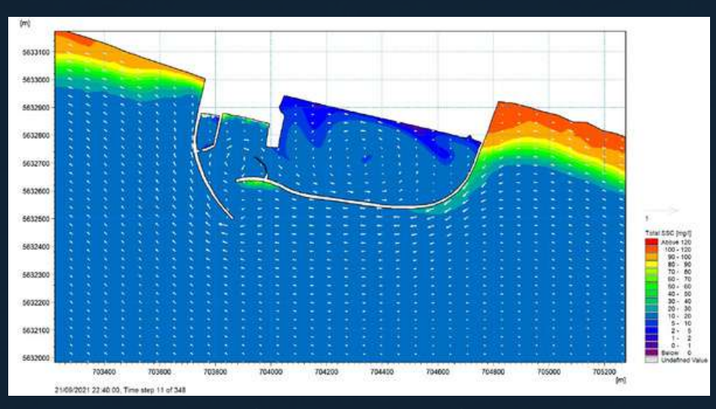
LOW WATER



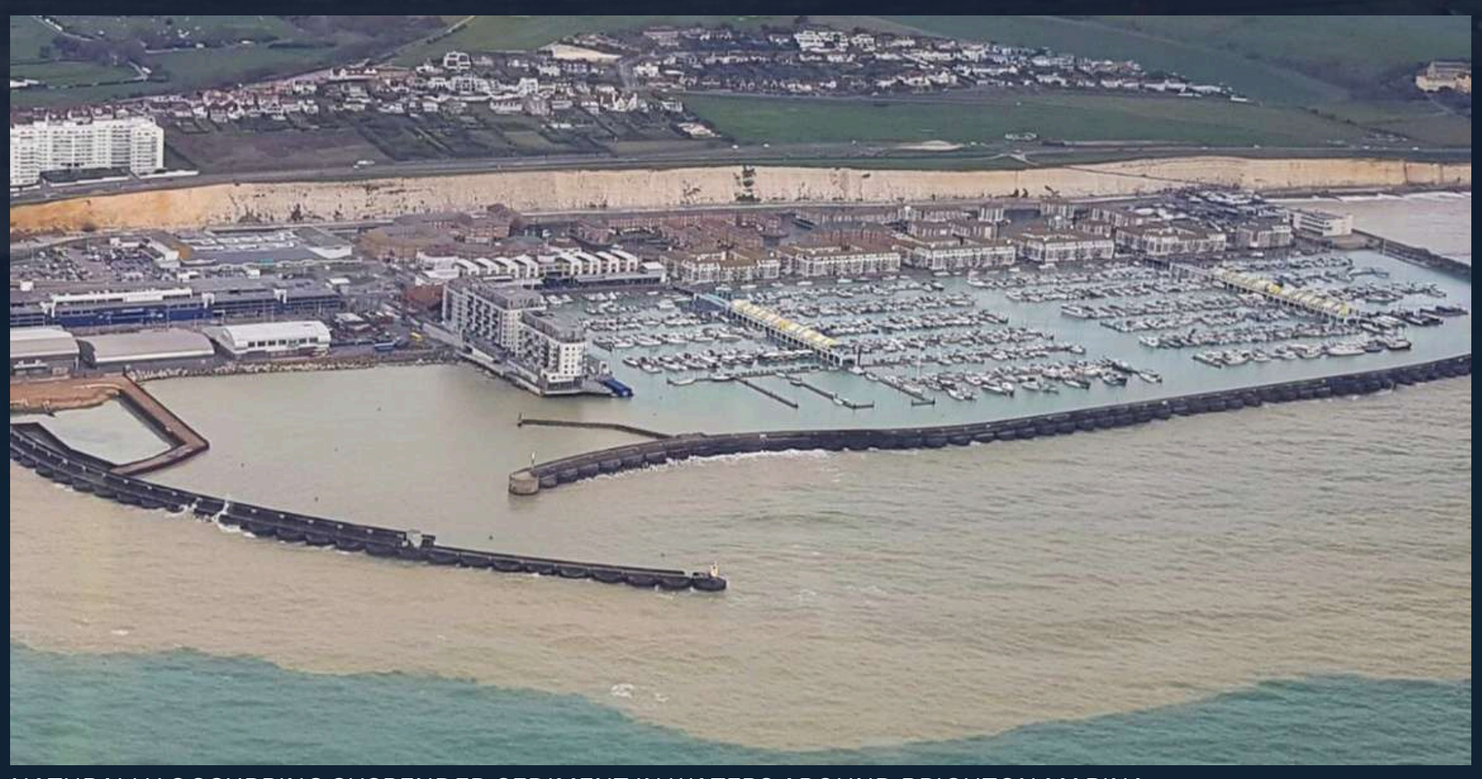
LOW WATER + 1HR (FLOODING TIDE)



LOW WATER + 3HR (FLOODING TIDE)



LOW WATER + 5HR (FLOODING TIDE)



NATURALLY OCCURRING SUSPENDED SEDIMENT IN WATERS AROUND BRIGHTON MARINA

MARINE LICENSING

WHEN & WHY IS A MARINE LICENCE REQUIRED?

- The Marine and Coastal Access Act 2009, is an act of UK Parliament
- Establishes a provision for the management and protection of the marine environment
- The 2009 act provides that a marine licence is required for certain activities carried out within the UK marine area, including that of dredging and disposal of arisings

WHO IS RESPONSIBLE FOR MARINE LICENSING?

Marine Management Organisation

- The Marine Management Organisation (MMO) is responsible for marine licensing in English waters and for Northern Ireland offshore waters.
- The MMO are an Executive non-departmental public body of the Department for Environment, Food and Rural Affairs (DEFRA)

WHAT IS COVERED BY MARINE LICENSING?

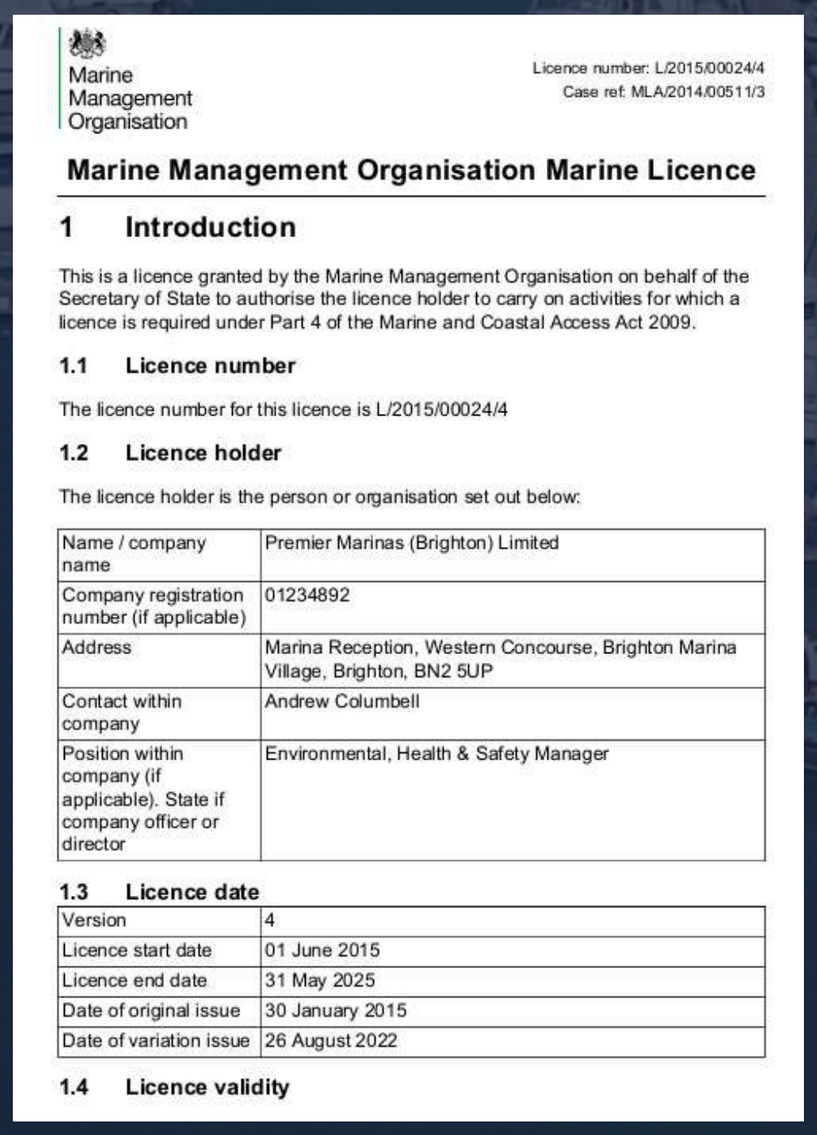
Seven Categories of activity that may require a Marine Licence;

- **Construction** (including laying of cables, maintenance, alteration or improvement of existing structures and assets)
- **Dredging**
- **Deposit** of any substance or object
- **Removal** of any substance or object
- **Incineration** of any substance or object
- **Scuttling** (sinking) of any vessel or floating container
- Use of **explosives**

Two categories of dredging are identified under Marine Licensing;

- **Capital dredging** is dredging to a depth not previously dredged, or to a depth not dredged within the last 10 years
- **Maintenance dredging** is undertaken to keep channels, berths and other areas at their designed depths. It involves removing recently accumulated sediments such as mud, sand and gravel

The disposal of sediment below Mean High Water Springs can only be completed under a Marine Licence.



Marine Management Organisation

Licence number: L/2015/00024/4
Case ref: MLA/2014/00511/3

Marine Management Organisation Marine Licence

1 Introduction

This is a licence granted by the Marine Management Organisation on behalf of the Secretary of State to authorise the licence holder to carry on activities for which a licence is required under Part 4 of the Marine and Coastal Access Act 2009.

1.1 Licence number

The licence number for this licence is L/2015/00024/4

1.2 Licence holder

The licence holder is the person or organisation set out below:

Name / company name	Premier Marinas (Brighton) Limited
Company registration number (if applicable)	01234892
Address	Marina Reception, Western Concourse, Brighton Marina Village, Brighton, BN2 5UP
Contact within company	Andrew Columbell
Position within company (if applicable). State if company officer or director	Environmental, Health & Safety Manager

1.3 Licence date

Version	4
Licence start date	01 June 2015
Licence end date	31 May 2025
Date of original issue	30 January 2015
Date of variation issue	26 August 2022

1.4 Licence validity

STAGES OF MARINE LICENCE APPLICATION



HISTORY OF DREDGING WITHIN BRIGHTON MARINA

1968

Brighton Marina Act 1968 established legal basis for construction of the site. The Act forecast the expectation of maintenance dredging requirements

1971

Construction of the marina commenced

1979

Officially opened by Queen Elizabeth II

1980's

Site Operational, Rottingdean Disposal Site established to support the start of dredging activities by Brighton Marina Group

2000

Marina acquired by Premier Marinas Ltd. Dredging continued under consents including FEPA Licence, then under Marine Licence from 2012

2015

Issue of a 10-year dredging licence from the MMO permitting maintenance dredging of up to 76,000 cubic meters or 100,000 tonnes per annum. Material Dredged through a combination of Backhoe with Split Barge and Premier's cutter suction dredger

2024

Submission of Renewal for another 10-year licence

MAY 2025

MMO issue a 10 year licence 2025-2035, dredging recommences under new licence

SEPTEMBER 2025

Notification from MMO of intention to quash licence following legal challenge. Dredging immediately stopped by Premier Marinas

NOVEMBER 2025

Confirmation received of quashing of 2025-2035 licence due to procedural issues within MMO's decision process. Requirement for Premier to seek new Licensing before any further dredging and disposal can be conducted.

Premier Marinas submit an EIA screening application to the MMO in late November to facilitate formal screening of a 1 year licence to dispose upto 100,000 wet tonnes of sediment to Rottingdean disposal site. The MMO completed screening in late February 2026, confirming the works would not require an EIA under the Marine Works Regulations.

JANUARY 2026

Premier Marinas commenced further assessment of long term disposal solutions due to the public perception around use of Rottingdean disposal site

FEBRUARY 2026

Based on the screening decision Premier Marinas Ltd. submit a Marine Licence application for the short-term ability to dredge and dispose to Rottingdean disposal site with reduced volumes over a one year period, whilst long term alternatives were assessed further.

MAY 2026

Following a full review of dredging activity and potential methodologies at Brighton Premier Marinas submitted an EIA screening request to the MMO for the use of Newhaven Disposal site with updated dredging methods.

JUNE 2026

The MMO completed screening of the Newhaven disposal concept in late June, confirming the proposals would not require an EIA under the Marine Works Regulations.

Requirement for updated modelling of the Newhaven disposal site to support any application is identified.

Following the 1 Year licence application consultation and engagement with Natural England Premier Marinas request that the 1 Year application is placed on hold, whilst further work is undertaken on the viability of Newhaven Disposal site. Premier Marinas Ltd and Newhaven Port & Properties Ltd jointly appoint ABPmer to undertake modelling assessment of disposal activities at Newhaven Disposal site.

OCTOBER 2026

ABPmer complete modelling of 15 scenarios which confirm that additional material from Brighton does not create an interaction with the MCZ designation.

Premier Marinas Ltd submit Marine Licence Application to the MMO seeking use of Newhaven disposal site under updated methodologies for a 10 year period.

NOVEMBER 2026

MMO seek to complete Technical assessments of the Marine Licence Application facilitating the Statutory and Public Consultation period.

WHERE IS THE DREDGED MATERIAL DEPOSITED?

- All material dredged from Brighton Marina must be placed within an 'Open' disposal site
- Sites are established, monitored and run by Centre for Environment, Fisheries and Aquaculture Science (CEFAS). The UK Network disposal sites can be found online via the CEFAS Spatial Hub Portal
- Three disposal sites for dredge disposal exist between Selsey Bill and Beachy Head. These are Shoreham (WI031), Rottingdean (WI020) and Newhaven (WI010)



Disposal sites, map, accessed 2024; https://data.cefas.co.uk/view/407

- Use of disposal site is only approved if the chemical testing supports material suitability, and the disposal site has assessed capacity to receive the material
- Newhaven (WI010) is an 'Open' disposal site for dredge arisings
- Newhaven disposal site is currently used by Newhaven Port, however the disposal site is managed by the Marine Management Organisation (MMO) and is available for other applicants to use via a Marine Licence application process
- Following concerns raised over the use of Rottingdean disposal site, Newhaven disposal site is considered the best alternative, however, due to the distance from the marina, dredging methodologies have to change

HOW IS THE MATERIAL DREDGED AND DISPOSED?

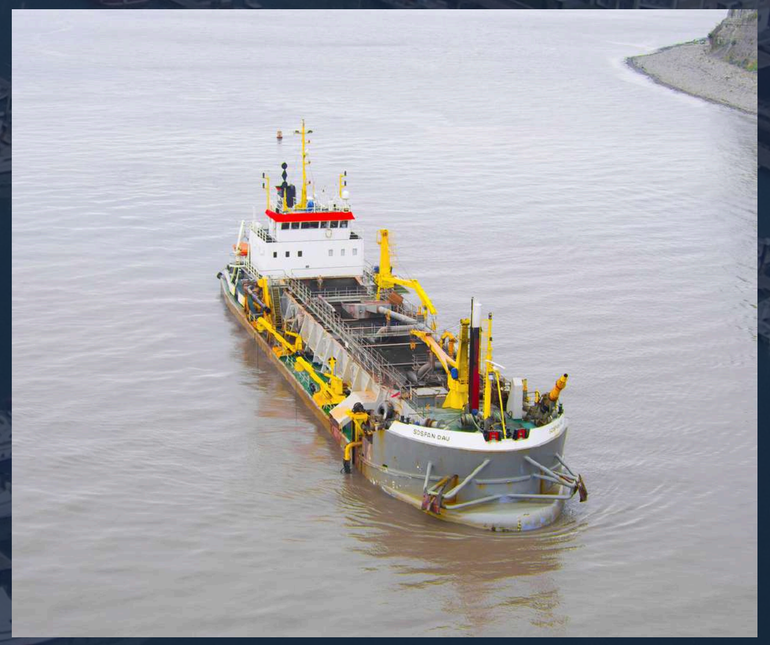
BACKHOE DREDGER WITH SPLIT BARGES

- Deployed under Contract for 2-3 months per year
- Required for maintenance of the fairways and berthing areas
- Requires significant preparations to work in berthing areas, including temporary displacement of vessels and pontoons
- Bulk volume approach with two split barges working in tandem transporting dredged material to and from Newhaven disposal site



TRAILING SUCTION HOPPER DREDGER

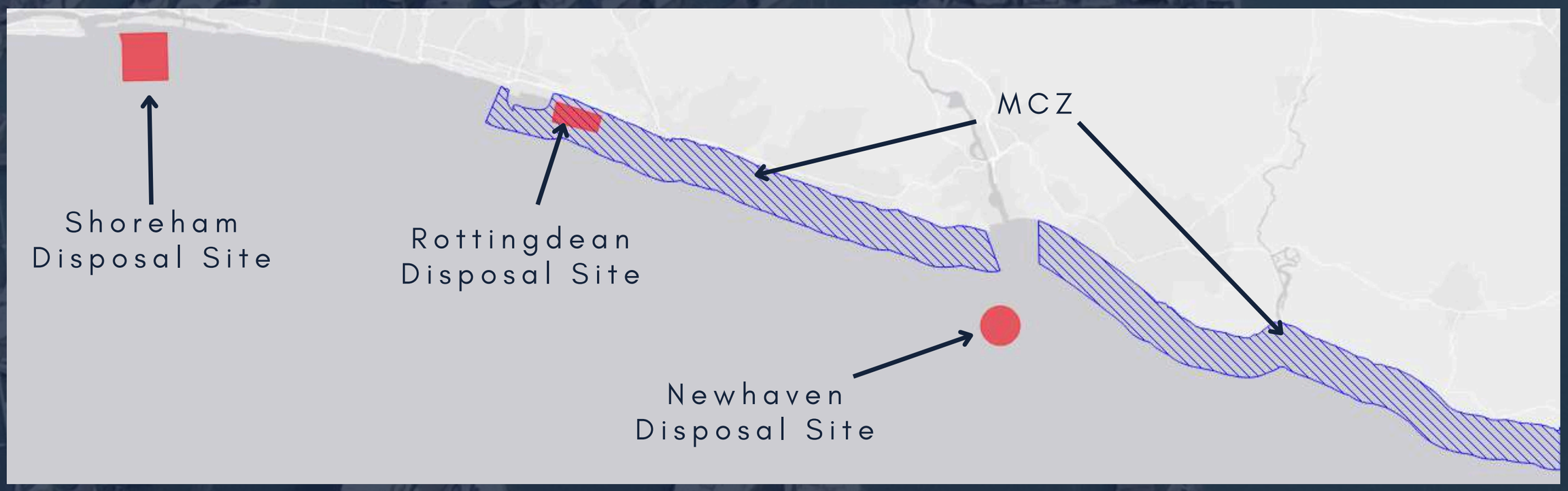
- Expected to only access approach channel and visitors area following initial trials
- Bulk volume approach where material is suctioned from the seabed into the hopper. All material is held within the plant, transported and disposed of at the Newhaven disposal site
- Larger craft expected to provide efficiency resulting in fewer total trips to and from the disposal site
- May operate in stints throughout the year to improve main channel access year round instead of only dredging at one time per year
- This is the only vessel of this type, size and capacity available that could service the marina
- This methodology can only be trialled under a MMO licence. If unsuccessful, backhoe dredger with split barge will service the entirety of the marina including berthing areas, fairways and main access channels



PREMIER'S CUTTER SUCTION DREDGER WILL NOT BE USED FOR DISPOSAL ACTIVITIES TO NEWHAVEN DISPOSAL SITE DUE TO THE DISTANCE FROM BRIGHTON MARINA

ENVIRONMENTAL CONSIDERATIONS & MODELLING

BEACHY HEAD WEST MCZ



- Designation ordered in 2013 and updated in 2016
- Covers approximately 24 square km from Brighton to Beachy Head Cliffs, Eastbourne
- Rottingdean Disposal site (WI020) is located within the defined extents of the Beachy Head West MCZ
- Newhaven Disposal site (WI010) is located offshore of Newhaven directly south of the 'break' in the MCZ designation area
- Shoreham Disposal site (WI031) is located nearshore and 7.5km West of the MCZ
- It is known that the predominant direction of sediment movement is West to East, for this reason Shoreham is considered the least best option

TESTING OF SEDIMENT

- Testing of sediment within the marina is required by the MMO as part of the Marine Licence process
- Sampling is ongoing through the life of a dredging Marine Licence at 3 or 5 year intervals
- Sediment is tested against a sampling plan issued by the MMO
- The sampling plan specification is set by MMO and CEFAS. This plan is specific to the site and works
- Sediment is collected and sent to Laboratories accredited by the MMO for analysis
- Analysis results are compared to the national 'Action Levels' and historic data in consultation with CEFAS. This considers the data against baseline natural levels
- Dredging is not permitted until valid sediment analysis data has been reviewed by MMO and CEFAS, with confirmation of suitability of material issued
- Material is tested for Oils and Fuels (hydrocarbons)
- The latest sampling at Brighton was completed in 2024
- The CEFAS review confirmed the material was suitable for disposal at sea and met national criteria for 5 year sampling intervals
- Works do not involve the release of Sewage

DISPERSAL MODELLING

- A modelling study was jointly commissioned by Premier Marinas and Newhaven Port to determine the dispersal rate of disposed sediment at Newhaven disposal site
- Sampling analysis data is used to understand the size of sediment particles and how these will move in relation to the local current climate alongside the disposal techniques and intensity of disposal activity
- The modelling found that sediment disposed of from Brighton moves in a West-East direction parallel to the shore and remains outside of the boundaries of the MCZ designation

