





## **Dawlish Warren Beach Management Scheme**

# Monthly project update

July 2017

### Dredging and beach recharge completed ahead of schedule

The dredging and beach recharge was completed ahead of schedule in early July, pumping over 250,000m<sup>3</sup> of sand to the beach – equivalent to over 100 Olympic swimming pools full of sand.



In order to protect internationally important species of birds and protected fish movements in the Exe Estuary, the dredging and beach recharge operation could only be completed in June, July and August. Work was sequenced to ensure the main tourist beach was accessible during the 2017 school summer holidays, but excellent progress has seen the entirety of the beach recharge completed by early July.



A trailing suction hopper dredger, the Mahury, collected sand from a site just offshore from Dawlish Warren. The new sand was pumped to shore via a series of pipes floating on the sea, on the sea bed and arranged on the beach. In places, the beach has been raised by up to 3m, meaning a large area of beach now exists above the high tide mark. The increased beach levels help to protect the dunes and allow them to behave naturally, whilst also providing a greatly improved beach for visitors to enjoy.



Beach closures were required throughout the beach recharge works for safety reasons. The project team would like to apologise for any inconvenience this may have cause, and thank all the users of Dawlish Warren for their patience and cooperation during these works.

#### Revetment construction on track for completion before summer holidays

To ensure the flood defence wall across the spit by the visitor centre is protected from future damage, a new revetment is being constructed between groynes 2 and 3 (see below), with a recurved section entering the dunes. The revetment forms a transition between the 'hard' concrete revetment at the west of the beach near the tourist attractions and the natural dune habitat from groyne 4 onwards. The structure works in conjunction with the flood wall installed across the Warren to prevent a flood route to the village and amenity infrastructure.



customer service line 03708 506 506 incident hotline 0800 80 70 60 floodline 0845 988 1188 Over 100 'Dycel mattress' panels have now been installed, forming a flexible mat of hollow concrete blocks that will extend the existing defence in this location. Recent efforts have been focused on completing the new access steps beyond groyne 3, which will be open in time for the school summer holidays on the 24<sup>th</sup> July.





### Works to protect the vulnerable 'Neck' section underway

Works to the GeoTube defence buried in the dunes at the 'neck', the narrowest point of the Warren, will be ongoing through the summer. Giant bags are being pumped full of sand and water, which drain to create compacted sand bags up to 2.85m high. When finished, the bags will be buried in the back face of the dune. The GeoTube defence will remain buried. In the event of extreme storms, it will reduce storm waves entering the Exe Estuary and damaging important infrastructure and property.

### **Upcoming Works (July/August)**

- Demobilisation of dredging pipework via barges from the far end of Dawlish Warren spit
- Completion of the new revetment, including the steps to the dog beach beyond groyne 3
- Installation of the GeoTube defence in the back of the dunes at the 'neck'

#### **Access and Plant Movements**

Access on the beach and through the Warren beyond groyne 6 is currently restricted due to heavy plant movements. Please be aware of changing access restrictions and follow site signage.

News about Dawlish Beach Management Scheme will be shared via:

https://www.facebook.com/DawlishWarrenBMS/

#### Background to the project

The Exe Estuary Flood and Coastal Erosion Risk Management Strategy identified that the narrow part (or neck) of Dawlish Warren is at risk of being broken through (breached) as a result of sea level rise and storms. If this happened, it would increase the risk of flooding to the railway line and estuary communities such as Starcross, Lympstone and Exmouth.

The Strategy suggested that a range of works are needed at Dawlish Warren to allow the sand spit to continue to act as a barrier to storm waves. It will also improve the quality of the beach and allow the sand dunes to recover.

For further information about the Dawlish Warren Beach Management Scheme, your contacts are:

Lawrence Jones, BMMJV PLO Richard Cox, Project Manager **07522 620369** 02030 252444

<u>lawrence.jones@bamnuttall.co.uk</u> <u>richard.cox@environment-agency.gov.uk</u>

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