





Dawlish Warren Beach Management Scheme

Monthly project update

May 2017

Piling works for new groynes completed and preparation for the beach recharge begins

As part of the Dawlish Warren Beach Management Scheme new timber groynes are being constructed at groyne 10 to groyne 14, while groynes 6, 8 and 9 are being extended to increase their effectiveness. The new groynes consist of vertical kingpost piles which are driven in with a piling rig, a horizontal timber beam (waling) and the planks. The installation of the new kingpost piles is now complete, with a total of 207 new piles installed.





The demolition of the existing groynes was completed earlier in the year, including the removal of the Bridge of Sighs and 'zig zag' groyne under an archaeological watching brief. These structures had eroded to form dangerous points, and while they would be submerged following the beach recharge, if left in place they would have formed a considerable hazard to future generations.

As part of the demolition works, a memorial plaque was found attached to one of the groynes. This plaque was recovered and retained. The team were approached by the individuals who had erected the plaque in memory of their brother, and were very grateful to be reunited with it.





Timber works

The timber works to the groynes installing new waling beams and planking has been progressing well, and will continue in the run up to and during the beach recharge in the summer. New planks are being fitted to both new and old groynes to suit the new, higher, beach levels.

Upcoming Works (May)

- Timber works installing new planking to all groynes in preparation for the beach recharge
- Installation of the new revetment between groyne 2 and 3 will continue, including excavation for the curved end section. This will require a diversion of the dune path (see below)
- The gabion baskets from groyne 8 onwards will be removed following safe translocation of sand lizards in the area.
- Activities have begun in preparation for the dredging and beach recharge operation (see below for further detail).
- Once sand lizards have been safely collected from the area and rehomed, work will begin on
 installing the Getoube hard neck defence, buried in the narrowest section of the Warren. At times
 this activity will affect access along the Warren. This will be covered in more detail in future
 updates.

Diversion of the sand path

In order to allow the construction of the proximal revetment, which forms part of the flood defence to Dawlish Warren, the sand path between the promenade and the beach access at groyne 4 has been diverted. Please follow this diversion to the beach access at groyne 4.







The diversion has been fenced to allow it to be used in the same way as the sand path. However, please be aware that when not using the diverted route dogs must be kept on leads at all times when walking in the Warren.

Preparing for the Beach Recharge

One of the main elements of the Dawlish Warren Beach Management Scheme is the beach recharge. This activity involves a dredger collecting sand from a tested source at Pole Sands. The dredger then sails close to the shore at Dawlish Warren and pumps the sand onto the beach via a network of pipes. In places the new beach levels will be over 2m above the current beach levels, providing greater flood protection and much improved amenity area.





customer service line 03708 506 506 incident hotline 0800 80 70 60 floodline 0845 988 1188 The beach recharge operation is due to start in June, with a number of activities occurring this month in preparation.

Delivery of dredging pipework

Work has already begun delivering the dredging pipework to the far end of Dawlish Warren spit. These pipes are being delivered by barge and unloaded during high tide.

Bird breeding enclosures have been established in the area to allow a potential breeding area for ringed plover, with all plant movements and storage staying outside of these areas.

Welding of dredging pipework

During the neap tides in mid may, the 'sinker line' element of the dredging pipework will be welded together on the beach north of groyne 14. Steel pipes, 600mm in diameter will be laid out on the top of the beach, in two parallel lines. These will then be welded together in specialist welding tents.



Installation of 'sinker line' dredging pipework

The 'sinker line' is a steel pipe that sits on the seabed running from the shore to the connection with the dredging vessel approximately a kilometre offshore. This pipe is being welded together on the beach, and will be floated into position during spring high tides at the end of May. Bulldozers on the beach will push the pipeline into the sea. A 'multicat' work boat (similar to a tug boat) and other boats will then tow the pipework into position, where it will be sunk to the seabed. The pipeline will come to shore between groynes 6 and 7.

Starting the Beach Recharge

The dredging vessel is due to arrive at Dawlish Warren on the 1st June. The work is being prioritised to complete the works at the amenity end of the beach (up to groyne 4) before the school summer holidays start on the 24th July.



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The beach recharge activity is due to start partway through the Whitsun half term week. The beach recharge is expected to have no negative impact on water quality or bathing conditions. However, to further reduce risk to the public, the RNLI bathing area will be located at the 'tidal beach' during Whitsun half term. The tidal beach can be accessed via the steps through the promenade seawall near to the kart track and outdoor amusements.

Please always swim between the red and yellow flags, and follow RNLI and site signage.

The source of the dredged material has been carefully selected and thoroughly tested to ensure it's suitable for the beach. Additional water quality samples will be taken throughout the recharge to ensure the bathing water at Dawlish Warren remains at a very high standard.

To ensure public safety, access to specific areas of the beach will be restricted during the beach recharge. Beach marshals will be located either side of live work areas to direct people to a safe route. The team will be working hard to minimise the disruption while ensuring the safety of the public throughout. As works progress, accesses to the beach will be opened up as soon as it is safe and practical to do so.

Plant Movements

As operations build up in advance of the beach recharge works, there will be an increase in plant movements over the coming weeks. Please be aware of plant movements on the beach, Warren and the promenade. The project team would like to thank everyone for their cooperation during the works.

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:

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