

8 IMPLICATIONS FOR THE DESIGNATED STATUS OF THE EUROPEAN SITES

8.1 Introduction

8.1.1 This section assesses the potential implications of the proposed scheme for the sites that are designated for nature conservation interest within and around of Poole Harbour and Poole Bay. The assessment considers the potential effects on the following designated sites:

- Poole Harbour SPA;
- Dorset Heathlands Ramsar site;
- Dorset Heathlands SPA;
- Dorset Heaths cSAC;
- Dorset Heaths (Purbeck and Wareham) and Studland Dunes cSAC; and,
- Isle of Portland to Studland Cliffs cSAC.

8.2 Predicted effects on the Poole Harbour SPA

8.2.1 The proposed scheme would result in small gains and losses to intertidal habitats within the Poole Harbour SPA. These changes are summarised below in Table 8.1 and, to put the predicted changes into context, are expressed as a percentage of the total area of the Poole Harbour SPA (2271.99ha) and the Poole Harbour European marine site (1983.32ha).

Table 8.1 Summary of predicted changes to intertidal area in relation to the designated area of the Poole Harbour SPA and European marine site

| Predicted effect | Predicted magnitude (ha) | Percentage of Poole Harbour SPA (2271.99ha) | Percentage of Poole Harbour European marine site (1983.32ha) |
|--|--------------------------|---|--|
| Increase in intertidal area due to effect on tidal propagation | +2.9 to +11.7 | +0.13% to +0.51% | +0.15% to +0.59% |
| Deposition of sediment in intertidal areas | +0.4 to +2.6 | +0.018% to +0.11% | +0.02% to +0.13% |
| Increase in intertidal erosion (saltmarsh) | -0.1 to -0.35 (per year) | -0.0066% to -0.03% | -0.0076% to -0.03% |

8.2.2 With the proposed change to agitation dredging of silty material in the Turning Basin, the year-on-year net increase in the erosion of intertidal area is about 2% of the one-off gains in intertidal area. The increase in net erosion being about 5-7% of the present rate. In this case, simplistically, fifty years after completion of the capital dredging the increases in intertidal area associated with the one-off effects would have been balanced by the increase in underlying erosion rate.

- 8.2.3 On balance, it is concluded that the predicted gains and losses of intertidal habitats within the Poole Harbour SPA and European marine site are of very minor magnitude. Given this, the effects of the scheme are not likely to prevent the site from making the same contribution to favourable conservation status for the internationally important populations of Annex I and migratory waterbirds, or the internationally important assemblage of waterbirds, as it did at the time of its designation.
- 8.3 Potential effects on the Dorset Heaths cSAC, Dorset Heathlands Ramsar site and SPA, Dorset Heaths (Purbeck and Wareham) and Studland Dunes cSAC and Isle of Portland to Studland Cliffs cSAC**
- 8.3.1 The hydrodynamic and sedimentary studies concluded that the scheme could increase the tendency for the northwards movement of material in the centre of Studland Bay, with accumulation of material in the north. However, the effect is predicted to be of low magnitude and is not expected to have any consequences for the designated status of the Dorset Heaths (Purbeck and Wareham) and Studland Dunes cSAC.
- 8.3.2 The proposed scheme has no potential to directly affect the designated status of either the Dorset Heaths cSAC, Dorset Heathlands Ramsar/SPA or Isle of Portland to Studland Cliffs cSAC.
- 8.3.3 The scheme would make a small minor contribution to an existing erosion problem in the south-eastern part of Brownsea Island. However, the scheme in itself does not give rise to a threat to the integrity of the existing coastal protection structures. In the long term, the integrity of the coastal protection structures could be affected in light of the on-going erosion, with possible adverse effects on the Dorset Heathlands SPA and Ramsar site and the Dorset Heaths cSAC on Brownsea Island.