

Scottish Water

515344 Holm Septic Tank Coastal Protection

Ecological Survey Report

October 2022

[Redacted]

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Summary

An ecological survey was carried out of the area of the proposed repair works to the Holm septic tank outfall to Luidhe nan Ron, Isle of Lewis. There were no significant numbers of wintering/passage birds using the area and no European Protected Species present. There is no significant scope for the works to impact on the nearest designated sites for conservation.

1 Introduction

Scottish Water (SW) is required to undertake an emergency project to reinstate coastal protection around the Holm septic tank, grid reference NB 4596 3142. The coastal protection has large voids and cracks and is currently a health and safety risk.

An initial ecological walkover survey of the area, particularly looking for signs of protected species, was requested.

The septic tank is situated on the coast at the village of Holm, adjacent to a marine bay area Luidhe nan Ron, which lies within two designated sites:

1. North-east Lewis Nature Conservation Marine Protected Area (MPA) designated to protect biodiversity; Rissos dolphin and sandeels
2. Inner Hebrides and the Minches Special Areas of Conservation (SAC), designated to provide protection to Harbour Porpoise.

2 Methodology

A walk over survey of the site was undertaken by Alison Tyler, an experienced ecologist, on 14 October 2022. The survey was undertaken between 1100 and 1630 GMT in good weather conditions. The survey timing included low tide to give access to a wide area of the intertidal zone.

The survey covered the full extent of the coastal protection of the septic tank, the intertidal area between the septic tank and the outfall, and a buffer zone area up to 300m either side of the septic tank. All birds and marine mammals within 300m of the septic tank were recorded. A search was undertaken for evidence of protected species. The sections of the beach above mean high water were checked for any signs of use by otters, including potential for resting places.

Within the survey area, a systematic search for signs and evidence of otter activity was carried out. The coastline and watercourses (including shallow ditches) were

searched for signs of use by otters. All habitat with potential for resting places and holt were searched.

A survey of wintering and passage birds was carried out using telescope and binoculars to cover the whole survey area.

3 Limitations of Survey

The timing of the survey in October meant that a survey of breeding birds was not possible. Wintering and passage birds using the intertidal area and freshwater bodies within the 300m buffer zone were recorded. There is potential for plant species to be under-recorded if they were not flowering at the time of the survey. The seasonal timing of the survey was suitable for otters, cetacean and seals.

4 Results

Habitats

The septic tank is located immediately above the intertidal area of the gravel/pebble/cobble beach. The intertidal zone has several strandlines of brown seaweeds with foraging potential for waders.

The immediate area above MHWs is coastal grassland, with rock coastal protection both around the septic tank and along the coastline to the south of the septic tank. To the north of the septic tank is coastal grassland above the pebble beach, with fenced rough grazing croftland to the west. There is a freshwater loch by the coastal track to the south of the septic tank, within 150m.

Otters

[Redacted]

Other Marine Mammals

No seals or cetacean were recorded in the inshore waters during the survey.

Birds

[Redacted]

4 Assessment

Otters

[Redacted]

Birds

The freshwater loch by the coast at Holm and the area of intertidal habitat provides foraging ground for coastal birds. However, the numbers of recorded wintering/passage waders and wildfowl are not of high conservation importance. Disturbance as a result of the works will be in a limited area and the proposed works do not significantly alter the footprint of the coastal protection and therefore there is negligible loss of feeding habitat.

A level of disturbance to birds is already present at the site due to the close proximity of houses, roads/tracks, crofting activities and recreational users. The proposed works are unlikely to significantly affect disturbance levels to wintering waders and wildfowl.

The breeding bird assemblage was not surveyed. There is some potential for ground bird nesting habitat above the tideline in the vicinity of the septic tank, however due to the close proximity of the houses and regular disturbance by recreational users, nesting close enough to the septic tank to be disturbed by the works is unlikely.

Designated Sites

The proposed works to repair the coastal protection around the Holm septic has some limited potential to impact on the North-east Lewis Nature Conservation Marine Protected Area (MPA). The protected features of the MPA are Risso's dolphin and sandeels. Although usually observed in deeper water, there is potential for Risso's dolphins to occur in the bay Luidhe nan Ron. However, the works are above the intertidal zone and do not require piling or blasting and so are unlikely to cause noise at a level which has the potential to cause injury or disturbance to this species. Larval sandeels are recorded in the offshore area to the south and east of the site at a density <50/m². Pollution caused by incidents such as fuel leaks could impact on the sandeel population, and therefore it is essential that during the course of the work potential pollutants are identified and appropriate pollution management systems are put in place.

The qualifying feature of the Inner Hebrides and the Minches Special Area of Conservation is Harbour Porpoise. The works are above the intertidal zone and do not require piling or blasting and so are unlikely to cause noise at a level which has the potential to cause injury or disturbance to this species.

Appendix Photographs



Photograph 1

Septic tank and coastal protection, coastal grassland above MHWS, coast to the south



Photographs 2 and 3

Rock armour coastal protection of septic tank requiring repairs.





Photograph 4

Septic tank with rock protection
and surrounding intertidal
habitat



Photograph 5

Coastline to the north of the
septic tank