

SUPPLEMENTAL ENVIRONMENTAL INFORMATION

Scapa Deep Water Quay Environmental Impact Assessment Non-Technical Summary

1. The Non-Technical Summary (NTS) was updated as a stand alone document and sets out the scope of the Environmental Impact Assessment (EIA). The NTS sets out the methods used, and the findings of the assessment on the likely significant environmental effects of updated environmental information and changes to the design of the Scapa Deep Water Quay (SDWQ) development and reflecting the comments of statutory consultees.

Coastal Flood Risk – Clarification Letter

2. The Coastal Flood Risk clarification letter addresses comments raised by Orkney Islands Council on the potential local inaccuracies of the national Coastal Flood Boundary (CFB) dataset around the Orkney Islands, and specifically within Scapa Flow.
3. It was confirmed that the SDWQ design and operational management plan will consider the observed extreme tidal event level of 3.43 metres above Ordnance Datum (mAOD) recorded in St Margaret's Hope during the January 2005 flood event. The operational management plan will consider the risks associated with coastal flooding, including wave overtopping, and detail necessary operational limits and processes.
4. It is noted that the proposed quay design includes a quay level of 7 mAOD, equivalent to 5.35 mAOD. This represents a freeboard of 1.92 m above the 2005 flood level and 0.99 m freeboard above the equivalent 2100 flood level when accounting for climate change driven sea level rise (+0.93 m).

Habitats Regulations Appraisal

5. The Habitats Regulations Appraisal (HRA) confirms that once caissons are unloaded from the semi-submersible vessel, they will be either temporarily tied to each other at the (partially constructed) quayside or temporarily secured to the seabed using anchors. No piling or drilling is required, therefore, there will be negligible underwater noise generated by this activity.
6. Section 3.6 addresses visual disturbance caused by craneage. It should be noted that the current development proposals do not include for any form of fixed or permanent craneage. Instead, it is anticipated that lifting operations will be carried out by a mixture of cranes attached to heavy lift vessels themselves and temporary mobile cranes deployed from the quay edge. Heavy lifting activities will typically coincide with large vessel movements, so cranes will be operating to similar timeframes as vessel movements.
7. There will be approximately 48 operational vessel trips per year (96 vessel movements) with approximately 80% occurring in the summer months (April – September). However, this includes 18 pilot vessel trips, so when these are excluded, the number of vessel trips that would require craneage is 30 per year. This equates to 4 vessel trips per month (1 a week) in summer and 1 vessel

trip per month (0.25 a week) in winter. As each vessel will be berthed at SDWQ for approx. 2-5 days, in the summer months cranes are likely to be active between 8 – 20 days per month, and in winter 2 – 5 days per month.

8. Crane activity in winter months will be dependent on weather conditions, as lifting of large loads is highly susceptible to even light to moderate winds. Based on analysis of 1 in 10 year weather averages in Kirkwall (1979-2010), the time lost to wind in the winter months is >200 hours per month. As such, it is likely that even less than 20% of lifting operations will take place in the winter.
9. The mobile cranes will be typically up to 250 tonnes capacity (Liebherr LTM1250 or similar). This type of crane has an extendable telescopic boom with maximum height of 60m in vertical lift. Smaller mobile cranes of 60 tonnes and 90 tonnes capacity will be used to support the larger cranes and will find more use during the winter months due to lower boom heights and lower windage. The maximum boom height for Liebherr LTM10-60 is 48m. On-vessel cranes would be in region of 70-100m height. The maximum number of cranes in use on site will depend on activities undertaken, but in summer months including on-vessel cranes could be up to 4 cranes on site i.e. one on-vessel crane plus 3 mobile cranes. In winter, this number will be far less and could be expected to be 2 mobile cranes given large shipments requiring on-vessel cranes will be planned for summer months. Mobile cranes are slow moving and generate limited engine noise at ground level.
10. During the summer months, mobile cranes will typically be stored on site at SDWQ, and in winter either stored on site or taken offsite if they are required elsewhere. Mobile cranes when not in use will be lowered with booms retracted and placed horizontally. In this configuration they are approximately 5m in height. These type of cranes do not normally provide own lighting, and lifting operations in winter will typically be carried out in daylight hours.
11. Section 4.3 discusses vessel movements associated with operation to address NatureScot's concerns. The size and number of vessels anticipated to utilise the quay will effectively occupy a water surface area of 39,000 m², when fully occupied, which is additional lost habitat to waterfowl species. Full occupation of the berths is expected to occur for about 100% of the time (worst case scenario).
12. There is significant existing vessel activity in the wider area around the proposed SDWQ. The only 'new' vessel route introduced by SDWQ is from the existing shipping channel to the site (hatched orange in Appendix C of the HRA). There are, in fact, existing vessel movements in this area, as shown by the vessel tracks in Appendix C of the HRA, and in more detail in the Navigation Risk Assessment submitted with the Environmental Impact Assessment Report.
13. During previous iterations of this HRA and dialogue with NatureScot, they have suggested a limit on vessel movements along this 'new' vessel route to SDWQ, to mitigate impacts from disturbance and displacement of SPA qualifying features and in particular Black-throated Diver, stating that 'birds are already habituated to tug and pilot boat traffic at the existing Scapa Pier, therefore a less impactful scenario would see tug and pilot boats remain at Scapa Pier, significantly reducing the vessel traffic along the 'new' route to the 60 vessel movements associated with offshore wind, and baseline traffic at Scapa Pier remaining as it is.'
14. To address NatureScot's concerns about operational vessel movements, Orkney Islands Council Harbour Authority (OICHA) will not relocate the tug and pilot boats from Scapa Pier to SDWQ in the current consent applications.
15. In this scenario, the estimated number of vessels calling at SDWQ in the operational phase is 30 per year (60 vessel movements), comprising 18 large vessels and 12 smaller vessel per year. This is the most up-to-date estimate and has not changed since previous iterations of the HRA. Each of the 18 large vessels will have one associated pilot boat (2 vessel movements). In addition, 2 or 3 tugs will

assist with berthing the large vessels, although these will be operating in very close proximity to these large vessels, so do not constitute a separate disturbance.

16. In total, the estimated vessel movements per year is 96. The majority of these vessels (approximately 80%) are expected to occur during the summer months (April – September), so there will be an average of 12.8 vessel movements per month (3.2 per week) in summer and 3.2 per month (0.8 per week) in winter.
17. While the quay is a major strategic facility, its operational profile is characterised by the infrequent arrival of large vessels, aligned with the integration and deployment schedules of major offshore wind developments described elsewhere.
18. Section 6.3 Great Northern Diver, non-breeding, Section 6.4 Black-throated Diver, non-breeding, Section 6.5 Slavonian Grebe, non-breeding, Section 6.6 European Shag, non-breeding, Section 6.7 Eider, non-breeding, Section 6.8 Red-breasted Merganser, non-breeding, Section 6.9 Long-tailed Duck, non-breeding, Section 6.10 Red-throated Diver, breeding have been updated to discuss operational vessel movements. The updates do not alter the findings of the previous version of the HRA.
19. Section 6.4 Black-throated Diver, non-breeding has been updated to address NatureScot concern on crane usage and disturbance/displacement effects on Black-throated Diver. NatureScot requested an assessment of Black-throated Diver disturbance up to 1km (recommended disturbance buffer for this species) from cranes is to be assessed during their flightless moult period (mid-September to end December).
20. As described in Section 3.6 of the HRA, the use and erection of cranes will not be permanent and are likely to be active between 8 – 20 days per month in the summer, and in winter 2 – 5 days per month, reflecting the frequency of vessels berthing throughout a given year.
21. During the surveys during Black-throated Divers flightless moult period, birds were present within 1km of the Proposed Development 58% of the time (20 surveys out of 34), demonstrating the ephemeral nature of their movements throughout Scapa Flow. During this period, the average count of birds within 1km across the three winter's worth of surveys was 2 birds, with a peak of 11 birds in November (although it is noted that these birds were not recorded foraging within the 1km area, merely steadily moving through to the north west). Counts of over 5 birds were recorded on 7 out of 34 survey visits, and double figure counts on 2 out of 34 visits. During this period, peak counts of 28 birds were present between 1km-2km distance from the Proposed Development, demonstrating that this area has the capacity to support any displaced birds through avoidance.
22. Therefore, given the infrequent nature of crane usage during the winter months, and particularly during the birds flightless moult period, the low numbers of birds present (as an average across the three winter's worth of surveys), and the fact that the area between 1km -2km from the Proposed Development has been demonstrated to have the capacity to support these birds should they undertake avoidance of the area during crane use, it is considered that there would be no significant impact to the Species, Not An Adverse Effect On Site Integrity.
23. Section 9 Appropriate Assessment: Hoy SPA, has been updated with operational vessels. The updated information does not alter the findings of the previous HRA.
24. Section 10 Appropriate Assessment: Sanday SAC has been updated with operational vessels. During the operational phase, with the retention of tugs and pilot vessel at Scapa Pier, the estimated number of vessels calling at SDWQ in the operational phase is 30 per year (60 vessel movements), comprising 18 large vessels and 12 smaller vessel per year. Each of the 18 large vessels will have one associated pilot boat (2 vessel movements). In addition, 2 or 3 tugs will assist with berthing the

large vessels, although these will be operating in very close proximity to these large vessels, so do not constitute a separate disturbance.

25. In total, the estimated vessel movements per year is 96. The majority of these vessels (approximately 80%) are expected to occur during the summer months (April – September), so there will be an average of 12.8 vessel movements per month (3.2 per week) in summer and 3.2 per month (0.8 per week) in winter.
26. The majority of the routes used by these vessels will be along established routes (i.e., the main shipping channel and the shipping lane west towards Stromness). The only new, or seldom used, section of route to be used for vessels will be the 2.6km (or 1.3 nautical miles – 167Ha) branching east off the established route to the SDWQ site. As with the construction phase vessel movements, the effects of the operational phase impacts will be highly localised and unlikely to affect the conservation status of this species. As the majority of the vessel routes will be using existing routes, seals will likely already be habituated to vessels in those areas and/ or avoid the area already. It is likely that due to the seldom used new route that there is a greater likelihood of vessel collision with seals, however over time, seals would likely become habituated to vessels using this route. Again, as above, the likelihood of vessel collisions is dependent upon vessel speed, animal behaviour and vessel manoeuvrability, therefore vessels travelling at slower speeds in general can allow time for seals and vessel operators to react to avoid collisions. The Seal Protection Plan (SPP) details protocols to be implemented to reduce collision risk during operation. This includes limits on vessel speed.
27. An ornithologist will conduct structured observations of black-throated divers associated with selected crane activity.
28. In summary, the inclusion of supplemental environmental information does not change the findings of the HRA dated June 2025.

Seal Risk Assessment

29. The Seal Risk Assessment has been updated following a request for operational vessel movement information to be included within the Assessment by NatureScot. This information updates Section 4.5 "*Effects of Increased Vessel Movement on Seals*".
30. The Seal Risk Assessment was also updated to include details of in-combination effects of operational vessels assessment conclusions. It should be noted that vessel movements associated with the operational fish farms identified within the in-combination assessment (Table 4-2) are accounted for within the Navigation Risk Assessment as they are deemed to be existing vessel movements. For those awaiting a decision, no vessel movement information associated with the fish farms was available
31. The inclusion of additional operational vessel movements does not change the findings of the Seal Risk Assessment dated June 2025