

Stranraer Marina Expansion Project

Environmental Impact Assessment Report

Non-Technical Summary – Addendum

September 2025



FAIRHURST

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Non-Technical Summary

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1.0 Introduction

- 1.1 In August 2025, Fairhurst Group LLP (“the Agent”) acting on behalf of Dumfries and Galloway Council (DGC) (‘the Applicant’), submitted consent applications for both Planning Permission from the Local Planning Authority (LPA) and Marine Licences from Marine Directorate – Licensing Operations Team (MD-LOT) for the proposed expansion and redevelopment of Stranraer Marina, including dredging (“hereafter referred to as the proposed development”).
 - 1.2 The applications to the Consenting Authorities were accompanied by an Environmental Impact Assessment Report (EIAR) (August 2025) and associated Non-Technical Summary (NTS) (August 2025). The NTS was prepared, to explain the project and the findings of the technical chapters within the EIAR in a non-technical manner.
 - 1.3 Since the production of the EIAR and NTS (August 2025), an Addendum Benthic Ecology Chapter to the EIAR (Chapter 12) (September 2025) has been prepared and submitted to the Consenting Authorities, as additional environmental information.
 - 1.4 This Addendum NTS updates the previously submitted NTS (August 2025), in relation to Benthic Ecology, including cumulative effects, mitigation and residual effects.
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2.0 Summary Of Environmental Effects

Benthic Ecology

- 2.1 The Benthic Ecology chapter of the EIAR assesses the potential impacts of the proposed development on marine organisms living on or within the seabed, and associated habitats. This includes impacts arising from habitat loss, water quality impacts, increased suspended sediments, sedimentation, resuspension of contaminated sediments, risks from invasive non-native species (INNS), and the potential impacts of creating new artificial habitats.
- 2.2 Both a desk study and field survey were undertaken in order to inform the assessment of potential impacts. The field survey was undertaken in May 2025 comprised an intertidal survey, drop down video (DDV) stations and transects, and a benthic grab sampling survey to quantify the faunal communities present. The extent of the DDV and grab sampling surveys was informed by the sediment plume modelling exercise undertaken for the proposed development.

Baseline Conditions and Receptor Sensitivity

- 2.3 The intertidal survey, carried out between the low-water and high-water lines along one kilometre stretches to the east and west of the marina, established nine distinct biotopes. These biotopes (areas of uniform environmental conditions supporting a particular ecological community) comprised a mixture of sand, coarse sediment, and rocky areas, with the marine species observed being typical of intertidal habitats widely distributed in Scottish coastal waters. Biotopes comprising of mixed substrata were largely characterised by the presence of brown wrack, green sheet form, and red foliose macroalgal species, alongside a range of faunal species such as crabs, periwinkles, whelks, and sponges. Biotopes comprising of finer sediments were dominated by lugworms, and on the shore to the east of Stranraer swathes of dwarf eelgrass beds were also observed.
- 2.4 The DDV and benthic survey established 13 distinct biotopes, one of which was also recorded in the intertidal survey. In the subtidal area, below the low-water line, surrounding the marina, sediments were dominated by mud and biotopes were characterised by the presence of ubiquitous annelid and bivalve species. Areas inside the marina itself showed a higher diversity of biotopes, largely driven by the range of sediments present which covered shells, gravel, and sand to mud.
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- 2.5 The intertidal and subtidal habitats within Stranraer Marina and the surrounding vicinity have been assessed as being of low sensitivity to potential impacts arising from the proposed works. This excludes the native oysters and seagrass beds recorded which are Priority Marine Features (PMF; habitats and species of conservation importance in Scotland defined by NatureScot and the Joint Nature Conservation Committee). Low sensitivity was assigned in light of the intertidal and subtidal biotopes being found to be typical for these habitat types and likely to be ubiquitous throughout Loch Ryan and the surrounding area, the historic dredging that has occurred in the area, and the likely moderate tolerance of these communities to changes.
- 2.6 During the benthic survey, two individuals of the native oyster were recorded within the marina basin. Native oysters are a PMF, however the number recorded during the field survey was very low and did not meet the definition of 'oyster beds'. Considerable populations are known to exist in the wider Loch Ryan area, and no evidence of any other native oysters was documented during any other part of the field survey. However, native oysters are of international importance and are unlikely to be tolerant of changes, thus receptor sensitivity was assessed as high, in EIA terms.
- 2.7 The area of intertidal foreshore to the east of Stranraer Marina was notable as supporting large swathes of dwarf eelgrass beds, a species of intertidal seagrass. Intertidal seagrass beds are a PMF in Scotland and are of national importance, therefore this receptor is considered to be of high sensitivity. However, the location of the seagrass beds to the east of Stranraer places them outside of the zone of influence from any potential impacts arising from the development.

Impact Assessment

- 2.8 Land reclamation, the installation of piles, and the extension of the breakwater as part of the proposed development will result in areas permanent habitat loss, i.e. not reversible or recoverable. However, losses are of a local spatial extent and are limited to within the confines of Stranraer Marina and so the impact was identified as medium. The low sensitivity of habitats within the affected areas considered alongside the medium impact equated to a slight adverse effect on the subtidal habitat receptors.
- 2.9 Dredging activity relating to the proposed project will result in associated temporary habitat loss in the affected footprint. Benthic communities within this footprint will be directly affected by the removal of sediment and loss of habitat, in addition to the mortality of benthic organisms. However, recovery of habitats following the completion of dredging is likely. The biotopes identified within the affected area are common throughout the local
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area and are of low sensitivity. The native oysters identified were in low abundance, also common within the local area, and are of high sensitivity. These factors resulted in a negligible impact and so an effect of negligible significance to the subtidal habitat receptors and a slight adverse effect on native oysters.

- 2.10 Changes in sediment concentration within the water column (the vertical expanse of water between the seabed and the surface) will occur as a result of dredging during the construction phase. Modelling of the anticipated dredge plume, the cloud of sediments formed as a result of dredging, suggested that any sediments mobilised within the short duration of the dredging process will likely settle out relatively quickly over a limited area, indicating that any increase in suspended sediment concentrations is expected to remain low. None of the biotopes present within the footprint of the predicted sediment plume are considered to be particularly sensitive to increases in turbidity or sedimentation and recovery for these habitats is likely to be relatively rapid. Short-term increases in turbidity are therefore considered to have a negligible impact on intertidal and subtidal habitat receptors, leading to a negligible effect on intertidal and subtidal habitat receptors in the affected area.
- 2.11 Dredging has the potential to release contaminants into the water column by disturbing sediments during the construction phase. All contaminants identified within the sediments at Stranraer were however present at relatively moderate levels. The short-term activity and low risk of harmful effects to the effected biotopes presents a negligible impact on the local intertidal habitat receptors and a low impact on subtidal habitat receptors, therefore an overall negligible effect has been identified for both.
- 2.12 Water quality indicators such as dissolved oxygen (DO) can also be affected by the release of sediments into the water column via dredging. The habitats present within the dredge plume footprint area are likely to be somewhat resistant and are thought to not be overly sensitive to changes of this nature, with recovery from any impact occurring at a relatively quick rate. The potential magnitude of impact of changes in DO in the water column on subtidal and intertidal habitats has been assessed as Negligible, and therefore the overall effect has been identified as negligible significance.
- 2.13 The wider Solway Firth area is known to shelter multiple INNS, several of which are known to be located within Loch Ryan. The presence of a non-native species of barnacle, known as the modest barnacle, and a non-native species of sea squirt, known as the leathery sea squirt, were identified during the field survey at Stranraer Marina (both previously reported in the same vicinity). Due to the possibly irreversible changes to local habitats caused by the spread of INNS establishing a high impact, coupled with the low

sensitivity of the identified biotopes, an overall effect of moderate adverse was identified on the intertidal and subtidal habitat receptors. Native oysters are also potentially vulnerable to the effects of the introduction of INNS, however, due to the low abundances within the survey area and widespread local populations, a magnitude of impact was identified as low. Native oysters have been assessed as High sensitivity, resulting in an overall moderate adverse effect.

- 2.14 Part of the proposed works at Stranraer includes an extension to the existing breakwater and the installation of new pontoons and marine structures, which are likely to provide additional habitat for epibenthic species. It is considered that local species will benefit from the creation of hard habitat due to increased complexity and shelter. Due to the low sensitivity of the receptors, the relatively small scale of the habitat creation, and the long-term duration, this equated to a slight positive impact on benthic ecology.

Mitigation, Residual Effects, and Cumulative Effects

- 2.15 In order to reduce potential impacts of the proposed development on benthic ecology, additional mitigation measures have been proposed. These include the development of a Construction Environmental Management Plan (CEMP) and a Biosecurity Plan for the marina which outline measures which are likely to significantly reduce the risk of any spread of INNS during construction and ongoing operation. With the adoption of these measures the potential effect from the spread of INNS on subtidal and intertidal receptor habitats can be reduced to negligible, and not significant in EIA terms, and the potential effect on native oysters can be reduced to slight adverse.
- 2.16 It is concluded that the predicted residual effects of both the construction and operational activities are considered to be of negligible to slight significance for intertidal and subtidal habitats, and of slight significance for native oysters.
- 2.17 The potential for cumulative effects arising from the proposed development in combination with other planned activities has the potential to increase overall ecological impact on the marine environment. However, upon review, other planned or consented activities are located considerably further up Loch Ryan and outside the zone of influence from any predicted impacts from the proposed works, or else have no detrimental impacts associated. Therefore, it is assessed that none of the potential impacts from any of the proposed additional projects will significantly alter the assessment made in this chapter.
- 2.18 Table 2-1 details a summary of the assessment of potential impacts.
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Table 2-1: Summary of Impact Assessment for Benthic Ecology.

Potential Effect	Receptor	Receptor Sensitivity	Impact Magnitude	Effect Significance (prior to mitigation)	Additional Mitigation Measures	Post Mitigation Effect Significance (Residual Effects)
Construction Phase						
Permanent habitat loss	Subtidal habitats	Low	Medium	Slight	-	Slight
Temporary habitat loss	Subtidal habitats	Low	Low	Negligible	-	Negligible
	Native oysters	High	Negligible	Slight	-	Slight
Changes in suspended sediment concentration and sediment deposition	Subtidal habitats	Low	Negligible	Negligible	-	Negligible
	Intertidal habitats	Low	Negligible	Negligible	-	Negligible
Changes in water quality (contaminants)	Subtidal habitats	Low	Low	Negligible	-	Negligible
	Intertidal habitats	Low	Negligible	Negligible	-	Negligible
Changes in water quality (dissolved oxygen)	Subtidal habitats	Low	Negligible	Negligible	-	Negligible
	Intertidal habitats	Low	Negligible	Negligible	-	Negligible
Invasive non-native species	Subtidal habitats	Low	High	Moderate	CEMP	Negligible
	Intertidal habitats	Low	High	Moderate	CEMP	Negligible
	Native oysters	High	Low	Moderate	CEMP	Slight
Operational Phase						
Invasive non-native species	Subtidal habitats	Low	High	Moderate	CEMP & Biosecurity Plan	Negligible
	Intertidal habitats	Low	High	Moderate	CEMP & Biosecurity Plan	Negligible
	Native oysters	High	Low	Moderate	CEMP & Biosecurity Plan	Slight
Artificial habitat creation	Subtidal habitats	Low	Medium	Slight (beneficial)	-	Slight (beneficial)

3.0 Mitigation, Significance and Conclusions

- 3.1 The previously submitted EIAR (August 2025) and NTS (August 2025) noted the importance that the final Construction Environmental Management Plan (CEMP) will have during the construction phase of the proposed development. The final CEMP would be relatively wide ranging in scope to address and minimise potential effects on receptors.
 - 3.2 The Benthic Ecology Addendum Chapter (September 2025) also recognises the important role that a final CEMP will have in terms of additional mitigation. In addition, it is also requested that a Biosecurity Plan for the marina be developed for the ongoing operational phase of the project to address the risks posed by operation of the marina, such as increased vessel traffic to the area. The Biosecurity Plan should also take the existing Solway Firth Biosecurity Action Plan into consideration when determining the control measures to take.
 - 3.3 With the application of additional mitigation measures, the magnitude of the impacts would reduce in relation to Invasive Non-Native Species (INNS) on benthic ecology, including subtidal habitats, intertidal habitats and native oysters, with no significant adverse effects, in EIA terms predicted.
 - 3.4 The Addendum Benthic Ecology chapter, also concludes that at the operational phase, as a result of the artificial habitat creation, subtidal habitats as a receptor have the potential to experience Slight Beneficial effects.
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