



Biodiversity Net Gain Report

**Fairport House,
Lands End Road,
Lowford,
Bursledon,
Eastleigh,
Hampshire
SO31 8DN**

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Introduction

Fathom Ecology was commissioned to undertake a Biodiversity Net Gain (BNG) Assessment at Fairport House, Lands End Road, Lowford, Bursledon, Eastleigh, Hampshire, SO31 8DN, hereafter referred to as the 'site'. The site is located on the western bank of the River Hamble within the parish of Bursledon, Hampshire, at Ordnance Survey Grid Reference SU 49231 09211.

Planning permission is being sought for the construction of a new access jetty and hammerhead pontoon to provide access from Fairport House to the River Hamble. The Site comprises a mosaic of intertidal mudflat, Atlantic salt meadow, timber sleeper seawall and amenity grassland habitats and lies within the Solent Maritime Special Area of Conservation (SAC), Solent and Southampton Water Special Protection Area (SPA), Solent and Southampton Water Ramsar Site and Upper Hamble Estuary and Woods Site of Special Scientific Interest (SSSI).

This report presents the Biodiversity Net Gain baseline assessment for the Site and has been prepared in accordance with the requirements of the Environment Act 2021 and the Statutory Biodiversity Metric. The assessment identifies the baseline biodiversity value of habitats affected by the proposed development and considers opportunities to achieve the mandatory minimum 10% Biodiversity Net Gain through habitat retention, enhancement and incorporation of biodiversity features within the development design.

The assessment has been informed by a Preliminary Ecological Appraisal (PEA) undertaken by Fathom Ecology.



Figure 1. The Site (orange boundary)

Designated Site Context

The proposed development comprises the construction of a new access jetty extending from the existing seawall at Fairport House to a hammerhead pontoon within the River Hamble. The development footprint is limited to the jetty support piles, access structure, and floating pontoon.

The site lies within multiple statutory nature conservation designations:

- Solent Maritime Special Area of Conservation (SAC)
- Solent and Southampton Water Special Protection Area (SPA)
- Solent and Southampton Water Ramsar Site
- Upper Hamble Estuary and Woods Site of Special Scientific Interest (SSSI)

The site supports qualifying habitats of the Solent Maritime SAC, including Atlantic Salt Meadow (H1420) and Mudflats and Sandflats not covered by Seawater at Low Tide (H1140). The Atlantic Salt Meadow occurs as a narrow strip immediately seaward of the existing seawall, whilst much of the site comprises intertidal mudflat habitat associated with the River Hamble estuary.

The proposed jetty will extend across the saltmarsh and intertidal mudflat habitats before terminating at a floating hammerhead pontoon within the subtidal channel. The structure has been designed to minimize direct habitat loss and should be elevated above the saltmarsh to avoid crushing, shading, or otherwise damaging the Atlantic Salt Meadow habitat beneath. The floating pontoon will rise and fall with the tide and will not result in direct loss of intertidal habitat.

Although the proposed works are located within internationally and nationally designated sites, the development footprint represents a small proportion of the extensive intertidal habitats present within the River Hamble and wider Solent estuary. The principal impacts comprise the permanent footprint of support piles and a limited area of temporary disturbance during construction. No significant loss of Atlantic Salt Meadow habitat is anticipated, whilst any loss of intertidal mudflat habitat will be negligible in the context of the wider estuary.

Consequently, whilst the development is situated within a highly sensitive designated landscape, the affected habitat area is extremely limited, and the proposal is not expected to adversely affect the ecological functioning of the designated sites or their qualifying habitats. Potential effects upon the Solent Maritime SAC, Solent and Southampton Water SPA and Ramsar Site are assessed separately within the accompanying Habitats Regulations Assessment (HRA).

Biodiversity Net Gain

The Biodiversity Net Gain (BNG) became mandatory for most planning applications in England in February 2024 under the Environment Act 2021. Under this legislation, development proposals are required to:

- Achieve a minimum 10% Biodiversity Net Gain;
- Follow the mitigation hierarchy by avoiding, minimizing and mitigating adverse impacts on biodiversity;
- Deliver biodiversity gains through habitat creation, habitat enhancement and/or the purchase of statutory biodiversity credits where necessary; and
- Secure biodiversity gains for a minimum period of 30 years.



Figure 2. Baseline Habitat at the Fairport House, the two wooden posts marking the location of the proposed jetty.

Baseline Habitat

The site was surveyed by Fathom Ecology on 7 May 2026 and comprises approximately 0.2065 ha of habitat, consisting of Atlantic Salt Meadow (0.0113 ha), Intertidal Mudflats and Sandflats (0.1215 ha) and Modified Grassland (0.0737 ha). The site also contains an existing timber sleeper seawall, classified

as a built linear feature, which is not assessed within the Statutory Biodiversity Metric.

The site is located on the western bank of the River Hamble and forms part of the wider Solent estuarine ecosystem. The habitats present support a range of estuarine flora and fauna and include qualifying habitats of the Solent Maritime Special Area of Conservation (SAC). Most of the site is made up of intertidal habitat, with a narrow strip of saltmarsh occurring between the mudflat and the existing seawall. Landward of the seawall, the site supports a small area of modified amenity grassland associated with the residential curtilage of Fairport House.

Table 2. Baseline Habitat Units

Habitat Type	UKHab Code	Distinctiveness	Condition	Strategic Significance	Area (hectares)
Atlantic Salt Meadow	T2a7	High	Good	Within SAC and Habitat of Principal Importance	0.011341
Intertidal Mudflats and Sandflats	T2d5	High	Moderate	Within SAC and Habitat of Principal Importance	0.121519
Built Linear Feature (Timber Sleeper Seawall)	u1e	Not assessed within the metric	NA	NA	Not assessed
Modified Grassland	g4	Low	Moderate	Not strategic	0.073683

Existing Ecological Value

Much of the site comprises Intertidal Mudflats and Sandflats (H1140), a Habitat of Principal Importance and qualifying feature of the Solent Maritime SAC. The habitat consists of a mosaic of estuarine mud, gravel, riprap and artificial hard substrates supporting characteristic estuarine flora and fauna. Brown seaweeds including *Fucus* spp. and *Ascophyllum nodosum* were present on stable hard substrates, whilst Pacific Oyster (*Magallana gigas*) and extensive stands of the invasive non-native seaweed *Gracilaria vermiculophylla* were recorded throughout the intertidal area. Common estuarine invertebrates observed included Baltic tellin (*Macoma balthica*), lugworm (*Arenicola marina*), shore crab (*Carcinus maenas*) and barnacles colonizing hard structures. The habitat also contained scattered anthropogenic debris, litter, and evidence of historic boat-related activities. Whilst the mudflat retains high ecological value owing to its designation and characteristic estuarine communities, the presence of invasive non-native species and artificial materials reduces its overall condition, and it is assessed as being in moderate condition.

A narrow strip of Atlantic Salt Meadow (H1420) occurs immediately seaward of the seawall. This habitat is dominated by Sea Purslane (*Atriplex portulacoides*), with smaller quantities of Sea Aster (*Tripolium pannonicum*), Sea Plantain (*Plantago maritima*) and Sea Arrowgrass (*Triglochin maritima*). The saltmarsh forms part of the qualifying features of the Solent Maritime SAC and contributes significantly to the biodiversity value of the Site. The habitat was assessed as being in good condition.

The existing seawall comprises a built linear feature constructed from reclaimed timber railway sleepers. Whilst not assessed within the Statutory Biodiversity Metric, the structure provides localized habitat for barnacles, seaweed, and other estuarine species.

Landward of the seawall, the Site supports a small area of modified amenity grassland associated with the residential curtilage of Fairport House. The grassland is species-poor and regularly maintained, although occasional plants of Sea Arrowgrass were recorded amongst the sward. The habitat was assessed as being in moderate condition.

Proposed Development

The proposed development has been specifically designed to minimize impacts on the existing habitats. The access jetty will be elevated above the existing saltmarsh and mudflat habitats and therefore will not result in direct habitat loss beneath the structure. The hammerhead pontoon will float within subtidal waters and similarly avoid direct habitat loss. The jetty will maintain sufficient clearance above the saltmarsh to avoid crushing, shading, or otherwise adversely affecting the Atlantic Salt Meadow beneath.

The development will be supported by four tubular steel piles associated with the jetty and two tubular steel guide piles associated with the floating pontoon. The combined permanent footprint of these piles is approximately 0.212 m² (0.000021 ha). The remaining habitats beneath and surrounding the structures will remain intact and available for use by estuarine flora and fauna.

No loss of Atlantic Salt Meadow habitat is anticipated, and all modified grassland will be retained. Much of the intertidal mudflat habitat will also be retained following completion of the development.

Treatment of Pile Footprints within the Biodiversity Metric

The proposed development results in a small permanent footprint associated with the support piles. The combined footprint of all piles is approximately 0.212 m² (0.000021 ha), representing less than 0.02% of the intertidal habitat resource present within the site.

Given the negligible extent of habitat affected, the elevated design of the jetty, and the continued ecological functioning of the surrounding mudflat habitat, the pile footprint has been treated as a de minimis impact for the purposes of the Statutory Biodiversity Metric. The intertidal mudflat habitat has therefore been considered retained within the Biodiversity Net Gain calculations.

The ecological effects of the pile footprint have nevertheless been considered qualitatively within the accompanying Preliminary Ecological Appraisal. The assessment concluded that the proposed development will not result in any significant loss of intertidal habitat and that the ecological integrity of the River Hamble estuary will be maintained.

Biodiversity Net Gain Assessment

A Biodiversity Net Gain Assessment was undertaken using the Statutory Biodiversity Metric in accordance with the requirements of the Environment Act 2021. The assessment considered the baseline habitats present within the site and the post-development habitat condition following implementation of the proposed habitat enhancements.

The site comprises three habitats assessed within the Statutory Biodiversity Metric: Modified Grassland, Intertidal Mudflat and Atlantic Salt Meadow. Most of the site comprises high distinctiveness intertidal habitat associated with the River Hamble estuary, whilst a smaller area of modified grassland occurs landward of the seawall.

The proposed development has been designed to minimize habitat loss and avoid impacts on the Atlantic Salt Meadow. The elevated jetty and floating pontoon ensure that the underlying intertidal habitats remain functionally intact and available for use by estuarine flora and fauna. Consequently, the Biodiversity Metric assessment assumes retention of the existing mudflat and saltmarsh habitats, with biodiversity gains arising through habitat enhancement measures.

The completed Statutory Biodiversity Metric demonstrates that the proposed development will deliver a net increase in biodiversity value. The assessment predicts a 13.76% Biodiversity Net Gain in habitat units, exceeding the statutory requirement to achieve a minimum 10% Biodiversity Net Gain.

The completed Statutory Biodiversity Metric Calculation Tool and associated habitat plans are provided in the appendices to this report.

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Area habitat units</i>	0.30
	<i>Hedgerow units</i>	0.00
	<i>Watercourse units</i>	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Area habitat units</i>	13.76%
	<i>Hedgerow units</i>	0.00%
	<i>Watercourse units</i>	0.00%
Trading rules satisfied?	Yes ✓	

Biodiversity Enhancements

The primary biodiversity enhancements proposed as part of the development comprise improvements to the condition of the existing modified grassland and intertidal mudflat habitats.

The modified grassland will be enhanced from moderate to good condition through the implementation of an appropriate long-term management regime. Measures will include reduced mowing frequency, avoidance of herbicide applications where practicable, retention of flowering plants, and management of the grassland to promote greater structural and botanical diversity.

Approximately 0.05 ha of intertidal mudflat habitat will be subject to enhancement through periodic litter removal, biosecurity management, and protection from unnecessary disturbance. These measures are intended to improve habitat quality and ecological function and form the basis of the habitat enhancement entered within the Statutory Biodiversity Metric.

The habitat currently contains areas of marine litter, anthropogenic debris, and invasive non-native species, including Pacific Oyster *Magallana gigas* and *Gracilaria vermiculophylla*. Habitat enhancement will be achieved through periodic litter removal, implementation of biosecurity measures and protection of the habitat from unnecessary disturbance. These measures will improve habitat quality for estuarine flora and fauna whilst maintaining the ecological function of the intertidal habitat.

In addition to the habitat enhancements captured within the Biodiversity Metric, opportunities exist to incorporate marine biodiversity features within the detailed design of the jetty and pontoon. Such measures may include textured pile surfaces, habitat panels, oyster settlement features and other "Greening the Grey" infrastructure designed to increase habitat complexity and provide additional colonisation opportunities for estuarine species. Whilst these measures are not directly accounted for within the Statutory Biodiversity Metric, they will provide additional ecological benefits and contribute to the wider biodiversity value of the site.

All habitat enhancements will be secured and maintained for a minimum period of 30 years in accordance with Biodiversity Net Gain requirements.

Long-term Habitat Management

Habitat enhancements will be secured and maintained for a minimum period of 30 years. Grassland management will comprise reduced mowing frequency and retention of flowering plants. Intertidal habitat enhancements will comprise periodic litter removal, implementation of biosecurity measures and avoidance of unnecessary disturbance. Monitoring should be undertaken at five-year intervals to confirm that target habitat conditions are being achieved.

Biodiversity Net Gain Summary

The Biodiversity Net Gain Assessment demonstrates that the proposed development can be delivered whilst retaining the ecological integrity of the Site and providing a measurable enhancement to biodiversity.

The development has been specifically designed to avoid direct impacts to the Atlantic Salt Meadow and minimize impacts to the intertidal habitats with an elevated jetty structure and floating pontoon. Permanent habitat loss is limited to a negligible footprint associated with the support piles and has been treated as a de minimis impact within the Biodiversity Metric assessment.

The proposed habitat enhancements result in an overall gain of 13.76% of habitat units, thereby exceeding the statutory requirement to achieve a minimum 10% Biodiversity Net Gain. The enhancement measures will provide long-term ecological benefits through improvements to grassland condition, management of the intertidal habitat and the incorporation of biodiversity-friendly design features.

Subject to the implementation of the habitat enhancement and management measures outlined within this report, the proposed development is considered compliant with Biodiversity Net Gain requirements and relevant planning policy. The scheme will deliver a measurable enhancement to biodiversity whilst maintaining the ecological value of the River Hamble estuary and its associated designated sites.

Conclusion

Fathom Ecology was commissioned to undertake a Biodiversity Net Gain (BNG) Assessment in support of proposals for the construction of a new access jetty and floating hammerhead pontoon at Fairport House, Lands End Road, Bursledon, Hampshire.

The site supports approximately 0.2065 ha of habitat comprising Atlantic Salt Meadow, Intertidal Mudflats and Sandflats, and Modified Grassland. The intertidal habitats form part of the wider Solent estuarine ecosystem and include qualifying habitats of the Solent Maritime Special Area of Conservation (SAC). A narrow strip of Atlantic Salt Meadow occurs between the existing seawall and the intertidal mudflat, whilst a small area of modified grassland is present within the residential curtilage of Fairport House.

The proposed development has been designed to minimize impacts on existing habitats with an elevated jetty structure and floating pontoon. No direct loss of Atlantic Salt Meadow habitat is anticipated, and the vast majority of the intertidal mudflat habitat will be retained. The only permanent habitat loss associated with the development comprises a de minimis footprint associated with the support piles, amounting to approximately 0.212 m² (0.000021 ha), representing less than 0.02% of the intertidal habitat resource present within the site.

The Biodiversity Net Gain Assessment demonstrates that biodiversity gains can be achieved through the enhancement of the existing modified grassland and intertidal mudflat habitats. Proposed measures include improved grassland management, implementation of biosecurity measures, periodic removal of marine litter and debris, and the protection of intertidal habitats from unnecessary disturbance. Additional biodiversity benefits may also be achieved through the incorporation of marine habitat enhancement features within the detailed design of the jetty and pontoon.

Application of the Statutory Biodiversity Metric demonstrates that the proposed development will deliver a 13.76% net gain in habitat units, exceeding the statutory requirement to achieve a minimum 10% Biodiversity Net Gain under the Environment Act 2021. The proposed habitat enhancements will be maintained for a minimum period of 30 years to ensure that biodiversity gains are secured in the long term.

It is therefore concluded that the proposed development can deliver a measurable enhancement to biodiversity whilst maintaining the ecological integrity of the site and the wider River Hamble estuary. Subject to the implementation of the habitat enhancement measures described within this report, the proposals are considered compliant with Biodiversity Net Gain requirements and relevant planning policy.

Appendix 1 – Condition Assessment Sheets

Condition Sheet: INTERTIDAL SEDIMENT Habitat Type					
EUNIS Habitat Type(s)					
Mudflats and sandflats not covered by seawater at low tide					
Habitat Description					
The littoral sediment EUNIS habitat description is available here: https://eunis.eea.europa.eu/habitats/425					
Habitat Attributes to Record					
The following information should be recorded within the condition assessment proforma: • Description of sediment character • Description of presence of typical communities and biotopes • Description of species diversity and community composition • Observations on coastal process functioning and any human physical modifications present • Observations on transitions to other habitats • Assessment of litter • % cover of algal growth that could be attributed to nutrient enrichment • WFD classification of overlying water • Description of zonation					
Condition Assessment Criteria					
Indicator		Good (3 points)	Moderate (2 points)	Poor (1 point)	Score per indicator
1	Coastal processes	Coastal processes are functioning naturally. No evidence of human physical modifications which are clearly impacting the habitat.	Artificial structures present e.g. groynes that are impeding the natural movement of sediments or water, affecting up to 25% of the habitat.	Artificial structures present e.g. groynes that are impeding the natural movement of sediments or water, affecting more than 25% of the habitat	2 Existing seawall, riprap and historic shoreline modification influence natural sediment processes locally.

2	Presence and abundance of invasive non-native species ¹	Not more than 1 invasive non-native species is present at a level of occasional on the SACFOR scale or occupying more than 1% of the habitat. No high-risk undesirable species present, see footnote.	No invasive non-native species are present above 'Frequent' on the SACFOR scale, or they occupy between 1-10% of the habitat. No high-risk undesirable species present, see footnote for list.	One or more invasive non-native species is present at an 'Abundant' level on the SACFOR scale, they occupy more than 10% of the habitat or a high risk undesirable species is present – GBNNSS should be notified, see footnote for details.	1 Poor Pacific Oyster (<i>Magallana gigas</i>) and extensive mats of <i>Gracilaria vermiculophylla</i> occupy significant areas of the habitat.
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3	Water Quality	No visual evidence of pollution. There are no nuisance algal growths that are likely to be attributable to nutrient enrichment. Seasonality of the assessment should be considered; peak bloom time is July – September.	Visual evidence of low to moderate levels of pollution. elevated algal growth with increases in cover that may indicate nutrient enrichment. Seasonality of the assessment should be considered; peak bloom time is July – September.	Visual evidence of high algal growth is indicative of nutrient enrichment. Signs of eutrophication that would impede bird feeding. Seasonality of the assessment should be considered; peak bloom time is July – September.	2 Moderate evidence of nutrient enrichment, excessive algal blooms (ephemeral green algae) adjacent to site was observed.
4	Non-natural structures and direct human impacts	No evidence of impacts from direct human activities (including pontoons, moorings, boats, crab tiles, bait digging or anchoring scars) or they occupy <1% of the habitat area	Some evidence of impacts from direct human activities (including pontoons, moorings, boats, crab tiles, bait digging or anchoring scars), occupying up to 10% of the habitat area	Some evidence of impacts from direct human activities (including pontoons, moorings, boats, crab tiles, bait digging or anchoring scars), occupying over >10% of the habitat area.	1 Poor Historic boat use, riprap, debris and shoreline modification are evident across parts of the habitat.
5	Litter (when examining a beach strandline /Mean high water line or intertidal rocky shore)	Following the MCS beach litter survey method the number of items of litter does not exceed $0.0036 \text{ m}^{-1} \text{ min}^{-1} \text{ person}^{-1}$ equivalent to up to 21 items per person per 100m per hour. See Nelms 2017 <i>et al</i> and the link to the MSFD threshold value assessment ² .	Following the MCS beach litter survey method the number of items of litter does not exceed $0.0078 \text{ m}^{-1} \text{ min}^{-1} \text{ person}^{-1}$ equivalent to between 20 and 47 items of litter per 100m survey per person per hour. See Nelms 2017 <i>et al</i> and the link to the MSFD threshold value assessment ² .	Following the MCS beach litter survey method the number of items of litter exceeds $0.0078 \text{ m}^{-1} \text{ min}^{-1} \text{ person}^{-1}$ equivalent to more than 47 items of litter per 100m survey per person per hour. See Nelms 2017 <i>et al</i> and the link to the MSFD threshold value assessment ² .	2 Moderate – historic litter and riprap and other anthropogenic debris on the intertidal
Total score (out of a possible 15)					8
TOTAL SCORE 8 = MODERATE CONDITION					

Condition Sheet: ARTIFICIAL HARD STRUCTURES Habitat Type
ARTIFICIAL Habitat Type(s)
Intertidal artificial hard structures Intertidal artificial features of hard structures Intertidal artificial hard structures with Integrated Greening of Grey Infrastructure (IGGI)

Habitat Description					
Artificial hard structures are man-made structures fulfilling a range of functions (e.g. coastal defences, port, harbour and marina installations, energy infrastructure, aquaculture). They can be made of various hard materials (artificial or natural rock, wood, plastics, metal) that would not normally be found in the area they are being deployed.					
Habitat Attributes to Record					
The following information should be recorded within the condition assessment proforma: • Description of presence of typical communities and biotopes • Description of species diversity and community composition • Presence and abundance of non-native species • Observations on coastal process functioning and any human physical modifications present • % cover of algal growth that could be attributed to nutrient enrichment • WFD classification of overlying water • Assessment of litter					
Condition Assessment Criteria					
Indicator		Good (3 points)	Moderate (2 points)	Poor (1 point)	Score per indicator
1	Coastal processes	Coastal processes are functioning naturally. No evidence of human physical modifications which are clearly impacting the habitat	Artificial structures present that are impeding the natural movement of sediments or water, affecting up to 25% of the habitat	Artificial structures present e.g. groynes that are impeding the natural movement of sediments or water, affecting more than 25% of the habitat.	1 Poor The seawall is an artificial shoreline structure replacing natural transition zones.
2	Presence and abundance of invasive non-native species ¹	Not more than 1 invasive non-native species is present at a level of occasional on the SACFOR scale or occupying more than 1% of the habitat. No high-risk undesirable species present, see footnote.	No invasive non-native species are present above 'Frequent' on the SACFOR scale, or they occupy between 1-10% of the habitat. No high-risk undesirable species present, see footnote for list.	One or more invasive non-native species are present at an 'Abundant' level on the SACFOR scale, they occupy more than 10% of the habitat or a high risk undesirable species is present – GBNNSS should be notified, see footnote for details.	2 Moderate Pacific Oyster present on adjacent hard substrates.
3	Water Quality	No visual evidence of pollution. There are no nuisance algal growths that are likely to be attributable to nutrient enrichment. Seasonality of the assessment should be considered; peak bloom time is July – September.	Visual evidence of low to moderate levels of pollution. elevated algal growth with increases in cover that may indicate nutrient enrichment. Seasonality of the assessment should be considered, peak bloom time is July – September.	Visual evidence of high algal growth is indicative of nutrient enrichment. Signs of eutrophication that would impede bird feeding. Seasonality of the assessment should be considered; peak bloom time is July – September.	2 Moderate Green ephemeral algae blanketing saltmarsh adjacent to site

4	Litter (when examining a beach strandline /Mean high water line or intertidal rocky shore)	Following the MCS beach litter survey method the number of items of litter does not exceed $0.0036 \text{ m}^{-1} \text{ min}^{-1} \text{ person}^{-1}$ equivalent to up to 21 items per person per 100m per hour. See Nelms 2017 <i>et al</i> and the link to the MSFD threshold value assessment ² .	Following the MCS beach litter survey method the number of items of litter does not exceed $0.0078 \text{ m}^{-1} \text{ min}^{-1} \text{ person}^{-1}$ equivalent to between 20 and 47 items of litter per 100m survey per person per hour. See Nelms 2017 <i>et al</i> and the link to the MSFD threshold value assessment ² .	Following the MCS beach litter survey method the number of items of litter exceeds $0.0078 \text{ m}^{-1} \text{ min}^{-1} \text{ person}^{-1}$ equivalent to more than 47 items of litter per 100m survey per person per hour. See Nelms 2017 <i>et al</i> and the link to the MSFD threshold value assessment ² .	2 Moderate Some marine litter and estuarine debris present.
5	Amount of colonisation	More than three different fauna and floral communities present.	Two or three different faunal/flora communities present.	One or no faunal/flora communities present.	3 Good Barnacles, fucoids (Fucus spp.), Ascophyllum nodosum and other estuarine species colonizing the structure.
Total score (out of a possible 15)					10

Condition Sheet: Atlantic Salt Meadow

EUNIS Habitat Type(s)

Atlantic Salt Meadow (H1420)
Saltmarsh Communities of the Lower and Middle Marsh

Habitat Description

Atlantic Salt Meadow is an intertidal coastal habitat occurring within sheltered estuaries and embayment where fine sediments accumulate and are regularly inundated by seawater during high tides. The habitat is characterized by salt-tolerant vegetation adapted to fluctuating salinity and tidal inundation and typically forms a transition zone between unvegetated intertidal mudflats and terrestrial habitats.

At Fairport House, the habitat occurs as a narrow strip immediately seaward of the existing timber sleeper seawall and is dominated by Sea Purslane (*Atriplex portulacoides*), with Sea Aster (*Tripolium pannonicum*), Sea Plantain (*Plantago maritima*) and Sea Arrowgrass (*Triglochin maritima*) also present. The habitat forms part of the Atlantic Salt Meadow (H1420) Annex I habitat and is a qualifying feature of the Solent Maritime Special Area of Conservation (SAC). Despite its relatively small extent within the Site, it provides valuable ecological functions including sediment stabilization, nutrient cycling, carbon storage and habitat for estuarine invertebrates and birds.

Habitat Attributes to Record

The following information should be recorded within the condition assessment proforma:

- Description of presence of typical communities and biotopes
- Description of species diversity and community composition
- Presence and abundance of non-native species
- Observations on coastal process functioning and any human physical modifications present
- % cover of algal growth that could be attributed to nutrient enrichment
- WFD classification of overlying water
- Assessment of litter

Condition Assessment Criteria					
Indicator		Good (3 points)	Moderate (2 points)	Poor (1 point)	Score per indicator
1	Vegetation composition	Dominated by characteristic Atlantic salt meadow species, with native saltmarsh vegetation covering more than 75% of the habitat. Typical species are well represented and include species such as Sea Purslane (<i>Atriplex portulacoides</i>), Sea Aster (<i>Tripolium pannonicum</i>), Sea Plantain (<i>Plantago maritima</i>) and Sea Arrowgrass (<i>Triglochin maritima</i>). No significant encroachment by invasive or non-characteristic species.	Characteristic saltmarsh species remain dominant, but vegetation diversity or cover is reduced. Non-characteristic species may be present locally and native saltmarsh vegetation covers between 25–75% of the habitat.	Characteristic saltmarsh species are scarce or largely absent, with vegetation dominated by non-characteristic species, invasive plants or bare ground. Native saltmarsh vegetation covers less than 25% of the habitat.	3 Good
2	Habitat Structure	Habitat exhibits a continuous vegetation cover with natural zonation and structure typical of Atlantic Salt Meadow. Vegetation is well established with limited erosion, fragmentation or bare ground.	Some fragmentation, localized erosion or disturbance is present, but the overall habitat structure and zonation remain intact.	Habitat is highly fragmented or degraded, with extensive bare ground, erosion, or loss of characteristic saltmarsh structure.	3 (Good) The saltmarsh forms a continuous narrow strip between the intertidal mudflat and the seawall and retains a clear transition between habitats. Vegetation cover is continuous with little evidence of erosion or fragmentation. Although constrained by the presence of the seawall, the habitat retains its characteristic structure and ecological functionality.
3	Presence and Abundance of Invasive Non-native Species	No invasive non-native plant species are present within the habitat.	Invasive non-native species are present but occupy less than 10% of the habitat area and not affecting habitat function.	Invasive non-native species are widespread, dominant, or causing degradation of habitat condition.	3 (Good) No invasive non-native plant species were recorded within the Atlantic Salt Meadow during the survey. Whilst invasive species such as Pacific Oyster (<i>Magallana gigas</i>) and <i>Gracilaria</i>

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					vermiculophylla were present within the adjacent intertidal mudflat, these species were absent from the saltmarsh vegetation.
4	Physical Disturbance	No evidence of significant trampling, vehicle access, erosion, excavation, or habitat damage. Habitat functioning remains unaffected by anthropogenic activities.	Localized disturbance is present but affects only a small proportion of the habitat and does not compromise overall habitat integrity.	Significant disturbance, erosion, or habitat damage affects a substantial proportion of the habitat.	2 (Moderate) The saltmarsh is located immediately adjacent to an existing seawall and residential property, resulting in some localized anthropogenic influence. However, there was no evidence of trampling, direct habitat damage or significant erosion and the habitat remains functionally intact.
5	Litter and Anthropogenic Impacts	No or negligible litter, debris or anthropogenic materials are present within the habitat.	Some litter or estuarine debris are present but not affecting habitat structure or ecological function.	Significant accumulation of litter or anthropogenic materials affecting habitat conditions or ecological function.	2 (Moderate) Small quantities of estuarine debris and litter were present along the upper shore and adjacent mudflat. However, accumulation within the saltmarsh itself was limited and there was no evidence that litter was adversely affecting habitat structure or ecological functioning.
Total score (out of a possible 15)					13

Condition Sheet: Modified Grassland
EUNIS Habitat Type(s)
Modified Grassland Amenity Grassland
Habitat Description
Modified Grassland comprises semi-improved or amenity-managed grassland that has been subject to regular mowing, grazing, fertilization, or other management practices that reduce botanical diversity. Such habitats are typically dominated by common grass species and support relatively few wildflowers compared to species-rich neutral grassland. At Fairport House, the habitat occurs landward of the existing timber sleeper seawall within the residential curtilage. The grassland is regularly maintained and dominated by common amenity grass species. Botanical diversity is limited, although occasional plants of Sea Arrowgrass (<i>Triglochin maritima</i>) were recorded, reflecting the site's proximity to the estuarine environment. The habitat provides limited ecological value in comparison to the adjacent saltmarsh and intertidal habitats but contributes to habitat connectivity and provides foraging opportunities for invertebrates and birds.

Habitat Attributes to Record					
The following information should be recorded within the condition assessment proforma: • Species diversity and community composition • Vegetation structure and sward diversity • Presence and abundance of invasive non-native species • Evidence of disturbance, compaction, or excessive management • Presence of litter and anthropogenic impacts • Connectivity with adjacent habitats					
Condition Assessment Criteria					
Indicator		Good (3 points)	Moderate (2 points)	Poor (1 point)	Score per indicator
1	Vegetation Composition	A range of grasses and wildflowers present with evidence of a diverse sward and limited dominance by a small number of species.	Dominated by common grass species with occasional forbs present. Botanical diversity is limited but characteristic grassland species remain evident.	Species-poor sward dominated by one or two grass species with little or no herb diversity.	2 (Moderate)
2	Habitat Structure	Varied sward heights and structural diversity present, providing habitat for invertebrates and birds.	Uniform sward structure due to regular management but habitat remains intact.	Highly managed or heavily disturbed with little structural diversity.	2 (Moderate)
3	Presence and Abundance of Invasive Non-native Species	No invasive non-native plant species present.	Invasive non-native species are present but occupy less than 10% of the habitat area.	Invasive non-native species are widespread or dominant.	3 (Good)
4	Physical Disturbance	No evidence of excessive trampling, soil compaction, vehicle damage, or erosion.	Some evidence of recreational use or management impacts but habitat remains functional.	Significant compaction, erosion, or habitat damage affecting condition.	2 (Moderate)
5	Litter and Anthropogenic Impacts	No or negligible litter present.	Small quantities of litter or anthropogenic materials are present but not affecting habitat function.	Significant litter accumulation affecting habitat quality.	3 (Good)
Total score (out of a possible 15)					12