

Site 29 - North Inishowen

Site description

North Inishowen is a medium-sized site located along the northwestern coast from White Strand Bay to Dunree Beach, Co. Donegal. It is divided in four sub-sites.

All the sub-sites are part of the North Inishowen Coast SAC (002012) (NPWS, 2014a) and Trawbreaga Bay is also part of Trawbreaga Bay SPA (004034).

Based on the currently available mapping, eleven coastal Annex I habitats occur within this SAC, three of which (**1220 Perennial vegetation of stony banks**, ***2130 Fixed dunes (grey dunes)** and ***21A0 Machairs**) are listed as Qualifying Interests ([Table 1](#)).

Table 1. Annex I habitats present at North Inishowen Coast SAC, the area they occupy (based on the most recent mapped available) and status as a Qualifying Interest of the SAC. An asterisk denotes a priority Annex I habitat and habitats that were not the target of this survey are excluded.

Habitat Code	Area (ha)	Qualifying Interest?
1210 Drift line vegetation	0.246	No
1220 Perennial vegetation of stony banks	5.356	Yes
1310 <i>Salicornia</i> flats	0.398	No
1330 Atlantic salt meadows	51.165	No
1410 Mediterranean saltmarsh	12.664	No
2110 Embryonic shifting dunes	0.673	No
2120 Marram dunes (white dunes)	8.639	No
*2130 Fixed dunes (grey dunes)	506.329	Yes
2170 Dunes with creeping willow	0.182	No
2190 Humid dune slacks	7.989	No
*21A0 Machairs	144.192	Yes

Few habitat losses were recorded mainly due to land reclamation or natural succession to reedbeds (sub-site 4) ([Table 2](#)).

Table 2. Habitat loss recorded during the desk and field surveys in hectares.

Habitat	Within SAC?	Loss (ha)	Impact code	New habitat
*2130	Yes	0.057	PM07	Dune scrub and woodland (CD4)
1330	Yes	0.026	PF05	Exposed sand, gravel or till (ED1)
1330	Yes	0.056	PM07	Reed and large sedge swamps (FS1)
1410	Yes	0.002	PF05	Exposed sand, gravel or till (ED1)
1410	Yes	0.015	PM07	Reed and large sedge swamps (FS1)
*2130	No	0.050	PE01	Buildings and artificial surfaces (BL3)
*2130	Yes	0.382	PF03	Amenity grassland (GA2)
*21A0	No	0.448	PF01	Buildings and artificial surfaces (BL3)
*21A0	Yes	1.095	PF01	Buildings and artificial surfaces (BL3)
*21A0	Yes	1.188	PF03	Amenity grassland (GA2)

Conservation assessments were carried out within four sub-sites occupying a total area of 104 ha ([Table 3](#)). Only two habitat (**2110 Embryonic shifting dunes** and **2120 Marram dunes (white dunes)**) were in Favourable condition and the remainder were in Unfavourable condition, mainly due to overgrazing and offroad driving for agriculture.

Table 3. Summary of Conservation Status for all habitats assessed at North Inishowen.

Subsite	Habitat	Area	Structure and Functions	Future Prospects	Overall assessment
29.01 Whitestrand Bay - Culoort	1220	Unfavourable - Inadequate (decreasing)	Unfavourable - Inadequate (stable)	Unfavourable - Bad	Unfavourable - Bad (stable)
29.02 Tullagh Bay and Tullagh Point	1220	Unfavourable - Inadequate (decreasing)	Favourable (increasing)	Unfavourable - Inadequate	Unfavourable - Inadequate (improving)
29.03 Crummies Bay	2110	Favourable (stable)	Favourable (stable)	Favourable	Favourable (improving)
29.03 Crummies Bay	2120	Favourable (stable)	Favourable (stable)	Favourable	Favourable (stable)
29.03 Crummies Bay	*2130	Favourable (stable)	Unfavourable - Inadequate (stable)	Unfavourable - Inadequate	Unfavourable - Inadequate (improving)
29.04 Trawbreaga Bay	1310	Favourable (stable)	NA (NA)	Favourable	NA (NA)
29.04 Trawbreaga Bay	1330	Unfavourable - Inadequate (stable)	Unfavourable - Inadequate (decreasing)	Unfavourable - Inadequate	Unfavourable - Inadequate (stable)
29.04 Trawbreaga Bay	1410	Unfavourable - Inadequate (stable)	Favourable (stable)	Favourable	Unfavourable - Inadequate (stable)

Sub-site 1. Whitestrand Bay - Culoort

Whitestrand Bay-Culoort is a medium-sized shingle sub-site located approximately 6 km northwest of Malin, Co. Donegal. Whitestrand Bay-Culoort is a multi-ridged raised beach (Moore & Wilson, 1999) and is defined as a fringing beach following Chapman (1976).

Whitestrand Bay-Culoort is mainly used for recreation, as evidenced by the number of caravans present in the southern part of the site. A track provides access to the caravans. This access track has also been used for gravel extraction purposes. At the northern end of the site a road runs along the edge of the beach for approximately 450 m. A small car park is also present in this area.

Summary Information

Survey Date: 28-29 April 2022

Water Framework Directive Waterbody: not applicable

Previous survey identifiers: CMP180, VSM001

Current survey details:

Table 4: Current survey details for Annex I habitats at Whitestrand Bay - Culoort

Habitat Code	Area	Monitoring stops
1220 Perennial vegetation of stony banks	2.098	6

1220 Perennial vegetation of stony banks

Area

The habitat has decreased from 2.79 ha to 2.09 ha since VSM. This decrease was the result of a different and better mapping technique. On the other hand there has been a loss less than 1% per year since 2007. This is consistent with an Area assessment of Unfavourable - Inadequate and the trend is decreasing.

Structure and Functions

The pioneer community, mainly dominated by *Silene uniflora* and secondly by *Honckenya peploides*, was extensive and formed an intermittent band along the shoreline. The grassland community, dominated by *Festuca rubra*, was present at either side of the access track in the south, adjacent to the road in the north and along the northwestern tip. A scrub community, dominated by *Rubus fruticosus*, was present in the north along the Culoort River.

Two criteria failed in the Structure and Functions assessment. This was mainly due to the presence of concrete rock armour that creates interference with the sediment dynamics. Furthermore, damage due to disturbance was recorded in 30% of habitat. As these two assessment criteria failed, the Structure and Functions were therefore assessed as Unfavourable - Inadequate. Since during CMP Structure and Functions were also assessed as Unfavourable - Inadequate, the trend is therefore stable.

Future Prospects

High-intensity negative impacts recorded at the site comprised coastal protection (pier), the presence of a road, camping, litter and dumping. All these impacts affected more than 40% of the habitat area. Medium-intensity negative impacts included offroad driving and car parking. Future Prospects were therefore assessed as Unfavourable - Bad, and the trend was assessed as stable.

Conservation assessment

The conservation status assessments of the three parameters are as follows:

- Area: Unfavourable - Inadequate (decreasing)
- Structure and Functions: Unfavourable - Inadequate (stable)

- Future Prospects: Unfavourable - Bad (stable)

Since at least one of the three parameters was assessed as Unfavourable - Bad, the overall conservation assessment for **1220 Perennial vegetation of stony banks** at 29.01 Whitestrand Bay - Culoort was Unfavourable - Bad. Since the overall conservation was previously assessed as Unfavourable - Bad, the trend is stable.

Overall Conservation Status: Unfavourable - Bad (stable)

Condition of the habitat by area

Considering that 25% of **1220 Perennial vegetation of stony banks** was affected by several impacts that led to a failure in the Structure and Functions assessment, this area was considered to be in poor condition. The remaining 75% of the habitat was considered to be in good condition.

Site 29 Subsite 1 Whitestrand Bay – Culoort Appendices

Appendix 1. Area

Total habitat area recorded during reporting cycles to date.

Habitat	2007	2013	2019	2025
1220	2.660	NS	2.790	2.098

Favourable Reference Area and cumulative changes in area due to human activities (restoration and loss) recorded during reporting cycles to date. Natural fluctuations are not taken into account.

Habitat	Favourable Reference area (ha)	2007 change (ha)	2013 change (ha)	2019 change (ha)	2025 change (ha)
1220	2.660	<1% per year	NS	<1% per year (2019) and 2007 loss	2007 loss and 2019 loss

Appendix 2. Structure and Functions

Negative indicator species and non-native invasive species

Habitat	Species name	Cover (%)
1220	<i>Cirsium vulgare</i>	0.1

Positive indicator species and notable species

Habitat	Species name	Cover (%) (if recorded)
1220	<i>Honckenya peploides</i>	5.0
1220	<i>Potentilla anserina</i>	10.0
1220	<i>Rumex crispus</i>	1.5
1220	<i>Silene uniflora</i>	27.5

Structure and Functions Assessment Criteria

Habitat	Indicator	Pass/Fail
1220	Shingle habitat	Pass
1220	Native species	Pass
1220	Notable/rare species	Pass
1220	Negative indicator species	Pass
1220	Non-native species	Pass
1220	Interference with the sediment dynamics	Fail
1220	Damage due to disturbance	Fail

Appendix 3. Impacts and Activities

Impacts recorded

Habitat code	Impact code	Impact description	Relative importance	Influence	Source	Timing	Trend	Area
1220	PE01	Road	High	Negative	Inside	Ongoing	Stable	20.0
1220	PF03	Camping	High	Negative	Inside	Ongoing	Stable	3.0
1220	PF04	Deposition of waste	High	Negative	Inside	Ongoing	Stable	10.0
1220	PF05	Offroad driving and parking	Medium	Negative	Inside	Ongoing	Stable	0.5
1220	PF06	Dumping	High	Negative	Inside	Ongoing	Stable	0.1
1220	PF15	Pier	High	Negative	Inside	Ongoing	Stable	10.0
1220	PM07	Natural erosion	Medium	Neutral	Inside	Ongoing	Stable	1.0

Conservation Measures required

Habitat code	Measure code	Measure description	Area (ha)	Status (in place/partial/Absent/unidentified)	Response timeframe	Purpose	Location (inside and or Outside SAC)
1220	CE01	Measure required to manage impact of unpaved road	0.4186	Absent	Medium-term results	Restore the structure & functions, including the status of typical species	Inside
1220	CF03	Measure required to regulate recreational activities	0.2826	Absent	Medium-term results	Restore the structure & functions, including the status of typical species	Inside

Appendix 4. Condition of the habitat by area

Summary of habitat condition

Habitat code	% remaining habitat in poor condition	% remaining habitat in good condition
1220	25	75

Sub-site 2. Tullagh Bay and Tullagh Point

Tullagh Bay and Tullagh Point is a medium-sized sub-site located approximately 4.5 km northwest of Clonmany, Co. Donegal. It is a vegetated shingle ridge (Moore & Wilson, 1999) and is defined as a fringing beach following Chapman (1976).

Tullagh Bay and Tullagh Point are mainly used for sheep grazing.

Summary Information

Survey Date: 30 April 2022

Water Framework Directive Waterbody: not applicable

Previous survey identifiers: VSM002

Current survey details:

Table 5: Current survey details for Annex I habitats at Tullagh Bay and Tullagh Point

Habitat Code	Area	Monitoring stops
1220 Perennial vegetation of stony banks	1.921	3

1220 Perennial vegetation of stony banks

Area

The habitat has decreased from 2.04 ha to 1.92 ha since VSM. This decrease was the result of a different and more detailed mapping technique. On the other hand, there has been a loss less than 1% per year since 2019. This is consistent with an Area assessment of Unfavourable - Inadequate and the trend is decreasing.

Structure and Functions

The pioneer community, dominated by *Silene uniflora* and *Rumex crispus*, was the most extensive habitat. It was present in the northwest of Tullagh Point and at the top of the beach in Tullagh Bay. The grassland community, dominated by *Festuca rubra*, was present at either side of the Tullagh Point headland. Heath and scrub communities occurred in the northwest of Tullagh Point on the landward side of the pioneer community. Another small area of scrub was present lower down on the western side of Tullagh Point.

Three criteria failed in the Structure and Functions assessment, regarding a decline over time in the **1220 Perennial vegetation of stony banks community** diversity, in the diversity of typical species within **1220 Perennial vegetation of stony banks community** communities and in the number of individuals of notable species (i.e. *Mertensia maritima*). These criteria were passed by expert judgement because the decline could be justified by early season survey and access issue (end of April 2022). Structure and Functions were therefore assessed as Favourable. Since during the VSM Structure and Functions were assessed as Unfavourable - Inadequate, the trend is increasing.

Future Prospects

Sheep overgrazing had a low-intensity neutral impact affecting 20% of the habitat, while offroad driving had a high-intensity negative impact and affected 10% of the habitat. Future Prospects were therefore assessed as Unfavourable - Inadequate, and the trend was assessed as increasing, because they were assessed as Unfavourable - Bad during the VSM.

Conservation assessment

The conservation status assessments of the three parameters are as follows:

- Area: Favourable (stable)
- Structure and Functions: Favourable (increasing)

- Future Prospects: Unfavourable - Inadequate (increasing)

Since at least one of the three parameters was assessed as Unfavourable - Inadequate, the overall conservation assessment for **1220 Perennial vegetation of stony banks** at 29.02 Tullagh Bay and Tullagh Point was Unfavourable - Inadequate. Since the overall conservation was previously assessed as Unfavourable - Bad, the trend is therefore improving.

Overall Conservation Status: Unfavourable - Inadequate (improving)

Condition of the habitat by area

Considering that 10% of **1220 Perennial vegetation of stony banks** was affected by several impacts that led to a failure in the Structure and Functions assessment, this area was considered to be in poor condition. The remaining 90% of the habitat was considered to be in good condition.

Site 29 Subsite 2 - Tullagh Bay and Tullagh Point Appendices

Appendix 1. Area

Total habitat area recorded during reporting cycles to date.

Habitat	2007	2013	2019	2025
1220	NS	NS	2.040	1.921

Favourable Reference Area and cumulative changes in area due to human activities (restoration and loss) recorded during reporting cycles to date. Natural fluctuations are not taken into account.

Habitat	Favourable Reference area (ha)	2007 change (ha)	2013 change (ha)	2019 change (ha)	2025 change (ha)
1220	2.040	NS	NS	<1% per year	2019 loss

Appendix 2. Structure and Functions

Positive indicator species and notable species

Habitat	Species name	Cover (%) (if recorded)
1220	<i>Potentilla anserina</i>	1.0
1220	<i>Rumex crispus</i>	8.7
1220	<i>Silene uniflora</i>	7.5

Structure and Functions Assessment Criteria

Habitat	Indicator	Pass/Fail
1220	Shingle habitat	Pass
1220	Native species	Pass
1220	Notable/rare species	Pass
1220	Negative indicator species	Pass
1220	Non-native species	Pass
1220	Interference with the sediment dynamics	Pass
1220	Damage due to disturbance	Pass

Appendix 3. Impacts and Activities

Impacts recorded

Habitat code	Impact code	Impact description	Relative importance	Influence	Source	Timing	Trend	Area
1220	PA08	Grazing (sheep)	Low	Neutral	Inside	Ongoing	Stable	20.0
1220	PF05	Offroad driving	High	Negative	Inside	Ongoing	Decreasing	10.0

Appendix 4. Condition of the habitat by area

Summary of habitat condition

Habitat code	% remaining habitat in poor condition	% remaining habitat in good condition
1220	10	90

Sub-site 3. Crummies Bay

Crummies Bay is a small sub-site located close to Buncrana, Co. Donegal.

Crummies Bay is used as an amenity by locals and tourists, and there is a path leading through the dunes to the beach. The main local land use is agriculture.

Summary Information

Survey Date: 30 April 2022

Water Framework Directive Waterbody: not applicable

Previous survey identifiers: CMP175

Current survey details:

Table 6: Current survey details for Annex I habitats at Crummies Bay

Habitat Code	Area	Monitoring stops
2110 Embryonic shifting dunes	0.090	2
2120 Marram dunes (white dunes)	0.290	4
*2130 Fixed dunes (grey dunes)	11.571	8

2110 Embryonic shifting dunes

Area

The habitat has decreased from 0.15 ha to 0.09 ha since SDM. This decrease was due to natural processes of erosion. This is consistent with an Area assessment of Favourable and the trend is stable.

Structure and Functions

No criteria failed in the Structure and Functions assessment: the Structure and Functions were therefore assessed as Favourable. Since **2110 Embryonic shifting dunes** was assessed as Favourable during SDM, the trend is therefore stable.

Future Prospects

Walking and natural erosion were recorded as low-intensity neutral impacts, affecting 30% of the habitat. Future Prospects were therefore assessed as Favourable, and the trend was assessed as increasing.

Conservation assessment

The conservation status assessments of the three parameters are as follows:

- Area: Favourable (stable)
- Structure and Functions: Favourable (stable)
- Future Prospects: Favourable (increasing)

Since all three parameters were assessed as Favourable, the overall conservation assessment for **2110 Embryonic shifting dunes** at 29.03 Crummies Bay was Favourable and trend is improving, because the SDM assessment was Unfavourable - Inadequate.

Overall Conservation Status: Favourable (improving)

Condition of the habitat by area

100% of the habitat was considered to be in good condition.

2120 Marram dunes (white dunes)

Area

The area of **2120 Marram dunes (white dunes)** decreased from 0.38 ha to 0.29 ha since SDM. This was mainly due to natural succession and there was no sign of anthropogenic causes. This is consistent with an Area assessment of Favourable and the trend is stable.

Structure and Functions

One criterion failed in the Structure and Functions assessment: flowering was rare (only 25% of frequency while the threshold is more than 40%), but as the site was surveyed prior to the flowering season for *Ammophila arenaria* and there were plenty of green shoots, the health of the habitat was considered to be good. This criterion was passed by expert judgement, so the Structure and Functions were assessed as Favourable. Since **2120 Marram dunes (white dunes)** was assessed as Favourable during SDM, the trend is therefore stable.

Future Prospects

Walking and erosion were recorded as low-intensity neutral impacts, affecting about 25% of the habitat. Future Prospects were therefore assessed as Favourable, and the trend was assessed as stable, because the previous assessment was also Favourable.

Conservation assessment

The conservation status assessments of the three parameters are as follows:

- Area: Favourable (stable)
- Structure and Functions: Favourable (stable)
- Future Prospects: Favourable (stable)

Since all three parameters were assessed as Favourable, the overall conservation assessment for **2120 Marram dunes (white dunes)** at 29.03 Crummies Bay was Favourable and the trend is stable.

Overall Conservation Status: Favourable (stable)

Condition of the habitat by area

100% of the habitat was considered to be in good condition.

*2130 Fixed dunes (grey dunes)

Area

The area of ***2130 Fixed dunes (grey dunes)** decreased from 11.95 ha to 11.57 ha between SDM and CHNW21. This decrease was the result of a natural succession between **2120 Marram dunes (white dunes)** and ***2130 Fixed dunes (grey dunes)**. This is consistent with an Area assessment of Favourable. Since the SDM assessment was also Favourable, the trend of the area is stable.

Structure and Functions

Two criteria failed in the Structure and Functions assessment, the first one concerning the height of the vegetation: in fact, an average height between 2 and 10 cm was recorded in 12.5% of stops, while the threshold is 30-70%. The second one concerned the presence of trees and scrubs other than *Juniperus* that was not recorded in the vicinity of stops but the cover across the habitat was 10%, while the threshold is no more than 5%. As these two criteria failed, the Structure and Functions were assessed as Unfavourable - Inadequate. The Structure and Functions were also assessed as Unfavourable - Inadequate during SDM, the trend is therefore stable.

Future Prospects

High-intensity negative impacts included offroad driving with presence of tracks, that affected only 1% of the habitat. The most significant medium-intensity negative impact was overgrazing, by horses and sheep,

which affected 20% of the habitat. Undergrazing also had a medium-intensity effect on 20% of the habitat, while bracken encroachment had a negative, medium intensity effect on 4%. Extensive sheep grazing had a medium-intensity positive impact on 40% of the habitat, but this was not enough to outweigh the effects of undergrazing and the habitat failed the Future Prospects assessment with a score of Unfavourable - Inadequate (stable). This is more negative than the baseline assessment and indicates that the lack of grazing represents an increasing threat and one that could result in the replacement of herbaceous vegetation on the fixed dunes with scrub.

Conservation assessment

The conservation status assessments of the three parameters are as follows:

- Area: Favourable (stable)
- Structure and Functions: Unfavourable - Inadequate (stable)
- Future Prospects: Unfavourable - Inadequate (stable)

As two of three parameters were assessed as Unfavourable - Inadequate, the overall conservation assessment for ***2130 Fixed dunes (grey dunes)** at 29.03 Crummies Bay was therefore Unfavourable - Inadequate. Since the overall assessment was Unfavourable - Bad in the previous report, the trend is therefore stable.

Overall Conservation Status: Unfavourable - Inadequate (improving)

Condition of the habitat by area

Considering that about 15% of the habitat area was affected by several impacts, leading to the failure of Structure and Functions, this area was considered to be in poor condition. The remaining 85% of the habitat was considered to be in good condition.

Site 29 Subsite 3 - Crummies Bay Appendices

Appendix 1. Area

Total habitat area recorded during reporting cycles to date.

Habitat	2007	2013	2019	2025
1210	0.100	0.000	NS	0.000
2110	0.090	0.150	NS	0.090
2120	0.460	0.380	NS	0.290
2130	11.890	11.950	NS	11.571

Favourable Reference Area and cumulative changes in area due to human activities (restoration and loss) recorded during reporting cycles to date. Natural fluctuations are not taken into account.

Habitat	Favourable Reference area (ha)	2007 change (ha)	2013 change (ha)	2019 change (ha)	2025 change (ha)
1210	0.100	0	NR	NS	NR
2110	0.090	<1% per year	0	NS	0
2120	0.460	0	0	NS	0
*2130	11.890	0	0	NS	0

Appendix 2. Structure and Functions

Positive indicator species and notable species

Habitat	Species name	Cover (%) (if recorded)
2110	<i>Elytrigia juncea</i>	
2110	<i>Leymus arenarius</i>	
2120	<i>Ammophila arenaria</i>	
2120	<i>Elytrigia juncea</i>	
*2130	<i>Carex arenaria</i>	
*2130	<i>Carex flacca</i>	
*2130	<i>Festuca rubra</i>	
*2130	<i>Galium verum</i>	
*2130	<i>Homalothecium lutescens</i>	
*2130	<i>Hylocomium splendens</i>	
*2130	<i>Hypochaeris radicata</i>	
*2130	<i>Lotus corniculatus</i>	
*2130	<i>Luzula campestris</i>	
*2130	<i>Plantago lanceolata</i>	
*2130	<i>Poa pratensis</i>	
*2130	<i>Rhynchospora squarrosa</i>	
*2130	<i>Rhynchospora triquetra</i>	
*2130	<i>Scleropodium purum</i>	
*2130	<i>Trifolium repens</i>	
*2130	<i>Veronica chamaedrys</i>	
*2130	<i>Viola riviniana</i>	

Structure and Functions Assessment Criteria

Habitat	Indicator	Pass/Fail
2110	Positive indicator species	Pass
2110	Negative indicator species	Pass
2110	Non-native species	Pass
2110	Flowering or fruiting of positive indicator species	Pass
2110	Notable/rare species	Pass
2110	Interference with the sediment dynamics	Pass
2110	Damage due to disturbance	Pass
2120	Positive indicator species	Pass
2120	Negative indicator species	Pass
2120	Non-native species	Pass
2120	Flowering or fruiting of positive indicator species	Pass
2120	Notable/rare species	Pass
2120	Interference with the sediment dynamics	Pass
2120	Damage due to disturbance	Pass
*2130	Positive indicator species	Pass
*2130	Negative indicator species	Pass
*2130	Non-native species	Pass
*2130	Cover of trees and scrub other than <i>Juniperus communis</i>	Fail
*2130	Trees or saplings from adjacent plantations	Pass
*2130	Height of vegetation	Fail
*2130	Flowering or fruiting of positive indicator species	Pass
*2130	Bare sand	Pass
*2130	Notable/rare species	Pass

*2130	Interference with the sediment dynamics	Pass
*2130	Damage due to disturbance	Pass

Appendix 3. Impacts and Activities

Impacts recorded

Habitat code	Impact code	Impact description	Relative importance	Influence	Source	Timing	Trend	Area
2110	PF05	Walking	Low	Neutral	Inside	Ongoing	Decreasing	20.0
2110	PM07	Natural erosion	High	Neutral	Inside	Ongoing	Stable	10.0
2120	PF05	Walking	Medium	Neutral	Inside	Ongoing	Decreasing	5.0
2120	PM07	Natural erosion	High	Neutral	Inside	Ongoing	Stable	20.0
*2130	PA05	Undergrazing	Low	Negative	Inside	Ongoing	Increasing	40.0
*2130	PA07	Overgrazing and trampling (horse and sheep)	Medium	Negative	Inside	Ongoing	Decreasing	20.0
*2130	PA08	Non intensive grazing (sheep)	Medium	Positive	Inside	Ongoing	Decreasing	40.0
*2130	PA25	Tractor paths	Medium	Negative	Inside	Ongoing	Decreasing	1.0
*2130	PF05	Vehicle track and walking	High	Negative	Inside	Ongoing	Stable	1.0
*2130	PI03	Pteridium aquilinum	Medium	Negative	Inside	Ongoing	Stable	4.0
*2130	PM07	Natural erosion and encroachment (Fraxinus excelsior, Rubus fruticosus, Salix cinerea and Ulex europaeus)	Medium	Neutral	Inside	Ongoing	Stable	15.0

Appendix 4. Condition of the habitat by area

Summary of habitat condition

Habitat code	% remaining habitat in poor condition	% remaining habitat in good condition
2110	0	100
2120	0	100
*2130	15	85

Sub-site 4. Trawbreaga Bay

Trawbreaga Bay is a medium-sized saltmarsh site covering 77 ha. The saltmarsh is distributed along most of Trawbreaga Bay, south and east of Malin, Co. Donegal.

Summary Information

Survey Date: 29 April - 01 May 2022

Water Framework Directive Waterbody: Trawbreaga Bay

Previous survey identifiers: SMP0150

Current survey details:

Table 7: Current survey details for Annex I habitats at Trawbreaga Bay

Habitat Code	Area	Monitoring stops
1220 Perennial vegetation of stony banks	0.021	0
1310 <i>Salicornia</i> flats	0.398	0
1330 Atlantic salt meadows	48.274	21
1410 Mediterranean saltmarsh	12.664	9
2110 Embryonic shifting dunes	0.078	0
2120 Marram dunes (white dunes)	0.043	0

1310 *Salicornia* flats

Area

The habitat has increased from 0.09 ha during SMPII to 0.4 ha. This change was the result of a different and more detailed mapping technique. This is consistent with an Area assessment of Favourable and the trend is stable.

Structure and Functions

Structure and Functions were not assessed due to the inaccessibility of the areas, so the trend is not applicable.

Future Prospects

No pressures were recorded for this habitat. Future Prospects were therefore assessed as Favourable, and the trend was assessed as stable, because the previous assessment was also Favourable.

Conservation assessment

The conservation status assessments of the three parameters are as follows:

- Area: Favourable (stable)
- Structure and Functions: not assessed (NA)
- Future Prospects: Favourable (stable)

Since Structure and Functions were not assessed, the overall conservation assessment for **1310 *Salicornia* flats** at 29.04 Trawbreaga Bay was also not possible and the trend is not applicable.

Overall Conservation Status: not assessed (NA)

Condition of the habitat by area

Condition of the habitat was not assessed.

1330 Atlantic salt meadows

Area

The habitat has decreased over the most recent reporting cycle, mainly due to natural processes, but also to anthropogenic causes. Since the loss has been less than 1% per year, Area was therefore assessed as Unfavourable - Inadequate and the trend is stable because during SMP II it was assessed as Unfavourable - Inadequate.

Structure and Functions

Five saltmarsh community types were recorded during the surveys: SM2a *Puccinellia maritima*–*Glaux maritima* saltmarsh; SM3a *Plantago maritima*–*Armeria maritima* saltmarsh; SM4d *Festuca rubra*–*Plantago maritima* saltmarsh; SM6b *Agrostis stolonifera*–*Triglochin maritimum* saltmarsh; SM7a *Elytrigia repens* coarse grassland.

Two criteria failed in the Structure and Functions assessment: only eleven positive indicator species were recorded across all plots, while the threshold is twelve. Furthermore, 19.04% of stops were recorded with a height greater than 15 cm while the threshold is 20-30% of stops. As these two assessment criteria failed, the Structure and Functions were Unfavourable - Inadequate. Since during the SMP II Structure and Functions were assessed as Favourable, the trend is therefore decreasing.

Future Prospects

Much of the site was affected by cattle and sheep overgrazing. Dumping of brush, rubble and agricultural material, and vehicular trampling was noted in many locations, particularly around the shellfish farm in Churchland Quarter. These were all high-intensity negative impacts, just like offroad driving and car parking. Future Prospects were therefore assessed as Unfavourable - Inadequate, and the trend was assessed as stable.

Conservation assessment

The conservation status assessments of the three parameters are as follows:

- Area: Unfavourable - Inadequate (stable)
- Structure and Functions: Unfavourable - Inadequate (decreasing)
- Future Prospects: Unfavourable - Inadequate (stable)

Since all three parameters were assessed as Unfavourable - Inadequate, the overall conservation assessment for **1330 Atlantic salt meadows** at 29.04 Trawbreaga Bay was Unfavourable - Inadequate. Since the SMP II assessment was also Unfavourable - Inadequate, the trend is stable.

Overall Conservation Status: Unfavourable - Inadequate (stable)

Condition of the habitat by area

High-intensity negative impacts were affecting about 15% of **1330 Atlantic salt meadows**, leading to the failure of two Structure and Functions criteria, so this area was considered to be in poor condition. The remaining 85% of the habitat was considered to be in good condition.

1410 Mediterranean saltmarsh

Area

The habitat has increased from 11.91 ha to 12.66 ha, due to better and different mapping techniques. Habitat loss was recorded anyway, mainly due to natural processes, but also to anthropogenic causes. Given that the loss has been less than 1% per year, since 2019, Area was therefore assessed as Unfavourable - Inadequate and the trend is stable because during SMP II it was assessed as Unfavourable - Inadequate.

Structure and Functions

No criteria failed in the Structure and Functions assessment, therefore the Structure and Functions were assessed as Favourable. Since during the SMP II Structure and Functions were also assessed as Favourable, the trend is stable.

Future Prospects

High-intensity negative impacts included offroad driving and deposition of waste, each one affecting no more than 1% of the habitat. Future Prospects were therefore assessed as Unfavourable - Inadequate, and the trend was assessed as stable.

Conservation assessment

The conservation status assessments of the three parameters are as follows:

- Area: Unfavourable - Inadequate (stable)
- Structure and Functions: Favourable (stable)
- Future Prospects: Unfavourable - Inadequate (stable)

Since two of the three parameters were assessed as Unfavourable - Inadequate, the overall conservation assessment for **1410 Mediterranean saltmarsh** at 29.04 Trawbreaga Bay was Unfavourable - Inadequate. Since the SMP II assessment was Unfavourable - Inadequate, the trend is stable.

Overall Conservation Status: Unfavourable - Inadequate (stable)

Condition of the habitat by area

100% of the habitat was considered to be in good condition.

Site 28 Subsite 4 - Trawbreaga Bay Appendices

Appendix 1. Area

Total habitat area recorded during reporting cycles to date.

Habitat	2007	2013	2019	2025
1220	NS	0.000	0.000	0.021
1310	NS	NS	0.095	0.398
1330	NS	NS	48.283	48.274
1410	NS	NS	11.909	12.664
2110	NS	0.000	0.000	0.078
2120	NS	0.000	0.000	0.043

Favourable Reference Area and cumulative changes in area due to human activities (restoration and loss) recorded during reporting cycles to date. Natural fluctuations are not taken into account.

Habitat	Favourable Reference area (ha)	2007 change (ha)	2013 change (ha)	2019 change (ha)	2025 change (ha)
1220	NA	NS	NS	NS	NA
1310	0.095	NS	NS	0	0
1330	48.283	NS	NS	<1% per year	2019 loss
1410	11.909	NS	NS	<1% per year	0.002 and 2019 loss
2110	NA	NS	NS	NS	NA
2120	NA	NS	NS	NS	NA

Appendix 2. Structure and Functions

Positive indicator species and notable species

Habitat	Species name	Cover (%) (if recorded)
1330	<i>Agrostis stolonifera</i>	
1330	<i>Armeria maritima</i>	
1330	<i>Aster tripolium</i>	
1330	<i>Cochlearia species</i>	
1330	<i>Elytrigia repens</i>	
1330	<i>Festuca rubra</i>	
1330	<i>Glaux maritima</i>	
1330	<i>Juncus gerardii</i>	
1330	<i>Plantago maritima</i>	
1330	<i>Puccinellia maritima</i>	
1330	<i>Triglochin maritimum</i>	
1410	<i>Aster tripolium</i>	
1410	<i>Cochlearia species</i>	
1410	<i>Glaux maritima</i>	
1410	<i>Juncus gerardii</i>	
1410	<i>Juncus maritimus</i>	
1410	<i>Leontodon autumnalis</i>	
1410	<i>Plantago maritima</i>	
1410	<i>Triglochin maritimum</i>	

Structure and Functions Assessment Criteria

Habitat	Indicator	Pass/Fail
1330	Positive indicator species	Fail
1330	Vegetation height – Standard deviation	Pass
1330	Vegetation height – Average height	Fail
1330	Negative indicator species	Pass
1330	Disturbed ground	Pass
1330	Signs of negative activities, e.g. infilling, reclamation, turf-cutting, pollution	Pass
1330	Human disturbance to hydrology	Pass
1330	Natural transitions to semi-natural terrestrial habitats on landward margin	Pass
1330	Presence of <i>Spartina</i> spp. within vicinity of habitat	Pass
1330	Presence of site-specific target species	Pass
1330	Number of zones (SM2, SM3, SM4, SM6BCD, SM7/driftline) covering 1% or more of 1330 area	Pass
1410	Positive indicator species	Pass
1410	Negative indicator species	Pass
1410	Disturbed ground	Pass
1410	Signs of negative activities, e.g. infilling, reclamation, turf-cutting, pollution	Pass
1410	Human disturbance to hydrology	Pass
1410	Natural transitions to semi-natural terrestrial habitats on landward margin	Pass
1410	Presence of site-specific target species (indicators of local distinctiveness)	Pass
1410	Presence of <i>Spartina</i> spp. within vicinity of habitat	Pass

Appendix 3. Impacts and Activities

Impacts recorded

Habitat code	Impact code	Impact description	Relative importance	Influence	Source	Timing	Trend	Area
1310	PX04							
1330	PA07	Overgrazing	High	Negative	Inside	Ongoing	Decreasing	15.0
1330	PA23	Dam	Low	Neutral	Inside	Ongoing	Stable	0.1
1330	PA25	Offroad driving and parking, deposition of wood	High	Negative	Inside	Ongoing	Stable	1.0
1330	PF06	Deposition of ground, grass, shrubs, waste and dumping	High	Negative	Inside	Ongoing	Stable	1.0
1330	PG04	Abandoned shellfish structure and lazy bed	High	Negative	Inside	Ongoing	Stable	0.5
1330	PI02	Cortaderia selloana and Phormium tenax	High	Negative	Inside	Ongoing	Decreasing	0.1
1330	PK02	Polluted water ponds	High	Negative	Inside	Ongoing	Decreasing	0.1
1330	PM07	Natural succession to HCH FS1 (Phragmites australis)	Medium	Neutral	Inside	Ongoing	Decreasing	0.5
1410	PA25	Offroad driving	High	Negative	Inside	Ongoing	Stable	0.1
1410	PF06	Deposition of waste	High	Negative	Inside	Ongoing	Stable	0.1
1410	PM07	Natural succession to HCH FS1 (Phragmites australis)	Medium	Neutral	Inside	Ongoing	Decreasing	0.1

Appendix 4. Condition of the habitat by area

Summary of habitat condition

Habitat code	% remaining habitat in poor condition	% remaining habitat in good condition
1330	15	85
1410	0	100