codling wind park

Environmental Impact Assessment Report

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Appendix 21.3 Ecological Survey of Supratidal habitats at Poolbeg, Dublin

Tobin Engineering

Ecological Survey of Supratidal Habitats at Poolbeg, Dublin

AQUAFACT
APEM Group

COMMERCIAL IN CONFIDENCE

Report Approval Sheet

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Table of Contents

List of Figures

List of Tables

1. Introduction

AQUAFACT was commissioned by Tobin to carry out a survey of supratidal habitats at Poolbeg, Co. Dublin. This location is a possible cable landfall site for the Codling Wind Park offshore wind farm. The survey was required to provide a baseline characterisation of the site and to supplement the existing ecological data that exists across the area of interest.

1.1. Supratidal Survey Methodology

A survey of the species and biotopes in the supratidal area of the proposed cable landfall site was undertaken on the 22 September, 2021, and a follow-up survey was undertaken on the 29 May 2024. On both dates, a walkover survey of the area (see **Figure 1.1** below) was carried out to determine the habitats and species present. The Poolbeg area lies within the South Dublin Bay and River Tolka Estuary SPA (site code: 004042) and the South Dublin Bay SAC (site code: 000210). Five 1m² relevés were carried out within the redline area during the September survey and these same five locations were re-surveyed in May 2024. An additional relevé location directly adjacent to the proposed cable landfall was surveyed in May 2024.

Figure 1.1: Location of Poolbeg walk over survey undertaken in September 2021 and May 2024.

2. Supratidal ecological results

2.1. Walkover survey

Biotopes recorded during the walk over surveys are mapped in **Figure 2.1** below.

Figure 2.1: Poolbeg habitat map.

2.2. Marram Grass

The most extensive natural supratidal habitat type is Marram dunes (CD2 *sensu* Fossitt, 2000). Marram grass (*Ammophila arenaria*) is the dominant plant (see **Figure 2.2** and **Figure 2.3**).

Figure 2.2: Marram dunes in the upper shore at Poolbeg Beach September 2021.

Figure 2.3: Marram grass dunes at Shelly Banks Beach access steps September 2021.

Cordylines, *Buddleia* and Sea Buckthorn (*Hippophae rhamnoides*) were also recorded, with the former being the most common of the two (see **Figure 2.4, Figure 2.5** and **Figure 2.9** below).

Figure 2.4: Strandline and rock armour at Poolbeg showing Marram grass and cordylines September 2021.

Figure 2.5: Marram grass community along access route to Poolbeg Beach (*Cupressus leylandii*) on extreme left of image and cordylines centre left and also visible on extreme right image, September 2021.

In places, erosion of the Marram dune habitat was recorded (see **Figure 2.6** below).

Figure 2.6: Erosion of Marram grass community at High Water near the Great South Wall Beach access September 2021.

On both survey dates, stands of Red Valerian (*Centranthus ruber)* were widespread within the Marram dune community (see **Figure 2.7** below). Other species recorded within the Marram grass were Sea Rocket (*Cakile maritima*), Buck's-thorn plantain (*Plantago cornopus*), Sea kale (*Beta vulgaris*) and Pineapple weed (*Matricaria discoidea*).

A badger sett was noted in the Marram Grass habitat during the September 2021 survey.

Figure 2.7: Red Valerian (*Centranthus ruber)* within Marram grass September 2021.

2.3. Amenity Grassland

Two small areas of Amenity grassland (GA2 *sensu* Fossit 2000) were recorded within the survey area (see **Figure 2.7** above), while a larger area outside the survey area was also recorded.

This habitat is of low ecological value as it does not contain any Qualifying Interest species for the SAC. Tree and shrub planting, partly on an earth mound, is classifiable as Immature woodland (WS2 *sensu* Fossitt 2000) and Ornamental shrub (WS3) and includes Alder, Birch and Willow, with some Pine and self-sown Butterfly Bush *Buddleia davidii*. It also includes the introduced species Sea Buckthorn *Hippophae rhamnoides* that has been planted along the Pigeon House Road.

Grassland, classified as a species-poor dry meadow and grassy verge habitat (GS2), adjoining the tree and shrub planting includes the grass species Red Fescue *Festuca*

rubra, False Oatgrass *Arrhenatherum elatius*, Crested dog's-tail *Cynosurus cristatus*, Creeping Bent-grass *Agrostis stolonifera* and Yorkshire Fog *Holcus lanatus*. Herbaceous dicotyledons include Winter Heliotrope *Petasites fragrans*, Coltsfoot *Tussilago farfara*, Dandelion *Taraxacrum* spp., Yarrow *Achillea millefolium* and two species of Ragwort; *Senecio jacobaea* and *S. squalidus*. This coarse grassland extends on both sides of the footpath and merges into Marram dune to the south of the footpath.

The amenity grassland area (GA2) was provided as a winter-feeding area for Light-bellied Brent Geese *Branta bernicla hrota*. It lies immediately to the south of the Poolbeg Wastewater Treatment Plant and to the north of Irishtown Nature Park. The grassland is included within the South Dublin Bay and River Tolka Estuary SPA (site code: 004024). The amenity grassland was completed in 2003 and seeded with a recommended grass mix for Brent geese with Perennial Ryegrass *Lolium perenne*, White Clover *Trifolium repens* and Timothy Grass *Phleum pratense*. The grassland is maintained by Dublin City Council Parks Department, with regular mowing during the summer months and autumn application of fertiliser. Additional management works by Dublin City Council Parks Department includes management of vegetation on sloping ground.

Figure 2.8: Rock armour and other features of note at Poolbeg Wastewater Treatment Plant.

2.4. Rock armour

Rock armour is present throughout much of the upper shore survey area; it has been put in place to counteract coastal erosion. Large granite boulders and other rock debris are placed at the top of the shore from the Great South wall in the northeast along the top of the shore towards Irishtown Nature Park with a break in the rock armour protection in the areas of marram grass dunes at Poolbeg Beach and Great South wall dunes. The locations of where the rock armour is located are presented in **Figure 2.8** and **Figure 2.10**.

East of Poolbeg Beach and to Great South Wall dunes, this rock armour is in the form of large boulders. In the Poolbeg Beach area, these rocks are above high water and, apart from lichen, are devoid of flora and fauna.

Figure 2.9: Marram grass community along access route to Shelly Beach September 2021. *Cupressus leylandii* on extreme left of image and cordylines centre left and extreme right also visible on image.

Figure 2.10: Rock armour and Marram grass in front of car park at Shelly Beach September 2021.

2.5. Man-made structures on the shore

Besides rock armouring along the shore line, concrete and metal piping were recorded on the shore line (see Figure 2.11 below).

Figure 2.11: Concrete rubble and metal pipe in Irishtown Nature Park mid shore September 2021.

2.6. Relevés

The locations of where the relevés were carried out are shown in Figure 2.13 below and the results for the September 2021 survey and May 2024 survey are presented in Table 1 and Table 2 respectively.

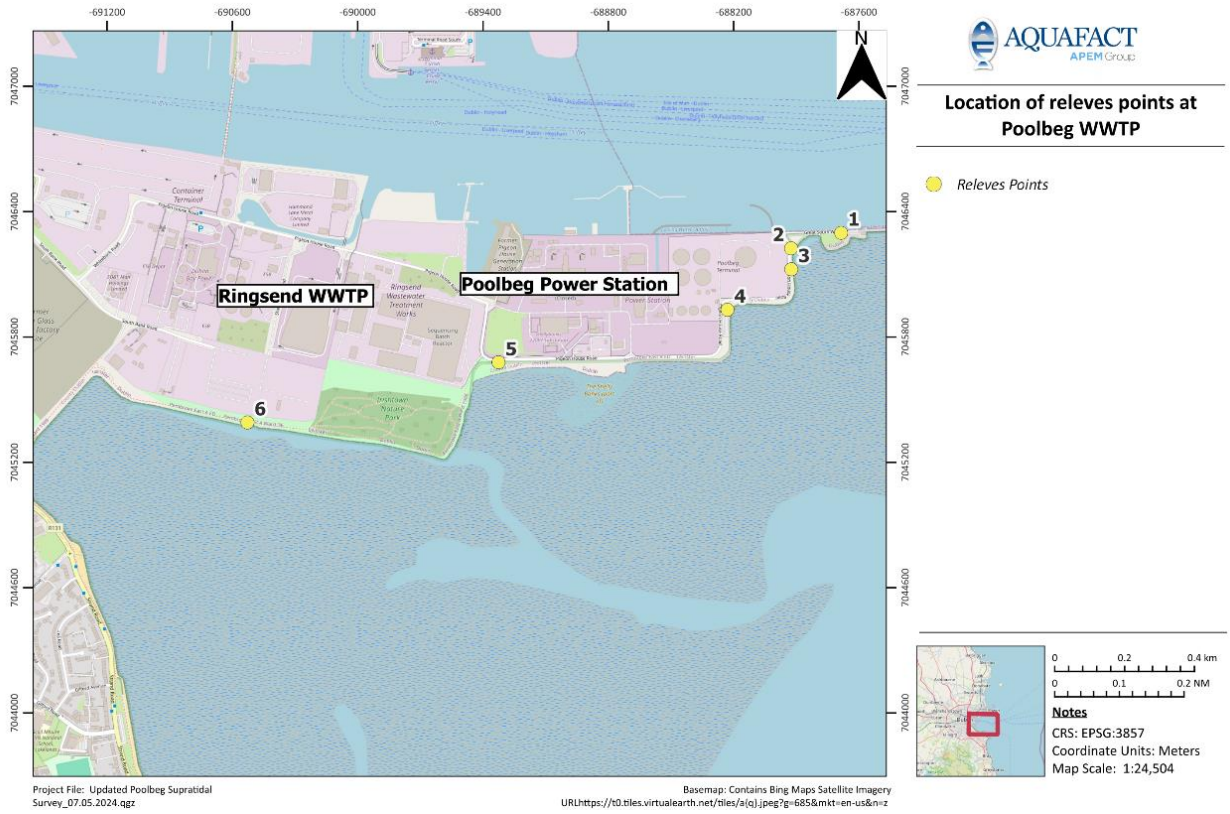

Figure 2.13: Location of 6 relevé sites.

Table 1: Relevé results September 2021

Species	Common Name	(%) Cover
Relevé No. 1		
Grasses	Grasses	80
Centranthus ruber	Red Valerian	10
Anthyllis vulneraria	Kidney Vetch	5
Plantago lanceolata	Ribwort Plantain	5
Relevé No. 2		
Ammophila arenaria	Marram Grass	80
Valeriana officinalis	White Valerian	10
Relevé No. 3		
Ammophila arenaria	Marram Grass	45
Bare ground		35
Taraxacrum sp	Dandelion	15
Senecio jacobaea	Common Ragwort	5
Plantago maritima	Sea Plantain	+
Relevé No. 4		

Ammophila arenaria	Marram Grass	55
Beta vulgaris	Sea Beet	25
Bare ground		15
Cardamine praetensis	Cuckoo flower	5
Relevé No. 5		
Grasses	Grasses	50
Mosses	Mosses	25
Senecio jacobaea	Common Ragwort	25
Plantago maritima	Sea Plantain	+

Table 2: Relevé results May 2024

Species	**Common Name**	**(%) Cover**
Relevé No. 1		
Bare Ground		50
Brown and green algae lower shore		25
Grasses		25
Relevé No. 2		
Centranthus ruber	Red Valerian	10
Senecio jacobaea	Common Ragwort	5
Anthyllis vulneraria	Kidney vetch	5
Ammophila arenaria	Marram Grass	35
Raphanus raphanistrum subsp. maritimus	Sea radish	5
Euphorbia sequierana	Sea spurge	5
Plantago lanceolata	Ribwort Plantain	5
Plantago maritima	Sea Plantain	5
Grasses		5
Bare ground/sand	Bare ground/sand	20
Relevé No. 3		
Ammophila arenaria	Marram Grass	45
Taraxacum officinale	Dandelion	**5**
Senecio jacobaea	Common Ragwort	5
Plantago maritima	Sea Plantain	**5**
Raphanus raphanistrum subsp. maritimus	Sea radish	+
Melilotus altissima	Melilot (sweet clover)	+
Bare ground/rock armouring		40
Relevé No. 4		
Centranthus ruber	Red Valerian	30
Taraxacum officinale	Dandelion	10

Senecio jacobaea	Common Ragwort	5
Valeriana officinalis	White Valerian	10
Plantago lanceolata	Ribwort Plantain	5
Ammophila arenaria	Marram Grass	20
Grasses Tall	Tall Grass	5
Plantago maritima	Sea Plantain	5
Beta Vulgaris	Sea Beet	+
Melilotus altissima	Melilot (sweet clover)	5
Grasses misc.		5
Relevé No. 5		
Grasses misc.		40
Senecio jacobaea	Common Ragwort	10
Plantago maritima	Sea Plantain	+
Ammophila arenaria	Marram Grass	30
Centranthus ruber	Red Valerian	15
Raphanus raphanistrum subsp. maritimus	Sea Radish	+
Beta Vulgaris	Sea Beet	5
Relevé No. 6		
Centranthus ruber	Red Valerian	15
Urtica dioica	Nettle	15
Cirsium spp.	Thistle	10
Hedera hibernica/helix	Irish Ivy	10
Rubus fructicosus	Bramble	10
Calysteiga sp.	Bindweed	5
Plantago lanceolata	Ribwort Plantain	5
Valeriana officinalis	White Valerian	5
Ranunculus sp.	Buttercup	5
Trifolium repens	White Clover	+
Grasses misc.	Grasses	10
Petasites fragans	Winter heliotrope	5
Smyrnium olusatrum	Alexanders	5

3. Conclusions

Due to the impact caused by the presence of a number of non-native species in the Poolbeg area, the amount of flotsam and jetsam and general rubbish (see **Figure 3.1** below) and the high level of human disturbance (cars, walkers, dogs), the habitats recorded in the supratidal area in the vicinity of Poolbeg are not of high ecological importance. Furthermore, any temporary effects of trenching will be short term in nature and re-colonisation will occur within a short time scale.

Figure 3.1: Flotsam and jetsam washed up at High Water near the Great South Wall Beach access.