



Plate 2.11. Lower Mullenmore Spring surrounded by emergent vegetation and woodlands



Plate 2.12. Short Section of Eroding River close to Mullenmore Springs



Plate 2.13 Lower Reaches of the Mullenmore Stream

The woodland within the washlands was classified as Wet willow-alder-ash (WN6). The woodland was dominated by grey willow, alder, ash with occasional sycamore. Ground vegetation included meadowsweet (*Filipendula ulmaria*), nettle (*Urtica dioica*) and yellow iris. These areas of wet woodland were found to correspond to the Annex I Priority Habitat Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)* [91E0] (Plate 2.14).

The Wet grassland (GS4) located to the east of the R315 is heavily grazed by sheep. Wet grassland recorded to the east of this point and located to the south of the river are dominated by dense swards of soft rush (*Juncus effusus*). To the north of the river, fields are improved and subject agricultural activity.

To the north of the river on the approach to the shores of Lough Conn, an area of Marsh (GM1) (was recorded (Plate 2.15). A drain forms western boundary of the marsh habitat and common reed (*Phragmites australis*) is dominant in this area. Species recorded from the marsh included water mint (*Mentha aquatica*), bog bean (*Menyanthes trifoliata*), marsh pennywort (*Hydrocotyle vulgaris*), lesser spearwort (*Ranunculus flammula*), marsh marigold (*Caltha palustris*), bird's-foot-trefoil (*Lotus corniculatus*), (*Lychnis flos-cuculi*), silverweed (*Potentilla anserina*), common spike-rush (*Eleocharis palustris*) and marsh ragwort (*Senecio aquaticus*), self-heal (*Prunella vulgaris*), marsh cinquefoil (*Comarum palustre*), lesser spearwort (*Ranunculus flammula*) and water horsetail (*Equisetum fluvatile*). Sedges and grasses including common cottongrass (*Eriophorum angustifolium*), common sedge (*Carex nigra*), bottle sedge (*Carex rostrata*), star sedge (*Carex echinata*), common yellow sedge (*Carex viridula* ssp. *oedocarpa*), tufted sedge (*Carex elata*) were present but did not dominate the habitat. This

habitat lacked a well-developed, diverse bryophyte layer and *Calliergonella cuspidata* was the dominant bryophyte species *Calliergonella cuspidata*, with occasional *Climacium dendroides*, *Plagiomnium* spp. also present.

Moving to the north, the marsh grades into a relatively species rich Wet grassland (GS4). Lough Conn is classified as a Limestone Marl Lake (FL3) and is located at the eastern end of the washlands. The Mullenmore Stream discharges into this lake.

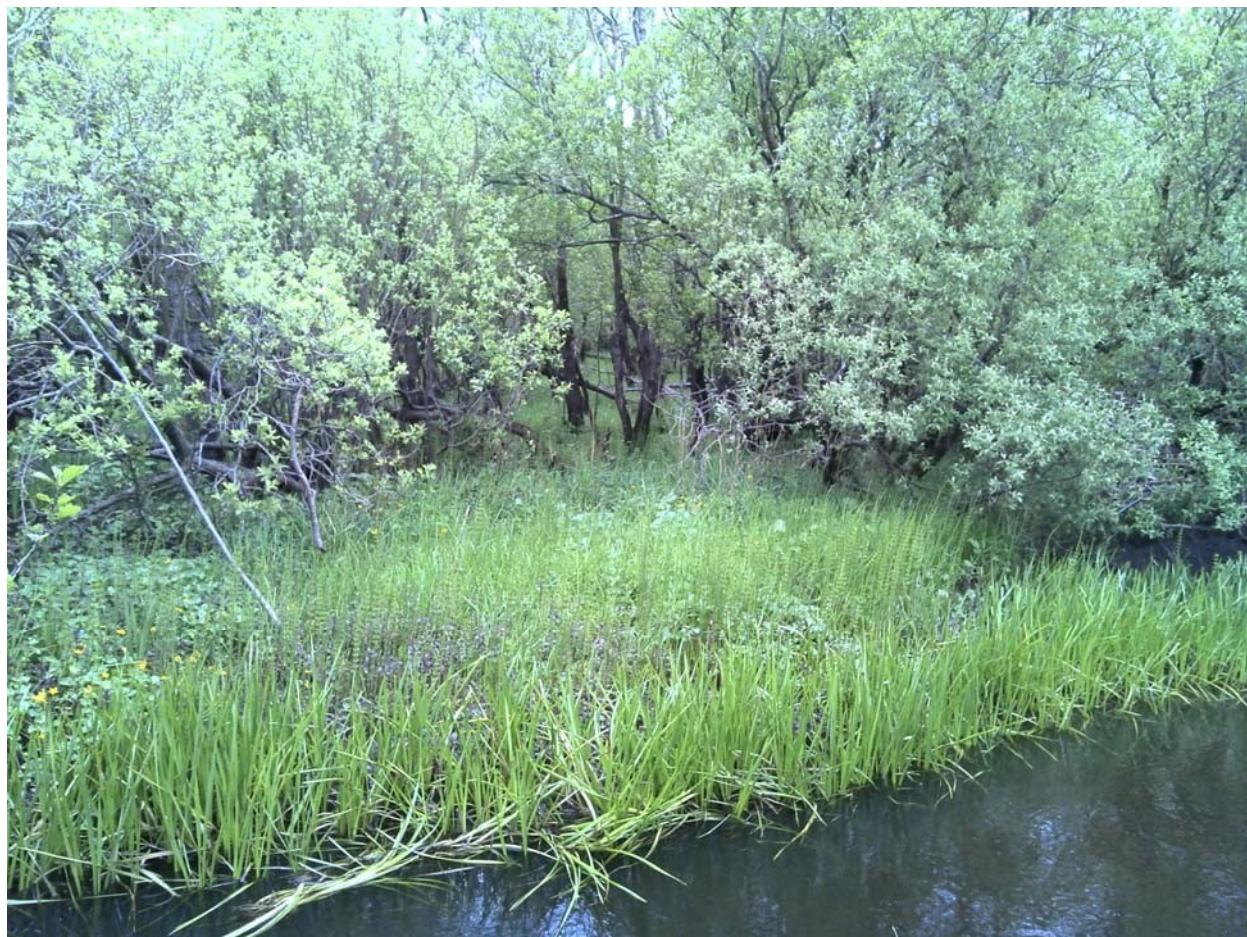


Plate 2.14. Annex I Alluvial Woodland adjacent to the Mullenmore Stream and Lough Conn



Plate 2.15. Marsh (GM1) grading into wet grassland (GS4) adjacent to Lough Conn

In addition to the above, the entire River Deel channel between Crossmolina and Lough Conn was the focus for an ecological walkover survey. This section of the river, whilst not directly affected by the proposed works, forms part of the benefitting lands and areas that previously flooded could potentially now no longer flood in a 1%AEP event. The main aim of the study was to identify areas of woodland along the river and to identify if these conformed to Annex I Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*) [91E0]. These surveys were undertaken in advance of some scheduled maintenance works by the OPW on the channel. This work is currently ongoing and has been assessed cumulatively with this flood relief scheme.

Of the faunal species recorded or known to be present, those that are among the QIs/SCIs of the River Moy SAC and the Lough Conn & Lough Cullin SPA are of **International** importance on this basis. These include the aquatic species associated with the River Moy, otter, white clawed crayfish, salmon, and Lamprey species. They also include the three bird species that are among the SCIs and were recorded during the bird surveys Greenland white fronted goose, common gull and tufted duck. Common scoter were not recorded and are unlikely to regularly occur within the study area.

3 IDENTIFICATION OF EUROPEAN SITES WITHIN THE LIKELY ZONE OF IMPACT

The following methodology was used to establish which European Sites are within the Likely Zone of Impact of the proposed development:

- Initially the most up to date GIS spatial datasets for European designated sites and water catchments were downloaded from the NPWS website (www.npws.ie) and the EPA website (www.epa.ie) on the 21/06/2020. The datasets were utilized to identify European Sites which could feasibly be affected by the proposed development.
- All European Sites within a distance of 15km surrounding the development site were identified and are shown on Figure 3.1. In addition, the potential for the proposed development to result in significant effects on European Sites at distances of greater than 15km from the proposed development was also considered in this initial assessment. In this case, no such potential was identified.
- The catchment mapping was used to establish or discount potential hydrological connectivity between the site of the proposed development and any European Sites. The hydrological catchments are also shown in Figure 3.1.
- In relation to Special Protection Areas, in the absence of any specific European or Irish guidance in relation to such sites, the Scottish Natural Heritage (SNH) Guidance, 'Assessing Connectivity with Special Protection Areas (SPA)' (2016) was consulted. This document provides guidance in relation to the identification of connectivity between proposed development and Special Protection Areas. The guidance takes into consideration the distances species may travel beyond the boundary of their SPAs and provides information on dispersal and foraging ranges of bird species which are frequently encountered when considering plans and projects.
- Table 3.1, provides details of all relevant European Sites as identified in the preceding steps and assesses which are within the likely Zone of Impact. The assessment considers any likely direct or indirect impacts of the proposed development, both alone and in combination with other plans and projects, on European Sites by virtue of the following criteria: size and scale, land-take, distance from the European Site or key features of the site, resource requirements, emissions, excavation requirements, transportation requirements and duration of construction, operation and decommissioning were considered in this screening assessment
- The site synopses and conservation objectives of these sites, as per the NPWS website (www.npws.ie), were consulted and reviewed at the time of preparing this report 21/06/2020. Figure 3.1 shows the location of the proposed development in relation to all European sites within 15km of the proposed development.
- Where potential pathways for Significant Effect are identified, the site is included within the Likely Zone of Impact and further assessment is required.