

6th October 2018 Update on Aquatics from EIAR consultants

The watercourses draining the Slieve Bernagh area mainly comprise the Annacarriga River to the East and Owengarney River to the West. Numerous sites were surveyed in August and September 2018. Surveys included habitat and fish stock assessment as well as biological water quality.

The watercourses in the study area are generally fast flowing of spate nature i.e fast response to rainfall. Some high gradient reaches of rivers and streams are considered obstacles to fish moving upstream. Fish were not detected in some stream reaches above significant falls, so some upper reaches are considered not utilised by fish. For example, there are a series of rapids on the upper Annacarriga River (downstream of proposed development), and no fish were recorded upstream of this high gradient stretch.

Fish recorded during studies undertaken in September 2018 included Brown Trout (*Salmon trutta*), Atlantic Salmon (*Salmo salar*), European eel (*Anguilla Anguilla*), Stone loach (*Barbatula barbatula*), Three-spined stickleback (*Gasterosteus aculeatus*), Minnow (*Phoxinus phoxinus*) and lampreys. Juvenile salmon were recorded at the lower sites on the Owengarney and its tributary, the Broadford River. Salmon were also present in the Blackwater (Clare) River and the Annacarriga River, watercourses which flow into the River Shannon. Only Brown Trout were recorded in the Killuran Stream, so it is probable that Salmon movement is impeded downstream of the lower survey site on this channel. Salmon were recorded at the lower-most site in the Owengarney River but not any further upstream in the catchment.

The macroinvertebrate communities at the study sites were indicative of good water quality. A wide range of stonefly larvae were recorded, including larvae of Common yellow sally (*Isoperla grammical*), Large pale stonefly (*Perla bipunctata*), Dinocras cephalotes, Protonemura sp and Nemoura sp.