

Preliminary Synopsis of the WFD Surveillance Monitoring Fish Stock Survey on Lough Rea in the Western River Basin District, July 2010

1.1 Introduction

A WFD fish stock survey was conducted on Lough Rea (M61513 15479, Fig. 1) from the 26th to the 29th of July 2010 by staff from Inland Fisheries Ireland as part of the programme of surveillance monitoring for the Water Framework Directive.

1.2 Methods

Lough Rea was surveyed over three nights between the 26th and the 29th of July 2010. A total of three sets of Dutch fyke nets, 19 benthic monofilament multi-mesh (12 panel, 5-55mm mesh size) survey gill nets and two floating monofilament multi-mesh (12 panel, 5-55mm mesh size) survey gill nets were deployed randomly in the lake (24 sites). The netting effort was supplemented using three benthic braided survey gill nets (62.5mm mesh knot to knot) at three additional sites. Survey locations were randomly selected using a grid placed over a map of the lake. A handheld GPS was used to mark the precise location of each net. The angle of each gill net in relation to the shoreline was randomised.

All fish apart from perch were measured and weighed on site and scales were removed from all brown trout, rudd and pike. Live fish were returned to the water whenever possible (i.e. when the likelihood of their survival was considered to be good). Samples of fish were retained for further analysis.



Fig. 1. Location map of Lough Rea

1.3 Results

A total of six fish species were recorded in Lough Rea. The number of each fish species recorded is shown in Table 1. A total of 539 fish were captured during the survey.

Table 1. Number of each fish species recorded in Lough Rea, July 2010

Species name	Common name	Number
<i>Perca fluviatilis</i>	Perch	459
<i>Gasterosteus aculeatus</i>	Three-spined stickleback	39
<i>Anguilla anguilla</i>	European eel	27
<i>Salmo trutta</i>	Brown trout	6
<i>Scardinius erythrophthalmus</i>	Rudd	6
<i>Esox lucius</i>	Pike	1

1.4 Further work

Perch will be measured and weighed and opercular bones will be removed in the laboratory. Otoliths will be removed from eels and all fish will be aged after the fieldwork season has ended. Catch per unit effort (CPUE), biomass per unit effort (BPUE) and age profiles will be calculated for all fish species and a more detailed report will be available in early 2011.