

## **Preliminary Synopsis of the WFD Surveillance Monitoring Fish Stock Survey on Lough Fern in the North Western International River Basin District, August 2014**

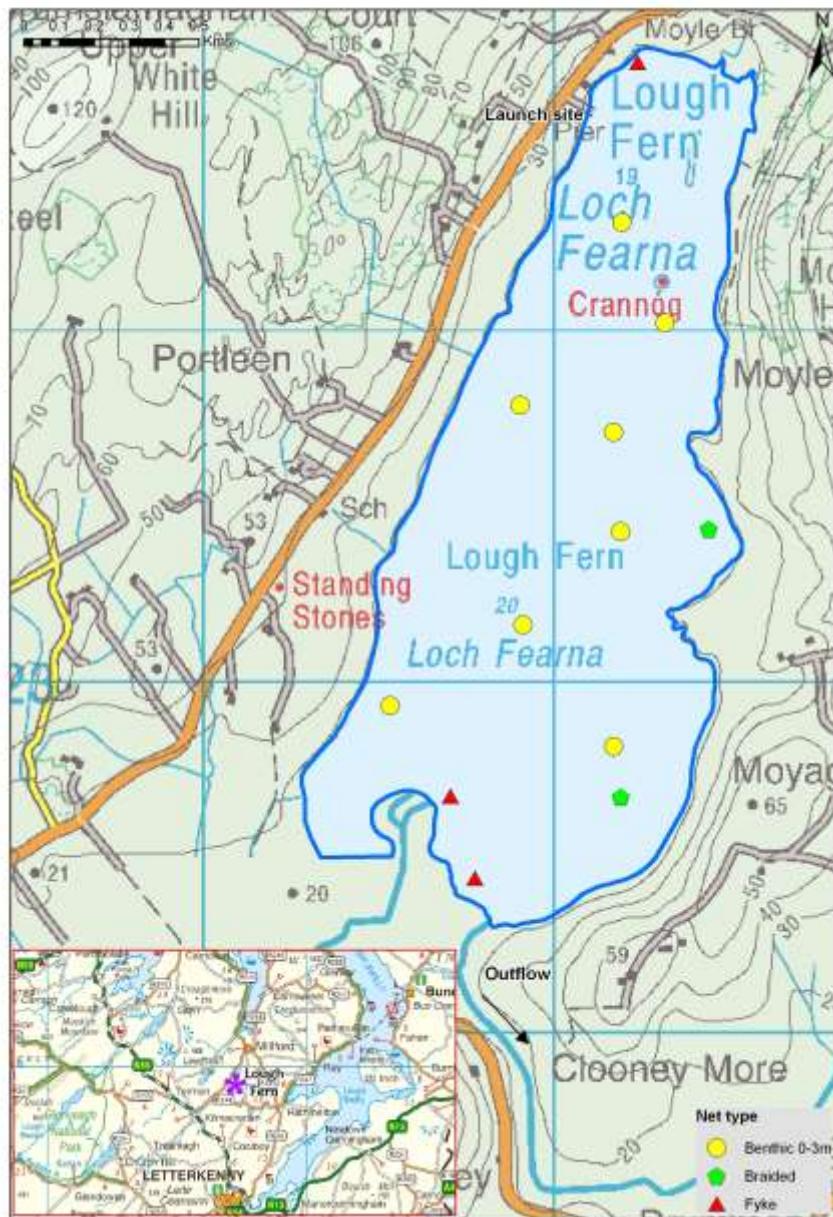
### **1.1 Introduction**

A WFD fish stock survey was conducted on Lough Fern (Fig. 1) from the 12<sup>th</sup> to the 14<sup>th</sup> of August 2014 by staff from Inland Fisheries Ireland as part of the programme of surveillance monitoring for the Water Framework Directive.

### **1.2 Methods**

Lough Fern was surveyed over two nights between the 12<sup>th</sup> to the 14<sup>th</sup> of August 2014. A total of three sets of Dutch fyke nets and eight benthic monofilament multi-mesh (12 panel, 5-55mm mesh size) CEN standard survey gill nets (8 @ 0-2.9m) were deployed in the lake (11 sites). The netting effort was supplemented using two benthic braided survey gill nets (62.5mm mesh knot to knot) at two additional sites. Nets were deployed in the same locations as were randomly selected in the previous surveys in 2008 and 2011. 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 and salmon. 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 Fern showing locations and depths of each net (outflow is indicated on map)**

### 1.3 Results

A total of four fish species were recorded in Lough Fern, with 237 fish being captured. The number of each fish species recorded is shown in Table 1.

**Table 1. Number of each fish species recorded in Lough Fern, August 2014**

Scientific name	Common name	Number
<i>Salmo trutta</i>	Brown trout	164
<i>Gasterosteus aculeatus</i>	3-spined stickleback	40
<i>Anguilla anguilla</i>	Eel	26
<i>Salmo salar</i>	Salmon	4
<i>Perca fluviatilis</i>	Perch	3

### 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 2015.