



“Restoration of the Lower Shannon SAC (Mulkear River) for Sea Lamprey, Atlantic Salmon and the European Otter”

## Press Release

31<sup>st</sup> July 2013

### **An Exceptional Month of Major Instream Works**

July 2013 has been an exceptional month for MulkearLIFE with major instream work completed on several sections of the Mulkear River. This work, which commenced on July 1st 2013, has been undertaken by our project partners in the Office of Public Works (OPW) and Limerick County Council. This web update relates to the work of Limerick County Council’s area of jurisdiction on the Mulkear River.

#### **Addressing Habitat Degradation From Past Drainage Schemes**

Since the 1850s, there have been three major drainage schemes on the Mulkear River and its tributaries, the latest of which was completed in 1998. In addition, there has been continuous drainage maintenance of the river for flood relief, and this maintenance continues today. The earlier drainage schemes reduced the base level, widened and straightened the river. The initial works on the main channel, removed large rock, overhanging vegetation and woody substrate. Coarse cobble and gravel was also removed. This type of substrate is still absent in many parts of the main channel of the Mulkear River.

A consequence of this drainage work has been the loss of channel length, through the removal of meanders (bends in the river) and the loss in instream habitat through the removal of instream substrate. These practices have given a more uniform channel and in certain stretches of the Mulkear River, the altered channel has led to significant bank erosion. This in turn can create a major problem with eroded riverbank silt being deposited into the channel potentially impacting on salmon spawning beds. The cumulative effect of these measures has straightened the river and greatly reduced the complexity of the habitat, which had led to a reduction in fish numbers. The Project’s instream works seek to address some of these concerns.

#### **No Progress in 2012**

Due to unprecedented levels of rainfall and subsequent flooding during the summer of 2012, no instream work was carried out in the main channel of the Mulkear River. Thus, the pressure was on to get major instream works completed when the season opened up on the 1st July 2013. The measures are a continuation of the highly successful instream measures undertaken on the Mulkear River in 2011. Thus, in contrast to last year, when no instream work was completed on the Mulkear River, the project has completed almost one-year’s planned work in one month.

#### **Great Progress Achieved To Date in 2013**

A dry June and an exceptionally dry and hot July has created ideal conditions to complete instream works. MulkearLIFE, with our project partner Limerick County Council, is delighted to report the continuation of major instream works, in the form of rubble mats, on the Mulkear River. The works do not impact negatively or restrict the flow of water or create a risk of flooding rather they greatly enhance the complexity of the river and riverbank biodiversity. MulkearLIFE and Limerick County Council have prioritised the implementation of these instream measures as part of the overall work programme of MulkearLIFE in the period 2011 to 2014. The overall objective of the habitat restoration plan is to enhance habitat complexity and quality in the wider river ecosystem. In 2011, MulkearLIFE installed 10 rubble mats on the Mulkear River. Since the 1st July 2013 an additional 11 rubble mats have been installed. All sites are extensively surveyed prior to the commencement of work. The sites have been approved by the NPWS and form part of MulkearLIFE’s ‘River Restoration Plan for the Mulkear River’.

During the same timeframe and while on site, Limerick County Council has completed significant bank protection work on areas severely damaged in 2012. In all cases, the construction of the rubble mats have been prioritized where they have the greatest potential beneficial impact on Atlantic Salmon. It is expected that additional rubble mats will be installed during the course of the summer.

### **What Are Rubble Mats?**

Rubble mats essentially perform the same function by mimicking the natural riffle habitat which was present pre-drainage. The rubble mat reduces the cross-sectional area of the river thereby increasing flow velocities at low summer flows. The main objective of this work is to restore degraded habitats along stretches of the river. The need for such instream measures arises from the arterial drainage work carried out on the Mulkear which altered the pre-existing natural riffles.

A long reach excavator is an essential component of the work. Operating from the riverbank a skilled excavator operator can carefully place the rock needed to form the rubble mat.

### **How Rubble Mats Help Rivers**

Rubble mats act as artificial riffles and the faster flowing area on top of the rubble mat is quickly colonised by a range of aquatic vegetation.

In addition, a considerable variety of invertebrates favour such conditions and colonise the rubble mat in significant numbers.

This level of colonisation happens within weeks and is indeed already taking place. The fast flowing water also provides exceptional habitat for young salmon and trout and with invertebrate colonisation having taken place will provide them with an adequate food supply.

When the rubble mat is dished towards the centre of the channel, the velocity through the dished section may be adequate to maintain scour for an excavated pool downstream. Such pools will also provide resting areas for adult salmon. So far this year nine rubble mats have been installed up and downstream of Brittas Bridge, the largest of which requiring in excess of 100 tonne of rock.

The work will be beneficial to a range of species associated with the Lower Shannon SAC. These species include the target species of MulkearLIFE namely, Atlantic Salmon, Sea Lamprey and European Otter. The work will also benefit other lamprey species, brown trout, white-clawed crayfish, kingfisher, heron, dipper and various aquatic invertebrates. All proposed structures are designed to minimise conveyance of floodwater and are being built during periods of low water flow.

The staff of MulkearLIFE, Inland Fisheries Ireland and Limerick County Council are working in partnership to complete the work this summer with the full co-operation and support of local landowners and the NPWS.

### Notes for Editors

1. High Resolution Digital Images are available to accompany this Press Release.
2. Interviews can be arranged with the Project Manager by using the contact details below.
3. MulkearLIFE is a new €1.75 million European Commission funded LIFE Nature project working on the restoration of the Lower Shannon Special Area of Conservation (with a focus on the Mulkear River catchment) for Atlantic Salmon, Sea Lamprey and European Otter. Further details may be viewed on the project website [www.mulkearlife.com](http://www.mulkearlife.com)
4. Inland Fisheries Ireland (Limerick) is lead partner together with the OPW and Limerick County Council. Additional funding support comes from National Parks and Wildlife Service. Other supporters include Teagasc, IFA, ICMSA, and local angling groups.

5. The project is one of the first and most important integrated catchment management projects in Ireland. It is a flagship EU LIFE Nature project –covering some 650 sq km which contain a variety of habitats and protected species. Much of the area is designated as a Special Areas of Conservation (SACs) under the EU Habitats Directive and forms part of the Natura 2000 Network.

**Issued by:**

Ruairí Ó Conchúir, Project Manager – MulkearLIFE

Inland Fisheries Ireland (Limerick Office)

Ashbourne Business Park, Dock Road, Limerick

Tel: 061 300 238 / Fax: 061 300 308 / Mob: 087 062 5582

E-mail: [info@mulkearlife.com](mailto:info@mulkearlife.com)

Web: [www.mulkearlife.com](http://www.mulkearlife.com) / [www.inlandfisheries.ie](http://www.inlandfisheries.ie)

