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Featuring the IRF Riverprize

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SESSION 09 — Ensuring Local Sustainability

COMMUNITY ENGAGEMENT AND INVOLVEMENT IN CATCHMENT RESTORATION AND MANAGEMENT ON THE LOWER SHANNON SPECIAL AREA OF CONSERVATION

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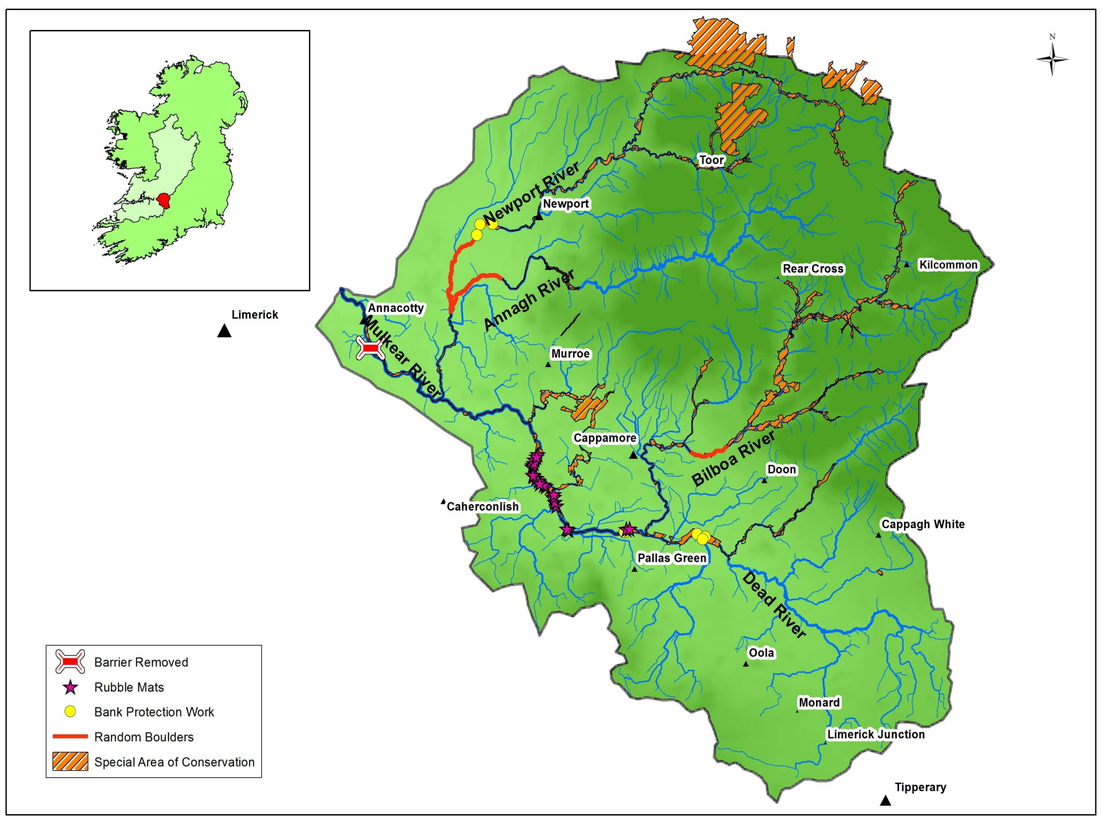
Introduction: MulkearLIFE (www.mulkearlife.com) is an important, partnership based, integrated catchment management project based on the Lower Shannon SAC. It is a five-year EU LIFE+ project involving Inland Fisheries Ireland, Office of Public Works and Limerick County Council, with significant co-financing from National Parks and Wildlife Service. The main project objective is to restore degraded habitats on the Mulkear River and its main tributaries. While the target species are Atlantic Salmon, Sea Lamprey and Otter, the project benefits a wide range of other fish species, invertebrates, birds and mammals. The catchment covers an area of 650m², including uplands and intensive agricultural lowlands, across counties Limerick and Tipperary.



Community Engagement: Community engagement and involvement has been of critical importance and is a key factor in the success of MulkearLIFE. The project's work has been supported through a formal catchment management body which acts in an advisory capacity. This body acts as a reference point for the Project Team and ensures that all parties involved in the catchment have an opportunity to work in a spirit of co-operation to support the delivery of the project's comprehensive work programme. It includes representatives of local anglers, the fisheries owner, farmers, local authorities and the relevant state agencies and departments.

Community Engagement – A Key Success Factor

Field Visits & Study Trips – A Key Success Factor

Conservation Volunteers: The project's river restoration work has also been greatly supported by the Mulkear Conservation Volunteers. This is first ever catchment based conservation volunteer corp established in Ireland. The group is a locally based corps of volunteers whose work is directly linked to that of MulkearLIFE. Practical conservation work is undertaken to address river pollution and the spread of non-native invasive plant species in the catchment. In addition, they undertake other conservation work linked to MulkearLIFE's work plans. Such work includes: tree planting, path clearance, assisting in otter survey work, construction of artificial otter holts, assisting with field trips, organising talks, workshops and training sessions.

Volunteers Undertake Major Clean-up – Clare River

Volunteers Install Artificial Otter Holt, Newport River

Instream Works & Habitat Rehabilitation: Degradation and loss of habitat, as a result of past drainage, has impacted negatively on target rivers preventing natural recovery. Consequently, habitat rehabilitation measures are required. MulkearLIFE's catchment wide instream work has included the installation of over 20 rubble mats and the strategic placement of over 600 random boulders. The measures have greatly assisted in creating habitat complexity, enhancing the abundance of macro-invertebrates and fish. The work has broken up uniform habitat and reduced sediment input. The work has included instream measures on over 22 km of river channel, treatment of over 200 km of riparian zone for non-native invasive plant species, including the manual removal of Himalayan balsam at various High Nature Value sites.

Building Rubble Mats on the Mulkear River

Building Paired Deflectors on the Newport River

Sea Lamprey Passage: Considerable success has also been achieved with sea lamprey including the installation of the first ever substrate designed specifically for the easement of sea lamprey passage on weirs in Ireland. Passage has been achieved over various barriers since 2011. In August 2013, a major barrier to sea lamprey passage was removed at Ballyclogh Weir on the Lower Mulkear River, opening up an additional 180km of habitat for sea lamprey.

Success With New Sea Lamprey Design, Annacotty

Weir Removal , Ballyclogh, Mulkear River, Aug. 2013

Supporting Salmonids: Rubble mats are an instream restoration technique used to create artificial riffles. They reduce the cross-sectional area of the river thereby increasing flow velocities. The top of the mat is quickly colonised by a range of aquatic vegetation and aquatic invertebrates. It also provides excellent habitat for young salmonids. Exceptional results have been achieved on the mats installed by MulkearLIFE in 2011. Electrofishing results in 2013 reveal that hundreds of salmon fry are utilising the rubble mats. The average density is an amazing 0.72 fry/m². In the space of two years, the average salmon parr density has tripled.

4,000 tonne of rock used to construct 25 rubble mats

Three fold increase in salmon parr numbers in 2 years

As part of the project's work, perhaps the most important work of all, almost 2,000 school children have been engaged in an Environmental Education Programme since 2010.

Almost 2,000 schoolchildren, their teachers and schools actively engaged in river management and conservation

WWW.MULKEARLIFE.COM