

# Water Biodiversity Action Plan for Shannon/Suck Catchment

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Authored by Shannon Suck Catchment Group.



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- Conor Ruane, Water Communities Officer, LAWPRO providing considerable assistance in plan preparation
- The community organizations that facilitated the visioning of the plan and promoted site visits in their local areas
- All other contributors that encouraged development of the plan through elective courses and providing background assistance for the plan.



Surfing on Suck, Athleague

C. Burns 2007



Suck Callows Foss Environmental

# Introduction

## Background to the Shannon Suck Water Biodiversity Action Plan

- The plan was initiated during phase 2 training by Veri with a number of participants taking part.
- Members of East Galway biodiversity training group have contributed to the plan as part of consultation with Veri training with Kieran Cowhig, Freshwater Ecologist
- The plan sets out a number of initiatives to augment water biodiversity in the Shannon Suck Catchment area with the involvement of local community organizations.
- The action group was set up during East Galway Water Biodiversity VERI training consisting of five members to highlight areas of conservation in each area.

## About Upper Shannon Catchment:

The waterbodies of interest to the group all lie within the Upper Shannon (Suck) catchment (WFD 29D). The catchment is 1,598 km<sup>2</sup> having mainly a karstified limestone bedrock as its underlay. There are 11 sub-catchments containing 58 river waterbodies, one lake waterbody and 17 groundwater bodies.

Land use in the catchment is primarily agricultural (pasture) and the predominant geology is Limestone and calcareous shale





The main urban centres are Castlerea, Athleague, Mount Bellew and Ballinasloe. The water bodies of interest in Upper Shannon catchment are: Subcatchment : Suck\_SC\_20 (Islands river), Suck\_SC\_50 (Shiven, river) and Lower Shannon catchment Cappagh(Galway)\_SC\_010( Duniry river). The population and density for the following areas are:

Area	Population	Density
Abbey	236	28
Ballymoe	142	27
Ballyforan	271	43
Newbridge	295	19

This Action plan will consider the following waterbodies

1. The Islands river at Ballymoe (Islands\_30)
2. The river Shiven at Newbridge
3. The Suck at Ballyforan

### **Ballymoe:**

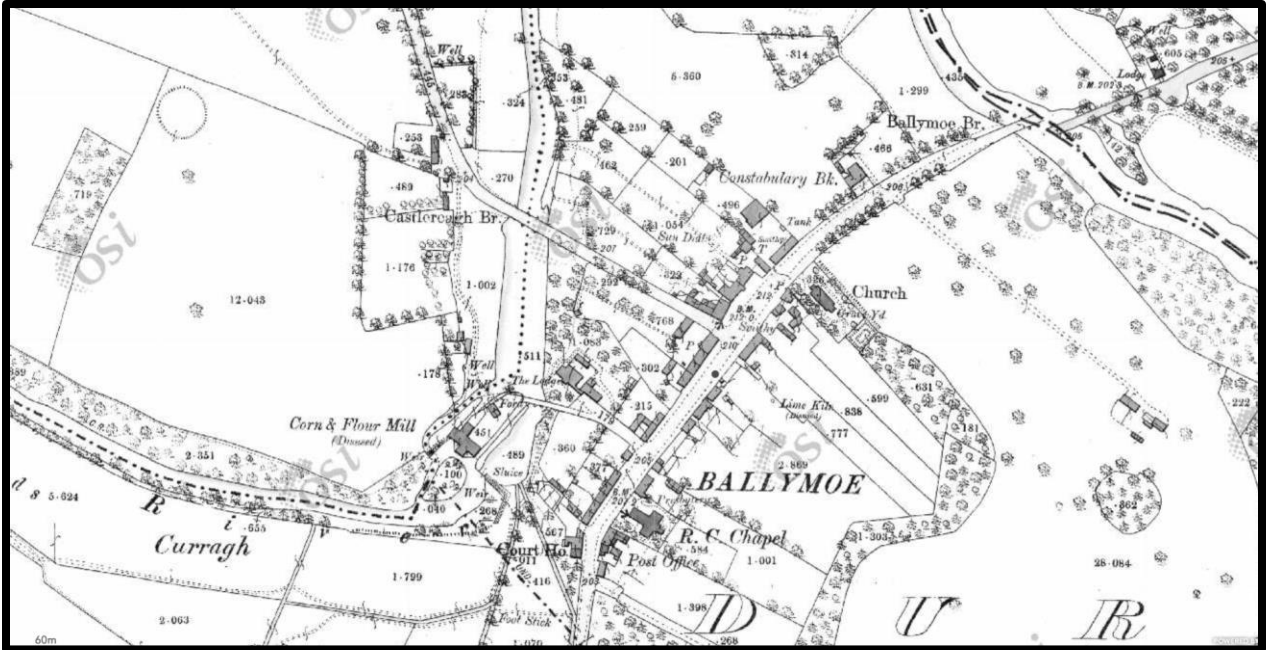
The river sub basin of interest for this area is Island\_030 which has an area of 47km<sup>2</sup> in the catchment Upper Shannon (26D) and subcatchment Suck\_SC\_20. The river flows in a southeasterly direction for 50 km from Ballinlough in west Roscommon into the Suck at Ballymoe.

There is considerable built heritage at two locations on the river, Knockanarra, Williamstown and Ballymoe. This includes corn mills, corn kiln and remnants of an inland promontory fort at the river inlet to the Suck. The fort has been referred to in various Táin stories.

The community groups are Ballymoe Development Company, Ballymoe Soccer Club and Ballymoe Active age.

Climate change risks are extensive flooding in the village area, surrounding lands at the inlet and along access roads to the village. Extensive growth and encroachment along river banks due to prolonged growing periods impact on river tunneling and proliferation of invasive species.

The development company has published a nature and wildlife plan along with other community groups. Targeting of green areas in the village has been the first biodiversity project with the removal of non-native trees and development of biodiversity areas.



**Historic 25" map Ballymoe**

[www.geohive.ie](http://www.geohive.ie)

### **Newbridge:**

The river sub basin of interest for this area is Suck\_120 in the catchment Upper Shannon (26D) and subcatchment Suck\_SC\_50. The river flows in a North South direction on eastern aspect of the subcatchment.

There are considerable archaeological features along the river basin consisting of enclosures and forts.

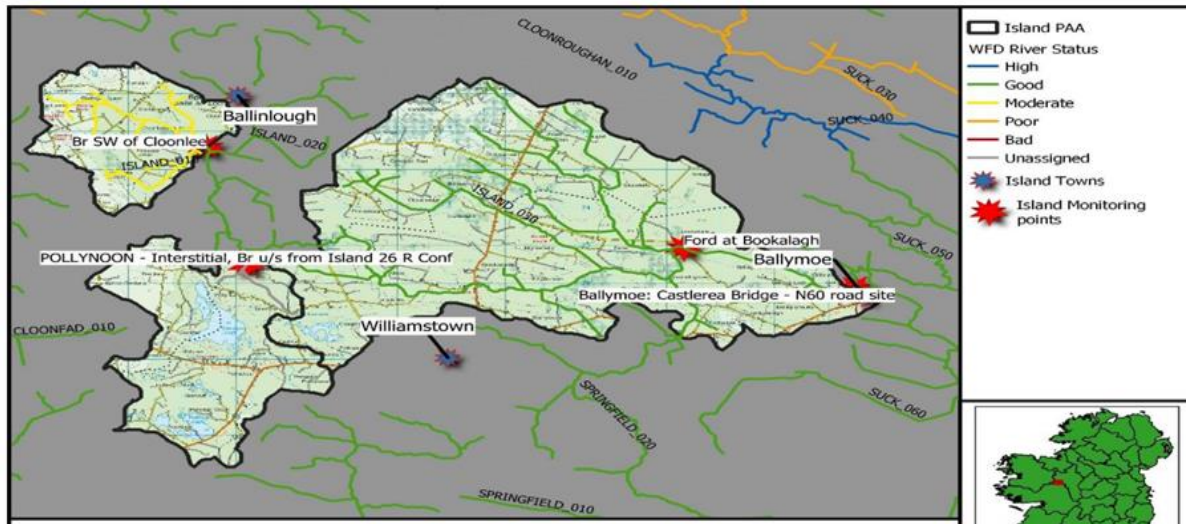
There are a number of community organizations in the area; Newbridge Tidy Towns, Newbridge Action group and Ballygar Newbridge Togergar Company Ltd

### **Ballyforan:**

The river sub basin of interest for this area is Suck\_120 in the catchment Upper Shannon (26D) and subcatchment Suck\_SC\_50. The river flows in north south direction and the callow lands develop in a southerly direction from Ballyforan.

## Water Quality in Ballymoe

The water quality is assessed by EPA under WFD at 3 main sampling points, Booklagh Ford, Castlerea Bridge and entry of river to the Suck. A specific sampling point at the Ballymoe Waste Water treatment plant is also used as this is viewed as a “sole significant pressure” on the waterbody.



Island Priority Area for action

AFA Island report LAWPRO

The waterbody currently has a good ecological status for 2015-2018 having had high ecological status from 2007 -2012. EPA sampling in 2020 has a Q value of 4 at Castlerea Bridge and 4-5 at the Bookalagh Ford. Local catchment assessment by LAWPRO is ongoing using *Small Streams Impact Score*

## Ballyforan/ Newbridge

Suck\_120 waterbody is currently at moderate risk from channelisation and forestry pressures.



## Biodiversity in Ballymoe area

The National Biodiversity Centre has collated biodiversity assessments since 1937 relating to townlands. The assessment frequency varies with an average of two assessments carried out each decade. Reference is made to Cloonee townland where 2.5 km of the Islands river forms its southern boundary. A total of 238 species have been identified under the following species groups

<b>Species groups</b>	<b>Records</b>	<b>Counts</b>
<b>Amphibian</b>	<b>1</b>	<b>2</b>
<b>Annelid</b>	<b>2</b>	<b>2</b>
<b>Bird</b>	<b>86</b>	<b>401</b>
<b>Bony fish (Actinopterygii)</b>	<b>1</b>	<b>1</b>
<b>Crustacean</b>	<b>1</b>	<b>7</b>
<b>Flowering plant</b>	<b>6</b>	<b>8</b>
<b>Insects</b>	<b>7</b>	<b>16</b>
<b>Liverwort</b>	<b>13</b>	<b>15</b>
<b>Mollusc</b>	<b>56</b>	<b>66</b>
<b>Moss</b>	<b>64</b>	<b>77</b>
<b>Terrestrial mammal</b>	<b>1</b>	<b>1</b>
<b>Total</b>	<b>238</b>	<b>596</b>

'Information from the National Biodiversity Data Centre downloaded from Biodiversity Maps on 23/06/21.'

## Planned Actions

To help improve biodiversity and water quality within the catchment area. A number of projects are being considered for the areas

- Awareness within the agricultural community (refocus on water quality and biodiversity)
- Information boards in particular areas (draw people in using colour, design) along river walks and bridges.
- Tree planting
- Ballymoe - Islands river awareness –
  - Poster exhibitions in events in community centre with guest speakers from LAWPRO and IFI to do talks to the greater community.
  - Carrying out surveys once a month in the tributaries of the Islands river.
  - Link in with schools for CSSI.
- Water conservation in the community centre.
- Deflector in the drains on the bridge.
- Rainwater garden with wetland plants
- Bank revetment on the eastern side of the river opposite water treatment plant.
- Signage (3-4) around river: artistic signage with minimum writing

### Planned Action 1 - Survey and Treatment of riparian invasive species.

The invasive species, *Gunnera* is located on the northern bank of the Islands river as part of an alluvial riparian woodland. The removal of the species will be carried out by specialists dealing with treatment and control either by mechanical or herbicidal means.

*Gunnera* impacts on riparian areas where large amounts woodland in particular *Salix* can be replaced. It also produces homogeneous seed flora eliminating natural flora. In turn, it replaces any riparian vegetation and leads to bank erosion.

The project will be completed towards the end of 2022. The project depends on both IFI, NPWS and landowner permissions.

The estimated cost of a feasibility study is €850. The project is led by Ballymoe Development Centre Limited in conjunction with Ballymoe Tidy Towns and Active age as part of a local wildlife and heritage plan.

## **Planned Action 2 – Riverbank Revetment**

Erosion of a riverbank opposite the riparian woodland has been noted which could impact on both aquatic and insect life in the river in the future through silting. The bank will be reinforced using a specialist company to install willow spilling.

The completion of the project should be in late 2022 at an estimated cost of €19,000. Both IFI and NPWS will be contacted and permissions sought prior to initiating the works where a specialist report will be provided to NPWS.

The funding stream has been applied for through Communities Water Development Fund with matching funding.

## **Planned Action 3 - Rainwater harvesting (Fr Flanagan Community Centre)**

A rainwater storage tank (10,000 litres) will be installed adjacent to the community centre which will supply water to the bathroom facilities. This will reduce the dependence on local group water supply as toilet facilities have been consuming over 20,000 gallons of water due to automatic flushing systems in situ. The collection of water from the building will reduce the level of water entering the storm drainage systems in the village and mitigate contamination of local rivers surrounding the town.

Installation will be carried out by engineering specialists who will consult on the project. Planned completion of installation will take place before Autumn.

Estimated cost will be in the region of €5,000 - €6,000 based on funding and matching monies from Ballymoe Development Centre Ltd.

## **Planned Action 4 - Water quality sampling, R training and purchase of sampling nets.**

A voluntary Citizen Science programme of invertebrate sampling will take place at 7-8 locations on a monthly basis. The purpose of the sampling is to raise local awareness using local community events as a platform to engage the community with water quality.

There are eight strategic tributaries entering the Islands river for a distance of 10 kms which are viewed as at risk under the Water Framework Directive 2015-2018 as not meeting a high ecological status for the Islands river in a blue dot catchment. The area of sampling will be subject to landowner permission to carry out with one or two public sampling points.

The results will be entered into an R programme along with observational parameters at each sampling point for statistical analysis and modelling. Staff in Ballymoe Area Development will be trained in R to carry out analysis.

The project will be ongoing to raise awareness and will be carried out by volunteers. It has an estimated cost of €1205 with a voluntary contribution estimated at €1,028.

## Planned Action 5 – Ecological survey

There is a considerable alluvial riparian woodland on the northern bank of Islands river in Ballymoe. This requires extensive survey to examine nature conservation to ensure longevity and naturalness while maintaining natural diversity.

The project will be completed in 2023 as this will be long term subject to upgrade of local water treatment plant and landowner consent.

This will not be costed until 2023

## Planned Action 6 – Rain garden

The installation of a rain garden on eastern bank of the Islands river beside the Castlereagh bridge to mitigate entry of any potential pollutants as part of road run off entering the river will be carried out in 2023.

The project is subject to landowner consent and will be carried out in consultation with local area engineers in Galway County Council.

Estimated costs will be sought from a number of companies providing nature based solutions.

## Summary Table of Actions

Project	Location	Permissions	Reports	Consultation	Est. Cost	Funding Stream	Time Frame
Invasive spp	Ballymoe	Y	N	Y	€850	CWDF/ Leader/ Match/ Voluntary	2022
Bank revetment		Y	Y	Y	€19000		
Water conservation		N	N	Y	€6000		
Ecological survey		Y	Y	Y	Unknown		2023
Rain garden		Y	Y	Y	Unknown		



## Sources of Funding

- LEADER Funding. Contact Galway Rural Development [www.grd.ie](http://www.grd.ie)
- LAWPRO – Community Development Fund
- The Wheel
- Inland Fisheries Ireland (for Fisheries related projects)
- [Environment and Nature Fund](#) - Development of Biodiversity Action Plans, Sustainable Communities through the circular economy
- [News | The Community Foundation](#)
- [The Ireland Funds](#)
- Department of Rural and Community Development schemes (funded by DRCD; administered by Local Authority)
- [CLÁR](#) – small scale targeted measures in rural areas (e.g. sensory gardens)
- [Town and Village Renewal Scheme](#)
- [Funding for Outdoor Recreation Facilities](#)
- [Social Enterprise Development Fund 2020 - Rethink Ireland](#)– DRCD provides match funding for all philanthropic funds raised by Social Innovation Fund (through dormant accounts)
- [Community Environment Action Fund](#) – Local Agenda 21 (DID not advertise in 2020; expected to open in Q1, 2021)
- [Community Enhancement Programme](#)
- LA Sports Grants (e.g. Sports Club Grants, Coaching and development Grants)
- Heritage / Conservation Grants
- Community Facilities Remedial Works Scheme
- Arts Grant Scheme
- Festivals and Events Schemes
- Scheme of Capital Grants
- Tidy Towns Grant Scheme/Burial Grounds Grants
- Local Improvement Scheme
- Creative Ireland – Community Grant Scheme
- Municipal District Grants
- Anti-litter/ Anti-Graffiti Schemes
- Men's' Shed
- [Creative Ireland Community Grant Scheme 2020 - Creative Ireland Programme](#)
- [Oscar \(sportscapitalprogramme.ie\)](#) - open from 11 Dec 2020 to 12 Feb 2021
- LA Sports Partnerships Grants (e.g. Sports Club Grants, Coaching and development Grants)
- [Go for Life Grants Scheme](#) – Sports Ireland
- [Coca-Cola Thank You Fund](#) Encouraging young people to become more active
- [Dormant Accounts Fund](#)
- [Healthy Ireland Fund](#) (edible landscape case study)
- [Tesco Community Fund](#)
- [Windfarm Community Fund](#)
- [Available funding | The Arts Council](#)

- Community Employment: [Community Services Programme](#)
- [Rural Social Scheme](#); [Tús – Community Work Placement Initiative](#)

## Possible Match Funding

- Partnerships for example with Local Businesses
- Corporate Sponsorship; Community Engagement Funds
- Voluntary labour
- Traditional Fundraising
- Sponsored Events
- Community loan [home – Community Finance Ireland](#). [Clann Credo - Community Loan Finance](#)
- Crowdfunding

## Additional Resources

- [Data - Catchments.ie - Catchments.ie](#) WFD reports
- [EPA Maps](#) Protected sites
- [A resource for communities working for water, biodiversity, and climate action. - Local Authority Waters Programme \(watersandcommunities.ie\)](#)
- [https://moytrust.files.wordpress.com/2018/11/guidelines-for-groups-working-on-rivers-in-county-mayo\\_final.pdf](https://moytrust.files.wordpress.com/2018/11/guidelines-for-groups-working-on-rivers-in-county-mayo_final.pdf)
- <https://www.npws.ie/farmers-and-landowners/activities-requiring-consent>
- Ballymoe Nature and Wildlife Plan 2019-2022

## Useful Contacts

- EPA - National Environmental Complaints Line (NECL) 1850 365 121
- NPWS – Brian Reidy
- LAWPRO Community Development Officer – Conor Ruane
- Local Authority Planning Section – give number
- Inland Fisheries Ireland Fisheries Inspector – Arnold Donnelly
- Local Authorities Heritage/Biodiversity Officer – Marie Mannion
- Local Authorities Water & Environment Section(s) – Ronan Mannion
- Local Public Participation Network – Galway 091 509 130
- Ballymoe Development Company Ltd.