

Water Biodiversity Action Plan for Corrib catchment, Clare River Group

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Introduction

Background to the Clare River Catchment Water Biodiversity Action Plan

This group convened during the course organized by Galway Rural Development and LAWPRO and delivered by Veri. The members live in or near the Clare river: Michael Waldron, Denis Healy, Sean O'Donovan, Sharon Walsh, Morgan, Eoghan Concannon and Caitríona Cunningham.

The purpose of the plan is to use our resources to improve water quality and biodiversity in and around the Clare River catchment waters.

- Discovery phase: We would like to discover the water quality & biodiversity of the catchment water and the pressures on the water quality
- Community Engagement Phase: We would like to educate and discuss the river water quality with the local community e.g. school children, farmers, politicians
- Remedial Phase: We would like to improve the water quality of the river using various measures.

About the Clare river sub-catchment.

The waterbody of interest to this group lies within the Corrib Catchment (WFD catchment 30) and is part of the Lough Corrib Special Area of Conservation. Draining a total area of approximately 900km², the catchment spans three counties, Galway, Mayo and a very small fraction of County Roscommon. The catchment is sparsely populated. The principal waterbodies in the catchment are the main channel of the Clare river and its tributaries.

The main Co. Galway urban centers within the catchment are Tuam, Claregalway, Milltown and Dunmore, plus Ballyhaunis in Co. Mayo. Notable water bodies within this catchment include the Clare River, Abbert River, Grange River, Nanny, Sinking River (Dunmore), Dalgan River (Ballyhaunis). To the East of Lough Corrib and Lough Mask the catchment is underlain with flat visian age Limestone. Because of this the soils in the area are rich in calcium and are highly productive. This is reflected in Corine 2018 dataset which shows that the dominant land use in the Corrib catchment is livestock grazing with some small areas of forest and peat bog.

The Clare river is the largest tributary of Lough Corrib, Ireland's premier wild brown trout fishery. It is an important migratory and spawning river for salmon and lake trout. An article from the Connacht Tribune in 1939 described the River Clare as "the best fishing spot for salmon and trout West of the Shannon" (Claregalway Parish History book).

Community groups operating within the catchment area include Milltown Tidy Towns, Tuam Tidy Towns, Claregalway Tidy Towns, Tuam Anglers Association, Galway Tuam Scouts, 12th Claregalway Scouting Group and Cairde na Chláir. Cairde na Chláir is a voluntary organization that acts as an umbrella group for angling clubs based on the Clare River in Co. Galway.

Among their activities, Cairde na Chláir promotes projects that aim to enhance the habitat of the Clare River so that its full potential can be achieved as a brown trout producing river.

According to Galway County Council's Draft Climate Adaptation Strategy 2019, there will be increasing seasonality in hydrological regimes expected with decreased summer and increased winter flows likely. Flood risk will increase due to a combination of higher river-flows and increases in extreme precipitation events. Climate Change will also impact on Water Quality as follows:

- Lower water levels and higher water temperature will reduce dissolved oxygen and lead to algal blooms and increased concentration of bacteria and other pollutants in the water.
- Increased precipitation increases the risk to groundwater quality from septic tank systems, agricultural, forestry and urban centre runoff.

The Clare river was heavily canalized in the nineteenth century resulting in the drainage of a lake at Cloonkeen north of Corofin and the gain of agricultural land. The catchment has been subject to on-going arterial drainage since the 1950s which continues today. This has included re-alignment and widening of the channel together with lowering of the bed to reduce overbank flooding. The effects can be seen in much of the river in the steep banks with heaps of extracted stone alongside. In recent years an area downstream of Cregmore bridge has been developed as a managed floodplain to control flooding downriver. Much of this work has impacted negatively on the catchment's ecology through the removal of riparian wildlife. The lack of riparian vegetation on and near the riverbanks and the lack of water-cooling shade can contribute to the deterioration of the river's habitat quality. Water temperature above 20 degrees celsius is a threat to the survival of Salmonids.

Our Action plan will consider the following water bodies

1. Upper Nanny river
2. Abbert river at Abbeyknockmoy
3. River Clare, Claregalway

Water Quality in the Clare Catchment

Much of the rivers in the catchment are classified by EPA as "at Risk" of failing to meet the Water Framework Directive objective of good water quality by 2027. These areas include most of the Sinking river, The middle Grange river, the lower Abbert, the main channel south of Tuam and between Lackagh and Claregalway. EPA sampling points over the entire catchment record 48 as Good or High status and 20 as Moderate or poor status.

Groundwater in almost the entire catchment is classified by the EPA as "at risk" of failing to meet Water Framework Directive objectivess.

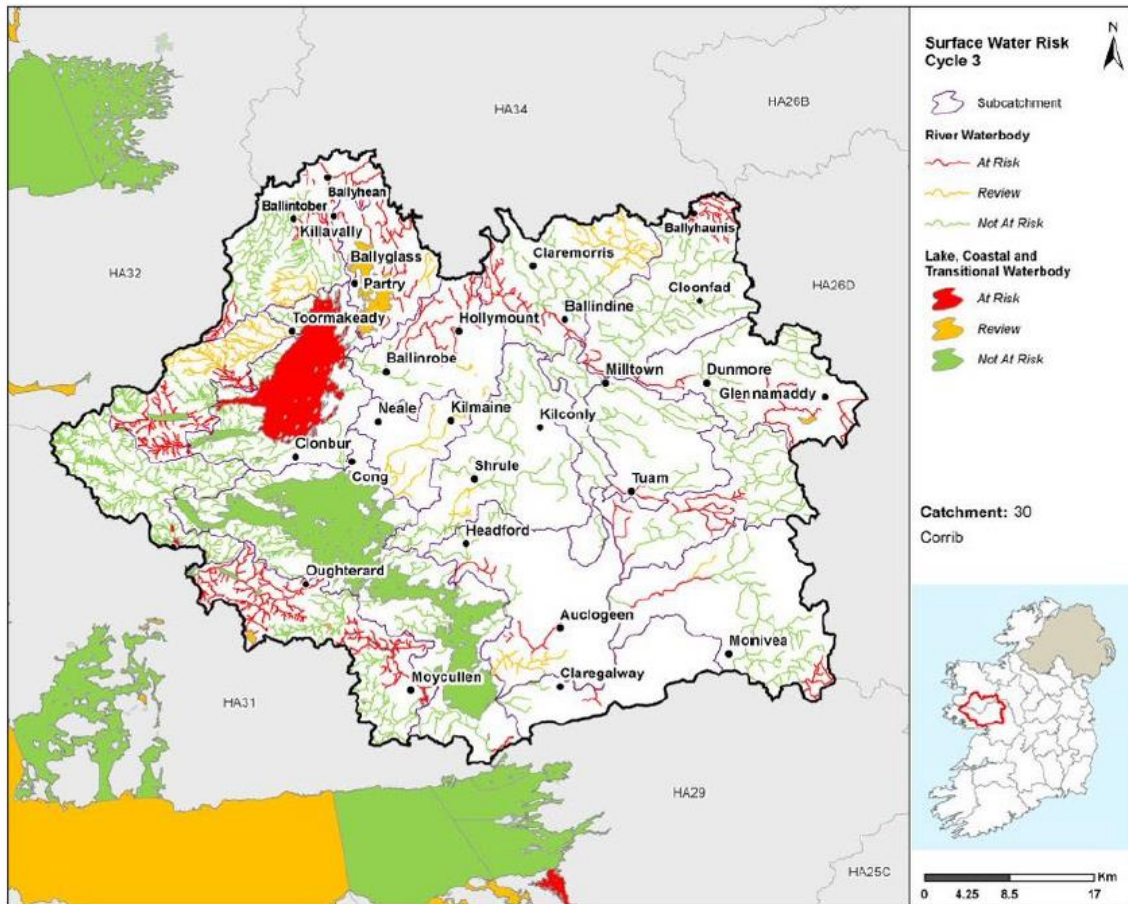


Figure 8: Surface Water Risk Cycle 3

Water bodies at risk of not reaching WFD obligations by 2027 (Corrib catchment report from catchments.ie). Red indicates “At risk”, Orange “Review”, Green “Not at risk”

Biodiversity in the Clare catchment

Clare river is within the Corrib Special Area of Conservation (SAC).

In the catchment there are three National Heritage Areas and one Special Area of Conservation. All four are raised bogs near tributary headwaters. The NHA areas are:

- Slieve Bog east of Dunmore where Red Grouse, a species that is becoming increasingly rare in Ireland, has been recorded.
- Killaclogher Bog north of Monivea, a habitat for the Marsh Fritillary butterfly.

- Lough Tee Bog east of Monivea which has recorded Golden Plover, a species that is listed on Annex I of the E.U. Birds Directive, and Otter, a Red Data Book species.
- The Special Area of Conservation is Monivea bog to the south of Monivea village designated as Raised Bog (Active), Degraded Raised Bog and a Rhynchosporion Vegetation habitat.

Apart from species mentioned above, others of interest seen in the catchment are the Large Heath Butterfly, Barn Owl (pre-2011 record), Kingfisher, Red squirrel, Pine marten (uncommon), White-clawed crayfish, Trout and Salmon.

Invasive species include Mink, Giant Hogweed, Japanese Knotweed. Crayfish plague disease has been found in the river.

Planned Actions

1. Nanny River

Upper Nanny river. Monitoring water using CSSI and possible N and P testing. Outfall safari.

Kick-sampling with school in Tuam.

Educational project in school.

Planned Action 1 - Nanny River, Tuam, Co. Galway

To Complete the Inner Bypass and Solve the Poor Water Status of the Curragh River

Completing the Inner Bypass is absolutely essential for the future development of the town of Tuam. It is stated in the Tuam Regeneration Plan that Bishop Street be connected with Upper Dublin Road. Tighes are offering Tuam Stars land to buy and a portion of it which they have no interest in and which the Rugby Club have expressed no interest in would connect the Curragh with Upper Dublin Rd. The Council should buy it.

In 1960 the Corrib Drainage came to Tuam. The main branch of the Nanny River was the source of water for the town and as a result this branch was left largely as it was. The Aghaglora branch however was massively reengineered to drain the turlough in the Curragh. However, the land that was created is very marginal and only a small part of it is used for grazing sheep in summer. I would say the owners would be only too glad to sell it to the Council.

Two small 1-meter wide streams join together behind Varden's house and an 8-meter wide channel was dug to drain the Curragh. This is almost a shallow warm pond with minimum flow and no shade. Not much can survive in this channel and Pobal clean it every November right bang in the middle of the spawning season. I doubt there are many trout in it and what macroinvertebrates that can survive in it would be worms and slugs. It has the worst water status of any part of the Clare River system.

An enlightened idea then would be to cut a new two stage channel 4 meters wide with a summer width of 1 meter and a couple of deep holding pools. A pond could also be dug to take all the drains from farming land and act as a silt trap reed bed over flowing into the new channel. Then the new road could be sited on top of the old river channel and the existing road. A biological assessment would have to be made and other assessments as to the road but I am confident that this would work.

Project 2. Abbert River at Abbeyknockmoy.



Figure: Abbert River Sampling Point adjacent to Newtown N.S., Abbeyknockmoy, Co. Galway

EPA samples at the bridge on the Abbert River, see figure above, and at this point the EPA reports good water quality according to the EPA's report on River Waterbody WFD Status 2013-2018. In 2021 the EPA recorded good water quality with a Q value of 4. The Abbert River is part of the Lough Corrib SAC.

Planned Action 2 - River Abbert: Maintain good water quality & increase environmental awareness

At present the Abbert river at Abbeyknockmoy has good water quality, and we would like to maintain and improve this water quality. We would like to do this by educating the local people about the River Abbert and to connect them to their river.

Phase 1: Discovery Phase

Conduct kick-sampling and analyze macro-invertebrates in the river at Abbey bridge, Abbert bridge, and at Killaclogher bridge, & conduct chemical sampling.

Phase 2: Community Engagement Phase

- Arrange a water environmental education workshop with the students from Newtown N.S., and teach the children about river macroinvertebrates, animals and plants. Distribute River coloring books to the students from the Nanny River project. Conduct kick-sampling with the students. [Tuam Tidy Towns tells the story of the River Nanny - Catchments.ie - Catchments.ie](#)
- Arrange a community river fun day out in the Summer, liaising with the local councilor Pete Roche. Picnic, kick-sampling, music, arts and crafts and games.
- Arrange a river walk and talk for the local people

Phase 3: Remedial Phase

Short-term projects

- Display a river information board by the Abbert River, as was done for the Nanny river [Tuam Tidy Towns tells the story of the River Nanny - Catchments.ie - Catchments.ie](#)
- Organize a hedge/tree planting day along the river for the community. The trees/hedging will provide a buffer zone, shading and habitat for animals and plants.
- Organize wildflower planting near the Abbert River bridge for the community
- Allow grass near the river Abbert to grow wild for pollinators, and display pollinator signs. This action will create buffer zones and it will raise awareness amongst the community of the importance of providing food and habitat for pollinators.

Long-term projects

- Liaise with local farmers & discuss ideas on how to improve the river quality near their farm e.g. buffer zones & investigate how these actions fit in with the new CAP.
- Create a river walk along the river

Project 3. River Clare at Claregalway

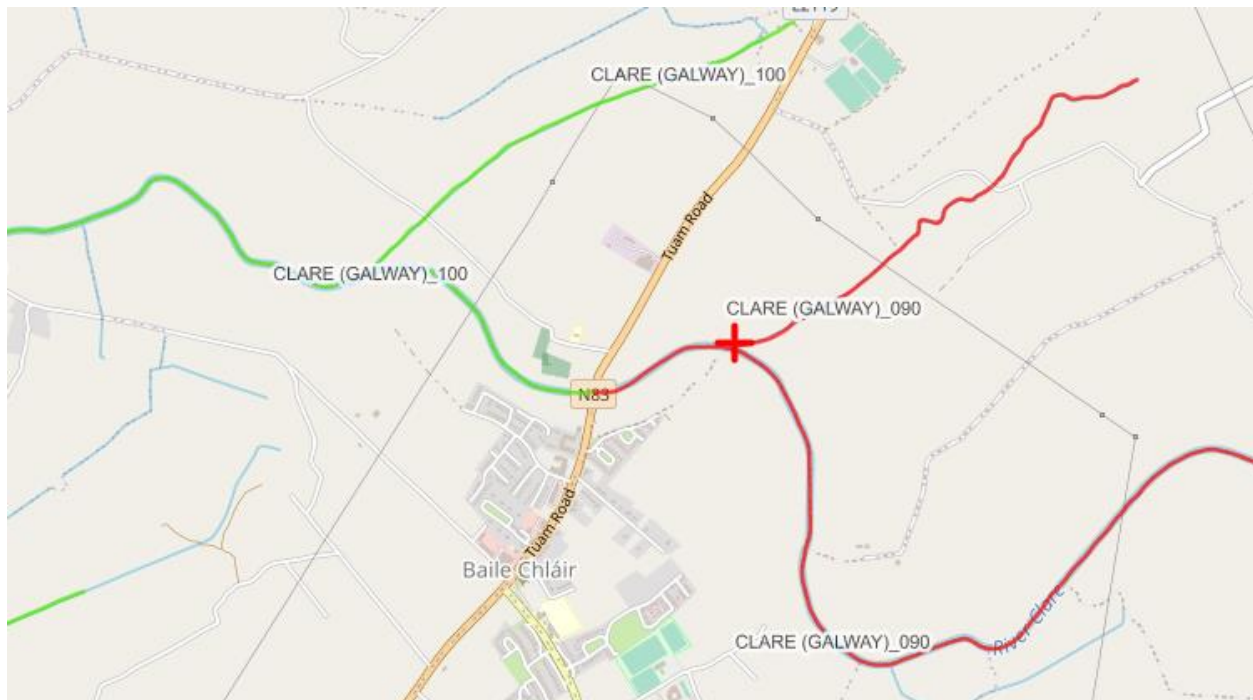


Figure: River Clare at Claregalway

EPA water samples of the River Clare west of the bridge, show that the water quality is good, however water samples of the River Clare east of the bridge show that the River Clare is at risk. The WFD Third Cycle assessment describes the Clare from Abbeyknockmoy to the lake as Moderate. River is under pressure from agricultural pressures and dredging in the 1950s and 1960s which impacted negatively on the catchment's ecology including the removal of riparian wildlife.

The River Clare in Claregalway is a Special Area of Conservation because it is included in the Lough Corrib Special Area of Conservation.

Planned Action 3 - River Clare: Improve water quality & increase environmental awareness

We would like to improve the water quality of the River Clare east of the Claregalway bridge. We would like to do this by educating the local people about the River Clare and to connect them to their river by hosting fun community days out. We would also like to encourage the local community to participate in local community actions. We would also like to liaise with local farmers and landowners and encourage them to participate in river conservation activities to benefit the River Clare and to provide an extra income for them through grants and environment schemes. In the long-term we would like to put in place a river walks.

Phase 1: Discovery Phase

Conduct kick-sampling and analyze macro-invertebrates in the river, & conduct chemical sampling.

Phase 2: Community Engagement Phase

- Arrange water environmental education workshop with the students from the local schools and teach the children about river macroinvertebrates, animals and plants. Distribute River coloring books to the students from the Nanny River project. Conduct kick-sampling with the students. [Tuam Tidy Towns tells the story of the River Nanny - Catchments.ie - Catchments.ie](#)
- Arrange sculpture art workshops with the students lead by artist Gordon Darcy. Display sculptures on the River Clare's bridge.
- Arrange a community river fun day out in the Summer, liaising with the local councillors Jim Cuddy, Shelley Herterich-Quinn, James Charity and Albert Dolan. Picnic, kick-sampling, music, arts and crafts and games.
- Arrange a river walk in consultation with Corrib Beo and talk for the local people
- Conduct Think Before You Flush campaign with local businesses, residents & farmers
- Arrange for community to paint fish beside village drains

Phase 3: Remedial Phase

Short-term projects

- Display a river information board by the River Clare, as was done for the Nanny river [Tuam Tidy Towns tells the story of the River Nanny - Catchments.ie - Catchments.ie](#)
- Organise a hedge/tree planting day along the river for the community. The trees/hedging will provide a buffer zone, shading and habitat for animals and plants.
- Organise wildflower planting near the River Clare bridge for the community
- Organise community litter pick-ups
- Allow grass near the River Clare to grow wild for pollinators, and display pollinator signs. This action will create buffer zones and it will raise awareness amongst community of the importance of providing food and habitat for pollinators.

Long-term projects

- Liaise with local farmers to discuss ideas on how to improve the river quality near their farm e.g. buffer zones & investigate how these actions fit in with the new CAP.
- Create a river walk along the river
- Liaise with LAWPRO, Conor Ruane and Inland Fisheries on how to further improve the river quality of the River Clare.
- Identify invasive river species & plan how to deal with them

Links to Additional Resources

<https://gis.epa.ie/EPAMaps/Water>

Useful Contacts

- Galway Rural Development www.grd.ie
- EPA - National Environmental Complaints Line (NECL) 1850 365 121
- NPWS District Conservation Officer (Galway city, Galway east). (076) 100 2644
- LAWPRO Community Development Officer – Conor Ruane 085 8083059
- Galway County Council Planning Section 091 509043 planning@galwaycoco.ie
- Inland Fisheries Ireland Fisheries Inspector – Sean Coady 087 9721913
- Local Authorities Heritage Officer Marie Mannion. 087 908 8387
mmannion@galwaycoco.ie
- Galway County Council Environment section 091 509510. environment@galwaycoco.ie
- Local Public Participation Network – 091 5099130. administrator@galwaycountypn.ie

