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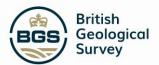
CatchmentCARE Community Incentive Scheme The Story of Community Engagement Projects 2019-2023

























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Disclaimer:

The views and opinions expressed in this report do not necessarily reflect those of the European Commission or the Special EU Programmes Body (SEUPB).

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1. Introduction to Community Incentive Scheme

The long-term sustainability of the river restoration actions depends on greater community knowledge and appreciation of the rich natural habitats of our rivers, streams and lakes. The CatchmentCARE project included a series of activities aimed at:

- supporting community engagement, knowledge transfer and project legacy outcomes
- advancing initiatives that took an innovative approach to Knowledge Exchange (KE), bringing together stakeholders with innovative visions of sustainable catchment management.
- Supporting actions that were inclusive of stakeholders across multiple sectors e.g. farmers, anglers, and tourism, who worked together to enhance KE and build their capacity to support sustainable land use in their catchment.

The Catchment Care project aimed to promote bottom-up approaches which took into account local needs, knowledge, experience, and instilled further commitment of the community to their local area and their sense of identity.

One of the main deliverables of the CatchmentCARE Project was to therefore to design, develop and deliver a bespoke 'Community Incentive Scheme' (CIS) which would support local capacity building and knowledge exchange. The scheme aimed to support cross border 'catchment improvement projects' in the Arney; Blackwater and Finn catchments. Project funding was made available through the CIS to support communities to look after and care for their local river systems including associated lakes.

The CatchmentCARE Community Incentive Scheme was open to Volunteer, Community Groups and NGOs, Schools and third level education organisations, Youth groups and Sports Clubs, Not for Profit Organisations and Farming Groups.

To be eligible, groups had to be embedded in their local community, have primary aims and objectives in line with the CatchmentCARE Project, aimed to benefit their local river / improve water quality through effective and innovative means and create a positive legacy within their local river catchment.

Projects were funded up to the amount of €25,000. Exceptional proposals exceeding this amount that are cross border based and fully compatible with the objectives of the CatchmentCARE Project were also considered. Projects ideas that were initially considered to be eligible for funding included:

- Wildlife sightings / Biodiversity protection
- Pollution watch
- StreamScapes projects
- Safe Access points & Demonstration Areas
- Community Litter Awareness Campaigns
- Community River walks
- River Bio Blitz
- Adopt a spring/ know your holy well/ protect your water well
- Agriculture / Land Use
- Interpretation / Signage / Display material
- Education Materials / Resources

A series of launch events took place in August 2019 to promote the rollout of CIS Phase 1. Six events took place as follows –

- Three events in the Blackwater Catchment (Quinn's Corner, Dungannon, Navan Centre, Armagh and 4 Seasons Hotel, Monaghan)
- Two events in the Finn Catchment (Jackson's Hotel, Stranolar and Finntown Community Centre, Finntown)
- One event in the Arney (Marble Arch Geopark, Florencecourt)

The above events were very well attended with 220 participants representing some 62 local community organisations and groups coming along to one of the six sessions.



- Applications opened on 5th September 2019 and closed on 4th October 2019
- After applications received these were scored by a panel of experts from within the CC project.

17 projects in total across the three catchments were funded in the autumn of 2019, (3 in the Arney, 3 in the Finn and 11 in the Blackwater). These were:

Arney Catchment

- Kiltyclogher Heritage Centre
- McNean & District Anglers and Cleenish Angling Club
- Speleological Union of Ireland

Finn Catchment

- River Finn Anti-Pollution Project
- Ballybofey and Stranorlar Integrated Community Company (BASICC)
- Coiste Slí Taobh an Mhuilinn

Blackwater Catchment

- Armagh Fisheries Ltd.
- Callan River Wildlife Group
- Edenderry Rod & Gun Club
- Emyvale Tidy Towns
- Friends of the Callan River
- Glaslough Tidy Towns / Castle Leslie Estate
- National Trust (Argory Mosses)
- River Blackwater Catchment Trust (2 projects)
- South Tyrone Farmers Group
- Torrent River Enhancement Association

Examples of the kind of projects supported in this round of funding included, practical water-quality improvement projects, education and awareness campaigns, access to loughs and rivers for local communities, volunteer training, specialised equipment, community river trails, bio-blitzes, citizen science projects and interpretation and signage.

The following pages are a detailed overview of each of the separate projects in Phase 1 of the CIS.



2. CIS Projects Phase 1

2.1 Arney Projects

Kiltyclogher Heritage Centre – Corracloona Link

The dedicated Heritage Officers based at the Kiltyclogher Heritage Centre, Co. Leitrim provide bus and walking tours highlighting their local heritage. They have a huge depth of knowledge about archaeology, mythology, historic figures such as Seán Mac Diarmada, as well as the natural environment and biodiversity.



These defenders of the natural and cultural landscape of Leitrim secured funding from Catchment Care to develop a new walking trail *Corracloona Link*. This informative trail follows the water cycle from the mountain bogs and streams to Lough MacNean, which ultimately connects, via the Arney river, with the Erne catchment and out to sea.

This project involved:

- Design and installation of four bespoke bi-lingual information panels along the trail
- Participation in a volunteer training programme
- Procurement of citizen science equipment
- Regular assessment of local small streams
- Facilitating SUI dye tracing study
- Supporting development of the ORNI canoe trail
- Collaborating with IFI and MacNean & District Anglers to improve fishing infrastructure
- Installation of outdoor furniture at Terry Mc's Pier
- Running a 'have-a-go fun day' for 70 participants





The information panels have been well received by locals and visitors alike. Footfall in the area has increased, and citizen science volunteers have been engaging with local land users and stakeholders raising awareness about conservation issues. The community group have successfully applied for funding from Leitrim Recreational Fund and Leitrim Development Company for Deane's Lake Project, a walking trail with parking amenity to be completed by end of February 2023



McNean & District Anglers and Cleenish Angling Club – Improving access to McNean

The MacNean and District Anglers run regular catch and release competitions along the shores of Upper Lough MacNean. The Cleenish Angling Association is also active on both MacNean loughs. Many of the angling structures that were in place over this time had fallen into disrepair and become unsafe. The clubs were also aware that predation by invasive mink was having a detrimental effect on fish, duck and ground nesting bird numbers.

Through CacthmentCARE the anglers secured funding for their *Improving Access to MacNean for Everyone* project. With significant support from Coillte, Inland Fisheries Ireland and Leitrim County Council this project achieved the following



- Construction of one disabled access fishing stand with dedicated parking
- One double and two single concrete and boulder fishing stands
- Two T-shaped recycled plastic double fishing stands
- Installation of crash-barrier boulders with reflective lozenges
- Erection of Steep incline and Deep-water warning signs
- Four enhanced parking laybys
- · Biosecurity station stocked at public jetty Co. Fermanagh
- Mobile biosecurity station (for competitions and visitors)
- Biosecurity signage for angling structures
- Successful mink trapping programme
- Information Panel installed on Upper MacNean shoreline
- A have-a-go fishing day will encourage others to take up this rewarding pastime
- Volunteer participation in CIS citizen science training programme



These measures have greatly increased the fishing infrastructure around Upper Lough MacNean. This has been welcomed by locals, visitors and the angling community. The road safety features have mitigated against a dangerous bend close to open water which was hazardous to those not familiar with the area. The universally accessible fishing stand, with its own car space for badge holders, encourages participation from whole community.

The biosecurity equipment and signs will help to protect native species against the transfer of aquatic diseases. The removal of large, breeding mink from the gene pool has already seen a decline in their numbers and will help support more vulnerable native species. One site where trapping took place has seen a disappearance of mink and an increase in kingfisher numbers. Monitoring of this will be continued by local volunteers.



The Speleological Union of Ireland – Dye tracing of Karst Springs



The Speleological Union of Ireland (SUI) represents the interests of cavers and speleologists on the island of Ireland. SUI is recognised as the national governing body for caving by Sport Ireland and Sport Northern Ireland. SUI provides training, supports conservation and exploration, and sponsors overseas expeditions. It also helps to influence government policy on sport, access and the environment and maintains very strong links with the Irish Cave Rescue Organisation (ICRO).

SUI engaged with phase 2 of the Catchment CARE project *Arney Karst Clean-up* to remove dumped waste from a cave known as Pollnagossan. Pollnagossan is located beside the road between Blacklion, Co. Cavan and the Cavan Burren Park, part of the Marble Arch Caves UNESCO Global Geopark.

Once beyond the polluted entrance it offers some fine wet crawling to a 25-metre pitch and extensive passage below. The project included:

- An online educational evening on the Arney karst landscape, particularly Pollnagossan was held for local caving groups and community volunteers.
- Findings from a phase 1 project to trace water in the catchment area was presented by Dr. Les Brown and the unique character of the drainage of Pollnagossan was highlighted.
- June 2021 clean-up event saw 20 attendees over two days, and an 11m³ Skip was filled with waste from the cave.
- A water permeable barrier was installed to reduce the risk of remaining rubbish being washed into the cave itself which presents a more challenging clean-up prospect than the open shakehole.
- March 2022 saw 6 attendees over one day, 5m³ of waste was removed from the site.
- Skips for clean-up events were kindly provided by Cavan County Council.
- Volunteers were also trained in the use of "AudioMoth" monitors by SoundArk Studios as a collaboration with their soundscape project.
- Procurement of a range of personal protection equipment and excavation materials.



Dumping is not currently an issue at the cave, but a very large amount was dumped in the cave during the late 70's and 80's. There have been numerous clean-ups since the early 90's when the cave had to be accessed through a dumped washing machine! Thanks to a titanic effort from the team, the original entrance of the cave is now accessible and the boulders in the shakehole have subsided by a foot. An increased number of cavers are now enjoying the cave. While plenty more rubbish remains to be cleared the SUI plan to continue working at the site, including arranging for water quality monitoring to take place.



2.2 Blackwater Projects

Armagh Fisheries, Lowry's Lake



Armagh Angling Club is one of the oldest angling clubs in Northern Ireland dating back to the 1920's. The group own and are responsible for several water bodies including Lowry's Lake, Tullna Wood and large stretches of the Blackwater River.

The Armagh Anglers applied for funding in the first phase of the CIS to carry out improvement works at Lowry's Lake in Armagh. The work entailed providing safe access around the lake for the local community and club members as well as purchasing a specialised piece of equipment called a Neptune Rake which has been used to help remove nonnative Nuttalls pond weed from the lake.

The club can now look forward to the care, development and advertising of Lowry's lake as a

community asset, which will allow people to value the waterway and improve awareness around water quality. User numbers have increased significantly and many more families, walkers, anglers and wildlife enthusiasts now frequent the area in order to partake of the new access provided by the project.

The group were so pleased with the results of the project that the Chairman of the group, Aidan Donnelly sent a very nice letter to the CatchmentCARE team, expressing his and the groups thanks at the completed works. Aidan pointed out the project has meant that the group can now safely progress with efforts to enhance and improve water quality which will have a very positive effect on the lake, angling and the local community. He also stated that the club can now look forward to the care, development and advertising of Lowry's lake as a community asset, which will allow people to value the waterway and improve awareness around water quality. The letter also highlighted the partnership approach taken by working with CatchmentCARE and mentioned the plans the group have to build on the work and look into the possibilities of applying for further funding using the experience they have gained on this project.



The project is an excellent example of what CatchmentCARE was about – making a difference on the ground to local communities and helping them to care for their water resources and catchments both now and in the future.



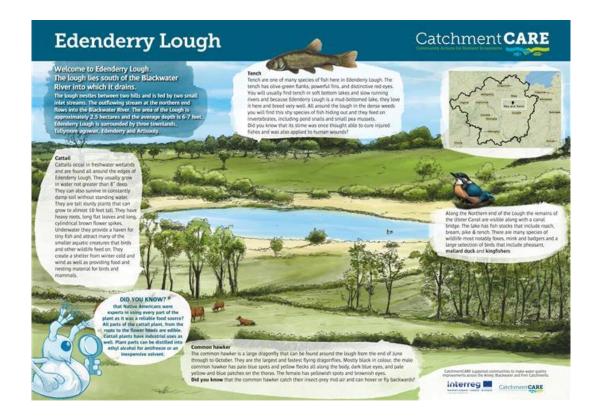
Edenderry Rod & Gun Club, Regeneration & Outreach Programme

Edenderry Rod & Gun Club are based outside of Armagh. Through the CIS, the Club proposed a series of projects for Edenderry Lough to help improve the amenity for use by the wider community and visitors. At the heart of these proposals was the improvement of water quality and the promotion of knowledge exchange with local community members and schools. The club were keen to promote the unique biodiversity and ecosystems of the Lough, whilst encouraging access and education through signage and interpretation.

Various elements were funded, these included:

- Vehicular access to the site and improved parking for visitors
- Fencing of the new access lane and car park to prevent livestock access to the site
- Provision of 2 new livestock drinkers for a local landowner
- Development of new information features in the form of an Interpretive Panel
- Development and running of a 6 week education programme in two local schools
- Provision of a range of scientific and education equipment
- Development and installation of a new on-site storage container for use by the group

Once again, the project was so successful that the Chairman of the group, Mr Michael Smith sent the Blackwater CatchmentCARE team a letter of thanks and praise for their efforts and help delivering the project. In the letter Mr Smith stated that the work had completely transformed access to the Lough and has turned it into a top-class angling facility and amenity area for the local community. He also wrote that the education side of the project has provided the Club with a huge opportunity to promote the Lough, its surrounding wildlife and angling to local schools, and that numbers of users including Junior members have risen to levels that the Club has not seen before and we hope to continue working with the local schools over the coming years using the equipment we received and the education programs to introduce the importance of water quality to the younger generations coming through.





Emyvale Tidy Towns, Emyvale Eco Trail



Emyvale Tidy Towns are a local community improvement group based in County Monaghan. The group have a keen interest in monitoring their water resources and improving the local environment. They applied for a CIS Phase 1 project to help develop and install an Eco-Trail along the banks of the Mountain Water River in the village of Emyvale.

The group were funded for the following elements:

- Creation of a 180m long trail including fencing
- Development of a new Panel
- Provision of a range of scientific equipment

The trail has improved accessibility and allowed local residents got involved in learning about environment assessments and scientific river monitoring. The equipment that was provided for the group has been used to monitor the status of the river.

CatchmentCARE signage was erected along the river trail and the group themselves have installed other features along the length of the trail including seating, sculptures and other features.

Enda Fields of Emyvale Tidy Towns sent CatchmentCARE a nice letter of thanks for their support and help with funding. Enda said that thanks to the project taking place, the public can sit, relax, listen to the sounds of the river and take in beautiful nature. It whole project and development of the trail has been a huge success, and thanks to CatchmentCARE the group have subsequently applied for a received additional funding from LEADER and Monaghan County Council to enhance and extend the original trail.





Friends of the River Callan - Education / Information Hub

The Friends of the Callan group were funded through Phase 1 of the CIS to develop a project entitled 'Callan Education Hub'. The project involved the development of an education / information hub to be sited on the banks of the Callan River to act as a resource centre for local young people, schools and the wider community to learn about the Callan River and its biodiversity. The following elements of the project were funded—

- Development, delivery and siting the education building
- Development of a 6-week river education programme for two local schools
- Development and installation of a new interpretative panel
- Procurement of a range of scientific equipment to help the group monitor water quality on the river and for use by local target audiences.

The CIS funded project has been a massive success not only for the groups and schools and local community involved but the river itself highlighting and educating the importance of water quality biodiversity and the environment.

The difference the project made was allowing access to the river Torrent which opened a whole new perspective on this little river that mundanely flowed through the village, which to a lot of people before the project had no importance. The river walk is used a lot by family's and different groups within the catchment area for wildlife awareness projects and youth badges the equipment was very well appreciated as this helped to identify the biodiversity that the river supported.

The CIS project was a success and the group have been working with young people and local families to educate them about the need to look after the Callan river.

The group have run a variety of events and activities such as engaging with local young people from local schools on community litter pick events along the banks of the river and carrying out tree planting activities.





Glaslough Tidy Towns / Castle Leslie - Glaslough Lake

This project was submitted by Glaslough Tidy Towns in partnership with the Castle Leslie Estate. The proposal was to run a small educational programme with local schools, develop interpretive information panels to be placed on-site and run a series of community engagement events in the form of a Bioblitz event and two annual community focus days to help connect the local community to the lake and its importance as a habitat and water resource.

Bioblitz event

To help build up a picture of the flora and fauna that lives in and around the lake, a Bioblitz was developed and delivered by local environmental facilitator Karl Hamilton. The event was a great success and Karl developed a species list of flora and fauna found in and around the lake.

Educational programme and resources

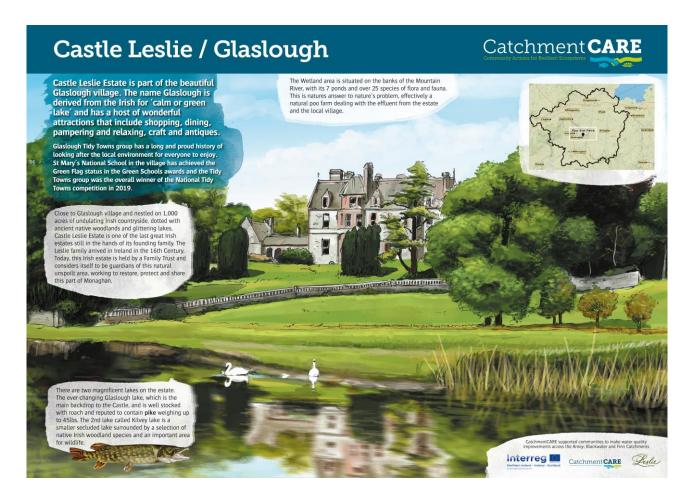
A small education programme was planned to be run in local schools. With the outbreak of the Covid pandemic however this had been postponed. Instead, the local schools received copies of the online education programme 'The River' developed by CatchmentCARE education staff in 2020 and 2021.

Interpretation Panels

Interpretive signage was also developed and erected on-site at the Castle Leslie Estate to help promote important messages to people using the lake. The panels will contain general information on the water body itself, the local wildlife, information on water quality and freshwater as a resource. Four panels were installed, two in English and two in Gaelic.

Equipment

The group were also supplied with a range of scientific and monitoring equipment such as nets, trays, ID charts, microscopes etc. in order to help the groups carry on their community and schools' engagement programmes post CatchmentCARE CIS funding.





National Trust, Argory Mosses Restoration (AMoR)

The project funded for the National Trust aimed to restore an area of degraded peat bog called 'The High Mosses' to an active and functioning raised bog in favourable priority habitat condition by raising the water table, blocking drains, and controlling invasive trees and scrub. The National Trust, as part of the project had plans to develop and promote opportunities for volunteers and local community groups to take part in appropriate activities as well as providing opportunities for guided walks/visits to the Argory Mosses and wider Argory estate, which borders the Blackwater River. The projects main funded elements included:

Drain Blocking

The primary objective of the restoration plan was to raise water levels within the bog and encourage the growth of Sphagnum moss. Drains on the bog were identified and approx. 80 of these were blocked. This has had the resultant effect of raising the water level in the bog helping to restore it to an active functioning bog.

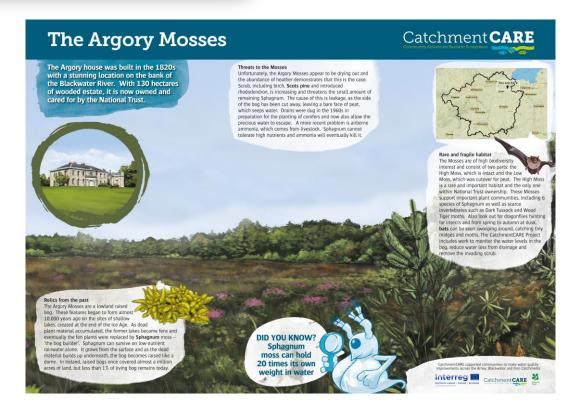
Scrub control

Birch, Scots pine and heather were encroaching across the surface of the bog in addition to non-native rhododendron. The National Trust had historically made some efforts to reverse the drying out of the bog by removing scrub. The funded CatchmentCARE project completed this process, and all of the scrub was removed by hand method and mechanical means.



Establish and implement a raised bog condition monitoring programme.

As part of the bog restoration work, the National Trust have now forged a working partnership with Armagh City, Banbridge & Craigavon Borough Council to develop a monitoring programme to assess habitat condition and status of notable and priority species. Ecological monitoring is taking place periodically and this has provided a range of opportunities to National Trust volunteers and the local community.





RBCT (Access Project), Ulster Blackwater Northern Bank Restoration



The River Blackwater Catchment Trust (RBCT) was formed early 2013 to address concerns about water quality and preservation of our wildlife around the banks of the Blackwater River. The Trust aims to conserve, protect, rehabilitate and improve the rivers, streams, watercourses and impoundments of the Blackwater catchment – comprising all of the waterways of the River Blackwater basin, including Lough Neagh.

The Trust applied for funding from the Community Incentive Scheme for a project entitled: 'Ulster Blackwater Northern Bank Restoration'.

The aims of the project were to -

- Erect fencing between the Ulster Blackwater Northern banks and the river
- Prune the overgrown vegetation along 2.2km of the river
- Plant native species along the banks to improve stability and biodiversity
- · Install stiles for safe angling access to river

The project was delivered in spring of 2021 and was a great success. The works on the river have helped improve bank stabilisation and the tree planting and re-emergence of native vegetation has created new habitats for a range of native species.

Due to this project being funded and completed, CatchmentCARE was able to come in behind and fund another 2.2km of river works both up and downstream of the Northern Bank project. "Ballygawley Phase 2" as this was named, continued the work begun and included a range of revetment work such as log wall revetment. Eight cattle drinkers were also installed helping to prevent cattle access to the main channel, fencing was also installed and tree planting initiated.





South Tyrone Farmers Group – Farming for Water Quality

South Tyrone Farmers Group (STFG) are a constituted group that initially organised lamb marketing for members and then facilitated an on-farm investment programme to increase environmental standards funded through the PEACE III programme. Prior to CIS funding, the group already played an active role in the conservation of the small tributary rivers of the River Blackwater.

The STFG applied for funding from Phase 1 of the CIS to establish a water quality and farmer engagement project based around the Mountain Water and Fury Rivers. The group successfully received funding for the following elements —

Farm Engagement & recruitment

40 farmers from the Furey and Mountain Water catchments were recruited and were involved in the project.

Control of Juncus effusus (soft rush)

The farmers recruited participated in a project to effectively control soft rush without using MCPA based herbicide. Weed wiping was the method of targeted application.



Best Practice Visits

A number of farm walks and best practice visits to explore how farmers working together can take an active role in improving water quality was organised.

Legacy Plan

A follow up survey and legacy plan with participating farmers to evaluate the project and secure their commitment for a farm action plan was carried out. This included:

- Control of soft rush without overall spraying with MCPA
- Reduce nutrient run-off from slurry and fertiliser
- Control invasive species along the banks of rivers and streams
- Fencing and cattle drinkers to reduce siltation.
- Soil analysis and advice where appropriate

This project was one of the most successful of the entire CIS programme and led onto a CIS Phase 2 application and project from the same group. It has also contributed to a lasting legacy within the catchment as further funding from LEADER has been secured to carry on this work with a more diverse and larger group of famers and the local Group Water Scheme.



Torrent River Enhancement Association – Torrent River Watch

The Torrent River Enhancement Association was established over 15 years ago to deliver a major river enhancement project funded by the International Fund for Ireland (IFI). This IFI project on the River Torrent included fencing and a variety of in-stream works that have improved fish habitat on the river. The group applied for funding through CatchmentCARE's CIS to run a further river project engage with the next generations of young people and encourage them to care for their local river. The elements of the project funded were:

A Torrent River Trail

A new river trail was developed to link an existing wildlife community garden with a historical aqueduct (part of the original Coalisland or Ducarts Canal). The trail linked key points along the river and allowed users to appreciate the local river safely.

Interpretation Panel

A new interpretation panel was installed in the Newmills Community Garden which highlights and informs the local community about this wildlife corridor and valuable ecosystems along the river.

Education Programme

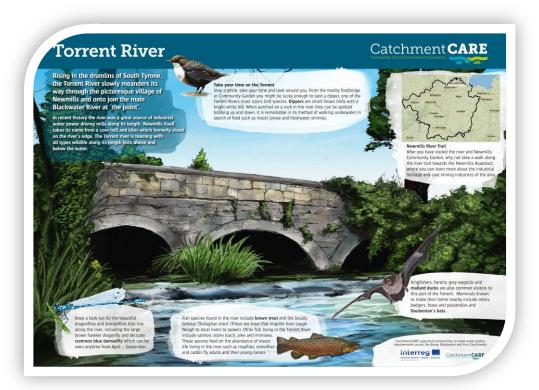
A new engaging 6-week education programme was developed and run with the local Newmills Primary School to help connect young people back to the river and its wildlife.

Bioblitz

A bioblitz is a biological surveying method in an attempt to record all the living species within a designated area. Groups of scientists, naturalists and volunteers conduct an intensive field study over a continuous time period. Local environmental expert Karl Hamilton ran a very successful Bioblitz in Newmills which attracted 30 local people.

Equipment

The group was also provided with a range of scientific and education equipment to help develop a range of citizen science engagement projects in the future, providing a strong legacy element to this project.





Callan River Wildlife Group - Callan River Wildlife Action Plan

The Callan River Wildlife Group applied for funding in Phase 1 of the CIS to run an 'Action Plan' project. This included a complete mapping exercise of the Callan River from its source in Tullynawood Lake to its confluence with the Blackwater River. The objective of the mapping exercise was to engage in a detailed survey of the physical attributes of the river with a view to increasing public accessibility to the river by locating and identifying access points in conjunction with riparian owners along the full length of the river. The action plan would intend to produce a full-length map of the river.



The project started with the running of a successful bioblitz event at Milford Cuttings. Facilitator Karl Hamilton trained group members and local community volunteers on wildlife spotting and recording.

The group were also supplied with a range of specialised equipment, including thermal imaging camera, bat detectors, moth and invertebrate sampling kits, water testing kits and GPS equipment.

Through the project, the group was able to carry out a comprehensive wildlife survey of the local rivers using volunteers and community members, which has helped to provide an accurate overview of the wildlife populations along the Callan River corridor. It has also led onto the group developing a range of wildlife habitat enhancement schemes, including the building and siting of bird boxes, bat boxes and owl boxes along the length of the river.

The group have also worked in partnership with CatchmentCARE Blackwater Riparian Officer, Tom Woods to complete an extensive river habitat scheme on the Callan which included revetment, fencing, tree planting and cattle drinkers.





2.3 Finn Projects

Finn Anti-Pollution Project (Finn APP)

The Finn Anti-Pollution Project is a local community group from the Glenmore/ Welchtown whose project aims to monitor the health of their local rivers within the Finn catchment area using appropriate monitoring equipment. Through the CatchmentCARE Community Incentive Scheme, the group were funded for their project entitled 'Finn APP'. The project involved the purchasing and delivery of a range of scientific equipment for use by the group.

The Finn Anti-Pollution Project group used the Hach HQ40D Multimeter to record parameters such as Conductivity, pH, Dissolved Oxygen and Temperature. Simple nitrogen and phosphorus test kits were also issued which are easy to use. When carried out, the tests give results in 3 to 5 minutes, using a reference colour guide to determine the concentration of the target analyse in the water sample. The group were trained in using the Hach HQ40D multimeter prior to equipment procurement to ensure familiarity with the device and to determine their capabilities with this equipment. For the duration of the project it has been agreed that Loughs Agency will conduct the re-calibration of the multimeters at monthly intervals. Loughs Agency have also designed the data recording format and will conduct regular checks on data recorded to detect anomalies or potential errors.

The Data collected on Survey123 has been uploaded to a dashboard which can be viewed by the group and also CatchmentCARE staff.

The FinnAPP group have also been supplied with the appropriate PPE such as life jackets, wellies, waders, disposable gloves and antiseptic wipes. In addition to appropriate PPE, Risk Assessments have been supplied with which the CIS Group must comply with, these include Driving, Environmental Sampling and Biological Sampling.





BASICC - The Finn through the Lens

The Finn Through a Lens Project is a local community group from the Ballybofey/Stranorlar area whose project aims to connect the local community to the River Finn. Through the CatchmentCARE Community Incentive Scheme, the group were funded for their project 'Finn through a Lens'. The project involved the delivering of workshops to local schools within the Finn Catchment with over 1100 participants joining from all over the Catchment to create a piece of art or literature based on the River Finn, the pieces were then showcased in a two day Art Exhibition in the Finn Suite at Jacksons Hotel, Ballybofey, Co. Donegal. The initial Art Exhibition had sparked more interest with the local school children as not only the art department had taken on the River Finn approach but the topic had spread into the rest of the school curriculum also and was discussed in subject such as Geography, History, English and Science.



A photographic exhibition was showcased in April 2022 which displayed the work done by photographer Emer O'Shea's work of the Finn Through a Lens which looks at various aspects of the River Finn throughout the seasons, this exhibition was a two day event within The BASE, Ballybofey, Co. Donegal. Another aspect of the exhibition was the launch of the Finn Through a Lens photographic booklet using the photos from the event and some information about the Finn Catchment from history to its geography.

Coiste Slí Taobh an Mhuilinn - Finntown Walking Trail

Local Finntown community group, Coiste Slí Taobh an Mhuilinn applied for funding to develop a new pathway around Lough Finn. This proposal aimed to create a safe 2km walking area for all abilities away from main roads hugging the shoreline of the Lough.

The pathway was also to make its way through the forest to Finn River banks. Beautiful Lough Finn is situated in West Donegal approximately 25km West of Ballybofey and is the source of the River Finn. The lough is approx. 4km long and ½ km wide and nestles at the base of the blue stack mountain range, lying under the Aghla and the Screig mountains. The lough and the neighbouring village of Fintown take their name from Finngeal, who drowned in the lake attempting to save her wounded brother Feargamhain, back in the far-off days when Fionn MacCumhaill and his Fianna roamed these parts



Lough Finn and its local area is home to a rich variety of wildlife both above and below the water, including many fish, insect, bird and mammal species. Bird species Snipe, Coot, Waterhen and Curlew. In the Spring Cuckoos, Sedge Warblers and Willow Warblers can all be heard, having arrived back from their annual migration journey to Africa. Mammals such as Otters, Badgers, Foxes, Pinemartins and majestic Red Deer all live in the area.

The trail is still in the process at the time of writing this document. The design of the trail has been completed and planning permissions has been prepared with the group.



2.4 Conclusion and Learnings from Phase 1

The CIS Phase 1 scheme was very well received across the 3 Catchments and we found a huge demand for the funding. Projects were developed and delivered throughout the rest of 2019 and into 2020.

ABC Council Officers controlled the budgets and procurement for the Blackwater projects, whilst the Arney and Finn projects were overseen by the relevant Catchment Officers, with Donegal County Council were responsible for procurement of project elements.

Phase 1 figures and outputs were correlated as are as follows:

Phase 1 Figures

Item	No.
Trail / Path / Access	8
Interpretive Panels	22
Equipment	12 projects supplied with a range of
	equipment
Storage Container / Hub	3
Events / Bio blitzes etc.	20
Literature	6 pieces of literature produced (maps / leaflets / guides / pamphlets / videos etc.)
Education Programmes / Numbers etc.	7 schools visited or engaged with through CIS programme
Numbers Involved – Group	331
Numbers Involved / Engaged – Community	9,555 local community members involved



3. Introduction to Phase 2 CIS Scheme

Following on from the successful delivery of Phase 1 of the CIS programme, it was decided in mid-2020 to run another round of the CIS later in the year. Phase 1 projects were still being delivered at this stage, however demand for extra projects from local groups warranted the need to roll out a Phase 2.

With this in mind, Phase 2 was opened up to groups in early September 2020, with a closing date of 2nd October 2020. With Covid restrictions and lockdowns still in place, it was not possible to run any physical launch events at venues across the Catchments as was carried out in Phase 1. The scheme was therefore advertised in local media (newspapers) and by using the CatchmentCARE's mailing list to inform groups that the scheme was open for applications. As with Phase 1, the demand was high and many groups contacted the Catchment Officers with ideas for potential projects and advice on how to proceed and develop these into a fundable and practical project.

Project Officers were very busy this time, visiting groups to help build up these projects and dispensing advice and support on the scheme and application process.

After the application stage had closed, the projects were assessed and scored by CatchmentCARE officers, resulting in a further 20 projects in total across the three catchments being funded, (7 in the Arney, and 12 in the Blackwater, 1 in the Finn).

These were:

Arney Catchment

- Belcoo Mens Shed Belcoo View: Community Clean Up
- Cleenish Community Association Arney Aquatic Acoustics (3A)
- Cuilcagh to Cleenish Arney Stepping Out to improve water quality
- Gowlan Group Water CoOperative Pilot Rainwater Harvesting Project
- Kiltyclogher Heritage Centre Crayfish habitat enhancement
- Portora Boat Club Rowing in harmony for water quality
- Speleological Union of Ireland (SUI) Arney Karst Clean-up

Blackwater Catchment

- Armagh Fisheries, Improving water quality Seagahan reservoir
- Blackwater Community Barge, Love the Blackwater
- Castlecaulfield Horticultural Society, The Little Ripples / Bamboos Project
- Edenderry Rod & Gun Club, Accessibility and Water Quality Improvement
- Edenderry Rod & Gun Club, Education and outreach programme
- Emyvale Tidy Towns, Improving Water Quality & Biodiversity
- Eskra Community Association, Knockmany Showcase
- Knockconan NS The Little Ripples Monaghan
- Monaghan Tidy Towns, Monaghan Riverwatch
- RBCT Water Quality Measurement Equipment
- RBCT Domestic Wastewater Treatment System
- South Tyrone Farmers Group, Farming for Water Quality Phase 2

Once again, as in Phase 1. An eclectic mix of projects were supported and delivered, including practical water-quality improvement projects, education and awareness campaigns, access to works, volunteer training, specialised equipment, community river trails, bio-blitzes, citizen science projects and interpretation and signage.

The following pages are a detailed overview of each of the separate projects in Phase 2 of the CIS.



3.1 Arney Projects

Belcoo Mens Shed - Belcoo View: Community Clean Up

Lakeland Community Care Limited is a registered charity and company limited by guarantee, led by a voluntary board of directors. Established in 1994, our core work includes provision of care services throughout Fermanagh & Omagh District, with a focus is on providing opportunities for people to live long and healthy more active lives, such as:

- Day Care social engagement, activities and care provided by our five-day care centres, located across rural Co Fermanagh.
- Domiciliary Care help with personal care and household tasks.
- Flexicare low level care service to help with day to day needs and maintain people's independence in their own homes
- Belcoo Healthy Living Centre delivery of Social Engagement Projects including Men's Shed, Active Age Friday Fun Club for Seniors, Women as One Group, Parent & Toddler Club, Fitness & Exercise Classes.

The Belcoo Men's Shed is one of its most productive projects, with members, growing their own fresh fruit and vegetables as well as crafting wooden desirables such as the award-winning Bog Barrow seat, fit for a Prince.

Through the CIS scheme the *Belcoo View* project secured funding to enhance the amenity area at the Belcoo viewing point—a layby with lakeshore parking and picnic area. The layby had become neglected and was being used to dump rubbish. The vegetation was so overgrown that the view of Lower Lough MacNean was completely obscured.

- Commissioned tree works to restore the view of the lough and surrounding geopark features.
- Litter picked to remove dumped and washed-up material.
- Entered into a unique co-operative stewardship agreement between the landowner, the community groups and the Cuilcagh Lakelands UNESCO Global Geopark/FODC to indemnify and maintain the area.
- Protected a small woodland enclave for the conservation of native species and biodiversity.
- Erected wildlife cameras.
- Installed an information panel on Belcoo's Wild Side
- Produced a video Belcoo Voices discussing the affects loss of habitat has had on wildlife.
- Bought a universally accessible picnic table and 3-seater backed bench.
- Bought equipment for educational field studies and biodiversity blitzes.
- Built bird and bat boxes.

Since the enhancement works began visitors to the layby have noticeably increased. Many stopping for a picnic on their travels west say it's the first time they realised there was a lake there and commented on the natural beauty of the area. The *Belcoo Voices* video has approximately 3,000 views to date and featured in a Your Place and Mine Ulster Radio interview.





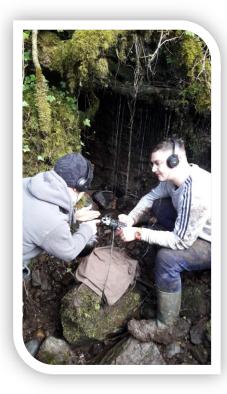
Cleenish Community Association - Arney Aquatic Acoustics (3A)

The Cuilcagh to Cleenish: A Great Place (C2C) landscape heritage project also developed an award-winning heritage Memory Map featuring local accounts and recordings of built, natural and cultural landscape.

As an extension to this, the Cleenish Community Association secured funding through CCARE's CIS scheme to commission a sound archivist to highlight the importance of our natural heritage and water quality. This *Arney Aquatic Acoustics* project produced a suite of recordings and short films of water and land-based wildlife species throughout the Arney Catchment area over a twelve-month period. The seasonal variability of the annual Arney wildlife cycle is captured in high-quality audio and cinematic feature pieces. This pilot survey technique demonstrates the valuable data that can be collected on wildlife behaviour and habitats in a non-intrusive way. It is particularly useful for migratory, nocturnal and elusive species difficult to document through traditional methods.

- Over 40 species documented
- 10 under-water recordings using hydrophones
- Field recordings edited and mastered in the studio
- Volunteer training in sound editing
- Volunteer training in field recording and passive acoustic monitoring devices (AudioMoths).
- Consolidated a network of local wildlife experts and enthusiasts.
- Final report produced
- Public facing storyboard developed with Donegal County Council

The AAA project has channelled a network of locals interested in nature, its conservation, and telling stories about the



area we live in. It has connected people across the counties of Cavan, Leitrim and Fermanagh, under the guise of nature.





The AAA project has proven that sound is a powerful survey medium. More often than not species can be heard before they are seen; sound recordings provide a wider set of data on species biodiversity than a photograph or film. The night flight call from an Eurasian Whimbrel, for example, was captured by AudioMoth during its migration route over Co. Cavan.

Acoustic monitoring of water bodies has proven challenging but if this project has shown one thing is that there are plenty of opportunities for further work in the field of underwater acoustics. This work can be viewed via the C2C memory map.



Cuilcagh to Cleenish - Arney Stepping Out – to improve water quality

Cuilcagh to Cleenish: A Great Place was a three-year landscape heritage project supported by the National Lottery Heritage Fund and Fermanagh and Omagh District Council. It was delivered in partnership by Outdoor Recreation Northern Ireland (ORNI lead partner), Cleenish Community Association, Killesher Community Development Association and Fermanagh and Omagh District Council through the resources of the Marble Arch Caves UNESCO Global Geopark. The Cuilcagh to Cleenish (C2C) area extended from the top of Cuilcagh mountain to Cleenish Island on Upper Lough Erne, and included the villages and hamlets of Bellanaleck, Arney and Florencecourt. The aims of C2C were to enhance community development by raising awareness and appreciation of the area's built, cultural, archaeological and natural heritage, and develop a suite of community trails to link local people to heritage sites in the landscape.

Arney River Canoe Trip Testimonial

"I was born and reared within 100 yards of Arney Bridge on the Old Coach Road, so the Arney River was a familiar part of my life since birth. As a child in the early 1960's I crossed it daily going to school in Mullinaveighy PS; as a young lad, I fished it and, as an adult, I video'd it to send to distant relatives in New South Wales, Australia, showing them something of where they came from.

The one experience of the river that had eluded me was to navigate its waters - that is, until May 11th, 2019. On that day a boyhood wonderment was finally realised, thanks to the Cuilcagh to Cleenish - A Great Place project - and of course, Erne Paddlers. The canoe trip from Arney Bridge to the Erne was like becoming a tourist in my own landscape and seeing it in a whole new light. It only took 61 and-a-bit years - but well worth the wait!"

response to the canoe steps has been positive and there is great enthusiasm to see the remaining trail completed.

A key objective was to connect local people to the Arney River which flows through our lowland landscape. It was once a historical transport corridor between Upper and Lower Lough MacNean and Upper Lough Erne, with the Glenfarne river known locally as the Upper Arney.

The Arney river was used from the 18th Century to World War Two to cot traditional handmade bricks to Enniskillen for building purposes. Manufactured by local farmers from Arney clay, the fields close to the river were once peppered with brick holes from which the clay was extracted, and kilns fired. The river was also once famous for its wildlife and fishing, including salmon and trout.

To develop greater local interest in the river and its natural and industrial heritage, C2C provided a series of canoe trips down the river. These were well received by young and old alike and generated a great deal of enthusiasm for greater public access to the waterway.

Through essential pump priming funds from Catchment Cares Community Incentive Scheme Arney Stepping Out - to improve water quality, the first set of canoe steps was constructed at Old Arney bridge in 2022. This initial instalment is as part of a wider plan to develop a 27-milelong cross border canoe trail to connect Leitrim, Cavan and Fermanagh through the waters of Upper and Lower MacNean, Arney River and Lough Erne. Community





Gowlan Group Water CoOperative - Pilot Rainwater Harvesting Project

The Gowlan Group Water Co-Op (GGWC) was established in 1979 to supply clean drinking water from spring and lake source to 220 member houses. It also provides water for 200 homes and businesses in Blacklion, Co. Cavan. This scheme is a member of the Federation of Group Water Scheme (FGWS). Through the LEADAR programme it erected source protection fencing around Lough Garvagh with access gates and stiles for landowners and anglers. The Co-Op is dedicated to protecting water quality and prioritising treated water for domestic use. It currently operates at maximum capacity.

To help alleviate pressure on the scheme, the group secured funding from CCARE Community Incentive Scheme (CIS) to install three pilot demonstration rainwater harvesting systems on two local farms. This *Pilot Rainwater Harvesting Project* included:

- Installation of 10,000 Ltr rainwater harvesting system providing water to an adjacent cattle shed and four field troughs.
- Installation of a 5,000 Ltr rainwater harvesting system for a duck processing facility.
- Installation of a 9,000 Ltr bespoke sub-terranean concrete rainwater harvesting system providing water for the header tank in the low-lying duck sheds.
- Hosting a demonstration day for local farmers, residents and group water scheme members explaining the rainwater harvesting systems and their multiple benefits.



All three systems have been shown to operate effectively. These systems can be adapted to function well in a variety of agricultural, domestic and business situations. The filter incorporated into the systems, with an independent outlet, ensures that the collected rainwater is clear of leaf litter and other contaminants. The rainwater is often of a high enough standard to meet that set for potable water for human consumption. Where necessary a pressure vessel is incorporated into the system to protect the pump from frequent switching which could lead to rapid wear.

An overflow pipe connects the two tanks on the duck farm so that excess water can be diverted to top up the larger tank when necessary. Throughout the summer drought this system did not run out of water. An overriding system where the mains water supply kicks in if there is insufficient rainwater at the cattle shed gives the farmer peace of mind. The significant saving in his water bill is also appreciated.



The farmers have experienced a significant reduction of their GGWC consumption, thus offering them considerable savings. This saving will continue to reward them over the lifetime of the systems, insulating them from potential water charge increases. The demand on the group water scheme has also been reduced. It is hoped that this pilot scheme will inspire others to install similar systems, further reducing the pressure on the GGWC. The demonstration farms welcome visitors to encourage rainwater harvesting as a sustainable solution to agricultural water needs.



Kiltyclogher Heritage Centre - Crayfish habitat enhancement

Building on their interest in water quality developed during the first CIS phase, the heritage officers from Kiltyclogher Heritage Centre were successful again in their application for funding for the second phase. This time their focus was on promoting biodiversity and protecting the habitats needed to support Leitrim's native species.

A special emphasis was placed on Irelands only indigenous crayfish. The white clawed crayfish (*Austropotamobius pallipes*) is protected and under threat across Europe. Evidence for a viable population of crayfish had been noted throughout the Lough MacNean system. Protection of this stronghold and an assessment of the crayfish community was central to the Crayfish Habitat Enhancement project which comprised:



- Training in crayfish handling and survey techniques
- Approval of seasonal licences to survey crayfish
- Design and installation of bi-lingual information panel raising awareness about crayfish
- Development of a biosecurity infographic promoting best practice amongst water users
- Partnership with Gortatole Education Centre and Cleenish Anglers
- Comprehensive survey of lakeshore and tributary habitats
- Submission of reports to authorities (NPWS & DAERA)
- Production of a bioblitz video for education purposes and local interest
- Community event demonstrating water quality assessment techniques
- Have a go day encouraging the public to use and appreciate their local water bodies
- Adopted by the LAWPRO Lake Buddies citizen science group to support on-going research



The group are committed to continuing to protect their crayfish population and successfully applied for a second licence to repeat the survey again in 2022. They are actively engaged with the local school and will continue to promote stewardship of the waterways and the species that depend on them amongst the next generation of budding conservationists.

The group are also challenging plans for a windfarm which threatens the stability of the upland bog. Damage to this sensitive habitat would have a detrimental affect across several high-value catchments, including Lough Melvin. Several contacts, made through their involvement with CatchmentCARE, have offered support for this cause.



Portora Boat Club - Rowing in harmony for water quality

The rowing community connected with Portora Boat Club believes we have a responsibility to apply environmentally sustainable practices in water use and management, and we welcomed the opportunity to actively contribute in partnership through the CatchmentCARE Community Incentive Scheme (CIS). The CIS funds approved for the *Rowing in Harmony for Water Quality* were used to procure:

- Two motor safety launch boats and trailers
- 12 life jackets
- Citizen science water quality analysis equipment
- Dissolved Oxygen Probe
- pH/EC/TDS Combo Tester
- A years membership of FreshWater Watch

Within our project we set out aims and objectives for our group members, including:

- Raising awareness of the importance of clean water
- Promoting and improving existing water environments
- Harnessing the rowing community to take action on the critical issue of clean fresh water.
- Supporting local conservation and clean-up activities.



In conjunction with Dr Stephen Prentice our local Ecologist / Palaeolimnologist, and FreshWater Watch, we designed, implemented and managed a practical, educational and conservational citizen science project that encouraged participation from our group members.

FreshWater Watch is a global project run by Earthwatch Europe, an environmental charity with science at its heart, in which individuals and communities monitor, protect and restore their local freshwater resources.

The CIS project allowed participants to gain knowledge and skills to look after and protect our local water environment. Several of our members also signed up for CIS training. This made them better informed to discuss problems and methods of mitigation with the wider community.



The project specifically analysed Nitrates and Soluble Reactive Phosphorus (SRP) as these contribute to eutrophication in freshwaters. The outputs monitored the chemical fingerprint at Upper Lough Macnean, making an important contribution to water quality management in the catchment.

Water sample collection and monitoring continues at 12 specific locations directly on the Lough using two motor launch boats. The CIS also provided testing equipment to help delivery the citizen science project.

Club members safely carried out rubbish removal from the water and clean up areas that are ordinarily inaccessible to traditional litter pick events. Portora Boat Club are also committed to supporting CIS groups with water safety and demonstrated this recently through the great support at the community have-a-go day which everyone enjoyed.

There has been over 40 people involved in the project to date. We believe that through the support of CatchmentCare, we have helped to facilitate sustainable water-based learning activities and reinforced a very positive image, leaving an ongoing legacy programme for years to come.



Speleological Union of Ireland (SUI) - Arney Karst Clean-up

The Speleological Union of Ireland (SUI) represents the interests of cavers and speleologists on the island of Ireland. SUI is recognised as the national governing body for caving by Sport Ireland and Sport Northern Ireland. SUI provides training, supports conservation and exploration, and sponsors overseas expeditions. It also helps to influence government policy on sport, access and the environment and maintains very strong links with the Irish Cave Rescue Organisation (ICRO).

SUI engaged with phase 2 of the Catchment CARE project *Arney Karst Clean-up* to remove dumped waste from a cave known as Pollnagossan. Pollnagossan is located beside the road between Blacklion, Co. Cavan and the Cavan Burren Park, part of the Marble Arch Caves UNESCO Global Geopark. Once beyond the polluted entrance it offers some fine wet crawling to a 25-metre pitch and extensive passage below. The project included:

- An online educational evening on the Arney karst landscape, particularly Pollnagossan was held for local caving groups and community volunteers.
- Findings from a phase 1 project to trace water in the catchment area was presented by Dr. Les Brown and the unique character of the drainage of Pollnagossan was highlighted.
- A clean-up event in June 2021 saw 20 attendees fill an 11m³ Skip with waste from the cave.
- A water permeable barrier was installed to reduce the risk of remaining rubbish being washed into the cave itself which presents a more challenging clean-up prospect than the open shake-hole.
- March 2022 saw 6 attendees over one day, 5m³ of waste was removed from the site.
- Skips for clean-up events were kindly provided by Cavan County Council.
- Volunteers were also trained in the use of "AudioMoth" monitors by SoundArk Studios
- Procurement of a range of personal protection equipment and excavation materials.





Dumping is not currently an issue at the cave, but a very large amount was dumped in the cave during the late 70's and 80's. There have been numerous clean-ups since the early 90's when the cave had to be accessed through a dumped washing machine!

Thanks to a titanic effort from the team, the original entrance of the cave is now accessible and the boulders in the shake-hole have subsided by a foot. An increased number of cavers are now enjoying the cave. While plenty more rubbish remains to be cleared the SUI plan to continue working at the site, including arranging for water quality monitoring to take place.



3.2 Blackwater Projects

Armagh Fisheries, Improving Water Quality - Seagahan Reservoir

Following on from a successful Phase 1 project at Lowry's Lough, Armagh Fisheries applied for another project in Phase 2 of the CIS scheme. Seagahan Reservoir was identified as a potential area for water quality improvements, having had problems with weeds and algae blooms. Armagh Fisheries identified that community engagement was the best means to resolve the issues. To facilitate this, they wanted to enhance accessibility for anglers, local community users, visitors and club volunteers, to help control weed growth and treat algae blooms in partnership with joint stakeholders.

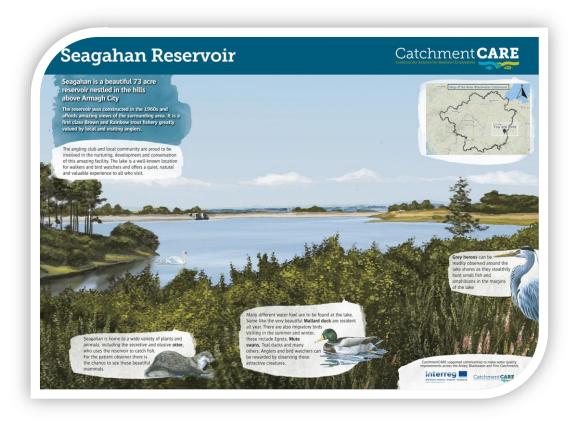
The funded project progressed well in 2020 and was a joint venture between Armagh Fisheries, Northern Ireland Water, Northern Ireland Forestry Service and the Department of Agriculture, Environment and Rural Affairs (NI).

Access was improved for people and maintenance vehicles by scrub clearing (1040m), and the creation of grass pathways around the lake. The new pathways enabled use of previously funded Neptune Rake to remove excessive weed growth.

An education programme was delivered to embed the work, delivered to local schools, community groups and anglers. Sampling equipment was provided (nets, trays, microscopes and reading material), which has enabled the group to facilitate regular sampling of the water quality and deliver a range of citizen science projects with local user groups.

Additionally, information panels were erected to reinforce the importance of the work. An on-going water quality monitoring scheme was also envisaged as a measurement of the effectiveness of the project.

Finally, the project sought to increase local people and groups to become partners, building on the existing increase in junior membership, to develop a legacy of active citizenship working towards water quality improvement and education.





Blackwater Community Barge - Love the Blackwater

The Blackwater Community Barge group was established to promote the lower Blackwater River from Blackwaterstown to Lough Neagh (being the only current navigable stretch of the whole river). The group own and run a purpose-built wide beam canal boat built to provide trips along the scenic river for a range of users.



The group were funded in Phase of the CIS for a project entitled 'Love the Blackwater'. This provided support for the group's increasing the level activity on the river as well as a range of volunteer training, in order to enable new guides to undertake boat tours, and to describe and highlight to visitors the problems along the stretch of river.

30 A3 maps with annotations were printed for use on the boats, providing information on the river habitats. Four conservation action days here also arranged and delivered to promote the groups work along the river and highlight the unique wildlife and history of the Blackwater.

A new specialised water craft (Whally Boat) was provided in order for the group to carry out water litter picks and river clean ups and specialised equipment in the form of a HACH meter was funded for use by volunteers to gather data on water quality.

The project enabled the group to:

- Recruit 5 new crew members
- Train 15 skippers and crew on Basic first aid, Powerboat level 2, safety on the river and the history of the Blackwater
- Created x9 two minute videos of the main points of interest along the river. The videos are being used to promote the river and also enrich passenger experiences.
- Build relationships with Lough Neagh Rescue, BEAM Creative Network, The National Trust, Clonmore Historical Society and other community organisations that operate further on the Blackwater Catchment.

Thanks to the project, the group have exceeded passenger targets for 2021 and 2022. During the last season the group brought 320 passengers on the river. From April to mid-May 2022 the group have already taken over 170 passengers and are on target to increase passengers on last year.





Castlecaulfield Horticultural Society - The Little Ripples / Bamboos Project

The Castlecaulfield Horticultural Society are well known for the hosting of a popular annual horticultural show, running of a local walled garden, and their lively street planting. They also run a variety of environmental projects and have a very active eco buddie youth group, the members of which undertake projects for the village throughout the year. Through the CatchmentCARE Community Incentive Scheme, the group were funded for their project entitled *'The Little Ripples / Bamboos Project'*. The project involved the development of a site on the River Torrent in the village and included the following elements —

- Improved access to the river through steps and new pathing
- Development of a 6-week river education programme for two local schools
- Development and installation of a new interpretative panel
- Two Community Bioblitz days
- Procurement of a range of scientific equipment to help the group monitor water quality on the river

The CIS funded project has been a massive success not only for the groups and schools and local community involved but the river itself highlighting and educating the importance of water quality biodiversity and the environment.



The difference the project made was allowing access to the river Torrent which opened whole new perspective on this little river mundanely through the village, which to a lot of people before the project had no importance. The river walk is used a lot by family's and different groups within the catchment area for wildlife awareness projects youth badges equipment was very well appreciated as this helped to identify the biodiversity that the river supported.

The CIS project was unique as it funded not only the works to access the river, but provided training and equipment to help with the admin and delivery of the work. This approach has secured the longevity of the project.

There has been a total of 228 people involved through groups and individuals that have taken part in the project to date. The project is still ongoing and forms part of the ECO Buddie youth group river and biodiversity awareness programme which includes taking water samples.

We have received a lot of excellent feedback regarding the river, most people were not aware how important the water quality of the river was and the life it supports.

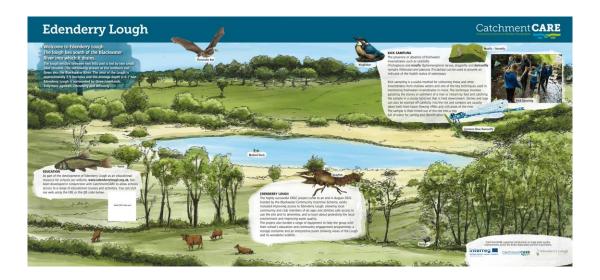


Edenderry Rod & Gun Club - Accessibility and Water Quality Improvement

Following on from the successful Phase 1 project, the Edenderry Rod and Gun Club applied for a Phase 2 scheme to develop the educational and recreational usage of Edenderry Lough whilst assisting the improvement of water quality and maintaining this area for future generations. The project had the intention of contributing to the development of this sustainable resource for future users whilst positively contributing to the local community and economy.

The project was funded for a variety of elements including -

- 1. Creation of a walkway which allowed a safe and accessible route to the water's edge, allowing the group to effectively monitor water quality of the Lough and providing opportunities for club members to survey the on-site wildlife and biodiversity.
- 2. Procuring of scientific equipment in order for the group to establish a baseline of readings of the water runoff from this land and monitor this through structured educational programmes with schools and local community groups over a 3 year period.
- 3. The carrying out of consultation events with landowners and farmers on steps to improve water quality. This was also an opportunity to engage with local stakeholders on future projects that the club are in the process of implementing.
- 4. To commission and install a large mural approx. 3mx2m which shows the wildlife of the Lough surrounding wetlands. This was installed on the side of a large storage container which had been funded and erected onsite during a CIS Phase 1 project.
- 5. A range of maintenance equipment was also supplied including a Lawnmower, Multi-functional strimmer with brush cutter, Knapsack sprayer, Wheelbarrows and forks and spades. This has allowed club members to effectively maintain and enhance the Lough and surrounding paths / access areas.
- 6. Tree and hedge planting was carried out at strategic areas around the Lough to buffer agricultural nutrient run-off from adjacent farmland. A variety of species was planted including Hawthorn, Oak, Sycamore, Beech, Birch and Alder.





Edenderry Rod & Gun Club - Education and Outreach Programme

At the time that Edenderry Rod and Gun Club applied for their two Phase 2 projects from the Community Incentive Scheme, Covid 19 restrictions were in force.

CatchmentCARE Officers had already developed and delivered a successful online Education Programme to local schools called 'The River'. With that on mind, the Edenderry club wanted to help reinforce this education work in its own area of influence by developing an online education platform specific to Edenderry Lough. The aim was to help develop this amenity to appeal to greater usage by the wider community and encourage new visitors to the Lough including local schools and youth groups.



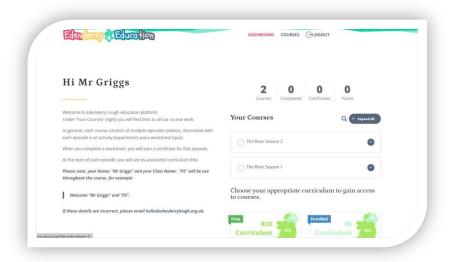
At the heart of this project was the improvement of water quality and the promotion of knowledge exchange with the local community and schools with a strong emphasis placed on the education of younger generations to promote learning and understanding of our local river systems and water bodies.

Website development

The main area of the project that was funded through the CIS scheme was the development of a user-friendly school facing educational website and curriculum based modules. This 'platform' contains an online course that local and wider schools can use to learn about water resources, biodiversity, pollution and other water related issues. It also contains a large citizen science-based element, encouraging classes to get out and record and monitor their local water body and feedback results to the platform.

The site contains a variety of worksheets, downloadable resources and activity pages combined with teacher notes and curriculum links. The resources connect to both the Northern Ireland and Irish curriculums and cover areas such as Numeracy, Literacy, ICT, Technology and Design and Art. The site is being used by schools now that lockdown restrictions are over and the site has enabled the club to forge links with new schools and groups, encouraging them to become involved with the conservation of Edenderry Lough.

The group are now intending to grow the platform and its reach even further to include individuals and groups from across the Catchment area of the Blackwater River system.





Emyvale Tidy Towns, Improving Water Quality & Biodiversity

Emyvale Tidy Towns are another local Blackwater group that has successfully applied for and received project funding in Phase 1 of the CIS for their project entitled 'Emyvale Eco-Trail'.

The group's Phase 2 project saw them apply for a follow-on project which would help strengthen the use of the Eco-Trail for a variety of local target audiences. The main elements funded in the Phase 2 project 'Improving Water Quality & Biodiversity' included:

 The provision of a range of specialised scientific equipment such as Ph meters, Nitrate and Phosphate testing kits, Microscopes, Water testing kits, Secchi disks, HACH Meters, Flow



meters , turbidity tables, Pond trays , Kick sampling nets , Wildlife cameras , Life jackets and Waders. This has helped to significantly grow the group's strong citizen science ethos with many community- focused events taking place on the river.

- The group were also provided with some computer and I.T equipment (Laptop, Screen and Projector) to aid them in delivering community and educational presentations to local groups and schools.
- Three new interpretive panels were also designed and erected to help inform visitors to Emy Lough and Emyvale village about the history, wildlife and water quality issues in the area.
- Karl Hamilton from Mantella Education, in conjunction with Emyvale Tidy Towns Committee also hosted a successful wildlife Bioblitz for the local community around Emy Lough.





Eskra Community Association - Knockmany Showcase

In recent years, three local groups have been working with Mid Ulster Council to use and promote the nearby Knockmany Forest Park as a 'Community Hub for Healthy & Active Lifestyles'. Eskra Community Association in partnership with Knockmany Runners and Clogher Valley Wheelers, spearheaded the action. In Phase 2 of the CIS scheme, the group wished to continue this progress further by developing the hub as a facility to encourage club members and those from the local community to become more engaged with the natural world and promote the beautiful Blackwater Valley.

The CIS funded project entitled 'Knockmany Showcase' included a variety of engaging and innovative actions to help achieve these aims, including:

- The development of a range of training courses such as a 'Small Streams Assessment Module' to help the local community build awareness and learn skills required to assess the health of the local river, whilst understanding the water quality issues that the river faces.
- A Bioblitz event was also funded and organised so that local families could be educated on the range of wildlife that inhabits the terrestrial and aquatic habitats in the area.
- Following on from the Bioblitz event, the group wished to carry out some practical conservation projects to help local species. They developed red squirrel and bird feeders and took part in the RSPB's Garden Bird Count.
- 4. The group have also been planting of native trees, shrubs, hedgerows and pollinator friendly plants as well as attempting to deal with the numerous non-native invasive species on-site



5. An interpretive panel was also installed on-site to educate visitors to the forest. The panel includes information on the Knockmany Neolithic Cairn as well as the wildlife found in and around the forest such as Red Squirrels, Pine Martens and Salmon.



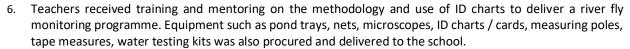


Knockconan National School - The Little Ripples Monaghan

Knockconan National School based just outside Emyvale in Co. Monaghan is a small school that has a strong environmental ethos having achieved the Green Flag for its Eco work on no less than 5 separate occasions. The school applied for a Phase 2 project in which it was funded for a programme of events and activities that would connect the pupils from the school to their local rivers and wildlife whilst allowing them opportunities to explore and protect the world around them.

The funded programme included:

- A biodiversity survey of the school grounds and surrounding area with recommendations on possible improvements and actions to take place was carried out
- 2. Facilitation of classroom based activities including 'Fish in the classroom'
- 3. A visit to Oxford Island National Nature Reserve to learn about water quality issues affecting Lough Neagh
- 4. An interpretive panel was developed in English and Irish and placed at the front of the school to help educate pupils, parents and visitors about the role of local rivers
- 5. The development of a wildlife pond in the school grounds which has complemented
 - the children's learning about aquatic environments through curriculum based activities



- 7. The school also organised two environmental activity days at the Blackwater Learning Centre to engage the local community. These demonstrated the importance of the looking after the river system and improving water quality, while encouraging local people to connect to the history, heritage, wildlife and environment of the River Blackwater
- 8. A citizen science based module where children recorded their activities in logs and through photography and video participated in an online blog of their activities. The children became ambassadors themselves, and produced a newsletter to spread their learning about water quality issues to the local community
- 9. A final showcase event was organised for the wider community. This included an art exhibition based on children's work, learning and experiences through the project.

Contribution to Water Quality and Legacy Elements

This project has been a huge success in helping to educate local young people about their rivers. The education work included looking at wildlife, water quality and connecting local schools with the river as an educational resource. The project linked up with a partner school in Castlecaulfield to share experiences and learning across the catchment and cross border.

The project has also helped to build capacity within a new River watch group in order to: --

- Building links with other local schools
- Development Citizen science projects and gathering robust data on our local river systems
- Helped the school to manage further funding applications
- Facilitated the school in building links with local farmers and other stakeholders.





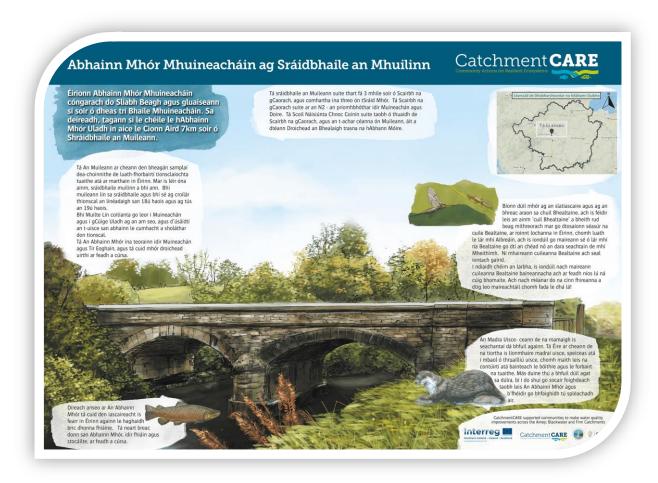
Monaghan Tidy Towns - Monaghan Riverwatch

Monaghan Tidy Towns have a long and successful track record of engaging people in looking after the environment improvement of Monaghan urban environment. The main branch of the Monaghan Blackwater flows through the town and connects with Peter's Lake and Convent Lake. These are important amenity facilities for the people of Monaghan.

The group applied for and was successfully funded for a project called 'Monaghan Riverwatch' which aimed to engage and inform local people as to the importance of the River Blackwater Catchment for wildlife habitats and as a source of drinking water. Young people in the area have been taking part in social media campaigns and the group have run water quality events and bio-blitzes. Two new interpretive panels have been placed in and around the town to help impart information on water quality; the aim is to ensure people are informed and motivated to make a change to benefit water quality.

The two bio-blitz events were run to engage and recruit local people and connect them to their stretch of the River Blackwater. One of these events took place in Rossmore Forest and the second event along the Ulster Canal Greenway.

The organised media campaign to inform and educate local people on the importance of our rivers was a great success with 3 young volunteers recruited and trained to produce video clips and social media posts promoting water quality. The articles and posts fed into the LawPro magazine, and featured in the 'Transition Monaghan' page of the Northern Standard every week. The volunteers were also given training in the creation of high impact social media posts and training on a range of video editing software that can be used on phones to create amazing effects.





River Blackwater Catchment Trust - Water Quality Measurement Equipment

The River Blackwater Catchment Trust was formed early 2013 to address concerns about water quality across the Blackwater Catchment. The Trust aims to conserve, protect, rehabilitate and improve the rivers, streams, watercourses across the Catchment and to raise awareness amongst the general public, statutory bodies, governments and local authorities as to the flight of our water bodies.



The Trust applied for two projects under the CIS Phase 2. This particular project provided volunteers with much needed equipment to conduct safely and efficiently survey work required in the catchment. This equipment included Nitrate and Phosphate Testing Kits, Oxygen Meters, Riverfly Monitoring Kits, Water Testing Kits, Underwater Viewers, Safety Equipment and First Aid Kits, Magnification Aids, HACH Meters and Buoyancy Equipment.

The project has been successful in helping the Blackwater Trust engage with other community groups and users across the Catchment, whilst encouraging individual volunteers to take part in surveying and monitoring of local river systems using the above funded equipment.

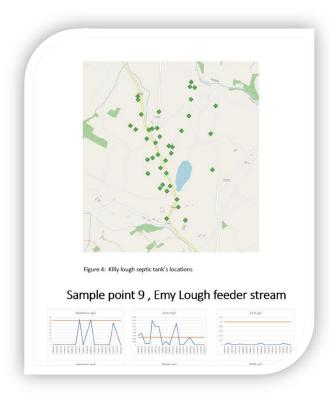
The River Blackwater Catchment can now also develop its member's river monitoring skills learned during CatchmentCARE training programmes, which in turn will attract new people to the Trust and continue this work into the future. It is also further planned that the Trust can use the equipment on school training days, heritage events, farm water quality demonstrations and during other environmental show case events.





River Blackwater Catchment Trust - Domestic Wastewater Treatment Systems

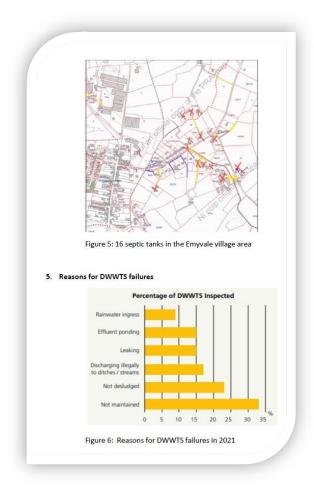
The second project that the River Blackwater Catchment Trust was funded for in CIS Phase 2 was an innovative piece of work that engaged with local householders, group water schemes and the EPA. The project focused on advising homeowners on best practice in maintaining domestic wastewater treatment systems (Septic tanks) and provided practical support by helping to empty these and provide a detailed report on each system.



humans can come in contact with the wastewater and be exposed to pathogens; also, foul odours can be generated. In addition, inadequately treated wastewater through poor siting, design and/or construction may lead to contamination of our ground waters and surface waters, which in many areas are also used as drinking water supplies. It is essential that this effluent is properly treated and disposed of.

The project was developed in response to a report issued by the Environmental Protection Agency (EPA) showing that of 210 domestic wastewater treatment systems (DWWTS) inspected during 2016, almost half failed to meet the required standards. The bulk of failures related to the operation and maintenance of systems (27%) and failure to de-sludge (27%). Both these categories showed a significant deterioration compared to the 2015 results when they accounted for 23% and 14% of failures respectively. Unlicensed discharges from DWWTS, surface ponding, leakage and rainwater water entering the system accounted for 43% of failures in total.

When on-site systems fail to operate satisfactorily, they threaten public health and water quality. When domestic wastewater is not absorbed by the soil it can form stagnant pools on the ground surface. In such failures,





South Tyrone Farmers Group - Farming for Water Quality Phase 2

South Tyrone Farmers are a constituted group that initially organised lamb marketing for members and then facilitated an on-farm investment programme to increase environmental standards funded through the PEACE III programme. We are now co-operating with Truagh Branch of the Irish Farmers Association (IFA) to encourage members to take an active role in the conservation of the small tributary rivers of the River Blackwater.

The group made a successful application to CIS Phase 1 and was funded for a project which engaged local farmers to control soft rush in a more environmentally sensitive and economically efficient manner. Their Phase 2 project was an extension to this work and aimed to treat an additional 300ha of farmland in the cross borders areas of Counties Monaghan and Tyrone. The project deliverables were as follows:

Farm Engagement & Recruitment

In Phase 2 another 80 farmers were recruited, trained and were involved in the project.

Control of Juncus effusus (soft rush)

The farmers recruited participated in a project to effectively control soft rush without using MCPA based herbicide. Weed wiping was the method of targeted application.

Best Practice Visits

A number of farm walks and best practice visits to explore how farmers working together can take an active role in improving water quality was organised.

Legacy Plan

A follow up survey and legacy plan with participating farmers to evaluate the project and secure their commitment for a farm action plan was carried out. This included:

- Control of soft rush without overall spraying with MCPA
- Reduce nutrient run-off from slurry and fertiliser
- Control invasive species along the banks of rivers and streams
- Fencing and cattle drinkers to reduce siltation.
- Soil analysis and advice where appropriate



This project was one of the most successful of the entire CIS programme and led onto a CIS Phase 2 application and project from the same group. It has also contributed to a lasting legacy within the catchment as further funding from LEADER has been secured to carry on this work with a more diverse and larger group of famers and the local Group Water Scheme.





3.3 Finn Projects

Finntown Anglers

The Finntown Anglers groups applied for funding to develop a large project based around installing a jetty and provide stiles and boardwalks along alocal lake. There was also to be an element of habitat improvement by placing gravel in streams. The group were also planning to carry out a variety of a water quality sampling.

The project elements were as follows -

- Placing of bi-lingual signage covering bio- security and regulations.
- The installation of a jetty to allow shore anglers better access to deep water fish and provide access for boats to the lake.
- The creation of gravel beds to help increase the amount of salmon and trout over time, which will lead to more popularity with anglers.
- The monitoring of water quality for nitrogen and phosphorus levels as well as surveys of salmon redds
- Purchase two water test kits to monitor Nitrogen and Phosphorus levels in local rivers waters.
- Carry out educational awareness campaigns with local schools and community members.

The project was eventually funded for a sectional building (50ft x 20ft) to house boats and act as a storage container.

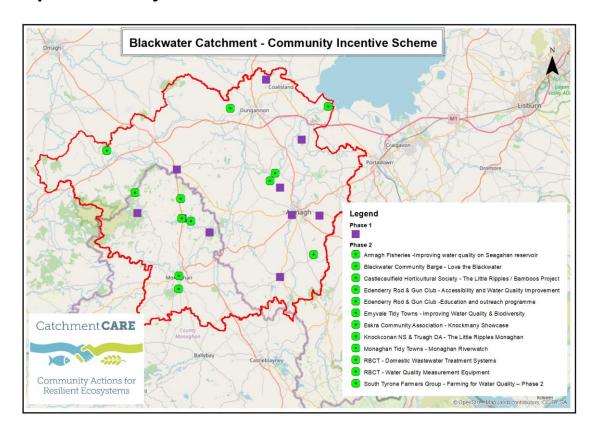
3.4 Conclusion and Learnings from Phase 2

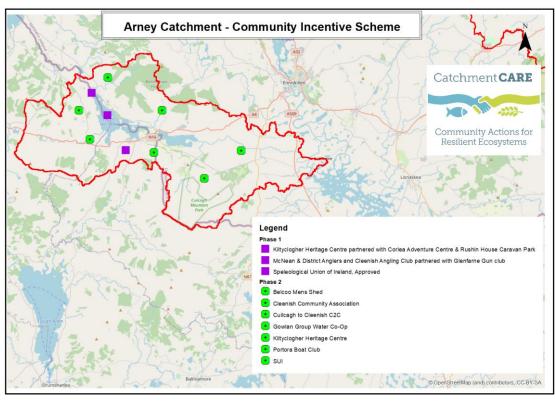
Phase 2 Figures

Item	No.
Trail / Path / Access	5
Interpretive Panels	16
Equipment	17 projects supplied with a range of equipment
Storage Container / Hub	0
Events / Bio blitzes etc.	35
Literature	9 pieces of literature produced (maps / leaflets / guides / pamphlets / videos etc.)
Education Programmes / Numbers etc.	25 schools visited or engaged with through CIS programme
Numbers Involved – Group	277
Numbers Involved / Engaged – Community	3,195 local community members involved

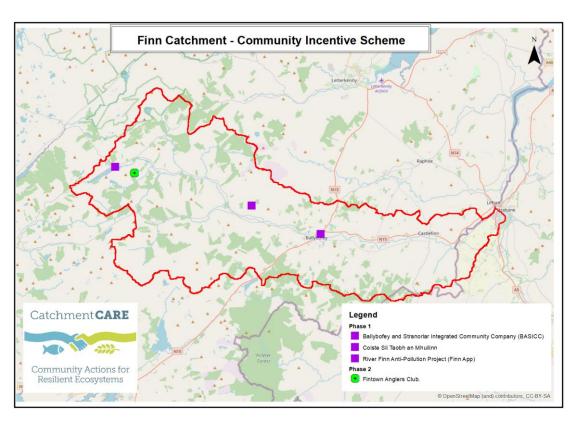


4. Maps of all Projects across the Catchments











5. CatchmentCARE Community Training Programme

Over the course of 2019, the Blackwater Catchment Officer has liaised with a number of community organisations on the CatchmentCARE project. Many of these are actively working on the main Blackwater or sub catchments and are engaged in water quality improvement work or awareness programmes in their local area.

Through these meetings and through the rollout of the Community Incentive Scheme in 2019, a number of enquiries from these groups has been received requesting a training programme to help upskill community groups, farmers and other volunteers in data collation and planning for the delivery of strategic catchment-scale biodiversity focused plans.

The River Blackwater Catchment Trust (RBCT) applied for funding through the 2019 round (Phase 1) of the CIS to develop and deliver a bespoke training programme for groups in the Blackwater Catchment.

It was decided however that the training programme should be delivered across the 3 Catchments, in order to maximise the reach and effectiveness of the programme and to train as many community members as possible in caring for their local catchments. Initially, it a physical programme of training events was planned which would be delivered by a series of 'experts' at different locations, covering a variety of water quality, water safety and invasive species and habitat assessment techniques.

Due to ongoing Covid lockdowns and restrictions however it soon became evident that this was going to be very difficult to achieve in the timescale originally set out. A decision was therefore taken to develop a bespoke online training course which could be completed by participants at their leisure, whilst also providing all of the elements and aspect planned in the original course content.

The Blackwater Catchment Conservation Training Programme

The online training programme was developed by ABC Catchment Officer Tom Woods in partnership with the River Blackwater Catchment Trust and expert facilitators. The programme was delivered to local interest groups from 2022 onwards and is still operational to date.

The Training Programme includes course content and independently assessed modules on the following topics:

Water & Flood Awareness Safety Training

The aims of this water & flood awareness course are to develop individuals to water awareness level in water safety and for them to operate safely and competently within or near a water environment.

Bespoke Fisheries Habitat Assessment

The aims of this course will be to help participants identify all of the pressures on the catchment, including Non-Native Invasive Plant Identification, Mapping, Control Options and Catchment Control Planning amongst others.

Habitat/Invertebrate Scoring Training Course

The course is designed to train those who are interested in small streams / small rivers on how best to monitor and characterise these small water bodies.

Non-Native Invasive Plant Identification and Control Options training

This one-day workshop will provide candidates with the opportunity to be hands-on with common terrestrial and aquatic invasive species across Ireland.

Benefits of the Training Programme

The programme will benefit a wide range of groups throughout the Blackwater catchment. Each group is at different stages of development, but all would benefit from training in standardised river / water assessment and survey



techniques, to produce baseline evidence and to target action plans for the improvements of rivers and water bodies in the Blackwater catchment area.

- 1. The participants would gain the knowledge and skills to make informed assessment of their catchment water bodies, thus increasing their engagement and investment in the local area. Participants will to go back to their own groups and train more individuals on the techniques learnt thus maximising the reach of the training programme throughout the catchment. It will give a networking opportunity, sharing their experience of water quality and environmental issues.
- 2. The project will allow participants to gain extra knowledge and skills to look after and protect local water bodies and associated flora and fauna. It will give a chance to discuss eco-systems with other groups in the catchment and have access to further information from the experts / organisations giving the training.
- 3. Citizen scientists and local involvement are essential to a water quality directive.
- 4. Empowering people with these skills will give a long lasting return. We need volunteers to be the catchments eyes and ears in order to maintain and enhance water quality. They will also be in a better position to discuss problems areas and methods of mitigation with the wider public. The training will also allow groups and individuals to understand which statutory agencies / NGOs are accountable for water quality / maintaining local waterways e.g. IFI, IFA, LAWCO/LAWPRO, NIEA, Rivers Agency / Rivers Trusts / DAERA / UFU.
- 5. Attendees will use these skills to undertake essential 'health' assessments on rivers and lakes in the Blackwater catchment, helping us to understand the pressures the rivers and lakes experience and begin to plan for strategic mitigation of these pressures, using an evidence-based approach.

To date the online training programme has been a huge success, with an excellent uptake across the 3 Catchments. Over 180 local community and interested individuals have signed up to and completed the course.

Due to the success of the programme, The River Blackwater Catchment Trust have been funded through the LEADER Programme in the Republic of Ireland to develop and deliver a more advanced training course of local Catchment Management.

6. Conclusions and Legacy

The Community Incentive Scheme (CIS), was one of the most successful elements of the entire CatchmentCARE project. A huge amount of positive work resulted from the funded projects and provided local groups with the means to carry out their own work on local river systems.

Overall, 35 projects were funded across the 3 Catchments over the 2 Phases of the scheme. CIS Phase 1 projects totalled 16 (Arney 3, Blackwater 11, Finn 2), whilst CIS Phase 2 project totalled 19 (Arney 7, Blackwater 12).

The Catchment Officers received some extremely positive feedback and comments regarding the rollout of the scheme, its administration and how the CatchmentCARE team were on had to offer support, advice and guidance throughout every stage of the process – from pre application stage, right the way through to project conclusion.

The groups were also very grateful that procurement was keep 'in house' and that the onus of having to purchase items or arrange contractors and suppliers was take off of them.