



**An Roinn Talmhaíochta,
Bia agus Mara**
Department of Agriculture,
Food and the Marine



**'The European Agricultural Fund
for Rural Development: Europe
investing in rural areas'.**

**Final Report for the - Ballymoney Stream Catchment
Biodiversity Pilot EIP Project
Project: EIP LLOC5054**

Karin Dubsy and Aine Breen
[Email address]



An Roinn Talmhaíochta,
Bia agus Mara
Department of Agriculture,
Food and the Marine



'The European Agricultural Fund
for Rural Development: Europe
investing in rural areas'.

Ballymoney Stream Catchment Biodiversity Project Id: EIP LLOC5054

Content

| | |
|---|---|
| 1. Executive Summary | Page 2 |
| 2. Project description | Page 3 |
| 3. Project Results and Area Assessments a. Baseline data b. Key Performance Indicators c. Closing Evaluation d. Issues and Challenges | Page 5 Page 5 Page 6 Page 9 Page 11 |
| 4. Financial Report | Page 12 |
| 5. Lessons learned | Page 13 |
| 6. Follow Up Actions and Recommendations | Page 14 |
| 7. Dissemination of project findings | Page 15 |
| 8. Project Team and contacts | Page 116 |

1. Executive Summary

A combination of practical measures to restore and enhance Ballymoney stream catchment habitats and species in five partner grounds with research on biota found, stream water quality and pressures undertaken by both experts and as citizen science initiatives. Outreach and wider community engagement events encouraging adaptation of measures to own grounds and wise decision making on gardening, lighting and public area management.

The Ballymoney stream EIP project 2021/22 was designed by the Ballymoney Community Group to assess, improve and protect the biodiversity of their coastal stream catchment. The five core partners responsible for EIP funded measures on their land were: an intensive dairy farm on the flanks of Tara Hill where the stream rises, a grassland sheep/equine farm in the plain stage of the stream and three different gardens through which the stream flows in the final stages before reaching Ballymoney beach and entering the Irish Sea at a popular bathing water. From these core partner lands, outreach actions involved the wider Ballymoney village community, visitors and beyond.

Each partner led a suite of biodiversity protection/enhancement activities on own land. Where possible activities were either dove tailed – so that one contractor could be offered several jobs in the area –e.g. for removing invasive alien species, or planned to run in sequence, like wetland creation/enhancement - so that other partners could both help and learn from the first and apply learning on own land. As wetlands were created or enhanced, parts were left to develop with no interference, while parts were planted from local native vegetation nursery stock grown by one partner.

Invited experts helped explore the catchment biodiversity. Their visits were linked to awareness and information events involving the wider community and included lizard, frog, bat and pollinator walks, vegetation surveys, stream macro invertebrate and fish field days.

Two wildlife cameras were set up in different locations with landowner participation to record day and night. The diversity of birds and mammals was greater than expected and brought wider family, community and local media interest. Wildlife use of wetlands brought better understanding of use of banks, rocks, water and vegetation and was used to further inform enhancement actions.

The pilot EIP was the first significant Ballymoney Community group project. The core landowner group soon widened to others from the local and visitor community who greatly added to the range of skills and connections. Interest and advice from Teagasc, ASAP and DAFFM supported the project team and was valued by the wider community. ‘Followers’ in the visitor and local community who joined events, started asking for more opportunities to get involved and make a difference. A ‘No spray scheme’ and a local primary school story telling competition were added in response.

The EIP project increased biodiversity data for the area. The number of bat species recorded in the North Wexford area rose from 4 to 7 and a large maternity roost was found and proudly protected by a farm family. This knowledge and valuing of biodiversity, reduces the risk of unintended damage of breeding, feeding or roosting sites. The EIP actions also increased biodiversity on partner lands where wetland habitats were restored along the stream and ryegrass replaced by multispecies grassland. Farmers, other residents and visitors formed better links and understanding with common catchment biodiversity and water quality goals and activities.

2. Project Description

The Ballymoney stream EIP project was designed by the Ballymoney Community Group to assess, improve and protect the biodiversity of their coastal stream catchment. It ran from June 2021 into September 2022, with some activities still continuing and the number of requests to advise on doing similar work elsewhere continuing to come in.

The area focussed upon was the Ballymoney stream main channel, rising on a dairy farm at 85 m above sea level on the flanks of Tara Hill. The stream runs mainly in straight ditches through farmland and then enters a diverse wet woodland habitat. After more farmland further down the hill, where tributaries join, it passes into the coastal plain dominated by residential and holiday homes, a WWTP and public carpark, before ending on Ballymoney beach and discharging into a popular bathing water. The local community and visitor mix brings communication and shared value challenges which the EIP group were aware of and had plans to address.

Assessments of key habitats and select species were organised by the EIP partners with invited experts, whose visits usually doubled up as awareness and information events to involve the wider community and visitors. Public events included lizard, frog, bat and pollinator walks, vegetation surveys, stream quality macro invertebrate and fish field days. It also included training in how to test Nitrates in water and macro invertebrate indicator identification and kick sampling as well as gentler rock lift techniques.

Each partner led a suite of biodiversity protection/enhancement activities on own land. Where possible activities were either dove tailed – so that one contractor could be offered several jobs in the area –e.g. for removing invasive alien species, or planned to run in sequence, like wetland creation/enhancement - so that other partners could both help in meetings and learn from the first and apply learning on own land. As wetlands were created or enhanced, parts were left bare, while parts were planted from local native vegetation nursery stock grown by a partner.

Core actions are summarised below:-

1. A suite of biodiversity measures at Ballinacarrig Farm where Ballymoney stream rises. Roche family
Measures taken on **Joe Roche's dairy farm** to increase biodiversity and reduce water pollution risks, included conversion of two fields to multispecies grassland, restoring an old stream stretch and wetlands to slow water and reduce nutrient and silt loss. Also verge habitat management to only allow cattle access for 2 days a year and wet woodland division into a 'no access' and a 'managed intermittent access' area so maximising the variation in ground cover and encouraging natural regeneration.
2. Stream habitats for Nature and children. Donovan family
SeaBreeze farm included greening shed walls, removal of lorrel and planting native hedgerow and fruit trees, finding/preserving animal hotspots, stream bank stabilisation by planting willow saplings and light management.
Retaining fence hole dug by the badger and used by other animals as route from fields to gardens and the shore.
3. Stream and floodplain habitat enhancement for wildlife, save for children Greene/Flynn family
Cutting non native shading tree, floodplain enhancement with retreat wetlands in the floodplain. Planting the wetlands and adding rocks as refuge. Bat boxes.
4. Wetland habitats, nursery and tree/grass pollinator enhancement Dubsy Family
Wood Walls and field stream floodplain enhancement by linking enlarged rain floodwater overflow ponds, and a wetland plant nursery. Tree crown surgery to avoid storm loss of large

trees, cut of non native Lylandii making space for ash and holly. Improving a bat feeding stretch and tweaking the mowing regime and bare bank management for pollinators.

5. **Sea wind exposed biodiverse garden with wetlands and IAS control. Meehan/Mc Kenna**
The Bungalow: tackling a large thicket of invasive alien species Japanese Knotweed, Wire Weed and Sea buckthorn by machine and hand to retain hawthorn, blackberry, honeysuckle and other native species. Merging wilderness habitats with kitchen garden, creating a natural clay pond and extending lizard habitat.

Ballymoney Stream Biodiversity EIP



EIP Main Actions beyond the physical measures on partner grounds:

1. Research into stream catch biodiversity was carried out by the community as citizen science activities and as expert fieldwork.
2. Wildlife motion sensor camera work by professional photographer for 6 months covered sites identified as promising and areas where wetlands were created in the stream catchment. Landowners helped find good locations based on increasing animal knowledge.
3. Control of invasive alien species was carried out both by contractor and land owners using different means to compare and contrast.
4. Chemical free gardening and ground management no spray trial was launched in May 22 and continues.
5. Stream N load at its mouth was monitored for a year and augmented with a stream nitrate and state of bed snapshot citizen science survey from source to sea.
6. Informal stream water quality indicator and pollution pulses/events were looked out by riperean land owners and beachusers.
7. Official stream data and discharge license data was searched for, formally requested and most finally obtained.
8. Engagement with authorities responsible for aspects of water management was ongoing including WWTP management, map corrections, discharge licenses.
9. Design and production of website, information posters on events, on pollinators and on bats of the watershed, creating short informative video clips on stream biodiversity and threats – cats and mink from 1000s of wildlife camera images,
10. Engagement with community members - advice, grounds visits, admire and collect ideas
11. Administration, monthly steering group meetings zoom, in person and hybrid. Sourcing insurance, writing reports and press releases/engagement with press.

3. PROJECT ASSESSMENT AND EVALUATION

3A – Baseline

Pre EIP project biodiversity, water quality, chemical use and Community engagements are described briefly below to set project activities and outcomes into context.

Biodiversity

The baseline biodiversity information for the catchment area on the National Biodiversity Data Centre data base - ie the ten sq kilometre quadrates - gave the impression that the catchment is among the less biodiverse areas of Ireland. However the area was very much under surveyed. The topography and landscape of the catchment have a high biodiversity potential. Located on southeast facing slopes of >230m high Tara hill with several archaeological sites, which are not ploughed, blanket bog and bare rock giving way to macamore clay with little wetlands including maerl holes from past clay extraction. The vegetation varies from exposed open heath and some high old trees, to grasslands with stone walls and banks with some good old hedgerows and fruit trees remaining. Cattle and sheep grazing adds to potential for insect and bird diversity. The coastal habitats with a defined stream estuary, dune, rocks and vegetated sea cliffs is the final habitat mix.

Among the biota noted locally were several birds of prey, woodpeckers, bats, badgers, foxes and frogs. Lizards were seen in the seashore stone walls.

Intensive dairy and intensive gardening with high fertiliser inputs and silage cuts/ grass mowing.

The countryside has suffered significant wetland loss. A Coastwatch mapping project had shown 68 maerl holes around the village on the 1940 OS map reduced to 8 by field survey in 2015. Wet woodlands and fields of rushes are still dotted around but have become rare. Wetland biodiversity along the streams is squeezed by deep drains and steep made ground banks and floodplain areas infilled hard subsoil ground. Riparian planting in gardens has seen alder and willow (efficient nutrient removers), replaced by non native Laurel and bamboo and ground taken over by invasive wire weed, Japanese Knotweed and at the stream mouth sea buckthorn. Use of stream banks for depositing garden waste and other infill to avoid flooding and gain dry garden ground is ongoing.

Water Quality

When we applied for the EIP project the Ballymoney stream quality was shown as 'undetermined' on EPA catchment maps. Also, the official course of the stream on catchment maps was incorrectly shown as leading into another stream further south, rather than travelling through the village and discharging onto Ballymoney front beach. When we started project work, the official stream quality status changed to 'moderate', but we could not find recent data to back up the status. An old monitoring station on the stream is no longer used.

From our own baseline stream checks at accessible points, excess sediment and waste were a problem, especially after heavy rain. Sensitive macroinvertebrates were missing and occasional nitrate testing had indicated that there was a nutrient pollution problem from spring to the sea.

Chemical use

At the start of the project, most public areas along the sea road plain stage of the stream were sprayed with Roundup for weed control and we estimated that at least 2/3rds of households used chemicals such as weed killers, Moss kill and fungicides in their grounds. All commercial gardeners working as contractors in the area used sprays and were unwilling to consider alternatives. and HSE and Irish Water staff and contractors confirmed that they were using chemical weedkiller control. They as well as council public toilet cleaning - were using extra chlorine for disinfection because of COVID.

Community Engagement

Community engagement ebbed and flowed over the last decade. Recently there was a strong focus on beach cleans led by a small dedicated team. Another team developed walking trails and maintains same. During COVID three sea swimming groups sprung up and the annual Christmas swim is a major event attracting over 100 swimmers and spectators. Old links between residents and farmers through the group water scheme were lost when the scheme was closed down and the public supply introduced. Family coastal biodiversity events organised by Coastwatch with the Ballymoney Community group had good family participation. Summer events were organised by and for the holiday home park, while small groups of visitor and resident families mixed as personal friends. There was very little contact between farmers, residents and holiday home owners. The community group moved from low activity to very active when there was a common purpose like getting a sewage treatment plant, or village area plan.

3 B - Key Performance Indicators

Every partner completed planned measures on own land and all were satisfied with the broad measures they took. Most are doing or thinking of further tweaking or adding to what they accomplished in their own grounds.

Beyond that, every partner participated in at least one meeting on another partner's land, shared tools, time and ideas. All also invited members of the wider community into own grounds one or more times to help disseminate methods and results.

Partners came from farming, local resident and part resident background with no previous joint work or recreation experience. A strong community spirit and joint purpose developed within the group and its widening membership. That stretched from core EIP goals to agreeing on wider ones like trying to work with natural and local materials where possible.

Both partners and the wide community who got drawn into participating, learnt a lot from what worked and didn't work. Much of that was becoming aware of, understanding and trying what is already in EU and national policy – such as key elements of the Pollinator plan or river basin management plan.

Biodiversity

There were clear increases in biodiversity in specific areas, some more subtle improvements overall and some losses noted which highlight that while we are working on measures to boost and protect biodiversity, other pressures are influencing the status of our environment.

Clear improvements were seen in the switch of 2 fields from ryegrass to multi species grassland and allowing this to flower. Specific indicators include:

- Acres of virtual pollinator desert on south facing grassland fields changed to pollinator friendly ground within a few months of sowing.

- Insect usage as measured by sound difference in multispecies grassland and adjacent ryegrass pasture was dramatic and witnessed by other EIP partners called by the farmer, as well as a bee keeper.
- Fieldmice were noticed along the multispecies field margins.
- Several birds of prey were noticed during day time and a barn owl at night. One became a regular visitor, roosting on favourite trees and scanning the field almost daily in summer 2022.
- The farmer noticed that his cows were satisfied for longer on their multi species grazing strips than on ryegrass pasture.

Biodiversity gains were also seen in all 5 partner grounds as measures were rolled out. Planting hedgerow and native trees, removal of invasive alien wire weed, Japanese knotweed and sea buckthorn, mowing paths and play areas, leaving high flowering grass and flower edges.

The suite of measures around wetland creation took most effort and joint planning. The most visible indicator is the change of low biodiversity riparian ground – as in intensive grassland, man made ground, invasive species - change to various wetlands which are thriving with native vegetation and support stream restoration by reducing nutrient and silt inputs – see also Stream Water below.

The increase in light and new wetland with its vegetation (set into site soil on natural macamore clay in most cases), augmented with rocks increased the habitat mosaic of each area and together with meadow strips, old trees, old and new and hedgerow and fruit trees provided diversity and suitable conditions for insects, frogs, birds and mammals. The change in riparian ground and its vegetation cover before and after restoration and creating wetlands in the 5 partner areas has been recorded in photographs and snapshots of use by wildlife picked up on motion sensitive wildlife cameras.

Stream Water Quality and biodiversity:

Significant silt and nutrient retention capacity was created in the main stream catchment by creating wetlands in carefully chosen low biodiversity areas near the stream or at the stream banks.

Head waters on the dairy derogation farm. The riparian wetland restoration, the stream slowing with beaver dams and extra broad ditch wetland with reeds created on the lower end of the sloping field all function well as seen in the clean ground stream bed as the stream enters the wet woodland and the generally moderate to good status' macro invertebrate fauna stretch of lower field and wet woodland.

Four further floodplain areas of different length and character have been restored/created along the length of the stream to take peak flow, host wetland biota and act as demo areas for others who are trying to restore stream functions and biodiversity.

Wetland plants and cuttings took to their new spots and flourished, with no need for replanting. In two garden wetlands the local stock was augmented by Irish grown flowering plants including water lilies to create optimal moorhen conditions.

There were frogs recorded in two of the new pond and overflow areas with frog spawn and tadpoles in one.

A small improvement in stream macroinvertebrate diversity with appearance of more sensitive species was recorded - between summer 2021 and August 2022 in the Ballymoney stream on the first farm before the stream enters the wet woodland and the next farm.

At the stream mouth though we saw no improvement

Chemical Use and Ground Management

More than half of the stream plain stage private gardens and all village catchment community ground is now spray free.

Twenty eight land owners joined the chemical free gardening and grounds trial. Their pledge were visible as No spray signs at their entrance gates or walls spread down the road.

The appearance of signs was matched by a noticeable reduction in the brown 'Round upped' ground seen along the road sides and in community areas as those who maintaining these agreed to join.

Two farmer extended the trial to their yard areas, cutting briars and nettles where needed instead of spraying.

Several holiday home owners who used contract gardeners were advised by these that 'no spray' was not commercially viable. However a few weeks in, one contractor agreed to try with new grounds plan bringing 5 houses on board. At the close of the EIP project one more contractor had switched to no spray on request. This means roughly half of the contract work on private grounds is now No spray.

The signage designed for the No Spray trial was well received and is still in place and in good state everywhere. The photos were taken by members of the local community, showing pollinators and frogs in their gardens. The local printer used new eco-friendly water based inks on a new recyclable plastic board which we also trialled in full sun, damp shaded and road dust prone conditions.



All photos local: wildflowers and insects Paul and Karin Dubsy, frogs Ciaran Rapple

Public Space Management and Gardening to benefit Nature, our Health and Happiness.

Information and joining options see <https://ballymoneystream.wordpress.com> EIP project

or contact the Ballymoney Community group science officer on kdubsky@tcd.ie



An Roinn Talmhaíochta,
Bia agus Mara
Department of Agriculture,
Food and the Marine



The baseline biodiversity data and information for the ± 5sqkm catchment area has increased significantly as a result of the project. The community were directly involved in citizen science monitoring with invited experts. The fact that 7 bat species were recorded on a bat walk and night watch with bat experts where previously and in NBDC records there were only 4 raised visitor interest too.

The added warning that species diversity was high but numbers low so we needed to make sure that there would be no loss in habitat, no increase in light and real effort to improve conditions resonated with the community and visitors.

All partners and many in the community are proud that they now have a better understanding of the biodiversity on their grounds and how their land links with others and the seashore in blue and green corridors.

Community Engagement

This was the first significant Ballymoney Community group project. The EIP group which originally included the 3 farm and 2 local resident partners, soon widened to associates from the local and visitor community who greatly added to the range of skills and connections. Farm advice through Teagasc, ASAP and DAFFM were a huge support and of wider community benefit as several advisors also joined public meetings and fieldtrips with real added value in expertise shared.

Communications within the group were adapted to COVID needs with a whatsapp group, monthly formal zoom or in person meetings to stay on track, share ideas and challenges and to plan public events and meitheals together.

The project became socially rewarding as farmers, other residents and visitors formed closer links in a common stream catchment biodiversity and water quality endeavour which is borne out by further land owners asking to join the 'No spray' campaign even after the completion of the EIP project and a second contract garden management company working locally now offering no spray management where clients request it.

3 C - Closing Evaluation

The combination of successful measures on individual partner lands, outreach measures and the increase in awareness and biodiversity understanding among partners and the wider community brought a change in land and feature management which supports biodiversity and restoration of habitats.

However the pilot covered only a part of the catchment and there was no buy in from Irish Water and weak time constrained support from Wexford county council. This contrasted with the ongoing information sharing, interest and support by Teagasc, LAWPRO and DAFFM including ministerial visit, prompt DAFFM response on project extension request. So we end having made biodiversity gains but also with frustration regarding the lack of water quality improvements at the stream mouth and lack of action and cooperation from relevant public bodies to a biodiverse healthy catchment.

Most experts revisited the catchment after giving advice. All of these were very satisfied with work done and results and have offered support if we need further tweaking and management advice.

This was the first significant Ballymoney Community group project. The EIP group which originally included the 3 farm and 2 local resident partners, soon widened to associates from the local and visitor community who greatly added to the range of skills and connections. Farm advice through Teagasc, ASAP and DAFFM was a huge support and of wider community benefit as several advisors also joined public meetings and fieldtrips with real added value in expertise shared.

Communications within the group were adapted to COVID needs with a whatsapp group, monthly formal zoom or in person meetings to stay on track, share ideas and challenges and to plan public events and meitheals together.

The project became socially rewarding as farmers, other residents and visitors formed closer links in a common stream catchment biodiversity and water quality endeavour which is borne out by further land owners asking to join the 'No spray' campaign even after the completion of the EIP project and a second contract garden management company working locally now offering no spray management where clients request it.

The EIP project increased biodiversity knowledge in the area and the number of known protected species especially bats. This knowledge and valuing of biodiversity, reduced the chances of unintended loss by interfering with or well meaning 'cleaning up' of patches which are breeding, feeding or roosting sites. It also increased biodiversity in specific action spots on partner lands - like restoring wetland habitats along the straightend stream, where the first frogs, then frog spawn and later macro invertebrates were recorded. Another clear positive example was replacing ryegrass by multispecies grassland and the resulting buzz of insects in the multispecies field compared to the remaining rye grass.

The blend of local knowledge, expert advice applied to brain storm and problem solving was empowering and fun.

Wetland creation fears expressed at the start of the project were dealt with adequately as shown in these two examples:

5.1: For partners with young children the fear of constructing a wetland which would lead to child drowning was addressed by designing a floodplain rain garden in one grounds and just widening the stream in another, instead of creating ponds as first considered. Also children were involved in wetland construction and it was highlighted and reinforced in the video footage that this was for nature.

5.2: for the farmer with large swail on a slope, there were two concerns: fear of the lower swail bank washing away in heavy rain and how to manage the work load of coppicing the willow planted around the margins or removing silt if a lot was washed in after heavy rain. This was overcome by building a wide enforcement bank with field stone and boulderclay on the slope side of the swail. The swail is save and the tractor can be brought up the bank to cut the willow.

More widespread smaller changes in catchment habitat management were also recorded especially in mowing regimes and chemical use. We feel that these changes were coming anyway, but the EIP project activities can claim a demonstration and information role to bring quicker change and amplify the messages in the National Pollinator Plan.

There was great resilience and adaptability in the EIP group which helped cope with significant timing issues for some expert field visits and contractors. Also as was to be expected, some measures did not work out as planned or needed a second attempt - replanting a hedgerow which died in summer drought, tweaking wetland size and shape from original plan to get the required result. A sense of humour in the group also helped overcome challenges.

Zero waste and plastic strategies were discussed and applied. This was also conveyed to press and invited experts who in turn highlighted it in their public presentations. As examples - wetlands were created without using plastic or rubber liners. Bee hives were made locally from wood. Refreshments included local honey, berries and locally made farm yoghurt and were served from standard plates, in glassware and reusable cutlery.

3 D Challenges

1. Wetlands: Sealing of one newt pond with bentonite was not successful but valuable for advising others on the limits of bentonite use. It still functions as rain water retention pond. On farm **wet woodland** management there was difference of opinion on stock access. Farmer and EIP group discussed and then went with the advice which allowed limited recorded stock access. Open day visitor view including ecologists in late August 22, was that the limited stock access was inkeeping with good wet woodland management.
2. Weather: the prolonged heat wave and drought in summer 22 stressed newly planted trees and hedging with some losses. Even some old trees are now showing early leaf browning.
After initial attempt to keep watering, hedging was lost and replanted in autumn.
3. **Pollinators:** Dr Catherine Keena 's as expert and the new all Ireland pollinator plan both advised not to introduce wildflower seed mixes to support recovery of local native flowers. However, at the same time there was heavy advertising of 'rewilding' and free wildflower seeds by several large Irish companies. This caused real confusion and lead some of our no spray trial outreach to go for sowing wild flower patches. As these were far more colourful than those appearing in the 'give local flowers a chance' gardens it worked against us.
4. Not all agencies who had pledged support were able to support us. Wexford coco and IFI in particular helped but would have liked to have helped more and told us that they were just too short staffed.

| | | |
|-------------------------|-------|-------|
| 4. FINANCE | | |
|-------------------------|-------|-------|

Ballymoney Comm Environment Group Company Limited by Guarantee

EIP project

Management Accounts from date of incorporation 28 July 2023**Income and Expenditure Account**

| | Actual | Budget |
|--|---------------|---------------|
| Income | € | € |
| Farmer's Grants | 12,741 | 16,250 |
| Administration and Implementation grant | 34,937 | 35,597 |
| Total Grant Income from Department | 47,678 | 51,847 |
| Expenditure | | |
| Farmers Projects | 12,741 | 16,250 |
| Implementation | | |
| Experts and communication with experts | 12,255 | 13,497 |
| Equipment | 1,646 | 1,590 |
| Public Information Events And Guide Material * | 4,869 | 8,410 |
| Landowners work without herd number | 5,002 | 6,370 |
| Administration | | |
| Meetings and event organisation | 2,172 | 3,350 |
| Insurance | 788 | 250 |
| Accounting and Companies office fees | 2,274 | 2,130 |
| Total Expenditure | 41,746 | 51,847 |
| Surplus to be repaid to the Department of Agriculture | 5,931 | 0 |

* may have included some expenses in admin return in error

Balance Sheet as at 31 December 2022

| | € |
|--|--------------|
| Current Assets | |
| Bank | 5,931 |
| Liabilities | |
| Accured Expenses | 0 |
| Total Assets less Current Liabilities | 5,931 |
| Capital And Reserves | |
| Retained Surplus to be repaid to the Dept of Agriculture | 5,931 |
| Accumulated Reserves | 5,931 |

5. LESSONS LEARNT

People from very different backgrounds can work together effectively on a common good goal with individual and group action. This is a core finding which brings hope to achieving successful environmental management and nature restoration.

Cooperation and common purpose was strengthened by the amount and steady drip feed of joint action from meetings to planning and executing joint citizen science, community and dissemination events.

It is critically important to have adequate inhouse expertise in a project group. It would have had huge challenges to master the administration and finance if we did not have an excellent financial controller in the group. Similarly it was very useful to have the different science, agri and teaching skills in the group as well as press connections to carry off the public events.

Finally we were so lucky to have dedicated, agile, adaptable members with good will, humour and attitude in the community and interested to come together as a group to work together.

The EIP funding was the impetus for moving from concerns and individual actions to joint action which empowered and strengthened the community and public understanding. It was adequate for the project. Though at times we thought that a dedicated full time project officer would be needed, on reflection and after attending the EIP results presentation day we believe that it is possible to achieve exciting results in small agile short projects and that these are useful to sit among the giants which employ several full time staff and run for years.

We experienced a steady flow of positive feedback, had exciting findings, enjoyed and fed public engagement which all drove the project on and kept a good team spirit alive.

Sadly we also learnt the serious limits of the Aarhus Convention implementation first hand when we sought cooperation on improving water quality and information related to sewage discharges and WWT. We came away with serious frustration over not one but several stream water quality and information dealings with authorities and their attitude to public participation. The second part of that lesson is that some progress can be made if you are willing to invest enough time.

The group agreed that you can't win everything and its wiser to park some issues and put them on our follow up list.

While the project was valuable for our area, more is needed. The 3rd River basin Management plan could bring dramatic change and our partial catchment biodiversity gains could be rolled out quickly to transform the whole catchment. However if that doesn't happen we will not achieve the desired nutrient, faecal microb and silt reductions in the stream to restore status to WFD required 'Good' or make it safe for children to paddle in the stream estuary.

6. FOLLOW UP ACTION AND RECOMMENDATIONS

- (i) Most measures taken by partners on the ground are bedding in and now need maintenance or some tweaking. Partners are in the process of doing that. But partners and community would benefit from update and 'booster' events to see how/whether biodiversity is continuing to benefit and whether there is a ripple effect up and down stream. It would also keep biodiversity goals high on the agenda, encourage maintenance actions and add to information exchange and feedback on actions.
The Community group is looking at organising a first event in summer 2023.
- (ii) The No spray trial looks like becoming a permanent feature in the area and has now spread to another village. A public meeting with a pollinator plan talk and more footage of the catchment biota are tentatively planned for heritage week.
We are also seeking a meeting with the NBDC to see whether there is opportunity for forming a network of no spray communities.
- (iii) A central log for local biodiversity information would be very beneficial and we are looking for models elsewhere and possibly project funding to set that up. Our Community EIP website could be the project depository. If that is successful then it would also be worthwhile to launch a call to secondary schools and 3rd level for biodiversity and water research projects in our area which we could support and benefit from.
- (iv) The group wants to feed into the planned new Wexford Biodiversity Action Plan and any catchment plans with the lessons learnt in the EIP project and with skills to help monitor.
- (v) It is a high priority to improve Ballymoney stream quality to Good. This requires a suite of actions. Better knowledge of the Ballymoney stream water quality and catchment biodiversity should be planned. Official stream monitoring coupled with integrated citizen science monitoring could be set up and here we are keeping a close eye on opportunities in the new river basin management plan.

There are also specific water pollution issues which are not unique to our catchment where we believe higher level review, guidance or action need to be taken:

- a. The stream springs are near the road skirting Tara Hill and the first farm wetland is picking up a lot of silt and dirt from the road and yard above that in heavy rain. While that used to run down the stream, it is now caught in the first pond arm which after a year is silting up. While the farmer can carry out the silt removal disposal may be an issue. It would seem reasonable that silt testing and removal to an approved site if there are oil/tyre contaminants would be undertaken by the county council, just like the Road authority is responsible for silt in silt traps along motor ways. At present there appears to be no guidance around this.
- b. The Irish Water run sewage treatment plant is from a report they commissioned contributing to stream pollution. The tertiary treatment reedbed has been removed and Irish Water have granted more WWTP connections as they say they have found extra capacity. In terms of responsibility to act as well as access to information, public participation and access to Justice, we see a real need of improvement here.

7. Dissemination Outreach and Community Actions

Eleven community info and engagement events were delivered. This included 2 with wetland and lizard expert Rob Gandola and 2 with bat experts Brian Keeling and Donna Mullan. There were 2 pollinator fieldtrips, one to find and identify plants and insects by pollinator expert Roishin Quirk with great Teagasc support and one with more demo and talks by beekeeper Samuel Allen and launch of the no spray trial.

An Open Day with minister Pippa Hackett attracted the largest mix of stakeholders in August 2022 with locals, visitors, Teagasc and farmers as well as eNGOS from further afield joining. Measures taken on all partner lands and outcomes were presented.

An indoor event hosted in the Orphan girl provided an opportunity to inform about the EIP project results and show David O Callaghan's video recordings and photos of wildlife seen during and because of the EIP project.

Events were well attended – 20 to 50 persons /event and there is a positiveness which should support further improvements.

A lot of young people including teachers and children are participating and expressing an interest in nature and contributing in a healthy stream watershed.

The interest here spawned the idea to plan a school story telling competition. Tara Hill school invited 3rd class to participate and showed the videos once more in class to spawn ideas. The wonderfully imaginative stories and art work were read out and prize winners announced.

Apart from these well planned events there were many informal meetings with individuals, families who wanted garden advice and discussions around increasing and protecting biodiversity in Ballymoney.

Examples of active positive participation are provided in box below.

The Bee keeper Samuel Allan agreed to put some of his hives into the grounds of interested residents and first little native bee swarms arrived.

The showing of significant cat predator presence in the movement activated wildlife camera recordings and identification of some led to many cat owners making an effort to keep their pets in at night.

Appreciating of the night sky and decisions on own grounds lighting after the bat experts discovered particularly light sensitive species.

Additionally there was a farm focus group walk led by Bob Sheriff on Joe Roches farm and Ballymoney group representatives were invited to man stands at two TEAGSC open day events on other farms.

Press There was good press coverage with four press articles in Irish times, and Gorey Guardian in the first half year, followed by four Gorey Guardian articles, Philip Bromwell's climate program and one Nationwide (sept 2022) program in the second.

We learnt a lot in this project and there are many actions and little tricks which we disseminated and are continuing to be asked about as others want to be adapted to other areas. At present that is done organically as the group or individuals are asked. As the same is likely in other EIP groups. It is worth considering a more organised way to disseminate under different themes and headings.

| | |
|---------------------|---|
| Project Team | <i>* is listed land owner or farm partner</i> |
|---------------------|---|

| Name | Title |
|---|--|
| Joe Roche * | Partner and link to neighbouring catchment |
| Cliona Greene/Flynn* | Partner and group secretary |
| Aine Breen/Pat Donovan * | Accounts and Partner |
| Ken Mehan* | Partner stream end |
| Paul Dubsy | Project lead |
| Karin Dubsy * | Partner Science Officer |
| Kathy Dillon (added to team) | Events officer |
| David O Callghan (added to project team) | Photography/videos , visual communcation |