



LOUGH CARRA CATCHMENT ASSOCIATION (LCCA)

Reg. Charity No. 20206138

MEETING MINUTES

28 November 2022

8.00 To 9.30 pm Belcarra Community Centre

	Directors
Chairperson	Tom Byrne
Vice-Chairperson	Peter Byrne
Secretary	Lynda Huxley
Treasurers	Joe Flannelly and Pat Gibbons
Technical Advisors	Chris Huxley, Cilian Roden, Philip Doddy
	Sean Coyne

Present:		
Antony Baynes	Ronan Cusack - IFI	Lynda Huxley
Martin Butler - IFI	Mike Faherty	Damian Jordan - LIFE
Peter Byrne	Olivia Feeny	Padraig Kelly - LIFE
Tom Byrne	Martin Feerick	Al McDonnell - Cllr
John Campbell - IFI	Pat Feerick	Pat McHale
Norita Clesham - SWMDC	Joe Flannelly	Cilian Roden
James Conran - NPWS	Kieran Flynn - LIFE	David Scully
Declan Cooke	Pat Gibbons	Pat Stanton
Will Corcoran - IFI	Teresa Horan	Michael Sweeney
Sean Coyne	Chris Huxley	John Thornton
		Eamon Walsh - IFI

APOLOGIES :		
Deborah Broughton Ray Broughton Tom Carolan - LawPro Philip Doddy		

AGENDA ITEMS

The Chair welcomed everyone to the meeting in particular Will Corcoran from the IFI.

Minutes of the last meeting

The minutes of the last public meeting held on 13 September 2022 were circulated by email and it is taken that they have been received and read by all present.

Proposed : Pat Stanton

Seconded : Antony Baynes

Matters Arising

There were no matters arising.

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Lough Carra LIFE Project update by Kieran Flynn, Project Manager

Kieran started by praising the work of the volunteers of the LCCA for all the work achieved over the past year as read out in the Secretary's report of the AGM.

The Project Office is now fully established. Whole team nearly recruited:

Padraig Kelly – Ground Water Officer

Damian Jordan – Community Admin Officer

Aisling Burke – Project Admin Officer

Siobhan Ward – Agri-environment Officer

There is one role outstanding, that of Surface Water office which will be filled internally from Mayo CoCo. And there is someone lined up.

Groundwater study – GSI have finished the first round of tracer testing. Produced report and analyzing it to decide how the testing will continue in 2023.

Agri-env scheme - 2nd November over 60 farmers attended meeting. Lots of questions and interest in project and scheme. There was a open Public Meeting earlier today which saw a steady trickle of people all day from 11am to 7pm. Lots of expressions of interest have been received so can start establishing on a catchment map where interested farmers are. Prioritising the area where scheme will be the most beneficial. This is a Pilot agri-environment scheme so can only offer to a limited number of applicants. The Team are waiting to see how many and where the farms are located before any decision is made. The end of 2022 will see closure of Expressions of Interest. The scheme will be starting in 2023.

Coillte are working on their biodiversity plan for Cloonee. Plan in place by end of year.

Invasive species - Padraig Farrell is now carrying out control of foxes at night. He has already done control work for Mink. He will work throughout the whole winter focusing on target invasive species.

Lake Monitoring: carried out some initial monitoring on lake marl this year. Meeting this week with representatives from MayoCoCo, NPWS, EPA, LCCA to set out comprehensive monitoring plan.

Public engagement:

- Website: <https://www.loughcarralife.ie> is now live and will be added to on a regular basis.
- Twitter page LoughCarra LIFE.
- Information boards have been designed for 6 locations Belcarra, Moorehall, Brownstown, Carnacon, Castle Burke, Partry.
- Working on brochures and leaflets.
- Radio, newspaper and press releases.

The Project Monitor is visiting the project next week and will be given a full update on the project.

Questions:

Q: How will the agri-scheme be worked out regarding number of farmers and how much they will receive?

A: In broad terms, the scheme being designed is a results-based agri-environment Pilot scheme. There are approximately 500 farmers in the catchment and can't roll it out to all. There is a set amount ring-fenced fund. The entire project plan that the EU agreed was to fund a Pilot scheme that would be rolled out to about 10% of farmers in catchment. This would then enable Project to establish what is the best way that it can be taken into the long-term as was the case with the Burren LIFE. When all the Expressions of Interest have been received it will be decided who and where will be accepted into the Pilot scheme. Will aim at prioritizing cluster groups in areas that give the best impact on water quality of the lake. Will be a transparent process with everyone. Because it is a results-based scheme, the payments will vary depending on implementation and results. Kieran agreed to meet with members of the LCCA agricultural committee at a future date to go through details of the agri-environment scheme.

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Presentation by Will Corcoran, Research Officer with IFI working for the National Research Survey Programme

The IFI National Research Survey team survey all the lakes and rivers and transitional waters. Will works on the lakes with regards to the Water Framework Directive and in that context they surveyed Lough Carra in June this year. The objective of that survey was to determine the current status of the fish stocks in the lake for two reasons 1) Water Framework Directive (WFD) – fish ecological status 2) Brown Trout Research to add to existing data.

The WFD aims to maintain High/Good water status where it exists, and to prevent further deterioration of existing water status. Came into law in 2003 and is a legal obligation of the State. The main aim is at least Good status for all water bodies by 2027. The national monitoring programmes are a key step in assessing health in water bodies and as part of this programme, the IFI has been responsible for monitoring fish stocks since 2007.

The methods used for monitoring are a combination of CEN standard monofilament survey gill nets (with incremental mesh progression from 5-55mm), Dutch fyke nets and large mesh braided gillnets were deployed at the 53 sites across the lake. These nets were set up in the same locations as in previous surveys to allow a direct comparison. They are set across different depth zones ranging from the surface to the lake bed to enable monitoring of benthic and pelagic fish populations. The nets are set for 12-18hrs usually between dusk and dawn. The length, weight and scales are taken from each fish. The lake's turbidity and temp profiles are recorded. In the lab the diet, sex and age of samples are recorded.

Results: the overall number of fish netted in the 2022 survey was 784 which was made up of: 742 Perch, 23 Brown Trout, 1 Roach, 11 Pike and 7 Eel. This shows that Perch are very dominant and make up approx. 95% of the fish population in Lough Carra. The previous surveys of Lough Carra took place in 2009, 2012, 2015 and 2019.

Comparing the metric of Catch Per Unit Effort (CPUE) for the years from 2009 to 2022, there has been a steady decline in Brown Trout, whereas Pike increased from 2009 to 2019 and have since declined. Perch have increased greatly. CPUE is total number of fish caught per metre of net set.

Another metric used is Biomass Per Unit Effort (BPUE) which equates to weight of fish per metre of net set.

From measurements taken of the fish caught, the smallest length of the Brown Trout was 16cm, any smaller fish were probably still in the streams. These 16cm fish were probably around 2+years. A few 3+ fish of 30cm. and 4-6 year old fish at around 50cm. Although numbers caught were small there is a sign of steady recruitment with no apparent age class missing. Of the Perch measured the majority were 9-11 cm of the age class 1+. Lots of the 1+ fish have survived the previous winter leading to such large numbers.

Distribution. There is a decent spread of Trout across the lake. Southern part not showing many Trout but not many nets set there. Perch are spread throughout the lake. Largest Perch caught in South of the lake. The two areas where Pike appear to be most plentiful are off Castle Burke and Moorehall where there is probably good habitat. The single Roach caught this year and on one previous survey was off Conor's Island near Moorehall.

Trends comparing the 5 years surveyed. CPUE shows that since 2009 there has been quite a substantial drop in Brown Trout in the lake – by over half. Perch numbers in 2009 were quite low but now increasing each time the lake is surveyed. Pike dropped a bit compared to 2019 but similar to 2015. Eel numbers are fluctuating but are currently on the increase from 2019. The BPUE figure is fluctuating but the Brown Trout caught in 2022 were slightly bigger than in 2019. The Perch BPUE figure has dropped due to large

LOUGH CARRA CATCHMENT ASSOCIATION (LCCA)

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number of small fish. When looking at length range, the Brown Trout population make up appears to be staying the same but the numbers of fish caught is fewer. Length of Perch is showing that in 2022 there was a large increase in the number of smaller fish. Pike are increasing in size since 2019.

Comparison of CPUE between lakes in the area – Corrib, Mask and Cullin. Brown Trout numbers in Lough Cullin have spiked in 2022 and its Perch numbers have dropped. Lough Carra has the highest number of Perch. By way of comparison with another lake, Lough Sheelin has a very high numbers of Perch and low numbers of Brown Trout.

Water Quality. One objective of the 2022 survey was to generate a ‘fish ecological status’ based on the fish stock present in the lake. The survey method uses parameters set out in a specially designed ‘Fish in Lakes’ classification tool developed by IFI. Using this method, in 2022 Lough Carra was assigned a provisional fish ecological status of Good. In the 2013 to 2018 surveillance monitoring reporting period, the EPA assigned Lough Carra an overall draft Ecological Status of Good. The next reporting period is 2019-2021 and the EPA report is due in the near future.

The IFI rivers team went out in 2019 and assessed the ecological status of several streams. This showed two streams at High status, four at Good but two were classified as Poor.

The full report will be on the IFI website in the coming year. The previous survey reports for Lough Carra can be found at the following links:

[2019 survey report](#)

[2015 survey report](#)

[2012 survey report](#)

[2009 survey report](#)

Questions:

Q1: How confident are you in high, good classification? Trout numbers declined 50% since 2009 but indicators not picking this up. Implication of the system is that Trout numbers can fall by half and yet the status of lake doesn't change?

A1: The tool used looks at the biomass of native species. Trout numbers are falling but still enough there to generate a good status with the tool.

Q2 from Dr Cilian Roden: Under EPA classification (phosphorus less than 0.02 mg per litre) Lough Carra qualifies for good status. I'm expert on charophytes and we have good evidence that if lake phosphorus goes above 0.01mg/l the charophyte vegetation rapidly declines. We have published this information in a National Parks and Wildlife Service manual '[Marl Lake \(Habitat 3140\) Survey and Assessment Methods Manual](#)' by C.Roden, P. Murphy, J. Ryan & P. Doddy

Equally Dr P. Doddy worked on cyanobacterial crusts. He demonstrates they have an even greater sensitivity than the charophytes. In the terms of Lough Carra it seems that level was not set high enough in the first place. It is probably hard for people to comprehend that if you can have a biomass and Trout population that falls by half and yet the lake is still classified as Good.

A2: The lake is trending downwards which is an indicator that needs remedying before it declines to Moderate. Still have good native biomass in that lake.

Q3: The Trout in Lough Carra seem to be getting larger and fewer. Is something happening? Ecological niche of the Trout is changing as the quality of lake falls. Could a classification be designed that takes this into account – that fewer and larger Trout is in itself a sign of a lake in decline?

A3: Could also indicate that recruitment is not as great but it has been noticed in other lakes that when Trout get bigger the numbers have also declined.

Q4: Noticeable on the charts higher growth rate of Trout which is similar to what happened in Lough Conn. Fish larger and not so many small fish.

A4: Could be missing an age cohort.

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Q5: In 10 years 2009 to 2019 saw a decrease in Brown Trout numbers - they halved in that ten year period. It is three years since the last survey and it now appears to have dropped by another 25%. Catastrophic background trend. Main tributaries appear to be in good status – so why is recruitment so low. Huge recruitment problem and a trend and nothing changing - 25% down every 3 to 4 years and if that continues the lake will cease to be a Brown Trout fishery in 10 years. Also seems to be an issue around predator control – higher predation in the lake from Pike.

A5: Two things working side by side. Could be missing an age cohort or that they have moved on and growing faster. The water quality issue is probably helping Perch who are now competing with Trout. Takes a while to clearly see the trend but can now see clearly.

Q6: Recruitment, predation, water quality problems. Does IFI have plan in place to address.

A7: The work done is reported into the EPA and comes to them to look at Water quality. Regarding the predation and recruitment, the results from the surveys are passed on to other areas within the IFI.

Q7: Appreciate that Will is only reporting on WFD stock assessments, but Martin O’Grady did assessments in 2000 and 2009 and in that nine-year period the CPUE dropped by 50% so even before current trends started there had been 50% drop which implies that what we have now is 25% or less than what the population was at its peak.

A7: The surveys done now are not comparable with Martin O’Grady’s because the nets are different type but do acknowledge that the trend started earlier.

Q8: The EPA assessment of lake status – a few years ago Cilian Roden and myself (Chris Huxley) were on lake with Andy Fanning of EPA, and his comments were ‘our monitoring system is not fit for purpose for a shallow marl lake like Lough Carra’ because the parameters used are not appropriate. So, the EPA status that the lake is Good quality is actually irrelevant ecologically. Would you have any informal explanation why we are observing the plummeting Trout and increasing Perch?

A8: Possibly a combination of water quality and competition with Perch. Perch are a bigger issue than Pike because there are so many Perch. Water quality issues would be favouring the Perch.

Q9: There has been a huge explosion in numbers of Perch but do their numbers fluctuate.

A9: We are still waiting for the Perch numbers to go bust. It could be that they will out compete themselves by eating everything and so starve themselves.

Q10: Does IFI have direct involvement in looking after the feeder streams or observing what is happening? Is there a team in IFI that check them?

A10 from Martin Butler: There is a plan and a small team working on the ground. The focus on fish habitat for many years has been neglected but there is a focus at the moment on enhancing that again. Following on from the Western Lakes Management Plan consultation process we hope that there will be an increase in resources.

Q11: Is there someone in IFI that could come and tell us what the plans might be regarding rehabilitation of the lake

A11 from Martin Butler: The Western Lakes Management Plan (WLMP) is due to be published soon following the public consultation process. All the actions that we feel are required to address those issues mentioned including Coarse fish proliferation should be in the Plan. However, the main question is resources will be provided to implement the WLMP. The local teams on Lough Carra, Lough Corrib and Lough Mask do as much as possible with the resources available. The local team are involved with the LCCA and collaborating on certain actions carrying out habitat work and putting in drinkers etc. More of that is what is needed.

The Chair added that there has been great work from the local IFI team, especially John Campbell and Ronan Cusack in carrying out work on streams but also with the IFI awareness programme ‘Something Fishy’ delivered in local schools, they have been at LCCA meetings and assisted with solar pump installation so we have had excellent co-operation from them .

Q12: Does Pike have influence on Perch numbers?

A12: Yes assume some but when Perch so prolific the numbers just explode. It’s possible that Pike may keep them in some check.

The Chair thanked Will for his presentation and thanked everyone for their questions.

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Treasurer's Report

Credit Union current balance : €4,033.02

Bank of Ireland : €131,347.90 – LIFE project funding to be used for land purchase/lease only.

Any Other Business

Water Communities Grant: Olivia Feeney mentioned that a €2,000 grant had been received in 2022 from the LawPro Water Communities Development Fund. This was less than applied for but enabled the fencing off of a length of the Ballintubber Stream to facilitate installation of a Solar Pump. The work had been carried by IFI local team. The Grant was not sufficient to cover the purchase of the Solar Pump and money had to be raised for that from other sources. The Chair responded that the LCCA Farmer Liaison group had done wonderful work with assistance from IFI.

The Chair asked for blanket approval for all decisions and discussions from the meeting. There was full approval from the floor.

The Chair thanked everyone for attending and since this is the last meeting of the year he wished everyone Merry Christmas and Happy New Year.

NEXT MEETING

The next meeting will be held on Tuesday 17 January 2023 at 8pm in Carnacon Community Centre.

All meeting minutes and other documents relevant to LCCA can be found on the Lough Carra website <http://loughcarra.org/catchment-association/>