



# LOUGH CARRA CATCHMENT ASSOCIATION (LCCA)

Reg. Charity No. 20206138

## MEETING MINUTES

14 November 2023

8.00 To 9.30 pm Belcarra Community Centre

	<b>Directors</b>
Chairperson	Tom Byrne
Vice-Chairperson	John Thornton
Secretary	Lynda Huxley
Treasurer	Sean Roberts
Vice Treasurer	Pat Gibbons
Technical Advisors	Chris Huxley, Cilian Roden, Philip Doddy
Directors	Peter Byrne, Sean Coyne

<b>Present:</b>		
Antony Baynes	Joe Greene - Tobins	Al McDonnell - Cllr
Peter Bowyer	Denis Healy	Pat Murray
Ray Broughton	Ger Heverin	Tony OConnor
Peter Bryne	Teresa Horan	Tom Quinn
Tom Byrne	Jackie Hunt	Lucy Roberts
John Campbell - IFI	Chris Huxley	Sean Roberts
Ronan Cusack - IFI	Lynda Huxley	Cilian Roden
Philip Doddy	Damian Jordan	John Sheridan
Joe Flannelly	Padraig Kelly – GSI/LIFE	Pat Stanton
Kieran Flynn - LIFE	Michael Kingdon	Michael Sweeney
Pat Gibbons	Jaroslaw Majkusiak	John Thornton
<b>APOLOGIES :</b>		
Deborah Broughton		

### AGENDA ITEMS

The Chair welcome everyone to the meeting.

### Minutes of the last meeting

The minutes of the last public meeting held on 15 August 2023 were circulated by email and it was taken that they have been received and read by all present.

Proposed: Joe Flannelly

Seconded : Pat Gibbons

### Matters Arising

There were no matters arising.

### Philip Brookes RIP

Chris Huxley informed the meeting of the sad news of Phil Brookes death. Phil was a friend of the LCCA, an expert beekeeper and a world renowned soil scientist. He came from Rothamsted research station in UK. Expertise lead him to work in many places in the world and was a senior academic in China. On reading the

# LOUGH CARRA CATCHMENT ASSOCIATION (LCCA)

Reg. Charity No. 20206138

## MEETING MINUTES

14 November 2023

8.00 To 9.30 pm Belcarra Community Centre

condolences on the RIP web site <https://rip.ie/death-notice/philip-phil-brookes-mayo-ballinrobe-531129> it is clear to see how well respected he was internationally, with messages from Japan, China all over the world. We only knew him recently but he created an important link for the LCCA with Rothamsted soil research station in the UK in particular regarding their prototype soil testing work. Phil was deeply committed to our cause and we will miss him.

The Chair expressed words of sympathy from the LCCA to his family. He will be a great loss.

### **Lough Carra LIFE Project update by Kieran Flynn, Project Manager**

Kieran briefed the meeting on various aspects of the project under the following headings:

#### *Groundwater study by Geological Survey Ireland (GSI) - part of LIFE Project Team*

Second round of dye tracing, and the follow up sampling/monitoring has been completed. All samples are currently being analysed. Initial results have been interesting, but no formal conclusions will be made until analysis is complete. Mapping of the karst features continues.

Water balance is being measured. Data loggers are to be installed at 7 locations of inflowing streams and springs around the lake. They will measure pressure, amongst other things, which will allow us to calculate flow and might provide information on subterranean features.

#### *Agri-environment Scheme*

- 30 farmers signed up to the scheme and it has progressed well.
- There were initially 40 farmers but some have dropped out.
- Results based monitoring on the farms has been completed.
- Supporting actions are now to be implemented on the farms that are in the scheme, such as:
  - Riparian buffer zones and strips
  - Fencing
  - Solar pumps
  - Woodland and hedgerow planting
  - Settlement ponds
  - Drain management
  - Nutrient Management Plans
  - Soil Sampling.
- This first year of the scheme has been a test year and will be expanded in 2024. There is now an open invitation for Expressions of Interest from farmers and landowners for 2024 and farmers who weren't successful in 2023 are now being contacted for the 2024 intake.
- There will be a Public Meeting about the 2024 scheme in early/mid December,

#### *Lake Monitoring*

Chemistry and biology: there is monthly chemistry monitoring and kick sampling is carried out for biology monitoring - pre and post summer. There is a new Surface Water Officer who has joined the team this week, Anne Marie Meaney. Leo Brogan who was filling that role has now moved back into the environment section of Mayo.

Yr1 will provide baseline monitoring:

- The submerged vegetation monitoring snorkel surveys have been completed.
- Marl crust monitoring – samples are awaiting analysis
- Emergent vegetation – there has been a partial survey and the survey process is under review

# LOUGH CARRA CATCHMENT ASSOCIATION (LCCA)

Reg. Charity No. 20206138

## MEETING MINUTES

14 November 2023

8.00 To 9.30 pm Belcarra Community Centre

3-D flow mapping of the lake's water movements will be progressing this winter. This should help us understand how nutrients move through the lake. Peter Bowyer will be carrying out this work

### **Biodiversity and Site Restoration**

- **Forestry**  
Biodiversity management plans in place for all publicly owned forestry in the catchment, including islands. Felling licenses have been granted and CCF works underway. Rhododendron control is ongoing.
- **Bat habitat enhancements**  
Bat surveys, summer and autumn bat surveys completed. Awaiting report. Bat roosts – 2 further mobile bat roosts have been installed (4 in total) showing signs of being used. Report on 2023 bat surveys will guide the hibernacula installation. Will be some permanent hibernation locations.
- **Invasive species control**
  - NPWS continue to collect data.
  - P. Farrell post breeding season he did some shooting of Greylag Geese and in the breeding season did some oiling of eggs with the objective of reducing the flock size. Main reason for needing to control the Greylag Geese is their numbers have been growing year on year and will start to push out some of the more vulnerable species. He is now doing fox and hooded crow control.
  - A strategy on how to keep Zebra mussel out of the lake is being developed.

### **Public outreach and awareness**

- Had Stakeholder group meeting to increase community awareness.
- Will be increasing engagement with farmers and keeping them updated on the project.
- Pat Stanton helped with interview on Castlebar Radio.
- Articles have appeared in Western People, Connaught Telegraph and Waterfall Magazine
- Damian Jordan has distributed brochures around the catchment
- End of year newsletter in print form is being prepared.
- Presentation was made for Mayo Ideas Month held in Tourmakeady
- Galway University students spent time on one of farms that is in the agri-environment scheme
- Project promotional film in final draft and will be launched by the end of the year. Philip Doddy provided the music and Aoibhinn Ní Shúileabháin is the narrator
- Social media and website remain active.

### **Questions**

Q – if a farmer enters the agri-scheme in 2024 would that mean he'd only have 3 years?

A – The original specification was that the scheme would run for 4 years. Since the scheme has already started then yes it would be a 3 year term for those entering in 2024. Before the end of the current LIFE Project the team have to design and After LIFE Plan which will proposed how the agri schemes could be implemented in the long term. The LIFE team is working with Teagasc to define how farming should best be managed in an area like the Lough Carra Catchment and this will be put forward to the Dept. There is no one size fits all as areas are different and specific areas need to be managed in specific ways.

### **Presentation by Joe Greene on behalf of GSI on Karst Trace Test Results**

Joe Greene explained that he is a hydrogeologist working for Tobin Engineers to provide external assistance to GSI for specific technical elements of the Lough Carra LIFE Project relating to hydrogeological services.

# LOUGH CARRA CATCHMENT ASSOCIATION (LCCA)

Reg. Charity No. 20206138

## MEETING MINUTES

14 November 2023

8.00 To 9.30 pm Belcarra Community Centre

His talk presented the results to date of the Karst Trace Testing which is being carried out to gain a better understanding of the groundwater catchment to Lough Carra and specific contamination pathways.

He explained that Lough Carra is situated in a lowland limestone area that is highly karstified, meaning that the limestone is characterised by features such as swallow holes, springs, and turloughs. In these areas the interactions of surface water and groundwater are complicated, and the conventional surface water catchment to the lake is not necessarily the 'true' or whole catchment.

Over the past two years GSI and Tobins have run 3 water tracer tests in the catchment and a smaller repeat test is currently ongoing. Tracer testing is when a coloured dye is put in the water at a clear entry point such as a swallow hole. Each coloured dye has a unique signal and several colours can be put in at one point. The dyes are not toxic and have no negative impact on the environment or animals. They dilute quickly and so special equipment is needed to analyse the water for any traces. Application of the dye has to be carried out when conditions are right i.e. not too dry and not too wet.

A monitoring system is set up around the catchment using charcoal/cotton wool bags to capture dye and in some more critical points a in-situ fluorometer is installed. Once the dye has been injected a routine system of sampling is commenced. Daily sampling in the first couple of weeks and then tapers off but the total duration is 5-6 weeks.

Water tracing results so far show that in 2022 there was positive confirmation of a connection between the swallow hole in Ballyglass turlough and the monitoring points at Bull's Well, Rooghaun and Annie's Bridge. It took 2.5 days to travel the 5.1 km (straight line distance), peaking at 3.5 days. So, they were able to deduce that groundwater flowed at a rate of at least 85 m/hr to get there. This shows an extension of the NE catchment boundary beyond the known surface water catchment.

2023 focussed on SE of the catchment and recently received results which show a positive trace to the Robe River from two sample points (SH1 and SH2) and a positive result at Toberloona from SH3.

When current trace test complete they will have a more complete view. Following that will design next tracer test and wait for conditions to be right in the new year.

They are constantly updating Karst feature map based on work being carried out by Padraig Kelly. Also working on flow monitoring of the springs but more work to be done on that.

### Questions:

Q – Does water coming into the lake all exit via the Keel canal? Or could water be leaving Carra elsewhere?

A – Results from the dye tracing carried out from Ballyglass turlough seems to show that rivers are going underneath each other. So it's possible water is exiting in underground river channels.

### Treasurer's Report

Credit Union balance is €10,325.23

Bank of Ireland balance is €131,186.60 - ring fenced for land purchase/lease for the LCCA contribution to Lough Carra LIFE.

### LCCA Update by Chris Huxley

For last year or more trying to acquire land in the catchment. It is specified in the LIFE Project that the LCCA should be doing this to demonstrate sensitive environmental land management and to carry out demonstrations for educational purposes. To date we have failed in two cases completely. The third

# LOUGH CARRA CATCHMENT ASSOCIATION (LCCA)

Reg. Charity No. 20206138

## MEETING MINUTES

14 November 2023

8.00 To 9.30 pm Belcarra Community Centre

attempt relates to 31 acres on the Kilkeeran peninsula. There have been long, protracted negotiations. The LCCA have now reached the maximum offer they can make for this land and have just received news that the vendors are favourably disposed to this offer. From conservation point of view it is some of best land in the catchment.

### Questions:

Q - is it the case that the land is all in SAC and if so if LCCA aren't able to buy it that the land still has to be administered as SAC?

A – Chris confirmed that this is the case.

### Any Other Business

Denis Healy – Treasurer Carra Mask Corrib commented how impressed with meeting. He informed the meeting that the Carra Mask Corrib AGM will be held on Thursday. Would welcome people from the LCCA and anyone else who can provide support and help. The meeting will be in the Anglers Rest in Headford on Thursday 16<sup>th</sup> November.

The Chair thanked all speakers and everyone for attending. He also thanked Joe Flannelly, outgoing Treasurer and Director, for all the work he had done as Treasurer. He thanked Peter Byrne for the work he had done as Vice-Chair. Peter will continue to be a Director but is handing over the Vice Chair role incoming Director, John Thornton.

### NEXT MEETING

**The next meeting will be held on Tuesday 16<sup>th</sup> January 2024 at 8pm in Partry Community Centre. All are Welcome.**

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