

UKILN Conference

**Lakes – protecting,
enhancing and restoring.**

**Westport
16th and 17th October 2019**

Hotel Westport Leisure, Spa & Conference Hotel

<http://www.ukandirelandlakes.org>

United Kingdom Ireland Lake Network



Lake Local Catchment Assessments in Action



Lough Carra, Co. Mayo

UK and Ireland Lakes
Conference

Dr Bernadette White,
Catchment Manager Western Region,
Local Authority Waters Programme

16th Oct. 2019

Overview

Improving Water Quality – Initiatives:

- What's driving the LA Waters Programme?
- Who are we and what are we doing?
- Water Framework Directive and River Basin Management Planning

Local Catchment Assessments – the steps?

- Deskstudy
- Community Information Meeting
- Catchment surveys
- Analysis of results & determination of referrals
- Delivery of Action Plan

What's Driving this Programme?

EU Water Framework Directive (WFD) 2000

- EU Legal framework to **protect and restore** clean water across Europe by 2027



- **How?** Preparation of **River Basin Management Plans** over three cycles

1st Cycle: 2009-2015 (minimal community engagement)

2nd Cycle: 2016-2021

3rd Cycle: 2022-2027

..... **“to achieve good ecological status (good water quality)
in all waters and retain high status”**



- 2014 Regulations provided **new role for Local Authorities**

Local Government Role

2014

- Increased responsibility for Local Government
- Regional coordination of implementing bodies
- Public engagement and catchment assessment responsibilities
- Driving the implementation of mitigation measures at Catchment Level

2015

- 2015 business case for Local Authority Shared Service
- Tipperary Co. Co. & Kilkenny Co. Co. joint lead on Shared Service
- LA Communities Team – coordinate implementing bodies & engage with communities
- Significant input to preparation of 2nd River Basin Plan

2017

- 2017 business case for further Shared Service
- LA Catchment Assessment Team – support implementation of RBMP through catchment assessment & referrals to implementing bodies

2018

- Services merged 2018
- **Local Authority Waters Programme** established (Communities Team + Assessment Team)
- Working together to improve water quality

Structure of LAWPRO



Communities Team (2016)

- 3 Regional Coordinators
- 13 Community Water Officers

KEY ROLE:

Community engagement – encouraging communities to value water in their catchment and to participate in actions to **protect water**



Catchment Team (2018)

- 1 Catchment Assessment Lead
- 5 Catchment Managers
- 30 Catchment Scientists
- 1 Blue Dot Scientist

KEY ROLE:

Scientific assessments – identify the right measure in the right place to help **improve water quality**



Comhairle Contae
Ros Comáin
Roscommon
County Council

Sample of the Implementing Bodies



An Roinn Tithíochta, Pleanála,
Pobail agus Rialtais Áitiúil
Department of Housing, Planning,
Community and Local Government



OPW
The Office of Public Works
Oifig na nOibreacha Poiblí



Local Authority
Waters
Programme
vibrant communities | catchment assessment | healthy waters



Department of
Agriculture, Fisheries and Food
An Roinn
Talmhaíochta, Iascaigh agus Bia



AGRICULTURE AND FOOD DEVELOPMENT AUTHORITY



Marine Institute
Foras na Mara

Waterways Ireland
Uiscebhealaí Éireann Watterweys Airlann



Iascach Intíre Éireann
Inland Fisheries Ireland



National Parks & Wildlife Service

Water Catchments

WHERE WE LIVE, WORK & PLAY

Properly sited and managed woodlands and forests help to protect water quality.

Agricultural Pressures

Good will grow crops and reduce risk to water quality.

Livestock access to watercourses needs to be properly managed.

Forestry Pressures

Blue Dot Catchments Programme – protecting and restoring high status waters

Drinking Water Abstraction

Clean water sources require less chemical treatment.

Private wells should be properly constructed, sealed and regularly tested.

Rural Dwelling Pressures

Domestic waste water treatment systems should be well sited and maintained.

Urban Run-Off Pressures

The Green Schools programme raises awareness of water as a valuable resource.

Effective urban waste water treatment protects public health and the environment.

Waste Water Pressures

Water quality is defined in terms of five status classes: High, good, moderate, poor and bad.

Most towns and villages in Ireland have angling clubs. Angling tourism benefits local communities.

Share Your story.

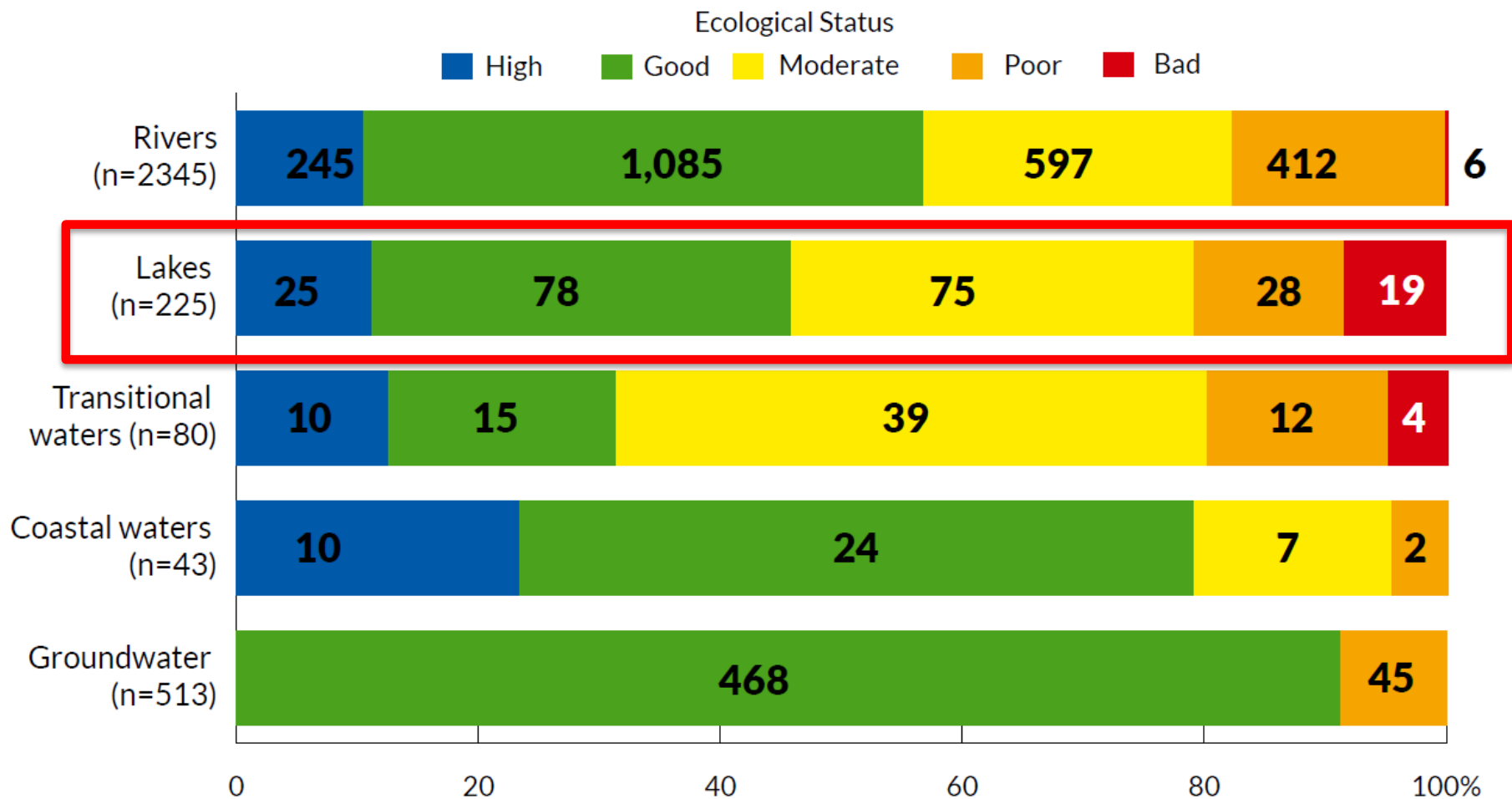
Catchment assessments are carried out for the benefit of local communities.

Protecting the water environment now will benefit future generations.

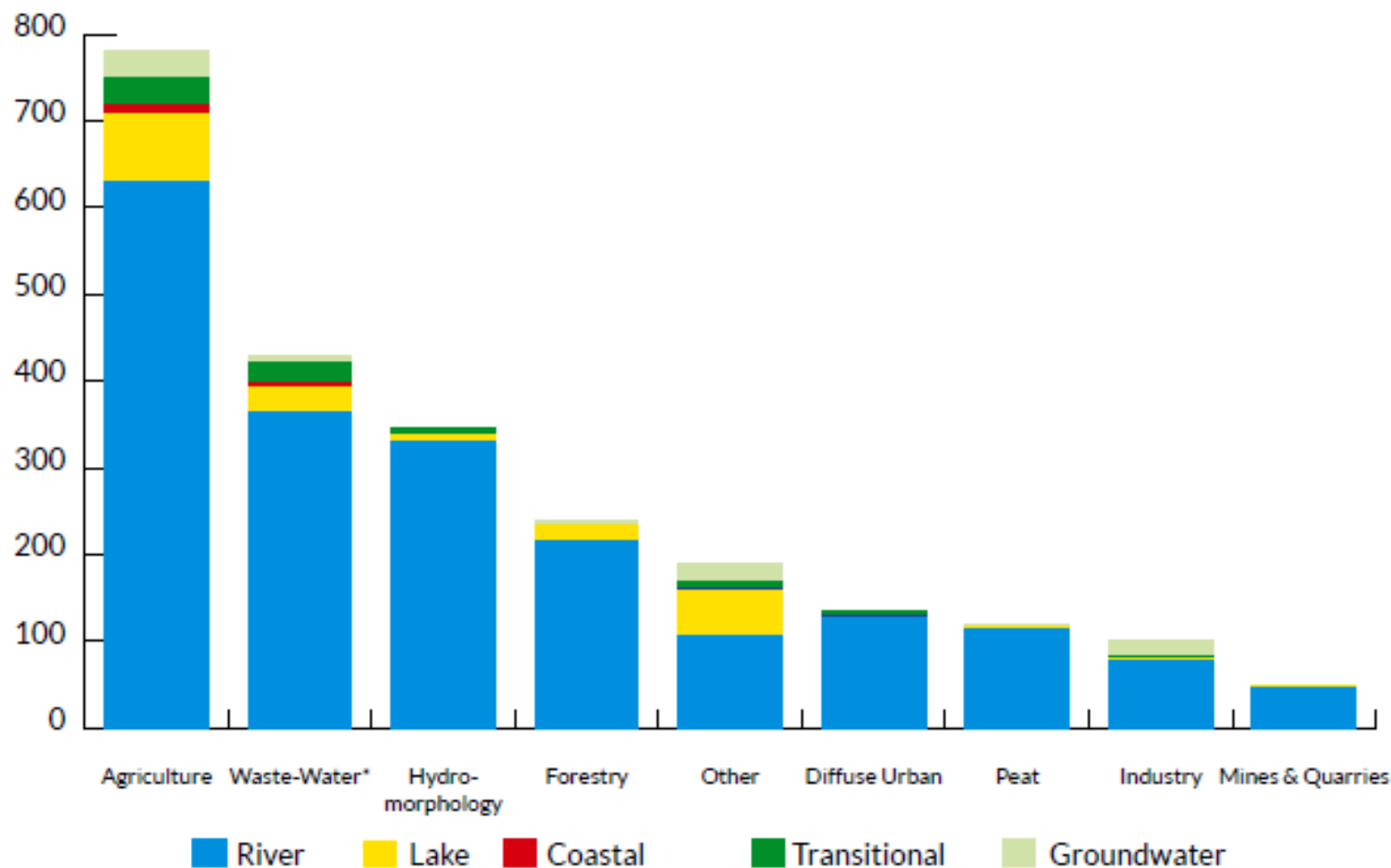
Local Authority
Waters Programme
Water conservation | Catchment assessment | Healthy waters.

**We all live in a catchment and
what we do impacts on our water quality...**

Scale of the Issues: Ecological Status



Significant Pressures

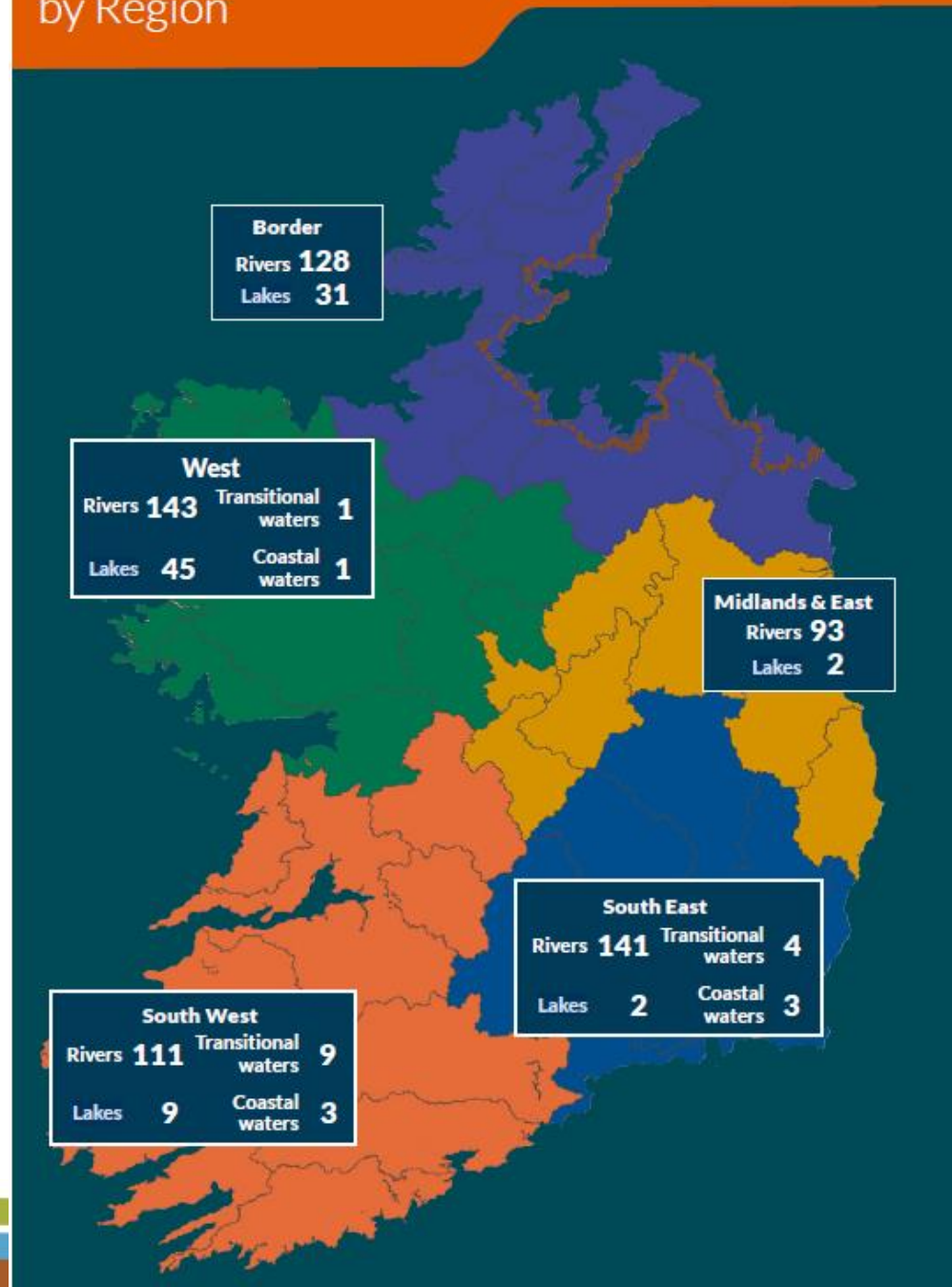


*Urban and Domestic Waste-Water

Our Work: The Statistics

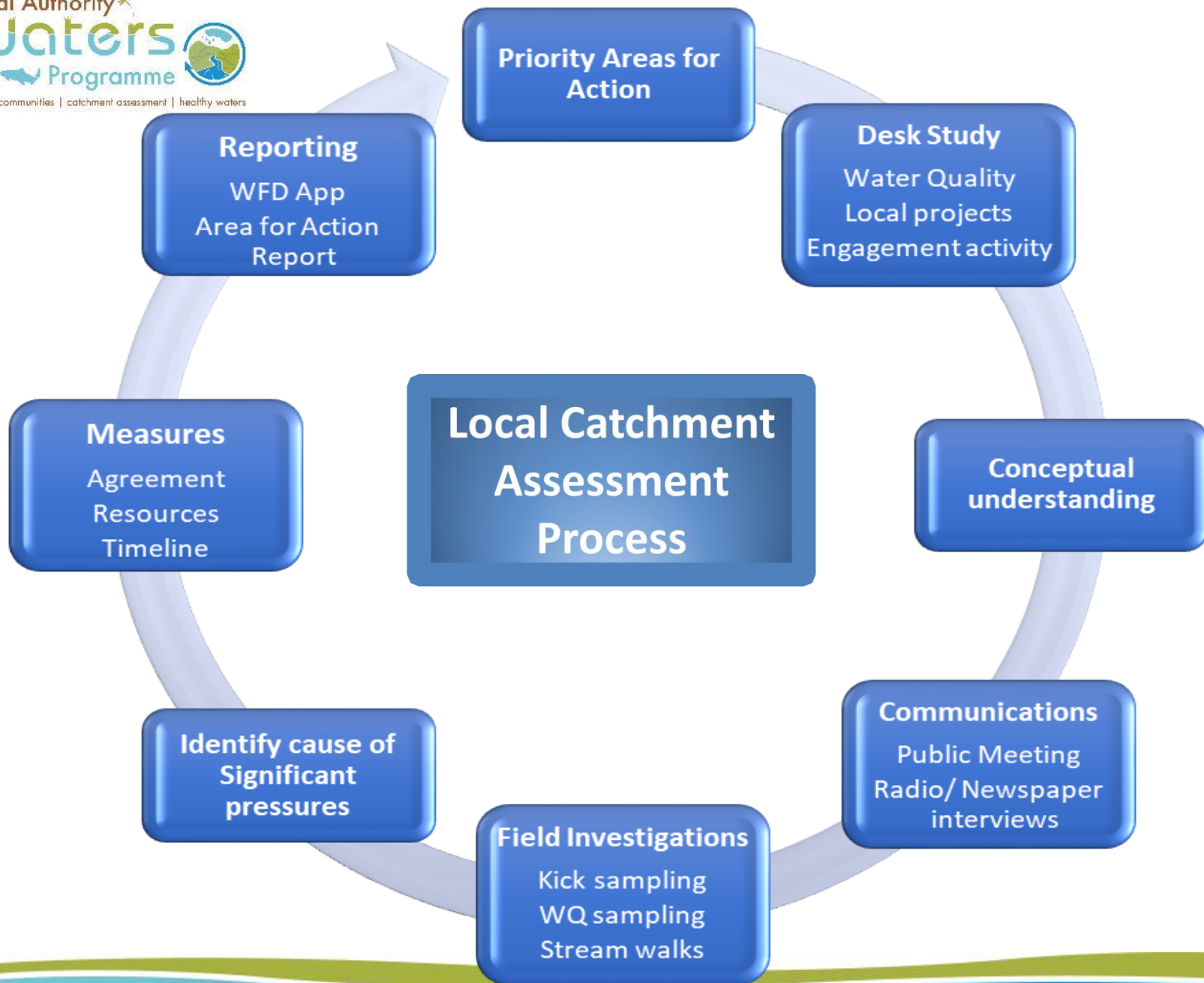
- Western & Border Region have highest proportion of lakes in PAAs
- 90 lakes within PAAs for further characterisation
- 44 lakes with no water quality data (unassigned)

Priority Water Bodies by Region



What do our assessments look like?





PAA Desk Top Study

Desk Study for
Carrowmore
Priority Area for Action

Willena Boukelia
Western Team



- Receptor Information and assessment
- Significant Pressures
- Pathway Information and Analysis
- Identification of data gaps

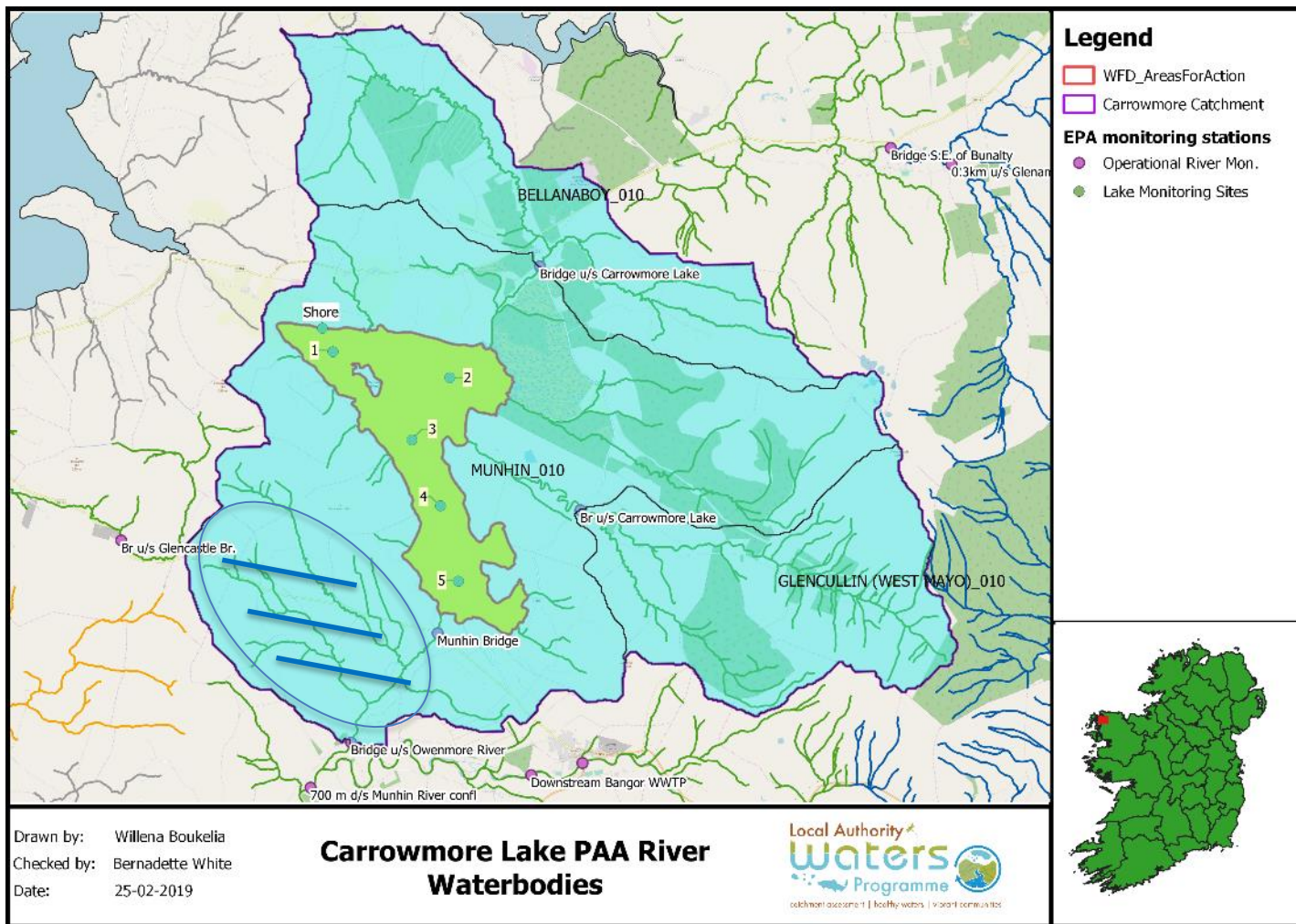
PAA Summary

WB Code	WB Name	WB Type	Risk	High status obj.	2009 Ecol. Status	2012 Ecol. Status	2015 Ecol. Status	2017 Biol. status	Pressure Category	Pressure Subcategory	Significant Pressure	Action	Responsible Organisation
IE_WE_33M030_200	MUNHIN_010 (outflow)	River	Not at Risk	No	G	G	G	G	None	None	No	None	
IE_WE_33B070_200	BELLANABOY_010	River	Not at Risk	No	G	G	G	G	None	None	No	None	
IE_WE_33G030_100	GLENCULLIN (WEST MAYO)_010	River	Not at Risk	No	G	G	G	G	None	None	No	None	
IE_WE_33_191_4	Carrowmore	Lake	At Risk	No	M	M	M	M	Extractive Industry	Peat	No	IA1 Provision of Information	Mayo County Council
									Agriculture	Pasture	Yes		
									Forestry	Forestry	Yes		
									Agriculture	Agriculture	Yes		

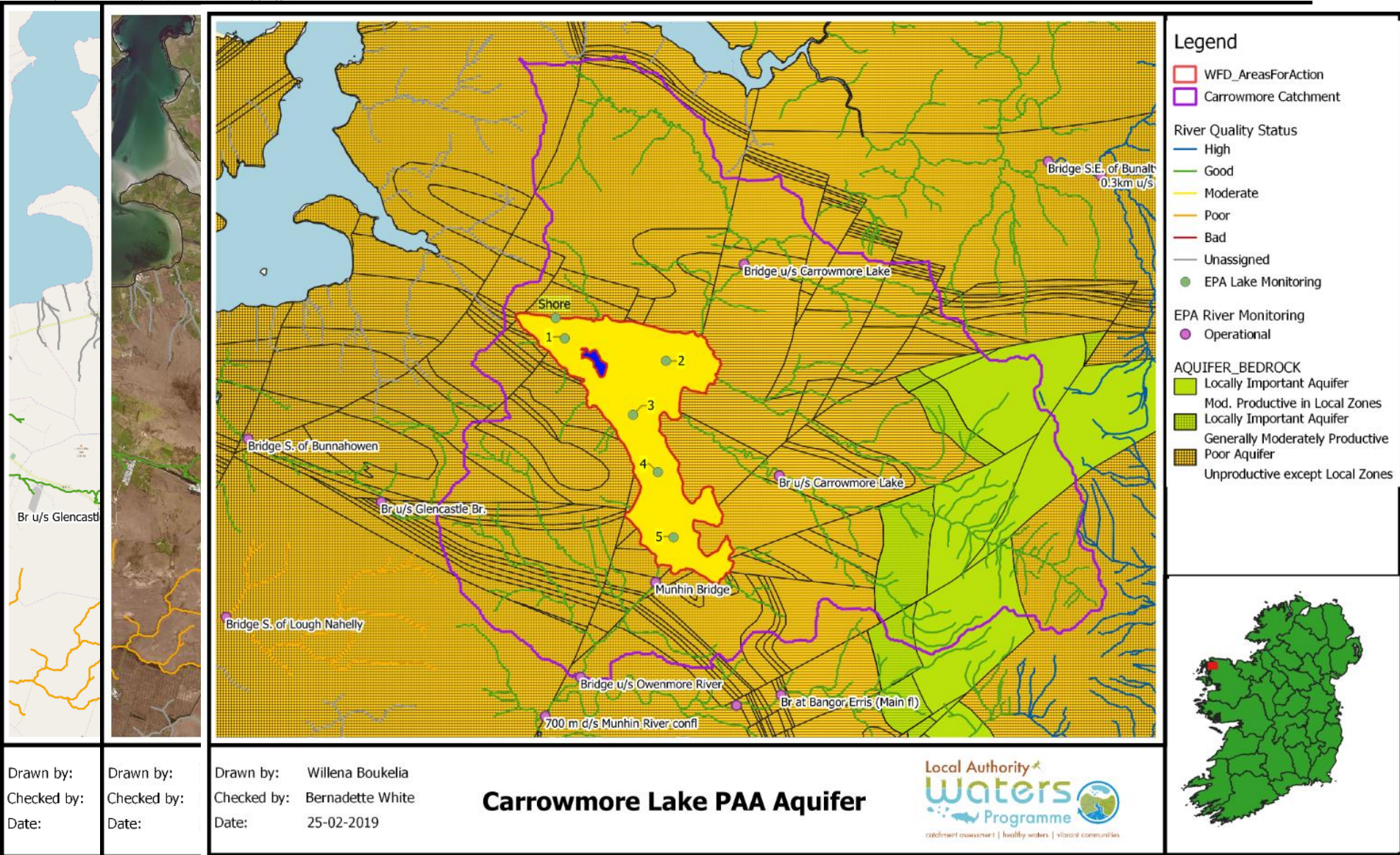
[1] Munchin_010 RWB is monitoring only for the outflowing rivers and not the inputting Munchin_010 rivers.

[2] Watching brief: Slurry spreading has been limited by Mayo CoCo in steep sloping fields in north west corner of lake as part of nutrient management plans. Sig pressures are Ag and forestry. Source Protection Zone also to be assigned given the Erris regional water supply which supplies most of north Mayo. Monitor potential impacts from Forestry.

Defining the Catchment



Conceptual Modelling – water & contaminant flow



Community Information Meeting



COMMUNITY INFORMATION MEETING

CARROWMORE LAKE HELP PROTECT YOUR LOCAL LAKE

VENUE	DATE	TIME
Broadhaven Bay Hotel, Bellmullet, Co. Mayo	4th April 2019	7.30 8.30

Refreshments afterwards.

At present, water quality in Carrowmore Lake is not as good as it could be. You are invited to an information meeting to hear about plans to improve water quality in this local catchment. There will be an opportunity for questions and discussion with the people who will be working in your local catchment. This is a new approach to water quality and everyone is invited to play their part.

The catchment area for Carrowmore Lake stretches from the townlands of Carnhill to Glencullin Upper and from Cloontakilla to Carrowmore.

For more information contact:
Bernie White (085 8030094/bwhite@lawaters.ie) or
Mick Kane (085 8083064/mkane@lawaters.ie) Or
www.watersandcommunities.ie

Or visit www.watersandcommunities.ie

Carrowmore Priority

The **Carrowmore Lake** catchment in the Western Region (Galway) was selected as a **Priority Area** for the Management Plan for Ireland.

Staff from the Local Authority Waters Programme will undertake a local catchment assessment in this catchment to identify causes of water quality deterioration and areas where actions can be taken to improve water quality.

Any actions taken to improve water quality will be carried out in collaboration with all relevant public authorities, landowners and interested groups in the catchment.

Carrowmore Lake was selected for the following reasons:

- One Lake water body not meeting objectives
- Failing to meet its protection objectives
- Important for Inland Fisheries
- Important local amenity
- Building upon previous forestry practices.



Agricultural Sustainability Support & Advisory Programme (ASSAP)

- ASSAP – a **free farm advisory** service
- 20 **Teagasc** Advisors (50/50 by DAFM & DHPLG)
- 10 Advisors – provided by the **Dairy** Industry
- Managed by **Teagasc Team Leader**
- **Coordinated** by LAWPRO/Teagasc/Dairy Industry



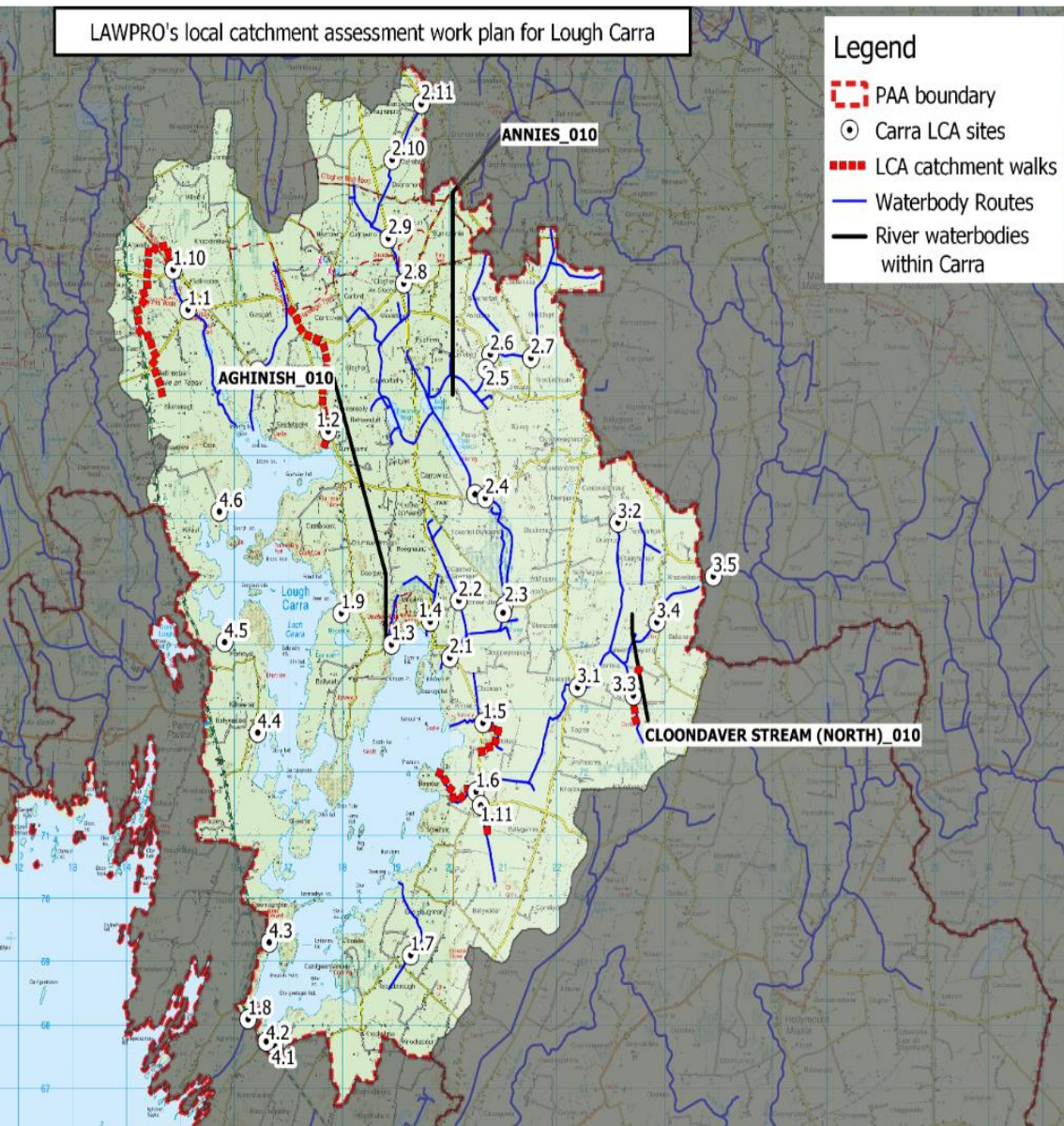
ASSAP Farmer Meetings



- **Farmers only** meetings (following-on from public meetings)
- **Presentation** from Teagasc Advisors and Catchment Assessment Team
- **Explanation of surveys & overall programme** including equipment & mapping on display

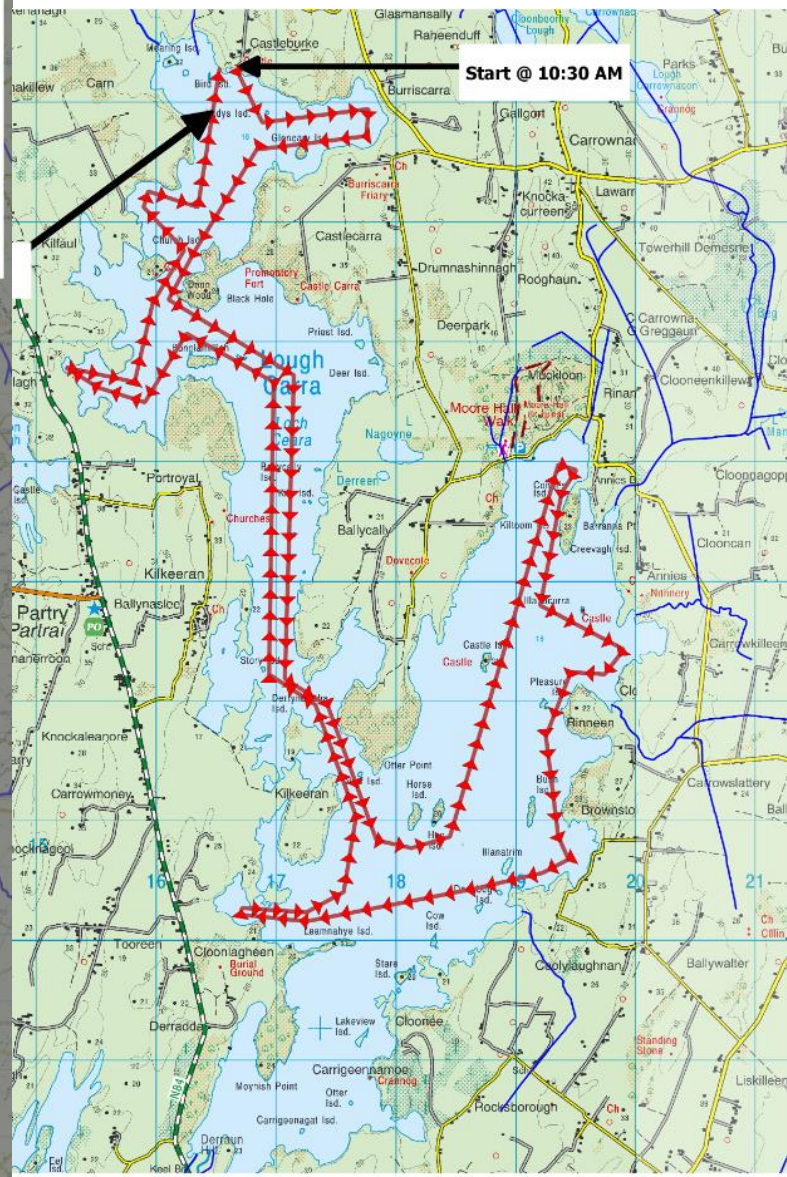
Catchment Assessment Planning

LAWPRO's local catchment assessment work plan for Lough Carra

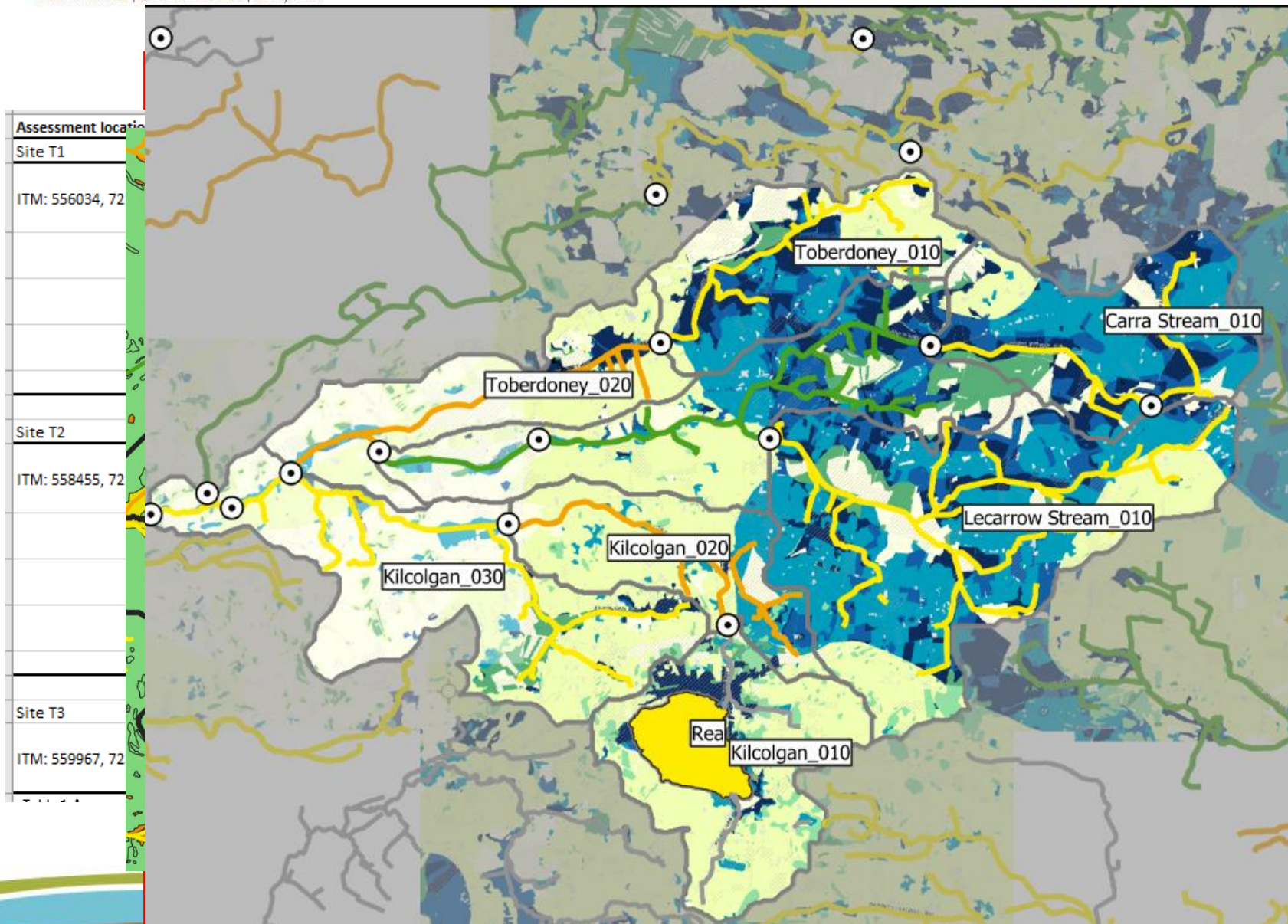


Legend

- PAA boundary
- Carra LCA sites
- LCA catchment walks
- Waterbody Routes
- River waterbodies within Carra



Results = Scientific Evidence Base for Actions



by Vaucheria. The high
 e (See photos sheet).
 particularly under the
 thin its filaments.

by Vaucheria. The high
 e (See photos sheet).
 particularly under the
 thin its filaments.

ed

Referrals to Implementing Bodies = Action Plans

Home / Current Characterisation Summary / Further Characterisation / Waterbody: Carrowmore

Step 1
Desk Based Study

Step 2
Field Assessment

Step 3
Specialist Assessment

Step 4
Refine Significant Pressures
& Mitigations

Step 5
Conclusions

Name Carrowmore

Code IE_WE_33_1914

Id FC001028

Last updated by EDEN System User

Last updated on 09/07/2019 08:19:33

Tier 2 Assessment - Summary Information

Action IA1 Provision of Information

Description Watching brief: Slurry spreading has been limited by Mayo CoCo in steep sloping fields in north west corner of lake as part of nutrient management plans. Sig pressures are Ag and forestry. Source Protection Zone also to be assigned given the Erris regional water supply which supplies most of north Mayo. Monitor potential impacts from Forestry.

Significant Pressures

Code	Category	Subcategory	License Status	Code	Name
WBP0003916	Agriculture	Pasture	n/a	n/a	n/a
WBP0003917	Forestry	Forestry	n/a	n/a	n/a
WBP0006406	Agriculture	Agriculture	n/a	n/a	n/a

Information & Contact details

- www.watersandcommunities.ie
- www.catchments.ie
- bwhite@lawaters.ie



Western Team

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