

Water



Working together to deliver for our uplands and water quality

Uplands
Symposium
2023



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*Catchment Manager,
Western Region,
LAWPRO*

- Local Authority Waters Programme (LAWPRO)
- Waterbodies and data used
- What is Water Quality
- Our upland rivers compared to others
 - Quality, pressures, and issues
- What we can and are doing
 - Areas for Action, Waters EIP, and ACRES
- Conclusion



Local Authority Waters Programme

Director of Service

6 Head Office Staff

Communities Team (2016)

12 Community Water Officers
4 Regional Co-ordinators

KEY ROLE:

Community engagement –

encouraging communities to value water in their catchment and to participate in actions to **protect and restore all waters nationally**



Catchments Team (2018)

30 Catchment Scientists
5 Catchment Managers

KEY ROLE:

Scientific assessments – help identify the right measure in the right place to **improve water quality** in **Priority Areas for Action**

1 Blue Dot Scientist



Local Authority Waters Programme

- Local Authority Waters Programme (LAWPRO)
- Shared service representing all local authorities
- Carry out Local Catchment Assessment in Areas for Action

LAWPRO's Mission

To engage and support communities, and work with local authorities, public bodies and stakeholders to protect and care for the natural waters and catchments of Ireland.

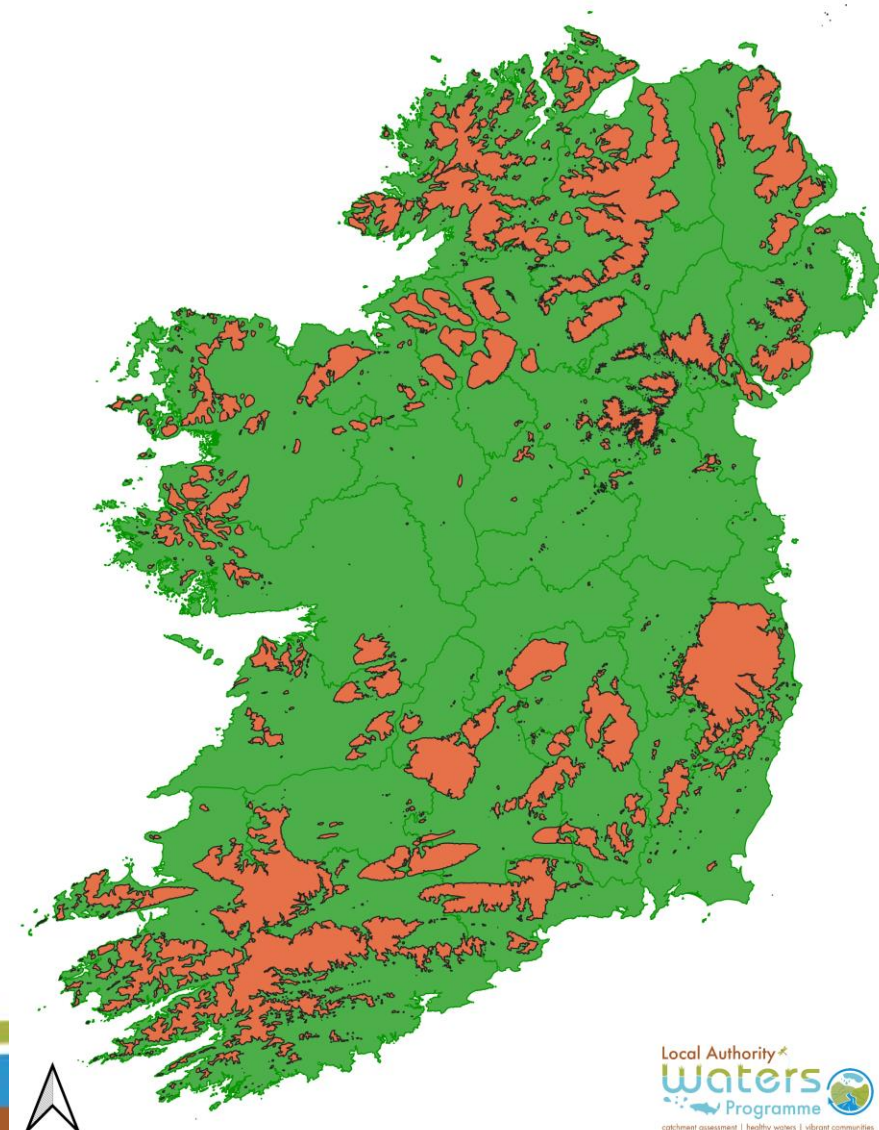
LAWPRO's Vision

Ireland's water catchments, including our rivers, lakes, wetlands, estuaries, ground, and coastal waters, are healthy, vibrant, and biodiverse places. Cared for and protected by public bodies, water users, and local communities.

Our Uplands

Upland Areas

- National Parks and Wildlife Service 150 m
- Irish Uplands Forum 200 m
- OSI 300 m
- Defined for this talk as areas over 150 m Elevation

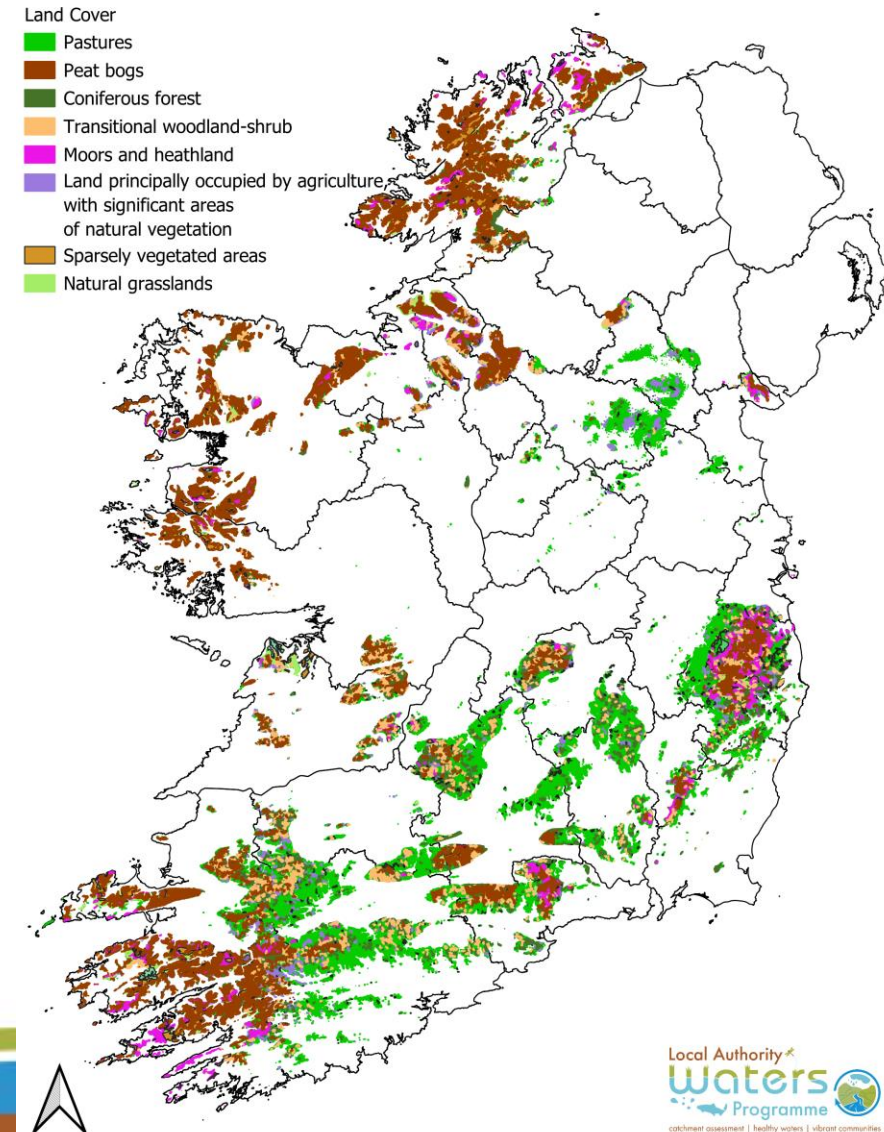


Land Cover in the Uplands

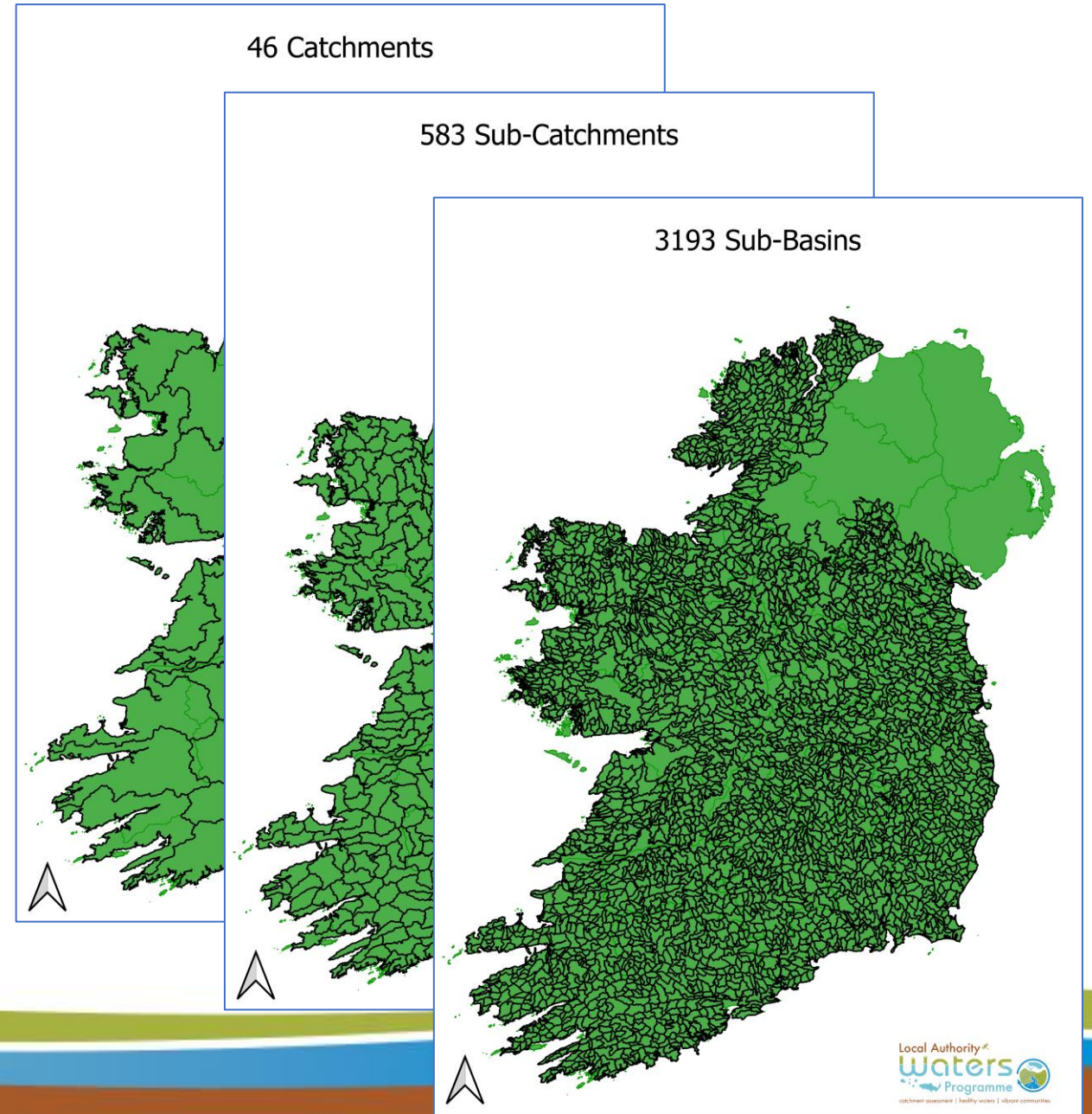
CORINE Land Cover in Uplands

- Pasture is the most common land cover closely followed by Peat bogs
- Coniferous make up a large portion but appears an underestimate and is misclassified in some instances

Corrine	Percentage Occurrence
Pastures	32%
Peat bogs	27%
Coniferous forest	13%
Transitional woodland-shrub	8%
Moors and heathland	6%
Land principally occupied by agriculture, with significant areas of natural vegetation	5%
Sparsely vegetated areas	3%
Natural grasslands	2%



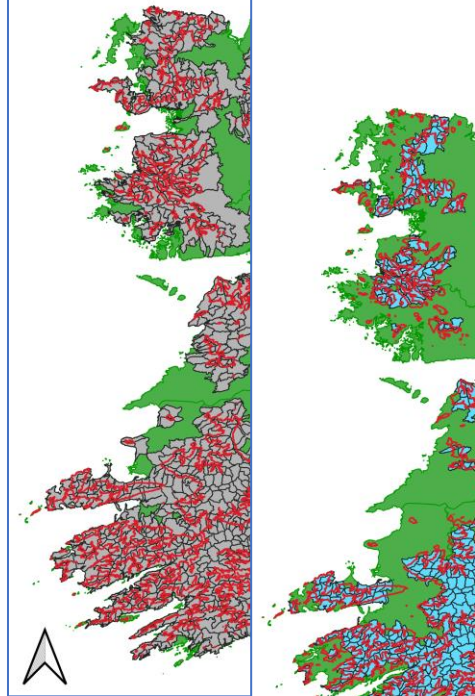
- 46 Catchment – think Corrib, Moy etc.
- 583 Sub Catchment – small section $\sim 100 \text{ km}^2$
- 3193 river sub-basins – excludes the canals
- All stats are at the sub basin level



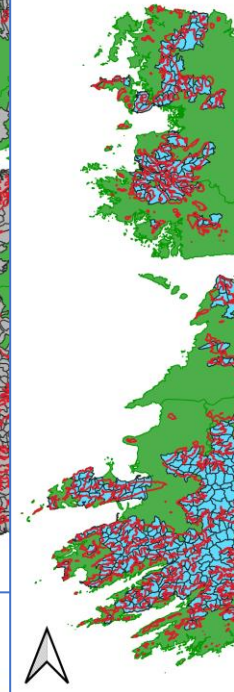
Rivers in the uplands

- 2192 Rivers have some section in the upland areas
 - Many are quite small overlaps
- 994 River sub basin have over a 30% overlap with the upland
- All data is based on these 994 rivers

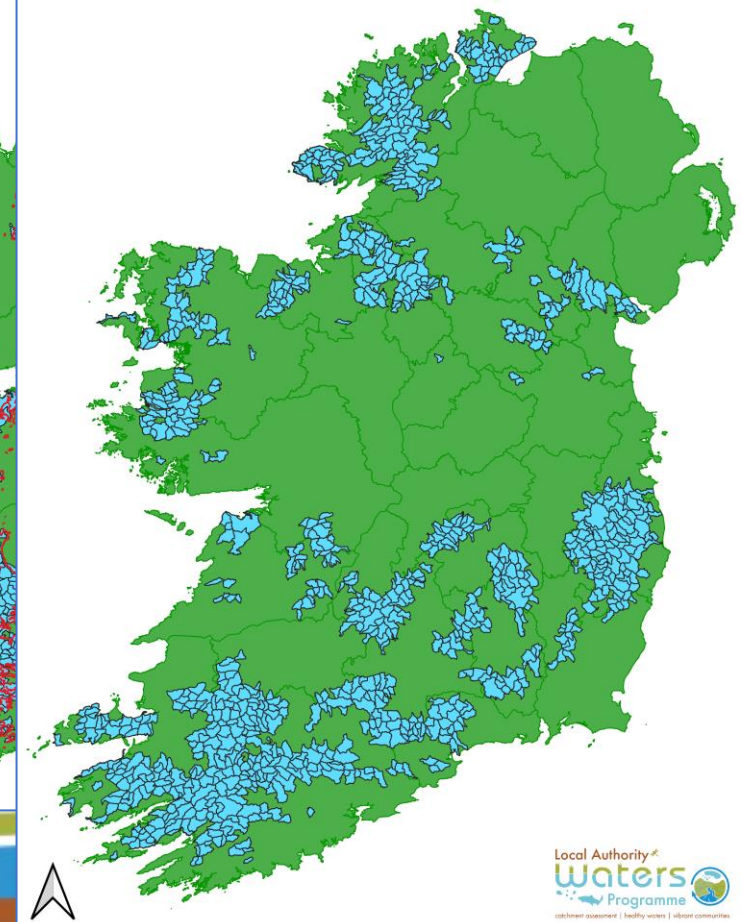
2192 Rivers that Intersect Upland



994 Rivers Significantly Upland (>30%)



994 Rivers Significantly Upland (>30%)



What do we mean by water quality?

European Union Water Framework Directive

High

Good

Moderate

Poor

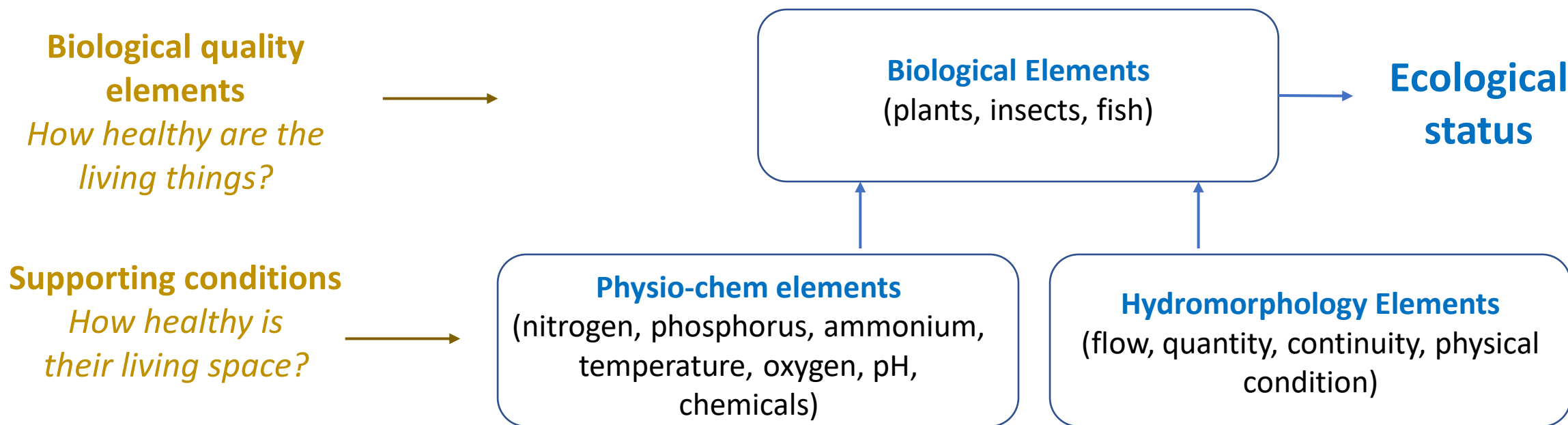
Bad



The Biological Indicators (INV)



What is 'water quality'?

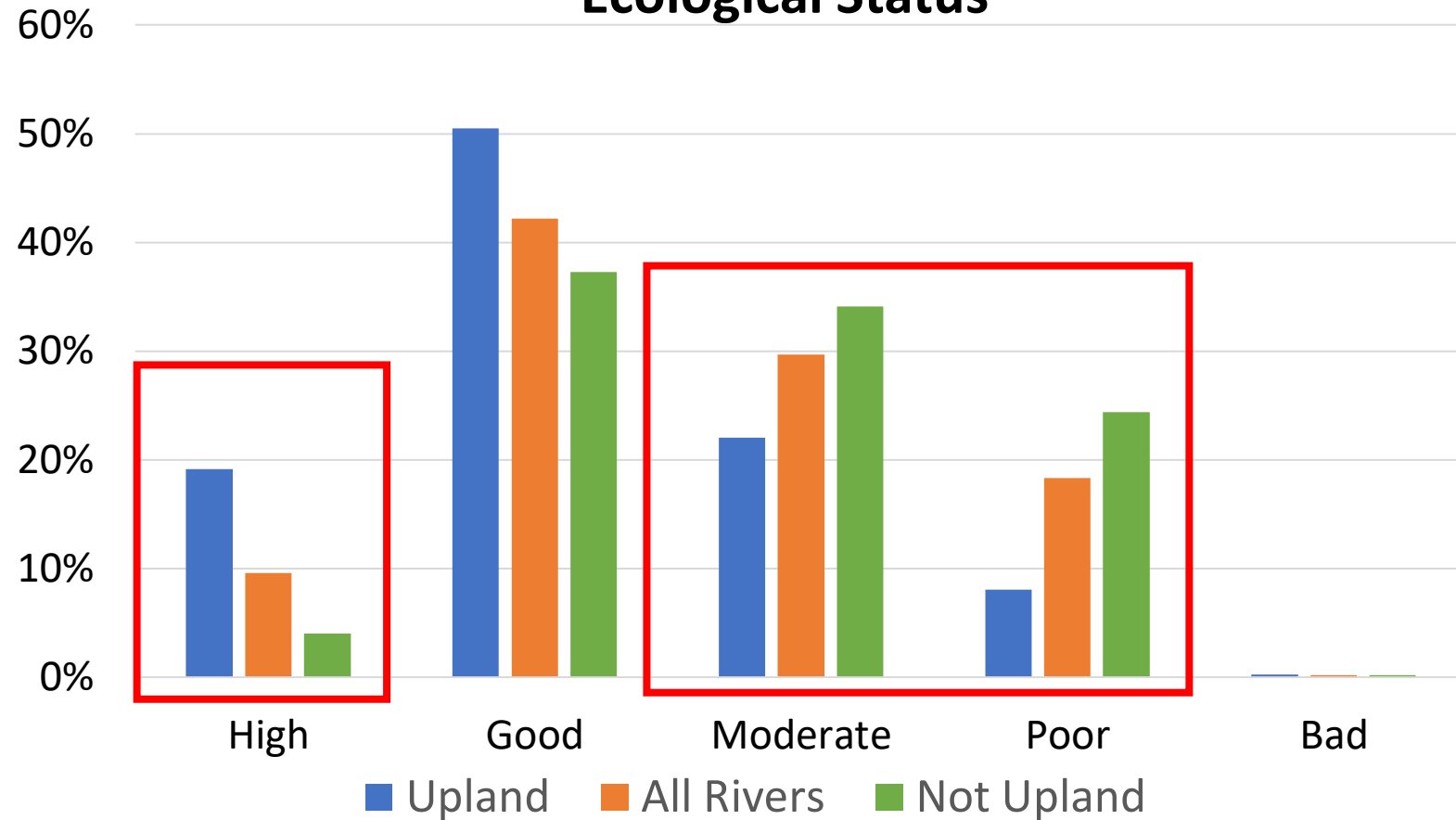


Measures are targeted at addressing the supporting conditions

Water Framework Directive Status 16-21

Percentage of Monitored Rivers at Each Ecological Status

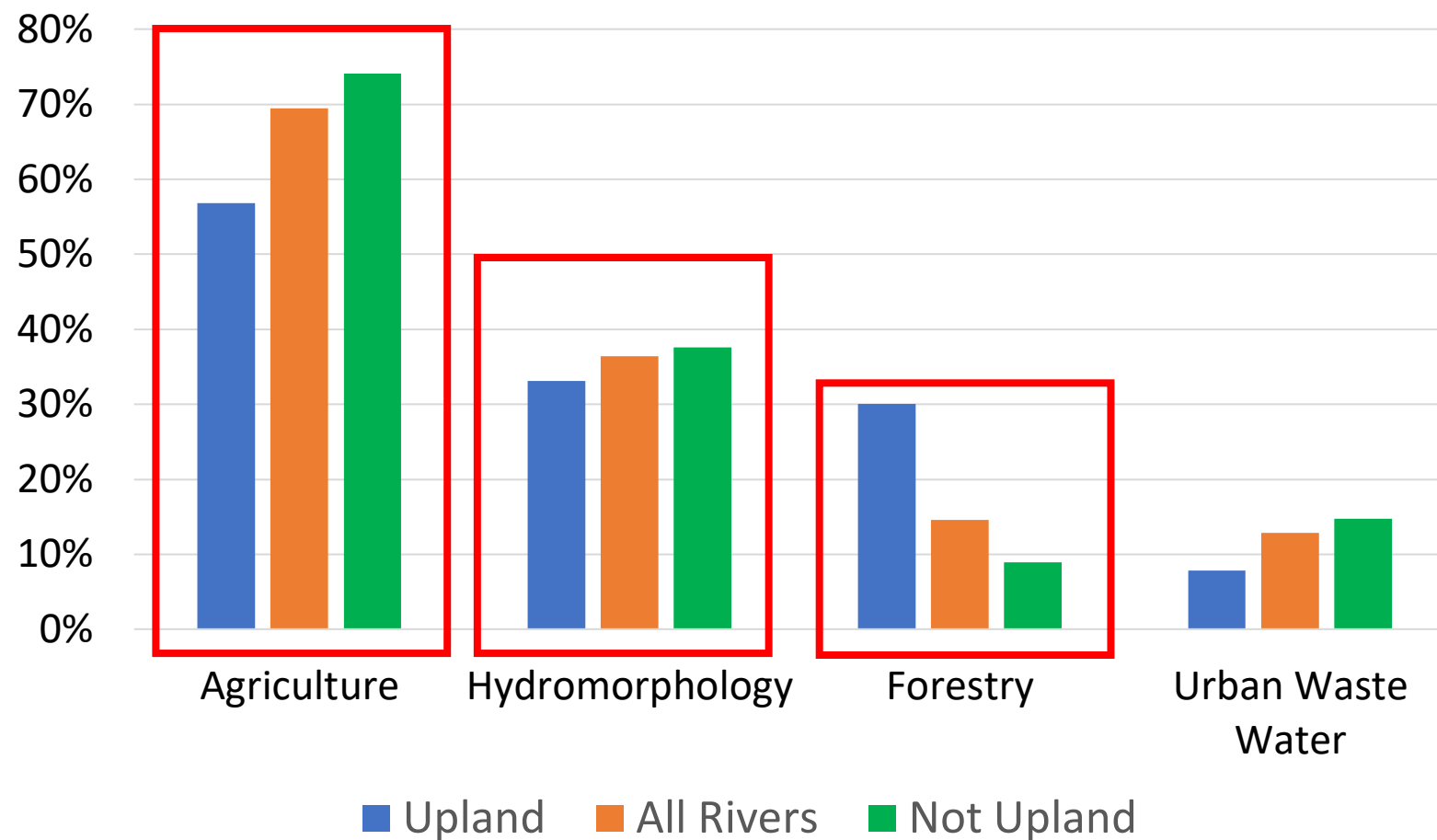
- River in the uplands are of notably better quality than others
- Three quarters of all high status rivers are in the uplands
- Exemplifies the quality of our uplands
- Not all good news with 30% less than Good



Risk of not achieving our WFD Objectives

Major Significant Pressure in *At Risk* Rivers

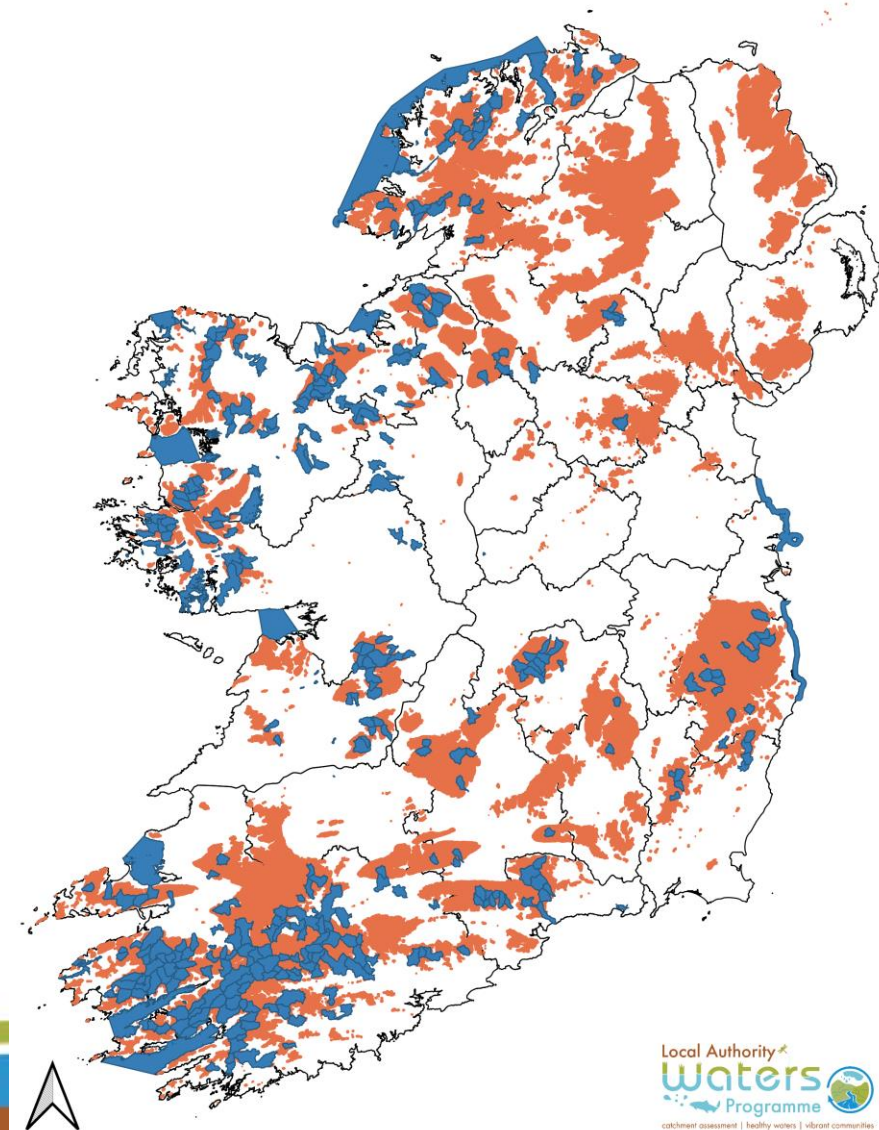
- Agriculture the largest pressure in upland rivers though less common than other rivers
- Hymo. roughly similar across rivers
- Forestry notably more common in the Upland rivers
- Urban waste water more common in the Not Upland rivers



Blue Dot Rivers and the Uplands

Blue Dot Waters and Uplands

- 334 Rivers are Blue Dots – High Status objective
- Blue Dots are waters that must achieve high status
- The best waters we have
- Heavily associated with the uplands with 252/334 rivers in the uplands



Example issues in Blue Dots

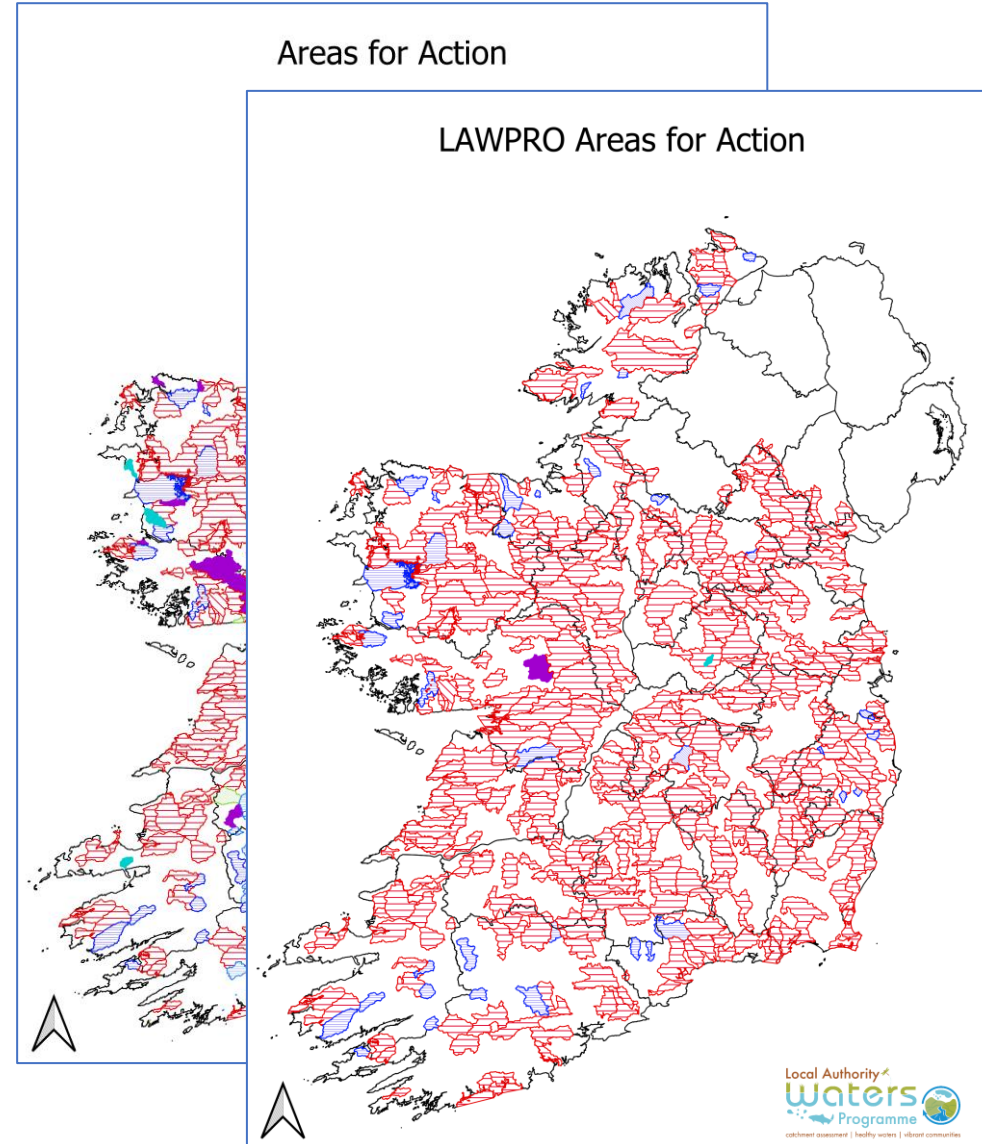




Actions to address issues

Third Cycle Areas for Action

- Key action of the River Basin Management Plan (2022-2027)
- 2299 waterbodies are in an Area for Action for the third cycle
- Of these 1893 are led by LAWPRO and will have Local Catchment Assessment carried out to identify and localise the specific issues affecting water quality

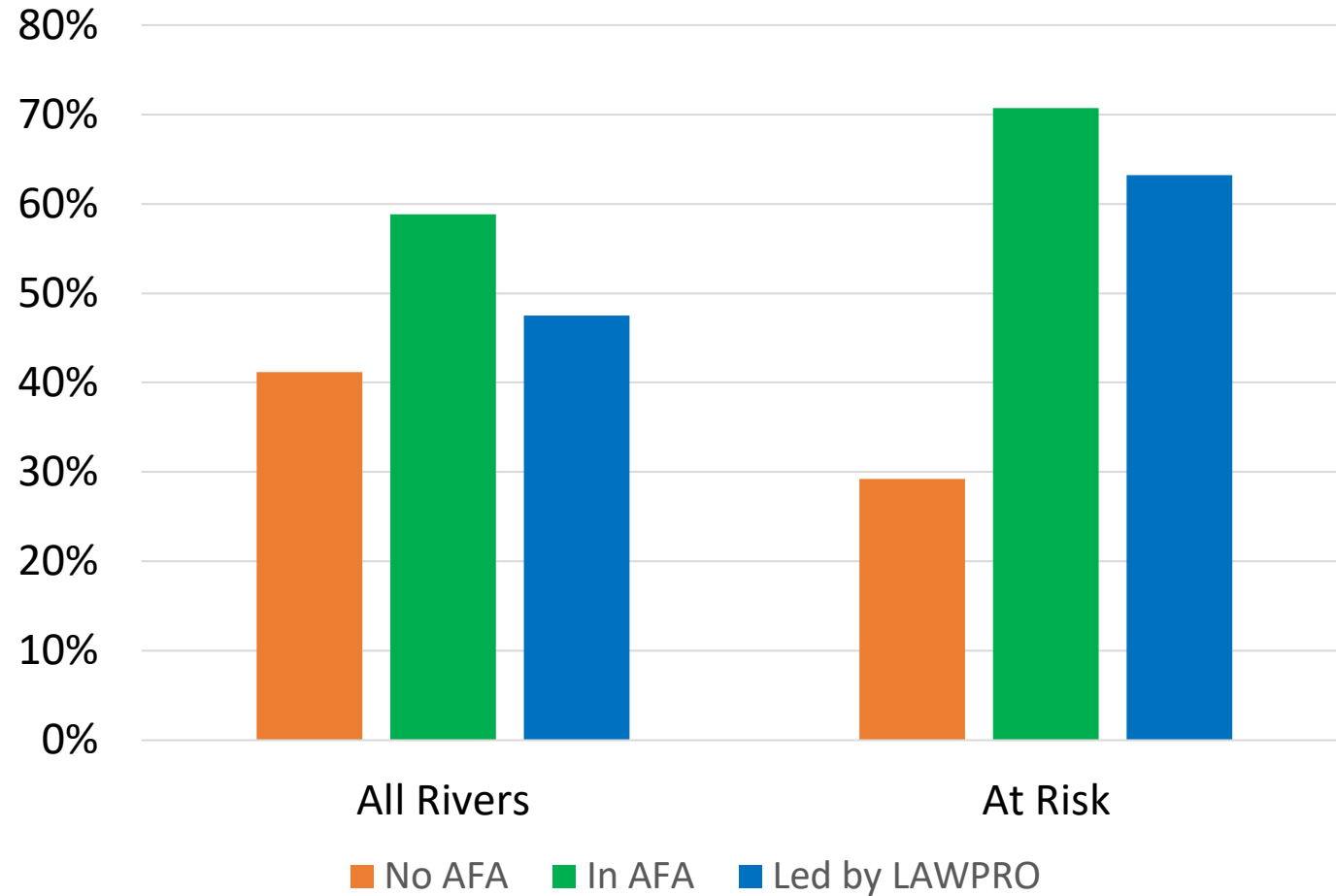


- Much of the Upland Rivers are in an Area for Action (59%)
- Most are led by LAWPRO (47%)
- When only looking at the upland rivers that are *At Risk* the large majority are in an Area for Action

Third Cycle Areas for Action

LAWPRO Areas for Action and Uplands

Occurrence of Areas for Action in Uplands



European innovation project

Three partners (LAWPRO, Teagasc and Dairy Industry Ireland)

Supporting partners including Meat industry, ABP, Dairygold (Tillage), research community, IFI, OPW

A number of innovations including results based payments, research hub, nature-based solutions approach (rainwater management plan)

Up to 15,000 farmers

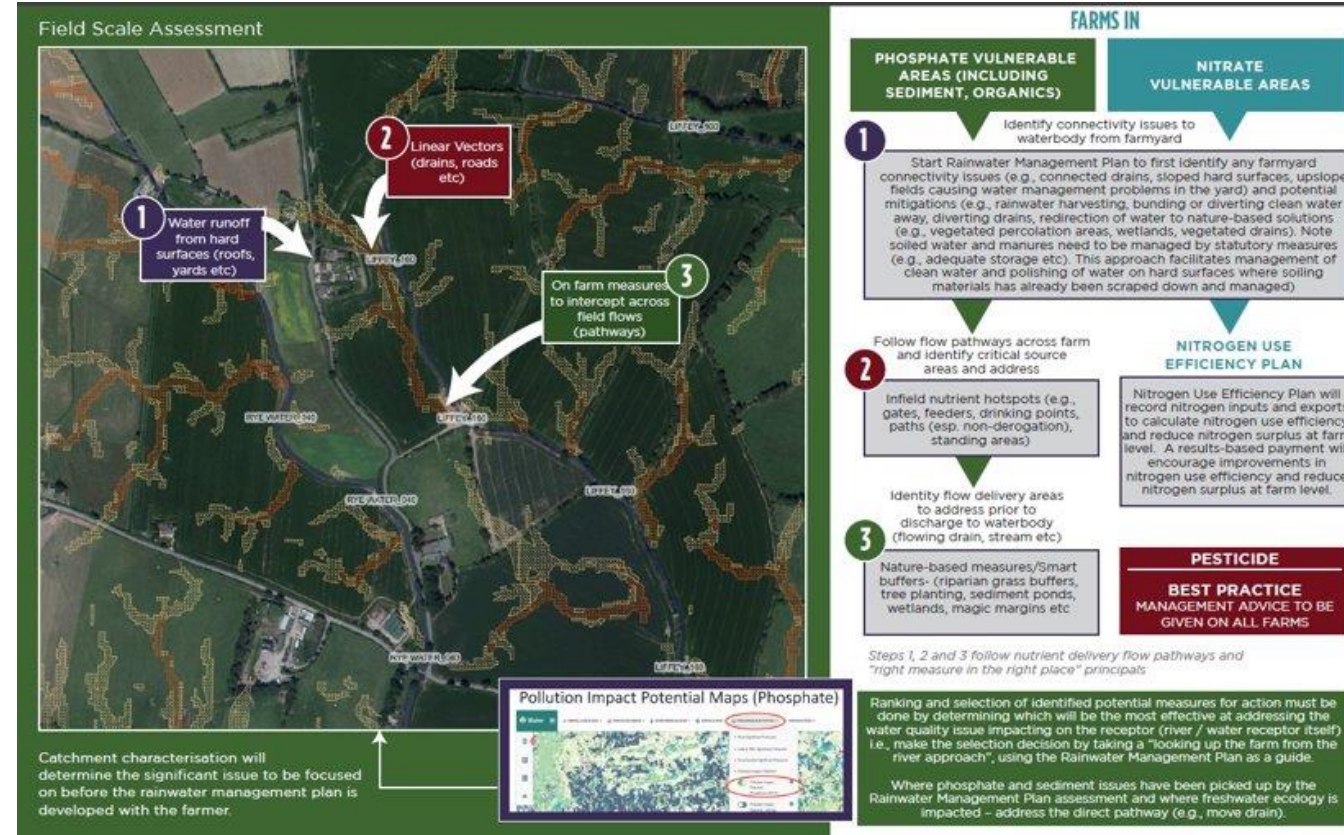
Reliant on ASSAP (up to 50 advisors) and project team of up to 26 staff (including 10 advisors and 6 community advisors)

Will follow catchment science – and first time ever attempted at a national scale.

The need for **supplementary measures** in addition to statutory requirements under the Good Agricultural Practice for the Protection of Water Regulations has been recognised as a key requirement under the River Basin Management Plan 2018-2021.

The **Agricultural Sustainability Support and Advisory Programme (ASSAP)** was established in partnership with the Department of Agriculture Food and the Marine (DAFM), Department of Housing, Local Government and Heritage (DHLGH), Teagasc and the Dairy sector to work alongside the catchment science advice and provides a confidential service in which farmers can voluntarily participate.

What type of measures are we talking about? Riparian buffers, sediment traps, woodlands, wetlands, better nutrient management etc – important these are in addition to compulsory measures so vary depending on stocking rates (i.e., Derogation).



WHAT IS THE AMBITION?

This European Innovation Partnership (EIP) project will engage up to 15,000 farmers across the country where water quality needs to be improved.

SCAN FOR MORE



DURATION

Five-year project from 2023 to 2028.

KEY PURPOSE

Good water quality provides many benefits for everyone including clean drinking water, water for livestock, tourism & recreation, other industries and sectors. It is also important for wildlife and is necessary to support vibrant local economies & healthy communities.

HOW TO SIGN UP?

The project will focus on areas needing most attention to protect water quality. Farmers from within these areas will be invited to participate by appointed farm advisors or agents working on behalf of the project. This is because the project will focus on areas needing most attention to protect water quality. The project will work with the ASSAP (Agricultural Sustainability Support and Advisory Programme) including the Dairy Co-op advisors and the wider agricultural industry.

WHAT MEASURES?

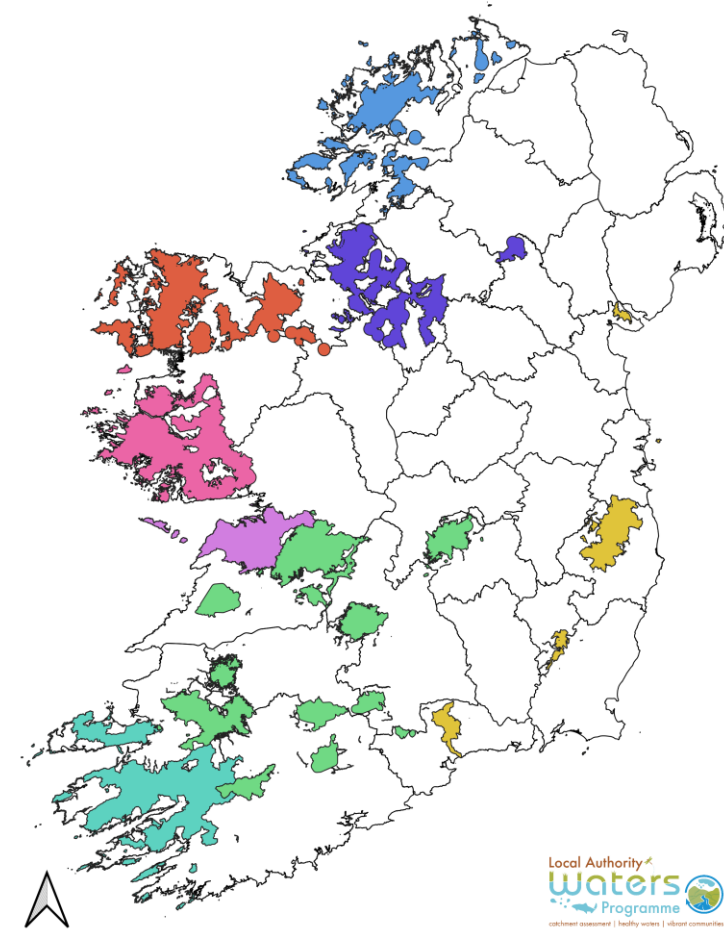
What type of measures are we talking about? These are voluntary measures that go over and above regulatory requirements. These measures include spatially targeted actions and improvements in nitrogen use efficiencies.

FOR MORE INFORMATION CONTACT YOUR LOCAL TEAGASC OR CO-OP ASSAP ADVISOR
www.lawaters.ie

ACRES and the Uplands

ACRES Cooperation Project Areas

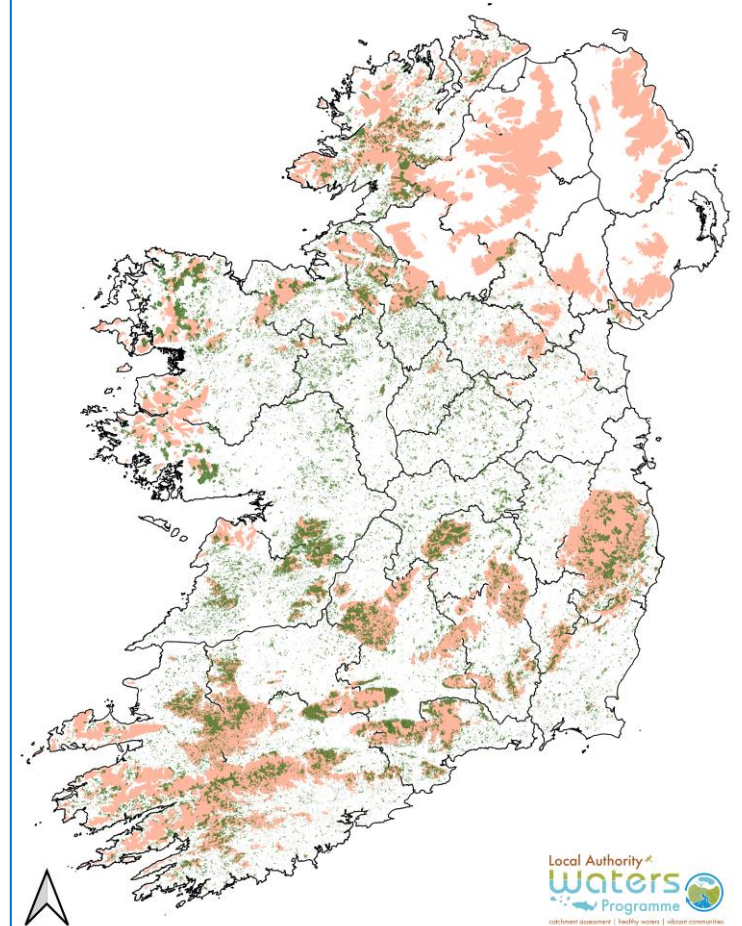
- Intersection with Blue Dots a factor in area selection
- Large areas of the uplands fall within ACRES Co-Operation Project areas
- Opportunity for measures using Result Based Scores



- Forestry covers a significant area of our uplands
- Multiple schemes in place and implemented through the licensing process and committed to in the River Basin Management Plan
 - Environmental Measures in Forestry Programme 2023-2027
 - The Forests for Water Scheme
 - Agroforestry
 - Ecologically Enhanced Forest Roads

Forestry Measures

Forestry in Ireland and Uplands



Other Activities

- Leader training
 - Biodiversity training delivered by leader companies.....building capacity in communities
- Development plans for planning authorities
 - Liaised with LA to incorporate **Blue Dots** into county development plans
- **Blue Dot** Booklet
 - Catchment specific booklet on **Blue Dots** for local communities
 - <http://streamscapes.ie/research/>
- Community Water Development Fund - Duhallow Targeted Tree Planting
- Q5 Engagement fund
- Ploughing Championships





View all presentations at
www.teagasc.ie/uplands