

Achieving Success in the Uplands Across Multiple Objectives: Water Quality

Uplands Symposium

12th November 2024

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Photo: P. Ryan, LAWPRO

Overview

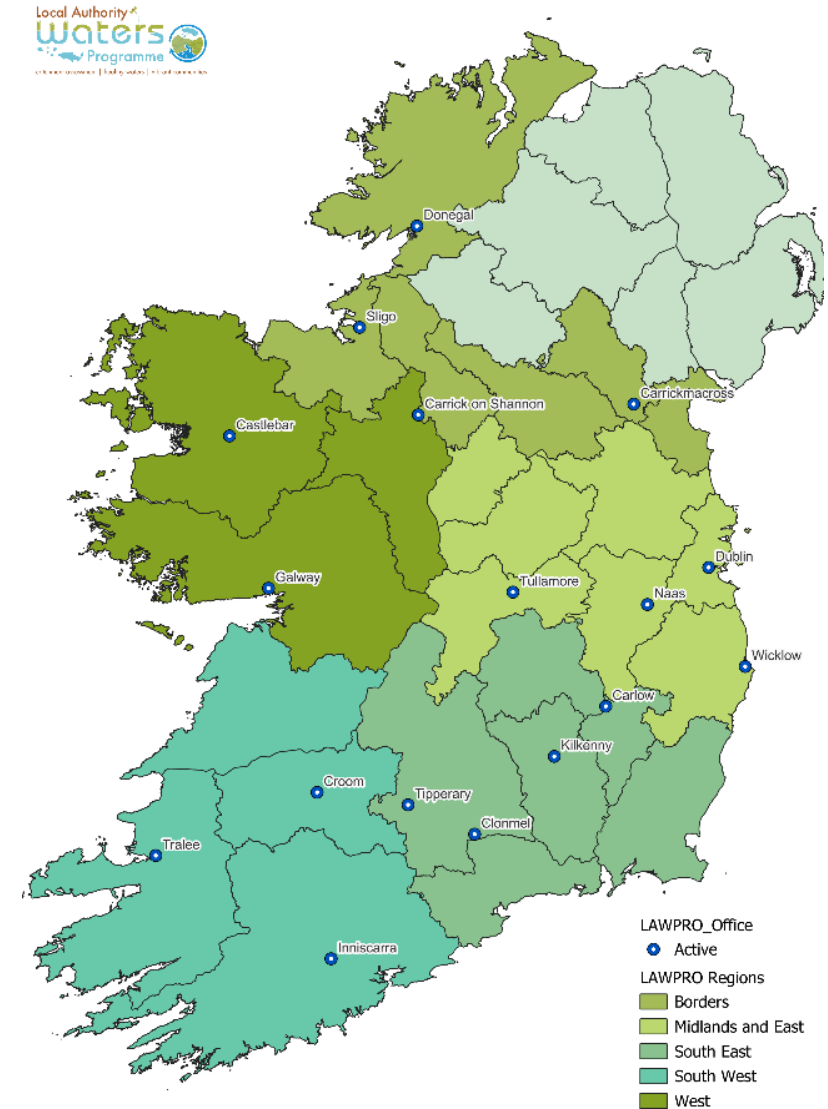
- Local Authority Waters Programme (LAWPRO)
- Water Quality in our uplands
 - Status, pressures, and issues
- Activities and Opportunities

“Water is not a commercial product like any other but, rather, a heritage which must be protected, defended and treated as such”
WFD, 2000/60/EC



About LAWPRO

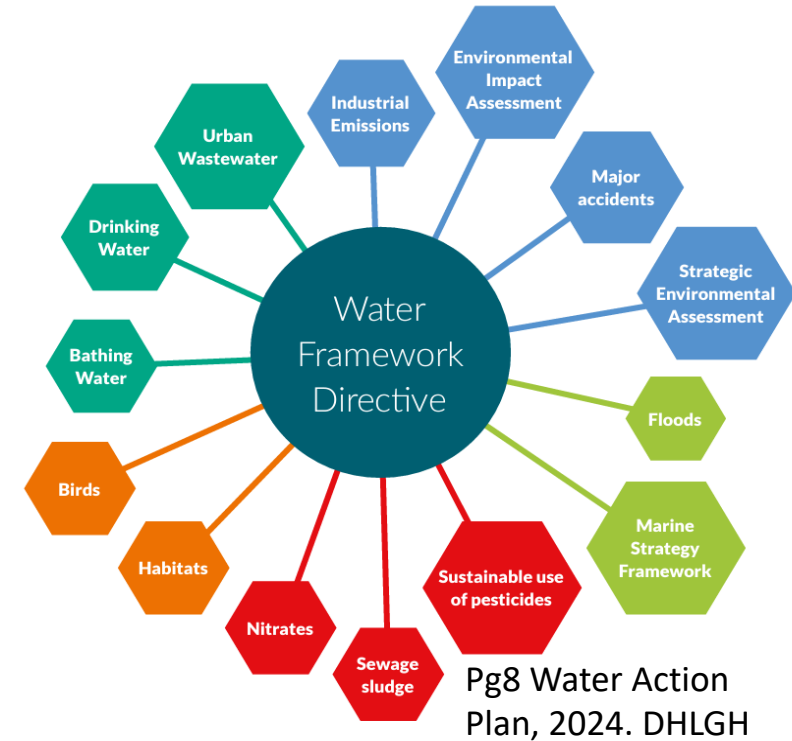
- ❖ Local Authority shared service, working with all 31 Local Authorities, across five operational regions.
- ❖ Formed following recommendations in 2nd Cycle River Basin Management Plan.
- ❖ Funded by Department of Housing, Local Government & Heritage (DHLGH Water Advisory Unit).
- ❖ www.lawaters.ie



About LAWPRO

LAWPRO's three core functions:

- 1. Coordination** on behalf of local authorities and public bodies.
 - *Regional Committees (incl. cross-border representation).*
 - *Nationwide Catchment Management Plan Template*
- 2. Catchment science and management** to inform decision making:
 - *Working in Priority Areas for Action (PAA)*
 - *Building capacity within Local Authority sector through knowledge sharing and training.*
- 3. Community engagement** at a local level and nationwide.
Advocating for a healthy water environment to deliver multiple benefits for health and wellbeing, biodiversity, climate, and local communities.

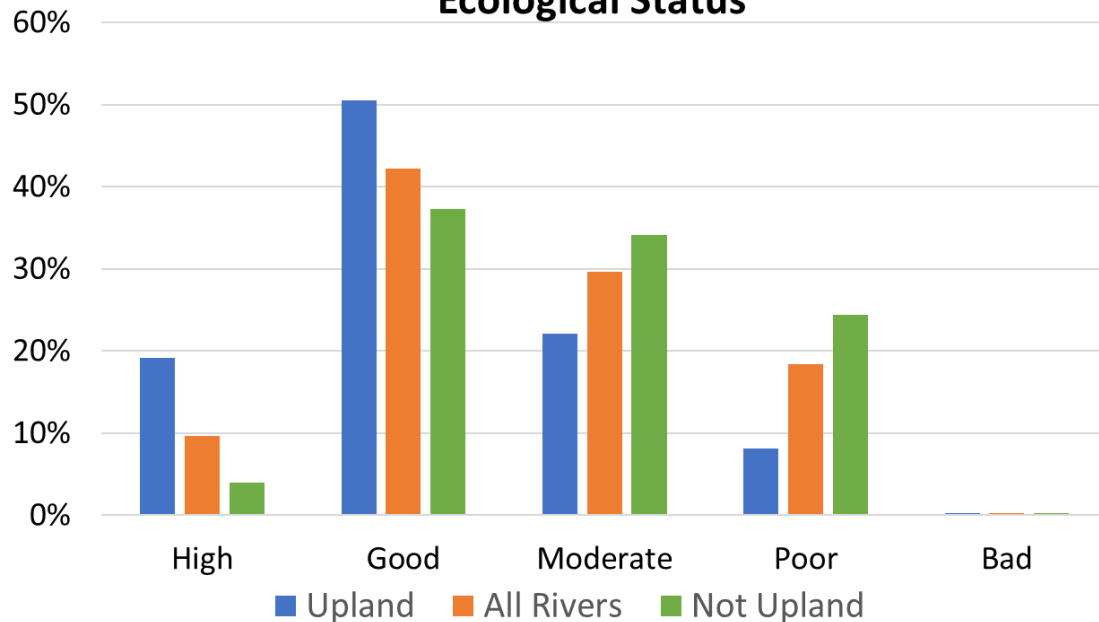


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Water Quality in Ireland's Uplands

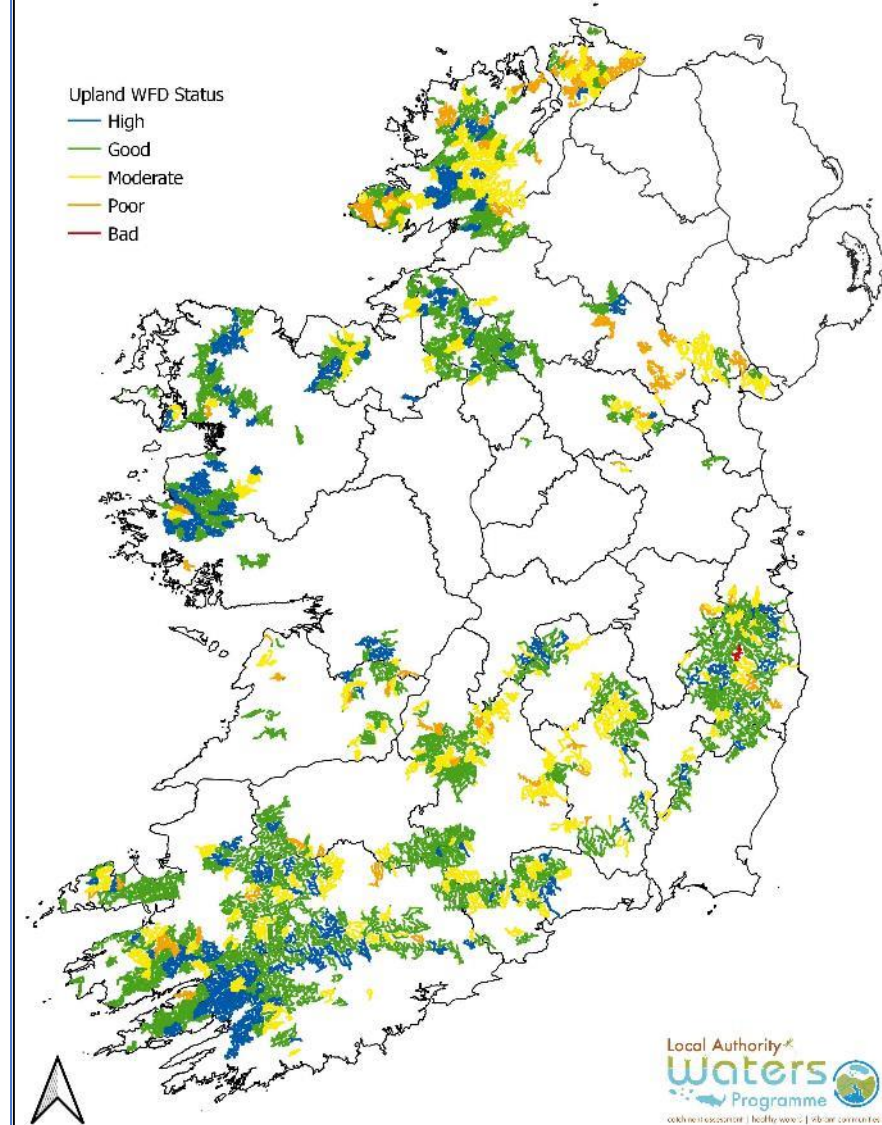
	Upland	All Rivers	Not Upland
High	19%	10%	4%
Good	51%	42%	37%
Moderate	22%	30%	34%
Poor	8%	18%	24%
Bad	0%	0%	0%

Percentage of Monitored Rivers at Each Ecological Status



- Three quarters of all High Status rivers are in the uplands
- Significant overlap with LAWPRO AFAs
- Importance for downstream water quality

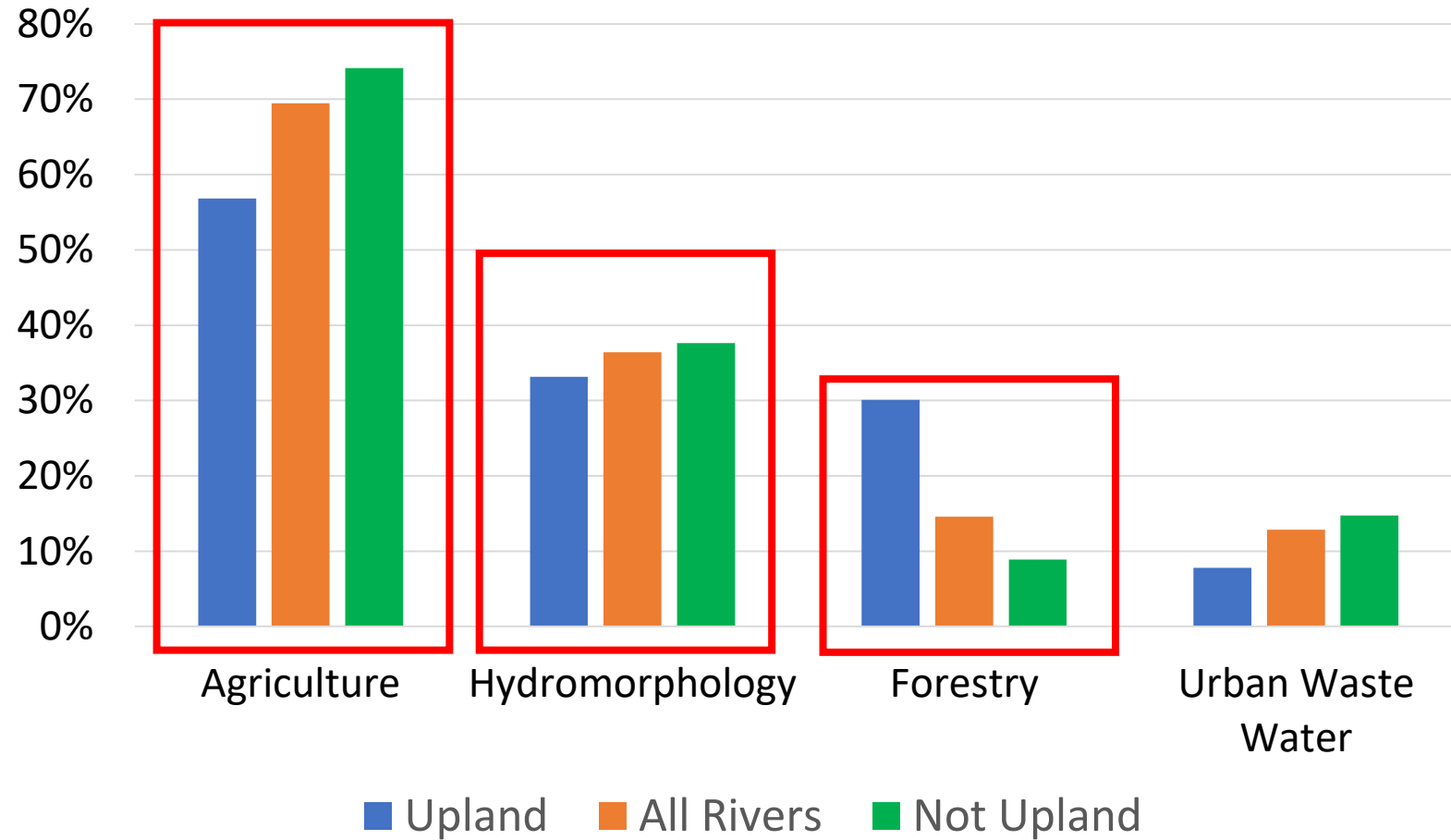
WFD Ecological Status in Uplands



Risk of not achieving our WFD Objectives

- 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

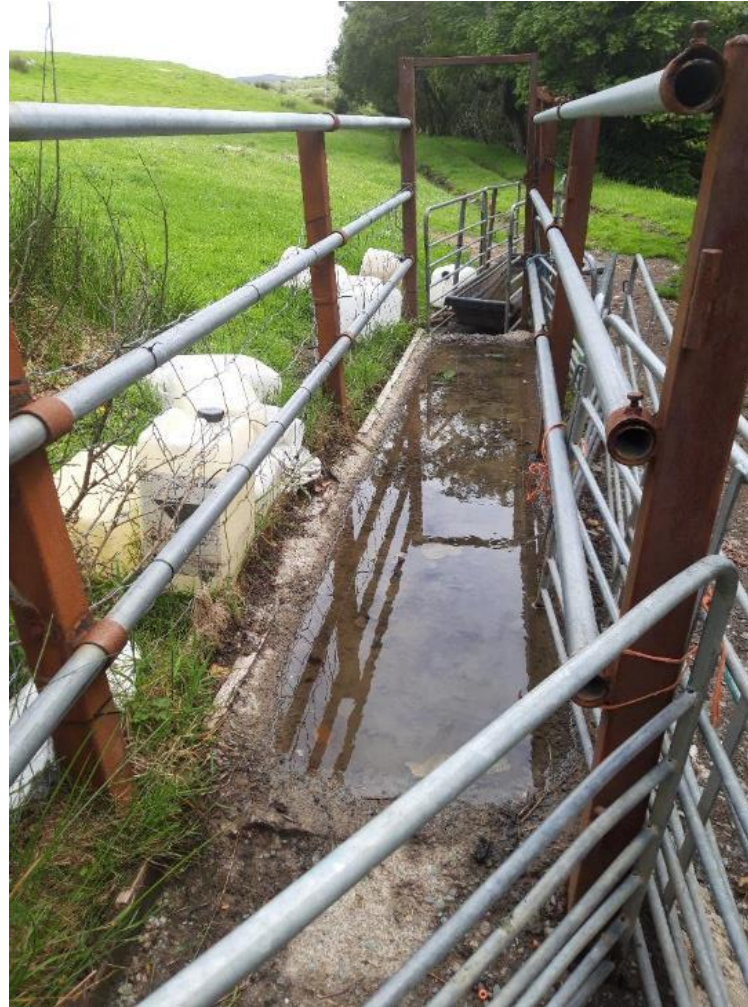
Major Significant Pressure in *At Risk* Rivers



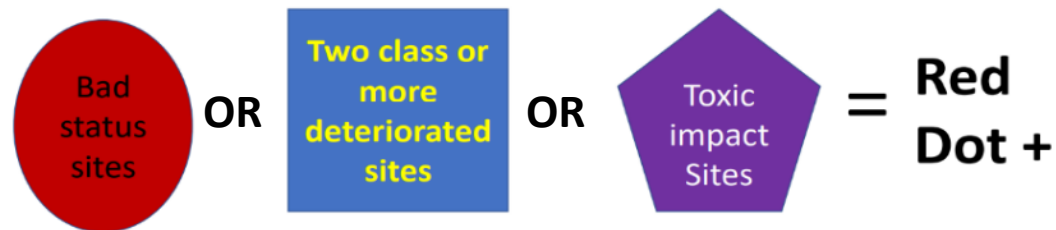
Toxic substances from Agriculture

Most common will be products to treat parasites

- Designed to kill arthropods
- Exceptionally potent
- Include various chemicals e.g.
 - Pyrethroids and organophosphates
- Cypermethrin
 - Inland surface water EQS 0.00008µg/l
 - 1g would pollute 12,500,000,000 litres
 - 5000 Olympic size pools



RED DOT + Programme



Mechanism for Rapid Response
- Nip the issues in the bud



Donegal Case Study 2021

WB name	Blue Dot? (Y or N)	PAA/priority	Present Q rating	Previous Q Rating
Glenna_010	N		Q3	Q4
Glaskeelan_010	Y	Top 8 FPM & PAA	Q3	Q4-5
Glenaddragh_020	N	PAA	Q3/0	Q4
Glenaddragh_020	N	PAA	Q3	Q4-5
Clady (Donegal)_010	N		Q3	Q4-5
Oily_010	Y	FPM	Q3-4/0	Q4-5
Owenteskiny_010	Y	PAA	Q3/0	Q5
Owenteskiny_010	Y	PAA	Q3-4/0	Q4-5
Owenteskiny_010	Y	PAA	Q3/0	Q4-5
Roechrow_010	N		Q3/0	Q4
Stragar_010	N		Q3	Q4
Tullinteane_010	Y		Q3-4/0	Q4-5

- Co-ordinated multi-agency response
- Further identification of issue
- Actions agreed
- Measures implemented
 - Education/awareness
 - Best practice training for usage and disposal
 - Alternative disposal options?

Oxygen 75.5%
6.82mg/l
20.5°C



Photo: P. O'Callaghan, LAWPRO

Hydromorphology

Can result in a myriad of issues including (but not limited to):

- Excess sediment
- Simplified habitat both in terms of flow type and substrate
- Disconnection from the floodplain
- Change to hydrology (higher flood peaks and more severe drought)
- Temperature increases due to increased surface area to depth ratio (more sun hitting surface)
- Local actions
 - Avoid drainage
 - Investigate potential for NbS – multiple benefits
 - Prevent excess sediment loss
 - Riparian zone

What's being done?

- **LAWPRO**

- Water Action Plan 2024 – AFAs
 - Sectoral and Catchment plans
- **Farming for Water EIP** – measures and training
- Comeragh Uplands – SEROC
- CWDF (projects) and CSF (resources)

- **Blue Dot Catchments Programme**

- Collaborative programme
- Key agencies/stakeholders
- Focus resources

- **Waters of LIFE IP**

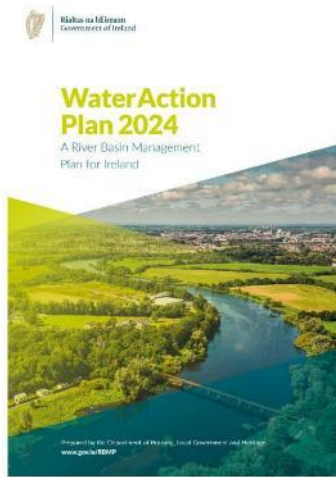
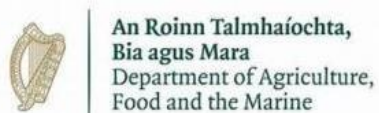
- Aims to develop effective measures for Blue Dots
- Sectoral best practice and measures

- **ACRES CP**

- Delivered training to encourage characterisation approach
- Continue to liaise regularly through Steering Groups etc

- **Forestry**

- Environmental Measures in Forestry Programme 2023-2027
- 12 FT schemes



"Water is the driving force of all nature"
Leonardo da Vinci

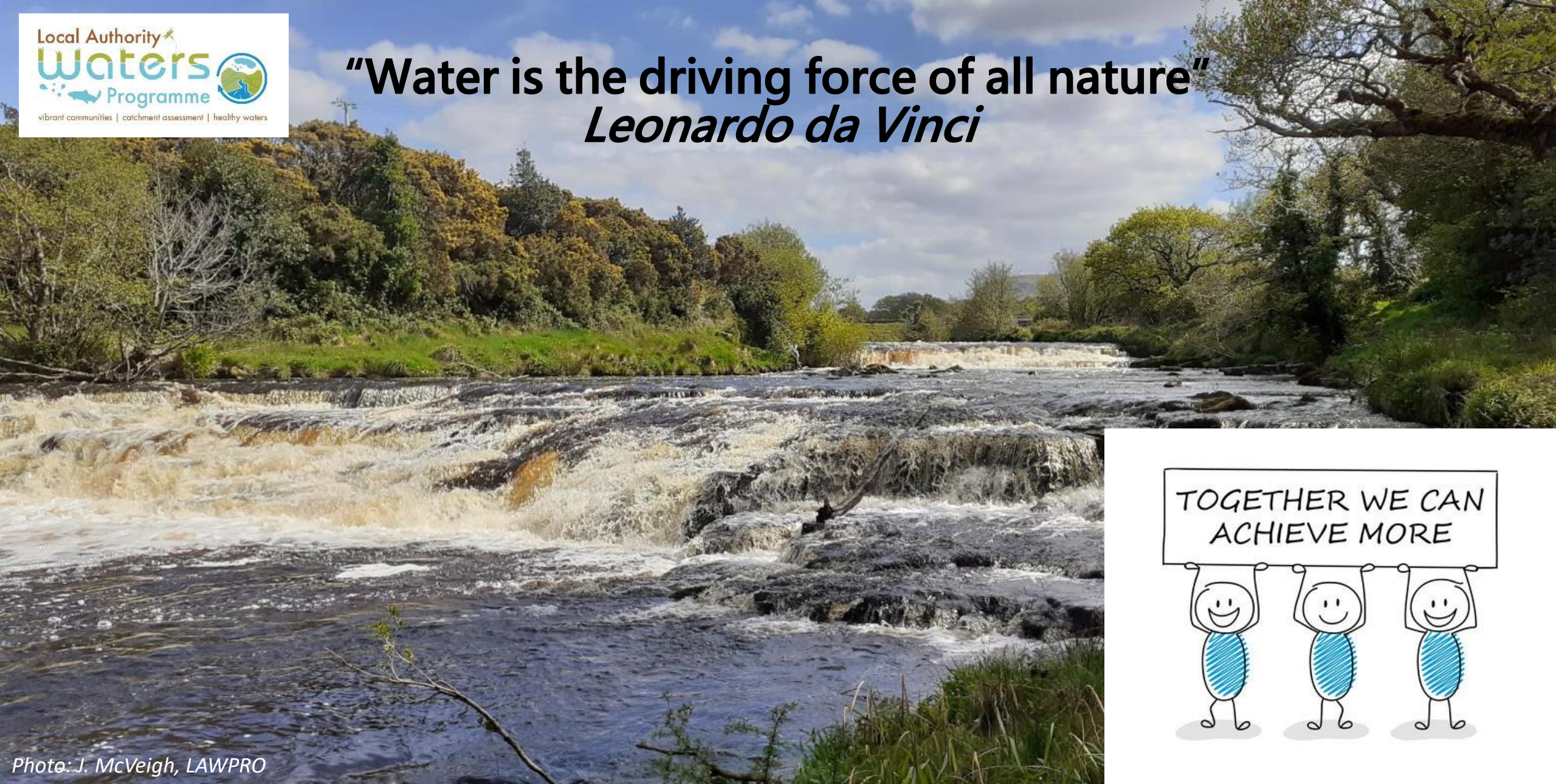


Photo: J. McVeigh, LAWPRO