



Protecting and Improving Water Quality

Sligo PPN environment series

Karen Kennedy

Community Water Officer
Local Authority Waters Programme

27th Aug. 2020



What's driving this programme?

EU Water Framework Directive 2000

the policy framework through which European freshwaters are managed



- Legal framework to **protect and restore** clean water across Europe by 2027
- **How?** Preparation of River Basin Management Plans over three cycles
 - 1st Cycle: 2010-2015 (**minimal community engagement**)
 - 2nd Cycle: 2016-2021
 - 3rd Cycle: 2022-2027



“to achieve good ecological status (good water quality) in all waters”



What is good ecological status?

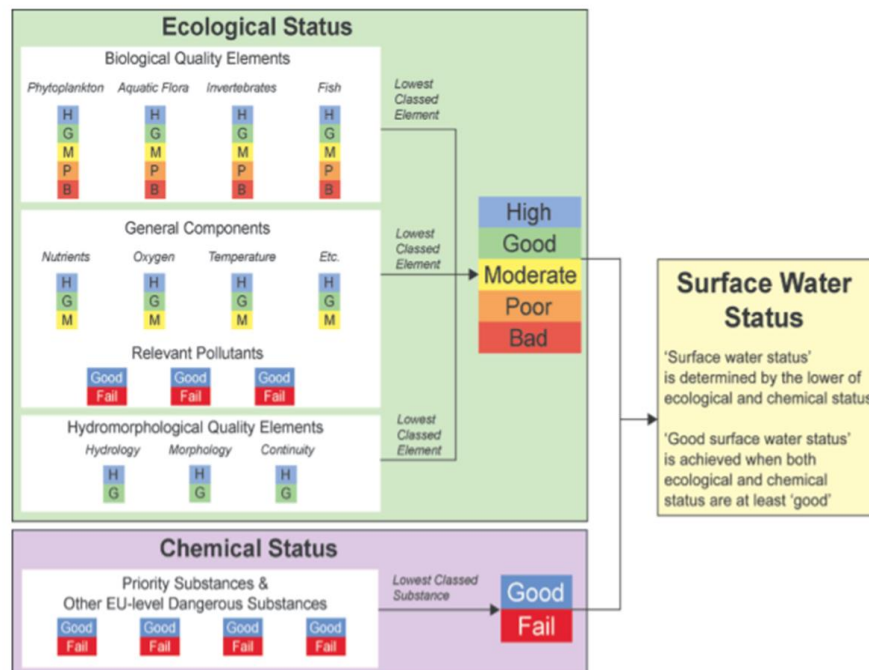


What does good ecological status and why does it matter?

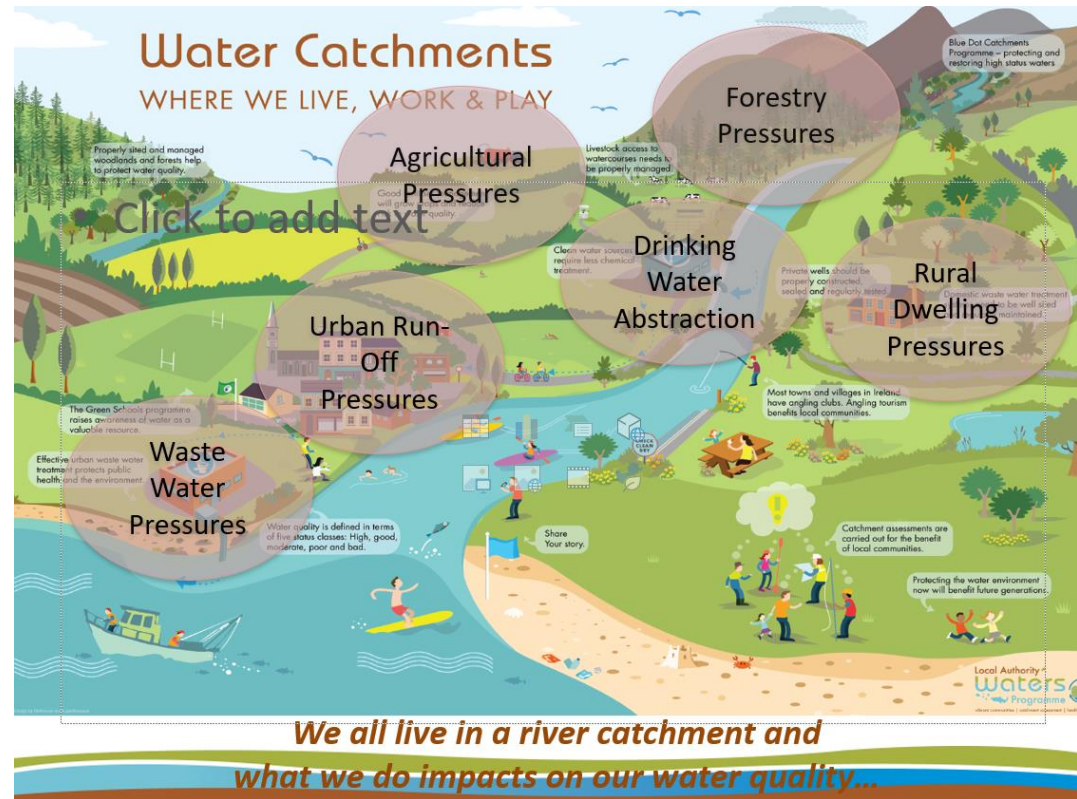
This film by an EU funded research project called *MARS: Managing Aquatic ecosystems and water resources under multiple stress* explains it in just over 3 minutes.

<https://youtu.be/xOExg4B9tRY>

- Good ecological status is a key term in the EU Water Framework Directive
- Member states are required to conserve and restore their rivers and lakes to good ecological status by 2027



Top Down & Bottom up Approach



New Approach: Science, collaboration and working with **communities** and **landowners** will be key to delivery of real and lasting improvements in water quality <https://www.catchments.ie/river-basin-management-plan-2018-2021/>

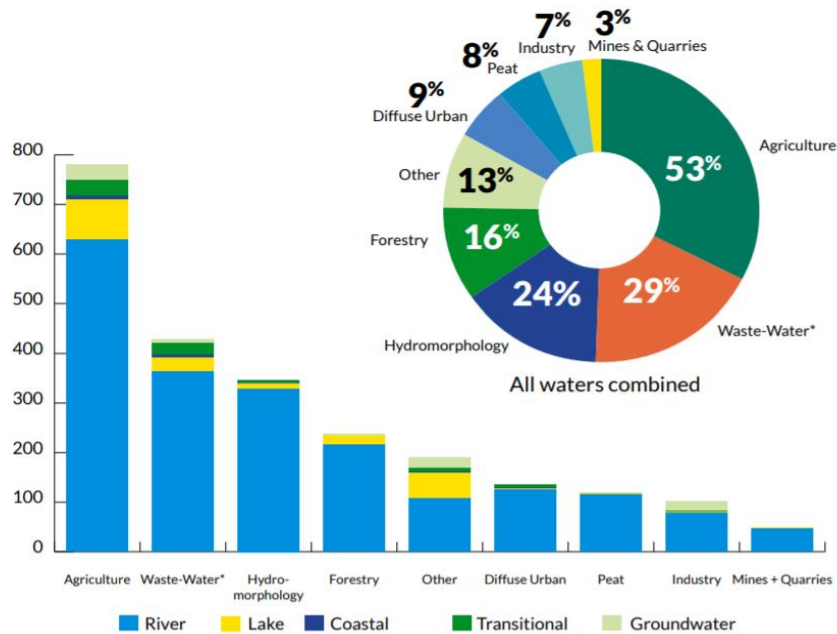
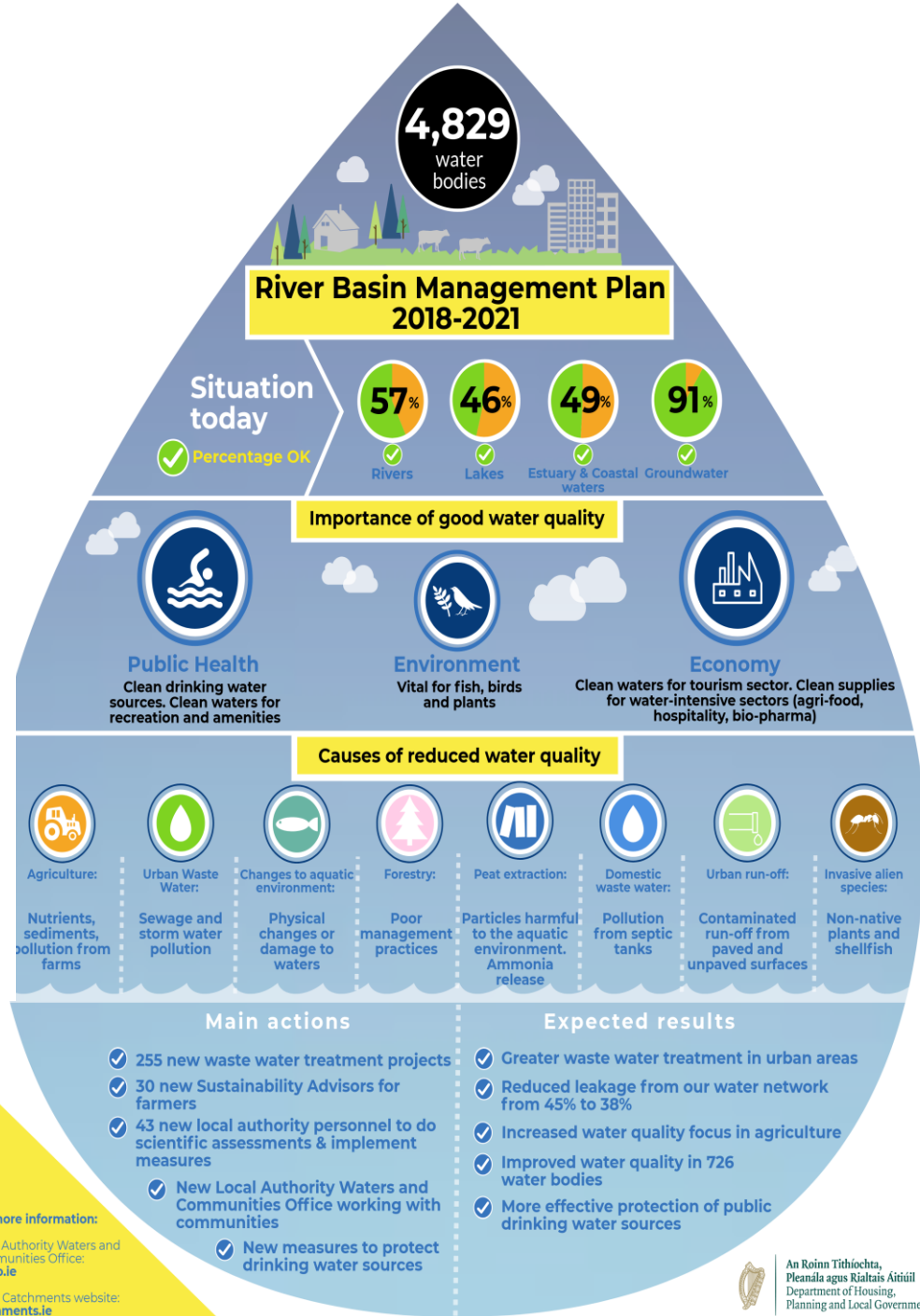
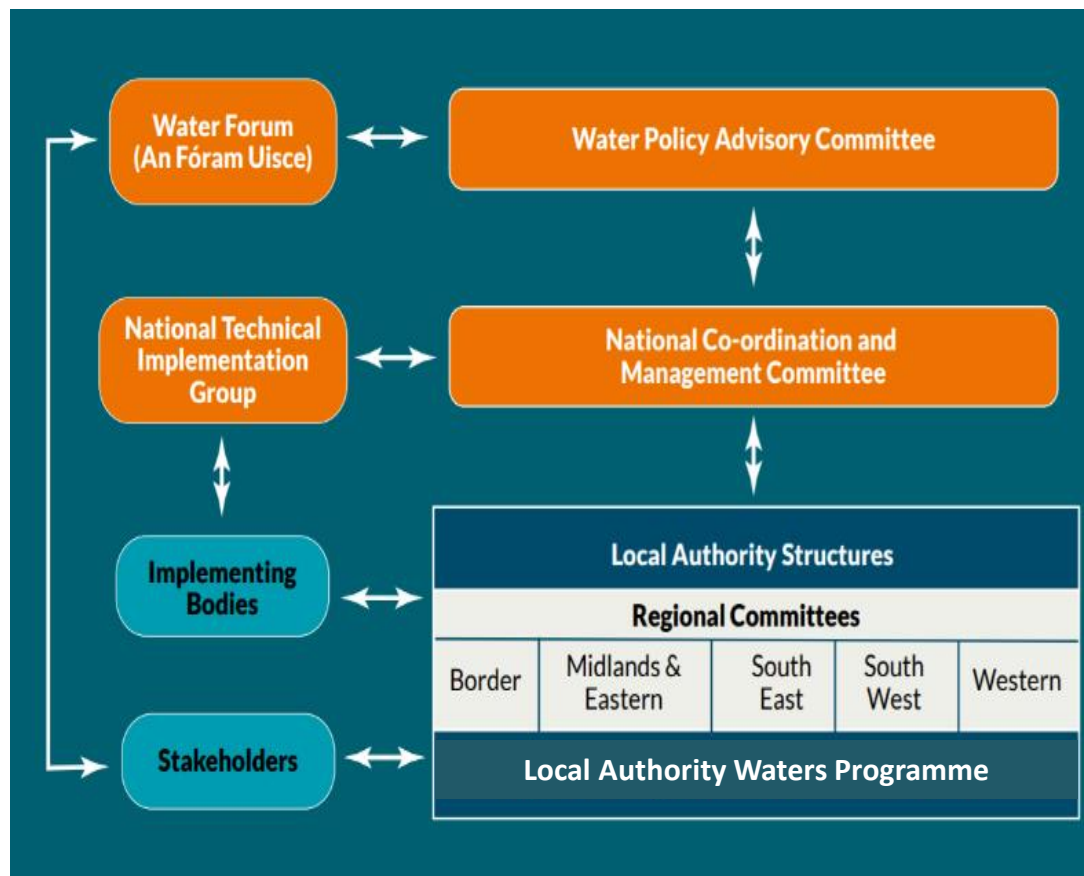


Figure 1 - Frequency of significant pressures and source of pressures on At Risk water bodies.



<https://www.housing.gov.ie/water/water-quality/river-basin-management-plans/river-basin-management-plan-2018-2021-infographic>

New governance and implementation structures



<https://thewaterforum.ie/>

..whole of Government approach.....



Local
Authorities



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



epa
Environmental Protection Agency
An Gníomhaireacht um Gaibheathas Comhshaoil



OPW
The Office of Public Works
Oifig na nOibreacha Poiblí



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

Aims and Structure of Local Authority Waters Programme

2014 Regulations provides new role for local authorities in coordinating the catchment management and public participation elements of the WFD

- Support and coordinate public bodies and other stakeholders to achieve the objectives of the RBMP
- Activate local communities to engage with river catchments in line with the integrated catchment management approach
- Build a foundation and momentum for long-term improvements and inform the development and implementation of the 3rd Cycle RBMP



Communities Team (2016)

- 13 Community Water Officers
- 3 Regional Managers

KEY ROLE:

Community engagement –

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



Catchment Team (2018)

- 37 science staff

KEY ROLE:

Scientific assessments –

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

Agricultural Sustainability Support & Advisory Programme (ASSAP)

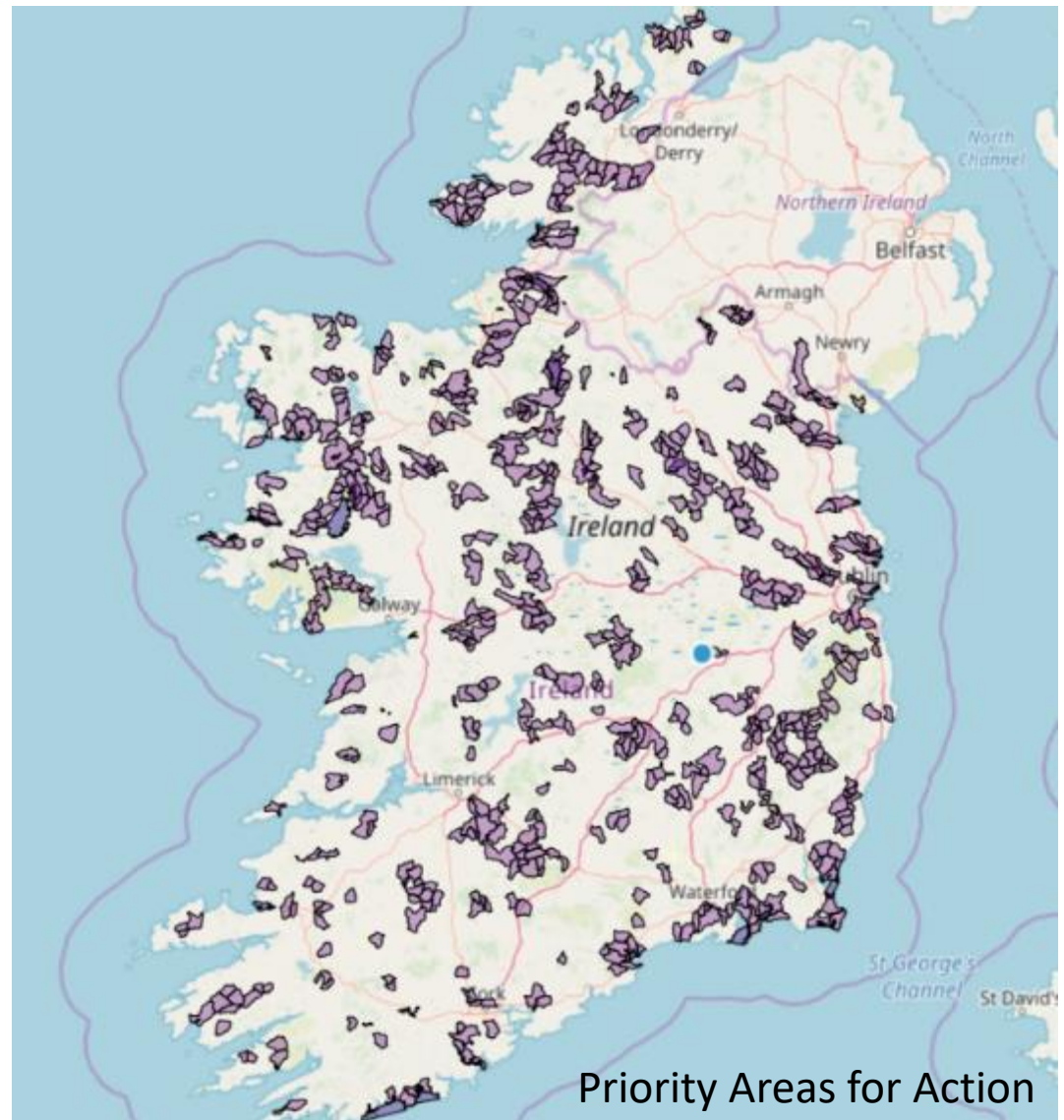
- ASSAP – a **free farm advisory** service working with farmers to help improve water quality in PAAs
- 20 **Teagasc** Advisors (50/50 by DAFM & DHPLG)
- 10 Advisors – provided by the **Dairy** Industry
- Managed by **Teagasc Team Leader**
- **Coordinated** by LAWPRO/Teagasc/Dairy Industry

<https://www.teagasc.ie/environment/water-quality/farming-for-water-quality-assap/>



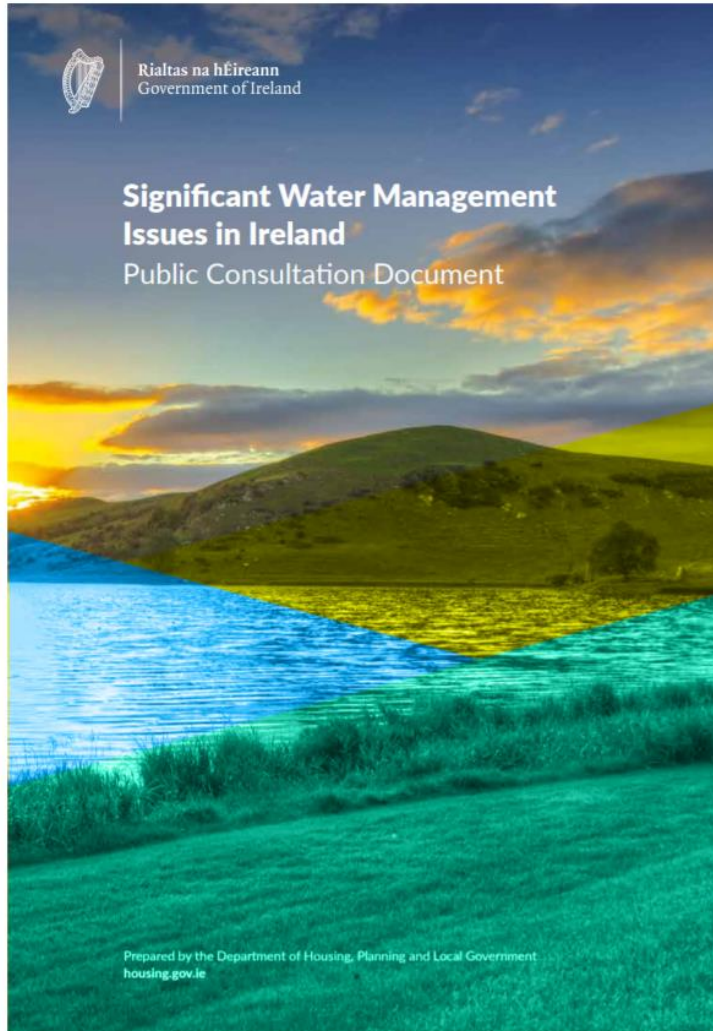
Priority Areas for Action (PAA's)

- 190 PAA's selected for Local Catchment Assessment
- Built on EPA evidence
- All 31 Local Authorities involved
- Relevant public agencies involved



Priority Areas for Action

Preparing for the next cycle



Significant Water Management Issues in Ireland | Public Consultation Document

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https://www.housing.gov.ie/sites/default/files/public-consultation/files/swmi_consultation_document_final.pdf

Waters & Communities Team – our work

- **Working together** with Local Authorities, other agencies and stakeholders
- **Awareness** on water issues
- **Promote public participation** and community engagement
- Promote and **support Rivers Trusts** – e.g. River Moy Trust Co. Mayo, Inishowen Rivers Trust Co. Donegal
- **Support community action** to manage and protect our local waters



Community Networking Events

Networking for Nature Tidy Towns Event



**Sligo City Hall
Sligo
Saturday, 14th April 2018**

**FREE
ADMISSION**



EVENT PROGRAMME

10.30 - 11.00	Registration & Networking Opportunity (Tea/coffee)
11.00 - 11.10	Welcome by Tom Kilfeather, Director of Infrastructure, Environment & Fire Services.
11.10 - 11.30	Communities & the Local Authority – A Natural Network Pete Murtagh Environmental Awareness Officer Sligo County Council.
11.30 - 11.45	Protecting Water Amenities and introducing the Waters & Communities Award (Tidy Towns Special Awards) Karen Kennedy, Community Water Officer, Local Authority Waters & Communities Office.
11.45 - 12.00	Experience of Westport Tidy Towns. Winner of Ireland's Tidiest Large Town National Award 2017 Eithne Larkin.
12.00 - 12.30	What a Tidy Towns Adjudicator looks for during their visit, with an emphasis on the newer categories of wildlife and sustainable waste and resource management. Sharon Eastwood Tidy Towns Adjudicator.
12.30 - 13.15	Light lunch and opportunity to explore community supports for Tidy Towns Sligo County Council, LAWCO, BirdWatch Ireland - Sligo Branch, An Taisce, NPWS, Coillte, Inland Fisheries Ireland, Bord Iascaigh Mhara - FLAGS Scheme.
13.15 - 13.45	Developing and connecting recreational walks and enhancing local rivers and lakes Michael Carty Senior Engineer Sligo County Council.
13.45 - 14.00	The Clean Coasts Programme, An Taisce Robert Nelson Clean Coast Officer Sligo and Mayo.
14.15 - 15.15	Biodiversity walk and talk along the Garavogue River led by Michael Bell (Bring Rain Gear!!).
15.15	Close

TO BOOK YOUR PLACE PLEASE REPLY BY FRIDAY 6th APRIL 2018 BY CONTACTING:

Tidy Groups from Sligo, Donegal reply to:
Pete Murtagh
Tel: 071 9111254
Email: pmurtagh@sligococo.ie

Tidy Towns Groups from Leitrim, Mayo reply to:
Karen Kennedy
Tel: 085 808 5495
Email: kkennedy@lawco.ie

Networking for Nature for Tidy Towns and community groups in County Sligo



**Corhownagh Parish Centre
Ballisodare
F91 RH70**



Programme for Saturday 6 April 2019

10.00 – 10.15am	Registration & Tea/coffee/scones
10.15 – 10.30am	Welcome and Introductions Pete Murtagh - Environmental Awareness Officer Sligo County Council
10.30 – 10.45am	Connecting with our Local Rivers and Lakes Karen Kennedy - Community Water Officer, Local Authority Waters Programme
10.45 – 11.00am	Showcasing Local Environmental Developments Margaret Savage Chairperson - Ballisodare Community Council
11.00 – 11.15am	Invasive Alien Species Kieran Cummins - Eco Advocacy
11.15 – 11.30am	Climate Change in Ireland Megan Doyle - Cool Planet Climate Champion
11.30 – 11.45am	What does the Native Woodland give us? Declan and Yvonne Foley - Longford Demesne Wood
11.45 - 12.30pm	Workshop - Practical actions to enhance community environmental resources
12.45 - 13.15pm	Lunch
13.30 – 15.00pm	Meet at Ballisodare Falls to hear about community enhancement projects for the river area followed by composting talk at the composting facility (Bring Rain Gear!!)
15.00pm	Close

TO BOOK PLEASE CONTACT (BEFORE 3 APRIL):

Pete Murtagh, Environmental Awareness Officer
Tel: 071 9111254
Email: pmurtagh@sligococo.ie

Karen Kennedy, Community Water Officer
Tel: 085 808 5495
Email: kkennedy@lawwaters.ie



Community vision for Dundalk Bay rivers and coast

Spring 2018



Coming together Creating a vision for your river

Working with Communities: Funding Support

CWDF 2020 – Spatial Distribution of Projects:



Community Water Development Fund by project type 2020



Objectives of the fund include:

- Support communities in progressing water-related projects and initiatives
- Help meet the objectives of RBMP and the WFD

Examples of Locally Funded Projects



River Clean-Up Days



**Wildlife information signage
erected along River Walks**



Guided River Walks



Invasive Species Control



Seán Hickey
Photography: Michael Bell



Seán Hickey has taught English in Spain and Austria. He has worked as a journalist, including a stint as a book reviewer with the *Irish Examiner*. He has been an archaeologist, digging up parts of Sligo, Leitrim and Waterford. He is a prize winning poet, and a keen birder.

Michael Bell of *Nature Learn* is Chairman of the Sligo Branch of BirdWatch Ireland and a wildlife expert with the Heritage in Schools Scheme. As well as observing birds he has a keen interest in wildlife photography.

This booklet was supported by Sligo Tidy Towns, The Local Authority Waters and Communities Office and The Sligo Branch of BirdWatch Ireland.



The children at Scoil Naomh Éanna, Carragee have been studying the wonderful nature to be found around Lough Gill. We visited Slish Wood on the shore of the lake and hope you enjoy this pamphlet showing some of our work.



Broadmeadow River, Ashbourne Investigative Assessment

Ashbourne Tidy Towns Committee

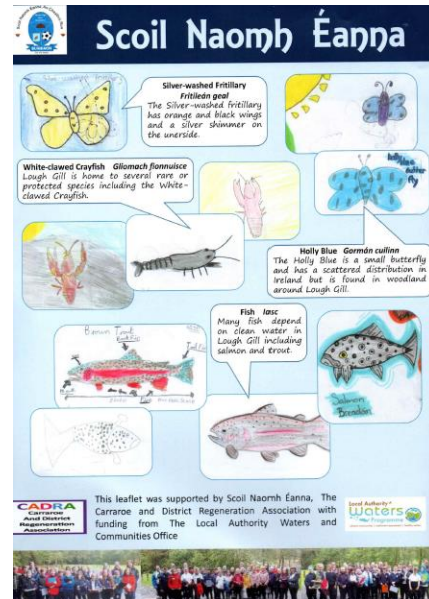
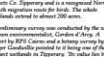
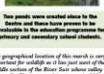


A Wonderful Wilderness

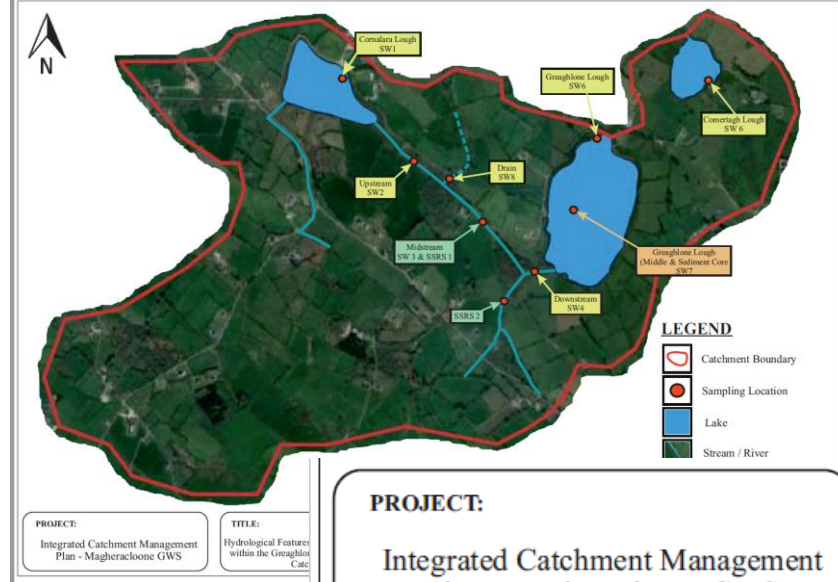
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THE EARLY DEVELOPMENTS

The first structure to be erected was a two storey building located 1850 feet from the shore. It served as the more dedicated headquarters since built on the site of John Derry's first land on the Halden side of the marsh overlooking the permanent lobe. A large carpenter and excavator from the British Isles arrived in 1895: four ponds were excavated. Following a severe winter storm these flooded and a large amount of water "leaky creation" was washed in, creating very muddy water which are an enormous educational asset. A walkway with educational display boards was developed along the perimeter of the 13 acres to highlight the diversity of habitats at the site. In 1990, a walkway was laid out on the generous grant from (The Hertford Council). A 2000 square foot visitors centre was erected at the carpenter and this has served as a hub for many environmental groups.



Training, Analysis and development of catchment literature



Catchments Newsletter Issue 11: Autumn 2019

Anglers in border region scale up lake monitoring

The Local Authority Waters Programme is helping anglers in the border region monitor their lakes using innovative citizen science techniques. Three Community Water Officers tell us how the project is progressing...



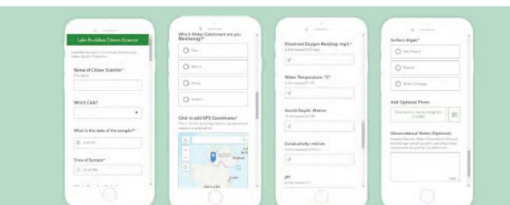
Jimmy McVeigh, Community Water Officer, working with local citizen scientists to monitor a lake.

- During the draft River Basin Management Plan consultation in 2018, anglers in the border region expressed a desire for more monitoring on their lakes. After researching the potential for LAUWRO funding for a Catchment Monitoring project, the Border Community Water Officer team approached the Environmental Protection Agency, Local Authorities, Northern Ireland Environment Agency and IFI about a potential project. Once the agencies were on board the team applied for funding from the *LAUWRO* which was awarded.
- As the project was due to take place in different lakes along the border region the team wished a systematic methodology for data collection. Jimmy McVie explored the options and with the LAUWRO Technical Lead Michael Pollard developed a GIS enabled app using Survey 123 and ArcGIS Online. The app is a part of the EPA, Ireland developed an online data entry system that would record site specific data directly onto the volunteers mobile or tablet. This provides a central database for all the data that can be shared throughout the partnership.
- Participants use meters and visual observations to collect data on the following parameters:
- Wind Speed
 - Direction of Wind
 - Dissolved Oxygen (mg/l)
 - pH

- Electrical Conductivity
 - Temperature
 - Observations at Sample Location
- Karen Kennedy organised a training day for volunteers at Rossiner Community Centre, County Leitrim, in May 2019. Topics included the science behind Lake Monitoring (delivered by Ray Smith of the EPA); Biosecurity (Ruairi Ó Conchúir, LAWPRO); Citizen Science in Northern Ireland (Lisa Maddox NIEA). Jimmy then demonstrated how to take a record using the app, and Patsy Ryan and Vicki Veerkamp, border catchment scientists demonstrated how to use the equipment in the local Ballagh River.

We are very pleased to say we have our first records submitted and we hope this pilot project will lead to greater stewardship of our waterways and helps further our understanding of lakes in the region. We would like to thank the anglers, volunteers, agency staff and LAWRPO colleagues for their contributions.

Jimmy McVeigh, Karen Kennedy and Gretta McCarron,
Community Water Officers, Local Authority Waters Programme



Survey 123 and the Lake Mead Monitoring Citizen Science

River Enhancement Works



Working with Communities to Leverage more Funding

A GUIDE FOR COMMUNITY GROUPS

WORKING WITH WATER AND BIODIVERSITY

TRAINING PROJECTS

UP TO 100% OF A PROJECT CAN BE GRANT FUNDED UNDER THE TRAINING HEADING

- Biodiversity Training offered to citizens in understanding their local environment to investigate experts in their field e.g. classes on catchment science and water management, flood risk and natural protection methods, chemical & non-chemical control of invasive species
- Researcher Training to community based projects from managing personal settings to youth equipment around water bodies
- Citizen science: Training people in doing the science themselves. Everything from recording waterfalls and birds to using aquatic bugs to test water quality
- How to develop a water body community management plan: Training in the basics of writing a management plan for a water course, e.g. what is involved in getting to know a water body
- Go to get people interested and promote their engagement, identification of issues and how to go about putting together an integrated water body or catchment management plan

DEVELOPMENT OF SUSTAINABLE VISITOR INITIATIVES

Ecotourism, Blueways & Greenways

- Identify water as unique and of interest to visitors
- Look at potential visitor activities
- Early into the project consult and involve the relevant state agencies, for example Inland Fisheries Ireland, National Parks and Wildlife Service
- Take time that the project is sustainable in a broad sense, not just water but the impact on it
- Use the route as a way to bring about other improvements to the environment on the way (e.g. clean up, low light or address sewage discharges, and so on)
- Outdoor biodiversity class rooms (bringing people closer to nature)
- Outdoor classrooms are a great way to engage people in nature
- Plan the outdoor classroom with people nearby in the area on the way
- Early into the project consult and involve the relevant state agencies, for example Inland Fisheries Ireland, National Parks and Wildlife Service
- Decide on what to do at the project
- Other things people can do on the way (e.g. creating a river access for pond dipping)
- Larger projects such as the provision of boardwalks over bogs or wet ground are usually more costly
- Consider connecting a trail back to avoid disturbance to wildlife by visiting routes

Inshore biodiversity and river class rooms

- Dedicated room or classroom to engage people in nature and educate on local water and catchment outdoor classrooms

Public engagement to waterways and nature through recreation. People enjoy being surrounded by nature and it has been shown that spending time in nature is good for our health. Bringing people closer to nature, from rivers to a lake, is not only more fun and more attractive but also to increase public's awareness of nature and their health.

Examples include:

- Riverbank: create a water body as an outdoor classroom
- Signage: what signs are used as an outdoor classroom
- Community: create a water body as an outdoor classroom

ANALYSIS AND DEVELOPMENT

UP TO 90% OF A PROJECT CAN BE GRANT FUNDED UNDER THE ANALYSIS AND DEVELOPMENT HEADING

- Actions to promote analysis and development of rural (rural) natural products
- Development of sustainable tourism initiatives e.g. eco-tourism, science and greenery, outdoor trail, water, class rooms (bringing people closer to nature)
- Feasibility studies to manage habitat issues. Projects to examine measures that could limit or control pollution or manage water in the future
- Development plans to protect a water body. Develop a community based management plan for the protection and enhancement of a water body
- Nature trails of water bodies, water courses or habitats of biodiversity importance
- Development of projects to promote and raise awareness of water, waterways e.g. Open Spaces, Boreas measures to address environmental issues and enhanced habitat offering water
- Costs associated with planning in environmentally sensitive areas. Assessments, surveys and other measures to inform the design of planning, development and/or putting other regulatory obligations for projects under the Rural Environment Theme and Heritage projects as defined in Section 4.4 of the LEADER rules

Feasibility studies to manage wildlife habitats

Wildlife habitats vary across different environments in water on land and in the air. The most effective habitats are those that are water quality, quantity and biodiversity.

Projects aimed at improving wildlife habitats (e.g. for water quality, water quantity or improve physical habitat) usually require studies to understand what is going on. These physical studies are important as they may require planning permission and in some cases such as historic 1000 year planning consents, you may require additional planning and advice that needed for work in unprotected areas.

The study, consultation, research, site visits, assessment, impact assessment, appropriate assessments, additional ecological studies, flood risk assessments and other measures that a project and environmental impact measures.

The relevant agencies which consultation could include Inland Fisheries Ireland, National Parks and Wildlife Service, Local Authorities and Office of Public Works. A planning consultation may be needed to help put together the relevant information and deal with planning requirements.

COSTS ASSOCIATED WITH PLANNING REQUIREMENTS IN ENVIRONMENTALLY SENSITIVE AREAS

Analysis and Development team supports the cost associated with planning requirements in environmentally sensitive areas. Projects under the Rural Environment Theme (Sustainable use of water, Biodiversity and Sustainable environment) and other projects required for the purposes of securing planning permission and/or fulfilling other regulatory obligations are therefore eligible for LEADER funding as a sustainable Analysis and Development (AD2) project as defined in Section 4.4 of the LEADER rules (see page 10 for further details).

A FEW IDEAS TO HELP WATER, BIODIVERSITY AND CLIMATE

THINK PROJECTS...

Planting of native wildflowers and vegetation in habitat restoration project

Silt trapping

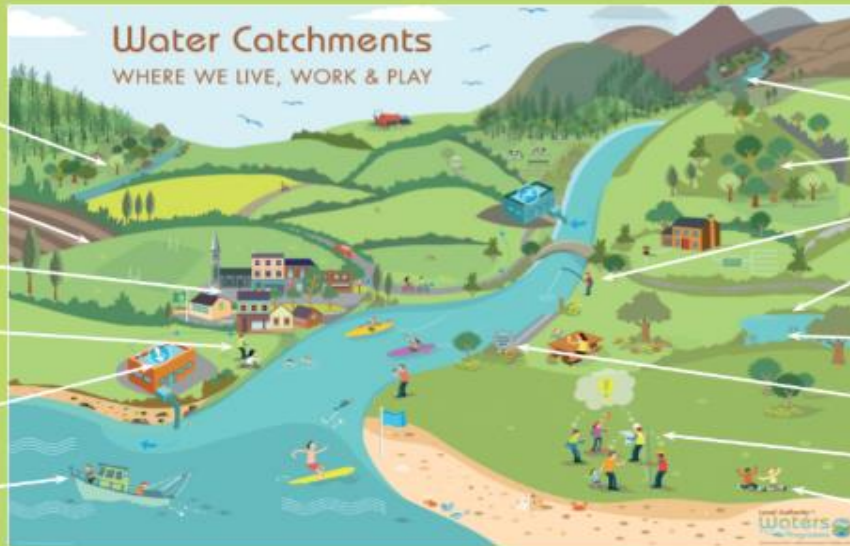
Rain garden and SuDS

Innovative monitoring technique

Rainwater harvesting on roof of buildings and use of recycled water

Coastal or lake nature safari and stewardship project by local fishermen and recreational users

Water Catchments WHERE WE LIVE, WORK & PLAY



...THINK RIVER CATCHMENTS

Fish passage project

Tree planting and riparian biodiversity work

Citizen science project led by anglers

Bespoke breeding boxes for birds and mammals

Wetlands to promote wildlife and reduce pollution and flooding

Removal of invasive species and biosecurity planning

Putting a plan together: where it all begins. Feasibility studies and planning involving all of the community in the catchment

Outdoor biodiversity classroom

Local Authority
Waters

Working with Communities

Local Authority
Waters
Programme
Water conservation | catchment assessment | healthy waters

Water Heritage Day
Sunday, 25th August, 2019

Water Heritage Day
August 2019...

PASTIMES | PAST TIMES
Connecting Communities and Catchments

For further information, visit
www.watersandcommunities.ie
@watersandcommunities @watersprogramme

River walks

Canal walks

Heritage Walks

River Clean-Up's

Family Fun Days

Biodiversity Talks

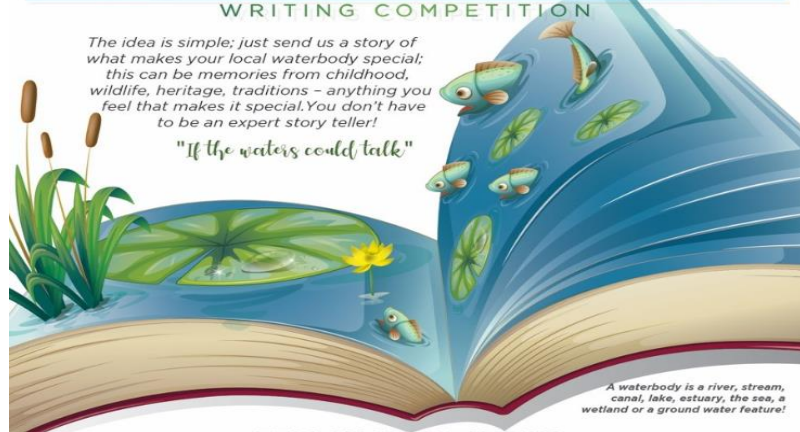
Recently launched for Heritage Week 2020

STORIES FROM THE WATERSIDE

WRITING COMPETITION

The idea is simple; just send us a story of what makes your local waterbody special; this can be memories from childhood, wildlife, heritage, traditions - anything you feel that makes it special. You don't have to be an expert story teller!

"If the waters could talk"



A waterbody is a river, stream, canal, lake, estuary, the sea, a wetland or a ground water feature!

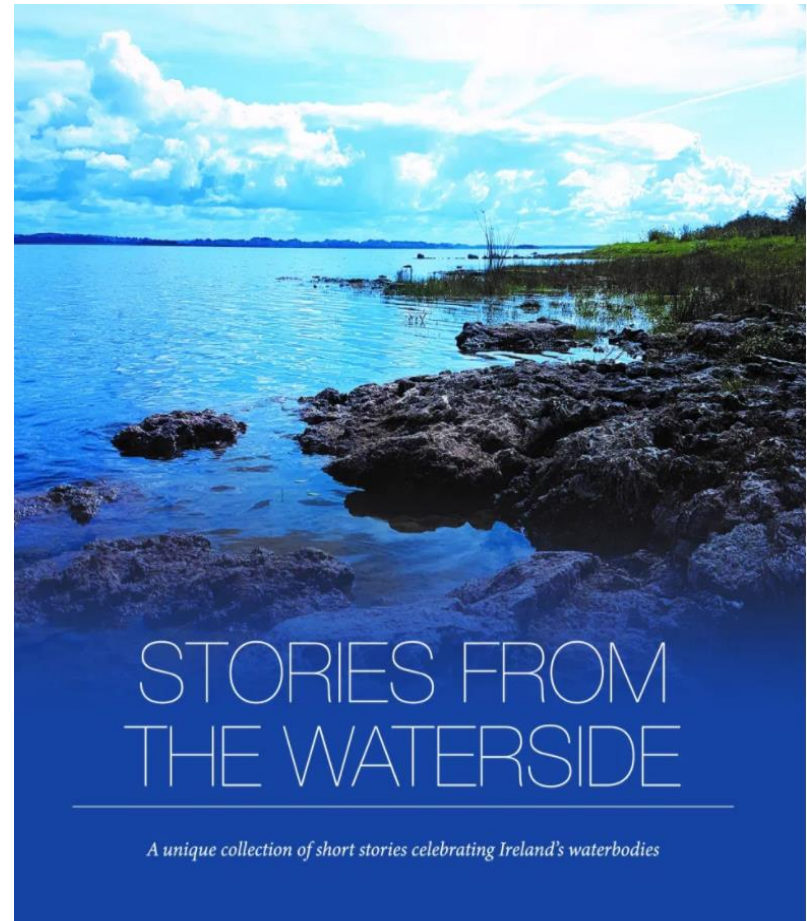
TELL US YOUR STORY

TELL US YOUR ORIGINAL STORY IN 600 WORDS OR LESS
 YOU CAN ENTER MORE THAN ONE STORY! CLOSING DATE: May 31st 2020

FORMAT	THEMES
STORYTELLER TELLS THE STORY Share your memories and reflections of a waterbody from the past. INTERVIEW OF THE STORYTELLER Interview someone with an interesting story about their local waterbody. This is one that all of the family can join in.	MEMORIES AND REFLECTIONS Send us memories of your favourite watery place or memories from the person you interview. FOLKLORE AND STORIES Is there a tale worth telling or folklore attached to your favourite waterbody?

**10 PRIZES OF €300 EACH TO BE WON!
 PLUS 10 PRIZES TO THE VALUE OF €100 EACH**
 CHOOSE FROM GUIDED FISHING FOR THE FAMILY, ZIP-LINING OVER A LAKE, FAMILY KAYAKING ADVENTURE, BOOK TOKENS AND MUCH MORE!

HOW TO ENTER
 Submit your entry either: online at www.lawaters.ie; by email to stories@lawaters.ie; by post to "Stories from the Waterside", Local Authority Waters Programme, The Lodge, Ballingarrane Estate, Clonmel, Co. Tipperary, E91 X370. All entries must be accompanied by a completed entry form, which is available at www.lawaters.ie. Entries can be in either English or Irish. Original and previously unpublished stories only. A selection of stories will later be printed in a compilation booklet. For more details and T&Cs visit www.lawaters.ie
 WINNERS WILL BE ANNOUNCED DURING HERITAGE WEEK (AUGUST 15 - 23) BEST OF LUCK!



<http://watersandcommunities.ie/stories-from-the-waterside/>

catchments.ie Home News Stories Learn + Maps Data Resources Contact

Welcome to Catchments.ie - Water from source to sea.

Water is a precious resource and is essential for all life on earth. Looking after our rivers, lakes and coastal waters so they can meet our current and future needs, and also continue to support the ecosystems that depend on them, is vital for Ireland's future. Doing this at community level is the best way to get people actively involved.

[Find out more](#)

Get involved

Make your local catchment work for you

First name Surname

Email County

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☐ I'm not a robot

[Sign me up](#)

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epaCatchments
Healthy • Resilient • Productive
Shared water resources supporting shared opportunities

Catchments Newsletter

Integrated Catchment Management: sharing science and stories



Plans and pressures:
how characterisation
helps us act as
custodians of our
catchments

Inside this issue

Waters and Communities – news from around the country
Understanding our catchments: Water Framework Directive Characterisation
Telling stories with data

Groundwater characterisation
The River Basin Management Plan, 2018-2021
The Local Authority Waters Programme Catchment Assessment Team

Local Catchment Assessments: the next step in characterising our catchments
Significant Pressures: selected summaries

[More](#) ➔

Catchments Newsletter – sharing information on catchment science, stories from communities around Ireland, updates on water issues and reporting on local and national events

Water quality can be linked to many of the SDG



SLIGO COUNTY COUNCIL
Climate Adaptation Strategy
September 2019



Thank you

- Karen Kennedy
- Community Water Officer
- kkennedy@lawaters.ie
- 085 8085495

