
# RESTORING OUR DRINKING WATER LAKES

# WHAT ARE GROUP WATER SCHEMES?

# IRELAND IN 1960s & 70s

In 1961 only 1 in 8 rural homes had a piped water supply

Farm production was being hindered

Community pumps were a health hazard

Rural Ireland demanded better

# WHO YOU GONNA CALL?

# THE GROUP WATER SCHEME SECTOR IS BORN

‘Turn on the Tap’ campaign

Huge voluntary effort

90,000 households connected to a GWS supply

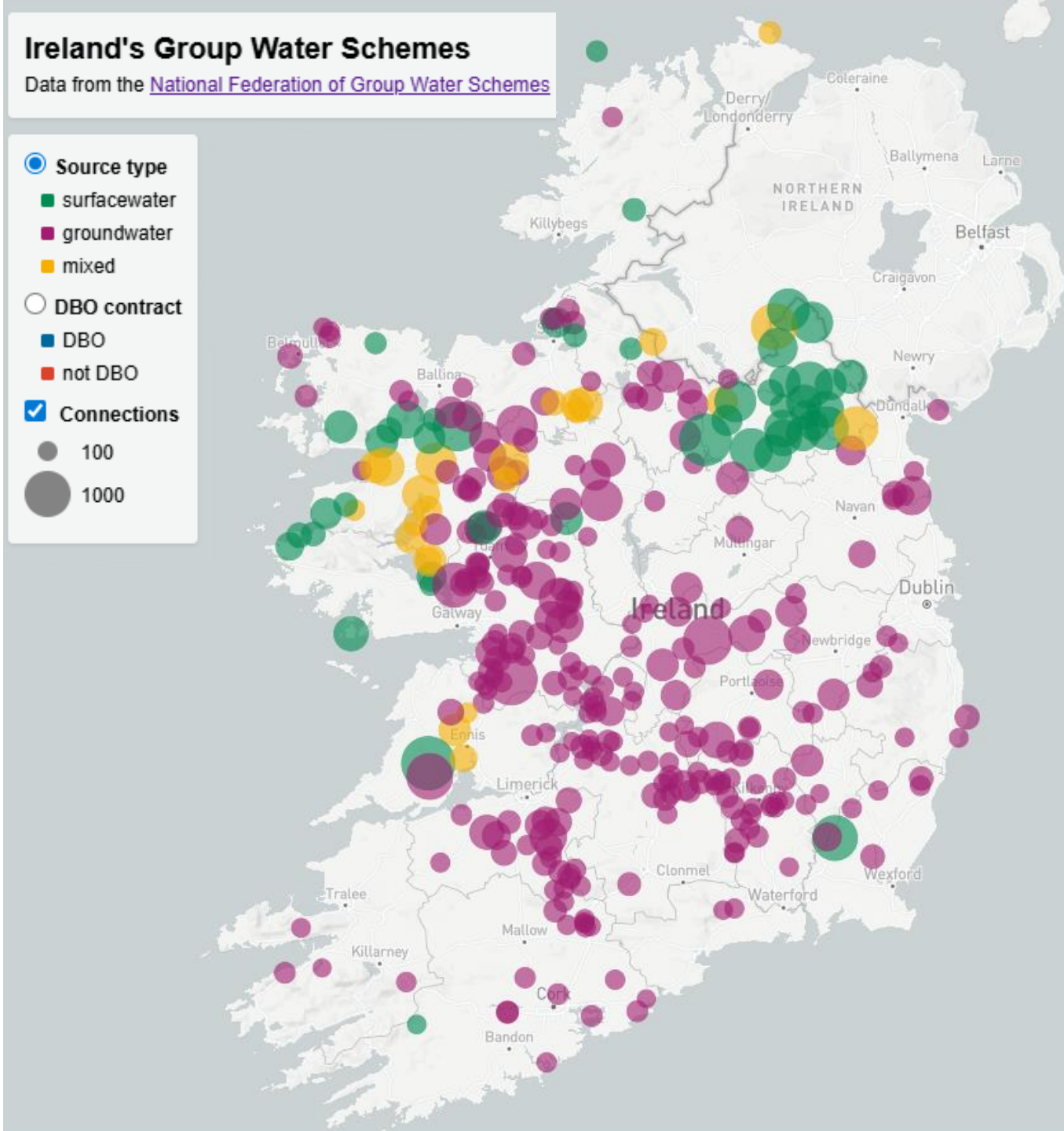
# IRELAND IN THE 1990s & 2000s

Formation of the NFGWS

Water treatment transformation

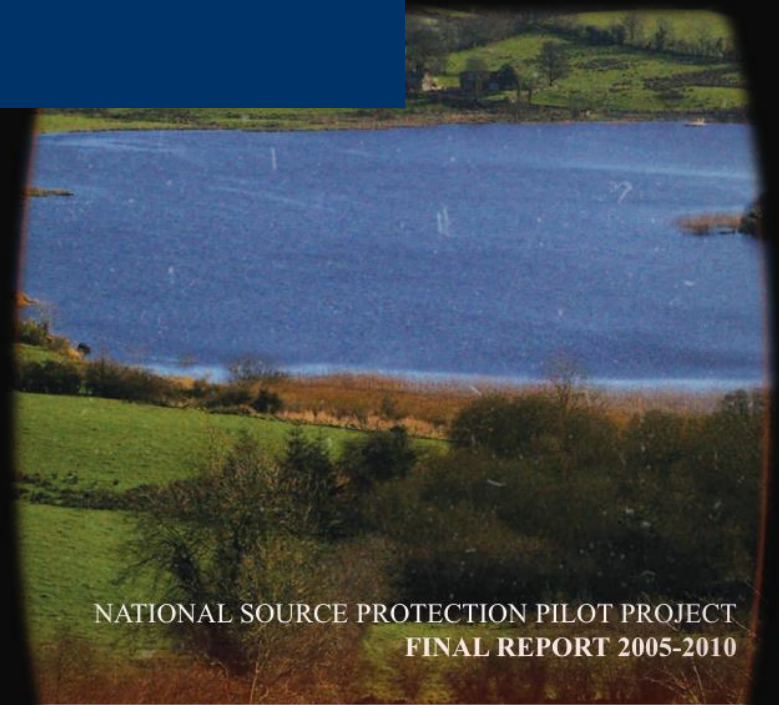
Professional approach

65 GWSs with surface water sources operating today




# NFGWS SOURCE PROTECTION JOURNEY

## THE EARLY YEARS



GUESS WHO'S COMING
TO SAVE THE WORLD AGAIN?

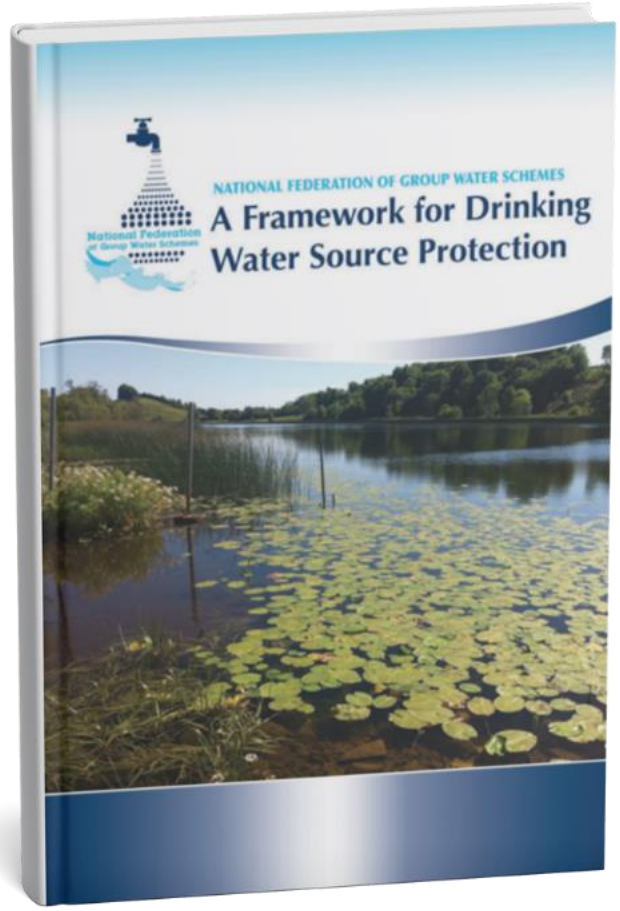
# MAINSTREAMING SOURCE PROTECTION

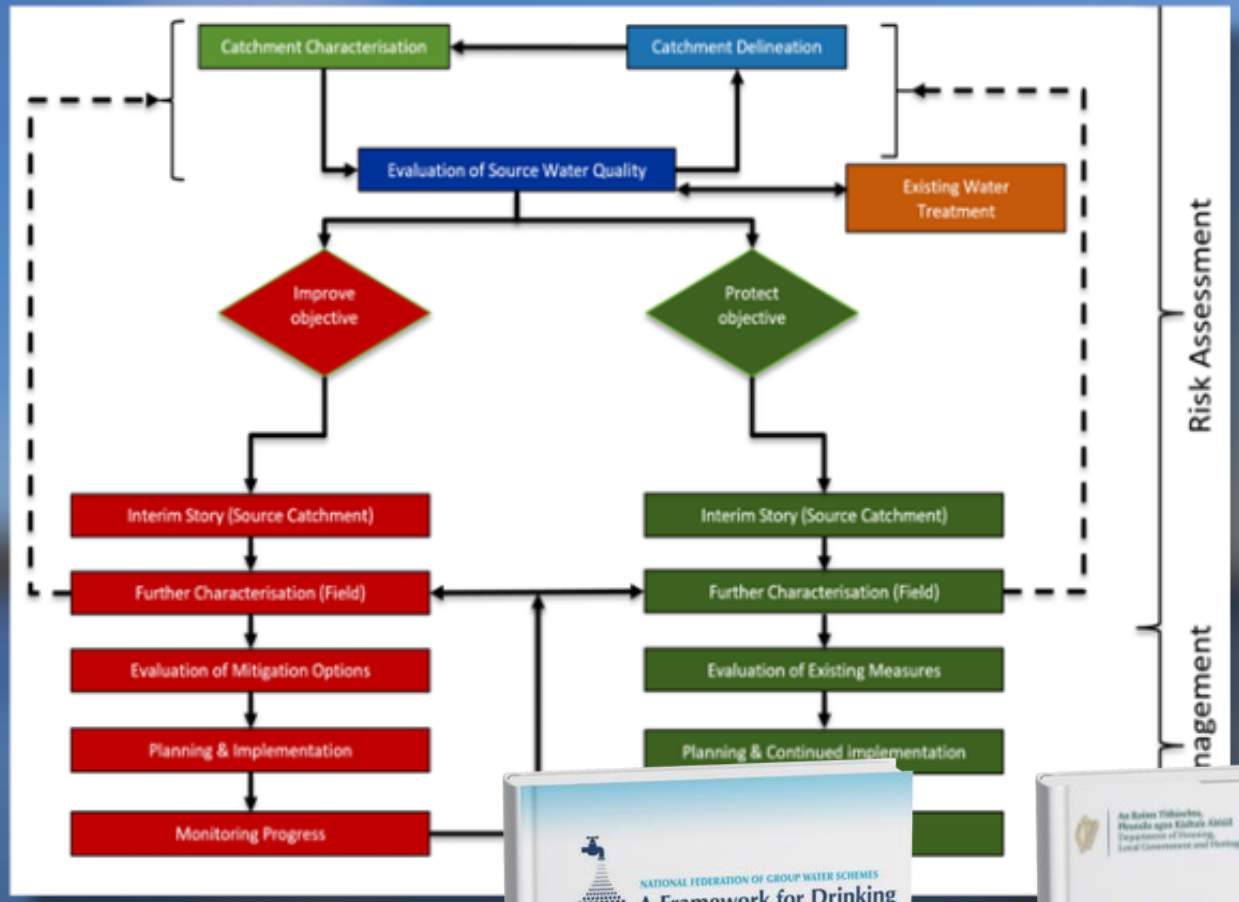
NFGWS source protection team established

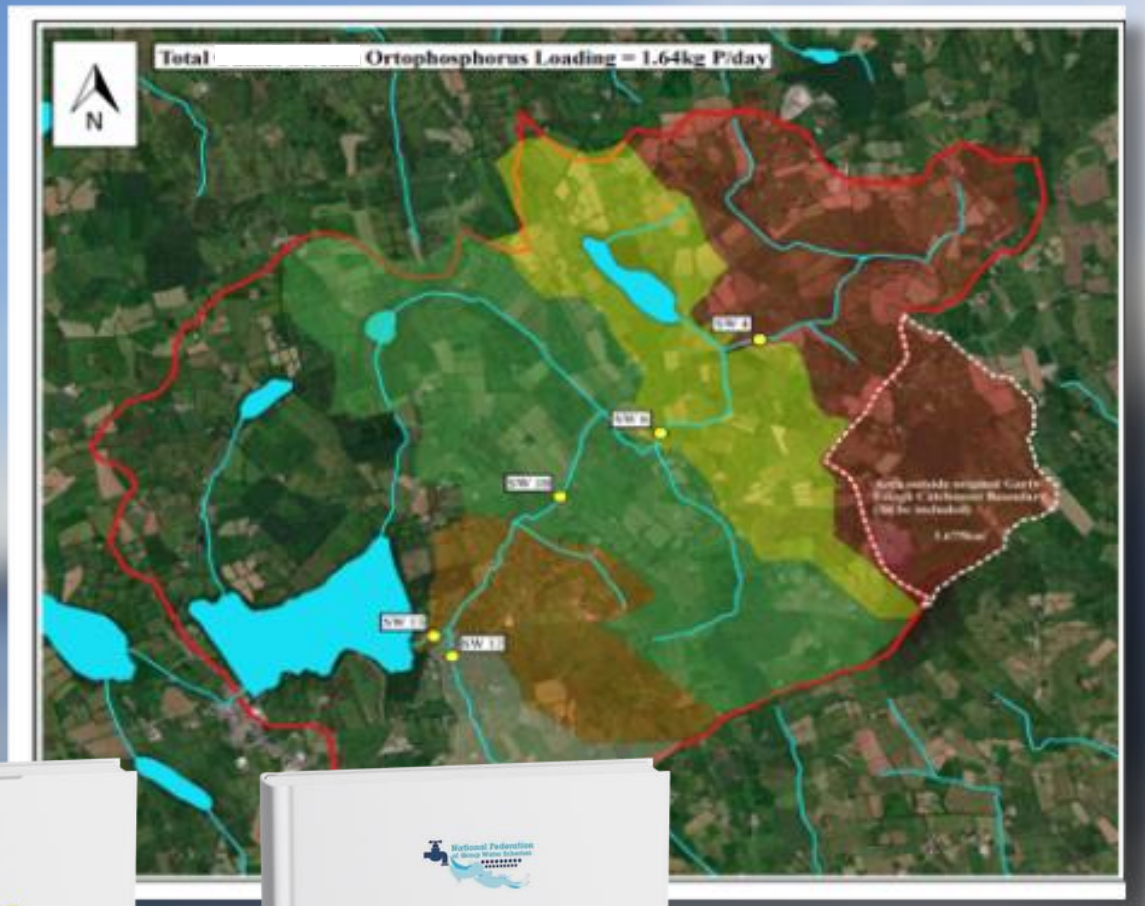
All GWSs completed source catchment preliminary delineation

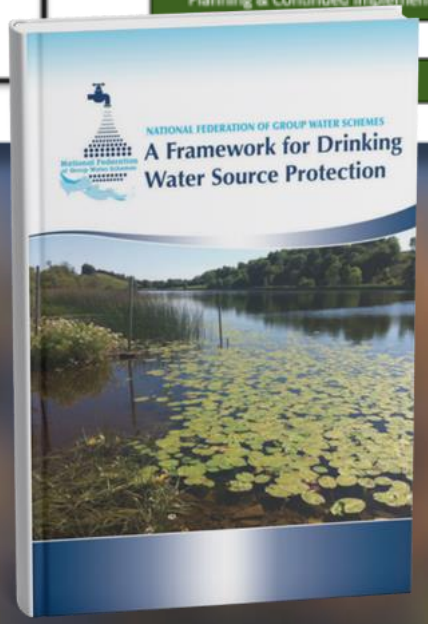
NFGWS Source Protection Framework and Mitigation Actions for Farming Handbook published in 2019

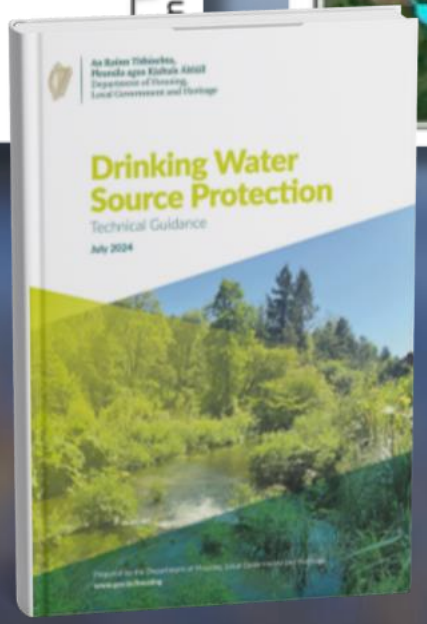
€2m of State Funding Provided for Integrated Source Protection Planning and Mitigation Actions

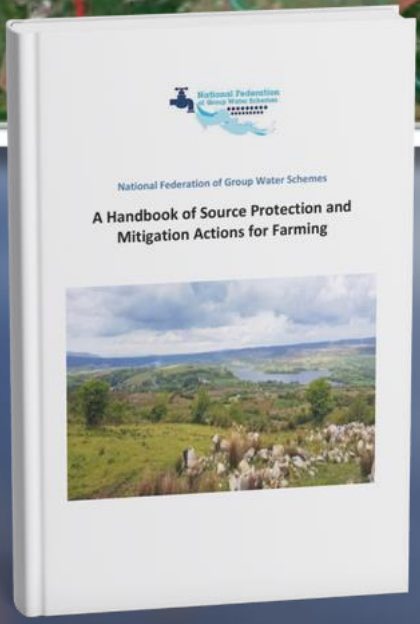



Catchment Characterisation
Catchment Delineation
Evaluation of Source Water Quality
Existing Water Treatment
Improve objective
Protect objective
Interim Story (Source Catchment)
Further Characterisation (Field)
Evaluation of Mitigation Options
Planning & Implementation
Monitoring Progress
Interim Story (Source Catchment)
Further Characterisation (Field)
Evaluation of Existing Measures
Planning & Continued implementation
Risk Assessment
nagement


N
Total Ortophosphorus Loading = 1.64kg P/day


NATIONAL FEDERATION OF GROUP WATER SCHEMES
A Framework for Drinking Water Source Protection


Drinking Water Source Protection
Technical Guidance
July 2024


National Federation of Group Water Schemes
A Handbook of Source Protection and Mitigation Actions for Farming

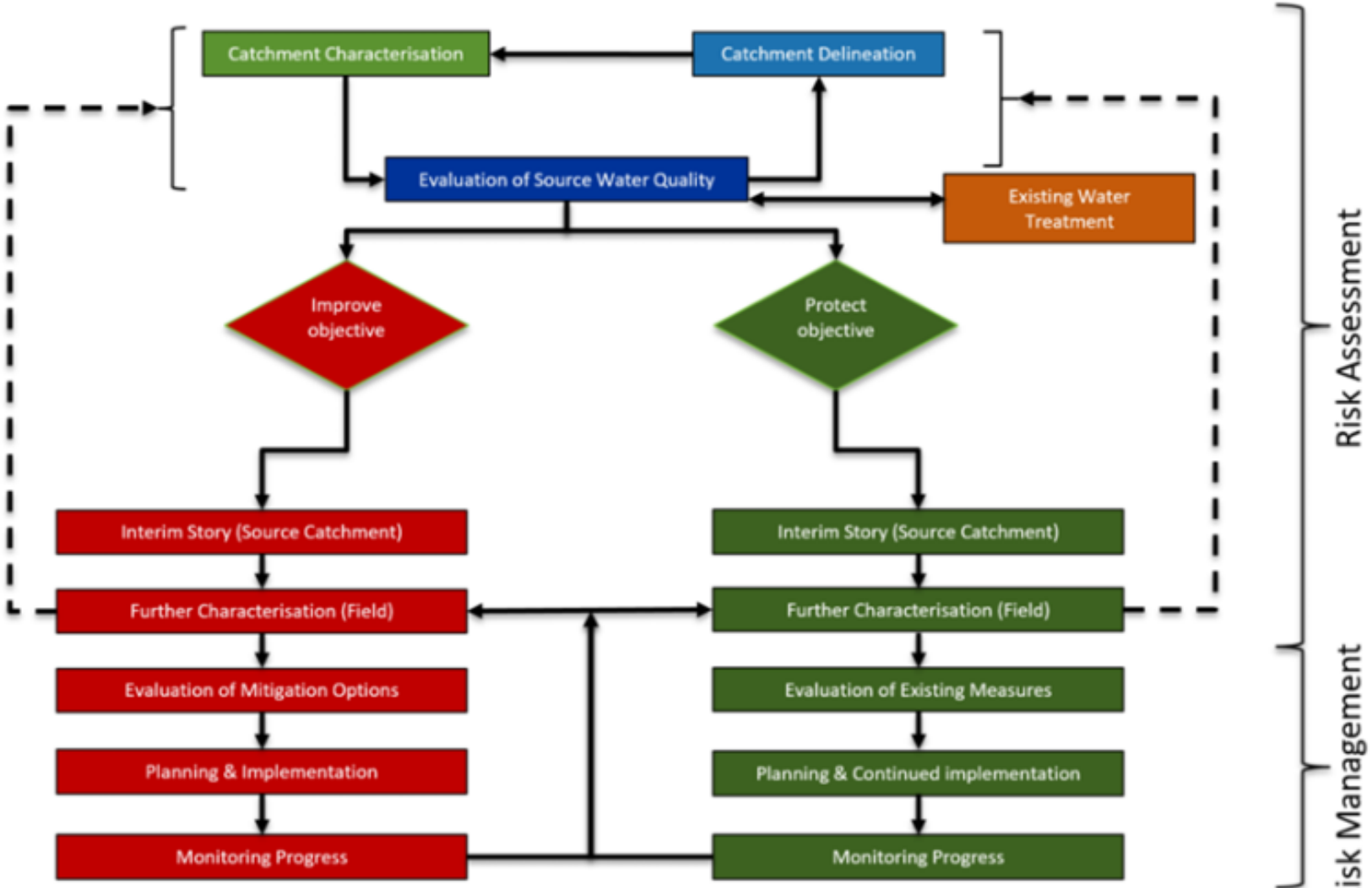



**Figure 2:** Drinking Water Source Protection Framework (Modified from NFGWS, 2019)

Source: www.assets.gov.ie/static/documents/drinking-water-source-protection.pdf

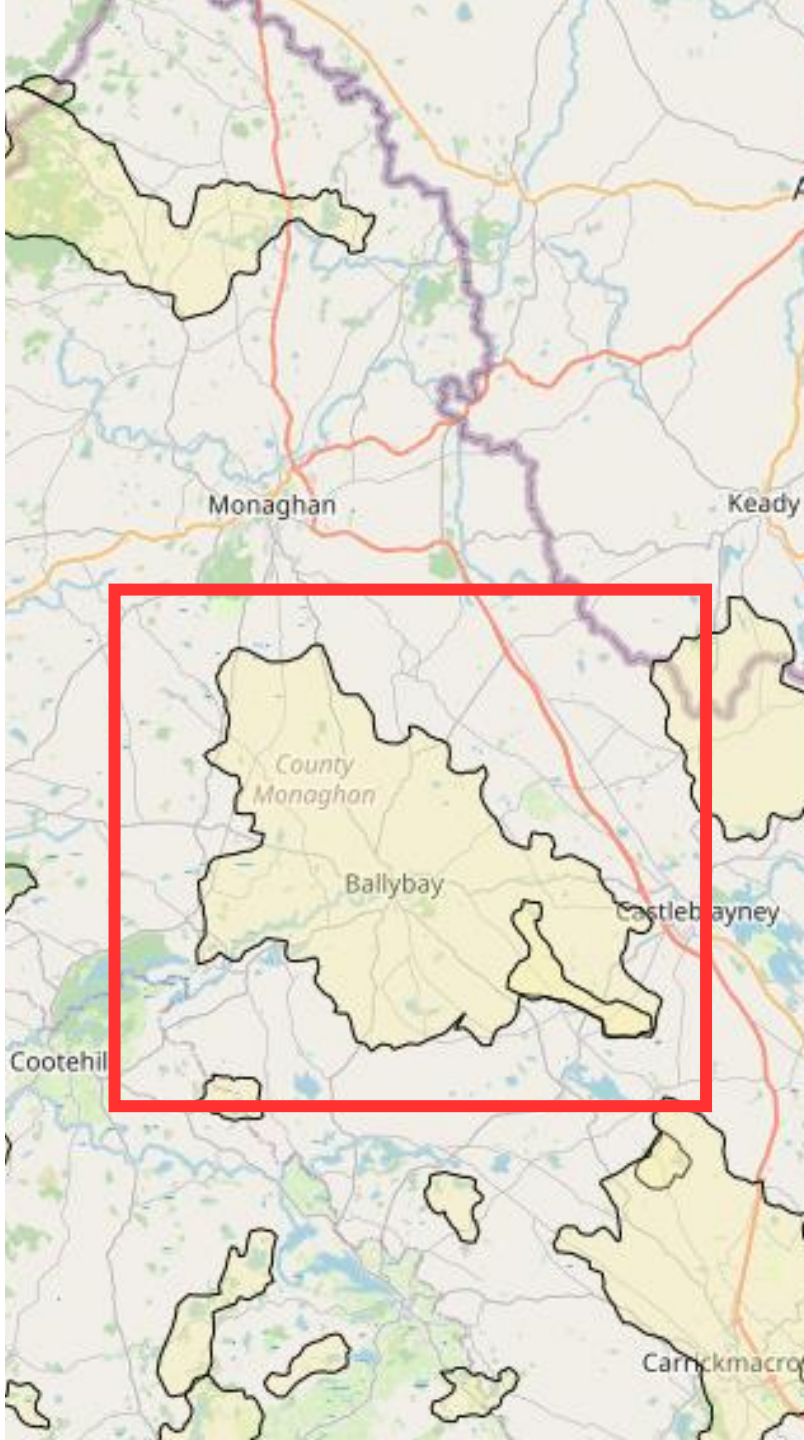
# STRANOODEN GWS

White Lough source - large 129km2 catchment in County Monaghan

Rural and urban pressures

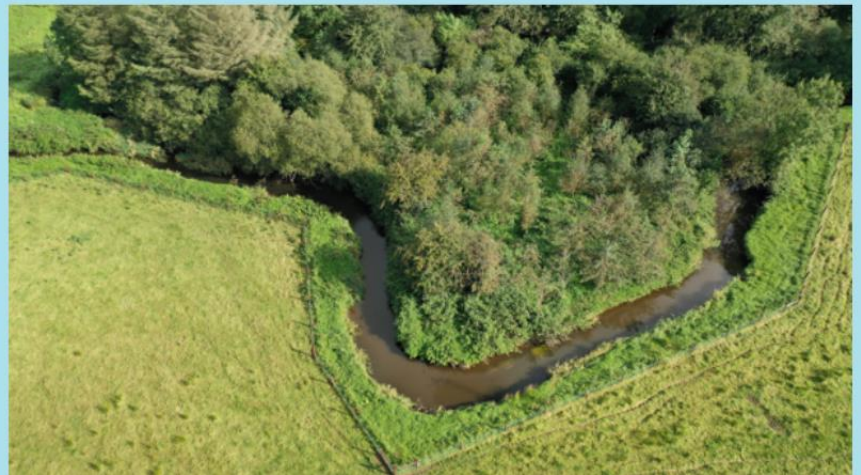
Pesticide & phosphorus primary hazards of concern

Targeted measures needed




Dromore River Catchment
Stranooden
The Dromore River


LOSRC




SOURCE PROTECTION PILOT PROJECT
BAIRD's SHORE / DROMORE RIVER
STOP AND THINK ABOUT THE WATER YOU DRINK
Who are We?
What is the Project?
What is the Problem?
Pesticides used for 'weed' or 'pest' control are being detected in local rivers and lakes. The water treatment available to Stranooden GWS cannot remove pesticides. Such treatment processes are very complex and expensive.
What are Pesticides?
Herbicides (especially MCPA and Glyphosate), insecticides, fungicides, rodent poisons/slug pellets
Pesticides contain toxic materials that pose both environmental and human health risks. All life forms in rivers and lakes, all soils, plants, insects and the bugs and the life forms that feed on them can be severely damaged by pesticides
Dromore River Catchment
Stranooden GWS
Ballybay
Baird's Shore
Doohamlet
How do Pesticides reach our water?
Leakage from storage / damaged pipes
Handling, filling and disposing
Rainfall within 48hrs of application
Wind drift
Run-off from roads and soil
Project Objective
Our aim is to develop a community-led approach to protecting the supply catchment (i.e. ditches and streams that feed into our Baird's Shore source). We also aim to reduce other forms of contamination being detected in the Dromore
Water Samples Taken at Catchment Sites 13/05/2020 to check for MCPA Levels
Solutions
Don't use pesticides. There are other options.
Rush control wiping service is available to farmers
Contact us @ 087 665 2727 or online
Stranooden

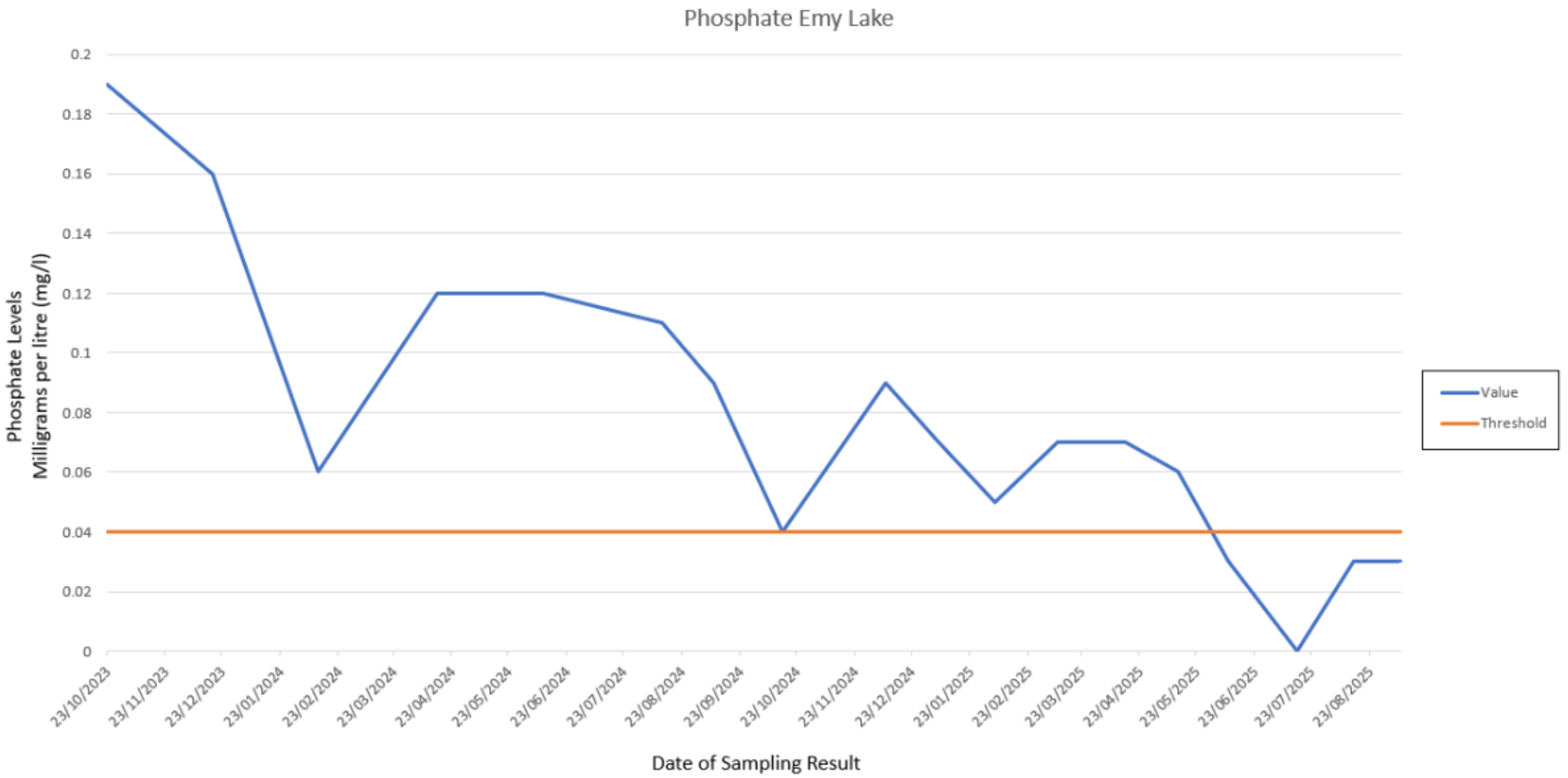

GTGWS
GLASLOUGH TYHOLLAND
GROUP WATER SCHEME LTD.
THE MOUNTAINWATER RIVER IS A SOURCE OF DRINKING WATER FOR GLASLOUGH TYHOLLAND G.W.S.
PLEASE RESPECT THE RIVER AND BE CAREFUL USING SPRAYS AND CHEMICALS.
REPORT ISSUES TO:
087 3464122


Orchards for Farmers
ORCHARDS
FOR FARMERS
Plant the seed to protect water quality


I've Planted a Tree
& my garden is
PESTICIDE FREE
WORLD WATER DAY
SAFE DRINKING WATER STARTS WITH US ALL


GTGWS
EMY LOUGH
DRINKING
WATER
SOURCE

# Phosphate Emy Lough



# MAGHERACLOONE GWS

Soil analysis on 30 farms (646.6 hectares)

Optimal fertility range = 6.2 pH with a P index of 3 or 4

In an area of 20 fields, only 11% were in optimum pH range

Advice given to farmers


SAFE DRINKING WATER
STARTS WITH US ALL
NATIONAL FEDERATION
of GROUP WATER SCHEMES


Cavan County Local Development
LCDC
Cavan
TIONSCADAL UM CHOSAINT FHOINSE LOCH GHARBHACHAIDH
LOUGH GARVAGH SOURCE PROTECTION PROJECT
FUNDED BY THE IRISH GOVERNMENT UNDER THE LEADER PROGRAMME 2014-2020.


GLINSK CREGGS GWS - LOUGH LOUNG CATCHMENT
SITE 1
SITE 3
SITE 4
Scale 1:20,000@A3

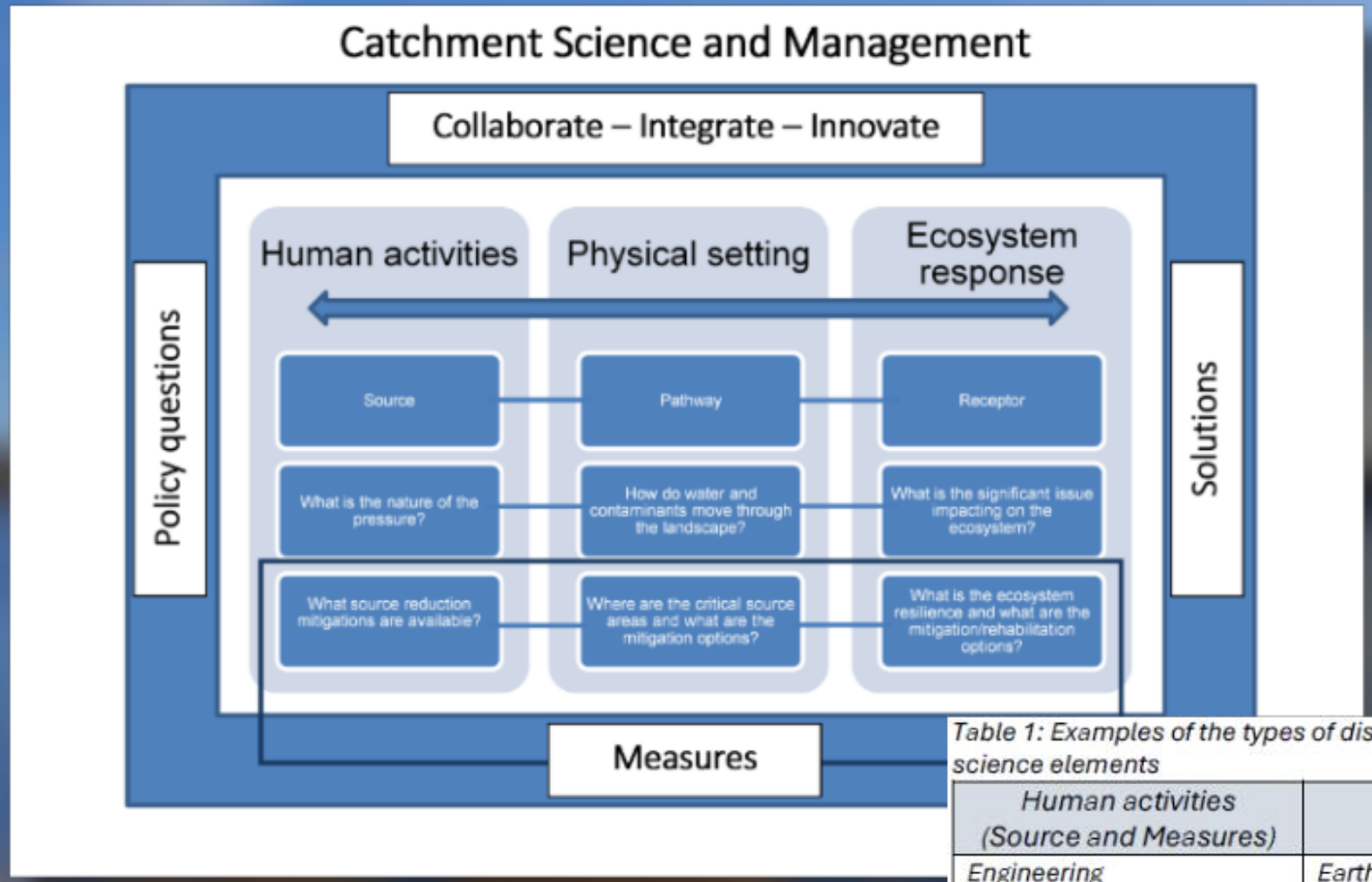



*Table 1: Examples of the types of disciplines appropriate to each of the three catchment science elements*

| *Human activities (Source and Measures)* | *Physical setting (Pathway)* | *Ecosystem response (Receptor)* |
|---|---|---|
| *Engineering* | *Earth science* | *Ecology* |
| *Agricultural science* | *Geology* | *Botany* |
| *Environmental science* | *Physical geography* | *Zoology* |
| *Forestry science* | *Hydrogeology* | *Limnology* |
| | *Geomorphology* | *Aquatic science* |
| | *Soil science* | *Biology* |
| *Communicating, building partnerships and encouraging understanding between different disciplines and sectors* | | |

Source: www.catchments.ie/what-is-catchment-science/


S.V.


Mid Roscommon Group
Water Scheme
Contactless
Water Refill Station


14:09


I've Planted a Tree
& my garden is
PESTICIDE FREE


National
Federation of
Group Water
Schemes
www.nfgws.ie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# HEAD - HEART - HANDS

Communicate effectively
Evidenced-based conversations
Listen

Make it interesting
Find meaning
Instil belief

Enable action
Give level of ownership
Social recognition

# WHAT'S NEXT FOR THE GWS SECTOR?

Water Action Plan 2024

Risk Assessment & Risk Management

Integrated Source Protection

Planning

Mitigation Actions

Support other WAP stakeholders

# THANK YOU