



Waters of **LIFE**



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

Issues and Actions for High Status Rivers

EPA Conference

18th June 2026

- We are an EU Co Funded **LIFE** integrated project led by DHLGH.
- The **LIFE** programme funds environment and climate action.
- Integrated projects aim to influence **policy** and leverage **complementary** funding
- **Main aim:** to develop measures for the protection and restoration of **high status** **objective** rivers.



& 4 Local Development Companies

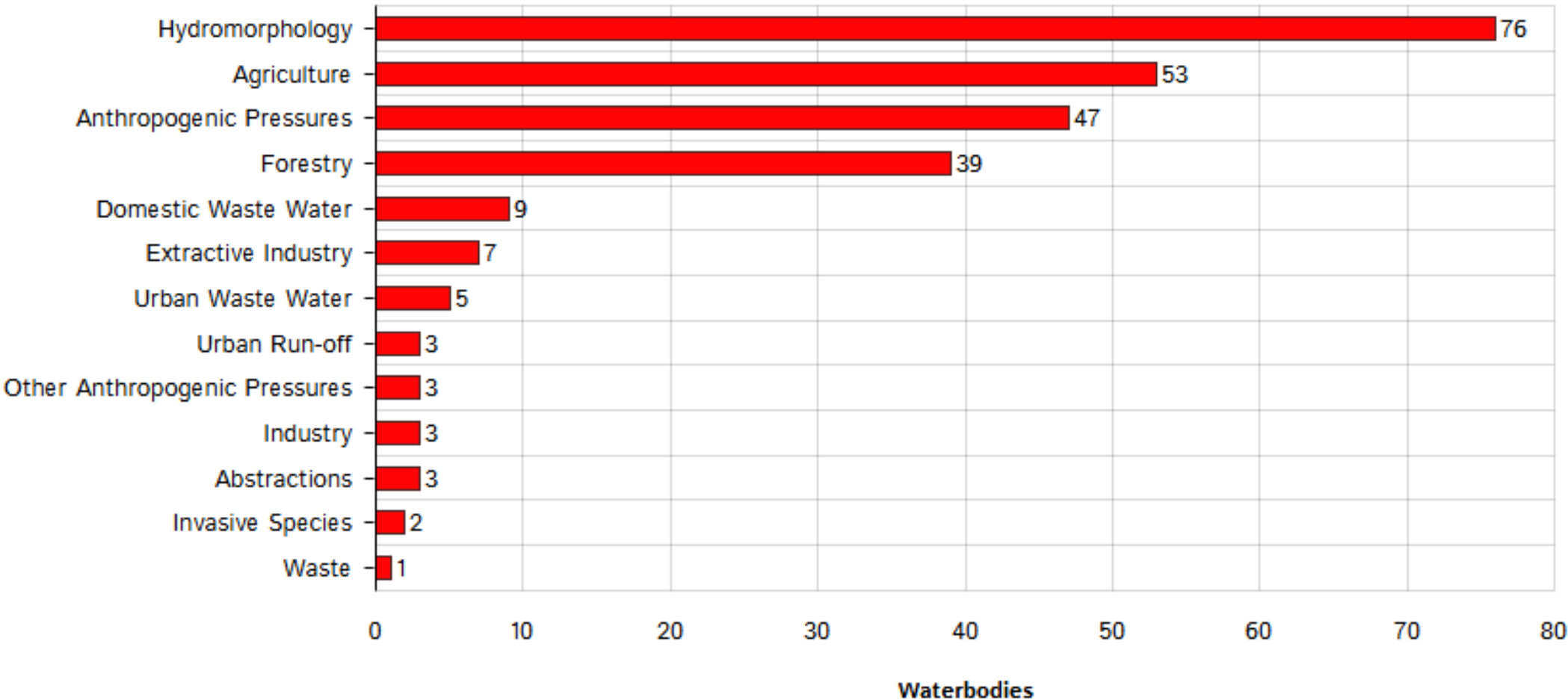
What are **High Status Objective** rivers:

1. Rivers currently achieving high status and which must **maintain** that status
2. Rivers which have fallen below high status and must be **restored** to high status by 2027
3. 334 HSO rivers identified in Water Action Plan
4. Only 139 (**42%**) currently at HS



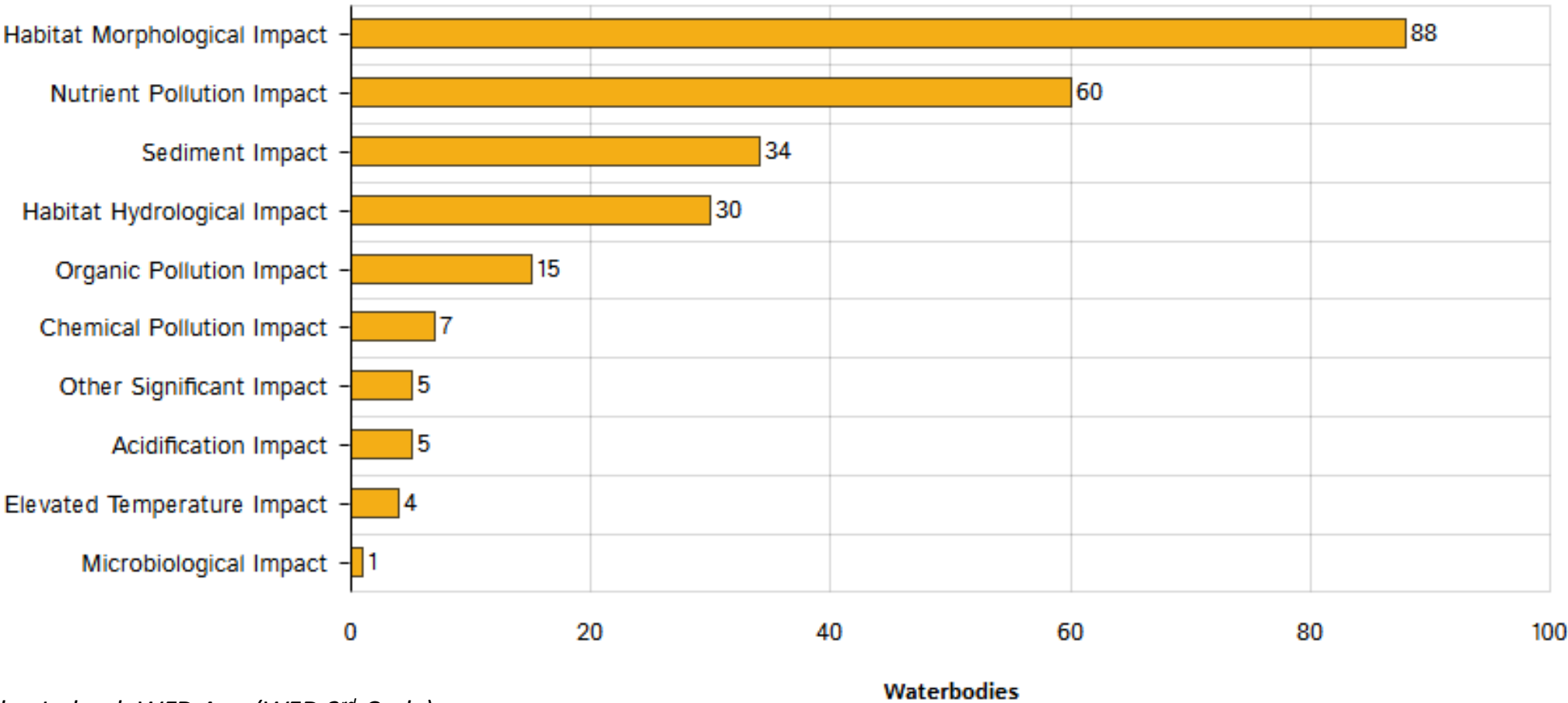
The Graney Catchment

Significant Pressures Impacting At Risk Waterbodies



Source: Eden Ireland, WFD App (WFD 3rd Cycle)

Impacts of Significant Pressures on At Risk Waterbodies



Source: Eden Ireland, WFD App (WFD 3rd Cycle)

Avonmore	Wicklow
Graney	Clare / Galway
Islands	Roscommon / Galway
Awbeg	Cork
Shournagh	Cork
Sheen (Control)	Kerry

Reflect the range of pressures and issue in HSO rivers generally



6 Project Pillars

1. Hydromorphology

2. Agriculture

3. Forestry

4. Peat

5. Other pressures

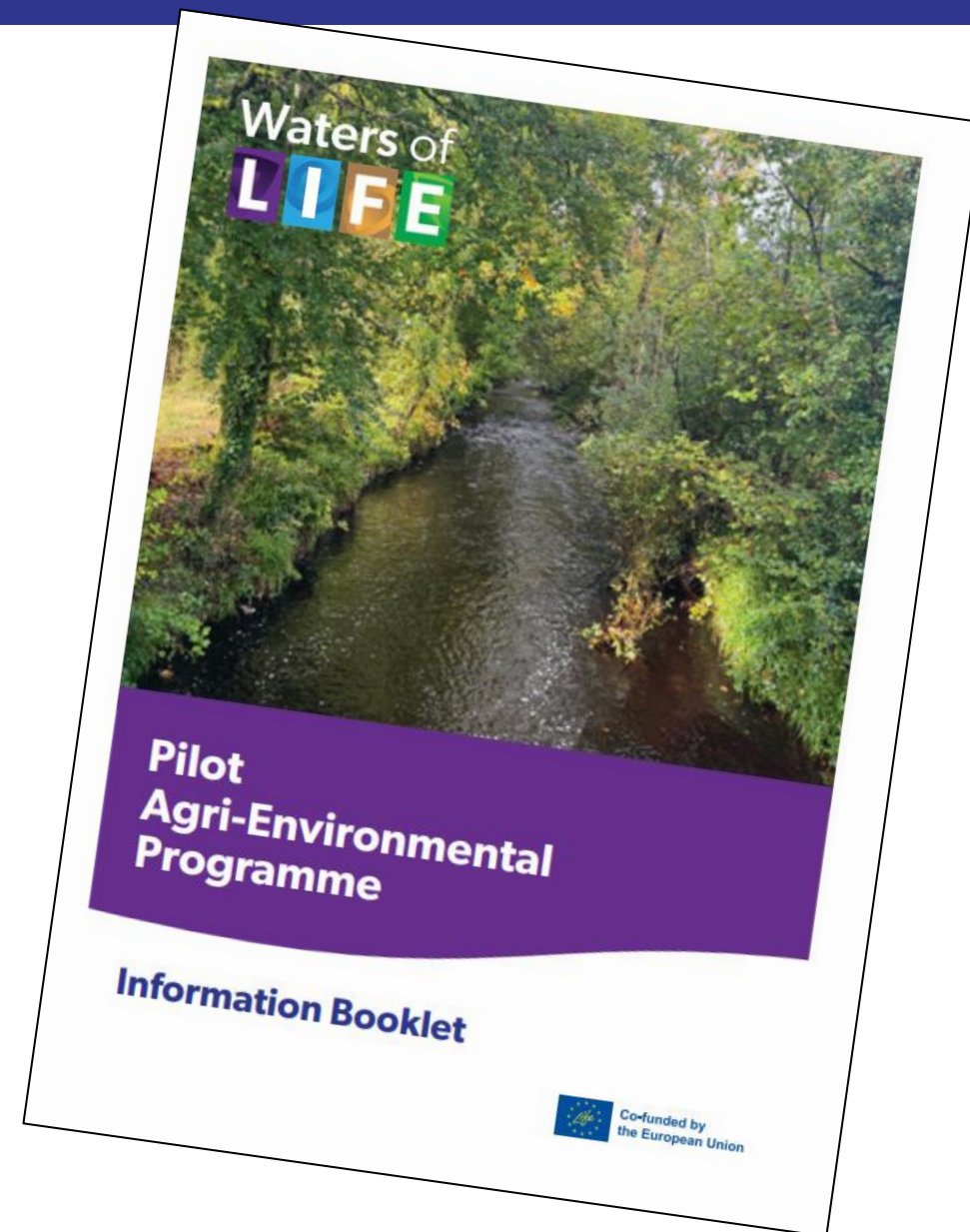
6. Education and Awareness



The Graney Catchment

Elements of the Programme

1. Results based payments
2. Action based payments (General Actions)
3. Supporting Actions (Non Productive Investments)
4. Education and awareness



Results Based Agricultural Payments

1. Built on the learnings of previous RBAPS
2. Incorporated learnings from the ACRES Cooperation Project development process
3. Consulted with stakeholders and specialists.
4. Adapted scorecards to be more focused on elements of hydromorphology.



Semi-Natural Habitat Score Cards

- Semi-natural grassland
- Grassland on peat
- Woodland and scrub
- Peatland

Why

High quality semi-natural habitats reflect **low inputs** and **extensive management**. This can have a **protective** effect on adjacent watercourses

Format

Similar to ACRES, but more emphasis on hydrology.
Up to €400/ha & a **riverside bonus** up to €3.2/m



Semi Natural Grassland (Wild Atlantic Nature)

New Scorecards

- Riverside habitat on improved grassland
- Riverside habitat on tillage

Why

On more intensively managed land, an area of semi-natural vegetation, including trees, adjacent to a river can have multiple benefits for river health.

Factors Assessed

- Fenced/uncultivated width
- Complexity of vegetation within this area
- Presence and continuity of trees.
- Drainage/damaging activities within 20m of river

Optimum width 20m. Payment up to €2000/ha



Riverside habitat scorecards:

Address several elements of River Hydromorphological Assessment Technique (RHAT):

- Bank structure and stability
- Bank and bank top vegetation
- Riparian land use (within 20m)

This is important because:

When sites fail to achieve a High RHAT score, these three elements are the primary drivers.*

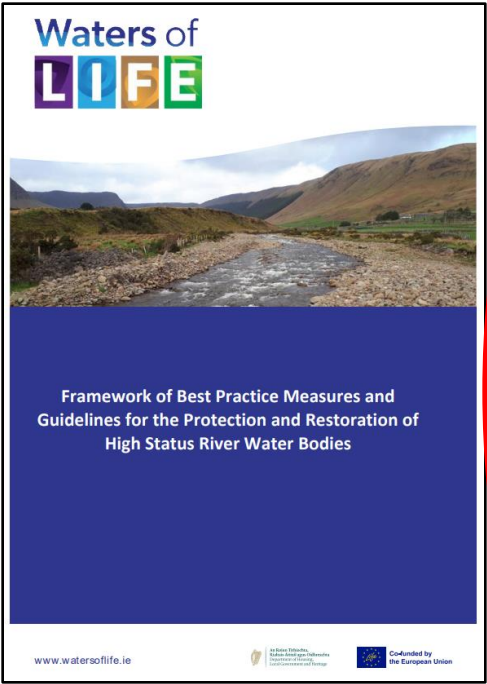
(* Source: Recent analysis of EPA RHAT data by Ed Cox, LAWPRO)



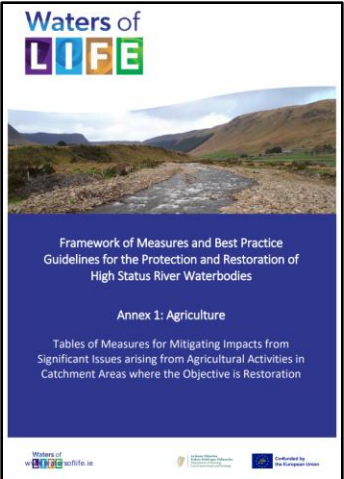
Framework of Measures and Best Practice Guidance for HS Waters

Measures effectiveness is ranked from high to low in different drainage settings for each issue

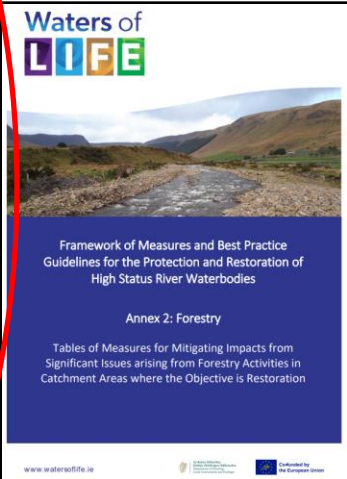
Framework



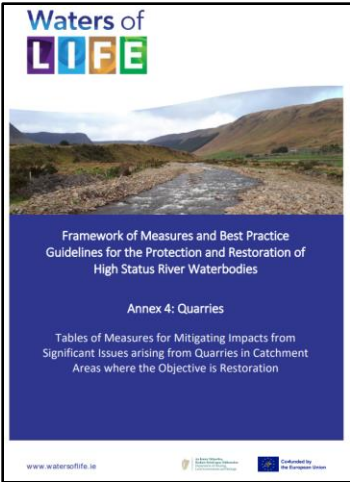
Agriculture



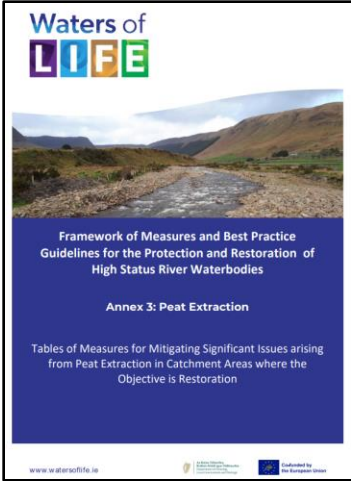
Forestry



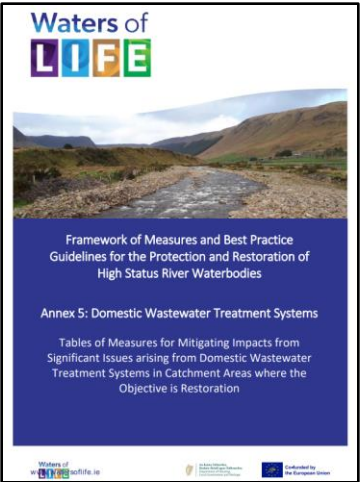
Quarries



Peat Extraction



DWTS



Action Based Payments (General Actions)

1. Runoff Risk Assessment
2. Nutrient management planning
3. Nutrient surplus calculation using AgNav
4. Precision Nutrient Application (Pasture Base Ireland and MoSt)
5. Catch crops
6. Min till

Why

Some issues such as **nutrient and sediment loss**, do not readily lend themselves to a results based approach.



Runoff Risk Assessment

- Whole farm assessment
- Based on the Source-Pathway-Receptor model
- Combines desk study and site visit
- Identifies risky areas for nutrient and sediment loss.
- Proposes supporting actions (right measures in the right place)
- These actions are funded through the project



Nutrient Measures (Cork Catchments)

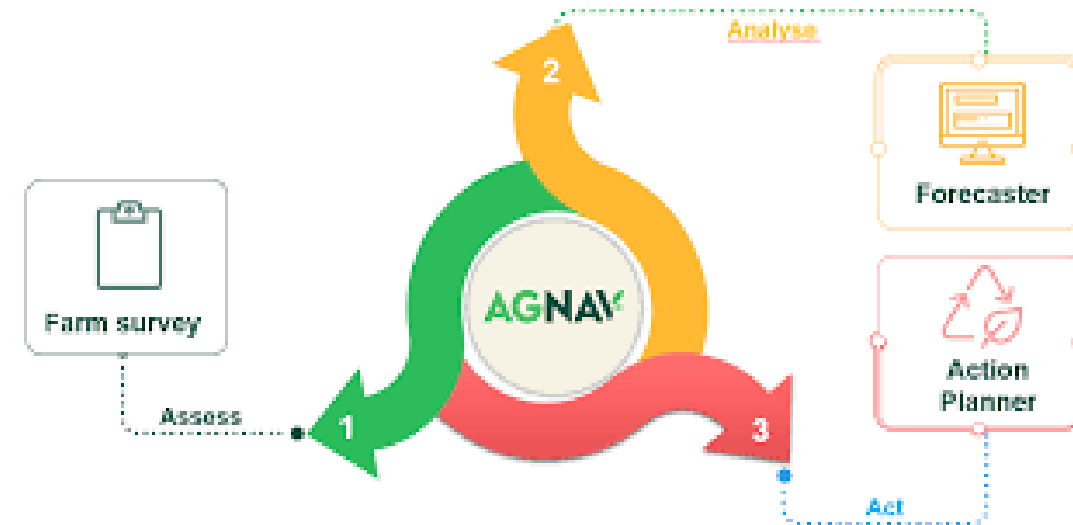
Shournagh Catchment

- Shallow free draining soils = nitrate leaky
- Approximately 1/3 of farmers in derogation
- Current estimated nitrate load leaving the Shournagh catchment = 1194kg/day N
- Reduction required to achieve 2.6mg/l N = 613kg/day N
- Equates a reduction in N losses of approximate 20kg N/ha/year across entire catchment or
- Approximately 30kg N/ha/year across PIP N rank 1 to 3



Ag Nav

- System developed by Bord Bia and Teagasc
- Calculates farm gate N&P balances using data from ICBF, Milk Co-ops, Bord Bia Sustainability Audit.
- Offers a forecaster tool which can help assess and compare different strategies for reducing nutrient surpluses
- Provides a farm specific action plan
- Does not currently account for clover fixed nitrogen



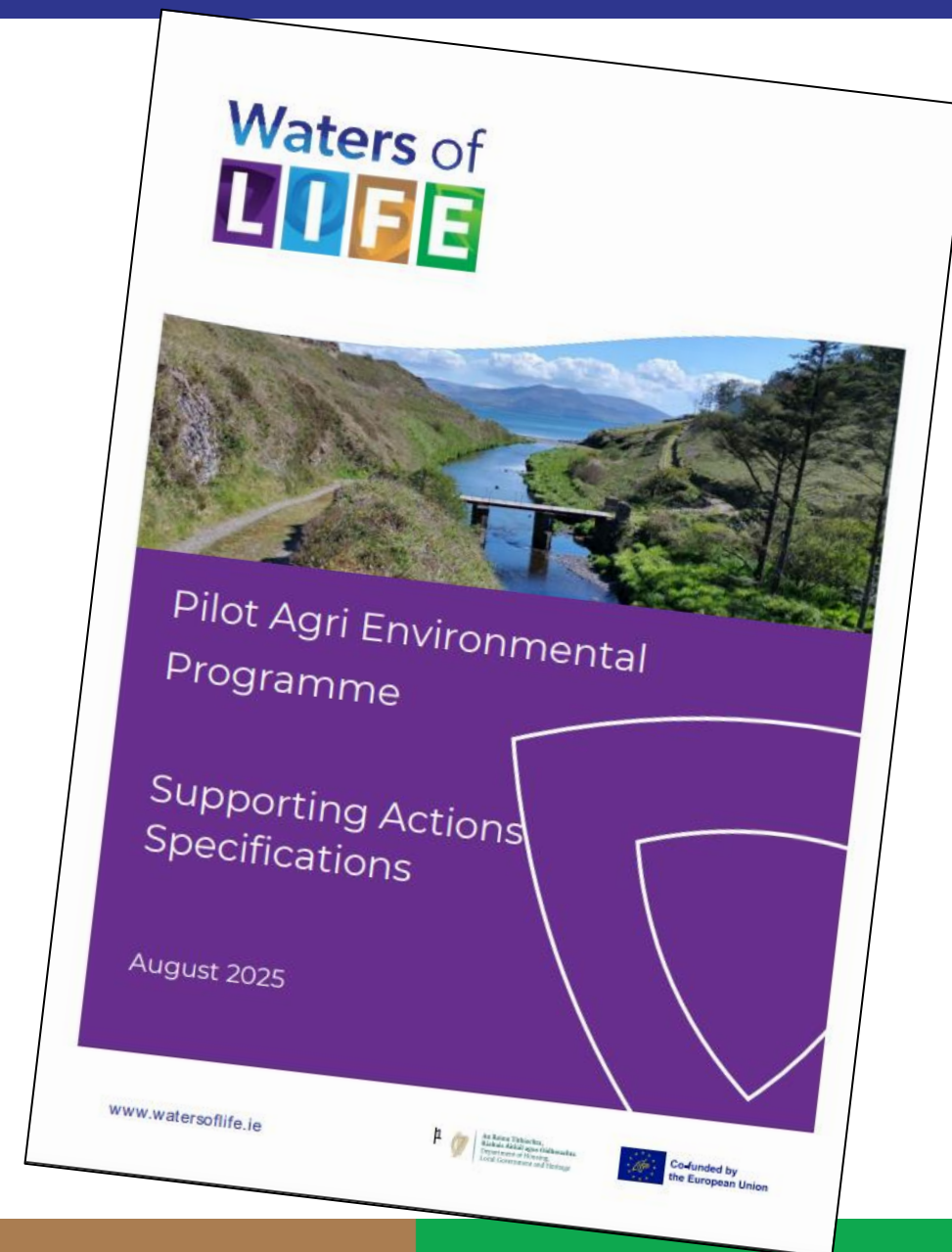
Precision Nutrient Application using PBI and MoSt

- PBI is a grass management tool
- Data from PBI and local weather information can be used to populate Teagasc's MoSt grass growth model
- Based on the model, Teagasc can provide farm specific guidance on optimum fertilizer amounts and timings.
- Minimum of 30 covers required and ideally 2 years data.



Supporting Actions (NPIs and Landscape Measures)

- Suite of 33 actions which can be selected by the farm advisor to:
 - Improve habitat quality (and payment)
 - Reduce the risk of nutrient or sediment loss via overland flow or drains
- List of actions informed by Framework Document



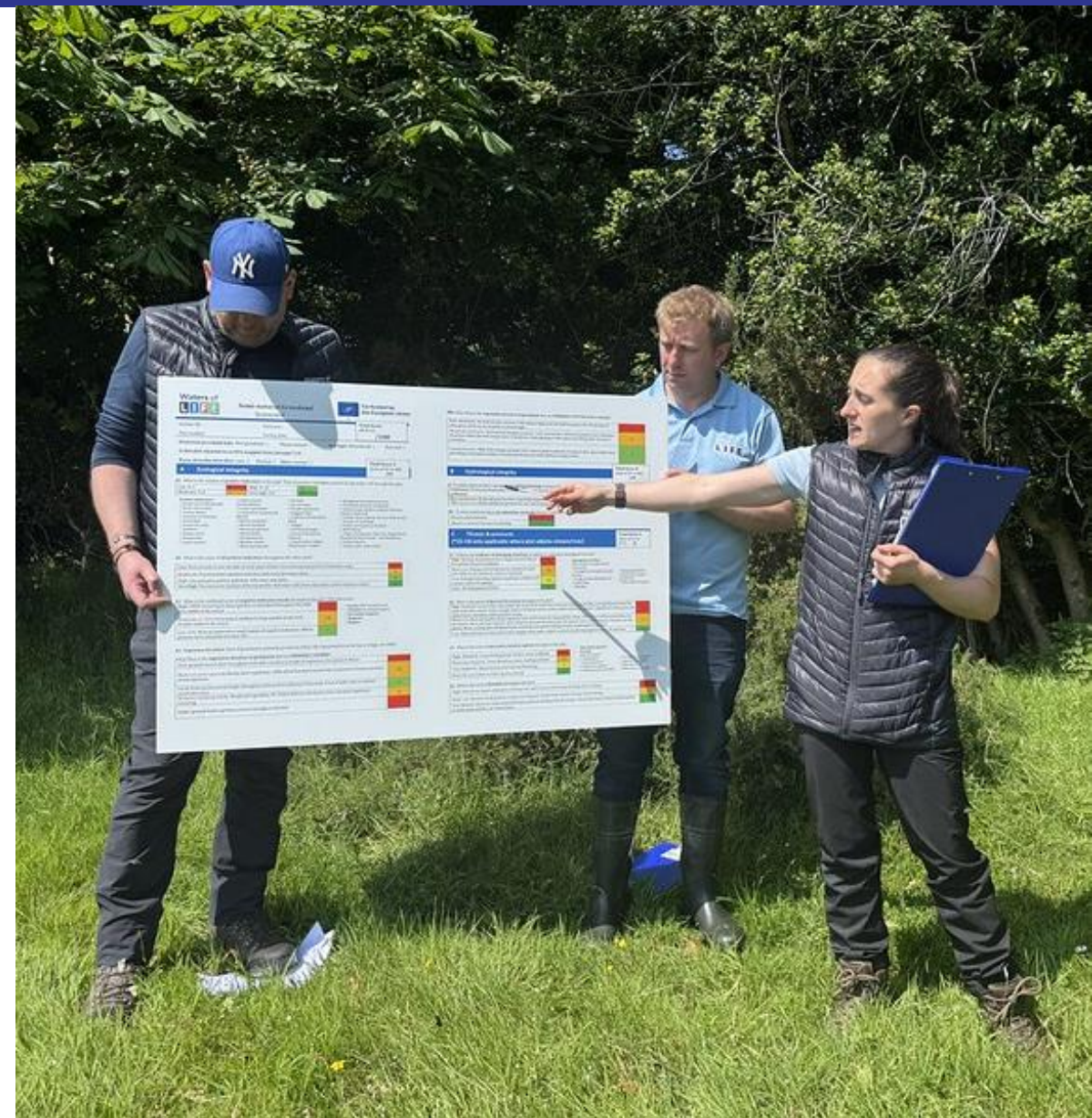
Education, Training and Awareness

Advisor Training (81 trained to date)

- 1 day intro to project and catchment science
- 1 day habitat scoring
- On line runoff risk assessment

Farmer Induction (490)

- ½ day intro to project agri env programme
- Additional optional awareness/training events (eg forestry schemes, runoff risk assessment)



More extensive catchments (Avonmore, Graney, Islands)

Catchment	No of farmers in programme	Average farm size	Total area of farmland year 1	Area of scored (semi-natural) habitat
Avonmore	38	35 ha	1338 ha	1013 ha (76%)
Graney	61	35 ha	2144 ha	1668 ha (78%)
Islands	98	27 ha	2626 ha	1575 ha (60%)

- Ecology reasonably good across all catchments
- Hydrology good in the Avonmore and Graney
- Hydrology a significant issue in the Islands particularly on peat soils (420 plots):
 - Active drains recorded on 280 plots
 - Low water table on 246 plots

More intensive catchments (Shournagh and Awbeg)

Catchment	No of farmers in programme	Average farm size	Total area of farmland year 1	Area of scored (semi-natural) habitat*
Awbeg	33	58 ha	1926 ha	105 ha (5.5%)
Shournagh	32	68 ha	2171 ha	120 ha (5.5%)

- Scoreable habitats limited to riverside habitats and some woodland and scrub.
- Average width of riverside habitat on improved grassland:
 - Shournagh = 1.7m
 - Awbeg = 2.5m
- Average width of riverside habitat on tillage:
 - Awbeg = 5.7m
 - No tillage farms in Shournagh

**Hedgerows not included*

- The presence of extensive, healthy **semi-natural habitats** correlates with **low nutrient levels** in adjacent water courses
- The presence of extensive **surface drainage** correlates with risk of **sedimentation**
- Our grassland scorecards were not incentivising development of healthier riparian zones.



Semi Natural Grassland (Wild Atlantic Nature)

Semi natural habitat scorecards need to:

- Assess more of the element of **hydromorphology** in the riparian zone.
- Identify the habitat type that would naturally occur a particular riparian zone: **wetland** or **riparian woodland**.
- Provide greater **incentive for habitat improvement** works in this zone (including tree planting where appropriate).

Riverside version of semi-natural habitat scorecards developed which will be introduced this year



Riverside habitats (improved grassland and tillage)

- The width of fenced riparian zones on grassland is unlikely to be sufficient to support conditions for high hydromorphological status.
- Very poor uptake of measures to widen the riparian zone despite generous payments.
- Uncultivated margins on tillage provide opportunity for significant riparian planting.



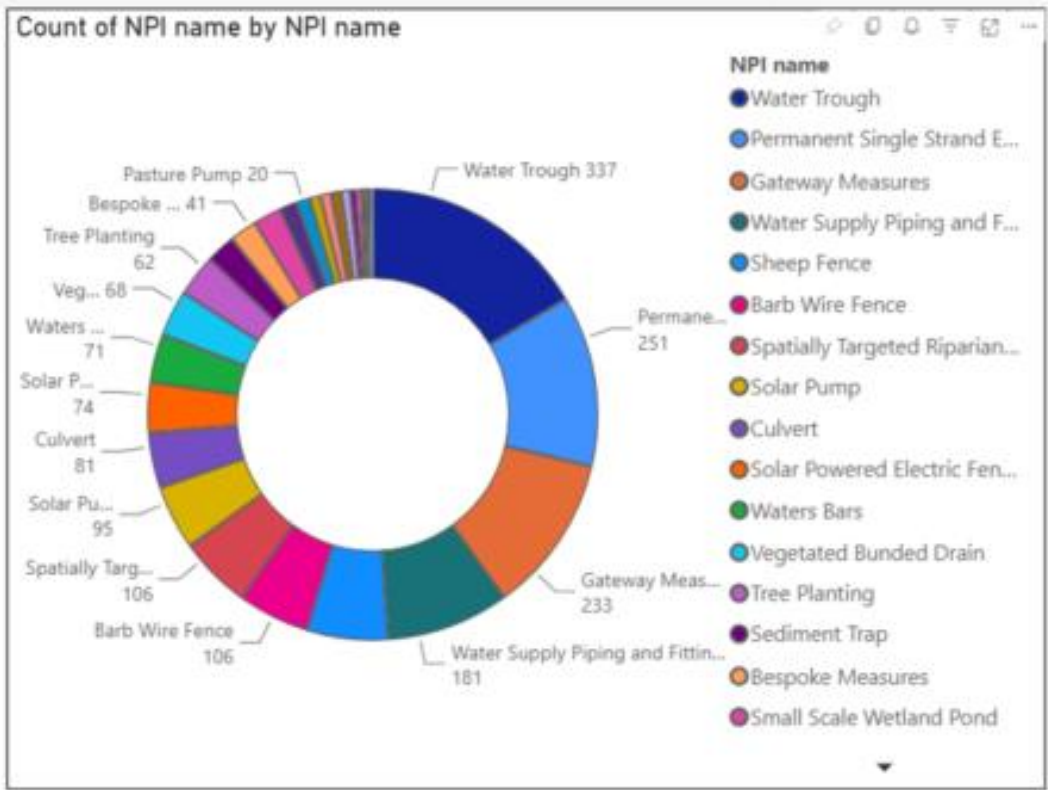
Credit: Rossa O Briain, IFI

GENERAL ACTIONS YEAR 1

Action	Availability to participants	No of farmers offered measure	Uptake to date	Comment
Runoff risk assessment	Mandatory for all participants	263	218	Quality very variable, some advisors requested to resubmit
Nutrient management planning	Mandatory in Cork, Optional else where	263	5	Some submitted without soil tests (not counted)
Nutrient Surplus (AgNav)	Mandatory in Cork, not offered elsewhere	70	0	Will improve significantly – issues with access for private advisors
Pasture base Ireland	Optional on dairy farms in Cork, not offered else where	41	5	4 in Shournagh, 1 in Awbeg. Will actively recruit to this measure
Catch crop	Optional on tillage in Cork	11	11	Only non legumes offered
Min Till	Option on tillage in Cork	11	10	Would be good to understand why not taken up by one farmer

- Measures subjected to rigorous approval process
- Over 50% being rejected.
 - No justification given for action
 - No obvious WQ benefit
 - Marginal WQ benefit but does not represent value for money.
 - Alternative measures would be more suitable.

Not always getting the right measures in the right places



- Skills gap in the advisory in relation to catchment science.
- Poor understanding of the source-pathway-receptor model
- Influenced by what the farmer would like rather than strict focus on WQ

But also

- We need to be more prescriptive about what measures will work where e.g. the Islands
- Provide better guidance materials
- Tailor our training to identified needs (eg RRA)
- Need to build connection between landowners and the river environment



Drainage in the Islands

- RBAPS have a role to play in delivering for HS but need:
 - Riverside specific scorecards
 - Greater emphasis on hydromorphology
- RBAPS alone not sufficient where nutrients are a significant issue
- The range of actions available for nitrates is limited
- A limited range of supporting actions will have most effect in a given scenario and provide best value for money.
- Advisors are key, but we need to address the skills gap
- We need to achieve buy in from the farming community through awareness raising, clear messaging and appropriate incentives.



Thank You for Listening



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