



Waters of **LIFE**



Co-funded by
the European Union

Public Meeting Shournagh Demonstration Sub-Catchment

25/09/24

We are an EU LIFE integrated project (2022-2028).

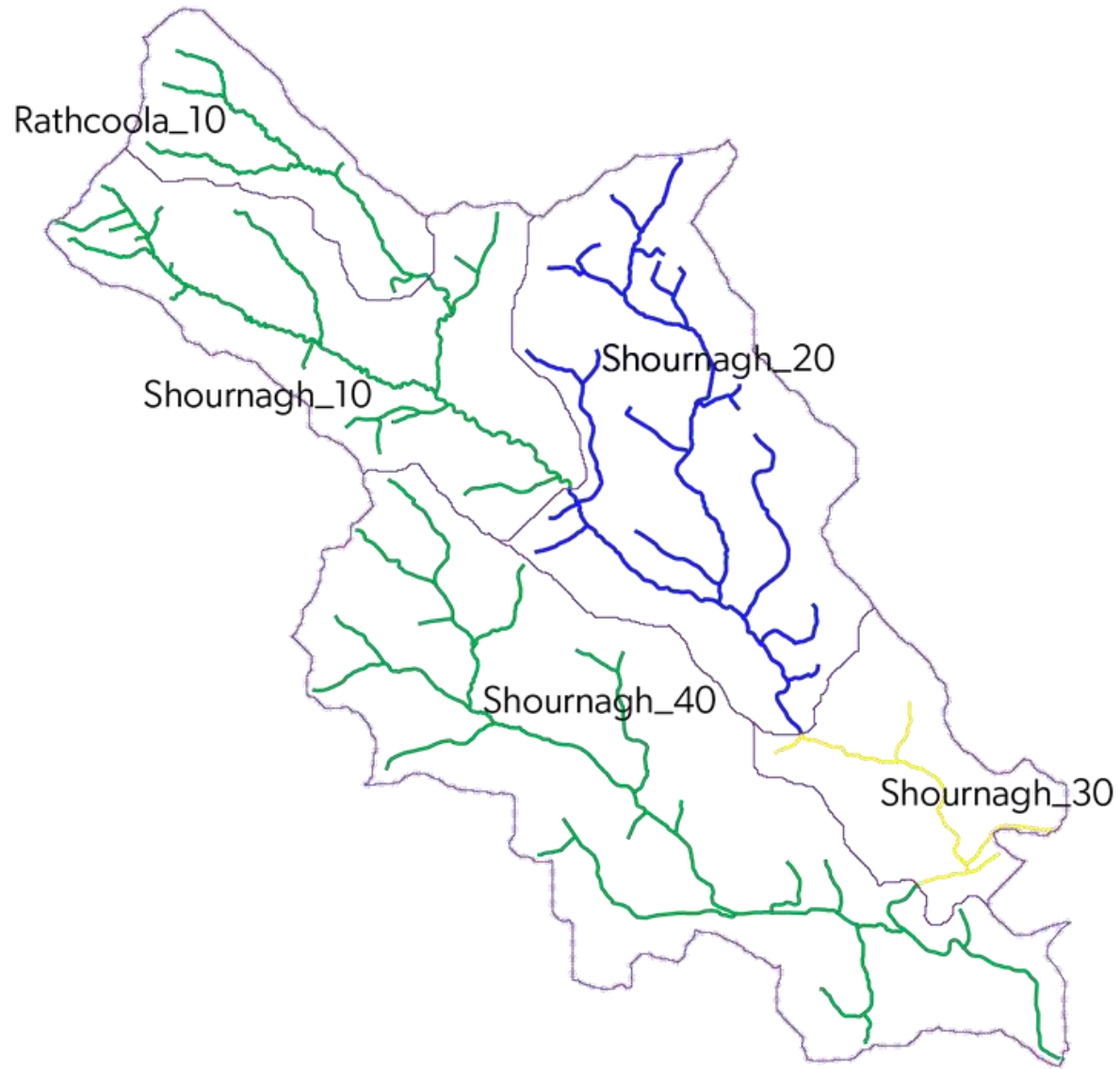
LIFE programmes are how the EU funds environment and climate action.

As an 'IP,' our work is directly connected to Ireland's River Basin Management Plan.

- We pilot water quality measures with landowners
- We test how effective the measures are
- We help communities understand water quality

Our work supports LAWPRO's Blue Dot Programme.

Blue dots are water bodies with high status or an objective to gain high status by 2027 (about 10% of river water bodies)



Blue Dots:

- Shournagh_20
- Shournagh_30
- Shournagh_40



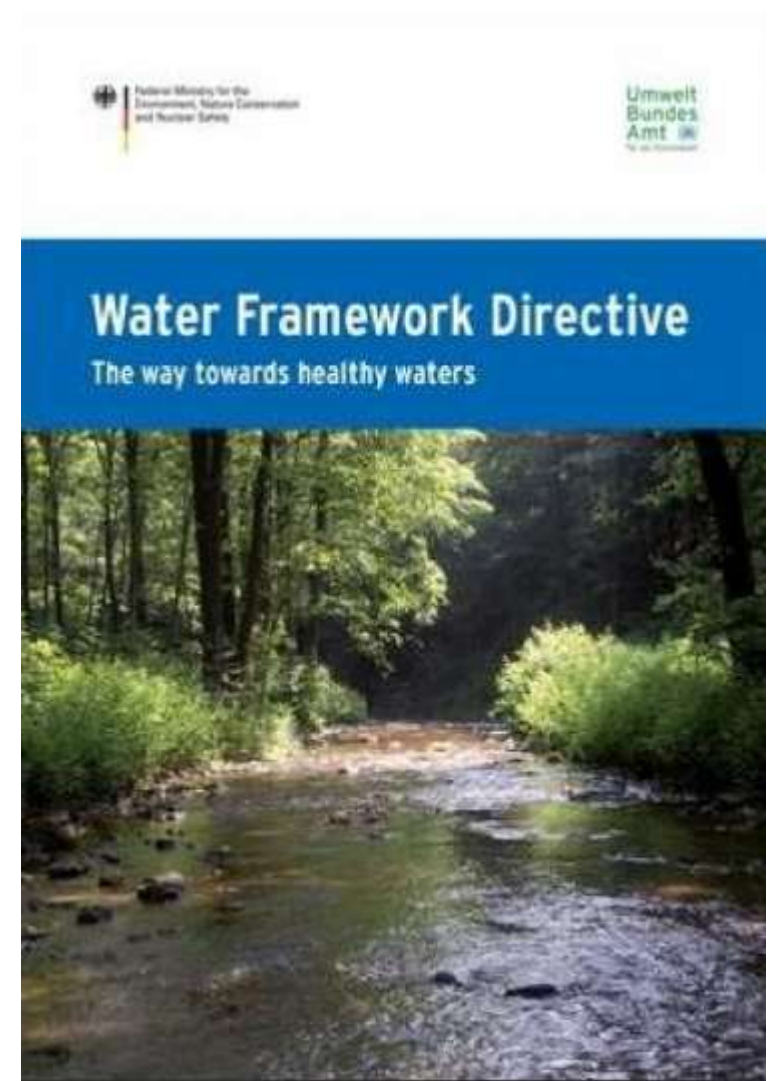
Demonstration Sub-Catchments

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



The **Water Framework Directive** is a legal commitment to protect and restore water bodies across Europe.

The status of all water bodies must be ‘**good**’ or better by 2027.



The **River Basin Management Plan** is Ireland's plan to meet our legal commitments under the **Water Framework directive**.

We must:

- Protect 'good' status water bodies and all 'high' status water bodies
- Restore all 'bad' 'poor' and 'moderate' water quality to at least 'good'

What is Water Quality Status?

Ecological and chemical status tells us if the water is clean and the habitat is healthy. It is not the same as drinking water quality or bathing water quality.

European Union Water Framework Directive



River water quality in Ireland 2018 to 2021 (Source: EPA)



How do water bodies get their status?

The EPA gives status based on:

Biology:

What plants and animals can live in the water?

Water Quality:

How much nutrients and harmful chemicals are in the water?

Hydromorphology:

What is the form, flow and function of the water and channel?

Would you like to know more?

Come to a community science event

Experience:

Your local river's ecology

Link between ecology & water quality

How we test water quality

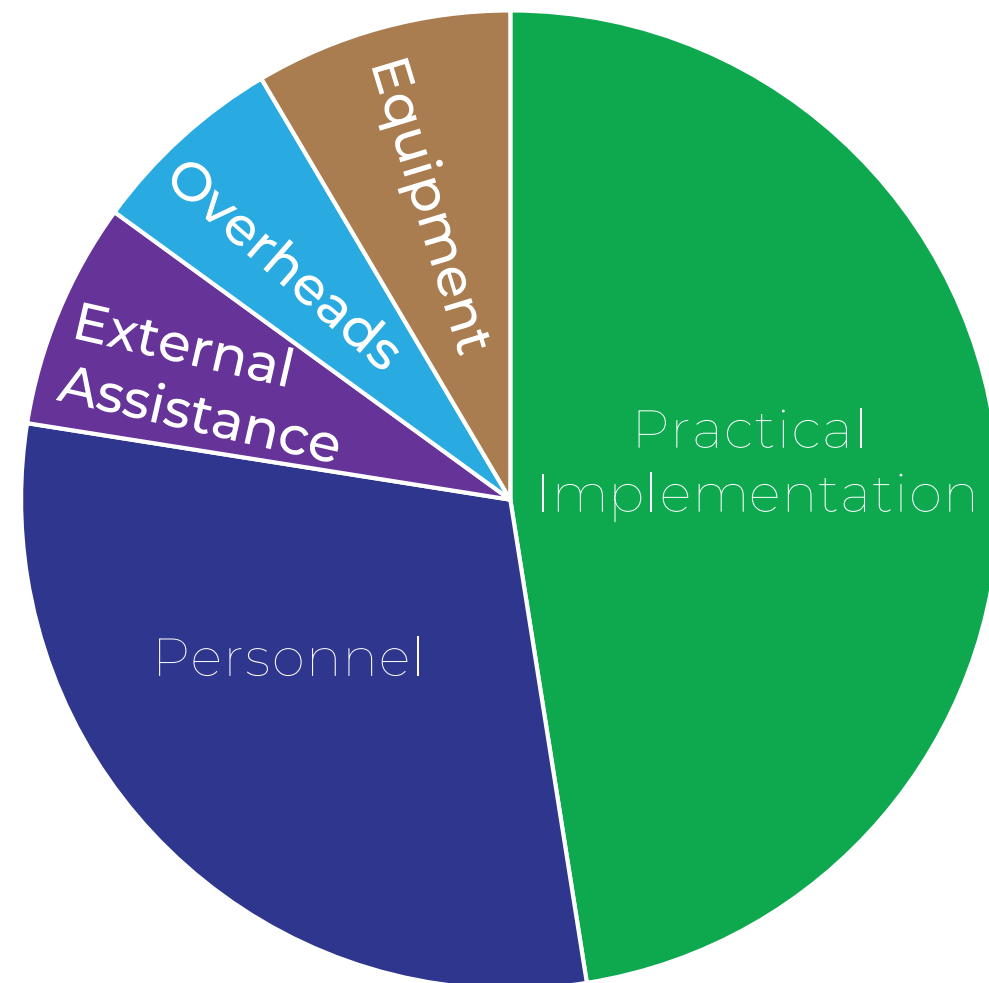
Say 'yes' on the attendance sheet.



- We need clean water to survive
 - High water quality needs less treatment to make it drinkable
- Ireland's natural environment is special
 - It needs healthy rivers to survive.
 - High status waters have a unique biodiversity .



- €20m is total funding for entire project
- Much of figure is contribution in kind
- About €9,000,000 ring fenced for practical works including the pilot agri-environment programme across the 5 demonstration catchments



	Waters of LIFE	ACRES CP	Farming For Water EIP	Better Farming For Water
EU Funded	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CAP Funded	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Results Based	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Pilot Scheme	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Commonage	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Double payment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N/A
Voluntary	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Where land and facilities are publicly managed, we work directly with our project partners and other public bodies on relevant measures. Our national project partners:



For **landowners**, our project features an environmental programme to **support farmers and private foresters**.

This includes a **pilot results based payment programme** for water quality measures. The programme is entirely voluntary.

We also provide free advice and guidance to non-farming landowners.

For communities, we engage with:

- Public Meetings
- Information events
- Community Science Events
- School visits
- Local interest groups



October 10th 2022 – Blarney Woollen Mills Hotel. Attendance: 29



August 2024 – Drop-In Consultations. Attendance: 15

The **RESTORE Project** is a sister project to independently detect change and assess effectiveness of measures:

- Approach **customised** for Shournagh
- More monitoring points and more data
- Monitoring points installed to **assess specific measures**.



EUROPE: CAP Strategic Plan (August 2024)

- “The quality of water bodies will be improved through multiple interventions”
 - We will feed into CAP 2028 by piloting work with landowners that can make a difference.

IRELAND: River Basin Management Plan

- Direct report to the Water Advisory Unit of DHLGH
- Project integrated into RBMP plan delivery

WHAT
YOU
TOLD
US



“I worked in water treatment for 30 years. It’s a hard thing to keep on top of. Anything can go wrong at any time.”

“You could walk across the Shournagh in sandals during the summer and you wouldn’t get your feet wet.”

“The amount of rubbish in the river – it needs to be cleaned out badly.”

“Fly tipping is an issue.”

“Losing that connection with the river means losing respect for the river. We need to get it back.”

“We want to stay farming and the regulations aren’t working. We’re nearly bigger fools for telling the truth.”

“If we’re doing it wrong, we’ll fix it.”

“The biggest change is that farming to calendar doesn’t work anymore.”

“Work with fellas. See what works, what doesn’t work and tell us.”

“There’s slime on the riverbed from March onwards.”

“There’s discharge occurring regardless of the weather.”

“I’m doing a lot already but I’m not seeing a big difference.”

“You won’t get perfection.”

“We want to know what do to, but we’re not sure where to go.”

“The river is supposed to be very clean isn't it? I read in the paper it was the cleanest river in North Cork.”

The Shournagh is one of a number of high status objective rivers in North Cork, which means it should be able to achieve high status.

Unfortunately only one part of the river is currently achieving high status and it looks like it is deteriorating.

Excessive nitrogen and phosphorus are the main problems.

“What will you be assessing in the yards?”

The project team will not be assessing yards.

The farmer's advisor will be looking at runoff in and around yards and will be offering advice to farmers.

But we want to stressed we have no role in compliance inspections or enforcement or regulations.

“What are the results of the sampling?”

The sample results for the Shournagh show that nitrate levels are elevated throughout the entire catchment.

Phosphorus levels are elevated everywhere except the head waters in the Rathcoola_010 waterbody.

“What can the project do for landowners on the river who aren't farming? I have a quarter of a mile on both banks.”

A river side plot like this could be perfect for the Native Tree Area 2 Scheme under the New Forestry Programme.

This scheme aims to create riparian woodland which is a great measure for protecting and enhancing rivers.

Generous grant aid and premiums are available for 10yrs.

The project can assist with accessing such funding.

“If you’re monitoring we’d like to chat to you about it.

Why didn’t anyone knock on my door to ask me about sampling?”

The sampling for the local catchment assessment was done by LAWPRO. Monitoring for the implementation phase will be managed by the RESTORE Project.

Once the monitoring programme for the project is designed, we will be liaising with landowners about permissions and installing equipment etc.

“ Can you tell us where ye did the sampling? I want to know what the water is like right now so I can do something about it. ”

LAWPRO sampled about 37 sites around the catchment.

Chemical results from these samples are available and we can talk you through them after the meeting.

We would aim to make these results available on line in the near future.

Cork is proud of its clean rivers.

You want to do your bit the right way.

You need the right information the right way.

No one wants perfect to be the enemy of good.

Something has to change



LOCAL CATCHMENT ASSESSMENT

Step 1: Desk Study – Published 2023

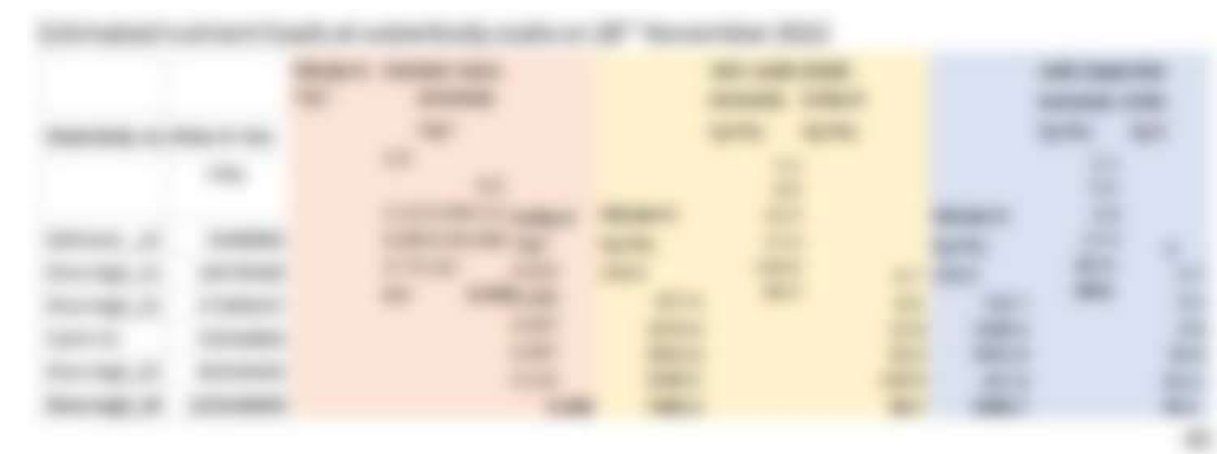
- Look at objectives for water quality
- Assess monitoring data
- Assess pressures
- Find and interim ‘story’

Step 2: Catchment Assessment – Aug 22 to Sep 23

- Chemistry Assessment (91)
- Biology Samples (49)

Step 3: Monitoring - May 24 to Present

- Chemistry Assessment (85)



STATUS 2016-2021	EPA STATUS OBJECTIVE AND RISK		
Water Body	Ecological Status of Water Quality	Water Quality Objective	Is it at risk of not meeting its objective?
Rathcoola_10	Good	Protect	Not at risk
Shournagh_10	Good	Protect	Not at risk
Shournagh_20	High	Protect	Not at risk*
Shournagh_30	Moderate	Restore to high	At risk
Shournagh_40	Good	Restore to high	At risk



LAWPRO'S LOCAL CATCHMENT ASSESSMENT FOUND THE FOLLOWING ISSUES

Where?	What?	How?
Rathcoola_10	Too much nutrients (nitrogen and phosphorous)	
Shournagh_10		Nutrients like nitrogen and phosphorous can cause too much algae and other plants to grow in rivers.
Shournagh_20		Too many plants rob water of oxygen and smother the river bed, making it hard for fish and other animals to survive.
Shournagh_30		
Shournagh_40		

LAWPRO'S LOCAL CATCHMENT ASSESSMENT FOUND THE FOLLOWING PRESSURES

Where?	What?	How?
Rathcoola_10	Agriculture	Agriculture refers to a broad range of farming activities and land use.
Shournagh_10		Certain activities can pose a higher risk to river quality.
Shournagh_20		These include inappropriate fertiliser use, drainage works, land clearance, and livestock access to rivers.
Shournagh_30		
Shournagh_40		

LAWPRO'S LOCAL CATCHMENT ASSESSMENT FOUND THE FOLLOWING ISSUES

Where?	What?	How?
Rathcoola_10	Too much fine sediment	<p>Fine sediment occurs in nature, but too much of it in the wrong place can suffocate a river.</p> <p>It clogs up stony riverbeds and stops fish and other animals from feeding and reproducing.</p> <p>Fine sediment can also carry nutrients that cause eutrophication.</p>

LAWPRO'S LOCAL CATCHMENT ASSESSMENT FOUND THE FOLLOWING PRESSURES

Where?	What?	How?
Shournagh_30	Urban runoff	Urban runoff is the rainwater that flows off hard surfaces (such as roads) into rivers from built up areas.
Shournagh_40		It can carry pollutants such as fine sediment, motor oil, heavy metals and rubbish directly into a river.

LAWPRO'S LOCAL CATCHMENT ASSESSMENT FOUND THE FOLLOWING PRESSURES

Where?	What?	How?
Shournagh_30	Urban waste water	Poorly treated human waste in rivers adds nutrients and organic matter.
Shournagh_40	Domestic water (including septic tanks)	They can cause a reduction in oxygen levels, making it hard for fish or other animals to survive.

PILOT AGRI-ENVIRONMENT PROGRAMME

Waters of
LIFE



Co-funded by
the European Union

Elements:

- Semi-natural habitat scoring
- Run-off Risk Assessment
- Training
- Non Productive Investments
- General Actions
 - Nutrient Management
 - Catch Crops
 - Minimum Tillage
 - Mob Grazing



1
Riverside Habitat on
Improved Grassland

2
Riverside Habitat on
Tillage

- Applies to within a 20m strip adjacent to river
- Only applies where there is no other semi-natural habitat.
- Higher the score - higher the payment
- Payment only on scores of 4/10 or higher
- 10/10 score pays €2000/ha

3 Semi-Natural Grassland

- Same as ACRES payment rates
- Riverside bonus applies river line on catchments.ie

4 Woodland and scrub

Nutrient Management Plan

An NMP will:

- Develop farm specific fertiliser plan
- Develop farm specific soil fertility plan
- Ensure compliance with maximum amount of inorganic fertiliser

Waters Of LIFE Role:

- Mandatory where nutrients are significant issue
- Optional elsewhere
- Project scientists can access
- Project will pay €400 for plan.
- Max of 1.

Nitrogen Surplus Calculation

AgNav (Bord Bia, Teagasc & ICBF)

Support framework for agri-sector targets in Climate Action Plan

Opt in - Subject to farmers permission

Relies on data:

- Entered in Bord Bia Sustainability Audit
- ICBF – animal live weights and movement
- Co-ops – milk sold

Waters Of LIFE Role:

- Participants receive €250 per annum for preparing a nitrogen surplus assessment.

Precision Nutrient Management

Teagasc PastureBase Ireland

Grassland management decision support tool. Captures background data on farms.

- For recording fertiliser applications at individual field level
- PBI calculates a N surplus value at field scale data

Waters Of LIFE Role:

- Payment adjusted relative to PBI scorecard (excluding questions 2 to 4)
- Maximum payment €490/annum.
- Payment towards cost of grass measuring
- Payment per cover €27 up to 50 ha and €0.50/ha for every hectare over that.
- Equates to maximum payment for 50ha farm of €875.



Run-off Risk Assessment:

- Farm walk with advisor and farmer.
- The farmer is paid for his cooperation
- Advisor recommends voluntary actions the farmer can do to improve water quality on their farm.

SOURCE

- Sediment
- Nutrients (N and P)
- Pesticides & other pollutants
- Drainage (flow) / abstraction

PATHWAY

- Drains
- Overland flow
- Well drained land (vertical pathways)

RECEPTOR

- Rivers
- Streams
- Lakes
- Ground water
- Coastal waters

Source – Pathway – Receptor





“The Right Measure In The Right Place”



MOB GRAZING



MINIMUM TILLAGE



COVER CROPS





QUESTIONS YOU HAVE ASKED

1. **When does it run?** Early 2025 to March 2028.
2. **Do you need an active herd number?** Yes.
3. **How do I sign up?** Fill out an Expression of Interest form. We'll be in touch.
No guarantee of entry.
4. **Who will be assessing my farm?** An agricultural advisor nominated by the farmer and approved by Waters of LIFE.
5. **Is there advisory costs?** No, all advisory cost are covered by the project.

6. I'm in another scheme (e.g. ACRES or Organics). Can I still apply?

Yes.

There are no double payments but we can pay payments based on results for water quality.

e.g. if you have a plot scored as semi-natural habitat under ACRES, we can still apply a bonus payment per metre where it bounds a catchment, i.e. river line.

7. Will you be assessing forestry?

Yes, but in our Wicklow and Clare catchments, as defined as main pressure there.

8. How much money can I expect to get?

The total pot for practical works including the pilot agri-environmental programme is about €9,000,0000 across all five catchments.

There is no set budget for each catchment. It is dependent on uptake. You might only know what you might expect to receive after your land is scored.

9. Is there a minimum payment?

Farmers would be paid for the time in training. They would also receive payment for certain mandatory elements e.g. run-off risk assessment.

After that, there is no minimum or maximum payment on scored land.

10. Do I have to fence off 20m of my land along by the river?

No. Your land will be scored on those 20m.

After that, if it's agreed that fencing is the right measure, a farmer can fence off as little or as much as they like and get paid per hectare.

E.g. if you fence off 10m, you'll be paid on that.

If you fence off 20m and there's already a mandatory requirement for 1.5m, you'll be paid on the difference.

11. Do I have to take up the scheme?

Participation in the scheme is completely voluntary.

It is also fully private and confidential.

And the Waters of LIFE project have no enforcement role.

THANK YOU

