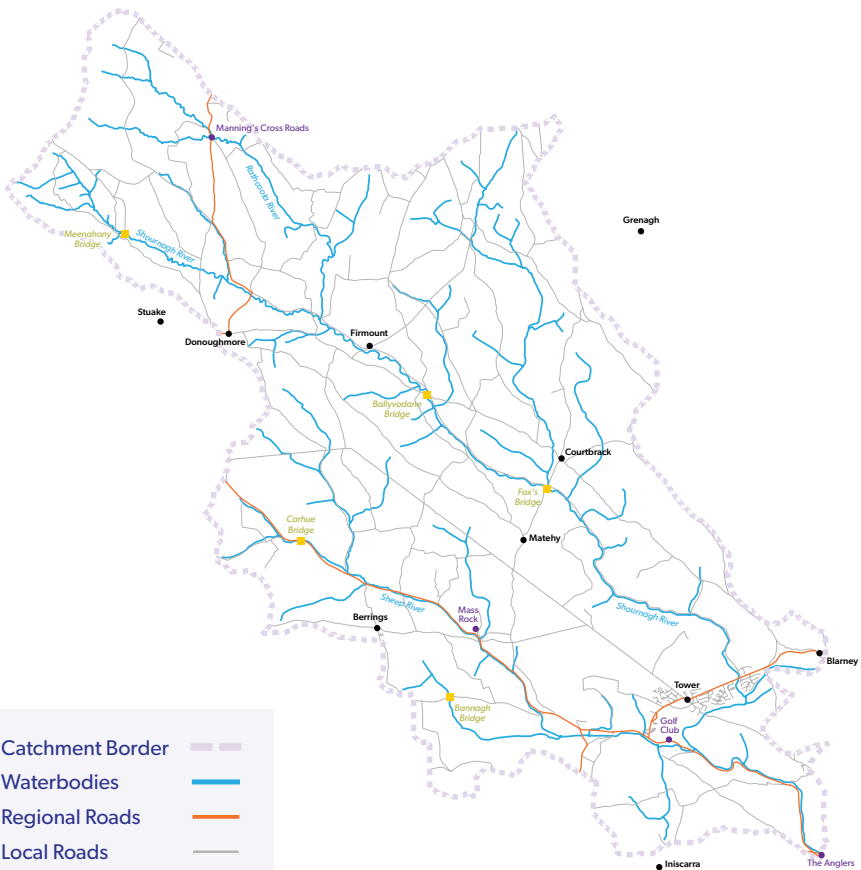


# How's the water quality in your local river?



## Shournagh Demonstration Sub-catchment



Catchment Border	— — — —
Waterbodies	— — — —
Regional Roads	— — — —
Local Roads	— — — —
Settlement	●
Point of Interest	●
Bridge	■



## About this summary

The map on page one shows the Shournagh demonstration sub-catchment. This is the local area where Waters of LIFE are working with landowners to improve water quality. This summary provides an overview of the issues and pressures facing local water quality. The information is taken from investigations and assessments carried out by the Environmental Protection Agency (EPA) and the Local Authorities Water Programme (LAWPRO).

## About the area

The Shournagh demonstration sub-catchment sits across Cork City North West and the Macroom municipal district. Covering 130 km<sup>2</sup>, the soils are mainly shallow and well-drained over a bedrock of old red sandstone. Land use includes urban areas and a lot of grassland dairy production across 302 farms. We estimate about 9,600 people live here based on the 2022 census.

Our demonstration sub-catchment includes three main rivers and all the waterways that flow into them:

- Shournagh river
- Sheep river
- Rathcoola river

The Shournagh River rises in the townlands of Commeenaplaw, Meenahony, Gowllane and Pluckanes. The Sheep River rises in the townlands of Lisladeen, Derry, Reagrellagh and Ballygirriha. Both rivers then join up

alongside Muskerry Golf Club near Tower Village and exit the demonstration sub-catchment near The Angler.

To measure impact at a local level, our demonstration sub-catchment is different to sub-catchments defined by the EPA.

We remapped the boundary to exclude the main channel of the River Lee. This gives us a smaller, more clearly defined drainage area to work in.

## Summary of EPA status

EPA data shows that water quality in the Shournagh sub-catchment is mixed.

- The upper section of the Shournagh and the Rathcoola river have good water quality status and need to be protected.
- The lower sections of the Shournagh and the Sheep river have moderate water quality and need to be restored.
- We'll be working to bring back the middle and lower sections of the Shournagh to high status.

The EPA assigns each water body an ecological status for water quality. They are then given an objective to have good or high status by 2027.

This is based on our Water Framework Directive legal requirements. A risk assessment works out how likely it is for a water body to meet its objective. Some sections of the Shournagh and Sheep rivers are at risk of not meeting their objective for water quality.

## Status

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



## Issues

### LAWPRO's local catchment assessment found the following issues

Where?	What?	How?
All water bodies	Too much nutrients (nitrogen and phosphorous)	<p>Nutrients like nitrogen and phosphorous can cause too much algae and other plants to grow in rivers.</p> <p>(This is known as eutrophication.)</p> <p>Too many plants rob water of oxygen and smother the riverbed, making it hard for fish and other animals to survive.</p>
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. 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>



## Pressures

### LAWPRO's local catchment assessment found the following pressures

Where?	What?	How?
All water bodies	Agriculture	<p>Agriculture refers to a broad range of farming activities and land use. Certain activities can pose a higher risk to river water quality.</p> <p>These include inappropriate use of fertiliser, drainage works, land clearance, overgrazing and access of livestock to rivers.</p>
Shournagh 30 Shournagh 40	Urban runoff	Urban Runoff is the rainwater that flows off hard surfaces (such as roads) into rivers from built up areas. It can carry pollutants such as fine sediment, motor oil, heavy metals and rubbish directly into a river.
Shournagh_30	Urban waste water	Poorly treated human waste in rivers adds nutrients and organic matter.
Shournagh_40	Domestic waste water (including septic tanks)	They can cause a reduction in oxygen levels, making it hard for fish or other animals to survive.



## We want to hear from you

We want to hear from people who live in the area and know its rivers. Your local expertise helps us review and update our approach.

Tell us about the changes and pressures you've seen, and how we can support you to look after your local river.

**Residents and landowners:** Come talk to us or email us in confidence.

**Community Groups:** Let us come and meet with your members.

**Everyone:** Attend our regular engagement events.

**Contact us:** [info@watersoflife.ie](mailto:info@watersoflife.ie)

## Further information:

The information in this document is taken from investigations and assessments carried out by the EPA and the Local Authorities Water Programme (LAWPRO).

LAWPRO completed a 2022 desk study and a 2024 field work report of the Shournagh Sub-Catchment. More information is available at [www.watersoflife.ie/shournagh](http://www.watersoflife.ie/shournagh)



The EPA has created a fact sheet with more information on how water is monitored and assessed. You can read the EPA's Plain English summary at [www.epa.ie](http://www.epa.ie)



The EPA has created a map to help understand the role of agriculture in protecting and restoring water quality. You can view it at [gis.epa.ie/EPAMaps/agriculture](http://gis.epa.ie/EPAMaps/agriculture)



## How we work

### With public land and utilities

Our project partners include: Local Authorities Water Programme; Department of Housing, Local Government and Heritage; Coillte; EPA; Department of Agriculture, Food and the Marine; Teagasc; Office of Public Works (OPW) and Forest Service.

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

### With local landowners

Our project features an environmental scheme to support farmers and foresters.

This includes results-based payments for water quality measures. The scheme is voluntary and advice is private and confidential.

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

### With local communities

We reach out to local communities to share how and why we work to improve water quality. This includes public meetings and information.

We also connect with local schools to help with learning about water and the local environment.



## Waters of LIFE IP – about the project

We trial water quality solutions that work for local landowners and feed into future influence policy at national and EU level. We are an integrated project co-funded by the European Union.

We support LAWPRO's Blue Dot Programme to look after Ireland's best quality waters. These are water bodies with a high-status objective for water quality. Blue Dots represent about 10% of all water bodies in Ireland.



## How do we find solutions for water quality?

1. Support landowners with measures that work both for water quality and their land-use.
2. Help communities understand the importance of water quality.
3. Inform future policy for long-term impact.

## Why is water quality important?

Humans and animals need clean water to survive. Ireland's nature is unique, and it needs healthy rivers to survive. Improving water quality is a challenge, but the solutions are there if we work together. That is our project's purpose.

## Where else does Waters of LIFE work?

We work in five sub-catchments (with a control catchment) to find water quality solutions for a variety of land uses.

## Waters of



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