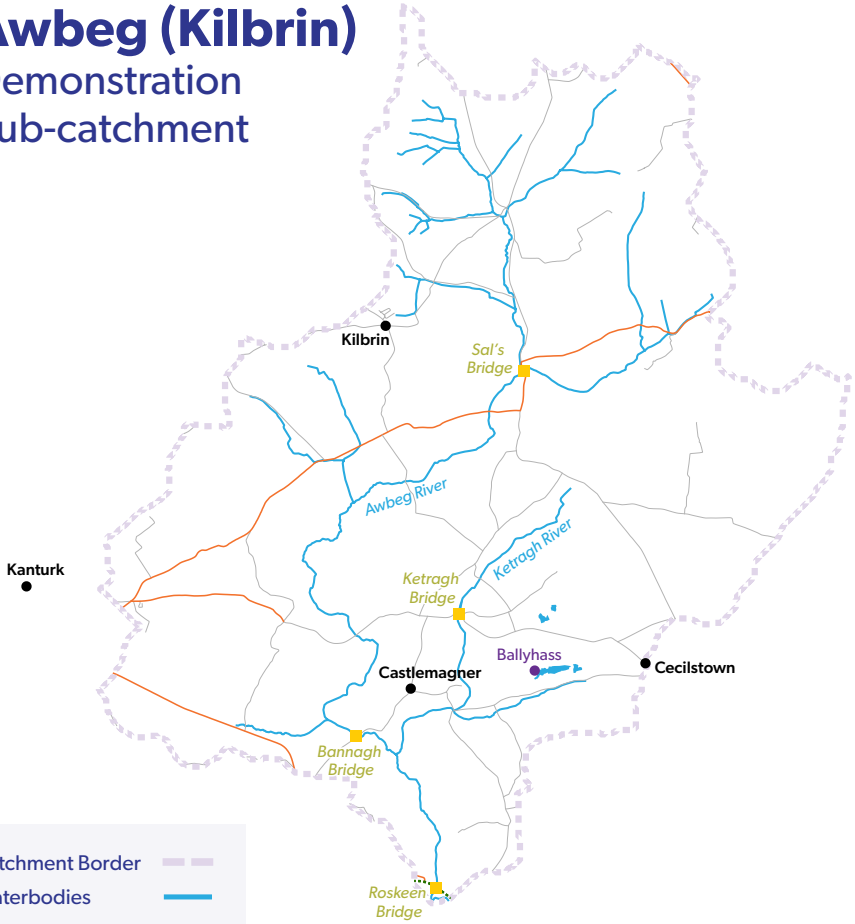
How's the water quality in your local river?

Waters of LIFE

Awbeg (Kilbrin)
Demonstration
Sub-catchment



- Catchment Border
- Waterbodies
- Regional Roads
- Local Roads
- Settlement
- Point of Interest
- Bridge

Local Authority Waters Programme

An Roinn Tithíochta, Rialtais Áitiúil agus Oidhreachta
Department of Housing, Local Government and Heritage

Co-funded by the European Union

About this summary

The map on page one shows the Awbeg (Kilbrin) 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. Information is taken from assessments and investigations and carried out by the Environmental Protection Agency (EPA) and the Local Authorities Water Programme (LAWPRO).

About the area

The Awbeg (Kilbrin) demonstration sub-catchment covers 80 km^2 of north county Cork in the Kanturk-Mallow Municipal District. It includes the villages of Kilbrin and Castlemagner.

It is a low lying limestone area with a mix of well and poorly drained soils. Land use includes 195 farms, some forestry, quarries and other commercial activities. We estimate about 2,000 people live here based on the 2022 census.

Our demonstration sub-catchment includes two main water bodies:

- The Awbeg (Kilbrin) river (part of the EPA's larger Blackwater (Munster)_090 water body)
- The Ketragh river (the EPA's Lisduggan_North_010 water body)

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 include the Ketragh river (as a tributary of the Awbeg) and excluded the main channel of the Blackwater river.

This gives us a smaller, more clearly defined drainage area to work in.

Summary of water quality

Local samples show that water quality in the Awbeg and Ketragh rivers are not where they need to be.

Initial assessments for the sub-catchment indicated good water quality status. However, more recent findings suggest water quality isn't as good as predicted.

All water bodies with moderate water quality or worse have to be restored under our Water Framework Directive legal requirements.

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

A risk assessment works out how likely it is for a water body to meet its objective.

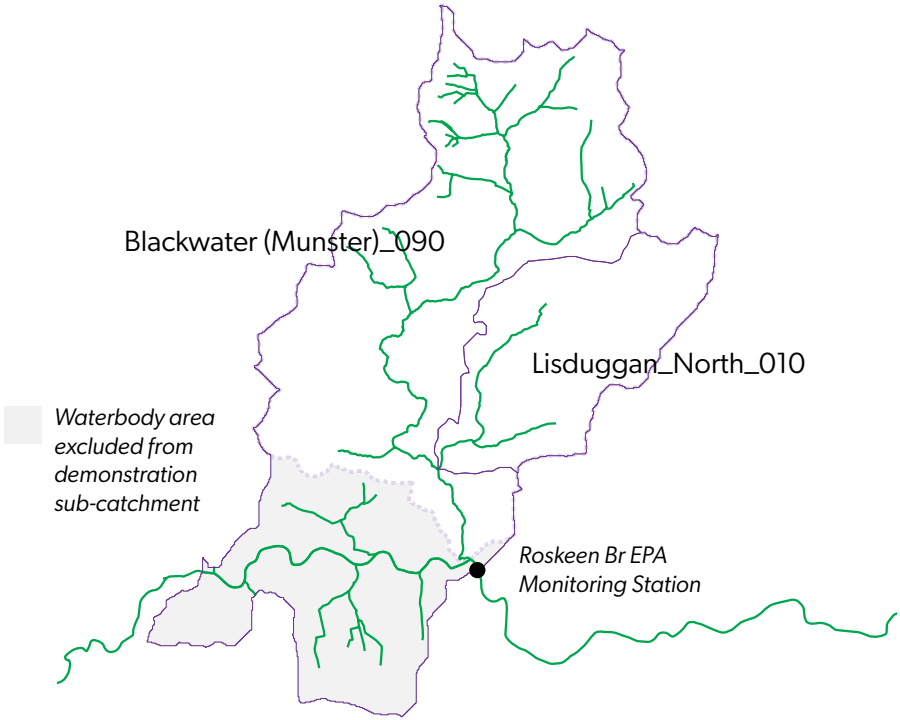
Some sections of our demonstration sub-catchment are at risk of not meeting their objectives for water quality.

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?**
Blackwater (Munster)_090	**Good***	Restore to high	At risk
Lisduggan_ North_010	**Good****	Protect	Not at risk

*Blackwater (Munster)_090 status is based on a monitoring (sampling) location outside our demonstration sub-catchment. It represents a bigger area so does not represent local water quality.

** Lisduggan_North_010 status is based on modelling (predicting). Recent findings suggest water quality is not as good as predicted.



Issues

LAWPRO's local catchment assessment found the following issues		
Where?	**What?**	**How?**
Awbeg River Ketragh River	Too much nutrients (nitrogen and phosphorous)	Nutrients like nitrogen and phosphorous can cause too much algae and other plants to grow in rivers. (This is known as eutrophication.) Too many plants rob water of oxygen and smother the riverbed, making it hard for fish and other animals to survive.
Ketragh River	Organic Matter (e.g. sewage)	Bacteria use up oxygen as they break down organic matter. The more organic matter in the water, the more oxygen gets used up. Less oxygen in water makes it harder for fish and other animals to survive. Organic matter can also cause the growth of sewage fungus that can smother a riverbed.
Awbeg River	Too much fine sediment	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. Fine sediment can also carry nutrients that cause eutrophication.

Pressures

LAWPRO's local catchment assessment found the following pressures		
Where?	**What?**	**How?**
Awbeg River Ketragh River	Agriculture	Agriculture refers to a broad range of farming activities and land use. Certain activities can pose a higher risk to river water quality. These include inappropriate use of fertiliser, drainage works, land clearance, overgrazing and access of livestock to rivers.
Ketragh River	Urban waste water	Poorly treated human waste in rivers adds nutrients and organic matter. They can cause a reduction in oxygen levels, making it hard for fish or other animals to survive.
Awbeg River	Weirs	A weir is a man-made barrier across a river channel to hold back the flow of water. Weirs change the river's habitat and can stop fish from moving up and downstream.

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

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 Awbeg Sub-Catchment. More information is available at **www.watersoflife.ie/awbeg**

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**

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**

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 LIFE

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