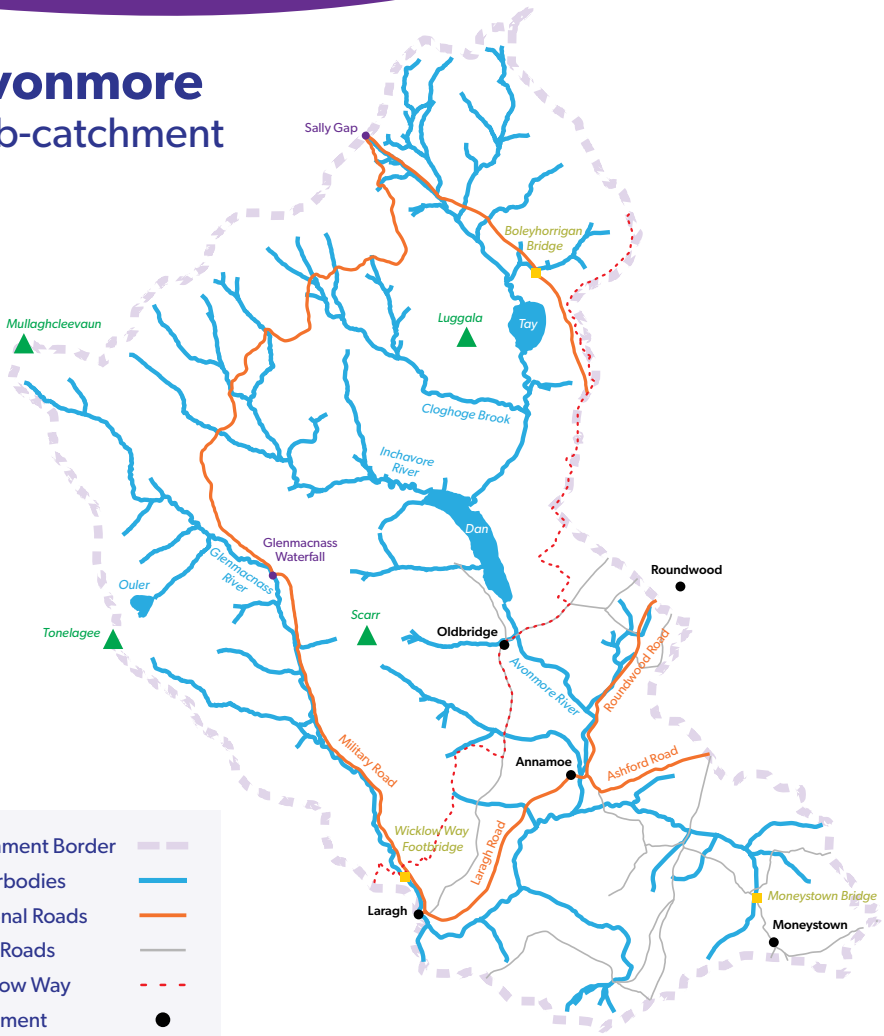
How's the water quality in your local river?

Waters of LIFE

Avonmore
Sub-catchment



- Catchment Border
- Waterbodies
- Regional Roads
- Local Roads
- Wicklow Way
- Settlement
- Point of Interest
- Peak
- 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 Avonmore 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 assessments and investigations carried out by the Environmental Protection Agency (EPA) and the Local Authorities Water Programme (LAWPRO).

About the area

The Avonmore sub-catchment covers 141km^2 of Wicklow. We estimate about 2,000 people live here based on the 2022 census.

It is mainly an upland region with land-use including forestry and 135 farms. Soil type includes a mix of peat, poorly drained soils and well drained soils.

The sub-catchment is divided into 7 river water bodies and 3 lake water bodies:

- Avonmore river (four sections) including Inchavore river
- Cloghoge brook
- Glenmacnass river (two sections)
- Lakes: Lough Dan, Lough Ouler and Lough Tay

Summary of EPA status

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

- Cloghoge brook and the upper sections of the Avonmore only have moderate water quality and we need to restore them.
- The Glenmacnass and the lower sections of the Avonmore are healthier and we need to protect their status.

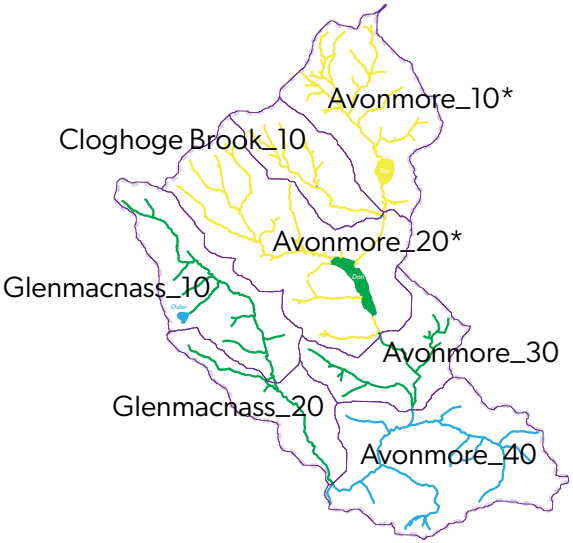
The EPA assigns each water body an ecological status for water quality. They are then given an objective to have good or high status by 2027.

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 of these rivers 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?**
Avonmore_10	**Moderate**	Restore to high	At risk
Avonmore_20 (including Inchavore river)	**Moderate**	Restore to high	At risk
Cloghoge Brook_10	**Moderate**	Restore to good	More assessment needed
Avonmore_30	**Good**	Protect	Not at risk
Avonmore_40	**High**	Protect	Not at risk
Glenmacnass_10	**Good**	Protect	Not at risk
Glenmacnass_20	**Good**	Protect	Not at risk
Lough Tay	**Moderate**	Restore to good	At risk
Lough Dan	**Good**	Protect	At risk
Lough Ouler	**High**	Protect	More assessment needed



** has a high status objective*

Issues

LAWPRO's local catchment assessment found the following issues		
Where?	**What?**	**How?**
Avonmore_10	Too much nutrients (phosphorous)	Nutrients like 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.
Avonmore_20 (including Inchavore 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.
Avonmore_10 Avonmore_20 (including Inchavore river) Cloghoge Brook_10	Too much acidity	When a water body gets too acidic, it is harmful to most animals depending on it.

Pressures

LAWPRO's local catchment assessment found the following pressures		
Where?	**What?**	**How?**
Avonmore_40 Avonmore_20 (including Inchavore river) Glenmacnass_10 Glenmacnass_20	Forestry	Forestry works, such as planting or felling, can increase soil erosion and the amount of fine sediment and nutrients entering rivers. Water channels running directly into rivers from commercially forested areas can carry excess fine sediment and nutrients. Water channels from peaty areas can also cause higher acidity levels.
Avonmore_10 Avonmore_20 (including Inchavore river) Cloghoge Brook_10	Peat	Peat that is degraded from drainage, overgrazing, cutting or burning can increase both fine sediment and acidity in water.
Avonmore_10	Domestic waste water treatment systems	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.

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 Avonmore Sub-Catchment. More information is available at **www.watersoflife.ie/avonmore**

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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