

As an island nation the sea surrounds us, and our landscape holds an intricate network of natural waters. Our rivers, lakes and coasts are some of our most beautiful places, forever changing with the seasons.

Water: Educational Resources and Inspirational Stories

This booklet contains educational resources to help people understand and connect with their water catchments. It also highlights *Stories form the Waterside*, a new website with people's stories about water and their connections to it, gathered from all around Ireland.

For water, a catchment is an area of land where water is collected by the natural landscape and flows from source though rivers, lakes and groundwater to the sea. Living in a catchment that has healthy waters can help a community to have a better quality of life.

A healthy water catchment provides high-quality drinking water and supports livelihoods like agriculture, recreational angling and water sports. It also supports local ecosystems so that humans, plants, animals, fish and insects that all depend on having healthy water can thrive and flourish.



Did you know?

- Ireland has more than 73,000 kilometres of river channels. If placed end-to-end, they could encircle the Earth almost twice. Three-quarters of these channels are very small streams that typically flow into larger rivers
- The longest and largest river in Ireland is the Shannon.
 It runs for more than 360 km from its source to the sea and discharges on average more than 200,000 litres of water per second into the Shannon estuary at Limerick, where it enters the sea. That is the same volume as 5 Olympic-sized swimming pools every minute!
- Half of all the endangered freshwater pearl mussels in Europe live in Irish rivers
- Riverbanks provide wildlife corridors through the countryside and give food and shelter for a wide range of animals and plants. They also serve as an important

habitat for many wildflowers that support butterflies and bees

- Ireland has more than 12,000 lakes
- Lough Corrib is the largest lake in the Republic of Ireland and contains around 800 billion litres of water, enough to fill more than 300,000 Olympic-sized swimming pools
- Lakes and reservoirs are the main source of drinking water for two million people in Ireland
- Ireland has 7,500 kilometres of coast and one of the largest sea areas in the EU
- Ireland has a seabed territory of about 880,000 km2.
 This is more than 10 times the size of the island of Ireland itself.



Educational resources

You can also access these educational resources on www.catchments.ie/education and www.thewaterforum.ie/education

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Aille Engaged

Burren & Cliffs of Moher UNESCO Geopark Retired members of Aille River catchment

www.burrengeopark.ie/learn-engage/aille-engaged

Rainfall data are collected every day by the team of citizen scientists (gauges are in their gardens), and uploaded to website where it is available to view immediately.

2

All About Water

NFGWS

Primary Schools

www.nfgws.ie/learning-resources-for-schools

All About Water is a hands-on and hugely interactive resource that encourages children to explore the fascinating world of freshwater habitats and to develop an understanding of all things wet and wild.

3

Bogs Discover and Learn

IPCC

Primary and Secondary Schools

www.ipcc.ie/discover-and-learn

IPCC education programmes offer informative and fun workshops on peatland biodiversity, carbon storage and water regulation, promoting the services peatlands offer us all, as well as practical skill sharing peatland restoration workshops.

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Champions programme

Leave No Trace & An Taiso

Primary Schools - 4th to 6th classes

www.leavenotraceireland.org/resources/educational-resources/primary-schools-resources

Fun and engaging learning activities about Ireland's natural environment, the importance of biodiversity, impact of Climate Change and positive actions they can take. The course has been designed to complement both the primary school curriculum and the An Taisce Green Schools programme.

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Clean Coasts

An Taisce

General

ww.cleancoasts.org/our-initiatives/2minutebeachclean

The 2 Minute Beach Clean campaign provides information on how to take simple actions that will reduce marine litter. The campaign encourages people to collect beach litter and post your snap on Instagram/Twitter/ Facebook and link into a network using the hashtags #2minutebeachclean and #cleancoasts

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Discover Primary Science and Maths Workshops

Galway Atlantaquaria

Primary Schools

www.nationalaquarium.ie/education.html

A tour of the aquarium plus an extra session chosen from the following: Science Experiments, Animal Anatomy, Maths, Engineering, or a Seashore safari. These workshops are accredited and can be counted towards SFIs DPSM Awards.

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Discover Primary Science and Maths

Science Foundation Ireland Primary Schools

www.sfi.ie/engagement/discover-primary-science-and-maths www.sfi.ie/engagement/discover-primary-science-and-maths/discover-centres

Lots of STEM resources available such as Cleaning Dirty Water, How plants drink water, Make a water pump and lots more. There are links to over 60 Discover Primary Science and Maths Centres

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Explorers Education Programme

Explorers Education
Programme

Primary School Teachers

www.marine.ie/Home/site-area/areas-activity/education-outreach/explorers/explorers-teachers-training

A series of continued development training courses including DES approved summer courses, webinars and workshops. Further marine education webinars, workshops and field trips are delivered in collaboration with Education Support Centres as well as third level Institutes, supporting STEM, ocean literacy and the Sustainable Development Goals.















Explorers Education Programme

Explorers Education Programme

Primary Schools, Families

www.marine.ie/Home/site-area/areas-activity/education-outreach/explorers/media/explorers-wild-about-wildlife-seashore

A series of online videos following the explorer's team as they explore the amazing animals and seaweeds on sandy and rocky shores around Ireland.

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Explorers Education Programme School Modules

Explorers Education Programme

Primary Schools

www.marine.ie/Home/site-area/areas-activity/education-outreach/explorers/explorers-outreach-schools

A range of marine themed modules for primary students and teachers, through blended learning as well as out-door education. Modules include marine projects, seashores safaris, aquariums in the classroom, and taking part in a number of exciting marine workshops.

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Explorers Education Programme Sea How to Draw Series

Explorers Education Programme

Families, Primary Schools

www.marine.ie/Home/site-area/areas-activity/education-outreach/explorers/media/sea-how-draw

Watch the Explorers SEA How to Draw classes, where you can follow one of our favourite cartoonists create fun characters, marine animals, research vessels, surfers, divers and lots more online.

Go Fishing

12-17 year olds

outreach@fisheriesireland.ie www.fisheriesireland.ie/Education-Outreach/ education-and-outreach.html

Making angling more accessible to groups, with online learning modules, outdoor classrooms, field trips and fishing trips which revolve around introducing participants to angling and greater environmental awareness and stewardship.

Green Schools

Green Schools Ireland & Irish Water

Primary and Secondary Schools

www.greenschoolsireland.org/themes/water

The Green-Schools Water theme offers a range of supports for schools to learn more about the value of water. Water workshops, poster competition, Walk for Water events and, for secondary school students, the prestigious Water Ambassador programme. Sponsored by Irish Water and operated by Green-Schools Ireland.

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Grounded

Transition Year

www.nuigalway.ie/science-engineering/school-of-natural-sciences/disciplines/earth-ocean-science/grounded

Short course with videos and manuals to learn to make maps using QGIS (free software) and input information using a number of data sets.

A SHOW

Heritage in Schools

Heritage Council and INTO Primary and Secondary Schools

www.heritageinschools.ie

About 160 heritage specialists in a range of subject areas visit schools across the country, a number of heritage specialists offer field trips to streams and rivers, water and biodiversity lessons.

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I have planted a tree and my garden is pesticide free

NFGWS

Primary Schools

www.nfgws.ie/learning-resources-for-schools

To raise awareness about the link between drinking water and biodiversity, and the dangers of pesticides to both. Students are also given easily digestible educational materials, as well as a certificates and stickers to help spread the message about pesticide use.

Introduction to water and biodiversity

NFGWS

Primary and Secondary Schools

www.nfgws.ie/learning-resources-for-schools

Short educational videos introduce some of the key concepts related to drinking water, including the water cycle, a Skittles experiment to highlight the solubility of water, and an introduction to biodiversity and pollinators in

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Junior Certificate Seashore Ecology Study

Galway Atlantaguaria

Junior Cycle Secondary Schools

www.nationalaguarium.ie/education.html

Covering Coursework B Investigation of the Science Curriculum, this fieldwork includes the fieldwork workbook where learners record their results. Learners will gather qualitative and quantitative data on their survey area, investigate and identify biotic and abiotic factors and use apparatus to carry out their fieldwork

Leaving Certificate Seashore Ecology Study

Galway Atlantaquaria

Senior Cycle Secondary Schools

www.nationalaquarium.ie/education.html

Covering the ecology element of the Biology syllabus this fieldwork includes the Fieldwork Workbook where learners record their results. Learners will gather qualitative and quantitative data on their survey area, investigate and identify biotic and abiotic factors and use apparatus to carry out their fieldwork.

Virtual Tour of the Aquarium

Galway Atlantaquaria

Primary Schools

www.nationalaquarium.ie/worksheets-english-and-irish-version.html

Through 6 engaging episodes we investigate a range of themes from freshwater habitats to ocean connections and care. Each episode has a quiz to test the learner's knowledge at the end. Free accompanying worksheets in English and as Gaeilge are available covering a range of cross curricular links.

Magic of Water and Water Matters at Home

An Foram Uisce I the Water Primary and Secondary Schools, and general audience

www.bit.lv/waterforumvoutube

Short videos on the Chemistry, Physics and Ecological Wonder of Water. Water Matters at Home looks at the small actions we can all take to protect water.



















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Online Workshops

Galway Atlantaquaria

Secondary Schools

www.nationalaquarium.ie/education.html

Online workshops on several topics: Biodiversity and Living Things; Ocean Conservation and Care; Ocean connections and Climate Change; Marine Litter; Fisheries and Food Production.

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President's Award Leaders (PALs) and Gaisce Award Partners (GAPs)

Gaisce: The President's

Secondary Schools, Third level and Transition Year

www.gaisce.ie Instagram: @gaisceglas

Gaisce Award Adventure Journey includes exploring waterway environments as part a Personal Skill through waterway clean ups for Community Involvement. Gaisce Glas projects engage young people in environmental action.

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River Catchment video

Local Authority Waters Programme General audience

www.watersandcommunities.ie www.vimeo.com/456880739

Animation on water catchments, explaining how healthy waters support communities living in the water catchment.

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River Explorers Programme

Leave No Trace & Waterways Ireland

Primary Schools - 4th & 5th Classes

www.leavenotraceireland.org/resources/educational-resources/primary-schools-resources

The learning objectives include raising awareness of local waterways and how to minimise impacts and take action to keep local rivers clean and identify and protect local biodiversity. In essence the key learning is how to "Use Waterways Responsibly".

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River/ Coastal/ Bog Environmental ecology Programme

Achill Outdoor Education and Training Centre MSLETB

Primary and Secondary Schools, 3rd Level, PLC, Community education

www.achilloutdoor.com

Outdoor recreation and activity training along with ecology and environmental learning programme focused on awareness of and education for environmental stewardship and care.

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Something Fishy

Inland Fisheries Ireland

Primary 5th & 6th class

www.somethingfishy.ie

A series of lesson plans and activity sheets which are based around the theme of the 'Lifecycle of salmon' – Bradán, and it also available as Gaeilge. The modules cover fish, angling and water are thought by the teacher and a school visit and a field trip is facilitated by local fishery officers between March-June.

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Streamscapes

Streamscapes

Primary and Secondary Schools, general public

www.streamscapes.ie

'StreamScapes' pioneered Community Engagement in Aquatic & Biodiversity issues from 1989, placing citizens at the heart of conservation and invoking a sense of 'voluntary stewardship'. We produce bespoke projects for Local Communities throughout Ireland, assist groups to develop Catchment-specific publications. We host schools' visits at our Stream School near Bantry.

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The Story of Water Activity book

Irish Wate

Primary Schools

www.water.ie/conservation/community/water-education-in-school/Story-of-Water-activity-booklet.pdf

The Story of Water Activity booklet explores with activities (word searches, spot the difference, etc) the journey of water from the source, to home to the sea.

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The Story of Water video

Irish Water

Primary and Secondary Schools

www.water.ie/storyofwater

Film telling the story of water, where it comes from, how it is used and managed and how we can protect it.

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Think before you flush

General Public

www.water.ie/wastewater/issues/think-before-you-flush

Think Before You Flush is a public awareness campaign about the problems that sanitary products and other items can cause to the plumbing in our homes, our neighbour's homes, our wastewater network and our marine environment when they are flushed down the toilet. The campaign is operated by An Taisce's Clean Coasts programme in partnership with Irish Water.





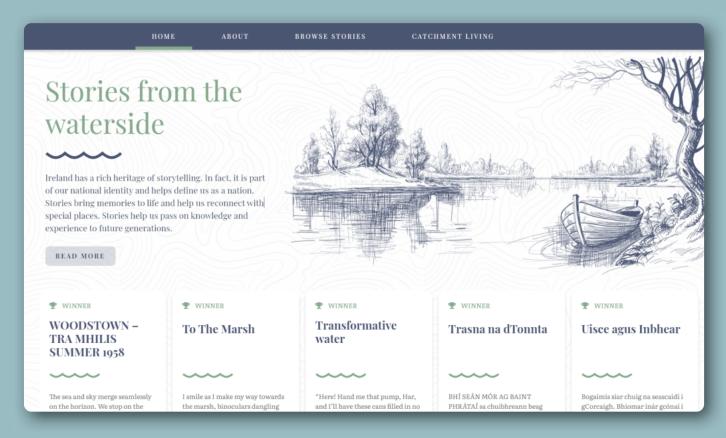












Stories from the Waterside

Stories from the Waterside is a collection of stories about people and their connections to water from all around Ireland. The Local Authority Waters Programme (LAWPRO) launched the Stories from the Waterside competition during Lockdown in May 2020 in partnership with The Heritage Council and The Heritage Officer Programme, Inland Fisheries Ireland and Waterways Ireland.

LAWPRO received over 470 stories from people right across the island of Ireland, and even further afield from Irish diaspora.

They included water themes involving wildlife, fishing, heritage, traditions, crafts, and ways in which nature can

inspire the imagination and replenish one's sense of wellbeing.

This new website is a celebration of these stories and we hope that you, the reader, enjoy them. A special thanks to all those who took the time to share their wonderful stories, for you have truly captured the value and magic of Ireland's natural waters. This website will be a valuable resource for future generations to access these stories into the future.

www.storiesfromthewaterside.com







Learn more on Catchments.ie – water from source to sea

If you would like to learn more, www.catchments.ie shares science and stories about Ireland's water catchments, and people's connections to their water. It has maps with information on local water quality for rivers lakes and coastal waters all around Ireland.

An Fóram Uisce – The Water Forum

The Water Forum is committed to facilitating stakeholder engagement on all water issues at a national, strategic policy level with the common goal of improving water quality. You can find out more at www.thewaterforum.ie

Get involved – The Local Authority Waters Programme

If you, or your community, would like to get involved in caring for your local waters contact your local Community Water Officer for support, advice, and funding opportunities. For contact details and further information visit www.lawaters.ie