

From Source to Sea

10 Steps to Sustainable Water Use in Northern Ireland



Northern Ireland
Freshwater Taskforce
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Freshwater is Life

Water is the world's most precious resource that supports life, health and well-being, our economy, wildlife and leisure activities. It provides us with numerous benefits and services including: drinking water; water for bathing/sanitation; water for food production; hydroelectric power generation; water purification and waste removal; nutrient cycling; recreation; flood control and climate regulation, yet we fail to manage water in a way that reflects its true value.

We need to change our approach to the management of freshwater in Northern Ireland to positively impact upon water quality, water efficiency and to protect our water dependent habitats. Economic benefits from improved water quality arise in the form of reduced costs of water treatment, increased revenue from tourism and a more cost efficient supply chain for food production.

The Northern Ireland Freshwater Taskforce represents a range of organisations working together to ensure that Northern Ireland preserves and improves freshwater ecosystems by encouraging Government and wider society to adopt a sustainable and integrated approach to water management. Following the publication of the Blueprint for Water (www.blueprintforwater.org.uk), this document sets out a 10 point action plan for Northern Ireland to achieve sustainable water use and help restore our rivers from source to sea.

Photographs

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Northern Ireland Freshwater Taskforce Members



Ulster Wildlife Trust



10 Steps to Sustainable Water Use in Northern Ireland

Implementation of European Water Policy

Ensure adequate funding and suitable government structures are in place to manage our water resources in line with European requirements

Keep our rivers flowing and wetlands wet

Ensure that water abstraction does not damage rivers, lakes and wetlands

Restore our water dependent protected areas

Implement sustainable catchment plans to ensure protection and restoration of our protected habitats

Slow, manage and clean up drainage from roads and buildings

Introduce modern drainage systems that prevent pollution entering rivers from buildings and roads

Stop pollutants contaminating our water

Increase monitoring of water bodies for pollution and make polluters pay in full

Keep sewage out of homes and rivers and off beaches

Upgrade our sewage systems to reduce damaging discharges into our natural and built environment

Retain water on floodplains and wetlands

Adopt a new sustainable approach to flood management that works with nature rather than against it

Help farmers deliver a healthy freshwater environment

Enable farmers to prevent pollution and restore rivers and wetlands through advice, training and payments

Waste less water

Support greater water efficiency in homes, buildings and business

Working together for good water quality

Enable all sections of society to actively contribute to the protection of our freshwater environment

Implementation of European Water Policy

The European Water Framework Directive (WFD) says we must restore our rivers, lakes and wetlands by 2015. Currently less than 30% of our water bodies are of sufficient quality to meet the requirements of the Directive. A report published in 2009 estimated that the cost of implementing River Management Plans would be £12.2m while the benefits accrued would be approximately £25m. To date, a secure source of funding for these plans has not been identified.

“Ensure adequate funding and suitable government structures are in place to manage our water resources in line with European requirements”

- Government should seek to implement the WFD by ensuring it is fully funded. The current budget to fund river restoration activities is less than half the amount requested by Northern Ireland Environment Agency to fund WFD implementation
- Delivery of WFD in Northern Ireland is heavily reliant on existing measures such as agri-environment schemes, which have recently had their budgets cut. These budgets must be restored and government must ensure that the new agri-environment schemes help deliver an improved water quality environment
- Currently the management of our water resources is divided among numerous government departments, agencies and local councils. One department must take the lead in coordinating a cross departmental approach to the management of our freshwater environment

Keep our rivers flowing and wetlands wet

We remove (abstract) millions of litres of water from our environment every day to use in homes, industry and agriculture. If we don't slow down the rate of abstraction we could cause irreversible damage to our rivers and wetlands. With climate change likely to result in drier summers the threat of our rivers and wetlands drying out is likely to increase.

Ensure that water abstraction does not damage rivers, lakes and wetlands

- Abstraction must be kept to sustainable levels and take account of the full impact on river habitats through tighter controls on abstraction licensing
- Improved information on the level and cumulative impact of water abstraction on our rivers is required to ensure that excessive water abstraction does not leave stretches dewatered and fish migration interrupted
- While efforts to harness renewable energy production from 'fish-friendly' hydropower are welcome, current and future negative impacts on water levels within rivers must be addressed
- Protection of rivers designated as Special Areas of Conservation is of particular importance and these water bodies should receive special protection from the threat posed by overabstraction



Restore our water dependent protected areas

Protected areas, such as peatlands selected because of their national and international significance, support our most environmentally sensitive habitats. Healthy peatlands provide high-quality water that is much cheaper to treat while damaged peatlands are very expensive to restore. Under the Water Framework Directive, these sites must reach favourable status by 2015. The Northern Ireland River Basin Management Plans report that only 21% of water dependent protected areas are in favourable status and 11% have not been assessed.

- Government should ensure plans to restore water dependent protected areas are put in place as a matter of urgency
- Sustainable Catchment Management Programmes (SCaMP) are a new approach to delivering the many benefits that water catchments provide. Northern Ireland Water must continue to invest in this approach to deliver good water quality and restoration of protected habitats
- Government should work with stakeholders to establish specific measures to restore and protect rivers, lakes and wetlands which have been designated as environmentally significant

“Implement sustainable catchment plans to ensure protection and restoration of our protected habitats”



Slow, manage and clean up drainage from roads and buildings

During heavy rainfall, water pouring off roofs and roads washes pollution from our towns straight into natural waterways. Sustainable Drainage Systems (SuDS) provide a more sustainable approach to draining surface water than the conventional practice of routing run-off through a pipe to a watercourse. Benefits of SuDS include: flood alleviation; pollution prevention; biodiversity enhancement and aesthetic benefits; water quality enhancement and climate change adaptation.

- SuDS must be considered as a viable alternative to traditional drainage systems. The spread of hard surfaces is making existing drainage problems worse and creating new flooding problems. This situation is set to deteriorate given increasing urbanisation and increased rainfall associated with climate change
- A strategy for promoting the use of SuDS needs to be implemented within Northern Ireland as a matter of urgency
- SuDS should be implemented and integrated from the design phase of all new planned developments as part of a holistic approach to sustainable development. Clear performance standards must be agreed from the outset
- Consideration should be given to retrofitting existing developments to incorporate SuDS where possible

“Introduce modern drainage systems that prevent pollution entering rivers from buildings and roads”

Stop pollutants contaminating our water

Diffuse water pollution is pollution from many different sources and cannot be attributed to one single source. Pollution run-off from land, farms, roads, residential and commercial areas accounts for a significant amount of contamination in our rivers, lakes and wetlands. Much of this type of pollution goes undetected meaning those responsible often get away with it while those who depend on a healthy supply of freshwater suffer the consequences. A small amount of pollution can do a lot of damage to the water environment, however the penalties handed down often do not reflect the extent of damage.

- Increased monitoring and enforcement related to diffuse pollution of water bodies is required
- Make polluters pay - ensure that those who damage the water environment bear the costs through more effective law enforcement and tougher penalties
- Enforce the Nitrate Action Programme including the 'closed period' which prohibits the spread of manure between 5th October - 31st January
- Fines for the illegal discharge of dangerous substances from industrial sources must be raised to act as an effective deterrent. Fines must be greater than the cost of compliance
- Forest Service should take steps to prevent water pollution during felling. Felling licenses (required for cutting down trees) should only be issued if there is no risk of pollution

“ Increase monitoring of water bodies for pollution and make polluters pay in full ”



Keep sewage out of homes and rivers and off beaches

It is estimated that there are some 120,000 septic tanks in Northern Ireland. However there are no accurate records, as regulatory controls were only introduced in the early 1970s. While a properly installed and maintained septic tank system is not likely to have any adverse impact on the environment, it is estimated that at least 12,000 septic tanks are not in possession of necessary discharge consents.

- Government should commit to better regulation of septic tanks supported by community awareness campaigns to ensure compliance. Upgraded septic tanks must be installed in accordance with manufacturer's instructions
- Funding must continue to be provided to enable on-going upgrade of Waste Water Treatment Works. The weak elements in the sewerage systems must be prioritised
- Government policy and funding is required to promote the use of wetlands and reed beds as an alternative source of waste treatment

Upgrade our sewage systems to reduce damaging discharges into our natural and built environment



Retain water on floodplains and wetlands

Recent flooding events and climate change predictions have raised awareness that society needs to adapt to future flooding in a more sustainable way. This means complementing structural flood defence with sustainable approaches that use natural systems and habitats to help control the flow of water. There is increasing evidence that recent major flooding incidents are the result of weather events exacerbated by poor planning decisions.

“Adopt a new sustainable approach to flood management that works with nature rather than against it”

- Primary legislation is required to address flooding. A Sustainable Flood Risk Management Bill must be brought forward by Government to ensure adequate protection for people, economic assets and the environment
- Better integration of flood risk and water quality management is essential to maximise available resources and provide a range of additional environmental benefits that will help achieve Floods Directive and Water Framework Directive targets
- A duty to promote a sustainable flood management approach should be explicitly stated within all departmental policies. This means prioritising natural flood management techniques which are ultimately less harmful to the environment and more cost effective



Help farmers deliver a healthy freshwater environment

European agricultural policy has been hugely successful in delivering plentiful food but at considerable environmental cost. Many rivers and lakes are polluted with high levels of fertilisers and pesticides damaging wildlife and driving up the cost of water treatment. Changes in financial support to farming could protect rural economies while reducing this damage to our freshwater environment.

- The Common Agricultural Policy (CAP) post 2013 should be reformed to reward farmers to produce valuable public goods including good water quality, more wildlife and sustainable rural economies
- CAP support should be utilised to help Northern Ireland meet the requirements of the Water Framework Directive. Agri-environment schemes need to have sufficient funding to help deliver an improved water quality environment
- The farm advisory service should be expanded to enable all farmers and landowners to receive advice on fulfilling their environmental obligations and in particular with regard to protection of biodiversity and water quality

“Enable farmers to prevent pollution and restore rivers and wetlands through advice, training and payments”



Waste less water

Northern Ireland Water supplies 619 million litres of water every day and treats 134 million m³ of wastewater each year. On average we each use approximately 150 litres a day with about 95% of the water delivered to our homes going down the drain. We already use 70% more water today than we did 40 years ago. Climate change is likely to result in drier summers so if we don't start wasting less, there may not be enough water for us or for the environment. The Water Framework Directive also requires us to promote greater water efficiency.

Support greater water efficiency in homes, buildings and business

- Incentives and schemes need to be introduced to install water efficient devices and appliances in existing homes and businesses
- All new housing developments should be 'water neutral'
- Government should introduce water efficiency standards for products and require public sector procurement to specify highly water-efficient goods
- Increased effort is needed to educate the public about:
 - ~ the cost of providing high quality water to our homes, including the cost of removing and treating waste water and the related energy use associated with treating water
 - ~ the damaging effect that pollution has on both our water resources and the general environment
 - ~ the need to use water more efficiently



Working together for good water quality

As our waters are used for a wide range of activities, government alone cannot achieve the improvement in water quality that is required to restore our freshwater environment. This will require government and agencies working in partnership with local communities and businesses. The benefits of engaging local communities include the development of a shared responsibility for managing water bodies and utilising local knowledge to identify and implement solutions.

- Government must continue to develop and fully fund local river management plans that are informed by local communities and clearly map out the actions to achieve good water quality targets as demonstrated by the RIPPLE (Rivers Involving People, Places and Leading by Example) project
- On-going investment is required in Sustainable Catchment Management Programmes involving Northern Ireland Water and NGOs working together to address land management issues that negatively affect both wildlife and water quality
- Continued support is needed for the creation of Rivers Trusts to coordinate and utilise local knowledge and skills to deliver improvements to our freshwater environment

Enable all sections of society to actively contribute to the protection of our freshwater environment



Further Information

Copies of this publication can be downloaded from: www.ourriversni.org.uk

For further information on members of the Northern Ireland Freshwater Taskforce visit:

WWF Northern Ireland

www.ni.wwf.org.uk

RSPB Northern Ireland

www.rspb.org.uk/northernireland

The Rivers Trust

www.theriverstrust.org

National Trust

www.nationaltrust.org.uk/ni

Ulster Wildlife Trust

www.ulsterwildlifetrust.org

Wildlife and Wetlands Trust (Northern Ireland)

www.wwt.org.uk

Friends of the Earth (Northern Ireland)

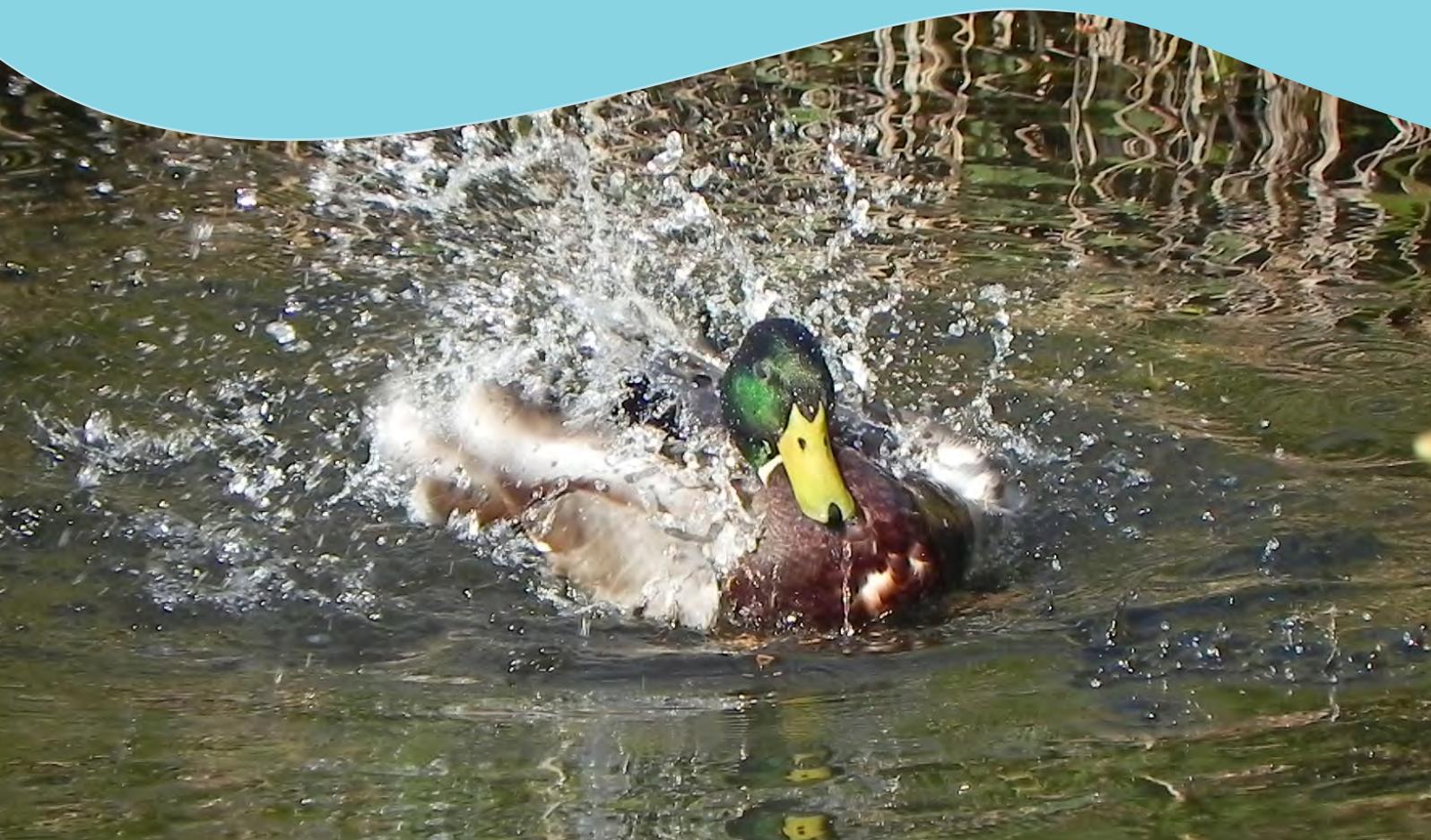
www.foe.co.uk/ni

Northern Ireland Environment Link

www.nienvironmentlink.org

The Ulster Angling Federation

can be contacted on: 028 9336 8952,
email: rob_f_marshall@hotmail.com



Useful Numbers

POLLUTION

Call the Pollution Hot Line: 0800 80 70 60

POACHING/ILLEGAL FISHING

Call the Hot Line: 0300 200 7860

FLOODING

Call the Flooding Incident Hot Line: 0300 2000 100

IN THE EVENT OF AN EMERGENCY CALL 999



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