

Planning for third cycle River Basin Management Plan 2021 - 2027

December 2019

Consultation on Significant Water management Issues

Appendix 8: Existing measures, new measures and measures under development

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In addition to the 136 national Key Target Measures (KTMs) or Programme of Measures (POMs) identified in the 2015 RBMPs, there are a number of new measures which have commenced in the last few years or are due to commence before the beginning of the next cycle RBMP. The new/revised measures and some potential new measures for each sector are listed below. Many of the KTMs identified in the 2015 plan were slow to start or delayed due to funding difficulties but these are now well underway and we would expect to see improvements in the water environment towards the end of this RPMP cycle and beyond 2021. Following the consultation on this SWMI report and the analysis of the responses, work will be undertaken to identify the range of measures to be included in the third cycle RBMP which should address the significant issues and impacts on the water environment.

Regulatory measures

- i. The Nutrient Action Programme (Amendment) Regulations (Northern Ireland) 2019
- ii. The Water Abstraction and Impoundment (Licensing) Regulations (Northern Ireland) 2006, as amended by The Water Abstraction and Impoundment (Licensing) (Amendment) Regulations (Northern Ireland) 2007
- iii. Water (Northern Ireland) Order 1999
- iv. Control of Pollution (Oil Storage) Regulations (Northern Ireland) 2010
- v. Pollution Prevention and Control (Industrial Emissions) Regulation (NI) 2013 (PPC)
- vi. Groundwater Regulations (Northern Ireland) 2009 (as amended in 2009, 2011, 2014, 2017 and 2018)
- vii. Waste & Contaminated Land Order 1997
- viii. Waste Management Licensing Regulations (Northern Ireland) 2003
- ix. The Environmental Liability (Prevention and Remediation) Regulations 2009

Agriculture

1. Monitor and evaluate the effectiveness of the Environmental Farming Scheme (EFS), EFS is DAERA's agri-environment scheme under the Rural Development Programme 2014-2020.
2. Pilot a collective action and local facilitation approach through group projects under the environmental farming scheme to achieve environmental outcomes.
3. Support the ongoing work of The Water Catchment Partnership (WCP) - promoting best practice for pesticide use.
4. Work together with Northern Ireland Water to deliver SCaMP (Sustainable Catchment Area Management Practice).
5. Prepare and implement action plans for 20 river water bodies to improve status.
6. Publish/implement Ammonia Action Plan to reduce ammonia.
7. The Sustainable Agricultural Land Management Strategy – To share findings including results of soil testing with relevant stakeholders and take forward identified actions.
8. Knowledge Advisory Service (KAS) continue to engage with the agriculture sector to support compliance.
9. A range of research projects will be continued and expanded to provide science and evidence to underpin the development of agricultural and land use policies to reduce impacts on the water environment.
10. Continue to develop catchment based ecosystem modelling approaches in a Northern Ireland context to include both point and diffuse sources of pollution.

Urban Development

11. Prioritise Capital Investment through the Price Control Process for the period of 2021 to 2027 regulated by the Utility Regulator under DfI Social and Environmental Guidance for PC21.
12. Development of a reviewed Compliance Assessment Model for NIW and establishment of monitoring and sampling programmes which strengthen the current regimes to further assess the condition of the NIW assets and to inform the prioritisation process for capital investment.

13. Focus on UK Alignment through the implementation of best practice and the principles set out in the Water UK 21st Century Drainage Plan.
14. Develop a catchment approach to consenting, establishing modelling to develop source apportionment for both diffuse and point source discharges to the aquatic environment, to assist in setting of discharge consents and development of sustainable consenting policies for future generations.
15. Continue to tackle misconnections through
 - The identification and tracking of misconnections and solutions
 - support for the 'Connect Right' campaign
 - NIW and Dfl support to education authorities to ensure the new trade force are adequately trained to avoid misconnections.
16. Continue to pursue the implementation of sustainable wastewater treatment technologies where appropriate.
17. Continue to regulate discharges from Private Wastewater Treatment Plants under the current regimes.
18. Review the consenting policies for Private Wastewater Treatment discharges from Housing Developments to ensure adequate treatment is provided under the UWWTD and to take account of a catchment based approach.
19. Work through the DAERA Digital Strategy and NICS OPENDATA Strategy to share spatial datasets and use a common evidence base to target mitigation and restoration measures to address physical modifications and barriers.

Industry

20. NIEA to implement new regulatory standards to prevent and /or limit the entry of hazardous substances to groundwater by existing and new regulated / permitted industrial activities – NIEA will be consulting with Industry on implementing such new standards in 2020.
21. NIEA has embarked on a Regulatory Transformation Programme with the aim of introducing an integrated permitting regime to include industrial discharges to the water environment. This will strengthen the regulatory regime and provide for more focused control of emissions.

22. Develop a catchment approach to consenting, establishing modelling to develop source apportionment for both diffuse and point source discharges to the aquatic environment, to assist in setting of discharge consents and development of sustainable consenting policies for future generations.

Abstraction & the Physical Condition of the Water Environment

23. Continue regulating abstractions, assessing compliance through assessment of data returns and the delivery of a site inspection programme.
24. NIEA to continue to work collaboratively with Inland Fisheries on the regulation of abstractions ensuring sustainable abstraction and protection of fish passage and habitats.
25. Continue to tackle the Deemed Authorisations and license activities appropriately securing sustainable water abstraction, protection of fish passage and fish habitat.
26. Finalise the Fish Farm Policy to facilitate the licensing of the Deemed Fish Farms supporting the growth of sustainable Aquaculture Industry alongside protecting water resource, fish passage and fish habitat.
27. Continue with the review of the NIW abstraction licenses based on strong monitoring data, robust modelling in compliance with the HD and WFD requirements. The delivery of the targeted monitoring programme of controlled releases and over spills from impoundments will be used to support the review of licenses taking account of the management of compensation flows and the reduction of over abstraction. The monitoring will also be used to identify capital investment requirements and included in the prioritized investment price control process for NIW.
28. NIEA is working to increase an awareness of the importance of groundwater protection alongside introducing new regulatory and enforcement controls to prevent / limit entry of hazardous substances to groundwater bodies.
29. Potential review of groundwater abstractions and their compliance monitoring data (especially conductivity) in the Coleraine-Kilrea groundwater body. Work with stakeholders to identify possible suitable mitigation measures regarding saline intrusion.

30. The current DfI annual river maintenance programme is designed to support drainage and reduce fluvial flood risk (<https://www.infrastructure-ni.gov.uk/articles/rivers-maintenance-and-flood-management#toc-3>). However, this maintenance programme impacts on river substrate, channel form and in-stream large woody habitat. NIEA is working to increase its co-operation with the DfI and relevant stakeholders to review the maintenance programmes to take into account impacts on river morphology and considering potential enhancements.
31. To establish appropriate mitigation measures for heavily modified water bodies following a targeted monitoring programme of controlled releases and over spills. Appropriate mitigation measures could be selected dependent on the existence of functional release mechanisms (scour valves) on impounding dams or the feasibility and cost of retro-fitting such mechanisms. Managed compensation flow would further regulate/ control the release of sediment from impoundments.
32. Development of a groundwater quality enforcement policy.
33. Scoping the requirements and developing a new groundwater protection policy.

Forestry

34. Implement revised guidelines on planning and managing forest operations.

Chemicals

35. Continue monitoring chemical contaminants in the aquatic environment including new/emerging contaminants, pharmaceuticals and antibiotics, as an extension of the EU Watch List.

Non- Native Invasive Species (NNIS)

36. Develop management plans for the 10 species of Union concern and develop Pathway Action Plans (PAPs).
37. Continue to monitor, assess risk and report the establishment of Non- Native Invasive species through various pathways. Sightings can be reported via a range of methods including a dedicated email account (info@invasivespeciesireland.com), via online recording forms (www2.habitas.org.uk/records/ISI) or via the iRecord app (<https://www.ceh.ac.uk/citizen-science-apps>)

Fisheries

38. Continue to undertake routine sampling and surveillance work on fish diseases. Reported mortalities are investigated and action taken as appropriate. (38)
39. Undertake a review to examine the current process of aquaculture licensing and its associated legal frameworks with regard to aquaculture licences and authorisations. The aim of the review is to facilitate enhanced transparency in the licensing process for all stakeholders and to encourage greater buy in from our stakeholders and partners so that the process is more effective and streamlined.
40. Identify and assess barriers to fish in the primary Salmon Rivers.

Waste & contaminated land

41. Enforce remediation of significant point sources impacting on the Faughan groundwater body
42. NIEA is working to increase an awareness of the importance of groundwater protection alongside introducing new regulatory and enforcement controls to prevent / limit entry of hazardous substances to groundwater bodies.
43. Continue to develop and implement the Regulatory Transformation Programme with the aim of introducing an integrated permitting regime to include regulated waste sites. This will strengthen the regulatory regime and provide for more focused control of emissions.

Plastic Pollution

44. Seek synergies with and contribute to initiatives on emerging issues like plastic pollution/ marine litter (single use plastic directive).

Emerging Issues

45. Consider future policy in relation to microplastics in the context of the review of the Northern Ireland Marine Litter Strategy.
46. Continue monitoring antibiotic concentrations and undertake AMR testing in NI's aquatic environment as part of the NI AMR Action Plan to provide a better understanding of the potential risks to the environment and both human and animal health.

Protected Areas

47. Development of site specific Conservation Management Plans which will determine the pressures and threats affecting the wellbeing of the important habitats and species of these sites and identify all the management actions required to address these issues.

General

48. Continue to engage with all the Interreg projects: CatchmentCARE, Source to Tap, SWELL, Seamonitor, COMPASS, SWIM and MarPAMM

49. Riverfly Monitoring Initiative - Citizen Science allows ownership of the water ways to local residents through monitoring their own water quality. The Angler's Riverfly Monitoring Initiative (ARMI) is a UK wide community scheme where fishing clubs and other interested parties monitor invertebrates to assess the biological water quality of their local river.

50. Investigate measures for sustainable agriculture and mutually beneficial outcomes:

- Riparian strips along streams/ rivers are a measure to improve water quality by preventing poaching and reducing the risk of sediment/ nutrients/ pesticides entering the waterways.
- Could these buffer strips be used to improve access to the countryside by using them as walking and cycling trials? Improved access to the country side would enhance physical and mental health (concept of green prescriptions) and reduce stress on National Health Service (NHS). This measure would also increase the touristic offering of Northern Ireland to active tourists and potentially contribute towards 'Increasing the use of public transport and active travel' and reduce greenhouse gases.
- To work together with Northern Ireland departments, public bodies and Non-Government Organisations (NGOs) to establish feasibility and explore trial if appropriate and linking up with the greenways programme.

51. Every citizen should understand how their behaviours cause environmental impacts and deterioration of our nature. Awareness should be raised on how a change of behaviours can reduce these impacts. It is therefore important to reach all children in primary and secondary schools.

To work together with education partners and Northern Ireland departments to

raise environmental awareness and teach environmentally friendly behaviours.

Possible actions could include:

- a. review of curriculum
- b. Northern Ireland Environment Agency staff to provide practical support through science, technology, engineering and mathematics (STEM) network
- c. consider an annual teacher training workshop
- d. development of educational resources.

52. Encourage the Northern Ireland Civil Service Estate branch, local councils and public bodies to practice pesticide-free weed control and pest control in public urban spaces. These measures would increase biodiversity and improve water quality. Possible actions could include:

- a. work with conference organizer to get a session on pesticide-free weed removal and share experience from areas where this is already well established (e.g. Luxembourg and some English councils)
- b. Investigate running a pilot with a willing/ interested public body delivery.