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SECOND ANNUAL REPORT ON SUSTAINABLE WATER - A LONG-TERM WATER STRATEGY FOR NORTHERN IRELAND (2015-2040)

November 2018

Executive Summary

1. The Executive's Sustainable Water – A Long-Term Water Strategy sets out a common vision for a sustainable water sector. To ensure full compliance with the Strategy, an Implementation Action Plan was agreed by all the relevant stakeholders. The Department for Infrastructure (DfI) is responsible for managing the implementation of the Strategy and has undertaken to co-ordinate an Annual Report on its progress and furnish the NI Executive with a copy. This is the second Annual Report on the implementation of the Strategy.

2. The Implementation Action Plan contains 231 actions which have been drawn directly from the Strategy. The actions have been prioritised as short, medium and long-term actions and progress, at this stage, is largely limited to the short-term actions. Some preparatory work or planning may be underway in respect of the others, but that may not be reflected in this Report. It should be noted that a large number of actions are considered 'business as usual' and as such will always be ongoing rather than having a specific end date.

3. Key achievements this period include :-

   (i) the Northern Ireland Environment Agency (NIEA), an Agency within the Department of Agriculture, Environment and Rural Affairs (DAERA) entered into Service Level Agreements with all 11 Local Councils, allowing them to undertake monitoring and risk assessments of private water supplies that are registered with DAERA;

   (ii) completion of a solar farm by Northern Ireland Water (NI Water), which will power Dunore Water Treatment Works and save over half a million pounds per year in energy costs;

   (iii) completion of a £10m upgrade at Newcastle Wastewater Treatment Works which has been honoured with an 'excellent' Civil Engineering Environmental Quality Assessment (CEEQUAL) award for its engineering and environmental work and the inclusion of a green roof;

(iv) completion of an innovative rainwater garden at Clandeboye Primary School to help mitigate against flooding in the local area;

(v) NI Water removed more than 119,200m^2 of impermeable area which was previously putting stormwater into combined sewers;

(vi) NI Water has completed 21 drinking water catchment management plans and has secured Interreg VA funding for Sustainable Catchment Management Plans (SCAMP), aimed at improving border catchments;

(vii) NI Water is leading the delivery of a Source to Tap Interreg Project which aims to pilot catchment management initiatives in the cross border Derg and Erne catchments;

(viii) following the flood event in the north west in August 2017, DfI Rivers repaired around 3km of damaged flood defences and repaired 122km of river channel works;

(ix) NIEA hosted a one day conference for stakeholders on "Working in Partnership" to deliver the Water Framework Directive; and

(x) DAERA has delivered training and support for Nutrient Management and Land Management to Business Development Groups and farmers to improve land management practices and subsequently raw water quality.

4. The Strategy encourages further involvement by local councils, particularly in relation to their planning, environmental health and leisure activities, and this partnership will evolve as the actions are progressed.

5. To help local councils gain a better understanding of relevant strategy actions, the DfI's Water and Drainage Policy Division, in conjunction with DfI Rivers, DfI Strategic Planning, the NIEA and NI Water, commenced a series of workshops with local councils. These workshops are proving to be very beneficial, providing further clarity on Strategy actions relating to the councils' planning functions, climate change, managing flood risk, sustainable drainage

systems, capacity at wastewater treatment works and reservoirs. This engagement is also helping to inform local development plans.

6. Strategy actions will assist in the delivery of a number of the Outcomes (detailed below) in the Executive's Outcomes Delivery Plan (ODP), and will ensure that water is respected as a valuable natural resource that is vital to life, enhances our environment and enables our economy to grow.

(i) outcome 1 – we prosper through a strong, competitive, regionally balanced economy;
(ii) outcome 2 - we live and work sustainably – protecting the environment;
(iii) outcome 4 – we enjoy, long, healthy, active lives; and
(iv) outcome 11 – we connect people and opportunities through our infrastructure.

Introduction

7. This is the second Annual Report on the Executive's Sustainable Water – A Long-Term Water Strategy. The Strategy sets out a common vision for a sustainable water sector and focuses on Economic Development & Growth, Affordability, Environmental Improvement & Compliance, Flood Risk Management and Sustainable Service Delivery.

8. The Strategy will support the delivery of specific commitments in the Northern Ireland Executive's Outcomes Delivery Plan, as well as its European commitments. It will also inform future Social and Environmental Guidance for water and sewerage services, which sets out key investment priorities for the water sector.

9. The Strategy focuses on four high-level aims to cover the key water needs within a catchment:

   i. to provide high quality sustainable supplies of drinking water to households, industry and agriculture;
   ii. to manage flood risk and drainage in a sustainable manner;
   iii. to achieve the environmental requirements of the Water Framework Directive in a sustainable manner; and
   iv. to provide sustainable water and sewerage services that meet customers' needs.

10. Full implementation of the Strategy may require significant financial investment over the 25-year period of the Strategy. The issue of costs and funding is particularly concerning in the current economic climate. It is recognised that reductions in funding will have an impact on key stakeholders' (government departments and NI Water) ability to deliver the objectives of the Strategy. In addition, the implications of the UK withdrawal from the EU, which are still to be clearly defined, will need to be carefully managed to minimise any potential impact on the delivery of the Strategy.

Drinking Water Supply and Demand

11. In order to *"Manage Drinking Water Quality Risks in a Sustainable Manner from Source to Tap (DW Aim 1)"*, NI Water has, in consultation with key stakeholders, put a number of plans and programmes in place:

i. it prepares, and annually reviews, its Drinking Water Safety Plans in consultation with the Drinking Water Inspectorate (DWI), to identify and mitigate against risks in drinking water;

ii. it has agreed Designated Drinking Water Protected Areas which are reported on in the River Basin Management Plans, with ongoing monitoring, and steps taken, to protect these areas having been formalised;

iii. it is nearing the completion of Catchment Management Plans for all drinking water catchments, with 21 of 23 live catchments completed to date. Catchment Management Plans for Killyhevlin and Belleek will be completed in 2018/19. NI Water is also progressing its Sustainable Catchment Management Planning programme (SCAMP). As part of this Programme, NI Water completed a free pilot weed wiping trial for farmers, in the Seagahan Catchment (Co Armagh), during spring/summer 2017. The objective of the pilot was to remove pesticides from the untreated raw water and potentially avoid having to construct further expensive assets to remove the pesticides in the treatment processes at the Water Treatment Plant. Interreg VA funding has also been secured for SCAMP, which is aimed at improving border catchments. NI Water's commitment to providing wholesome water supplies to its customers is evidenced in the 2017 drinking water quality compliance figure of 99.88%;

iv. it is the lead partner in the delivery of a Source to Tap Interreg Project involving Irish Water, Agri-Food and Biosciences Institute, East Border Region, Ulster University and the Rivers Trust, which aims to pilot catchment management initiatives in the cross border Derg and Erne catchment. This project is underway and will run until 2021. It has five

strands: love your water, water for forests, water for peatland, water for farming and learning for water; and

v. it has set up a Point of Sale (POS) working group with GB water suppliers and the Water Regulations Advisory Scheme to help change the behaviours of manufacturers and retailers, many of whom are manufacturing, stocking and selling non-complaint water fittings.

12. Over the PC15 period, NI Water has committed to proactive replacement of over 11,000 lead communication pipes (which are outside the curtilage of the property) at consumer properties in addition to lead pipe replacement under water main rehabilitation. In 2017/18, NI Water completed 1870 lead pipe replacements under the proactive replacement programme against a target of 1844.

13. The DWI, a unit within the NIEA, leads on risks to drinking water quality from private water supplies, within the Strategy. In June 2017, NIEA successfully signed off on Service Level Agreements with all 11 Local Councils, allowing them to undertake the monitoring and risk assessments of private supplies that are registered with the Department. DWI works closely with council staff and private water supply owners in administering the private water supply regulations and in providing advice and guidance on mitigation of risks, to protect both the groundwater source from contamination and the public health of consumers.

14. The DWI also leads on a series of targets, within the Strategy, related to managing water quality risks within domestic distribution systems. These include the development and implementation of an education programme to make owners aware of the public health risks that exist with water use within buildings. To take this work forward, a working group was established in February 2018 between DWI, NI Water and DfI.

15. NIEA has launched an online survey on the use and protection of groundwater. This survey was aimed at farmers and the Agri-food sector and will help NIEA learn more about the level of awareness and understanding of

the function and quality of groundwater. This information will help inform DAERA's future groundwater protection strategies.

16. The Strategy aims to ensure that we *"Meet the Water Demand Needs of Society, the Economy and the Environment (DW Aim 2)" and a* key means of achieving this is by effective forward planning. NI Water is currently in the final stages of drafting its first Water Resource and Supply Resilience Plan, in collaboration with key stakeholders including the Utility Regulator for Northern Ireland (UREGNI), NIEA, the Consumer Council for Northern Ireland (CCNI) and DfI.

17. The impact of water abstraction and water usage on the environment is a key consideration and, in order to reduce water consumption, NI Water runs an extensive education campaign involving primary and secondary schools. This includes bringing the Waterbus to schools and giving class talks on how to save water in the home. In addition, NI Water has increased its attendance at exhibitions and local community events to promote water efficiency. Social media is also used to promote key messages.

18. In 2017/18, NI Water also donated 34 water butts to a number of local community groups to harvest rainwater, which can be used to for activities such as watering plants or washing windows.

19. To ensure that it can *"Resource Efficient Drinking Water Treatment and Supply Chains (DW Aim 3)"*, NI Water has made significant progress reviewing its water treatment and supply systems to identify how potential energy savings might be achieved.

    i During the current PC15 Price Control period (2015-21), NI Water commenced implementation of its Instrumentation, Automation and Telemetry (ICAT) Strategy. During 2017/18, new technology was installed at 39 service reservoir (potable water storage) sites. This investment enables automatic control of its assets, with remote control available for incident management, providing additional resilience and improving customer service;

ii It has also invested in energy efficiency measures and green energy, having invested in Renewable Solar at 58 sites adding to its three hydro schemes that were already in place. NI Water continues to purchase a significant proportion of its grid energy as 'Green Energy'; and;

iii NI Water has invested £7m in a solar farm on a 33 acre site on the eastern shore of Lough Neagh. This new 24,000 panel solar farm will power Dunore Water Treatment Works in south Antrim and is expected to save over half a million pounds annually in energy costs for NI Water. This project will also enable NI Water to contribute spare electricity capacity to the Northern Ireland electricity grid as well as help them to reach their goal of increasing electricity consumption from renewable sources from the current 13% to 40% by 2021.

Flood Risk Management and Drainage

20. Land-use planning is key to managing flood risk and drainage issues and to *"Delivering Sustainable Flood Resilient Development (FRMD Aim 1)"*. DfI is responsible for planning policy and drainage matters and it is working closely with councils to enable them to make informed decisions on planning, taking flood risk and drainage into account.

21. The Stormwater Management Group is a multi-agency group jointly chaired by DfI's Water and Drainage Policy Division (WDPD) and NIEA, which has been set up to encourage the use of sustainable drainage systems (SuDS) as the preferred means of dealing with surface water. This group is exploring various issues, including planning for SuDS at an early stage in the development process, and has been recently undertaking presentations to local councils to encourage them to include SuDS within their Local Development Plans. The widespread use of SuDS will reduce flood risk and provide sustainable development.

22. In *"Managing the Catchment to Reduce Flood Risk (FRMD Aim 2)"*, it is important to consider man-made structures as well as those that occur

naturally. DfI Rivers, NI Water and DfI Roads continue to carry out routine proactive and reactive maintenance, as resources permit, to ensure that publically managed drainage systems are performing their function, particularly during periods of intensive or prolonged rainfall. Specifically, DfI Rivers has a rolling programme of annual watercourse and drainage asset maintenance.

23. Reservoirs are significant man-made structures. It is, therefore, important that these structures are routinely monitored to ensure that the structure is fit for purpose and that any identified weaknesses are addressed to mitigate against the risk of flooding caused by reservoir failure.

24. A proportionate framework for reservoir safety is provided for by the Reservoirs Act (Northern Ireland) 2015. The Reservoirs Act, when fully commenced, will require managers of reservoirs that are capable of holding 10,000 cubic metres or more of water, to commission specialist reservoir engineers to monitor the reservoir and to provide him/her with reports on its condition. The manager will, by law, be required to undertake any works in the interests of reservoir safety within the timescale set out by the engineer.

25. The risk of flooding from reservoirs is also recognised in the Strategic Planning Policy Statement (paras 6.119 to 6.122 'Development in Proximity to Reservoirs) with more detail provided in Policy FLD 5 of Planning Policy Statement 15. This advises that new development in the anticipated flood inundation area of a controlled reservoir, i.e. a reservoir that comes under the scope of the Reservoirs Act, can only be justified where the condition, management and maintenance regime of the reservoir are appropriate to provide assurance regarding reservoir safety.

26. The Department, in recognising that this assurance may be difficult to obtain in the absence of the framework for reservoir safety provided for by the Reservoirs Act, has been working with council representatives to provide further advice on how this Planning Policy can be complied with. The product of this work is a Technical Advice Note which is to be posted on the Department's website.

27. The Living with Water programme is also developing a Strategic Drainage Infrastructure Plan for Belfast, to protect against flooding, enhance the environment and enable economic growth. The plan will be produced in 2019 and will examine a range of sustainable drainage options e.g. SuDS, etc. as potential solutions.

28. The Connswater Community Greenway project was a finalist in the 2018 UK River Prize and won the Urban Rivers Section. This project is an excellent example of integrating flood risk management and river restoration.

29. DAERA's Forest Service carried out research into afforestation in the Omagh area, to help inform future DfI Rivers flood alleviation projects.

30. In an effort to *"Provide Sustainable Integrated Drainage in Rural and Urban Areas (FRMD Aim 3)"*, NI Water has successfully completed a new innovative rain water garden at Clandeboye Primary School to help mitigate against flooding in the local area and provide an additional educational resource, visual amenity and an element of play and fun in the school's grounds. This collaborative, cross-departmental approach has shown how a retrofit solution can work to deliver a small, but excellent, example of sustainable drainage to reduce flooding, whilst providing a valuable educational tool to illustrate some of the major topics of the Eco School programme, for example, water, waste, school grounds, biodiversity and climate change. The rainwater garden helps discussion, with pupils, on a range of topics, e.g. wildlife – flora and fauna, water cycle, flooding, pollution, flood mitigation and biodiversity.

31. NI Water is also piloting stormwater separation projects and in 2017/18, it removed more than 119,200m^2 of impermeable area which was putting stormwater into the combined sewers. This is in excess of its target of 30,000m^2 per annum which was set in PC15 and reduces the risk of flooding from combined sewers.

32. To *"Improve Flood Resistance and Resilience in High Flood Risk Areas (FRMD Aim 4)"*, DfI Rivers maintains registers of flood hot spots, designated

sea defences and properties that are at risk from flooding. The Flood Investment and Planning Group (FIPG) was also established in October 2013 with the aim of alleviating flooding through improved partnership working between the departments and organisations responsible, to address customer need. In the relatively short time that the FIPG has been operating, the partnership working that it has driven, has had a measurable impact, and has directly led to the development and delivery of a number of flood alleviation investigations and schemes. Some examples of where ongoing partnership working is being progressed include:

- Mourneview, Newcastle;
- Toome Road, Ballymena;
- Foylesprings, Londonderry;
- Whyte Acres, Banbridge; and
- Lille Park, Belfast.

33. The Homeowner Flood Protection Grant Scheme pilot, launched in January 2016, remains open for applications. To the end of June 2018, 159 applications have been received and of those, 91 have been assessed as suitable and approved. Installation started in October 2017 and to the end of June 2018, 38 homes have been completed. The scheme will run until October 2019 and a subsequent review will inform any future possible scheme.

34. DfI Rivers spent £7m on drainage and flood alleviation schemes in 2017/18 which protected 204 properties.

35. DfI Rivers repaired over 5km of designated culverts, 0.5km of sea defences and 3km of fluvial defences. In addition to this, DfI Rivers also maintained over 410 designated rural open watercourses and 98% of all designated culvert inlet grilles and all designated urban open watercourses.

36. Following the flooding event in the north west in August 2017, DfI Rivers repaired around 3km of damaged flood defences and completed 122km of river channel works.

37. In preparation for *"Extreme Weather Events (FRMD Aim 5)"*, the Regional Community Resilience Group (RCRG) has developed multi-agency plans to help communities prepare for and respond to flooding emergencies. The Lead Government Department (LGD) framework and the CCG (NI) protocols, on escalation and co-ordination, also provide clear guidance on the various aspects of managing multi-agency emergencies. In addition, 3 Sub-Regional Emergency Planning Groups, each co-chaired by a designated council chief executive and a member of the PSNI, are already in place. Emergency response plans have already been developed and a new Council Regional Co-ordinator has been appointed.

Environmental Protection and Improvement

38. DfI and DAERA work closely to help develop and implement *"Sustainable Environmental Policy and Regulation (EP Aim 1)".*

39. NIEA hosted a one day conference for stakeholders on "Working in Partnership" to deliver the Water Framework Directive. It was held at the CAFRE Greenmount Campus in Antrim on Saturday 25th November 2017. The aim of the conference was to inform and engage stakeholders on the work being taken forward by DAERA in meeting the 2027 Water Framework Directive targets. There was a series of talks by representatives from DAERA, NI Water, Donegal Catchment Care, Queens University Belfast and Agri-Food and Biosciences Institute. The afternoon consisted of parallel workshops on citizen science, funding, invasive species, restoring rivers, assessing invertebrates, accessing data, a visit to a constructed wetland and the Greenmount farm. The conference attracted a diverse group of over 100 stakeholders including environmental NGOs, conservation groups, anglers, local councils, rivers trusts, farmers and academic researchers.

40. DAERA continues to test recommendations made in the Sustainable Agricultural Land Management Strategy by piloting a water catchment-based approach to soil testing and analysis. Approximately 1,500 farmers in selected water catchments have, to date, been offered a free service to collect and analyse soils. Objectives include enhanced economic performance (more forage from cheaper grass), enhanced environmental performance (less chemical fertilizer usage and better on-farm distribution); and reducing run-off by identification of high risk fields. As part of this scheme, training has also been made available to assist the farmers, by providing nutrient advice information on their soils in order to apply nutrients in line with crop requirements. Those farmers within the catchment part of the scheme have also been given maps with detailed overland flow areas. An evaluation of the scheme will be carried out to assist in shaping further evidence gathering requirements. This is one of the measures which DAERA is implementing to help achieve a positive outcome in terms of ODP indicator 44 covering water quality (phosphorus levels in rivers and dissolved inorganic nitrogen levels in marine waters).

41. To work towards *"Sustainably Managing the Catchment to Improve Water Quality (EP Aim 2)"*, DAERA has recently established a multi-agency Priority Catchment Working Group, involving marine colleagues, and focusing on the Dundrum catchment. This should provide a model for addressing other catchments with multiple problems.

42. DAERA's Environmental Farming Scheme (EFS) aims to deliver specific environmental measures in order to restore, preserve and enhance biodiversity; improve water quality; and foster carbon conservation and sequestration in agriculture. The EFS contains a Higher Level, which is aimed at environmentally designated land and priority habitats, and a Wider Level which is aimed at the wider countryside. Water quality measures are largely being delivered through the Wider Level of EFS. This is because the Wider Level targets more intensively farmed land, where agricultural pressures on water quality are greatest. Tranche 1 of EFS opened in February 2017. Over 1100 Wider Level agreements commenced in July 2017 and 233 Higher Level

agreements commenced in early 2018. Uptake of water quality measures has been good, with 56% of Wider Level agreements including at least one of the five specific water quality options. In total for Tranche 1, this includes some 400km of watercourses protected by fencing and the creation of 30km of riparian zones. Tranche 2 of the Higher Level opened for applications during 2018. Tranche 2 of the Wider Level is planned to open for applications in August 2018. Tranche 2 agreements for both levels will commence in January 2019. The water quality measures implemented through EFS will help to reduce nutrient inputs and sedimentation arising from farming activities. Therefore, they will contribute to ODP outcome 2, 'we live and work sustainably – protecting the environment'.

43. Training and support for Nutrient Management and Land Management is being delivered to farmers on a sectorial basis by the Business Development Groups (BDG) and 3,000 farmers are enrolled.

44. In 2017/18, DAERA's Forest Service supported the planting of 210 hectares of new woodland by grant-aiding private landowners.

45. To provide *"Effective and Efficient Wastewater Collection and Treatment (EP Aim 3)"*, NI Water is developing a sustainable wastewater treatment solution (aerated reed bed) for Clabby Wastewater Treatment Works in County Fermanagh. NI Water's commitment to providing compliant wastewater treatment is evidenced in the 2017 wastewater compliance figure of 98.65%.

46. NI Water completed a £10m upgrade at Newcastle Wastewater Treatment Works and this work received an 'excellent' Civil Engineering Environmental Quality Assessment (CEEQUAL) award for its engineering and environmental work. The design included an excellent example of sustainable drainage in the form of a green roof.

47. DfI, NIEA and NI Water have produced a leaflet to raise awareness and understanding of drainage misconnections and the environmental problems they can cause. In addition, NIEA and NI Water have become members of

ConnectRight, which is a partnership of organisations working to reduce water pollution from drains and sewers.

48. NI Water has established partnerships with environmental stakeholders such as Environmental Health (in all councils) to work collaboratively to raise awareness of how to dispose of fats, oils and greases appropriately.

49. NI Water is currently preparing its first Water Resource and Supply Resilience Plan to ensure that it can *"Maintain Sustainable Levels of Water in the Environment (EP Aim 4)"*. Once the Plan is finalised, it will be issued for consultation.

50. To assist in *"Improving River and Coastal Water Morphology and Biodiversity (EP Aim 5)"*, DAERA is working, through the delivery of the second cycle of River Basin Management Plans, to achieve Good Ecological Status, in 70% of Northern Ireland's water bodies, by 2021, from a baseline of 37% at Good Ecological Status in 2015. The River Basin Management Plans outline 136 measures to be implemented between 2015 and 2021, in order to try to address and reduce the impacts of the key pressures affecting water quality in Northern Ireland. By the end of 2017, 85% of the 136 measures were either completed, or on track to be completed, by the end of the second cycle. Interim statistics on the status of Northern Ireland's water bodies will be published in 2018.

Water and Sewerage Services

51. NI Water strives to *"Provide Efficient and Affordable Water and Sewerage Services (WSS Aim 1)"* and this is overseen and monitored by the Northern Ireland Authority for Utility Regulation ("the Regulator") which sets challenging targets for year on year efficiency improvements. In order to fully assess how NI Water is performing, the Regulator uses the Overall Performance Assessment (OPA) framework. This monitors the overall level of service that NI Water provides to its customers, by combining 11 individual service measures and scoring them against a reasonable range. Scores are then

weighted in order of importance and combined to give an overall picture of service level performance.

52. NI Water outperformed its PC15 OPA target (of 224) for 2017/18 by 12 points. Over the 2017/18 year, NI Water met or exceeded planned delivery in all but two of the 45 key outputs, these being total leakage, and combined sewer overflow and emergency overflow discharges, at which event and duration monitoring equipment has been installed.

53. The company has also driven through efficiency measures in the past few years, reducing its operating cost by £65 million, in real terms, since 2010, whilst at the same time improving its service levels. This improved efficiency has also benefited business customers, who are paying less, in real terms, for their water sewerage services than they did at the start of the current Price Control 2015 (PC15 period).

54. In its aim to *"Provide High Quality Services to All Water and Sewerage Customers (WSS Aim 2)"*, NI Water has conducted consumer research and assessed the impact of its education campaigns to identify areas for improvement and to develop partnerships with new stakeholders to help deliver its key messages to achieve greatest effect.

55. NI Water places great importance on *"Providing High Quality Customer Service and Customer Information (WSS Aim 3)"* and continues to make efficiencies through its ambitious Achieving Customer Excellence programme, driving down its operating costs whilst maintaining exceptionally high standards of water quality and wastewater treatment. Through ongoing collaboration the Customer Measures and Satisfaction Working Group, which includes CCNI, NI Water, DfI and is chaired by the Utility Regulator, has identified the following new customer measures more relevant to NI Water and their customers: Unwanted contacts, First Point of Resolution (FPOCR), a customer advocacy measure and an Omnibus survey. The group has concluded that as the measures are new, there is insufficient data available to allow realistic performance targets to be set for NI Water during PC15. It has

therefore been agreed that performance against the new measures should be monitored over the remainder of the PC15 period in preparations for targets being set in PC21, NI Water's Strategic Business Plan sets out Key Performance Indicators (KPIs) across its business activities to demonstrate the improvement and quality of services to be achieved. Despite its budgetary constraints, NI Water met or exceeded planned delivery in all but one of the 16 KPIs for 2017/2018. In addition, NI Water continues to develop its ability to resolve issues at the first time of contact and proactively engages with representative organisations to help vulnerable customers in the community. NI Water are working in conjunction with the Regulator and NIE Networks to progress the actions arising from the Regulator's "Care Register Review Final Decisions Paper". The paper includes proposal for improvements in promotion and data sharing.

The only one KPI which reflected underperformance was Target 5a - leakage. NI Water failed to meet the target level of 159 million litres per day, with an actual level of 165 million litres per day. The increase in leakage was primarily caused by this year's bad weather from December to March, which caused a higher level of bursts over the network during 2017/18. Leakage reduction continues to be given a high priority in 2018/19, to achieve the PC15 target of 153 million litres per day by 2021.

56. In order to *"Provide Resilient and Secure Water and Sewerage Service (WSS Aim 4)"*, NI Water is in the process of preparing its Water Resource and Supply Resilience Plan and has taken steps to insulate key components, in its water and wastewater treatment works, against extreme cold.

57. NI Water not only provides us with valuable water and sewerage services, but it also *"Utilises its Estate to Promote Recreation, Biodiversity and Cultural Heritage (WSS Aim 5)"*. NI Water has put in place a Recreational and Access Policy, for its land, to facilitate and encourage recreational activities, where it is safe to do so. It is also working in conjunction with Newry, Mourne and Down District Council, the Mourne Heritage Trust and Tourism NI to promote recreation, biodiversity and cultural heritage.

58. Conclusion

This second Annual Report highlights significant further progress in a number of areas. However, the ongoing constraints on budgets across all areas involved in the Strategy is a cause for concern and may impact on the Executive's ability to meet all its objectives in the medium to long term.

The impact of the UK's withdrawal from the EU is not yet clearly defined, and this will need to be carefully managed to minimise any potential impact on the delivery of the Strategy.

It is also important that local councils and government departments continue to build strong links and develop stronger partnership working to help achieve successful outcomes.

Delivering the Strategy will also help to fulfil our commitments in the Executive's Outcomes Delivery Plan.