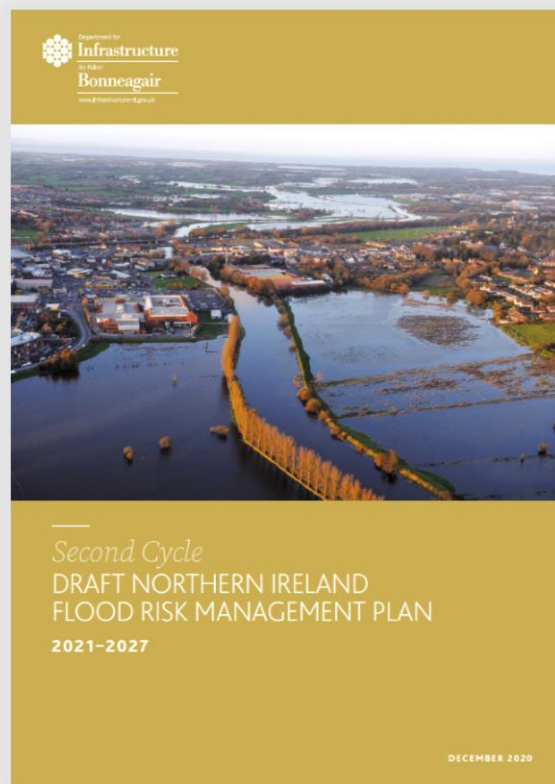


Public Consultation Report

Northern Ireland

- › Flood Risk Management Plan 2021-2027
- › Strategic Environmental Assessment Screening Report
- › Habitats Regulations Assessment Report



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1. Introduction

- 1.1. The Department for Infrastructure (DfI) is the competent authority for the preparation of the Northern Ireland Flood Risk Management Plan 2021–2027 (FRMP) in compliance with the legislative requirement under The Water Environment (Floods Directive) Regulations (Northern Ireland) 2009¹ and its amendments.
- 1.2. The Floods Directive Regulations require DfI to establish a framework for managing flood risk that is aimed at reducing the adverse consequences of flooding on human health, the environment, cultural heritage and economic activity within the 12 Areas of Potential Significant Flood Risk (APSFR) identified in the Northern Ireland Flood Risk Assessment 2018 (NIFRA18).
- 1.3. In line with the requirement of the Floods Directive Regulations and as part of the process of developing the FRMP, DfI issued a draft FRMP for Public Consultation in December 2020. Through this consultation exercise, which ended on the 25 June 2021, the Department has sought to obtain the views of its statutory consultees, other stakeholders and members of the public on the draft FRMP which is to be finalised and published by 22 December 2021. As well as seeking comments on the draft FRMP, the associated Environmental Assessment Documents were also included in the Consultation. Specific comments were sought on particular Consultation questions, see Section 7.

2. Acknowledgments

- 2.1 DfI would like to thank members of the various working groups that contributed to the development of the Plan and all of the statutory consultees and stakeholders who took time to respond to the Consultation.

3. Public Participation

- 3.1. On 22 December 2020, DfI launched the six month Public Consultation on the draft FRMP and associated Environmental Assessment Documents.

¹ <https://www.legislation.gov.uk/nisr/2009/376/contents/made>

3.2. Public Consultation is an important stage in the Flood Risk Management Planning process. Regulation 19 of the Water Environment (Floods Directive) Regulations (Northern Ireland) 2009 emphasises the need for a wide range of stakeholders, including those persons and bodies with direct interest in flooding, likely to be affected by the Plan and the general public, to have meaningful input to the Planning process.

3.3. The Covid19 pandemic has undoubtedly created difficulties regarding public participation and the holding of public meetings, which happened during the first cycle Planning process, was simply not possible during this second cycle. The Department is therefore heavily reliant on this Public Consultation for all of the views and comments received, which will be fully considered in shaping the final Plan.

4. Engagement with Stakeholders

4.1. A Press Release was issued to mark the start of the Consultation period and advertisements were placed in a range of National Newspapers. Details of the Consultation was also directly emailed to over 260 consultees, including Section 75 groups, MPs, MLAs, government departments and consultees identified in the legislation. Other stakeholders internal and external to Government, including flood affected communities, were also included. See [Annex A](#) for full details.

4.2. Information was also made available on the Department's website, and social media updates were issued via Twitter, throughout the Consultation period. Consultees were invited to respond to the Consultation, on a Consultation Response Form (CRF), by email to floods.directive@infrastructure-ni.gov.uk or to submit responses by post.

4.3. DfI has ensured that all of these interested parties have had the opportunity to voice their views and opinions on the draft FRMP and to influence the focus, direction and content of the final Plan. Appropriate and meaningful responses received through the Public Consultation will contribute to the content of the final FRMP and importantly, the Objectives and Measures for the next six year cycle.

4.4. A tandem targeted Consultation was also carried out in relation to the Environmental Assessment Documents, with the Department of Agriculture, Environment and Rural Affairs (DAERA), the Environmental Consultee for Strategic Environmental Assessment (SEA) in Northern Ireland, and with the transboundary Environmental Consultees for SEA in the Republic of Ireland. Comments received in response to this Consultation, along with the Department's response, are set out in [Annex B](#).

5. Consultation Responses

5.1. A total of 22 responses were received in relation to this Consultation, and electronic copies of these are held on an internal database by DfI. Five of the responses consisted of; two acknowledgements; two requests for hardcopies; and one individual made comments which were not directly related to this Consultation, and this was forward to DfI Rivers to be addressed. This leaves the 17 substantive responses that are listed in the table 6.2 below.

5.2. Three consultees requested additional time to respond and although the closing date was not extended, late submissions were taken into consideration. Consultees responded by using the CRF or by headed letter. No hard copies of the CRF were received. The responses have been reviewed and the comments and information have been categorised in line with the Consultation questions to allow a consistent analytical approach. Further details of specific comments raised in respect of each Consultation question and the Department's response to those comments, are set out in [Annex B](#).

6. Substantive Responses

6.1. As stated previously, the Consultation asked ten specific questions. This section of the report provides an overview of the responses received to each question. Not all respondents answered all of the questions with some preferring to make general comments.

The Consultation questions were:

Draft Flood Risk Management Plan 2021-2027

Question 1: Do you agree that, using the methodology noted, the draft plan highlights the most significant flood risk areas in each of the three River Basin Districts?

Question 2: Do you understand and agree with the objectives as described in the draft plan?

Question 3: Do you agree that there is the right balance between the social, economic and environmental objectives?

Question 4: Do you agree with the proposed measures identified for each of the Areas of Potential Significant Flood Risk (APSFR)?

Question 5: What measures do you think should be given the highest priority to manage the flood risk in your area?

Question 6: Do you see any ways that you or your community can support and contribute to any of the measures set out in the draft Plan to reduce the flood risk?

Question 7: Are there things you think should be done to improve the co-ordination of river basin and flood risk management planning?

Strategic Environmental Assessment and Habitats Regulations Assessment

Question 8: Do you agree with the conclusions of the environmental reports?

Question 9: Are there any further significant environmental effects of the draft Plan which you think should be considered?

Question 10: Are there further mitigations or opportunities that should be considered for the Plan?

6.2. The table below summarises the replies received from each respondent in regard to the Consultation questions. Respondents marked with an asterisk (*) did not submit the response on the standard CRF.

Table 6.2

Respondent		Questions																			
		FRMP										SEA and HRA									
		Q 1		Q 2		Q 3		Q 4		Q 5		Q 6		Q 7		Q 8		Q 9		Q 10	
1	Lagan Branch Inland Waterways Association of Ireland (IWAI) *	-	C	-	C	-	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	Fermanagh and Omagh District Council (FODC)	Y	-	Y	-	Y	-	N	C	C	Y	C	N	C	Y	-	N	-	N	-	
3	Mid and East Antrim Borough Council (MEABC)	Y	-	Y	-	Y	-	N	C	C	Y	C	-	C	Y	-	N	-	N	-	
4	Watertight International *	-	C	Y	C	-	C	Y	C	C	-	C	-	-	Y	C	-	-	-	C	
5	Belfast City Council (BCC)	Y	-	Y	C	Y	C	Y	C	C	Y	C	Y	C	-	-	Y	C	-	-	
6	Sinn Fein *	-	C	-	-	-	-	-	C	-	-	-	-	-	-	-	-	-	-	C	
7	British Red Cross (BRC)	Y	C	Y	C	-	C	Y	C	C	Y	C	Y	C	-	C	-	C	Y	C	
8	NI Water	Y	C	Y	C	Y	C	Y	-	C	-	-	Y	C	-	-	-	-	-	-	

9	Institution of Civil Engineers (ICE)	Y	C	Y	C	Y	C	Y	C	C	Y	C	Y	C	Y	C	Y	C	Y	C
10	Royal Society for the Protection of Birds (RSPB)	Y	C	N	C	N	C	N	C	C	Y	C	Y	C	N	C	Y	C	Y	C
11	Consumer Council *	-	-	-	C	-	-	-	C	-	-	-	-	-	-	-	-	-	-	C
12	Climate NI	Y	C	Y	C	N	C	-	C	C	Y	C	Y	C	-	C	-	C	Y	C
13	Loughs Agency	Y	C	Y	C	Y	-	N	C	C	Y	C	Y	C	Y	-	Y	C	Y	C

Environmental Respondent

14	Department of Agriculture, Food and Marine, RoI *	-	C																	
15	Environmental Protection Agency (EPA), RoI *														-	C	-	C	-	C
16	DAERA, Strategic Environmental Assessment Team NI	-	C	Y	C	-	C	-	C	C	-	C	-	C	-	C	N	C	N	C
17	Department of Housing Local Government and Heritage, RoI *														Y	C	Y	C	Y	C

N → Responded No to question
Y → Responded Yes to question
C → Additional comments provided
- → Did not provide comments

7. Key Issues Raised in Response to Questions

7.1. This section provides a summary of the key issues raised in the consultation responses. It should be noted that it is not intended to be a comprehensive report of every view expressed but rather a broad synopsis of the key issues raised by respondents. [Annex B](#) provides a more detailed breakdown of all the comments received and the Department’s response.

Question 1: Do you agree that, using the methodology noted, the draft plan highlights the most significant flood risk areas in each of the three River Basin Districts?

All respondents agreed with the methodology used to determine the APSFR and several welcomed the inclusion of ‘surface water’ in determining flood risk. However, some comments were raised with regard to greater emphasis on Climate Change and extreme events; also the inclusion of reservoirs inundation mapping in the FRMP. One respondent queried the reason for reduction from three FRMPs in the first cycle to one FRMP for the second cycle. One other respondent raised the issue of the need to use the most up to date United Kingdom Climate Prediction (UKCP) data.

The Department noted that respondents welcomed the additional second cycle consideration of surface water (pluvial) flooding in the identification of the APSFR and the inclusion of Measures to consider surface water flooding within the Plan. Respondents recognised that surface water has the potential to cause significant localised flood impacts and that no single government organisation has the lead responsibility for surface water management and so a collaborative approach between the various risk management agencies is required to ensure that problems relating to surface water flooding are effectively addressed.

Several respondents raised the issue of Reservoirs and the risk they pose to public health and safety through potential breach. One suggested the inclusion of reservoir inundation mapping within the Plan. Respondents suggested that this risk should be included within the FRMP even though Reservoirs are covered by separate legislation.

Respondents sought clarification as to why the decision was made to change from the three FRMPs in first cycle to one single FRMP in the second cycle. Several respondents raised issues regarding Climate Change suggesting a stronger emphasis in the Plan. The Department was reminded that updated UKCP18 Climate Projections are available. Detailed responses to these queries are provided in [Annex B](#).

Response 1: Based on the responses received, the unanimous consensus is that the methodology used by the Department to determine the APSFR is appropriate. However the Department acknowledges that there are some issues to be addressed within the final FRMP and that Climate Change and its effects on flooding are major challenges faced by us all. The transition to updated UKCP information has been included as a Measure within the Plan. The Department does not intend to include Reservoir flood risk within the Plan because it is covered by other legislation but there are links to reservoir inundation mapping included for information purposes. The second cycle Plan differs from the first cycle Plans in that we now have a single Plan covering the three River Basin Districts (RBDs). The move to a single plan simply removes duplication and consolidates information on the three RBDs

in the one document, without any reduction in the quality or level of detail. The production of a single FRMP also mirrors the approach taken by DAERA for the River Basin Management Planning.

Question 2: Do you understand and agree with the objectives as described in the draft plan?

Not all respondents addressed this question but of those that did, the majority agreed with the objectives detailed under the headings of Prevention, Protection and Preparedness for the FRMP, some stating they were clear and concise.

Several welcomed the inclusion of Climate Change in the objectives while others suggested that the Climate Change objective be worded more strongly or Climate Change is incorporated into other objectives.

Natural Flood Management (NFM) was raised throughout the Consultation responses and most respondents were pleased to see these practices mentioned within the objectives. It was suggested that all areas would benefit from a 'Living With Water' approach which incorporates sustainable drainage solutions such as NFM; blue/green infrastructure etc.

All Respondents supported the environmental aspects of the objectives and emphasised the close and indeed legislative relationship between the Floods Directive and the Water Framework Directive (WFD).

A few respondents considered that the objectives could be 'SMARTer' and there should be clear links between measures and objectives with greater inclusion of targets and indicators.

Response 2: Generally, the consensus is that respondents believe the objectives for the FRMP are appropriate and their priority is satisfactory. It was evident though that certain respondents had particular leanings towards objectives pertaining to their specific areas of expertise. Following up on comments received, the Department has reviewed the objectives but as they all carry an equal priority no changes are intended to be made in this regard. However, the Department has amended the wording of objective 8 regarding Climate Change, as raised in the Consultation and will add additional information on the linkage between the objectives and measures.

The Department has tried to include targets or indicators for measures proposed in the FRMP. However, it is not always possible to set targets especially when the Plan relates to a six year cycle and completion of measures may be dependent on annual budgeting. Also some measures relate to non-capital programmes e.g. community resilience. At this stage in Plan preparation these may be difficult to programme within the six year cycle and the extent of the work involved may also be unclear. This is also true of drainage maintenance programmes which are included as flood risk management measures and for which required work and allocation of resources may not be predictable at the Plan preparation stage.

Question 3: Do you agree that there is the right balance between the social, economic and environmental objectives?

The majority of respondents agreed that the balance between social, economic and environmental objectives was appropriate and comments were generally positive.

A request was raised for the Department to review the relationship of funding between Prevention, Protection and Preparedness measures. This particular request was aimed towards greater funding for Preparedness.

The effect of flooding on the Socially Vulnerable, the risk to life and the mental well-being of those affected by flooding were considered by a number of respondents to be of significant importance. Those respondents felt that vulnerability should receive greater cognisance in the Plan process.

Others believed the balance of objectives should be re-prioritised to illustrate how the climate and environment objectives underpin both the human health and economic objectives.

Response 3: The Department has considered all of the respondents' comments regarding the balance between social, economic and environmental objectives. The majority of respondents believed the FRMP contained the correct balance between the social, economic and environmental objectives. Some believed that priority should be given to climate and environmental objectives, however, the Department concludes that no changes in the balance of the

objectives should be made as a result of the responses to this Question. All suggestions are individually addressed in [Annex B](#).

Question 4: Do you agree with the proposed measures identified for each of the Areas of Potential Significant Flood Risk (APSFR)?

With regard to the measures identified for each of the APSFR, respondents offered conflicting opinions. A greater number of respondents agreed with the proposed measures but suggested caveats while other respondents did not agree with the proposed measures or suggested measures could be more ambitious in some areas.

Several respondents agreed with the Enhanced Drainage Area Plan (DAPs) measure proposed for each APSFR but suggested that the timescale for the Enhanced DAPs should be brought forward or made more APSFR specific. Councils in particular wanted this measure to proceed urgently for APSFR within their own jurisdictions.

Respondents suggested the introduction of a measure on “Flooding Education”. This could include awareness and education of people of all ages (including children) in relation to sources of flooding, the hazards from flood water, how certain actions can cause or exacerbate flooding in their area or in other areas e.g. urban development, paving gardens, dumping in watercourses etc.

Other respondents considered the need for better linkage in each area to show how the measures relate to the overall Objectives and what relevant indicators would be for success. Others suggested measures could go further with regard to biodiversity, Climate goals and adopting NFM.

One respondent believed that Prevention measures of Enhanced DAPs and Planning Policy and Local Development Plans (LDP) are insufficient and suggested promoting much more explicit targets to incentivise NFM.

Response 4: Overall the majority of respondents were content with the measures planned for the APSFR with a few amendments, and with additional detail on the

linkage between the measures and objectives. The desire for greater uptake of NFM measures was also apparent. The Department has considered all the comments and replied accordingly in [Annex B](#).

Question 5: What measures do you think should be given the highest priority to manage the flood risk in your area?

Most respondents were positive in their reply to this question and the general consensus received was that the measures under the headings Prevention, Protection and Preparedness were all equally important.

Mid and East Antrim Borough Council raised concern that there were no specific Protection or Preparedness measures for Larne APSFR, and no Preparedness measures for Carrickfergus APSFR.

Prevention of New Development within Flood Risk Areas was strongly supported by many respondents and the notion that Property Flood Resilience (PFR) should be prioritised along with the existing measures was also suggested.

Respondents agreed that Protection measures could be multiple problem solvers mitigating flood risk while contributing towards other objectives of the FRMP and other wider plans.

The importance and greater emphasis on a Sustainable Urban Drainage System (SuDS) Policy was brought up by several respondents referring to; making SuDS compulsory in new developments and the issues of the maintenance, ownership and public liability of SuDS.

Response 5: The Department acknowledges respondents' feedback that the measures covered under the titles Prevention, Protection and Preparedness all have an equal priority in the management of Flood Risk. All of the comments are addressed in [Annex B](#).

Regarding Mid and East Antrim's concerns about measures for Larne and Carrickfergus:-

- in Carrickfergus a community engagement process has commenced with the residents of Rhanbuoy Park supported by RCRG members including the Council.
- in Larne there are currently no communities requiring assistance to develop their preparedness for flooding. Also in Larne there is currently no major fluvial flooding requiring a protection scheme in that APSFR; the main risk relates to surface water flooding which is supported by the measure of an Enhanced DAP for Larne.

Question 6: Do you see any ways that you or your community can support and contribute to any of the measures set out in the draft Plan to reduce the flood risk?

The great majority of respondents who replied using the CRF answered a very positive 'yes' to this question. All respondents were very keen to provide assistance in the delivery of the FRMP and its measures. Several agreed to continue to support the management of flood risk through membership of the Preparedness Groups in their areas. At least two organisations offered their services and expertise to sit on resilience groups or in delivering schemes on the ground. Others suggested that while close working relationships already exist, there are areas where they perceive further co-ordination and support could be achieved. Several respondents have worked within the Regional Community Resilience Group (RCRG) since its inception, facilitating and supporting local Community Resilience Groups and would continue to do so.

The Royal Society for the Protection of Birds (RSPB) would be prepared to engage with measures across a range of sites and scales and welcomed the opportunity to engage with measures to address issues directly affecting RSPB managed sites.

Climate NI also offered access to its Climate Emergency Training.

Response 6: The Department acknowledges the valuable contributions that Councils and other organisations have made to the RCRG and affected communities and their assistance in Emergency Coordination and Recovery. The Department also acknowledges and is grateful for the offers of partnering and assistance

in managing flooding from respondents, including RSPB and the Institution of Civil Engineers (ICE) in particular.

Question 7: Are there things you think should be done to improve the co-ordination of river basin and flood risk management planning?

Most Respondents using the CRF answered 'yes' to this question indicating that they believe more could be done to improve co-ordination of River Basin Management Plan (RBMP) and FRMP. Respondents suggested greater co-ordination with neighbouring Member States on shared RBD; new innovative approaches; introducing a new Infrastructure Advisory body; and upscaling nature based solutions.

Most Respondents agree about a need for a holistic, strategic, and collaborative approach for the water environment and also suggest that there needs to be a rapid upscaling in the use of nature based solutions to help address challenges to the water environment. Improving the management of water flow in urban areas will require blue/green infrastructure and measures such as SuDS and that in periods of heavy rain, green spaces in urban areas should be used to hold water on a temporary basis to help prevent flooding of homes and businesses. This is in keeping with the Living With Water Programme (LWWP). NI Water has been advancing, with partners and stakeholders, new and innovative approaches, like the LWWP, to address the growing demands placed on our drainage systems and welcomes the extension of the LWWP to the Derry catchment area.

Respondents suggest that RBMPs and FRMPs should be screened for objectives, measures and planning procedures for possible overlaps and conflicts.

Response 7: The Department encourages close co-operation between the FRMP and the RBMP with delegates from the DAERA RBMP team involved as members of the Floods Directive Technical Stakeholders Group (FDTSG). This should avoid any overlaps, conflicts or duplication of work. The Department also accepts that Natural Flood Risk Management, SuDS and Blue / Green measures have a greater role to play in Flood Risk Management and this has

been encapsulated within the LWWP and its Living With Water in Belfast Plan.

In relation to Floods Directive implementation, DfI has a close working relationship with the Office of Public Works in the Republic of Ireland; this indeed precedes the Directive. For the purposes of the Directive second cycle, three joint groups are active at different levels to inform, cooperate and coordinate Flood Risk Management activities in both jurisdictions. DfI is a member of a range of Flood Risk Management groups within the UK covering issues e.g. allowances for Climate Change, Flood Risk Assessment, Coastal Flood Risk, hydrological information etc. This interaction, sharing of information and cooperation is not necessarily evident to stakeholders but it simply forms part of routine business for the Department.

Question 8: Do you agree with the conclusions of the environmental reports?

Of the Organisations that replied to the Consultation that were not Environmental Specialists, only nine addressed this question and there were conflicting views.

Two of the Respondents agreed with the conclusions of the Environmental Reports but suggested greater progress could be made to improve the Environment by the use of NFM measures. It was noted by others that the SEA (Strategic Environmental Assessment) is strategic and that all reports concluded that there has been no wider negative impact on the environment and that some positive localised environmental impacts have been observed. Others suggested that the legislative reporting cycle of every six years was too infrequent in relation to reporting progress on the achievement of measures and objectives.

One Respondent on the other hand did not agree with the Environmental Reports and questioned the Department's justifications for not conducting a full second cycle SEA. They suggest that the FRMP requires further scrutiny to make it more ambitious and impactful to deliver the change our rivers clearly need with the plans resulting in significant positive environmental effect.

Another suggested a need to address 'Priority Species' lists and raised the issue that flooding could potentially allow freshwater species to move to/invade areas where they are not currently present which could impact on native species.

Response 8: The Department has engaged with the appropriate Environmental consultees in both Northern Ireland and the Republic of Ireland at SEA scoping stage and again during this Consultation process. The Department acknowledges that there are minor adjustments required to the SEA and HRA (Habitats Regulations Assessment) to address the points that have been raised, and revised versions of these documents will be published with the final Plan.

Many environmental aspects of measures will be addressed at a project level as and when measures such as flood alleviation schemes have greater certainty of programming and implementation. This is when detailed environmental scoping and assessment is carried out and when opportunities for environmental enhancement and mitigation are considered / developed for potential implementation when the measures are undertaken.

Question 9: Are there any further significant environmental effects of the draft Plan which you think should be considered?

Of the Organisations that replied to the Consultation that were not Environmental Specialists, only nine addressed this question and most agreed that there were further environmental effects of the draft Plan to be considered, although there was no consensus on the significant environmental effects suggested.

An emphasis on NFM measures was suggested and acceleration of NFM schemes encouraged.

One respondent suggested the SEA should be updated to reflect the significant positive environmental effects planned as a result of the second cycle FRMP in relation to environment and cultural heritage objectives.

It was also suggested that the interactions between Flooding and the UK target for 'Net Zero' Emissions needs to be considered. Actions should be taken within the Plan to improve uptake of NFM measures with the view to reducing the Green House Gas (GHG) emissions for Northern Ireland (NI) as a contribution towards the 'Net Zero' target.

Response 9: The Department, as previously stated, accepts that minor adjustments to the SEA are required. The Department considers as laudable the desire to reduce the GHG emissions and increase carbon storage as we work toward 'Net Zero' emissions. Within the remit of this Plan it will endeavour to seek opportunities for the development of Nature Based Solutions / NFM within Flood Alleviation Schemes and other measures.

Question 10: Are there further mitigations or opportunities that should be considered for the Plan?

Of the Organisations that replied to the Consultation that were not Environmental Specialists, nine addressed this question with two believing there were no further mitigations/opportunities to be considered for the Plan and seven believing that there were.

One of the main suggestions from respondents was for DfI to consider local and wider sustainability aspects of all schemes at the core of decision making and once again suggested that greater progress could be made on the use of NFM techniques.

Others in a similar vein suggested a comprehensive 'toolkit' of measures to prepare for floods should be used to achieve effective landscape management including:-

- looking after soil;
- using uplands to catch and retain water;
- diverting flood water onto fields upstream of settlements; and
- installing "leaky dams" to slow the flow of water towards urban areas.

One respondent raised the issue that there were no detailed estimates of the loss of coastal habitats in NI and the threat to the same from rising sea levels as an impact of Climate Change.

Finally one respondent requested that the FRMP information be communicated through an information pack.

Response 10: With regard to NFM Measures, the Department will endeavour to address this by analysing the possibility of Nature Based Solutions / NFM being used appropriately within Flood Alleviation Schemes.

Where assistance in preserving any Coastal Habitats can be facilitated by this Plan, this shall be encouraged. While it is recognised that Coastal Erosion Risk Management is only in its infancy in NI in comparison with the rest of the UK, Coastal Management issues are now being progressed jointly by DfI and DAERA, through the NI Coastal Forum.

8. Next Steps

DfI will be working alongside and engaging with stakeholders and other government departments to develop the key suggestions from the Public Consultation and to integrate them into the final FRMP and associated environmental documents which will be published by the legislative deadline 22 December 2021.

This report, along with the detailed Departmental response to each Consultation comment received (detailed in [Annex B](#)) and the updates to the final Plan, form the Department's overall response to this Public Consultation exercise.

9. Contact

If further information is required, this can be obtained by contacting the Department:

E-mail to: floods.directive@infrastructure-ni.gov.uk

Write to: Flood Risk Management Plan Consultation Response
Department for Infrastructure
Water and Drainage Policy Division
Room 1-22
Clarence Court 10-18 Adelaide Street
BELFAST
BT2 8GB

Annex A – List of Consultees Issued with Formal Notification

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Legislative Consultees

The Drainage Council
Antrim and Newtownabbey Borough Council
Ards and North Down Borough Council
Armagh City, Banbridge and Craigavon Borough Council
Belfast City Council
Causeway Coast and Glens Borough Council
Derry City and Strabane District Council
Fermanagh and Omagh District Council
Lisburn and Castlereagh City Council
Mid and East Antrim Borough Council
Mid Ulster District Council - Dungannon
Newry, Mourne and Down District Council
Belfast Harbour Commissioners
Coleraine Harbour
Larne Harbour Limited
Londonderry Port & Harbour Commissioners
Warrenpoint Harbour Authority
Department of Agriculture, Environment and Rural Affairs (DAERA)
Department for Communities
DfI Rivers
DfI Roads
NI Water
Waterways Ireland
Foyle, Carlingford and Irish Lights Commission (Lough Agency and Irish Lights Commission)
Office of Public Works, Republic of Ireland

Additional Consultees

Agri-Environmental Policy Team
Air and Environmental Quality Unit
All MLAs District Councils
All Northern Ireland MPs and MEPs who are not MLAs
All Political Parties in NI Assembly
All Political Parties not represented in NI Assembly
All Political Parties Spokespersons
Built Heritage - Historic Environment Division
CeDAR
Chief Constable Police Service of Northern Ireland
Council for Nature Conservation and the Countryside (CNCC)
Countryside Management Development Branch

Criminal Legislation and Procedures Branch Police Service of Northern Ireland
Departmental Library
Floods Directive Steering Group Members
Forest Service
Future Agri-Environmental Policy Team
Geological Survey of Northern Ireland
Inland Fisheries
Legal Deposit Libraries
Lough Agency
Marine and Fisheries Division
National Trust Regional Office
NIEA - Natural Environment Division
NIEA - Resource Efficiency Division (Waste Management)
NIEA - Water Management Unit
NIO Constitutional and International Division
Northern Ireland Environment Link
NSMC – NI Secretariat
Office of the Attorney General (AGNI)
Regional Community Resilience Group
Rivers Trust
RSPB Northern Ireland
Section 75 Groups
The Woodland Trust Northern Ireland
Ulster Angling Federation
Ulster Wildlife Trust
Assembly Library
British Red Cross
Chartered Institution of Highways & Transportation
Climate NI
Community Transport Association (CTAUK)
Consumer Council
Federation of Small Businesses
Fermanagh Community Transport
Friends of the Earth
Health and Safety Executive for NI
Institution of Highways and Transportation - Northern Ireland
Invest Northern Ireland
Irish Transport Heritage Limited
Law Centre (NI)
Living Streets (The Pedestrians Association)
Phoenix Natural Gas
Quarry Products Association
Road Safety Council for NI

Rural Community Network
Rural Support
Sustrans
The Law Society of Northern Ireland
Translink
Wildfowl & Wetlands Trust

Environmental Consultees

Department of Agriculture, Environment and Rural Affairs (DAERA)
Department of Agriculture, Food and the Marine (DAFM)
Department of Communications, Climate Action and Environment (DCCAE)
Department of Culture, Heritage and the Gaeltacht (DCHG)
Department of Housing, Planning and Local Government (DHPLG)
Environmental Protection Agency (EPA)
Northern Ireland Environment Agency (NIEA)

Key Infrastructure Consultees

AES Corporation - Kilroot
AES NI
Belfast Health and Social Care Trust
Belfast International Airport
British Telecom
City of Derry Airport
ESB
ESB - Coolkeeragh
George Best Belfast City Airport
NI Ambulance Service
NI Fire and Rescue Service
NI Prison Service
NI Transport Holding Company
NIE
Northern Health and Social Care Trust
PSNI
South-Eastern Health and Social Care Trust
Southern Health and Social Care Trust
The Education Authority
Western Health and Social Care Trust

Annex B – Summary of Consultation Questionnaire Comments and Departmental Responses

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Respondent	Comments	Department's Response
<p>Lagan IWAI</p>	<p>Lagan Branch of the IWAI is a charitable organisation with the long term aim of restoring and reopening the Lagan Navigation Canal from Belfast to Lough Neagh.</p>	<p>The Department notes your comment in relation to your interest in the Lagan Navigation Canal.</p>
	<p>The only area of common interest to the Branch and your report is the non-tidal section of the River Lagan from Stranmillis weir to the Union Locks near Lisburn, including some tributaries such as the Minnowburn. We note that fluvial flooding is the lowest category of flooding risk on that section and that the “green flood plain” is considered adequate to prevent any serious damage.</p>	<p>The Department notes your area of interest in relation to the River Lagan.</p>
	<p>All Lagan Branch members are volunteers who carry out work on the canal, mainly removing vegetation from the locks to improve their appearance and prevent further deterioration of the built structures. All of this work is carried out with the approval of the Department of Infrastructure and Department of Environment (Built Heritage Division)</p>	<p>The Department notes the ongoing improvement works and liaison.</p>
	<p>One of the original reasons for building canals was to provide a drainage channel which would prevent flooding. We therefore trust that no structural work will be done on the section noted above which would prevent the restoration and reopening of the Lagan Navigation Canal at any time in the future.</p>	<p>The Department notes your comment in relation to the restoration of the Lagan Navigation Canal, and can advise that the refurbishment of Stranmillis Weir, which is currently nearing completion, is the only structural measures proposed in the FRMP and would impact on your area of interest. In addition there are other refurbishment works planned, that are not included in the FRMP, at the existing weir structures at Lambeg and Hilden.</p>
<p>Fermanagh Omagh DC</p>	<p>Omagh (page 208) - With regard to the prevention measure "By 31 March 2027, NI Water will produce an enhanced DAP (Drainage Area Plan) for Omagh that sets out actions to mitigate integrated flooding issues". Council welcomes this prevention measure as surface water flooding, in a high probability event, is the predominant risk for the Omagh area. Council would however ask that consideration is given to bringing the timescales forward for this work to reflect the level of the acknowledged risk. It is important to acknowledge that the extent of the risk to Omagh town centre is inhibiting</p>	<p>Timescales for this work have been reviewed and programme is brought forward, text now reads '<i>Commencement in April 2023 with a 2 year programme. Output will be better understanding of NI Water storm capacity and opportunities for storm water separation</i>'.</p>

<p>investment, and this needs to be urgently addressed, to allow a meaningful "balancing" of the NI economy.</p>	
<p>Council also wishes to highlight its continued support for further feasibility work with regards to a flood alleviation scheme for Omagh Town Centre. In recent years the existing flood defences in Omagh have come extremely close to overtopping and, going forward, are likely to be unable to withstand the increasing impacts which climate change may bring. Any significant fluvial flooding event will have devastating consequences for Omagh Town Centre residents and businesses and a flood alleviation scheme would provide a vital first line of defence.</p> <p>However Council is aware that previous feasibility studies have identified preferred solutions, and is concerned that no funding for these works has been identified to allow them to proceed.</p> <p>Council stresses that urgent action is required to deliver flood alleviation schemes designed to prevent a recurrence of flooding in Omagh. This will have particular relevance for the Derry Road, including Hunters Crescent, and for Campsie and Lower Market Street.</p>	<p>The Department welcomes the support for the feasibility work in relation to the Omagh FAS. The Department is currently engaging with our partner consultant to re-visit the most recent flood study for Omagh Town, which was completed in 2016. This review of the feasibility study will take account of revised climate change guidance and consider opportunities for natural flood management, to determine if any viable options can be identified to reduce flood risk. It is anticipated that this study could take 12 – 18 months to complete.</p>
<p>At Chapter 5, Page 208, a prevention measure summary for Omagh is identified as "Influence local planning policy for development and flood risk" and the specific measures states that "By 2024, DfI Rivers will work with Fermanagh and Omagh District Council to update flood risk policy in the Local Development Plan." It is unclear if is the intention of DfI Rivers is to update policies further to those comments already provided to date as part of the LDP preparation process. The Council has already been working closely with DfI Rivers on the wording of the Flood Risk Management planning policies for the District, and the draft Local Development Plan (LDP) Strategy is now with the Planning Appeals Commission for Independent Examination. Given the stage we are at in the LDP process, it is suggested that the timing of this specific measure around the influencing of planning policy for development and flood risk should be revisited to align with the councils LDP Timetable. If however it is the intention of DfI Rivers to influence planning policy further beyond the comments that have been provided thus far, then this should be clearly stated and also communicated to the Council's Regeneration and Planning department.</p>	<p>The Department notes the comment in relation to the Local Development Plan. DfI Rivers and Fermanagh and Omagh District Council have been working closely through the LDP process and while this will continue it is not envisaged this work will be revisited. The text in the Plan has been amended to clarify this.</p>
<p>It is also noted at Page 207, paragraph 5.9.7.11 that the Plan Strategy is referred to as " a Plan Strategy to define strategic objectives for future development of the District, including strategic policies and a spatial strategy;" It is important that the role of the two stages of the LDP process are fully understood and reflected in this draft Flood Risk Management Plan (FRMP).</p>	<p>The Department notes the comment in relation to the Local Development Plan process and the text has been amended to reflect the most recent timetable.</p>

<p>The LDP contains both a suite of strategic planning policies and also detailed policies to guide development. Paragraph 5.9.7.1.1 also needs to be updated to reflect the correct timescales from the most recent LDP Timetable.</p>	
<p>At Page 204 paragraph 5.9.6.1 under the heading of Planning, the document explains in addition to national planning policy and advice, DfI Rivers will advise against bringing forward sites or the zoning of any land in preparation for the new Fermanagh and Omagh District Council Local Development Plan, particularly for built development, that has been identified from the flood maps as being within the 1 % AEP (1 in 100 year) fluvial floodplain, 0.5 % AEP (1 in 200 year) reservoir inundation area, or is susceptible to surface water flooding. It is worth noting that the strategic planning policy within the SPPS states that "LDPs should apply a precautionary approach to development in areas that may be subject to flood risk presently or in the future as a result of climate change predictions. Consequently, LDPs should not bring forward sites or zone land that may be susceptible to flooding, now or in the future, unless in exceptional circumstances." It is noted that 'exceptions' are not referred to in the 'planning' section of this draft FRMP and it would be helpful to understand if this is intentional.</p>	<p>The Department notes your Comment and would advise that it is not the intention of DfI Rivers to oppose taking forward exceptions, as currently outlined in the SPPS and PPS 15 (revised), into the proposed LDP. The additional text, detailed below, has been added to the FRMP to clarify this.</p> <p><i>'In the determination of planning applications any proposed development within a flood risk area will either be advised against or will be further considered if it meets one of the 'Exception' rules and is accompanied by a suitable Flood Risk/Drainage Assessment'.</i></p>
<p>Preparedness, protection and prevention measures are of equal importance. We acknowledge that prevention through planning policy is a vital measure, although unfortunately flooding events will still happen. When flooding events do happen, activities which have been carried out in relation to protection and preparedness will be of significant importance in terms of helping to mitigate against the potential devastating impacts of flooding in Omagh. An Enhanced Drainage Area Plan and Implementation of a Flood Alleviation Scheme for Omagh as well as the update to Flood Risk Policy are all high priority actions and should be treated accordingly.</p>	<p>The Department notes your comment in relation to the measures being of equal importance.</p>
<p>The Omagh Community Resilience Group for the Campsie area of Omagh was established in 2016 and the community has benefitted from the addition of a sandbag container in a nearby car park, as well as residents signing up to receive weather warning and informing information via email and text. On page 206 of the document it is stated that 'this resilience group differs from others in NI, because it is represented predominantly by owners of commercial rather than residential properties'. The Council's experience through our links with this group is that it is mainly made up of owners of residential properties. Also we would like to highlight that at a meeting with this group in March 2020 which DfI Rivers, Roads, NI Water and the Council attended, the residents expressed their frustrations at being unable to source affordable home insurance even with the FloodRe scheme in place. The group reported that</p>	<p>The Department notes the comment in relation to the Omagh Community Resilience Group for the Campsie Area. This reference has been amended in the Plan.</p> <p>In relation to affordable home flood insurance I understand that discussion is ongoing with FODC, DfI Rivers and the ABI to try and resolve this particular issue.</p>

<p>some residents have to consider purchasing home insurance with the flood risk element removed due to cost.</p>	
<p>The Council has worked closely with the RCRG to facilitate and assist local Community Resilience Groups in the District. However, it is important to reflect that there is a limit to the ability of such Groups to contribute to the measures set out in the Plan; the most effective measures must come from the relevant Statutory Agencies.</p>	<p>The Department notes the comment in relation to the Councils close working with RCRG and the contribution towards the measures set in the Plan.</p>
<p>The Council will continue to play a key role in supporting the management of flood risk through membership of the Southern Emergency Preparedness Group and welcomes the breadth and scope of the plan objectives as referenced in Table 4-1.</p>	<p>The Department welcomes the Councils ongoing involvement in the Southern Emergency Preparedness Group.</p>
<p>Council looks forward to working with DfI in the development of the plan over the coming years.</p>	<p>The Department welcomes the Councils ongoing commitment to the development of the Plan.</p>
<p>Council recognises the multi-agency partnership working already in place to respond to and mitigate against flooding across the District and is committed to continuing our involvement in this partnership. It is important to acknowledge that, while outside the general remit of the Plan, the district has the unique challenges of fluvial risk in Omagh and lake based flooding in Fermanagh.</p>	<p>The Department note the comment in relation to the challenges in Omagh and Fermanagh.</p>
<p>Council calls for an urgent review of the Fermanagh Flooding Taskforce Report in conjunction with all those affected by its recommendations. On Page 49 of the Report, the Taskforce noted that Fermanagh was part of the NW River Basin District (RBD) and that a Flood Risk Management Plan would be developed for the entire RBD, involving Cross-Border collaboration. Neither the Plan, nor any associated actions, have ever come to fruition. Flooding in Boho can occur up to 10 times every year and impacts residents and businesses alike. The Agricultural sector was particularly impacted last year through flooding affecting silage and after grass.</p>	<p>The Department notes your comments in relation to the Fermanagh Flooding Taskforce Report and can advise that the recommendations of this report have been completed. It should be noted that through the work of the Regional Community Resilience Group (RCRG) a community group has been established in the Upper Lough Erne area including residents in the Boho area. The RCRG, a multi-agency partnership, works with local communities at risk of flooding and provides information on weather warnings, river level data, as well as information on household and community plans. As part of an RCRG Education Sub-Group, chaired by the Education Authority, work has been progressing in relation to the development of a resilience pack to be rolled out through the education sector. Whilst this work had been progressing significantly, the Covid pandemic has reduced further progress in this area at present. A further RCRG Farming Sub-Group, chaired by DAERA, is also considering best practice in liaising with farming communities in flood risk areas. In the meantime the Department continues to carry out routine watercourse maintenance on all the designated watercourses in the Boho area and wider Fermanagh area to reduce flood risk to life and property.</p>

Mid and East Antrim Borough Council	<p>The measure on 'Influencing planning policy for development and flood risk' (e.g. page 157) is for DfI Rivers to work with the Council to update flood risk policy in the LDP in 2022. The planned timing of this is unfortunate as Council have already drafted their LDP draft Plan Strategy (dPS) flood risk policies in 2019 in conjunction with DfI Rivers. This dPS will only be going through Independent Examination in late 2021 and likely adopted in early 2022. It would be very unhelpful for the flood risk policies to then be planned for updating just as they have finally been adopted.</p>	<p>The Department notes the comment in relation to the Local Development Plan. DfI Rivers and Mid and East Antrim Borough Council have been working closely through the LDP process and while this will continue it is not envisaged this work will be revisited. The text in the Plan has been amended to clarify this.</p>
	<p>With regard to the measure "NI Water will produce (by 31 March 2027) an enhanced DAP (Drainage Area Plan) for the APSFR areas of Ballymena, Carrickfergus and Larne setting out actions to mitigate integrated flooding issues". Council welcomes this measure particularly as surface water or Pluvial flooding has been predicted as the highest risk across all these areas Council would ask that consideration be given to the timescales being revisited for this work in order to reflect the risk.</p>	<p>Timescales for this work have been reviewed and programme is brought forward, text now reads '<i>Commencement in April 2022 with a 2 year programme. Output will be better understanding of NI Water storm capacity and opportunities for storm water separation</i>'.</p>
	<p>Larne Chapter 5 - 5.6 Page 157 This table outlines what action will be undertaken as part of Cycle 2 (2021-2030). Compare to other areas which will not experience a 1% (1 in 100) flood event from tidal surges, proposed measures for Flood Risk Management Plan cycle 2021-2027 are very light, with no mention of Protection or Preparedness.</p>	<p>The Department notes the comment in relation Protection and Preparedness Measures. The NIFRA 2018 has identified the predominant flood risk in Larne is from surface water flooding. This source of flooding is being further considered via the Enhanced Drainage Area Plan Measure. Whilst there are no specific RCRG groups established in Larne, there are resources located within the area to facilitate an early response to a flood event.</p>
	<p>Preparedness measures are in place through the community resilience work of RCRG and/or Council in areas such as Carnlough where a sandbag store is available for local residents. Carnlough and Glenarm have both experienced recent flooding events. Council will continue to work with RCRG to progress community engagement as necessary and appropriate to increase community resilience to flooding.</p>	<p>The Department notes the comment and is aware of the ongoing RCRG work in the council area. The Department is committed to supporting this work, during this FRMP cycle.</p>
	<p>Page 156 para 5.6.6.1 states 'DfI Rivers will advise against bringing forward sites or the zoning of new land in the LDP that has been identified from the flood maps as being within the 1% AEP (1 in 100 YEAR) fluvial floodplain, 0.5% (1 in 200 year) tidal floodplain/reservoir inundation area, or is susceptible to surface water flooding'. (also repeated on Pages 238 and 255) This statement appears more strict than current planning policy which permits exceptions and assessment of development proposals (supported by either flood risk assessments, drainage assessments or reservoir safety reports) in</p>	<p>The Department notes your Comment and would advise that it is not the intention of DfI Rivers to oppose taking forward exceptions, as currently outlined in the SPPS and PPS 15 (revised), into the proposed LDP. The additional text, detailed below, has been added to the FRMP to clarify this. <i>'In the determination of planning applications any proposed development within a flood risk area will either be advised against or will</i></p>

<p>each of these cases. There are also a number of existing zoned lands which wouldn't meet this test so in some cases large sites and potentially significant parts of the Borough's 3 main settlements would need to be considered for de-zoning in the new LDP because of surface water flooding or reservoir inundation. Council would suggest that in preparing the local policies plan working in conjunction with DFI Rivers to formulate key site requirements which could be considered instead on affected zoned sites. Some of which are existing industrial sites etc. to require assessments/reports be submitted for the particular type of flood risk/ development? (although it is likely these flood predictions will change throughout the lifetime of the plan).</p>	<p><i>be further considered if it meets one of the 'Exception' rules and is accompanied by a suitable Flood Risk/Drainage Assessment'.</i></p>
<p>Page 156 para 5.6.7.1.1. refers to outdated timeframes for Council LDP. Needs to be amended to reflect updated LDP Timetable. (also repeated on pages 239 and 257)</p>	<p>The Department notes the comment in relation to the Local Development Plan process and the text had been amended to reflect the most recent timetable.</p>
<p>Carrickfergus Chapter 5 - 5.11 Page 239 para 5.1.1.7.1.1 refers to current planning guidance and policy for Carrickfergus being set out in BMAP. This would need changed to Carrickfergus Area Plan and draft BMAP (2004).</p>	<p>The Department notes the comment and the text had been amended as suggested.</p>
<p>Page 240 - Although the modelling used for NIFRA 2018 did not indicate any significant tidal flood damages for Carrickfergus, there is historic evidence of localised tidal flooding at the A2 Marine Highway and of coastal property to the west of Carrickfergus marina, but outside the APSFR. A small number of residential properties and roads have suffered flood damage (e.g. in January 2014 and January 2020), when wave overtopping of the sea walls occurred due to tidal surge and spring tide conditions combining with southerly winds. Flooding due to tidal surge, heavy rain and wind direction has impacted on a number of residential properties in the Rhanbuoy Park area. Tidal hazard mapping at a 0.5 %AEP (1 in 200 year) extent shows this localized area of Carrickfergus to be at risk but as mentioned in 5.11.5.1 above, detailed risk mapping has not been done for this localised area but may be considered in any future review of tidal mapping for NI. As climate change proposes an increase in sea level and increase in verbosity of storms and therefore tidal action, it would be prudent to undertake detailed risk mapping for this area of the coastline, to protect properties and businesses in the local area.</p>	<p>The Department notes your comment and would advise that as part of ongoing coastal model and mapping update work, consideration is being given to the potential impacts of including of wave overtopping within the coastal flood maps. Carrickfergus is one of the locations under consideration for inclusion in this work.</p>
<p>Page 241 – Preparedness - There have been no specific flood risk management activities under the preparedness category for Carrickfergus in terms of resilience, engagement and emergency planning. As mentioned in the paragraph above a community engagement process has commenced with the residents of Rhanbuoy Park supported by RCRG members including Council. Sandbag bunkers have been provided for community use. Council will</p>	<p>The Department notes the ongoing process to establish a RCRG community at Rhanbuoy Park. Table at 5.11-4 has been amended to reflect this additional layer of preparedness.</p>

<p>continue to work with RCRG to progress community engagement as necessary and appropriate to increase community resilience to flooding.</p>	
<p>Ballymena Chapter 5 - 5.12 - Page 257 Preparedness - point 5.12.7.3 "The measure to establish a community resilience group in the area of Ballykeel has been partially achieved; two local areas were identified, and one has been established. The Leighinmohr Avenue/Phoenix Fields area group was established in 2015/16 and is ongoing and the Ballymoney Road area group is yet to be established and is programmed for 2020/21."Can the reference to Ballykeel be removed. Also "Leighinmohr Avenue/Phoenix Fields" should read Toome Road, Ballymena.</p>	<p>The Department notes your comments in relation to community resilience in the Ballymena area. Paragraph at 5.12.7.3 has been amended to read as follows: <i>'The measure to establish community resilience groups in a number of areas of Ballymena has been partially achieved; two local areas were identified, and one has been established. A group in the Toome Road area, including Leighinmohr Avenue and Phoenix Fields, was established in 2015/16. The establishment of a further group in the Ballymoney Road area is currently being considered and will be progressed in 2021/22. Other community engagement under the RCRG programme in the vicinity of Ballymena has been undertaken in the villages of Ahoghill and Broughshane.'</i></p>
<p>Page 257 5.12.7.1.1 Planning Policy refers to replacing 'the Plans for Ballymena'. This should be amended to read as 'Plans for the Borough' as per the wording used in similar paras on pages 156 and 239)</p>	<p>The Department notes the comment and the text had been amended as suggested.</p>
<p>Page 259 Preparedness line in table – Can this be changed to read "The RCRG will continue to support the Community Resilience Groups at Toome Road, Ballymena, Ahoghill and Broughshane and progress engagement with further local community groups, as appropriate, to increase community resilience to flooding"</p>	<p>The Department notes your comments in relation to community resilience in the Ballymena area. The table on page 259 has been amended as follows: <i>'The RCRG will continue to support the Community Resilience Groups at Toome Road Ballymena, Ahoghill and Broughshane and progress engagement with further local community groups, as appropriate, to increase community resilience to flooding'</i>.</p>
<p>None should have priority over another. Although Prevention through Planning Policy is key. Even with that being fully adhered to, flooding events will still happen which will require the Protection and Preparedness elements.</p>	<p>The Department notes your comment in relation to the measures being of equal importance.</p>
<p>No Protection or Preparedness measures are suggested for Larne, and no Preparedness measures for Carrickfergus, even though both these towns arguably have potentially significant flood risk elements which are still largely unknown to the local public. See above for detail.</p>	<p>The Department notes the comment in relation Protection and Preparedness Measures. The NIFRA 2018 has identified the predominant flood risk in Larne is from surface water flooding. This source of flooding is being further considered via the Enhanced Drainage Area Plan Measure.</p>
<p>Mid and East Antrim Borough Council has worked closely with the RCRG since its inception facilitating and supporting local Community Resilience Groups across the Borough. Council officers are also involved in and support the RCRG awareness raising campaigns around being prepared for flooding and acknowledge this as a vital tool in the preparedness work.</p>	<p>The Department notes the comment in relation to the Councils close working with RCRG.</p>

	<p>Council also plays a key role in supporting the management of flood risk through membership of the Civil Contingencies Multi Agency Preparedness Structures across all areas of prevention, protection and preparedness.</p>	<p>The Department notes the comment and welcomes the Councils ongoing support in this area.</p>
	<p>Considering the objectives set out in 4.1 of the plan Council welcomes the breadth and scope of the plan and recognises that while close working relationships already exist there are areas where further co-ordination and support could be achieved. Particularly around Community Resilience and also in Community Planning and Community Development</p>	<p>The Department notes the comment and welcomes the Councils support for the Plan.</p>
	<p>The Council has included a new policy in the dPS on Sustainable Drainage systems to help contribute to a reduction in stormwater entering the combined sewer network or our rivers. The community can buy in to sustainable drainage in some way even on the smallest of proposed developments. Knowledge of what SuDS are suitable for the geology within the APSFRs would be useful from a competent central government/regulatory body.</p>	<p>The Department welcomes the inclusion of SuDS in the Council dPS. The Department also understands and recognises the need for a clear SuDS policy, and this is reflected in the Regional Measures within the Plan. The progression of these measures and development of SuDS policy will require ongoing engagement with local councils and other stakeholders.</p>
	<p>Council recognises the cross agency multi sectoral work already in place to mitigate and prevent flooding across the Borough and would be keen to continue with this partnership approach.</p>	<p>The Department notes the comment and welcomes the Councils ongoing support in this area.</p>
Watertight	<p>Flood Control NI, trading as Watertight, is based in Bangor, Co. Down, and provides smart flood protection and project management as a framework provider delivering Property Flood Resilience (PFR) on behalf of the UK Environment Agency and local authorities in England. We have also delivered a PFR project on behalf of the Office of Public Works in the Republic of Ireland, and our experience across the jurisdictions gives us a strong insight into best practice to make properties resilient to flooding. Our solutions are individually designed to reflect the person, the property, and the flood risk, reflecting the unique characteristic of each of these important factors. We then develop a bespoke solution that takes these factors into consideration to mitigate against the impacts of the flood risk and engage with the homeowners or business to install and advise on maintenance and upkeep, which is key to securing the long-term benefits.</p> <p>We believe that by empowering communities with the tools to equip them to take proactive steps against flooding, informed by their circumstance, homes and businesses will become more resilient to the effects of flooding, minimising damage, and reducing the time, cost, and emotional impact of the flooding event on their property</p>	<p>The Department notes the background information on Watertight.</p>
	<p>We welcome the methodology being used within the draft Plan and welcome the updated advances in flood mapping technology. We further welcome that</p>	<p>The Department welcomes your agreement with the methodology.</p>

<p>the new methodology highlights the flood hazards and risks from rivers, the sea and surface water, and sets out how the relevant authorities will work together and with local communities to manage flood risk.</p>	
<p>To fully protect communities from the risk of flooding, we believe there should be consideration given within the plan for the introduction of Property Flood Resilience (PFR) to be provided to local communities, especially those at risk of flooding which will not be able to benefit fully from large scale infrastructure projects</p>	<p>The Department notes your comment and recognises the benefits of Property Flood Resilience (PFR) as a measure in reducing Flood risk. The Department currently operates a grant scheme for Property Level Flood Protection in Northern Ireland. An evaluation of the scheme has demonstrated both the need for and the benefit of Property Level Flood Protection measures. The Homeowner Flood Protection Grant Scheme has been included as a Regional Measure within the FRMP.</p>
<p>Yes. We understand and agree with the objectives as described within the draft Plan. We welcome the recognition of prevention, protection, and preparedness. These are key strands we believe should be embedded within each community to allow them to mitigate against flood risks.</p>	<p>The Department welcomes your agreement with the Objectives.</p>
<p>Whilst engineered flood defences, flood warnings and upper catchment measures can make an improvement, it is essential for resilience to be built into individual properties. PFR includes any measures to reduce the risks to people and property enabling households and businesses to reduce flood damage, speed up recovery, reoccupation of flooded buildings and potentially obtain insurance cover more easily and affordably.</p>	<p>The Department note your comment in relation to the benefits of PFR.</p>
<p>PFR includes resistance measures (e.g., barriers and doors) to keep water out of a property and recoverability measures, specifically measures, products and construction methods that reduce the damage caused if water does enter a building to allow it to recover quickly after a flood.</p>	<p>The Department note your comment in relation to the benefits of PFR.</p>
<p>PFR can be implemented at various stages in the life of a property: at design (new build); renew (planned works); refit (as part of refurbishment); recovery (after a flood event, claim); invest (with the right knowledge and advice)</p>	<p>The Department note your comment in relation to the benefits of PFR.</p>
<p>Resilience is the ability to recover quickly from events, and key to building a resilient approach is equipping people, communities, and businesses with the tools to minimise disruption that a flooding episode can cause to their lives.</p>	<p>The Department note your comment in relation to the benefits of PFR.</p>
<p>It is also important that any investment in resilience measures is maximised and maintained over the product/asset lifetime, providing the necessary solutions to ensure properties, people and communities are protected, and that the EA can have confidence that their interventions generate long-term positive outcomes.</p>	<p>The Department note your comment in relation to maintenance of PFR.</p>

<p>We welcome the social, economic, and environmental objectives outlined within the Plan. The outlined objectives on the economic support are to be welcomed, however, we would urge for the Department to investigate further the positive learnings which have been developed by the Environment Agency on the use of PFR. The deployment of PFR can allow for homes and businesses to become habitable or operational for business within several days rather than the typical weeks or months.</p>	<p>The Department notes your comment and will consider the points raised in relation to PFR as part of the Homeowner Flood Protection Grant Scheme.</p>
<p>There should be consideration given to the use of PFR within the plan, to support those areas at highest risk of flood, along with the measures outlined within the Plan.</p>	<p>The Department notes your comment and recognises the benefits of Property Flood Resilience (PFR) as a measure in reducing Flood risk. The Department currently operates a grant scheme for Property Level Flood Protection in Northern Ireland. An evaluation of the scheme has demonstrated both the need for and the benefit of Property Level Flood Protection measures. The Homeowner Flood Protection Grant Scheme has been included as a Regional Measure within the FRMP.</p>
<p>As outlined previously, there should be consideration given to PFR within the Plan, which will support the developments within a local community to reduce flood risk.</p>	<p>The Department notes your comment and recognises the benefits of Property Flood Resilience (PFR) as a measure in reducing Flood risk. The Department currently operates a grant scheme for Property Level Flood Protection in Northern Ireland. An evaluation of the scheme has demonstrated both the need for and the benefit of Property Level Flood Protection measures. The Homeowner Flood Protection Grant Scheme has been included as a Regional Measure within the FRMP.</p>
<p>The starting point must be to understand what level of resilience is currently in the property, both resistance and recoverability measures, to receive the discount and once recorded this needs to be checked annually and therefore we welcome the proposal from Flood Re to develop a database of properties which have installed PFR. This will be a benefit to homes which are unable to access community level flood defences, in situations where they are unaffordable or unsuitable. In this situation PFR provides the best solution for homes which may be under threat of flooding. This database should be refreshed on a regular basis to take account for any changes in properties within areas liable to flood.</p>	<p>The FloodRE insurance scheme operates within Northern Ireland and therefore any developments in this area will also apply here. In addition, the Department holds records of PFR measures installed as part of the Homeowner Flood Protection Grant Scheme.</p>
<p>There should be a process of engagement between the Department for Infrastructure and the Environment Agency on the benefits of introducing PFR for businesses and homeowners in areas affected by flood risks.</p>	<p>DfI already has established links with the Environment Agency, and others, through membership of a number of working groups and will continue to engage on areas of mutual benefit, including PFR.</p>
<p>The Department should also engage with FloodRe on their plans for Build Back Better, which was recently consulted upon. The proposal from Flood Re to offer Build Back Better to policies ceded to the scheme, to ensure that</p>	<p>The Department notes your comments in relation to FloodRE and is aware of the proposals to include Build Back Better as an element of its policies, through our ongoing engagement with Defra in relation to this matters.</p>

	properties which have been affected by flooding will be able to avail of PFR to ensure their homes will be more flood resilient in the future.	
	There is a need for a joined-up approach to the delivery of flood protection within government departments at the Northern Ireland Assembly, to ensure we live and work sustainably. This will should include the development of PFR measures in areas of flood risk.	The Department notes your comment and recognises the benefits of Property Flood Resilience (PFR) as a measure in reducing Flood risk. The Department currently operates a grant scheme for Property Level Flood Protection in Northern Ireland. An evaluation of the scheme has demonstrated both the need for and the benefit of Property Level Flood Protection measures. The Homeowner Flood Protection Grant Scheme has been included as a Regional Measure within the FRMP.
	We would also welcome a commitment to developing community-based solutions, engaging with those at risk of flooding and future proofing their homes to make them more resilient to flooding, and importantly, to ensure effective spend of government money. Further, we would also welcome Government to increase volume of PFR schemes in line with recommendations from Committee on Climate Change, and the development of a Flooding Compliance Platform to provide certainty and return on investment for government, and peace of mind for householders. This work will create a legacy of steady, long-term returns.	The Department notes your comment and recognises the benefits of PFR as a measure in managing flood risk. The Department currently operates a grant scheme for Property Level Flood Protection in Northern Ireland and awareness of this scheme is raised by RCRG through its communications with communities at risk.
	Finally, the Environment Agency framework for PFR has been highly successful in securing support for those properties which are most at risk of flooding. This framework has been developed for implementation across each of the devolved regions, and the Department for Infrastructure should give consideration to it being introduced for use in Northern Ireland.	The Department notes your comment and will consider the points raised in relation to PFR as part of the Homeowner Flood Protection Grant Scheme.
	We would be happy to provide more information on any of the proposals mentioned above, please contact adam@Stratagem-ni.com should you wish to engage further	The Department notes your comment.
Belfast City Council	Welcome the consideration of the impact of Climate Change for the main sources of flooding and the measures to support the objectives of the Water Framework Directive and contribute to the achievement of good ecological potential/status for waterbodies. However consideration of other Directives such as the Habitats and Birds Directives and environmental opportunities should be taken for example habitat creation or restoration or opportunities to address environmental pressures such as IAS. This is an opportunity to address both climate and biodiversity issues.	The Department notes the comments on Climate Change and the Water Framework Directive, and welcomes the Council's support for the various elements of the Plan. While undertaking the Measures detailed within the Plan the Departments will give due consideration to other Directives and environmental / biodiversity enhancement opportunities, where these are linked to flood risk management activities. The progression of standalone projects to address environmental pressures is considered to be outside the scope of this Flood Risk Management Plan.

<p>Whilst the inclusion of the general objective To protect and enhance the natural environment and cultural heritage is welcome without specific actions and measures there is likely to be limited benefits achieved.</p>	<p>The Department notes the comments in relation to the objective to protect and enhance the natural environment and cultural heritage. Both the specific APSFR Measures and the more general Regional Measures within the Plan are intended to contribute to the achievement of these objectives. Because of the level at which this Plan is set, it is not yet specific about how each measure will contribute to the environment or biodiversity. This will be scoped out and addressed at a measure level in the course of development and implementation.</p>
<p>Welcome the inclusion of the opportunity for Natural Flood Management but this needs to be carefully planned collaboratively across stakeholders and adequately resourced.</p>	<p>The Department notes your comments in relation to Natural Flood Management.</p>
<p>Belfast City Council welcomes the opportunity to respond to this strategic consultation, the Draft Flood Risk Management Plan. Long term investment in Flood Risk Management is required to meet the ambition for growth of the City and to alleviate the impacts of climate change.</p>	<p>The Department notes the comments.</p>
<p>We support the adoption of an approach to the provision of Flood Risk Management which promotes holistic and integrated solutions that achieve multiple benefits at reduced cost and disruption. Whilst it is recognised that significant investment will be required in more traditional 'hard engineered' infrastructure we welcome the acknowledged contribution that other sustainable measures such as Green & Blue Infrastructure and Sustainable Drainage Systems (SuDS) can deliver. This sustainable approach is supported by both the Local Development Plan (LDP) as set out in the Draft Plan Strategy vision, aims, objectives and policies as well as in the council's Green and Blue Infrastructure Plan, and the Belfast Resilience Strategy.</p>	<p>The Department notes the comments and welcomes the Councils support for the various elements of the Plan.</p>
<p>We welcome the work undertaken to date to address Flood Risk and call for a coordinated, collaborative approach, working with Council where appropriate to ensure a balance between the social, economic and environmental needs of Belfast. Human health should be the foremost priority however we welcome the focus on economic and environmental objectives and the desire to have a balanced approach.</p>	<p>The Department notes the comments and recognises the benefits of a coordinated and collaborative approach to flood risk management.</p>
<p>Under the Environment and Culture objective we support the commitment that the Climate Change flood hazard maps will be updated to take account of the latest IPCC assessment from 2018 (UKCP18) rather than relying on the 2009 data. This is positive given that UKCP18 predicts higher increases in Sea Level Rise than the earlier UKCP09 as the UKCP18 takes into account the potential polar ice sheet melting. The latest CCC advice, is that the UK needs to adapt to a minimum average global temperature rise of between 1.5 and</p>	<p>The Department notes your comments in relation to Climate Change and welcomes your support for the proposed Measure. We have considered the Council's proposal in relation to the strengthening of the Climate Change Objective and have revised Objective 8 in line with this suggestion. The revised Objective is: <i>'To consider and prepare for the impacts of Climate Change for the main sources of flooding'</i>. This revision has been included in the final Plan. The Department recognises</p>

<p>2°C for the period 2050 – 2100 and consider the risks up to a 4°C warming scenario. In addition, the objective “to consider the impact of Climate Change for the main sources of flooding” could be strengthened “to consider and prepare for the impact of Climate Change for the main sources of flooding. Given the impact and costs associated with localised surface water flooding in Belfast, it may be beneficial to include an explicit objective (under Economic Activity) “to promote the use of sustainable drainage systems to reduce surface water runoff and help reduce pressure on existing drainage network” although it is noted that these measures are included in the measures elsewhere in the report. The report highlights the opportunity to use natural flood management upstream of flood risk areas to hold water back. As well as the benefits, in terms of flood risk, Climate Change adaptation, water quality and Biodiversity, it would also be useful to include the potential for these measures to contribute to carbon sequestration (p37). This is important as it has implications for reducing the costs associated with NI achieving a net zero target. In this respect, the document could include a higher level of ambition by including an objective (under Environment and Cultural Heritage) “to restore naturally functioning wetland and river systems where possible”.</p>	<p>the benefits that can be achieved through the appropriate use of sustainable drainage systems and considers that is adequately reflected in the Plan Measures. It is also recognised that natural flood management schemes may also deliver additional benefits, including in some cases carbon sequestration. However, given the strategic nature of this Plan it is not known if this is a benefit that could be achieved at this stage.</p>
<p>Yes there has been significant engagement with the Living with Water Programme by Belfast City Council and we anticipate playing a major role in the strategic development, local planning, and operational delivery aspects of the programme. We support the plans for flood alleviation measures and use of SUDS and sustainable drainage interventions in areas most at risk and where water can be better managed to prevent flooding in and around Belfast. It must also be noted that until the LWWP is fully implemented, existing partnership engagement remains critical to plan, respond and recover from the flooding risks which are faced by the City. Such linkages include for example Belfast City Council’s Emergency Plan, Belfast Emergency Preparedness Group (Multi-agency Partners) and the Regional Community Resilience Group (Multi-agency Group focused on promoting and supporting resilient communities).</p>	<p>The Department notes the comment and acknowledges the important role that Belfast City and other councils play both during flood emergencies and in the aftermath, during the recovery phase.</p>
<p>The risks posed to Belfast from tidal inundation, particularly in the City Centre are sobering – Belfast Tidal Flood Alleviation Scheme with 8.6km of new flood defences seeks to address this, however the scheme is complex with lots of engagement with different land owners required. This is taking longer to deliver than initially envisaged. This is only one scheme, so in order to implement the LWWP and integrated plan huge emphasis must be placed on delivering a collaborative approach by all partner agencies. In addition we encourage the Flood Risk Management Plan to include costed proposals and identify sources of finance and investment where possible.</p>	<p>The Department notes the comment and recognises the benefits of partnership and collaborative working, it is hoped that the progression of the Living With Water Programme will be an opportunity to see this being taken forward. The Department also notes your comment in relation to finance and would advise that the FRMP is strategic in nature and while we intend to include cost estimated where these are available, it does not necessarily include individual costs of every proposed measure. The Plan includes high level annual financial information in Chapter 6, however, detailed cost benefit considerations and analysis</p>

		will only be carried out during the feasibility and detailed design stage for the specific measures.
	Under flood prevention we propose a separate measure in relation to community engagement and involvement on how their actions can help reduce surface water management and alleviate flooding such as rainwater harvesting, green roofs, rain gardens etc. but also in terms of land management.	The Department notes the comment and recognises the benefit of education and ongoing public awareness. Where opportunities arise DfI will work with stakeholders and communities to reinforce this message through RCRG engagement and through specific projects such as the Living with Water Programme.
	Welcome the inclusion of SuDS but the adoption and future management of SuDS specifically soft SuDS needs to be addressed. The LWWP identified Green spaces principally BCC land for flood attenuation measures but this needs to be carefully designed, consulted upon and resourced. Belfast City Council strongly emphasise the need for more soft suds in urban spaces including where multiple land owners exist.	The Department notes your comments and would advise it recognises and understands the need for a clear SuDS policy, and this is reflected in the Regional Measures within the Plan. The progression of these measures and development of SuDS policy will require ongoing engagement with local councils and other stakeholders. The Storm water Management Group plays a key role in the progression of SuDS policy. The Plan also includes the Living With Water Programme which will promote schemes and concepts to manage water in an integrated way across its catchment to mitigate flood risk. This will include Natural Flood Management, attenuation and SuDS, along with integration of blue/green infrastructure to public open spaces.
	Agree with the flood alleviation measures being divided into three main areas of prevention, protection and preparedness for Belfast as an Area at Potential Significant Flood Risk. The Department is encouraged to be mindful of work being delivered by Belfast City Council and partnership agencies implementing the Belfast Agenda. A number of these projects are multiple problem solvers which, with a collaborative approach can help mitigate against flooding as identified within the Area at Potential Significant Flood Risk as well as other problems. This draft document broadly aligns with the SPPS (Strategic Planning Policy Statement) and PPS15 (Planning Policy Statement) in terms of Planning but goes further to specifically recognise the multiple benefits of SuDS (Sustainable Urban Drainage Solutions) relating to surface water flooding.	The Department welcomes your agreement to the division of measures into the areas of prevention, protection and preparedness and notes your comment in relation to the Belfast Agenda. In undertaking the measures included in this Plan the Department recognised the aspirations of the Council's Belfast Agenda and understands that flood risk management measures can have multiple benefits, including improvement to community health, wellbeing and environmental enhancement.
	Specifically under 5.1.7.3 Preparedness suggest the wording around community resilience 'this is on hold as flooding has not been experienced in a number of years' is reviewed to reflect that community resilience is continuously reviewed and maintained via the Regional Community Resilience Group. Whilst the demand from communities at risk of flooding does fluctuate based on recent events RCRG members continue to engage and support community resilience recognising the valuable role it plays in education and awareness alongside increased community cohesion.	The Department notes the comments and have amended this section as follows: <i>'and although community resilience has not progressed in other areas as detailed in the first cycle FRMP, this is continually reviewed and prioritised by the RCRG. This ensures that those communities most at risk and affected by recent events are supported as appropriate.'</i>

	<p>Under flood preparedness a separate measure is suggested in relation to the broader education of the public. This could include education of all ages (including children) in relation to the hazards from flood water, how their actions can cause flooding in their area or in other areas e.g. paving their driveways and also the potential ways to help themselves such as individual property protection, having their own emergency plan and knowing whether or not they are at risk.</p>	<p>The Department notes the comment and recognises the benefit of education and ongoing public awareness. Where opportunities arise DfI will work with stakeholders and communities to continue this work both through the Education Sub-Group of RCRG and specific projects such as the Living with Water Programme.</p>
	<p>The Council would note that many of the proposed measures within the consultation impact on Council assets and will require significant collaboration. Council support the ongoing flood alleviation measures and recommend these be reviewed on an ongoing basis to take into consideration new research and projections relating to the impact of the climate emergency. Belfast City Council has worked with a wide range of partners to develop the Belfast Resilience Strategy and structures in the city to address Climate such as the Belfast Climate Commission and the Belfast Resilience and Sustainability Board. We recommend engagement with these bodies as the Flood Risk Management Programme progresses. The Council is working closely with the Department on a number of pilot projects within the Living with Water Programme, and will be playing a key role in terms of delivery moving forwards. For projects to be successful the Council urges that these need to be co-designed with early input from specialists and planned with partners and stakeholders taking account the following important areas:</p> <ul style="list-style-type: none"> • Meaningful engagement with local communities including park users, local residents and stakeholders e.g. sports clubs; • Understand current site usage, feasibility and commerciality; • Open space typology, functionality and ensuring a balance of local needs; • Existing natural environment including current ecosystem services benefits and constraints such as Invasive Alien Species (IAS); • Current and future management and maintenance requirements and costs. Depending on proposals this could include the need for new machinery, additional staff resources and management of increased invasive species; and • Early ecological input is required to maximise opportunities. We encourage the implementation of natural flood management (NFM) that protects, restores and mimics the natural functioning of rivers and the coastal ecosystems. 	<p>The Department notes and welcomes the comments in relation to collaboration and partnership working, and the Council's support for ongoing flood alleviation measures. The Department will continue to engage with the Council and others both through its work on the Living With Water Programme and other specific Measures to ensure successful holistic projects are delivered. The Department has a successful past record of collaboration with the Council e.g. Connswater Community Greenway / E. Belfast Flood Alleviation Scheme and looks forward to working with the Council on other collaborative projects which would yield multiple benefits.</p>

<p>Belfast has a paucity of open water and many rivers and streams have been partially or almost fully culverted. The use of NFM will enable the restoration and creation of riverine and coastal habitats which are key priorities to address biodiversity loss. The LWWP and integrated plan provides a major opportunity to address broader environmental issues but most especially a unique opportunity to contribute to nature recovery in Belfast.</p>	<p>The Department notes your comments and it is hoped that the progression of the Living With Water Programme will be a unique opportunity to contribute to nature recovery in Belfast.</p>
<p>Belfast City Council leads on a number of key enabling strategies and initiatives in the city, including the Belfast Agenda, Belfast Resilience Strategy, and the Bolder Vision (in partnership with DFI and DFC). Belfast City Council is responsible for the Local Development Plan and for managing planning applications and development within the city. As such Council is a key partner and will work with relevant partners to ensure Flood Risk is managed effectively through our existing and emerging strategic frameworks.</p>	<p>The Department notes the comment and acknowledges the important role the Council plays along with its support for the management of flood risk.</p>
<p>Belfast City Council has a role to support other responding agencies in dealing with flood emergencies when its residents are directly affected including the coordination of recovery. The Council would seek to provide its resources such as buildings, staff, expertise and equipment to assist where possible. BCC continues to administer the Scheme of the Emergency Financial Assistance on behalf of the Department for Communities for homes that have been 'severely inconvenienced' by flooding.</p>	<p>The Department notes the comment and acknowledges the important role that councils play both during flood emergencies and in the aftermath, during the recovery phase.</p>
<p>The Council is also a key partner in engaging with local communities to enhance their preparedness. It raises awareness across the city with a number of community resilience groups established in flooding hot spots. The work is coordinated via the Regional Community Resilience Group.</p>	<p>The Department notes the comment in relation to the Council's close working relationship within RCRG and the contribution towards the measures set in the Plan.</p>
<p>Belfast City Council (BCC) launched a Green and Blue Infrastructure Plan (GBIP) for Belfast in 2020 which outlines how vegetated areas (the green) and waterways (the blue) can provide a broad range of economic, social and environmental benefits in and around our more urban areas. The GBIP recognises that these natural and semi-natural assets are increasingly seen as 'infrastructure' and like any type of infrastructure, these assets will only continue to provide us with benefits if we actively plan, invest in and manage them to ensure that they are utilised sustainably. To do this, it sets a vision that by 2035, green and blue infrastructure will be strategically planned to enhance ecosystem services that benefit everyone visiting, living and working in Belfast. This now provides a solid foundation for progressing the Living With Water Programme approach across the plan area. Furthermore, there are obvious community cohesion and wellbeing benefits to be derived from investing in the development and expansion of blue and green infrastructure</p>	<p>The Department acknowledges the Council's Green and Blue Infrastructure Plan (GBIP) for Belfast and looks forward to continuing to work with BCC in progressing the Living with Water Programme and through the implementation of this Plan.</p>

<p>that serve as greenways and open spaces; a catalyst for increased biodiversity, and more active and sustainable travel.</p>	
<p>The Council, working alongside key partners, has already demonstrated the success of taking such an approach in terms of the use of urban green areas to prevent flooding through the exemplar £40m Connswater Community Greenway project in the East of the city. East Belfast had a history of severe flooding. The 2007 flood was the largest on record with 340 flooded properties within the catchment of the Loop, Knock and Connswater rivers. Consequently, a number of at risk areas were identified where flood alleviation measures were necessary. In 2006 funding was secured from the Big Lottery's 'Living Landmarks Programme' to develop and build a 9km linear park scheme. It became apparent that construction work for the flood works and the park could be combined. Because both proposals involved works along the same river corridors there were many areas of overlap which allowed the project to be designed in such a way that it created both an enhanced urban asset and provided flood alleviation measures. This joined-up approach minimised disruption to local communities and businesses affected by the works and delivered better value for money. It also meant that the scheme provided 1,700 properties within East Belfast with the national standard of flood protection against fluvial and tidal events.</p>	<p>The Department acknowledges the Council's contribution to the success of the Connswater Community Greenway / E. Belfast Flood Alleviation Scheme and agrees that this project is an excellent model for future proposals.</p>
<p>The Council is already working closely with the Living with Water Programme on a number of projects across the city including pilot projects at Belfast Castle, Ballysillan Playing Fields and the new Forth Meadow Community Greenway project and would welcome the opportunity to work closely with relevant partners to identify other projects in the city which could present opportunities for joint working.</p>	<p>The Department welcomes the ongoing partnership working with the Council on the Living With Water Programme and looks forward to further opportunities for this to continue.</p>
<p>The Plan is Central and Local Government focussed however there is a major opportunity to engage and involve citizens and stakeholders through the management of private assets, buildings and land to reduce or slow surface water for example through rainwater harvesting, retention of natural areas in gardens, planting of hedgerows and trees, creation of open water, permeable paving, green roofs etc.</p>	<p>The Department would be open to discussion with the Council to determine how we could work together and with others to promote and encourage these natural flood management measures. The approaches mentioned are also advocated through Sustainable Water - A Long-Term Water Strategy for Northern Ireland (2015-2040).</p>
<p>Soil and land management is also key area to address including soil structure, soil compaction and supporting sustainable agricultural practices. These issues are not confined to rural areas and a collective approach across all stakeholders including business and private individuals is required within an urban context.</p>	<p>The Department notes your comment and while it is recognised that flooding and drought impacts on soil health, this Plan does not specifically address these impacts.</p>

	<p>Ensure Belfast City Council and relevant stakeholders are involved in the strategic development, local planning, operational delivery, monitoring and review of the programme. Engage with key structures including those within the Belfast Community Planning Partnership and in particular those which address the impact of the climate on the city.</p>	<p>The Department notes your comments and will continue to engage with the Council through the implementation of this Plan and in other plans and programmes which are of mutual interest.</p>
	<p>The risk of IAS (Invasive and Alien Species) should be considered and addressed within the Plan given the potential to exacerbate flooding and pollution issues in particular sedimentation which is a key issue across Belfast. Aquatic and riverine IAS are a major concern with significant environmental, economic and social repercussion across NI. Unfortunately this is an area which is under resourced and without mechanisms to enable a collaborative approach to address issues such as IAS along entire watercourses. A multi-agency collaborative approach is required with central government co-ordination and resourcing to address these complex issues.</p>	<p>The Department agrees that flooding has the potential to enable the movement of species, including invasive species, outside of their usual range; flood flow is also when movement of sediments can be greatest. However the Plan aims to prevent flooding and therefore has the potential to positively affect the spread of species in this manner and to reduce the transport of substrates. In addition DAERA have developed an Invasive Alien Species Strategy and Implementation Plan for Northern Ireland, and the Department is a partner in implementing this strategy.</p>
<p>British Red Cross</p>	<p>In general we agree with the methodology - assuming that this methodology is based on reliable and current information concerning climate change impacts.</p> <p>However, we had several observations. For instance, although different climate change scenarios were considered in the Flood Risk Management Plan (FRMP), there is a lack of detailed information about extreme events and changes in the frequency of recurrence time - or on whether the main source of flooding is likely to change in the long term.</p>	<p>The Department welcomes your agreement with the methodology.</p> <p>For the NIFRA 2018, with respect to Climate Change, one scenario - the 'medium probability' event, was considered for each of the 3 types of flooding; for fluvial this was the 1% AEP event; for Pluvial and Coastal, this was the 0.5% AEP event.</p> <p>It is recognised that as the climate may change, the frequency of extreme flood events may increase and also their intensity. Therefore if a flood of a particular magnitude may be expected at present to occur statistically once every 100 years, with climate change it may occur more frequently say, every 75 years.</p> <p>With regard to how the 3 main sources of flooding may change in a changing climate, it is currently perceived that storms which generate surface water flooding in Northern Ireland are becoming more prevalent and more intense. We have therefore included measures in the Plan to develop Drainage Area Plans for each of the APSFR with the intention of more in depth flood modelling of urban areas to better understand the effects of stormwater flooding and the ability of drainage systems to cope with extreme events. However, it is clear from the latest climate projections that Sea Level Rise will increase due to effects of temperature rise and melting of polar ice sheets. Therefore, the risk of coastal flooding may also become more of a problem in future.</p>

To illustrate, there does not appear to be information which indicates that climate change was considered with regard to measures to reduce pollution risk in flood prone areas, spatial planning, or land use measures. Also, we could not find reference to the consideration of climate change in economic instruments for the FRMP. In addition we could not find reference in the FRMP on the impact of climate change with regard to structural measures (e.g. raising defences in certain areas, larger wall foundations, culvert inspection, asset maintenance regimes and raising outfalls).

The Department fully acknowledges that when flooding happens, that is when significant pollution can occur whether by high flows transporting material into flood risk areas or by sewers and drainage systems overflowing etc. Climate Change will potentially make such flood events more frequent and more severe. However, we hope that through the Prevention, Protection and Preparedness measures included within this Flood Risk Management Plan, and by those organisations contributing to this Plan, we will be able to mitigate potential flooding within the Areas of Potential Significant Flood Risk thereby reducing the risk of polluting material being transported by floods to affect people, property and the environment. Some of the measures proposed in this Plan directly relate to the reduction of pollution e.g. NI Water's programme to reduce the number of properties affected by sewer flooding (DG5 programme) and also the proposed development of detailed Drainage Area Plans for all APSFRs included within the Plan. Precautionary Spatial Planning is key to the Prevention measures proposed in this Plan. The Department works closely with Planning authorities both departmental and in local councils, to ensure that flood risk and the effects of Climate Change are fully considered in Development Planning and Management here in N. Ireland. This robust planning policy has been happening for many years now and has been very effective. Key to these considerations are the Flood Maps (NI) produced by DfI Rivers and these include flood mapping for Climate Change. The Department's aims are to ensure inappropriate development does not take place within Flood Risk areas and that the stock of properties already at flood risk is not added to. Land use measures such as retention of run-off in a natural way either higher up catchments (Natural Flood Management) or through sustainable drainage are both included within measures in this Plan e.g. those of the Living With Water Programme, and also encouraged through policies being employed by stakeholders to reduce run-off from developments. The Department recognises the benefits of such methods and will seek opportunities to incorporate measures to naturalise catchments and to mitigate flood risk where opportunities may arise. Climate Change was not addressed in economic considerations within the Northern Ireland Flood Risk Assessment 2018 (NIFRA) which has defined the Areas of Potential Significant Flood Risk for which this Plan is legislatively required to be prepared. Climate Change is only considered for the 'Medium probability' scenario for each of the 3 main sources of flooding (1% AEP for Fluvial, 0.5% AEP for Coastal and

		<p>Surface water). Economic methods used during the NIFRA to generate Annual Average Damages require consideration of multiple probability scenarios. However, the effects of Climate Change have been modelled in relation to future mapped extents of flooding and additional number of properties and people which may become at risk in the future (2080s). This Flood Risk Management Plan is intended as an overarching Plan to set out proposals for mitigating risk in APSFRs. Climate Change is considered in more detail in design and construction of flood defences, maintenance of drainage assets and in the assessment of performance of existing assets and their effectiveness to protect property. Such matters are generally considered at a more operational level – within construction, asset management or maintenance plans and programmes.</p>
	<p>Generally, yes. As an observation we noted that objectives in relation to the reduction of economic losses included the cost of flood damage to the agricultural and livelihood sector; and these were not clearly stated mentioned in the 'Economic Activity' section.</p>	<p>The Department notes your comment and would clarify this point as follows. Agricultural flood damages are inherently much less than damages incurred by flooding in more densely populated areas. Therefore in the high level economic assessment undertaken for the NIFRA, to determine the APSFR and their extents, agricultural damages had little influence. Flooding of agricultural land is a natural process and one which can be beneficial to the land. Following the Second World War there was a programme of drainage schemes throughout the UK and Ireland to encourage agriculture and production of food. However, today the focus is on protecting urban areas and away from creating more farmland capable of food production. Today, flood alleviation schemes to protect agricultural land would be unlikely to be economically viable or environmentally acceptable. Indeed opportunities are now being sought to enable farmland to flood to protect urban areas lower down catchments and for biodiversity reasons.</p>
	<p>This is a complex area for further evaluation which we cannot provide a simple 'Yes' or 'No' response to. In our work we have identified a need for a careful balance of measures. The BRC AA Floods Team would highlight and encourage DFI to look more closely at the funds between hard flood defences and those allocated, and moreover the additional funds that would be needed, to prepare for and respond to floods. This would increase the amount of resource dedicated to Emergency Preparedness Groups (EPG's) and local councils, and bolster preparedness to respond to large-scale flooding that could easily overwhelm local capability.</p>	<p>The Department notes your comment and would advise that there is not necessarily conflict between 'capital allocation' that is used to fund Capital Works such as flood alleviation schemes and 'resource budget' from which funds may be allocated towards 'preparedness' activities. However in general, departmental 'resource budgets' are under greater funding pressures than capital budgets. The Department will continue to make the case for continued investment in activities associated with preparing for flood emergencies.</p>
	<p>In our work it has been noticed that an increasing responsibility has been placed on local authorities and EPG's at a time when there are significant</p>	<p>The Department will continue to engage with partner organisations and stakeholders involved in Civil Contingencies and Regional Community</p>

<p>constraints on resources (across the UK). In terms of financial resources, there is widespread concern about the impact of budget cuts and council tax freezes on the ability of local authorities and EPG's to deliver critical services and meet statutory functions. Community engagement is essential for enhancing risk awareness and ownership of risk responsibility at the local level. However, resource limitations can constrain the ability of local authorities and EPG's to deliver this essential work. Additional resources (financial, staffing and skills) are needed to support public engagement activities that are rooted in local concerns and thereby enhance sustainability.</p>	<p>Resilience Groups. This will include making the case for continued, and any additional, funding of these important areas.</p>
<p>Additionally, increased focus is needed on the effect of flooding on mental health. We believe that at a minimum multi-sectoral response plans to protect and improve people's mental health and psychosocial wellbeing in the midst of flooding emergency sitting is an important component to consider in any future version of FRMP's. For instance, there are different available toolkits that could be utilized including Psychosocial Support in Flooding Toolbox published by the British Red Cross, Danish Red Cross, ECHO and IFRC.</p>	<p>The Department notes your comments and would advise that one of the recommendations from the North West flooding review of August 2017 was in relation to Emotional Support and Wellbeing and how to identify and implement ways to further improve immediate and longer term psycho-social support for those affected in any future emergency in both the urban and rural communities. This work has been progressed by Department of Health (DoH), supported by BRC, with an initial meeting identifying the need for a NI Health and Wellbeing Framework. The Public Health Agency (PHA) have advised that a number of clear outcomes/actions have since happened with the development of an NI Psychological Wellbeing Framework (Toolkit), a Framework for supporting Emotional Health and Wellbeing following a Collective Trauma Event having been completed. Communication is ongoing with DoH on clarification on where this framework would sit and who would facilitate its implementation.</p> <p>In addition The Mental Health and Emotional Wellbeing (MHEWB) Surge Cell was formed in April 2020 as part of the wider Executive Cell response to COVID 19. The cell included representatives from DoH, PHA, Health and Social Care Board (HSCB), Health and Social Care Trusts (HSCTs), Primary Care and Community and Voluntary (C&V) partners. The aim was to ensure that the response to the psychological impact of the pandemic drew on and contributed to national and international clinical expertise and evidence-based practice and was consistent with guidance emerging from the UK four nations and Republic of Ireland. The PHA have also advised that as part of this work the Psychological First Aid online platform was launched June 2020 and since then over 20,000 people have completed the online course. Psychological first aid is a humane, simple, yet powerful way of helping someone in distress during and after a crisis like the COVID 19 pandemic. It involves paying attention to the person's reactions, active listening and if relevant, practical assistance to help address immediate</p>

		<p>problems and basic needs. Learning psychological first aid skills and understanding reactions to crises empowers helpers to help others and apply the same skills to their own lives. These resources are to support anyone who is working or volunteering with local statutory, community or voluntary communities at this time. It is also noted that the NI Mental Health Strategy was launched on 29th June 2021. Theme 1 deals with promoting mental wellbeing, resilience and good mental health across society and this aims to Increase public awareness of the distinction between mental wellbeing, mental ill health and mental illness, encouraging public understanding and acceptance of how life can impact upon mental wellbeing, and recognition of the signs of mental ill health and mental illness. Also to create an action plan for promoting mental health through early intervention and prevention, with year on year actions covering a whole life approach. Under theme 2, Providing the right support at the right time, the aim is to Embed psychological services into mainstream mental health services and ensure psychological therapies are available across all steps of care. The Department is fully supportive of this initiative and will continue to liaise with DoH and BRC through the EPGs and RCRG as necessary.</p>
	<p>Yes, however with a caveat. We would encourage increased co-ordination of more community resilience activities in the APSFR, and welcome moves to establish a risk-specific emergency flood standard to support local councils and Emergency Preparedness Groups, which would clearly outline statutory duties and good practice when responding to an emergency flooding incident. Greater clarity could be made on the question of who is ultimately accountable for resilience issues and outcomes.</p>	<p>The Department notes your comments in relation to community resilience. Through the work of RCRG, of which BRC is a key multi-agency partner, we will continue to develop consistent approaches to community engagement and development of Community Resilience activities across Northern Ireland. Work will also continue, on a multi-agency basis, to facilitate sufficient planning and preparation for adequate community response and recovery to cope with emergency incidents in pre-identified communities.</p>
	<p>We would offer advice for DfI to conduct and provide a wider review of such documentation and guidance if possible, as consolidation would help local councils and EPG's. Additionally, local councils and EPG's should have a clear understanding of how to access nationally and locally deployable assets, as well as better awareness of the technological capabilities available to aid flood events.</p>	<p>The Department notes your comments. The multi-agency response partners, through the EPGs and RCRG process, are able to share understanding in relation to flood response assets as well as information on warning and informing prior to and during flood events. It is felt that this is the most appropriate forum to share this type of information</p>
	<p>The British Red Cross Atlantic Area Floods Project team have also noticed the following: The quantitative measures were not used to assess targets; rather, distributive targets with no numerical measures were used.</p>	<p>The Department notes your comment and would advise that where possible, it has tried to include targets or indicators for measures proposed in the FRMP and how they relate to objectives. However, it is not always possible to set targets especially when the Plan relates to a 6 year cycle and budgets for measures in the Plan may be dependent on annual budgeting. Targets may be able to be included for schemes</p>

		<p>programmed early in the Plan period where costs and start times are known but for measures which are programmed further into the future, their programming and costings may be less certain. It may not be clear at Plan stage when a measure may be taken forward. Also some measures relate to non-capital programmes e.g. community resilience and other types of non-capital measure. At this stage in Plan preparation these may be difficult to programme within the 6 year cycle and the extent of the work involved may also be unclear. This is also true of drainage maintenance programmes which are included as flood risk management measures and for which required work and allocation of resources may not be predictable at the Plan preparation stage.</p>
	No methods were used to demonstrate how much a measure will contribute to the objectives.	<p>The Department notes your comment and would advise that for similar reasons as those stated above, it is not always possible to clearly demonstrate the extent to which an individual measure will contribute to the Plan's overall objectives. The Department has provided additional information in the final Plan to help to demonstrate the linkage between the measures and objectives.</p>
	For the sake of assessing the progress and achievements of the FRMP, objectives and targets should be measurable to the greatest extent possible.	<p>The Department notes your comment and would advise that where possible, it has tried to include targets or indicators for measures proposed in the FRMP and how they relate to objectives. However, it is not always possible to set targets especially when the Plan relates to a 6 year cycle and budgets for measures in the Plan may be dependent on annual budgeting. Targets may be able to be included for schemes programmed early in the Plan period where costs and start times are known but for measures which are programmed further into the future, their programming and costings may be less certain. It may not be clear at Plan stage when a measure may be taken forward. Also some measures relate to non-capital programmes e.g. community resilience and other types of non-capital measure. At this stage in Plan preparation these may be difficult to programme within the 6 year cycle and the extent of the work involved may also be unclear. This is also true of drainage maintenance programmes which are included as flood risk management measures and for which required work and allocation of resources may not be predictable at the Plan preparation stage.</p>
	The methods used to assess cost and benefit and to apply the results of the FRMP should be clearly described.	<p>The Department notes your comment and would advise that the FRMP is strategic in nature and does not necessarily include individual costs of each proposed measure. The Plan includes high level annual financial information in Chapter 6, however, detailed cost benefit considerations</p>

		and analysis will only be carried out during the feasibility and detailed design stage for the specific measures.
In the FRMP, we suggest that the estimated cost should be reported for each measure and an explanation of how a lack of funding may impact the implementation of the measures provided.		The Department notes your comments in relation to reporting the estimated cost of each measure. This is not possible for all measures in a strategic plan covering a six year period, as the measures are at various stages of development and the required level of information may not be available at this time.
We suggest considering the issue of Climate Change more deeply, including how sources of flooding may change in the future, and change in extreme events, as well as better integration with and reference to the National Climate Change Adaptation Strategy.		<p>The Department has included considerable information in the Plan with regard to Flood Risk Management and Climate Change.</p> <p>With regard to how the 3 main sources of flooding may change in a changing climate, it is currently perceived that storms which generate surface water flooding in Northern Ireland are becoming more prevalent and more intense. We have therefore included measures in the Plan to develop Drainage Area Plans for each of the APSFR with the intention of more in depth flood modelling of urban areas to better understand the effects of stormwater flooding and the ability of drainage systems to cope with extreme events. However, it is also clear from the latest climate projections that Sea Level Rise will increase due to effects of temperature rise and melting of polar ice sheets. Therefore, coastal flooding may become more of a problem in future. It is therefore necessary to retain flexibility and to be able to adapt and change direction as the climate may change. As emphasised in the most recent UK Climate Change Risk Assessment, it is important not be locked into particular courses of action which in future, could become detrimental rather than beneficial.</p> <p>The Department also liaises with DAERA Climate Change Unit during the development and production of NI Climate Change Adaptation Programmes (NICCAP) and with regard to flood risk management related text and targets which may be included and monitored for NICCAP.</p>
The BRC AA Floods Team believes that Prevention, Preparedness, and Protection are equally important, based on our work. We offer and suggest the following enhancements could be a focus in future FRMP's:		The Department notes your comment in relation the equal importance of Prevention, Preparedness, and Protection.
Prevention: an increased focus given for restricting the development within flood plains and compulsory use of SuDS and the attenuation of flows from all future developments. Additionally, SuDS and green infrastructure such as ponds and swales can contribute greatly to protecting communities from flooding. DFI is encouraged to review the sustainable drainage regulations to ensure that SuDS are deployed to maximum effect in all new developments.		The Department notes your comments and would advise that precautionary Spatial Planning is key to the Prevention measures proposed in this Plan. The Department works closely with Planning authorities both departmental and in local councils, to ensure that flood risk, including the effects of Climate Change, are fully considered in Development Planning and Management in N. Ireland. This robust

<p>Also, we found from our UK analysis work that internal drainage boards and local authorities (including Councils and EPG's) must ensure that their operational plans include adequate provision for river channel maintenance. Plans could also evaluate where dredging can provide an effective solution in reducing flood risk, taking account of impacts both near to the dredged site and downstream. Also we found that responsibility for emergency planning and response to surface and groundwater flooding should be brought into line with main river and coastal flooding.</p>	<p>planning policy has been happening for many years now and has been very effective. Key to these considerations are the Flood Maps (NI) produced by DfI Rivers and these include flood mapping for Climate Change. The Department's aims are to ensure inappropriate development does not take place within Flood Risk areas and that the stock of properties already at flood risk is not added to. The Department would also advise that it recognises and understands the need for a clear SuDS policy, and this is reflected in the Regional Measures within the Plan. The progression of these measures and development of SuDS policy will require ongoing engagement with local councils and other stakeholders. The Plan also includes the Living With Water Programme which will promote schemes and concepts to manage water in an integrated way across its catchment to mitigate flood risk. This will include Natural Flood Management, attenuation and SuDS, along with integration of blue/green infrastructure to public open spaces. The continued inspection and maintenance of designated watercourses is also included as a Regional Measure within the Plan.</p>
<p>Preparedness: More weight could be given to raising awareness, education, and building community resilience through multi-agency engagement with local communities. The British Red Cross has been an integral member of the Regional Communities Resilience Group since 2013, and has collaborated with multi-agency partners in engaging with people and communities across NI to improve awareness and preparedness. Since 2015 the Red Cross has developed flood resilience toolkits and manuals (Community Resilience in Urban Areas) and undertaken awareness raising to empower communities to take a lead in resilience building. Additionally, the adverse mental health effects of flooding are essential to address. Our UK analysis noted that there can be a lack of consistent and robust preparedness across infrastructure companies. Therefore, we offer the suggestion that government can recommend infrastructure companies to be mandated to report their target resilience level, why this target is appropriate and what progress they are making to achieve it.</p>	<p>The Department notes the comment in relation to engagement with local communities. There is a significant focus in NI on awareness raising in relation flood risk and RCRG / community resilience. The importance of this work has been recognised within the plan's Measures and are included at both a regional and APSFR level. The remit of RCRG, in working with local communities, builds on the initial establishment of individual community groups, and will continue to liaise and educate those groups in respect of any advances in awareness raising around severe weather events. Furthermore an Education Sub-Group of RCRG has been established to promote this work through the school environment. Whilst this work had been progressing significantly, the Covid pandemic has reduced further progress in this area. In relation to mental health issues it is noted that one of the recommendations from the North West flooding review of August 2017 was in relation to Emotional Support and Wellbeing. This work has been progressed by DoH, supported by BRC, with an initial meeting identifying the need for a NI Health and Wellbeing Framework. This would focus on: recovery; signposting people after the event; emotional support for all e.g. victims, first responders, people who help, families and friends who support victims, those who treat the victims and others long term; capacity issues; ensuring people do not feel forgotten; and support in both rural and urban areas. The Department is fully supportive of this initiative and will continue to liaise with DoH and BRC through the EPGs and RCRG</p>

		as necessary. While there has been engagement with key infrastructure providers to help them understand the risk flooding may present to the services they provide, the progression of target resilience levels for infrastructure companies is considered to be beyond the scope of the FRMP.
Protection: We suggest providing additional assistance to homeowners to install Individual Property Protection (IPP) measures and to get covered by flood insurance.		The Plan acknowledges the benefits of Individual Property Protection (IPP) and includes the continuation of the 'Homeowner Flood Protection Grant Scheme' (HFPGS) as a Regional Measure. In addition there is a commitment to continue to work with the insurance industry with respect to flood insurance issues, including "FloodRe" in NI, to help address long term flood insurance affordability issues.
We also believe that improvements are needed in how flood risk is communicated, including:		The communication of flood risk can often be technical in nature and the terminology difficult to understand, however, through the forum of RCRG in NI, this information on flood risk and river level data is often easier to provide to affected communities given the personal relationships built up over many years.
Think carefully about the audience for any communication and do not address "the public" as an undifferentiated aggregate of individuals.		The Department recognises that communication of flood risk is often expressed in technical language which may be difficult for the general public to comprehend. However, through the work of the RCRG, communities who may be at particular risk of flooding are provided with information about the sources of flooding to which they may be exposed. They are provided with weather warnings through texts and e-mails, and when appropriate community leaders may be contacted directly. Further information in relation to river levels can also be provided and advice on how to access this directly through the DfI River Hydrometric Network has been shared with affected communities through the RCRG forum. This information helps them to make decisions around the implementation of their household and community flood plans. As part of ongoing communications with local communities, as well as multi-agency weather debriefs, the lessons learned will inform the future approach of RCRG. Further links to appropriate sites in relation to how to be ready for emergencies, weather warnings and advice, community resilience, and how to report a flood event, are included in ongoing communication with communities at risk.
Enable communities affected by flooding to engage directly in exploring flood risks by making rainfall and flow gauge data publicly available at an appropriate level of granularity.		
Provide an early explanation of the logic and structure of the central argument of any communication. Offer a clear account of the connections between rainfall, river flows and floods (and tides, where relevant). Provide information about the various sources that have been used, individually or in combination, in reaching conclusions.		
The BRC AA Floods Team believes that communities might be able to contribute more to preparedness, resilience, and recovery activities if additional funds are allocated. We also reinforce the importance of public awareness/education of flooding and the inclusion of community		

<p>representatives in multi-agency meetings on flooding issues. As a member of the Regional Communities Resilience Group, the Red Cross advocates further development with multi-agency partners in engaging with people and communities across NI to improve awareness and preparedness. Flood resilience toolkits and manuals are available to help raise awareness and help empower communities to take a lead in resilience building.</p>	<p>This multi-agency work will continue through the period of this plan with engagement ongoing in those established communities, as well as progressing the establishment of new community groups. The resourcing of this work will continue to be agreed through RCRG and its multi-agency partners. The public will continue to be made aware of ongoing issues in relation to severe weather events through awareness raising campaigns, social media updates, and by the issuing of weather warnings to affected communities via text and e-mail. An Education Sub-Group of RCRG has also been established to promote this work through the school environment.</p>
<p>In addition to previously identified suggestions we offer advice to focus on recovery measures. Internally BRC has worked on identifying models of recovery to assist in building the capacity and capability of the community itself to identify its needs and co-produce recovery plans. This indicates that a person-centred approach with the community at its heart must be at the core of any recovery strategy, and recognizes the value that communities can bring to any recovery plan through their knowledge of local vulnerabilities, capabilities, resources, and partnerships. It also considers local stakeholders as essential contributors to recovery. Therefore, it recommends that all stakeholders should be considered from the outset of the response, and be included in early briefings and planning sessions, as they may be able to offer important insights and services.</p>	<p>The Department notes the importance of recovery measures for affected communities in the aftermath of a flooding event. Whilst recovery is not specifically dealt with as part of the FRMP, it is an important part of the process as outlined in the NI Civil Contingencies Framework which details the "prepare, respond, recover" elements of an emergency. The Department continues to work with multi-agency partners, including the BRC and Local Government, to evaluate lessons learned from multi-agency weather debriefs so that they can be incorporated into future plans to improve the preparation, response and recovery phases of an emergency as necessary.</p>
<p>For example, this would entail (1) enabling community-led recovery, (2) ensuring values are at the heart of recovery, (3) addressing the building blocks of everyday wellbeing, (4) recognising diversity in recovery, (5) providing support for the bereaved, and (6) planning for long-term recovery.</p>	
<p>Coordination with neighbouring Member States on shared RBDs/UoMs is limited; for example, the 2015 Neagh Bann FRMP indicated that there is coordination with the Republic of Ireland on all technical matters and proposed flood mitigation measures. We could not ascertain from the FRMP information whether cross-border flood risk areas were identified. The BRC AA Floods Team recommends additional improvements on flood mapping that overlaps the national boundaries for cross-border river basins and map-based data to highlight the location of vulnerable people.</p>	<p>There is ongoing cooperation and coordination between the Department and the OPW (Office of Public Works), both at a strategic coordination level and on specific more localised issues. DfI has a close working relationship with the OPW in the Republic of Ireland; this indeed precedes the Directive. For the purposes of the Directive second cycle, three joint groups are active at different levels to inform, cooperate and coordinate Flood Risk Management activities in both jurisdictions. DfI is also a member of a range of Flood Risk Management groups within the UK covering issues e.g. allowances for Climate Change, Flood Risk Assessment, Coastal Flood Risk, hydrological information etc. This interaction, sharing of information and cooperation is not necessarily evident to stakeholders but it simply forms part of routine business for the Department. The NIFRA 2018 has not identified any APSFR that</p>

		require specific cross-border coordination, however, any new areas identified will be considered during the next Floods Directive cycle.
	The BRC AA Floods Team also believes that improvements are needed in coordination to include the quasi-commercial and commercial sectors in FRMP's. In order to ensure that new developments are flood resilient, we would recommend that bodies with responsibility for managing the effects of developments on surface water flows, including water and sewerage companies, become statutory consultees for planning applications.	There is a robust Planning Policy in place in Northern Ireland, with the aim of the SPPS in relation to 'Flood Risk' to prevent future development that may be at risk from flooding or that may increase the risk of flooding elsewhere. In addition applications for development which, by exception, are located within flood risk areas are required to be accompanied by a Flood Risk Assessment or Drainage Assessment as part of the process. This Planning Policy equally applies to the commercial sector as it would to all other sectors. In addition both NI Water and DfI Rivers are statutory consultees under the current Planning process and their advice must be considered as a material planning consideration, the weight to be afforded is a matter for the decision-taker.
	The BRC AA Floods Team would offer the following suggestions: A comprehensive 'toolkit' of measures to prepare for floods should be used to achieve effective landscape management. This includes looking after soil so it can soak up water and does not run off the land to block watercourses, using uplands to catch water, diverting it onto fields upstream of settlements, and putting in "leaky dams" made of wood in streams to slow the flow of water down towards towns.	The Department notes your comments in relation to measures, the benefits of Natural Flood Management have been acknowledged within the plan and has been included as a Regional Measures.
	Land-use planning should be made more holistic and integrated, and different spatial scales, such as at the catchment or conurbation level, should be incorporated to respond to climate change challenges.	The Department notes your comment, and further consideration may be given to this during the next cycle of flood risk management planning.
	There is a need to better manage community expectations, improve public understanding of flood risk and risk responsibilities, and enhance acceptance of the risk-based, "living with water" philosophy advocated in flood policy in the pursuit of social, economic and environmentally sustainable FRMP.	The Department notes the comments and agrees that there needs to be an acceptance of flood risk, this is an ongoing element of the work of RCRG and its engagement with flood affected communities.
	In order to address the issue of continuous building in high risk flooding zones, it is recommended that government impose a statutory liability on developers to meet the costs of flooding where their development fails to comply with planning requirements and increases flood risk, whether to a property sited on the new development or further afield. Regulations must provide for developers to avoid such liability where they comply with planning conditions: as part of the planning process, local planning authorities should be required to issue a drainage certificate to confirm compliance.	The Department does not consider that there is an issue of continuous building in high risk flood zones. There is a robust Planning Policy in place in Northern Ireland, with the aim of the SPPS in relation to 'Flood Risk' to prevent future development that may be at risk from flooding or that may increase the risk of flooding elsewhere. In addition applications for development which, by exception, are located within flood risk areas are required to be accompanied by a Flood Risk Assessment or Drainage Assessment as part of the process. In addition both NI Water and DfI Rivers are statutory consultees under

		the current Planning process and their advice must be considered as a material planning consideration, the weight to be afforded is a matter for the decision-taker.
	Establish a 'standard' for flood response planning – and be used as a part of the assurance process; and all Multi-Agency Flood Plans should address and cover the same basic principles of flood planning.	<p>The Department, in conjunction with other multi-agency partners, including the BRC, have developed a number of emergency response plans. These include the Severe Weather Plan and Coastal Flood Plan. In addition to the overarching Severe Weather Plan, there are some local bespoke flood plans and Action Cards for communities at risk of flooding. For these individual areas information on the number of properties at risk, river level thresholds, contact details, and actions to be taken at appropriate levels is included.</p> <p>As part of the work of the RCRG, over 30 local community groups have been formed to enable enhanced preparation and response to weather related emergencies within communities at risk. As a partner, within RCRG, the BRC will be aware that the aims include multi-agency co-ordination to facilitate adequate community response and recovery, to cope with emergency incidents in pre-identified 'at-risk' communities and, to make provision for the sharing of any available alert information. This approach to community planning can help individuals and communities to be better prepared and more self-reliant during emergencies.</p>
NI Water	NI Water welcomes the inclusion of surface water flooding within the 2nd cycle draft FRMP and recognizes that this has the potential to cause significant localised impact. No single government organisation has the lead responsibility for surface water management and a collaborative approach between the various risk management agencies is required to ensure that surface water issues are effectively addressed; furthermore wider stakeholders including the private sector and consumers all have an important role in managing flood risk sustainably into the future.	The Department notes your comments in relation to a collaborative approach to surface water risk and more general flood risk management.
	The inclusion of climate change impact on flood risk is also welcomed; our industry is vulnerable to the impacts of changing weather patterns and more frequent extreme weather events. When planning for the future we need to think about how we invest to be more resilient to climate change.	The Department welcome your support for the inclusion of Climate Change.
	NI Water supports the approach to manage catchments naturally and effectively to reduce flood risk and help combat the impacts of climate change. To support this objective it is critical that policy and legislative gaps in relation to Natural Flood Management, SuDS and blue green infrastructure are	The Department notes your comments and would advise it understands and recognises the need for clear NFM and SuDS policies, and this is reflected in the Regional Measures within the Plan. The progression of these measures and development of policy will require ongoing

	<p>addressed including approval mechanisms for, and the adoption and maintenance of 'soft' SuDS.</p>	<p>engagement with local councils and other stakeholders. The Plan also includes the Living With Water Programme which will promote schemes and concepts to manage water in an integrated way across its catchment to mitigate flood risk. This will include Natural Flood Management, attenuation and SuDS, along with integration of blue/green infrastructure to public open spaces. The progression of these measures will provide valuable learning that will assist with the development of future policy and legislation.</p>
	<p>The water environment is a shared responsibility between a wide range of stakeholders. The Long Term Water Strategy outlines the adoption of a holistic drainage approach, that where practicable and economically viable surface water should be managed above ground at source using 'soft' SuDS or natural watercourses rather than hard engineered drainage solutions.</p>	<p>The Department notes your comments and continues to advocate the holistic drainage approach, outlined in the Long Term Water Strategy.</p>
	<p>NI Water has a duty to provide and maintain sewerage infrastructure to ensure effectual foul and surface water drainage to those premises with foul connections and to reduce the potential for out of sewer flooding and environmental damage resulting from discharges from its foul and combined sewer networks. However, as a consequence of a legacy of financial constraints, current levels of funding to NI Water necessitate prioritisation on internal flooding only. NI Water will continue to work with stakeholders to maximise opportunities to manage flood risk.</p>	<p>The Department welcomes NI Water's commitment to continue to work with stakeholders to maximise opportunities to manage flood risk.</p>
	<p>DfI under the Living With Water programme (LWWP) and supported by NI Water and other stakeholders, is leading the development of an Integrated Drainage Investment Planning (IDIP) Guide for Northern Ireland. This will provide the basis for a collaborative approach to drainage and wastewater planning to identify integrated interventions that can provide multiple benefits to society and the environment over the long term, while striving for best value to the economy and our customers.</p>	<p>The Department welcomes NI Water's commitment to the LWWP.</p>
	<p>NI Water Draft Strategy 2021 - 2046 identifies that 'as a society we need to place more value on water; to reduce pollutants entering our waterways and the millions spent on removing them through water treatment; to work with nature rather than against it to support sustainable economic growth'. NI Water has an important role to play, including sustainable solutions that underpin a healthy and thriving population, a growing economy, and a flourishing natural environment. Our strategy clearly identifies that we will contribute to the development and implementation of flood risk management plans where this aligns to our roles and responsibilities.</p>	<p>The Department notes the comments in relation to NI Water Draft Strategy 2021 - 2046 and welcomes NI Water's commitment to the development and implementation of Flood Risk Management Plan.</p>

	<p>NI Water's ambition is that our services contribute to the management of flood risk. To achieve this ambition it is key NI Water continues to work with its partners and stakeholders to deliver sustainable solutions and that levels of funding for NI Water are increased, and then sustained, such that NI Water can deliver what matters.</p>	<p>The Department welcomes NI Water's ambition to contribute to the management of flood risk and notes the comments in relation to funding.</p>
	<p>NI Water has been a key contributor to the draft FRMP and the identification of measures for the 2nd cycle plan. NI Water will continue to develop enhanced Drainage Area Plans (DAPs) for the areas of APSFR, this being the augmentation of DAP sewer models to include NI Water's surface water network. Enhanced DAPs will support an improved understanding of out of sewer flood risk. These enhanced models when combined with fluvial flood models, form Integrated Drainage Models. Integrated Drainage Models provide a robust platform for integrated sustainable planning and solutions. NI Water, through the LWWP, is leading the development of Integrated Drainage Models for the Belfast Strategic Drainage Infrastructure Plan and will collaborate with other stakeholders for other APSFR areas where integrated drainage modelling is brought forward by lead agencies.</p>	<p>The Department acknowledges NI Water's contribution to the development of the FRMP and its ongoing commitment to the delivery of the Measures detailed in it.</p>
	<p>Surface water is a significant pressure on sewerage infrastructure, both in relation to out of sewer flooding and in the discharge of combined storm overflows to the environment. NI Water has been advancing, with partners and stakeholders, new and innovative approaches, like the LWWP, to address the growing demands placed on our drainage systems, and recognizes that we must continue to do so to meet future pressures including growth and climate change.</p>	<p>The Department welcomes NI Water's commitment to the LWWP.</p>
	<p>The LWWP is an interdepartmental group comprising all stakeholders with responsibilities for water quality and flood risk management, setting out a holistic sustainable approach for the management of our water environment. Accordingly, NI Water welcomes the extension of the LWWP to the Derry catchment.</p>	<p>The Department welcomes NI Water's commitment to the LWWP and inclusion of Londonderry catchment in the programme.</p>
Institution of Civil Engineers	<p>In general ICE agrees with the methodology noted in the draft plan and welcome the addition of the surface water mapping in addition to the fluvial and coastal mapping. However, we would also advise that consideration be given to the inclusion of reservoir inundation mapping within the plan. The FRMP states that this source of flooding is not addressed within the plan as it is covered by other legislation. However, given its potential impact on public health and safety we consider it appropriate to also include the reservoirs which, if breached, would have a detrimental impact on the public and/or the</p>	<p>The Department welcomes your agreement with the methodology. The risk of flooding from reservoirs is not specifically addressed within this FRMP because it is covered by separate legislation. The Reservoirs Act (Northern Ireland) 2015 makes provision for a proportionate regulatory reservoir safety framework for all Controlled Reservoirs (i.e. those reservoirs capable of holding 10,000m³ or more of water above the natural level of any part of the surrounding ground). Subject to Ministerial and NI Assembly approval, the secondary legislation</p>

<p>environment. This could be heavily populated areas or areas of significant environmental significance which are at most risk or would suffer heavily should a breach occur. Whilst it is recognised that there is separate legislative issue this does not remove the impact on people or the environment should a breach occur.</p>	<p>necessary to introduce the regulatory reservoir safety framework will be in operation in this Flood Risk Management Planning cycle. Outline inundation maps for each Controlled Reservoir were published by the Department in 2016 (link to Reservoir Flood Mapping included in the Plan). These maps show the areas that could be flooded if Controlled Reservoirs were to fail and release the water they hold. The maps are used by reservoir managers, government bodies, organisations and others dealing with flood risk from reservoirs, particularly those engaged in development planning and emergency planning.</p>
<p>The objectives in the draft FRPM are clear and concise and we agree with them, particularly the categorisation into the pillars of sustainability.</p>	<p>The Department welcomes your agreement with the objectives.</p>
<p>However, consideration could be given to the naming of the “Human Health” category. Given that we are currently in a worldwide pandemic the term “health” has a certain connotations at this time and some of the objectives may not align specifically to what the public consider health in this case. Consideration could be given to splitting this category up into two, one for human which could include the impact on health (both physical and mental), safety and general wellbeing, and the other for social. Alternatively, it may also be appropriate to term the category Human Impact as oppose to Human Health as impact would have a wider scope of objectives.</p>	<p>The Department notes your comments in relation to the naming of the 'human health' category. The terms 'human health, the environment, cultural heritage and economic activity' are all directly derived from the Water Environment (Floods Directive) Regulations (Northern Ireland) 2009. This legislation requires the Department to set objectives for the management of flood risks for the APSFR identified, focusing on the reduction of potential adverse consequences of flooding for these four specific categories.</p>
<p>ICE is supportive of the use of the UN Sustainable Development Goals as a helpful framework of universal themes.</p>	<p>The Department notes your comment in relation to the UN Sustainable Development Goals.</p>
<p>We believe that the objectives have been very well considered and we recognise that it is appropriate to keep the balance neutral. It is also clear that it aligns with social value goals and objectives from other key documents such as the Water Framework Directive.</p>	<p>The Department welcomes your agreement to the balance of the objectives.</p>
<p>However, we consider the risk to public life to have the utmost importance. Noting this would help highlight the risk to public/life as a “red flag” area. This, in turn, would help in the priority of works and in planning by councils and emergency services for responding to flood events.</p>	<p>The Department agrees that the risk to public safety is a high priority, however it is considered that this is adequately covered within the current range of Objectives and Measures.</p>
<p>Overall, we welcome the proposed measures identified for each APSFR. The split between prevention, protection and preparedness is clear and understood. The methodology and report structure used presents information clearly.</p>	<p>The Department welcomes your comments in relation to the proposed measures, the methodology used and plan structure.</p>
<p>On the basis that a yearly breakdown has been undertaken within Chapter 6 of the report, we believe a more specific time frame and target dates can be provided for proposed measures throughout the 6 year cycle with a suggestion</p>	<p>The Department notes your comment and would advise that where possible, it has tried to include targets or indicators for measures proposed in the FRMP. However, it is not always possible to set targets</p>

	<p>to give specific quarters for the completion of scheme design, detailed design and construction. This will allow for clear review of dates throughout the 6 year cycle and act as Key Performance Indicators.</p>	<p>especially when the Plan is set at a strategic level and relates to a 6 year cycle. Targets may be able to be included for schemes programmed early in the Plan period where costs and start times are known but for measures which are programmed further into the future, their programming and costings may be less certain. It may not be clear at Plan stage when a measure may be taken forward. At this stage in Plan preparation these may be difficult to programme within the 6 year cycle and the extent of the work involved may also be unclear.</p>
	<p>Can DfI advise if there are any proposed measures which are unable to be included within second cycle due to funding available, which should be noted within the report and highlighted for the following cycle? We suggest that an additional proposed measure be added to each APSFR as 'DfI and NI Water to complete network capacity assessment of all drainage assets to determine suitability of existing infrastructure for use against current industry standards and suitability for future use.' Only through a detailed understanding of the condition and capacity of existing infrastructure assets can the correct plan be developed for future upgrades and capital expenditure.</p>	<p>The Department cannot specifically say at this stage in preparing what is a strategic Flood Risk Management Plan covering a 6 year cycle, precisely which measures may be funded or not; each proposal will be developed and assessed and will then be subject to funding bids. There will be more certainty about measures planned to be undertaken early in the cycle as opposed to those undertaken later on. ICE will be aware that government funding for both resources and capital works is on an annual funding basis but the Plan looks forward 6 years and priorities and funding availability can change within that time frame. Also, progress of measures can be affected by various; measures may slip and new measures brought forward into this cycle. An example would be the North West Flooding in August 2017 which resulted in emergency flood alleviation works having to take priority for funding against other planned measures. The FRMP however does form a basis for bidding for funds because the Plan is a legislative requirement and sets out measures for the areas which are most at risk from flooding. Network conditions / capacity is already reviewed by Roads, Rivers and NI Water as part of their business as usual activities, and issues are addressed through maintenance or capital improvements.</p>
	<p>The continued update of DfI online flood maps on a quarterly basis throughout the 6 year cycle to inform the community as measures are actioned and completed.</p>	<p>DfI Flood Maps are revised and updated as new information becomes available, including when Flood Alleviation Schemes are completed. In addition a formal review takes place at the Flood Hazard and Risk Mapping stage of the Flood Directive cycle.</p>
	<p>We suggest proposed measures to reduce the risk of surface water flooding should be given priority within the first 2-3 years of the second cycle. At present this is not identified through the proposed measures table and initial costing exercise whereby maintenance and capital works appear to be evenly split over the full 6 year cycle. A one year delay to the implementation of a number of blue/green infrastructure schemes which primarily focus on river flooding will provide funds to respond to key surface water flood risks.</p>	<p>The Department notes your comments relating to delaying the implementation of blue/ green infrastructure schemes to provide funds to respond to key surface water flood risks. However, it should be noted that the development of appropriated solutions, informed by the Enhanced DAP programme detailed within the Plan, may take several years to complete. In addition Roads, Rivers and NI Water all have separate capital works programmes and it may not always be possible</p>

		to delay one element of these programmes to allow another one to advance.
	Belfast Enhanced Drainage Area Plan - Indicated that this will be completed by 2027. On the basis that existing NI Water surface water networks have not been modelled to date in relation to flood risk this appears to be a key action which would we would suggest to be completed in next 1-2 years to inform NI surface water flood risk and refinement of flood risk mapping.	The surveying and hydraulic modelling associated with the enhanced DAP for Greater Belfast is complete. NIW is currently reviewing the outputs in detail.
	Improvements to surface water flood risk through maintenance of existing private and public drainage and river infrastructure	The Department notes your comment and agrees that ongoing maintenance of drainage and flood defence assets is an important element of flood risk management. This is recognised in the Plan with asset maintenance being included as a Regional Measure.
	Private developments - As part of new developments, owner agrees to be responsible for maintenance of drainage infrastructure (formally if required). Process which is followed in England as part of planning process through SAB's could be used as basis.	The Department understands and recognises the need for a clear SuDS policy, and this is reflected in the Regional Measures within the Plan. The progression of these measures and development of SuDS policy will require ongoing engagement with local councils and other stakeholders.
	Public infrastructure - Continual maintenance of existing DfI/NI Water infrastructure with KPI's agreed and communicated to public. E.g. all road gullies cleaned and jetted on annual basis, CCTV and jetting of all critical infrastructure every 2-3 years and CCTV and jetting of all non-critical infrastructure every 5 years to allow a network asset register to be created.	The Department notes your comment and agrees that ongoing maintenance of drainage and flood defence assets is an important element of flood risk management. This is recognised in the Plan with asset maintenance being included as a regional measure. In addition there is a specific measure for the development of a Rivers' Asset Management Plan, the completion of which will identify the amount of funding required for future maintenance. Roads and NI Water also work to various maintenance standards. However, the extent to which maintenance is completed is directly related to the available funding.
	Improvements to surface water flood risk through clear development requirements in relation to water quantity and water quality. Greenfield runoff requirement for new developments on greenfield sites. For brownfield sites to encourage land reuse, agreement that 50-70% reduction from pre-development rates would be acceptable. This could be communicated to developers at the early stage of construction.	<p>Development proposals located within areas of Surface water flood risk outside of flood plains are currently determined taking into account the policy provisions of the SPPS and FLD 3 of Planning Policy Statement 15 (revised) (PPS15). As part this process, DfI Rivers provides advice to the planning authorities on “hard attenuation” solutions where run-off discharge is restricted.</p> <p>Consent to discharge stormwater must be received from NIW or DfI Rivers and correspondence confirming the discharge rate must be included. The discharge rate for greenfield development will typically be limited to existing greenfield run-off. For brownfield development,</p>

		applicants will be asked to provide a site specific brownfield run-off rate using appropriate methodologies. Although a reduction in the existing discharge rate is encouraged and would be welcome it is not currently a requirement under planning policy.
	Adoption of SuDS components could be noted within report and updates provided by NI Water and DfI. This will encourage the use of SuDS components within new developments.	The Department understands and recognises the need for a clear SuDS policy, and this is reflected in the Regional Measures within the Plan. The progression of these measures and emerging SuDS policy will encourage the use of SuDS components within new developments. The Department and NI Water will also provide updates on progress with SuDS schemes.
	The above maintenance, improvement and sustainable solutions will help drive more resilience in our existing infrastructure assets. This is an important factor in achieving a number of aims, not least contributing to the drive to net zero carbon and reducing longer-term expenditure.	The Department notes your comments and advises that the benefits of SuDS and maintenance of existing assets are noted within the Plans and are reflected in the Measures.
	The Institution of Civil Engineers is willing to support and assist with the communication and implementation of the measures outlined within the report to the public and construction industry where possible and appropriate. Once the report is finalised and issued a suggestion would be the creation of a working group with key bodies and companies within the infrastructure and construction sector to work with DfI/NI Water and other stakeholders.	The Department acknowledges ICE's offer on assistance with communication and will consider this further after the final FRMP has been published.
	An opportunity is present for ICE to join the Regional Community Resilience Group or other groups outlined within Table 2-2 of the report if requested by DfI.	The Department acknowledges ICE's offer to join RCRG and RCRG will consider this further.
	NI Water are in the process of an engagement process with development stakeholders in relation to network capacity issues. Engagement with developers at early stage and construction/maintenance industry will assist with the implementation of the measures and provide clarity. Recommend presentation of FRMP given to industry through video calls to highlight mutual benefits of Flood Risk Management to the whole community.	The Department will consider this further after the final FRMP has been published.
	The communication of infrastructure improvements and challenges which have been overcome in relation to flood risk management is key. It is important to celebrate success and publicise, as part of a wider public engagement programme to inform the wider population of the work being done, their role in supporting the wider aims, and of the link between this work and the broader net zero aims. This programme could be through emails, leaflets, design competitions, construction links to schools and colleges. There is opportunity to reinforce the importance of the water cycle and flood risk in relation to the environment and ecosystem to people of school/college/university age who will	The Department will consider this further after the final FRMP has been published. It is also expected that the main engagement and communication will be around individual Flood Alleviation Schemes, which will be publicised during the various stages of development. An Education Sub-Group of RCRG has also been established to promote awareness of flood risk through the school environment.

	<p>then communicate to other generations, as well as engaging people of all ages via other means.</p>	
	<p>ICE has previously provided thoughts on the need for an independent infrastructure advisory body, now under further consideration by the Infrastructure Minister, to help support decision makers and inform an overall joined-up and longer-term infrastructure strategy. Consideration infrastructure as an holistic system, even where aspects sit across different Departments, is an important part of co-ordination and improved resilience across all infrastructure, and would support improvement in the co-ordination of river basin and flood risk management planning.</p>	<p>The Department notes your comments and would advise that in August 2021, the Infrastructure Minister announced that the establishment of an Infrastructure Commission in Northern Ireland, would be included as a commitment in the NI Executive Building Forward Consolidated Covid-19 Recovery Plan.</p>
	<p>On a more specific level, we note the established good practice of restoring natural meanders in rivers, supporting farmers to avoid land management techniques that include removing meanders, informing communities more widely of the impact of changing river basins etc. We also encourage investment on research and holistic planning over large natural basins, increased hydraulic modelling, particularly to assess the impact of climate change, and engaging with other jurisdictions and nations to examine detailed best practice case studies to consider where techniques could be adopted here.</p>	<p>The Department notes your comments and advises that the Plan acknowledges the importance of Natural Flood Management and references ongoing engagement with CIRIA in the development of NFM guidance. In addition there are also Measures in relation to engagement with DAERA on how future agricultural and land support measures may incorporate flood risk management options. The Measure in relation to the work of the LWWP will also provide additional research and demonstration of NFM schemes.</p>
	<p>Having reviewed the various environmental reports, ICE agrees with the conclusions on the whole.</p>	<p>The Department welcomes your agreement with the conclusions of the environmental reports.</p>
	<p>We note that the nature of the SEA is strategic and that all reports concluded that there has been no wider negative impact on the environment and that some positive localised environmental impacts have been observed.</p>	<p>The Department notes your comment.</p>
	<p>We are in agreement with the SEA and HRA assessments that detailed Environmental Assessments (EIA) need to be undertaken for each specific project.</p>	<p>The Department welcomes your agreement with the SEA and HRA.</p>
	<p>From review of the full suite of consultation documents, we note that little progress appears to being made with wider opportunities to improve the environment through Natural Flood Risk Management techniques. The first plan cycle noted that these were under review and the proposed draft plan noted that this work is ongoing with information expected towards the end of the plan period. This represents two plan cycles where the opportunity has been lost to implement more environmentally sustainable techniques that could help achieve carbon reduction/ Net zero targets. We would encourage DfI to accelerate these considerations and implement projects within the current plan period.</p>	<p>The Department notes your comment and would advise that a number of the specific Flood Alleviation Schemes, included as measures within the Plan, will consider NFM as an element of the solution. In addition the development of the LWWP will also include further Blue / Green solutions that will not only help to manage flood risk but will also deliver additional environmental benefits.</p>

	By the nature of the SEA process, each APSFR has been assessed from a generalised perspective only.	The Department notes your comment.
	The main Flood Risk Management Plan includes details on specific projects and opportunities. Our review indicates that these, in general, propose traditional flood alleviation (Protection) techniques at the location of flood risk. We have noted that in the first cycle plan and again in this plan explorations are ongoing into wider natural flood risk management techniques and use of blue-green infrastructure. We consider that this is a significant opportunity lost over 2 plan cycles to achieve potentially significant environmental improvements, providing a better overall solution and assisting in the achievement of net zero commitments.	The Department notes your comment and would advise that a number of the specific Flood Alleviation Schemes, included as measures within the Plan, will consider NFM as an element of the solution. In addition the development of the LWWP will also include further Blue / Green solutions that will not only help to manage flood risk but will also deliver additional environmental benefits.
	We would strongly urge DfI to accelerate the commitment to these areas of potential environmental improvement within the early stages of the plan period.	The Department notes your comment.
	The HRA outlines avoidance and mitigation techniques to address the potential adverse effects on the environment. However, the mitigation hierarchy states that compensation and enhancement can also be utilised.	The Department notes that the purpose of HRA is to assess the potential for any adverse effects on European designated sites (now National Site Network sites post-Brexit), to avoid any potential for adverse effects where possible, and to provide mitigation where necessary in order to ensure that there are no adverse effects on the integrity of the sites from implementation of the Plan. There is no scope to outline enhancement measures for these sites within the HRA report. However, the potential for both positive and negative effects on environmental topics are assessed within the SEA Environmental Report, and the Department intends to fully consider the potential for positive effects at the project level.
	Clearly, avoidance and mitigation of any negative impacts on the environment would be preferable. However, there could be many ecological and environmental benefits that could arise from FASs that could be included within an enhancement section of the report. We would encourage DfI to consider local and wider sustainability aspects of all schemes at the core of decision making.	
	Specifically, we note the very limited progress being achieved in: Natural Flood Risk techniques; Blue/ Green Infrastructure, Flood forecasting; and The potential gains that could be realised from the Living with Water Programme.	The Department notes your comments and would advise that there are Measures included within the FRMP in relation to further progressing NFM, Blue / Green infrastructure and Flood Forecasting. It is intended that all these areas will continue to be developed throughout this FRMP cycle.
	We would urge DfI to accelerate all of these considerations, since we lag behind other jurisdictions in these areas and, importantly, these could assist with helping achieve wider net zero commitments.	The Department notes your comments regarding acceleration of measures.
RSPB	The methodology to identify the most significant flood risk areas is clear and publishing the available data in Flood Maps (NI) is a helpful tool for spatially understanding the distribution of these areas.	The Department welcomes your agreement with the methodology.

<p>However, it is unclear from the consultation documentation why the decision was made to change from the first cycle of FRMPs where three FRMPs were created for each of North Eastern River Basin District (RBD) and the North Western and Neagh Bann International River Basin Districts (IRBD), to the second cycle where only one FRMP will be created and encompass the three River Basin Districts. More information and justification are needed before being able to fully comment on this change.</p>	<p>The Department notes your comment in relation to the production of a single FRMP for the second cycle. This second cycle Plan differs from the first cycle Plans in that we now have a single Plan covering the three River Basin Districts (RBD) for the six years from 2021 until 2027. The move to a single plan simply removes duplication and consolidates information on the three RBDs in the one document, without any reduction in the quality or level of detail. The production of a single FRMP also mirrors the approach taken by DAERA for the River Basin Management Planning.</p>
<p>Referring to Objective 8, 'To consider the impact of Climate Change for the main sources of flooding', this objective should be much stronger to help Northern Ireland (NI) adapt for the predicted impacts of climate change, including more extreme rainfall events and flooding. Consider rewording to, 'To ensure all catchments are Climate Change resilient'.</p>	<p>The Department is very conscious of the potential effects of Climate Change in relation to the main sources of flooding. The Department's policies and guidance require Climate Change to be taken into account in design of drainage and flood defence infrastructure and in development planning and management. Climate Change is included in the mapping of flood risk areas. This FRMP is very much focussed on how Climate Change may affect APSFR and other areas at high flood risk. To ensure 'all catchments are Climate Change resilient' would be a considerable undertaking. However the Department has revised its Objective 8 to be stronger in relation to Climate Change. The revised Objective is: <i>'To consider and prepare for the impacts of Climate Change for the main sources of flooding'</i>. This revision will be included in the final Plan.</p>
<p>In addition, there should be explicit targets to incentivise and ensure that Natural Flood Management (NFM) is adopted in flood alleviation schemes for the benefits to the environment, as well as human health and well-being. Climate change poses an increased risk of flooding. NFM provides cost-effective and sustainable means of adapting to climate change impacts and providing benefits to biodiversity. NFM presents a shift from our predominantly piecemeal and reactive approach to flooding towards a strategic, multi-benefit, and catchment-based approach. NFM is achieved by adopting a strategic, source to sea (catchment) approach, protecting and using natural systems, habitats and processes, and utilising soft engineering techniques.</p>	<p>The Department agrees with the promotion of Natural Flood Management (NFM), and will create opportunities to work with others, through partnership arrangements, to deliver sustainable flood risk management measures at a catchment level. These measures include NFM in rural areas and retrofitting SuDS as part of wider environmental improvements in urban areas. The Department will continue to engage with CIRIA in the development of NFM guidance and consider the use of NFM practices on all flood alleviation schemes / works to complement the traditional hard engineered solutions, implementing industry best practice guidance techniques in doing so. The Living With Water Programme will also promote schemes and concepts to manage water in an integrated way across its catchment to mitigate flood risk. This will include NFM, attenuation and SuDS, along with integration of blue/green infrastructure to public open spaces. In addition, a number of the specific Flood Alleviation Schemes included as measures within the Plan will consider NFM as an element of the solution, that will not only help to manage flood risk but will also deliver additional environmental benefits.</p>

<p>We specifically welcome the objectives around achieving good ecological potential, protecting and enhancing the natural environment, and to consider the impact of Climate Change.</p>	<p>The Department welcomes your comment in relation to the objectives.</p>
<p>We are also pleased to see that 'Catchment Based Natural Flood Management' practices are mentioned, and that NFM will be considered on all, or as a complementary flood alleviation scheme. The RSPB would like to see NFM mainstreamed into flood risk management and considered as the first approach in all schemes.</p>	<p>The Department welcomes your comments and advises that the Plan Measures relating to NFM are intended to promote and extend the use of these techniques.</p>
<p>The consultation mentions working with DAERA to consider how future agricultural land can incorporate flood risk management options. Given that approximately 75 % of land NI is agricultural, we would like to see stronger commitments around rewarding farmers for delivering natural flood management on their land. This should be incorporated as, part of a wider reform of agricultural policy focussing on farmers receiving public money, in return for the delivery of public goods (including flood alleviation).</p>	<p>The Department notes the comment in relation to the reform of agricultural policy. The engagement with DAERA, to consider how future agricultural and land support measures may include flood risk management options, is intended to deliver the outcome noted in your comments.</p>
<p>The objectives should be reprioritised to illustrate how the climate and environment objectives underpin both the human health and economic objectives. As currently illustrated, the objectives appear to standalone from each other without showing the intrinsic links and dependencies.</p>	<p>The Department notes your comments and would advise that the Objectives detailed in Table 4-1 have not been listed in priority order. The Department recognises that there is a linkage between objectives and that the completion of measures under one of the objectives may also have a positive impact on the achievement of other objectives.</p>
<p>Climate change is already happening, and given that NIFRA has identified that approximately 45,000 properties in NI are already at risk from flooding, without considering the impacts of climate change, it is paramount that all levels of government and the public understand the links between our changing climate, the economy and health.</p>	<p>The Department notes your comment in relation to Climate Change.</p>
<p>The impacts of climate change are set to increase with extreme floods triggered by intense precipitation, longer duration, close repetition of precipitations or a combination of these. The Intergovernmental Panel on Climate Change in its comprehensive assessment of the physical science basis of climate change found that there is high confidence that this is an increasing trend in Europe, especially for winter flooding.</p>	<p>The Department has included considerable information in the Plan with regard to Flood Risk Management and Climate Change. It is currently perceived that storms which generate surface water flooding in Northern Ireland are becoming more prevalent and more intense. We have therefore included measures in the Plan to develop Drainage Area Plans for each of the APSFR with the intention of more in depth flood modelling of urban areas to better understand the effects of stormwater flooding and the ability of drainage systems to cope with extreme events. However, it is also clear from the latest climate projections that Sea Level Rise will increase due to effects of temperature rise and melting of polar ice sheets. Therefore, coastal flooding may become more of a problem in future. It is therefore necessary to retain flexibility and to be able to adapt and change</p>

		direction as the climate may change. As emphasised in the most recent UK Climate Change Risk Assessment, it is important not be locked into particular courses of action which in future, could become detrimental rather than beneficial.
We understand that this FRMP focusses on the 12 APSFR identified in the NIFRA 2018 and that these cover a diverse variety of landscapes and land uses. Whilst we agree with many of the measures proposed in the APSFR, we feel there is room to be more ambitious and joined up with wider biodiversity and climate goals:		The Department notes your comment in relation to wider goals. In undertaking the measures identified for each of the APSFR the Department, in addition to looking at the management of flood risk, will work to protect and enhance the natural environment in a way that will also support the objectives of the Water Framework Directive and contribute to the achievement of good ecological status for waterbodies. With a view to progress measures that deliver multiple benefits for flood risk, Climate Change adaptation, water quality and biodiversity.
Biodiversity – In section ‘5.1.3.3 Environment’, the consultation shows goals for water status under the WFD have not been met to date and their reason for failure. There is an opportunity to more clearly align the potential benefits for using natural flood management interventions at scale to meet the dual challenges of becoming more resilient to climate change and reversing biodiversity loss.		The Department notes the comment in relation to WFD status and would advise that the multiple benefits of NFM are recognised and reflected within the FRMP. The Department will create opportunities to work with others, to deliver sustainable flood risk management measures at a catchment level. There are also a number of specific measures that will contribute to greater awareness and use of NFM techniques as part of flood risk management solutions, an example of this will be the projects proposed through the LWWP. A measure has also been included for the Department to work with DAERA to consider how future agricultural and land support measures may include flood risk management options.
Prevention and climate change resilience – the consultation suggests for many of the APSFR’s that no prevention measures were set out in the first round of FRMPs, and that the planning team are advised on the risk of proposed developments to flooding. This round of FRMPs should be far more ambitious to include incorporating Sustainable Urban Drainage as a mandatory part of the planning process. We expand on this in our response to Question 4.		The Department would clarify that the first cycle FRMPs included a regional Prevention measure, which applied to all areas of Northern Ireland including APSFR, to discourage inappropriate development in areas of high flood risk. A similar measure is included for this second cycle. The Department also understands and recognises the need for a clear SuDS policy, and this is reflected in the Regional Measures within the Plan. The progression of these measures and development of SuDS policy will require ongoing engagement with local councils and other stakeholders.
Sustainable Catchment Management (SCaMP) - We support a strategic and collaborative approach to managing water higher up in the catchment. This reduces pressure and the energy requirements of hard engineered infrastructure.		The Department notes your comment.
Catchment scale solutions will help manage rainwater more naturally through the catchment by controlling run-off, reducing peak flows in the drainage		The Department notes your comment and will continue to work with NI Water, and other land owners, to explore further opportunities to

<p>systems, and providing areas for flood storage. As one of the largest landowners in NI, NI Water has the potential to lead the way, working in partnership to develop projects which deliver their strategic objectives, whilst securing benefits for climate and biodiversity.</p>	<p>manage water naturally through the catchment. This concept is also a significant focus of the LWWP.</p>
<p>The Utility Regulator and NI Water, through the Price Control process, provides an important mechanism for funding SCaMP and investing in the delivery of nature-based solutions at scale. Ongoing investment is required through SCaMP involving NI Water and NGOs working together to address land management issues that negatively affect both wildlife and water quality.</p>	<p>The Department notes the comment in relation to SCaMP and agrees that ongoing investment in this area is required. NI Water is expected to invest around £4.8m in SCaMP during the PC21 period (April 2021-March 2027).</p>
<p>Previous examples of successful partnership delivery should provide a model for future application of SCaMP. In partnership with NI Water, RSPB has been involved in a large-scale peatland restoration project on the Garron Plateau in North Antrim, the largest single area of blanket bog in NI. This landscape provides numerous nature-based solutions for climate, as well as providing drinking water for nearly 12 thousand homes and businesses in the surrounding area. The 4650ha site is protected due to the presence of blanket bog, fens, mires, lakes, ponds, and heathland. The site is also home to a range of priority species, including iconic birds such as Hen Harrier and Merlin.</p>	<p>The Department notes the comment and welcomes RSPB's inputs to this project.</p>
<p>The restoration of Garron was achieved by raising the bog's water table through blocking a large network of on-site drains. Blocking drains rewets the peat, stabilising the site's hydrology and allowing the specialised peatland plants to recolonise. The unique natural balance of the site has been enhanced through habitat restoration which has improved drinking water quality and reduced NI Water's treatment costs. A recent RSPBNI natural capital study, Valuing our Peatlands, shows the 'value' derived from peatland restoration, with every £1 invested, delivering £4 of public benefit in return. The Garron project demonstrates the win-win outcomes and considerable return on investment that can be delivered if public money is invested in nature-based solutions. Now we need action to deliver similar restoration at scale.</p>	<p>The Department notes the comment and welcomes RSPB's inputs to this project.</p>
<p>Better catchment scale management can be achieved through delivery of a variety of nature-based solutions, which provide value for money. Adequate funding is required to deliver strategic long-term investment in nature-based solutions to drive positive outcomes for water quality, biodiversity, climate change action, health and wellbeing, and the economy. This will require input from across the various stakeholders to deliver partnership projects and investment, and innovative thinking for delivery of multi-benefit outcomes. It will also require integration and policy cohesion across government departments. For example, future agriculture policy should be based around</p>	<p>The Department notes the comments and agrees that multiple benefits can be achieved through the implementation of nature based solutions and better catchment management. The LWWP will promote schemes and concepts to manage water in an integrated way across its catchments to mitigate flood risk. Schemes and concepts will include:</p> <ul style="list-style-type: none"> • Policy and legislative changes; • NFM, attenuation and SuDS; and • Integration of blue/green infrastructure to public open spaces. <p>In relation to local operational planning policies, DfI Rivers has been</p>

<p>rewarding farmers for the delivery of environmental public goods which play a key role in delivering better land management. Furthermore, there needs to be improved links between flood management decisions and land use planning decisions with a continuation of the precautionary approach to floodplain development as set out in Planning Policy Statement 15 to ensure that our floodplains are kept free from inappropriate development.</p>	<p>involved in extensive consultation with the Local Planning Authorities in the development of their Local Development Plans (LDPs). Once adopted, LDPs will be given primacy in the determination of planning applications unless material considerations indicate otherwise. It is expected that new LDPs will provide appropriately worded and suitably future proofed floodplain definitions to enable the continued implementation of the presumption against development in both present day and Climate Change flood mapped areas. DfI Rivers is also a Statutory Consultee in the planning process which advises local planning authorities on flood risk management for new developments. It seeks to apply strong, robust flood risk management policies intended to reduce development in flood risk areas. The thrust of this policy is to take a precautionary approach to ensure that new development, where possible, is avoided in floodplains and that any proposed development does not increase flood risk elsewhere.</p>
<p>Nature based solutions and natural flood management - Large-scale nature-based projects should be funded and delivered to deliver win-win outcomes for nature, people and climate, including implementation of NFM at a catchment scale. The combination of solutions, such as tree planting, peatland restoration, wetland creation can provide flood alleviation benefits while helping tackle the climate and nature crises. There needs to be a rapid upscaling in the use of these tried-and-tested solutions, to help address challenges to the water environment and deliver multiple co-benefits for people and nature.</p>	<p>Where appropriate, the Department will consider nature based solutions to alleviate flooding in APSFR and other areas at high risk where such solutions or part-solutions may be cost beneficial. We recognise that nature based solutions yield environmental and biodiversity benefits as well as contributing towards flood alleviation. The Department notes RSPB's suggestion of a Foyle Polders Project in relation to reducing tidal flood risk to Derry.</p>
<p>For example, Derry City is under major threat from tidal surges and sea-level rise, as highlighted by the Committee on Climate Change in their 2018 report 'Managing the Coast in a Changing Climate' and the Northern Ireland Flood Risk maps.</p>	
<p>A Foyle Polders Project would use managed re-alignment to re-engineer land in the Foyle estuary to absorb and store tidal surges and help protect the city. As well as reducing flood risk for Derry City, it would create new natural spaces with easy access for the people of Derry and Strabane and further afield, in addition to providing carbon sequestration benefits and creating new natural habitat for internationally importance priority species. RSPB has significant experience in delivering managed realignment projects as discussed in our Sustainable Shores report, including Medmerry and Wallsea Island in England, and would welcome any discussions on this. Benefits of such schemes include: Reduced GHG emissions, New carbon-rich habitat created, Climate change adaptation, Helping protect Derry from tidal flooding</p>	

<p>using natural solutions to absorb tidal surges, Flood risk reduction, Local Economy resilience, Local employment on site engineering and management, Species and Habitats, Creation of internationally important habitat for migratory species, Creation of a local recreational resource , Creation of public access routes adjacent to new habitat.</p>	
<p>Building on this, we welcome the inclusion of a section on NFM which describes the role of key natural assets in enhancing our resilience and ability to withstand extreme weather events. Peatland, forests, river floodplains, and wetlands are all cited as relevant natural assets delivering flood management. The objectives should be more explicit about NFM goals because ‘guidance’ alone will not be sufficient to deliver the necessary scale of improvement in land management. The development of policy around natural flood alleviation on privately owned land should form part of a wider strategic policy and incentivisation for landowners to deliver public goods on their land. This could also include provision of and maintenance of public access, as well as delivering public goods, such as flood alleviation and carbon storage.</p>	<p>The Department recognises the multiple benefits of NFM and is open to using nature based solutions for flood alleviation where such options (or part-options) are viable and practical means of achieving the required level of flood protection.</p>
<p>Carbon storage and climate change adaptation benefits to NFM</p>	<p>The Department notes your comment in relation to the benefits of NFM.</p>
<p>In addition to the benefits to water management that NFM interventions can have, there are also carbon related benefits. For example, peatland is of enormous importance for storing carbon whilst supporting populations of priority species and affecting river catchment hydrology. According to the UK National Ecosystem Assessment 2011, although peatlands only occupy 15% of the land in NI, they contain 42% of the carbon stock. Healthy peatland also plays a vital role in adapting to the impacts of climate change, like floods, by slowing, and absorbing water as it filters down from the hills.</p>	
<p>Unfortunately, most of our peatland is currently in a damaged state, because of decades of draining, overgrazing, burning, inappropriate tree planting, and extraction. Of the 242,000 hectares of peatlands in NI, approximately 86% is degraded and potentially emitting carbon. Leaving peatland in a damaged state is contributing to climate change as these ecosystems release CO2 to the atmosphere when the soil is exposed to the air. Peatlands currently emit around the equivalent of 5% of UK’s annual total of greenhouse gases. As little as 1% of NI peatland has been restored in some way over the last 30 years and this needs to be prioritised. Degraded peatland could add around 9% to NI’s total emissions.</p>	
<p>Urban environments – sustainable urban draining systems - The use of sustainable urban drainage systems (SuDS) should be mandatory in any future developments, given they are key features for increasing resilience to</p>	<p>The Department understands and recognises the need for a clear SuDS policy, and this is reflected in the Regional Measures within the Plan. The progression of these measures and development of SuDS policy</p>

<p>climate change. Using a combination infrastructure such as wetlands, living roofs and walls, reedbeds, street tree planting, community woodlands, and raingardens can deliver some of the multi-functionality needed to adapt urban areas for the impact of the climate crisis, whilst providing benefits for nature.</p>	<p>will require ongoing engagement with local councils and other stakeholders. The progression of these measures and emerging SuDS policy will encourage the use of SuDS components within new developments.</p>
<p>New and existing urban developments and their design need to be planned within the overall water catchment to ensure that communities are made more resilient to the water-related impacts of climate change, creating liveable communities and cities. Planning at scale in this way would provide multi-benefits for flood risk management, cooling, air quality, biodiversity, amenity, health and wellbeing, and water quality.</p>	
<p>The RSPB wants to see more ambitious commitments to incorporate SuDS as a mandatory requirement in all new developments and retrofits, recognising the scale of the climate and nature crises, as well as pressures from increasing urbanisation. This could be achieved through inclusion within each of the Council's Local Development Plans as part of any zoned site's key site requirement. This would mean that for planning to be granted the proposed development must satisfy all its key site requirements, including the provision of SuDS for example. Furthermore, a revision to the Strategic Planning Policy Statement (SPPS) to make the inclusion of SuDS mandatory, would secure this provision at a Regional level.</p>	
<p>Ultimately, we welcome new policies and procedures to encourage greener drainage solutions and a collaborative approach to drainage and wastewater management. Partnership working will be essential to delivering the ambitions of the FRMP and NGOs have proven to be a key delivery partner helping to deliver large-scale strategic projects effectively and efficiently.</p>	<p>The Department notes the comment and welcomes RSPB's support.</p>
<p>Due to the nature of the RSPB's work there are a range of ways in which we can deliver management to improve the water environment and as previously mentioned, RSPB has actively engaged with previous and ongoing projects that have improved the water environment. Measures that benefit priority species and habitats as well as measures that contribute to Natura 2000 and other designated sites achieving Favourable Conservation Status would be a priority for the RSPB, particularly those that impact upon sites partly or fully under RSPB management.</p>	<p>The Department recognises RSPB's experience and expertise in managing habitats and species in the water environment. The Department looks forward to cooperating with RSPB during the course of implementing this FRMP where this may be relevant to the achievement of particular measures and objectives.</p>
<p>The RSPB has experience of delivering a wide range of measures including, but not limited to, habitat creation and management, upland restoration including blanket bog restoration, wetland creation and management, coastal managed alignment, and woodland management. In NI, the RSPB is engaged in land management in many areas including our reserves at Lough Foyle,</p>	

<p>Portmore Lough, Rathlin Island, the Lower Lough Erne Islands, and Aghatirourke. RSPB has also taken several steps to address water management and storage on the RSPB managed reserves improving and demonstrating how water can be managed within a variety of landscapes to reduce the impacts of flooding.</p>	
<p>The RSPB would be prepared to engage with measures across a range of sites and scales and we would welcome the opportunity to engage with measures to address issues directly affecting RSPB managed sites. We would also be willing to engage at a catchment scale where required to address issues such as Invasive Non-Native Species (INNS), many of which are spread through the freshwater environment.</p>	
<p>There is a need to join up the various planning processes in developing a holistic, strategic, and collaborative approach for the water environment. For example, the river basin management plan (RBMP) process does not connect with the Asset Management Plan and Price Review processes resulting in a limited ability to cross-reference and align with business planning by NI Water. Connecting these multiple planning processes would provide a greater rationale for NI Water to be involved in delivering outcomes for the RBMPs and allow the Utility Regulator to consider RBMP implementation and the delivery of nature-based solutions as part of the final determination process. There needs to be a rapid upscaling in the use of nature-based solutions to help address challenges to the water environment and deliver multiple co-benefits for people and nature, including increasing resilience of systems in the face of a changing climate.</p>	<p>The Department recognises the need for coordination of plans and programmes. Indeed, legislatively under the Floods Directive Regulations 2009, the Department is required to coordinate its FRMP with DAERA's RBMP. To this end, DAERA WFD representatives sit on the Floods Directive Technical Steering Group and advise the content of the FRMP accordingly. At project / measure level, environmental connections are particularly strong to ensure the Department meets the requirements of the Water Framework legislation. Environmental Scoping and necessary Impact Assessments are carried out and mitigations and enhancements are included within measure specifications. Because the NI Flood Risk Assessment 2018 has identified Surface Water as the predominant source of flooding in NI, the FRMP process includes significant input from NI Water; enhanced Drainage Area Plan modelling for every APSFR has been included as a measure in the FRMP. Therefore there is linkage between the FRMP and NI Water's Price Control process since funding for the enhanced DAPs is through PC21. Similarly, the Living with Water in Belfast links strongly with the FRMP and measures from the LWWP have been included in the FRMP. Also fundamentally, the Councils' Local Development Plans link strongly to the Department's flood risk management policies and guidance concerning development within river and coastal floodplains and associated drainage, to ensure adverse effects on water and human environment are minimised.</p>
<p>The Department for Infrastructure's justifications for why it considers that the Strategic Environmental Assessment (SEA) and Habitats Regulations Assessment (HRA) are not required to be updated for the 2nd cycle FRMP 2021-2027: is as follows that the minor modifications proposed do not have the</p>	<p>The HRA report has been updated for the 2nd cycle FRMP. The SEA Screening report notes that no additional "Measure Types" are proposed for inclusion in the 2nd cycle FRMP, above and beyond those described and assessed in the 1st cycle FRMPs. The supplementary</p>

<p>potential for significant effects on the environment, and that this was covered in the 1st cycle SEA and HRAs.</p>	<p>This rationale concerns us as it appears somewhat 'back-to-front'. The exemption in the SEA Directive applies to the scale of environmental impact, not the scale of the change to the plan or programme. The two are clearly distinct but it is not clear from the Department for Infrastructure's justification that this distinction has been properly considered. Section 2.5.2 details how the RBMPs and FRMPs interact and how the two are integrated to improve flood risk management and water quality. Given the FRMPs ambitious objectives around the environment we can only infer that the "minor" changes to the plans will in fact deliver significant improvement on the ground thereby rendering SEA obligatory.</p>	<p>"Measure Activities" either expand upon Measure Types already assessed in the 1st cycle FRMPs (such as catchment based management) or represent additional flood prevention policies, and do not have the potential to provide a framework for development consent for projects listed in the EIA Directive. The SEA Environmental Report for the 1st cycle FRMPs assessed each of these Measure Types, including the potential for both positive and negative effects on the environment across SEA Topics (detailed in Appendix 2 of the SEA Environmental Report for the 1st cycle FRMPs). The Department is content that the previous SEA assessment acknowledged all Measure Types within the Plan that may have the potential for environmental impacts, and that any additions or expansions of "Measure Activities" will not affect the outcomes of this assessment. Following consultation with the environmental consultee for SEA in Northern Ireland (DAERA) and the transboundary environmental consultees for SEA in the Republic of Ireland, it was agreed that, as the 2nd cycle FRMP is considered to be a modification of the 1st cycle FRMPs, with no additional physical actions or "Measure Types" being proposed, the SEA for the first cycle FRMPs remains valid, with no need to undertake a full new SEA. The Department acknowledge that, moving forward, the next FRMP cycle will include a comprehensive review.</p>
<p>However, the Department for Infrastructure's current position seems to be that the objectives and the measures contained within the 2nd cycle FRMP will fail to deliver significant environmental benefit, which is concerning. The FRMP requires further scrutiny to make it more ambitious and impactful. To deliver the change our rivers clearly need, these plans must result in significant positive environmental effect - again, thereby rendering SEA obligatory.</p>	<p>Yes, the SEA should be updated to reflect the significant positive environmental effects planned as a result of the 2nd cycle FRMPs. The three objectives under the heading 'environment and cultural heritage', should each be creating positive environmental effects that should be documented: Referring to Objective 8 'To consider the impact of Climate Change for the main sources of flooding'. Referring to Objective 9 'To support the objectives of the Water Framework Directive and contribute to the achievement of good ecological potential/status for waterbodies'. Referring to Objective 10 'To protect and enhance the natural environment and cultural heritage'.</p>	<p>The FRMP objectives for environment and cultural heritage for the 2nd cycle were also objectives for the 1st cycle Plans. As such, the SEA Environmental Report for the 1st cycle assessed these Plan objectives against each of the SEA Topics, including positive, negative and neutral interactions. This can be found in Appendix 1 of the SEA Environmental Report for the 1st cycle FRMPs.</p>
<p>Currently there are no detailed estimates of future loss of coastal habitats in NI. The RSPB's Sustainable Shores Report (2018), stresses that to date there have been no government-led assessments of future coastal habitat loss published in NI. We have therefore been limited to using the ONS 2016 scoping report to estimate potential losses in NI; it projects only 28 hectares of saltmarsh loss by 2060 using a simple extrapolation of recent loss rates. However, we are aware that several important tern nesting sites within NI are deteriorating because of rising sea levels and erosion.</p>	<p>The Department notes your comments, and would advise that it is outside the scope of the FRMP to assess the future loss of coastal habitats. The Department feels that the Coastal Forum is ideally positioned as the body to consider the need for a Shoreline Management Plan approach for NI and this will be considered as part of its ongoing work.</p>	<p>The Department notes your comments, and would advise that it is outside the scope of the FRMP to assess the future loss of coastal habitats. The Department feels that the Coastal Forum is ideally positioned as the body to consider the need for a Shoreline Management Plan approach for NI and this will be considered as part of its ongoing work.</p>

	There needs to be further investigation into the potential and existing loss of protected habitat in NI due to the impacts of climate change, including that through projected coastal squeeze. Actions need to be identified to restore lost habitats and re-establish habitat condition and functionality. This could be delivered through the development of a National Habitat Creation Programme.	
Consumer Council	The Consumer Council is the statutory consumer representative body for water and sewerage consumers in Northern Ireland. We are pleased to respond to the Department for Infrastructure's consultation on the Second Cycle Draft Northern Ireland Flood Risk Management Plan 2021-2027 (dFRMP).	The Department notes your comment.
	We support the objectives detailed in the dFRMP of prevention, protection and preparedness, under the overall objective of reducing and managing the risk of flooding. Fit for purpose drainage and wastewater infrastructure is fundamental to achieving the aims of the New Decade, New Approach agreement, and at least two of the outcomes of the NI Executive's draft Programme for Government – 'We live and work sustainably – protecting the environment' and 'Our economy is globally competitive, regionally balanced and carbon-neutral'.	The Department notes and welcomes the support of the Consumer Council for the objectives detailed in the Plan and the approach being adopted.
	Consumers consistently place sewer flooding, and flooding more generally, as a priority for NI Water to tackle, and understand that investment in good infrastructure is needed to do this. The investment needed is significant, over an extended period. NI Water estimates that to address existing internal property flooding, facilitate growth, and meet environmental standards, approximately £1bn of investment is required in Belfast's wastewater infrastructure alone.	The Department notes the comments and will continue to make the case for funding in this area.
	We know that a major constraint on improving the wastewater infrastructure and developing flood management schemes across NI will be the level of public expenditure funding available. We are very aware of the significant difficulties that will be presented by the constrained public expenditure budget. Given the latest Climate Change projections (UKCP18) of a rise in sea level, increased winter precipitation and an increase in the frequency and intensity of rainfall events, which will further increase flood events, we share the concerns of many stakeholders that deficits in investment will lead to flooding and consumer detriment.	The Department notes the comments and will continue to make the case for funding in this area.
	We support the aims of reducing flood risk and enhancing the environment through improved local development plans that are cognisant of flood risk areas, the management of development in flood risk areas, storm separation, the removal of impermeable surfaces, the design and build of sustainable	The Department notes and welcomes the support of the Consumer Council for the approaches being adopted.

<p>blue/green drainage systems and flood resilient infrastructure. Consumers value their water environment and want to see it protected and improved.</p>	
<p>In 2014 we conducted research exploring consumers' views of sustainable flood solutions. The majority of consumers (60%) supported the use of hard and soft sustainable drainage solutions, recognising the benefits of Sustainable Drainage Systems (SuDS) solutions such as ponds, and agreed that designated 'flood points' can bring to the community in terms of lowering flood risk, improving water quality, amenity and biodiversity. Three quarters of consumers supported seeking ways to prevent flooding through more sustainable, less expensive methods of managing rain water above ground.</p>	<p>The Department notes the positive findings from the Consumer Council research (2014) and understands and recognises the benefits of SuDS solutions, and this is reflected in the Plan's Regional Measures.</p>
<p>Additionally, consumers commented on the importance of good planning and the effects of development and housing, in combination with the reduction of green areas as contributing to drainage issues and increasing the likelihood of flooding. We agree that to improve the management of water flow in our urban areas will require blue/green infrastructure and measures such as SuDS, and that in periods of heavy rain, green spaces in urban areas should be used to hold water on a temporary basis to help prevent flooding of homes and businesses. This will help manage surface water, reduce flood risk and enhance the water environment for the benefit of all.</p>	<p>The Department notes your comments in relation to SuDS and understands and recognises the need for a clear policy in this area, which is reflected in the Regional Measures within the Plan. The progression of these measures and development of SuDS policy will require ongoing engagement with local councils and other stakeholders. The Plan also includes the Living With Water Programme which will promote schemes and concepts to manage water in an integrated way across its catchment to mitigate flood risk. This will include Natural Flood Management, attenuation and SuDS, along with integration of blue/green infrastructure to public open spaces.</p>
<p>During our research consumers raised questions regarding sustainable flood solutions, particularly on soft SuDS.</p>	<p>The Department understands and recognises the need for a clear SuDS policy, and this is reflected in the Regional Measures.</p>
<p>Who will 'own' the SuDS, i.e. is ownership transferred to the householder, who will be responsible and pay for the maintenance of the SuDS, who will be responsible for any insurance and public liability issues.</p>	<p>The Department notes your comments in relation to the ownership, maintenance and public liability questions around SuDS, these points will be considered further during the ongoing policy work in this area.</p>
<p>More work will be needed to provide clarity on these issues to avoid creating future problems for consumers. We would note that these concerns should not prevent sustainable blue/green solutions being promoted and progressed through the dFRMP. To do so could limit the long term and ongoing benefits that improved drainage infrastructure can bring to communities.</p>	<p>The Department notes your comment.</p>
<p>The consultation asks what further opportunities should be considered for the plan. The Consumer Council has long advocated that comprehensive engagement with consumers is fundamental to the design and delivery of policy and services. Putting consumers at the centre of decisions is vital to ensure that we are delivering what really matters to them. To enable this, good consumer engagement practice is critical.</p>	<p>The Department notes the comments and recognises the benefits of community and individual engagement in taking forward policies and delivery of measures that are included within the Plan.</p>

<p>Community involvement should be built into the development of Specific area plans. Affected communities should be enabled to participate in co-design, co-delivery and co-assessment of the plans. These inclusive design principles begin with recognising that good decisions must start from understanding the experience and need of the consumer.</p>	<p>The Department notes the comments and recognises the benefits of community engagement. The work of the RCRG is designed to support communities and individuals in relation to their understanding of flood risk. The RCRG also work on a multi-agency basis to facilitate, plan and prepare to allow for community and individual response and recovery to flooding and other hazards. In addition, where measures include proposals for a Flood Alleviation Scheme, there is considerable community engagement both prior to and during construction. This would include the scheme being publicly advertised in advance of commencement.</p>
<p>We are a member of the Regional Community Resilience Group (RCRG). RCRG works directly with households and communities at flood risk to lower their risk and to help prepare household and flood action plans.</p>	<p>The Department notes and welcomes the support of the Consumer Council for RCRG.</p>
<p>As a member of RCRG, we have witnessed first-hand the benefits that can be delivered through direct community involvement and participation in water management and resilience schemes. We are pleased to see the importance of this work reflected in the dFRMP's key approaches in terms of preparedness (table 4-4 of the consultation document).</p>	<p>The Department notes and welcomes the support of the Consumer Council for RCRG</p>
<p>We note the annual indicative budget of £30k included in the dFRMP for stakeholder groups and £75k for community resilience. We would encourage DFI to ensure the appropriate resourcing of RCRG to continue its work. It is important that a consumer engagement approach is incorporated as specific plans for the areas identified in the consultation are developed.</p>	<p>The Department notes your comments and would advise that broad estimates have been included in the Plan for RCRG activities; these are based on historic expenditure. Should there be a requirement for additional funding or resource requirements for Community Resilience activities, a bid or bids for such resources could be made from RCRG to organisations which contribute to its activities; the Department being one organisation of several within RCRG. However, this would be outside the scope of the Plan.</p>
<p>Effective ongoing engagement with consumers can also help shape behaviours. This will prove beneficial in campaigns such as NI Water's '3Ps' to protect the sewer network. We would encourage DFI to work with water stakeholders when developing trials and pilot studies to test methods of consumer engagement and their efficacy. Well-developed trials will aid understanding of the activities required to change consumer behaviour.</p>	<p>The Department notes Consumer Council's comments on involving stakeholders in trials and pilot studies and will endeavour to seek the Council's advice if and when engaging in these types of activities</p>
<p>Government co-ordination - Joined up Government action is expected by consumers. However, joined-up thinking is not always apparent. This can lead to consumer scepticism and have an adverse impact on consumer trust in Government strategies. It is encouraging that the Consultation clearly outlines the arrangements that will be put in place to coordinate planning and action.</p>	<p>The Department notes the comments and recognises the benefits of a coordinated approach with all involved in flood risk management.</p>

<p>Sinn Fein</p>	<p>Sinn Féin welcome the opportunity to respond to the second cycle draft Flood Risk Management Plan 2021–2027. The Flood Risk Management Plan (FRMP) is an important step in the implementation of the Floods Directive, and is a requirement under The Water Environment (Floods Directive) Regulations 2009. Over the years flooding has affected families, communities and businesses across the north by threatening physical harm and damaging property while causing environmental harm such as through the pollution of rivers. Local economies and infrastructure have also been impacted by flooding and all of this can contribute to severe mental health impacts as well, causing deep stress and frustration for the affected families. It's abundantly clear that flooding poses a significant threat to communities across the north and this will only be exacerbated by the rising sea levels and extreme weather patterns that are a part of climate change.</p> <p>It is therefore vital that people across the north whose areas are prone to flooding can benefit from the best preventive, protective and preparedness measures available for combating flood risk.</p> <p>To help in this regard, it is imperative that the Department fully examines and considers the responses to this consultation to help ensure that each area has the necessary measures in place to best combat any threat of flooding.</p>	<p>The Department notes and welcomes the support of Sinn Féin for the FRMP and agrees that the consultation process is an important element in the development of the final Plan.</p>
	<p>The Flood Risk Management Plan 2021-27: Sinn Féin notes that the north is currently in the second cycle of Flood Risk Management Planning, as the Floods Directive and the Water Environment (Floods Directive) Regulations 2009 requires the undertaking of a staged process on a 6 yearly cycle to prepare and review Flood Risk Management Plans for identified Areas of Potential Significant Flood Risk. There have been some significant changes since the First Cycle of the Floods Directive, such as through the improvement in technological advances in flood risk mapping and assessment (i.e. more detailed mapping and modelling). Also, there has been an advance from the first cycle of Flood Hazard and Flood Risk Mapping in that surface water mapping is now included in addition to fluvial and coastal mapping.</p> <p>However, it was acknowledged during the public inquiry for the A5 that the Department did not take into account the most recent flooding data and that the inspector has asked DFI to re-examine flood risk on the basis of the most up-to-date flood data. While this was concerning to discover in that it contributed to the delay of the A5, Sinn Féin would like assurances that the Department is taking into account the most recent flooding data across the north when designing this flood risk management plan.</p>	<p>The Department notes the comments in relation to the A5 road scheme and the use of the most recent flood data in the development of the FRMP. The Floods Directive operates on a six year cyclical process of assessment, mapping and planning. The purpose of this cyclical approach is to take account of new and updated information and recognises that our understanding of flood risk is continually evolving taking account of improved hydraulic modelling techniques, flood events and ongoing analysis. Flood risk is continually reassessed to identify new objectives and measures which will be applicable to all at risk areas of NI and can be taken into account in future plans.</p>
	<p>It is also noted that in undertaking analysis of flood risk in the north, the Flood Risk Assessment 2018 identified 45 Flood Risk Areas as opposed to the 69 areas which had been identified through the PFRA 2011. It cannot be</p>	<p>The Department notes the comment and acknowledges that there is still the risk that incidences of serious flooding could occur in areas outside the 45 FRAs identified in NIFRA 2018. Should major flooding occur</p>

<p>understated that any area that may be prone to significant flood risk must benefit from the full range of measures for preventing and tackling the impacts of flooding. In order to help realise this it is vital that the Department fully examines all responses to this consultation in order to ensure that all legitimate flooding concerns within the 6 counties are addressed moving forward.</p>	<p>elsewhere in NI outside of the identified FRAs, then measures to address such flooding may be developed and prioritised alongside those currently included within the second cycle FRMP? In addition the Regional Measures identified in the FRMP will help to manage and mitigate flood risk in all areas.</p>
<p>Consultation and Engagement: Sinn Féin believe it is vital for the Department for Infrastructure to reach out to communities and fully take into consideration their views of this draft Flood Risk Management Plan (FRMP). Due to Covid, public meetings regarding the drafting of the FRMP have not been feasible and while this is understandable, it is key that proper engagement is carried out within the consultation.</p>	<p>The Department notes the comments and agrees that the public's views on the draft FRMP are important. In addition to the requirements to advertise the consultation in national newspapers, notification was directly emailed to over 260 individuals and groups. This additional targeted consultation, included known flood affected communities.</p>
<p>It is welcome that the draft plan is being circulated to the Regional Community Resilience Group and its at-risk communities as well as the Key Infrastructure Group which comprises members of organisations who manage critical infrastructure and services, and whose members are encouraged to provide their views to this plan.</p>	<p>The Department notes the comments and agrees that the public's views on the draft FRMP are important.</p>
<p>Additionally, as the environment does not recognise borders, it is also welcome that the Department intends to continue to engage with the Office of Public Works (OPW) in the south to ensure that measures undertaken in either jurisdiction do not increase flood risk and are mutually beneficial in avoiding flooding. It is key that there is strong north south cooperation on this going forward.</p>	<p>The Department notes the comments and agrees that ongoing engagement with OPW is important. Indeed coordination and information exchange with Rol is a requirement of the Floods Directive Regulations 2009.</p>
<p>Impact of Climate Change: Sinn Féin recognises with increasing extreme weather events comes greater risk of flooding to properties and infrastructure across the island, often associated with climate change. The latest Climate Change projections forecast a rise in sea levels, increased winter precipitation and an increase in the frequency and intensity of extreme rainfall events, which will further increase flood risk in the north, with sea levels potentially rising to 94 cm in areas such as Belfast by the year 2100.</p>	<p>The Department notes the comments.</p>
<p>The draft plan notes that the 2018 Flood Risk Assessment identified approximately 45,000 or 5 % of the properties in the north are at risk of flooding from rivers, the sea or overland surface water flows. Appropriate actions need to be taken if we are to manage this growing flood risk in a sustainable manner. It is imperative that we address the threat the north faces regarding flooding and take the necessary actions needed to mitigate this risk.</p>	<p>The Department notes the comments.</p>
<p>Regarding preparation for extreme weather due to climate change, Sinn Féin stresses the importance of improving government response to major flooding</p>	<p>The Department notes the comments.</p>

<p>incidents and for effective emergency planning. While flooding is already a very serious issue it will only become worse so if the climate emergency is not appropriately addressed. The north must play its part in tackling climate change and Sinn Féin have been calling for the introduction of a Climate Change Act based on just transition principles for the north of Ireland.</p>	
<p>Protection from all types of flooding: Communities across the north need to be protected from all types of flooding including pluvial, fluvial and coastal flooding, but also flooding from sewer overflow as well as from reservoirs.</p>	<p>The Department notes the comments (see detail on Reservoirs below).</p>
<p>Sewage capacity is an issue affecting the entire north. Investing in our wastewater infrastructure will help reduce the risk of out-of-sewer flooding and increase the capacity of the sewerage network. It is vital that wastewater capacity is addressed so that across this island, the right infrastructure is in place that allows us to protect communities against flooding, enhance the environment and grow the economy in a sustainable and regionally balanced manner. This is also important in terms of ensuring we can build much needed housing in a sustainable way that doesn't increase the risk of flooding.</p>	<p>The Department notes and welcomes the support for investment in wastewater infrastructure to address capacity issues.</p>
<p>The plan also makes reference of the possible risk of flooding from reservoirs however states that it is not considered within this plan as it should be covered in other legislation, namely the Reservoir Act 2015. This act makes provision for a regulatory reservoir safety framework for all Controlled Reservoirs however due to complications this safety framework is not yet in place and Sinn Féin urges for this to be addressed as a matter of urgency.</p>	<p>The Department notes the comments and acknowledges that the risk of flooding from reservoirs is not specifically addressed within this FRMP because it is covered by separate legislation. The Reservoirs Act (Northern Ireland) 2015 makes provision for a proportionate regulatory reservoir safety framework for all Controlled Reservoirs (i.e. those reservoirs capable of holding 10,000m³ or more of water above the natural level of any part of the surrounding ground). Subject to Ministerial and NI Assembly approval, the secondary legislation necessary to introduce the regulatory reservoir safety framework will be in operation in this Flood Risk Management Planning cycle.</p>
<p>The draft consultation also notes that there may be a risk of flooding from groundwater, however there is little known of this in the local context as groundwater flooding can often be masked by fluvial or surface water flood events. It notes that studies have been undertaken by the competent authorities in other areas to assess the extent and susceptibility of aquifers to groundwater flooding and that further consideration of this area needs to be carried out to establish if there are significant risks associated with this source of flooding in the north. Sinn Féin also urges for a greater understanding of the potential risk from groundwater-based flooding in the context of the north.</p>	<p>The Department notes the comments in relation to groundwater flooding and advises that the FRMP includes a Regional Measure to undertake a study to improve understanding of the potential for groundwater flooding.</p>
<p>The Living With Water Programme is referred to within this plan, as a multi-agency initiative headed by the Department for Infrastructure to develop a Strategic Drainage Infrastructure Plan (SDIP) for the city of Belfast to support</p>	<p>The Department notes the comments in relation to the LWWP. While the LWWP is currently focused on Belfast and surrounding APSFR, it is intended that this approach will be rolled out across Northern Ireland,</p>

	<p>economic growth, protect the environment and address flood risk. It should be noted that all areas that would benefit from a 'Living With Water' approach should be able to do so through integrated drainage measures that incorporate sustainable drainage solutions such as natural flood management; blue/green infrastructure; as well as the 'hard engineering' solutions such as the much-needed investment in wastewater sewage infrastructure.</p>	<p>helping to inform future drainage investment. The Minister for Infrastructure recently announced that a Strategic Drainage Infrastructure Plan will be developed for Derry, similar to the Living With Water in Belfast plan.</p>
	<p>It is vital that across the north of Ireland we have the right measures and long-term strategy in place that allows for a greater protection against flooding for communities.</p>	<p>The Department notes the comment.</p>
	<p>That should include adapting to adverse weather challenges, such as those presented by climate change, and to enhance our water environment while also facilitating community and economic development in a balanced and sustainable way.</p>	<p>The Department notes the comment.</p>
	<p>It is important to stress that the Department properly engages with all stakeholders, and seek their views in order to ensure this plan meets all the objectives it sets out to achieve, mainly addressing the risk of flooding and to facilitate sustainable development.</p>	<p>The Department notes the comment.</p>
	<p>It is absolutely vital that any location that may be prone to significant flood risk must be able to benefit from the full range of measures to prevent and tackle the impacts of flooding.</p>	<p>The Department notes the comment.</p>
	<p>Flooding impacts on families, businesses, communities and the local environment. It's vital that this plan maximises our response to tackling this serious issue in order to provide the protection communities deserve from adverse weather events.</p>	<p>The Department notes the comment.</p>
	<p>As a final point, the increased risk of extreme weather events and flooding demonstrates the seriousness and intensity of the climate crisis, as well as our need to fully commit towards achieving a just transition into a sustainable society.</p>	<p>The Department notes Sinn Fein's comments in relation to the climate crisis and its potential effects. We consider that the Plan recognises the effects of Climate Change and flooding and includes adaptive measures for drainage infrastructure and development planning and management to improve resilience to these effects.</p>
Climate NI	<p>Climate NI supports the approach taken in the second cycle Floods Directive of assessing flood risk in the NI Flood Risk Assessment and applying this information to the Flood Risk Management Plan. To highlight the most significant flood risk areas in each of the River Basin Districts it may be beneficial to provide a map showing the areas of potential significant flood risk (APSFR) and transitional areas of potential significant flood risk (TAPSFR)</p>	<p>The Department notes and welcomes the support of Climate NI for the approach taken in the FRMP. Information on each APSFR and TAPSFR in relation to their respective River Basin District is detailed in Tables 3-2 and 3-3.</p>

<p>overlaid on the River Basin District map i.e., Figure 1-2 and Figure 1-3 combined.</p>	
<p>However, it is important to note that updated climate change projection data is now available. A precautionary approach using Met Office UKCP18 rather than UKCP09 should be utilised in both the NI Flood Risk Assessment and the Flood Risk Management Plan. As well as utilising new data sets such as the 2.2km models, which could be important for modelling changes in heavy summer rainfall events. Climate NI welcomes the statement that “During the second cycle, new Climate Change mapping will be developed to take account of UKCP18 information” (p29), but further consideration should be given to how this wide range of new projection information can be integrated in this cycle of the Floods Directive.</p>	<p>The Department notes Climate NI’s comments in relation to the availability of UKCP18 information. The NI Flood Risk Assessment 2018 formed the basis of the determination of Areas of Potential Significant Flood Risk (APSFR) for this second 6 year cycle of the Floods Directive. Climate Change information for NIFRA was based on UKCP09 information but since NIFRA publication in 2018, UKCP18 has been published with its more up to date research and information. For the third cycle strategic flood risk assessment it is probable that UKCP18 information will be adopted. The Department intends to revise its guidance on climate change allowances for drainage infrastructure and development planning and management, from UKCP09 to UKCP18 during this Plan period. However, revising guidance, design and planning processes along with associated flood mapping will all take time to implement. The Department is aware of the local 2.2 km data in UKCP18 and its potential use in consideration of uplifts in relation to convective storms and surface water flooding. In this respect the Department awaits outcomes of other UK research and the actions of other parts of the UK. In relation to River flow uplifts, the Environment Agency in England recently issued new guidance in July 2021 based on up to date research. Similarly, the Department will be considering the most appropriate UKCP18-based peak river flow uplifts for Northern Ireland.</p>
<p>In addition, there is a need to map where communities who are most socially and spatially vulnerable to potential flood events in terms of their underlying characteristics (i.e., socio-demographic data such as age and health, spatial and physical characteristics of the neighbourhood), with a focus on mapping flood disadvantage (i.e., socio-spatial vulnerability combined with the probability of being flooded). For examples of this see the Climate Just mapping and work in Scotland mapping flood disadvantage which feeds into the Flood Risk Management plans. Recent work by Sayers et al (2020) which is supporting evidence for the UK Climate Change Risk Assessment provides some of the supporting evidence for Northern Ireland for the socially vulnerable, but this should be utilised in flood risk management in NI.</p>	<p>The Department recognises that social vulnerability is a factor which can be mapped and considered within flood risk assessments. Vulnerability data were included in the first cycle Preliminary Flood Risk Assessment for Northern Ireland. However, it was concluded that vulnerability had a low level of influence on the determination of extents of the Areas of Potential Significant Flood Risk (APSFR) - which are the focus of the Flood Directive Regulations 2009; areas which had the highest level of social vulnerability were also where density of population and economic damages were greatest in any case. Therefore for the 2nd cycle, social vulnerability was not included as a dataset for the NIFRA 2018 to determine of the extents of APSFR, however, this might change for the next (3rd) cycle.</p>

<p>Climate NI agrees with the objectives set out in the Flood Risk Management Plan. However, with any objectives it is important they are SMART where possible and have indicators in order to measure success. The Indicators that are currently listed in the NI Climate Change Adaptation Programme 2019-2024 (NICCAP) are:</p> <p>% uptake of Sustainable Drainage Systems for new Article 161 Sewer Adoption Agreements.</p> <p>% of properties at risk of flooding in NI.</p> <p>Number of Local Development Plans (Plan Strategy/Local Policies Plan) which take account of climate change adaptation considerations in accordance with the provisions of the Strategic Planning Policy Statement and have been adopted post Independent Examination. These should then integrate into the NICCAP and other policies.</p> <p>Additional Example: To reduce the risk to life, health and wellbeing – No. of People whose flood risk has been reduced. These are examples of the potential health indicators taken from use of routine health measurements to predict impact of floods (publishing.service.gov.uk)</p>	<p>The Department notes your comment and would advise that where possible, it has tried to include targets or indicators for measures proposed in the FRMP. However, it is not always possible to set targets especially when the Plan is set at a strategic level and relates to a 6 year cycle. Targets may be able to be included for schemes programmed early in the Plan period where costs and start times are known but for measures which are programmed further into the future, their programming and costings may be less certain. It may not be clear at Plan stage when a measure may be taken forward. At this stage in Plan preparation these may be difficult to programme within the 6 year cycle and the extent of the work involved may also be unclear. Regarding the 'Additional Example' of an Indicator, No. of People whose flood risk has been reduced, as with the NICCAP2 indicator '% of properties at risk of flooding in NI', this would be a moving target. (Please note that the approach adopted for the NIFRA assumed that domestic properties on average housed 2.5 people so the two indicators are based on the same information). Flood alleviation schemes and other measures when completed, will reduce the number of people affected by flood risk but updated modelling and mapping and revisions to uplifts for climate change may increase the land areas potentially at flood risk.</p>
<p>In addition, it is not clear how the objectives are connected to the measures. Any measures listed should state which objectives they are connected to and indicators of success. A table matrix cross referencing all the objectives with the measures would provide a visual way to see this information clearly but information should also be included in each section to explain linkages, indicators and impact on reducing flood risk and action towards the objectives. Appendix C lists the objectives and measures but it is still not clear how the majority of them are connected even if the measures activities listed are useful there is no system currently. SMART targets would be much better.</p>	<p>The Department notes your comment and would advise that for similar reasons as those stated above, it is not always possible to clearly demonstrate the extent to which an individual measure will contribute to the Plan's overall objectives. The Department has provided additional information in the final Plan to help to demonstrate the linkage between the measures and objectives.</p>
<p>We would like to note that climate change has only been stated in one of the objectives under Environment and Cultural Heritage. The Independent Climate Change Risk Assessment (CCRA3) identifies that climate change and the impacts from flooding are a risk to health and wellbeing, communities, infrastructure, natural habitats and assets, businesses and the built environment. It would be useful to include references to climate change in other objectives in addition to objective eight or as an overarching principle.</p>	<p>The Department is very conscious of the potential effects of Climate Change in relation to the main sources of flooding. The Department's policies and guidance require Climate Change to be taken into account in design of drainage and flood defence infrastructure and in development planning and management. Climate Change is included in the mapping of flood risk areas. This FRMP is very much focussed on how Climate Change may affect APSFR and other areas at high flood risk. Climate Change has been a key factor considered when developing the objectives and measures within the Plan. While we acknowledge that Climate Change is only mentioned in one objective, it</p>

		<p>is incorporated intrinsically into prevention and protection approaches and measure headings.</p> <p>In addition the Department has revised its Objective 8 to be stronger in relation to Climate Change. The revised Objective is: <i>'To consider and prepare for the impacts of Climate Change for the main sources of flooding'</i>. This revision will be included in the final Plan. The Plan also states that <i>'Taking account of the likely impacts of Climate Change is an integral part of flood risk management planning and adaptation measures in the Plan will help to address future increased flood risk'</i>. Therefore Climate Change is an important aspect of the Plan and we consider that it is already included as an overarching principle.</p>
	<p>Climate NI asks DfI to reconsider the wording in Objective 5 to read 'To reduce the cost of flood damages to properties and infrastructure'. We believe 'potential future' could be removed as the NI Flood Risk Assessment and Flood Risk Management Plan confidently state that we are currently at risk of flooding and Met Office projections show high likelihood that the risk of flooding will increase in the future.</p>	<p>The Department notes your comment in relation to the removal of the words 'potential future' from Objective 5, but would consider that our aim is to reduce future flood damages and not those that have happened in the past.</p>
	<p>CCRA3 also highlights the interconnected nature of risks from flooding, such as the risk of flooding to electricity substations and the knock-on effect this could have on people, the health service, ICT and infrastructure services. This has been researched in depth by Sayers et al (2020) and WSP (2020) for the CCRA3 evidence base and may provide additional information for this cycle of the Floods Directive</p>	<p>The Department notes your comment and recognises the impacts that flooding can have on infrastructure and the knock-on, cascading effects this can cause. The Sayers et al (2020) research used data and information provided by via the Department for CCRA3. The Department recognises the interlinkage of effects caused by flooding. The strategic nature of this Plan does not include assessment of the knock-on effects of individual elements of infrastructure on people and health etc. This is something that would be addressed at measure level.</p>
	<p>Also in the recent CCRA3 Advice Report, risks to soil health from increased flooding and drought was in the list of highest priorities for adaptation action in the next two years. There is an opportunity to consider how the FRMP will link into the Sustainable Agricultural Land Management Strategy (and vice versa).</p>	<p>The focus of the Plan is essentially on APSFR which comprise predominantly urban areas at flood risk. While we recognise that rural / agricultural flooding and drought impacts on soil health, this Plan does not address these impacts.</p>
	<p>It would be useful for the FRMP to link into the risks identified from flooding in the latest CCRA3. We fully recognise that this information has only just been released and there is no Government response yet, however an objective to ensure that the latest evidence is taken into consideration within X amount of time would be useful. In this case the flooding risks are listed within the Flooding Briefing and there is further information in the NI Summary and the Technical Report in the relevant risk sections.</p>	<p>As Climate NI indicate, there is a lag time between CCRA3 being published and our Plan being finalised. In the timescale between the two there may be insufficient time to amend as you suggest. However, the Department will liaise with DAERA Climate Change Unit during the development and production of NI Climate Change Adaptation Programmes (NICCAP) with regard to flood risk management related text and targets which may be included and monitored for NICCAP. Measures within this Plan which relate to adapting to Climate Change, will contribute towards the new NICCAP objectives.</p>

<p>The recent CCRA3 Technical Report also has a section on the implications for Net Zero for each of the risks so an objective to consider the implication for the UK's Net Zero Target on actions taken would be future proofing the policy as nature based solutions may contribute to carbon sequestration while some hard engineering solutions may have higher GHG emissions in their development (of course this all needs to be balanced with the right solution in the right place but developing an understanding of actual GHG emissions and sequestration means the NI National Inventory would also be more accurate).</p>	<p>The Department notes your comment and would advise that UK Net Zero is a mainly 'emissions' based target but would agree that nature based solutions will have a part to play in managing flood risk with a benefit towards emissions reduction. We consider that the Plan goes some way towards adopting such solutions.</p>
<p>Climate NI welcomes the changes to this Floods Directive as outlined in Table 3-1. In particular, the enhanced focus on strategic links to other plans and strategies as the actions taken as the result of the Flood Risk Management Plan should have cobenefits in other areas such as River Basin Management. The plans for managing flood risk in each APSFR should take other strategies into consideration and help shape new plans and policies such as Shoreline Management Plans. The lack of shoreline management planning in Northern Ireland is an area needing further work which would benefit from the work carried out for the Floods Directive. Sea levels have risen across the UK by between 1.2 and 1.6mm per year since 1901. In Northern Ireland sea level rise is projected to be between 27 and 58cm by the 2080s.</p>	<p>The Department welcomes your comments in relation to links to other plans and strategies. The Department would also advise that Shoreline Management Planning is outside the scope of the FRMP. The Department feels that the Coastal Forum is ideally positioned as the body to consider the need for a Shoreline Management Plan approach for NI and this will be considered as part of its ongoing work.</p>
<p>NB: The Independent Climate Change Risk Assessment (CCRA3) was published on 16th June 2021, page 20 of the FRMP could be updated with this information. The CCRA3 should be used to raise ambition for the adaptation actions laid out in the third Northern Ireland Climate Change Adaptation Programme. As the time is so short between the publication and closing date we have not been able to include all the suggestions here in particular for the other nations.</p>	<p>The Department notes your comment and this section of the Plan has been updated to reflect the publication of CCRA3 in June 2021.</p>
<p>There needs to be a specific objective to consider those who are most socially vulnerable to flood risk. Mapping vulnerability to flooding now and in the future using climate change projections along with social and economic statistics would help to increase our understanding of who is at risk. This would benefit flood risk management in NI by providing more information to the multiple flood response agencies, allowing them to plan ahead for the people they will be caring for.</p>	<p>The Department recognises that social vulnerability is a factor which can be mapped and considered within flood risk assessments. Vulnerability data were included in the first cycle Preliminary Flood Risk Assessment for Northern Ireland. However, it was concluded that vulnerability had a low level of influence on the determination of extents of the Areas of Potential Significant Flood Risk (APSFR) - which are the focus of the Flood Directive Regulations 2009; areas which had the highest level of social vulnerability were also where density of population and economic damages were greatest in any case. Therefore for the 2nd cycle, social vulnerability was not included as a dataset for the NIFRA 2018 to determine of the extents of APSFR, however, this might change for the next (3rd) cycle.</p>

<p>There should also be an objective in relation to the risk towards businesses – for example – More actions to improve the evidence base and provide advice and support to businesses in relation to flood risk.</p>	<p>The Department is conscious that businesses are major sufferers of flooding along with homeowners. Flooded businesses also contribute significant benefits towards flood alleviation schemes in economic appraisals. However we consider that Objective 5 covers both domestic and business properties as neither is specifically referred to in the Objectives.</p>
<p>Utilise nature-based solutions and holistic catchment management where possible as a first option to improve resilience to the risks of flooding. The CCRA3 recommends that adaptation through effective implementation of nature-based solutions, including managed realignment and habitat restoration could be used to reduce the risk from coastal flooding, erosion and climate factors and provide multiple benefits for both people and biodiversity.</p>	<p>We recognise that nature based flood risk management solutions have a part to play in reducing risk and the Department is supportive of such solutions. Nature based solutions may take time to develop their effectiveness in reducing risk and they may also only contribute to a partial reduction of risk thus requiring an engineered solution to be done in tandem. The Plan includes such solutions within the proposed measures and where Nature Based Solutions are identified within viable solutions to address the flood risk in an APSFR or other high risk areas, these will be investigated and considered as part of any overall scheme(s). 'Managed realignment' of the coast has not been a significant issue / not formed part of a significant proposal in Northern Ireland in comparison to other parts of the UK. We are aware of only one small scheme that has been undertaken, at Kilnatierney, Greyabbey, where land was allowed to become tidal wetland by removing a sea defence which was no longer necessary.</p>
<p>Climate NI largely agrees with the regional measures identified at a strategic level, but since the Flood Risk Management Plan provides detailed information on each APSFR, Climate NI cannot comment on each of these individually. However, it is important to link in each area how the measures link back to the overall Objectives and what would be relevant indicators for success</p>	<p>The Department notes your comment and would advise that it is not always possible to clearly demonstrate the extent to which an individual measure will contribute to the Plan's overall objectives. The Department has demonstrated the linkage between the measures and objectives.</p>
<p>It could also be considered extremely important to make sure development of the LWW Integrated Drainage Investment Planning (IDIP) Guide is developed soon and communicated clearly so developers can work with planning and drainage authorities from design stage. Perhaps under 'Prevention', there could be a role for this communication, working with developers and other practitioners to boost design standards in NI to prevent further climate vulnerability.</p>	<p>Comment noted. The Department plans to issue an Integrated Drainage Investment Planning Guide and Programme to allow strategic drainage infrastructure plans to be developed across Northern Ireland.</p>
<p>Although reservoirs are not covered within this plan it should be noted that climate change predictions should be used in estimating what peak flows the spillway should be able to cope with when assessing reservoir flood risk.</p>	<p>The Department notes your comment.</p>

<p>We recommend that the 'beneficial actions in the next five years' within the CCRA3 Flooding and Coastal Change Briefing and in the CCRA3 Summary for Northern Ireland are explored for their potential to build into the Flood Risk Management Plan.</p>	<p>The Department notes your comment in relation to CCRA3 and the potential to incorporate the 'beneficial actions in the next five years' into the Plan. Given the limited lag time between CCRA3 being published and our Plan being finalised there may be insufficient time to amend as you suggest. However we consider that many of the beneficial actions associated with flood risk are already incorporated within the Plan and these will be considered further as the individual measures are progressed.</p>
<p>Climate NI believes adaptation is key to managing the risk of flooding, therefore we support the inclusion of all measures under the headings of prevention, protection and preparedness. The Flood Risk Management Plan provides detailed information on each APSFR, Climate NI cannot comment on each of these individually. A risk prioritisation exercise should take place in order to ensure that actions take place in areas of most risk first, as there are always budget and other capacity constraints.</p>	<p>The Department notes your comments on priorities and would advise that NIFRA 2018 identified the key Areas of Potential Significant Flood Risk and while this Plan focuses on these areas, this does not prevent other schemes outside these areas being progressed.</p>
<p>The measures and approaches outlined in the FRMP are all important to reduce the risk and consequences of flooding now and in the future. However, priority must be given in the first instance to keeping development out of flood risk areas, or carefully adapting where any exemptions apply, so as not to lock-in climate vulnerability. Maintenance of the existing network is also of utmost importance, for example, lack of continual maintenance and upgrade is one of the key reasons for the challenging scale of the Living With Water Programme. The age of existing infrastructure such as pipes and the capacity within the system for increased water flow must be carefully considered before permitting development. This has been an issue across Northern Ireland but can have a considerable impact in agricultural areas where systems have not been upgraded. Preparedness of communities on the ground and clear communications with them must also be a priority.</p>	<p>The Department notes your comments and would consider that the points raised are addressed through the measures detailed within the Plan.</p>
<p>The co-benefits of high-quality catchment based and natural flood management are huge, in terms of biodiversity and habitat creation, as well as benefiting people and the economy. SuDS and in particular SuDS with co-benefits to biodiversity, should be mandatory default where possible in developments in Northern Ireland, with developers supported by providing clear guidance. The current situation of adoption as a barrier to SuDS installation cannot continue in Northern Ireland. This should be an area of focus for the measures in the FRMP.</p>	<p>The Department recognises and understands the need for a clear SuDS policy, and this is reflected in the Regional Measures within the Plan. The progression of these measures and development of SuDS policy will require ongoing engagement with local councils and other stakeholders. The progression of these measures and emerging SuDS policy will encourage the use of SuDS components within new developments.</p>
<p>Northern Ireland could benefit from a flood warning system such as Floodline in GB and Scotland where the public can register to receive flood warnings via various media. The work by the Regional Community Resilience Group in NI is</p>	<p>In recent years, the Department and other stakeholders have been working alongside the Met Office Civil Contingencies to develop systems of Flood Forecasting, Flood Warning and Informing which are</p>

<p>vital in warning community groups about the risk of flooding but their work could be supported by a NI level flood warning system that the public can easily access.</p>	<p>appropriate for Northern Ireland. The RCRG, of which the Department is a member, works closely with known communities at risk to provide them with focussed information such as severe weather warnings, water level alerts and advice on community and household flood planning. It is recognised that these systems have advanced significantly. The Plan includes a Regional Measure to continue to develop and update these systems.</p>
<p>Problems with people being unable to insure their homes will become an increasingly prevalent issue, this should also be the source of some considerable thought over coming years.</p>	<p>The Plan acknowledges the importance of affordable home flood insurance and includes a commitment to continue to work with the insurance industry, including FloodRe in NI, to help address long term flood insurance affordability issues in areas of flood risk.</p>
<p>Action is required across all sectors in Northern Ireland to manage climate risk. The more we can do now to raise awareness of the risk of flooding in APSFR and take action to prevent considerable damage then the costs following serious flooding should decrease.</p>	<p>The Department notes your comment and would consider that actions to manage climate risk are incorporated throughout the Plan.</p>
<p>Climate NI can provide support to share information with stakeholders on the risks from flooding in their area and the need to take action. It has set up the Local Government Climate Action Network (LGCAN) which includes representatives from each council, public bodies and some Government departments, and has developed the NI Adapts Planning Toolkit to support councils in the development of climate change adaptation plans. This is facilitated through a five-step process, where understanding flood risk is an important aspect of Step 2 - Understanding your Vulnerability. In this step councils use DfI Flood Map data to map out the areas and assets at risk of flooding within their council area. Climate NI could look at how best to integrate the information on each APSFR into the adaptation planning process, with support from DfI. Climate NI is also running Climate Emergency Training (Accredited by the Carbon Literacy Project). Our courses build in climate adaptation and relevant NI information which we can keep updated with the latest flooding related links and guidance to share with the councils and other stakeholders.</p>	<p>The Department notes Climate NI's information on LGCAN.</p>
<p>Climate NI welcomes the more strategic approach taken in the second cycle of the Floods Directive. The enhanced focus on strategic links to other plans and strategies is important, in particular the link between river basin management and flood risk management. Co-ordination between the implementation of and the actions in the River Basin Management Plans and the Flood Risk Management Plan is vital to the success of managing the quality and supply of water alongside managing flood risk. This will require DAERA and DfI to work in partnership to deliver these plans in a cohesive manner. The actions taken</p>	<p>The Department notes your comments in relation to coordination between the River Basin Management Plan and the Flood Risk Management Plan.</p>

<p>in one plan should have benefits for the other. Just as important as co-ordination within Government, is the need for central Government to work with organisations outside departments, including local councils, farmers, NGOs and civil society, in order to plan for and adapt to the risk of flooding now and in the future.</p>	
<p>Climate NI welcomes the cross-border collaboration with OPW in the Republic of Ireland. This is a relationship which will only become more important throughout the coming decades as issues of flooding become more pronounced</p>	<p>The Department's cross-border coordination and cooperation with OPW in the Republic of Ireland is a legal requirement of the Floods Directive Regulations 2009 and this relationship precedes Floods Directive legislation.</p>
<p>For Biodiversity Flora and Fauna there is a need to add the Priority Species lists as amended recently by DAERA. Also if a habitat or species is already in decline then changes in numbers which are not 'significant' may need to be considered. Flooding also has the potential to allow freshwater species to move to areas they are not currently present. This could be invasive species, native species and also potentially commercial species – which could also impact on native species if they get into other water courses.</p>	<p>The updated list of Priority Species in Northern Ireland has been referenced in the updated baseline information within the SEA Monitoring report. We agree that flooding has the potential to enable the movement of species, including invasive species, outside of their usual range, however the Plan aims to reduce/prevent flooding and therefore has the potential to positively affect the spread of species in this manner.</p>
<p>The Article 12 and 17 reporting are every six years which is too infrequent in relation to the impact of a flooding event. There is a need for additional monitoring after a significant flooding incident and then at set time periods after in order to understand the rate of recovery or shift. Also as the reporting on this plan is also only every six years and all reporting is at different times and not synced then it would be hard to match impacts up to any specific action – whether positive or negative.</p>	<p>Monitoring under the SEA process is designed to measure, not the potential effects of flooding incidents, but the implementation of measures within the FRMP that provide protection against this flood risk. Monitoring of SEA topics is at a strategic level given that this is a national level plan, and data sources used for monitoring are those that are already monitored regularly and effectively at a national level. At this strategic scale, monitoring for SEA using these data sources should show whether anything has been significantly affected through FRMP implementation e.g. construction of flood infrastructure. Individual projects that arise from the FRMP may have a requirement for more frequent monitoring, however this will be dependent on project level EIA and/or HRA.</p>
<p>Currently Biodiversity, and water quality under WFD, are not in favourable condition so how will the Plan enhance this rather than lead to further impact? (As stated in the objectives).</p>	<p>Objective 9 of the FRMP, as provided in Table 4-1, is "<i>To support the objectives of the WFD and contribute to the achievement of good ecological potential/status for waterbodies</i>", and Objective 10 is "<i>To protect and enhance the natural environment and cultural heritage</i>". As discussed in Section 2.5.2 of the Plan, there is continued engagement between DfI and NIEA through the interdepartmental Floods Strategy Steering Group (FSSG) and the FDTSG for implementing Floods Directive activities. Similarly, DfI Rivers engages with NIEA on the Strategic Planning And Resources group (SPAR) for delivering WFD outcomes. DfI Rivers and NIEA also collaborate on an inter-agency basis to develop a catchment wide view of river</p>

		<p>restoration/enhancement projects, with the aim to develop projects at the catchment and local level, through partnership working. The development and implementation of measures proposed under the FRMP provides potential opportunities for more natural flood risk management, including during capital works (e.g. improving floodplain storage, re-establishing connectivity between rivers and floodplains, fish passage, sediment continuity, morphological and other enhancement of watercourses etc.), as well as wider catchment based supporting strategies. It is anticipated that measures within the draft third cycle RBMP 2021-27 will highlight the need for multi-agency working at a catchment level to deliver wider benefits for water status, morphology, flooding and fisheries through a coordinated approach. As stated on p.21 of the FRMP, DfI will consider the use of Natural Flood Management (NFM) practices on all flood alleviation schemes / works to complement the traditional hard engineered solutions, implementing industry best practice guidance techniques in doing so. As part of the SEA process, the Strategic environmental objective (SEO) for the Water topic was "Maintain compliance with requirements arising from the implementation of the WFD, and improve water quality where possible", while SEOs for Biodiversity include "Protect, maintain and, if possible, improve linkages between existing green spaces to allow for ecological connectivity and biodiversity" and "Protect, maintain and, if possible, improve existing habitats and native species of flora and fauna.. Consideration of opportunities for more natural flood risk management, as stated in the FRMP, has the potential for improvement of conditions as assessed under the WFD, and on enhancement of conditions for biodiversity, flora and fauna, and therefore on these SEOs.</p>
	<p>The SEA provides indicators for population and human health however it does not include information on how many vulnerable people are at risk from flooding as they are likely to need additional support and different support pathways. For example, the elderly, those with physical or mental health issues, people who don't speak English, those with young children or pregnant etc... This type of information could be anonymised from the census and through mapping such as the Climate Just project</p>	<p>The Department notes your comment and would advise that the SEA assesses the information that is included within the Plan itself. In Northern Ireland the census data would not provide the level of data as discussed in the comment, i.e. mental health issues, lack of English language, etc. on a property level. Rather, by electoral area the census data is averaged to give an indication as to whether an area overall is more wealthy / has more sick people, etc. The Department recognises that social vulnerability is a factor which can be mapped and considered within flood risk assessments. Vulnerability data were included in the first cycle Preliminary Flood Risk Assessment for Northern Ireland. However, it was concluded that vulnerability had a low level of influence on the determination of extents of the Areas of Potential Significant Flood Risk (APSFR) - which are the focus of the Flood Directive</p>

		<p>Regulations 2009; areas which had the highest level of social vulnerability were also where density of population and economic damages were greatest in any case. Therefore for the 2nd cycle, social vulnerability was not included as a dataset for the NIFRA 2018 to determine of the extents of APSFR, however, this might change for the next (3rd) cycle.</p> <p>The work of RCRG has helped develop a consistent approach to community engagement across NI to manage flood risk and the impacts of severe weather. One of the outcomes of this work has been the co-development of household and community emergency plans. This allows communities to manage their own local arrangements, including how to respond quickly and assist vulnerable residents within their community. It has been evident from local engagement that communities want to be prepared for severe weather and to help look after their neighbours, their property and their local environment, and it is felt that vulnerable residents are an essential part of this community plan.</p>
	<p>There should also be an assessment of the interrelationships between cascading factors and how they are related – so if one improves what happens to the others in progress towards a climate resilient system?</p>	<p>Presuming that the factors referred to in the comment correspond to the measures and measure types as outlined in the Plan, the FRMP states clearly that these measures, as required by the Floods Directive, give consideration to prevention measures to reduce the likelihood of flooding, and protection and preparedness measures to reduce the adverse consequences of flooding when it does occur. Section 3.4.4 of the FRMP outlines how climate change is taken into account within these measures. P.25 and 26 of the SEA Environmental Report for the 1st cycle FRMPs outline the process by which DfI identify preferred options associated with flood risk management, as shown in the flow diagram of measures/measure types.</p>
	<p>The interactions between Flooding and the UK target for Net Zero needs to be considered. Even though Northern Ireland does not have Climate legislation, actions within the plan should be taken with the view to reducing the GHG for Northern Ireland as a contribution towards the UK target and ensuring that there is no maladaptation. The recent CCRA3 Technical Report has a section on the implications for Net Zero for all risks including those linked to flooding so it is recommended that those sections are explored and linked into the plan and SEA where possible.</p>	<p>The Department notes your comment and would advise that UK Net Zero is a mainly 'emissions' based target but would agree that nature based solutions will have a part to play in managing flood risk with a benefit towards emissions reduction. We consider that the Plan goes some way towards adopting such solutions.</p>
	<p>Under the Section 75 Review there are groups who will be more vulnerable to flooding should it occur or be at risk of it occurring in their area therefore there is a need to consider vulnerable groups and what actions target reducing their</p>	<p>The Department recognises that social vulnerability is a factor which can be considered within flood risk assessments. Vulnerability data were included in the first cycle Preliminary Flood Risk Assessment for</p>

<p>risk. Specifically, the very old and the very young, those with a disability of the categories listed. The Sayers 2020 report as part of the supplementary work for the Climate Change Risk Assessment and also the Scottish Flood Management Plan would help with inclusion so flooding decisions can be equitable and prioritised to reduce risk.</p>	<p>Northern Ireland. However, it was concluded that vulnerability had a low level of influence on the determination of extents of the Areas of Potential Significant Flood Risk (APSFR) - which are the focus of the Flood Directive Regulations 2009; areas which had the highest level of social vulnerability were also where density of population and economic damages were greatest in any case. Therefore for the 2nd cycle, social vulnerability was not included as a dataset for the NIFRA 2018 to determine of the extents of APSFR, however, this might change for the next (3rd) cycle.</p>
<p>P28 - "The surface water maps within Flood Maps (NI) are not currently suitable for decision making in regard to capital investment on infrastructure for the purposes of flood alleviation. Further study will be required to refine the understanding of surface water flood risk to inform these capital investment decisions." Is there work ongoing to support capital development decisions in general? Could this FRMP info be communicated through an information pack for each council (elected members and staff) in terms of planning and what they need to be considering when making decisions, including any uncertainties?</p>	<p>The Department notes your comments in relation to surface water mapping. Unlike fluvial and coastal flood risk where multiple return periods have been utilised to estimate Annual Average Damages in relation to flooding, surface water mapping is not as detailed and therefore cannot yet be used to form the basis of economic appraisals. The inclusion of a measure to develop enhanced Drainage Area Plans for each of the 12 APSFR will provide much more detailed mapping and modelling of drainage networks in APSFR. It is anticipated that this will provide much data on how drainage systems perform which will better inform mapping and modelling and capital investment across Northern Ireland, and outside APSFR. The draft Plan has been communicated to all Councils and elected members should all be aware of its recent Public Consultation. The final Plan will be published openly and will be available to all elected members.</p>
<p>A review of necessary funding could be carried out for: The RCRG, to define what functions that group may be able to assist with given further resource. This could involve resilience and flood training, development of local plans where stakeholders want one and the resource and time to properly maintain partnerships with communities, which is not a quick or easy thing to do Assessing if £1000 emergency household payments scheme is still fit for purpose.</p>	<p>Reviews of funding for e.g. RCRG and SEFA Scheme, are not within the remit of this Plan. However, estimates of the costs of elements of the Plan are included in Section 6 of the Plan.</p>
<p>Climate NI is about to carry out research of the publics perceptions of Climate Risk and Resilience Options and the results of this research (carried out in conjunction with Cardiff University who have carried out similar research across GB) may be useful in helping prioritise options and also understanding where awareness needs to be targeted and how</p>	<p>The Department notes your comment in relation to ongoing research.</p>
<p>In addition, Climate NI are exploring bringing Climate Just mapping to Northern Ireland which would support decision making around vulnerable sectors or society and may also be useful for future plans</p>	<p>The Department notes your comment in relation to Climate Just mapping.</p>

Loughs Agency	<p>Loughs Agency is the statutory body charged with the conservation, protection and development of inland fisheries within the Foyle and Carlingford catchments, as such our focus on the review of the draft plans is centred on the plans for Omagh, Newry and Derry/Londonderry as these areas are within our remit. Comments made on this CFR are grounded in background knowledge from the Foyle and Carlingford catchments. For specific comments on fisheries interests for areas outside of the Foyle and Carlingford catchment DfI should defer to our colleagues in DAERA Inland Fisheries and DAERA Marine Division.</p>	<p>The Department notes your comment.</p>
	<p>The methodology looks in detail at flood risk in urban areas and centres of population. Loughs Agency will use this CRF as an opportunity to highlight the importance of flood management in upland areas also.</p>	<p>The Department notes your comment.</p>
	<p>Loughs Agency as a fisheries body is primarily concerned with the 3 Environmental objectives. Namely; 1). To consider the impact of climate change for the main sources of flooding, 2). To support the objectives of the WFD and contribute the good ecological potential status for waterbodies, 3). To protect and enhance the natural environmental and cultural heritage.</p>	<p>The Department notes your comment.</p>
	<p>From a fisheries perspective Loughs Agency welcome holistic flood management that considers the impact of climate change. Climate change is predicted to bring more extreme flood events with higher peak flows and increased duration and severity. Extreme events such as the 2017 floods are detrimental for fisheries interests; resulting in fish kills as juvenile trout and salmon are flushed from rivers, a loss of spawning gravels, a loss of riparian habitat from bankside erosion which increases the risk of silt and sedimentation in the river over time.</p>	<p>The Department notes your comment.</p>
	<p>It is essential that flood management is not at odds with achieving the WFD goals of good water status and good ecological potential status for all waterbodies. Flood management should be implemented with dual goals to restore and enhance biodiversity in riparian zones. Flood management should be integrated with the objectives of the WFD and should address specific catchment pollution pressures e.g. interception of agricultural runoff and urban storm water runoff to slow the flow and buffer pollutants before it reaches the rivers. Flood management should also complement to the conservation objectives for SAC designated rivers.</p>	<p>The Department notes the comment in relation to WFD goals and would advise that it will endeavour to create opportunities to work with others, to deliver sustainable flood risk management measures at a catchment level. There are also a number of specific measures that will contribute to greater awareness and use of NFM techniques as part of flood risk management solutions, an example of this will be the projects proposed through the LWWP. A measure has also been included for the Department to work with DAERA to consider how future agricultural and land support measures may include flood risk management options. When individual schemes are taken forward they will be assessed for</p>

		any significant impact on the environment through rigorous environmental assessments (Environmental Impact Assessments (EIA) and Habitat Regulation Assessments (HRA)) where appropriate.
	Loughs Agency is the statutory body charged with the conservation, protection and development of inland fisheries within the Foyle and Carlingford catchments, as such our focus on the review of the draft plans is centred on the plans for Omagh, Newry and Derry/Londonderry as these areas are within our remit. For specific comments relating to fisheries interests for outside of the Foyle and Carlingford catchment please refer to the consultation response from our colleagues at DAERA Inland Fisheries and DAERA Marine Division.	The Department notes your comment.
	Loughs Agency feel the proposed Prevention measures for Flood Risk Management Plan cycle 2021-2027 of 1). An Enhanced Drainage Area Plan and 2). Influence local planning policy for development and flood risk are insufficient. Loughs Agency is of the view that there are a number of preventive measures which could be subject to scoping, evaluation and possible inclusion in the plan.	The Department notes your comment and would advise that a number of the specific Flood Alleviation Schemes, included as measures within the Plan, will consider NFM as an element of the solution. In addition the development of the LWWP will also include further Blue / Green solutions that will not only help to manage flood risk but will also deliver additional environmental benefits. We recognise that nature based flood risk management solutions have a part to play in reducing risk and the

Loughs Agency are aware the APSFR are urban centres of population. However, the Agency feels like nature-based preventative measures implemented in the wider catchment, including upland areas, could be incorporated in the plans and offer natural ways of managing flood risk. Loughs Agency would welcome a catchment wide approach to flood risk management, and think it is imperative that due consideration is given to natural water retention measures throughout the catchment. Natural water retention measures reduce flood risk, improve water quality and create habitats and have multiple co-benefits such as climate change adaptation, carbon capture, improved soil management and creation of amenities. The following measures have shown to be effective at reducing flooding in small catchments for frequent floods and reduce and delay the onset of peak flow rates downstream.

- 1). Woodland creation in upland areas.
- 2). Floodplain and riparian tree planting. The planting of native broadleaf trees in riparian zones is demonstrated as a highly efficient measure at "slowing the flow" and reducing peak runoff rates. An added benefit of the creation of riparian buffer zones, especially on agricultural land is the buffer capacity of storm water runoff and the reduction of pollutants. The creation of riparian buffer strips can provide protection from grazing, stabilise banks, and reduce erosion and the amount of water and pollutants reaching the watercourse, while also improving biodiversity. Even erecting fencing to allow natural regeneration and protection from stock could go a long way.
- 3). Natural floodplain restoration and management including the removal of flood embankments where feasible. Floods induce environmental changes (e.g., greater habitat and resource availability) that can stimulate fish productivity and increase species abundance, richness, evenness, and diversity compared to stable flow regimes
- 4). Storage ponds in intercept storm water before discharge to the catchment. Dual benefit of settlement sediment and pollutants and habitat creation.
- 5). Rural SUDS features e.g. sediment traps, ponds
- 6). Urban SUDS features on all new development
- 7). Retrofitting of SUDS in existing development in urban centres
- 8). Education in relation in water management in agricultural areas, including water recycling and re-use, rainwater harvesting, planters, wet woods features
- 9). Restored peatlands, which act as sinks for carbon dioxide, mitigating against climate change
- 10) River re-meandering and removal of artificial barriers
- 11). Wetland restoration and creation and "rewilding" of riparian corridors

Department is supportive of such solutions. Nature based solutions may take time to develop their effectiveness in reducing risk and they may also only contribute to a partial reduction of risk thus requiring an engineered solution to be done in tandem. The Plan includes such solutions within the proposed measures and where Nature Based Solutions are identified within viable solutions to address the flood risk in an APSFR or other high risk areas, these will be investigated and considered as part of any overall scheme(s).

<p>Loughs Agency feel the proposed Protection measures of flood alleviation schemes in the urban centres should be underpinned by natural flood management involves techniques that aim to work with natural hydrological and morphological processes, features and characteristics to manage the sources and pathways of flood waters. These techniques include the restoration, enhancement and alteration of natural features and characteristics, in favour of traditional flood defence engineering that disrupts these natural processes. To continue to focus only on traditional approaches to flood management, such as flood walls, will not be sustainable and therefore our approach to managing flood risk has to change. It needs to be more integrated, managing land and water throughout the river system and recognising that activities in one part of the catchment can influence flooding elsewhere.</p>	
<p>Natural Water Retention Measures and SUDS, tree planting, for the reasons outlined in Question 4. Dual benefits to combat biodiversity loss and climate change. Catchment wide approach, planning for the future (Adaption and mitigation to climate change).</p>	<p>The Department notes your comments in relation to Natural Flood Management measures, and would advise that the benefits of Natural Flood Management have been acknowledged within the plan and has been included as a Regional Measure. The Department also recognises and understands the need for a clear SuDS policy, and this is reflected in the Regional Measures within the Plan. The progression of these measures and development of SuDS policy will require ongoing engagement with local councils and other stakeholders.</p>
<p>Loughs Agency will engage with DfI as a statutory body as and when required. Loughs Agency will provide on advice on fisheries interests and protection of the aquatic environment. Loughs Agency will work with landowners and stakeholders within our catchment and ensure where possible our habitat restoration schemes have a dual benefit of reducing flood risk and increasing biodiversity.</p>	<p>The Department notes your comment and welcomes your ongoing engagement.</p>
<p>Co-ordination of river basin and flood risk management planning is vital. River basin management planning (WFD) aims at achieving a good ecological status of all water bodies. The flood risk management plans (FRMP) are supposed to ensure appropriate levels of flood protection. River basin and flood risk management plans should be screened for objectives, measures and planning procedures possessing possible overlaps and conflicts. There is overlap between the objectives of the management plans. Both management approaches are compulsorily and face many of the same pressures, like landscape management and river processes and anthropogenic activity.</p>	<p>The Department recognises the need for coordination of plan. Indeed, legislatively under the Floods Directive Regulations 2009, the Department is required to coordinate its FRMP with DAERA's RBMP. To this end, DAERA WFD representatives sit on the Floods Directive Technical Steering Group and advise the content of the FRMP accordingly. At project / measure level, environmental connections are particularly strong to ensure the Department meets the requirements of the Water Framework legislation. Environmental Scoping and necessary Impact Assessments are carried out and mitigations and enhancements are included within measure specifications.</p>
<p>Plans could be reviewed in the context of climate change, characteristics of the river basin catchment, and processes in the channel like run-off</p>	<p>The Departments accept that hydromorphological changes can impact on water and habitat quality. For this reason the Plan include</p>

	generation, groundwater recharge, transport of particulate matter and sedimentation, hydraulic discharge or exchange with the floodplain and wetlands. The anthropogenic intervention in the natural system influences both the ecological and chemical status of water bodies and the flood risk. The issues of water quality and hydromorphological changes for increased flows or low flows are linked.	catchment-based measures where appropriate to reduce/ slow down runoff during rainfall events and for opportunities to be explored which address both water quantity and quality issues. The Departments have proposed pilots of nature-based solutions to reduce sediment and nutrient loss while reducing the impacts from flooding in the upcoming PeacePlus Programme. (see Investment Area 5.3 of https://seupb.eu/sites/default/files/styles/PEACE%20PLUS%20Public%20Consultation/PEACE_PLUS_Consultation_Information_Document_FINAL.pdf)
	Pressures such as agriculture, abstraction, forestry, housing, mineral extraction should be considered jointly for flood risk and water quality. A joint approach between different statutory bodies is necessary to consider issues in the round including data sharing and an evidence based approach to management.	The Department notes your comments and would advise that the Plan includes catchment-based measures where appropriate to reduce/ slow down runoff during rainfall events. These measures will co-benefit water quality pressures like the runoff of nutrients and sediment. DfI understands that DAERA is proposing in its draft River Basin Management Plan to give catchments upstream of an APSFR additional weighting when prioritising catchments for action.
	Legislation - Foyle Fisheries Act It is an offence to remove or disturb any material, including sand or gravel from the bed of any freshwater river within the Foyle and Carlingford Areas without the consent of the Loughs Agency contrary to Section 46 of the Foyle Fisheries Act (NI) 1952, as amended by Article 18(3) of the Foyle and Carlingford Fisheries (NI) Order 2007.	The Department notes your comment.
	Adopting a SuDS strategy including a joint up approach with NI Water in relation to flood risk. Using a number of SuDS components in series and characterising areas into land use and drainage type, source control - managing runoff as close as possible to where it falls as rain. Early and effective engagement – consider the use of SuDS at the earliest stages of site selection and design and make a requirement for all new development.	The Department also recognises and understands the need for a clear SuDS policy, and this is reflected in the Regional Measures within the Plan. The progression of these measures and development of SuDS policy will require ongoing engagement with local councils and other stakeholders.
	Promote natural water retention measures for interception and attenuation in upland areas. Tree planting and natural flood reclamation where possible. Removal of embankments and re naturalising channelised stretches.	The Department notes your comments in relation to Natural Flood Management measures, and would advise that the benefits of Natural Flood Management have been acknowledged within the plan and has been included as a Regional Measures.
Environmental Comments		
Department of Agriculture, Food and the Marine (Rol)	At this time the DAFM has no observations in regards to the consultation for FRMP, and associated environmental reports.	The Department notes your comment.

EPA (RoI)	<p>It would be useful to consider the relationship with more recent national level plans, programmes, policy and legislation that have been established since the last iteration of the SEA Environmental Report. This would be in the context of ensuring the alignment of high-level environmental commitments are considered over the lifetime of the new Plan</p>	<p>A new Section 4 "Review of relevant Plans, Programmes and Policies" has been added to the SEA Monitoring report, providing an update on the relationship of the NI FRMP with more recent plans and programmes.</p>
	<p>We suggest that the Plan should consider more recent relevant environmental baseline information. In this context, we refer you to the EPA's State of the Environment Report 'Ireland's Environment – An Integrated Assessment (EPA, 2020). It sets out the recommendations, key issues and challenges described and could be considered, as relevant and where appropriate</p>	
DAERA (NIEA Natural Environment Division)	<p>Natural Environment Division (NED) do not have any further suggestions or comments to the draft Plan's approach to the most significant flood risk areas in the three RBDs</p>	<p>The Department notes your comment.</p>
	<p>NED understand and agree with the draft Plan objectives. It remains of paramount importance that conservation of the natural environment is ensured as part of any proposals moving forward to the implementation and construction phases.</p>	<p>The Department notes your comment.</p>
	<p>NED do not have any further comments on the balance between social, economic and environmental objectives. NED will remind the department of the importance of the natural environment to the social and economic wellbeing of society.</p>	<p>The Department notes your comment.</p>
	<p>NED do not have any further comments on the proposed measures in each of the APSFRs.</p>	<p>The Department notes your comment.</p>
	<p>NED do not have comments on what should be given highest priority. It remains of paramount importance that conservation of the natural environment is ensured as part of any proposals moving forward to the construction and implementation phases. The natural environment can provide protection from flood risk</p>	<p>The Department notes your comment.</p>
	<p>NED do not have any further comments.</p>	<p>The Department notes your comment.</p>
	<p>NED welcome consideration of SuDS as part of proposals and how the incorporation of these can benefit biodiversity and the natural environment. Ensuring any proposals are considerate of the natural environment, including</p>	<p>The Department notes your comment.</p>

priority habitats and designated sites. The consideration of priority habitats such as river corridors can help with the preservation from flood risk.	
NED do not have any further comments and is content with the conclusions of the SEA and HRA.	The Department notes your comment.
NED do not have any further comments on further significant environmental effects following statutory consultation for the SEA screening in July 2020.	The Department notes your comment.
NED do not have any further comments on further significant environmental effects following statutory consultation for the SEA screening in July 2020.	The Department notes your comment.
Please note following the decision of the UK to leave the EU, the collective term of "Natura 2000" sites the network of European protected sites are now known as "National Site Network" sites within the UK including NI. This will require updating within all the documents.	The FRMP, SEA Monitoring, SEA Screening and HRA reports have been amended to clarify the terminology for these designated sites following the UK's exit from the EU. Reference to Natura 2000 or N2K sites has been removed, instead referring to UK National Site Network sites, or European Sites, to include consideration of Ramsar sites.
There is reference to consultation/agreement with Natural Heritage, which is now Natural Environment Division, this should be updated.	The FRMP, SEA Screening report, SEA Monitoring report and HRA have been reviewed, and no reference was found to Natural Heritage within these documents. Appendix 3 of the 1st cycle SEA ER refers to liaison with Natural Heritage as mitigation against potential adverse effects on biodiversity from physical measures. Text has been added to Section 5.1 Biodiversity, Flora and Fauna (BFF) in the SEA Monitoring Report under "Recommendations for monitoring effects on BFF from implementation of the 2nd cycle FRMP" to establish that NED should be liaised with through the statutory consultation process.
p.22 SEA states there are two UNESCO WHSs within NI. There is only one UNESCO WHS 'The Giants Causeway & Coast WHS'. The Marble Arch Caves is designated a UNESCO Global Geopark, this is a different designation to a WHS.	The SEA Screening report has been amended to clarify that there is just one WHS within NI.
NED concur with Marine team comments that impacts of construction noise has potential to disturb protected and priority species, some of which may be selection features of designated sites and, as such, should also be considered under Biodiversity, Flora and Fauna.	State of the Seas reporting has been included in Table 6.1 "Proposed Monitoring Measures, Indicators and Data Sources for SEA Topics for the 2nd cycle FRMP", under the proposed data sources for Biodiversity, Flora and Fauna. This text has been amended from "State of the Seas reporting" to "Monitoring undertaken by DAERA Marine and Fisheries Division under the Marine Strategy". A bullet point has been added to Section 5.1 Biodiversity, Flora and Fauna under "Recommendations for monitoring effects on Biodiversity, Flora and Fauna from implementation of the 2nd cycle FRMP", to specify that monitoring under the Marine Strategy (MS) should be included.

DAERA (NIEA Protected Landscape Team)	p.274 SEA Landscape topic. Suggest a text change for 'Proposed Measures', as follows: "Flood management measures should be designed to protect, maintain and enhance both visual amenity and landscape/seascape character of local landscapes. Monitoring can assess the amount of blue/green infrastructure created during the implementation of completed schemes, and any changes in visual amenity and/or landscape/seascape character following implementation of FASs".	Table 6.1 "Proposed Monitoring Measures, Indicators and Data Sources for SEA Topics for the 2nd cycle FRMP" for the Landscape topic the recommended text for "Proposed Measures" has been amended as follows "Flood management measures should be designed to protect, maintain and enhance both visual amenity and landscape/seascape character of local landscapes. Monitoring can assess the amount of blue/green infrastructure created during the implementation of completed schemes, and any changes in visual amenity and/or landscape/seascape character following implementation of FASs".
	p.274 SEA Landscape topic. Suggest a text change for 'Proposed Indicator(s)', as follows: "Any changes to visual amenity and/or the landscape/seascape character from implementation of FASs".	Table 6.1 "Proposed Monitoring Measures, Indicators and Data Sources for SEA Topics for the 2nd cycle FRMP" for the Landscape topic the recommended text for "Proposed Indicator(s)" has been amended as follows "Any changes to visual amenity and/or the landscape/seascape character from implementation of FASs".
	p.274 SEA Landscape topic. For 'Proposed Data Source(s)', in reference to the first bullet point (Landscape and seascape character assessments for NI), are there references and links to landscape and seascape character assessments within the Draft document, i.e. NILCA 2000, NIRLCA 2016, NIRSCA 2012 (links provided in consultation response).	References and links to the assessments referred to in this comment have been added to Section 5.8 of the SEA Monitoring report.
DAERA (Marine and Fisheries Division Teams)	Under Section 4.2. Criteria g: Any reference to Natura 2000 or N2K should be avoided, instead, following the UK's exit from the EU, SACs, SPAs and RAMSARs collectively should be referred to as the UK National Site Network.	The text has been amended in Section 4.2 Criteria g of the SEA Screening report to remove reference to Natura 2000 sites and replace with National Site Network sites.
	Under Section 4.2. Criteria g, include the following section: "Marine Conservation Zones (MCZ) are designated under the Marine Act (Northern Ireland) 2013 for the protection and conservation of vulnerable or unique marine species and habitats of national importance in the Northern Ireland inshore region. There are currently five sites designated as MCZs in Northern Ireland".	The suggested text regarding MCZs has been added to Section 4.2 Criteria g of the SEA Screening report.
	Table 3-1: Biodiversity, Flora and Fauna - impacts of construction noise is referenced under Population and Human Health but should also be considered here - potential impacts to marine mammals.	Table 3.1 (now Table 5.1) of the SEA Monitoring report reflects the SEA monitoring proposed for the 1st cycle FRMPs, while Table 6.1 proposes monitoring for the 2nd cycle FRMP. Text has been added to Section 5.1 of the SEA Monitoring report under "Recommendations for monitoring effects on Biodiversity, Flora and Fauna from implementation of the 2nd cycle FRMP" to include the potential for impacts on marine mammals from construction noise.
	Table 3-1: Water - we note while the Water Framework Directive (WFD) has been referenced there is no mention of UK Marine Strategy Framework which sets standards to ensure water quality meets good environmental status	Table 3.1 (now Table 5.1) of the SEA Monitoring report reflects the SEA monitoring proposed for the 1st cycle FRMPs, while Table 6.1 proposes monitoring for the 2nd cycle FRMP. In Table 6.1, "Monitoring

<p>(GES). Monitoring under MS is carried out by DAERA Marine and Fisheries Division.</p>	<p>undertaken by DAERA Marine and Fisheries Division under the Marine Strategy" has been added to "proposed data source" for the SEA topic Water. The following bullet point has been added to Table 6.1 "Proposed Indicator(s) for the SEA topic of Water "Change in the status of Quality Descriptors under the MS". A bullet point has been added to Section 5.3 Water under "Recommendations for monitoring effects on Water from implementation of the 2nd cycle FRMP", to specify that monitoring under the MS should be included.</p>
<p>Section 3.1 Biodiversity, Flora and Fauna. The NI Environmental Statistics Report 2019 has been referenced here however the latest version is now available. The report can be accessed here https://www.daera-ni.gov.uk/sites/defaultfiles/publications/daera/ni-environmental-statistics-report-2020_0/pdf</p>	<p>Section 3.1 (now Section 5.1) of the SEA Monitoring report has been updated with details from the most recent NI Environmental Statistics Report 2020, which was released in May 2021 after the FRMP and associated environmental reports went out to public consultation.</p>
<p>Section 3.1 Biodiversity, Flora and Fauna. Table 3-5 should also include East Coast Marine proposed SPA.</p>	<p>East Coast Marine pSPA has been added to Table 5-5 (previously Table 3-5) of the SEA Monitoring report.</p>
<p>Section 3.1 Biodiversity, Flora and Fauna. Marine Strategy should also be included here as some of the indicators under MS are not captured under WFD (e.g. noise which can have an adverse impact on marine mammals, or litter).</p>	<p>State of the Seas reporting has been included in Table 6.1 "Proposed Monitoring Measures, Indicators and Data Sources for SEA Topics for the 2nd cycle FRMP", under the proposed data sources for Biodiversity, Flora and Fauna. This text has been amended from "State of the Seas reporting" to "Monitoring undertaken by DAERA Marine and Fisheries Division under the Marine Strategy". A bullet point has been added to Section 5.1 Biodiversity, Flora and Fauna under "Recommendations for monitoring effects on Biodiversity, Flora and Fauna from implementation of the 2nd cycle FRMP", to specify that monitoring under the MS should be included.</p>
<p>Section 3.7 Climate Factors. The UK Committee for Climate Change launched a Climate Change Risk Assessment 3 (CCRA3) Report on 16 June 2021, which included a summary report for NI. The CCRA3 report notes that at the coast risks will emanate from the effects of coastal flooding, sea level rise, coastal erosion as well as extreme weather events. These risks will impact upon a wide range of aspects of the Northern Irish coastline. In particular these risks will impact upon infrastructure services, coastal communities, coastal habitats and species as well as cultural and historical sites. As such the need to understand these risks, plan for them and adapt to them is vital for managing and protecting the coastal zone. The Committee on Climate Change (CCC) recommends a holistic approach is taken when considering benefits of further adaptation related to coastal erosion and coastal flooding. The following recommendations made by the CCC are beneficial to the risks identified: 1. Development of shoreline management plan processes for</p>	<p>The Department notes your comments, and would advise that the points raised including the need for a Shoreline Management Plan are outside the scope of the FRMP. The Department feels that the Coastal Forum is ideally positioned as the body to consider the need for a Shoreline Management Plan approach for NI and this will be considered as part of its ongoing work.</p>

	<p>Northern Ireland to show links between evidence, policy and implementation actions under different adaptation options and pathways; 2. Improved consistency in monitoring and change assessments (e.g. using a common protocol and Coastal Observatories working together) to facilitate better transparency in adaptation progress reporting across all the UK; and 3. Creating a good quality baseline and monitoring survey of coastal change on which to base future projections would be beneficial. The report is clear on the urgency of work that is required to be undertaken to address the challenges of coastal flooding and change here in Northern Ireland. Failure to adapt with the projected increases will significantly increase the impact coastal flooding will have upon the Northern Ireland coastline; action must be taken to both manage and mitigate.</p>	
	<p>Section 3.8 Landscape. This section should also include reference to Seascope; a NI Regional Seascope Character Assessment was carried out by NIEA in 2014 and details of this can be found at https://www.daera-nigov.uk/articlesseascope-character-areas</p>	<p>Text has been added to Section 5.8 (previously Section 3.8) of the SEA Monitoring regarding the NI Regional Seascope Character Assessment.</p>
	<p>Any reference to Natura 2000 or N2K should be avoided instead following the UK's exit from the EU SACs, SPAs and RAMSARs collectively should be referred to as the UK National Site Network.</p>	<p>The FRMP, SEA Monitoring, SEA Screening and HRA reports have been amended to clarify the terminology for these designated sites following the UK's exit from the EU. Reference to Natura 2000 or N2K sites has been removed, instead referring to UK National Site Network sites, or European Sites, to include consideration of Ramsar sites.</p>
	<p>We note The Maidens SAC has not been included in Figure 4.1 yet referenced in Table -1 under Larne APSFR.</p>	<p>Figure 4.1 in the HRA report has been amended to include The Maidens SAC.</p>
	<p>Section 6.2.3.2 Marine Mammals - recommend inclusion of the following Guidance for assessing the significance of noise disturbance against Conservation Objectives of harbour porpoise SACs (England, Wales & Northern Ireland) (jncc.gov.uk)</p>	<p>The suggested guidance has been added to section 6.2.3.2 mitigation of disturbance on Marine Mammals text of the HRA report.</p>
<p>DAERA (Marine Plan Team)</p>	<p>It is noted the 2nd cycle of FRMP is considered by DfI to be a minor modification to the 1st cycle of FRMPs, with Larne as a new APSFR representing the sole modification of the Plan. Marine policy documents (including the UK Marine Policy Statement and the draft Marine Plan for Northern Ireland) provide the framework for decision making by public authorities taking decisions which affect or might affect the marine area. This applies to both authorisation and enforcement decisions (such as those taken by planning authorities) and decisions related to the exercise of any function capable of affecting the marine area, such as this draft NI FRMP and local development plans. In terms of the approach being taken, provided DfI is satisfied the SEA assessment that accompanied the 1st cycle of FRMP fully</p>	<p>The SEA Environmental Report for the 1st cycle FRMPs made reference to the Marine Strategy Framework Directive (MSFD) in Section 4.3, under the baseline for the SEA Water topic, while in Section 5 Policy Context, the MSFD is referred to under the Water topic as "aiming to protect and enhance both inshore and offshore marine waters". In Table 7 Relationship with other Policies and Environmental Objectives, it is specified for the MSFD that the Plans take cognisance of the aims of the Directive to achieve Good Environmental Status (GES). Although the SEO for the Water topic does not explicitly refer to GES, it aims to "maintain compliance with requirements arising from the implementation of the WFD, and improve water quality, where possible".</p>

	<p>assessed the likely effects upon marine aspects, including the achievement of 'good environmental status' (GES), across relevant SEA topics, the Marine Plan Team would have no further comments on this Screening Report.</p>	<p>The assessments under the Water topic (detailed in Appendix 3) are considered to have covered the majority of status descriptors under the MSFD, such as effects on water quality, hydrographical conditions (e.g. design of any coastal flood walls/embankments include sediment transport in scheme design parameters and minimise risks through design), and construction noise effects on protected species such as fish and birds, at a scale appropriate to the Plan and assessment. In the SEA Monitoring report for the 2nd cycle FRMP, "Monitoring undertaken by DAERA Marine and Fisheries Division under the Marine Strategy" has been included as a "proposed data source" in Table 6.1 for the Biodiversity, Flora and Fauna and Water SEA topics, and the following bullet point has been added to Table 6.1 under "Proposed Indicator(s) for the SEA topic of Water "Change in the status of Quality Descriptors under the MS". A bullet point has been added to Section 5.1 Biodiversity, Flora and Fauna under "Recommendations for monitoring effects on Biodiversity, Flora and Fauna from implementation of the 2nd cycle FRMP", and to Section 5.3 Water under "Recommendations for monitoring effects on Water from implementation of the 2nd cycle FRMP" to specify that monitoring under the MS should be included.</p>
	<p>It is not clear if the monitoring proposed includes the monitoring of the achievement of 'good environmental status' of marine and coastal waters. Whilst WFD also applies in coastal waters, there are aspects of the UK Marine Strategy (Marine Strategy Framework Directive) that are not addressed in WFD. For example, impacts on marine noise and litter, certain aspects of biodiversity. One element of GES involves ensuring that concentrations and effects of contaminants are kept within acceptable levels, so as to ensure that there are no significant impacts on, or risks to, the wider marine environment.</p>	<p>In the SEA Monitoring report, "Monitoring undertaken by DAERA Marine and Fisheries Division under the Marine Strategy" has been included as a "proposed data source" in Table 6.1 for the Biodiversity, Flora and Fauna and Water SEA topics, and the following bullet point has been added to Table 6.1 under "Proposed Indicator(s) for the SEA topic of Water "Change in the status of Quality Descriptors under the MS". A bullet point has been added to Section 5.1 Biodiversity, Flora and Fauna under "Recommendations for monitoring effects on Biodiversity, Flora and Fauna from implementation of the 2nd cycle FRMP", and to Section 5.3 Water under "Recommendations for monitoring effects on Water from implementation of the 2nd cycle FRMP" to specify that monitoring under the MS should be included.</p>
<p>DAERA (Inland Fisheries)</p>	<p>In Table 4-1 Summary of Key Plans, Programmes and Legislation Relevant to the 2nd cycle FRMP 2021-2027, International and EU Level – IF (Inland Fisheries) would suggest the inclusion of the 'North Atlantic Salmon Conservation Organisation (NASCO), Convention for the Conservation of Salmon in the North Atlantic Implementation Plan for the period 2019-2024. This is an international commitment for Northern Ireland (as part of the UK).</p> <p>In Table 4-1, National level - IF would suggest the inclusion of the 'Fisheries Act (Northern Ireland) 1966 as amended'.</p>	<p>The recommended reference has been added to Table 4-1 of the SEA Screening report.</p> <p>The recommended legislation has been added to Table 4-1 of the SEA Screening report.</p>

	<p>Inland Fisheries (IF) is content that these documents seek to measure the impacts from any potential schemes for flood protection/alleviation, IF have some concerns that not all priority species and their habitats will be considered. Most of the rivers within NI will maintain populations of migratory species not listed in Annex II, IV or V; they hold considerable biodiversity value and should be afforded the same protections and assessments. Any potential impacts (barriers) to fish migration routes to/from the different habitats required for all stages (juvenile/spawning habitats, etc.) of their life-cycle should also be considered when measuring the impacts to these species from these plans, i.e. migration to and from freshwater and marine environments. For these reasons, IF would encourage the replacement of the terms 'Protected species' and 'Protected habitats' with Priority Species and their habitats, this will ensure the protection of all species and their habitats as outlined in the NIEA Priority Species list which are of considerable biodiversity value at local, national and international levels.</p>	<p>Table 6-1 has been amended to include both protected and priority species and habitats for the SEA topic Biodiversity, Flora and Fauna. Under "proposed measures" the text has been amended as follows "Protected sites and species are monitored with regards to their conservation objectives. Any increase in unfavourable/favourable conditions for protected and priority species and their habitats will be monitored in conjunction with the implementation of flood risk management projects as well as any habitat loss/increase". Under "proposed indicator(s)" the second bullet point has been changed from "Significant changes in existing habitats or species" to "Significant changes in existing protected and priority species and habitats".</p>
	<p>As a statutory consultee, IF will continue to provide technical advice on any individual projects that derive from these schemes and will continue to provide comment relating to any potential impacts for fisheries interests as a result of any plans through the planning applications process.</p>	<p>The Department notes your comment.</p>
<p>Department for Communities (DfC) Historic Environment Division (HED)</p>	<p>Table 3-1 – Historic Environment Division (HED) welcomes the addition of Climate Change information and advice to planning authorities to keep new development outside Flood Risk Areas.</p>	<p>The Department notes your comment.</p>
	<p>Table 4-1 - HED noted amendments to include recommended additional international and national references. At the National Level we would also advise that reference to 'Article42 (1) of the Planning Order 1991 - Listed Buildings', should be updated to 'The Planning Act (NI) 2011' and reference to the Regional Development Strategy revised to the 'Regional Development Strategy 2035 Building a Better Future.</p>	<p>The recommended addition and amendment have been made to Table 4-1 of the SEA Screening report.</p>
	<p>Table 4-1 - HED reiterates advice that at the sub regional level, cognisance of existing (and forthcoming) draft plan strategies for local council areas affected by the plan would be appropriate noting also that the Planning Policy Statements cited in Table 4-1 will cease to have effect, upon adoption of a Council's Plan Strategy.</p>	<p>Existing or forthcoming draft Plan Strategies for local council areas have been added to Table 4-1 of the SEA Screening report.</p>
	<p>Section 4.2.7 -HED note and welcome reference to the WHS at the Giants Causeway; however, we reiterate for the purposes of accuracy that the Marble Arch Global Geopark is not designated as a UNESCO WHS. We would nonetheless welcome its recognition as an area of natural and cultural heritage interest in the content of the report.</p>	<p>Text in Section 4.2.7 of the SEA Screening report has been amended to clarify that the Marble Arch Global Geopark is not a UNESCO WHS.</p>

	<p>HED welcomes the inclusion of monitoring effects on industrial and maritime heritage assets which, as previously advised, may have specific relationships with coastal and riverine areas. We however reiterate that this report could be more robust in its consideration of cultural heritage, and strongly recommend referring to our historic environment datasets (held by HED, not NIEA) in assessment and monitoring, which are available to download from the following link https://www.communities-ni.gov.uk/publications/historic-environment-digital-datasets. For datasets on wrecks and recorded maritime losses, you should contact DAERA.</p>	<p>An additional bullet point has been added to Section 5.2 of the SEA Monitoring report under "Recommendations for monitoring effects on Cultural Heritage from implementation of the 2nd cycle FRMP" referencing the historic environment datasets held by HED for use in assessment and monitoring of the effects of implementing the 2nd cycle FRMP on cultural heritage features.</p>
	<p>While monitoring may be dealt with at Project Specific Level, we nonetheless consider it important that the full suite of heritage assets, available from the Historic Environment Record of Northern Ireland has recognition at this stage, alongside the intertwined relationship that cultural heritage has with landscape, seascape and the natural environment. As well as measuring the impact on the sites themselves, we suggest that the potential for adverse impact on their settings should be taken into account as this has the potential to affect how these sites are seen, experienced understood and enjoyed. We therefore advise that at Project Specific Level - cognisance of the HED Guidance on Setting and the Historic Environment would be appropriate. https://www.communities-ni.gov.uk/publications/guidance-setting-and-historic-environment</p>	<p>An additional bullet point has been added to Section 5.2 of the SEA Monitoring report under "Recommendations for monitoring effects on Cultural Heritage from implementation of the 2nd cycle FRMP" referencing consideration of the full suite of heritage assets, as available from the Historic Environment Record, and the potential for adverse impacts on the setting of sites in addition to direct effects, to include reference to the suggested guidance document.</p>
<p>Department of Housing, Local Government and Heritage (RoI)</p>	<p>The Dept. notes that, due to the high level and strategic nature of the Plans, the following areas have been identified where plan level mitigation measures/actions will be integrated into the main body of the FRMPs: 1. Developing mechanisms for monitoring, reviewing and managing areas of emerging flood risk at a strategic level; 2. Ensuring coordination between all bodies associated with flood risk management in Northern Ireland; 3. Ensuring compliance with European and national legislation at a project level.</p>	<p>The Department notes your comment.</p>
	<p>The trans-boundary nature of risks arising from the proposed plans are not reflected in the suggested monitoring measures for BFF. Affected sites and species that operate on or are dependent on cross-border nature conservation features should be monitored using data from appropriate data sources in both jurisdictions (i.e. Northern Ireland Environment Agency (NIEA) and the National Parks and Wildlife Service (NPWS)).</p>	<p>Text has been added to Table 6-1 "Proposed Monitoring Measures, Indicators and Data Sources for SEA Topics for the 2nd cycle FRMP" of the SEA Monitoring report under "Proposed Data source(s)" as follows "Article 17 Habitats Directive reporting and Article 12 Birds Directive reporting for the Republic of Ireland, relevant to completed/in progress FASs that have potential for trans-boundary effects. NPWS website and data request portal for provision of relevant data for trans-boundary habitats and species that are likely to be affected by downstream projects". An additional bullet point has been added to Section 5.1 Biodiversity, Flora and Fauna, under "Recommendations for monitoring</p>

		effects on Biodiversity, Flora and Fauna from implementation of the 2nd cycle FRMP" referencing the potential for transboundary effects on habitats and species, and the NPWS data sources available for monitoring these effects.
	<p>The Department takes this opportunity to highlight that the NPWS website and data request portal provide a substantial data source (e.g. dedicated survey data) for trans-boundary habitats and species that are likely to be affected by downstream projects. They are not referenced in Table 5 data sources supporting the Environmental Report and should be consulted where necessary. http://www.npws.ie/maps-and-data</p>	<p>Note Table 5 referred to is part of the SEA ER for the 1st cycle FRMPs, listing data sources supporting the ER. Text has been added to Table 6-1 "Proposed Monitoring Measures, Indicators and Data Sources for SEA Topics for the 2nd cycle FRMP" of the SEA Monitoring report under "Proposed Data source(s)" as follows "Article 17 Habitats Directive reporting and Article 12 Birds Directive reporting for the Republic of Ireland, relevant to completed/in progress FASs that have potential for trans-boundary effects. NPWS website and data request portal for provision of relevant data for trans-boundary habitats and species that are likely to be affected by downstream projects". An additional bullet point has been added to Section 5.1 Biodiversity, Flora and Fauna, under "Recommendations for monitoring effects on Biodiversity, Flora and Fauna from implementation of the 2nd cycle FRMP" referencing the potential for transboundary effects on habitats and species, and the NPWS data sources available for monitoring these effects.</p>
	<p>The Department takes this opportunity to highlight that several catchment areas of the plans are cross-border in nature. This co-dependence requires a partnership approach and the Department suggests that the wording is amended to reflect the trans-boundary nature of flood management and to safeguard that FRMPs "Ensure coordination between all bodies associated with flood risk management in Northern Ireland and where relevant the Republic of Ireland".</p>	<p>There is ongoing cooperation and coordination between the Department and the OPW (Office of Public Works), both at a strategic coordination level and on specific more localised issues. DfI has a close working relationship with the OPW in the Republic of Ireland; this indeed precedes the Directive. For the purposes of the Directive second cycle, three joint groups are active at different levels to inform, cooperate and coordinate Flood Risk Management activities in both jurisdictions. The NIFRA 2018 has not identified any APSFR that require specific cross-border coordination, however, any new areas identified will be considered during the next Floods Directive cycle.</p>
	<p>The Dept. is concerned that the new status of nature conservation areas previously considered Natura 2000 sites within NI is not reflected in the ER. The Dept. suggests that the draft documents are revised to reflect the new post-Brexit legal landscape in NI in this regard. As a result of this, there is a need for NI based public authorities and consent bodies to be cognisant of the relevant ROI legislation that underpins the protection of European sites. Specifically, the proposed steps to address potential risks to European sites either within or partially within the ROI arising from downstream project level structural measures should be cognisant of the requirements of the relevant ROI legislation. Accordingly, the European Communities (Birds and Habitats)</p>	<p>The SEA Monitoring, SEA Screening and HRA reports have been amended to clarify the terminology for these designated sites following the UK's exit from the EU. Reference to Natura 2000 or N2K sites has been removed, instead referring to UK National Site Network sites, or European Sites, to include consideration of Ramsar sites. In the HRA, text has been amended in Section 1.1 clarifying the legislation underpinning the protection of European sites in NI and RoI. Text has also been added to Section 6 Avoidance and Mitigation of the HRA as follows "Should any case arise, whereby protected species or habitats within the Republic of Ireland have potential to be adversely affected by</p>

<p>Regulations 2011 (ROI S.I. No. 477 of 2011) should be included in Table 7. Additionally, the ER should be cognisant of the ROI National Biodiversity Action Plan 2017-2021 and this should also be included in Table 7. http://www.npws.ie/sites/defaultfiles/publications/dpf/National%20Biodiversity%20Action%20Plan%20English.pdf</p>	<p>the implementation of projects arising from the NI FRMP, there should be consultation with the National Parks and Wildlife Service (NPWS)". Note Table 7 is the key Plans and Programmes (P/P) Table within the SEA ER for the 1st cycle FRMPs; the recommended legislation and Biodiversity Action Plan (BAP) for RoI has been added into a new Section 4 of the SEA Monitoring report, which updates relevant plans and programmes. Text has been added to Table 6-1 "Proposed Monitoring Measures, Indicators and Data Sources for SEA Topics for the 2nd cycle FRMP" of the SEA Monitoring report under "Proposed Data source(s)" as follows "Article 17 Habitats Directive reporting and Article 12 Birds Directive reporting for the Republic of Ireland, relevant to completed/in progress FASs that have potential for trans-boundary effects. NPWS website and data request portal for provision of relevant data for trans-boundary habitats and species that are likely to be affected by downstream projects". An additional bullet point has been added to Section 5.1 Biodiversity, Flora and Fauna, under "Recommendations for monitoring effects on Biodiversity, Flora and Fauna from implementation of the 2nd cycle FRMP" referencing the potential for transboundary effects on habitats and species, and the NPWS data sources available for monitoring these effects.</p>
<p>Yes, with reservations regarding the extent of trans-boundary considerations and consultations required to ensure mitigation of risks to protected species and or habitats that are dependent on nature conservation sites or features.</p>	<p>In the HRA, text has been amended in Section 1.1 clarifying the legislation underpinning the protection of European sites in NI and RoI. Text has also been added to Section 6 Avoidance and Mitigation of the HRA as follows "Should any case arise, whereby protected species or habitats within the Republic of Ireland have potential to be adversely affected by the implementation of projects arising from the NI FRMP, there should be consultation with the National Parks and Wildlife Service (NPWS)". Relevant legislation and BAP for RoI has been added into a new Section 4 of the SEA Monitoring report, which updates relevant plans and programmes. Text has been added to Table 6-1 "Proposed Monitoring Measures, Indicators and Data Sources for SEA Topics for the 2nd cycle FRMP" of the SEA Monitoring report under "Proposed Data source(s)" as follows "Article 17 Habitats Directive reporting and Article 12 Birds Directive reporting for the Republic of Ireland, relevant to completed/in progress FASs that have potential for trans-boundary effects. NPWS website and data request portal for provision of relevant data for trans-boundary habitats and species that are likely to be affected by downstream projects". An additional bullet point has been added to Section 5.1 Biodiversity, Flora and Fauna, under "Recommendations for monitoring effects on Biodiversity, Flora</p>

		<p>and Fauna from implementation of the 2nd cycle FRMP" referencing the potential for transboundary effects on habitats and species, and the NPWS data sources available for monitoring these effects.</p>
	<p>Many of the water catchments are cross border in nature and it is acknowledged that management in one section of a catchment has the potential to adversely impact an area of the water catchment (down or upstream) in another jurisdiction (i.e. ROI). It follows that, the scope of consideration given to trans-boundary effects and cross border impacts in the ROI should be given more consideration. Specially, the Dept. is concerned that the assessment and monitoring of risks and potential impacts to protected habitats and species in the ROI are not supported by sufficient references to ROI data sources, relevant legislation and or statutory bodies (i.e. NPWS).</p>	<p>In the HRA, text has been amended in Section 1.1 clarifying the legislation underpinning the protection of European sites in NI and RoI. Text has also been added to Section 6 Avoidance and Mitigation of the HRA as follows "Should any case arise, whereby protected species or habitats within the Republic of Ireland have potential to be adversely affected by the implementation of projects arising from the NI FRMP, there should be consultation with the National Parks and Wildlife Service (NPWS)". Relevant legislation and BAP for RoI has been added into a new Section 4 of the SEA Monitoring report, which updates relevant plans and programmes. Text has been added to Table 6-1 "Proposed Monitoring Measures, Indicators and Data Sources for SEA Topics for the 2nd cycle FRMP" of the SEA Monitoring report under "Proposed Data source(s)" as follows "Article 17 Habitats Directive reporting and Article 12 Birds Directive reporting for the Republic of Ireland, relevant to completed/in progress FASs that have potential for trans-boundary effects. NPWS website and data request portal for provision of relevant data for trans-boundary habitats and species that are likely to be affected by downstream projects". An additional bullet point has been added to Section 5.1 Biodiversity, Flora and Fauna, under "Recommendations for monitoring effects on Biodiversity, Flora and Fauna from implementation of the 2nd cycle FRMP" referencing the potential for transboundary effects on habitats and species, and the NPWS data sources available for monitoring these effects.</p>
	<p>The Dept. recommends that the FRMPs acknowledge more explicitly the risk of trans-boundary effects and clearly identify the mechanisms and forums which serve to prevent such risks manifesting at project level.</p>	<p>There is ongoing cooperation and coordination between the Department and the OPW (Office of Public Works), both at a strategic coordination level and on specific more localised issues. DfI has a close working relationship with the OPW in the Republic of Ireland; this indeed precedes the Directive. For the purposes of the Directive second cycle, three joint groups are active at different levels to inform, cooperate and coordinate Flood Risk Management activities in both jurisdictions. The NIFRA 2018 has not identified any APSFR that require specific cross-border coordination, however, any new areas identified will be considered during the next Floods Directive cycle.</p>

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