

# 21/22

## DfI Rivers



Business Plan  
2021/22

[www.infrastructure-ni.gov.uk/dfi-rivers-overview](http://www.infrastructure-ni.gov.uk/dfi-rivers-overview)

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## Foreword

I am pleased to present the Rivers Business Plan for 2021 - 2022. The Plan sets out our priorities for this year, along with the objectives and business targets which will help us deliver those priorities.

Last year was an exceptionally challenging and difficult year for all of us as the pandemic continued to disrupt many of the activities associated with normal daily life. Your diligence and determination in continuing to deliver the services we provide in every aspect of flood risk management over this period has been exemplary. The innovative approaches to working and the real challenges faced by many in balancing work commitments with home life has been one of the best examples of professionalism and dedication I have seen in my career so far.

Your achievements have been made all the more notable by the fact that our Minister and the Executive continued to receive a high level of support throughout and key operational services were maintained largely uninterrupted..

In addition to these challenges and achievements, we have continued to deliver a targeted programme of flood risk management infrastructure maintenance, reviewed our asset management processes and progressed a number of significant capital schemes, that will result in our highest ever capital spend this year. Critically we continue to inform planning decisions from a flood risk perspective and seek to include the latest climate change information. We have also continued to deal with a range of reservoir safety issues and progress the implementation of the EU Floods Directive, our key legislative driver.

Work on the Roads and Rivers Development programme has progressed and we have seen a further significant step forward in Roads and Rivers working closer together, with the creation of a shared Fleet Unit and Stores Unit.

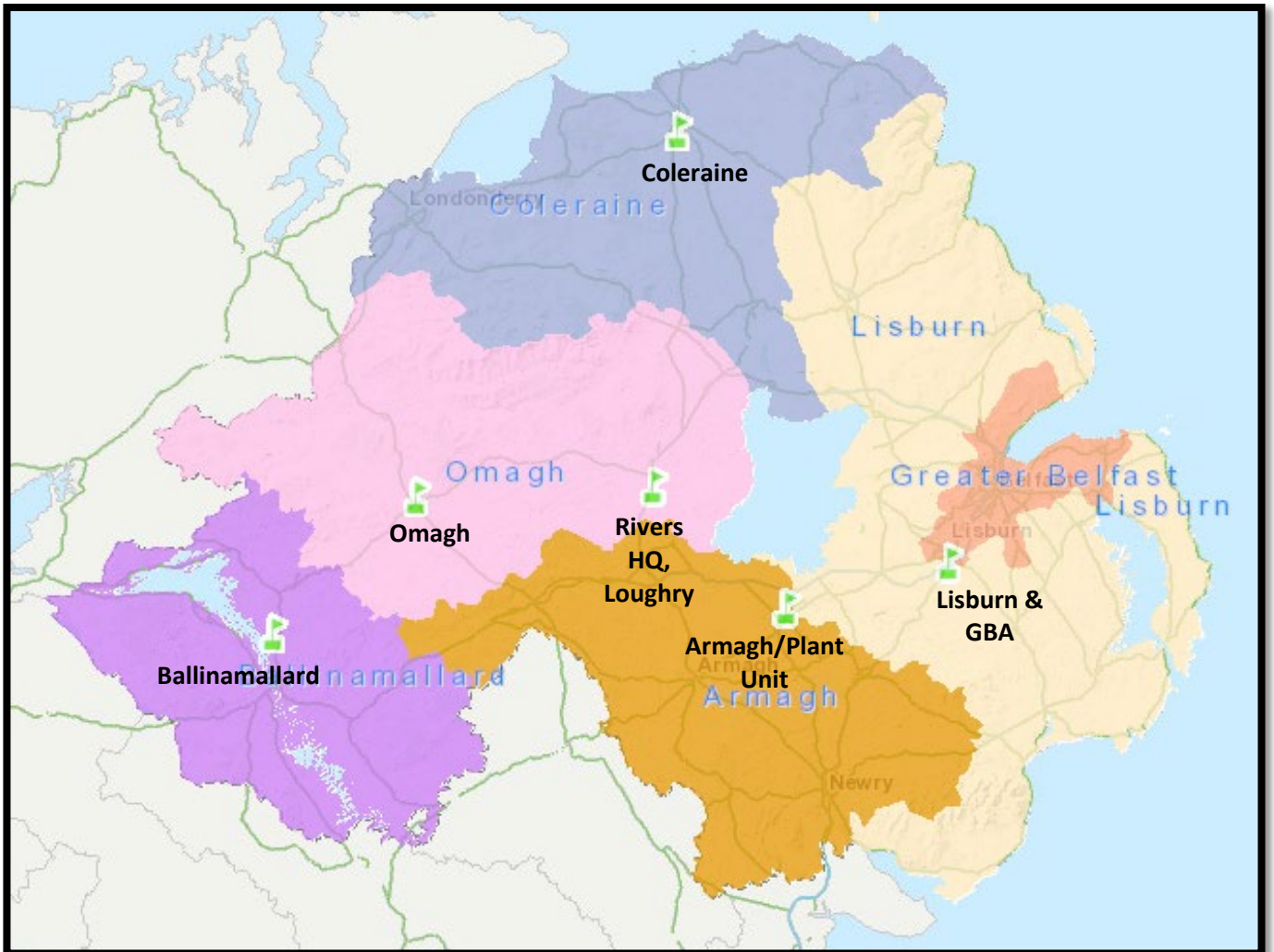
Your expertise and commitment is our greatest asset and we need to further enhance professional development opportunities and continue to link with other sources of knowledge and information from other nations.

As we develop closer links with the Living with Water Programme our hydraulic models, flood maps and the hydrometric network will be of paramount importance to make sure integrated drainage investment decisions are accurate and deliver multiple benefits without detriment.

This year, as in other years, the support of all our administrative teams will be the cohesive bond that draws together information from all areas of Rivers and ensures our customer focus remains strong and the quality of our service to the public is maintained.

**JONATHAN MCKEE**  
**DIRECTOR OF RIVERS**

## Office Locations



Rivers Headquarters is located at Loughry Campus in Cookstown.

Rivers is divided into two Regions; Eastern and Western. Our main Regional offices are located in Lisburn and Omagh for the respective Regions. There are also Area offices located in Coleraine, Fermanagh and Craigavon.

## Senior Staff Structure



**Jonathan McKee**  
Director of Rivers



**Des McFarlane**  
Head of Development



**Owen McGivern**  
Head of Operations



**Laura Conlon**  
Personal Secretary

### DfI Rivers PPTO

<b>Ronan Devlin</b> Capital Procurement (Minor)	<b>Johnathan Carlisle</b> Capital Procurement (Major)	<b>Andrew Hitchener</b> Asset Management and Mapping Unit	<b>Seamus McCann</b> Emergency Planning	<b>Mike O'Gorman</b> Western Region	<b>Kristopher Campbell</b> Eastern Region	<b>Eoghan Daly</b> Planning Advisory	<b>Shaun Donnelly</b> Business Support

### DfI Rivers SPTO

<b>Craig Rankin</b> CPU Minor	<b>Alan Reddick</b> CPU Major	<b>Shane Grant</b> Asset Management	<b>Ruth Bond</b> Hydrometrics	<b>JB Murphy</b> Omagh/Fermanagh	<b>Alastair Payne</b> Lisburn	<b>Neil Jenkinson</b> Planning Advisory	<b>Colette Devlin</b> Business Support
<b>Tommy O'Neill</b> CPU Minor	<b>Ian Coulter</b> CPU Major	<b>Noel O'Neill</b> Environmental	<b>Ciaran Fearon</b> Emergency Planning	<b>Ruairi Boylan</b> Coleraine	<b>Alan McWatters</b> Greater Belfast	<b>Stephen Lancashire</b> Planning Advisory	<b>Quinton Campbell</b> Reservoirs Authority
<b>Jon Hilditch</b> CPU Minor	<b>Alex Ballie</b> CPU Major	<b>Holly Graham</b> Mapping Unit		<b>Chris Dinsmore</b> Plant Unit	<b>Nick Gregg</b> Armagh	<b>Walter Morhall</b> Planning Advisory	<b>Cara O'Hagan</b> Finance Business
	<b>Sean O'Neill</b> CPU Major	<b>Malcolm Calvert</b> Mapping Unit				<b>Stephen Lindsay</b> Planning Advisory	<b>Henry Thompson</b> Lough Erne Estate
	<b>Mark Glendinning</b> CPU Major					<b>Graeme Anderson</b> Living With Water Policy	<b>Jim Martin</b> Lough Erne Estate

## **Department for Infrastructure**

The Department for Infrastructure (Dfi) is one of nine Northern Ireland Departments. The main responsibilities of the Department are:

- regional strategic planning and development policy;
- transport strategy and sustainable transport policy;
- public transport policy and performance;
- road safety and vehicle regulation policy, including strategies to reduce the number of people killed or seriously injured on our roads;
- driver and operator licensing and driver and vehicle testing;
- provision and maintenance of all public roads;
- certain policy and support work for air and sea ports;
- river and sea defence maintenance and the construction of flood alleviation schemes;
- provision of flood maps and risk information; and
- policy on water and sewerage services and management of the Department's shareholder interest in Northern Ireland Water.

### **Aim**

The Department is responsible for much of the infrastructure that is essential for a modern society and for creating the capacity and connectivity needed to support economic growth. The creation of Dfi has enabled a more integrated response on a range of issues, for example, regional development, active travel, road safety, and flood risk management. To maximise our role as an enabling department, we work with others ensuring that our plans for transport and water infrastructure dovetail with the plans others have for improving all aspects of society. The Department's Strategic Objectives are:

- shaping the region and promoting economic growth;
- developing our infrastructure in a sustainable way; and
- connecting people to opportunities and services.

### **Programme for Government**

The Department for Infrastructure delivers services to every citizen, visitor and business in the region multiple times a day. Dfi is a key contributor to a number of the Executive's Programme for Government (PfG) outcomes, from unlocking the economic potential of the region, to tackling disadvantage, to protecting the environment and in promoting the health and wellbeing of our citizens. The Department has a particular focus on Outcome 11: We connect people and opportunities through our infrastructure. In addition, the Department makes a particular contribution to Outcome 2: We live and work sustainably, protecting the environment.

## **DfI Rivers**

### **Vision**

Our vision is to manage flood risk to facilitate the social, economic and environmental development of Northern Ireland.

### **Aims**

To support the vision Rivers aims:

- to reduce the risk to life and the damage to property from flooding from rivers and the sea; and
- to undertake watercourse and coastal flood management in a sustainable manner.

### **Objectives**

In support of these aims Rivers' objectives are to:

- deliver sustainable flood risk management policies to meet society's social, environmental and economic needs, whilst taking account of climate change;
- implement the requirements of the European Directive for the assessment and management of flood risks;
- reduce the number of properties currently at risk of flooding from rivers and the sea;
- maintain flood defence and drainage infrastructure in a satisfactory condition;
- maintain the designated watercourse network;
- operate to resource limits;
- support and motivate all our people to achieve DfI Rivers' objectives; and
- deliver quality services for our customers and stakeholders in a fair and equitable way.

Approximately 45,000 properties (equivalent to 5.2% of Northern Ireland's properties) are identified as being at flood risk from rivers, the sea or surface water.

Managing this risk is a key priority for Rivers. We do this by, amongst other activities, providing expert flood risk advice to local planning authorities, undertaking sustainable watercourse maintenance, controlling, as far as weather conditions permit, Lough Neagh and Lough Erne water levels, constructing new flood defences, maintaining existing defences and fulfilling a key role in the emergency response to flooding incidents.

## **Rivers Business Units**

Rivers is headed by a Director and supported by three Business Areas:

1. Operations;
2. Development; and
3. Corporate Support Services.

### **A. Operations**

**HEAD OF OPERATIONS – OWEN MCGIVERN**

There are four business units within Operations:

1. Eastern Region;
2. Western Region; and
3. Capital Projects (Major and Minor).

### **Regional Area Offices**

Business Unit Managers - Kris Campbell - Eastern  
Mike O’Gorman - Western

Eastern Region maintains and protects the river drainage network across Armagh, Lisburn and Greater Belfast Areas. Western Region maintains and protects the river drainage network across Omagh and Coleraine Areas plus the Fermanagh Sub-Area. Western Region also looks after operational procurement, stores and management of the fleet.

The regional teams are also responsible for the following key functions:

- maintenance of a network of free flowing watercourses to provide adequate outlets for urban storm and land drainage;
- maintenance of flood and sea defences;
- identifying flood risks and undertaking minor works to repair and construct urban flood defences, culverts and provide drainage infrastructure;
- administering advisory and enforcement procedures to protect the drainage function of all rivers;
- provision of a fast and effective flood emergency response with a view to mitigating any threat to life or property;
- responding to complaints and enquiries;
- utilising available resources to maintain the effectiveness of the Department’s assets during periods of adverse weather and threat to life and property from flooding;
- responding where possible to requests for assistance from the public whose property has suffered or is threatened by flooding. Liaising with other statutory and public bodies to provide an effective response to flooding or threat of flooding;
- Emergency Planning & Chair of the **Southern** Severe Weather Working Group - Eastern Region; and
- Emergency Planning & Chair of the **Northern** Severe Weather Working Group - Western Region
- Management of control structures used to control the flow of rivers when required.



- Regulation of Water Levels on Lough Neagh and Lough Erne

Additionally Western Region also looks after the following functions:

- regulation of water levels on Lough Neagh and Lough Erne;
- provision and maintenance of store facilities; and
- operational procurement.

### **Roads & Rivers Internal Contractor development programme**

Work has been ongoing for some time under the Internal Contractor Project to formally amalgamate the two Fleet teams. The formal amalgamation took place at the start of the financial year. Work is also progressing in relation to the creation of a single Roads & Rivers stores and procurement organisation operating with three stores in Coleraine, Omagh and Carn. We are aiming to have the new merged arrangements in place for commencement mid-year.

### **Capital Projects Units**

Capital Projects Major - Business Unit Manager: Johnathan Carlisle

Capital Projects Minor - Business Unit Manager: Ronan Devlin

These units identify and deliver cost viable river engineering schemes to minimise identified flood risks. They are based at Loughry and consist of Capital Projects Major and Minor Works and Design Section. They carry out the majority of their functions through a Partner Consultant (Amey). The Design Section undertakes design and site supervision of some schemes via an in-house team of staff. A prioritised programme of schemes is delivered under the following headings:

- Flood Alleviation Schemes – generally new culverts, walls, embankments, flood storage, open watercourse upgrade; and
- Drainage infrastructure Schemes – generally repair and construction of culverts, weirs and control structures.

The major schemes typically cost more than £1.5m and have been identified through the Flood Risk Management Plans for Northern Ireland which were published in December 2015.

### **Major Schemes 2021/22**

- Belfast Tidal Scheme is at Procurement stage for a Design and Build Contract. Works are planned to start in 2021/22;
- Shimna River Flood Alleviation Scheme, Newcastle is at Procurement stage for a works contract. Works are planned to start late summer 2021;
- Drumahoe and Eglington Flood Alleviation Schemes are at the Detailed Design stage ;
- Londonderry feasibility study is expected to progress to the Detailed Design stage in 2021/22;
- Portadown Flood Alleviation Scheme is at Detailed Design stage;
- Newry Scheme is at Detailed Design stage; and
- Glenbrook River East Belfast Scheme at construction stage. Works are due to be completed in Spring 2022.

## **B. Development**

### **HEAD OF DEVELOPMENT – DES MCFARLANE**

There are four business units within Development:

1. Emergency Planning (EPU);
2. Asset Management & Mapping Unit (AMMU);
3. Planning Advisory & Modelling Unit (PAMU); and
4. Reservoirs Team.

### **Emergency Planning Unit**

Business Unit Manager – Seamus McCann

Emergency Planning Unit (EPU) carry out the emergency planning co-ordination duties within DfI Rivers. Key areas of responsibility include:

- fulfilling Lead Government Department (LGD) responsibilities for the co-ordination of flooding emergencies. While the response to, and recovery from an emergency will require many organisations, each delivering their own responsibilities and functions, the role of the LGD is a key one as it provides detailed and specific flood risk expertise that assists the wider overall multi agency response to flooding;
- managing the implementation of the Homeowner Flood Protection Grant Scheme. The grant scheme is a government scheme which is designed to encourage the owners of eligible residential properties that are located within known flood prone areas and/or have flooded before, to modify their properties to make them more resistant to flooding;
- delivering Community Resilience through the Regional Community Resilience Group (RCRG) which aims to provide a forum and governance to facilitate the co-ordination and partnership working necessary to enhance Community Resilience in areas subject to flood risk or severe weather; and
- representing Rivers on the Emergency Preparedness Groups (EPGs) for civil contingencies in Northern Ireland. The purpose of each EPG is to ensure that there is an appropriate level of preparedness to enable an effective multi-agency response to emergencies which have a significant impact on the local community.

EPU also includes the Hydrometrics team who are responsible for:

- managing, maintaining and enhancing the Northern Ireland Surface Water Network currently consisting of over 130 river level monitoring stations;
- collating water level and river gauging information to contribute to the 'National Archive' and determine flow return periods to facilitate flood alleviation scheme design and accurate flood mapping;
- providing near to real-time river level information to inform Rivers and other multi-agency partners' response to flooding; and
- monitoring the coastal water level network to identify problematic storm surges which can raise sea levels and cause flooding.

## **Asset Management and Mapping Unit**

Business Unit Manager – Andrew Hitchenor

### **Asset Management Unit**

Asset Management is responsible for the inspection, grading and valuation of drainage and flood defence infrastructure and incorporates an Environment Section. The Unit is based at Loughry and delivers the following:

- establishment and monitoring of Asset Management Plans for flood defences;
- maintain databases of physical above and below ground assets;
- condition grading of assets and valuation year end;
- inspection of the fluvial and coastal flood defences through a programme of risk based inspections;
- carry out Environmental Impact Assessment (EIA) scoping studies on all new capital works; and
- advice on timing, methodology and potential impact of maintenance works.

### **Mapping Unit**

Mapping is responsible for developing and providing map based information to enable the assessment and communication of flood risk. Key areas of responsibility include:

- Management of the Corporate Geographical Information systems (internal & external-facing) specific to Rivers business;
- Provision of GI support to Water and Drainage Policy Division with respect to various initiatives including the Living With Water Programme.
- Development and Maintenance of Flood Hazard and Flood Risk Mapping for all sources of flooding (fluvial, coastal and pluvial), in support of the requirements of the EU Floods Directive;
- Development and Maintenance of Reservoir Flood Mapping for Emergency Planning and for Development Planning (FLD5); and
- Liaison with our Strategic Business Partner, Land and Property Services (LPS) to have access to their expert staff and on the management of jointly branded flood mapping products (including online map services to customers).

### **Planning Advisory & Modelling Unit (PAMU)**

Business Unit Manager – Eoghan Daly

PAMU is based in Craigavon and provides advice to Planning Authorities on the drainage/flood risk aspects of the forthcoming Local Development Plans and planning applications with a view to prevent inappropriate and unsustainable development.

The unit's key functions are:

- advising Planning Authorities in relation to inappropriate development on floodplains, or elsewhere, that may increase risk to life and damage to property through flooding as outlined in Planning Policy Statement PPS15 (Revised): Planning and Flood Risk;

- advising Planning Authorities on other river drainage aspects that may be impacted as a result of planning applications;
- scrutiny of flood risk assessments submitted by developers as part of planning applications;
- acting as key contact with the Planning Authorities in relation to matters concerning flood risk and land use planning;
- input to the Storm Water Management Group dealing with the emerging Sustainable Drainage Systems (SuDS) policy for Northern Ireland; and
- liaising with Planning Authorities to ensure that development and flood risk policies in Local Development Plans (LDPs) are robust and consolidate the principles that underpin PPS15.

## **Flood Modelling**

This Unit contributes to the progression and management of feasibility studies to identify viable flood alleviation schemes. It is based in Craigavon and delivers the following:

- provision of expert technical advice regarding Flood Mapping & Modelling products;
- manage and update the Rivers library of 'infoWorks ICM' hydraulic models to inform:
  - production of Flood mapping;
  - the EU Floods Directive Implementation; and
  - the Living with Water Programme – Strategic Drainage Infrastructure Plan.

## Reservoirs Team

Rivers will ultimately be responsible for the administration of the Reservoirs Act (Northern Ireland) 2015.

When fully commenced, the Act will provide for the regulation of structures or areas capable of holding 10,000 cubic metres or more of water above the natural level of the surrounding land. These are Controlled Reservoirs.

The provisions of the Act are based on industry best practice in respect of reservoir management to minimise the risk of flooding due to an uncontrolled release of water resulting from dam failure, in order to protect people, the environment, cultural heritage and economic activity.

The current Rivers Reservoirs Team will ultimately become the Reservoirs Authority and will administer the key provisions of the Act if they are taken forward and commenced by the Northern Ireland Assembly. In the interim period the Reservoirs Team will:

- establish the location of, and the reservoir manager for, each controlled reservoir in Northern Ireland;
- engage with the reservoir managers to:
  - inform them of their common law responsibilities to ensure their reservoir are in a safe condition and the liabilities that will lie with the reservoirs manager should the reservoir fail;
  - encourage the commissioning of reservoir engineers to supervise and inspect reservoirs;
  - encourage the reservoir manager to progress any reservoir safety related works that are identified to prevent an uncontrolled release of water from reservoir;
  - signpost potential sources of additional information on reservoirs safety and consider the need for reservoir managers to potentially comply with other legislative requirements;
- the Reservoirs Team will monitor the condition of reservoirs by periodically requesting reservoir managers to notify their progress in the respect of any reservoirs safety related works identified on their reservoir; and
- the Reservoirs Team will share information on the condition of Controlled Reservoirs with Planning Advisory and Modelling Unit where a planning consultation request is received concerning a proposal to develop lands within the inundation area of a Controlled Reservoir.

## **C. Corporate Support Services**

### **Business Unit Manager - Shaun Donnelly**

#### **Business Support Unit**

The Business Support team is based in the Rivers Headquarters, Loughry and is responsible for:

- providing an accurate response to correspondence and enquiries, including ministerial correspondence, Assembly Questions and Press queries. This includes commissioning of necessary background material from Professional and Technical staff, drafting responses and ensuring clearance by line management/Rivers Senior Management Team before issue within set timescales;
- keeping an accurate record of all correspondence handled within Business Support Unit, including service requests and following up on any necessary action required, ensuring deadlines are met;
- submission and co-ordination of returns to DfI Headquarters, including Director's assurance statements and risk register returns;
- co-ordination of DfI Rivers' budget management through meetings with Budget Holders and presentation of finance information to the Senior Management Team;
- liaising with DfI Training Centre, providing Training and Development support for DfI Rivers Industrial and Non-Industrial staff;
- Human Resource Management support including updating staff changes and preparing internal staff structure charts, providing staffing information to Senior Management and checking Payroll reports on a monthly basis for incorrect pay cost centres, grades, etc; and
- providing admin and secretariat support to Senior Management Team and other Business Areas as required. This includes secretariat support for various meetings, such as the Drainage Council. Arranging and coordinating meetings for senior management and taking minutes of meetings when required.

#### **Lough Erne Estate Management**

DfI Rivers is the statutory authority responsible for facilitating and processing management arrangements relating to the Lough Erne Estate. The main functions associated with the management of Lough Erne are:

- the completion of a mapping exercise detailing lands leased by the Department in the Erne Estate;
- working towards "First Registration title" on behalf of the Department to those lands not already claimed by private individuals / bodies / companies relating to the Lough Erne Estate;
- working with the Departmental Solicitors Office in respect of land issues pertaining to the Lough Erne Estate, including research for Court proceedings; and
- dealing with land disposals and associated tasks.

## **Significant Works 2021/22**

DfI Rivers has ongoing schemes at various stages of development, all aimed at minimising identified flood risks. Some of these are due to complete in 2021/22 and others are due to commence.

### **Belfast Tidal scheme**

The Flood Risk Management Plans (FRMPs) developed in 2015 as part of implementing the EU Floods Directive identified Belfast as being at the highest flood risk of 20 Significant Flood Risk Areas in Northern Ireland. Tidal flood risk is of most concern, with up to 1,500 properties currently at risk from a 1 in 200 year event, which is the Rivers design standard for sea defences. The impact of climate change, causing sea level rise, will increase the number of properties at risk to over 7,300 by 2120.



As a result of the FRMP's, Rivers have developed a scheme of works that will provide a long term approach to tidal flood risk management for Belfast and the tidal River Lagan.

The proposed scheme will extend from Belfast Lough to Stranmillis Weir and will involve the construction of flood defences along both sides of the river. The defences will extend to 8.5km and will comprise of a mixture of:

- Glass flood walls;
- Concrete flood walls;
- Sheet pile flood walls;
- flood gates;
- Temporary barriers
- Demountable barriers;
- Individual property level protection.

The estimated cost of this scheme is £17.8m. Works are planned to start 2021/22.

### **Stranmillis Weir Refurbishment**

The scheme, which recommenced in 2019/20, involves the refurbishment of Stranmillis Weir on the River Lagan, Belfast in order to improve the long term integrity of the structure. The weir is comprised of three vertical lift gates, each approximately 7.5m long and 1.7m high. The structure is maintained by Rivers. This work is being carried out in conjunction with Belfast City Council work, which incorporates a new pedestrian bridge and a lock.



In recent years, Rivers has also identified evidence of scouring occurring immediately downstream of the concrete apron. The scouring of the river bed and undermining of the weir structure on the downstream side will eventually cause the structure to fail. The scheme involves the refurbishment of Stranmillis Weir in order to improve the long term integrity of the structure, and thereby to reduce the potential likelihood of damage to property from flooding.

The works include the refurbishment of the structure's structural, hydraulic and control features as follows:

- Installation of new steel sheet piles, back fill of voids and anti-erosion repair works;
- repair of concrete civil structure and adjacent masonry walls;
- replacement of the existing sluice gates, operation gear, catwalk and associated works;
- repair of rock armour at upstream entrance of the structure;
- rock armour required along the downstream face of the proposed sheet piles; and
- installation of new lighting and safety equipment.

The estimated cost of this scheme is £750k and works are due to be completed in September 2021.

### **Shimna River Flood Alleviation**

An extreme flood event took place in Newcastle on 16/17 August 2008 which caused significant flooding in the Bryansford Avenue and Shimna Road areas, where flood water from the Shimna River crossed into the Burren River catchment and caused internal flooding to 36 properties. This flooding mechanism was replicated during the major flooding event of the 26th August 2020.

The scheme is designed to protect an estimated 312 properties during a 1 in 100 year fluvial flood event. The detailed design is now complete. The scheme is made up of 4 separate flood walls, all emanating from the 4 corners of the Bryansford Road Bridge. The flood walls have a total length of 1430 metres at an estimated cost of £6.5m.

An Environmental Statement was completed and advertised between the 28th May and the 29th June 2018. As the works area was located within the Shimna River Area of Special Scientific Interest (ASSI) and Mourne Area of Outstanding Natural Beauty (AONB) it was also necessary to undertake an Appropriate Assessment (AA) in accordance with the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995.

The scheme design is complete and the majority of the lands agreements have been completed. The two stage procurement process has commenced and works are planned to start late summer 2021.



## **Newry Flood Alleviation Scheme**

The Flood Risk Management Plans (FRMPs), developed in 2015 as part of implementing the EU Floods Directive, have identified Newry as the most significant area of flood risk in Northern Ireland outside of Belfast. It is estimated 1,100 properties are subject to flood risk in the city with the potential to cause approximately £100m of damage.

A Feasibility/Economic Appraisal has been approved by Department of Finance (DoF) for this flood protection infrastructure with the cost of the works in the region of £14m. The Feasibility Study recommends flood defences to a number of tributaries, flood defences in the city centre on the main Newry River/Canal and upstream flood storage.

Due to a number of complex issues it has been decided to take forward the scheme in two separate parts. The project received Internal Gateway 2 approval on 25 February 2019, which allows the commencement of the detailed design.

Phase one of the project, entitled “Newry River and Tributaries,” was procured at a cost of £2.05m and has now commenced on site, with completion targeted for summer 2022.

Stage 2 involving the detailed design of flood defences through the city centre and upland flood storage, has just commenced. The detailed design will take into consideration the latest DfI climate change policy and updated flood modelling.

Newry, Mourne and Down District Council are proposing the construction of a new theatre and associated public realm works at the Art Centre on Sugar Island. Opportunities for collaboration are actively being considered and consultation with the Council is on-going to ensure proposals integrate and connectivity with the river environment is not cut off. Works are some way off and could potentially start during 2024/25.

## **Portadown Flood Alleviation Scheme**

The Flood Risk Management Plans (FRMPs), developed in 2015 have also identified Portadown as a Significant Flood Risk Area. A Feasibility/Economic Appraisal was approved by the DoF on 28 September 2018. The scheme has undergone a review to take into account the revised guidance on climate change and subsequently an addendum to the Business Case is currently being produced. It is now estimated that 574 properties in the town are subject to flood risk, with the potential to cause £38.8m of damage. (total present value of damages avoided).

The preferred option is a series of flood defences on the Annagh, Upper Bann and Ballybay/Corcrain Rivers at 20 separate locations. The estimated cost of the scheme is £17.1m.

The detailed design is now well underway and discussions are ongoing with Armagh, Banbridge and Craigavon Council to consider including a riverside walk as part of the scheme.

It is planned that construction works will commence in 2023/24.

## **Glenbrook River East Belfast Flood Alleviation Scheme**

The Loop River (and its tributaries) has a long history of flooding dating back more than twenty years. Major flooding events have occurred on the 16th August 2008 and on 12th June 2007. The June 2007 event is the largest flood on record in East Belfast. More than 400 properties were affected with approximately 60 of those flooded within the Loop catchment.

The purpose of the flood alleviation scheme is to provide a 1 in 100 year plus climate change standard of flood protection to 285 residential properties located in the area of Cregagh Road, Downshire Park Central, Downshire Parade, Downshire Park North, Downshire Park East, Somme Drive and Montgomery Chase in East Belfast.

Works commenced on site in February 2021 and are due to be completed by April 2022, at a cost of £2.8m.

## **Drumahoe, Eglinton and Londonderry Feasibility Studies**

Following the extensive flooding in Drumahoe and Eglinton on 22 August 2017 Feasibility Studies into the viability of flood defences were completed in 2019. As Drumahoe formed part of the Londonderry Significant Flood Risk Area identified within the 2015 Flood Risk Management Plans it was decided that the City should be included as part of the commission.

- Drumahoe is at the early design stage and involves constructing flood walls and a possible bridge replacement at Church Brae, adjacent to the Burnagibbagh River; and
- Eglinton is at the design stage and involves the provision of formal flood defences, such as walls and embankments along the Muff and Castle Rivers, with some potential widening and realignment locally of the watercourses.
- The Londonderry Feasibility Report was completed in 2020 and the Economical Appraisal approved in Oct 2020. It is expected that the project will proceed to the design stage in 2021/22.

## **Flushbridge Stream, Lisburn**

A significant flood event in June 2012 to the Ballymacash area of Lisburn caused flooding which affected approximately 17 properties along with key road infrastructure, causing major disruption. The proposed scheme to upgrade the drainage infrastructure will alleviate the potential of flooding, providing protection to properties in the Thistlemount Park, Orangehall Lane, Fulmar Avenue and Ballymacash Road area of North Lisburn.

The project commenced on site in February 2021 and is due to be completed by December 2021, at a cost of £900k.

### **Hollywell Burn, Antrim**

In October 2011, a major rainfall event caused the Hollywell Burn to come out of bank and affect a number of commercial properties within the Killbegs Industrial Estate, Antrim. The proposed scheme will, by building a new reinforced concrete flood wall and earth embankment, protect up to 18 commercial properties within the estate. The scheme commenced on site in February 2021 and is due to be completed in October 2021, at a cost of £500k.

### **Other Notable schemes**

Lurgan Significant Flood Risk Area is currently at the detailed design stage, with the Merok Burn, Belfast and Plank Drain, Downpatrick projects both going through the feasibility process at present.

## DfI Rivers Business Targets 2021/22

Business Priority	Business Target
Maintenance of Drainage and Flood Defence Assets	<p>1.1 By 31 March 2022, maintain drainage and flood defence infrastructure to protect people and property by repairing at least <b>0.5 km</b> of designated culverts, <b>1 km</b> of Sea Defences and <b>3 km</b> of fluvial defences.</p> <p>1.2 Inspect &amp; maintain as required, <b>98%</b> of all designated urban open watercourses.</p> <p>1.3 Inspect &amp; maintain as required, <b>98%</b> of all designated culvert inlet grilles.</p> <p>1.4 Maintain a minimum of <b>326</b> designated rural open watercourses.</p>
Flood Alleviation	<p>2.1 Construct infrastructure to offer enhanced flood protection to <b>100</b> properties.</p> <p>2.2 Ensure <b>90%</b> of requests to Rivers for assistance are responded to within 3 hours, during flooding events up to a level defined as significant.</p> <p>2.3 Appoint a contractor and begin construction on the Belfast Tidal Flood Alleviation Scheme.</p> <p>2.4 Appoint a contractor and begin construction on the Shimna Flood Alleviation Scheme.</p>
Advice to Land Use Planners and the Public	<p>3.1 Respond to <b>98%</b> of Schedule 6 applications within 3 months of receipt.</p> <p>3.2 Respond to <b>50%</b> of planning application consultations within 21 calendar days of receipt.</p> <p>3.3 Respond to <b>90%</b> of written enquiries from customers within 15 working days of receipt.</p> <p>3.4 Respond to <b>100%</b> of all statutory LDP consultations no later than the target date set by DfI Strategic Planning.</p> <p>3.5 Respond to <b>100%</b> of all non-statutory LDP consultations no later than the target date set by the Council issuing the consultation.</p>

### **Additional Key Priorities**

In addition to the commitments set out in the targets, Rivers has a number of additional priorities which will support improvement in performance across the organisation. These are:

- **managing financial resources** – Ensure that our provisional capital outturn will be as required by Department;
- **maintain a sound system of internal control** – Ensure that controls are in place throughout DfI Rivers to provide a satisfactory assurance level of governance and control;
- **Learning & Development** – Continue, within current budgetary constraints, to take forward essential training and support staff to enable them to carry out their duties effectively to deliver Rivers objectives and achieve their potential;
- **Health & Safety** – We shall continue to demonstrate our commitment to maintaining high levels of health & safety across the Department by:
  - continuing to roll out our health & safety training programme;
  - carrying out risk assessments as appropriate;
  - implementing recommendations from health and safety audits and health & safety bulletins; and
  - aiming to reduce the number of accidents resulting in lost time off work.

## Annual Financial Allocation 2021/22

The total opening capital allocation equates to £8.0m. Table 1 below shows the split of the £8.0m across budget lines. Also included within the £8.0m is £0.5m for the capitalisation of salaries and wages.

**Table 1. DfI Rivers Capital Plan 2020/21**

<b>Capital</b>	<b>£000's</b>
<b>Capital PV &amp; M</b>	1000
<b>Drainage Infrastructure</b>	900
<b>Flood Alleviation</b>	10088
<b>Flood Defences – Belfast Tidal</b>	8000
<b>Capitalisation of Wages &amp; Salaries</b>	900
<b>Homeowner Flood Protection Grant</b>	12
<b>Capital Total</b>	<b>20,900</b>

**Table 2. Rivers Resource Budget 2020/21**

<b>Description</b>	<b>Total £m</b>
<b>Total Payroll</b>	<b>12,226</b>
<b>Non Payroll Costs:</b>	
Rivers Current	2,767
Rivers GAE	1,068
Rivers Public and Employer liability	351
Rivers income	<b>(174)</b>
<b>Total Non-Pay</b>	<b>4012</b>
<b>Resource Total</b>	<b>16,238</b>

## DfI Roads & Rivers Business Plan 2021/22

The Roads & Rivers Business Plan sets the context for the outcomes to which the Department's work contributes. Roads and Rivers, along with the rest of DfI, no longer use the 'Balanced Scorecard' approach to business planning and have adopted the Outcomes Based Approach (OBA). The OBA is about linking objectives to outcomes. Performance against these targets will be measured by answering three questions:

- How much have we done?
- How well have we done it?
- Is anyone better off?

More guidance is provided in the Business Planning Framework Document, and the template that will be used to measure performance is illustrated on page 21 of the Document:

<http://nics.intranet.nigov.net/infrastructure/documents/business-planning-framework-2017-18>

Outcome 2 We live and work sustainably - protecting the environment by			
Objectives	Action	Also contributes to	Owner
Managing flood risk and drainage in an integrated and sustainable fashion	R&R 4 Maintain our drainage and flood defence infrastructure to protect people and property by repairing at least: <b>0.5km</b> of designated culverts, <b>1km</b> of Sea Defences and, <b>3km</b> of fluvial defences.	We connect people and opportunities through our infrastructure.	Jonathan McKee
	R&R 5 Construct infrastructure to offer enhanced flood protection to <b>100</b> properties.  Appoint a contractor and begin construction on the Belfast Tidal Flood Alleviation Scheme.		Jonathan McKee

We will contribute to, enable and support the achievement of PfG outcomes by:		
Objectives	Action	Owner
Managing flood risk and drainage in an integrated and sustainable fashion	R&R 14 By 31 March 2022, inspect & maintain as required, <b>98%</b> of all designated urban open watercourses	Jonathan McKee
	R&R 15 Inspect & maintain as required, <b>98%</b> of all designated culvert inlet grilles	Jonathan McKee
	R&R 16 Ensure <b>90%</b> of requests to Rivers for assistance are responded to within 3 hours, during flooding events up to a level defined as significant(fluvial)	Jonathan McKee
Planning Application Process	R&R 24 Return <b>80%</b> of all planning application consultations to the relevant Council Planning Office within the prescribed 21 days from date of receipt, where an extension has not been granted.	Conor Loughrey / Jonathan McKee
Ensure Roads and Rivers communicate effectively with its customers to promote better understanding of service provision	R&R 26 Respond to <b>90%</b> of written enquiries from customers within 15 working days	All Directors
Work constructively with Roads and Rivers key stakeholders to support the delivery of services	R&R 27 Contribute to the delivery of Councils' LDP programmes in line with agreed timetables and statutory timescales.	John Irvine / Jonathan McKee
Manage and develop the Roads and Rivers structure to ensure that it is fit for purpose	R&R 28 Support the ongoing programme of succession planning to ensure that Roads and Rivers staff structure is fit for purpose and maximises the use of the existing skills and resources available	All Directors



## **Drainage Council for Northern Ireland**

The Drainage Council ('the Council') for Northern Ireland is a non-Departmental Public Body constituted under the Drainage (NI) Order 1973. The Council has a general scrutiny role in relation to the Department's drainage functions and has a statutory duty to ensure uniformity of treatment of drainage throughout Northern Ireland.

### **Functions**

The Drainage Council for Northern Ireland is responsible for ensuring the impartial and uniform application of Rivers' drainage and flood defence programme throughout Northern Ireland.

### **Designation/De-designation of watercourses**

It is the Council's responsibility to decide which watercourses and sea defences should be maintained by Rivers at public expense. The Council 'designates' such watercourses and sea defences. Over 6,800km of watercourses and 26km of sea defences have been designated since the Council was established in 1947.

The Council may also decide to de-designate a watercourse or sea defence if circumstances change and its maintenance at public expense is no longer justified.

### **Consideration of Drainage/Flood Defence Schemes**

The Drainage Council is charged with considering all works/schemes that Rivers proposes to undertake at public expense to ensure impartiality and value for money.

The Drainage Council considers:

- Rivers plans for drainage and flood defence schemes which satisfy cost benefit criteria;
- details of any emergency works carried out;
- any drainage issue likely to have an impact on the public;
- Rivers Annual Report and Accounts and Business Plans;
- Examine information presented in the Environment Statement and reach a reasoned conclusion on the significant effects of a drainage scheme on the environment; and
- Make a determination that that the drainage scheme should be approved or should not be approved and provide the Department with this determination.

### **Consultee role**

As determined by the Drainage (Northern Ireland) Order 1973 Part II, Rivers must consult with the Drainage Council on a number of environmental aspects of any proposed drainage/flood defence works or schemes.

Rivers must consult with the Drainage Council on:

- drainage/flood defence works or schemes which are considered likely to have a significant impact on the environment;
- drainage/flood defence works or schemes which are considered not likely to have a significant impact on the environment;

- environmental statements relating to all drainage/flood defence schemes; and
- notices regarding environmental aspects of drainage/flood defence works and schemes.

## Current Membership of the Drainage Council

<b>Name</b>	<b>Date of First Appointment</b>	<b>Expiry of Appointment</b>	<b>Interest Represented</b>
<b>Chair</b>			
Prof Alan Strong	2021	2025	<b>Drainage Specialist</b>
<b>Vice Chair</b>			
<i>Cadogan Enright</i>	2021	2025	<b>Newry Mourne and Down District Council</b>
<b>Members</b>			
Cllr Bill Keery	2021	2025	<b>Ards and North Down District Council</b>
Cllr Cadogan Enright	2015	2025	<b>Newry Mourne and Down District Council</b>
Cllr William (Billy) Webb	2015	2025	<b>Antrim and Newtownabbey District Council</b>
Cllr Siobhan Currie	2021	2025	<b>Fermanagh and Omagh District Council</b>
Cllr Dan Kelly	2021	2025	<b>Derry and Strabane District Council</b>
Cllr Tim McClelland	2021	2025	<b>Armagh City, Banbridge and Craigavon Borough Council</b>
Cllr Sean McPeake	2021	2025	<b>Mid-Ulster District Council</b>
Ald Maurice Devenney	2021	2025	<b>Derry and Strabane District Council Mid-Ulster District Council</b>
Cllr John Palmer	2021	2025	<b>Lisburn and Castlereagh City Council</b>
Cllr Kyle Savage	2021	2025	<b>Armagh City, Banbridge and Craigavon Borough Council</b>
Prof Alan Strong	2021	2025	<b>Drainage</b>
Mrs Wendy Joanne Elliott	2021	2025	<b>Tourism</b>

Mr Peter Mervyn Archdale	2021	2025	<b>Conservation</b>
Dr Cathal Gallagher	2021	2025	<b>Northern Ireland Fisheries</b>
Mr Jonathan McKee	2017	--	<b>Dfi Rivers Ex Officio</b>
Shaun Donnelly			<b>Secretary</b>
Mrs Maureen Brunt	2021	2025	<b>Agriculture</b>
Mr Angus Kerr	2015	--	<b>Dfi Planning, Water and DVA</b>

NB: Terms of Appointment to the membership of the Drainage Council have been extended until the date on which new local council representatives are appointed (for local government members) and the end of April 2021 (for the specialist representatives).

## DfI Rivers Contacts

<b>Office</b>	<b>Area Covered</b>	<b>General Office Numbers</b>	<b>Office Address</b>
<b>LOUGHRY HQ</b>	All areas	(028) 86768300	49 Tullywiggan Road Loughry Cookstown BT80 8SG
<b>ARMAGH</b>	Armagh, Banbridge, Craigavon, Dungannon, Mourne & Newry	(028) 38399111	44 Seagoe Industrial Estate Portadown Craigavon BT63 5QD
<b>LISBURN &amp; GREATER BELFAST AREA</b>	Ards, Antrim, Ballymena, Carrickfergus, Belfast, Down, Larne, Lisburn, Lurgan, Newtonabbey & Newcastle	(028) 92606100	Ravarnet House 36 Altona Road Largymore Lisburn BT27 5QB
<b>COLERAINE</b>	Ballymoney, Coleraine, Derry, Newbuildings Limavady, Moyle & Toome	(028) 70342357	37 Castleroe Road Coleraine BT51 3RL
<b>FERMANAGH</b>	Enniskillen, Fivemiletown, Kesh & Newtownbutler	(028) 66388529  (028) 66389221	53 Lettermoney Road  Ballinamallard Tullylone BT94 2NA
<b>OMAGH</b>	Castledearg, Cookstown, Magherafelt, Omagh, Strabane & Stewartstown	(028) 82254900	3A St. Julian's Road Omagh BT79 7HQ
<b>PLANNING ADVISORY &amp; MODELLING UNIT</b>	All areas	(028) 38399118	44 Seagoe Industrial Estate Portadown Craigavon BT63 5QD