



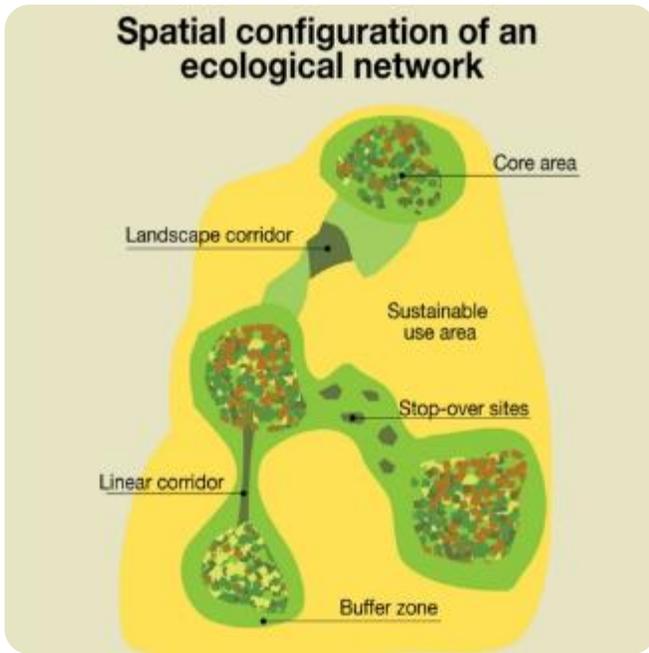
# On the edge

**Giving space to our Wildlife  
Corridors in Planning**

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Council

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# Wildlife Corridors

- Wildlife Corridors (or Ecological corridors) are linear landscape features such as rivers, hedgerows and road verges that enhance the movement of wildlife through the landscape.
- Have their own unique flora and fauna.
- Core areas are important protected areas for nature conservation include Natura 2000 sites and Natural Heritage Areas etc. .
- Stepping stones comprise a series of smaller landscape features such as small woodlands, areas of scrub, wet grassland and marshes.
- **Together they form an Ecological Network.**
- This network is then protected and enhanced to provide all those Ecosystem Services or the benefits that flow from nature to us.
- One of our objectives of the DLR County Development Plan



Spatial configuration on an ecological network

# Why are rivers relevant to my work?



Rivers form part of the Wildlife Corridors and Ecological Network

Rivers and associated aquatic/terrestrial habitats form part of our Green Infrastructure.

Green Infrastructure is the tool by which ecosystems services are provided and Nature Based Solutions.

These concepts are now been integrated into policy and decision making e.g. CDPs

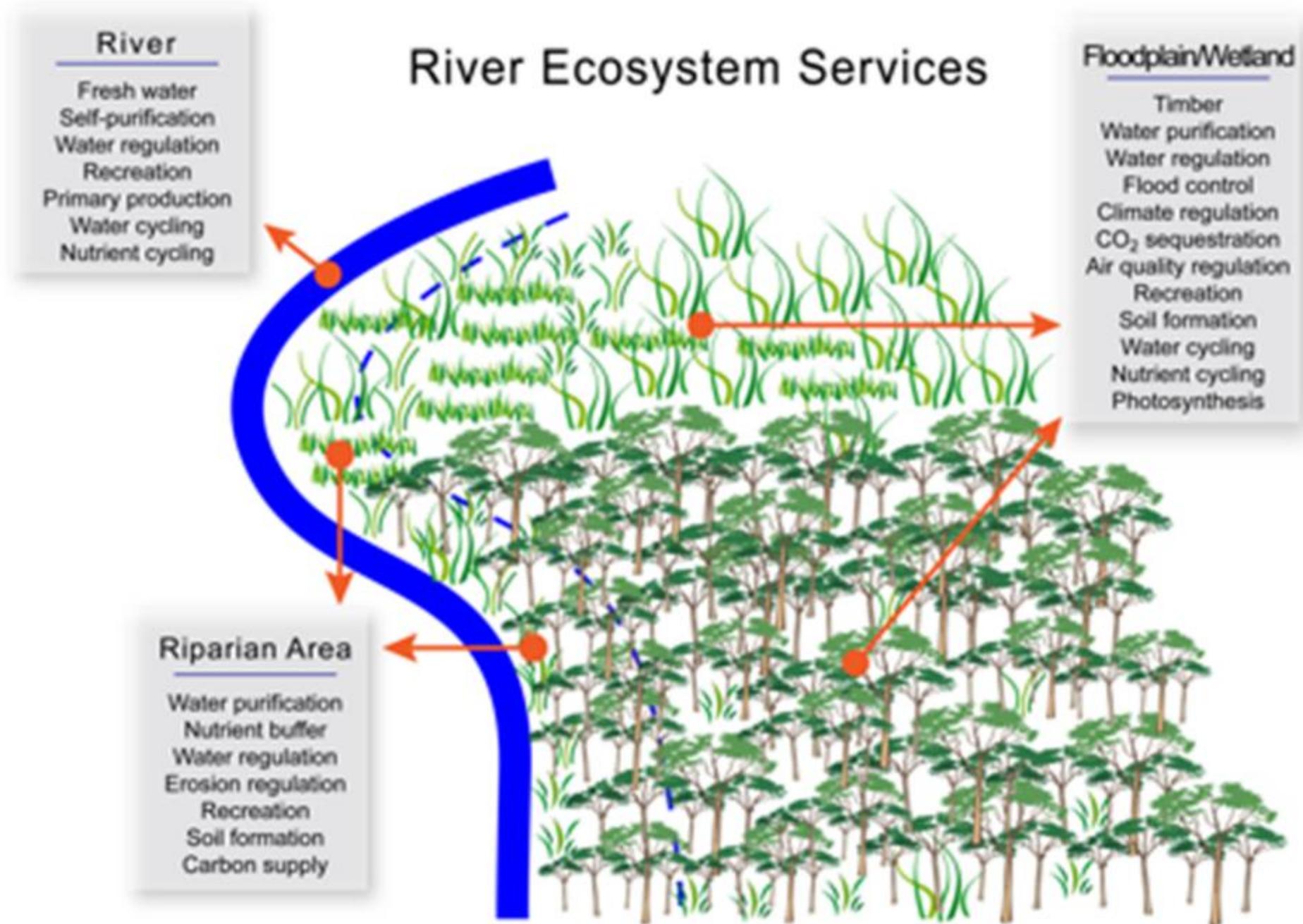
The importance of protecting our rivers and how we do that is an integral part of concepts



EU Green Infrastructure includes:

- the Natura 2000 network as its backbone,
- natural and semi-natural spaces outside Natura 2000,
- parks, private gardens, hedgerows, vegetated buffer strips along **rivers** or structure-rich agricultural landscapes with certain features and practices, and
- artificial features such as green roofs, green walls, or ecobridges and fish ladders.

# Rivers and their Ecosystem Services



# Nature Based Solutions (NBS)

## Often if its not broken then why fix it?

The river ecosystem is often working perfectly as a solution to Climate Change and associated problems

We need to protect, maintain, enhance and restore our river ecosystems and their functioning and it is often more economical to do so.

In some cases we imitate these natural features e.g. manmade wetland.

We need to know enough about these NBS to ensure that they are working in the longterm.

For example we should require that all NBS for flood risk management or green roofs will include for adaptive management, based on long-term monitoring, indicating that the proposed sustainable NSB is performing.

We need to gather this data so we can provide our engineers and others with proof that they are working.



# Renaturation of River Aire Geneva



Constructed landscape features - ditches, hedges, marshes - almost entirely disappeared, but clearly legible on the historical documents.

It created diversified environments that allow the creation of a true ecological corridor that encourages the networking of habitats and the movement of fauna.

The safety of property and people is one of the main aspects of this project, which makes it possible to manage floods while contributing to the restoration of natural and landscape values. It contributes to enhancing safety through water management and storage measures.

Planning  
Applications

Project Level





# Doyle's Nurseries Brennanstown Rd, Cabinteely

Flooding - created small wetlands as opposed to an amenity grassland strip and attenuation tank.

Biodiversity - fisheries, birds, pollinators etc.(included removal of weirs)

Amenity - boardwalk next to apartments - moved the cycle path out of 10m buffer

Climate Change Resilience - NBS

Other PA s in the catchment

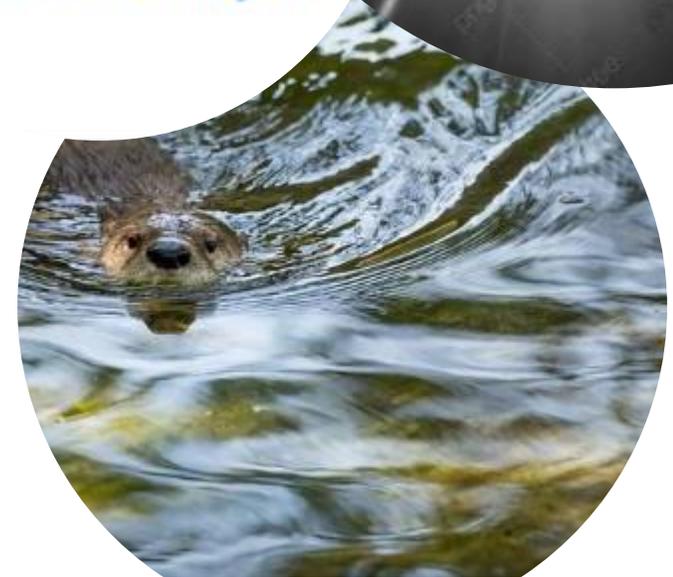
Monitoring

The Planning Authority welcomes that the issue of flooding has been addressed in a holistic manner carefully balancing the flooding, ecological, movement and amenity

# What are the main messages discussed with the Applicant?

A river, stream or indeed any wildlife corridor **needs a buffer**

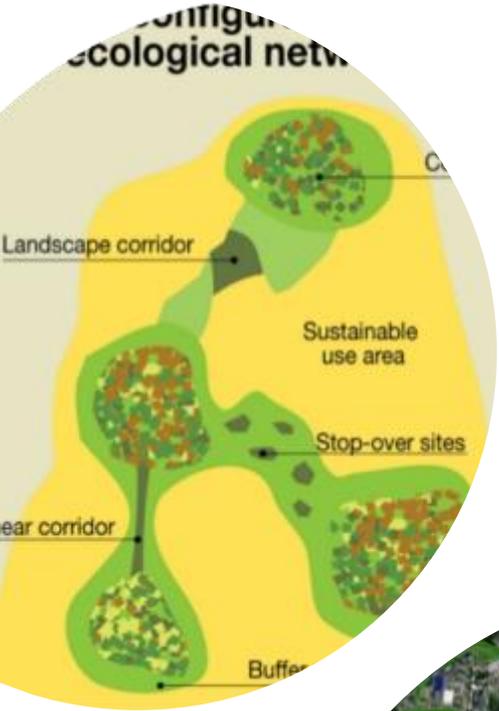
- In order to function
- to allow space for water to flow,
- to move (not in a straight line necessarily), to meander
- to flood its plain,
- for groundwater infiltration
- to allow species to forage, to feed and to exist undisturbed by humans,
- to allow nocturnal species (most of which are protected) to survive without a big light shining in on them
- Keep the walkway (boardwalk) away from the buffer



Policies and  
Plans – County  
Development  
Plans (CDPs)



# Policies and Plans - CDP Policies



## County-Wide Ecological Network

It is Council policy to develop an Ecological Network throughout the County which will improve the ecological coherence of the Natura 2000 network in accordance with Article 10 of the Habitats Directive.

The network will also include non-designated sites.

Stepping stones comprise a series of smaller landscape features such as small woodlands, areas of scrub, wet grassland and marshes.

Together they form an Ecological Network.

This is then protected and enhanced to provide all those Ecosystem Services we spoke about earlier.

## Rivers form part of this Ecological Network



# CDP Policies

## Rivers and Waterways

It is Council policy to maintain and protect the natural character and ecological value of the river and stream corridors in the County and where possible to enhance existing channels and to encourage diversity of habitat.

**It is also policy (subject to the sensitivity of the riverside habitat) to provide public access to riparian corridors to promote improved passive recreational activities.**

**Existing County flood plain management policy seeks to limit development in identified floodplains and to preserve riparian corridors.**

Development proposals in riparian corridors will be considered providing they:





# CDP Policies

## Rivers and Waterways

'Dedicate a minimum of 10m each side of the water's edge for amenity, biodiversity and walkway purposes (where practical).'

'Preserve the biodiversity of the site.'

'To be ecologically effective corridors need to be a minimum of 30m in width measured from the top of each riverbank.'

'To protect and enhance the County's floodplains, wetlands and coastal areas as 'green infrastructure' which provides space for storage and conveyance of floodwater, enabling flood risk to be more effectively managed and reducing the need to provide flood defences in the future.'

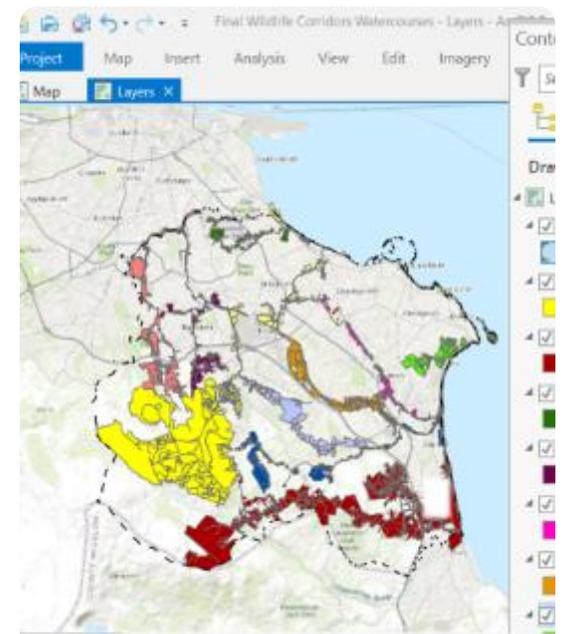
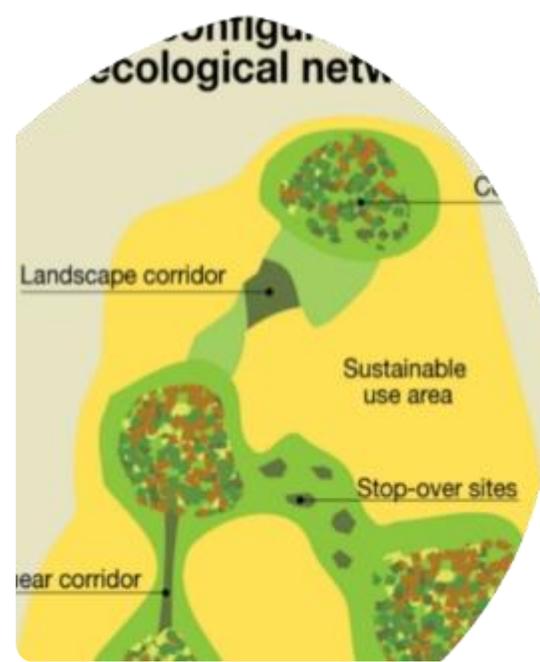


# Policies and Plans

- What is needed to preserve the biodiversity of a site, to preserve our river ecosystems ? Brian has some answers.
- Should a catchment have a bespoke buffer and what should that be?
- For biodiversity we have data for species and their needs which may vary from groundwater catchment for a groundwater dependent habitat or the habitats in the surface water catchment such as reedbeds, to the physical space needed for the flood plain, to what an Otter needs .
- Baseline information is Key
- Habitats and Species Surveys
- Details of our river corridors
- Tools for Planners in Map Browsers

# Rivers are part of the DLR Wildlife Corridor Plan

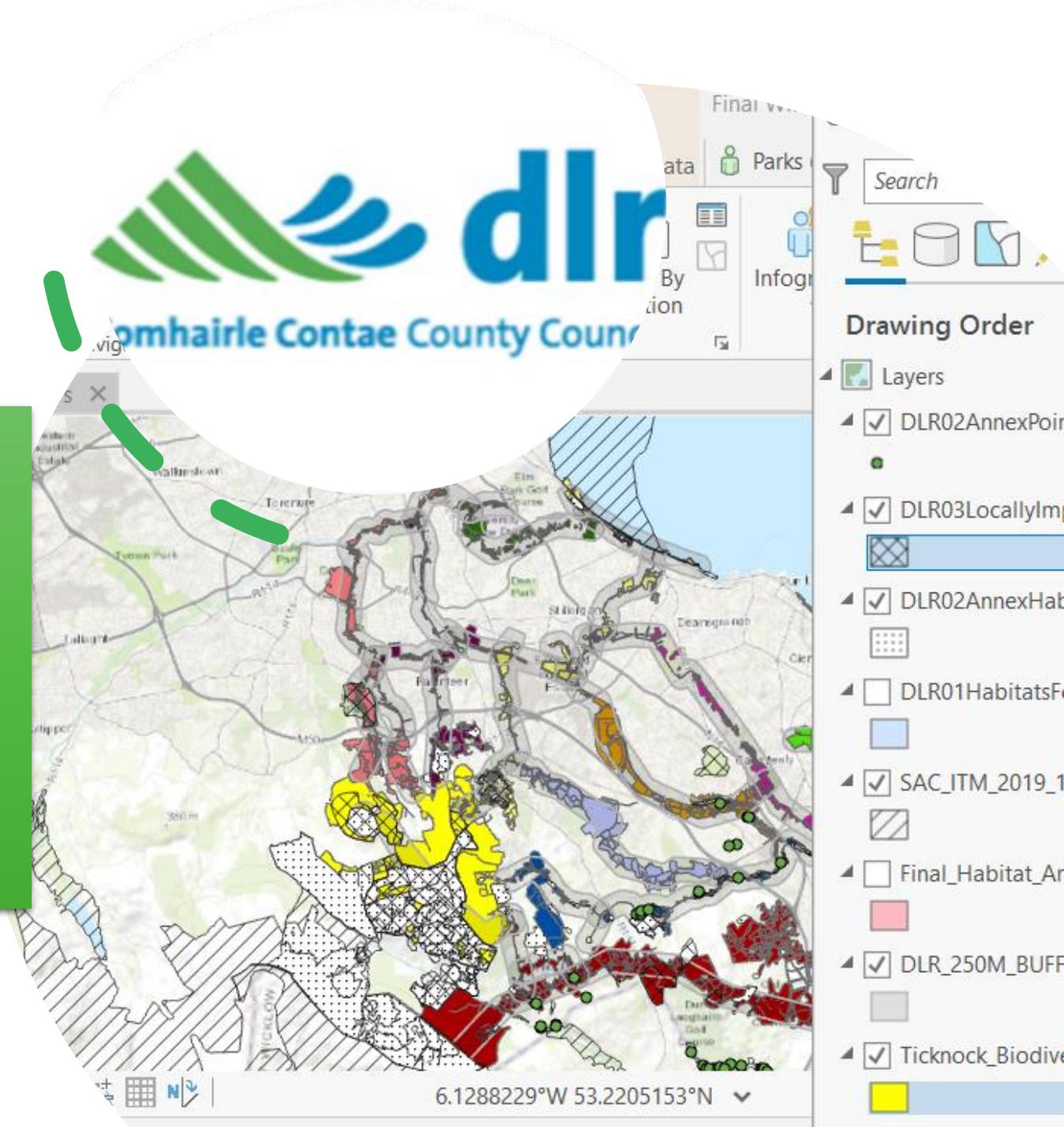
Part of our Ecological Network

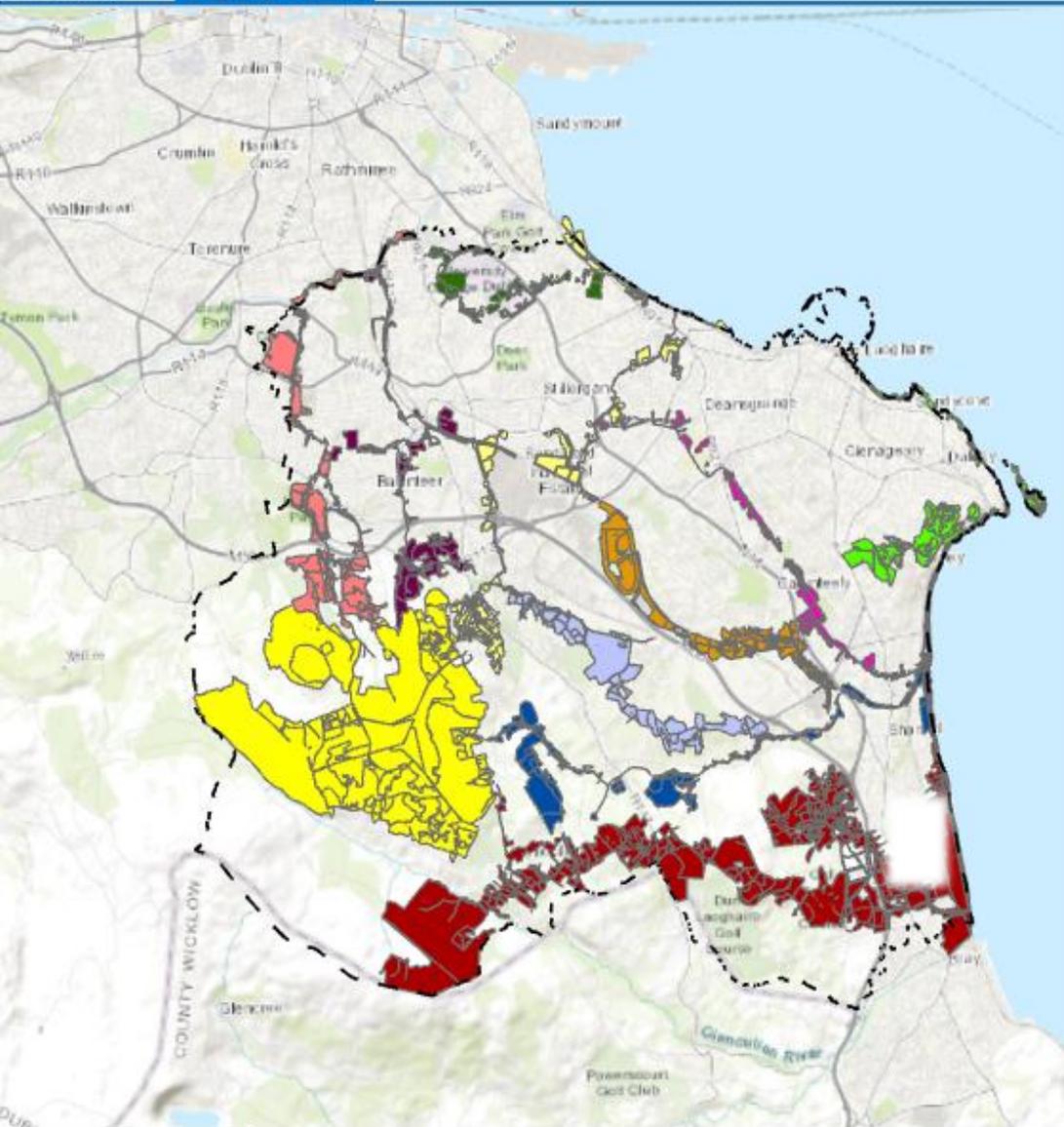


# DLR Maps

## DLR Planning Map Browser

- EU Natura 2000 sites ✓
- NHAs and pNHAs
- Important Habitats ✓
- Locally Important Areas new 2020
- Hedgerows ✓
- Important Species ✓
- Rare Plants
- Rivers and associated habitats
- GI - Wildlife Corridors Buffer new 2020/2021
- Ecosystem Services Scores 2018 - 2021
- Adding Pollinator areas etc. ✓





### Contents

Search



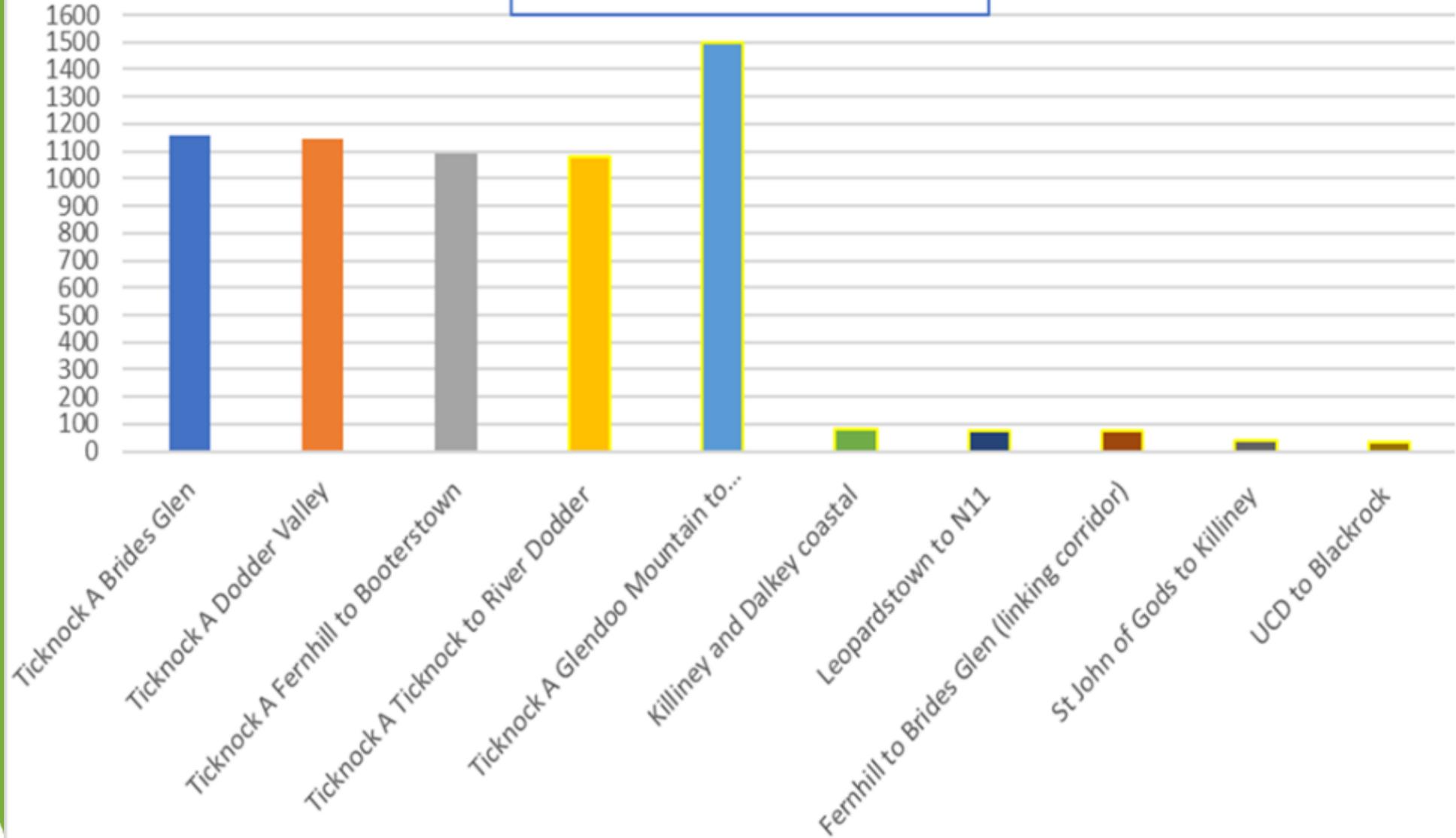
### Drawing Order

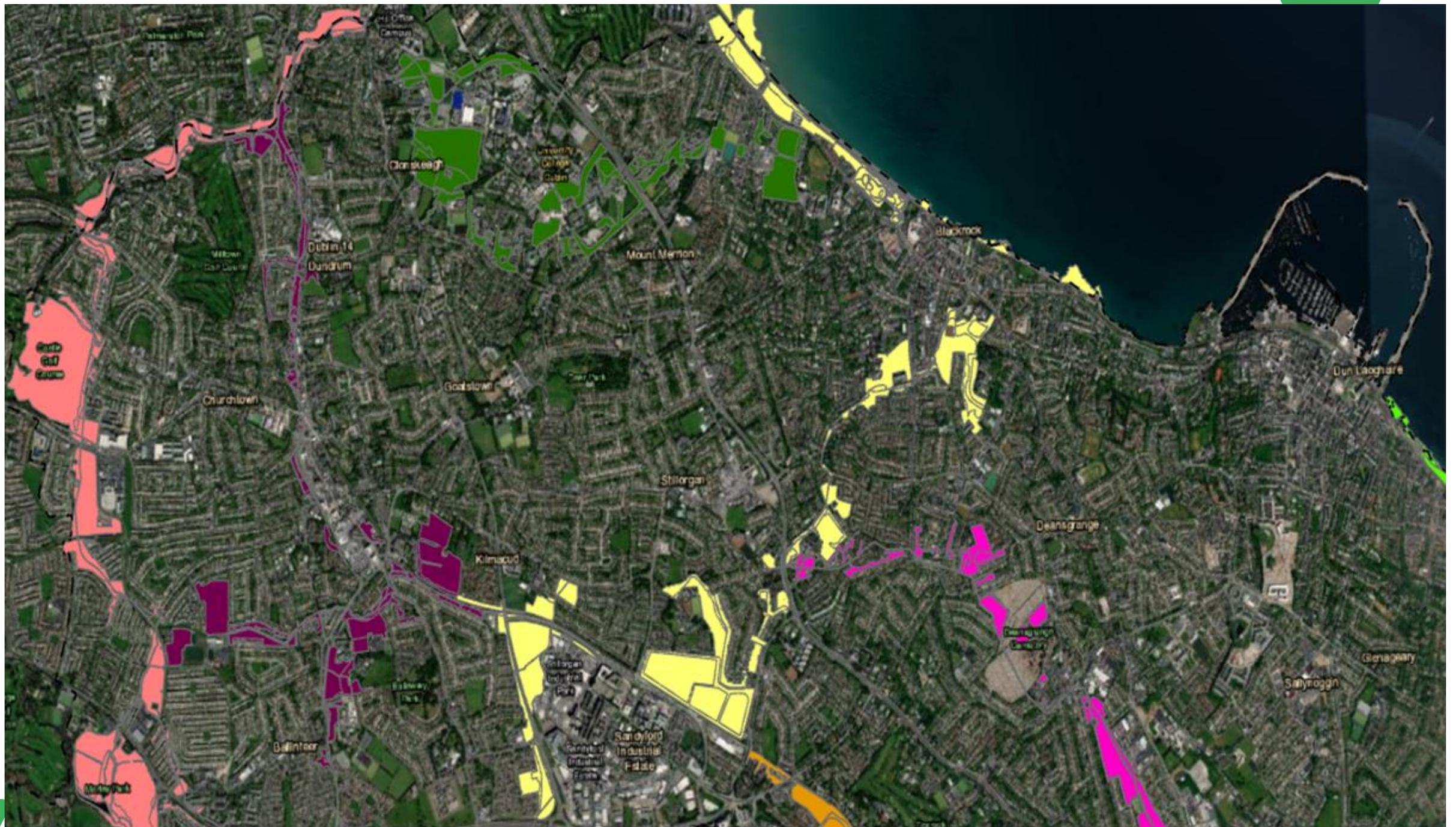
- Layers
  - DLR\_County\_Boundary\_ITM
  - Ticknock\_Biodiversity\_Area\_Hab
  - Glendoo\_Mountain\_to\_Shanganagh\_WC\_Hab\_V2
  - UCD\_to\_Blackrock\_WC\_Hab
  - Ticknock\_to\_River\_Dodder\_WC\_Hab
  - St\_John\_of\_Gods\_to\_Killiney\_WC\_Hab
  - Leopardstown\_to\_N11\_WC\_Hab
  - Killiney\_and\_Dalkey\_Coastal\_WC\_Hab

Killiney\_and

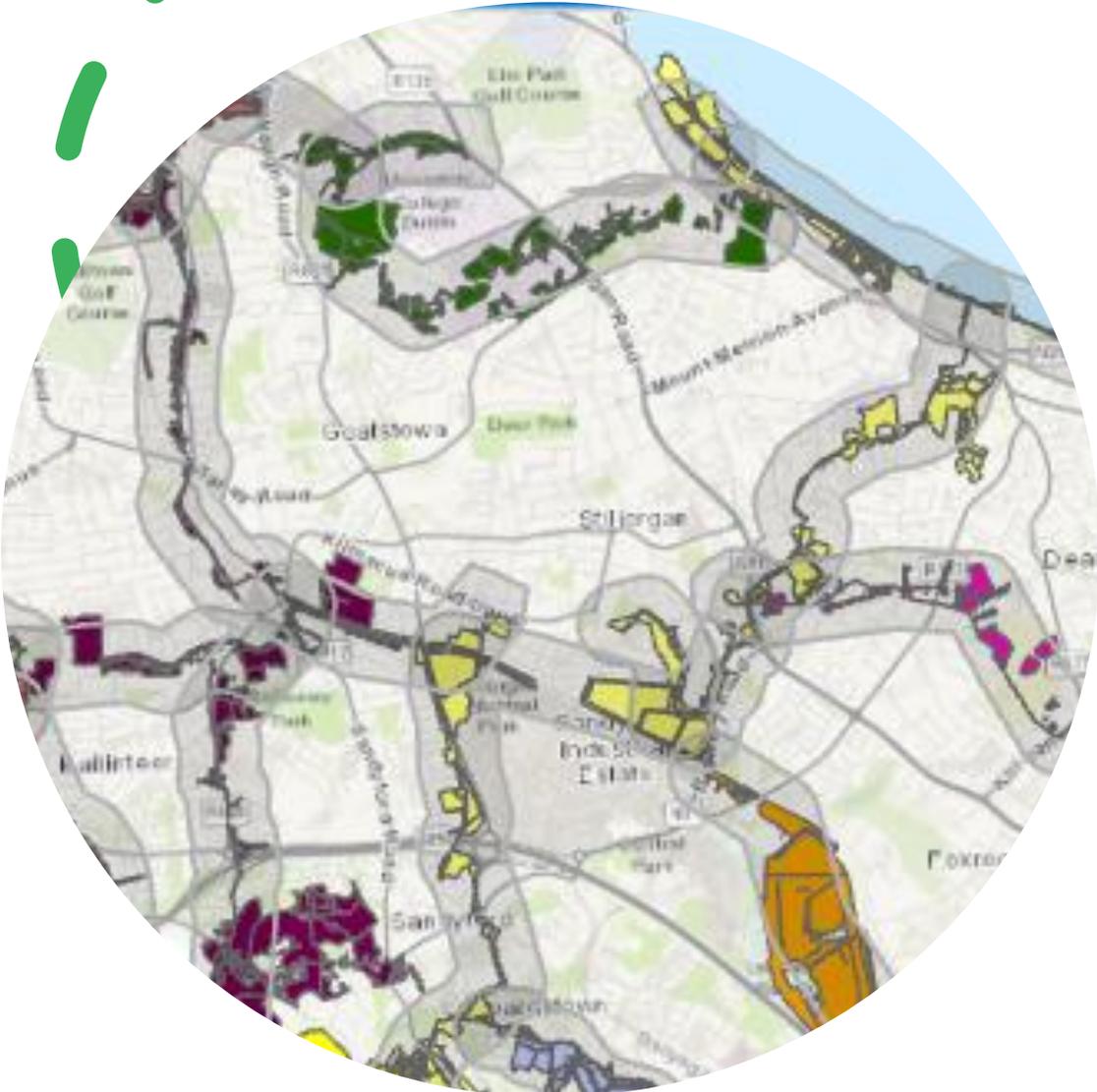
Ecosystem services including regulation of water quality and water flow

### Ecosystem Services Scoring DLR Wildlife Corridors





# DLR Maps



Placing a buffer on our maps around our rivers.

The buffer will indicate that there is a need to look into this further as part of a project level Planning Application (PA). Alert the Planner that this area is sensitive.

The information will also help the Applicant's ecologists understand our expectations. Ecologists play an important part in providing information to Planners in the PA.

Request an Ecology Report as a minimum for PAs unless they have good reason not to.

The Ecosystem Service Scoring will also play a part in showing how the score can be improved if a project includes NBS etc.

# Summary

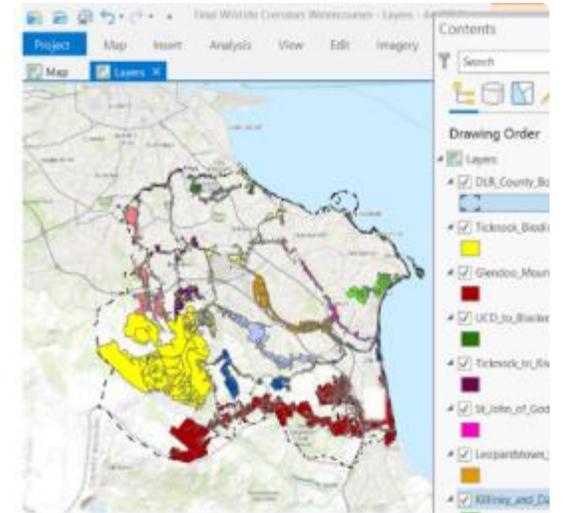
At Local Authority Level there are varying levels of protection for river ecosystems in our Plans and Policies. How do we address this?

At project level in Planning Applications, the ecologist input is important, suitably qualified ecologist (river ecosystems experience).

In Planning we need to provide tools to planners to assist in their decision - making process.

Our Ecological Network forms part of that aim in DLR. Providing information, data, maps and a guiding buffer.

Brian has some great guidance on the river buffer next.



Thank You

