

CHAPTER 18

GREEN INFRASTRUCTURE

18.0 Introduction

Green Infrastructure (GI) can be broadly defined as *'an interconnected network of green space that conserves natural ecosystem values and functions and provides associated benefits to human populations. Green Infrastructure is the ecological framework needed for environmental, social and economic sustainability – in short it is a nation's natural life sustaining system'*¹. Green Infrastructure can include varying land uses - pasture lands, croplands, woodlands, heath, bog, scrubland, quarries, parks, formal and informal green spaces, active and passive spaces, areas around domestic and non-domestic buildings, brownfield areas, waterways, waterbodies, waterway corridors, wetlands, coastal areas and community/institutional lands such as hospitals, schools, graveyards, allotments and community gardens. Heritage sites, European sites and NHAs are also important GI sites.

Taken collectively, the GI network in the County has an important role in climate action. Reinforcing our GI assets supports the creation of a more climate resilient environment which in turn contributes significantly to climate adaptation and mitigation.

Individually, each GI site/asset has an important role and benefit. These individual roles and benefits can be strengthened and enhanced when the sites/assets are linked together into a network of green infrastructure. Many social, economic and environmental benefits can be achieved especially when the green infrastructure is proximate to where people live and work. The benefits of green infrastructure sites/networks include some of the following:

- support unique habitats for wildlife, biodiversity, and fragile ecosystems;
- have important recreational, tourism and cultural roles;
- provide corridors for walking and cycling;
- provide or support forestry, crop production, agriculture and energy development;
- provide places for local food production - in allotments, gardens and through agriculture;
- provide green buffers /green wedges between built up areas;
- improve air quality;
- provide ready access to nature for the populace;
- assists in climate change adaptation - including flood alleviation;
- increase environmental education and awareness;
- improved health and well-being by raising the quality of the County's citizen's living and working environment;
- assists in 'place-making', by positively recognising and maintaining the character of particular locations, particularly where new development is planned, and
- enhance biodiversity.

As this chapter of the County Development Plan addresses a range of components that make up 'Green Infrastructure', there will be considerable overlap with other chapters and parts of this plan, including but not limited to Chapter 11 'Tourism and Recreation', Chapter 13 'Water Services' and Chapter 17 'Natural Heritage & Biodiversity', as well as some overlap with Chapter 12 'Sustainable Transportation'.

¹ Source Comhar Sustainable Development Council 'Creating Green Infrastructure for Ireland', August 2010

GI is multifunctional, performing many functions in the same spatial area. When the GI ecosystem is in a healthy condition it can deliver benefits to a wide range of stakeholders as well as to the public at large. The table below 'Green Infrastructure Elements: Social and Economic Benefits' shows how Green Infrastructure relates to such benefits²:

Green Infrastructure Elements: Social & Economic Benefits	
Recreation & Health	<ul style="list-style-type: none"> ▪ Improves physical and mental well-being³ ▪ Provides opportunities to exercise, play and engage in sport ▪ Provides accessibility (permeability) through the landscape, especially for walking and cycling
Biodiversity & Natural Resources	<ul style="list-style-type: none"> ▪ Increases opportunities for sustainable land management ▪ Safeguards priority habitats and species ▪ Restores ecological networks ▪ Conserves and improves soil quality ▪ Reduces the impact of poor air quality
Coast, Water Resource & Flood Management	<ul style="list-style-type: none"> ▪ Improves water quality ▪ Provides coastal and waterside recreation ▪ Protects water resources and abstraction sites and brings them into multifunctional use
Sense of place – appreciation of landscapes & cultural heritage	<ul style="list-style-type: none"> ▪ Safeguards the distinctive character and openness ▪ Safeguards and encourages beneficial use of local landscape resources ▪ Conserves historic landscapes, archaeological assets, built heritage and cultural heritage
Climate Change Adaptation & Mitigation	<ul style="list-style-type: none"> ▪ Provides opportunities for renewable energy production ▪ Buffers/brakes flooding (fluvial and coastal); providing space for SUDS ▪ Provides shade and cooling to densely populated areas, especially those with vulnerable communities
Economic Development	<ul style="list-style-type: none"> ▪ Provides a setting to encourage inward investment ▪ Encourages retention of entrepreneurs and graduates ▪ Provides a setting and market for land-based tourism and social enterprises
Social Inclusion	<ul style="list-style-type: none"> ▪ Provides a setting for community engagement and informal education ▪ Stimulates increase in training and skills ▪ Provides an outlet for community instincts for stewardship of the environment
Productive Environments – Food, Fibre, Energy	<ul style="list-style-type: none"> ▪ Sustains a diverse land-based industry (farming, forestry, fisheries, tourism, renewable energy)

² Source Comhar Sustainable Development Council 'Creating Green Infrastructure for Ireland', August 2010

³ The EPA 2016 report 'Health Benefits from Biodiversity and Green Infrastructure' states that human health and wellbeing depends on a healthy environment and that management of such a key natural resource also has strategic importance in terms of the potential to contribute to the Irish economy.

18.1 Statutory & Policy Context

The European Union adopted a Biodiversity Strategy (May 2011) to halt biodiversity loss in Europe by 2020. The strategy is built around six mutually supportive targets which address the main drivers of biodiversity loss. Target 2 aims to ensure that *'by 2020, ecosystems and their services are maintained and enhanced by establishing Green Infrastructure and restoring at least 15% of degraded ecosystems'*.

Responding to the Biodiversity Strategy, the EU published *'Green Infrastructure: Enhancing Europe's Natural Capital Strategy'* (May 2013), which sets out *'to promote the deployment of green infrastructure in the EU in urban and rural areas'*. The strategy aims to create a robust enabling framework in order to promote and facilitate GI projects. The EU GI strategy is made up of the following four main elements:

- Promoting GI in the main EU policy areas;
- Supporting EU-level GI projects;
- Improving access to finance for GI projects, and
- Improving information and promoting innovation.

Nationally, there are a number of organisations involved in developing GI guidance and GI actions in Ireland. The Department of Housing, Local Government and Heritage, the Department of Rural and Community Development, The Heritage Council, National Parks and Wildlife Service and Comhar - The Sustainable Development Council - are the key state stakeholders in providing information on GI in Ireland as well implementing the delivery of GI actions. Comhar published *'Creating Green Infrastructure for Ireland: Enhancing Natural Capital for Human Wellbeing'* (August 2010) and this document is a key tool in GI as it sets out how a network of green spaces can be developed to benefit natural heritage and biodiversity as well as the greater economy and society.

The multiple benefits of Green Infrastructure are recognised in a range of national policy documents including, but not limited to, the National Biodiversity Plan (2017-2021), the Strategy for the Future Development of National and Regional Greenways (2019-2021), Creating Green Infrastructure for Ireland (2010) and Flood Risk Management Guidelines (2009).

Project Ireland 2040: National Planning Framework (NPF)

Green Infrastructure Planning, in particular protecting and valuing our important and vulnerable habitats, landscapes, natural heritage and green spaces is an *'overarching aim'* of the NPF. The NPF identifies that *'our environment is an asset that if planned for in the same way as for other forms of infrastructure, can provide long term benefits. Nature and green infrastructure provide a range of uses, goods and services and make the best use of land, help manage competing demands and can complement other sectors'*.

The NPF sets out that green infrastructure planning will inform the preparation of regional and metropolitan strategies and city and county development plans by:

- Assisting in accommodating growth and expansion, while retaining the intrinsic value of natural places and natural assets;
- Providing increased certainty in planning by proactively addressing relevant environmental issues;
- Encouraging more collaborative approaches to plan-making by enabling examination of the interactions between future development requirements and the capacity of receiving areas; and
- Ensuring that sufficient and well planned green spaces, commensurate in scale to long-term development requirements, are designated in statutory plans.

A number of the NPF 'National Strategic Outcomes' are relevant to GI, namely:

NSO 7 Enhance amenity & heritage	This will ensure that our cities, towns and villages are attractive and can offer a good quality of life. It will require investment in well-designed public realm, which includes public spaces, parks and streets, as well as recreational infrastructure. It also includes amenities in rural areas, such as national and forest parks, activity-based tourism and trails such as greenways, blueways and peatways. This is linked to and must integrate with our built, cultural and natural heritage, which has intrinsic value in defining the character of urban and rural areas and adding to their attractiveness and sense of place.
NSO 8 Transition to Low-Carbon & Climate Resilient economy	The National Climate Policy Position establishes the national objective of achieving transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050. This objective will shape investment choices over the coming decades in line with the National Mitigation Plan and the National Adaptation Framework. New energy systems and transmission grids will be necessary for a more distributed, renewables-focused energy generation system, harnessing both the considerable on-shore and off-shore potential from energy sources such as wind, wave and solar and connecting the richest sources of that energy to the major sources of demand.
NSO 9 Sustainable management of water, waste & other environmental resources	Ireland has abundant natural and environmental resources such as our water sources that are critical to our environmental and economic wellbeing into the future. Conserving and enhancing the quality of these resources will also become more important in a crowded and competitive world as well as our capacity to create beneficial uses from products previously considered as waste, creating circular economic benefits.

In addition, a number of NPF National Policy Objectives address green infrastructure directly:

NPO 22	Facilitate tourism development and in particular a National Greenways, Blueways and Peatways Strategy, which prioritises projects on the basis of achieving maximum impact and connectivity at national and regional level.
NPO 58	Integrated planning for Green Infrastructure and ecosystem services will be incorporated into the preparation of statutory land use plans.
NPO 64	Improve air quality and help prevent people being exposed to unacceptable levels of pollution in our urban and rural areas through integrated land use and spatial planning that supports public transport, walking and cycling as more favourable modes of transport to the private car, the promotion of energy efficient buildings and homes, heating systems with zero local emissions, green infrastructure planning and innovative design solutions.

Further, the NPF identifies that the development of an integrated network of greenways, blueways and peatways, to promote more sustainable forms of travel and activity based recreation utilising canal and former rail and other routes, will become a key future planning and place-making policy priority for the Mid-East Region.

Regional Spatial & Economic Strategy (RSES)

The RSES identifies that GI serves a wide variety of important functions including but not limited to; provision of habitat, increased biodiversity, ecological corridors, climate change adaptation and mitigation, water treatment, water retention, local amenity provision, air quality improvement, cultural and heritage preservation, a mentally restorative environment and flood mitigation.

At the local authority scale, GI offers an opportunity to develop integrated strategies around economic development, urban placemaking and rural policy. Linking strategic natural assets with cultural and heritage assets further enhances the opportunities for GI strategies to drive recreation and tourism benefits.

The RSES identifies that enhanced green infrastructure is a key component of the climate action and healthy placemaking strategies set out in the RSES, as well as an important 'growth enabler' for the wider region and the Metropolitan Area in a number of ways:

'Support rural areas by harnessing natural resources to develop renewables, recreation and tourism opportunities including green infrastructure planning and the development of an integrated network of greenways, blueways and peatways';

'To enhance provision of regional parks and strategic Green Infrastructure, to develop an integrated network of metropolitan scale amenities, and to develop greenways/blueways along the canals, rivers and coast, as part of the implementation of the National Transport Authority's Cycle Network Plan for the Greater Dublin Area'.

The RSES identifies the following strategic natural, cultural and GI assets in the region, in Wicklow:

Bays, estuaries, headlands, islands and reefs	The Murrough wetlands, Wicklow Head, Wicklow Reef, Magherabeg and Brittas dunes
Maritime towns & beaches	Bray, Greystones, Wicklow Town, Maheramore, Brittas, Clogga, Arklow
Lakes, Rivers & canals	Rivers Avonmore, Aughrim, Avoca, Dargle, Liffey, Slaney and tributary Derry River and walks around the Vartry Reservoir
Greenways, blueways & peatways	Wicklow Way, Dublin Mountains Way, Blessington Greenway*, Coastal Greenway from Wicklow to Greystones**, Arklow – Shillelagh recreation trail*
Uplands, woodlands & designated sites	Uplands; Dublin and Wicklow Mountains Woodlands; Knocksink, Glen of the Downs SPAs, SACs, NHAs and pNHAs, Ramsar sites
Bogs & Peatlands	Red Bog, Holdenstown, Carriggower Bog
National & Regional Parks	Wicklow Mountains National Park, Avondale and Kilmacurragh
Heritage sites	Monastic sites at Glendalough, Baltinglass cluster of Hillforts, See also Record of National monuments

* under development

** proposed

The RSES sets out the following Regional Policy Objectives with respect to GI:

RPO 7.22	Local authority development plan and local area plans, shall identify, protect, enhance, provide and manage Green Infrastructure in an integrated and coherent manner and should also have regard to the required targets in relation to the conservation of European sites, other nature conservation sites, ecological networks, and protected species.
RPO 7.23	Support the further development of Green Infrastructure policies and coordinate the mapping of strategic Green Infrastructure in the Region.
RPO 7.24	Promote the development of a sustainable Strategic Greenway Network of national and regional routes, with a number of high capacity flagship routes that can be extended and/or linked with local greenways and other cycling and walking infrastructure, notwithstanding that capacity of a greenway is limited to what is ecologically sustainable.
RPO 7.25	Support local authorities and state agencies in the delivery of sustainable strategic greenways, blueways, and peatways projects in the Region under the Strategy for the Future Development of National and Regional Greenways.
RPO 7.26	Support the development of guidance for assessment of proposed land zonings in order to achieve appropriate riparian setback distances that support the attainment of high ecological status for waterbodies, the conservation of biodiversity and good ecosystem health, and buffer zones from flood plains.

In the MASP area:

RPO 5.7	Co-ordinate across local authority boundaries to identify, manage, develop and protect regional Green Infrastructure, to enhance strategic connections and develop a Green Infrastructure policy in the Dublin Metropolitan Area.
RPO 5.8	Support the promotion and development of greenway infrastructure and facilities in the Dublin Metropolitan Area and to support the expansion and connections between key strategic cycle routes and greenways as set out in the NTA Greater Dublin Area Cycle Network Plan.

In the MASP area, the RSES recognises Dublin Bay and the Coastal Zone and the Dublin/Wicklow Mountains as key GI assets.

Strategy for the Future Development of National & Regional Greenways (DoTTS 2018)

This strategy was prepared and published by the Department of Transport, Tourism and Sports in 2018. The objective of this strategy is to assist in the strategic development of nationally and regionally significant greenways in appropriate locations constructed to an appropriate standard in order to deliver a quality experience for all greenways users. It also aims to increase the number and geographical spread of greenways of scale and quality around the country over the next 10 years with a consequent significant increase in the number of people using greenways as a visitor experience and as a recreational amenity.

For the purposes of this strategy, a 'greenway' is a recreational or pedestrian corridor for non-motorised journeys, developed in an integrated manner which enhances both the environment and quality of life of the surrounding area, that meet satisfactory standards of width, gradient and surface condition to ensure that they are both user-friendly and low-risk for users of all abilities. It sets out that greenways should ideally be in the order of at least 20km in length and preferably longer; in order to bring additional revenue into an area, greenways should ideally be closer to 40km.

The strategy recognises that where proposed greenways are along existing natural ecological corridors such as rivers and canals, or across natural habitats such as coastal habitats, there is potential for people to access nature and to see and learn about our natural heritage, its importance, and how to protect it. There is also potential to enhance the biodiversity value of an ecological corridor or other area when planning for greenways. Providing interpretative facilities concerning the natural heritage is recommended.

18.2 Strategic Green Infrastructure Network in Wicklow

County Wicklow has a widespread and prosperous existing Green Infrastructure network. The County boasts many key features and resources along the coast and across the urban, rural and upland/mountain areas. Many of these are iconic in nature, including the varied and dramatic coastline itself, the Murrough and Brittas Bay, the Wicklow Mountains, the numerous rivers and streams and the open spaces of County and regional significance.

The 'County Wicklow Heritage Plan' and the 'County Wicklow Biodiversity Action Plan' are two key Green Infrastructure tools for the County. The Heritage Plan's aim is '*conserving the natural, built and cultural heritage of the county, and increasing awareness and enjoyment of it among all in Wicklow*'. The biodiversity action plan sets out a strategy for increasing our understanding and appreciation of biodiversity in the county along with measures for enhancing the protection and management of this valuable resource.

Key actions undertaken through the County Heritage and Biodiversity Plans include the identification and mapping of wetlands and locally important biodiversity areas; the preparation of conservation management prescriptions for

Council owned lands; audits of Geological heritage sites, of key threatened species such as swift, and of identified biodiversity threats such as the assessment of river barriers to fish migration. Key public awareness outputs include publications such as the 'Biodiversity in County Wicklow' leaflet series.

Wicklow County Council, through the development of social infrastructure also has a role to play in enhancing the Green Infrastructure of the County. The County Council's 'Local Economic and Community Plan 2016 - 2022' (LECP) has an important role in this regard. The LECP sets out, for a six-year period, the objectives and actions needed to promote and support the two key elements of a) the economic development and b) the local and community development of the County by Wicklow County Council, both by itself directly and in partnership with other economic and community development stakeholders.

The development of infrastructure is addressed in the 10 overarching goals for economic and community development within County Wicklow, and Goals 8 and 9 are particularly relevant to GI:

- Goal 8** *Capitalise on Wicklow's unique attributes and proximity to the Dublin market, excellent quality of life, human capital, tourism, landscape, marine, agricultural and forestry resources.*
- Goal 9** *Support a shift towards low carbon and climate change resilient economic activity, reducing energy dependence, promoting the sustainable use of resources and leading in the Smart Green Economy.*

Table 18.2 shows the regional classifications of GI resources and routes⁴ alongside an example of the County's strategic resources and routes:

⁴ Source Regional Planning Guidelines for the Greater Dublin Area 2010 - 2022

Table 18.2 Green Infrastructure in County Wicklow (see Maps 18.01 – 18.11)

Green Infrastructure Classifications	
Regional GI Resources	County Wicklow GI Strategic Resources (examples)
UNESCO World Heritage Sites	Glendalough Monastic Settlement (tentative list)
European sites	Uplands: Wicklow Mountains SAC Wetlands: The Murrough SAC Headlands /cliff/ heath: Bray Head SAC Rivers: Slaney River Valley SAC, Ballyman Glen SAC Woodlands: Knocksink SAC, Glen Of The Downs SAC, Deputy's Pass SAC, Vale of Clara SAC Coastal: Buckronev-Brittis Dunes & Fen SAC, Magherabeg Dunes SAC Bogs: Carriggower Bog SAC, Holdenstown Bog SAC, Red Bog SAC The Murrough SPA Wicklow Head SPA Wicklow Mountains SPA Poulaphouca Reservoir SPA
Wildfowl Sanctuaries	Broad Lough Poulaphouca
Nature Reserves	Deputy's Pass Glen Of the Downs Glendalough Glenealo Valley Knocksink Wood Vale of Clara
Other identified area of environmental value (pNHAs)	Arklow Rock-Askintinny, Arklow Sand Dunes, Arklow Town Marsh, Avoca River Valley, Avondale, Ballinacor Wood, Ballinagee Wood, Ballycore Rath, Ballyman Glen, Bray Head, Buckronev-Brittis Dunes And Fen, Carriggower Bog, Dargle River Valley, Devil's Glen, Dunlavin Marshes, Glen Of The Downs, Glencree Valley, Glenealy Woods, Great Sugar Loaf, Holdenstown Bog, Hollywood Glen, Kilmacanogue Marsh, Knocksink Wood, Lowtown Fen, Magherabeg Dunes, Newtown Marshes, Poulaphouca Reservoir, Powerscourt Waterfall, Powerscourt Woodland, The Murrough, Tomnafinogue Wood, Vale Of Clara, Vartry Reservoir, Wicklow Head.
Specific County level designations	Newcastle Nature Reserve, Bray Head SAO
Architectural heritage	Structures on the RPS, NIAH, within ACAs
Cultural sites	Holy wells, graveyards, churches
Archaeological Sites	National Monuments, Areas of Archeological Potential, Cultural landscape e.g. Baltinglass Hills
Regional Scale Managed Parks	The Wicklow Mountains National Park, Avondale, Kilmacurragh, other forestry lands
Strategic green belts	Bray / Greystones agricultural green belt buffer
Regional GI Routes	County Wicklow Strategic GI routes (examples)
River corridors, waterways, lakeshore, coastal	All waterways within County – e.g. Avonmore, Avoca, Dargle, Vartry Reservoir, Blessington greenway East Coast "blueway" Bray – Dungarvan ⁵
Transport corridors, Roads & Rail	All roadways within County – e.g. N81, R750, existing railway lines, disused railway line in from Woodenbridge to Shillelagh.
Regional cycle / walkways (including in development)	Wicklow Way, Blessington Greenway, Arklow – Shillelagh trail, Coastal Route

⁵ This is an initiative of the Celtic Routes INTERREG, and would entail a blueway from Bray to Dungarvan. In conjunction with counties Wexford and Waterford, a feasibility study has been carried out and delivery options are being explored.

18.3 Green Infrastructure & Land Use Planning

The Development Plan's role in Green Infrastructure is to facilitate the protection, management and enhancement of urban, peri-urban and rural environmental resources through the identification and provision of multi-functional and interconnected green spaces and networks which in turn enhances the overall benefit. It is also important to recognise the economic, social, environmental and physical benefit of green spaces and networks through the development of and integration of GI planning and development in the development management process.

At a County or strategic level, regionally significant GI assets are identified, as well as GI principles. GI planning at a local level can be more specific; existing green infrastructure resources can be identified, as well as areas where improvements and new green infrastructure resources should be provided in the future. It is an aim of this plan to incorporate local level Green Infrastructure proposals into local plans; local plans will include where feasible, the incorporation of the following local GI requirements:

- Identification of the key Green Infrastructure resources of the plan area;
- Identification of potential sites for the development of new Green Infrastructure elements and routes;
- Identification and facilitation of the provision of important linkages between urban and rural areas;
- Identification of areas of deficiency in active open space areas based on spatial distribution and population needs;
- Identification of important landscape corridors and green areas, including hedgerows, tree lines and pockets of tree cover, scrub, wetlands, streams and roadside verges and to encourage their protection and enhancement;
- Incorporate nature based solutions in the provision and design of green spaces in association with all major new developments;
- Seek the provision of green spaces in association with all major new developments;
- Support for the development of targeted walkway and cycle ways, integrated as part of opportunities for other projects such as river restoration, biodiversity enhancement as part of process of strengthening connectivity between green spaces and strategic linkages between urban settlements and countryside; and
- Identification of, where feasible, existing GI assets such as trees/ hedgerows/ woodlands/ wetlands on lands zoned for development within the plan area that are worthy of retention and/or enhancement.

Green Infrastructure & Development Management

All planning applications for development shall seek to ensure that development proposals provide for the protection of existing on-site green infrastructure resources and, where appropriate, the enhancement of existing and provision of new green infrastructure resources in tandem with new development. All proposed development shall have regard to relevant green infrastructure proposals in place and to any Green Infrastructure objectives at local plan level. All new proposals seeking planning permission should address, as much as is reasonably possible, best practice sustainable solutions and a sustainable site design, with emphasis on the following:

- The proposal should address how existing natural features of the site will inform sustainable design, by exploring the potential for the integration of existing natural features of merit such as watercourses, mature planting and topography. Such an approach ensures that the landscape character of the area is maintained whilst also assisting biodiversity maintenance and more natural forms of surface water drainage.
- The layout of the proposed development should be informed by the inherent natural characteristics of the site. Connectivity between proposed open spaces and adjoining existing open space or natural features should also be considered in the site design.
- Proposals in relation to larger sites should be cognisant of any ecologically sensitive areas where it may be appropriate to retain or integrate into a landscape plan.

18.4 Recreational Use of Natural Resources

The Council is committed to ensuring sustainable recreational use of the outdoors in County Wicklow in accordance with the objectives of the current County Wicklow Outdoor Recreational Strategy and in consultation with the Wicklow Uplands Council and other key stakeholders. Natural areas provide opportunities for passive and active activities such as picnicking, walking, mountain biking, swimming, fishing and sailing / canoeing / windsurfing.

The Council will support and facilitate development of greenways where feasible, as well as shorter more localised routes and trails, that may or may not ultimately form part of a longer interconnected formal greenways.

18.5 Public Rights of Way

Section 10(2)(o) of the Planning and Development Act 2000, requires the inclusion of a mandatory objective in the development plan for the preservation of public rights of way (PROW) which give access to seashore, mountain, lakeshore, riverbank or other place of natural beauty or recreational utility. PROWs shall be identified both by marking them on at least one of the maps forming part of the development plan and by indicating their location on a list appended to the plan.

A PROW is a type of easement of way that is in legal terms distinct from other easements of way such as private rights of way and customary rights of way. A PROW or highway is a physically defined route over which the public have a right of passage which in legal terms is described as 'a user as of right'. The form of PROW here is the type that is normally used for recreational purposes rather than for regular daily vehicular/non vehicular access-transportation purposes. A PROW "*confers the unrestricted right of the general public to pass and re-pass at all times of the day or night and at all seasons without notice to, or permission from the landowner over whose lands the way runs*"⁶. The most common physical characteristics of PROWs have been identified as follows:

- it follows a defined route which may be sub-divided amongst different branches, and
- the route normally runs between two public places, such as public roads as defined under roads legislation or landscapes of special amenity such as a beaches, woodlands or lakes.

Section 14 of the Act sets out the formal process for including public rights of way in development plans. The scope of these statutory provisions is grounded on identification of existing routes over which PROWs are deemed to exist. The inclusion of PROW objectives for their preservation provides greater protection for such route-ways under the development management provisions of planning legislation whilst also restricting the scope of certain exempted development. The Council has identified seven routes that are outlined in Table 18.3 that are considered fulfil the criteria pertaining to PROWs as a form of public easement of passage⁷.

⁶ Edward Walsh & Constance Cassidy v The County Council for the County Sligo, [2013] IESE 48.

⁷ PROW1 to PROW4 are 4 existing public rights of way that were established in 1994 by way of variation to the 1989 County Development Plan in the Wicklow Town Environs Plan 1994.

Table 18.3A Public Rights Of Way (Maps 18.09 A, C, D)

Reference	Location	Description
P.R.O.W.1	The Murrough, Wicklow Town	A coastal walkway from the public car park in the Murrough Wicklow Town to the former Wicklow Town Council boundary in Tinakelly via Bollarney Murrough, Knockrobin, Murrough, and Tinakilly Murrough.
P.R.O.W.2	Corporation Lands Dunbur Lower and Dunbur Head, Wicklow Town.	From the public car park known as the Glen car park in the townland of Corporation Lands /off the R750 coast road to the Glen Strand, onto Brides Head-Lime Kiln Bay on a cliff/coastline path as far as the private road leading from the R.750 to the site of Wicklow Head Light House in the townland of Dunbur Head and back onto the principal linear section of this pathway via a new short looped section of path (to be developed during the lifetime of this plan).
P.R.O.W.3	Broomhall, Rathnew, Wicklow Town	From the junction of the Rocky Road and Ashtown Lane (L-1099-0) and L-5100-20) to the roundabout junction at Merrymeeting/Burkeen, Rathnew (L-5392-0 and L-1098-60).
P.R.O.W.4	Corporation Lands and Dunbur Lower, Wicklow Town	The old coast road from the north-western public road junction (L 5721-15/L-57251-10) in Seafield housing estate (townland of Corporation Lands) on a laneway that runs along the western boundary of that estate, to a footbridge over the stream in Dunbur Glen, onto a pathway that in parts is backfilled with soil which adjoins the eastern boundary of an agricultural field and thereafter onto a laneway that runs between the boundaries of two housing estates (Seaview and Seapoint/Bayside Glen to the R750 (Dunbur Lower).
P.R.O.W.6 *	Tinakelly The Murrough to Blackditch Newcastle.	A continuation of the Murrough coastal walk referenced herein as P.R.O.W.1 from Tinakelly Murrough Wicklow to the beach at Newcastle in the vicinity of the former Newcastle Railway Station at Blackditch via the townlands of: Clonmannon, Ballybla, Castlegrange, Grange South and Grange North.
P.R.O.W7	Main Street Kilcoole to the L-1042 /Kilquade Road.	Sally Walk/Kilcoole Mass Path, from the pedestrian opening on the R761/Main Street to the L-1042 in Priestsnewtown Kilquade via: a public footpath, the grounds of St. Patrick's Hall, a defined pathway, a pedestrian bridge over Saint Patrick's River and through a pathway in a field in Priestsnewtown and a laneway that opens onto the L-1042.

Table 18.3B Proposed Amended Public Right Of Way⁸ (Map 18.09 B)

Reference	Location	Description
P.R.O.W.5 *	From Beach Road Greystones to the coastline in Rathdown Lower and Rathdown upper	This section of amenity route constitutes the initial linear southern section of the Bray to Greystones Cliff Walk. From the junction of Beach Road (L-12042)/Victoria Road (L-1204) in the Greystones harbour area via part of the new residential area of the Greystones harbour-marina development, via the new public park; this route is linked to the coastline at (a) the north beach and (b) an existing pathway to the coast in the vicinity of the site of the former Rathdown Castle. Total cumulative length of this route is circa 1.3 km.

*subject of current legal challenge

⁸ This amendment (to map and description) is proposed to reflect the new on the ground layout following the completion of the new harbour roads, housing and landscaped park

18.6 Green Infrastructure Objectives

- CPO 18.1** To recognise the importance and contribution of Green Infrastructure for the maintenance of biodiversity and ecosystem services, ensuring that the region and county will be better able to adapt and respond to climate change issues.
- CPO 18.2** To protect existing Green Infrastructure resources and to facilitate, in consultation with relevant stakeholders, the development of green infrastructure that recognises the benefits that can be achieved with regard to the following:
- provision of open space amenities,
 - sustainable management of water,
 - protection and management of biodiversity,
 - protection of cultural heritage, and
 - protection of protected landscape sensitivities.
- CPO 18.3** New development and redevelopment proposals shall wherever possible, integrate nature based solutions to the design, layout and landscaping of development proposals, and in particular to the delivery of linear parks and connected open spaces along watercourses in order to enhance the existing green infrastructure of the local area. All such proposals will be subject to ecological impact assessment.
- CPO 18.4** To facilitate the development and enhancement of suitable access to and connectivity between areas of interest for residents, wildlife and biodiversity, with focus on promoting river corridors, European sites, nature reserves and other distinctive landscapes as focal features for linkages between natural, semi natural and formalised green spaces where feasible and ensuring that there is no adverse impact (directly, indirectly or cumulatively) on the conservation objectives of European sites.
- CPO 18.5** To identify and facilitate the provision of linkages along and between green / river corridors within the county and adjoining counties to create inter connected routes and develop riverside parks and create linkages between them to form 'necklace' effect routes including development of walkways, cycleways, bridleways and wildlife corridors where feasible and ensuring that there is no adverse impact (directly, indirectly or cumulatively) on the conservation objectives of European sites.
- CPO 18.6** To promote and facilitate the development of coastal trails linking up with existing recreational trails, creating new linkages between coastal sites and inward linkages to settlements and green spaces in built up areas and extensions to existing facilities where feasible and ensuring that there is no adverse impact (directly, indirectly or cumulatively) on the conservation objectives of European sites.
- CPO 18.7** To facilitate the development of green bridges / wildlife crossings over existing physical transport barriers to repair fragmentation of the Green Infrastructure network caused by such grey infrastructure developments.
- CPO18.8** To require the integration of Green Infrastructure principles and inclusion of native planting schemes in all development proposals in landscaped areas, open spaces and areas of public space.

Recreational Use of Natural Resources Objectives

- CPO 18.9** To facilitate the use of natural areas for active outdoor pursuits, subject to ecological and cultural heritage assessment and associated mitigation as appropriate and all other normal planning controls.
- CPO 18.10** To facilitate access to amenity areas in the County for the benefit of all, on the basis of cooperation with landowners, recreational users and other relevant stakeholder groups to promote "agreed access" on public and privately owned land in the County on the basis of sustainability, consultation and consensus.
- CPO 18.11** To support the development of greenways, blueways and other access routes along natural corridors while ensuring that there is no adverse impact on the flora and fauna, biodiversity or water quality of natural assets. Wicklow County Council prioritises environmental protection in our design and construction of routes and surface selection.
- In particular, to support the development of existing and examine the feasibility of new walking, cycling, horse riding and water based routes and trails along the following routes:
- from Bray Head, via the Sugarloaf Mountains, joining up with The Wicklow Way;
 - the extension of the 'Blessington Greenway' walk around the Poulaphuca reservoir;
 - the expansion of a lakeshore walk around the Vartry reservoir;
 - the extension of the old Shillelagh branch recreational trail - railway walk from Arklow to Shillelagh;
 - the development of a route along the disused Great Southern and Western Railway line (Naas to Tullow branch) through Dunlavin and Baltinglass;
 - the development of a coastal route from Bray to Arklow as well as links between this potential route and the coast road;
 - the Wicklow Way and St. Kevin's Way (as permissive waymarked routes);
 - the Wicklow to Glendalough "pilgrim walk" incorporating ancient wells; and
 - 'Mountains to the Sea' amenity route incorporating Glendalough, Laragh, Annamoe, Roundwood, Newtownmountkennedy and Kilcoole-Newcastle.
- CPO 18.12** To protect and facilitate The Wicklow Way and St. Kevin's Way as permissive waymarked routes in the County. The Council shall work in partnership with relevant stakeholders in relation to management of these routes, and will protect them from inappropriate development, which would negatively infringe upon their use.
- CPO 18.13** To facilitate greater public recreational access to the Wicklow coast and improved linkages between the coast and the coast road, subject to full ecological and heritage impact assessment and ensuring that there is no adverse impact (directly, indirectly or cumulatively) on the conservation objectives of European sites.
- CPO 18.14** To preserve the open character of commonage land and similar hill land and secure access over paths and tracks through consensus with local landowners, particularly in mountain areas.
- CPO 18.15** To implement the measures set out in the Bray Head SAAO (Special Amenity Area Order) (See Map 18.02).
- CPO 18.16** To protect the quality of bathing waters and to endeavour to ensure that bathing waters achieve "*sufficient or better status*" and increase the number of bathing waters classified as "*good*" or "*excellent*", in accordance with the Bathing Water Directive (Directive 2006/7/EC).

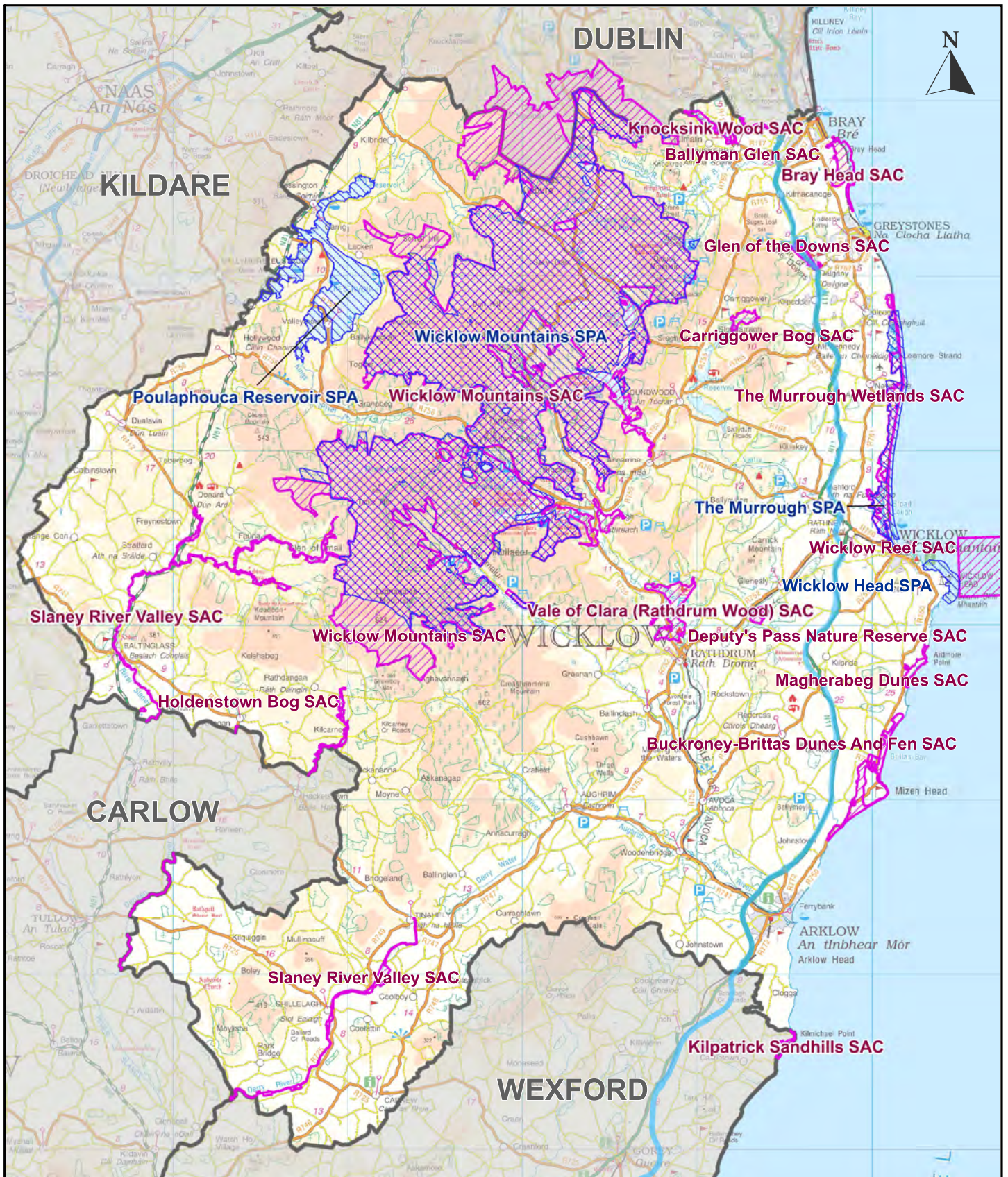
- CPO 18.17** Where projects for significant green infrastructure identified in this chapter are not already provided for by existing plans / programmes or are not already permitted, then the feasibility of progressing these projects shall be examined, taking into account planning need, environmental sensitivities as identified in the SEA Environmental Report and the objectives of the plan relating to sustainable mobility. A Corridor and Route Selection Process will be undertaken where appropriate, for relevant new green infrastructure in two stages: Stage 1 – Route Corridor Identification, Evaluation and Selection and Stage 2 – Route Identification, Evaluation and Selection.
- CPO 18.18** Where relevant, the Council and those receiving permission for development under the plan, shall manage any increase in visitor numbers and/or any change in visitor behaviour in order to avoid significant environmental effects, including loss of habitat and disturbance. Management measures may include ensuring that new projects and activities are a suitable distance from ecological sensitivities; visitor/habitat management plans will be required for proposed projects as relevant and appropriate. Potential environmental effects of a likely increase in tourists/tourism-related traffic volumes in particular locations/along particular routes shall be considered and mitigated as appropriate. Such a consideration should include potential impacts on existing infrastructure (including drinking water, wastewater, waste and transport) resulting from tourism proposals.

Public Rights of Way Objectives

- CPO 18.19** The Council will utilise its relevant statutory powers for the purpose of preserving in so far as is practical, the character of the routes of the public rights of way detailed in Table 18.3 (Map 18.09 a, b, c & d) for amenity purposes. In this regard, the Council will, in the interests of attaining a balance between the needs of the individual owners of holdings over which these listed routes transverse and the common good, engage with such landowners in circumstances where there are reasonable ground for giving consideration to the re-routing of sections of such means of public access within the same holding.
- CPO 18.20** To carry out further research, where resources permit, regarding the identification and mapping of other potential existing public rights of ways in the County. Such research will be carried out in consultation with, elected representatives, members of the public, representatives of recreational organisations, relevant statutory public bodies, landowners, farmer representative groups and the Wicklow Upland Council (where appropriate) for consideration for inclusion of any further identified public rights of way in this plan by way of variation in accordance with Section 13 of the Planning and Development Act 2000 (as amended). Part of such a project may, where considered appropriate/warranted, give rise to proposals for the creation of new public rights of way and or the extending/re-routing of existing public rights of way in accordance with respective provisions of either Sections 206 or 207 of the Act.
- CPO 18.21** In accordance with the provisions of Section 208 of the Planning and Development Act 2000 (as amended), it is an objective of Wicklow County Council to carry out maintenance and repair works to the four existing public rights of way in the Wicklow Town Environs area (PROW 1 to PROW 4 inclusive) that were listed for preservation under planning and development legislation prior to the commencement of this section of the Act on 21st January 2002. Such works may, where considered warranted, on foot of an assessment of the structural capacity of such routes to accommodate public usage in a safe and commodious manner, involve the carrying out of surface upgrading/improvement works.

CPO 18.22 The Council recognises the recreational and heritage conservation importance of the preservation, protection, enhancement, maintenance and improvement, for the common good, of public rights of way providing access to seashores, mountains, lakeshores, riverbanks or other places of natural beauty or recreational utility by ensuring that new developments do not materially restrict or block the routes [pathways/trackways/laneways] of those PROWs. Developments will not be permitted where the established recreational utility or otherwise of a PROW would be compromised or lost altogether, unless specific proposals are made by the developer as part of a planning application to:

- a) Develop a new route-way to replace the route-way of the existing PROW in full or to realign a section of such a route-way, in manner that ensures that new routeway/realigned section of route-way is of similar character, capacity and function of the route/part of a route of the PROW that it is to replace; and
- b) Appropriate legal procedures have been undertaken to extinguish the existing PROW (or part thereof) and to establish an entirely new route way or a realigned section of the existing route of a PROW.





Green Infrastructure

Map No. 18.01



Legend

European Sites

-  Special Area of Conservation (SAC)
-  Special Protection Area (SPA)

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Green Infrastructure

Map No. 18.02



Legend

-  Nature Reserves
-  Wildfowl Sanctuaries
-  Bird Sanctuaries
-  Special Amenity Area Orders

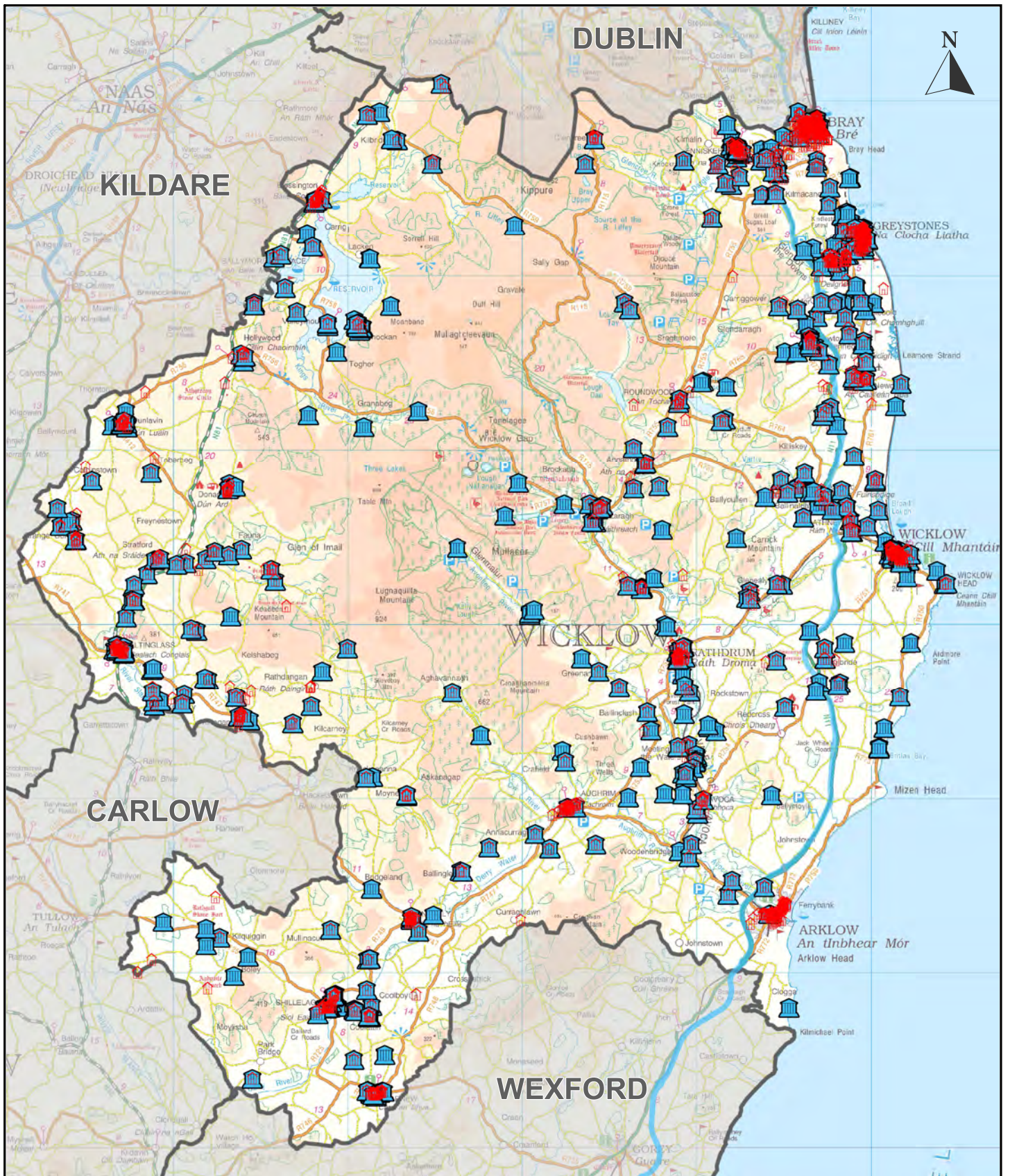
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Green Infrastructure

Map No. 18.03



Legend

-  **Architectural Heritage**
National Inventory of Architectural Heritage (NIAH)
-  **Record of Protected Structures (RPS)**

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Green Infrastructure

Map No. 18.04



Legend

Green Infrastructure Resources - Transport Corridors, Roads & Rail

-  Road
-  Rail
-  Dis-used Rail

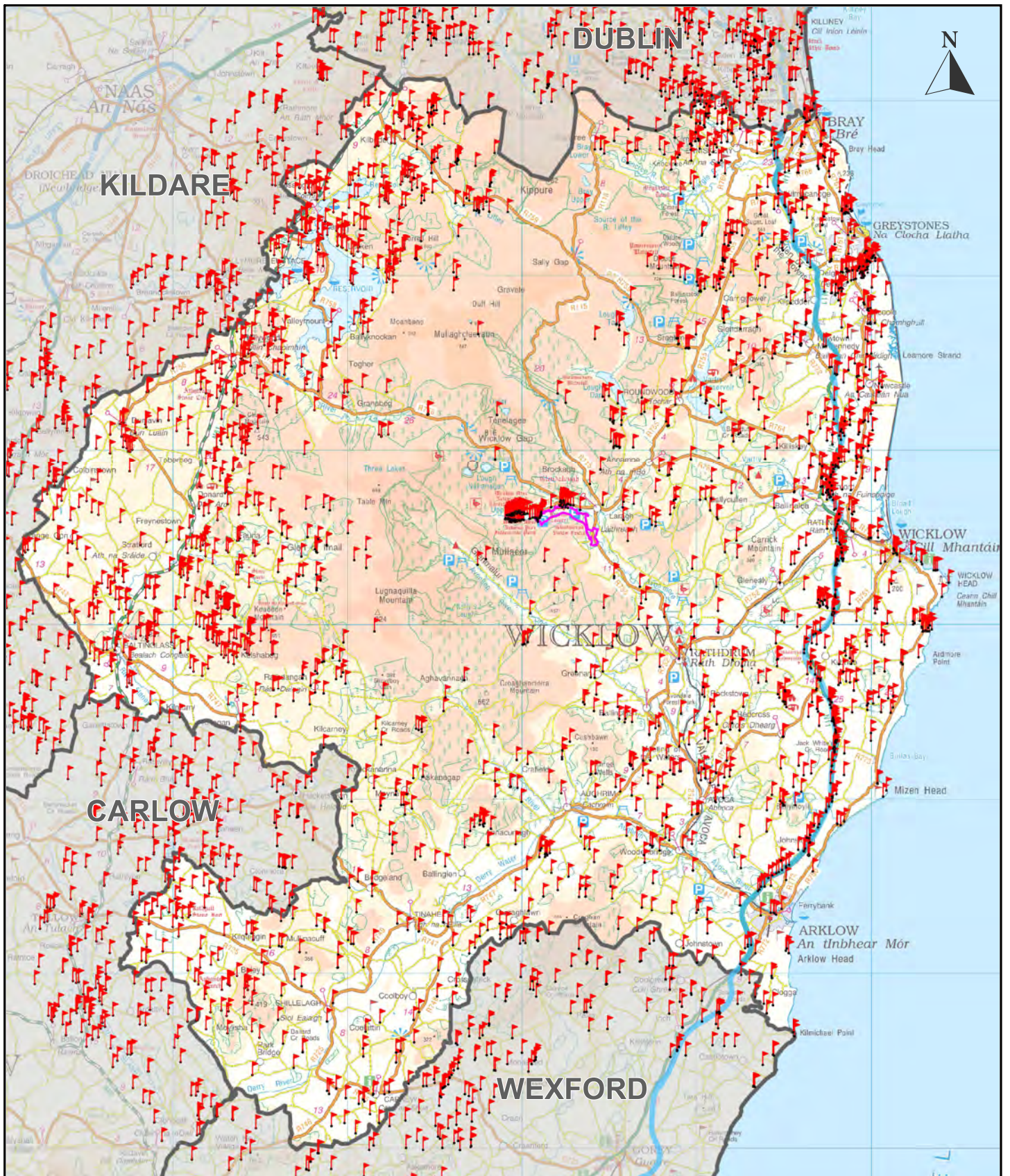
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Green Infrastructure

Map No. 18.05



Legend

-  Archaeological Sites
-  National Monuments Service (Archaeology)
-  Glendalough Monastic Settlement (UNESCO World Heritage Sites [tentative list])

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Green Infrastructure

Map No. 18.06



Legend

Other Identified Areas of Environmental Value



Proposed Natural Heritage Area (pNHA)

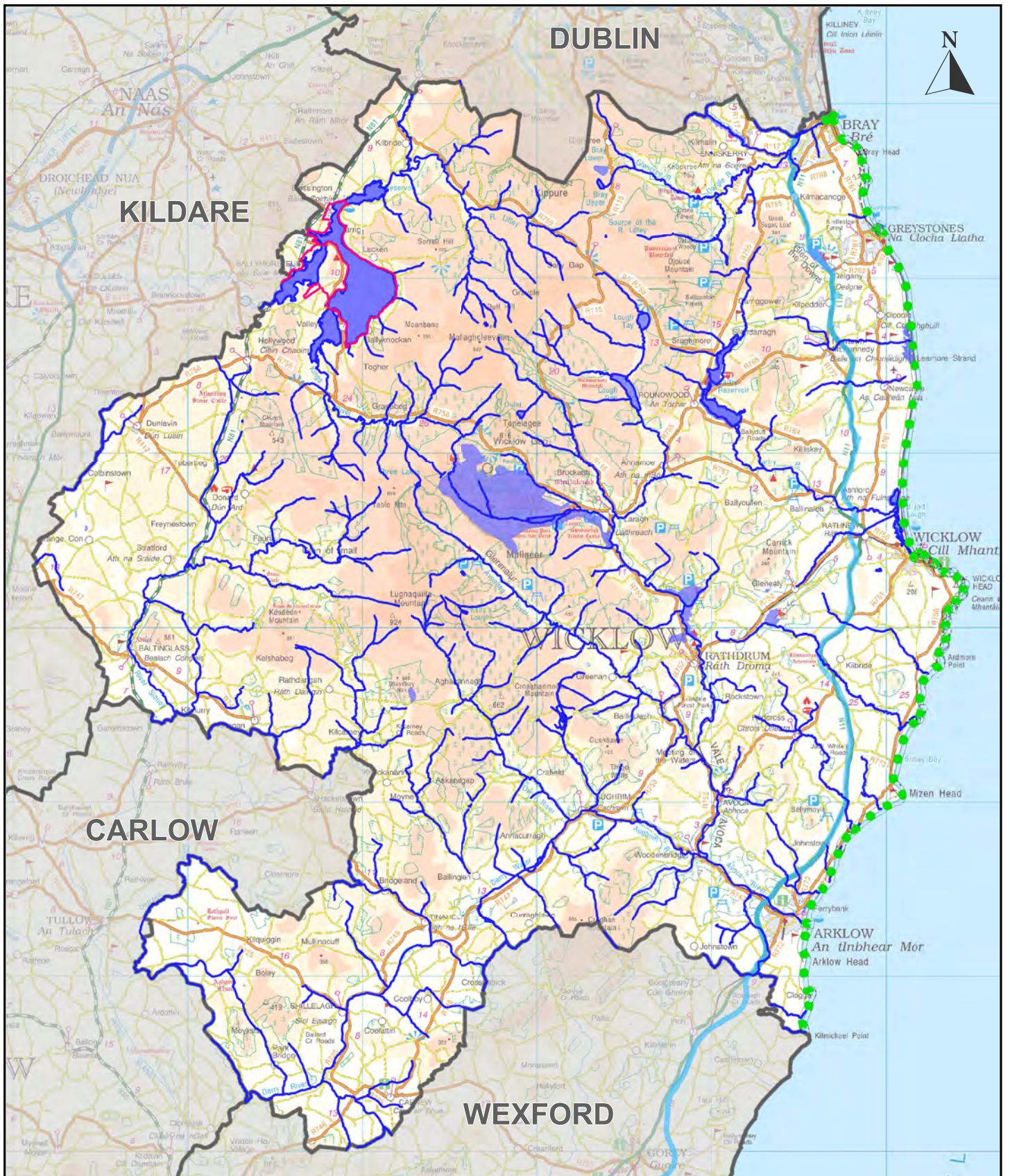
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Green Infrastructure

Map No. 18.07



Legend

Rivers, Lakes & Coastal

-  Lakes & Reservoirs
-  Watercourses
-  Coastline
-  Proposed Blessington Greenway (Indicative Alignment)

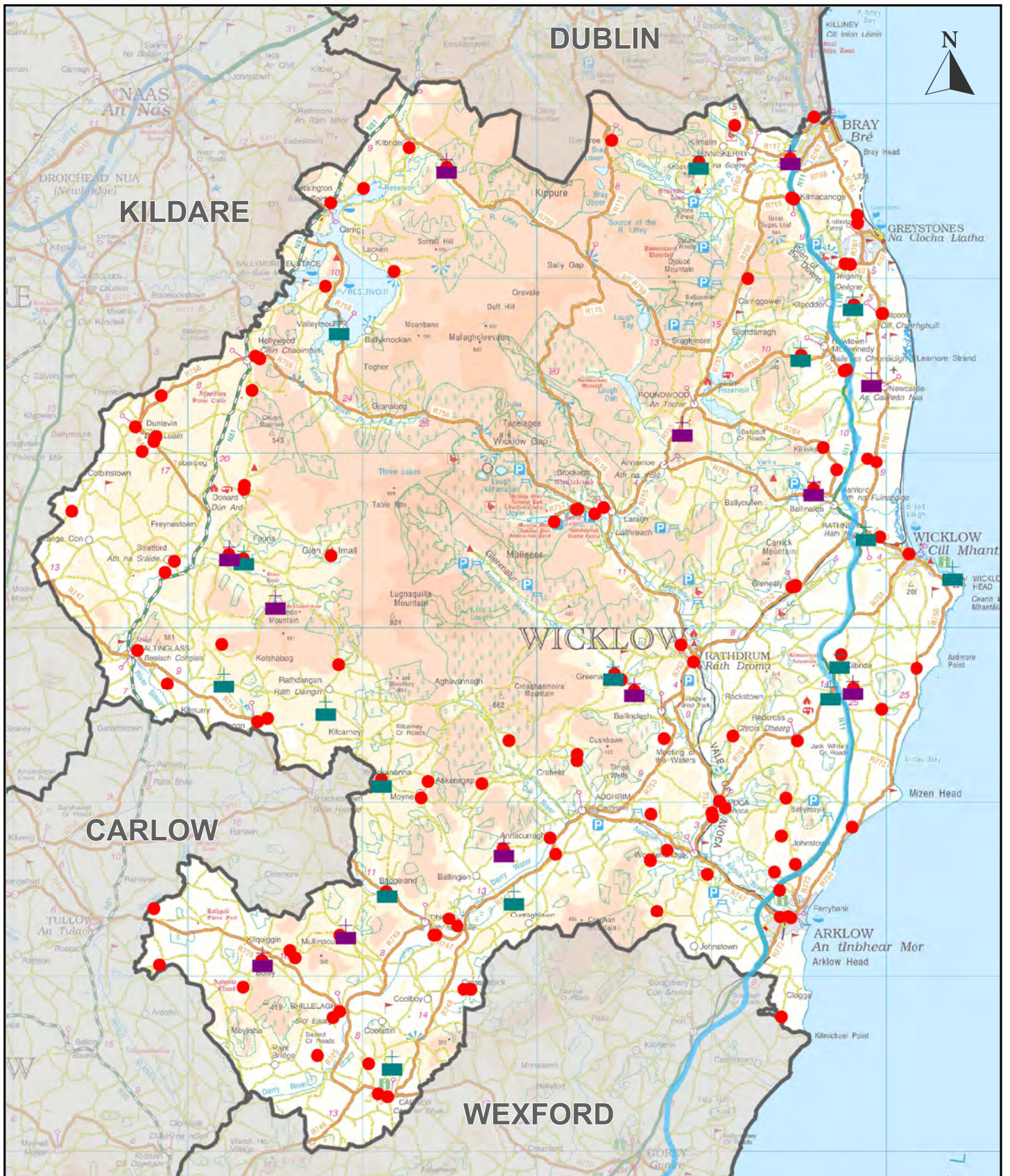
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Green Infrastructure

Map No. 18.08



Legend

Cultural Sites

-  Roman Catholic Churches
-  Church of Ireland Churches
-  Graveyards / Burial Grounds

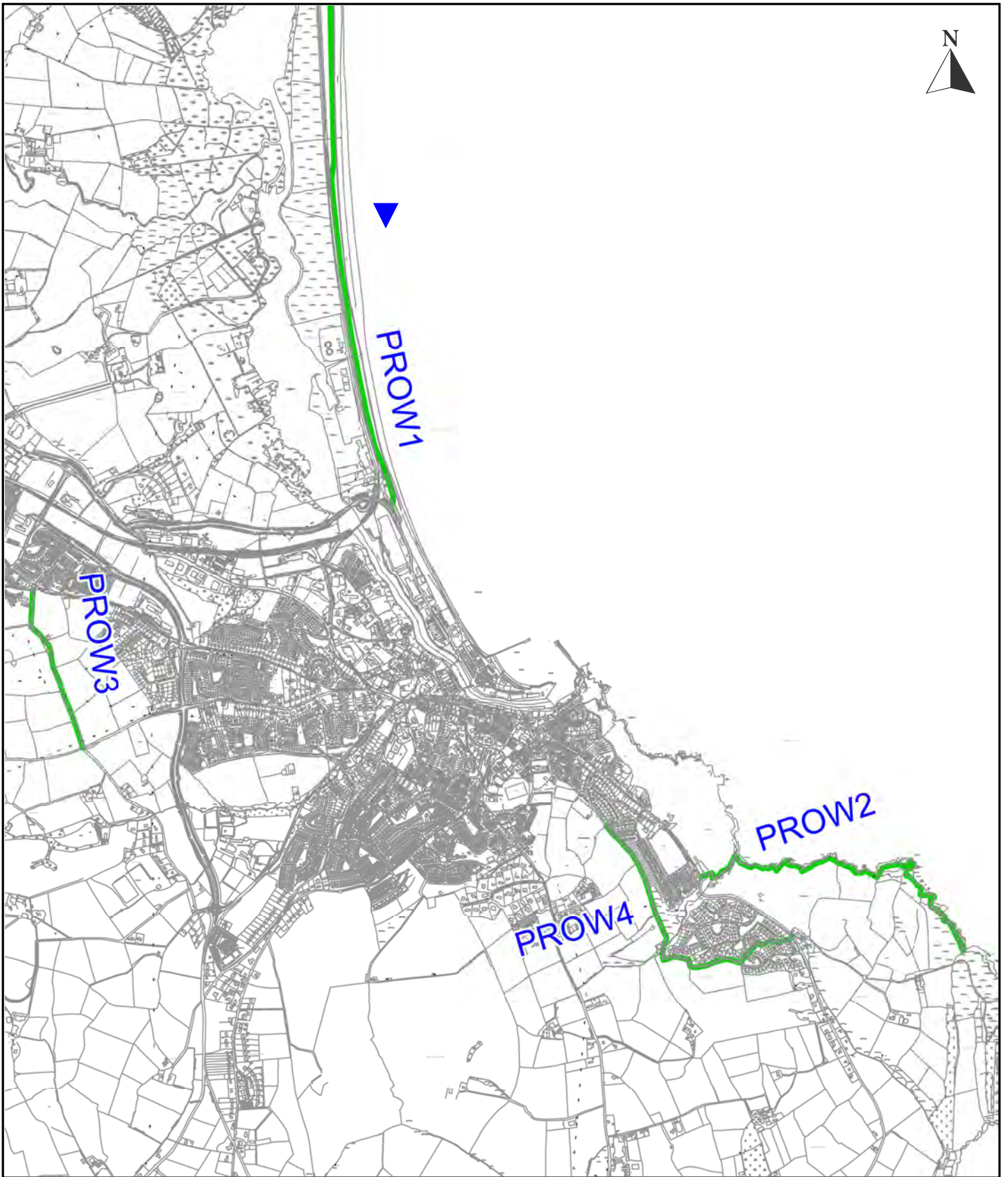
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Green Infrastructure

Map No. 18.09A



Legend

-  Public Rights of Way
-  Point of merger between PROW1 and PROW6

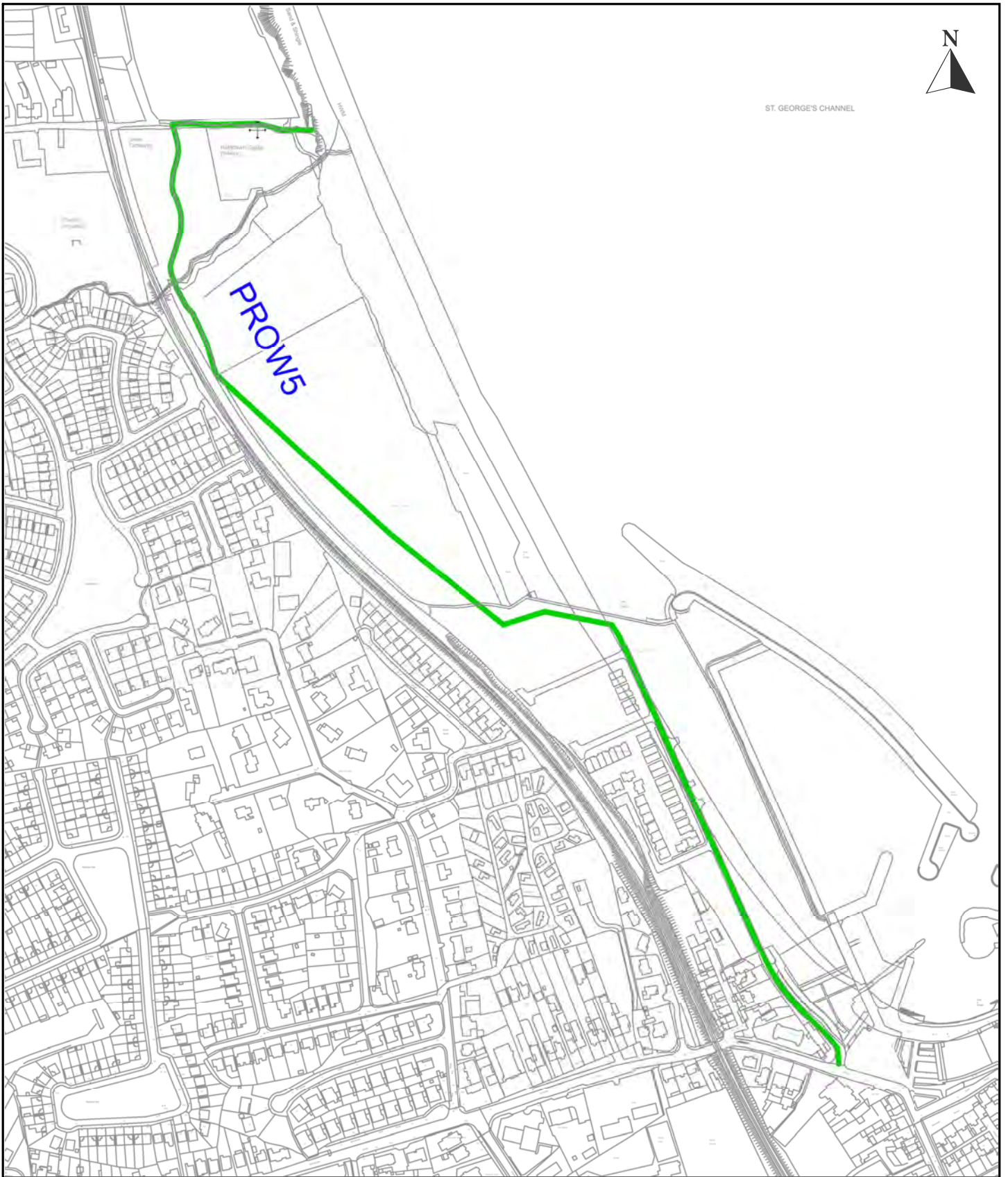
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Green Infrastructure

Map No. 18.09B



Legend

 Public Rights of Way

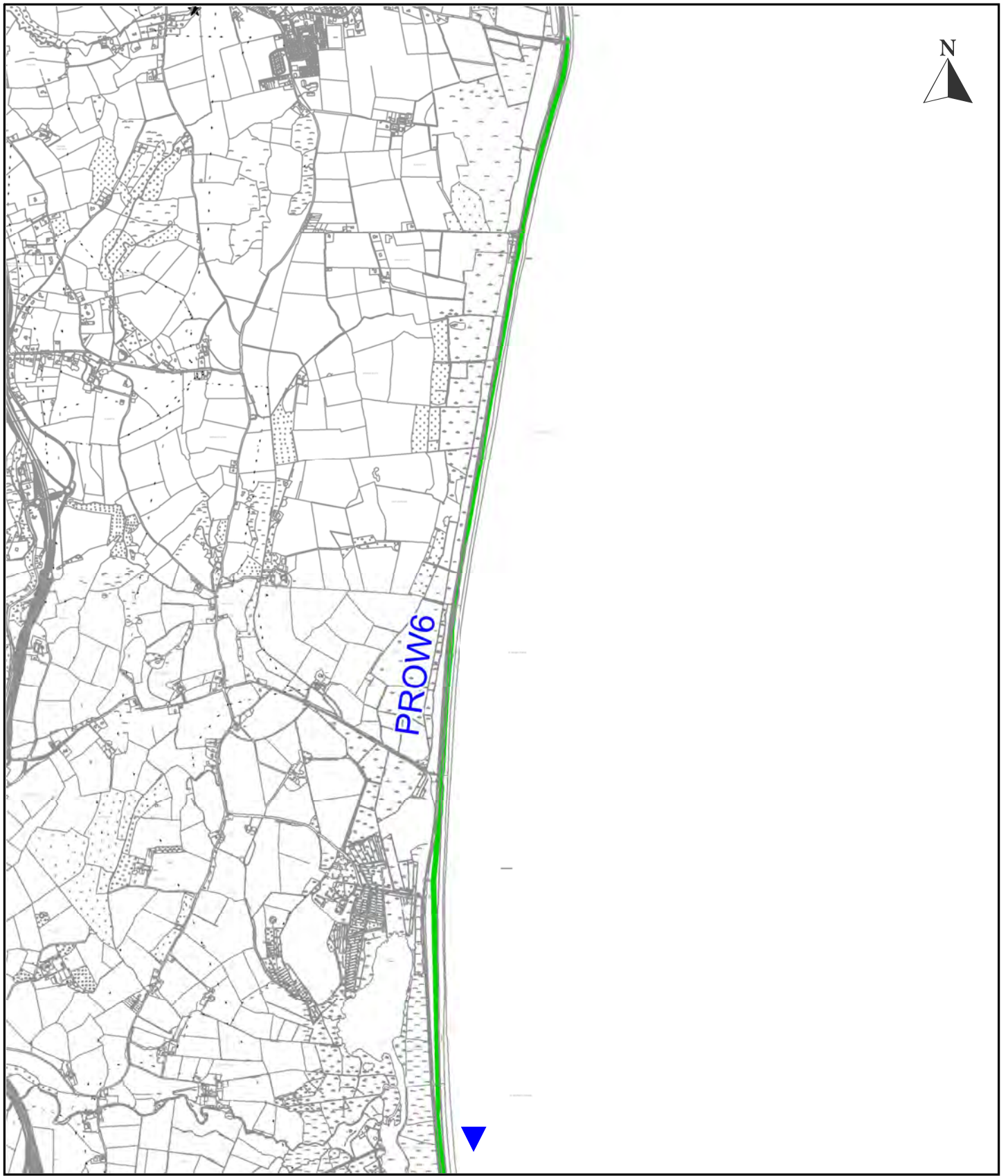
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Green Infrastructure

Map No. 18.09C



Legend

-  Public Rights of Way
-  Point of merger between PROW1 and PROW6

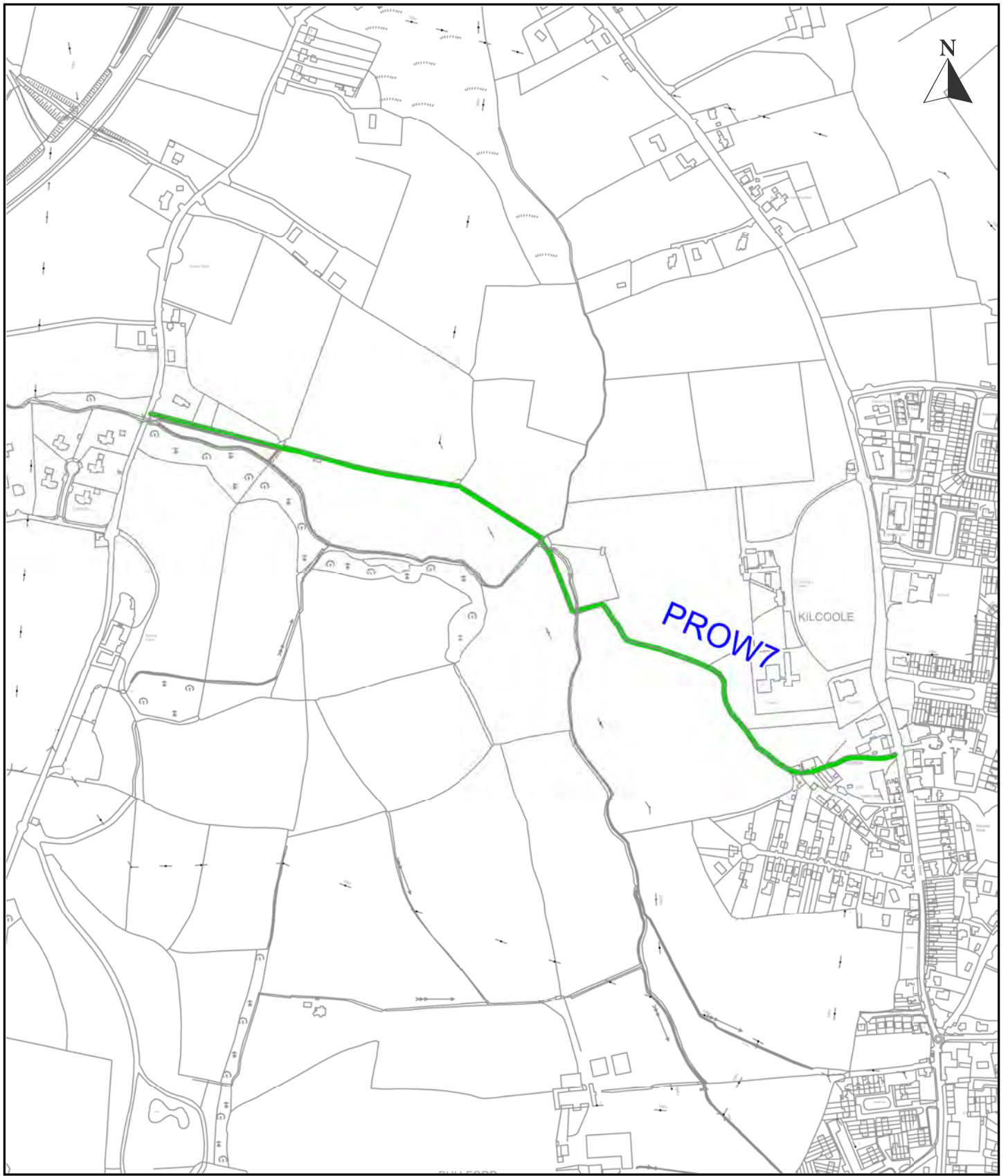
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Green Infrastructure

Map No. 18.09D



Legend

 Public Rights of Way

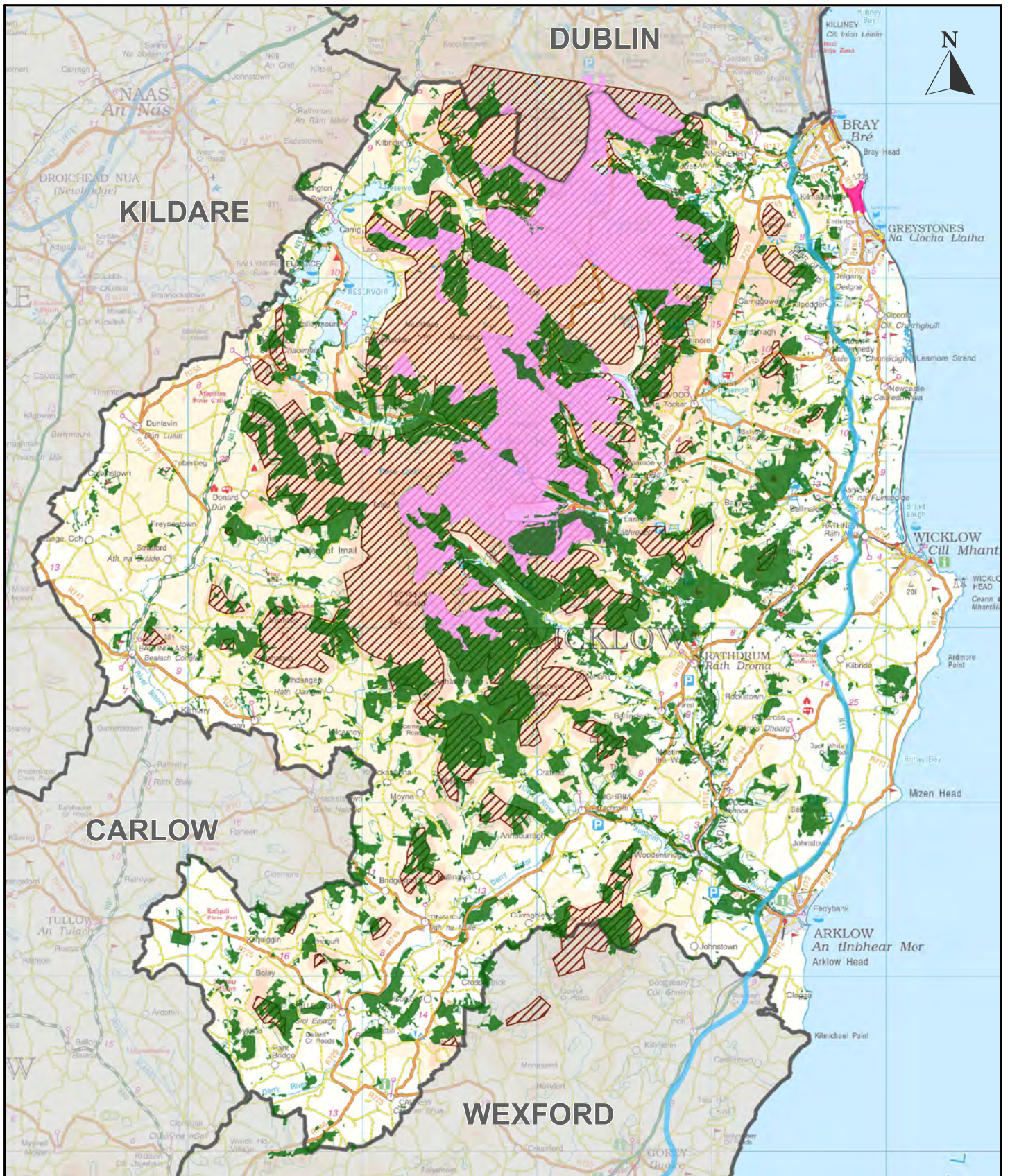
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Green Infrastructure

Map No. 18.10



Legend

-  Uplands and Mountains
-  Trees, Forestry and Woodland
- Regional Scale Managed Parks**
-  Wicklow Mountains National Park
- Strategic Green Belt**
-  Bray / Greystones Agricultural Green Belt Buffer

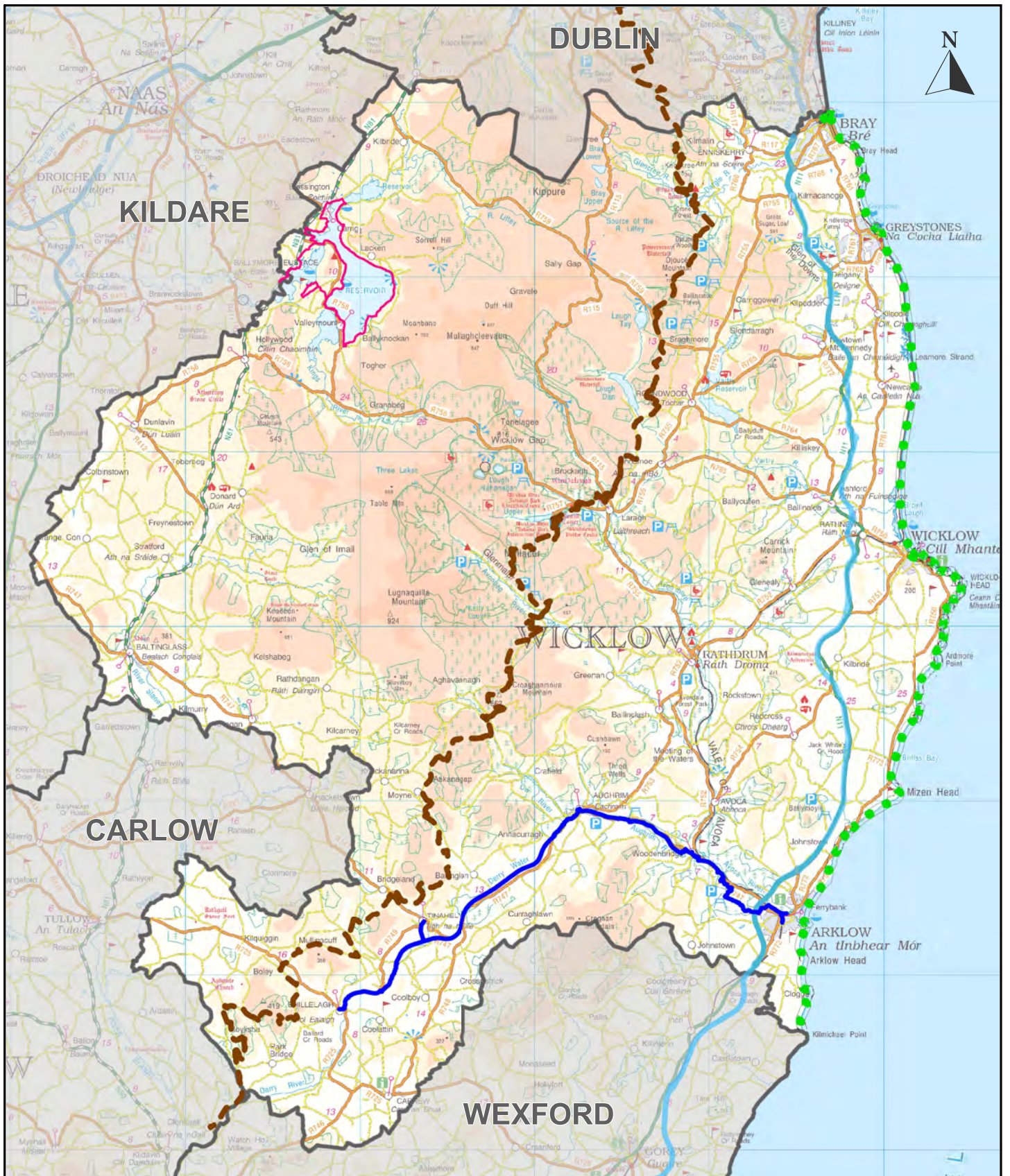
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Green Infrastructure

Map No. 18.11



Legend

Regional Cycleways / Walkways

-  Wicklow Way
-  Arklow - Shillelagh Trail (DRAFT)
-  Coastal Route
-  Proposed Blessington Greenway

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