



Comhairle Cathrach & Contae Phort Láirge  
Waterford City & County Council

# **Waterford City and County Draft Development Plan 2022-2028**

## **Appendix 20**

### **Appropriate Assessment**

### **Natura Impact Report**

**June 2021**

## **CONTENTS**

### **1 Introduction**

- 1.1 The European Habitats Directive and requirement for Appropriate Assessment
- 1.2 Appropriate Assessment Process: Purpose and Process
- 1.3 Procedure for Stage One Screening
- 1.4 Data Sources

### **2 Overview of Waterford City and County Development Plan and Receiving Environment**

- 2.1 Overview of Waterford City and County Development Plan
- 2.2 Waterford City and County Development Plan Themes and Objectives
- 2.3 Description of Natura 2000 Network
- 2.4 Other Designated Sites
- 2.5 Overview of Receiving Environment
  - 2.5.1 Conservation Status of protected habitats and species
  - 2.5.2 Water Quality
  - 2.5.3 Habitat Loss and Species Disturbance
  - 2.5.4 Noise
- 2.6 Protection of Species and Habitats outside designated sites.

### **3 Appropriate Assessment Screening**

- 3.1 Development Plan Policy Screening
- 3.2 Land Use Zoning Screening
- 3.3 Population and Residential Zoning Objectives
- 3.4 Infrastructure Projects
- 3.4 Settlement Objectives
- 3.5 Flood Risk and Sea-level Rise
- 3.6 Impacts on Natura 2000 sites within 15km of Waterford

### **4 Summary Screening Assessment**

- 4.1 Other plans and projects, in-combination effects

### **5 Conclusion of the Appropriate Assessment**

### **References**

## 1 Introduction

### 1.1 The European Habitats Directive and requirement for Appropriate Assessment

The aim of the European Habitats Directive (Council Directive 92/43/EEC on the conservation of wild habitats and of wild fauna and flora) was to create a network of protected wildlife sites in Europe, maintained at a favourable conservation status<sup>1</sup>. Each member state was required to designate their most important natural areas as Special Areas of Conservation. The Directive specifies the scientific criteria on the basis of which SAC sites must be selected and very strictly curtails the grounds that can be used as justification for damaging a site. The network of sites is referred to as NATURA 2000 and includes SACs (Special Areas of Conservation) for protected habitats and species and SPAs (Special Protection Areas) for protected bird habitats. Wild bird species in SPAs and habitats and species listed on Annexes I and II of the Habitats Directive in SACs in which they are designated features have full European protection. Species listed on Annex IV of the Habitats Directive are strictly protected wherever they occur, whether inside or outside the Natura 2000 network. This protection is afforded to animal and plant species by Sections 51 and 52 of the Habitats Regulations. Annex I habitats outside of SACs are still considered to be of national and international importance and, under Article 27(4)(b) of the Habitats Regulations, public authorities have a duty to strive to avoid the pollution or deterioration of Annex I habitats and habitats integral to the functioning of SPAs.

The European Habitats Directive (Council of the European Communities 1992) was transposed into Irish legislation by the European Communities (Natural Habitats) Regulations 1997 and amended in 1998, 2005 and 2011. The (Natural Habitats) Regulations 2011 addressed transposition issues raised in judgements of the ECJ against Ireland in 2008 and along with provisions of the Planning and Development Act 2000 (as amended) (Part XAB), clarified the obligations of planning authorities under the Birds and Habitats Directives.

Article 6 of the Habitats Directive provides a strict assessment procedure for any plan or project not directly connected with or necessary to the management of a designated European site but which has the potential to have implications for the site in view of the site's conservation objectives. The Waterford City and County Development Plan 2022-2027, therefore, falls under the remit of Article 6.

The Regulations and the Planning and Development Act 2010 (as amended) require planning authorities when considering an application for a development that is likely to have a significant effect on a SAC/SPA, to ensure that an appropriate assessment of the implications of the development for the conservation status of the site is undertaken. Similarly land use

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<sup>1</sup> The conservation status of a species can be taken as "favourable" when population dynamics data on the species concerned indicate that it is maintaining itself on a long term basis as a viable component of its natural habitats, the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future and there is and will continue to be a sufficiently large habitat to maintain its populations on a long-term basis. Article 1 (i) of the Habitats Directive 92/43/EEC

The conservation status of a habitat can be taken as "favourable" when its natural range and area it covers within that range is stable or increasing and the ecological factors that are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future.

plans are required to be subject to an appropriate assessment screening as set out in Section 177 U of the Act. “The competent authority shall determine that an appropriate assessment of a draft land use plan or a proposed development, as the case may be, is not required if it can be excluded, on the basis of objective information, that the draft land use plan or proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site.”

### **1.2 Appropriate Assessment: Purpose and Process**

The Department of Environment, Heritage and Local Government published *Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities* in December 2009. This guidance document sets out the steps and procedures to be followed in undertaking an appropriate assessment of statutory land use plans within the framework of current planning legislation.

Section 4.10 of the Guidance states “ It is the competent authority’s responsibility to carry out the appropriate assessment of the plan. The Statement of AA of plans should be based on best available information, objective criteria, best scientific knowledge and expert judgment in relation to its impact on the integrity of a Natura 2000 site with respect to the conservation objectives of the site and to its structure and function. There should be no reasonable scientific doubt as to the absence of effects.”

It is recommended that the Department be consulted by a planning authority at every stage of the plan making process (i.e. at the pre-draft, draft and proposed amendments stages). The Department’s comments should be taken into account by the planning authority before the plan is adopted. In each iteration of the plan, earlier observations from the Department should be carried forward.

Section 4.8 of the guidance states “The key to deciding if an appropriate assessment of a plan would be required is determined by an assessment of whether the plan and its policies and objectives are likely to have a significant effect on a Natura 2000 site. The decision will be influenced by the nature and extent of the development likely to be proposed in the plan, and the plan’s area *in situ*, *ex situ* and in combination relationship to adjoining the Natura 2000 sites and the wider Natura 2000 network.

When screening the plan and its policies and objectives there are two possible outcomes:

The plan poses no risk of a significant effect and as such requires no further assessment; and the plan has potential to have a significant effect (or this is uncertain) and AA of the plan is necessary.

Screening can be used to establish which policies and objectives have potential to have significant effects, and therefore the ones that require further attention at the AA stage.

The European Commission methodological guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive sets out the four stages for the assessment.<sup>2</sup>

**Stage 1. Screening** — the process which identifies the likely impacts upon a Natura 2000 site of a project or plan, either alone or in combination with other projects or plans, and considers whether these impacts are likely to be significant;

**Stage 2. Appropriate assessment** — the consideration of the impact on the integrity of the Natura 2000 site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts. The output of the AA is a Natura Impact Report;

**Stage 3. Assessment of alternative solutions** — the process which examines alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the Natura 2000 site;

**Stage 4. Assessment where no alternative solutions exist and where adverse impacts remain** — an assessment of compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed.

### **1.3. Procedure for stage one screening**

This report consists of Natura Impact Report following a screening for Habitats Directive Assessment of the Development Plan for Waterford City and County 2022-2028.

The screening stage examined the likely effects of the Waterford City and County Development Plan on Natura 2000 sites in Waterford and within a 15km radius of the City and County and considers whether it could be objectively concluded that these sites would not be significantly impacted by policies, objectives and zonings in the Plan. This assessment comprised four steps:-

**Step 1: determining whether the project or plan is directly connected with or necessary to the management of the site: -**

The Waterford City and County Development Plan 2022-2028 is a spatial planning framework for Waterford City and County and is not directly connected to the management of any Natura 2000 sites.

**Step 2: describing the project or plan and the description and characterisation of other projects or plans that in combination have the potential for having significant effects on the Natura 2000 site;**

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<sup>2</sup> *Assessment of plans and projects significantly affecting Natura 200 sites- methodological guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC.*  
Managing Natura 2000 sites The provisions of Article 6 of the Habitats Directive 92/43/EEC.  
European Commission (2018)

The objective of the Waterford City and County Development Plan 2022-2028 is to provide a strategic planning framework for the development of Waterford City and County. The Plan is intended to be a framework for local authority development and will address issues such as settlement, transportation, economic development, placemaking, heritage, conservation, climate action and environmental protection.

With a total population in excess of 116,000 (Census 2016), Waterford City and County encompasses 2.3% of the state population. One of the key assets of the City and County is its diversity of landscapes from uplands to woodlands, rivers and the coast providing for a strong tourism base. Waterford is characterised by two significant waterway corridors, the River Blackwater and River Suir and a number of other smaller rivers. The county has 147km of coastline and mountain ranges in the Comeraghs and Knockmealdowns. Waterford contains several sites designated for their nature conservation value especially along the coast. There are 14 Natura 2000 sites within the County comprising six Special Protection Areas and nine Special Areas of Conservation and 3 sites within 15km of the Waterford boundary with other counties.

### **Step 3: Identifying the potential effects on the Natura 2000 site;**

The DoEHLG Guidance on Appropriate Assessment on Plans and Projects in Ireland (December 2009) states that all Natura 2000 sites within or adjacent the City & County must be mapped and tabulated, and site integrity and site conditions necessary to support the site integrity must be indicated.

The information presented in Table 1 details the Natura 2000 site within Waterford City & County. Table 2 details sites outside the Plan area and within a 15km buffer of the City & County .

The Natura 2000 sites are listed by designation; Special Areas of Conservation / Special Protection Areas. The following information is listed for each Natura 2000 site:

- Site code
- Site name
- Qualifying interests
- Conservation objectives
- Threats to site integrity

### **Step 4: Assessing the significance of any effects on the Natura 2000 site.**

The screening stage involves application of the precautionary principle proportional to the policy/objective and the Natura 2000 site in question. Objectives and policies from the Waterford City & County Development Plan and their impact on Natura sites have been screened to ascertain if the policies / objectives are likely to have significant effects on any Natura 2000 sites, using the following framework.

- Development Plan zoning/policy/objective

- Natura 2000 site
- Qualifying interests
- Threats to site integrity
- Potential impacts from the Waterford City & County Development Plan 2013-2019
- Risk of significant impact (Y/N)
- Potential 'in combination' impacts
- Risk of significant impacts (Y/N)
- Avoidance and (then) mitigation measures
- Action required: Policy change needed / rewording / additional CDP objective

Where no significant effects are found, then policies or objectives are accepted. If all the policies / objectives/zonings in the Waterford City and County Development Plan are found not to have a significant effect on any Natura 2000 site no further assessment is required.

Where a policy / objective as worded does have potential for a significant effect, a Stage 2 Appropriate Assessment and preparation of a Natura Impact Report is required.

The following guidance documents informed the assessment methodology:

EC (2001) *Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC*. Environment Directorate-General of the European Commission.

EC (2018) *Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC*. European Commission, Brussels.

DEHLG (2010) *Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities*. Department of the Environment, Heritage and Local Government, Dublin.

NPWS (2010a) *Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities*. Circular Letter NPWS 1/10 & PSSP 2/10. Department of the Environment, Heritage and Local Government, Dublin.

#### **1.4 Data Sources**

National Parks and Wildlife Service published a series of Conservation Objectives for the range of Natura 2000 sites in Waterford which set out targets and indicators for maintenance or restoration of the favourable conservation status of the qualifying habitats and species of the Natura 2000 Network.

The overriding objective of the Habitats Directive is to ensure that the habitats and species covered achieve 'favourable conservation status' and that their long-term survival is secured across their entire natural range within the EU (EU Commission, 2010). In its broadest sense, favourable conservation status means that an ecological feature is being maintained in a satisfactory condition, and that this status is likely to continue into the future.

The conservation status of a species is the sum of the influences acting on the species that may affect the long-term distribution and abundance of its populations. The conservation status will be taken as ‘favourable’ when:

- the population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations

For coastal SPA sites, conservation objectives are defined for attributes relating to bird species populations, and for attributes related to the maintenance and protection of habitats that support them. These attributes are:

- Population trend;
- Population distribution;
- Habitat range and area (extent).

Appendix 1 details the Conservation Objectives for the Natura 2000 Network in Waterford.

Some sites within the Natura 2000 Network were the subject of Conservation Management Plans prepared by NPWS which although were not all published provide useful baseline information on habitat mapping and habitat management issues pertaining to those sites. Plans were prepared for Ardmore Head, Tramore Dunes and Back Strand and the Comeragh Mountains.

A number of habitat and species specific surveys commissioned by NPWS contain valuable habitat data and condition status assessments relevant to a number of sites within the Natura 2000 Network in Waterford. These include;

Conservation Objectives Supporting Documents for Waterford’s Natura2000 Network  
National Survey of Native Woodland 2003-2008  
National Survey of Upland Habitats (Pilot Survey Phase, 2009-2010) Site Report No. 3:  
Comeragh Mountains cSAC  
Saltmarsh Monitoring Project 2007-2008  
The Status of EU Protected Habitats and Species in Ireland 2019  
Waterford Chough Survey 2008  
Wildlife Manual 78 The Irish Semi-natural Grasslands Survey 2007-2012  
Wildlife Manual 105 Calaminarian Grassland Monitoring 2018  
Wildlife Manuals 108 Saltmarsh Monitoring Project 2017-2018

Other reports that contain valuable baseline data and analysis of trends in conservation status include;



## **2. Overview of Waterford City and County Development Plan and the Receiving Environment**

### **2.1 Overview of Waterford City and County Development Plan**

The Waterford City and County Development Plan is a land use plan and overall strategy for the proper planning and sustainable development of Waterford City and County over the six year period 2022-2028. The Development Plan is structured as follows;

Volume 1- Written Statement detailing Context and Strategy, policies for Waterford City and County in relation to; Economy, Education and Retail, Transport and Mobility, Utilities and Infrastructure, Energy and Communication, Housing and Sustainable Communities, Placemaking, Climate Action, Biodiversity and Environment, Landscape, Coast, Marine and Green Infrastructure and Heritage.

Volume 2 contains appendices detailing protected sites, landscape and seascape character assessment, flood risk assessment, zoning and settlement maps, SEA Environmental Report and Natura Impact Report.

### **2.2 Waterford City and County Development Plan Themes and Objectives**

The vision of the Plan is that by 2028 Waterford City and County will have continued to grow and will be evolving to become an even more attractive, prosperous, resilient and sustainable place anchored by Waterford City as a Living and Learning City and City Region driver. It will be an excellent place to live, visit and do business. It will be recognised for enterprise and inventiveness in the knowledge economy and high-value markets with a particular focus on biopharmaceuticals, technological innovation, tourism, food and drink, fishing and the primary industries and the City and County's unique built, historic, cultural and natural environment, which will be protected and, where appropriate, enhanced as a key asset in underpinning a high quality of life and place. Decision makers will have acted confidently and taken the courageous decisions necessary to further develop a robust and diversified economy. The council will have taken a proactive approach towards development that promotes and facilitates appropriate development that nonetheless; ensures the sustainable use of natural resources, can deal with climate change and creates a more, open inclusive society.

The Core Strategy Strategic Aims of the Plan are as follows;

1. Based on the population /employment targets and policy objectives of the NPF, RSES & MASP, provide a local policy framework to support development where it is

consistent with the principles of sustainable development, and which is applied through planning decisions which are clear, consistent, robust and risk adverse.

2. Identify investment priorities to deliver and support the settlement strategy and hierarchy, founded on the principle of infrastructure-led development.
3. Counteract imbalance in housing type, tenure and location both within settlements, between settlements and across broader rural areas in order to meet the needs of the people of Waterford, mitigating current residential leakage and unsustainable travel patterns.
4. To require where appropriate all plans and projects to comply with the requirements of the SEA, Water Framework, Flood and Habitats Directives. To protect the integrity of all Natura 2000 sites, pNHAs and sites of Local Biodiversity Importance.
5. To ensure the policies and objectives of the Development Plan demonstrate consistency with national and regional policy objectives set out in the NPF, RSES and MASP.
6. To implement a tiered and infrastructure-led approach to the development of new residential land and engage in active land management to bring forward opportunities for redevelopment where feasible.
7. Develop key infrastructure required to develop the concentric city model for Waterford City, consistent with the NPF, RSES and MASP and founded on the assimilation of PLUTS and WMATS policy objectives.
8. Implement the Waterford City and County Climate Adaptation Strategy 2019 and promote a climate resilient pattern of development and land uses which assist in achieving national climate change mitigation and adaptation targets.
9. To protect and strengthen the retail primacy of Waterford City within the Southern Region.
10. To protect and enhance the vibrancy and vitality of urban and rural centres and their mixed use functions/capacity as community hubs.
11. To enhance the sense of place throughout settlements in Waterford and deliver 10 minute neighbourhoods through enhanced pedestrian and cycle permeability and mixed land use planning.
12. To protect existing employment and promote new employment areas at strategic locations and district and local services centres across Waterford county.
13. Continue to encourage and promote the sustainable development of a range of quality tourism facilities, attractions and accommodation types across Waterford.

### **2.3 Description of Natura 2000 Network**

Waterford supports a wide range of habitats and species including Blanket Bog, Dry and Wet Heath, Rivers with Floating and Tall Herb Vegetation, Coastal Grassland, Salt Marsh and Mudflats, Alluvial and Oak Woodlands. The value of these habitats is recognised in the high number of sites in the county designated by the State for nature conservation. There are nine SACs and six SPAs designated in County Waterford. These sites must be managed to ensure maintenance or restoration of their favourable conservation status.



**Map 1.** Special Areas of Conservation (in blue) and Special Protections Areas (red hatching) in Waterford.



**Table 1: Natura 2000 sites within Waterford City and County**

Site code Site name	Qualifying interests	National Conservation Status 2019 <sup>3</sup>	Conservation Objectives
0002137 Lower River Suir	Alluvial Wet Woodland	Bad (declining)	To restore the favourable conservation condition of Alluvial Woodland
	Yew Wood,	Bad (stable)	To restore the favourable conservation condition of Yew Woods
	Floating River Vegetation,	Inadequate (declining)	To maintain the favourable conservation condition of Floating River Vegetation
	Atlantic Salt Meadows,	Inadequate (declining)	To restore the favourable conservation condition of Atlantic Salt Meadows
	Mediterranean Salt Meadows	Bad (declining)	To restore the favourable conservation condition of Mediterranean Salt Meadows
	Old Oak Wood	Bad (declining)	To restore the favourable conservation condition of Old Oak Woodland
	Eutrophic Tall Herbs	Bad (stable)	To maintain the favourable conservation condition of Eutrophic Tall Herbs
	Sea Lamprey,	Favourable (stable)	To restore the favourable conservation condition of Sea Lamprey
	Brook Lamprey,	Unknown	To restore the favourable conservation condition of Brook Lamprey
	River Lamprey,	Bad (declining)	To maintain the favourable conservation condition of River Lamprey
	Freshwater Pearl Mussel,	Bad (declining)	To restore the favourable conservation condition of Freshwater Pearl Mussel
	Crayfish,	Bad (stable)	To restore the favourable conservation condition of Crayfish
	Twite Shad,	Inadequate (stable)	To restore the favourable conservation condition of Twite Shad
		Favourable (improving)	To restore the favourable conservation condition of

<sup>3</sup> The Status of EU Protected Habitats and Species in Ireland 2019 ( Department of Culture, Heritage and the Gaeltacht)

	Atlantic Salmon, Otter		River Lamprey  To restore the favourable conservation condition of Freshwater Pearl Mussel  To maintain the favourable conservation condition of Crayfish <sup>4</sup>  To restore the favourable conservation condition of Twaite Shad  To restore the favourable conservation condition of Salmon  To maintain the favourable conservation condition of Otter  In accordance with attributes and targets set out in Conservation Objectives Series (NPWS 2017)
002123 Ardmore Head	Dry coastal heath Vegetated sea cliffs.	Bad (stable)  Inadequate (stable)	To maintain the favourable conservation condition of Vegetated sea cliffs  To maintain the favourable conservation condition of Dry Heath
000072 Blackwater River	Estuary Mudflats	Inadequate (declining)  Inadequate (declining)  Inadequate (stable)	To maintain the favourable conservation condition of Estuary  To maintain the favourable conservation condition of

<sup>4</sup> Note the crayfish population of the River Suir was decimated by the Crayfish Plague in 2018

(Cork/Waterford)	Shingle Banks,	Favourable (stable)	mudflats and sandflats
	Salicornia mudflats	Inadequate (declining)	To maintain the favourable conservation condition of perennial vegetation of stony banks
	Atlantic Salt Meadows	Inadequate (declining)	To maintain the favourable conservation condition of salicornia mudflats
	Mediterranean Salt Meadows	Inadequate (declining)	To restore the favourable conservation condition of Atlantic Salt Meadows
	Floating River Vegetation	Bad (declining)	To maintain the favourable conservation condition of Mediterranean Salt Meadows
	Old Oak Woods	Bad (stable)	To maintain the favourable conservation condition of Floating River Vegetation
	Alluvial Woodland	Bad (declining)	To restore the favourable conservation condition of Old Oak Woodland
	Yew Woodland	Bad (declining)	To restore the favourable conservation condition of Alluvial Woodland
	Freshwater Pearl Mussel	Bad (stable)	Objective under review by NPWS
	White-clawed Crayfish	Bad (stable)	To restore the favourable conservation condition of Freshwater Pearl Mussel
	Twaite Shad	Favourable (stable)	To maintain the favourable conservation condition of Crayfish <sup>5</sup>
	Sea Lamprey,	Unknown	To restore the favourable conservation condition of
	Brook Lamprey,	Inadequate (stable)	
	River Lamprey,	Favourable (improving)	
	Salmon	Favourable (stable)	
	Otter		
Killarney Fern			

<sup>5</sup> Note the crayfish population of the River Suir was decimated by the Crayfish Plague in 2018

			<p>Twaite Shad</p> <p>To restore the favourable conservation condition of Sea Lamprey</p> <p>To maintain the favourable conservation condition of Brook Lamprey</p> <p>To maintain the favourable conservation condition of River Lamprey</p> <p>To maintain the favourable conservation condition of Salmon</p> <p>To restore the favourable conservation condition of Otter</p> <p>To maintain the favourable conservation condition of Killarney Fern</p> <p>In accordance with attributes and targets set out in Conservation Objectives Series (NPWS 2017)</p>
001952 Comeragh Mountains	<p>Blanket bog</p> <p>Dry Heath</p> <p>Wet Heath</p> <p>Alpine Heath</p>	<p>Bad (declining)</p> <p>Bad (stable)</p> <p>Bad (declining)</p> <p>Bad (improving)</p>	<p>To maintain or restore the favourable conservation condition of the Annex I Habitat(s) and/or Annex II species for which the cSAC has been selected.</p>



	<p>Rocky Slopes</p> <p>Oligotrophic Lakes</p> <p>Floating River Vegetation</p> <p>Slender Green Feather Moss</p>	<p>Inadequate (stable)</p> <p>Inadequate (stable)</p> <p>Inadequate (declining)</p> <p>Favourable (stable)</p>	
<p>002324</p> <p>Glendine Wood</p>	<p>Semi-natural Woodland with rare assemblages of Ground Flora.</p> <p>Killarney Fern</p>	<p>Favourable (stable)</p>	<p>To maintain or restore the favourable conservation condition of the Annex I</p> <p>Habitat(s) and/or Annex II species for which the cSAC has been selected.</p>
<p>000665</p> <p>Helvick Head</p>	<p>Vegetated Sea Cliffs</p> <p>Dry Heath.</p>	<p>Inadequate (stable)</p> <p>Bad (Stable)</p>	<p>To maintain the favourable conservation condition of the vegetated sea cliffs in Helvic Head Sac defined in the Conservation Objectives Series (NPWS 2016)</p> <p>To maintain the favourable conservation condition of Dry Heath in Helvic Head SAC defined in the Conservation Objectives Series (NPWS 2016)</p>
<p>000668</p> <p>Nier Valley Woods</p>	<p>Old Oak Woodlands</p> <p>Dry Heath</p>	<p>Bad (Declining)</p> <p>Bad (Stable)</p>	<p>To maintain or restore the favourable conservation condition of the Annex I</p> <p>Habitat(s) and/or Annex II species for which the cSAC has been selected.</p>
<p>002162</p>	<p>Estuary</p>	<p>Inadequate (declining)</p>	<p>To maintain the favourable conservation condition of</p>

River Nore and River	Mudflats & Sandflats	Inadequate (declining)	Estuary
Barrow	Reefs	Inadequate (stable)	To maintain the favourable conservation condition of mudflats and sandflats
	Salicornia Mudflats	Favourable (stable)	To maintain the favourable conservation condition of salicornia mudflats
(Waterford Estuary)	Atlantic Salt Meadows	Inadequate (declining)	To restore the favourable conservation condition of Atlantic Salt Meadows
	Mediterranean Salt Meadows	Inadequate (declining)	To restore the favourable conservation condition of Mediterranean Salt Meadows
	Floating River Vegetation	Bad (stable)	To restore the favourable conservation condition of Floating River Vegetation
	Dry Heath	Bad (declining)	To maintain the favourable conservation condition of Dry Heath
	Tall Herb River Vegetation	Inadequate (declining)	To maintain the favourable conservation condition of Tall Herb River Vegetation
	Petrifying Springs	Bad (declining)	To maintain the favourable conservation condition of Petrifying Springs
	Old Oak Woods	Bad (declining)	To restore the favourable conservation condition of Old Oak woods
	Alluvial Woods	Bad (declining)	To restore the favourable conservation condition of Alluvial woods
	White-clawed Crayfish	Bad (declining)	To maintain the favourable conservation condition of Crayfish
	Nore Freshwater Pearl Mussel	Inadequate (declining)	
	Whorl Snail	Bad (declining)	
	Twaite Shad	Bad (stable)	
	Sea Lamprey,	Favourable (stable)	
	Brook Lamprey,	Unknown	

	<p>River Lamprey, Salmon Otter Killarney Fern</p>	<p>Inadequate (stable) Favourable (improving) Favourable (stable)</p>	<p>To restore the favourable conservation condition of Nore Pearl Mussel</p> <p>To maintain the favourable conservation condition of Whorl Snail.</p> <p>To restore the favourable conservation condition of Twaite Shad</p> <p>To restore the favourable conservation condition of Sea Lamprey</p> <p>To restore the favourable conservation condition of Brook Lamprey</p> <p>To restore the favourable conservation condition of River Lamprey</p> <p>To restore the favourable conservation condition of Salmon</p> <p>To restore the favourable conservation condition of Otter</p> <p>To maintain the favourable conservation condition of Killarney Fern</p> <p>In accordance with attributes and targets set out in Conservation Objectives Series (NPWS 2011)</p>
<p>00671 Tramore Dunes</p>	<p>Mudflats and sandflats</p>	<p>Inadequate ( declining)</p>	<p>To maintain the favourable conservation condition of mudflats and sandflats</p>

and Back Strand	Drift lines Vegetated Shingle Salicornia colonising mud and sand Atlantic Salt Meadows Mediterranean Salt Meadows Embryonic Dunes White Dunes Fixed Dunes.	Inadequate ( declining) Inadequate (stable) Favourable (stable) Inadequate ( declining) Inadequate ( declining) Inadequate (stable) Inadequate (stable) Bad (declining)	To maintain the favourable conservation condition of annual vegetation of drift lines To maintain the favourable conservation condition of perennial vegetation of stony banks To maintain the favourable conservation condition of Salicornia colonising mud and sandflats To maintain the favourable conservation condition of Atlantic Salt Meadows To maintain the favourable conservation condition of Mediterranean Salt Meadows To maintain the favourable conservation condition of Embryonic Shifting Dunes To maintain the favourable conservation condition of Marram/ White Dunes To maintain the favourable conservation condition of Fixed Dunes  In accordance with attributes and targets set out in Conservation Objectives Series (NPWS 2013)
<b>Site code</b> <b>Site name</b>	<b>Qualifying interests</b>		
Tramore Backstrand	Brent Geese, Golden Plover, Grey Plover, Black-tailed Godwit, Bar-tailed Godwit, Lapwing, Dunlin, Sanderling,		To maintain the bird species of special conservation interest for which this SPA has been listed at favourable conservation status
Dungarvan Bay	Brent Goose, Black-tailed Godwit , Bar-tailed Godwit, of international importance		To maintain the bird species of special conservation interest for which this SPA has been listed at favourable conservation status

	Nationally important numbers of Shelduck, Wigeon, Red-breasted Merganser, Grey Plover, Golden Plover, Lapwing, Knot, Sanderling, Dunlin, Redshank and Turnstone		
Blackwater Estuary	Little Egret, Golden Plover, Bar-tailed Godwit, Sandwich Tern, Roseate Tern, Common Tern		To maintain the bird species of special conservation interest for which this SPA has been listed at favourable conservation status
Helvick Head Coast	Peregrine, Chough Kittiwake and Guillemot		To maintain the bird species of special conservation interest for which this SPA has been listed at favourable conservation status
Mid-Waterford Coast	Peregrine, Chough Herring Gull, Cormorant		To maintain the bird species of special conservation interest for which this SPA has been listed at favourable conservation status

**Table 2: Natura 2000 sites within 15km of Waterford City and County**

<b>County Cork</b>		<b>Special Areas of Conservation (SACs)</b>
<b>Site code</b> <b>Site name</b>	<b>Qualifying interests</b>	<b>Conservation objectives</b>
Ballymacoda Bay SPA	Estuaries, salt meadows, mudflats and sandflats	To maintain the Annex I habitats and Annex II species for which the cSAC has been selected at favourable conservation status.

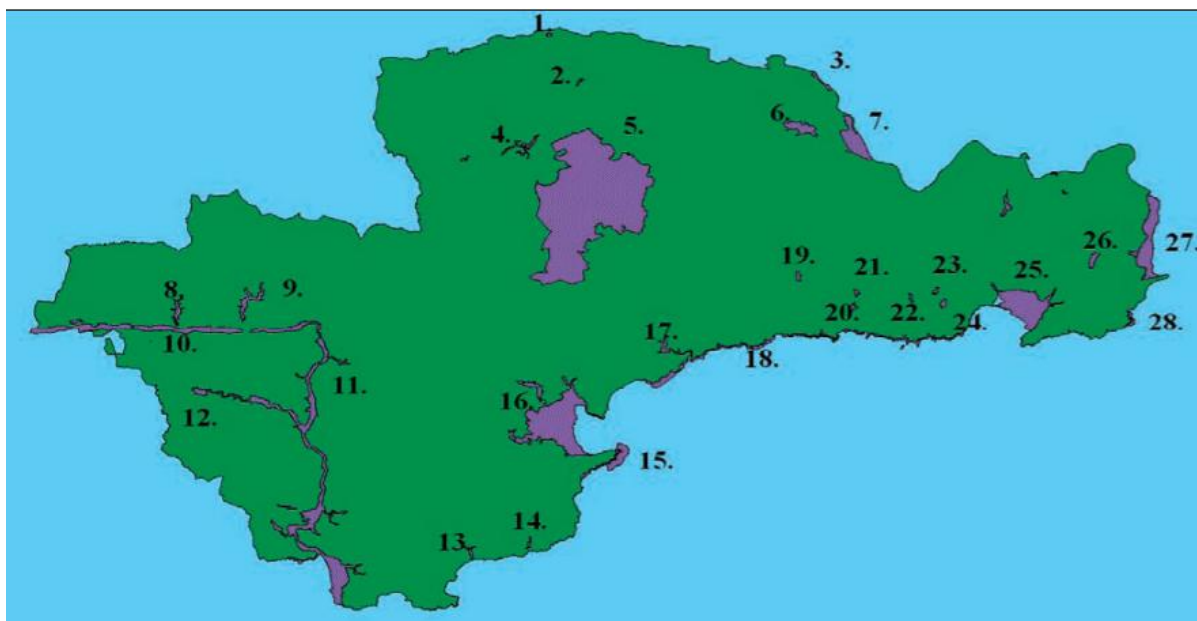
		.
000072 Blackwater River (Cork/Waterford)	Estuary, Mudflats, Shingle Banks, Salt Meadows, Floating River Vegetation, Old Oak Woods, Alluvial Woodland, Yew Woodland, Freshwater Pearl Mussel, White-clawed Crayfish, Shad, Lampreys, Salmon, Otter, Killarney Fern	To maintain the Annex I habitats and Annex II species for which the cSAC has been selected at favourable conservation status.  See above
<b>Kilkenny</b>		<b>Special Areas of Conservation (SACs)</b>
<b>Site code</b> <b>Site name</b>	<b>Qualifying interests</b>	<b>Conservation objectives</b>
0002162 River Barrow and River Nore	Alluvial Wet Woodlands, Petrifying Springs, Old Oak Woodlands, Floating River Vegetation, Estuary, Tidal Mudflats, Salicornia Mudflats, Atlantic Salt Meadows, Dry Heath and Eutrophic Tall Herbs  Sea lamprey, Brook Lamprey, River Lamprey, Freshwater Pearl Mussel, Nore Freshwater Pearl Mussel, Crayfish, Twaite Shad, Atlantic Salmon, Otter <i>Vertigo moulinsina</i> , Killarney Fern	To maintain the Annex I habitats and Annex II species for which the cSAC has been selected at favourable conservation status.  See above
<b>Wexford</b>	Large Shallow Inlets and Bays	To maintain the favourable conservation condition of

000764 Hook Head SAC	Reefs Vegetated Sea Cliffs	these habitats In accordance with attributes and targets set out in Conservation Objectives Series (NPWS 2013).
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## 2.4 Other Designated Sites

### 2.4.1 Proposed Natural Heritage Areas

There are 30 proposed Natural Heritage Areas in Waterford City and County protected in the Development Plan in recognition of nationally important habitats, species and sites of geological interest. Fenor Bog is also designated a Nature Reserve and is the only community owned Nature Reserve in the State. Map 2 and Table 3 below list the proposed NHAs in Waterford.



**Map 2. Proposed Natural Heritage Areas in Waterford City and County**

Reference No.	pNHA	Reference No.	pNHA
1.	Kilsheelan Lake	15.	Heilbhc Head
2.	Toor Wood	16.	Dungarvan Harbour
3.	Fiddown Island	17.	Stradbally Woods
4.	Nire Valley Woods	18.	Ballyvoyle Head to Tramore
5.	Comeragh Mountains	19.	Ballinlough
6.	Portlaw Woods	20.	Lissaviron Bog
7.	Coolfin & Darrigle Marshes	21.	Castlecragdock Fen
8.	Glenmore Woods	22.	Fenor Bog (NHA)
9.	Lismore Woods	23.	Carrickavrantry Reservoir & Marsh
10.	Blackwater Callows	24.	Islandtarsney Fen
11.	Blackwater River and Estuary	25.	Tramore Dunes & Backstrand
12.	Tallow Church of Ireland	26.	Belle Lake
13.	Ballyeelinan Wood	27.	Creadan Head
14.	Glen Anna Wood	28.	Dunmore East Cliffs



29.	Kilbarry/Ballinakill	30.	King's Channel
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**Table 3 Proposed Natural Heritage Areas in County Waterford**

### 2.4.2 Wetlands

Wetlands are areas of marsh, fen, peat land or water, whether natural or artificial, permanent or temporary, with water that is static or flowing. Wetlands are significant habitats in Waterford providing habitats for communities of species that can survive in aquatic and semi-aquatic conditions. The amount of drainage and water present are their most important feature as increased drainage or flooding can cause significant change in habitat value and species diversity. The Water Framework Directive and Ramsar Convention provide for the protection and wise use of Wetlands. A total of 45 sites have been identified as Ramsar sites in Ireland. These are wetlands that are of significant value for nature. There are two Ramsar Sites in Co. Waterford - Dungarvan Harbour and Tramore Bay.

There are over 200 wetlands of local biodiversity interest in Waterford and ongoing survey work since 2006<sup>6</sup> has recorded their habitat diversity and condition. These and other habitats such as riverbanks, small woodlands and hedgerows are very important as interconnecting ecological corridors between designated sites and recognised under Article 10 of the EU Habitats Directive which states that Member States shall endeavour in their land use planning and development policies, to encourage the management of features of the landscape, which are of major importance for wild flora and fauna.

A key challenge is the maintenance of favourable conservation status for all protected habitats and species avoiding encroachment of development on designated sites and sites of local biodiversity value, maintaining appropriate buffers around these areas and also enhancing green infrastructure and ecological corridors between key sites of nature conservation value.

## 2.5 Overview of Receiving Environment

### 2.5.1 Conservation Status of protected habitats and species occurring in Waterford

In December 2007, the first baseline assessments of conservation status for all 59 habitats and c.100 species listed for protection by the EU in Ireland was prepared by the National Parks and Wildlife Service as required under Article 17 of the Habitats Directive. The report was the first such comprehensive compilation of the status of habitats, animals and plants in Ireland which have protected status under national and EU law. The report found that only 7% of the habitats examined were in good status, with 46% inadequate and 47% bad. Many habitats associated with water were considered to be in bad condition. Even moderate declines in water quality makes rivers and lakes unsuitable for many fish and invertebrate species. Coastal habitats were found to have declined in quality, often as a result of recreation and development pressure over the previous 20 years. Roughly 50% of the species examined

<sup>6</sup> Wetland Surveys completed in 2006, 2015 and 2021.

were in good status, while 10% were considered bad. Species such as bat, seals, dolphins and whales were considered to be in good condition.

Availability of data on some Annex II species such as Twaité Shad and Allis Shad is poor but surveys on Otter and Lamprey indicate that they hold favourable conservation status in Waterford.

In Waterford City Annex 1 habitats listed as qualifying interests for this section of the River Suir SAC are Atlantic Salt Meadows and Mediterranean Salt Meadows. Areas of saltmarsh along King's Channel and Ballynakill were surveyed in the NPWS Saltmarsh monitoring project 2007-2008. The overall conservation status of the survey site was rated as unfavourable-bad due to the negative impact of adjacent development, infilling of saltmarsh habitat and disturbance from pipeline construction, potential loss of Mediterranean Salt Meadows (Sea Rush had been recorded in the past but not in this survey) habitat and decline of the rare species Meadow Barley.

A more recent survey in 2017-2018<sup>7</sup> reported a favourable condition status for structure and function of the saltmarsh habitat and good ecological status for the site.

The third Irish report on status of habitats and species protected under the EU Habitats Directive (NPWS 2019) shows that most listed habitats are at unfavourable status and almost half are demonstrating ongoing declines. "The majority of species (57%) listed on the Habitats Directive are, however at Favourable status in Ireland including most of the bat species, seals and cetaceans. A declining trend is reported for 15% of species with freshwater species most at risk. An improving trend is reported for 17% of species with populations of species such as otter and pine marten and many bat species expanding. The salmon is stable due to a very recent improving trend though still in low numbers and is susceptible to a wide range of pressures in the ocean and freshwater. Fish species such as sea lamprey, pollan and twaité shad remain at Bad status although a small number are considered to be in Bad status and continue to require concerted effort to protect and restore them. The report highlighted that the freshwater pearl mussel, which can live to an age of 130 years, is on the brink of extinction in Ireland. Waterford has three freshwater pearl mussel rivers – the Blackwater, Licky and Clodiagh all of which are known to have had a dramatic decline in populations. A survey of the River Clodiagh FPM population by Ross in 2006 estimated a total population of 2,412 individual mussels remaining, 97% of which are longer than 80mm in length. He concluded that there was unlikely to be any living mussels present that are younger than 30 years of age. However by 2019 it is estimated there were under 100 adult mussels remaining with little or no survival of juveniles. Key pressures include hydromorphological and agricultural impacts with sediment run off to the river causing detriment to mussel populations.

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<sup>7</sup> Saltmarsh Monitoring Project 2017-2018 Irish Wildlife Manuals 108 NPWS

## 2.5.2 Water Quality

The maintenance of favourable conservation status for freshwater species is dependent on good habitat quality requiring good water quality. Waterford is fortunate to have a number of high water quality status rivers which are known as Blue Dot Catchments and these include the Glasha, Nier, upper reaches of the Tay and Mahon, Dalligan, Upper Colligan, Glenshelane, Glenafallia, Glenakeefe, Monavugga and Owenashad. Maintenance of high water quality status in these river systems is imperative for the protection of spawning grounds for species such as salmon, lamprey, crayfish and pearl mussel that occur either within the headwaters or downstream in the catchment.

Map 3 below details surface water status across the City and County in the period 2013-2018. Key river catchments are the River Suir and Blackwater.

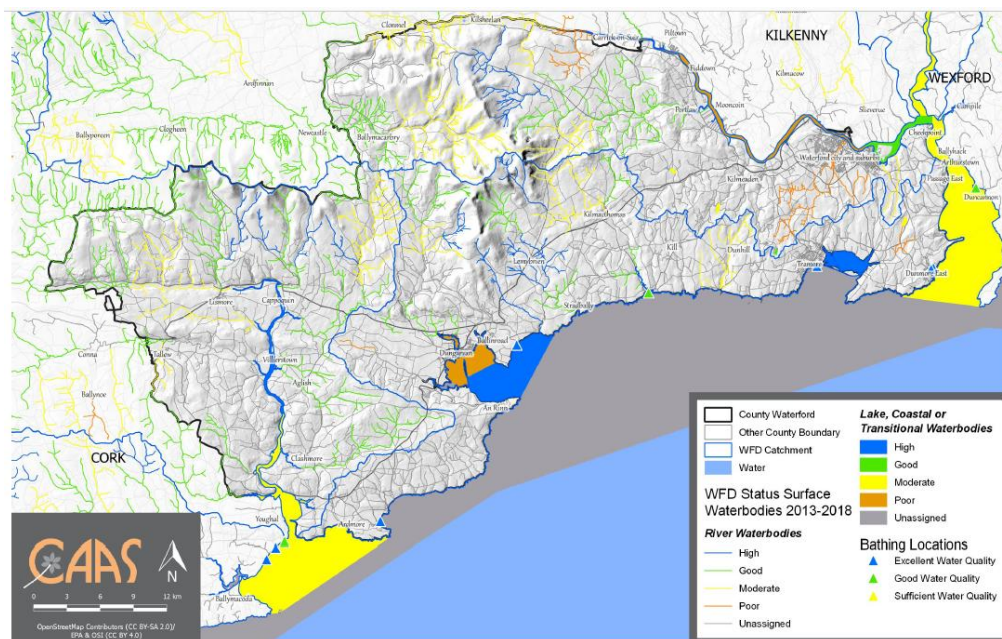


Figure 3.2 Surface Water Status (2013-2018)  
CAAS for Waterford City and County Council

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The status of most of the rivers within the county is classified as moderate, good and high, however sections of rivers (including the Suir, St. John's River, Leperstown Stream and Brickey) are identified as poor due to unsatisfactory ecological and /or physico-chemical status. The surface water status of transitional and coastal waterbodies within and surrounding the county is rated as high including Upper Blackwater Estuary; Tramore Back Strand and Dungarvan Harbour, Good (including Lower Suir Estuary, Little Island-Cheekpoint) and moderate (including Barrow/Suir/Nore Estuary, Lower Blackwater Estuary/Youghal Harbour; Youghal Bay and Waterford Harbour, however some transitional waterbodies (including Upper Suir Estuary; Middle Suir Estuary and Colligan Estuary) are rated as poor due to unsatisfactory ecological and /or physico-chemical status.

Significant pressures identified in Waterford Catchments by the EPA include agriculture, combined sewer overflows and river channel dredging in the River Suir catchment ,

expansion of dairy industry and zero grazing operations with associated increased production of slurry in the Colligan-Mahon catchment, diffuse agriculture and elevated nutrients in the Blackwater catchment while in Blue Dot catchments there is evidence of agricultural land clearance in advance of next round of CAP and agri-environmental schemes. The loss of excess nutrients and sediments, excess Phosphorous in rivers and lakes and nitrogen in estuaries and coastal water bodies can lead to proliferation of algae as evident in Waterford Estuary, Dungarvan Harbour and Ardmore Bay.

Other threats to site integrity include impacts from urban waste water; freshwater habitats and species may be impacted by run off from underperforming sewer networks and misconnections with private foul connections to storm sewers and overflows from combined sewers and storm waters.

In rural areas there is potential for significant effects on groundwater and surface waters from the cumulative impact of increasing rural housing and septic tanks not subject to monitoring and maintenance.

Changes to the physical course and structure of watercourses including dredging and channelling of rivers, land drainage and culverting can impact on the natural functioning of a watercourse with consequent impacts on freshwater habitat and species.

Sediment loss from Forestry and quarrying activities also has potential for significant effects on groundwater and surface waters.

**Table 4** details water quality status for Waterford's rivers and environmental pressures impacting that status. (Source EPA)

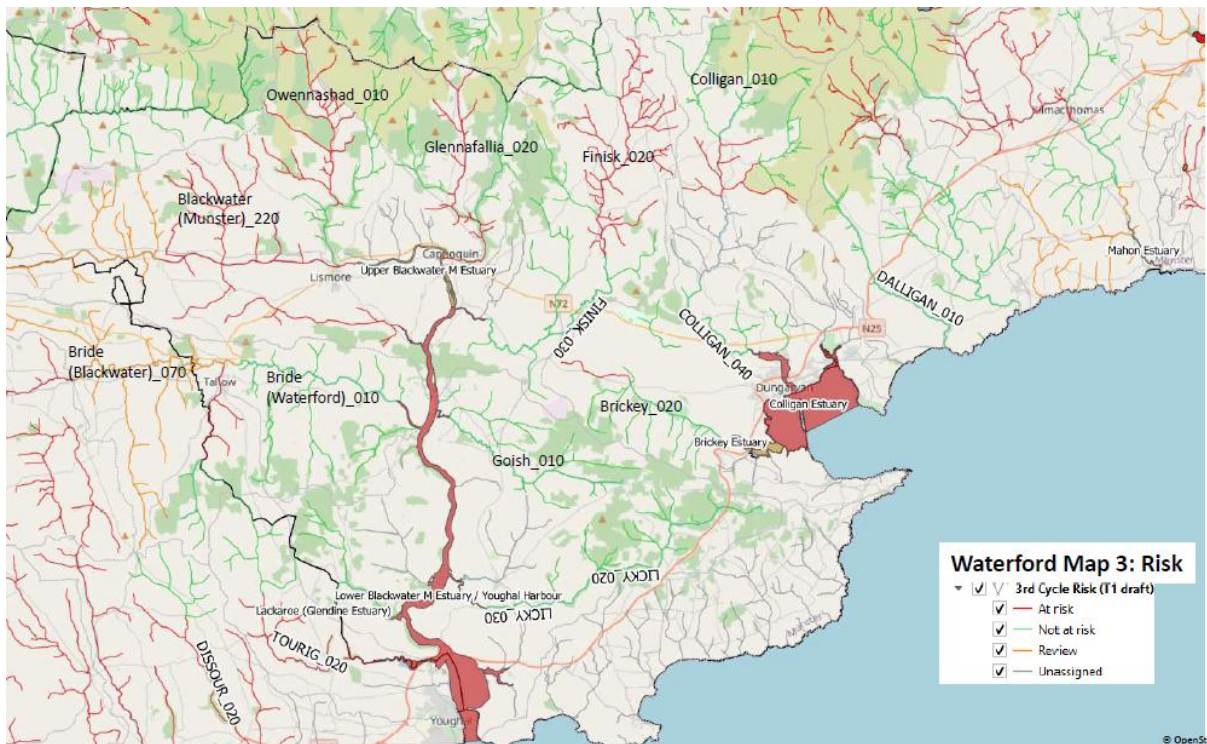
<b>Waterbody</b>	<b>Type</b>	<b>WFD Surface Waterbody Status (2013-2018)</b>
Suir_220	River	Poor-due to poor ecological/biological status. No pressures identified.
St. John's_020	River	Poor-due to poor ecological/biological status. Under significant pressure from agricultural, urban run-off and urban wastewater sources.
Leperstown Stream_010	River	Poor-due to poor ecological/biological status. Under significant pressure from agricultural sources.
Brickey_010	River	Poor-due to poor ecological/biological status. Under significant pressure from agricultural and domestic waste water sources.
Upper Suir Estuary	Transitional	Poor-due to poor ecological/biological status. Under significant pressure from agricultural sources.
Middle Suir Estuary	Transitional	Poor-due to poor ecological/biological status. Under significant pressure from agricultural sources.
Colligan Estuary	Transitional	Poor-due to poor ecological/biological status. Under significant pressure from urban

		wastewater sources.
Suir_210	River	Moderate. No pressures identified.
Suir_200	River	Moderate. No pressures identified.
Suir_190	River	Moderate. No pressures identified.
Owbeg_010	River	Moderate. Under pressure from hydromorphological/anthropogenic sources.
Nier_020	River	Moderate. Under pressure from Forestry sources.
Nier_010	River	Moderate. Under pressure from hydromorphological/anthropogenic sources.
Mahon_020	River	Moderate. Under pressure from urban wastewater sources.
Halfway House Stream_010	River	Moderate. Under pressure from urban run-off sources.
Glenaboy_020	River	Moderate. Under pressure from urban run-off sources.
Finisk_020	River	Moderate. No pressures identified.
Dunhill_010	River	Moderate. Under pressure from domestic wastewater sources.
Colligan_020	River	Moderate. No pressures identified.
Clodiagh (Portlaw)_030	River	Moderate. No pressures identified.
Blackwater (Munster)_220	River	Moderate. Under pressure from extractive industry related sources.
Ballyshunnock	Lake	Moderate. Under pressure from agricultural sources.
Belle	Lake	Moderate. Under pressure from agricultural sources.
Knockaderry	Lake	Moderate. Under pressure from agricultural sources.
Lower Blackwater Estuary/Youghal Harbour	Transitional	Moderate. Under pressure from agricultural sources.
Barrow Suir Nore Estuary	Transitional	Moderate. No pressures identified.
Waterford Harbour	Coastal	Moderate. Under pressure from hydromorphological/anthropogenic sources.
Youghal Bay	Coastal	Moderate. Under pressure from agricultural sources.
Tourig_020	River	Good. No pressures identified.
Tourig_010	River	Good. No pressures identified.
Tay_030	River	Good. No pressures identified.
Tay_010	River	Good. Under pressure from agricultural and forestry sources.
Suir_180	River	Good. No pressures identified.
Suir_170	River	Good. No pressures identified.
Owennnashad_030	River	Good. No pressures identified.
Owennnashad_020	River	Good. No pressures identified.
Nier_030	River	Good. No pressures identified.

Morrageen_010	River	Good. No pressures identified.
Mahon_040	River	Good. No pressures identified.
Licky_030	River	Good. No pressures identified.
Licky_020	River	Good. No pressures identified.
Licky_010	River	Good. No pressures identified.
Goish_020	River	Good. Under pressure from agricultural sources.
Goish_010	River	Good. Under pressure from forestry sources
Glennafallia_020	River	Good. No pressures identified.
Glennafallia_010	River	Good. Under pressure from forestry sources.
Glendine (Blackwater)_010	River	Good. No pressures identified.
Glenaboy_010	River	Good. No pressures identified.
Finisk_030	River	Good. No pressures identified.
Finisk_010	River	Good. No pressures identified.
Colligan_040	River	Good. Under pressure from hydromorphological/anthropogenic sources.
Colligan_010	River	Good. No pressures identified.
Clodiagh (Portlaw)_050	River	Good. No pressures identified.
Clodiagh (Portlaw)_040	River	Good. No pressures identified.
Clodiagh (Portlaw)_020	River	Good. No pressures identified.
Bride (Blackwater)_070	River	Good. No pressures identified.
Blackwater (Munster)_210	River	Good. No pressures identified.
Araglin (Blackwater)_030	River	Good. No pressures identified.
Araglin (Blackwater)_020	River	Good. No pressures identified.
Araglin (Blackwater)_010	River	Good. No pressures identified.
Carraigavrantry	Lake	Good. Under pressure from forestry sources.
Lower Suir Estuary (Little Island-Cheekpoint)	Transitional	Good. Under pressure from agricultural sources
Tay_020	River	High. No pressures identified.
Monavugga_010	River	High. No pressures identified.
Mahon_010	River	High. No pressures identified.
Glenshelane_010	River	High. No pressures identified.
Glenakeeffe_010	River	High. No pressures identified.
Glasha(Waterford)_010	River	High. No pressures identified.
Farnane_010	River	High. No pressures identified.
Dalligan_010	River	High. No pressures identified.
Clodiagh (Portlaw)_010	River	Under pressure from agricultural and forestry sources.
Araglin(Colligan)_010	River	High. No pressures identified.

Upper Blackwater Estuary	Transitional	High. Under pressure from hydromorphological/anthropogenic sources.
Dungarvan Harbour	Coastal	High. No pressures identified.
Tramore Back Strand	Coastal	High. Under pressure from hydromorphological/anthropogenic sources.

The third cycle River Basin Management Plan 2021-2024 has identified a number of watercourses at risk of not achieving good water quality status detailed in Maps 4 and 5 below.



**Map 4.** Watercourses at risk West Waterford



**Map 5.** Watercourses at risk East Waterford

### 2.5.3 Habitat Loss and Species Disturbance

Many of Waterford’s scenic amenity and outdoor recreation areas are within the Natura 2000 network e.g. Comeragh Mountains, Dungarvan Harbour and Tramore Dunes and the Draft Development Plan recognises potential for further development of cycling and walking trails and Blueway related activity on the River Blackwater. The challenge is to maintain a high quality standard of visitor attraction whilst avoiding over tourism and degradation of the natural environment.

Since the onset of the 2020 Pandemic Waterford’s trail network has experienced greater levels of recreational use and demand for extension to the existing trails network. People are seeking greater access to the coast, rivers and uplands and on trails that accommodate physical distancing of 2m. Where trail networks encroach on sites designated for nature conservation there is potential for competing interests and loss of ecological value. This may manifest itself through trampling pressure and erosion of semi-natural habitat e.g. coastal heath, saltmarsh, dry heath and wet heath as users divert from single routes on a trail. The very construction of a trail can cause direct loss of habitat e.g. coastal grassland, dry heath and wet heath and bringing an increased level of usage to what were previously undisturbed areas that may impact on coastal nesting sites for species such as Chough and Peregrine Falcon.

In wetland areas during winter e.g. Dungarvan Harbour and Tramore Back Strand waders and wildfowl are easily disturbed by dogs off leads displacing birds from where they feed thus reducing their energy intake but also causing increase in energy expenditure by needing to fly off to an alternative feeding area where there may be competition for food from other bird species. Where there is constant displacement waterbirds may be disturbed so frequently



that their displacement is equivalent to habitat loss. At its worst effect this may cause reduced survival or reproductive success with significant consequences at population level for that species. Where new trails are created with night time lighting this can also impact on roosting and foraging areas for birdlife and bats. Supporting infrastructure such as car parks may also give rise to increased surface water flow which may impact on adjacent watercourses.

More significant ecological impacts can arise from motorised recreation such as use of scrambler bikes and quads in heather moorland and sand dunes whilst jet skis and power boating can cause disturbance to nesting waterbirds.

As Ireland aims to reduce carbon emissions in line with targets set in the 2021 Climate Action Bill there will be an increase in renewable energy infrastructure including on and off wind turbines. This infrastructure has potential for significant effects on bird life through risk of bird strike and also disturbance to Cetaceans in marine areas.

#### **2.5.4 Noise**

The River Suir provides habitat for a number of freshwater species that are qualifying interests of the SAC. These are; Otter, Sea Lamprey, River Lamprey, Salmon and Twaite Shad. Twaite Shad are a member of the Clupeid Family, which are most sensitive to noise being fish with a swim bladder associated with hearing. Potential for significant effects on the species arises from construction noise that may impact their migration upstream to spawning grounds leading to risk of reduced reproductive success, decreased recruitment, mortality and overall population decline of the Annex 1 qualifying species.

#### **2.6 Protection of species outside designated sites**

While the designation of the Natura 2000 Network is based on the presence of Annex 1 habitats or species that meet a range of criteria for site designation it should be noted that these habitats and species are protected under the Habitats Directive wherever they occur even if ex-situ to the Natura 2000 Network. The presence of such habitats and usage by these species is key to the overall conservation status of the Natura 2000 Network and any potential for significant effects requires comprehensive assessment. Ecological pressures may arise from proposals for drainage and infilling of wet grasslands used by overwintering waders and wildfowl, zoning of lands for development that contain Annex 1 habitats or culverting of watercourses that are important for Otter or freshwater fish. Collation of data on these habitats and species is key to an informed Appropriate Assessment process.

Apart from Annexed habitats Article 10 of the Habitats Directive recognises the importance of ecological networks as corridors and steppingstones for wildlife, including for migration, dispersal and genetic exchange of species of flora and fauna. The Directive requires that ecological connectivity and areas of ecological value outside the Natura 2000 network are maintained and it recognises the need for the management of these areas through land use planning and development policies. Ecological corridors include linear features such as treelines, hedgerows, disused railway lines, rivers, streams, canals and ditches.

### 3. Appropriate Assessment Screening

Having reviewed the conservation status of qualifying interest species of Waterford’s Natura 2000 Network and pressures on the receiving environment the next step in the screening process was to review all policies and land use zonings in the Draft Waterford Development Plan 2022-2028 to assess potential for significant effects on the conservation objectives of the Natura 2000 network.

#### 3.1 Development Plan Policy Screening

The Draft Plan contains over 500 policies and the majority of policies have no implications for significant effects on the conservation objectives for the Natura 2000 Network. Core Strategy Objectives 02 and 17 make reference to UN Goals for Sustainable Development which frame the context for the Draft Plan. Chapter 9 of the Draft Plan – Climate Action, Biodiversity and the Environment sets out policies for protection of the Natura 2000 Network and the AA process and a number of policies throughout the plan are explicit in the requirement to satisfy the AA process in order to deliver that policy e.g. CS06, ECON22, ECON 16, SC36 and SC40. Policies for protection of Water Quality and Flood Plains and promotion of SuDS will in turn provide positive benefits for the Natura 2000 Network e.g. ECON 03, TRANS 59, UTL06, UTL09, UTL10, UTL11, UTL21,H18. Protecting the habitat confers protection for species within the habitat.

No policies were assessed as having potential for adverse impacts (permanent and irreversible) on the integrity<sup>8</sup> of the Natura 2000 Network. However, a number of policies in the Pre-Draft Plan were assessed as having potential for significant effects on Natura 2000 sites and thus screened in for a Stage 2 Appropriate Assessment with recommended wording amendment to mitigate for potential for significant effects. These amendments were incorporated to the policies in the Draft Plan as detailed in table below.

**Table 5. Policies Screened in for AA**

<b>Policy Reference</b>	<b>Policy and mitigation amendment</b>
W City 26	“We will ensure that the growth of the city takes place in an infrastructure led manner.....we support the development of transformational infrastructure such as an additional city centre river crossing and a downstream river crossing to link the R710 to the R711/N25 to the east of the city..... <i>Proposals for development shall ensure no adverse impacts on the integrity of the River Suir SAC.</i>
ECON 12	We will facilitate farm or rural resource related enterprise.....and likely impacts on amenity and the environment <i>and the Natura</i>

<sup>8</sup> whereby the ‘integrity of the site’ defined as the coherent sum of the site’s ecological structure, function and ecological processes, across its whole area, which enables it to sustain the habitats, complex of habitats and/or populations of species for which the site is designated.

	<i>2000 Network.</i>
ECON 23	In collaboration with local communities , we will promote, facilitate.....and deliver improvements to our tourism product....walking and cycling trails....service/rest facilities. <i>Proposals for development shall ensure no adverse impacts on ecological integrity including the Natura 2000 Network.</i>
TRANS 07	We will promote walking and cycling.....routes which are high quality, fully connected and inclusive <i>with no adverse impacts on ecological integrity including the Natura 2000 Network.....</i> or any update thereof.
TRANS10	We will continue to develop an integrated network of greenways/blueways and green/blue routes within Waterford and linking to adjoining counties. <i>Proposals for development shall ensure no adverse impacts on ecological integrity including the Natura 2000 Network.</i>
TRANS27	We will continue to support the development of the Port of Waterford and Waterford Airport to create , maintain and strengthen linkages with EU and international markets <i>subject to environmental considerations including no potential for adverse impacts on the Natura 2000 Network.</i>
TRANS 29	We will support improved berthing facilities for cruise ships ..... subject to environmental considerations <i>including no potential for adverse impacts on the Natura 2000 Network.</i>
CM06	We will facilitate appropriate public access to the coast and the sustainable development of coastal walkways subject to ecological, <i>habitats directive</i> and climate risk assessments.
BGI10	To support the sustainable ..of Blueways ..environmental degradation. <i>Proposals for development shall ensure no adverse impacts on ecological integrity including the Natura 2000 Network.</i>
BGI11	We will work in collaboration...development potential of additional trails, whilst ensuring <i>no adverse impacts on ecological integrity including the Natura 2000 Network</i> and best practise.....and management.
BG12	To develop comprehensive plans for all




	<p>proposed recreational trails that incorporate planning and design of sustainable trails and supporting infrastructure such as car parking and lighting and in consultation with local communities to ensure no adverse impact on local land use and the environment.</p>
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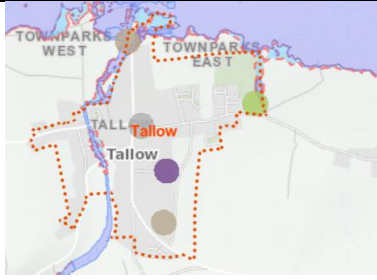

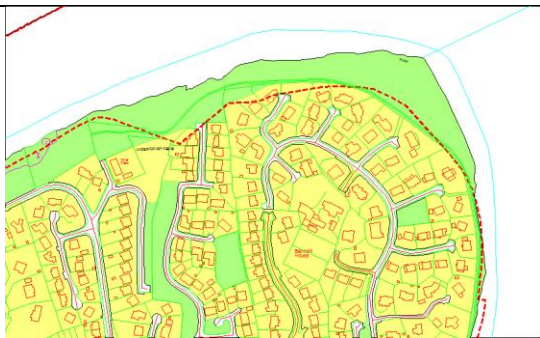
Some policies promote preparation of plans which will be subject to AA as part of that plan process e.g. ECON 17 (Estuary Framework Plan), UTL12 (Renewable Energy Strategy) and SC40 (Open Space Strategy). The existing Renewable Energy Strategy included as Appendix 7 to the Draft Plan was subject to AA Screening in 2016 and found not to have potential for significant effects on the Natura 2000 Network.

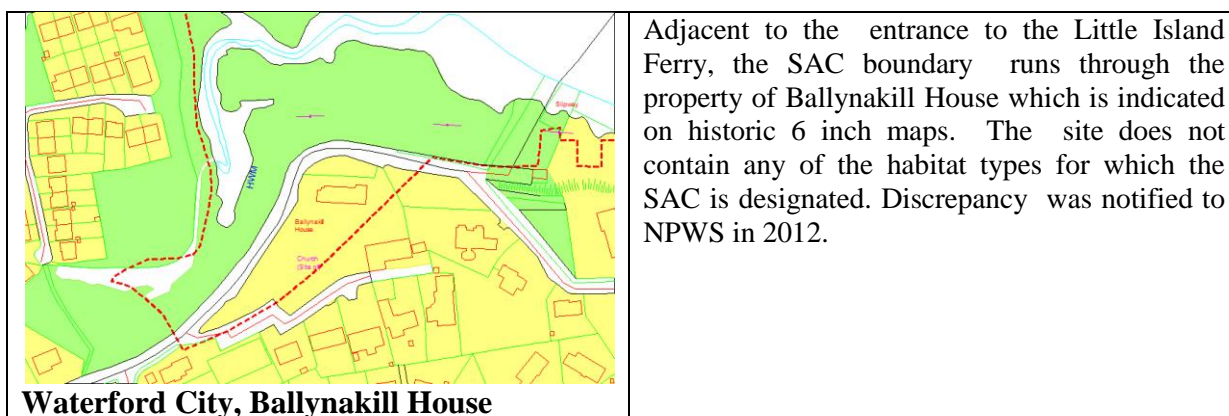
### 3.2 Land Use Zone Screening

The Draft Development Plan Zoning was overlain on Natura 2000 Network mapping to assess potential for significant effects.

**Table 6. Land Use Zoning Screened in for AA**

 <p><b>Ballymacarbry</b></p>	<p>The identified settlement boundary takes account of the flood zone which encompasses the boundary of the SAC. An area zoned institutional in the previous Co. Development Plan which included part of the buffer zone to the river was previously built on subject to development consent in 2005.</p>
 <p><b>Bunmahon</b></p>	<p>No impact on Mid-Waterford Coast SPA .</p> <p>However, the identified settlement boundary includes site of Annex 1 Metalliferous Vegetation. It is a recommendation of this assessment that an objective be added to those cited for Bunmahon as follows; D0 11 To protect former mine spoil vegetation at Knockmahon that corresponds to the Annex 1 Habitat Calaminarian Grassland. There is no SAC designated at the site but there is an obligation to protect the Annex 1 habitat under the Habitats Directive.</p>
 <p><b>Cappoquin</b></p>	<p>The identified settlement boundary takes account of the flood zone which encompasses the boundary of the SAC.</p>

 <p><b>Dungarvan</b></p>	<p>Feeding ground for Annex 1 Brent Geese zoned as conservation, amenity, buffer space.</p>
 <p><b>Portlaoise</b></p>	<p>Zoning encroaches on boundary of River Clodiagh (River Suir) SAC and to avoid potential for impacts on integrity should be re-zoned open space, buffer.</p>
 <p><b>Tallow</b></p>	<p>The identified settlement boundary takes account of the flood zone which encompasses the boundary of the SAC.</p>
 <p><b>Waterford City, Riverside, Ballinakill Downs</b></p>	<p>Historic overlap between the SAC boundary and residential land use zoning incorporating back gardens of 11 houses. SAC boundary overlaps the residential zoned area by approximately 0.5ha. Discrepancy was notified to NPWS in 2012.</p> <p>As the area is already built on (planning permission was approved for 57 houses in 1997 97/226 McNerney Construction and in 1996 for 12 houses 96/9888) a change of the residential zoning to open space would not have any effect on the SAC boundary at this site.</p>
 <p><b>Waterford City, King's Channel</b></p>	<p>Historic overlap between the SAC boundary and residential land use zoning incorporating back gardens of 8 houses. SAC boundary overlaps the residential zoned area for a length of approximately 240m. Discrepancy was notified to NPWS in 2012.</p> <p>Review of the 2000 aerial photographs shows housing in existence and it may be the case that permission was approved prior to advertisement of the River Suir SAC designation on 1<sup>st</sup> July 1999. The 1997 NHA boundary survey noted adjacent housing development in the survey notes.</p>



### 3.3 Population and Residential Zoning Objectives

The Waterford City and County Draft Development Plan 2022-2028 aims to support growth in the Regional City in accordance with the RSES and NPF. A review of the County Development Plan 2012-2018 and City Development Plan 2013-2019 showed that of the existing area of zoned land in the City, approximately 247.51 ha remained undeveloped and c.40 ha of this is subject to extant permissions and in the County, approximately 442.45 ha remained undeveloped and 4.64 ha of this is subject to extant permissions.

Table 7 sets out the projected population targets for Waterford City and County in line with the RSES and NPF. These targets will ensure that Waterford city has the capacity to develop in its role as a regional economic driver for the wider city region, while the growth rate for Dungarvan is 50% that of the City enabling it to function as a key service town for West Waterford.

For rural areas, development plan objectives are to facilitate the housing requirements of the local rural community subject to satisfying site suitability and technical considerations and directing urban generated development to areas zoned and designated for housing in the adjoin villages and rural settlement nodes. Provision of single houses in the countryside will be based on economic or social need, siting and design and having regard to viability of smaller towns and rural settlements consistent with NPO19 of the National Planning Framework. The primary objective is to ensure consolidation and growth of smaller towns, rural settlements and settlement nodes.

**Table 7. Envisaged target population for Waterford City and County in the RSES, NPF**

	2016	2028	2031	Residential Zoned land required in Draft Plan (ha)
Waterford County	116,176	137,630	144,00	
Total City Area	51,616	66,285	70,995	
Waterford City & Suburbs	48,216	62,382	66,966	202
Dungarvan	10,388	11,864	12,337	25

(including Ballinroad)				
Clonmel Environs	925	1,056	1,091	2
Tramore	10,381	11,549	11,873	19
Dunmore East	1,808	2,002	2,068	4
Portlaw	1,742	1,929	1,992	4
Lismore	1,374	1,521	1,572	3
Aggregate Rural (incl. Rural towns and villages)	41,342	45,328	46,101	

In the context of Habitats Directive Assessment, potential impacts on Natura 2000 sites may arise where increased population growth cannot be served by water and wastewater infrastructure leading to deterioration of water quality standards and pollution which may compromise habitat quality and thereby affect the favourable conservation status of habitats and species. Table 8 details Waste Water Capacity, level of treatment and compliance in Waterford City, towns and villages. Review of this table indicates all settlements have adequate capacity for future growth with some constraints at Tallow, Ballyduff (West), Clonea-Power, Bunmahon, Annestown and Fenor. As Ballyduff (West), and Clonea-Power are located on SAC rivers containing Freshwater Pearl Mussel resolution of capacity is imperative prior to approval of any future loading or at least requirement for tertiary treatment at these locations.

In Waterford City, Dungarvan, Tramore, Lismore, Cappoquin, Portlaw, Kilmacthomas and Dunmore East there is adequate waste water capacity to cater for projected population growth in the Core Strategy. The current water quality status of the Lower River Suir Estuary is good and Waterford Harbour is moderate. Dungarvan Harbour and Tramore Bay are both rated high status. The Blackwater and Mahon are rated as moderate.

**Table 8. Waste Water Capacity and level of Treatment in Waterford Settlements**

WWTP	Level of Treatment	Compliance (Pass/Fail)	Parameter Failed	Cause of Exceedance and Significance of Results	Organic Capacities (Population Equivalent)		
					As Constructed	Collected Load (peak week)	Remaining
Waterford City	Secondary	Pass	N/A	Compliant with Wastewater Discharge Licence	190,600	116,576	74,024
Tramore	Secondary	Fail	Ammonia-Total (as N)mg/l	WWTP not designed for N removal. Not compliant with Wastewater Discharge Licence. Discharge does not have an observable impact on water quality.	20,000	15,183	4,817
Lismore	Tertiary	Pass	N/A	Compliant with Wastewater Discharge Licence	3,000	2,148	852
Cappoquin	Secondary	Pass	N/A	Compliant with Wastewater Discharge Licence	2,728	1,115	1,613
Tallow	Tertiary	Pass	N/A	Compliant with Wastewater Discharge Licence	2,186	2,295	0
Portlaw	Tertiary	Fail	Ortho-Phosphate (as P) unspecified mg/l Suspended solids mg/l	Exceedances relate to upgrade works to WWTP. Not compliant with Wastewater Discharge Licence. Ambient monitoring results meet required	2,500	1,796	704



				EQs. The EQs relate to the oxygenation and nutrient conditions set out in the Surface Water Regulations 2009. Discharge does not have an observable impact on water quality or negative impact on WFD Status.			
Kilmacthomas	Tertiary	Pass	N/A	Compliant with Wastewater Discharge Licence	2,110	1,173	937
Baile na nGall	Secondary	Pass	N/A	Compliant with Wastewater Discharge Licence	1,600	30	1,570
Ardmore	Secondary	Pass	N/A	Compliant with Wastewater Discharge Licence	2,934	1,312	1,622
Dunmore East	Secondary	Pass	N/A	Compliant with Wastewater Discharge Licence	8,991	3,436	5,555
Dungarvan	Secondary	Pass	N/A	Compliant with Wastewater Discharge Licence	25,000	20,103	4,897
Stradbally	Secondary	Pass	N/A	Compliant with Wastewater Discharge Licence	1,914	563	1,351
<b>Rural Villages</b>					<b>WWTP Capacity</b>		<b>Spare Capacity</b>
Aglish					800		300
Cheekpoint					750		432
Villierstown					700		400
Kill					750		450
Clashmore							
Dunhill					500(ICW)		300

Ballyduff Upper (West)					Septic Tank near capacity		200 possibly
Annestown					Septic Tank at capacity		
Fenor					Septic Tank at capacity		
Clonea Power					Septic Tank at capacity		
Rathgormack					Septic Tank		
Tooraneena					ICW		
Ballymacarbry							
<b>Rural Networks</b>							
Passage East/Crooke							No Data
An Rinn (Heilbhic/Maoil na Choirne/Baile na nGall//Old Parish)					1,600		630
Kilmeaden (Ballyduff Lower (east))					1,142		883
Lemybrien/Kilrossanty							
Bonmahon/Knockmahon					3 Septic Tanks at capacity		

### **3.4 Infrastructure Projects**

Some policies in the Draft Development Plan set a framework for future infrastructure development that may impact on Natura 2000 sites, e.g. policies supporting development of Waterford Port, Waterford Airport, Dunmore East Marina, breakwater and port, City Centre river crossings and a down-stream river crossing to link the R710 to the R711/N25. Any potential for significant effects on the Natura 2000 Network shall be assessed as per the policies and objectives set out in Chapter 9 which require compliance with the AA process.

### **3.5 Settlement Objectives**

Appendix 2 details specific development objectives for the range of settlements across the county. Explicit objectives for protection of the Natura 2000 Network and consideration of Articles 6 and 10 of the Habitats Directive are cited for Ballyduff D01, Cappoquin D01, Villierstown D01 (relevant to River Blackwater SAC), Portlaw D03 (River Clodiagh SAC) and Tramore D04 (Tramore Dunes and Backstrand SAC and SPA). An objective (D01) for Clonea-Power requiring availability of appropriate waste water treatment system prior to any further residential development is also positive in the interests of protecting the River Clodiagh SAC. It is a recommendation of this assessment that a similar objective be included for Ballyduff West given that the septic tank is near capacity and the Blackwater is designated for Freshwater Pearl Mussel. It is also a recommendation of this assessment that an objective be added to those cited for Bunmahon as follows; D0 11 To protect former mine spoil vegetation at Knockmahon that corresponds to the Annex 1 Habitat Calaminarian Grassland. There is no SAC designated at the site but there is an obligation to protect the Annex 1 habitat under the Habitats Directive. It is also recommended that the following be added to the General Policy Objectives; To protect the favourable conservation status of sites designated for nature conservation and ensure compliance with Article 6 and Article 10 of the Habitats Directive. This shall mitigate for objectives relating to development of riverside/estuary walkways that may have potential for significant effects e.g. D01 Dungarvan – development of a linear walkway along the Colligan Estuary.

### **3.6 Flood Risk and Sea –Level Rise**

A Strategic Flood Risk Assessment was prepared as part of the Development Plan Review Process and recommendations integrated into policies of the Plan. The Waterford City Flood Alleviation Scheme has addressed flood areas through the construction of flood defences along the south quays of the River Suir from Grattan Quay to Adelphi Quay and to along the St John's River as far as the Inner Ring Road. Overlay of the flood risk zones on the River SACs demonstrate overlap of Flood Risk Zones with the SAC. Policy UTL 10 sets out a requirement for site specific flood risk assessment which also contributes to protecting the SAC and an adjacent buffer.

Climate Adaptation and building resilience is a key component of the Draft Development Plan in recognition of climate change impacts that are presenting increased intensity and frequency of storm events, increased periods of flooding and drought and rising sea level. A

coastal county such as Waterford is at risk from climate change events ; climate adaptation measures and nature based solutions are required to be inherent to all future land use planning and development proposals. Waterford City and County Council published a Climate Adaption Plan in 2019 which seeks to implement best practices and incorporate solutions that will meet climate change adaptation requirements and service the needs of the communities. With regard to the Natura 2000 Network coastal sites such as Tramore Dunes are at risk from increasing coastal erosion and loss of habitats that are qualifying interests for the site such as dunes and saltmarsh.

### 3.7 Impacts on Natura sites within 15km of Waterford City and County

There are three Natura 2000 sites located within 15km of County Waterford. All the River SACs within the county (Blackwater, Lower River Suir, Barrow and Nore,) traverse the county boundary with Counties Cork, South Tipperary, Waterford City and Kilkenny. No significant impacts arising from the Draft Development Plan are anticipated upstream in these river corridors. Other Natura 2000 sites within 15km of the county’s boundary such as Ballymacoda SPA and Hook Head SAC are self-contained habitats that will not be directly affected by policies in the Draft Development Plan.

## 4. Summary Screening Assessment

Table 9 below presents a summary screening of potential for adverse impacts on the Natura 2000 Network from the Draft Development Plan Policies and Land Use Zonings. Where there is potential for the Draft Plan to give rise to impacts on site integrity this is mitigated by policies for protection of the Natura 2000 Network and compliance with the AA process in Chapter 9 of the plan.

<b>Natura 2000 site</b>	<b>Threat to Site Integrity</b>	<b>Potential for Significant effects/adverse impact on integrity arising from Draft Development Plan</b>	<b>Mitigation</b>
River Suir SAC	Water quality Loss of Blue Catchment Status in tributary rivers. Nutrient and sediment runoff FPM Habitat Noise. Erosion of Saltmarsh	City Infrastructure development including river crossings. Increase in population. Proliferation of unmaintained and unmonitored septic tanks.	Policies in Draft Plan seeking protection of Natura 2000 Network and Water Quality. Adequate WWTP capacity for population targets in Waterford City. Rural Settlement Strategy promoting consolidation of towns and villages.
River Blackwater SAC	Water quality Nutrient and sediment runoff	Agricultural intensification Recreational Trails Proliferation of	Policies in Draft Plan seeking protection of Natura 2000 Network

	Loss of Blue Catchment Status in tributary rivers. FPM Habitat Recreational Trails Invasive Species	unmaintained and unmonitored septic tanks.	and Water Quality. Rural Settlement Strategy promoting consolidation of towns and villages.
River Nore & Barrow (Waterford Estuary SAC)	Water quality Nutrient and sediment runoff	Expansion of Cruise Ship Tourism	Policies in Draft Plan seeking protection of Natura 2000 Network and Water Quality. Adequate WWTP capacity for population targets.
Comeragh Mountains SAC	Recreational Trails Encroachment of Bracken Change in vegetation Climate impacts causing peat haggling	Recreational Trails	Policies in Chapter 9 of Draft Plan seeking protection of Natura 2000 Network.
Tramore Dunes and Back Strand	Recreational Trails Development of Waterford Airport Climate Impacts	Recreational Trails	Policies in Draft Plan seeking protection of Natura 2000 Network and Water Quality. Adequate WWTP capacity for population targets.
Ardmore Head SAC	Recreational Trails Lack of grazing leading to vegetation change	Recreational Trails	Policies in Chapter 9 of Draft Plan seeking protection of Natura 2000 Network.
Nire Valley Woodlands SAC	Natural woodland decline	None Arising	Policies in Chapter 9 of Draft Plan seeking protection of Natura 2000 Network.
Glendine Woods SAC	Natural woodland decline	None Arising	Policies in Chapter 9 of Draft Plan seeking protection of Natura 2000 Network.
Helvick Head SAC	Vegetation Change due to atmospheric N deposition	None Arising	Policies in Chapter 9 of Draft Plan seeking protection of Natura 2000 Network.
Dungarvan Harbour SPA	Storm water runoff from new residential development near Colligan Estuary.  Aquaculture	Increase in population Recreational Trails	Policies in Chapter 9 of Draft Plan seeking protection of Natura 2000 Network and Water Quality. Zoning changes in

	Loss of feeding grounds in areas SPA adjacent to		Duckspool.
Tramore Back Strand SPA	Disturbance to foraging and roosting wildfowl and waders from recreational users	Increase in population	Policies in Draft Plan seeking protection of Natura 2000 Network and Water Quality. Adequate WWTP capacity for population targets.
Mid-Waterford Coast SPA	Recreational Trails Loss of grassland due to intensification of agriculture	Recreational Trails	Policies in Draft Plan seeking protection of Natura 2000 Network and Water Quality.
Ballyquinn-Helvick SPA	Loss of grassland due to intensification of agriculture	None Arising	Policies in Draft Plan seeking protection of Natura 2000 Network and Water Quality.
Blackwater Callows SPA	Recreational Trails Loss of grassland due to intensification of agriculture	Recreational Trails	Policies in Draft Plan seeking protection of Natura 2000 Network and Water Quality.
Blackwater Estuary SPA	Water Quality Recreational Trails	Recreational Trails	Policies in Draft Plan seeking protection of Natura 2000 Network and Water Quality.

#### 4.1 Other Plans and Projects and in-combination effects

The AA process requires consideration of other plans and projects that may contribute in combination with the subject plan to give rise to significant effects or adverse impacts to the integrity of the Natura 2000 Network in Waterford. Relevant Plans in this context include;

Tipperary, Kilkenny, Wexford and Cork County Development Plans  
Regional Spatial and Economic Strategy for the Southern Region  
River Basin Management Plan for Ireland 2021-2028  
Climate Change Adaptation Strategy 2019  
Catchment Flood Risk Management Plans

Relevant Projects include;

Development of North Quays SDZ  
Sustainable Transport Bridge  
River Suir Flood Defences West of Waterford Railway Station  
Development of Mount Congreve Visitor Attraction  
Development of a SE Greenway network linking Waterford City with South Kilkenny, New Ross and Rosslare.

Fáilte Ireland Activity Centre Tramore and Ardmore

As the Draft Plan itself will not have any adverse impacts on the integrity of the Natura 2000 Network and with reference to the AA of other plans and projects listed above it is considered there is no potential for in-combination impacts to adversely affect the integrity of the Natura 2000 Network in Waterford.

## **5. Conclusion**

A Habitats Directive Screening Assessment was carried out on the Draft Waterford City and County Development Plan 2022-2028. A review of conservation objectives and threats to site integrity for the range of Natura 2000 sites in the city and county was undertaken to identify sites that may be impacted by policies, objectives and land use zonings in the Draft Development Plan. Zoned settlements that are located adjacent to river and coastal SACs and SPAs were considered to be the key areas for assessment. Threats to site integrity such as infrastructure, habitat loss and species disturbance, water quality and protection of annexed species and habitats outside the designated boundaries of the Natura 2000 Network were identified as key potential impacts for maintaining the favourable conservation status of the network. The majority of policies, objectives and zonings in the Draft Plan screened out for AA. However, a number of policies were assessed as having potential for significant effects on Natura 2000 sites and screened in for a Stage 2 Appropriate Assessment. These policies were reviewed with recommended wording amendments to mitigate for potential for significant effects. Review of the Settlement Strategy shows there is adequate waste water capacity to cater for projected population growth in Waterford City, Dungarvan, Tramore, Lismore, Cappoquin, Portlaw, Kilmacthomas and Dunmore East. Infrastructure projects and future plans within the framework of the Draft Development Plan will be subject to AA in their own right and policies and development management standards of the plan requiring environmental compliance and no adverse impacts on the integrity of Natura 2000 sites.

The NIR has examined and analysed with best scientific knowledge the potential sources and pathways for adverse impacts on the Natura 2000 Network in Waterford. It is objectively concluded following an examination, analysis and evaluation of the potential impacts associated with the draft plan that the Draft Plan will not adversely affect the integrity of the Natura 2000 Network either alone or in-combination with other plans or projects.

This assessment should be read in conjunction with the Draft City and County Development Plan 2021-2028 and the accompanying Environmental Report prepared in fulfilment of the SEA process. Comments on the assessment are invited during the period of public consultation from June 17th 2021- August 27th 2021.

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