

SEA of Local Authority Land-Use Plans - EPA Recommendations and Resources

2020 Version 1.9

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Tracking of Updates for 2020

Version No.	Date	Amendments since previous version
Version 1.1	03/01/19	Updating references for various EPA Reports including Urban
		Wastewater, Water Quality, Bathing Water, Air Quality, Waste &
		link to DCCAE Climate Adaptation Guidelines,
Version 1.2	13/02/19	Added Draft Building Development & Height Guidelines for
		Planning Authorities (DHLG) to Plan list in Appendix II
Version 1.3	21/06/19	Updates reference to Water Quality in Ireland – Indicators Report
		(EPA, 2018), Bathing Water Quality in Ireland (EPA, 2019) and
		Ireland's Greenhouse Gas Emissions Projections for 2018-2040
		(EPA, 2019)
Version 1.4	11/10/19	References to Drinking Water Report (EPA, 2019), Domestic Waste
		Water Treatment Systems 2017-2018 (EPA, 2019), National
		Climate Action Plan 2019 (DCCAE), Air Quality in Ireland 2018
		Report (EPA, 2019), Article 17 Report on status of Protected
		Habitats/Species (NPWS, 2019)
		In Resources –Link to ESM mapping tool (<u>www.enviromap.ie</u>), and
		OPR resources/planning library
		Additional plans to consider updated in Appendix II
Version 1.5	03/12/19	Reference to Urban Waste Water Treatment in 2018 (EPA, 2019)
		Updated SEA and climate change guidance (EPA, 2019)
		Urban Environmental Indicators: NO ₂ levels in Dublin (EPA, 2019)
Version 1.6	21/02/20	Reference to Water Quality in Ireland 2013-2018 report (EPA,
		2019), Progress Report on the National Hazardous Waste
		Management Plan (EPA, 2018)
Version 1.7	04/08/20	Added reference to Cumulative Effects Guidance note (EPA, 2020)
		Updated references to latest Drinking Water, Wastewater,
		Bathing Water and Greenhouse Gas emissions reports.
Version 1.8	25/09/20	Updated EPA SEAGIS tool link added to Appendix 1b.
		Air Quality in Ireland Report for 2019 (EPA, 2020)
Version 1.9	17/11/20	Reference to Urban Waste Water Treatment in 2019 (EPA, 2020)

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1. Introduction

This document provides key EPA recommendations for Local Authorities to consider when carrying out Strategic Environmental Assessment (SEA) of land-use plans at county and local level. It also includes information on recently published EPA reports and links to other relevant resources.

EPA is one of five statutory Environmental Authority under the SEA regulations. Our role in SEA focuses on promoting full integration of the findings of the Environmental Assessment into the Plan. It is not the function of the EPA to either approve or enforce Plans or SEAs.

We focus our efforts and resources on reviewing and commenting on key national and regional plans within the planning hierarchy. For Local Authority land use plans at county and local level, we advocate a 'self-service approach' through use of this guidance document. This document is updated regularly.

2. Key Environmental Recommendations to Consider

Drinking Water

In considering additional zoning/development and growth of settlements within the Plan area, it is critical that development be closely linked to the ability to provide a safe and secure supply of drinking water and related critical service infrastructure.

We have produced a series of drinking water quality reports, including the *Drinking Water Report for Public Water Supplies – 2019* (EPA, 2020), that should be consulted to ensure the relevant recommendations are implemented to improve drinking water quality. Key issues identified with particular supplies, including significant issues identified through (Irish Water) Drinking Water Safety Plans, should be highlighted for individual plans. We recommend including a commitment to collaborate with Irish Water and other relevant stakeholders in the Plan, to provide an adequate and appropriate drinking water supply.

A 'Remedial Action List' (RAL) of problematic drinking water supplies is released by the EPA on a quarterly basis. It is a dynamic list which records identified and reported issues. Once appropriate mitigation measures are established and implemented, supplies are removed from the RAL. You should consider including a commitment in the Plan to support Irish Water, in addressing issues where water supplies servicing the Plan area included on the RAL. Further information can be found at: http://www.epa.ie/downloads/pubs/water/drinking/.

Conservation of Water Resources

The Plan should include an Objective/Policy promoting the need for the conservation of water resources and also the need for detection/mitigation of infrastructural leakages. It may also be useful to consider developing a Water Conservation Strategy, in association with Irish Water and adjoining local authorities, where appropriate.

Waste Water

Our <u>Water Quality in Ireland 2013-2018</u> (EPA, 2019) highlights that one of the key causes of water pollution is from point sources including discharges from waste water treatment plants. The need to provide and maintain adequate and appropriate wastewater treatment infrastructure to service zoned lands and developments over the lifetime of the Plan should be included as a specific Policy/Objective in the Plan.

Agglomerations with treatment or poorly performing (or at capacity) treatment plants are highlighted in the <u>Urban Waste Water Treatment in 2019</u> (EPA, 2020). A commitment to support the provision of appropriate measures to address these issues as a priority, in collaboration with Irish Water should be considered where relevant. Measures to ensure that combined storm water overflows, sewers and trade effluent in the area covered by the Plan is also managed properly should also be included as appropriate.

You should consult our <u>Code of Practice: Wastewater Treatment and Disposal Systems Serving Single Houses (p.e < 10)</u>, (EPA, 2009) with regard to any

- proposed rural residential development which may arise
- or development proposals in un-sewered rural area
- or areas where connection to the public sewer is not feasible

The <u>National Inspection Plan for Domestic Wastewater Treatment Systems</u> (EPA, 2018), and <u>Domestic Waste Water Treatment Systems 2017-2018</u> (EPA, 2019) reports should also be considered, as appropriate.

Water Framework Directive

Protection of Surface and Ground Water Resources

Protecting our valuable surface and ground water resources is of vital importance to protect both human health and provide for a healthy environment. In this context, you should provide clear commitments in the Plan to protect surface water, groundwater and coastal/estuarine resources and their associated habitats and species, including fisheries within and adjacent to the Plan area. Where specific recommendations/concerns for water bodies within the Plan area are identified in EPA water quality reports, including the *Water Quality in 2017: An Indicators Report'* (EPA, 2018) and *Water Quality in Ireland 2013-2018* (EPA, 2019), these should also be addressed/considered at an appropriate level in the Plan.

The Plan should also ensure that any specific relevant objectives and measures for individual water bodies, within the Plan area as set out in the existing relevant Water Framework Directive River Basin Management Plan. are provided for in order to ensure water quality protected/improved/maintained. The Plan should also consider that subsequent water management plans (including catchment management plans) may arise out of current review of the second cycle of WFD River Basin Management Planning should be integrated as appropriate upon their adoption. The 'integrated catchment management' approach for protecting and managing water resources, should also be supported in the Plan. The EPA's www.catchments.ie website provides useful resources such as GIS mapping and related information that should be useful in preparing the Plan.

The <u>European Union (Water Policy) Regulations 2014</u> (S.I. No. 350 of 2014) sets out the roles and responsibilities of the various stakeholders and the associated requirements in relation to river basin management planning and should be integrated as appropriate. These responsibilities should be reflected in the Plan and the associated environmental monitoring.

Protection of Groundwater Resources

Groundwater aquifers form important sources of drinking water both locally and regionally. Much of the summer seasonal flow in many rivers is also derived from groundwater sources. To maintain high quality water resources within the Plan area, it is important that development is controlled and managed appropriately, in particular in areas of high groundwater vulnerability to avoid transmission of pollutants into important aquifers.

The Plan should include a clear Policy / Objective for the protection of groundwater resources and associated habitats and species. The Plan should also include a commitment to integrate any existing Groundwater Protection Schemes and Groundwater Source Protection Zones, as relevant and appropriate within the Plan area. The Plan should also include a commitment to comply with the <u>European Communities Environmental Objectives (Groundwater) Regulations 2010</u> (S.I. No. 9 of 2010).

Issues to consider relating to protection of groundwater include; enforcement of planning conditions related to installation, operation and maintenance of on-site wastewater treatment / septic tank systems, connection of all remaining houses within settlement boundaries to wastewater treatment plant, the development of a wastewater leak detection programme and the implementation and enforcement of the European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2009 and associated European Communities (Good Agricultural Practice For Protection Of Waters) Regulations 2010 (S.I. No 610 of 2010).

Protection and Management of Bathing Waters

The obligation to protect bathing waters within (and adjacent to) the Plan area should also be reflected in the Plan. Bathing Waters are afforded protection under Directive 2006/7/EC, known as the 'Directive on bathing water', which is transposed into National legislation by the Bathing Water Quality Regulations 2008 (S.I. No. 79) of 2008. In addition, under the Water Framework Directive, recreational waters/bathing water areas are included on the Register of Protected Areas. The Plan should provide for the protection of any waters which are used for bathing within or adjacent to the Plan area.

The EPA's most recent report on bathing water quality <u>Bathing Water Quality in Ireland – A Report for the Year 2019</u>, (EPA, 2020) sets out the status of Irish Seawater and Freshwater Bathing areas and should be integrated as appropriate. The EPA's available bathing water advice/guidance includes an online GIS resource <u>beaches.ie</u>, which should be considered.

Water Framework Directive & Biodiversity

Any sites of significant biodiversity value within or adjacent to the Plan area listed on the Water Framework Directive Register of Protected Areas, (such as Fresh Water Pearl Mussel Catchments, designated Salmonid waters, fisheries / shellfisheries), should be protected in preparing the Plan.

Flooding

The Plan should fully comply with <u>The Planning System and Flood Risk Management – Guidelines for Planning Authorities</u> (OPW/DEHLG, 2009). These Guidelines place requirements on planning authorities to carry out strategic flood risk assessments and also to ensure that development/zoning of vulnerable land uses, in areas at significant risk of flooding (flood zones A and B) is avoided. In effect, only flood/water compatible uses should be built in flood plains. Where this is not possible, any proposal for development/zoning is required to include a 'Justification Test' in accordance with

the Guidelines. Examples of vulnerable land uses include hospitals, residential developments and essential infrastructure such as transport and utilities (electricity generating power stations, water and sewage treatment) and potential significant sources of pollution (SEVESO sites, IPPC sites).

In May 2018, the OPW launched a new website to access flood risk management plans, flood maps and information on flood risk management in Ireland. In can be consulted at: www.floodinfo.ie.

The Plan should include a commitment to carry out strategic flood risk assessments, in line with the Flood Risk Management Guidelines, to inform the development and implementation of the County Development Plan and lower level local area plans respectively.

A specific Policy should be included to provide for/promote appropriate flood risk assessments to be undertaken, where development / zoning is being proposed in the Plan area where there is significant risk of flooding, in accordance with the Guidelines referred to above.

The Plan should also promote the development, where appropriate, of adaptation measures to account for the likely increased risk of flooding due to climate change within the Plan area, including implementation of adequate and appropriate Sustainable Urban Drainage Systems. Additionally, the Plan should provide for protection, management, and as appropriate, enhancement of existing wetland habitats where flood protection/management measures are necessary.

Integrated Coastal Zone Management should also be considered as relevant and appropriate, to inform the preparation of coastal plans and programmes.

Climate Change / Climatic Factors

Urgent action is needed to address climate change and to move Ireland towards a low carbon, climate resilient economy and society. Climate change adaptation and mitigation measures should be included in the Plan as appropriate and the Plan should be consistent with the *National Policy Position on Climate Action and Low Carbon Development*¹, the *National Climate Action Plan* 2019, the *National Mitigation Plan*² and the *National Adaptation Framework*, as well as relevant sectoral, regional and local adaption plans.

The Agency recently published <u>Ireland's Greenhouse Gas Emissions Projections for 2019-2040</u> (EPA, 2020) which should be taken into account in preparing the Plan, as appropriate and relevant.

The EPA has published an update of its existing good practice guidance note on how to incorporate climatic factors into plans and programmes falling under the remit of the SEA Directive – *Integrating Climatic Factors into the Strategic Environmental Assessment Process in Ireland* (EPA, 2019³). This guidance is due to be updated before the end of the year. Key aspects to be considered in the Plan and SEA, where relevant, include:

- Direct and indirect impacts of the Plan on greenhouse gas emissions and removals (Mitigation)
- Direct and indirect impacts of climate change on the implementation of the Plan, e.g. the resilience of critical water service infrastructure to flooding and drought (Adaptation)

¹ http://www.dccae.gov.ie/en-ie/climate-action/publications/Pages/National-Policy-Position.aspx

² http://www.dccae.gov.ie/documents/National%20Mitigation%20Plan%202017.pdf

³ http://www.epa.ie/pubs/advice/ea/EPA%20SEA-Climatic-Factors-Guidance-Note.pdf

The linkages between mitigation and adaptation (inter-relationships)

Mitigation

To fulfil national commitments on greenhouse gas emissions reduction, Ireland must effectively switch away from fossil fuel sources of energy by 2050. The Plan should reflect the need to reduce greenhouse gas emissions and to protect, maintain and enhance carbon stocks. The National Mitigation Plan (NMP) identifies 106 actions to decarbonise electricity generation, the built environment and transport and to move towards carbon neutrality for agriculture, forest and land use sectors. Relevant actions in the NMP should be integrated into the Plan as appropriate. The inclusion of specific policies/objectives which promote the integration of climate change mitigation measures at a regional and local level in land use planning within the Plan area should also be considered. In developing and implementing mitigation-related measures, opportunities should be sought to maximise the potential co-benefits of for the wider the environment and society, such as improvements in air quality, water quality, biodiversity, public amenity, renewable energy, tourism etc.

Adaptation

The EPA has published guidelines to support local authorities in developing local climate adaptation strategies (EPA, 2016⁴). Climate change is already discernible in Ireland, especially within the temperature record, and projected climate change impacts include higher intensity rainfall events, more intense storms and storm surge, sea level rise, warmer temperatures and longer periods of low rainfall. Additionally, the DCCAE have prepared Guidelines to also assist local authorities prepare adaptation strategies. (DCCAE, 2018⁵) and sectoral Guidelines to assist the relevant sectors prepare sectoral adaptation plans. (DCCAE, 2018⁶).

In preparing the Plan and associated SEA, the degree to which climate change impacts, individually and in combination, are likely to influence its implementation and operation should be considered. Aspects to be considered include the resilience of existing and proposed infrastructure and systems to climate variability. This analysis may include an assessment of responses to recent extreme weather events and the adequacy of existing systems and procedures. Other climate change impacts to be considered include changes in native species and habitats and the spread of invasive species, pests and pathogens. To minimise any adverse impacts identified in the SEA, the Plan should include appropriate climate change adaptation measures that can be implemented either directly or through relevant land use plans and/or specific plans e.g. Flood Risk Management Plans, Integrated Coastal Zone Management Plans etc.

The 'Climate Ireland' website provides information, support and advice to help local authorities, sectors and government departments to adapt to climate change and includes a Local Authority Adaptation Support Wizard. It can be consulted at http://www.climateireland.ie/#/

Monitoring

The Plan and SEA should consider monitoring for both climate mitigation and climate adaptation monitoring aspects, where relevant and appropriate. Appendix III of this guidance document provides climate-related baseline information and questions to consider.

⁴ http://www.epa.ie/pubs/reports/research/climate/EPA Research Report164.pdf

⁵https://www.dccae.gov.ie/en-ie/climate-action/publications/Pages/Local-Authority-Adaptation-Strategy-Development-Guidelines.aspx

⁶https://dccae.gov.ie/en-ie/climate-action/publications/Pages/Sectoral-Planning-Guidelines-for-Climate-Change-Adaptation.aspx

Air

Air quality legislation in Ireland highlights the need "to avoid, prevent or reduce harmful effects on human health and the environment as a whole". In addition, it requires that Local Authorities where appropriate "shall promote the preservation of best ambient air quality compatible with sustainable development.". These requirements should be incorporated by means of a specific plan objective / policy.

It is also worth noting that the <u>National Clean Air Strategy</u> (DCCAE) is currently being prepared, with the intention of developing the necessary policies and measures to comply with new and emerging EU legislation, in addition to supporting climate change mitigation.

Recent <u>EPA reports on air quality</u> include the *Air Quality in Ireland 2019 Report* (EPA, 2020) which sets out the most recent status in each of the four air quality zones in Ireland. Where relevant, the EPA have also published <u>Urban Environmental Indicators for Nitrogen Dioxide levels in Dublin</u> (EPA, 2019) to also take into account.

The EPA manages the national ambient air quality monitoring network and measures the levels of a number of atmospheric pollutants. The pollutants of most concern are those whose main source is traffic such as Particulate Matter and Nitrogen Dioxide should to be taken into account. Information in relation to these aspects is available at: http://www.epa.ie/air/quality/monitor/#

Noise

The objectives of EU and Irish noise legislation is "to avoid, prevent or reduce harmful effects on human health and the environment as a whole", and this includes noise nuisance. To this effect the Plan should ensure this requirement is complied with. The assessment and management of noise from the main infrastructural transport sources (roads, rail, and airports) are governed by the Environmental Noise Directive and associated 2006 Environmental Noise Regulations (S.I. 140 of 2006). In this context, as appropriate, the Plan should promote the implementation of Environmental Noise Directive and associated national regulations. http://www.environ.ie/environment/noise/si-140-2006-environmental-noise-regulations-2006

The National Planning Framework recognises the significance of environmental noise and includes National Policy Objective 65 to 'Promote the pro-active management of noise where it is likely to have significant adverse impacts on health and quality of life and support the aims of the Environmental Noise Regulations through national planning guidance and Noise Action Plans.'

Available Noise Action Plans should be considered and reviewed as required, to reflect the Plan period and associated development proposals. Consideration should be given to any relevant noise maps, and action plans. Strategic noise maps are designed to assess noise exposure resulting from major roads, railways and airports. Noise action plans are designed to act as a means of managing environmental noise through land use planning, traffic management and control of noise sources. The third round of noise mapping is currently underway in Ireland and will be completed in 2019. http://noise.eionet.europa.eu/help.html.

Consideration should be given to protect, where relevant, any designated quiet areas in open country. In 2003, the EPA commissioned a <u>research project</u> to establish baseline data for the identification of quiet areas in rural locations. Quiet Areas are defined as "an area in open country, substantially unaffected by anthropogenic noise." A range of minimum distance criteria from man-

made noise sources such as urban areas, industry and major road sources were defined, and the report includes a number of key recommendations for the identification and control of Quiet Areas.

Waste Management

The Plan should promote the integration of land use zoning and development to existing and planned availability of waste infrastructure and capacity. The Plan should also refer to and incorporate the relevant aspects of the relevant Regional Waste Management Plan.

In addition, the Plan should promote and incorporate the relevant recommendations in the following series of EPA reports including:

- EPA National Waste Statistics are available at: http://www.epa.ie/nationalwastestatistics/
- The Nature and Extent of Unauthorised Waste Activity in Ireland (EPA, 2005)
- Progress Report on the National Hazardous Waste Management Plan (EPA, 2018)
- Draft National Hazardous Waste Management Plan 2021-2027 (EPA, in preparation)

These, and other resources are available at: http://www.epa.ie/pubs/reports/waste/stats/ and http://www.epa.ie/pubs/reports/waste/haz/

Radon

Where significant concentrations of radon occur within the Plan area, these should be taken into account in the Plan or associated development control measures, as appropriate. Radon Maps are available at http://www.epa.ie/radiation/radonmap/ which should be useful in identifying potential for significant radon accumulations within the Plan area. Reports on radioactivity monitoring of the Irish environment are also available at http://www.epa.ie/pubs/reports/radiation/

3. Wider Environmental Recommendations to Consider

Biodiversity

Biodiversity within the Plan area may include designated and undesignated sites, habitats, species and networks of importance at an international, national, regional or local level. The protection of ecological resources is a key consideration which needs to be addressed. In this regard, the Plan should include clear Policies/Objectives to conserve and protect all designated sites within and adjacent to the Plan area (including the habitats and/or species for which they have been selected, or which they support), and should also promote the protection of undesignated sites and local biodiversity features.

The Plan should also promote the need to protect wider aspects of biodiversity including ecological corridors / linkages / green infrastructure, areas of important local biodiversity, the provision of buffer zones between developments and areas of significant biodiversity and ensuring appropriate control and management measures for invasive species.

Plans should be supported / informed by available habitat mapping (including wetland mapping) and other ecological surveys as relevant. The Plan should refer to and reflect the relevant commitments

in Ireland's *National Biodiversity Action Plan 2017-21* (DCHG, 2017). Additionally, the NPWS have published the <u>Article 17 Report on the Status of EU Protected Habitats and Species in Ireland</u> (NPWS, 2019) Local Heritage/Biodiversity plans should be highlighted and should promote the implementation of key actions set out in these plans. Where not established, commitments should be included to prepare these plans.

Appropriate Assessment

The Plan should promote the application of the guidance set out in the DECLG Publication 'Appropriate Assessment of Plans and Projects in Ireland- Guidance for Planning Authorities' (2009; revision 2010), in relation to the requirements of Article 6 of the Habitats Directive.

The Plan should include a commitment to ensure compliance with the requirements of Article 6 of the Habitats Directive. The Plan should also be subject to Appropriate Assessment (AA). The Plan should include a clear Policy/Objective that sets out a requirement for AA Screening for new, reviewed or amended Plans and proposed projects, which may have the potential to impact on European sites. Potential for cumulative/in-combination effects associated with other relevant Plans/Programmes/Projects should also be determined.

You should consult with the National Parks and Wildlife Service (NPWS) regarding screening of the *Plan* for Appropriate Assessment. Where Appropriate Assessment is required, any findings or recommendations should be incorporated into the SEA and the *Plan*, as appropriate.

Our AA GeoTool application has been developed and launched in partnership with the NPWS. It allows users to a select a location, specify a search area and gather available information for each European Site within the area. It is available at:

http://www.epa.ie/terminalfour/AppropAssess/index.jsp

Integrated Biodiversity Impact Assessment

In 2012, we published guidance on <u>Integrated Biodiversity Impact Assessment – Streamlining AA, SEA and EIA Processes. Best Practice Guidance</u>. This guidance aims to inform practitioners, plan/project proponents and consent authorities to integrate SEA, EIA and AA processes and requirements to streamline biodiversity considerations.

Energy Conservation & Renewable Energy

When considering energy conservation / renewable energy aspects of the Plan, where relevant, the <u>Interim Guidelines for Planning Authorities on Statutory Plans, Renewable Energy and Climate Change</u> (DHPCLG, 2017) should be taken into account. The Government White Paper – <u>Ireland's Transition to a Low Carbon Energy Future 2015-2030</u>, (DCENR) should also considered.

The relevant renewable energy / energy conservation actions in the National Mitigation Plan should be integrated. Additionally, the Plan should, where relevant, include a commitment to prepare and implement an 'Energy Conservation Strategy' and associated awareness campaign within the lifetime of the Plan where feasible.

The Plan should also support and promote the need for energy conservation measures to be incorporated into buildings. Relevant guidance in this regard, can be found on the website of the Sustainable Energy Authority of Ireland: www.seai.ie.

There is merit in including a commitment where relevant and appropriate, to use energy derived from renewable energy systems (e.g. solar, wind, bioenergy, geothermal etc.) and energy storage networks and systems within the Plan area.

Landscape

The Plan should provide for the protection of designated scenic landscapes, scenic views, scenic routes and landscape features of national, regional, county and local value. The Plan should also take into account the landscape character adjoining the Plan area. Visual linkages between established landmarks and landscape features and views should be taken into account when land is being zoned and when individual development proposals are being assessed / considered. The *National Landscape Strategy* (DECLG, 2015) should be taken into account and integrated as appropriate into the Plan.

Geology / Geomorphology

The Plan should protect any designated Geological and Geomorphological NHAs/pNHAs, which may be present/designated within or adjacent to the Plan area in consultation with the Geological Survey of Ireland.

Human Health / Quality of Life

The Plan should ensure provision of adequate and appropriate infrastructure and to serve both the existing community and likely future predicted increases in population within the Plan area. In preparing the Plan, there is merit in exploring current practice and opportunities with respect to promote the protection and, as appropriate, improvement of "Quality of Life". Where relevant, the application of existing "Quality of Life Indices" would be considered in consultation with relevant statutory and non-statutory bodies/organisations. We also refer you to the relevant aspects already referred to above under water, biodiversity, air, energy.

Transportation

The Plan should promote and as appropriate, provide for the provision of sustainable modes of transport. The Department of Transport Tourism and Sport 'Smarter Travel — A Sustainable Transport Future — Transport Policy for Ireland 2009-2020' (DTTAS, 2009) should be referred to, in the context of possible initiatives which could be included as objectives within the Plan. The Plan should include and provide support for appropriate access to public transport, dedicated cycleways and pedestrian pathways, access to rapid charging infrastructure etc.

The transport-related actions in the National Mitigation Plan, Climate Action Plan 2019 and the National Planning Framework, should also be considered and integrated, as appropriate in the Plan. In seeking to support achieving a low carbon economy, it is important to consider and manage transport related emissions within the Plan area. In this regard the Plan should promote, and as appropriate provide for sustainable modes of transport.

Promoting the development of traffic management measures to reduce the potential for traffic congestion and associated vehicular emissions should be considered. In particular, it would be useful to prepare (and review existing) Integrated Traffic Management Plans, where relevant and appropriate, for the existing urban areas and proposed new urban developments to consider and address the short, medium and long-term traffic management requirements within the Plan area.

Infrastructure Planning

Where zoning/rezoning of lands and the introduction of new development is being proposed within the Plan area, the Plan should promote the need for an integrated planning approach to service any development proposed and authorised during the lifetime of the Plan in collaboration with key stakeholders.

The Plan should, (when considering additional development proposals), support and promote the provision of adequate and appropriate critical service infrastructure, surface and storm water drainage, public transport, waste management, community services and amenities etc. on a planned and phased basis. This is in the context of taking into account and addressing existing infrastructural inadequacies to meet the expected needs of predicted increases in population associated with the Plan implementation.

The potential impact on human health, habitats and species of ecological importance, flood risk and water quality should be taken into account in considering proposed additional infrastructure or in proposed upgrading of existing infrastructure.

Environmental Impact Assessment (EIA)

The Plan should highlight that, under the EIA and Planning & Development Regulations, certain projects arising during the implementation of the Plan may require an EIA. It should be noted that projects may also require Appropriate Assessment screening, as required by Article 6 of the Habitats Directive. It should be noted that the EPA's role in relation to EIA relates only to facilities/sites which are licensable by the EPA, namely IPPC, waste water and waste sites.

Draft Guidelines on information to be contained in Environmental Impact Assessment Reports can be consulted at: http://www.epa.ie/pubs/advice/ea/drafteiarguidelines.html

Appendix 1a: Links to environmental guidance/reports

Air	http://www.epa.ie/pubs/reports/air/quality/
Bathing Water	http://www.epa.ie/pubs/reports/water/bathing
Biodiversity	http://www.npws.ie/guidance-appropriate-assessment-planning-authorities
	http://www.npws.ie/publications
	http://www.epa.ie/pubs/reports/research/biodiversity/
Climate Action	https://www.dccae.gov.ie/en-ie/climate-action/Pages/default.aspx
	http://www.epa.ie/pubs/reports/research/climate/
	https://www.climateireland.ie/
Cumulative Effects	http://www.epa.ie/pubs/advice/ea/
Assessment	
DHPLG Guidelines /	https://www.housing.gov.ie/planning/planning
Legislation	
Drinking Water	http://www.epa.ie/pubs/reports/water/drinking/
EIA	https://www.housing.gov.ie/planning/planning
Energy Conservation	www.seai.ie
Flood Risk	https://www.flooding.ie/Planning/
Geology /	www.gsi.ie
Geomorphology	
Ground Water	http://www.epa.ie/water/wm/groundwater/
Landana Charriti	
Landscape Character	http://www.heritagecouncil.ie/
Assessment	
Marine	https://www.marine.ie/Home/home
Noise	http://www.epa.ie/pubs/advice/noise/
Radon	http://www.epa.ie/pubs/advice/radiation/
SEA EPA resources	http://www.epa.ie/pubs/advice/ea/
State of Environment	http://www.epa.ie/irelandsenvironment/stateoftheenvironmentreport/
Surface Water	http://www.epa.ie/pubs/reports/water/waterqua/
Transportation	https://www.nationaltransport.ie/planning-policy/
	https://www.tii.ie/technical-services/environment/
Waste Management	http://www.epa.ie/nationalwastestatistics/
NA/ I - NA/ - I	http://www.epa.ie/pubs/reports/waste/
Waste Water	http://www.epa.ie/pubs/reports/water/wastewater/

Note: The above list is indicative only; all of the above may not be relevant to a particular plan

Appendix Ib: Links to spatial environmental resources

Air	http://www.epa.ie/air/quality/monitor/
Bathing Water	http://www.beaches.ie
Biodiversity	https://maps.biodiversityireland.ie/
,	https://www.birdwatchireland.ie/OurWork/PolicyAdvocacy/BirdSensitivityMappin
	g/tabid/1312/Default.aspx
	https://www.npws.ie/research-projects/ecosystems-services-mapping-and-
	assessment
	http://www.wetlandsurveysireland.com/wetlands/map-of-irish-wetlands/map-
	of-irish-wetlandsmap/
Drinking Water	http://www.epa.ie/pubs/reports/water/drinking/
EIA	https://www.housing.gov.ie/planning/environmental-assessment/environmental-
	impact-assessment-eia/eia-portal
Flood Risk	www.floodinfo.ie
Geology /	http://www.gsi.ie/Mapping.htm
Geomorphology	
Ground Water	https://www.gsi.ie/en-ie/data-and-maps/Pages/Groundwater.aspx
	http://www.epa.ie/hydronet/#Water%20Levels
Noise	https://gis.epa.ie/EPAMaps/ (Under Environment & Wellbeing)
Radon	http://www.epa.ie/radiation/radonmap
SEA EPA resources	www.enviromap.ie
	https://gis.epa.ie/EPAMaps/SEA (SEAGIS Reporting Tool)
	http://www.epa.ie/pubs/advice/ea/seaspatialinformationsourcesinventory.html
Spatial Planning GIS	www.myplan.ie
	http://www.epa.ie/soilandbiodiversity/soils/land/corine/
	http://gis.epa.ie/SeeMaps
	https://gis.epa.ie/EPAMaps/SEA
	https://www.enviromap.ie
	https://www.opr.ie/resources/
	https://www.opr.ie/library/
Surface Water	http://www.catchments.ie
	http://www.epa.ie/water/watmg/wfd/wfdapp/
	http://www.epa.ie/pubs/reports/water/waterqua/

The *Environmental Sensitivity Mapping (ESM) WebTool* was launched at the Environment Ireland Conference in Croke Park on the 3rd October 2019. This is a new decision support tool to assist SEA and planning processes in Ireland. It is available at www.enviromap.ie.

The tool brings together over 100 datasets and allows users to create plan-specific environmental sensitivity maps. These maps can help planners examine environmental considerations, anticipate potential land-use conflicts, and help identify suitable development locations while also protecting the environment.

Appendix II: Key national & regional plans, programmes & strategies⁷

National

- National Planning Framework (DHPLG)
- Rural Development Programme (DAFM)
- National CFRAMS Programme (OPW)
- National River Basin Management Plan for Ireland (DHPLG)
- National Renewable Electricity Policy Framework (in preparation DCCAE)
- Grid 25 Implementation Strategy (Eirgrid)
- Draft National Hazardous Waste Management Plan (EPA, in preparation)
- FoodWise 2025 / Agri Food Strategy 2030 (DAFM)
- National Forestry Programme / Forestry Policy Review (DAFM)
- Draft National Marine Planning Framework (DAFM)
- Seafood Operation Programme / Strategic Aquaculture Programme (DAFM)
- Harnessing Our Ocean Wealth (DAFM)
- National Broadband Plan (DCCAE)
- National Landscape Strategy (DCHG)
- National Peatland Strategy, SAC Raised Bog Management Plan (DCHG)
- National Biodiversity Plan (DCHG)
- Water Services Strategic Plan / Capital Investment Programme / Draft Water Resources Management Plan (Irish Water)
- Climate Action Plan 2019 (DCCAE)
- Sectoral Climate Change Adaptation Strategies and Low Carbon Roadmaps
- Smarter Transport / Strategic Framework for Integrated Land Transport (DTTAS)
- Framework for Alternative Fuel Infrastructure in Transport (DTTAS)
- Offshore Renewable Energy Development Plan (DCCAE)
- State of the Environment Report 2020 (EPA, in preparation)
- National Bioenergy Plan (DCCAE)
- National Mitigation Plan (DCCAE)
- National Policy Position on Climate Action and Low Carbon Development (DCCAE)
- 10 Year Tourism Strategy (Fáilte Ireland)
- National Greenway Strategy (DTTAS)
- Urban Development & Building Heights Guidelines for Planning Authorities (DHPLG)

Regional

- Regional Spatial and Economic Strategies
- Relevant CFRAMS Flood Risk Management Plans
- Pollution Reduction Programmes for Shellfish Waters
- Forestry and Freshwater Pearl Mussel Plan (DAFM, in preparation)
- Regional Waste Management Plans
- Transport Strategy for Greater Dublin Area
- Wild Atlantic Way
- Shannon Integrated Framework Plan (SIFP)
- County Renewable Energy / Wind Energy Strategies
- County Tourism Strategies
- National Investment Framework for Transport Investment (DTTAS)
- Metropolitan Area Transport Strategies (NTA)

⁷ Plan-makers should identify key relevant plans/programmes/strategies in the SEA. The above list is indicative only; all of the above may not be relevant to a particular plan.