

## Chapter 6: Infrastructure and Environmental Services

### 6.1 Background

We note the following:

*The Council is responsible for the management of surface water, with the Office of Public Works (OPW) having overarching responsibility for flood risk management. The Council also has a statutory role in regulating waste management and pollution in conjunction with the Environmental Protection Agency (EPA) and in co-operation with Regional support organisations such as the Local Authority Waters Programme (LAWPRO) and the Waste Enforcement Regional Lead Authority (WERLA) offices.*

It should be clearly stated here, in the interests of clarity for the general public and accessibility to environmental information (Aarhus Convention), that **Local Authorities are responsible for enforcement of the Nitrates Directive within their catchment areas.** (<https://www.gov.ie/en/publication/b87ad-nitrates-directive/>)

#### 6.5.1 Water Services

We note the following from the **Kildare County Council Draft Kildare County Development Plan 2023-2029 SEA Environmental Report.**

(<https://consult.kildarecoco.ie/en/consultation/draft-kildare-county-development-plan-2023-2029>)

*“The County is located within the **Eastern and Southeastern River Basin Districts**. The Local Authorities located in the RBDs have prepared River Basin Management Plans. **The Eastern RBD Plan has been adopted**. The Management Plans provide objectives for river basins in order to implement the requirements of the WFD to help protect and improve all waters in the RBDs. The largest catchment in the County is the **Barrow catchment** which drains the southwest of the County and includes the Barrow River and all of its tributaries. This catchment is generally a **mixture of good or moderate status**. The northeast of the County forms part of the **Liffey catchment** which includes the River Liffey and its tributaries. The waters in the Liffey catchment are generally **classified as being of poor or good status**. **Poulaphouca Reservoir** is located within the Liffey catchment and partially in County Kildare. This lake is the only lake in Kildare attributed with a status (it is identified as being of **moderate status**). Downstream of County Kildare, the Liffey catchment includes various bathing waters at Dublin Bay. The north-eastern corner of the County forms part of the **Boyne catchment** – waters here are generally classified as being of **poor or moderate status**.”*

With respect to water quality, we note policy **IN P1** and in particular **IN P2**:

**IN P2** - *Ensure the protection and enhancement of water quality throughout Kildare in accordance with the EU WFD and facilitate the implementation of the associated programme of measures in the River Basin Management Plan 2018-2021 (and subsequent updates).*

Additionally, we note objectives **IN O1 - IN O11** and particularly **IN O5** and suggest amendment as follows:

**IN O5** - *Manage, protect, and enhance surface water and groundwater quality to meet the requirements of the EU Water Framework Directive to achieve good ecological status by, at the latest 2027.*

- However, we note that no recognition is given to the importance of peatlands in filtering water within river catchment areas, and contributing to the good ecological status of those waterbodies, and we recommend inserting the following objective:
- **Additional objective** - Recognise the important role of natural boglands and other wetland areas in filtering water and contributing to sound ecological status in river catchment areas.

Additionally, given the current ecological status of Kildare's waterbodies (see Section 6.8.2 below) we are **extremely concerned** that only one single action – **IN A1** - is listed in this section.

**IN A1** - *Install public water fountains in two towns as pilot schemes within 1 year of the adoption of this Plan.*

We recommend inserting additional actions, as follows:

- **Additional Action:** Urgently seek adoption of the **Southeastern River Basin Management Plan** in cooperation with other relevant Local Authorities and stakeholders
- **Additional Action: Enforcement and reporting of the Nitrates Regulations** within all of Kildare's River catchment areas in line with statutory requirements. (<https://www.gov.ie/en/publication/b87ad-nitrates-directive/>)

## 6.6 Surface Water / Drainage

We recognise the value and need for Sustainable Urban Drainage systems (SuDs); however, we would like to emphasize the following:

- The **primary nature-based solution** should be to leave **established native vegetation *in situ*, wherever possible, to intercept runoff.**
- **It is important to note that SuDs have the capacity to disrupt and undermine the integrity of native flora** when generic (often imported) swale, pond and other green infrastructure plants or seed mixtures are employed. Often planting specifications provided by landscape consultants are from generic lists of swale 'wildflower' mixes, or pond plants, and these plant mixtures bear little or no resemblance to natural pond floras or the flora of the surrounding area.
  - <https://dnfc.net/wildflower-seed-mixtures/>
  - <https://pollinators.ie/wildflower-seed/expert-opinions/>
- Additionally, **aquatic plants are some of the world's most problematic invasive organisms**, many are extremely difficult to identify accurately to species level (relevant botanical expertise is required), and **mis-identified invasive species are often sold in garden centres and nurseries**, due to this difficulty.

- Aquatic plants are highly vagile and **disperse readily in nature**; therefore, left unplanted, **pond features will rapidly colonise from locally available material, and this should be the preferred option.**
- **Any nature-based or green infrastructure solution** should therefore be under the explicit guidance of a **suitably experienced botanist/ecologist.** See: ([https://www.susdrain.org/files/resources/other-guidance/ecological\\_benefits\\_summary.pdf](https://www.susdrain.org/files/resources/other-guidance/ecological_benefits_summary.pdf))

In particular, we note the following objective:

**IN O25** - *Promote the use of green infrastructure (e.g., green roofs, green walls, planting, and green spaces) as natural water retention measures.*

And we suggest that an additional objective should be inserted, as follows:

- **Additional Objective** - Require that established native vegetation should be left *in situ*, wherever possible, to intercept, slow down and filter runoff as an integral part of all new development proposals.

Additionally, if we are to be serious and genuine about protecting our native biodiversity, **we strongly suggest insertion of the following action:**

- **Additional Action** - It is an action of the council to ensure that the construction of swales, ponds and other SuDs or nature-based solutions **will not contribute to further native biodiversity loss**, by requiring that plans submitted at design stage are under the direction of a **suitably experienced botanist/ecologist.** Additionally, the preferred option in employing these techniques is to allow natural recolonization, or at the very minimum, that any plantings arise from locally sourced native material of native provenance and origin.

## 6.7 Flood Risk Management

We particularly welcome insertion of objective **IN O32.**

**IN O32** - *Recognise the important role of natural boglands and other wetland areas in flooding patterns. Development in these areas shall therefore be subject to a Flood Risk Assessment in accordance with the relevant guidelines.*

### 6.8.1. Waste Management

The most recent statistics from the EPA report that **Ireland produced over 1 million tonnes of packaging waste in 2019, for the third year in a row;** and of the 1,127,917 tonnes of packaging waste generated in Ireland in 2019, **just 182,321 tonnes (16%) was recycled in Ireland.**

It is well recognised that it is utterly unsustainable to continue to encourage the proliferation of packaging waste, particularly single-use packaging waste.

Additionally, we note here, the **Waste Hierarchy** under the **EU Waste Framework Directive** ([https://ec.europa.eu/environment/topics/waste-and-recycling/waste-framework-directive\\_en](https://ec.europa.eu/environment/topics/waste-and-recycling/waste-framework-directive_en)), wherein, **the biggest focus should be in preventing waste in the first instance.**

And we draw your attention to Ireland's new roadmap for waste planning and management, wherein "we need to embed climate action in all strands of public policy" by shifting focus away from waste disposal and looking instead to how we can preserve resources by creating a circular economy" **Waste Action Plan for a Circular Economy 2020-2025** (<https://www.gov.ie/en/publication/4221c-waste-action-plan-for-a-circular-economy/>).

This document states:

*"Our policy focus must be broader, looking first at how we consume materials and resources, how we design the products that households and businesses use, how we prevent waste generation and resource consumption and how we extend the productive life of all goods and products in our society and economy."*

*"COVID-19 has exposed fragilities within our global economic model. It is causing a rethink throughout the world about the ways we work, the way we produce, transport, buy and consume things. A transition to a circular economy contains some important answers, for example in terms of:*

- *the need to design and make products to be repairable, reusable and potentially for remanufacturing (such as ventilators during the current pandemic);*
- *self-sufficiency and local production / consumption;*
- *shorter and more resilient supply chains for certain products;*
- *consumption and production patterns guided by scarcity and necessity; and*
- *creating local jobs, training and enterprise opportunities using local resources and providing local repair and refurbishment services."*

Taking into account the above, we strongly suggest the following changes to objective - **IN O42**:

- **IN O42** - *Promote and facilitate communities to become involved in environmental awareness activities and community-based ~~recycling initiatives~~ reduction initiatives, which lead to a circular economy and local sustainable waste management practices.*

And in line with: **Waste Action Plan for a Circular Economy 2020-2025**, we suggest an additional objective:

- **Additional Objective** - *As part of an education and public awareness programme, to promote plastic and packaging as an urgent public issue. Building awareness on how to prevent it (e.g. by choosing packaging free products) and how to handle the packaging waste that arises; and raise consumer awareness on the benefits of use of reusable containers and work with retailers to encourage the provision of refill options.*

Additionally, in light of the EPA statistics above, the projected increase in population in Kildare, expiry of the Eastern-Midlands Regional Waste Management Plan 2015, publication of the more recent Climate Act and Waste Action Plan for a Circular Economy 2020-2025, associated fossil fuel usage and CO<sub>2</sub> emissions in the production and disposal of packaging waste, production of methane from food waste, current litter problems; **we find the following action totally underwhelming:**

**IN A5** - *Achieve the vision of the Eastern-Midlands Regional Waste Management Plan 2015-2021 by meeting the following targets:*

- *Ensure a 1% reduction per annum in the quantity of household waste generated per capita over the period of the Plan.*
- *Support the target to achieve a recycling rate of 50% of Managed Municipal Waste.*
- *Reduce to 0% the direct disposal of unprocessed residual municipal waste to landfill over the lifetime of this plan.*

Additionally, we note, under the EU Waste Framework Directive that:

- by 2025, the preparing for re-use and the recycling of municipal waste shall be increased to a minimum of 55 %, 60% and 65% by weight by 2025, 2030 and 2035 respectively

Furthermore, **Waste Action Plan for a Circular Economy 2020-2025** details that in 2017, each person living in Ireland produced, on average, 577 kg of municipal waste, which is well above the European average of 487 kg.

We humbly suggest that KCC should be a leader and not a follower in tackling the unsustainability of waste production in Ireland.

We suggest that a substantial revision of action **IN A5** is required along the lines of the following:

**Revised Action IN A5** – *Achieve the vision of the Waste Action Plan for a Circular Economy 2020-2025 and the Eastern-Midlands Regional Waste Management Plan 2015-2021 (and future revisions) by meeting the following targets:*

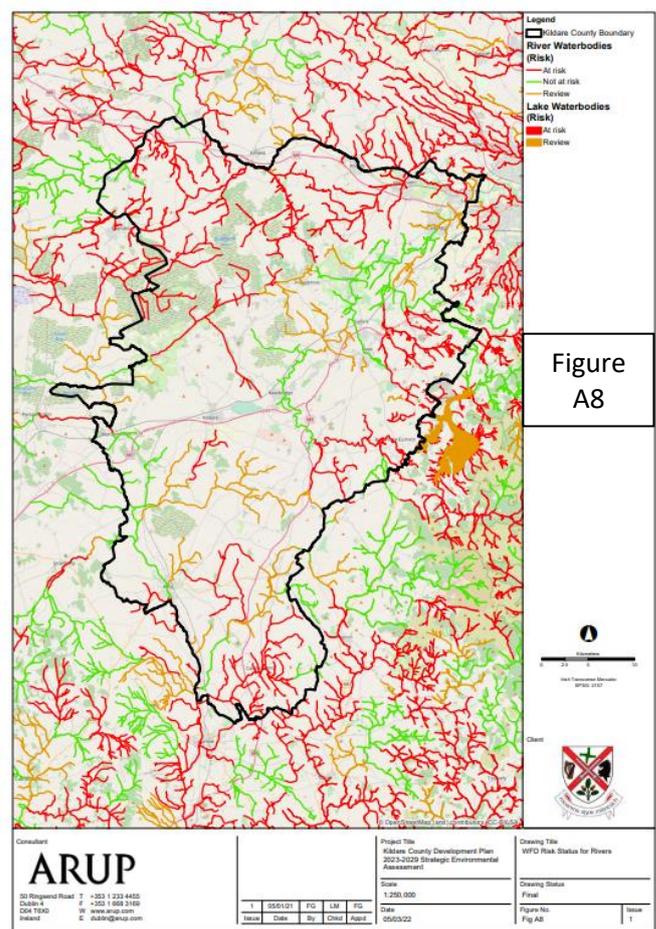
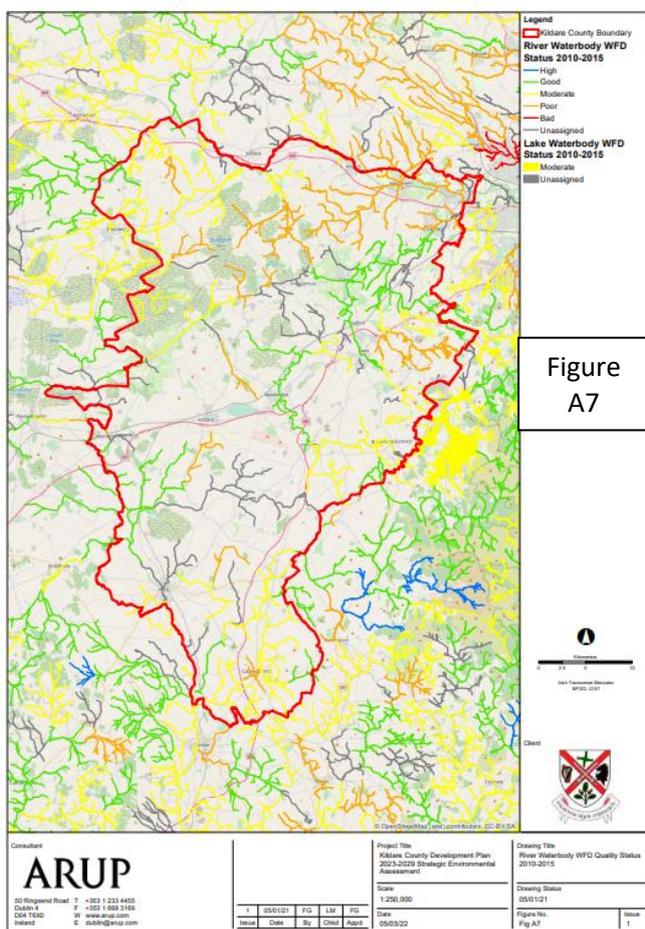
- *Ensure a ~~1%~~ 5% reduction per annum in the quantity of household waste generated per capita over the period of the Plan.*
- *Support the target to achieve a recycling rate of ~~50%~~ 55% of Managed Municipal Waste (household and commercial) by 2025 leading to 60% by 2030*
- *Reduce to 0% the direct disposal of unprocessed residual municipal waste to landfill over the lifetime of this plan*

## 6.8.2 Pollution Control – Water, Air, Noise and Light

### Water quality

We note the reporting of EPA’s **Water quality in Ireland Report 2013 – 2018** in the introduction to this section; however, we would like to draw attention to the two maps produced in **Figures A7 (Water Framework Directive (WFD) Quality Status 2010-2015 for Rivers and Lakes within County Kildare)** and **A8 (WFD Risk Status for Rivers and Lakes)** of **Appendix A** of the **Draft Kildare County Development Plan 2023-2029 - SEA Environmental Report**:

(<https://consult.kildarecoco.ie/en/system/files/materials/4060/Draft%20Kildare%20CDP-%20SEA%20Environmental%20Report%20Final%20Issue.pdf>)



The **Water Framework Directive (WFD) Quality Status 2010-2015 for Rivers and Lakes** within County Kildare are shown in Figure A7 of Appendix A, and the **WFD Risk Status for Rivers and Lakes** within the County is shown on Figure A8 of Appendix A. (Adapted from the Draft Kildare County Development Plan 2023-2029 - SEA Environmental Report: <https://consult.kildarecoco.ie/en/system/files/materials/4060/Draft%20Kildare%20CDP-%20SEA%20Environmental%20Report%20Final%20Issue.pdf>)

Additionally, we would like to direct the Council to the following from **the EPA River catchment reports**, and the relevant statistics pertaining to the number of waterbodies **At Risk** in both the **River Barrow and River Boyne catchment areas, along with the most significant pressure:** (<https://www.catchments.ie/data/#/?k=66otdi>)

*“A waterbody that is **At Risk** means that either the waterbody is currently not achieving its **Water Framework Directive (WFD) environmental objective of Good or High Ecological Status** or that there is an upward trend in nutrients or ammonia and if this trend continues the waterbody Status will decline by the end of Cycle 3 and will fail to meet its environmental objective”.*

#### **Barrow catchment area:**

- **3rd Cycle Draft Barrow Catchment Report (HA 14)** (<https://catchments.ie/wp-content/files/catchmentassessments/14%20Barrow%20Catchment%20Summary%20WFD%20Cycle%203.pdf>)
- *In total there are 205 waterbodies in the Barrow Catchment **and 96 (47%) are currently At Risk, 52 (25%) in Review and 57 (28%) are Not At Risk.***
- *The significant pressures affecting the greatest number of waterbodies is **agriculture**. Followed by hydromorphology, urban waste water, peat, urban run-off, domestic waste water, other, industry, forestry and mines and quarries.*
- *Agriculture is a significant pressure in 62 river waterbodies, five transitional waterbodies and five groundwater bodies. The issues related to farming in this catchment include diffuse phosphorus loss to surface water from, for example, direct discharges; or runoff from yards, roadways or other compacted surfaces, or runoff from poorly draining soils. High PIP for surface water nitrates was noted in arable and pasture lands, sediment is also a problem from land drainage works, bank erosion from animal access or stream*

#### **And the River Boyne catchment area:**

- **3rd Cycle Draft Boyne Catchment Report (HA 07)** (<https://catchments.ie/wp-content/files/catchmentassessments/07%20Boyne%20Catchment%20Summary%20WFD%20Cycle%203.pdf>)
- *In total there are 172 waterbodies in the Boyne Catchment **and 93 (54%) of these are currently At Risk, 32 (19%) in Review and 47 (27%) are Not At Risk***
- *The significant pressure affecting the greatest number of waterbodies is **agriculture**, followed by hydromorphological pressures, domestic waste water, peat, urban waste water, urban run-off, industry and mines & quarries.*
- *Agriculture is a significant pressure in 51 river waterbodies, five lake waterbodies, one transitional waterbody (Boyne Estuary) and six groundwater bodies in Cycle 3. Phosphorus loss to surface waters from, for example, direct discharges; or runoff from yards, roadways or other compacted surfaces, or runoff from poorly draining soils, remains an issue since Cycle 2. Sediment associated with agricultural activities, including land drainage works, bank erosion from animal access or stream crossings,*

*has also been noted as an issue in this catchment. **Organic pollution associated with run-off from farmyards in particular, has also been identified throughout the catchment.***

We draw your attention to the following from Minister Darragh O'Brien (21.10.21): (<https://www.oireachtas.ie/en/debates/question/2021-10-21/202/#pq-answers-202>)

*“Local authority functions, including enforcement activities, are set out under Part 6 of the European Union (Good Agricultural Practice for Protection of Waters) Regulations 2017. Under these regulations, local authorities are required to undertake inspections to determine on-farm compliance with the provisions of the regulations on farms within their jurisdiction.”*

and the EPA: ([https://www.epa.ie/publications/compliance--enforcement/public-authorities/EPA\\_LAEnforcementReport2019.pdf](https://www.epa.ie/publications/compliance--enforcement/public-authorities/EPA_LAEnforcementReport2019.pdf))

*“Local authorities have substantial water enforcement related responsibilities to protect both human health and the environment. The work they do to delivery their key role in national water monitoring is fundamental to inform their action and the actions of other stakeholders. That being said, water quality is declining nationally, and there is a small number of enforcement actions and prosecutions being taken by local authorities. **Local authorities and their shared service (the Local Authority Waters Programme) need to work together to deliver on their water quality protection functions. Local authorities also have a key role in protecting public health by monitoring and enforcing the drinking water standards in all regulated private water supplies.”***

“Local authorities need to:

- Ensure the adequacy of their resources to meet their statutory water related responsibilities and increase enforcement action to protect both human health and the environment.
- Protect public health by monitoring and enforcing the drinking water standards in all regulated private water supplies.
- Maintain their key role in national water monitoring.”

“Local authorities need to:

- Ensure the adequacy of their resources to meet their statutory water responsibilities.
- Actively collaborate with their shared service to deliver their water quality protection and restoration functions. In particular where the local authority is advised of a significant decline in water quality under the Red Dot+ programme investigations should be undertaken.
- Maintain their key role in WFD monitoring, bathing water monitoring, and investigative monitoring
- Monitor all private water supplies and enforce the drinking water standards where monitoring identifies non-compliance to better protect human health.”

We note in the most recent EPA reporting cycle, 2019, that **Kildare Co. Co. conducted 7 water inspections per 1,000 population** (1,500 total water inspections), and that this is at the lower end of the scale, for example, Monaghan (19), Cavan (17), Mayo (17), Kilkenny (16), Sligo (14), Wexford (14), Kerry (13), Meath (12), Offaly (12), Laois (11), Roscommon (11) and Clare (10).

([https://www.epa.ie/publications/compliance--enforcement/public-authorities/EPA\\_LAEnforcementReport2019.pdf](https://www.epa.ie/publications/compliance--enforcement/public-authorities/EPA_LAEnforcementReport2019.pdf))

We note policy number **IN P7** and objectives **IN O52** and **IN O53** in relation to water quality; however, given the **significant pressure posed by agriculture to water quality** we request that additional concrete actions be inserted.

**IN P7** - *Support the implementation of the Water Framework Directive, the River Basin Management Plan, and the Local Authority Waters Programme in achieving and maintaining at least good environmental status for all water bodies in the county.*

**IN O52** - *Protect water quality from pollution by agricultural sources and to promote the use of good farming practices in accordance with the Nitrates Directive (91/676/EEC) and Ireland's Nitrates Action Programme 2017-2021 (including any subsequent update).*

**IN O53** - *Assess applications for developments, having regard to the impact on the quality of surface waters and any targets and measures set out in the River Basin Management Plan and any subsequent local or regional plans.*

Replace with:

- **IN P7** - To actively implement the Water Framework Directive, the River Basin Management Plans, and the Local Authority Waters Programme and to attempt to achieve and maintain a high ecological status of all water bodies in the county by 2030. And at a minimum to achieve and maintain at least good ecological status for all water bodies in the county during the timeframe of this plan.
- **Additional Objective:** Ensure that adequate resources are in place to meet statutory water responsibilities
- **Additional Action:** Active enforcement and reporting of the Nitrates Regulations within all of Kildare's River catchment areas in line with statutory requirements. <https://www.gov.ie/en/publication/b87ad-nitrates-directive/>

Additionally, we suggest inserting the following in **IN O58**:

**IN O58** - *Promote and support the ban on the use, marketing, sale, and distribution of bituminous coal and peat in Naas, Newbridge, Celbridge, Leixlip and Maynooth.*