



Memorandum PL 61.PA0033

To: Liam Bowe, Senior Planning Inspector
From: Emmet Smyth, Scientist
Re: Galway Harbour Extension
Date: 19th June 2025

Brief Site Description

The application site with a stated area of 85.39 ha is located in Galway Harbour in Galway City. The development area generally comprises of 3 areas:
Namely Galway Harbour Extension, Galway Harbour Enterprise Park Road & Services Upgrade and Lough Atalia Road & Services upgrade.

The Galway Harbour Extension (GHE) area of development consisting of 82.89 ha is broken down as follows:

- Land development area (28.07 ha)
- Breakwaters and Revetment area (3.04 ha)
- Dredged Area (46.48 ha)
- Working Area (Dredge/ Marine Construction) (5.30 ha)

The land development/ redevelopment area of 28.07 ha comprises of:

- Land to be reclaimed from Sea (23.89 ha)
- Existing Galway Harbour Enterprise Park land to be redeveloped (4.18 ha).

The inspector requested an assessment of the issues raised in the submissions regarding the Water Framework Directive.

These are as follows.

An Taisce highlighted deficiencies in the 2022 and 2023 AERs submitted by Uisce Éireann to the EPA and highlights deficiencies in the wastewater and storm water networks referenced in Uisce Éireann's Drainage Area Plan for the Galway agglomeration. Inland Fisheries highlighting the classification of the River Corrib under the EU Water Framework Directive as of 'good ecological status' and 'not at risk' and the need to maintain this status.

Baseline Environment.

The primary objectives of the Water Framework Directive are to maintain "high status" of surface waters where it exists and to prevent deterioration in the existing status of waters and achieve at least "good status" in relation to all waters by the end of the current cycle. A water body must attain both good 'ecological status' and good 'chemical status' before it can be considered to be at good overall status a failure in either will result in the failure of the waterbody overall.

The Environmental Quality Standards for classifying surface water status are outlined in the European Communities Environmental Objectives (Surface Waters) Regulations, 2009 (SI No. 272 of 2009), *as amended*. These regulations set standards for biological quality elements, physico-chemical conditions supporting biological elements (including general conditions and specific pollutants), priority substances and priority hazardous substances.

The ecological status of a water body is determined by complying with the EQSs for the biological quality elements, physico-chemical conditions supporting biological elements and relevant pollutants and hydro-morphological quality elements. The chemical status of a water body is determined by complying with the EQSs for priority substances and priority hazardous substances. In addition to achieving good ecological ^{and} chemical status, a water body must achieve compliance with standards and objectives specified for protected areas, which include areas designated by the

Bathing Water Directive; the Urban Waste Water Treatment Directive; the Shellfish Waters Directive; the Habitats Directive and the Birds Directive.

Catchment description.

The project is set in the Corrib catchment and its estuarine waters which encompasses the following catchments 29 Galway Bay Southeast, 30 Corrib and 31 Galway Bay North with an area of 9.75km². The Corrib enters the transitional waters at the harbour. The sub-catchments or in-putting surface waterbodies that are the in the area of the proposed project are the Carrowmoneash (Oranmore) SC 010 at and the 30 18 Corrib SC_010 at the Corrib estuary.

Carrowmoneash (Oranmore) SC 010 sub catchment.

This sub catchment is located within the 29 Galway Bay Southeast Catchment and has an area of 129.01km². There is a variety of landcover generally of the well-drained grey, brown podzolics and Brown earths soils. Pockets of fen peat and surface water gleys become the soil type as this river makes its way to the transitional waters. Elevated concentrations of phosphate and ammonia are a significant issue. In the lower reaches, urban diffuse and wastewater are a significant pressure. In the middle and upper reaches of the sub catchment wastewater treatment systems are a significant pressure. The sub catchment is underlain by a regionally important Karstified aquifer with predominantly high groundwater vulnerability.

Corrib SC 010 sub catchment

This sub catchment is located within the 30 Corrib catchment. Predominant soil group throughout the sub catchment is of a limestone till with pockets of bedrock out crop and cut over raised peatland as it makes its way towards the transitional waters. One out of three river water bodies within the sub catchment, Terryland_010, is at moderate status with downward trending ammonia at three of the four monitoring stations with similar profiles for phosphorus. The lake water bodies of Corrib Lower is not deemed to be at risk and is at good status with failure due to specific chemical compounds,

Benzo(a)pyrene, Mercury and PBDE with all other conditions deemed to be of high status. Corrib Upper is not deemed to be at risk and is at good ecological status with failure due to specific chemical compound, Benzo(a)pyrene, with all other conditions deemed to be of high status. The significant pressures within Terryland_010 are likely to be a combination of channelisation and misconnections.

Water Framework Directive status Classification.

The project is located within the following surface water bodies, Corrib Estuary a transitional waterbody not heavily modified, Inner Galway Bay North coastal waterbody and Oranmore and Corrib river waterbodies. The project also lies within the Clarinbridge groundwater body (WE_G_0008) which is at good status both qualitatively and quantitatively there are no likely significant water quality effects on groundwater expected. Based on the monitoring data for the period 2016-21 the present WFD classification of the transitional waters and the coastal water bodies will be discussed hereafter.

Table 1. WFD Status

WFD Status period	Corrib Estuary	Inner Galway Bay North	Carrowmoneash (Oranmore)	Corrib
2016-21	Moderate	Good	Poor	Good

The Corrib estuary is deemed to be of moderate status with the WFD status currently under review. Ecological status here is of moderate status with the chemical surface water status failing on chemical status for the presence of PBDE, a ubiquitous substance with the ability to persist within the environment for some time, this represents a decline in the condition of the waters since the previous monitoring period 2013-18 where status was good. The Inner Galway Bay North is deemed to be of good status and not at risk. The Carrowmoneash (Oranmore) 010 is of poor status and the WFD risk in review. Based on modelling the ecological status is deemed to be poor status. The Corrib 020 is of good status and not deemed to be at risk and this is based

on monitoring with high value for various nutrient conditions. The objective of this assessment is to ensure that this development will not result in the deterioration of the current Water Framework Directive status of the water bodies within the project area, based on the 2016-2021 Water Framework Directive monitoring programme as reported by the EPA, and also to ensure that the project does not compromise the achievement of the WFD objectives for the improvement in the overall status of the aforementioned water bodies. The assessment will also consider the protected areas linked to the water bodies in question and ensures that the protected area objectives are also unaffected.

Heavily modified Water bodies within the project area.

Heavily modified waterbodies are bodies of surface water that have been substantially altered in their hydro-morphological character for the purposes of a specified use. The hydro-morphological condition of water bodies has been significantly modified by anthropogenic intervention for various specified uses, such as for navigation, land drainage, hydroelectric power generation and water supply. The environmental objectives for HMWBs recognise that the extent of the modifications therefore means that the conditions are not consistent with those required for Good Ecological Status, and that the impacts cannot be fully mitigated without impacting on the specified use.

Waterbodies that are designated as heavily modified have a WFD environmental objective of Good Ecological Potential rather than Good Ecological Status. The designation means that an objective is set that recognises that the water body has been physically altered for a specified use and that is required for the greater good. The physical modifications caused by the use need to be mitigated against as far as possible, whilst acknowledging that the specified use needs to be retained.

Regarding the development area: The Corrib Estuary transitional waters is not designated as a highly modified waterbody and neither are the remaining pertinent waterbodies.

Protected areas

A significant proportion of the area of Galway Bay and adjacent coastline is protected under existing EU legislation requiring special protection due different particular environmental criteria.

The protected areas relevant to the area of this subject development includes the following:

- bodies of water designated as recreational waters and or bathing waters,
- areas designated for the protection of habitats or species where the maintenance or improvement of the status of water is an important factor in their protection including relevant Natura 2000 sites (Special Protection Areas); and Special Areas of Conservation).

Bathing waters

The Bathing water Directive (2006/7/EC) was transposed into Irish law by the Bathing Water Quality Regulation, 2008 as amended. Water quality at these beaches is classified as followed: excellent, Good, sufficient or poor. This is a pan European approach to bathing and or recreational waters whereby member states must ensure that bathing waters are of sufficient standard or better. E.coli for coastal waters shall not exceed 250 for the 95-percentile value and Intestinal enterococci shall not exceed 100 for the 95 percentile value for the attainment of excellent status.

The designated bathing waters within the project vicinity Ballyloughane Beach, Grattan Road Beach and Salthill beach. The most up to date bathing water classification being for the year 2024.

Ballyloughane Beach: is located in the townland of Inmore, approximately 2km from Galway City centre. It is located in the Corrib Estuary coastal water body (WE_170_0000), in the Western River Basin District. The contributing catchment is approximately 13 km² in area. The entire beach area lies within the Inner Galway Bay SPA, a Special Area of Conservation and houses a number of habitats of high conservation status, being listed in Annex I of the EU habitats Directive. There are no

streams/rivers discharging directly to the bathing water however there are a number of surface water outfalls which discharge surface water from the surrounding catchment. The bathing waters have been classified as "Excellent" for the 2023 & 2024 bathing season, based on a four year water quality assessment (2021-2024). Good Quality Classification was achieved for 2021 & 2022. The bathing water quality is sensitive to heavy precipitative events.

Grattan Road Beach: is located in the townland of Townparks, approximately 1.2km from Galway City centre. It is located in the Corrib Estuary coastal water body (WE_170_0000), in the Western River Basin District. The contributing catchment is approximately 5.2 km² in area. The entire beach area lies within the Inner Galway Bay Special Protected Area, and Galway Bay Complex, a Special Area of Conservation and houses a number of habitats of high conservation status, being listed in Annex I of the EU habitats Directive. There are no streams/rivers discharging directly to the bathing water however there are a number of surface water outfalls which discharge surface water from the surrounding catchment.

For the 2024 bathing season, Grattan Beach achieved good water quality status and complied with EU mandatory values. In 2022 & 23 it was classified as good, which was an improvement from 2021, when it achieved sufficient water quality status. Monitoring has been carried out at Grattan Beach annually for a number of years, and the water quality has generally been shown to be sufficient or good from 2013 -2023. Presently this year sampling has shown the bathing waters to be presently to be in excellent standard. Again, this bathing waters is sensitive to heavy precipitation where microbes can be washed in through the stormwater overflows.

Salthill beach:

The beach is located approximately 3km from Galway City centre. The contributing catchment is approximately 5.2 km² in area. The entire beach area lies within the Inner Galway Bay, Special Protected Area and Galway Bay Complex. There are no streams/rivers discharging directly to the bathing water however there are a number

of surface water outfalls which discharge surface water from the surrounding catchment.

The bathing water quality monitoring carried out at Salthill since 2004 has shown consistently good water quality. For the 2024 bathing season, Salthill achieved Excellent Water Quality status and complied with EU guide and mandatory values. All water quality samples taken during the 2023 bathing season were Excellent.

European sites:

Natura 2000 is a European network of important ecological sites. The EU Habitats Directive (92/43/EEC) places obligations on Member States of the EU to establish the Natura 2000 network. The network is made up of Special Protection Areas (SPAs), established under the EU Birds Directive (79/409/EEC), and SACs, established under the Habitats Directive itself. The subject site falls within the Galway Bay Complex SAC and the inner Galway Bay SPA.

Issues raised by the following appellants.

An Taisce: Outlined deficiencies in the 2022 and 2023 AERs submitted by Uisce Éireann to the EPA and highlights deficiencies in the wastewater and storm water networks referenced in Uisce Éireann's Drainage Area Plan for the Galway agglomeration.

The applicant responded as follows,

In relation to wastewater and water, Uisce Eireann is the prescribed body for the provision of wastewater and watermain infrastructure. Uisce Eireann have been consulted at all stages of the design of the Project. In its submission dated 7 February 2025 Uisce Eireann confirmed the proposed connection details and raised no concerns in relation to existing infrastructure or connection to same. In this submission Uisce Eireann outlined their standard conditions such as further engagement being

required prior to commencement of any development which the Applicant accepts, and the Applicant confirms that it will engage with Uisce Eireann as requested.

Comment:

There have been no concerns raised by Uisce Eireann regarding the capacity existing infrastructure and the capacity of same. The Annual environmental report for the existing wastewater infrastructure for the years 2022, 2023 and 2024 shows that the under the wastewater discharge authorisation that the plant is performing within the confines of the conditions placed on it by the Agency and is deemed compliant. For the year 2024 there were no exceedances except for 2 TON exceedances for the year. The coastal transitional monitoring results are not meeting the required EQS's pertaining to oxygen and nutrient conditions. There has been a noted deterioration on Grattan beach regarding microbiology however this is more likely attributable to heavy precipitative events.

For the year 2023 the Galway agglomeration annual Environmental report has been deemed compliant with no exceedances across the various parameters and has been deemed compliant regarding the conditions of the discharge authorisation. UE also reports that the coastal and transitional waters met the required EQS as stipulated under the Surface Water Regulations 2009, with the treatment plant not to be deemed to having any negative impact on the ability of the receiving waters to achieve Water Framework Directive objectives. There were No. 3 incidents reported that lead to an uncontrolled release for the period of this year.

For the year 2022 the Galway agglomeration annual Environmental report has been deemed compliant with no exceedances across the various parameters and has been deemed compliant regarding the conditions of the discharge authorisation. UE also reports that the coastal and transitional waters met the required EQS as stipulated under the Surface Water Regulations 2009, with the treatment plant not to be deemed to having any negative impact on the ability of the receiving waters to achieve Water Framework Directive objectives with 1 uncontrolled release attributed to a sewer blockage.

In my opinion the alterations of the dispersion patterns for the disposal of effluent from the wastewater treatment plant will not negatively impact the quality of waters. Data from the last three years would suggest that the WWTP presently is not impacting on water quality and therefore will not impede the ability of the WFD objectives to be met post development. In addition, the discharge from the existing and any future WWTP is and will be regulated by the Environmental Protection Agency.

Inland Fisheries Ireland: Highlights the classification of the River Corrib under the EU Water Framework Directive as of 'good ecological status' and 'not at risk' and the need to maintain these statuses. The Terryland_10 stream entering the Corrib main channel as referenced earlier is presently at Moderate status due to pressures attributable to a combination of channelisation and misconnections. The main channel Corrib_020 is of good status and not deemed to be at risk downstream from the entry point of the Terryland_10 stream. The Corrib Estuary as earlier mentioned is of Moderate Ecological status and has failed by virtue of the presence of persistent chemicals PBDE. The Corrib transitional waters extend c. 700m from the end of Nimos pier to Wolfe Tone bridge and it at this point that the waters become the Corrib-020 waterbody or river waters. The nearest EPA monitoring stations from here are the **Salmon weir bridge** (c. 600m upstream of Wolfe Tone Bridge) and the **Quincentennial bridge** (c 950m upstream of the Salmon Weir bridge). In essence the nearest monitoring station to the proposed development is c.1.3km upstream of the works area. In my opinion the proposed development will not impact on the ability of the Corrib to retain its good status. The development works and operational works will not in my opinion propagate upstream and impact the status of the waterbody by virtue of the distance from the nearest monitoring point.

Conclusion

I have considered the issues raised by the aforementioned appellants, and the potential impact that the development may have on the environment and water quality. I conclude, from the information provided, that the proposed development will not

result in a risk of deterioration of any water body, in this instance coastal waters, either on a temporary or permanent basis. In coming to this conclusion, I have considered the content of the relevant third-party submissions and concerns raised and the potential impact on the receiving environment from the proposed development.

In addition, given the evidence submitted and the mitigation measures proposed I am satisfied that the applicant has submitted sufficient evidence regarding the potential for environmental impact to support the development as proposed. I am satisfied that, in my opinion, no reasonable scientific doubt remains regarding the proposal.

Emmet Smyth.

Inspectorate Scientist