Jacobs

Greater Dublin Drainage Project Addendum

Environmental Impact Assessment Report Addendum: Volume 2A Part A of 6

Chapter 5A Consideration of Alternatives

Uisce Éireann

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Greater Dublin Drainage Project Addendum

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5. Consideration of Alternatives

5.1 Introduction

As detailed in Chapter 1A (Introduction) in Volume 2A Part A of this Environmental Impact Assessment Report (EIAR) Addendum, we have reviewed Chapter 5 (Consideration of Alternatives) in Volume 2 Part A of the EIAR submitted with the original 2018 planning application, in the light of:

- · Changes to the baseline environment;
- The requirement for updated surveys; and
- Changes to the law, policy, and industry standards and guidance, in the intervening period.

We have also had regard to the information presented at the Oral Hearing for application ABP-301908-18 for the Greater Dublin Drainage Project (hereafter referred to as the Proposed Project), and the High Court proceedings in respect of that application, including the addition of ultraviolet (UV) treatment, and the extension to the River Mayne Culvert on the access road to the proposed Wastewater Treatment Plant (WwTP), such that the Proposed Project description has been updated in preparing this Chapter of the Addendum Report (refer to Chapter 4A (Description of the Proposed Project) in Volume 2A Part A of this EIAR Addendum for a full description).

5.2 Alternatives Overview

The findings and recommendations of the Greater Dublin Strategic Drainage Study (Dublin Drainage Consultancy 2005) and its Strategic Environmental Assessment (SEA) (Fingal County Council 2008), as outlined in this Section of the EIAR in the 2018 planning application remain valid.

This is further backed up by the latest Central Statistics Office (CSO) Census 2022 population results (CSO 2023). The full results of Census 2022 have not yet been published but based on the Census 2022 results available, over 2 million people, or just over 40% of the population of Ireland, now live in the Greater Dublin Area (GDA) which includes the counties of Dublin, Meath, Kildare, and Wicklow. By 2031, the population of the GDA is projected to reach 2.2 million. The GDA experienced a 24.7% increase in population in the period from 2006 to 2022 with an increase of 8.7% from 2016 to 2022. The latest Census 2022 results confirmed that the GDA also recorded the largest inward migration nationally, with +81,702 persons between 2016 to 2022. Fingal's population increased by 37% in the period from 2006 to 2022 with an increase of 11.2% from 2016 to 2022, significantly above the regional growth rate for the same period, while all four administrative areas of Dublin were amongst the fastest growing nationally.

5.3 'Do Nothing' Scenario

There are no changes to the information presented in this Section of the EIAR submitted with the 2018 planning application. The 'Do Nothing' scenario assessed under the strategic drainage scenarios in the SEA of the Greater Dublin Strategic Drainage Study (Fingal County Council 2008) identified five Major Negative impacts under the environmental objectives relating to biodiversity, population and human health, water, air quality and material assets. These Major Negative impacts were reviewed in relation to the current baseline and still reflect the significant future environmental, economic and sanitary problems (and the subsequent significant public health risks and impacts) which will arise if additional wastewater treatment capacity is not provided to cater for future wastewater loads.

5.4 Alternative Non-Project Approaches to Address the Shortfall in Wastewater Treatment

There are no changes to the information presented in this Section of the EIAR in the 2018 planning application. There are no additional alternative non-project approaches, and following review, it has been determined that the findings of this assessment continue to be reasonable and correct.

5.5 Strategic Drainage Scenarios

There are no changes to the information presented in this Section of the EIAR in the 2018 planning application. There are no additional strategic drainage scenarios, and it has been determined that the findings of this assessment continue to be reasonable and correct.

5.6 Alternative Sites Assessment and Route Selection

The Proposed Project in its entirety has been the subject of a systematic, authoritative and comprehensive consideration of alternatives. A significant range of alternatives was considered during strategy development, strategic environmental appraisal and site selection. The consideration of these alternatives was informed, authoritative, rational and robust.

The site and route selection process has been considered against the most recent Uisce Éireann Guidance, A Guide to Route and Site Selection (IW-AD-PD-GL-008) (Uisce Éireann 2021), and the alternative site assessment process completed for the Proposed Project follows the recommended site / route selection process in this Guidance. Therefore, the fundamental principles guiding the original assessment remain valid and comprehensive, and no changes are required to this Section of the EIAR in the 2018 planning application.

5.7 Consideration of Outfall Location

No elements of the Proposed Project incorporated into the planning design following direction at the Oral Hearing in 2019, and the subsequent planning conditions applied to the 2018 planning application submission, necessitated an update to the original hydrodynamic modelling outlined in this Section of the EIAR, which identified the preferable location for the proposed outfall discharge location. The modelling undertaken as part of the consideration of alternatives was informed, authoritative, rational and robust.

The conclusion provided in this Section of the EIAR in the 2018 planning application remains valid. As outlined in Section 5.1, out of an abundance of caution, UV treatment has been included in the design of the Proposed Project, following the Oral Hearing process in 2019, to provide additional reassurance on the protection of designated shellfish waters.

The EIAR and Natura Impact Statement (NIS) included in the 2018 planning application concluded that there will be no significant residual impacts on the environment from the construction and operation of the proposed long sea outfall pipeline route (marine section) for a WwTP providing secondary treatment. The updated assessments completed for the Addendum to the EIAR and the Revised NIS included in this remittal, assessed the inclusion of UV treatment, and continue to conclude that there will be no significant residual impacts on the environment from the construction and operation of the proposed long sea outfall pipeline route (marine section).

5.8 Consideration of Potential for Reuse of Treated Wastewater

There are no changes to the information presented in this Section of the EIAR in the 2018 planning application. The findings of the report entitled, Assessment of Potential for Reuse of Treated Wastewater from Proposed Regional WwTP, which was included as Appendix A5.1 in Volume 2 Part B of the EIAR in the 2018 planning application, remain reasonable and correct.

5.9 Regional Biosolids Storage Facility

5.9.1 Do-Nothing Scenario

The Do-Nothing Scenario remains a non-viable option, as presented in this Section of the EIAR in the 2018 planning application.

5.9.2 Biosolids Disposal Alternatives

As stated in this Section of the EIAR in the 2018 planning application, before arriving at its preferred approach to meeting sludge storage needs, the Applicant considered the findings of the National Wastewater Sludge Management Plan (NWSMP) (Uisce Éireann 2016). There have been no updates to the NWSMP since the submission of the 2018 planning application. Therefore, there are no changes to the information presented in this Section of the EIAR in the 2018 planning application.

5.9.3 Alternative Regional Biosolids Storage Facility Sites

As stated in this Section of the EIAR in the 2018 planning application, before arriving at its preferred approach to meeting sludge storage needs, the Applicant considered the findings of the NWSMP (Uisce Éireann 2016). There have been no updates to the NWSMP since the submission of the 2018 planning application. The alternative site assessment remains valid and robust. Therefore, there are no changes to the information presented in this Section of the EIAR in the 2018 planning application.

5.9.4 Design and Site Layout Alternatives

The selected Regional Biosolids Storage Facility (RBSF) site layout is still considered to be the best overall fit having regard to the various site constraints.

5.9.5 Regional Biosolids Storage Facility Conclusion

In this Section of the EIAR in the 2018 planning application, it was stated that the proposed RBSF site was in the ownership of Fingal County Council and had previously been partially developed as a waste recycling facility. Since the submission of the 2018 planning application, the proposed RBSF was granted planning permission by An Bord Pleanála (Case Reference Number PA29S.301798), as part of the Ringsend Wastewater Treatment Plant Upgrade Project in April 2019, and the ownership of the site transferred to Uisce Éireann.

There are no other changes to the information presented in this Section of the EIAR since the 2018 planning application.

5.10 Conclusion

Following the review, as evidenced above, it can be confirmed that no changes to the information presented in this Section of the EIAR in the 2018 planning application are required.

5.11 References

CSO (2023). Census 2022 - Summary Results

Dublin Drainage Consultancy (2005). Greater Dublin Strategic Drainage Study

Fingal County Council (2008). Greater Dublin Strategic Drainage Study Strategic Environmental Assessment

Uisce Éireann (2016). National Wastewater Sludge Management Plan

Uisce Éireann (2021). A Guide to Route and Site Selection (IW-AD-PD-GL-008)