Introduction

Pursuant to Regulation 42(11) of the European Communities (Birds and Natural Habitats) Regulation 2011 (As amended), The Office of Public Works, as a Public Authority, has conducted an Appropriate Assessment of the statutory arterial drainage maintenance activities for 2019 - 2023 on the Knockcroghery Arterial Drainage Maintenance Scheme. The works as part of the Knockcroghery Arterial Drainage Maintenance Scheme are required as part of maintenance activities under the 1945 Arterial Drainage Act. The purpose of the Determination Statement is to allow interested parties to assess the Public Authority determination. In accordance with Article 6(3) of the EU Habitats Directive (Directive 92/43/EEC) and Regulation 42(1) of the European Communities (Birds and Natural Habitats) Regulations 2011 as amended, the OPW has undertaken a Natura Impact Statement (NIS) to assess, in view of best scientific knowledge and the conservation objectives of the site, if the project, individually or in combination with other plans or projects is likely to have a significant effect on a European Site(s). In undertaking this determination, the OPW have had regard to:

- The Natura Impact Statement prepared on behalf of the OPW by JBA, and
- Impact assessment and mitigation contained therein.

The Plan or Project

The Knockcroghery Arterial Drainage Scheme is located in Co. Roscommon (NIS Figure 2-1). It includes 12.3km of watercourse. Within the Knockcroghery Arterial Drainage Scheme the exact location and type of required maintenance activity varies over time. For the purposes of this NIS not all activities will occur on all scheme channels and structures, but due to the high level nature of this report, all normal drainage maintenance activities are assessed. The OPW drainage maintenance subcategories and activity types are set out in Tables 2.1 & 2.2 of the NIS Report. Drainage maintenance works of channels within Lough Ree SAC (00440) and Lough Ree SPA (004064) will be limited to silt and vegetation management.

Screening Assessment

An Appropriate Assessment screening assessment, addressing Stage 1 of the AA process, has already been completed for the Boyle Arterial Drainage Scheme (JBA, 2014). This identified that likely significant effects on Natura 2000 sites may occur as a result of the proposed maintenance activities and therefore a Stage 2 Appropriate Assessment is necessary.
The Stage 1 Screening Assessment was conducted in line with guidance produced for the OPW in 2014 (Ryan Hanley 2014b, 2014a). This methodology is based on source > pathway > receptor chain principles and involves assessing likely significant effects on Natura 2000 sites within the zone of influence of the proposed drainage maintenance in relation to three pathways:

4. Surface water
5. Land & air
6. Groundwater

Sites that had the potential to be impacted by the maintenance works were determined to be within the zone of influence (ZOI) and these sites require further assessment. The resulting assessment determined that the following Natura 2000 sites may potentially be impacted by the maintenance works and required further assessment:

- Ballinturly Turlough SAC (000588)
- Ballynamona Bog and Corkip Lough SAC (002339)
- Castlesampson Esker SAC (001625)
- Corbo Bog SAC (002349)
- Lough Forbes Complex SAC (001818)
- Lough Funshinagh SAC (000611)
- Lough Ree SAC (000440)
- Ballykenny Fishertown Bog SPA (004101)
- Lough Ree SPA (004064)

The conclusions of the assessment are based on the assumption that all drainage maintenance activities are to be undertaken on all watercourses and structures during the plan timeframe (2019-2023).

**Avoidance and Reduction of Impacts**

The NIS provides an assessment of all potential direct or indirect pathways for adverse effects on the QI/SCI habitats and species of the Natura 2000 sites within the zone of influence of the proposed drainage maintenance. This determination has had regard to specific measures to avoid and reduce potential impacts documented in the NIS report mitigation measures section and the OPW Environmental Procedures (EPs) being adhered to during the period of maintenance works. Avoidance and mitigation measures are based upon the best current practice. Maintenance staff are trained in the implementation of the SOPs and specific mitigation measures. An audit process is followed to ensure compliance. This ensures that there will be no adverse residual impacts on the qualifying interests of the identified QIs/SCIs of the relevant EU designated sites.
Conclusion

The Office of Public Works (OPW) has determined, pursuant to Regulation 42(11) of the European Communities (Birds and Natural Habitats) Regulation 2011 (As amended) and following a review of the findings of the NIS, that the statutory arterial drainage maintenance activities for 2019 - 2023 on the Knockcroghery Arterial Drainage Maintenance Scheme will not adversely affect the integrity of any European Site. The NIS concludes the following:

This Natura Impact Statement details the findings of the Stage 2 Appropriate Assessment conducted to further examine the potential direct and indirect impacts of the proposed arterial drainage maintenance works in the Knockcroghery Arterial Drainage Scheme on the following Natura 2000 sites:

- Ballinturly Turlough SAC (000588)
- Ballynamona Bog and Corkip Lough SAC (002339)
- Castlesampson Esker SAC (001625)
- Corbo Bog SAC (002349)
- Lough Forbes Complex SAC (001818)
- Lough Funshinagh SAC (000611)
- Lough Ree SAC (000440)
- Ballykenny Fishertown Bog SPA (004101)
- Lough Ree SPA (004064)

The above sites were identified by a screening exercise that identified likely significant effects in relation to Natura 2000 sites within the Zone of Influence of the proposed works. This screening exercise was conducted following the methodology outlined in Ryan Hanley (2014a), which examines three source > pathway > receptor chains; surface water, land and air, and groundwater pathways. The Appropriate Assessment investigated the potential direct and indirect impacts of the proposed works on the integrity and interest features of the above Natura 2000 sites, alone and in-combination with other plans and projects, taking into account the site’s structure, function and conservation objectives. The three pathways of potential impact were again used as a framework of assessment. Where potentially significant adverse impacts were identified, a range of mitigation and avoidance measures have been stipulated to help offset them. As a result of this Appropriate Assessment it has been concluded, that the avoidance and mitigation measures suggested, the proposed drainage maintenance operations in the Knockcroghery Arterial Drainage Scheme will not have a significant adverse impact on the integrity of the above Natura 2000 sites.