

Consultation on the Draft Arterial Drainage Maintenance Activities 2022-2027 and associated SEA Environmental Report and AA Natura Impact Statement Report

To whom it concerns,

The Local Authority Waters Programme (LAWPRO) would like to make a brief submission with the following observations as part of the consultation process on the Draft Arterial Drainage Maintenance Activities 2022-2027 and associated SEA Environmental Report and AA Natura Impact Statement Report.

[gov.ie](http://www.gov.ie) - [Consultation on the Draft Arterial Drainage Maintenance Activities 2022-2027 and associated SEA Environmental Report and AA Natura Impact Statement Report \(www.gov.ie\)](http://www.gov.ie)

Background

The Local Authority Waters Programme (LAWPRO) welcome the fact that the OPW is inviting submissions, observations and comments on the Draft Arterial Drainage Maintenance Activities 2022-2027 and associated SEA Environmental Report and AA Natura Impact Statement.

LAWPRO is a local authority shared service working with the 31 local authorities, relevant State agencies, stakeholders and communities in the restoration and protection of water quality. The goal is to meet the requirements of the EU Water Framework Directive to have all-natural waters meet at least a good ecological standard by 2027. LAWPRO interacts with the OPW in fulfilment of its duties through relevant committees set up under the River Basin Management Plan (2018-2021), national committees and at project level work.

Where possible, as with other implementing bodies, LAWPRO endeavours to support the objectives of the OPW where they relate to water quality management, recognising the need for an integrated approach to water management in Ireland. This includes looking for synergies between the EU Water Framework Directive, the EU Habitats / Birds Directives, biodiversity and natural heritage protection and recognising the need for managing flood risk in a changing climate environment. LAWPRO works extensively with the public and it is clear that the public understand the connectedness and interdependency of water quality, biodiversity and habitat conservation. Therefore, LAWPRO promotes best practice in terms of water quality management (protection and restoration), biodiversity conservation and associated water dependent multiple benefits.

It is intended to continue our engagements with the OPW at the national, regional and local level and the following observations are intended to support that process and encourage an integrated catchment management approach outlined in the River Basin management Plan 2018-2021 and envisaged within the draft River Basin management Plan 2022-2027.

We would like to make some brief observations on the above document and have made some additional comments and finally recommendations, that need to be taken into consideration for the next River Basin Management Plan period of 2022-2027 (in draft), which aligns with the Arterial Drainage Maintenance Activities 2022-2027, covered in this document.

Observation 1 - “Volume 1 - Arterial Drainage Maintenance Activities 2022- 2027 SEA Non-Technical Summary”

8.3.1 SEO A Objective: Support the objectives of the Water Framework Directive (WFD)

Our assessment has predicted a minor negative impact on the objective relating to the supporting the WFD objectives and sub-objective SEO A1. The assessment concludes that, in the absence of suitable mitigation measures, the impact will be local and will typically be of medium-term duration (6-years). Any maintenance activity that involves dredging or in-channel works will cause increases in suspended solids and nutrients in the channel. Depending on the flow in the channel, the increased suspended solids may discharge into the receiving waters. The fate of the suspended material will be dependent upon the rate of flow in the receiving stream and the nature of the riverbed. Longer term impacts may arise due to changes in the hydromorphology of the channel and the receiving waters. This would cause a decrease in water quality which would have a knock-on impact on the biodiversity using the water body. A decline in water quality could have a significant impact on fish, particularly salmonids or shellfish, particularly freshwater pearl mussel in for example the Corrib catchment. In the absence of suitable mitigation measures JBA has assigned this a significant negative impact on the Corrib catchment. Our assessment has identified several mitigation measures that will reduce/remedy these impacts and the OPW has identified mitigation measures to remedy the impacts. For example, the OPW and Inland Fisheries Ireland carry out several Environmental River Enhancement Programmes (EREP) nationwide. The purpose for the EREPs is to investigate the status of habitats and species, mostly fish, in drained catchments. The OPW and IFI recently successfully completed a EREP for the Glyde catchment. In the Corrib catchment several EREPs have been initiated and our assessment found that arterial drainage maintenance activities in this catchment are slightly positive for the catchment.

The highlighted section is inaccurate as any physical works dredging or in channel works normally will result in an increase in silt and suspended solids to the receiving waters. This is an issue in terms of ecology and water quality protection.

8.4.1 Interaction of Measures with the Arterial Drainage Maintenance Programme

The impacts on population and human health will be positive because the maintenance of the arterial drains will ensure that numerous properties and lands will be protected from flooding.

The cumulative impacts on water and biodiversity will be generally neutral because of the EPs employed by the OPW in their maintenance programme and the habitat formation and restoration projects carried out by IFI and OPW in the salmonid rivers around the country. Specific EPs for the protection of protected species like the freshwater pearl mussel, salmon, otter etc. will ensure that these species are protected during the maintenance activities. The OPW's role in the Bog Restoration project will help to return bogs to their natural wetted status that supports several plants and species.

This statement is not supported by evidence on the ground. The cumulative impacts are usually negative in terms of impacts on ecology, and this includes situations even where Environmental Protocols are in place. The objective of specific Environmental Protocols aim to protect, but evidence that they provide full protection to support the above statement is not available. Feedback from the public, including during the recent public consultations on the River Basin Management Plan period

of 2022-2027 is that best practice is not always followed by machine operators at the site level, leading to water quality and hydromorphological impacts.

Observation 2.

The report states that “The key consideration for the Arterial Drainage Maintenance Activities 2022-2027” is that the alternatives proposed and assessed must be technically viable and within existing Arterial Drainage Act legislation. The current approach is unlikely to be significantly changed as this would require an amended or new Arterial Drainage Act legislation.”

The proposed works will take place over a six-year period and do not demonstrate consideration of Climate change nor Water Framework Directive learnings with regard to taking a more catchment based approach to flood risk management. Incorporation of such, should not necessarily require an amendment to the Arterial Drainage Act legislation, but a building in of nature-based solutions as is being done in the urban and agricultural sectors. Furthermore, although there is reference to CFRAMS, there is no indication on how the Arterial Drainage Maintenance programme will take CFRAMS objectives into account at the practical level and integrate fully, to minimise flood risk downstream.

The above should be considered in tandem with the proposed works programme and amended to properly build in nature-based solutions, this could include

1. A review of what land benefits from each Arterial Drainage Scheme through a “fit for purpose analysis”. Does the scheme make the benefitting land for all schemes productive and does that productivity in terms of agricultural output justify the effort and cost to make it so? It is recommended that at a minimum a pilot approach is taken to determine “cost benefit analysis” of continuing arterial drainage on sections of waterbodies. Where and when the wider externalities (water quality, flood risk downstream, climate change mitigation, adaptation and resilience, biodiversity, water dependent tourism and recreation) in terms of public good are taken into account the cost of the scheme can be difficult to justify. This could be examined in the context of agri-environment schemes and ensuring that where appropriate there is a just transition for landowners with benefitting lands that do not on balance provide for the public good, when these externalities are taken into account.
2. Renaturalise upland areas discharging in to flood prone areas to reduce maintenance and provide extra climate resilience to the schemes. Consider this also in context of CFRAMS. CFRAMS projects are generally located to protect urban areas some distance downstream of headwaters in river catchments. Working towards slowing the flow by restoring degraded upland landscapes will reduce peak flows downstream and provide greater resilience during heavy weather. Rewetting landscapes and promoting more natural nature-based solutions across land use sectors (agriculture, upland management, forestry etc) upstream of urban infrastructure prone to flood risk will provide for greater resilience during flood events.
3. Climate considerations. –
 - The Arterial Drainage 1945 original schemes were designed to maintain the channel for 3-year flood events. As climate changes this has changed to 10-year flood events effectively now occurring in that time frame. In the context of climate change, for some of these schemes, it will not be feasible to maintain this conveyance on many channels without changing the maintenance specifications. Provision could be made to review these schemes within in the timeframe of this programme (i.e., six years) and compensate people where appropriate instead (as per point 1 above).

- These schemes were designed pre-mechanisation and were managed with less mechanical support. Current practices are mechanised and often over maintained, in excess of what they were built for in the first place. This needs to be reviewed in terms of operations.

The “Programme for Government – Our Shared Future” places land use management centre stage of government policy. It is important that all government agencies take this into consideration when planning out significant work programmes during this period. The OPW Arterial Drainage Maintenance can and should in our opinion compliment these objectives. See highlighted section reproduced below.

Land Use, Nutrient Management and Soil Health

Land Use Review

The Government will undertake a national land use review, including farmland, forests, and peatlands, so that optimal land use options inform all relevant government decisions. The review will balance environmental, social, and economic considerations and involve a process of evaluation of the ecological characteristics of the land. It will include consideration of emissions to air and water, carbon sequestration, and climate adaptation challenges. Policy co-benefits, such as rewetting or forest regrowth to mitigate flooding risks in river catchments, will be considered. All stakeholders will be consulted. Such a review would allow knowledge transfer to policymakers, advisory services, and landowners, to assist farmers in making an informed choice as to how best to use their land, while also benefiting from available supports and incentives.

Recommendation

- The Arterial Drainage Maintenance Activities 2022- 2027 should take into account the changing climate environment, which does not appear to be reflected in practical terms within the documents.
- Integration with other flood risk protection measures is key and there is an opportunity for the programme to be integrated with CFRAMS to ensure that at a minimum flood risk is not transferred downstream to vulnerable critical infrastructure, require further engineering interventions leading to associate hydromorphological impacts (biodiversity and water quality impacts in terms of sediment and nutrients).
- Taking a nature-based approach upstream of the delineated Arterial Drainage Maintenance areas will provide greater resilience to the Arterial Drainage Maintenance areas themselves and reduce the need for more environmental damaging maintenance activities such as dredging to increase conveyance.
- The Arterial Drainage Maintenance Activities 2022- 2027 is an opportunity to pilot a more ambitious catchment management approach integrating land management outside of the

immediate footprint of the schemes taking a more nature-based approach targeting catchment areas upstream of the proposed works to slow the flow during peak flood events.

- The six-year programme provides an opportunity to trial pilots to inform the pending review of the Arterial Drainage Act and build in a nature-based approach, which is effectively absent at the moment. A review of externalities in the context of benefitting lands is needed as part of this process and should be carried out immediately in the context of predicted climate change scenarios.
- The SEA and AA should be accurate in statements concerning likely impacts of proposed Arterial Drainage Maintenance Activities as outlined in the examples above.

LAWPRO appreciate the valuable work and commitment by the OPW and its staff and hope that this submission helps support OPW in its role with regard to the EU Water Framework Directive.

Name Redacted

Local Authority Waters Programme (LAWPRO)

