Addendum to Interim Technical Advisors Report AP11/2019, Poulnasherry Bay, Shannon Estuary, submitted by Eco Eireann to ALAB on 10th September 2021

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As described in the Technical Advisor Report submitted by Eco Eireann to ALAB on the 10th September 2021, the appeal AP11/2019 deals with sites T08/106 B, C & D in Poulnasherry Bay, Shannon Estuary in Co. Clare. The Sites under appeal are located within both the Lower River Shannon Special Area of Conservation (SAC) and the River Shannon and Fergus Estuaries Special Protected Area (SPA). Details on these Natura 2000 sites, and their Special Conservation Interests are given in the Interim Technical Advisors Report.

This addendum focuses on the SCI species of the SPA only. It considers the conclusion of the Interim Technical Advisor's report and the outcome of three bird monitoring programme reports submitted to ALAB by the Marine Institute on the 8th October 2021 in response to the Board's Section 47 Notice dated 1st October 2021. The reports were prepared on behalf of the Marine Institute by INIS Consultants and relate to a three-year wintertime bird monitoring programme in Poulnasherry Bay. The reports are entitled "Marine Institute Poulnasherry Bay Waterbird Survey Winter 2018-19 Bird Survey Report", "Marine Institute Poulnasherry Bay Waterbird Survey Winter 2019-20 Bird Survey Report" and "Marine Institute Poulnasherry Bay Waterbird Survey Winter 2020-21 Bird Survey Report".

Opinion of the Technical Advisor – Eco Eireann Interim Technical Advisor Report:

The Interim Technical Advisor's Report states, under Section 10, Recommendation of Technical Advisor with Reasons and Considerations:

"It is the considered opinion of the advisor that the licenses be refused or postponed, should that be possible, on the grounds that;

- Wintering waterbird population data for the site is outdated and a monitoring programme is ongoing in Poulnasherry Bay, two years of this monitoring have been completed (Report only available for the first year 2018/2019) with one subsequent year to follow (2020/2021). This monitoring data can be used to inform complete consideration of the proposals in relation to potential effects on the conservation objectives of the SPA and therefore future aquaculture licensing decisions.

The Technical Advisor, based on the above information, recommends the Board apply the precautionary principle and either agree with the Minister's decision to refuse the application or postpone the decision until the monitoring programme is complete and sufficient data to conclude a robust assessment is available."

The monitoring programme reports are now all complete and have been submitted to ALAB by the Marine Institute as outlined in the second paragraph of this Addendum.

Outcome of the Marine Institute-commissioned Monitoring Programme:

The final report of the three-year monitoring survey (Marine Institute Poulnasherry Bay Waterbird Survey Winter 2020-21 Bird Survey Report) found that Poulnasherry Bay is important for several waterbird species listed as SCIs for the River Shannon and River Fergus Estuaries SPA. The study found that overall, waterbird SCI numbers were occurring in lower numbers than approximately 20 years ago, which ties in with national trends. Five SCI species (of 21) are occurring in greater numbers now than 20 years ago, 15 are declining and one showed no change. Compared with approximately 10 years ago, recent results were slightly

more positive with seven species showing higher numbers in the most recent survey. Also of note was that peak waterbird numbers across the entire survey area have been consistent across the three recent winters studied (Marine Institute, 2021).

Figure 1: Bird survey count sites - Marine Institute Poulnasherry Bay Waterbird Survey Winter 2020-21 Bird Survey Report

While the recent study at Poulnasherry Bay recorded low levels of disturbance overall, the standard low tide survey methodology used in this programme is not considered to be best suited to assessing the effects of aquaculture activities and disturbance to waterbirds. Bespoke studies (e.g. Gittings & O'Donoghue, 2012) were recommended as they would provide better detail. It was also recommended to continue an annual survey at the site because without the continued collection of count data, discerning trends in waterbird numbers at this site would remain difficult.

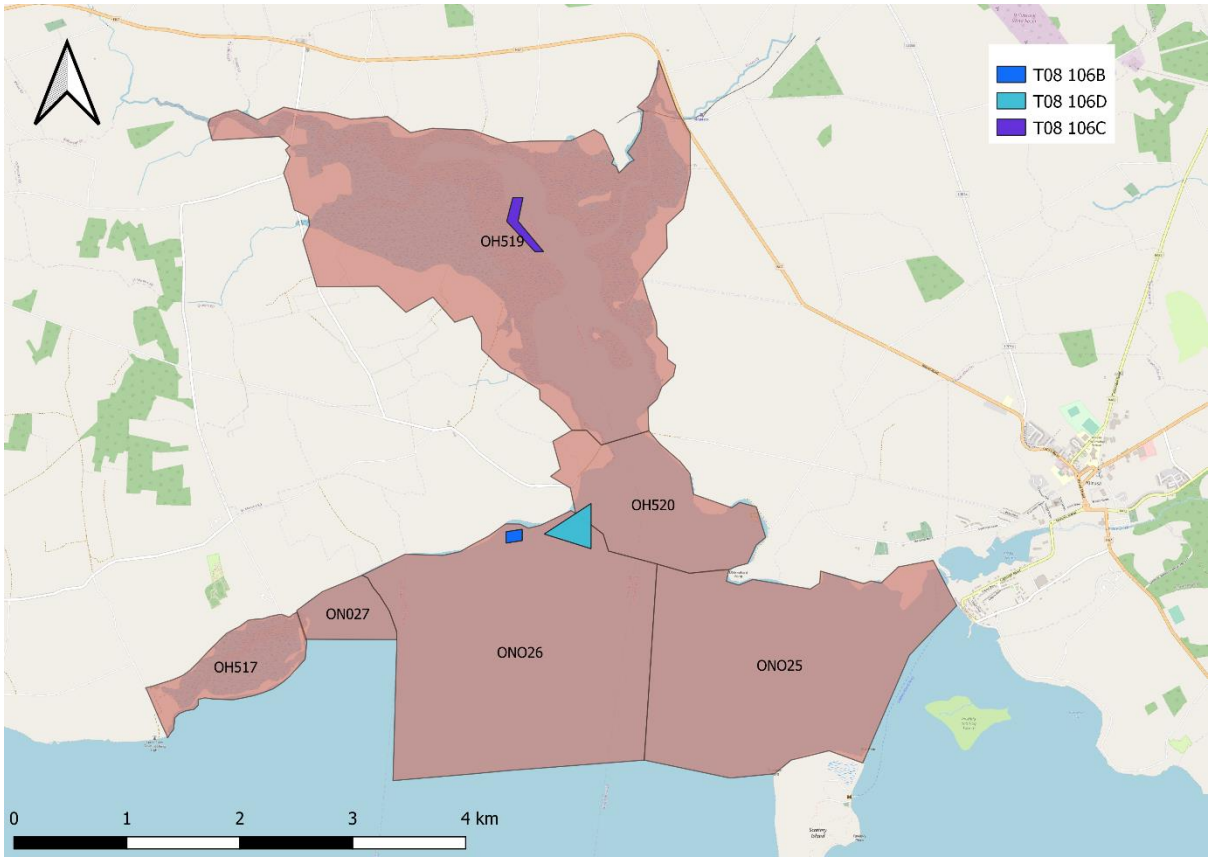

Figure 2: Appeal Sites and Count Subsites.

The three appealed sites are highlighted in Figure 2. Site T08/106C is located within Poulnasherry Bay itself in Count Subsite OH519. T08-106D is located between Count Subsites OH520 and ON 026 and Site T08-106B is in ON026.

Variation between Subsites

The Marine Institute Report found that Count Subsites OH519 and OH520 were the most important areas for bird activity, and the most likely therefore to be affected by disturbance. With Count Subsite OH 519 found to have a far higher level of bird activity than any of the other subsites These Count Subsites correspond with inner Poulnasherry Bay and the narrow neck of the bay, as shown in Figure 1. Sites T08/106 C and D are located either within or partially within these Count Sites. The third Site, T08/106B, is located within Count Site OH026, which was found to be to have the lowest species diversity and relative importance of all the subsites studied.

Figure 3 shows Species Diversity recorded during 2020-2021 in the Count Subsites and shows highest diversity in OH519 and lowest diversity in ON026. These observations also fit the trends recorded during the 2018-2019 and 2019-2020 surveys. Relative importance of Count Subsites is discussed in Section 4.6 of the Marine Institute Poulnasherry Bay Waterbird Survey Winter 2018-2019 Bird Survey Report, and Section 4.7 of both 2019-2020 and 2020-2021 versions of the report. Site T08/106B is also much smaller (1.42 ha) compared to Sites T08/106 C (3.96 ha) and T08/106D (8.3 ha).

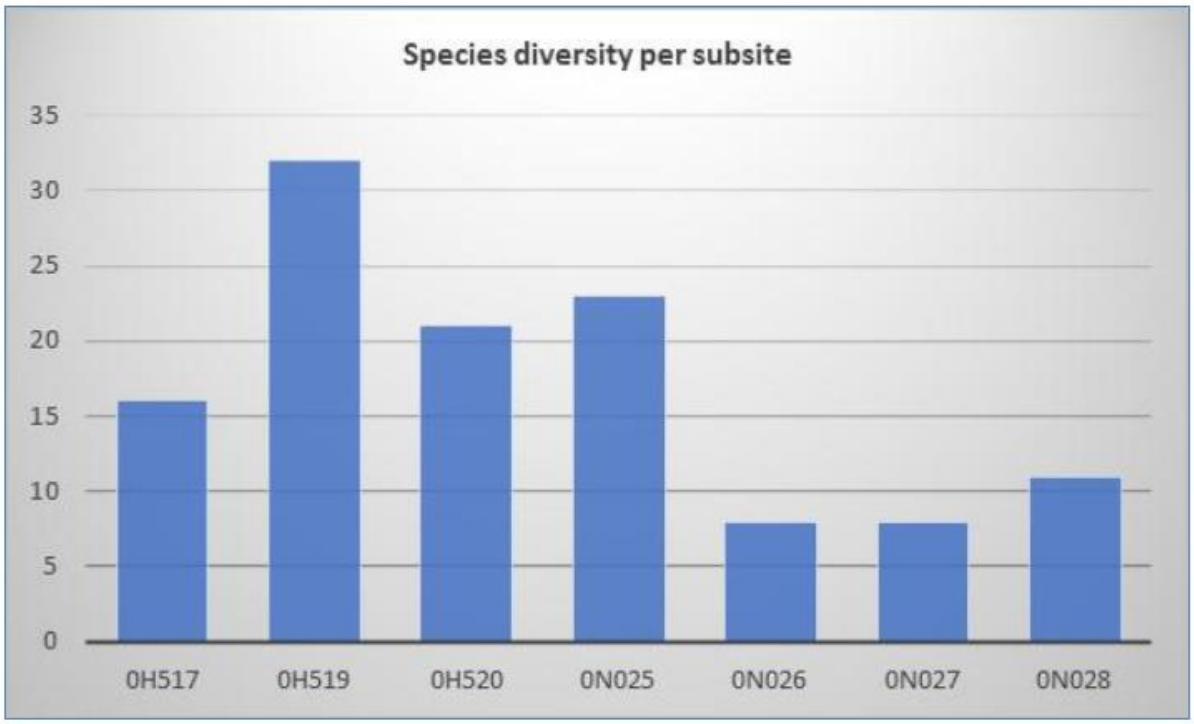

Figure 3: Species diversity at each subsite, from Poulnasherry Bay Waterbird Survey Winter 2020-21 Bird Survey Report

Opinion of the ALAB Technical Advisor:

Having reviewed the reports from the Monitoring Programme and the Interim Technical Advisor's Report, it is my considered opinion that there is not sufficient evidence provided to rule out negative impacts of Special Conservation interest (SCI) species within the SPA for Site T08/106C in particular.

Site T08/106D is a large site that occurs across two Count Subsite Areas, one of which, OH520, is recognised as being of particular importance. Due to the Sites location across two Count Subsites,. It is my considered opinion therefore that the evidence provided to date cannot rule out negative impacts of Special Conservation interest (SCI) species within the SPA for Site T08/106D.

Site T08/106B is located in a Count Subsite which has been found to date to be of relatively low importance for SCI species in the SPA, as outlined in the three Winter Bird Survey Reports commissioned by the Marine Institute (ON026). The Site is in an area of low recorded species diversity and relatively low importance for SCI species. This was seen not only in the Marine Institute reports, but also in a survey of the entire SPA carried out by MKOS throughout 2017-2018 (MKOS 2019). Additionally, two of the SCI species highlighted in the River Shannon and Fergus Estuaries SPA: Appropriate Assessment of Aquaculture Report (Atkins, 2019) as being at risk of displacement due to aquaculture activities, Grey Plover and Bar-tailed Godwit, were not observed in OH026 during the Marine Institute surveys. The Atkins report also highlights a potential risk to nocturnal roosts for Whooper Swan as their location is currently unknown, an issue could be mitigated for by a condition preventing night-time work.

However, Scaup were another species that could potentially be impacted by oyster culture in the SPA, and particularly this area according to Atkins (2019). Unfortunately, the MKOS (2019) report records an 82% decline in the species across the entire River Shannon and Fergus Estuaries SPA and this species was not recorded at all during the Marine Institute surveys. The lack of a population at the present time does not remove the need to protect available habitat under the legislation relating to Natura 2000 sites and species. As there is a gap in the data relating to Scaup, it is my considered opinion that the evidence provided to date cannot rule out negative impacts of Special Conservation interest (SCI) species within the SPA for Site T08/106B.

The report commissioned by the Marine Institute recommends continued winter survey work over several more years to determine trends more exactly and potentially, a specific study looking at aquaculture interaction and SCI species within the Bay. Taking all this into consideration and taking into consideration the Interim Technical Report from Eco Eireann

and its conclusion and the River Shannon and Fergus Estuaries SPA: Appropriate Assessment of Aquaculture Report 2019, it is my recommendation as Technical Advisor to the Board that the Board apply the precautionary principle and uphold the Ministers decision to refuse the application for Sites T08/106 B, C & D.

References

Atkins (2019) River Shannon and Fergus Estuaries SPA: Appropriate Assessment of Aquaculture. Report to the Marine Institute 2019.

EcoEireann (2021) Interim Technical Advisor Report to the Aquaculture Licences Appeals Board for AP11/2019, Poulnasherry Bay, Co. Clare. September 2021.

Inis Environmental (2019) Poulnasherry Bay Waterbird Survey – Winter 2018-19 Bird Survey Report. Report for the Marine Institute. July 2019.

Inis Environmental (2020) Poulnasherry Bay Waterbird Survey – Winter 2019-20 Bird Survey Report. Report for the Marine Institute. September 2020.

Inis Environmental (2021) Poulnasherry Bay Waterbird Survey – Winter 2020-21 Bird Survey Report. Report for the Marine Institute. April 2021.

MKO (McCarthy Keville O'Sullivan) (2019) Waterfowl numbers, usage and distribution on the River Shannon & River Fergus Estuaries. Volume 1. Final report. Report to Clare County Council.

NPWS (2012a) Conservation Objectives: River Shannon and River Fergus Estuaries SPA 004077. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2012b) River Shannon & River Fergus Estuaries Special Protection Area. Site Code 4077. Conservation Objectives Supporting Document. Version 1. September