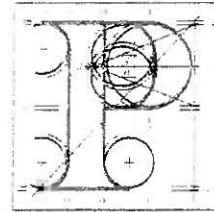


Our Case Number: PA0033



An  
Bord  
Pleanála

Inland Fisheries Ireland  
Teach Breac  
Earl's Island  
Co. Galway

**Date:** 10 February 2025

**Re:** Galway Harbour Extension  
Renmore and Townparks Townlands, Galway

Dear Sir / Madam,

An Bord Pleanála has received your recent submission in relation to the above mentioned proposed development and will take it into consideration in its determination of the matter.

The Board will revert to you in due course with regard to the matter.

Please be advised that copies of all submissions / observations received in relation to the application will be made available for public inspection at the offices of the local authority and at the offices of An Bord Pleanála when they have been processed by the Board.

More detailed information in relation to strategic infrastructure development can be viewed on the Board's website: [www.pleanala.ie](http://www.pleanala.ie).

If you have any queries in the meantime please contact the undersigned officer of the Board. Please quote the above mentioned An Bord Pleanála reference number in any correspondence or telephone contact with the Board.

Yours faithfully,

Lauren Griffin  
Executive Officer  
Direct Line: 01-8737244

PA04

Teil (01) 858 8100  
Glaó Áitiúil LoCall 1800 275 175  
Facs Fax (01) 872 2684  
Láithreán Gréasáin Website [www.pleanala.ie](http://www.pleanala.ie)  
Ríomhphost Email [bord@pleanala.ie](mailto:bord@pleanala.ie)

64 Sráid Maoilbhríde 64 Marlborough Street  
Baile Átha Cliath 1 Dublin 1  
D01 V902 D01 V902

**Lauren Griffin**

---

**From:** Lauren Griffin  
**Sent:** Friday 7 February 2025 16:49  
**To:** David.Harrington@fisheriesireland.ie  
**Subject:** RE: IFI Galway Observations re: Further Information to An Bord Pleanála for the extension of Galway Harbour - An Bord Pleanála reference: 61.PA0033

Dear Sir,

The Board acknowledges receipt of your email, official correspondence will issue in due course.

Kind regards,

Lauren

**From:** David Harrington <David.Harrington@fisheriesireland.ie>  
**Sent:** Friday 7 February 2025 16:43  
**To:** LAPS <laps@pleanala.ie>  
**Cc:** Rachel Cooper <Rachel.Cooper@fisheriesireland.ie>  
**Subject:** IFI Galway Observations re: Further Information to An Bord Pleanála for the extension of Galway Harbour - An Bord Pleanála reference: 61.PA0033

**Caution:** This is an **External Email** and may have malicious content. Please take care when clicking links or opening attachments. When in doubt, contact the ICT Helpdesk.

Dear Secretary,

Please find attached IFIs observations relating to Further Information supplied to An Bord Pleanála for the extension of Galway Harbour.

An Bord Pleanála reference: 61.PA0033

I would appreciate if you could acknowledge receipt of this submission.

Kind regards,

David

**David Harrington**  
**Senior Fisheries Environmental Officer**

✉ [David.Harrington@fisheriesireland.ie](mailto:David.Harrington@fisheriesireland.ie) • 📞 +353 (0)91 563118 • 🌐 [www.fisheriesireland.ie](http://www.fisheriesireland.ie) • 🏠 H91 E2A2



**IFI** Iascach Iníre Éireann  
Inland Fisheries Ireland

beolín / hotline  
**0818 34 74 24**

Oscailte 24 uair an lá / 7 lá in aghaidh na seachtaine  
Open 24 hours a day / 7 days a week

Help us protect Ireland's rivers, lakes and coastlines by reporting illegal fishing, water pollution or invasive species.  
Our confidential phone number is 0818 34 74 24, which is open 24 hours a day / 7 days a week.

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An Bord Pleanála  
64 Marlborough Street  
Dublin 1



**Iascach Iníre Éireann  
Inland Fisheries Ireland**

07<sup>th</sup> February 2025

ABP Reference Number: 61.PA0033

**Re: Notice of Further Information to An Bord Pleanála for the extension of Galway Harbour at Renmore and Townparks Townlands and on lands to be reclaimed from the foreshore and the sea in Galway Bay to the south of the existing Galway Harbour Enterprise Park, which contains a Seveso site (An Bord Pleanála Reference Number 61.PA0033).**

Dear Secretary

Having reviewed the above further information and in light of the fact that approximately 10 years have passed since the original oral hearing on the matter, IFI wish to make the following observations.

#### Inland Fisheries Ireland

Inland Fisheries Ireland (IFI) is the statutory body with responsibility under the provisions of the Fisheries Acts for the management, conservation and protection of Ireland's fishery resource. This includes the protection of both the instream and riparian habitat and the water quality of all watercourses across the proposed site and their associated catchments.

#### EU Water Framework Directive

The EU Water Framework Directive (WFD) (2000/60/EC) requires the protection of the ecological status of river catchments – this encompasses water quality and requires the conservation of habitats for ecological communities. One of the primary objectives of the Directive is to establish a framework which prevents further deterioration and protects and enhances the status of aquatic ecosystems. Protection of aquatic ecosystems requires that river systems be protected on a catchment basis. Protection of the aquatic environment/habitat not only requires the protection of water quality but also necessitates the protection and maintenance of physical habitat and hydrological processes/regimes.

The River Corrib\_020 is currently classified as of "good" ecological status and "not at risk" under the Water Framework Directive. It is imperative that these ecological statuses are maintained, and the water quality does not deteriorate. Unfortunately, the Corrib Estuary is currently classified as of "moderate" status and is failing to achieve good chemical water status due to PBDE – unspecified isomers. It should also be noted that fish are an indicator species for the Water Framework Directive and any diminution in fish stock status will impact on the WFD status of the River Corrib.



**Iascach Intíre Éireann  
Inland Fisheries Ireland**

### Lough Corrib Special Area of Conservation (SAC)

The Lough Corrib SAC (000297) provides legislative protection toward the conservation of the Atlantic salmon (*Salmo salar*), sea lamprey (*Petromyzon marinus*) and brook lamprey (*Lampetra planeri*) populations as they are listed species of qualifying interest.

### Potential impact of site development on diadromous fish

Diadromous fishes include species with marine and freshwater life-stages characterised by migratory phases between these two domains, where the coastal zone is critical for overall migration success. Diadromous fish in the locale of the proposed Galway Harbour Extension include Atlantic salmon (*Salmo salar*), anadromous brown trout or "sea trout" (*Salmo trutta*), European eel (*Anguilla anguilla*) and sea lamprey (*Petromyzon marinus*).

The conservation status of these diadromous fish, and of diadromous fishes more generally, is of widespread concern owing to a large suite of human stressors that negatively impact these species across freshwater, coastal and oceanic domains – since 1970 abundance of migratory freshwater fish has declined by 75% in Europe.

The European eel is classified as critically endangered in the International Union for Conservation of Nature (IUCN) Red List of threatened species. European eels spawn in the Sargasso Sea, and after hatching as larval eels, they drift on the Gulf Stream Ocean current until they reach the Atlantic coasts of Europe and transform into glass eels. Sadly, the number of young eels reaching our waters has declined over the past 30 years and amounts to as little as 8% of what was present during the 1970s. Ireland has submitted a recovery plan for eel to the EU, one of the elements of which is to ensure the adequate upstream migration of juvenile eel (elver) into our rivers.

IFI previously expressed concern that the location of a proposed wildlife pass at the seaward end of the proposed harbour extension may not be sufficient to address possible impacts on elver migration. The design/location of said wildlife pass will require further discussion with IFI. Furthermore, IFI had also requested that an elver monitoring programme be initiated prior to the commencement of the construction phase of the project, in order to obtain baseline data on elver migration routes into the River Corrib, a request that still stands.

Subsea noise will occur during site investigations and the construction phase of the project. Given the river mouth orientation of the River Corrib, there is a high degree of likelihood that seaward emigrating juvenile fish leaving the River Corrib and adult fish returning to the river will pass through the proposed zone and may be impacted by site development in this region. In general, there is a scarcity of empirical information on the effects of underwater noise on fish in the marine environment. Considerable knowledge gaps exist at present in understanding how underwater noise impact migratory diadromous fish species including Atlantic salmon, sea trout, European eel and sea lamprey and further research is warranted.



**Iascach Intíre Éireann  
Inland Fisheries Ireland**

It is noted that Table 10-3 of the EIS Addendum Chapter 10, titled "Updates to threshold criteria for marine fauna" states noise criteria applied in the 2014 EIS in relation to fish *incorporated a considerable margin of safety and continue to be lower than the current guidance.*

#### Reference Material

For your reference, the following documents are also attached.

1. IFI's original submission on the application, including maps of the Galway Fishery (Appendix 1)
2. Responses received from the Galway Harbour Comment on the IFI submissions of 11<sup>th</sup> March and 3<sup>rd</sup> December 2014 (Appendix 2).
3. Wildlife pass proposal (Appendix 3).
4. Summary of Oral Presentation by Dr Paddy Gargan, Inland Fisheries Ireland, to the An Bord Pleanála hearing, Connacht Hotel, Galway, 14/1/15 (Appendix 4)

IFI would be grateful if An Bord Pleanála could acknowledge receipt of this submission.

Yours sincerely

---

David Harrington  
Senior Fisheries Environmental Officer  
IFI Galway  
ABP-GHE-0225



Iascach Intire Éireann  
Inland Fisheries Ireland

11 March 2014

Mr Kieran Doherty  
Executive Officer  
An Bord Pleanála  
64 Marlborough Street  
Dublin 1

**Re: Galway Harbour Company, Galway Harbour Extension,  
Direct Application to An Bord Pleanála in respect of a Strategic Infrastructure Development**

Dear Mr Doherty

I refer to the Galway Harbour Company's notice of its intention to make an application to An Bord Pleanála for permission for the development of an extension to Galway Harbour at Renmore and Townparks Townlands and on lands to be reclaimed from the foreshore and sea in Galway Bay.

Inland Fisheries Ireland (IFI) is mandated to ensure that the fisheries of the State are protected. "Fisheries" includes all inland fisheries recreational and commercial, sea angling and mollusc fisheries stipulated under the Fisheries Acts, the physical habitat upon which the fishery relies, the facilities and access, the quantity and quality of the water and the plant and animal life on which fish depend for shelter and food and the spawning areas where in fish deposit their eggs. The protective role of IFI relates to all aspects of the aquatic environment and all factors that influence the biotic communities within waters, which in any way relate to the propagation of fish stocks.

Whilst IFI is not opposed to this strategic infrastructure project, it does seek to ensure that the fishery resource is fully protected. Having reviewed the proposal and associated documentation, IFI has the following observations which it requests are borne in mind in relation to the conditions attached to any approval to proceed:

**Galway Fishery:**

IFI had previously expressed concerns that this development will encroach into the zone which is legally an integral part of the Galway Fishery the fishing rights of which are vested in IFI. The two outer markers of the Galway Fishery (dated 1669) seem to have been lost or removed during previous developments undertaken within Galway Bay. The marker located at the existing Harbour Enterprise Park may have been covered over by spoil as part of this development. IFI is anxious to have the location of the marker identified and replaced, and similarly the outer marker which was previously located on Mutton Island. In accordance with the Fishery Consolidation Act, 1959, the mouth of a river is defined by an order under Section 10 of the Fisheries Consolidation Act, 1959. The existing River Corrib mouth boundaries as defined by law should be delineated and an examination of any implications arising from the development should be undertaken.

**Angling Facilities:**

IFI market and promote angling and has invested in developing access routes, including disabled access, bridges and fishing stands for anglers. Currently, spaces for recreational sea fishing in Galway

City are limited due to other public uses of promenade and beach space, shallow water and lack of access. Sea angling within the city boundaries is restricted to shallow water species, such as flounder, and angling for mackerel in the summer months, which is very popular, but due to the aforementioned lack of space leads to crowded piers and angling in unsafe places. The proposed new pier would allow access to a significant increase in usable space, as well as access to deeper water, allowing more species to be targeted. IFI would recommend that public access to the pier be permitted, and that angling is encouraged where it does not interfere with boating or shipping operations. This would constitute a public amenity use, and foster community pride and involvement in the project.

#### **Water Quality:**

The EU Water Framework Directive (2000/60/EC) requires the protection of the ecological status of river catchments – this encompasses water quality and requires the conservation of habitats for ecological communities. The Western River Basin Management Plan states that the Corrib Estuary's overall chemical status has failed to meet the standard and needs to be restored to at least "good" status by 2021.

IFI would highlight the importance of ensuring that there is sufficient capacity available both within the receiving sewerage network and at Mutton Island waste water treatment plant over the full duration of the project to ensure that the ecological integrity of Corrib estuary is protected.

It is noted that the pollution mitigation measures with regard to construction activities have been largely addressed in the EIS and these are generally acceptable subject to close liaison with IFI Galway should the project be approved.

#### **Non-native Invasive Species**

Non-native invasives are species that have been introduced, generally by human intervention, outside their natural range and whose establishment and spread can threaten native ecosystems. Invasive species represent one of the greatest threats to biodiversity, second only to that caused by direct habitat destruction. They do this by competitively excluding or out-competing our less robust native species, by preying on native species or by altering the natural aquatic or riparian habitat in which they become established.

Aquatic Invasive Species (AIS), fish parasites and diseases are readily transferred from one watercourse to another via angling tackle, boats and protective clothing. These can be very damaging to resident fish stocks, the aquatic habitat and the general environment. Invasive species can also adversely impact the recreational and amenity use of infested watercourses, and hence tourism, by restricting angling, boating, swimming and other water-based leisure pursuits. An example of a proactive policy in this regard would be to prohibit invasive species from inclusion in the landscape design proposals. Landscaping proposals etc. should require the use of native species from local stock.

IFI has concerns that the escalation in marine traffic associated with the harbour extension will increase the volumes of ballast water discharged into Galway Harbour. This in turn will increase the risk of introducing non-native species to the estuary which could cause extensive ecological and economic damage to the aquatic ecosystem. It is noted that Section 7.7.4.18 of the EIS states that Harbour Company will implement an Environmental Management Plan and policy regarding handling of invasive alien species. IFI requests that it is included in the EMP as a notifiable body should any invasive species be detected.

#### **Increased Seal Predation:**

Section 7.7.6.16 of the EIS states that the design of the proposed harbour construction with steel sheet pile to act as a toe for the rock armour will create a steep drop into the water and thus mitigate against the possibility of seal haul out areas being created in this area. Whilst this design may ensure that no

additional seal haul out areas are created, IFI still has concerns that the narrowing of the channel will increase the likelihood of seal predation on migrating salmonids and may also render migrating smolts more vulnerable to predation by aquatic birds.

Observations by IFI personnel over the years would indicate that there are a greater numbers of seals present at the estuary than was observed during the seal study undertaken as part of the EIS. Indeed anglers and IFI staff have reported sporadic sightings of grey seals as far upriver as the Galway Weir during the summer months. A large proportion of the salmon caught by anglers within the Galway Fishery also exhibit claw marks associated with seal predation.

The proposal to monitor the seal populations prior to, during, and for at least two years post construction is welcomed by IFI. However, should it emerge that the rate of seal predation increases as a result of the new layout of Galway Harbour, consideration may have to be given to the introduction of some mitigation measures such as an acoustic deterrent device at the mouth of the river.

#### **Elver Migration:**

There are concerns that the proposed harbour extension may obstruct the upstream migration of elvers, as they typically return to the River Corrib via the coastline. Indeed, existing structures such as the causeway out to Mutton Island may already be interfering with eel migration.


IFI would recommend that a monitoring programme is initiated pre construction (April/May) to determine the existing migration pathways utilised by migrating elvers entering the River Corrib. Should it emerge that the elver's migration route could be hindered by the proposed harbour extension, an ongoing emergency recovery programme and elver transportation programme will need to be implemented. It should be borne in mind that stocks of European eel (*Anguilla anguilla*) are at a dangerously low level Europe wide which has led to the introduction of a complete ban on fishing for this species in Ireland and, as such, every protection should be afforded the recovery of this native fish species.

#### **Lough Atalia:**

As per the concerns expressed in relation to elver migration, and also to reduce the likelihood of poaching, IFI would recommend that a fish monitoring programme is implemented during and post construction to ensure that the frequency of returning salmonids entering Lough Atalia rather than travelling straight up the River Corrib does not increase as a result of the harbour extension.

IFI requests an acknowledgement from An Bord Pleanála of receipt of this submission.

Yours sincerely

  
John Connolly  
Director

ABP-GHE-0314

Your Ref: 61.PA0033



Mr Kieran Doherty  
Executive Officer  
An Bord Pleanála  
64 Marlborough Street  
Dublin 1

14<sup>th</sup> October 2014

Re: Galway Harbour Extension at Renmore and Townparks Townlands, Galway

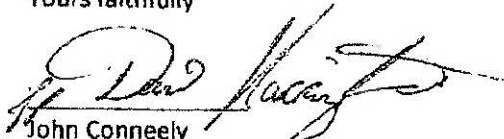
Dear Mr Doherty

I refer to your recent notification that the Board intends to determine the above-mentioned case before the 28<sup>th</sup> of November 2014. In its last correspondence, dated the 11<sup>th</sup> of March 2014 (attached for your reference), Inland Fisheries Ireland (IFI) expressed concern that this development will encroach into the zone which is legally an integral part of the Galway Fishery, the fishing rights of which are vested in IFI.

The Galway Fishery is of ancient origin with the first definite reference mentioned in the Rolls of the Great Pipe in 1283 during the reign of Edward 1. The Fishery is a several or exclusive fishery in tidal waters extending from Lough Corrib to the sea, approximately 4.5 miles in length. Two stone markers, one sited on Mutton Island and the second on the site of the old Isolation Hospital (now Galway Business Park in the New Docks) mark the extent of the Galway Fishery.

Draft net fishing rights extend beyond these markers into Galway Bay to both a half mile and a one mile radius (see attached map entitled "Plan of the Galway Salmon Fishery"). For the purposes of illustrating how the proposed development will impact upon these fishing rights, IFI has overlaid the plan of the Galway Salmon Fishery onto the proposed Harbour Extension Layout which accompanied the Non-Technical Summary of the planning application. This overlay clearly illustrates how the proposed Harbour extension will encroach into and beyond the half mile radius line of the draft net fishery boundaries. As per its original submission, IFI would like to reiterate the importance of delineating the River Corrib mouth boundaries and the need to examine the implications on the Galway Fishery arising from this proposed development.

Yours faithfully



John Conneely  
Director

ABP-GHE-1014



NTS 2



**Galway Harbour Company**

**Galway Harbour Extension**

**Response to Submissions**

*of*

**Inland Fisheries Ireland**

**11<sup>th</sup> March 2014**

*and*

**3<sup>rd</sup> December 2014**

## 66 Inland Fisheries Ireland

### Galway Fishery:

- Two outer markers

#### R1. Response:-

The location of the markers has been re-established and the markers will be reinstated.

- Any implications arising from the development

#### R2. Response:-

The loss of fishing ground is acknowledged. The monetary loss, if any, accordingly will be addressed with the IFI.

- Angling Facilities

#### R3. Response:-

Access to the marina breakwater, marina pier and adjacent boatyard on the Western side and access to all of the open space area on the Eastern side as far as, but not including the Fishing Yard and Pier, i.e. all the shoreline amenity areas shown on Open Space Layout Drawing 2139-2131 will be available for angling. Access to Port Security areas will not be provided for angling in the interest of safety and security.

- Capacity ... at Mutton Island
- Pollution mitigation measures with regard to construction

#### R4. Response:-

- (i) Adequate capacity is available at Mutton Island Sewage Treatment Plant to cater for the proposed development and to ensure that water quality in the River Corrib is protected.
- (ii) When the project is approved, a meeting will be held with IFI confirming the necessary monitoring and mitigation measures, which have been proposed.

- Non-native Invasive Species

#### R5. Response:-

One such recent invasive non-native species to Galway Bay is *Didemnum vexillum* which is a type of sea squirt. It was recorded near Kilcolgan at an oyster farm location. It is native to the Far East and was more than likely brought in with oyster spat. There are no records on non-native species in the vicinity of the Galway Docks. The Harbour Master will introduce a

bye law requiring all trans-National commercial vessels to discharge ballast waters 20 km off the shore thereby ensuring that any non-native species will not be able to colonise substrates around the area of the Galway Harbour Extension site. There is no method to control non-native species that attach to the hulls of vessels.

- **Increased Seal Predation**

**R6. Response:-**

Cormorants (*Phalacrocorax carbo*) are common fish predators and occur in both marine and freshwater habitats. There is a breeding colony on Deer Island in Inner Galway Bay off the Clare coast and in April 2010, the colony was estimated at 110 occupied nests.

Cormorants have been identified as significant predators on Salmon smolts in certain fisheries (e.g. the River Bann in Northern Ireland) as the fish depart their mother rivers and head for marine feeding grounds. The migration period for Salmon smolts on the Corrib is well established and data on numbers of smolts running down the River Corrib for a number of years were reviewed.

Inland Fisheries Ireland raised concerns that the proposed development could impact smolt numbers by restricting the fish to a smaller area of sea water than they have access to at present and thereby increase likely contact with predators such as Cormorants and seals. Smolt data (numbers and dates) were provided by the Marine Institute. A study was undertaken to address this issue and involved making regular observations in the vicinity of the proposed development area to record numbers of Cormorants and to observe birds to try to determine what they were feeding on. The opportunity was taken to make observations on numbers of seals, cetaceans and otters present at the same time in the same area.

#### Numbers of Cormorants and Seals at the site

Cormorant numbers were regularly recorded in the vicinity of the proposed development site. Birds overflying the area were also noted. Observations were made with x10 binoculars from the end on Nimmo's Pier and the duration of each observation period was 15 minutes. Observations were made between the layby and the new slipway within the Galway Enterprise Park and broad scale sweeps were made between the slip, Hare Island and Mutton Island in calm weather. Maximum numbers (+50) were recorded between October 2010 to mid-January 2011 when there was a shoal of Sprat in the area while no birds were recorded on a number of dates throughout the survey period. Salmon smolts annually migrate out of the Corrib system during the months of March and April. Comparison of the cormorant and the smolt numbers shows no correlation with periods of smolt migration through the area and indicate that in the Corrib Estuary, Cormorants are not a significant predator on salmon smolts. From the observations made of birds overflying the area, it appears that Cormorants have a greater preference for feeding within Lough Corrib than in the estuary.

Maximum salmon smolt numbers in 2010 peaked at 1250 on 8 May. 1301 smolts was the highest number recorded in 2011 on 19<sup>th</sup> April.

The same field methodology as for Cormorants described above was used to assess seal numbers in the area. When making the observations both at the mouth of the Corrib and during the sweeps between the Galway Enterprise Park, Hare and Mutton Islands, the observer also checked for otters and cetaceans. Porpoises were seen on one occasion and a

single dolphin was noted several times in the area between Hare Island and Mutton Island. A single otter was seen several times in the area off the head of Nimmo's Pier and one individual was seen swimming in the open sea off Nimmo's Pier in the direction of Mutton Island. As for Cormorants, maximum numbers of seals coincided with the presence of shoaling Sprat between the period October 2010 to January 2011. Outside this period, seal numbers were low at the site and no seals were observed on several occasions. Comparison of the seal and the smolt numbers shows no correlation with periods of smolt migration through the area and indicates that in the Corrib Estuary, seals are not a significant predator on Salmon smolts.

- **A greater number of seals present at the estuary**

**R7. Response**

Our seal survey results indicate a general population of 0-5 Common Seal in the area. However, during periods of shoaling of species such as spratt, the number could be as great as 50. Occasional Grey Seals have been observed in the Corrib.

We confirm the proposal to monitor the seal population during and for at least two years post construction. Should it emerge that the number of seal increases as a result of the new layout of Galway Harbour, consideration will be given to the introduction of some mitigation measures such as an acoustic deterrent device at the mouth of the river, on then NPWS consent. Any additional man-made noise will need to be carefully examined and is generally not best practice. The use of such a device may have unintended consequences for other species such as the Otter. The introduction of such a device would require the consent of DAHG and is beyond the scope of the EIS. The design of the marina breakwater wall and the outer sea walls are such as to mitigate against seal haul out to curtail this problem arising.

- **Elver Migration**

**R8. Response:**

Prior to the construction of the Mutton Island causeway, migratory fish species such as elvers, eels, salmon and lamprey could swim through the passage between South Park and Mutton Island when there was sufficient water present. This would have been for ca 8 hours in every tidal cycle. The construction of the Mutton Island causeway has prevented this and fish must swim around Mutton Island to gain access to the River Corrib.

Returning fish will seek out the Corrib River water and as the proposed harbour extension will not cut off the flow of the river water, either arriving or departing fish will still be able to locate the river waters.

We note that the freshwater flow will be narrower and deeper in the context of the new development. This improved concentration of Corrib water will assist elver, returning salmon and lamprey to move up the estuary faster.

- **Elver Monitoring Programme**

**R9. Response:-**

When the project is approved, a meeting will be held with IFI to agree on the detail of an elver monitoring programme.

- **Elvers Migration Route**

**R10. Response:-**

As part of additional mitigation to reduce the impact on elver migration and other fish species, a wildlife pass has been incorporated into the design and the IFI has been forwarded design details and a description of the pass.

- **Salmonids Entering Lough Atalia**

**R11. Response:-**

When the project is approved, a meeting will be held with IFI to agree on the detail of a salmonid monitoring programme in this regard.

**2<sup>nd</sup> IFI Submission on 3<sup>rd</sup> December 2014**

- **Additional Information**

**R12. Response:-**

The points raised are accepted.

- **Two Stone Markers**

**R13. Response:-**

Accepted and addressed at R.1 above.

- **The proposed Harbour extension will encroach into ... the draft net fishery boundaries**

**R14. Response:-**

Accepted and addressed at R.2 above.

### **Additional Monitoring**

*Additional information regarding marine mammal monitoring has now been added to Section 7.7.9 (of the EIS Addendum/Errata October 2014) with regard to Additional Monitoring.*

*This information is also relevant to previously Section 7.8.3 of the EIS Addendum/Errata Document (October 2014)*

### **Marine Mammal Monitoring**

Since, studies carried out by the NPWS indicate that a minimum of 6-7 years of Harbour Seal count data are required to properly detect population trends, it is proposed that seals counts will be started immediately and will continue through construction for a period of seven years after operation begins. The suggested method is haul-out site counting, carried out during a period from two hours before to two hours after low tide and following the conditions on weather and visibility that are used by NPWS staff for the seal haul-out monitoring that they currently conduct. It is proposed that the major sites at Oranmore Bay, Kinvara Bay, Tawin and Deer Island, along with the largest haul-out in the harbour area (Rabbit Island) will be counted and that this will be done on a quarterly basis in February, May, August (moulting period) and November. Comparison will also be possible with the annual August counts made by the NPWS at Oranmore Bay and Kinvara Bay.

### **Additional Mitigation Measures**

*The following additional mitigation is proposed. This information is relevant to Section 7.9 of the EIS Addendum/Errata Document (October 2014) as previously presented.*

**Incorporation of Wildlife Pass into layout/footprint design** - The layout and footprint of the proposed development has evolved over the course of the design process with a view to minimising impacts on Natura 2000 sites, including the Galway Bay Complex cSAC and Inner Galway Bay SPA and their conservation objectives.

A wildlife pass, presented in Figure EIS (A2) 1.4 has been incorporated into the design of the scheme, to allow for passage of wildlife including otter, eel and possibly salmon and seal, thereby reducing requirements to swim around the total extension footprint.

The wildlife pass will be formed at the junction of the 400m quay with the 260m quay as shown on Drawing 2139-1212A, attached.

The width of the pass between sheet piles varies 2.0m to 2.7m as per sheet pile corrugation and 1.2m between the circular piles.

The variation in texture and width will provide the baffle effect required to prevent wave transmission from the seaward side to the port side.

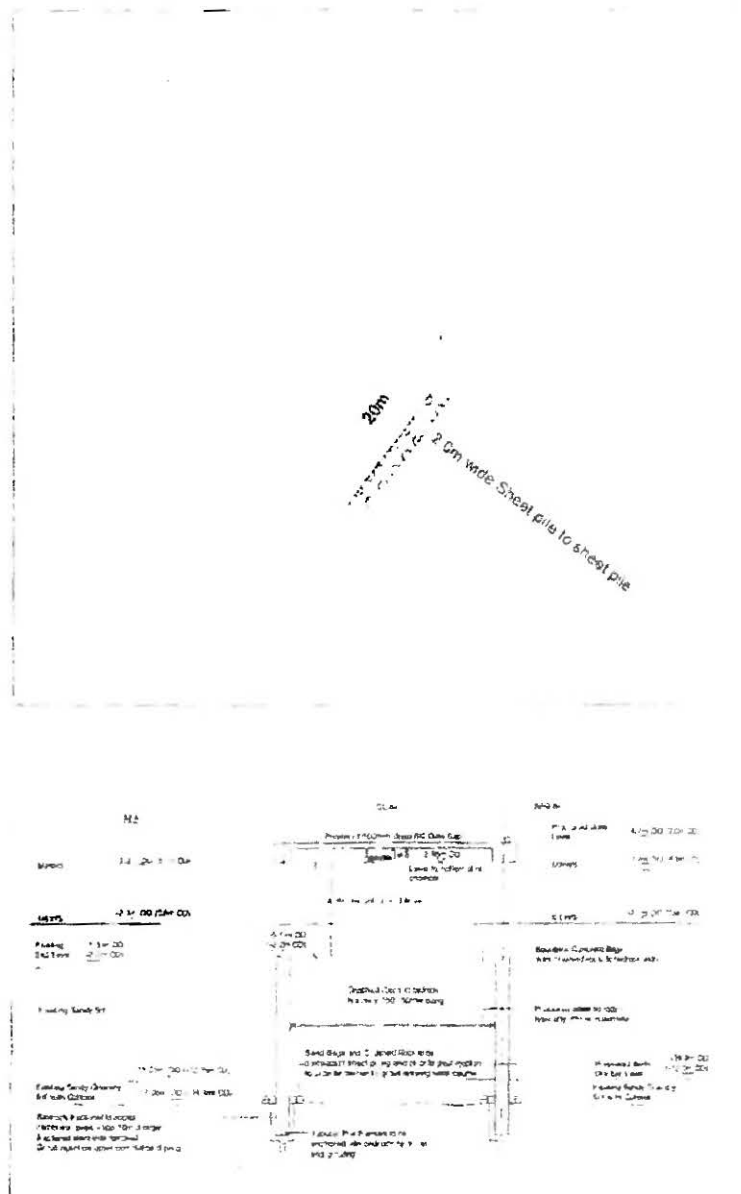
The bed-level of the pass will be at -2.2m C.D. (-5.1 O.D.) i.e. 500mm above present seabed level to prevent seabed material migrating through into the lower dredged berth bed levels.

A free board of 0.75m will be available above M.H.W.S. to the soffit of the quay.

A single vertical bar baffle between sheet piles inside of either end will prevent human / kayak use of the pass as a short cut in the interest of safety, while allowing approx.1.0m for wildlife species.



**Galway Harbour Extension – NIS – Addendum / Errata**



**Figure EIS (A2) 1.4 Wildlife Pass Design Layout**

**Summary of Oral Presentation by Dr Paddy Gargan, Inland Fisheries Ireland, to the An Bord  
Pleanála hearing, Connacht hotel, Galway, 14/1/15**

I wish to make a brief comment on the concerns of IFI with regard to the proposed Galway Harbour extension and comment on the responses received today from the Galway Harbour Company on the IFI submissions of 11<sup>th</sup> March and 3<sup>rd</sup> December 2014.

**Galway Fishery**

IFI previously expressed concern that this development will encroach into the zone which is legally an integral part of the Galway Fishery. IFI requested that the existing River Corrib mouth boundaries be delineated and an examination of any implications arising from the development be undertaken. I note in the response from the Galway Harbour Company that the location of the markers has been re-established and the markers will be reinstated. The loss of fishing ground is also acknowledged by the Harbour Company and the monetary loss, if any, will be addressed with IFI.

**Atlantic Salmon**

Lough Corrib is an SAC for Atlantic salmon under the EU Habitats Directive and the Galway fishery is one of the most important salmon angling fisheries in Ireland. IFI raised concerns in their submission regarding the possibility of increased seal predation on returning salmon due to the more restricted nature of the Corrib river mouth if the proposed harbour extension proceeds. The response received from the Harbour Company states that consideration will be given to the introduction of some mitigation measures such as an acoustic deterrent device at the mouth of the river.

On a national scale, salmon marine survival is currently at 5% compared to 15% or more during the 1980s. IFI have concerns that increased seal predation may arise on returning salmon that have spent one or more sea winters at sea. In an era of low marine survival, the impact of increased seal predation could be significant. There is a proposal to monitor seal numbers prior to, during and for a period of years post construction. If this monitoring results in evidence of increased seal numbers and predation on salmon at the Corrib river mouth, IFI wish to see mitigation measures to address this issue. Increased seal predation on salmon is potentially a long-term effect which will need to be addressed.

**European Eel**

Eels in Ireland are protected under the EU recovery plan, (EC regulation establishing measures for the recovery of the European eel (Council Regulation 11000/2007)) and there is a prohibition on eel fishing since 2009. Ireland has submitted a recovery plan for eel to the EU, one of the elements of which is to ensure adequate upstream migration of juvenile eel (elver). IFI previously expressed concern regarding the possibility that the proposed harbour extension may restrict or hinder the upstream passage of elver into the Corrib river. The response from the Harbour Company notes that the freshwater flow will be narrower and deeper in the context of the new development and this

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improved concentration of Corrib water will assist elver to move up the estuary faster. Elver movement into the Corrib may take place when water temperatures rise in May and June and water levels may be low at this time period. Therefore the narrower and deeper nature of the flow may not be significant in attracting elver into the river. The response from the Harbour Company also states that as part of additional mitigation to reduce the impact on elver migration and other fish species, a wildlife pass has been incorporated into the design. It is the view of IFI that the location of this wildlife pass, near the seaward end of the proposed harbour extension, may not be sufficient to address our concerns that elvers may accumulate to the east of the proposed extension and not have access to move into the river.

IFI had requested that an elver monitoring programme be initiated pre construction to determine the existing migration pathways utilised by migrating elvers entering the river Corrib. The response from the Harbour Company states that when the project is approved, a meeting will be held with IFI to agree on the detail of an elver monitoring programme. It is the view of IFI that an elver monitoring programme be initiated now, prior to any development, in order to get baseline data on elver migration routes.

IFI, in its previous submission, requested that should it emerge that the elver migration route could be hindered by the proposed harbour extension, an ongoing recovery programme and elver transportation programme will need to be implemented. This issue is not addressed in the response from the harbour Company.

In summary, IFI wish to have a monitoring programme in place with regard to seal numbers and predation on salmon and a monitoring programme regarding elver migration routes. If it transpires that the proposed development demonstrates an impact from increased seal numbers and predation or an impact on elver migration, adequate mitigation measures need to be put in place to address these issues. It is important to point out that such potential impacts could be long-term in nature and could potentially impact on the status of two protected fish species.

Dr Patrick Gargan

Fisheries Scientist

Inland Fisheries Ireland

14/1/2015