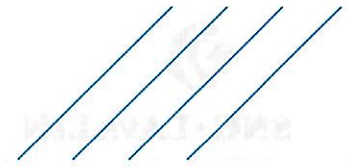


Appropriate Assessment Screening – Note TO289/RM01

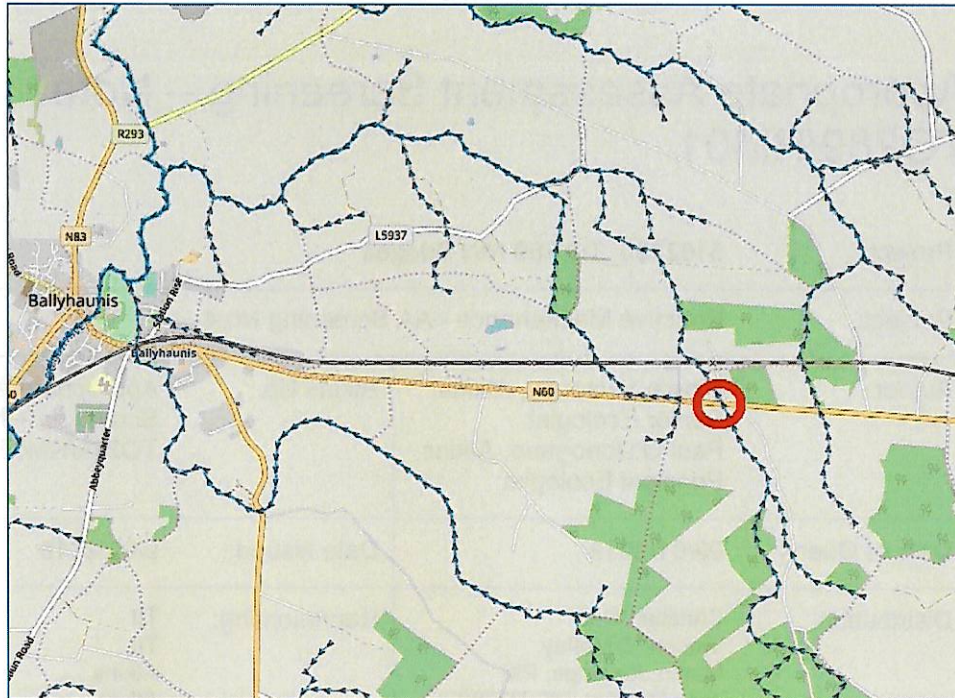
Project:	5162160_TO 289 NW Bridges		
Subject:	Reactive Maintenance - AA Screening No.4		
Author:	Niamh Sweeney, Atkins, Senior Ecologist Paul O'Donoghue, Atkins, Principal Ecologist	Atkins No.:	Appropriate Assessment Screening – Note TO289/RM04. Revision 0
Date of Query:	09/01/2019	Date Issued:	9/01/2019
Distribution:	Christian Nea Vincent O'Malley [REDACTED]	Representing:	TII TII Atkins Atkins

Bridge / Culvert Details

Bridge	Coolloughra Bridge, Scregg, Co. Mayo
Structure ID	MO-N60-015.00
County	Mayo
Location	<p>Coolloughra Bridge is situated on the N60, approximately 3.3km east of Ballyhaunis town and 15km west of Castlerea, Co. Mayo.</p> <p>Cooloughra Bridge spans the Moneymore stream, which is a tributary of the River Dalgan. The River Dalgan flows for a considerable distance (approximately 30km) until it joins the Clare River. The Clare River ultimately discharges to Lough Corrib.</p>

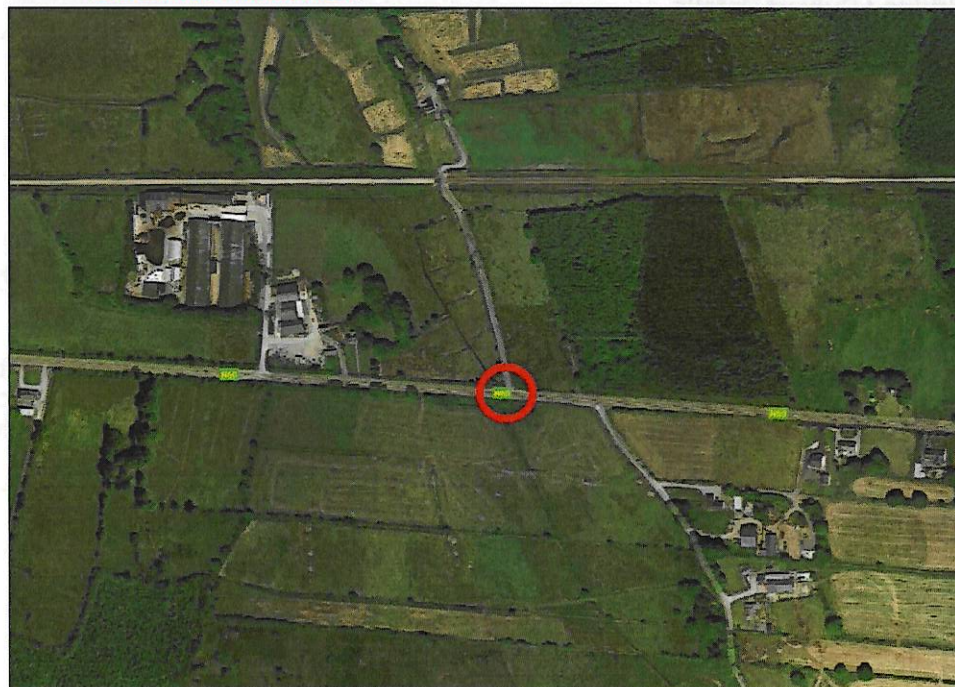


Maps

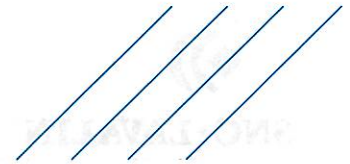


Map 1. Cooloughra Bridge (circled in Red).

[Source: <https://gis.epa.ie/EPAMaps/>]



Map 2. Cooloughra Bridge [Source: [GoogleMaps](https://www.google.com/maps/)]



Photos

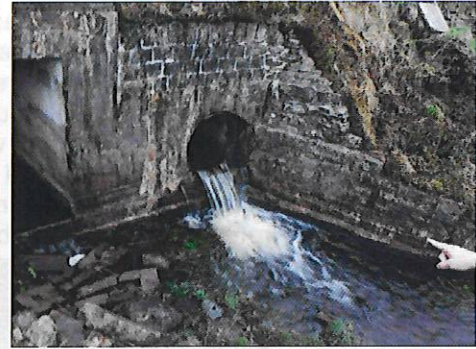


Plate 1. Downstream of Coolloughra Bridge, showing box culvert and concrete pipe.



Plate 2. Wall collapse on the downstream side of Coolloughra Bridge.

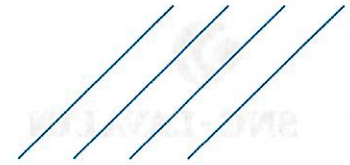


Plate 3. Upstream of Coolloughra Bridge. [Source: Atkins R.E.; 08/01/2019]

Proposed Works

The proposed works at Coolloughra Bridge are outlined below. With respect to access, the proposed works will only require access to the lands immediately adjacent to Coolloughra Bridge.

1. Regrading of bund adjacent to bridge which caused wall collapse.
2. Removal of 5m² of debris from the watercourse (collapsed wingwall).
3. Additional 5m² of wall rebuild including scour protection on north side (there is an area of scour under the debris that needs to be removed).
4. Additional 2m² of rock scour protection on south side.
5. 2m² of concrete repairs to concrete pipe as water is leaking from several locations.



The area of the bund adjacent to the bridge requiring regrading (Item 1) is shown in Plate 4 below. The area requiring regrading is circled in red and will be regraded to a 45 degree slope away from the water. This is necessary to allow the wingwall to be rebuilt (Item 3). The regrading works will be carried out using a small excavator and works will be carried out from the riverbank. No machinery access to the channel will be required. The material will be disposed of as per the waste management requirements of the bridge maintenance contract. The removed material will be removed from site.

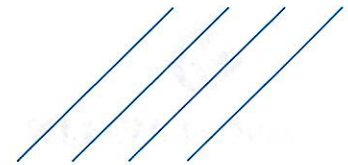


Plate 4. Mound of material to be regraded to a 45 degree slope (circled in red).



Plate 5. Debris within the channel (collapsed wingwall)

The proposed works outlined above will require de-watering of the box-culvert and concrete pipe in turn. Items 3 & 4 will require the flow to be diverted to the concrete pipe to carry out the works around the collapsed wingwall and Item 5 will require the flow to be diverted to the box culvert while the concrete pipe is repaired.

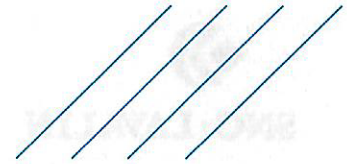


Appropriate Assessment Screening Decision Matrix

Natura 2000 Sites

There are 12 Natura 2000 sites located within 15km of Coolloughra Bridge, which are detailed in the table below.

Natura 2000 site	Site Code	Distance from site/ Connectivity	Within Potential Zone of Influence
Carrowbelly/ Caher Bog SAC	000597	5km by land No surface water connectivity	No
River Moy SAC	002298	5.4km by land No surface water connectivity	No
Errit Lough SAC	000607	5.7km by land No surface water connectivity	No
Lough Corrib SAC	000297	7.2km by land Surface water connectivity present - 15.2km from Coolloughra Bridge	Yes – needs further consideration
Drumalough Bog SAC	002338	7.3km by land No surface water connectivity	No
Cloonchambers Bog SAC	000600	8km by land No surface water connectivity	No
Coolcam Turlough SAC	000218	8.2km by land No surface water connectivity	No
Urlaur Lakes SAC	001571	8.6km by land No surface water connectivity	No
Derrinea Bog SAC	000604	8.7km by land No surface water connectivity	No
Croaghill Turlough SAC	000255	10km by land No surface water connectivity	No
Williamstown Turlough SAC	002296	10.3km by land No surface water connectivity	No
Croliskea/Trien/Cloonfelliv Bog SAC	002110	12.1km by land No surface water connectivity	No



pNHA / NHA There are no pNHAs / NHAs at or in the immediate environs of the site.

A number of bogs that are designated as SACs and detailed in the table above, are designated as pNHAs/NHAs and are within 15km of Coolloughra Bridge. However, as detailed in the table above, these are not connected to the bridge by landscape features or hydrological pathways.

The rivers in the vicinity of the bridge are not designated as a pNHA or NHA.

Hydrological links Coolloughra Bridge spans the Moneymore stream, which is a tributary of the River Dalgan. The River Dalgan flows for a considerable distance (approximately 30km) until it joins the Clare River. The Clare River ultimately discharges to Lough Corrib.

Coolloughra Bridge is situated within the Clare (Galway) subcatchment (30_010) and the Corrib Water Framework Directive catchment (30).

Lough Corrib SAC is located approximately 15.2km downstream of Coolloughra Bridge. The upper extent of Lough Corrib SAC is in the vicinity of Logboy Cross Rds/ Culaclena Bridge on the River Dalgan.

FWPM Coolloughra Bridge and the Moneymore, Dalgan and Clare Rivers are not located within a *Margaritifera* sensitive area.

The Dalgan and Clare Rivers are not listed on the European Communities Environmental Objectives (Freshwater Pearl Mussel) Regulations, 2009 [S.I. 296 of 2009].

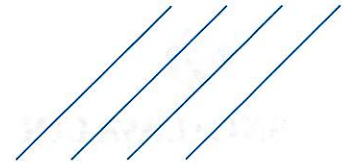
FWPM are listed as a qualifying interest of Lough Corrib SAC, [REDACTED]. The Owenriff River lies to the west of Lough Corrib and is within Ballycuirke Lough Stream subcatchment (30_14). [REDACTED]

Bats Coolloughra Bridge has some potential to support roosting bats, but no evidence of bats was recorded during bat surveys conducted in 2018.

Invasive Species While Japanese knotted (*Fallopia japonica*) has been recorded in the vicinity of Lough O'Flynn and in the townland of Cloonalough, there is no evidence of it at the works location (Source: Atkins RE).

Other Ecology Notes NBDC records of white-clawed crayfish include records on the River Dalgan in Ballyhaunis town. It is probable that crayfish may occur in the Moneymore stream.

NBDC records show otter present on the River Dalgan and small lakes in the general area. Thus, otter may frequent the Moneymore stream and use it as a commuting route.

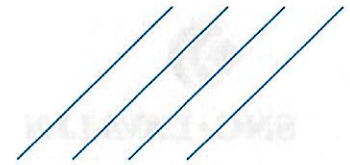


Brief Description of the Natura 2000 site

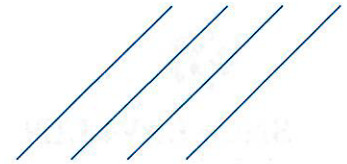
Site	Lough Corrib SAC (000297)
Qualifying Interests: -	<ul style="list-style-type: none"> ➤ Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) [3110] ➤ Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or <i>Isoeto-Nanojuncetea</i> [3130] ➤ Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara spp.</i> [3140] ➤ Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and Callitriche-Batrachion vegetation [3260] ➤ Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210] ➤ Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinia caeruleae</i>) [6410] ➤ Active raised bogs [7110] ➤ Degraded raised bogs still capable of natural regeneration [7120] ➤ Depressions on peat substrates of the Rhynchosporion [7150] ➤ Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> [7210] ➤ Petrifying springs with tufa formation (Cratoneurion) [7220] ➤ Alkaline fens [7230] ➤ Limestone pavements [8240] ➤ Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0] ➤ Bog woodland [91D0] ➤ <i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029] ➤ <i>Austropotamobius pallipes</i> (White-clawed Crayfish) [1092] ➤ <i>Petromyzon marinus</i> (Sea Lamprey) [1095] ➤ <i>Lampetra planeri</i> (Brook Lamprey) [1096] ➤ <i>Salmo salar</i> (Salmon) [1106] ➤ <i>Rhinolophus hipposideros</i> (Lesser Horseshoe Bat) [1303] ➤ <i>Lutra lutra</i> (Otter) [1355] ➤ <i>Drepanocladus vernicosus</i> (Slender Green Feather-moss) [1393] ➤ <i>Najas flexilis</i> (Slender Naiad) [1833]


Assessment The location of QIs¹ in relation to the works area are detailed in the table below. It is important to note that Coolloughra Bridge is located outside Lough Corrib SAC. The SAC is located 7.2km from the bridge by land and 15.2km by surface water pathways.

¹ Conservation Objectives for Lough Corrib SAC (000297) https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000297.pdf

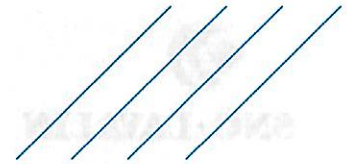


Qualifying Interest	Location	Within Zone of Influence
Oligotrophic waters	Lough Corrib is located a significant distance from Coolloughra bridge (i.e. greater than 60km instream distance). Ballydoo Lough and the small lakes in the Owenriff catchment are not hydrologically connected to the bridge.	No
Oligotrophic to mesotrophic waters	Lough Corrib is located a significant distance from Coolloughra bridge (i.e. greater than 60km). Ballycuirke Lake is not hydrologically connected to the bridge.	No
Hard oligo-mesotrophic water	Lough Corrib is located a significant distance from Coolloughra bridge (i.e. greater than 60km).	No
Floating river vegetation	Floating river vegetation may occur in both upland and lowland depositing rivers. Therefore, this habitat may be present in the River Dalgan.	Yes – via surface water pathways (15.2km).
Semi-natural dry grasslands on calcareous substrate	Small grassland areas are present in association with other habitats such as fens and limestone pavements.	No
Molinia meadows	Molinia meadows are present in association with habitats such as other grassland types and fens.	No
Active raised bogs	Addergoole Bog and Lough Tee Bog are located adjacent to Lough Corrib and north east of Athenry respectively.	No
Degraded raised bogs	Degraded raised bogs have not been identified within the SAC, but would be located at minimum of 7.2km from the proposed works.	No
Depressions of peat substrates with Rhynchosporion vegetation	The distribution of this habitat has not been identified within the SAC, but would be located at minimum of 7.2km from the proposed works.	No
Calcareous fens	Calcareous fens have not been mapped within the SAC, but would be located at minimum 7.2km from the proposed works.	No
Petrifying springs	Petrifying springs have not been mapped within the SAC, but would be located at minimum 7.2km from the proposed works.	No
Alkaline fens	Alkaline fens have not been mapped within the SAC, but would be located at minimum 7.2km from the proposed works.	No
Limestone pavement	Limestone pavement is located on the east and west of Lough Corrib, which is located approximately 45km by land from the proposed works.	No



Oak woodlands	Oak woodlands are located around Lough Corrib and as described above, are located a significant distance from the proposed works.	No
Bog woodland	Bog woodland occurs on Addergoole Bog and around Lough Corrib. These are located a significant distance from the proposed works.	No
Freshwater pearl mussel		No
White-clawed crayfish	White-clawed crayfish are present in the River Dalgan at Ballyhaunis and further downstream on the Dalgan and River Clare in the vicinity of Milltown.	Yes – via surface water pathways (15.2km).
Sea lamprey	Sea lamprey are present in the River Corrib in the vicinity of Galway City. Their upstream passage is impeded by the regulating weir located upstream. Inland Fisheries Ireland (IFI). Surveys ² have not recorded sea lamprey on the Clare or Dalgan Rivers.	No
Brook lamprey	Lamprey sp. have been recorded by IFI on the River Clare. Thus, brook lamprey may be present in the River Dalgan.	Yes – via surface water pathways (15.2km).
Salmon	Salmon have been recorded by IFI on the River Clare and thus are likely to be present in the River Dalgan.	Yes – via surface water pathways (15.2km).
Lesser Horseshoe bat	One important summer roost and associated foraging grounds are present along the northern shore of Lough Corrib. The proposed works are located approximately 50km from this location and thus lie outside the 2.5km foraging zone.	No
Otter	Otter are present along many lakes, rivers and streams in Ireland. Thus, otter are likely to be present on the River Dalgan.	Yes – via surface water pathways (15.2km).
Slender Green Feather-moss	Slender green feather moss is located at Gortachalla on the west of Lough Corrib.	No
Slender Naiad	Slender Naiad habitat is within Lough Corrib, which is a significant distance from the proposed works.	No

² IFI Water Framework Directive Fish Survey Map <http://www.ifigis.ie/WFDFishMap/>



Potential impacts during construction: -

As shown in the table above, the proposed works will not give rise to impacts via land and air pathways as the SAC is located 7.2km from the proposed works, with many qualifying interests located at greater distances. The works area is hydrologically connected to the Lough Corrib SAC via the Moneymore stream and River Dalgan. Thus, the proposed works could potentially affect the water quality of the River Dalgan and thus, indirectly impact floating river vegetation, white-clawed crayfish, brook lamprey, salmon and otter through the degradation of water quality. However, as noted, it is necessary to de-water the box culvert and concrete pipe so that the works can take place. Therefore, all works to the structure will be carried out in the dry and are minor in extent.

The localised regrading of the bund will be carried out from the bankside and the material disposed of as per the waste management requirements of the contract. The removed material will be removed from site.

Thus, due to the nature, extent, duration and location of the proposed works, the potential risk of impacts to the Lough Corrib SAC is negligible.

Potential impacts during operation: -

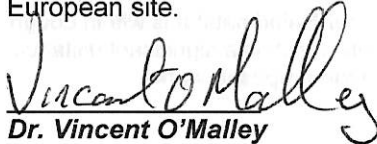
Impacts during the operational phase of the proposed works are not anticipated. The works will not affect the hydrological regime of the rivers and will not generate further emissions to the watercourses.

Findings of this Assessment

Atkins Findings	This Screening for Appropriate Assessment report is based on the best available scientific information. It is concluded by the authors of this report that the proposed project poses no likely significant effects on the River Corrib SAC. Thus, it is recommended that it is not necessary for the proposed project to proceed to Appropriate Assessment.
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Findings of TII Appropriate Assessment

AA Determination	Having performed screening for Appropriate Assessment in respect of the proposed reactive maintenance works detailed in this document entitled <i>Appropriate Assessment Screening – Note TO289/RM04. Revision 0</i> , I accept the recommendations of Atkins Limited that the proposed reactive maintenance works, individually or in combination with other plans or projects, would not be likely to have a significant effect on any European site in view of the best scientific knowledge and the site’s conservation objectives. I determine that an Appropriate Assessment of these proposed works is not required, as <i>it can be excluded</i> on the basis of objective scientific information following the screening done that the proposed works, individually or in combination with other plans or projects, will have a significant effect on any European site.
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 14/01/2019
Dr. Vincent O'Malley
Head of the Environmental Policy and Compliance Section
Transport Infrastructure Ireland