

Marine Scotland Science advice on freshwater and diadromous fish and fisheries in relation to onshore wind farm developments.

July 2020, updated April 2022

Annex 1

MSS – EIA Checklist

The generic scoping guidelines should ensure that all matters relevant to freshwater and diadromous fish and fisheries have been addressed and presented in the appropriate chapters of the EIA report. Use of the checklist below should ensure that the EIA report contains the following information; the absence of such information **may necessitate requesting additional information** which could delay the process:

MSS Standard EIA Report Requirements	Provided in application YES/NO	If YES – please signpost to relevant chapter of EIA Report	If not provided or not what MSS has asked for, please set out justification.	ECU/MSS use
1. A map outlining the proposed development area and the proposed location of: <ul style="list-style-type: none"> ○ the turbines, ○ associated crane hard standing areas, ○ borrow pits, ○ permanent meteorological masts, ○ access tracks including watercourse crossings, ○ all buildings including substation, battery storage; 	YES	Chapter 2: Development Description and associated figures.		

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<ul style="list-style-type: none"> ○ permanent and temporary construction compounds; ○ all watercourses; and ○ contour lines; 				
<p>2. A description and results of the site characterisation surveys for fish (including fully quantitative electrofishing surveys) and water quality including the location of the electrofishing and fish habitat survey sites and water quality sampling sites on the map outlining the proposed turbines and associated infrastructure;</p>	YES	<p>Electrofishing survey results for sample points along River Aray taken from Argyll Fisheries Trust Reports. Summarised in Chapter 8: Ecology.</p> <p>Fish habitat suitability survey undertaken within the site. Chapter 8: Ecology.</p> <p>Water quality assessed in Chapter 10: Hydrology and Hydrogeology.</p>		
<p>3. An outline of the potential impacts on fish populations and water quality within and downstream of the proposed development area;</p>	YES	Chapter 8 Ecology and Chapter 10 Hydrology and Hydrogeology		
<p>4. Any potential cumulative impacts on the water quality and fish populations associated with adjacent (operational</p>	YES	Potential Cumulative impacts to water quality assessed in Chapter 10:	Note: Scoped out of ecology cumulative assessment due to lack of impacts.	

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and consented) developments including wind farms, hydro schemes, aquaculture and mining;		Hydrology and Hydrogeology.		
5. Any proposed site specific mitigation measures as outlined in MSS generic scoping guidelines and the joint publication “Good Practice during Wind Farm Construction” (https://www.nature.scot/guidance-good-practice-during-wind-farm-construction);	YES	<p>Implementation of a 50m buffer distance, where possible, from watercourses (excluding water crossings). Seasonal restrictions to instream works within salmonid spawning areas of River Aray. See Chapter 8: Ecology</p> <p>Embedded mitigation to protect hydrological receptors is outlined in Chapter 10: Hydrology and Hydrogeology. In addition, a Construction Environmental Management Plan will be provided as a technical appendix to Chapter 11, which provides embedded mitigation and best practice measures to manage drainage as well</p>		

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		as pollution prevention guidance.		
6. Full details of proposed monitoring programmes using guidelines issued by MSS and accompanied by a map outlining the proposed sampling and control sites in addition to the location of all turbines and associated infrastructure (see wording suggested by MSS for planning conditions).	NO		<p>There is a commitment for a monitoring programme following MSS guidance. The Water Quality & Fish Monitoring Programme would include all details requested by MSS and agreed prior to construction commencement. At this stage, the exact timings of surveys are unknown (these would be included in monitoring programme document), but they would follow recommended seasonality.</p> <p>Committed mitigation is included in Chapter 8: Ecology and Chapter 10: Hydrology and Hydrogeology.</p>	
7. A decommissioning and restoration plan outlining proposed mitigation/monitoring for water quality and fish populations.	NO		A decommissioning plan would likely follow a similar process as above for construction mitigation and monitoring, but details would be agreed nearer the point of decommissioning when	

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			current conditions are better known.	

Developers should specifically discuss and assess potential impacts and appropriate mitigation measures associated with the following:	Provided in application YES/NO	If YES – please signpost to relevant chapter of EIA Report	If not provided or provided different to MSS advice, please set out reasons.	ECU/MSS use
8. Any designated area (i.e. SAC), for which fish is a qualifying feature, within and/or downstream of the proposed development area;	YES	Assessed for potential connectivity in Ecology chapter.		
9. The presence of a large density of watercourses;	YES	Fish habitat suitability survey of site included in Chapter 8: Ecology. Chapter 10: Hydrology and Hydrogeology assess impacts to watercourses.		
10. The presence of large areas of deep peat deposits;	YES	Peat and peatland coverage presented and assessed in Chapter 11: Geology & Soils and Chapter 8 Ecology. Information on the Development evolution, designed to		

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		avoid peat where possible, is presented in Chapter 3: Site Selection & Design.		
11. Known acidification problems and/or other existing pressures on fish populations in the area; and	YES	Potential acidification of watercourses is assessed in Chapter 10 Hydrology and Hydrogeology.		
12. Proposed felling operations.	YES	<p>Chapter 14: Forestry assesses potential effects on forestry.</p> <p>Potential effects on nature are assessed in Chapter 7: Ornithology and Chapter 8: Ecology.</p> <p>Potential effects of forestry felling on hydrological receptors are assessed in Chapter 10: Hydrology and Hydrogeology.</p>		