

Loch Lomond & the Trossachs National Park Authority:**Habitat Regulations Appraisal****Proposal:** Construction of a hydro scheme**Location:** Benmore Farm Crianlarich Stirling FK20 8QS**Planning Application Reference:** 2017/0119/DET**Date:** 25th October 2018.

	Requirement for screening	
	The proposal is not directly connected or necessary to site management for nature conservation, therefore the proposal must first be screened to determine if the proposal is likely to have a significant effect on the site. If the conclusion is yes then an 'Appropriate Assessment' of the implications of the proposed hydro scheme on the River Tay SAC, European protected site must be carried out	
	<i>Background</i>	
1	Brief description of the project	<p>The proposal is for the construction of a 200kW four-intake run-of-river hydro scheme with associated powerhouse.</p> <p>The site boundary is located approximately 70m upstream of the boundary with the River Tay of Conservation (SAC).</p>
2	Brief description of other plans or projects likely to have a significant effect on the site	n/a
3	Brief description of the Natura 2000 site	<p>The boundary with the River Tay SAC (channel linking Loch Dochart and Loch Lubhair) is approximately 70m downstream of the application site boundary.</p> <p>The qualifying interests of the River Tay SAC are:</p> <ul style="list-style-type: none">• River lamprey (<i>Lampetra fluviatilis</i>)• Brook lamprey (<i>Lampetra planeri</i>)• Sea lamprey (<i>Petromyzon marinus</i>)• Atlantic salmon (<i>Salmo salar</i>)• Otter (<i>Lutra lutra</i>)• Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels
4	Conservation objectives for the site	<p><u>Conservation Objectives for the River Tay SAC are:</u></p> <p>To avoid deterioration of the habitats of the qualifying species (listed above) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and</p> <p>To ensure for the qualifying species that the following are maintained in the long term:</p> <ul style="list-style-type: none">• Population of the species, including range of genetic types for salmon, as a viable component

		<p>of the site</p> <ul style="list-style-type: none"> • Distribution of the species within site • Distribution and extent of habitats supporting the species • Structure, function and supporting processes of habitats supporting the species • No significant disturbance of the species
	Likely Significant Effect	
5	Describe the individual elements of the project likely to give rise to impacts on the Natura 2000 site.	<p>The following individual elements of the project have the potential to give rise to impacts upon the Natura 2000 site:</p> <ul style="list-style-type: none"> • Impact on the population of the species from construction of intake weirs and tailrace; • Impact on structure and function of the habitat caused by construction of temporary tracks; • Impact on species caused by construction works and possible sedimentation of water course; • Impact from disturbance of the water course on species and habitat caused by penstock development and impact on water quantity and quality;
6	Describe any likely direct, indirect or secondary impacts of the project on the Natura 2000 site.	<ul style="list-style-type: none"> • Could affect population of fish; • Habitat for species and • Clear water habitat.
7	Describe from above those elements of the project where the scale or magnitude of impacts is not known.	n/a
8	Describe how the integrity of the site (determined by structure and function and conservation objectives) is likely to be affected by the project (eg loss of habitat, disturbance, disruption, chemical changes, hydrological changes and geological changes etc	<p>As the SAC is 70m downstream of the proposed hydro scheme it is likely to have a significant effect on population of fish, habitat for species and clear water habitat if no mitigation is put in place.</p> <p>As no holts or lying up areas were recorded it is not considered that there will be a likely significant effect on distribution or extent of habitats of otters.</p> <p>It will therefore be necessary to carry out an appropriate assessment for the qualifying features of fish and fish habitat.</p>
	Appropriate Assessment.	
		<p>It is considered that the proposal is likely to have an adverse effect on the integrity of the SAC if appropriate mitigation measures are not put in place..</p> <p>The following mitigation will be put in place to ensure that the qualifying features mentioned in point 4 above are safeguarded:</p>

		<ul style="list-style-type: none"> • To protect salmon spawning grounds from sedimentation there will be no in-stream construction works November to May. • To maintain the existing habitats for fish there will be regular flushing of sediments from the intake weir. • A sediment management plan will be produced to ensure that there is no additional sediment added to the water courses during construction; • A screen will be fitted in the tailrace to stop fish and otters entering. • The intake weirs will not cause an obstruction to migratory fish as there are many barriers to fish already upstream from the powerhouse. • A Water Environment (Controlled Activities) Regulations 2011 (CARs) licence will control hands-off flow rate to ensure that fish habitats are maintained.
	Conclusion	
<p>The proposal is unlikely to have a significant effect on the River Tay SAC (either alone or in combination with other plans and projects) if the mitigation mentioned above is put in place.</p> <p>The Park Authority has assessed these mitigation measures and concluded that they are appropriate to address any indirect impacts that may arise from the proposed development.</p>		