

# Balliemeanoch Pumped Storage Hydro

Environmental Impact Assessment  
Report

Volume 2: Main Report

ILI (Borders PSH) Ltd

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# Volume 2: Main Report

## Table of Contents

1. Introduction
2. Project and Site Description
3. Evolution of Design and Site
4. Approach to EIA
5. Landscape & Visual
6. Terrestrial Ecology
7. Aquatic Ecology
8. Marine Ecology
9. Ornithology
10. Geology & Ground Conditions
11. Water Environment
12. Water Resources
13. Cultural Heritage
14. Access, Traffic & Transport
15. Noise & Vibration
16. Socio-Economic, Recreation and Tourism
17. Climate
18. Marine Physical Environment and Tourism
19. Shipping & Navigation
20. Commercial Fisheries
21. Summary of Effects and Conclusions

# Glossary

Acronym	Definition	Acronym	Definition
<b>ABC</b>	Argyll and Bute Council	<b>GWDE</b>	Groundwater Dependent Terrestrial Ecosystem
<b>AIL</b>	Abnormal Indivisible Loads	<b>HAT</b>	Highest Astronomical Tide
<b>AIS</b>	Automatic Identification System	<b>HBRG</b>	Highland Biological Recording Group
<b>ALARP</b>	As Low As Reasonably Practicable	<b>HD</b>	Hydro-Dynamic
<b>AOD</b>	Above Ordnance Datum	<b>HES</b>	Historic Environment Scotland
<b>ASPT</b>	Average Score Per Taxon (ref WHPT metric)	<b>HFC</b>	Hydrofluorocarbons
<b>AWT</b>	Average Weekday Traffic	<b>HGV</b>	Heavy Goods Vehicle
<b>bgl</b>	Below ground level	<b>IIP</b>	Infrastructure Investment Plan
<b>BGS</b>	British Geological Survey	<b>IUCN</b>	International Union for Conservation of Nature
<b>BOD</b>	Biochemical Oxygen Demand	<b>JNCC</b>	Joint Nature Conservation Committee
<b>BODC</b>	British Oceanographic Data Centre	<b>JRCC</b>	Joint Rescue Coordination Centre
<b>BSS</b>	Bed Shear Stress	<b>kg CO<sub>2</sub>e/kWh</b>	Kilograms of carbon dioxide equivalent per kilowatt hour
<b>BTO</b>	British Trust for Ornithology	<b>kWh</b>	Kilowatt hour
<b>CAR</b>	Controlled Activities Regulations	<b>LB</b>	Listed Building
<b>CBC</b>	Common Birds Census	<b>LBAP</b>	Local Biodiversity Action Plan
<b>CCC</b>	Climate Change Committee	<b>LCT</b>	Landscape Character Type
<b>CCI</b>	Community Conservation Index	<b>LDP</b>	Local Development Plan
<b>CCP</b>	Climate Change Plan	<b>LEAFPACS2</b>	The aquatic macrophyte Prediction and Classification System (V2)
<b>CCR</b>	Climate Change Resilience	<b>LGV</b>	Light Goods Vehicle
<b>CEMP</b>	Construction Environmental Management Plan	<b>LIFE</b>	Lotic-invertebrate Index for Flow Evaluation
<b>DfT</b>	Department for Transport	<b>LNCS</b>	Local Nature Conservation Site
<b>DMRB</b>	Design Manual for Roads and Bridges	<b>LVIA</b>	Landscape and Visual Impact Assessment
<b>DOC</b>	Dissolved Organic Carbon	<b>Ma</b>	Million Years
<b>DTM</b>	Digital Terrain Model	<b>MAIB</b>	Marine Accident Investigation Branch
<b>EA</b>	Environment Agency	<b>mAOD</b>	Meter Above Ordnance Datum
<b>EclA</b>	Ecological Impact Assessment	<b>MBES</b>	Multi-Beam Echo-Sounder
<b>ECow</b>	Ecological / Environmental Clerk of Works	<b>MCA</b>	Maritime & Coastguard Agency
<b>eDNA</b>	Environmental DNA (survey method)	<b>NAC</b>	Noise Advisory Council
<b>EIA</b>	Environmental Impact Assessment	<b>NAVTEX</b>	Navigational Telex
<b>EIAR</b>	Environmental Impact Assessment Report	<b>NBN</b>	National Biodiversity Gateway
<b>EQR</b>	Ecological Quality Ratio	<b>NCMPA</b>	Nature Conservation Marine Protected Area
<b>EQS</b>	Environmental Quality Standard	<b>NF<sub>3</sub></b>	Nitrogen trifluoride
<b>ES</b>	Environmental Statement	<b>NGR</b>	National Grid Reference
<b>EU</b>	European Union	<b>NHZ</b>	Natural Heritage Zone
<b>FSA</b>	Formal Safety Assessment	<b>nm</b>	Nautical Mile(s)
<b>FWPM</b>	Freshwater Pearl Mussel	<b>NOAA</b>	National Oceanic and Atmospheric Administration
<b>GDL</b>	Garden and Designed Landscape	<b>N<sub>2</sub>O</b>	Nitrous oxide
<b>GHG</b>	Greenhouse Gas	<b>NPF</b>	National Planning Framework
<b>GPP</b>	Guidance on Pollution Prevention		
<b>GPS</b>	Global Positioning System		

Acronym	Definition	Acronym	Definition
<b>NPF4</b>	National Planning Framework 4	<b>SOLAS</b>	Safety of Life at Sea
<b>NPS</b>	National Planning Statement	<b>SPA</b>	Special Protection Area
<b>NSR</b>	Noise Sensitive Receptor	<b>SSSI</b>	Sites of Special Scientific Interest
<b>NTAXA</b>	Number of scoring Taxa	<b>SVOCs</b>	Semi-Volatile Organic Compounds
<b>NTS2</b>	National Transport Strategy 2	<b>SWCRIFG</b>	South West Coast Regional Inshore Fisheries Group
<b>NTU</b>	Nephelometric Turbidity Unit	<b>TAG</b>	Transport Assessment Guidance
<b>NVC</b>	National Vegetation Classification	<b>TBM</b>	Tunnel Boring Machine
<b>OCCT</b>	Open Cycle Gas Turbine	<b>TC</b>	Temporary Compound
<b>ODN</b>	Ordnance Datum Newlyn	<b>tCO<sub>2</sub>e</b>	Tonnes CO <sub>2</sub> equivalent
<b>OS</b>	Ordnance Survey	<b>TCV</b>	Taxon Cover Values (aquatic macrophytes)
<b>oWMP</b>	Outline Water Management Plan	<b>TSS</b>	Total Suspended Solids
<b>PAN</b>	Planning Advice Note	<b>UKCP18</b>	UK Climate Projections 2018
<b>PC</b>	Permanent Compound	<b>UKHO</b>	UK Hydrographic Office
<b>PFCs</b>	Perfluorocarbons	<b>UKSIA</b>	United Kingdom Single Issuing Authority
<b>PLL</b>	Potential Loss of Life	<b>UNCLOS</b>	United Nations Convention on the Law of the Sea
<b>PMF</b>	Priority Marine Feature	<b>UNFCCC</b>	United Nations Framework Convention on Climate Change
<b>PPC</b>	Pollution Prevention and Control (Scotland) Regulations 2012	<b>VDV</b>	Vibration Dose Value (m.s-1.75)
<b>PPG</b>	Pollution Prevention Guidelines	<b>VMS</b>	Vessel Monitoring System
<b>PPV</b>	Peak Particle Velocity (mm/s)	<b>VOCS</b>	volatile organic compounds
<b>PSH</b>	Pumped Storage Hydro	<b>Vp</b>	Vantage point
<b>PSI</b>	Proportion of Sediment-sensitive Invertebrate index	<b>WANE</b>	Wildlife and Natural Environment (Scotland) Act 2011
<b>PSYM</b>	Predictive System of Multimetrics (pond survey method)	<b>WBCSD</b>	World Business Council for Sustainable Development
<b>PWS</b>	Private Water Supply	<b>WCA</b>	Wildlife and Countryside Act
<b>RAM</b>	Restricted in Ability to Manoeuvre	<b>WeBS</b>	Wetland Bird Survey
<b>RBMP</b>	River Basin Management Plan	<b>WEWS [Act]</b>	Water Environment Water Services ('the WEWS Act') (Scotland) Act 2003
<b>RCP</b>	Representative Concentration Pathways	<b>WFD</b>	Water Framework Directive
<b>RICT</b>	River Invertebrate Classification Tool	<b>WHPT</b>	Whalley, Hawkes, Paisley & Trigg (WHPT) Metric
<b>RLB</b>	Red Line Boundary	<b>WL</b>	Water Level
<b>RNLI</b>	Royal National Lifeboat Institution	<b>WLA</b>	Wild Land Area
<b>RSPB</b>	Royal Society for the Protection of Birds	<b>WoSAS</b>	West of Scotland Archaeology Service
<b>SAC</b>	Special Area of Conservation	<b>WPZ</b>	Water Protection Zones
<b>SAR</b>	Search and Rescue	<b>WRI</b>	World Resources Institute
<b>SCOS</b>	Special Committee on Seals	<b>ZoI</b>	Zone of Influence
<b>SEPA</b>	Scottish Environment Protection Agency		
<b>SF<sub>6</sub></b>	Sulphur dioxide		
<b>SFF</b>	Scottish Fishermen's Federation		
<b>SLR</b>	Sea Level Rise		
<b>SM</b>	Scheduled Monument		
<b>SMU</b>	Seal Management Units		
<b>SNH</b>	Scottish Natural Heritage (now NatureScot)		
<b>SNMP</b>	Scottish National Marine Plan		

# Definitions

Term	Description
As the crow flies	In a straight line
The Applicant	ILI (Borders PSH) Ltd, the company responsible for the application for consent of the Development.
Amenity	The preferable features of a location which contribute to its overall character and the enjoyment of residents or visitors.
Baseline	Environmental conditions at specific periods of time, present on, or near a site, against which future changes may be measured or predicted.
Bat Logger	Aids in the detection and identification of bats
British Standard	A standard is a published document that contains a technical specification, or other precise criteria designed to be used consistently as a rule or definition. Standards are designed for voluntary use and do not impose any regulations. However, laws and regulations may refer to certain standards and make compliance with them compulsory. Sometimes British Standards (BS) will be accompanied by the letters EN and/or ISO. These mean that the standard was developed as an European (EN) or International (ISO) standard and then adopted by the UK as a British Standard.
Conservation Areas	Conservation Areas are described by the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997 as “ <i>areas of special architectural or historic interest, the character of which it is desirable to preserve or enhance</i> ”. Local planning authorities are required to determine which parts of their area should be safeguarded due to their architectural or historic interest, to ensure that any new development pays respects to or enhances their character.
Construction Contractor	The individual or organisation who will be contracted to provide and manage the construction of the Development
Construction Environmental Management Plan	Strategic document setting out best practice methods to minimise environmental impacts during construction. An outline CEMP has been produced for the Development ( <i>Appendix 3.1 (Volume 5: Appendices)</i> ).
Construction Traffic Management Plan	Strategic document that outlines the management of vehicle movements and interactions with the surrounding road network during the various stages of the construction process. A framework CTMP has been produced for the Development ( <i>Appendix 14.1 (Volume 5: Appendices)</i> ).
Cumulative Effects	The summation of effects caused by both intra-project (where a single receptor is affected by multiple aspects of a project, worsening the effect) and inter-project effects (where effects are exacerbated due to other reasonably foreseeable projects either in construction, consented or yet to be built).
Dawn	During the period before sunrise
Desk Based Assessment	Research based primarily on database and internet data gathering methods, and other third party data.
the Development	Balliemeanoch Pumped Storage Hydro
Development Site	Land within the red line boundary encompassing the Development
District Network Operator	The operator of a electricity distribution network
Dusk	During the period shortly after sunset
Effect	The consequence of an impact on the environment, multiplied by the sensitivity of the receptor.
Section 36 of the Electricity Act 1989	The application to construct, operate and decommission the Development will be made in accordance with the requirements of Section 36 of the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017, and will be submitted to the Energy Consents Unit (ECU) of the Scottish Government.
EIA Development	A development requiring EIA by virtue of its size, nature or location under schedule 2 of the EIA Regulations.
EIA Regulations	For the Development the relevant EIA Regulations are the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017. By virtue of its size, nature and location, the Development constitutes an ‘EIA development’ under regulation 6 and Schedule 2 of the EIA regulations.
Embankment	Earth and rockfill structures which contain the water within the Headpond.
Environmental Impact Assessment	The assessment of the likely significant environmental effects of the Development. Undertaken in accordance with the EIA Regulations.

Term	Description
Environmental Impact Assessment Non-Technical Summary	A report presenting a non-technical summary of the information provided in the EIA Report.
Environmental Impact Assessment Report	A report that includes such of the information referred to in Schedule 4 of the EIA Regulations as is reasonably required to assess the environmental effects of the Development.
Gardens and Designed Landscapes	The Historic Environment (Amendment) Scotland Act (2011) made it a statutory duty for HES to compile and maintain an Inventory of Gardens and Designed Landscapes in Scotland.
Groundwater	Water occurring in the ground which can be reasonably attributed to relatively geologically recent recharge and which can be reasonably considered to be wholesome (potable) unless it has been contaminated (altered) by anthropogenic activity.
Headpond	The headpond is the upper reservoir with associated embankments.
Habitat	The environment in which populations or individual species live or grow.
Habitats Regulations	The Conservation of Habitats and Species Regulations 2017
Habitats Directive	Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora
Heavy Goods Vehicle	A commercial road vehicle that is of a construction primarily suited for the carriage of goods or burden of any kind and designed or adapted to have a maximum weight exceeding 3,500 kilograms when in normal use and travelling on a road laden.
Hectare	A unit of area (10,000 m <sup>2</sup> / 2.471 acres).
Historic Environment	All aspects of the environment resulting from the interaction between people and places through time including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped, planted or managed flora. Those elements of the historic environment that hold significance are called heritage assets.
IEMA Guidelines	Institute of Environmental Management and Assessment (IEMA) Guidelines, 2023
Impact	A physical or measurable change to the environment.
Inlet / Outlet structure	The Headpond Inlet / Outlet structure is where the waterways exit the Headpond through the headrace. The waterways will terminate at the Tailpond Inlet / Outlet structure situated on the eastern bank of Loch Awe.
Inter-Project Effects	Combined effects from other projects on a shared receptor.
Intra-Project Effects	Combined effects on a single receptor from other sources of effect arising from different aspects of the Development. Also known as "in-combination effects".
Kilometre	Measurement of distance (1,000 metres).
Landscape and Visual Impact Assessment	A tool used to identify and assess the likely significant effects of change resulting from development both on the landscape as an environmental resource in its own right and on people's views and visual amenity.
Landscape Character	The distinct and recognisable pattern of elements that occur consistently in a particular type of landscape, and how this is perceived by people. It reflects particular combinations of geology, landform, soils, vegetation, land use and human settlement.
Laydown Area	A temporary construction compound area for the storage of materials, plant and equipment as well as containing site accommodation and welfare facilities, temporary car parking and temporary fencing.
Limits of Deviation	The maximum extent within which a development can be carried out as shown on any work plans. Allows for refinement of the preliminary design during detailed design.
Listed Building	A list of buildings of special architectural or historic interest compiled by HES for the guidance of local planning authorities in the exercise of their planning functions under the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997. Buildings are graded as follows: Category A – Buildings of special architectural or historical interest which are outstanding examples of a particular period, style or building type.; Category B - Buildings of special architectural or historic interest which are major examples of a particular period, style or building type.; and Category C – Buildings of special architectural or historic interest which are representative examples of a period, style or building type.
Magnitude	A combination of the scale, extent and duration of an impact.
Mitigation	Action proposed to avoid, prevent, reduce and where possible offset adverse effects arising from the whole or specific elements of a development.
Not Significant	Effects predicted to be minor and manageable.

Term	Description
Outline Surface Water Management Plan	A document outlining the approach to onsite surface water and foul water drainage. An Outline Surface Water Management Plan for the Development is included as <i>Appendix 11.5 (Volume 5: Appendices)</i>
Ramsar Convention	Convention on Wetlands of International Importance
Realistic Worst Case	Selection of the most environmentally detrimental parameter for assessment within the EIA.
Receptor	A component of the natural, created, or built environment such as a human being, water, air, a building, or a plant that has the potential to be affected by the Development.
Red line boundary	The area of land over which consent for the Development will be sought and within which the Development will be constructed
The Reservoirs Act	The Reservoirs Act provides a legal framework with regards to responsibilities and requirements for inspection and maintenance of reservoirs, in order to ensure the risk presented by such structures is acceptable.
Residual Effect	Those effects of a development that remain following the implementation of mitigation measures.
Rochdale Envelope	The establishment of a series of maximum development extents.
Scheduled Monument	Scheduled monuments are of national or international importance and are protected under the Ancient Monuments and Archaeological Areas Act 1979.
Section 36 Application	Planning application for consent under Section 36 of the Electricity Act 1989
Section 36 Consent	Consent under Section 36 of the Electricity Act 1989 to construct, operate and decommission the Development.
Sensitivity	A term applied to specific receptors, combining judgements of the susceptibility of the receptor to the specific type of change or development proposed and the value related to that receptor.
Site of Special Scientific Interest	A site statutorily notified under the Wildlife and Countryside Act 1981 (as amended) as being of special nature conservation or geological interest. SSSIs include wildlife habitats, geological features and landforms.
Special Area of Conservation	Areas of protected habitats and species as defined in the Habitats Directive, also known as an European site as defined in the Habitats Regulations.
Special Protection Area	Classified for rare and vulnerable birds, and for regularly occurring migratory species, as defined in the EC Birds Directive (2009/147/EC), also known as an European site as defined in the Habitats Regulation.
Species	A group of organisms that seldom or never interbreed with individuals in other such groups, under natural conditions; most species are made up of subspecies or populations.
Tailpond	The Tailpond is the lower reservoir, and in the case of this Development, will be the existing body of Loch Awe.
The Act	The Electricity Act 1989.
The Baseline	Existing environmental conditions.
The CAR Regulations or CAR	Water Environment (Controlled Activities) (Scotland) Regulations 2011
Topography	The natural or artificial features, level and surface form of the ground surface.
Visual amenity	The value of a particular area or view in terms of what is seen.
Visual effect	Change in the appearance of the landscape from available viewpoints as a result of development.
Visual receptors	Individuals and/or defined groups of people who have the potential to be affected by the visual appearance of a development.
Water Framework Directive'	Council Directive 2000/60/EC establishing a framework for Community action in the field of water policy as implemented in Scotland through the Water Environment and Water Services (Scotland) Act 2003 and related regulations.
Wild Land Area	Wild land areas are defined by NatureScot as the most extensive areas of high wildness. They are identified as nationally important in Scottish Planning Policy but are not a statutory designation.
Zone of Theoretical Visibility	Areas from which a specified element of a development may be visible. Hence, the development would not be visible beyond the ZTV.

