

Loch Kemp Storage - EIA Report

Appendix 14.3: Schedule of Watercourse Crossings

November 2023

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Loch Kemp Pump Storage Scheme

Technical Appendix 14.3: Schedule of Watercourse Crossings

Loch Kemp Storage Limited

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Basis of Report

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1.0 Introduction

This Appendix contains information relating to the new watercourse crossings at the Proposed Development.

This report presents photographs and dimensions for each proposed new crossing point. The report also details the likely form of the track crossing solution (e.g., culvert, arch culvert, or bridge), however, the final design of each crossing solution would be agreed with Scottish Environment Protection Agency (SEPA) prior to construction and be determined as part of the detailed site design.

A survey of the proposed watercourse crossings was undertaken in June 2023 by experienced SLR hydrologists.

The location of the watercourse crossings is shown in **Volume 2, Figure 14.1: Local Hydrology** of the EIA Report.

1.1 Relevant Legislation

The Water Framework Directive (2000/60/EC) (WFD) has been transposed into Scottish legislation as the Water Environment and Water Services (Scotland) Act 2003¹ (or WEWS) and has given Scottish ministers powers to introduce regulatory controls over activities in order to protect and improve Scotland's water environment. The water environment includes wetlands, rivers, lochs, transitional waters (estuaries), coastal waters and groundwater. These regulatory controls, known as the Water Environment (Controlled Activities) (Scotland) Regulations 2011² (CAR) came into force in 2011 and have since been amended in 2013, 2017, and 2021.

With respect to watercourse crossings, CAR requires that all engineering works in inland surface waters and wetlands are subject to authorisation and allow for proportionate risk-based regulation which is outlined in the CAR Practical Guide³. The authorisation process operates at three levels:

- General Binding Rules (GBR):
 - Minor bridges with no construction on bed or banks.
- Registration:
 - Bridges across rivers and lochs where no part of the structure encroaches on the bed (e.g., no piers or in-channel supports). In addition, the total length of the structures on both banks should not be more than 20 m. This category includes bottomless arch culverts; and
 - Closed culverts used for single-track tracks, footpaths and/or cycle routes, where the affected river is not more than 2 m wide.
- Licence (Simple/Complex):
 - All other bridges, fords or causeways; and

¹ Water Environment and Water Services (Scotland) Act 2003, available at <https://www.legislation.gov.uk/asp/2003/3/contents> [Accessed June 2023]

² Water Environment (Controlled Activities) (Scotland) Regulations 2011, available at <https://www.legislation.gov.uk/ssi/2011/209/contents/made> [Accessed June 2023]

³ SEPA (December 2022) The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended), A Practical Guide, available at https://www.sepa.org.uk/media/34761/car_a_practical_guide.pdf [Accessed June 2023]



- This category would include bridges affecting more than 20 m total bank lengths, bridges with in-stream supports or closed culverts for crossings not specified above.



SEPA provide authorisation for watercourse crossings shown on the 1:50,000 scale Ordnance Survey (OS) maps (Landranger Series). All other watercourses are classed as “minor watercourse” and are exempt under CAR.

The design, construction and/or improvements to the crossings would be agreed with SEPA prior to any construction works commencing in accordance with CAR as part of the detailed development design.





2.0 Watercourse Crossing Details

The location of the proposed watercourse crossings are shown on **Volume 2, Figure 14.1** of the EIA Report.

Watercourse Crossing ID	WX01
Watercourse Crossing Details	<p>NGR: NH 48190 16272</p> <p>Status: New</p> <p>Watercourse Width: 0.3 m</p> <p>Watercourse Depth: 0.7 m</p> <p>Notes: None.</p>
Photograph Looking Upstream	
Photograph Looking Downstream	
Proposed Crossing Type Likely Required CAR Authorisation	<p>Culvert Registration</p>





Watercourse Crossing ID	WX02
Watercourse Crossing Details	<p>NGR: NH 46778 16893 Status: New Watercourse Width: 1.5 m Watercourse Depth: 0.2 m Notes: Watercourse is situated within channel 0.5-1.5 m high</p>
Photograph Looking Upstream	
Photograph Looking Downstream	
Proposed Crossing Type Likely Required CAR Authorisation	<p>Open Span Bridge or Bottomless Arch Culvert Licence or Registration</p>





Watercourse Crossing ID	WX03
Watercourse Crossing Details	<p>NGR: NH 46962 15173 Status: New Watercourse Width: 0.3-0.6 m Watercourse Depth: 0.1 m Notes: Watercourse is situated within a channel 0.7 m high.</p>
Photograph Looking Upstream	
Photograph Looking Downstream	
Proposed Crossing Type Likely Required CAR Authorisation	Culvert Registration



Watercourse Crossing ID	WX04
Watercourse Crossing Details	<p>NGR: NH 46897 15316 Status: New Watercourse Width: 0.5 m Watercourse Depth: 0.1 m Notes: Watercourse is situated within a channel 0.5 m deep.</p>
Photograph Looking Upstream	
Photograph Looking Downstream	
Proposed Crossing Type Likely Required CAR Authorisation	Culvert Registration



Watercourse Crossing ID	WX05
Watercourse Crossing Details	<p>NGR: NH 47762 15752 Status: New Watercourse Width: 2 m Watercourse Depth: 0.1-0.2 m Notes: Watercourse is situated within a "valley" 1.5 m high.</p>
Photograph Looking Upstream	
Photograph Looking Downstream	
Proposed Crossing Type Likely Required CAR Authorisation	Open span bridge or Bottomless Arch Culvert Licence or Registration





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