

Glyn Rhonwy Pumped Storage Development Consent Order

Appendix 7.12 Cambrian Ecological Partnership (2012d) Proposed Glyn Rhonwy Pumped Storage System Otter Species Surveys – 2011.
February 2012



This Appendix was previously submitted as part of the 2012 Environmental Statement. Where there are references to Quarry Battery Company (QBC), this now relates to Snowdonia Pumped Hydro (SPH) as this Appendix is submitted in support of the Development Consent Order (DCO) application.



Proposed Glyn Rhonwy Pumped Storage System

Otter Species Surveys – 2011

29:02:2012

Surveys by: Cambrian Ecological Partnership. 15 Ty Canol, Harlech, Gwynedd.
LL46 2NZ

Client: Quarry Battery Company Ltd, 1 Finsbury Place, London, EC2M 7SH

**Planning
Authority:** Gwynedd Council.

**Grid
Reference:** SH 560 607 (approx. site centre)

EXECUTIVE SUMMARY

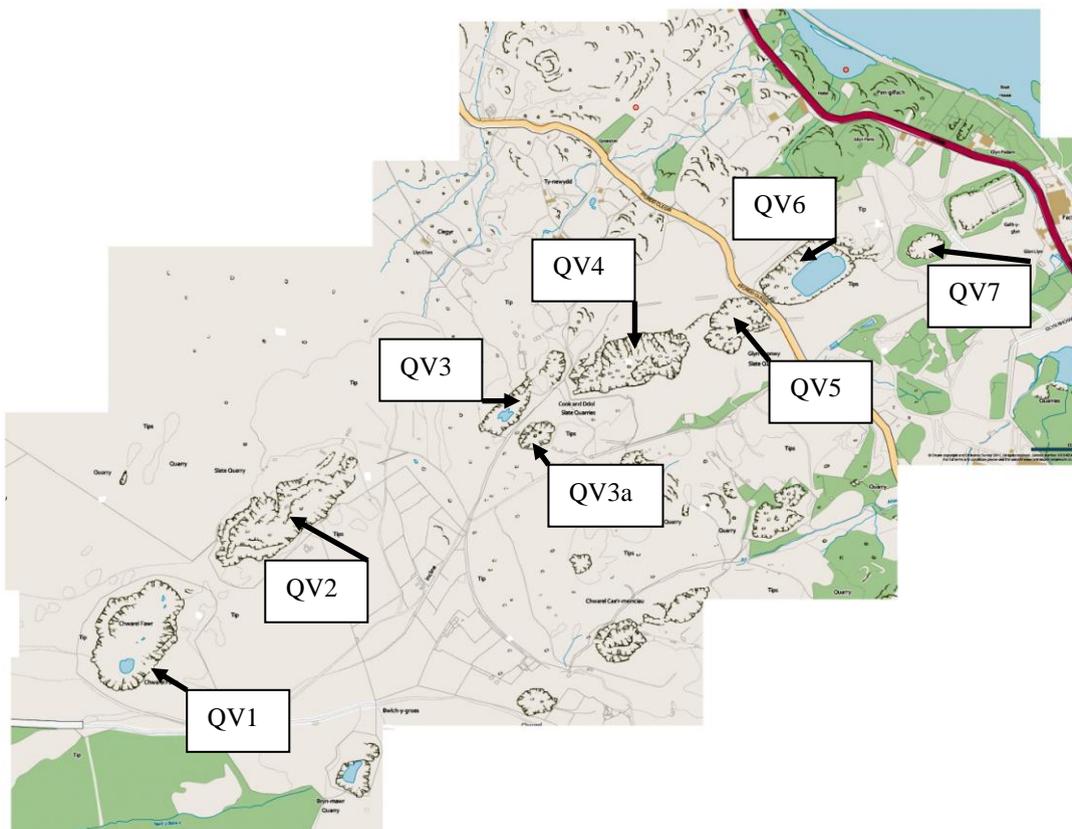
The results of the survey for otters at Glyn Rhonwy were negative, recording no signs of past or current usage by the species. The habitat and foraging opportunities on the site are considered to be low quality, especially in context of the adjacent habitats to the East, i.e. Llyn Padarn SSSI.

However, due to the close proximity of otters to the lower end of the proposed development site, a number of mitigation and reasonable avoidance measures are recommended.

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Figure 1: Location of survey site and numbering of quarry voids



GLYN RHONWY PROPOSED PUMPED STORAGE SYSTEM

OTTER SURVEY –2011

**Glyn Rhonwy
Llanberis
Gwynedd**

29th February 2011

1. Introduction

The Cambrian Ecological Partnership was commissioned by the client, Dave Holmes, of Quarry Battery Company, to conduct an otter survey, as part of a suite of ecological surveys of relevant protected species for the proposed pumped storage battery hydro scheme at Glyn Rhonwy.

An otter survey was included in the recommendations for surveys obtained from the Senior Biodiversity Officer at Gwynedd Council during initial consultation at the beginning of this project.

2. Methodology

An otter survey of the site was carried out on 8th November by licensed otter surveyors Chris Hall (Chris Hall Ltd) and Kate Williamson (Eryri Ecology) following survey guidelines in ‘Guidance in Common Standards Monitoring for Terrestrial Mammals’, JNCC 2004. Survey effort was concentrated on the lower end of the proposed development site due to the presence of appropriate habitat and proximity to known areas of otter usage, but the whole of the site was examined. The survey site was methodically searched for field signs of otter presence. These field signs included spraints (droppings), footprints, prey remains and footprints. Tracks leading directly to and from watercourses/bodies were investigated. Any signs of otter presence found during the surveys for other taxa/species were also recorded and are included within this report.

In addition to direct field signs of otters, areas of potential habitat were searched for ‘lying up’ sites in dense cover possible holts noted and potential prey availability assessed within the habitats on site.

Data was also gathered during a desk top survey from several sources; National Biodiversity Network, Cofnod (North Wales Environmental Records Centre), Snowdonia Mammal Group and Environment Agency National Otter Survey of Wales.

The results of all the above are combined within this report to produce a holistic picture of otter use of the proposed development site within the context of the surrounding habitats and to assess its potential as an otter breeding area. To be considered a potential breeding area a site should satisfy the following criteria:

- Freely available and abundant local food sources
- Safe underground breeding holt or very dense cover
- Freedom from flooding
- Freedom from disturbance/persecution
- Good habitat connectivity

3. Survey Limitations

While spraint surveys are the recognized method of establishing the presence of otters, it is not possible to interpret the number of spraints found with the amount of activity on a site or the number of animals present.

Otters are known to occupy extensive territories of up to 30 – 40 kilometres, (Green et al 1984), in which they pursue a semi-nomadic existence, moving from one holt to another to exploit seasonally available food sources when they are present in sufficient biomass for hunting to be efficient. It is therefore possible that on any given site that the site will be used by otters but not visited for some considerable time. In this case there is a possibility of no field signs being present when the survey is carried out. After periods of heavy or persistent rain, field signs are often scarce and maybe absent entirely.

Within this particular survey site, there are some restrictions with access to areas of potential habitat due to dangerous conditions. However, it was judged highly unlikely that otters would be utilizing any areas that were impossible for surveyors to access, certainly they would not have been using them as breeding areas. In the context of this survey it is felt that the restricted access had a negligible effect on the results.

4. Site Description

The Glyn Rhonwy site for the proposed pumped storage hydro scheme varies considerably in habitat type and features from the Western end, which is at a relatively high altitude, down to the Eastern end near the village of Llanberis and Llyn Padarn. The Phase 1 and Phase II habitat surveys present this information in detail.

5. Habitat Assessment

The habitat within the proposed development site boundary offers sparse foraging and lying up opportunities for otters. Once above QV5, there is little scrub or dense vegetation that might give secure holt or lying up sites. There are good lying up sites within many of the quarry voids themselves in cavities between large boulders.

There is generally little prey availability throughout the site, over and above a few amphibians within QV3 and QV6. There is no watercourse that animals might follow within the site and nothing above the site that would give reason for animals to pass through.

Otters are known to be present within and around Llyn Padarn (Cofnod), below the development site, where there is a large prey biomass and excellent wooded habitat for holt sites. QV6 has some potential habitat in the form of woodland around the Northern end and scrub within the void itself. There are also holt opportunities within crevices between boulders. The void has some prey available in the form of fish species and amphibians, although this is likely to be in low densities.

6. Results

The otter survey on the Glyn Rhonwy site was negative. No signs of past or present otter

activity was recorded.

The survey was conducted during dry weather conditions and there were no survey limitations due to water levels or rain.

As outlined above, there were some potentially suitable holt sites towards the lower end of the site, as well as within rocks and scree in some of the other quarry voids. However, the foraging opportunities were minimal across the site and there was no feature within the site or features above the site to encourage animals to commute through.

7. Conclusions

Although there is known otter activity in areas adjacent to the development site, there was no indication that the site itself is used by otters. Otters are widespread within Snowdonia and Gwynedd (EAW, Wales Otter Survey 2010) and there is a large amount of excellent otter habitat in the rivers, lakes and streams. The site at Glyn Rhonwy offers low quality foraging habitat and in the context of the wider area, holds little to encourage otters to either forage within it or commute through to the upland areas above.

Given the proximity of animals to the lower end of the site and the moderate opportunities offered within QV6, it would seem reasonable to assume that there may be occasional incursion by individual animals. However, it is highly unlikely that any animals would remain in the area or utilize the resources to any significant degree.

8. Impact Assessment

Current Impacts

1. Low prey biomass

Direct and indirect

Secondary

Cumulative

Permanent and temporary

Positive and negative

1. The level of prey biomass is primarily due to the nature of the habitat. There are no natural watercourse on the site and the isolated waterbodies within QV1, QV3 and QV6 have low densities of a few species within them. There are fish present within QV6, but the food chain is very restricted and so fish numbers are likely to be very low. They are not thought to be naturally colonized.

Future Impacts, (Enabling Works and Construction Phase)

1. Risk of disturbance

Direct and indirect

Secondary

Cumulative

Permanent and temporary

Positive and negative

1. It is highly unlikely that there will be any significant disturbance to this species as it is, at best, an occasional visitor to small parts of the site. Any disturbance that does result will be direct and temporary.

Future Impacts, (Post-Construction)

1. Increase habitat – flooded quarry voids
2. Disturbance

Direct and indirect

Secondary

Cumulative

Permanent and temporary

Positive and negative

1. There will be a very slight increase in the amount of potential foraging habitat available due to the proposed flooding of additional quarry voids and the increase in the amount of water within quarry voids currently holding waterbodies. However, due to the managed nature of these water levels, it is unlikely that they will hold significant populations of potential prey for otters.
2. The management of the water levels within the flooded quarry voids may present some disturbance to an animals that are utilizing the potential foraging opportunities that they present.

Future Impacts, (Decommissioning)

1. None

Direct and indirect

Secondary

Cumulative

Permanent and temporary

Positive and negative

1. It is unlikely that there will be any long term, future impacts on otters in the area due to this development. There is ample, high quality habitat in adjacent areas and the current site offers very little potential for the species.

9. Mitigation and Recommendations

- At minimum of two months prior to works commencing, an additional otter survey should be carried out by a suitably qualified ecologist. This survey should concentrate on identifying any actual or potential holt sites, as well as looking for otter activity. The results of this survey will determine whether the clearance works need to be undertaken under a derogation license from the Welsh Government. This is considered to be highly unlikely.
- Assuming that the survey above is negative, then a further otter survey will be conducted immediately prior to works commencing. If the results are still negative then work may begin immediately.
- If either of the surveys above show signs of active holts, then a WG derogation

license will need to be applied for. Whatever the results, the following reasonable avoidance measures should be adopted, following the precautionary principle.

- Night time working within 50m of waterbodies, such as excavations, demolition and tracking of heavy plant on unmade surfaces, should be avoided to minimise disturbance to any otters in the area.
- Any deep excavations left open over-night will be securely fenced to prevent access by otters and other species such as badgers.
- Environment Agency Pollution Prevention Guidelines (PPG) 5 will be adhered to throughout the duration of works to control the risks of negative impacts upon water quality.

Table 4: Summary of Impacts, taking mitigation measures into consideration

| IMPACTS | Current | Enabling/ Construction | Post- Construction | Decommiss ioning |
|------------------|---------|---------------------------|-----------------------|---------------------|
| Prey biomass | | | | |
| Disturbance | | | | |
| Habitat creation | | | | |
| | | | | |
| TOTAL | | | | |

| | |
|--|---|
| | Significant or widespread impact likely |
| | Relatively low level impact expected on balance |
| | No impact or positive enhancement expected on balance |

Overall the project, including the mitigation measures outlined in this report, is not expected to have any significant impact on otters. There is the possibility of some slight disturbance to animals during the construction phase but the likelihood of any animals being present is considered to be very low.

The main negative impact on otters on this site is the lack of prey availability and this development is unlikely to significantly change this, although any change may be considered to be positive due to the increased volume of water-bodies proposed.

10. Legal Implications

Otters are protected under UK law by the Wildlife and Countryside Act 1981 (as amended) and also under European law by the Habitat and Species Regulations 1994 (as amended). Under these laws it is an offence to deliberately kill or injure an otter, to disturb them or to damage, destroy or block access to their place of shelter. This legislation includes any operations that may have a detrimental effect on the conservation status of the species. Under both laws the Welsh Government are empowered to issue licences to disturb them, and disturb or destroy their habitat for reasons of overriding public interest.

11. References

Strachan et al 2010, Otter Survey of Wales – Environment Agency Wales

JNCC, (2004), Common Standards Monitoring Guidance for Terrestrial Mammals, Version August 2004, ISSN 1743-8160