

Heckington Fen Solar Park

ENO10123

Environmental Statement | Volume 3: Technical Appendices Appendix 8.9: Water Vole Report – Energy Park and Cable Route Corridor

Applicant: Ecotricity (Heck Fen Solar) Limited

Document Reference: 6.3.8.9

Pursuant to: APFP Regulation 5(2)(a)

February 2023



APPENDIX 8.9- WATER VOLE REPORT – ENERGY PARK AND CABLE ROUTE CORRIDOR

Document Properties		
Regulation Reference	Regulation 5(2)(a)	
Planning Inspectorate Scheme Reference	EN010123	
Application Document Reference	6.3.8.9	
Title	Appendix 8.9 - Water Vole Report – Energy Park and Cable Route Corridor	
Prepared By	Heckington Fen Energy Park Project Team (RSK Biocensus)	
Version History		
Version	Date	Version Status
Rev 1	February 2023	Application Version



Ecotricity (Heck Fen Solar) Limited

Heckington Fen Energy Park

Water Vole Survey Report

2483649

DECEMBER 2022

Executive Summary

1. This report presents the results of water vole (*Arvicola amphibius*) surveys carried out at Heckington Fen, near Boston, Lincolnshire (grid reference: TF 20591 43674) (hereafter known as the 'site'). The surveys were undertaken to inform an ecological impact assessment of the Proposed Development of a new energy park. The Heckington Fen Energy Park will comprise the following three elements: the Energy Park, cable route to, and above ground works at, the National Grid Bicker Fen Substation referred to within this report as 'the Proposed Development'.
2. Two of the five watercourses within the site and their riparian habitats are suitable for water vole.
3. No evidence of water vole was found during the surveys despite suitable habitat being present.
4. The surveys are sufficient to prove the likely absence of water voles. As they are absent, there is currently no need to consider them further for compensation or mitigation.
5. A single Pre-construction survey will be required to confirm the continued absence of water voles to be fully compliant with survey guidance and ensure no recently created burrows or other water vole signs are to be affected by the proposed works.

CONTENTS

1	INTRODUCTION	1
1.1	Purpose of this Report.....	1
1.2	Ecological Context.....	1
1.3	Project Background.....	1
1.4	Survey Validity.....	1
2	METHODS	2
2.1	General	2
2.2	Background Data Search	2
2.3	Water Vole Survey	2
2.4	Survey Constraints	3
3	RESULTS	4
3.1	Background Data Search	4
3.2	Survey Results	4
4	EVALUATION AND RECOMMENDATIONS	5
4.1	Conclusion.....	5
5	REFERENCES	6
	APPENDIX A: LEGISLATION	7
	APPENDIX B: FIGURES	8
	APPENDIX C: PHOTOGRAPHS	9

1 INTRODUCTION

1.1 Purpose of this Report

This report summarises the results water vole (*Arvicola amphibius*) surveys carried out at Heckington Fen, near Boston, Lincolnshire (grid reference: TF 20591 43674) (hereafter known as the 'site'). The surveys were undertaken to inform an ecological impact assessment of the three elements of the proposed development: the Energy Park, cable route to, and above ground works at, the National Grid Bicker Fen Substation (hereafter known as the 'Proposed Development'). The Proposed Development site is shown in Figure 1. RSK Biocensus carried out the surveys on behalf of Ecotricity (Heck Fen Solar) Limited.

1.2 Ecological Context

The Proposed Development site is located between Sleaford and Boston in Lincolnshire just east of the village of East Heckington. The site lies to the north and south of the A17. The surrounding habitat is dominated by arable farmland, with fields surrounding the site to the north, east, south and west. There are numerous wet and dry ditches within this arable landscape.

1.3 Project Background

In 2013, 22 wind turbines and associated infrastructure were approved by the Secretary of State on the Energy Park Site.

1.4 Survey Validity

The data from these surveys are generally considered valid for a maximum of two years. Therefore, if more than two years elapse prior to commencement of the Proposed Development, additional updated surveys may be required to ensure up-to-date information is considered.

2 METHODS

2.1 General

Surveys were undertaken on 30 September 2022 by Charlotte Rose and Kallum Buxton. All surveyors are skilled in animal and botanical habitat surveys and have extensive experience of identifying field signs and assessing habitats for use by water vole. All surveyors are members of the Chartered Institute of Ecologists and Environmental Managers (CIEEM).

The weather conditions during the updated survey are described in *Table G1*. The prevailing water levels at time of field survey were average, with no recent flood events.

Table 1: Weather Conditions Recorded during the Field Surveys

Date	Air Temperature	Cloud Cover	Wind Speed	Precipitation
30/09/2022	11°C	8	3	dry

2.2 Background Data Search

The Lincolnshire Environmental Records Centre were consulted in June 2022 for records of protected and noteworthy mammals within 1 km of the site boundary.

2.3 Water Vole Survey

Habitat Assessment

The suitability of the habitat for water vole was assessed during the previous Phase 1 survey of the site (RSK Biocensus 2022) (document reference 6.3.8.5). The five watercourses noted from Phase 1 surveys were walked and assessed for their potential for water voles. Where suitable habitat was present, the watercourse was searched for evidence of water vole activity. The suitable watercourses were searched 100m in each direction of the proposed crossing points.

Presence/Likely Absence Survey

In habitats with the potential for water vole, surveys for evidence of water vole activity were carried out following standard methods from Dean *et al.* (2016). All of the suitable bank-side and water-edge habitats were thoroughly searched for field signs including:

- burrows;
- feeding platforms and evidence of feeding;
- food remains;
- latrines; and
- footprints.

The apparent size and distribution of water vole populations can be affected by changes in habitat suitability during the breeding season. Therefore, two surveys for field signs of water vole are routinely required (Dean *et al.*, 2016). The impacts of a development on

water vole can be assessed more robustly using data collected during two surveys. In particular, this applies where different parts of site are used during different periods of the breeding season. As there was no evidence of water vole found during previous Phase 1 surveys, it was deemed acceptable that one survey in 2022 would be sufficient to prove the continued absence of water vole.

2.4 Survey Constraints

There were no constraints to the surveys, all areas were accessed to the satisfaction of the surveyors and weather conditions were appropriate to the level of survey with no recent floods or great fluctuations in water levels.

3 RESULTS

3.1 Background Data Search

The BDS in June 2022 returned no records of water vole within 1km of the site.

3.2 Survey Results

The results of the habitat assessment and the presence/likely absence survey for water vole are set out in *Table 4*.

Table 4: Water Vole Survey Results

Water-course	Habitat assessment	Surrounding habitat	Habitat classification	Present/Absent
1	Steep banks, northern bank mostly railway ballast. Southern bank modified grassland leading to marginal vegetation in places.	Railway, scrub, modified grassland, road.	Marginal	Absent
2	Steep earth banks, dry and had been dry for at least six months at time of survey.	Arable, hedge, field margins.	Unsuitable	Absent
3	Steep earth banks, dense marginal and some aquatic vegetation.	Arable land, field margins.	Suitable	Absent
4	Steep earth banks, some sections with little marginal and aquatic vegetation, little water in the ditch.	Arable land, field margins, road.	Unsuitable	Absent
5	Steep earth banks, recently trenched, no marginal or aquatic vegetation, little water in the ditch.	Arable land, field margins, road.	Unsuitable	Absent

No evidence of water voles was recorded.

4 EVALUATION AND RECOMMENDATIONS

4.1 Conclusion

The absence of water vole signs during these surveys is sufficient to prove the likely absence of water voles on the site. As this species is absent, there is currently no imperative to consider this species further where compensation or mitigation are concerned. However, a single Pre-construction survey will be required to confirm the continued absence of water voles to be fully compliant with survey guidance and ensure no recently created burrows or other water vole signs are to be affected by the proposed works.

5 REFERENCES

Dean, M., Strachan, R., Gow, D. & Andrews, R. (2016), *The Watervole Mitigation Handbook*, In The Mammal Society Mitigation Guidance Series (Eds Fiona Mathews and Paul Chanin). The Mammal Society, London.

RSK Biocensus (2022) *Heckington Fen Energy Park Preliminary Ecological Appraisal*.

Strachan, R. (1998). *Water Vole Conservation Handbook*. Wildlife Conservation Research Unit, Oxford

APPENDIX A: LEGISLATION

Water Vole

Water vole (*Arvicola amphibius*) is listed on *Schedule 5* of the Wildlife and Countryside Act 1981 (as amended), and receive full protection under *Section 9*.

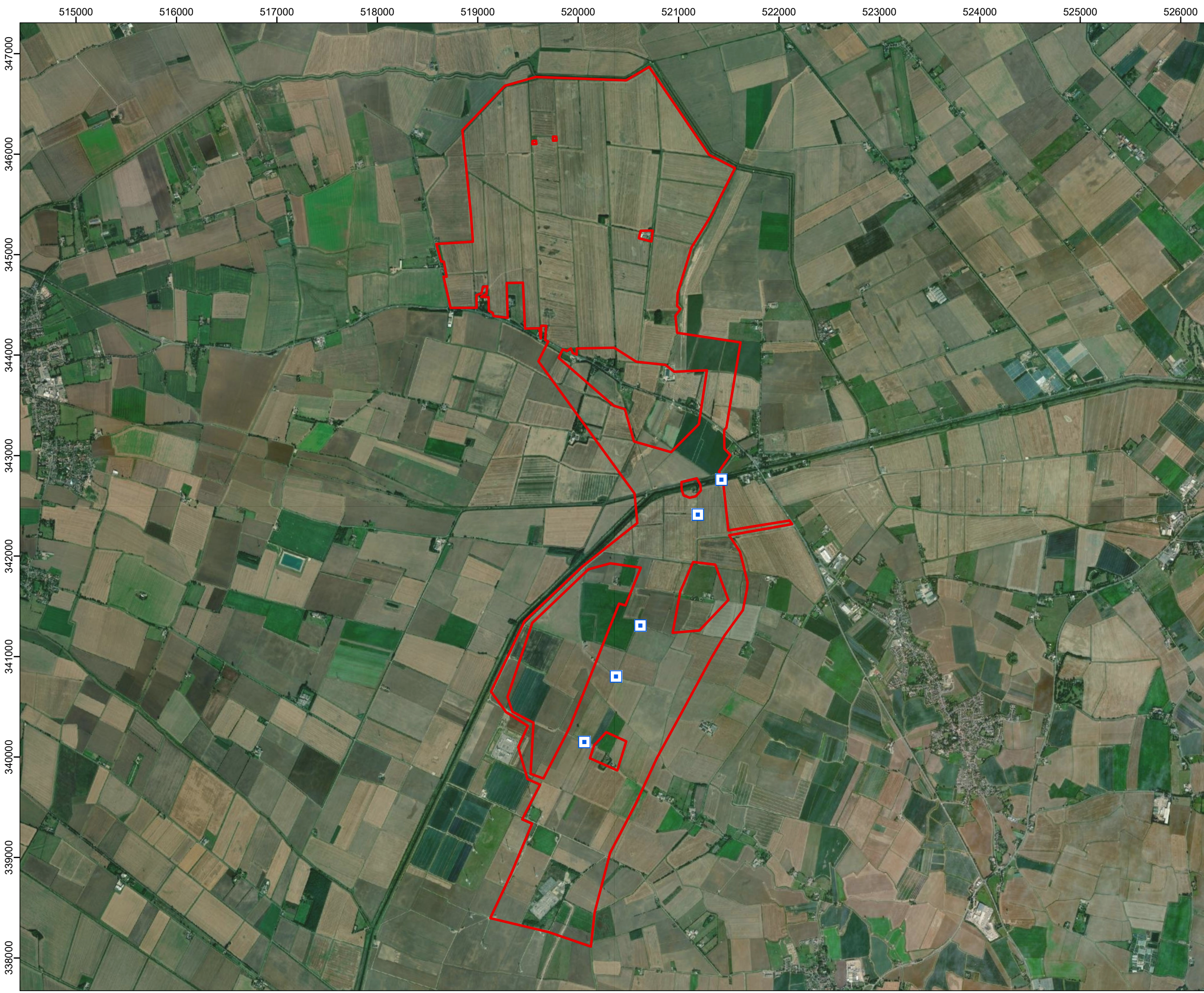
Under this legislation, it is an offence to:

- intentionally kill, injure or take (capture) a water vole;
- possess or control alive or dead water vole, or any part of a water vole;
- intentionally or recklessly damage, destroy or obstruct access to any structure or place which water voles use for shelter or protection, or to intentionally or recklessly disturb water voles while they are using such a place; or
- sell, offer for sale or advertise for live or dead water voles.

The water vole is included as a Priority Species in the UK Biodiversity Action Plan (UKBAP).

APPENDIX B: FIGURES

Figure 1 – Site Location Plan



- Legend:**
- Indicative DCO Extent
 - Water Vole Survey Locations

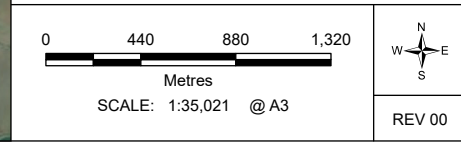


Rev	Date	Description	Drn	Chk	App
00	15/12/2022	2483649	TG	SP	CR

Solar Park, Heckington Fen



TITLE: Figure 1:
Site Location Plan



APPENDIX C: PHOTOGRAPHS



Photograph 1: Ditch 1



Photograph 2: Ditch 2



Photograph 3: Ditch 3



Photograph 4: Ditch 4



Photograph 5: Ditch 5