

Havant Thicket Reservoir Project

Environmental Statement Volume 4 - Appendices
Appendix A9 Biodiversity
A9.6 Otter Survey Report

Portsmouth Water Ltd.



**HAVANT THICKET WINTER STORAGE RESERVOIR,
ROWLAND'S CASTLE, HAMPSHIRE**

**APPENDIX 9.6
OTTER SURVEY REPORT**

Final Document

August 2019 (Revision 1)

Preliminary Ecological Appraisals • Protected Species Surveys and Licensing • NVC • EclA • HRA • Management Plans
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ECOSA Quality Assurance Record

This report has been produced in accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Ecological Report Writing 2017 (CIEEM, 2017). The survey work has been undertaken in line with references within CIEEM's Source of Survey Guidance (CIEEM, 2017).

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*ECOSA produced this report as a stand-alone Ecological Impact Assessment. The document was converted into an Appendix to an Environmental Statement by Atkins, with approval of ECOSA, in August 2020. This has included removal of impact assessment and mitigation text which is covered in Chapter 9 (Biodiversity) of the ES.

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HAVANT THICKET WINTER STORAGE RESERVOIR, ROWLAND'S CASTLE, HAMPSHIRE

OTTER SURVEY REPORT

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1.0 INTRODUCTION

1.1 Background

Ecological Survey & Assessment Limited (ECOSA) have been appointed by Portsmouth Water Limited (Portsmouth Water) to undertake otter survey and report of their land at Havant Thicket, Rowland's Castle, Hampshire. The site is centred on National Grid Reference (NGR): SU 715 097 (**Map E1**).

The otter report is required as a result of Portsmouth Water's plan to construct a winter storage reservoir, Havant Thicket Winter Storage Reservoir (HTWSR), for public water supply in the centre of the site. At the time of survey, the final designs were not confirmed, although the extent of the development was proposed to be approximately 1.6 kilometres from east to west and 800 metres from north to south with a storage capacity of approximately 8,700 million litres. It was understood water would be pumped into the reservoir from Portsmouth Water sources at Havant and Bedhampton Springs, providing a sustainable supply of water with no requirement to change the existing abstraction licence.

At the time the surveys were undertaken the planning application red line boundary (see Figure 2.1 in ES Volume 3) had not been defined and therefore the Site Boundary (the site) and Ecological Enhancement Area (wider site) boundaries referred to in this report were provisional boundaries available at that time. Within this report where mention is made of 'the site' this refers to the reservoir footprint and other areas used for built development and habitat creation. This area is referred to as the 'Reservoir Footprint' in the Environmental Statement (as the Site includes the reservoir footprint, the pipeline corridor as well as land around the reservoir footprint being used for ecological mitigation and compensation). Where reference is made in this report to the 'wider site' this includes the reservoir and the area proposed for ecological enhancement within Forestry England's (FE) Havant Thicket woodland to the north and Bell's Copse to the west of the site and Staunton Country Park (SCP) to the south of the site. This area is similar to the area referred to as the 'Reservoir Site' in the Environmental Statement. The areas covered by 'the site' and 'wider site' in this report are shown in **Map E1** and the key ecological and landscape features mentioned in this report are shown in **Map E2**.

1.2 Aims and Scope of Report

The information within this report is based on a desktop study and field surveys carried out by ECOSA between 2005 and 2008 and December 2017 and October 2018. The report provides details of the ecological survey work undertaken.

2.0 METHODS

2.1 Introduction

This section details the methods employed during the field surveys undertaken for the HTWSR site and Havant Thicket woodland during 2018. Any significant limitations to the survey methods are also discussed. This section also includes desktop study data from relevant surveys undertaken within the site by ECOSA between 2005 and 2009.

2.2 Zone of Influence

To define the total extent of the study area for this appraisal (Zone of Influence¹), the proposed scheme was reviewed to establish the spatial scale at which otter could be affected. The appropriate survey radii for the various elements of the appraisal (i.e. desktop study and field survey) have been defined in the relevant sections below. These distances are determined based on the professional judgement of the ecologist leading the appraisal, taking into account the characteristics of the site subject to appraisal, its surroundings and the nature and scope of the development proposals and the ecology of the species of focus within this report.

2.3 Desktop Study²

2.3.1 Biological Records Centre

Hampshire Biodiversity Information Centre (HBIC) was consulted on 30th April 2018 for records of otter located within two kilometres of the site boundary.

2.3.2 Multi-Agency Geographic Information for the Countryside

The Multi-Agency Geographic Information for the Countryside (MAGIC)³ database was reviewed on 12th June 2018 to establish the location of statutory designated sites located within the vicinity of the site which were either designated for otter or include otter within their citation for a reason for designation. This included a search for all internationally and nationally designated sites such as Special Areas of Conservation (SACs), Wetlands of International Importance (Ramsar sites), Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs) and Local Nature Reserves (LNRs) within two kilometres of the site.

2.3.3 Other Sources of Information

Online mapping resources, including aerial photography, at an appropriate scale, were used to identify the presence of habitats such as ponds and watercourses in the vicinity

¹ The Zone of Influence (Zoi), as defined by CIEEM, is the area over which ecological features may be subject to significant effects as a result of the proposed project and associated activities.

² Due to the age of this data and updated desk study has been undertaken in 2020 and details are included in Appendix 9.1.

³ www.defra.magic.gov.uk

of the site. These habitats may offer resources and connectivity between the site and suitable habitat in the local area, which may be exploited by otter populations.

ECOSA undertook field surveys at the site between 2005 and 2009 (ECOSA, 2013). Surveys undertaken at the site between 2005 and 2009 included a detailed assessment of watercourses to search for evidence of riparian species such as otter, water vole and American mink. Detailed surveys of watercourses in Havant Thicket woodland were not undertaken as part of this work; these areas were covered in 2018.

A number of other ecological assessments have been undertaken in the surrounding landscape between 2014 and 2016. The information from these surveys has been used to support this assessment:

- White Young and Green undertook an extended Phase 1 habitat survey report during 2014 (WYG, 2014) in relation to an outline planning application for new homes at land east of Horndean (East Hampshire District Council planning reference: 55562/001). This area is located to the north-west of the HTWSR site.
- RPS (RPS, 2016) undertook a Preliminary Ecological Appraisal on behalf of Hampshire County Council (HCC) in relation the proposed restoration of the SCP. This area is to the south of the HTWSR site.

2.4 Field Survey

2.4.1 Survey Methods

A field site suitability survey was undertaken to assess the proposed reservoir site's suitability to support otter. The otter appraisal was based on an assessment of the suitability of the habitat present within the site to support otter.

A detailed investigation was undertaken of both banks of all watercourses in order to record any evidence of otter such as spraints, footprints, feeding remains, otter slides, holts and couches. Any evidence encountered was mapped where appropriate. Where possible the survey was undertaken from within the watercourse in order to maximise the likelihood of encountering field signs.

The otter appraisal was based on an assessment of the suitability of the habitat present within the site to support otter by reference to habitat type (such as rivers, streams, ditches, wetlands, reed beds, lakes, ponds and reservoirs), proximity of the site to freshwater and potential important feeding resources (such as fisheries), presence of habitat features which could provide opportunities for resting places and/or holts (such as tunnels, hollows at the base of trees and presence of dense, undisturbed habitat). During the survey attention was paid to the presence of evidence such as spraints,

feeding remains, footprints and slides. The survey followed the Natural England standing advice for surveying otter (Natural England, 2018).

In addition to the field survey outlined above ecologists working on other protected species surveys during 2018 paid attention to the potential presence of otter at the site.

2.4.2 Survey Details

A preliminary appraisal of the proposed reservoir site's suitability to support otter was carried out by Simon Boswell of ECOSA on 22nd December 2017. The weather conditions were overcast with 100% cloud cover, an ambient temperature of 8°C and no wind.

An additional field survey was carried out by Simon Boswell on 24th July 2018. The weather conditions were hot and sunny, an ambient temperature of 22°C and no wind.

The Havant Thicket woodland field survey was carried out by Simon Boswell on 21st September 2018. The weather conditions were sunny, an ambient temperature of 12-18°C and a light breeze.

During the survey, the surveyor was equipped with 10x40 binoculars, a digital camera and information on previous survey work undertaken at the site.

2.4.3 Field Survey Limitations

There were no significant limitations to the field survey.

Discussion

Discussion of the otter survey results is based on ECOSA's professional judgement and publicly available publications, survey data and other sources as referenced in the main text.

3.0 BASELINE ECOLOGICAL CONDITIONS

3.1 Introduction

This section details the results of the 2018 field survey work in relation to otter undertaken for the HTWSR site, along with survey data from previous years. It assesses the baseline ecological conditions of the site in respect of otter at the time the desktop study and field surveys. The baseline draws on a wealth of historical and present data, relevant data from historic surveys has been included in the report to increase the understanding of the site in terms of otter.

3.2 Baseline Ecological Conditions

Desktop Study Results

Field survey work undertaken by ECOSA between 2005 and 2009 did not record otter on the site despite extensive survey effort including a detailed inspection of watercourses for evidence of otter.

The nearest population is likely to be those otter present in Langstone Harbour approximately 4.75 kilometres south of the site. Langstone Harbour is linked to the site by the Hermitage Stream and an associated tributary, which runs through a large area of housing before entering the site from Staunton Country Park.

The RPS Preliminary Ecological Appraisal did not consider the presence of otter and therefore it is assumed that the ecologists considered them to be absent from SCP. WYG assessed the ditches within land East of Horndean to have negligible suitability for otter.

2018 Field Survey

Riparian habitat within the site and Havant Thicket woodland consists of a number of narrow streams and ditches and a small lake at the northern end of the Avenue. A small number of ponds are also present in Havant Thicket woodland. These habitats were considered to offer limited suitability for otter given the narrow and ephemeral nature of the streams and ditches and lack of other suitable habitat in the local landscape.

Given the poor quality of habitats within the site for otter and lack of other more suitable otter habitat to the north it is unlikely that otter would visit the site via the Hermitage Stream to the south of the site.

During the surveys no evidence of otter was recorded and other survey work identified that all watercourses within the site and Havant Thicket woodland were dry by the end of May. The only water remaining within the site past this time was Upper Lake at the top of the Avenue. This feature is relatively small and is not known to support a

population of fish. Given the results of the 2018 surveys, otter is considered to be absent from the site and Havant Thicket woodland.

3.3 Discussion

Otter is considered to be absent from the site and Havant Thicket woodland. The species is also unlikely to commute to the site from the nearest population within Langstone Harbour located 4.75 kilometres down the Hermitage Stream and an associated tributary, especially given the unsuitability of riparian habitat within the site for otter. Therefore, there will be no negative impact on this species as a result of the development proposals and the development of the reservoir and a retained wetland (Portsmouth Water, 2009) may provide suitable habitat for future colonisation.

4.0 REFERENCES

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Map E1 Site Location Plan

Map E2Key Site Features