the newsletter for the proposed havant thicket winter storage reservoir

spring 2007 issue 3



AN ARTISTIC IMPRESSION OF THE PROPOSED HAVANT THICKET WINTER STORAGE RESERVOIR WITH LEIGH PARK, BOTTOM LEFT AND ROWLANDS CASTLE, TOP RIGHT

INTRODUCTION

Portsmouth Water plans to construct, by 2021, a large winter storage reservoir at Havant Thicket in South-East Hampshire. The reservoir has been identified as part of a package of measures for meeting the forecast growth in demand for water in South-East Hampshire and West Sussex over the next fifteen years. The package incorporates leakage reduction and water conservation initiatives, as well as other water resource options.

The reservoir is principally required to meet the demands of Portsmouth Water's customers but there will be opportunities to provide regional transfers to neighbouring companies.

The reservoir will be a pumped storage reservoir, being filled by pumping surplus water from the Company's existing Havant & Bedhampton Springs. There is no need for any change to the Company's existing abstraction licences.

This document explains:

- the history of the project
- recent studies into the need for the reservoir
- the proposed way forward to completion
- how the local community will be involved as plans develop and construction proceeds

the history of the project 1960 to 2007

Prior to 1960

The Company had identified the possibility of surplus yield from its Havant & Bedhampton Springs to be stored on land to the North of Havant.

1965

Portsmouth Water first identified and purchased the site at Havant Thicket, between Rowlands Castle and Havant in southeast Hampshire, for a future winter storage reservoir to meet increasing demand. Soils investigations were carried out on the site.

1970s and 1980s

Further soils investigations were carried out at Havant Thicket to establish the viability of a reservoir. Yield estimates were carried out.

A report for Southern Water Authority by consultants Mander, Raikes and Marshall examined a range of potential reservoir sites in southern Hampshire and concluded that Havant Thicket was the most favourable.

The Sir George Staunton Country Park, incorporating the Havant Thicket site, was set up in the 1980s, with the Company a representative of the Joint Management Committee.

Mid 1960s

Havant Thicket was included as one option for future water resources for south-east England, in a report prepared by the Water Resources Board.

Late 1960s

A new source on the River Itchen was adopted, in preference to Havant Thicket Winter Storage Reservoir, to meet projected demand from the planned 'Solent City' between Southampton and Portsmouth. The River Itchen source was more economic than the construction of the reservoir.

Early 2000s

Regulatory support gained and Stakeholder Group established.

2007

Engineering Study undertaken to review available yield, supply/ demand options, alternative site, reservoir design and ecological base line.

preliminary stage 2004 to 2005

REGULATORY APPROVAL

In 2004, as part of the Industry's Periodic Review process, the Company submitted its 5 year Business Plan to Ofwat and the 25 year Water Resources Plan to the Environment Agency. The Water Resources Plan identified a potential shortfall in water supplies after 2020, and as a result of economic appraisals a final solution was developed comprising:

- the continued promotion of water efficiency initiatives
- the metering of all new domestic households from April 2005
- a reduction in leakage levels by 2019
- the implementation of a progressive water efficiency programme by 2018
- the development of a washwater recovery plant at Farlington WTW in 2018
- the construction of Havant Thicket Winter Storage Reservoir by 2021

In December 2004 Ofwat confirmed the funding arrangements for the Preliminary, Engineering and Environmental Studies through to the expected Planning Application in 2009.

STAKEHOLDER CONSULTATION 2004-2007

A Stakeholder Group was established by Portsmouth Water to help take the scheme forward from inception to completion. Membership comprises:

- Portsmouth Water (chair)
- Environment Agency (Supra-Region and Area)
- Hampshire County Council (officer and elected member)
- George Staunton Country Park (which bounds the site)
- East Hampshire District Council (officers and elected member)
- Havant Borough Council (officer and elected member)
- Rowlands Castle Parish Council (elected member)
- Forestry Commission (owner of adjacent land)
- · Hampshire & Isle of Wight Wildlife Trust
- Consumer Council for Water
- · Hampshire Ornithological Society

English Nature and Royal Society for the Protection of Birds declined an invitation to join.

Meetings of the Group were subsequently held in December 2004, June 2005, January 2006 and June 2006, January 2007 and a workshop in September 2005. The next meeting is scheduled for June 2007. Topics discussed were:-

December 2004 Stakeholder Group

Presentations on need for scheme and outline proposals.

June 2005 Stakeholder Group

Resume of proposals, forthcoming water resources and engineering study, proposed baseline ecological survey.

September 2005 Workshop

Structured, facilitated workshop for Stakeholder Group members on selection of options to balance future demand with supply.

January 2006 Stakeholder Group

Visit to Testwood Lakes for Group to see a prime example of an operational water asset that also provides visitor, recreational, ecological and educational facilities.

Presentations on: resources/engineering study progress, ecological survey progress and Rutland Water habitat provision

June 2006 Stakeholder Group

Presentations on: resources/engineering study progress and reservoir layout options.

January 2007 Stakeholder Group

Presentations on: results of further soils survey and impact on options, results of baseline ecological survey, and next steps



BROADLEAF TREES OF THE AVENUE

INSET: NOCTULE BAT AND BAT ROOST

stage 1

needs and alternatives 2005 to 2007

NEEDS AND ALTERNATIVES

Entec UK Ltd were appointed in June 2005 for Stage 1 of the project covering the following brief:

- a review of Portsmouth Water source yields
- a review of the Portsmouth Water demand forecast
- a review of the supply/demand options and their economics
- a review of the alternative sites for reservoirs
- an engineering study to identify the suitability of the site and the needs for additional water treatment

SOURCE YIELDS

The Company's groundwater source yields were reassessed in 1997, primarily utilising a 1984 assessment of drought deployable output undertaken jointly with Southern Water Authority.

Entec highlighted the fact that the drought output of sources is likely to be affected by licence conditions imposed by the Environment Agency under their ongoing Review of Consents under the Habitats Directive and the requirements of the Water Framework Directive. This alone represents the greatest uncertainty associated with Portsmouth Water's resource plans.

In addition, a programme of yield assessments is planned for the period 2005-08, with the proviso that drought conditions are experienced. Portsmouth Water utilised the low groundwater level conditions of the autumn of 2005 to conduct yield tests at Aldingbourne, Newtown and Lower Upham and these have been included in Entec's revised Supply/Demand calculations.

DEMAND FORECASTS

Portsmouth Water's 2004 Demand Forecasts for domestic properties were based upon the application of individual per capita consumption figures from its consumption monitors, applied to property and population forecasts from Local Authorities. Commercial Demand Forecasts utilised sectoral projections.

For the Stage 1 study, Entec prepared a revised demand forecast using the most recent per capita consumption figures and, up-to-date property and population forecasts in line with the proposed south east plan (although these figures will require updating as the South-East plan is developed). Industry derived modelling using micro-component analysis was used to verify per capita consumption forecasts. Commercial demand forecasts were not updated.

SUPPLY/DEMAND OPTIONS

Portsmouth Water's 2004 Water Resources Plan considered the economics of 15 options to resolve a deficit between supply and demand which develops by 2020.

The Entec study incorporated a completely new options

review and solution process, starting with a set of 100 unconstrained options, which were, in due course, refined to 30. An Entec 'expert panel' refined the list using a scoring matrix and following a review with the Havant Thicket Stakeholder Group, 17 options were taken forward for quantitative assessment. The assessment using a standardised measure known as 'Average Incremental Social Cost' enabled each scheme, whether a new resource development or demand management measure, to be evaluated in terms of pence per cubic metre of water delivered or saved.

The Final Solution proposed by Entec was as follows:

Implementation Date	
Leakage Reduction Schemes	Prior to 2010
Farlington Washwater Recovery	2012/13
Additional Boreholes at Lavant and Brickkiln	2017/18
Water Efficiency Programme	2018/19
Havant Thicket Winter Storage Reservoir	2020/21

ALTERNATIVE SITES

Studies in the 1960s and subsequently, have revealed as many as 80 potential reservoir sites in South Hampshire.

Entec have reviewed those studies taking account of subsequent development in the area and have concluded that Havant Thicket remains the most suitable site for the storage of surplus winter yield from the Havant & Bedhampton Springs. A reserve option at Southleigh Farm, Emsworth, has also been considered.

Eight different alternatives have been developed by Entec for further consideration at Stage 2.

ENGINEERING STUDY

During the summer and autumn of 2006 the suitability of the Havant Thicket site has been further investigated by Entec. Boreholes have been sunk and trial pits excavated to enable soils testing to be undertaken.

Entec considered water treatment issues including eutrophication, thermal stratification, other nutrient loads, and reservoir management, with a view to recommending treatment to cope with problems such as particulate and algae removal, and taste and odour control. Treatment plant will be located at either Bedhampton source works, Farlington Water Treatment Works, or at the Havant Thicket reservoir site itself.

BASELINE ECOLOGICAL SURVEY

In preparation for the Environmental Impact Assessment, the Company has undertaken a Baseline Ecological Survey of the site and surrounding areas during 2005 and 2006.

A specialist ecological consultant, ECOSA, has undertaken the work on the Company's behalf.

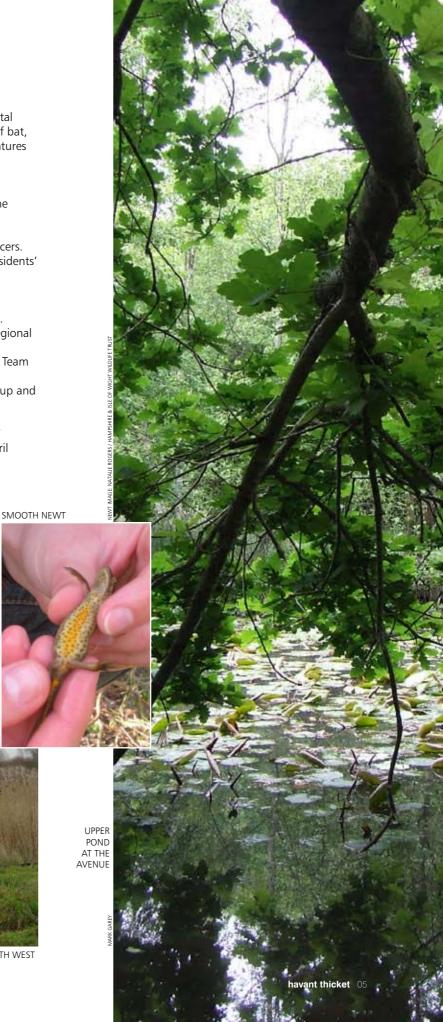
The principal concerns, which will require environmental mitigation, relate to the presences of several species of bat, reptiles and a section of the Avenue displaying the features and species associated with ancient woodland.

WIDER PUBLIC CONSULTATION

Presentations about the scheme have been given to the following groups:-

- Havant Borough Council members and senior officers.
- Havant Borough Council, members, officers and Residents' Group representative.
- Clanfield, Horndean & Rowlands Castle Community Forum.
- Consumer Council for Water (Southern Committee).
- Environment Agency Area, Regional and Supra-Regional staff
- Environment Agency Hampshire Water Resources Team
- GSCP Stakeholder Forum
- Hampshire & IoW Wildlife Trust South Downs Group and Friends of Langstone Harbour

Project website http://www.portsmouthwater.co.uk/ Havant%20Thicket/home.htm was established in April 2006.



WETLAND AREA AT RUTLAND WATER, A SUGGESTION FOR THE NORTH WEST CORNER OF PROPOSED RESERVOIR

KE HEDGES

stage 2

preferred scheme development and consultation 2007 to 2009

PUBLIC CONSULTATION - 2007 TO 2009

The Company anticipates wider consultation in early 2007 through:

- meetings and Presentations to other Groups not involved in the Stakeholder Group
- the circulation of a Havant Thicket Newsletter
- the development of an Information Display at Staunton Country Park
- further development of the Havant Thicket website

PREFERRED SCHEME DEVELOPMENT - 2007 TO 2009

January 2007

Tenders were invited in January 2007 for Stage 2 of the scheme, to include Environmental Impact Assessment, selection of preferred option, Statement of Community Involvement, Environmental Statement, and Planning Application.

April 2007

Contract to commence for Stage 2 of the scheme.

2007-08

Selection of final preferred option in consultation with Stakeholder Group and other bodies. Further engineering and demand forecasting work and consideration of pipeline, access and recreational and environmental features.

Public meetings and exhibitions will be held to inform the community about the preferred option, obtaining views on options for the pipeline route and construction access, and recreational and visitor facilities.

Project news will continue to be published on the website and in newsletters.

2008

A formal Statement of Community Involvement (SCI) will be published and circulated widely to organisations and the public. This will set out how and when the public will be kept informed and involved with the project as it develops, right through to the completion of construction.

This information will be disseminated through:-

Environmental Impact Assessment of preferred reservoir option, pipeline routes, construction access routes and new treatment works will be completed.

Public meetings and exhibitions will be held to inform the community about project progress, the results of environmental impact assessment of the options for the pipeline route and construction access road, and the proposals for recreational and visitor facilities.

Project news will continue to be published on the website and in newsletters.

2008-09

Development planning work, culminating in submission of the planning application in May 2009.

Preparation of updated Water Resources Plan for the 25-year period to 2035, along with Business Plan submission to Ofwat. These will seek regulatory support for the next phase of development of the Havant Thicket project.



NESTING PLATFORMS AT RUTLAND WATER, SIMILAR FACILITIES TO BE PROVIDED AT HAVANT THICKET WINTER STORAGE RESERVOIR

possible public inquiry, planning approval and detailed design 2010 to 2015

POSSIBLE PUBLIC INQUIRY - 2010 TO 2013

It is possible that a Public Inquiry will be required and $2\frac{1}{2}$ years has been set aside for the preparation, the Inquiry and the decision!

DETAILED DESIGN - 2013 TO 2015

Further work is expected in order to satisfy any planning conditions. Detailed negotiations with affected bodies together with partners on associated works will be required.

construction, filling and commissioning

2015 to 2020

Procurement and Letting of Construction Contracts, together with arrangements for enabling and associated works including construction access routes and pipeline negotiations.

project communication 2007 to 2020

Throughout the development of the project the Company anticipates ongoing dialogue with stakeholders, the media and the public via

- Continuing availability of information on project website
- Public Meetings at local venues
- Further work with Stakeholders
- Opportunities for the public to provide their views through web links and e-mail etc
- Exhibitions at local venues
- Public Consultation.
- Press Releases to local newspapers, TV and radio
- Leaflets
- Newsletters
- Workshops
- Open Days

More detail on communication will be available in the Statement of Community Involvement expected in 2008.



timeline

proposed havant thicket winter storage reservoir 2007 - 2020

2007 - 2009 STAGE 2 - PREFERRED SCHEME DEVELOPMENT AND CONSULTATION

Environmental Impact Assessment Statement of Community Involvement Public Consultation Planning Application

2010 - 2015 PUBLIC ENQUIRY, PLANNING APPROVAL AND DETAILED DESIGN

2015 - 2020 CONSTRUCTION, FILLING AND COMMISSIONING

