

Annual Report on Conservation, Access & Recreation 2014/15



Introduction

Portsmouth Water operates within an environmentally sensitive area, with internationally important inter tidal mudflats and saltmarsh along the coast, and the chalk streams of the South Downs which provide a very special wetland habitat and water resource. This provides major challenges to the Company at a time when customer expectations are also rising. The requirements of European legislation provide extra constraints, in addition to climate change, extreme weather events, and the day to day operating challenges of supplying water to more than 700,000 people, while minimising our environmental impact.



Thousands of purple Pyramidal Orchids at Fort Southwick Reservoir on Portsdown Hill

Conservation & Biodiversity

We are committed to ensuring compliance with all environmental legislation and obligations, carefully assessing the impact of our activities, especially construction projects on the environment, to ensure that the impact of such schemes is minimised. In 2014/15 the Company once again entered in to a data sharing agreement with the Hampshire and Sussex Biodiversity Records Centres to ensure that the information in our environmental screening tools is kept up to date. This enables our engineers and project managers to identify any potential environmental and ecological constraints at the start of any project, by displaying data on maps showing protected habitats, species and monuments over the area of interest.

As part of our wider commitment to improving environmental quality, we aim to conserve and, where possible, enhance biodiversity on the 44 operational sites we own, which include 19 water treatment works. Sites are located in a variety of habitats including chalk downland, river catchments and coastal margins.

We own one Site of Special Scientific Interest (SSSI) at the Itchen Water Treatment Works. In 2013/14 we worked in partnership with Eastleigh Borough Council to carry out works which enabled the SSSI wetland meadow to be grazed by cows from the Itchen Valley Country Park. The cows grazed the meadow for the first time in August 2014. Annual grazing in late summer will help to ensure that the meadow is maintained in favourable condition. The project was part funded by Natural England through a High Level Stewardship agreement. The work involved constructing a bridge over the Town Hill Stream to allow the cattle to cross from the Park, extensive fencing works, and installing a pasture pump to provide water for the cows.

Ecological Survey Update

Habitat surveys were completed at 4 sites in summer 2014 these included; Clanfield Reservoir, Shedfield Reservoir, Littleheath Reservoir and Walderton WTW. This has enabled us to review our management for each site and update the site specific biodiversity action plans.



Consultant John Norton undertaking a botanical survey at Clanfield Reservoir

In summer 2014 we also field tested and adapted a new methodology to review the condition of national priority habitats on Company owned land. This has been developed in line with Natural England guidance. Baseline monitoring was completed at 9 sites; Clanfield Reservoir, Fort Southwick Reservoir, Itchen WTW, Lavant Reservoir, Littleheath Reservoir, Nelson Reservoir, Nore Hill Reservoir, Racton Reservoir and Shedfield Reservoir.

A great crested newt survey was completed during April & May 2014 at ponds on and adjacent to the Westgate WTW. The survey included torch searches, netting and egg searches. Only smooth and palmate newts were found. Evidence of water vole was found during a survey at Fishbourne WTW stream on 30 April 2014.

On the 28 November 2014 the Environment Agency issued an Exemption Notice under the Eel Regulations 2009 for the Gaters Mill Intake on the River Itchen. On the 10 December the Company acknowledged receipt of the notice and confirmed that the diversion structure will be screened to best practice, or alternative eel protection measures agreed and implemented by 31 March 2021. Part of the programme of work agreed with the Environment Agency was to establish an eel sampling programme. This was put in place by the 16 March 2015, to tie in with when young eels (elver) are known to start migrating up the River Itchen. The outcome from the sampling programme will then determine what further work is required.

Phase 1 Bat Survey findings

The Hampshire and Isle of Wight Wildlife Trust were commissioned by Portsmouth Water to undertake phase 1 bat surveys of 79 Portsmouth Water buildings over 46 sites during July and August 2014. The surveys were to identify the bat roost potential of buildings and provide advice regarding potential building maintenance.

The phase 1 surveys identified five buildings with bat roosts, with varying degrees of use by bats. Slindon WTW and Woodmancote WTW both have large accumulations of droppings, suggesting a maternity colony of bats, most probably pipistrelle and long-eared bats based on identification of the droppings. Brickiln WTW and Eastergate WTW both had large accumulations of droppings but of varying ages suggesting regular use over a number of years by a small number of bats. West Marden Booster only had a few droppings suggesting it had been used on a couple of occasions.

A further two buildings had high bat roost potential but no evidence was found during the surveys (Bedhampton PS M & E Store and Soberton WTW Auction House). In addition one tree, a dawn redwood, at Northbrook WTW with a woodpecker hole was assessed as having a high bat roost potential.

A breakdown of the buildings by bat roost potential is as follows:

Bat Roost Potential	Number of Buildings	Percentage
Negligible	42	53
Low	25	32
Medium	5	6
High	2	3
Confirmed Roost	5	6

Phase 2 bat surveys were conducted during August 2014 at 4 sites:

- Bedhampton Pumping Station 2 – 1 evening emergence survey
- Maindell WTW – 1 evening emergence survey
- Slindon WTW – 1 evening emergence survey
- Woodmancote WTW – 1 evening emergence survey

No bats were recorded emerging from Bedhampton Pumping Station 2 or Maindell WTW. Three common pipistrelle bats were seen emerging from under the soffit at Slindon WTW. Four soprano pipistrelle and two long-eared bats were seen emerging from the roof void at Woodmancote WTW. The pipistrelle bats emerged from a tile under the ridge and the long-eared bats from a gap between the wall top and roof.

Bat roost warning signs have been put up at the known roost sites. Further surveys were recommended for all buildings with confirmed roosts and this work was commissioned in summer 2015.



Wildlife Trust expert undertaking a dusk bat survey at Bedhampton Pumping station



The findings from the survey have been used to create a Bat Risk Register, which can be consulted in future before works are planned at our buildings. The register identifies where further survey work will be required before works can take place.

In February and March 2015 all Supply Department staff who look after our buildings on a day-to-day basis, maintenance staff and project managers / engineers who may plan work in buildings, were given a half day training session on bats by an expert from the H&IOW Wildlife Trust. This provided information on the legislation relating to bats, their habits and behaviour, how to look out for signs of bats, licensing requirements and what constitutes good practice when undertaking work on a building that has a bat roost. The training used examples of bat roosts and entry points from Portsmouth Water buildings with known bat roosts, to make sure the training was as relevant as possible, and to illustrate what can and cannot be done to ensure compliance with the law.

Habitat Management projects

Conservation projects completed in the financial year 2014/15 included;

- Removed an area of blackthorn scrub invasion at the Itchen WTW on the west edge of the old lagoon.
- Gorse & scrub clearance from the north-west embankment around Highwood Reservoir, as part of a rotational scrub clearance programme.
- Removal of conifer trees around mature boundary oak trees from the northern woodland edge at Highwood Reservoir.
- Removal of trees to open up an old ride along the west site boundary at Highwood Reservoir. This work will let in more light and enhance the woodland floor flora.



Trees cut back to open up a ride along the west boundary at Highwood Reservoir

- Removal of scrub and trees along a short section of the River Lavant to reduce shading of the channel and banks.
- Removed trees from the Appledown Reservoir banks to restore grassland.
- Removed scrub from Nore Hill Reservoir bank to restore high value grassland.
- Cut and collected the grass from Soberton Meadow at Misingford as part of an ongoing programme to help restore the grassland and fen habitat alongside the River Meon.



Forage harvester cutting and collecting grass at Soberton Meadow

In addition, company staff actively embraced the programme of working parties which included;

- Removal of ragwort plants from the grassland at Nelson Reservoir to enable a local farmer to cut and collect hay (July 2014)
- Removed invasive Himalayan balsam from the River Itchen SSSI fen (July & August 2014).
- Removed young thorn trees from a chalk grassland reservoir site near Walderton (August 2014).



Removing young trees / scrub from Walderton Reservoir to improve grassland

- Removed invasive blackthorn and coppiced some hazel stools in the woodland at the Itchen WTW (December 2014).
- Removing ash trees invading the grassland at Shedfield Reservoir and created a glade in the woodland. The ash trees were used to construct a dead hedge which will provide habitat for insects and nesting sites for birds (January & February 2015)



Creating a dead hedge at Shedfield



Removing invasive Himalayan balsam from the Itchen SSSI

Case Study: New Home for Badgers - Update

During 2013 a rapid expansion of the badger sett at the George Service Reservoir site posed a potential risk to water quality and the safety of staff during site maintenance work.

Badgers and their homes are protected by an Act of Parliament, so the first step was to complete a survey of badgers in the area and obtain a special licence from Natural England to permit us to close the sett. A specialist consultant was then appointed to design and build a new home for the badgers on company land to the north of the site. The artificial sett has 15 chambers connected by twin walled pipes, with 3 entrance tunnels. Peanuts and bedding material from the old sett were placed outside the new entrances, to encourage the badger family to use the new sett before the old sett was removed.

We created a residence that was so desirable that the badgers moved in within a week of the new sett being completed. Once we were certain the new sett was occupied the old set was sealed, with one way gates fitted for 21 days, then the old sett was removed. Badger fencing was buried in to the ground around the perimeter of the reservoir site to ensure that the badgers could not move back in to the reservoir site in the future.

Monitoring throughout 2014/15 has confirmed that the relocation has been a complete success. The badgers are living happily in their new artificial sett, and they have not made any attempt to re-enter the reservoir site.

Case Study - Barn Owl Success

On the 12 March 2014 a number of volunteers helped us to build and erect a barn owl box in a disused building the Company owned near Slindon in West Sussex. Boards were placed to create a small loft area on to which the box was placed. The box contained a nesting and roosting chamber. The habitat around the building is being farmed organically and is a mix of arable and sheep grazing. The farmer has planted new hedgerows around the site, which will provide improved habitat for mice and voles.

In February 2015 two barn owls were observed leaving the building, which raised hopes that they might nest. By June a retired member of staff who was regularly visiting the site at dusk to keep an eye out for owls was regularly reporting seeing owls going in and out of the building carrying food.



Barn owl nest box erected in a disused company building



3 chicks in the nest box

As barn owls are Schedule 1 protected species we were not allowed to check the nest box ourselves. Instead the National Trust arranged for their qualified expert who has a Schedule 1 license to check the building and ring the chicks before they left. Now the chicks have been ringed we hope that at some point in the future we will get some news on where they have gone. The expert was able to tell us that that we had 3 healthy chicks about to fledge, two male and one female. The female chick was slightly larger. The chicks left the nest to fend for themselves in early July 2015.

Thirty owl pellets were collected from below the nest box, these comprise the indigestible fur and bones of the owls prey regurgitated through their beaks. The pellets were given to the Community Wildlife Officer (from the Manhood Wildlife & Heritage Group) to use at an environmental education event for youngsters who dissected the pellets to identify the bones. They identified the skulls and jaw bones of at least 79 small mammals of 7 different species including; 4 harvest mouse, 7 shrews, 24 house mice, 22 wood mice and 22 field or bank voles.



Barn owl chick 25 June 2015

We have our fingers crossed that the pair will come back in 2016 and nest in our box again.

Recreation & Access

Staunton Country Park; The proposed Havant Thicket Winter Storage Reservoir site is owned by the Company but managed through an agreement with Hampshire County Council as part of the Staunton Country Park (SCP). In 2013 the Company extended the tenancy to enable the whole of the 167 hectare site to be managed by the Staunton Rangers. The site includes a public bridleway and network of permissive paths through woodland and grassland.

Portsmouth Water is a member of the SCP Access Group, working with partners to improve the local path network, upgrade signage and provide an all weather circular cycling and walking route. In September 2014 Portsmouth Water funded and managed a path improvement project on the west side of the Company land holding at Havant Thicket. In recent years the path which runs north from Swanmore Road towards the Forestry Commission land at Havant Thicket had regularly flooded in the winter, in the vicinity of the bridleway intersection, such that it was only accessible with wellington boots. Concerns were expressed through the Staunton Country Park Access Group that this was deterring walkers and cyclists from using the path in the winter.

The path improvement work included excavation to clean out three existing ditches, construction of one new ditch and the installation of new pipes to improve surface water drainage. Stone was then imported to raise the level of the path at the bridleway intersection and the path resurfaced. In addition, a 70m section of path to the north which was badly rutted was repaired and resurfaced with path gravel. The work will help to ensure that walkers and cyclists can use the path and circular route around our land holding throughout the year.



West path improvement works at Havant Thicket (September 2014)

Highwood Reservoir; This raw water storage reservoir site owned by Portsmouth Water is located within the popular Itchen Valley Country Park, managed by Eastleigh Borough Council. The site is open to the general public, with a circular permissive path around the building that houses the reservoir. In winter 2014/15 scrub clearance work was completed on the banks around the reservoir building to maintain public access and enhance biodiversity. The Company have also provided some assistance to help the Council develop a new woodland school within the Park.

Special arrangements have been made for access at other company owned sites.

- At the Itchen Water Treatment Works this enables schools, universities and other organised groups to participate in educational visits. In spring 2014 the Company Environment & Biodiversity Specialist led a guided walk to explain to a local natural history group the extensive management work which has taken place at the site to enhance biodiversity including; coppicing, rotational scrub management, removal of invasive species and improving water levels for water vole through a sustainable drainage project.

- Part of the Clanfield Reservoir site is leased to the Hampshire Astronomical Society to utilise. They have erected a number of structures and a sun dial. They organise a number of events for the benefit of their members. Small groups of members of the public are able to visit by prior arrangement with the Society.



Sun dial and astronomical observatory at Clanfield Reservoir (Hampshire Astronomical Society)

Community Engagement

The maintenance of the grounds at our Head Office site in Havant, the Itchen WTW and some smaller sites is undertaken with the help of the New Blendworth Centre. This is a facility that was set up to help local people with learning difficulties / disabilities, who attend the centre on a full or part time basis. The centre provides work experience in landscape maintenance and Portsmouth Water is proud to have supported this initiative for many years.

In 2014 we met the Blendworth team supervisor at our Park Road spring pond in Havant to discuss adapting the landscape maintenance of the pond margins for the benefit of water voles that had been observed using the site. In addition, we brought some additional equipment for the supervisors to enable them to take a more proactive role in removing litter from the margins of the pond. The improvement which has resulted has been commended by the local councillor and chairman of the planning committee and water voles are continuing to flourish at the site.

The Horizon Angling Club have sole use of the West Lake at our Head Office site in Bedhampton. The club promotes the sport of angling for the disabled.

In 2014/15 the Environment and Biodiversity Specialist gave two talks to the local community;

- Rowlands Castle U3A group on the 20 October 2014 – A presentation on the company's plans for the Havant Thicket Winter Storage Reservoir.
- Friends of the Earth Havant group on the 11 March 2015 – A presentation on the company's approach to biodiversity including environmental protection, along with an update on the plans for the Havant Thicket Winter Storage Reservoir.

The Company is an active corporate member of the Hampshire & IOW Wildlife Trust.

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Environment & Biodiversity Specialist*