

PORTSMOUTH HARBOUR SPA

This document summarises the key issues and findings of the Habitats Directive Review of Consents for Portsmouth Harbour Special Protection Area (SPA).

About this site

Portsmouth Harbour is located on the south coast of England. It is a large industrialised estuary and includes one of the four largest expanses of mud-flats and tidal creeks on the south coast of Britain. The mud-flats support extensive beds of eelgrass and Sea Lettuce.

Portsmouth Harbour connects to the sea through a narrow channel, via the Solent. It receives comparatively little fresh water, giving it an unusual hydrology.

The site supports important numbers of wintering dark-bellied Brent Geese. It also supports nationally important species: red-breasted merganser, black-tailed godwit and dunlin. As well as using the harbour, the geese also feed in surrounding agricultural areas, away from the designated SPA.

Aerial view of Portsmouth Harbour



Review of Consents

Nutrient enrichment

Portsmouth Harbour SPA suffers from nutrient enrichment, particularly elevated levels of nitrogen. The adverse impact that this causes is to promote excessive growth of naturally occurring green seaweed, which smothers the feeding areas of the birds. There are a number of sources of nutrients into the harbour, these include:

- effluent discharges into the site, and elsewhere in the Solent
- coastal background seawater in the English Channel
- natural and diffuse sources in rivers and streams
- landfill leachate from historic unlicensed and current licensed waste sites
- nitrogen bound in the sediment

Toxic contamination

Tri-butyl tin (TBT) concentrations exceed the Environment Quality Standard for this substance throughout the site and are thought to be present due to their historic use as an anti-fouling paint on boats.

Dark-bellied Brent Goose

The dark bellied Brent goose is found in Portsmouth Harbour.



Freshwater flows

Recent research indicates that freshwater creeks flowing over intertidal areas are an important resource to many bird species.

Birds are observed using this resource at times of low tide for feeding, drinking, bathing and shelter.

It is difficult to quantify how much freshwater the birds require to maintain their numbers, however it is clear that some freshwater inputs into the site must be maintained.

The amount of freshwater flow is also important for creek morphology, which dictates the degree of shelter, food and water that is available.

Licensed abstractions which take significant amounts of water from the harbour's catchment pose a risk to the site. They may reduce the volume and rate of freshwater flowing across the intertidal areas.

Conclusions

- We assessed 133 permissions in Stage Three.
- We concluded that three abstraction licences are unable to show that they have no adverse effects on freshwater flows entering the harbour and will be modified.
- We concluded that two sewage treatment works are a significant source of nitrogen contributing to the nutrient load and causing excessive green weed growth. The standard of treatment required at these works is already covered by the Urban Waste Water Treatment Directive, but nevertheless is also required as a result of the Review of Consents.
- All of the remaining permissions will be affirmed.
- Unfortunately, these measures alone will not restore the SPA to favourable condition. They will only remove the proportion of impact from the permitted activities. Therefore, we have identified a number of further actions. These include recommending agricultural land management practices, which would help to improve the quality of diffuse run-off draining from the land and into the harbour via rivers and streams.

For more details about this process, contact Jo Simmons

jo.simmons@environment-agency.gov.uk

Further information can be found at:

www.environment-agency.gov.uk under Southern>Habitats Directive
or visit www.naturalengland.org.uk for contacts within Natural England

For guidance e-mail: enquiries@environment-agency.gov.uk

customer service line

08708 506 506

www.environment-agency.gov.uk

incident hotline

0800 80 70 60

floodline

0845 988 1188