

MEDWAY ESTUARY AND MARSHES SPA

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

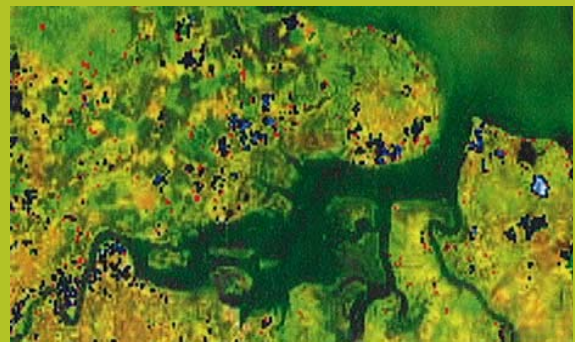
About this site

Medway Estuary and Marshes SPA covers an area of almost 47 square kilometres and forms part of the North Kent Marshes estuarine complex. It is flanked by the Thames Estuary & Marshes SPA to the north-west and the Swale SPA to the east.

It extends from the southern and eastern flanks of Hoo Peninsula in the west, to the Kingsferry Bridge that links the Isle of Sheppey with the mainland, in the east.

The SPA encompasses a number of distinct estuarine features. A mosaic of tidal channels drains around large islands and peninsulas of intertidal mudflats and sandflats. Grazing marshes, intersected by ditches and waterways, are present on the landward side of the coastal defence structures.

Satellite View of the Medway Estuary



It is this complex and diverse mix of coastal habitats that supports important numbers of waterbirds throughout the year, which flock to feed and graze across the mudflats and marshes that are rich in invertebrates. In summer, the estuary supports breeding waders and terns, whilst in winter it supports internationally important numbers of over-wintering and migratory geese, ducks, grebes and waders. The Medway Estuary and Marshes SPA forms part of the north west European flyway, a significant link of the migratory chain between Scandinavia and the Arctic down the North Sea, across the Bay of Biscay and on to Africa.

Review of consents

Water quality is particularly important to the bird populations that rely on the SPA. Poor water quality can be caused by excessive nutrients, which can cause algal blooms, and toxic contaminants that can bio accumulate within the food chain.

The appropriate assessment for this site found that four Consents to discharge may pose a risk of adverse effect on the integrity of the SPA due to toxic contamination, particularly the copper component of the discharges.

One of the four consents is held by Southern Water Services and permits the discharge of treated sewage effluent from the Motney Hill sewage treatment works (STW). A further three consents permitting the discharge of trade and industrial effluents were found to be acting in combination with

Bewick's Swan

Is supported by the Medway Estuary and Marshes SPA in winter



Source: www.surfbirds.com/sbirdsnews/archives/rspb/

the discharge from Motney Hill STW, compounding the risk of toxic contamination by adding to the potential concentration of contaminants.

The appraisal of options for these licences concluded that it is necessary to cap the concentration of copper that may be present in the discharge from Motney Hill STW. This would ensure that it cannot contribute to any exceedence of the environmental quality standard for copper within the site.

It was further concluded that capping the consent for Motney Hill STW removes the risk of in combination effects from the three trade discharges which, acting on their own, are too small to adversely effect the site. We therefore propose to affirm these three discharge consents.

The appropriate assessment also considered the potential impact from licenced abstractions. The designated features are not particularly vulnerable to the impacts of abstraction. However two abstraction licences were found to pose a risk of adverse effect when acting in combination with the discharges listed above. This is because the areas of the site (by hectare) potentially impacted by water quality and abstraction, when added together, becomes significant. The risk is removed when the risk of impact from the most significant impact (Motney Hill STW) is addressed. Therefore it is possible to affirm all abstraction licences.

Conclusions

- We assessed 405 permissions at Stage three for the Medway Estuary and Marshes SPA.
- We will modify one discharge consent, which permits the discharge of treated sewage effluent from Motney Hill sewage treatment works. The modification will set conditions to limit the concentration of toxic compounds, including copper, allowed to be present in the discharge.
- The modification will enable us to conclude that no Environment Agency permissions are having an adverse effect on the integrity of the site.
- We will affirm all other permissions.

For more details about this process, contact Jo Simmons

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Further information can be found at:

www.environment-agency.gov.uk under Southern

or visit www.naturalengland.org.uk for contacts within Natural England

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