

Poisoned wetlands - water pollution in the UK



Summary

This fact file considers the effects of pollution on UK wetlands, and protective measures to combat such pollution.

Introduction

Throughout the UK, people are used to having access to clean, safe freshwater. However, many human activities produce poisonous or harmful by-products that end up in water - either in wetlands or, occasionally, in the domestic water supply. This water becomes polluted. And all water, polluted or otherwise, eventually returns to the environment. Polluted water may adversely affect the environment, wildlife and human health.

Every year there are thousands of water pollution incidents in the UK. The most important sources of inland and coastal water pollution are sewage, industrial - and farm-related substances, air pollution and landfill sites. Water quality may be influenced directly from discharges from sewage works, agricultural or industrial processes, or from spillages; and indirectly from run-off and from leaching.

A number of European Union (EU) Directives place obligations on member states to regulate pollution, and to protect and improve water quality. These include:

Water Framework Directive (2000/60/EU) for river basin management.

Urban Waste Water Treatment Directive (91/271/EEC)

Discharges of Dangerous Substances Directive (76/464/EEC) and the **Priority Substances under the Water Framework Directive**

Nitrates Directive (91/676/EEC).

Bathing Water Quality Directive (Council Directive 76/160/EEC) concerning the **quality of bathing water** (and its proposed revision).



Acid rain

Drinking Water Directive (98/83/ EC).

For more information about the about Directives and the EU policy on water quality, see www.europa.eu.int/comm/environment/water/index.html.

The Environment Agency (EA) (and its regional equivalents in Scotland and Northern Ireland) and the water companies have responsibilities for the implementation of the standards of these Directives in the UK The Agency is responsible for implementing a system of licencing for abstraction and discharge (quantity and quality is regulated according to national and EU standards for different uses).

The discharge of sewage and sewage effluent is one of the most important influences on inland and coastal water quality. About 96% of the UK population is served by sewers, and 75% by sewage treatment works. Untreated sewage is disposed of via septic tanks or by direct discharge to streams, rivers and the sea. The EU Urban Waste Water Treatment Directive requires that all significant discharges of sewage are treated.

Farm waste and silage can cause serious pollution of lakes and rivers. Since 1989, grants have been available for the provision, replacement or improvement of agricultural wastes and silage effluent. Where there exists a significant risk of pollution, regulations empower the Environment Agency to require existing installations to be brought up to an acceptable standard. The Government provides free advice to farmers through its Agricultural Development and Advisory Service - ADAS (see www.adas.co.uk) , and a free Code of Good Agricultural Practice for the Protection of Water.

The main source of polluting nitrate in water is agriculture. The Nitrate Sensitive Areas Scheme has been developed to regulate the use of fertilisers and organic manures in certain designated areas. The EU Nitrates Directive requires member states to identify waters potentially affected by nitrate pollution, to designate their catchments, and to undertake action there to reduce existing, or prevent future, pollution.

Industrial discharges to water are generally licenced. Since 1991, all new or significantly changed major industrial processes require authorisation from the Environment Agency. The EA also controls direct discharges to surface waters.