

Section 11 Water Quality and Pollution

Guiding Principle

To maintain and improve water quality standards within the estuary for the benefit of the Natural environment, and to support and promote measures to reduce pollution throughout the estuary

Due to the low concentration of urban populations and industry around the Fowey Estuary, the water quality has been generally good and pollution low.

11.1 Ensure legal minimum standards are met and seek to further improve water quality.

The Environment Agency has statutory duties in relation to water quality and pollution to ensure compliance with standards set by the European Commission (EC) Directives and in United Kingdom Law, of which a number apply to the Fowey Estuary, including the EC Bathing Water Directive and EC Urban Waste Water Treatment Directive.

South West Waters 'Clean Sweep' which was completed in 1996, has greatly improved sewage treatment facilities with most sewage from the towns around the estuary now receiving secondary treatment. There are further improvements to be completed at Bodinnick and Golant to meet the appropriate treatment level under the EC Urban Waste Water Treatment Directive by 2005.

Issues relating to the quality of water, soil and air and their current and future management have been addressed by the Environment Agency through the non-statutory Local Environmental Agency Plan (LEAP), covering Bodmin Moor to the Coasts. The boundary extends further than the FEMP area, encompassing the catchments of the rivers and streams running off Bodmin Moor. LEAPs replaced Catchment Management Plans (CMPs) that were prepared by the National River Authority (NRA), before it became the Agency in April 1996. Issues raised within the consultation process of the FEMP were submitted to the Environment Agency for inclusion in the LEAP. Therefore the FEMP will not contain detailed considerations of issues relating to air, soil or water quality. Instead these issues are considered in the Bodmin Moor to the Coasts LEAP, published July 1999, with the Final Annual Review in 2001. The ongoing priority actions from the LEAP will be taken forward into the Area's "Local Contribution" (section 4.1).

Public awareness of water quality is important. The provision by the Environment Agency of more information about the estuaries water quality and water quality indicators would be beneficial to many users, particularly those participating in recreational activities. This information is becoming ever more available, particularly on the Environment Agency's website. The public should be encouraged to report incidences of non-compliance or concern to the Environment Agency via their 24-hour pollution hotline number.

11.2 Identify and reduce sources of diffuse or other pollution

There is a considerable amount of farmland and forestry around the estuary and it is not surprising therefore, that land run-off enters the estuary. This is probably one of the biggest sources of diffuse pollution that enters the estuary. The Environment Agency works with a number of organisations to regulate and minimise pollution from diffuse sources (e.g. run-off from agricultural land) within the catchment. However, many sources of pollution entering the streams and rivers have unknown bacteriological, biochemical and nutrient loads. It is difficult to trace and record the occurrence and origins of diffuse pollution, especially with regards to responsibility.

The Fowey Voluntary Marine & Coastal Conservation Area Committee are actively encouraging and supporting the take-up of agri-environment grant schemes such as Countryside Stewardship by liaising with landowners and other organisations to encourage sympathetic land management techniques that could reduce the risk of polluting substances entering the estuary.

Heavy metals are also a source of diffuse pollution. Nationally significant sediment loads of copper and zinc have been recorded at Restormel, a legacy of old mine workings and abandoned mines. This occurs in many rivers in Cornwall as a result of intensive historic mining. Heavy metal quantities in the river water cannot be reduced, but monitoring keeps a check on the levels.

11.3 Reduce pollution from boats

Pollution from boats in the form of litter, fuel, oil and sewage should be prohibited. Fowey Harbour Commissioners provide facilities and services for visiting and resident craft within the Harbour. Other boatyards should also have facilities for the safe disposal of waste that arises from their operations.

All boat types need to use anti-fouling paints, but consideration should be taken of their polluting effects on the environment. Legislation has banned use of TBT based antifouling on boats under 25m in length and no boatyard in Fowey can take vessels over this threshold. However, copper based antifouling is used, which is by definition toxic to marine life. Promotion of good practice for the disposal of anti-fouling paints and other substances from painting and scrapping of boats and marine structures should be encouraged by all businesses working on the estuary.

Other sources of pollution from commercial and recreational craft may be of concern to the Environment Agency, DEFRA and the MCA.

11.4 Support the development and implementation of pollution contingency planning

Despite increasingly stringent legislation, coastal wildlife populations are still at risk from accidental oil and chemical spillages. Although potential spills in the estuary area are more associated with water-based activities, similar incidents can also occur on the land. All agencies and organisations with responsibilities in this area should encourage the continual development of their own and others contingency planning.

Fowey Harbour Commissioners have in place an Oil Spill Contingency Plan Published in February 2001, which gained MCA approval in April 2001. This is a statutory requirement under the Merchant Shipping (Oil Pollution Preparedness, Response and Co-operation Convention Regulations 1998). This plan was produced in consultation with the Environment Agency, English Nature, Cornwall County Council, the MCA and others – all of whom are statutory consultees.

The plan is designed to guide Fowey Harbour Commissioners through the processes required to manage an oil spill originating either from operations within the Harbour or one entering the Harbour from the open sea or the land. The response would make use of Fowey Harbour Commissioners own oil spill response equipment and/or the equipment of their accredited Tier II contractor in the case of a more serious incident.

The plan is exercised regularly in co-operation with IMERYS and the Environment Agency. A large number of staff members have completed accredited training to recognised levels in the use of oil spill equipment and managing their response to an oil spill.

Those spills and emergencies not related to oil are dealt with in the Emergency Plans outlined in Section 9.2.