

EA-SW

Box 7

ENHANCING THE RIVER TAMAR

*The Environment Agency
working with the local
community to improve the
water environment*



ENVIRONMENT AGENCY



Farmers play a vital role in looking after the environment. That's why the Environment Agency has launched a new partnership initiative with the agricultural community to help protect and enhance the catchment area of the River Tamar.

The Agency is undertaking a series of free farm visits on the upper Tamar to maintain the momentum for improvement. This leaflet sets out the background to the project and underlines how farmers can help.

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THE UPPER TAMAR AND ITS POLLUTION CHALLENGE

The River Tamar is a major river defining much of the border between Cornwall and Devon. It draws a large catchment, rising north-east of Bude and flowing south to enter the sea at Plymouth. It is a catchment largely rural in character and sparsely populated outside of the main centres of Launceston and Holsworthy. The landscape is dominated by traditional rural industries, principally agriculture.

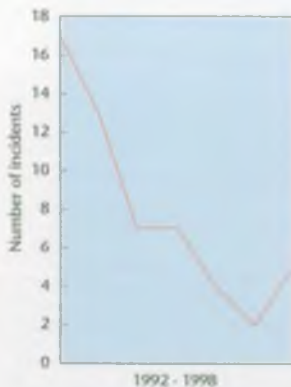
The catchment contains a wide variety of river type and environment which is acknowledged nationally for landscape and conservation values. It supports a major game fishery for Atlantic salmon, sea trout and brown trout and is one of the premier salmon fishing rivers in the westcountry. The Tamar is also regionally important as a source of public water supply.

As a large catchment, the Tamar is subject to many pollution pressures. The biggest threat to water quality in the catchment is due to its agricultural intensity, however there are other pressures from industries such as sewage treatment works and creameries. As well as agriculture, the Environment Agency has worked with these other industries over the past decade to improve their discharges and lessen their impact upon water quality. The case studies given in this leaflet show in more depth the quality advances made with industry in the area in recent times.

This year's farm visit programme is part of the next stage in our aim to improve water quality in the Tamar catchment. By working with farmers to solve effluent and storage problems we hope to limit this source of pollution and prevent the damaging fish kills and pollution incidents that threaten good water and habitat quality in this region.



Double locked valves on a circular slurry tank



Significant pollutions in the upper Tamar catchment

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Circular slurry tank

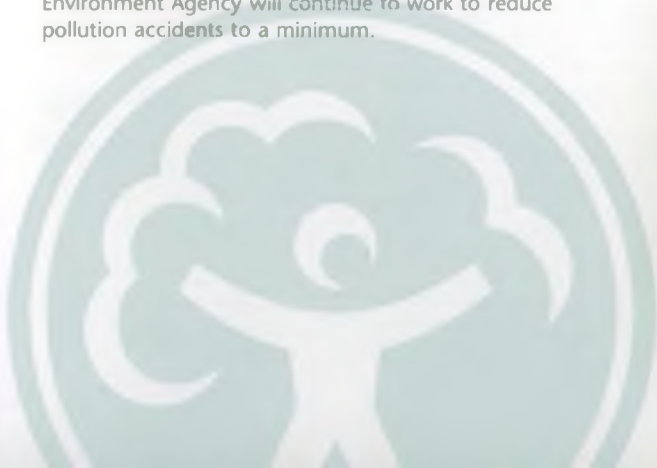
PREVENTING POLLUTION

Anyone who wishes to discharge waste water into our rivers requires prior permission from the Environment Agency, in the form of a written consent.

The granting of such a consent is very carefully considered and only agreed where there will be no significant detrimental effect on the environment. If consent is permitted then strict limits on the quality and quantity of the discharge are set and enforced.

In the River Tamar catchment the main method of achieving improvements has been by agreeing and enforcing increasingly more stringent effluent standards to achieve long term quality objectives for the river. This in turn requires increasingly more sophisticated methods of effluent treatment.

Environment protection officers regularly visit farms, factories and sewage treatment works to liaise on progress and to ensure correct attention and maintenance of the treatment systems, storage of chemicals and any other potentially polluting materials including farm waste facilities. Major incidents have decreased considerably in recent years. The Environment Agency will continue to work to reduce pollution accidents to a minimum.



E FOR FARMERS

5. To protect the bed of the river and its banks from stock damage, fencing and suitable drinking areas should be provided to minimise pollution and erosion of good farmland.
6. It has been found that large numbers of sheep have access to the river to drink. If sheep have been dipped they should be kept away from watercourses to prevent dip chemicals being washed off. An alternative source of water should be provided. All sheep dip formulations are environmentally toxic and may poison other animals, fish and other creatures. Very small quantities of sheep dip, such as from washing out a measuring cup, in a stream could kill everything for hundreds of metres downstream.
7. Several publications and associations give advice on the design, location, construction regulations and management of storage facilities. For further details please contact Mr Bruce Newport at our Bodmin Office on 01208 78301.



*Good sheep dip with
drain off pens*

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Case Studies

The rural character of the upper Tamar catchment has led to the longstanding development of communities and rural industries. These have produced waste in the form of sewage and trade effluents which have been historically treated in different ways. The resulting effluent is then discharged into the River Tamar with the permission of the Environment Agency.

For many years both South West Water and local creameries have had to invest large sums of money in improving the quality of their effluents. Modern consents have been tightened to improve the quality of our rivers. Companies have worked extensively to reduce the quantities of waste that they handle which has taken pressure off the environment. These improvements were achieved by liaison with dischargers and establishing commitments to long term improvements that have been possible due to the advances in treatment technology. The Environment Agency regularly monitors those discharges for quality and takes appropriate action if conditions are breached.



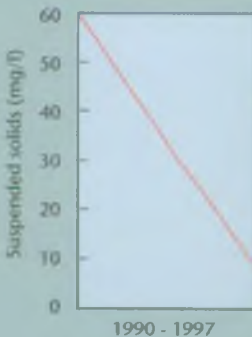
Davidstow Creamery treatment works



Launceston sewage treatment works



Bottles of creamery effluent before and after treatment



Launceston sewage treatment works

GENERAL ADVICE

GENERAL ADVICE FOR FARMERS

Agricultural practices have been linked to poor water quality in the upper Tamar in a number of ways. The following advice is intended to reduce local environmental damage caused by farming practices and to enable farmers to use land and waste to the best effect possible.

1. It is vital that appropriate individual farm waste management plans are in place so that spreading schedules can be planned and implemented.
2. Pollution prevention in the waste storage phase involves the following necessary steps:
 - The separation of clean water (rainfall) and liquid farm wastes (yard run off) through the effective guttering of farm buildings. Clean water outfalls should be installed so that the visual quality can be checked frequently for signs of contamination.
 - Adequate storage for the total volume of farm waste produced.
 - The presence of reception pits to intercept yard run off and parlour washings.
 - The covering of contaminated areas and waste stores to reduce the water content of farm wastes.
3. Regular maintenance of facilities is essential , including the inspection of the condition of structures and the emptying of tanks when applicable. Furthermore it is essential that waste spreading is planned and is in conjunction with crop production and these operations monitored regularly for signs of over application or run off.
4. The optimum season for application to grassland is summer, since nutrient losses are minimised by high plant growth and direct run off is minimised by high soil moisture deficits, accompanied by lower rainfall.