



case study

environmental sustainability



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The Objective One Partnership
for Cornwall & the Isles of Scilly

CORNWALL RIVERS PROJECT

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the project

The Westcountry Rivers Trust runs the Cornwall Rivers Project to deliver large-scale integrated river catchment management to improve habitat within 15 major river catchments and deliver significant economic benefit to Cornwall.

The Programme has invested £919,581 from the European Agricultural Guidance and Guarantee Fund (EAGGF) in the project which has a total cost of £2,628,511.

The project targets farms and land holdings within the designated catchments and has developed integrated management plans for each individual site focussing on the importance of optimising resources (energy, water, nutrients etc) for the benefit of both the river and farm as a business.

To date over 860 farms have received support from the project including integrated management plans, grants for fencing and other environmental improvements and advice on farm diversification. Eight demonstration sites have also been set up to promote the activities of the project.

The project has won the following awards:

- RDA's Hand in Hand award for Environmental Business in 2002
- Highly Commended by Biffaward's National Strategy for Agriculture Management award for Sustainable Resource Use and New Technology in 2004
- Transco Grassroots award for green awareness

measures of environmental sustainability adopted

To promote the prudent use of natural resources

The project gives advice on water demand control encouraging methods for water minimisation e.g. by collecting rainwater from roofs, using spray nozzles on water hoses, and checking for water leaks. Farmers



This tributary of the River Camel is a good example of a pristine Cornish river

are advised on how to reduce pollution and energy for example by separating clean and dirty water so reducing slurry volumes, implementing minimum tillage systems, efficient use of machinery, access to machinery share via machinery rings, signposting to product distribution pooling projects, and reducing ditch and hedge clearing regimes. The project cuts farm inputs and waste by recommending testing soil and slurry for nutrient content to reduce need for chemical fertilisers; providing best practice on pesticide spray savings e.g. using weed wipes rather than ground sprays; and using biological weed controls such as oil beetles which eat dock. Farm management transport is decreased due to the lower volumes of fertiliser needed now that optimised use of slurry is being made on-farm, and by employing local contractors for goods and services (such as fencing). The project lessens its resource use by buying recycled office paper, recycling paper and print cartridges and having a website, thereby reducing the volume of paper used in promoting the project. Project staff carry out visits and meetings in one area on the same day, car pool to work where possible and work from home for the majority of the time.

To protect and improve the environment

The improvement of water quality and aquatic ecosystems is a key driver of the project's work. Specifically the project provides advice and financial support on fencing around waterways to protect water courses from pollution caused by livestock walking in and around streams. Guidance is given on how to



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control field infiltration e.g. though planting winter sown crops and careful use of machinery. Equally, rotational clearing of ditches helps to clean water before it flows off the field. The farming practices recommended by the project result in better soil structure which is good for invertebrates and birds, the hedge cutting and ditch regimes provide improved habitats for ditch and hedge flora and fauna. The project requests the use of less colours and toxic inks in the printing of its publicity and information materials.

To increase awareness of residents, businesses and visitors of the value and importance of the environment

Farmers are provided with information on best practice in farming methods and the economic benefits of being environmentally sustainable via their individually tailored integrated farm management plan, newsletters and the website and are signposted to other organisations for environmental advice. The organisational environmental policy is included in staff inductions.

Mini case study

South Penquite Farm is one of 8 demonstration sites set up during the Cornwall Rivers Project. It is a family run organic farm that comprises permanent pasture, broadleaf woodland, some wetland areas and a pond. The farm is located on a hill to the south west of St Breward on the edge of Bodmin Moor and is bordered by the De Lank River to the north and west and Kerrow and Pendrift Downs to the south and east. The farm has an exceptionally rich archaeological and wildlife value that is recognised in its designation as part of the Camel River and Bodmin Moor North SSSIs. Most of the river is fenced to protect the watercourse and allow controlled grazing in the summer months. The farm has a significant resource in the form of a 1000m stretch of the De Lank River which has a unique population of Brown Trout and has been entered into the Angling 2000 scheme also run through the Cornwall Rivers Project. Through the scheme, the farm owners receive a modest income from angling visits promoted throughout the Westcountry by the Trust.

The farm was chosen as a demonstration site as it is well managed and there are many areas of good environmental practice. It is an excellent example of the appropriate balance that can be forged between modern farming and wildlife conservation and this theme is central to the interpretation at the site. The farm exhibits many areas of good farming practice and the owners are exceptional in their approach to farming, wildlife and diversification ideas. The family are involved in numerous activities in the local farming community and for the betterment of the environment.

The site is already a Soil Association demonstration organic farm and there are links with a variety of other environmental and conservation organisations.

Through Objective One (EAGGF) investment via the Westcountry Rivers Trust a selection of sign boards, activities and way-markings were installed to identify the unique wildlife and habitats existing on the farm as a result of the low-impact farming practices. The interpretation material helps visitors discover the biodiversity of South Penquite and to understand how sensitive farming has encouraged such diversity.

The farm has diversified and offers 'green' camping facilities which include a new shower block for which solar panels on the roof deliver heated, filtered rainwater into cubicles lined with sheets of recycled plastic from bottles and yoghurt pots. The farm also has an educational resource room which is used throughout the year for school visits. The Westcountry Rivers Trust's educational officer has helped with several river ecology sessions and has supported conservation events at the farm throughout the life of the Cornwall Rivers Project.

www.southpenquite.co.uk

benefits of environmental sustainability

Environmental water quality is improved due to better infiltration rates reducing runoff from crops and creating natural rates of flow which in turn result in more natural river conditions for riverine species, more pollutants being removed and less silt travelling into streams. Equally the benefit of using slurry as fertiliser is that it is absorbed and used in the crop rather than potentially ending up in rivers and the reduction in pesticides reduces potential for harmful input into rivers as well as creating economic savings for the farmer. Collecting rainwater from roofs for reuse saves money on farmers' water bills. A knock on effect of the water separation is that there is less slurry to move or remove and, in the same way that the minimum tillage systems require fewer cultivation trips, leads to less vehicle fuel consumption.

Reduced energy usage means less environmental and noise pollution, less consumption of fossil fuels and lower fuel bills on the farm.

Minimising ditch and hedge clearing regimes is good for the wildlife found in these habitats and releases farmers' time which instead can be invested into other areas of farm management such as taking stock of what the farm is doing and how best to manage it.



The project itself has gained by adopting environmental measures; home working reduces travel costs for the individuals concerned, the use of local contractors means project officers have face to face contact with suppliers and there is greater trust from the farmers in the work being done e.g. when using local people for fencing contracts.

Ultimately the project helps to restore lengths of river corridor and reduce or eliminate the effects of excess nutrient leaching, sedimentation and reduced water quality by tackling these problems at source by positively influencing land management. Healthy rivers can then be enjoyed by users of countryside, such as tourists and anglers. The benefit and appeal to the farmer is the impact the recommended farming practices have on their bottom line.

In summary the economic benefits created through the adoption of environmental sustainability measures are cost savings on water, waste, fuel and input bills, better nutrient control, improved quality of land, and the creation of angling beat income for farmers.

lessons learnt

Dylan Bright, Director of the Westcountry River's Trust says:

"Environmental practices should be inherent in anything anyone tries to do. If it's not environmentally sustainable then it shouldn't be entertained in this day and age."

"Environmental sustainability is a very cost effective addition to be made to a project. In nearly every case there's the possibility of making environmental measures cost neutral or of benefit and they have never been hard to sell to farmers except where subsidies act against these actions."

A farmer in the Fal catchment:

"Thanks to advice from WRT we are now soil testing and are utilising our farmyard manures and slurry more efficiently, spending our money on Nitrogen rather than compound fertilisers, improving efficiency, and saving money – the way farming is now, we couldn't afford to ignore the advice."

For more information about how you can incorporate environmental sustainability into your project please contact the Objective One Partnership Office on 01872 241379 or email objectiveone@cornwall.gov.uk.



Erosion of riverbanks by livestock before fencing



Erosion controlled and wildlife habitat enhanced after fencing