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How effective have agricultural stewardship programmes been for reducing nutrient pollution in the UK?

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Pollution of waterbodies due to agricultural activities is problematic for a variety of water uses, including water supply, nature conservation and recreation. Policies have subsequently been developed to address the problem and actions in the UK have included the designation of Nitrate Vulnerable Zones (NVZs) and, recently, the delivery of farm advice through the Catchment Sensitive Farming (CSF) initiative. Little is known about how effective agricultural stewardship has been at improving water quality though. This issue has been addressed through using existing scientific literature and experimental investigations in a catchment that is both an NVZ and a pilot catchment for the delivery of CSF advice. Analysis of long term datasets held by the UK Environment Agency has indicated that the designation of NVZs has not been effective in reducing nitrate pollution, despite all farmers being compliant with regulations. Moreover, phosphorus concentrations remain above regulatory limits much of the time and are likely to account for the significant blooms of toxic blue-green algae in reservoirs in the catchment. Further farm advice has been delivered since 2006, comprising farmer meetings, on-farm workshops with demonstrations and field walks, and one-to-one visits leading to the production of farm management plans. Further monitoring has shown that, to date, this too has failed to improve water quality, possibly due to a lack of action 'on the ground' by farmers.