

The costs and efficacy of sediment mitigation measures for representative farm types across England and Wales

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Abstract A major collaborative research project in the UK is delivering new science to support improved targeting of on-farm pollution mitigation measures for the benefit of freshwater ecology. One important aspect of the project concerns a national scale evaluation of the costs and efficacy of packages of sediment mitigation measures which can be delivered over and above the existing implementation of abatement through various policy instruments including advice and new targeted agri-environment schemes. The assessment includes typical farm types present across England and Wales. Outputs from this assessment of costs and efficacy will eventually be used to help model the potential for closing the sediment pollution gap in those water bodies currently failing water quality targets due to sediment loss from agriculture. Some preliminary uncertainty ranges in costs (–£146,402 to £175,631) and effectiveness (0–80%) associated with a potential policy scenario implementing a large number (up to 93) of abatement measures at 95% uptake are presented in this paper.

Key words sediment; mitigation; costs; efficacy; farm scale; policy support