

## **Integrating design with the environment to maximise benefits from a flood storage dam: successful implementation at Harbertonford**

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**SYNOPSIS.** Environmental enhancement is not just about changing the seed mix and planting a few trees to hide the structures we build. Designing using the environment rather than seeing it as a constraint can help to produce cost-effective designs that bring great benefit to the environment and raise the public perception of the benefit dam engineering can bring to their lives. So often, the potential of embankment dams to benefit the environment is not taken advantage of. This paper explores what can be done to fully realise the potential of flood storage dams.

The award winning Harbertonford Flood Defence Scheme, described as “the future of flood defence schemes” by Sir John Harman, Chairman of the Environment Agency, was a combination of in-village channel lowering and upstream flood storage (Palmer's Dam). This paper focuses on the flood storage element of the scheme and demonstrates the multifunctional benefits that have been delivered through the integrated work of design professionals, driven forward by the flood defence aim.