

National NFM Opportunity Maps

Overview

4 July 2017

This document provides a brief overview of the Strategic National Natural Flood Management Opportunity Maps

Introduction

A nationally consistent set of opportunity maps to indicate potential for natural flood management (NFM) for fluvial systems have been produced by the Environment Agency, in partnership with JBA Consulting. They can provide a strategic screening tool to support the identification and development of effective NFM interventions, but were produced at pace as a pragmatic, interim product and so are not fully comprehensive. The maps take the form of a suite of linked, interactive geo-pdf documents and are supported by a user guide. Three new GIS data sets were also produced alongside the pdf maps.

What the Maps can be used for

The maps are a high-level screening tool to help guide further, more detailed investigations. They should be used alongside the user guide and other sources of relevant information (for example, the Opportunity Maps produced by the Rivers Trust), as well as drawing on local knowledge and expertise from as wide a range of people and organisations as possible, considering both flood risk and environmental benefits. The maps are not sufficient to determine where NFM measures may, in practice, work. When discussing potential NFM interventions with landowners and other local stakeholders it is important to recognise that they may have detailed local knowledge that may compliment or supersede information on the maps.

What the Maps Show

The maps show potential opportunities for a few important types of fluvial NFM interventions: small-scale, distributed storage; woodland planting; and soil structure improvements, as well as potential opportunities for reducing sediment delivery to watercourses, which may have both flood risk and wider environmental benefits. In accordance with their 'interim' status, the maps do not show opportunities for other NFM measures or wider environmental benefits. Notably, opportunities for floodplain reconnection are not included. To contextualise the potential opportunities identified, the locations of schemes in the 6-year capital programme are also shown. These locations are taken from the February 2016 refresh, and are subject to change.

The maps also provide indications of the effect of the potential NFM measures on peak flows, assuming that all the identified opportunities in each catchment were to be realised. Such widespread interventions are, however, extremely unlikely in practice. Also, the estimated effects are derived from statistically extrapolating the results of a limited number of modelling studies, and so must be regarded as indicative even if all the interventions were to be implemented. Consequently, the indicated impacts on peak flows can be used to compare between catchments, but should not be used in quantitative assessments.

Although the maps account for some constraints in locating NFM measures, no consideration of land ownership is included.

Future Developments

These maps will be built upon by an ongoing Research and Development Team project. This will provide a more comprehensive and open-access set of NFM opportunity maps, along with a working with natural processes (WWNP) / NFM evidence directory. These are expected to be launched late 2017.