Urban Pollution Management Manual

3rd Edition
FOREWORD TO THE THIRD EDITION OF THE UPM MANUAL

The first edition of the UPM Manual was published in 1994 following a major research and development programme that was partnership funded by the whole of the water industry. Many of the planning concepts and tools were new at the time and addressed the major environmental issues arising from urban drainage and wet weather impacts on water quality.

In 1998, the Manual and associated guidance was substantially reviewed with a similar arrangement and sponsored by the environmental regulators EA, SEPA, DOENI, OFWAT and the water industry in the UK. Both documents were developed as collaborative ventures and published by FWR.

The UPM manual and the associated standards have been adopted by the regulators as guidance and best practice for planning the improvements of intermittent wet weather discharges to achieve water quality standards and the implementation of Bathing Waters and UWWT Directives.

The need for a review

Since the last revision in 1998 there have been significant changes in environmental regulation with the implementation of the Water Framework Directive and its new water quality and ecological standards and the revised Bathing Water and Shellfish Directives. In that time there have also been step changes in computing power and major developments in software resulting in improved modelling tools for urban drainage planning.

The priority for environmental issues have also changed as there is now an urgent need to take account of the impact of climate change and to plan for adaptation and mitigation measures in the upgrading of urban drainage systems.

All the partners involved; regulators, industry and the practitioners saw a common need for the guidance to be updated and ensure the Manual remained best practice and fit for purpose. A review working group was established of representatives from the water companies, EA, SEPA, CIWEM UDG (formerly WaPUG), FWR and WRc. A workshop and consultation with other interested parties was also undertaken to identify issues and improvements.

The Review

The UPM Manual was designed to be generic in developing solutions to wet weather wastewater systems, with the standards and policy requirements set by the regulator. In the review there were two parallel work streams:

• A review of the UPM standards led by the EA on behalf of Defra in association with SEPA and NIEA. The review was based on the need to incorporate new WFD water
quality standards and to re-examine the fundamental intermittent standards in the light of new scientific evidence.

• A review led by the professional practitioners led by the CIWEM UDG who have been the main customer base for UPM over the last ten years. The review was carried out to update and streamline the methodology of the overall planning process and to enable additional guidance and best practice to be incorporated or be able to be easily accessed and updated in the future.

The conclusion was that much of the UPM Manual remained sound, best practice and fit for purpose. A significant improvement has been made to ensure that future changes can be easily assimilated. The Manual now separates the principles and process guidance from a “dynamic” set of references, new tools, techniques and good example. This dynamic and current information will be linked to, and hosted on the CIWEM UDG web-site.