Oxford to Cambridge

Joining up surface water and drainage management planning

Environment Agency



Introduction

Exploring how local authority-led surface water management planning can be effectively aligned with Drainage Wastewater Management Plans (DWMPs) to identify shared priorities and deliver joint solutions to:

- reduce flooding
- protect water quality
- deliver wider benefits

The challenge

Surface water flooding, drainage capacity and water quality are managed by different organisations.

Plans are often developed separately and to different timescales.

This leads to gaps in data, misaligned priorities and missed chances to invest jointly.

Our project ambitions

To support place-based water planning by helping organisations work together more effectively.

To improve alignment between surface water, drainage and wastewater planning activities.

To provide a flexible approach that can be applied at different scales and levels of partnership maturity.

To develop learning that can be used beyond the study area.

Project Aims

To explore

Existing plans, relationships, data gaps, barriers and opportunities to collaboration.

To create

An approach which allowed for the co-development, design and delivery of multi-partner interventions.

A practical, flexible way of working to guide joint planning.

To learn

What works in practice, how decisions are made, and how information within plans is used.

How DWMPs and surface water flood risk evidence influence one another, and how they can be used more effectively together.

Introduction

The project looked at joining up surface water and drainage management planning. It focuses on the Oxford to Cambridge Growth Corridor (OxCam), with a case study in West Northamptonshire.

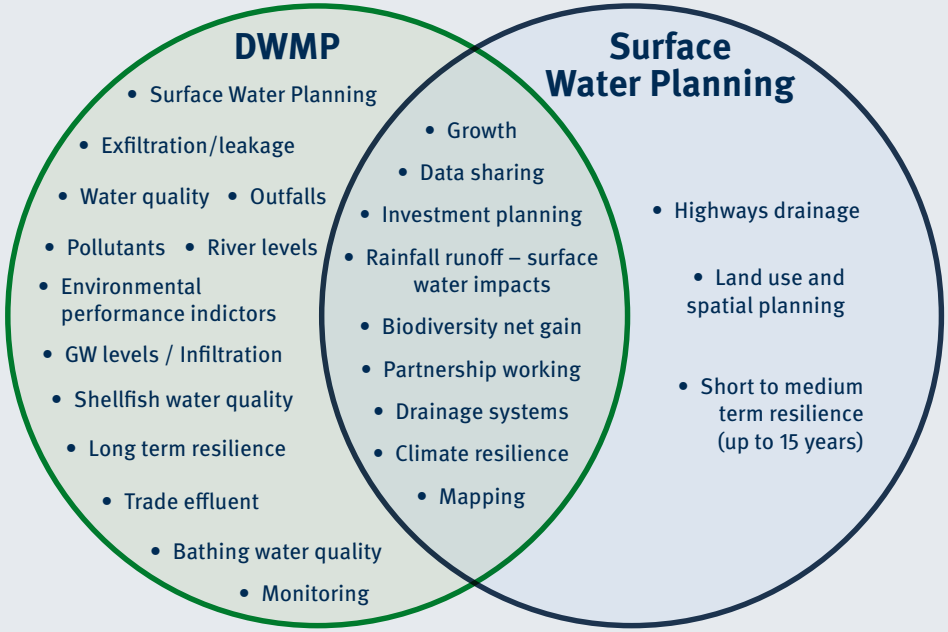
The project was delivered in partnership, with West Northamptonshire Council and Anglian Water Services playing a leading role.

Bedford Borough Council, Central Bedfordshire Council, Defra, Environment Agency were also part of the wider project team, providing assurance on the approach taken and how the learning could be applied elsewhere.

The project was commissioned by the Environment Agency's OxCam team as part of the Integrated Water Management Programme.

The challenge

- our previous work has identified that full system-wide integration would be complex and resource intensive
- the need for stronger alignment to improve coordination between existing plans, organisations and decision making processes to deliver better outcomes for communities and the environment
- surface water flooding requires coordination between multiple organisations with shared responsibilities
- different planning cycles, priorities and processes can make collaboration difficult
- DWMP Cycle 2 increases expectations for collaboration, whole-system planning and multiple-benefit outcomes



Our method | Our findings | Our product and key messages

Joining up drainage, wastewater and surface water planning processes

Method

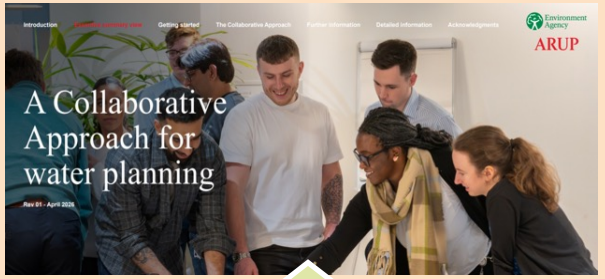
Task 1: exploration
Task 2: approach selection and design
Task 3: testing
Task 4: refining the approach

Findings

Identifying and working through challenges

Identifying good practice and new ways of working

A Collaborative Approach for water planning



Key messages



Engagement

Who we worked with

We worked with partners in a place to develop a Collaborative Approach to water planning that supports coordinated, place-based delivery bringing together drainage and surface water planning.

The approach is designed to improve how organisations work together, providing a shared framework for collaboration and decision-making, rather than create new plans or change existing responsibilities.

Lead Local Flood Authorities

Surface water and flood risk planning

- West Northamptonshire Council
- Central Bedfordshire Council
- Bedford Borough Council

West Northamptonshire Council
BEDFORD BOROUGH COUNCIL
Central Bedfordshire

Water company

- Anglian Water Services

love every drop anglianwater

Environment Agency

Technical and strategic lead

Environment Agency

DEFRA

Policy interest

Department for Environment Food & Rural Affairs

Arup

Consultant and delivery partner

ARUP

Expected benefits

Economic:

- better value for money through shared investment
- reduced duplication of effort
- avoided costs from flood damage and pollution

Social:

- safer, more resilient places for communities
- better public spaces and blue and green infrastructure

Environmental:

- reduced surface water flooding
- improved water quality
- more use of nature based solutions

Joining up drainage, wastewater and surface water planning processes

Task 1: Exploration

We reviewed:

- plans
- evidence
- guidance

To identify:

- existing relationships
- opportunities for closer joint working
- gaps in available evidence
- key risks

We also interviewed partner organisations to understand how they currently work together, exploring existing ways of working, decision-making processes, and how organisations collaborate in practice.

Task 2: Approach selection and design

We explored different approaches to joint planning informed by existing guidance, policy and best practice from across England.

This learning, combined with partner feedback informed the selection, development and design of the approach.



Case study in West Northamptonshire

Task 3: Testing

Together we developed an approach based on good practice identified during the early stages of the project, bringing together the activities that are common to effective joined-up planning.

We carried out a range of activities set out in the emerging Collaborative Approach, including workshops with partners. Over time, the focus narrowed on Far Cotton and Delapre drainage catchment in Northampton, allowing us to test the approach in a real place. This gave partners a collective understanding of local risks and opportunities and helped identify the types of measures, including nature based solutions, that could deliver shared benefits.

Task 4: Refining the approach

Workshops with key partners across the OxCam Corridor and Defra Group to gather feedback on data sharing, technical integration, stakeholder engagement and collaboration, which was used to refine the final Collaborative Approach.

Our findings

Non-tech summary

Full report

Our product and key messages

Collaborative Approach

IWM hub

Engagement

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Task 1

Exploration

Task 2

Approach selection and design

Task 3

Testing

Task 4

Refining the approach

Our project findings

The project found that one of the primary barriers to effective joint planning is not a lack of tools, plans or evidence, but the need for a clearer and more adaptable way of working that supports collaboration across organisations.

We identified some challenges when looking to improve joined up working including but not limited to:

- limited staff time and funding in partner organisations
- differences in organisational priorities and scales
- misaligned funding and planning cycles
- data gaps, outdated plans and data-sharing challenges

Key recommendations and next steps

The main recommendations are to:

- embed early collaboration into planning activities
- make better use of existing evidence and knowledge
- apply a place-based approach
- align investment and delivery
- use the Collaborative Approach for water planning and consider using it more widely

Next steps:

- identifying opportunities to use the Collaborative Approach
- refining the approach further
- promoting the approach
- embedding it into business as usual activities

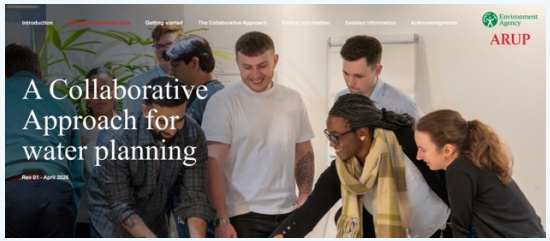
We found that

- a clear understanding of roles, responsibilities and evidence is essential for effective joint planning
- effective use of evidence and data is critical to identifying place-based solutions that deliver multiple benefits even when differences in scale, format and assumptions can create barriers to collaboration
- early engagement provides the strongest foundation for successful collaboration

Product: A Collaborative Approach for water planning

Working with our partners we produced a ten-stage workflow to provide a structured and simple way for organisations to join up surface water and drainage planning across boundaries.

Although developed and tested in the OxCam area, the approach is designed to be scalable, transferable and applicable across England, wherever organisations need to work together to manage water challenges.



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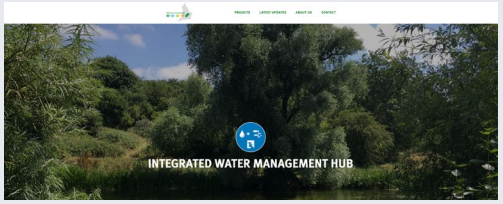
Integrated Water Management Hub

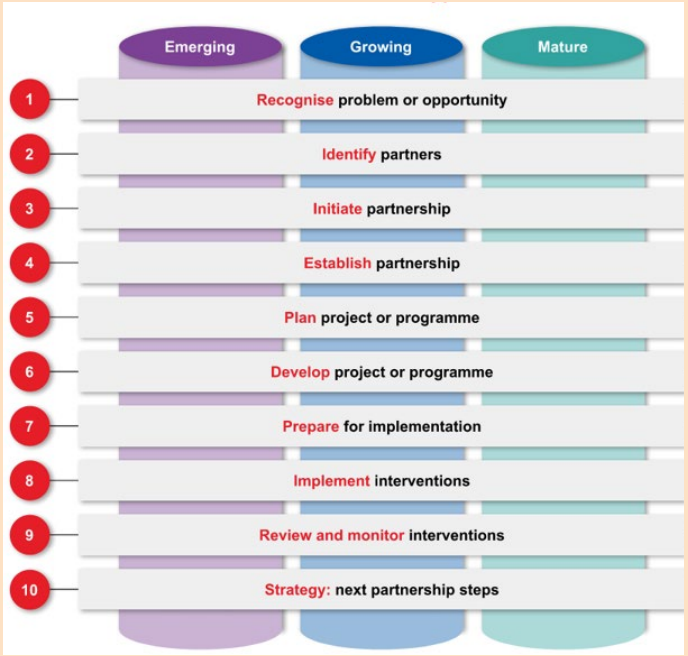


The Integrated Water Management (IWM) hub brings together the learning and approaches developed through our programme. It includes tailored key messages about the joining up project for different audiences to support engagement and encourage the practical application of IWM principles and approaches.

A Collaborative Approach for water planning

The Collaborative Approach is a flexible ten-stage framework that helps water companies, local authorities and partners work together more effectively on drainage and surface water planning.

The approach aligns with the direction of travel set out in the Government's water reforms by supporting more integrated, system-wide planning. It provides a practical way for organisations to align evidence, priorities, investment and delivery while continuing to address flood risk, drainage and wastewater challenges at different scales.



Scalable to different project sizes and stages, it encourages collaboration across organisational boundaries, improves the use of existing information, and helps develop integrated, place-based solutions that deliver multiple benefits.

Three maturity pathways reflect that partnerships start from different points and may progress in different ways. The approach therefore can reflect the differing relationships and circumstances different organisations face with their projects.

The approach will:

- provide a joined-up approach to planning
- help with cross boundary working
- support place-based thinking
- provide a practical and flexible approach