



# Working together to protect and enhance our water environment

What our partnership in the River Crane catchment has achieved this year

Smarter Water Catchment Plan  
Update Document  
March 2025

Working in partnership





# Welcome to this update

In March 2021, we collectively set out a 10-year plan to protect and enhance the River Crane catchment. Throughout 2024/25, we continue to deliver the actions outlined in this plan and have started to collect data to demonstrate the additional benefits of this programme.

We've been able to measure how working in partnership can leverage additional match funding, support and create new jobs, enhance and create habitat and biodiversity and increase engagement and public awareness across a river catchment. All of the insight gathered is being used to inform our long-term strategy for partnership working across the Thames region.

## Working in partnership

We've been working with many different partners across the River Crane catchment, bringing together expertise from many specialisms to make sure our future plans are robust and right for the local environment and communities.

Our partners include water companies, regulators, non-government organisations, academia and local interest groups – all have given either finances or in-kind support to help make this project a success.

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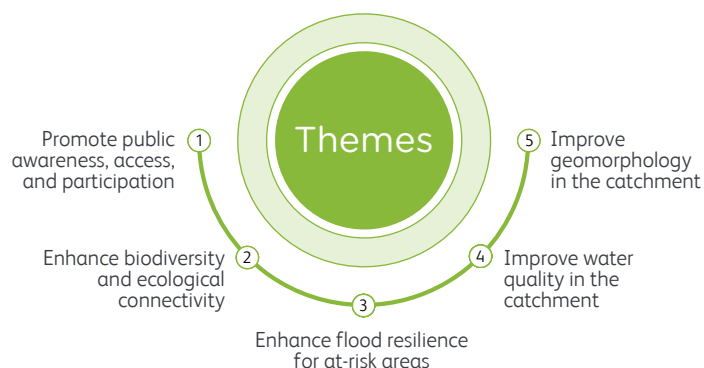


# What we're aiming to achieve

Throughout 2024/25, we've focused on delivering the actions set out under each of our key themes. The main focus has been on analysing data to shape our strategies and delivering interventions across the catchment.



## River Crane strategy



### Aim for 2025

Our aim is to collate the benefits and lessons learnt from all three Smarter Water Catchments trial projects and disseminate this information in 2025.

On the next page is a case study on some of our collaborative work within the River Crane catchment and the benefits it's delivered so far.

## Putting the right governance in place

A steering group with representatives from across the different sectors has guided the development and delivery of this catchment plan. We also have technical experts working on each key theme, bringing in additional stakeholders who are responsible for ensuring the best plan is in place to

achieve our objectives. It's also critical that Catchment Partnerships have the resources to partner with us, so we're funding multiple positions to support with facilitation, community engagement and data collection & analysis.

## What's our collective vision for the River Crane catchment?

As part of the Crane Valley Partnership's Strategy 2018-2028, we want the rivers in the catchment to be recognised and valued as the 'central thread' that links together natural environments in north-west London. We want people living and working in the catchment to be able to easily access rivers and surrounding green spaces – to see thriving wildlife and enjoy low pollution levels.

The health of its rivers reflects the health of an area. So, we want local residents, businesses and policy makers to understand how the catchment's natural capital enriches people's lives. We also want these groups to be actively involved in caring for the catchment, feeling a shared sense of responsibility to look after it and ensure that it thrives in the future.

## Steering group members

CAMELLIA (Imperial College London)

Citizen Crane

Crane Valley Community Interest Company

Environment Agency

Harrow Council

Let's Go Outside and Learn CIC

Thames Water



# A project case study

## Engaging Citizen Scientists using MoRPh

**Start date:** April 2022 **End date:** March 2023

### Project description

Cartographer have been working on two strands of work: citizen science engagement, and research for Harrow Council to develop their understanding of the Upper Yeading Brook West. Both strands use MoRPh field surveys to understand the Brook's physical form, functioning and problem areas in order to co-develop recommendations to improve the Brook's condition.

### What is MoRPh?

A survey method that records properties of vegetation, sediment, physical habitat and human modifications in a section of river. It records how much of each property is present across the bank tops, bank faces and river bed. Side-by-side MoRPh surveys provide information to summarise how a river is functioning or changing along its length. Measurements of channel size indicate whether it's artificially deep and disconnected from its flood plain.

### Objectives

- Increase understanding of the structure and form of the Brook, and why and how it changes (this is geomorphology)
- Enable people to collect data and build evidence to influence decision making
- Improve Harrow Council's understanding of the Upper Yeading Brook

### Outcomes

- 3 training events held, training 30 citizen scientists
- 10 field-surveys recorded by citizen scientists
- 2,840m of Upper Yeading Brook surveyed in 20m sections which fed into the development of the Yeading Brook Unbound Project

- The MoRPh surveys showed that the Yeading Brook:
  - is a well functioning urban river with diverse physical habitats and invertebrates
  - however, it faces a number of problems including deep, narrow channels that are hydrologically disconnected from their bank faces and tops, and widespread patches of invasive plant species

### Project costs

Thames Water contribution: £5,000  
Public funding: £18,000  
**Total Costs: £23,000**

### Lessons learnt

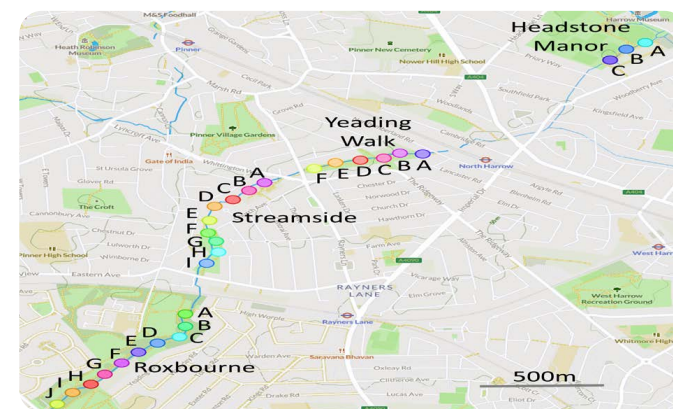
- Although urban sections of river can be heavily modified and highly vegetated, they can have highly diverse physical habitats and healthy functions
- Local citizen scientists are keen to learn more about their local river habitats and gather data to influence decisions

### Future plans

- Help with the interpretation of river restoration recommendations for the Yeading Brook Unbound Project
- Establish a community-based legacy to support sustainable citizen science monitoring and stewardship of the Brook and contribute to wider research

## Project highlights

- Empowering citizen scientists and giving them a voice to influence decisions that will affect river habitats
- Long list of recommendations for geomorphological improvements on the Yeading Brook
- Additional funding secured via the Crane Valley Grant Fund to carry out complementary studies on water quality and invertebrate communities with Brunel University



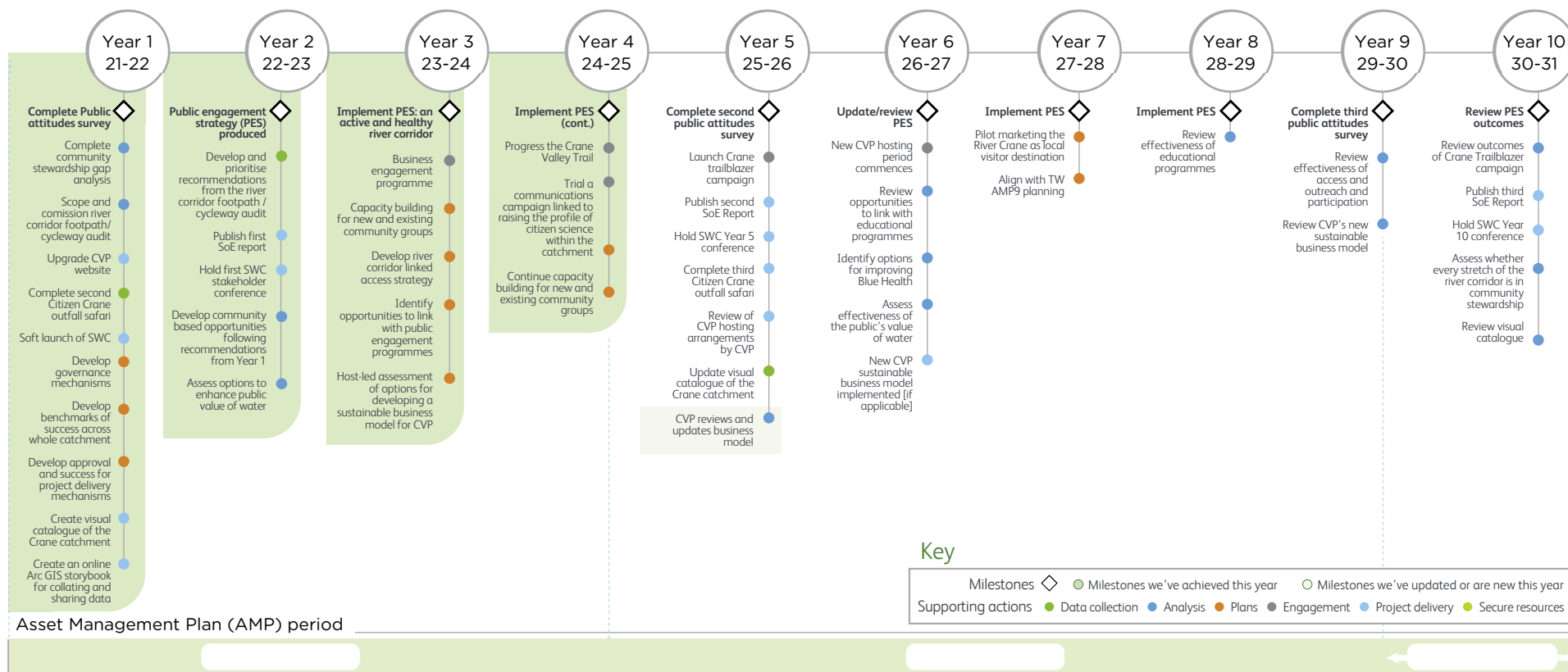
INDICATOR NAME	A			B			C			D			E			F		
	CO	GP	SA	CO	GP	SA	CO	GP	SA	CO	GP	SA	CO	GP	SA	CO	GP	SA
Coarsest bed sediment size class	CO	GP	SA	CO	GP	SA	CO	GP	SA	CO	GP	SA	CO	GP	SA	CO	GP	SA
Average bed sediment particle size	2.26	2.16	1.79	2.63	2.63	2.53	2.53	2.37	1.84									
Bank top vegetation structure	2	2	2	4	4	2	4	2	3	2	3							
Bank top tree feature richness	2	1	0	2	4	3	4	3	3	2								
Bank top water-related features	0	0	0	0	2	1	0	0	0	0								
Bank face riparian vegetation structure	3	4	2	4	3	4	4	3	4	4								
Bank face tree feature richness	3	2	1	4	3	2	4	3	3	2								
Bank face natural bank profile extent	3	3	3	3	3	3	3	3	3	3								
Bank face natural bank profile richness	3	3	2	4	3	4	3	4	3	2	2							
Bank face natural bank material richness	3	3	3	3	3	3	3	3	3	3								
Bank face bare sediment extent	4	2	3	4	1	4	3	3	4	4								
Channel margin aquatic vegetation extent	1	3	2	3	2	2	2	2	2	0								
Channel margin aquatic morphotype richness	2	3	2	2	1	2	2	2	1	0								
Channel margin physical feature extent	2	2	1	2	3	2	2	2	2	1								
Channel margin physical feature richness	3	3	3	2	4	3	3	3	2	2								
Channel aquatic morphotype richness	0	0	0	1	0	1	1	1	1	0								
Channel bed tree features richness	2	1	2	3	3	3	2	3	1									
Channel bed hydraulic features richness	2	2	2	2	2	2	2	2	2	2								
Channel bed natural features extent	2	2	2	2	3	2	2	2	2	1								
Channel bed natural features richness	1	1	1	1	2	1	1	1	1	1								
Channel bed material richness	2	4	3	4	4	4	4	4	4	4								



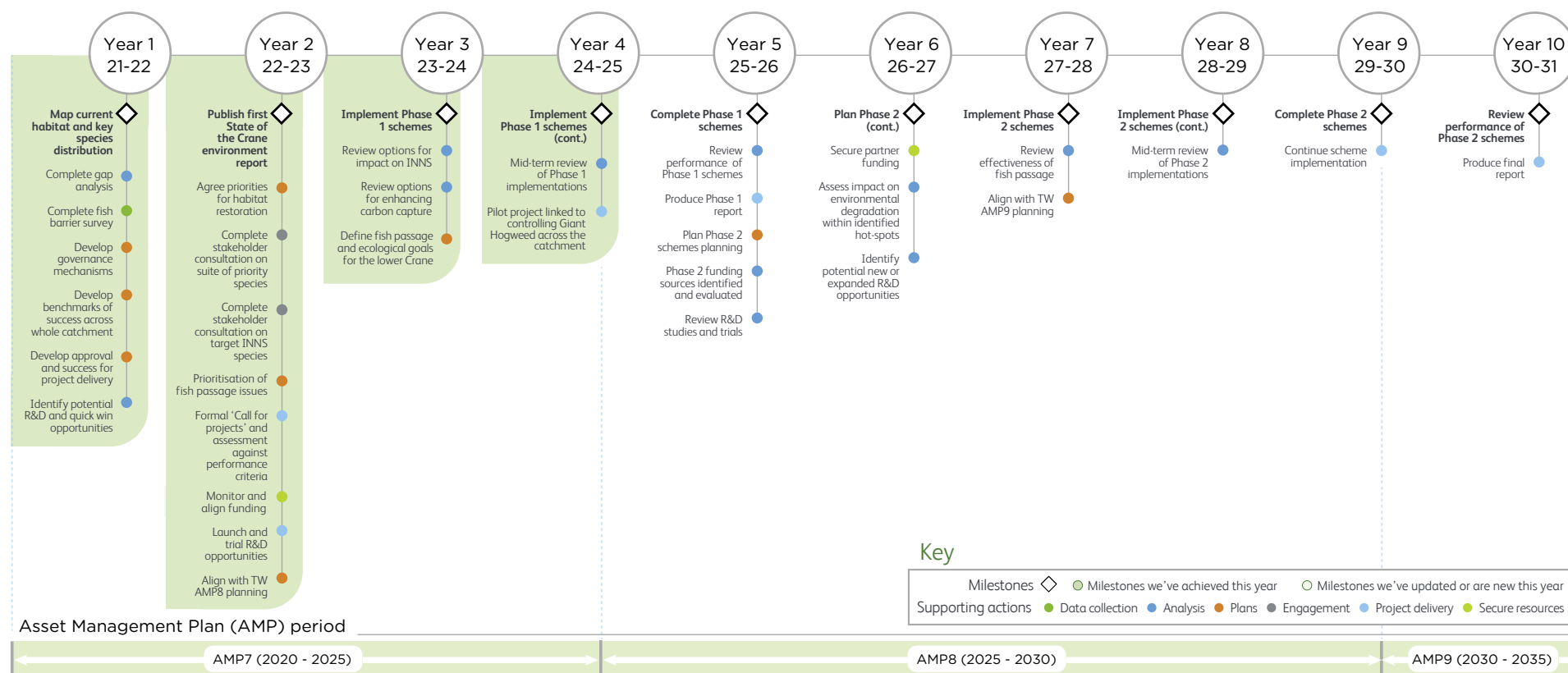
# Delivering our shared long-term plan

Here are the milestones we achieved in 2024/25. Over the coming months we will be working on finalising any updates to future milestones, following a full review of progress achieved over the last four years.

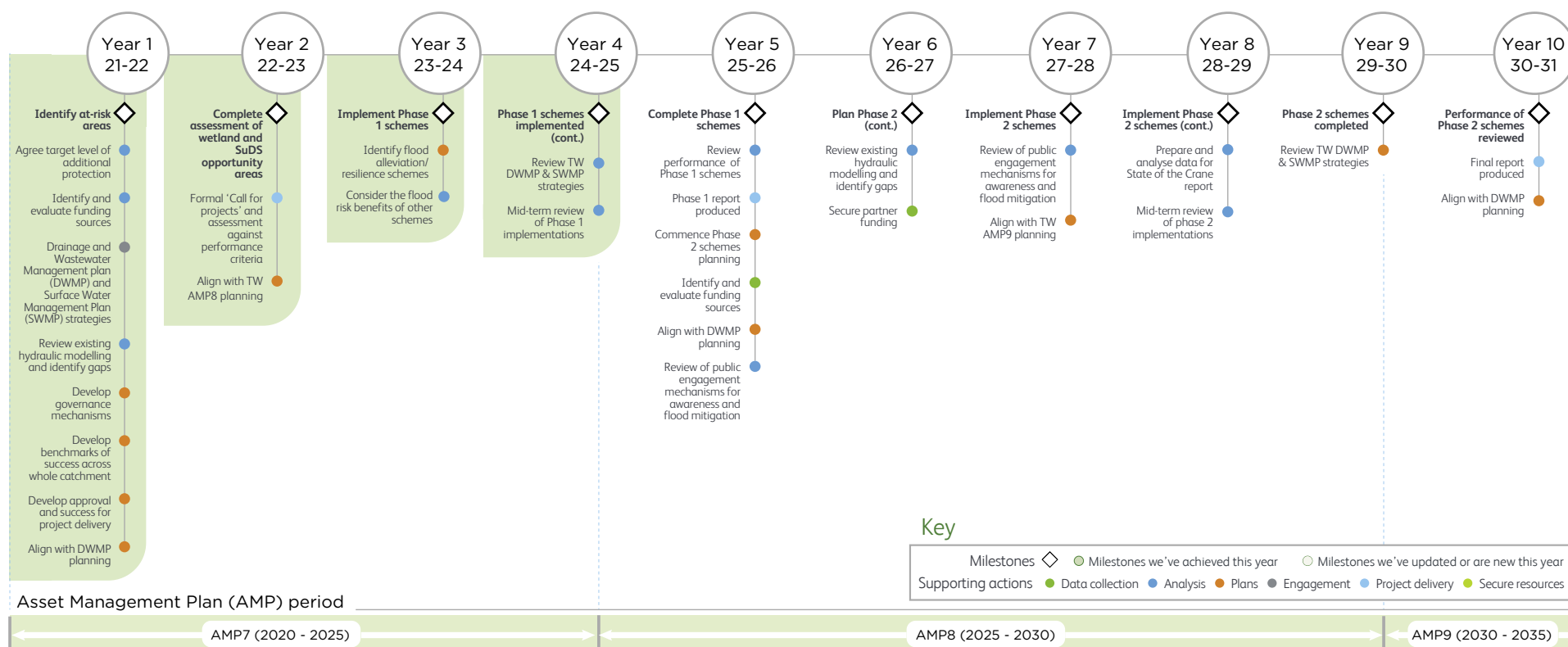
## Promote public awareness access and participation



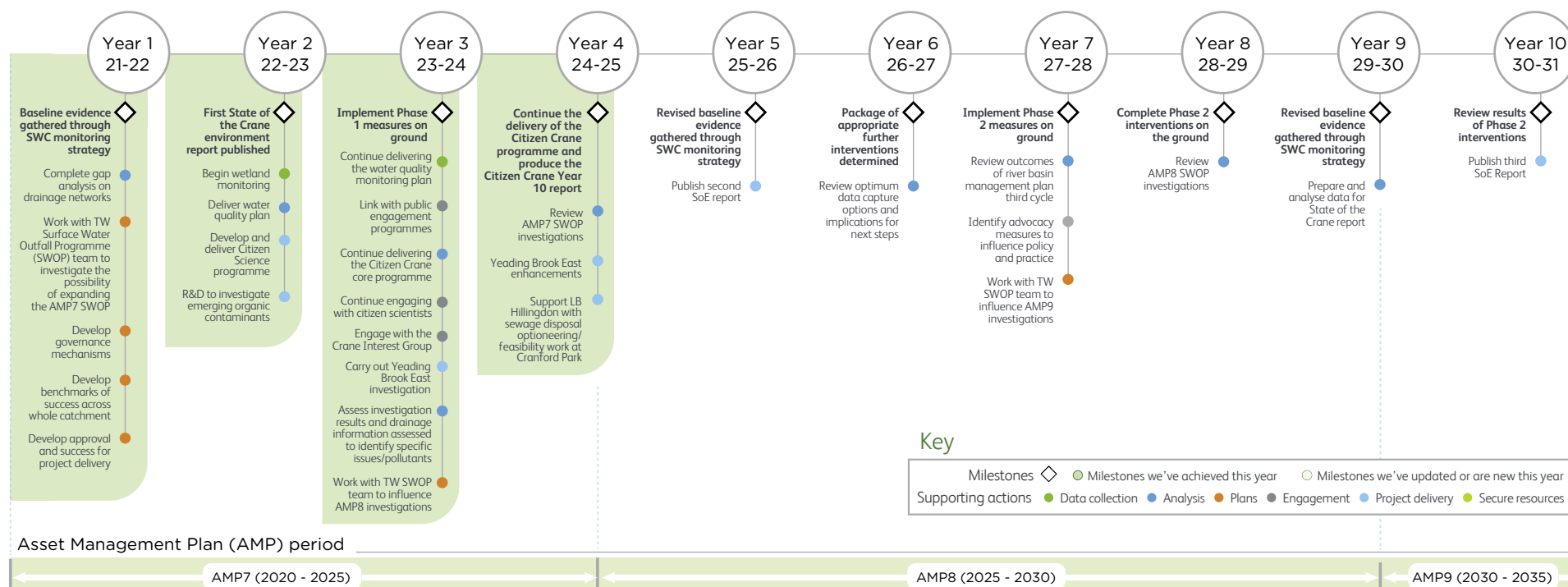
# Enhance biodiversity and ecological connectivity action plan



# Enhance flood resilience for at-risk areas action plan

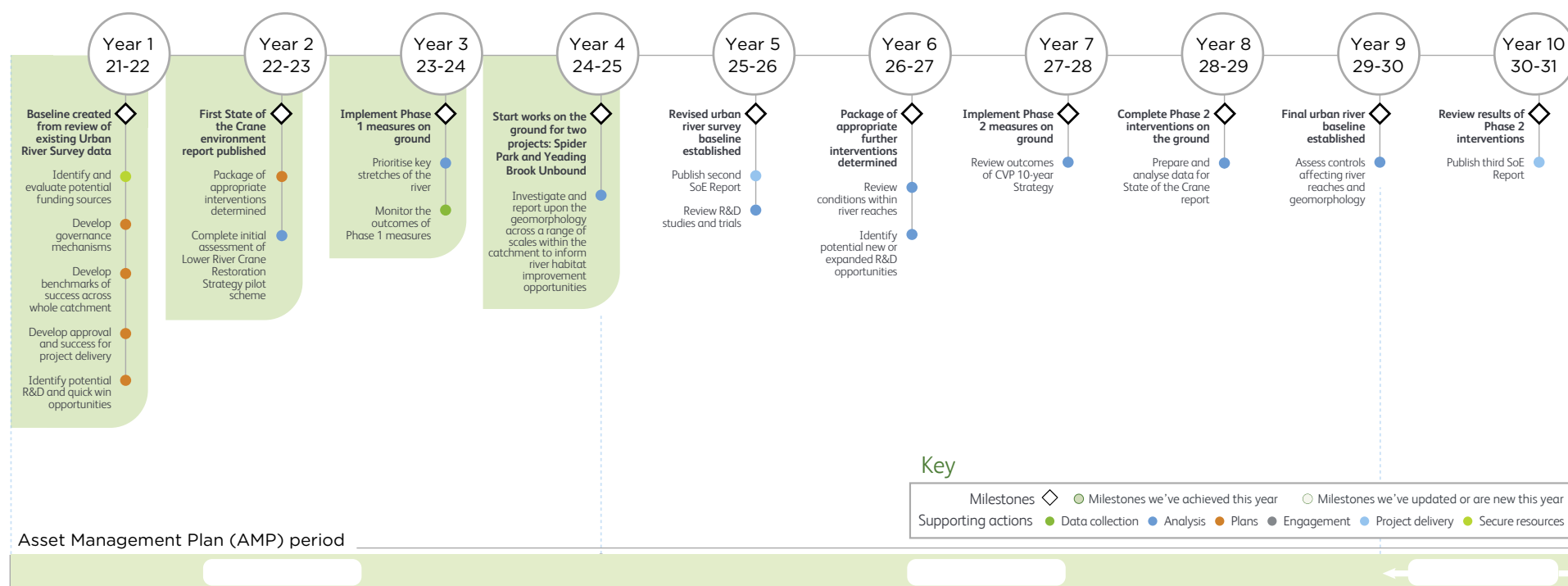


# Improve water quality in the catchment action plan





# Improve geomorphology in the catchment action plan



# Acknowledgements

We'd like to thank all the organisations and individuals in the partnership who've contributed their valuable technical inputs, insights and time. Through various forums and engagement platforms, we've been able to jointly develop this plan. We greatly appreciate everyone's commitment and enthusiasm, so we can collectively achieve this vision and deliver the plan.

The information provided in this plan is correct as of 31 March 2025 and has the formal support of all key stakeholders.

## Partners

Atkins

CAMELLIA project:

- British Geological Survey
- Imperial College London
- University College London
- University of Oxford

Cartographer

Crane Valley Community Interest Company

Environment Agency

Friends of Headstone Manor Park (FoHMP)

Friends Of the River Crane Environment (FORCE)

Frog Environmental

Groundwork London

Habitats and Heritage

Heathrow Airport Limited

Let's Go Outside and Learn CIC

London Borough of Ealing

London Borough of Harrow

London Borough of Hillingdon

London Borough of Hounslow

London Borough of Richmond upon Thames

London Wildlife Trust

Metis

River Restoration Centre

Sustrans

Thames Anglers' Conservancy

The Conservation Volunteers (TCV)

Wild Future

Zoological Society of London (ZSL)

## Photography

Front cover photos taken by FORCE,  
John Waxman - Crane Valley Community  
Interest Company, Thames Water and  
Wild Future

Page 2 photos taken by Thames Water

Pages 3 and 10 photos taken by FORCE

Pages 5, 6, 7, 8, 9 and 10 photos taken by  
John Waxman, Crane Valley Community  
Interest Company

Page 10 photo taken by Wild Future



Welcome

What we're  
aiming to  
achieve

A project  
case study

Delivering our  
shared long-  
term plan

Acknowledgements

# Your views

We'd really welcome your views on this smarter water catchment plan. Please share your thoughts and ideas on an email to our dedicated team at [partnerships@thameswater.co.uk](mailto:partnerships@thameswater.co.uk).

Working in partnership

