



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.

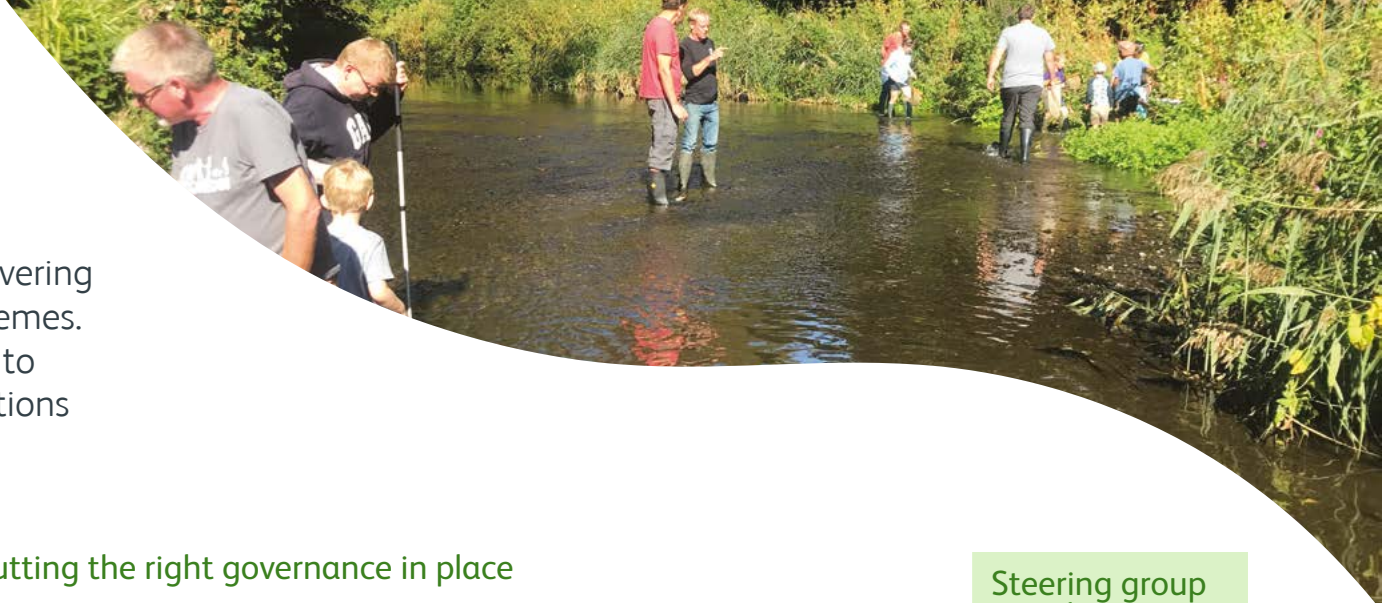
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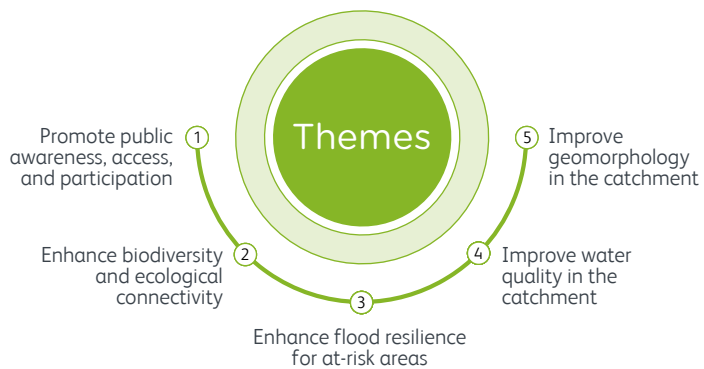


What we're aiming to achieve

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

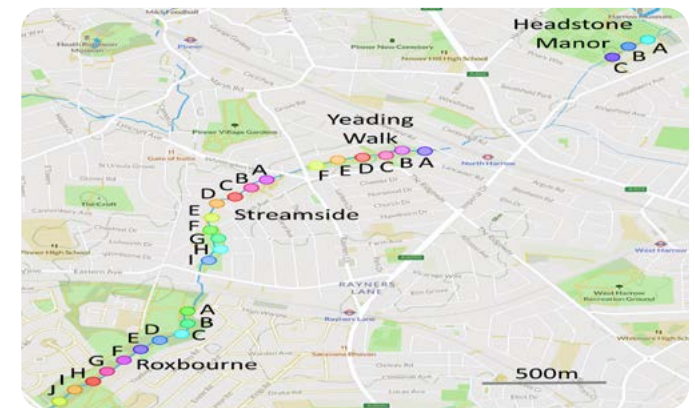
- Although urban sections of river can be heavily modified and highly vegetated, they can have highly diverse physical habitats and healthy functions
- Local citizen scientists are keen to learn more about their local river habitats and gather data to influence decisions

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



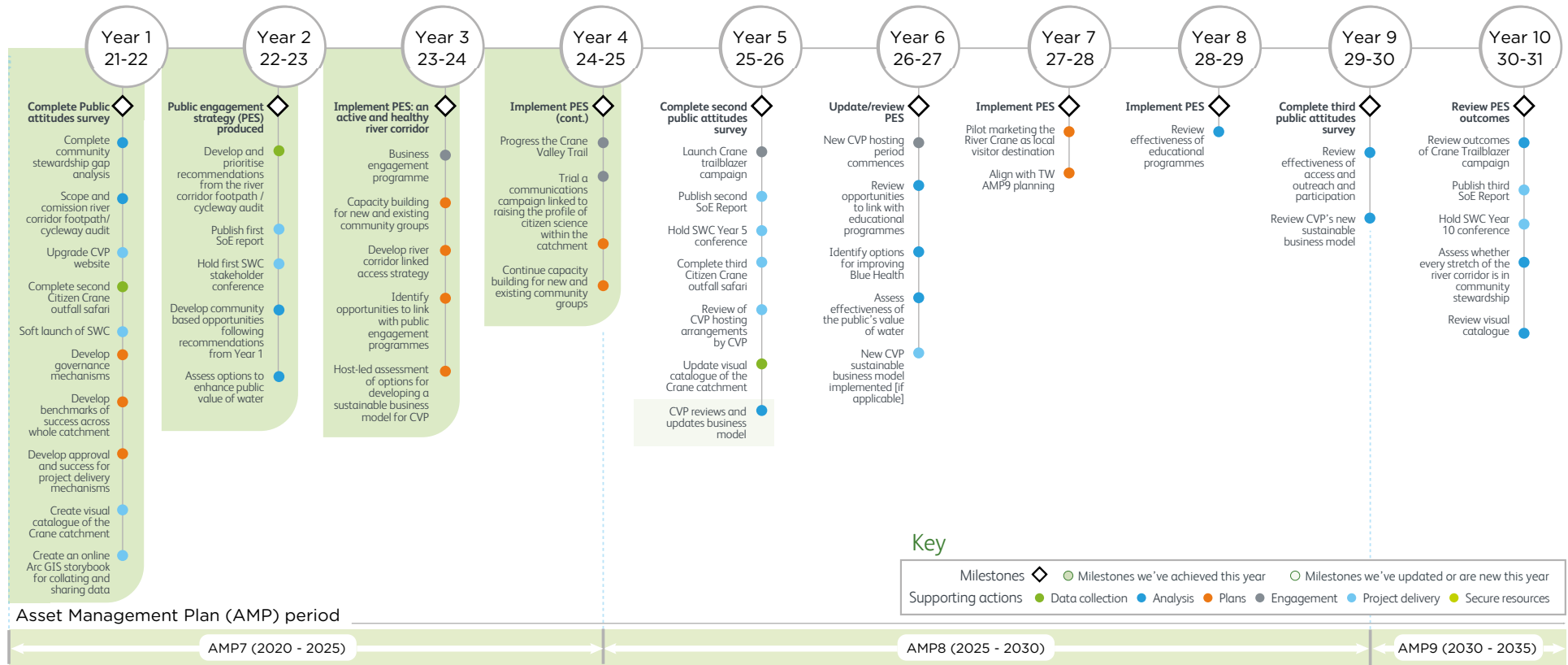
INDICATOR NAME	A			B			C			D			E			F		
	CO	CO	GP	CO	CO	GP	CO	CO	GP	CO	CO	GP	CO	CO	GP	CO	CO	GP
Coarsest bed sediment size class	SA	GP	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA
Average bed sediment particle size	SA	GP	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA
Bank top vegetation structure	2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



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.

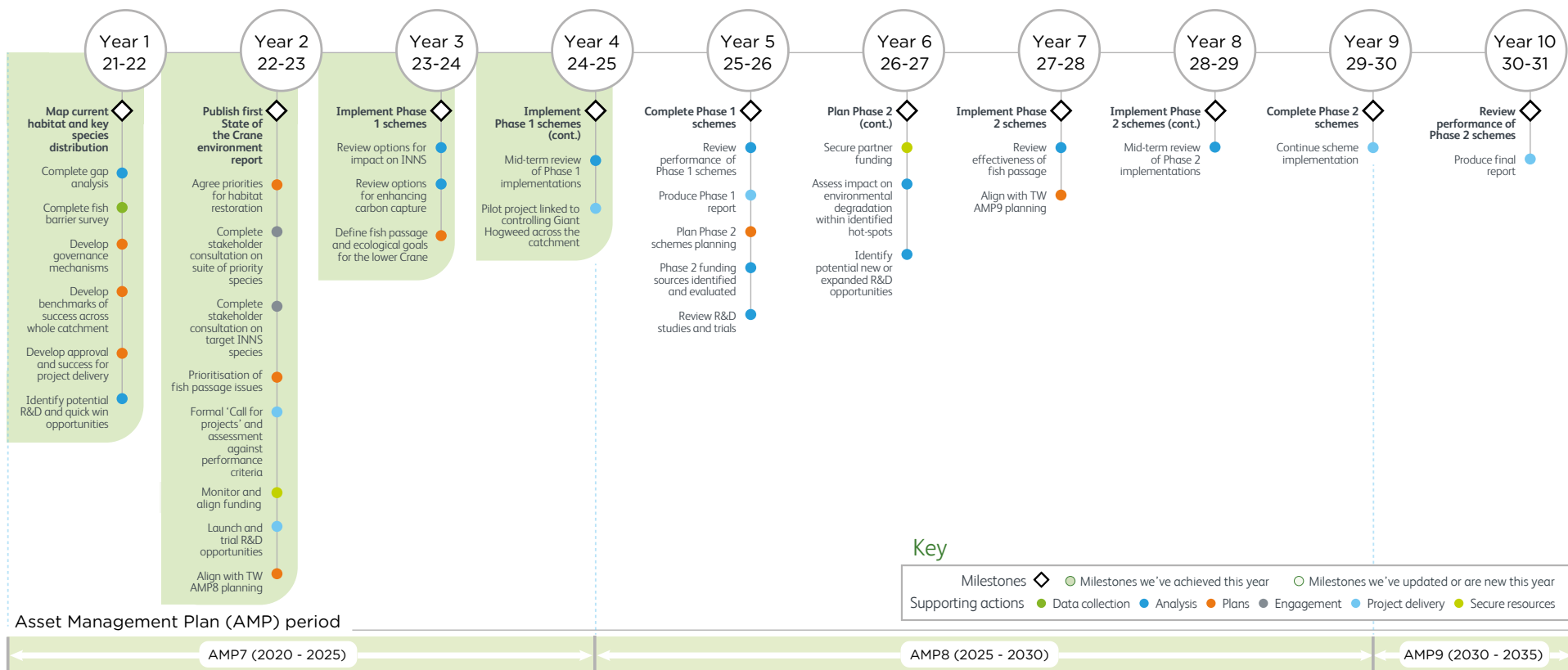
Promote public awareness access and participation



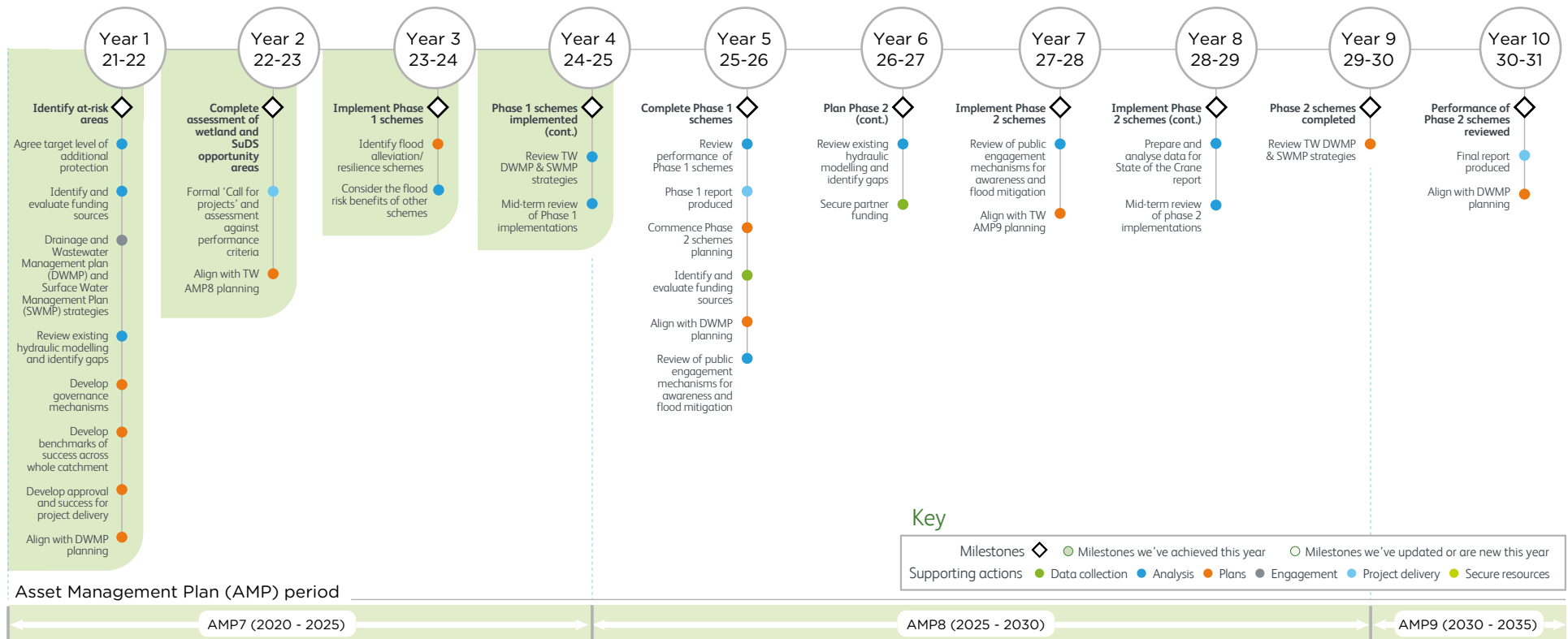
Key

- Milestones ◇ ● Milestones we've achieved this year ○ Milestones we've updated or are new this year
- Supporting actions ● Data collection ● Analysis ● Plans ● Engagement ● Project delivery ● Secure resources

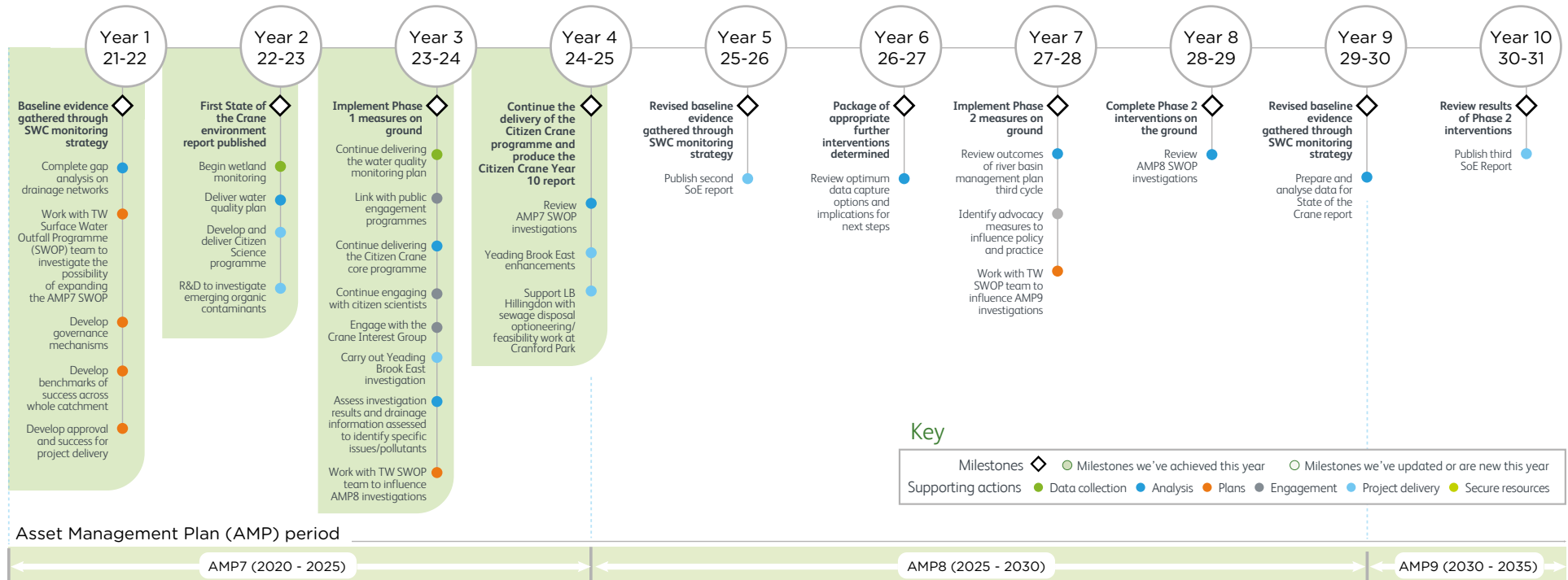
Enhance biodiversity and ecological connectivity action plan



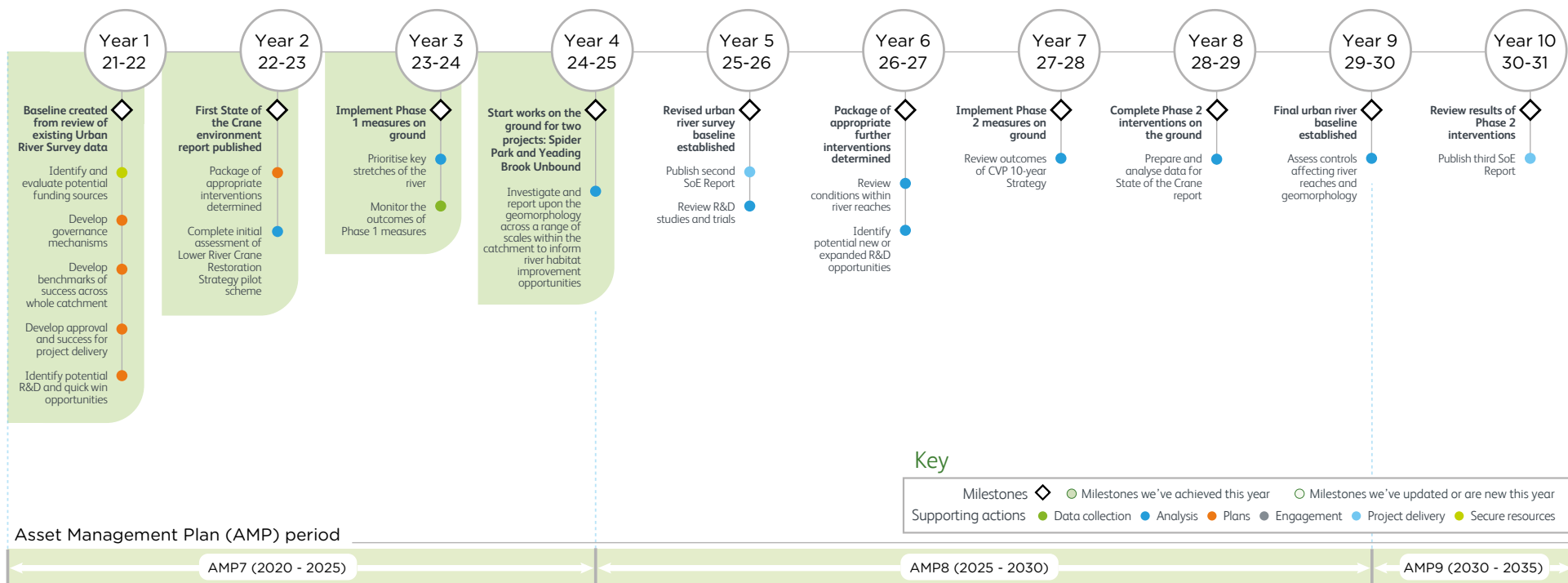
Enhance flood resilience for at-risk areas action plan



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 | Heathrow Airport Limited |
| CAMELLIA project: | Let's Go Outside and Learn CIC |
| • British Geological Survey | London Borough of Ealing |
| • Imperial College London | London Borough of Harrow |
| • University College London | London Borough of Hillingdon |
| • University of Oxford | London Borough of Hounslow |
| Cartographer | London Borough of Richmond upon Thames |
| Crane Valley Community Interest Company | London Wildlife Trust |
| Environment Agency | Metis |
| Friends of Headstone Manor Park (FoHMP) | River Restoration Centre |
| Friends Of the River Crane Environment (FORCE) | Sustrans |
| Frog Environmental | Thames Anglers' Conservancy |
| Groundwork London | The Conservation Volunteers (TCV) |
| Habitats and Heritage | 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 | Pages 3 and 10 photos taken by FORCE |
| Page 2 photos taken by Thames Water | 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 |



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.

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