



River Chess Smarter Water Catchment

Working together to protect and enhance our water environment

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

Smarter Water Catchment Plan
Update Document
March 2025

Working in partnership



Environment
Agency



Chilterns
National
Landscape



AffinityWater



Herts &
Middlesex
Wildlife Trust



Queen Mary
University of London

Welcome to this update

In March 2021, we collectively set out a 10-year plan to protect and enhance the River Chess 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 Chess 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 Chess 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 Chess 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 working groups for 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 Chess catchment?

Our collective vision is for the Chess catchment to be a jewel in the heart of the Chilterns landscape. We want to create a place where people are working together to protect and improve the water environment for everyone. From the headwaters in Chesham to its confluence with the River Colne in Rickmansworth, we want the River Chess to possess the clean, plentiful, flow characteristics of a healthy chalk stream. We want to ensure that the river is sensitively managed, meeting the needs of all those that rely on its resource whilst enabling it to reach its full biological potential, supporting rich and diverse populations of fish, birds and other wildlife.

We also want the wider catchment to be a working landscape that is managed for the benefit of both people and wildlife. We want to minimise the impact of pollution, flooding and non-native invasive species and conserve a connected mosaic of wildlife-rich habitats. We want to create a natural and attractive amenity for people to enjoy and improve social wellbeing for present and future generations. We've identified year-on-year actions under each of our key themes so that we can work towards this vision together.

Steering group members

Affinity Water
Buckinghamshire Council
Chilterns National Landscape
Chiltern Society
Environment Agency
Hertfordshire & Middlesex Wildlife Trust
Thames Water
The River Chess Association

A project case study

Flow monitoring

Start date: April 2022 **End date:** On-going

Project description

Led by the River Chess Association (RCA) and in partnership with Chilterns National Landscape (CNL), the Environment Agency (EA) and Thames Water, the project has initiated additional flow monitoring. The requirement was identified by the National Environment Programme study of the River Chess by Affinity Water and Thames Water. The purpose is to better understand the pattern of flow in the upper part of the catchment, where the river comprises multiple channels fed from several different sources. Volunteer flow monitors were trained by the EA to conduct consistent surveys across ten sites in the upper catchment, upstream of Chesham Sewage Treatment Works.

Objectives

1. Identify trends in flow patterns: delivered through long-term monitoring
2. Engage Volunteers: through the co-ordination of site-specific teams
3. Provide consistent and accurate data: through competent and reliable volunteers

Outcomes

- Monthly flow surveys have been conducted consistently for almost seven years (since December 2016) feeding into the long-term datasets
- 12 volunteers have been engaged and trained as part of the project
- The long-term monitoring has provided a consistent body of accurate data for the same sites, which is utilised by the EA
- The surveys have captured useful changes in river flow (following cessation of abstractions by Affinity Water), and will continue to account for future plans at Hawridge Pumping Station by Thames Water

- The project has provided more detail of flows in some of the tributary channels and has helped give a better understanding of flows in the upper catchment

Project costs

Thames Water Contribution:	£5,000
Partner Contribution:	£23,000
Total Costs:	£28,000

Lessons learnt

- Challenges with volunteer involvement as it requires regular commitment. Working in the river in all weathers can be demanding for volunteers
- The need for periodic testing and recalibration of the flow meters by the EA. This involved periods of several months during which a meter was unavailable and isn't possible during storm discharges which can impact long-term datasets
- Drying of the upper channel and excessive growth of bankside and in-stream vegetation made surveys difficult or impossible to conduct at times
- The two new flow monitors are very technical and require additional training; there have been some difficulties on the use of the kit. Also concerns about site access as the equipment is large and expensive
- Data storage and sharing should be considered to ensure legacy and open access to datasets

Future plans

Chilterns National Landscape aspire to create an online portal that will allow for communication between volunteer groups and help to make the co-ordination of surveys and sharing equipment more efficient.

Through the use of the two new flow monitors, the RCA team have extended their monitoring to include all the sites previously surveyed regularly by the EA on the River Chess. Additional volunteers have been recruited and training is being provided.

Project highlights

- RCA was given two new advance flow monitoring kits in 2023 funded through the Smarter Water Catchment Programme and the EA
- Flow monitoring has increased from 6 to 20 sites
- RCA has received positive feedback from the EA on the quality of data collected. The EA has asked the volunteer team to extend their flow monitoring to cover the full length of the River Chess
- The flow monitoring work was presented at the "Chilterns Champions" conference in October 2020 and now reports to the Managing Flows Working Group. It's one of several activities that feed into the Thames Water Smarter Water Catchment initiative



Flow Monitoring Training



Flow Monitoring



Flow Monitoring Training



**River Chess
Smarter Water
Catchment**



**Chilterns
National
Landscape**

Welcome

What we're
aiming to
achieve

A project
case study

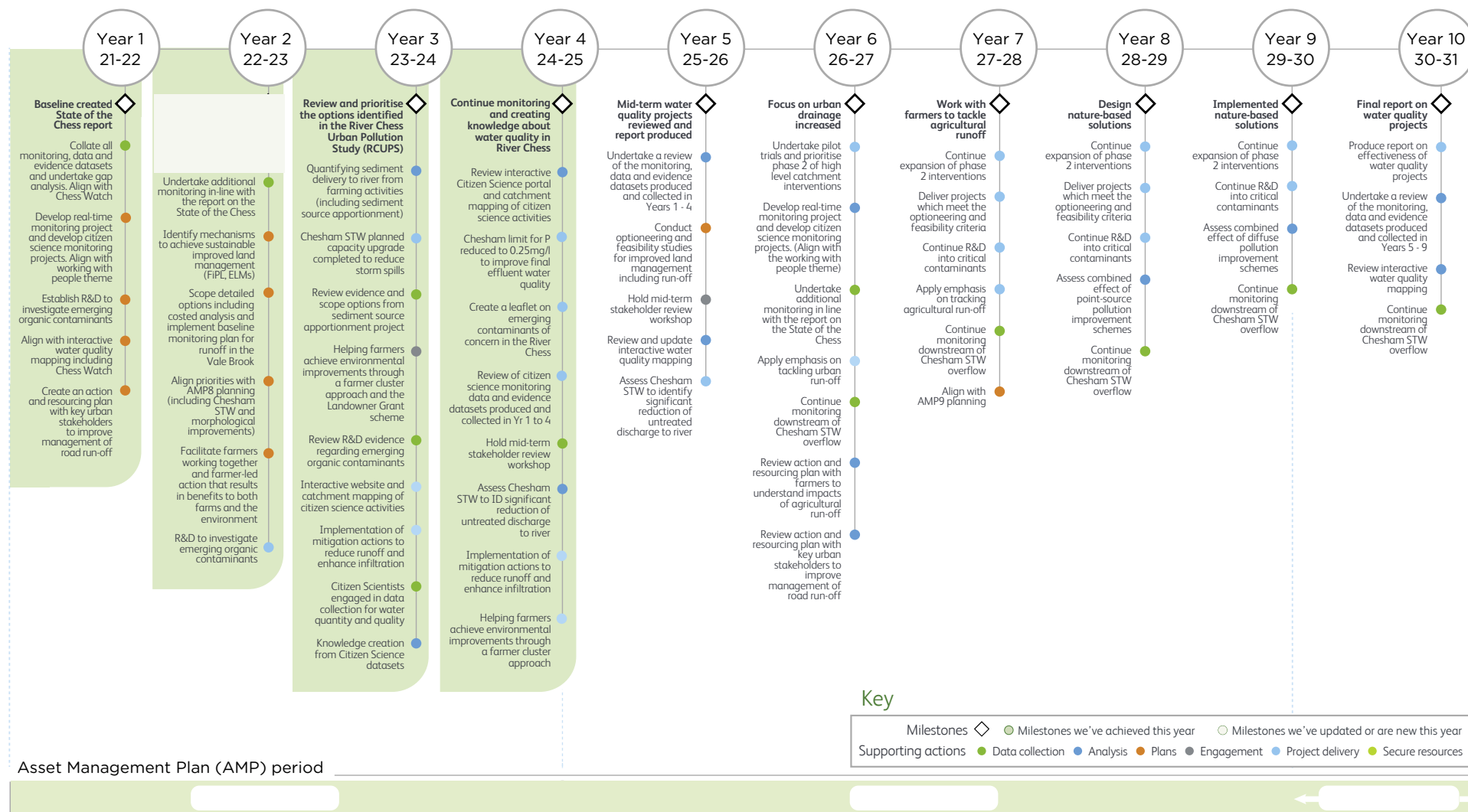
Delivering our
shared long-
term plan

Acknowledgements

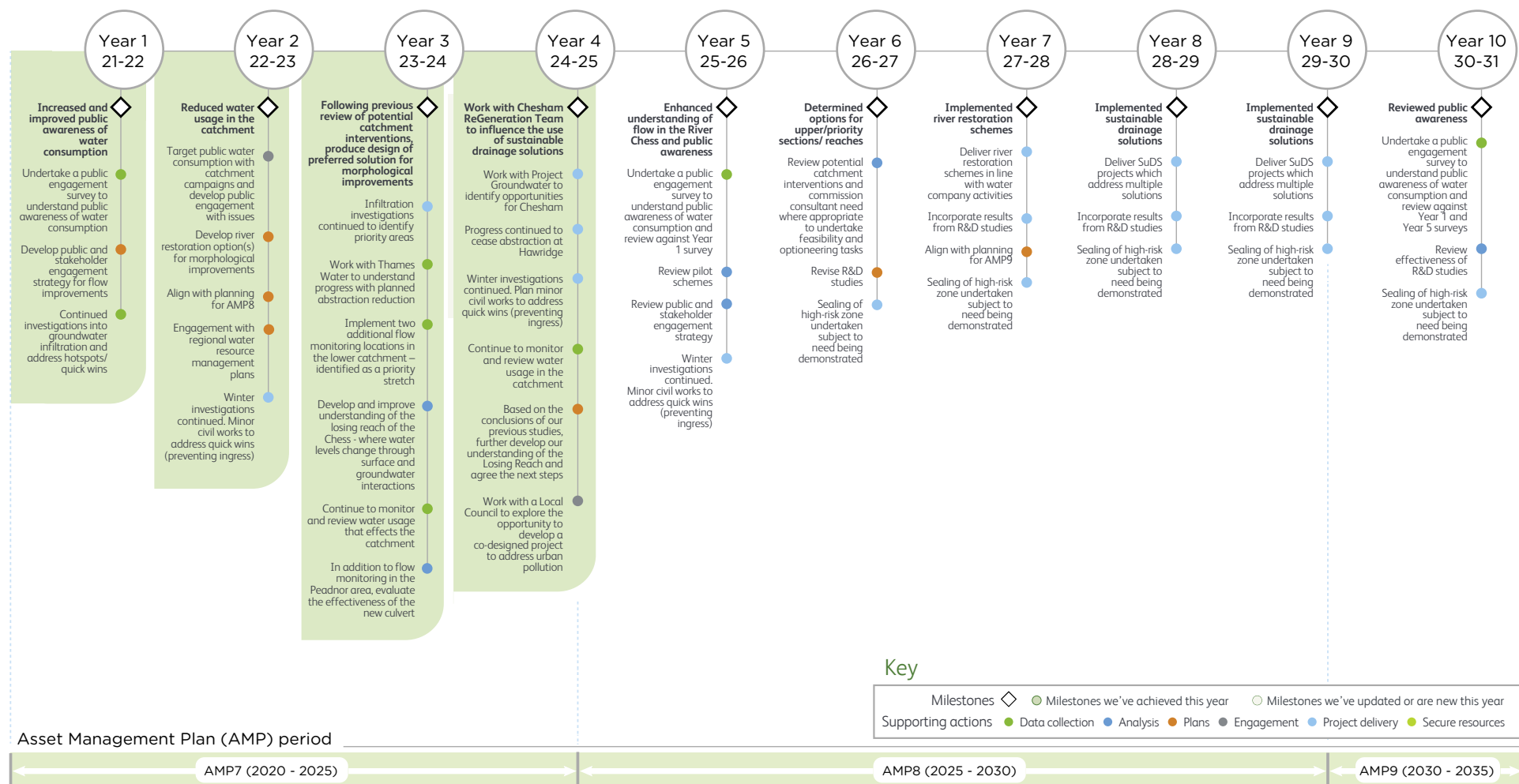
Delivering our shared long-term plan

Here are the milestones we achieved in 2024/25. Updates to future milestones will follow once the revised catchment plan (2025-2035) has been finalised.

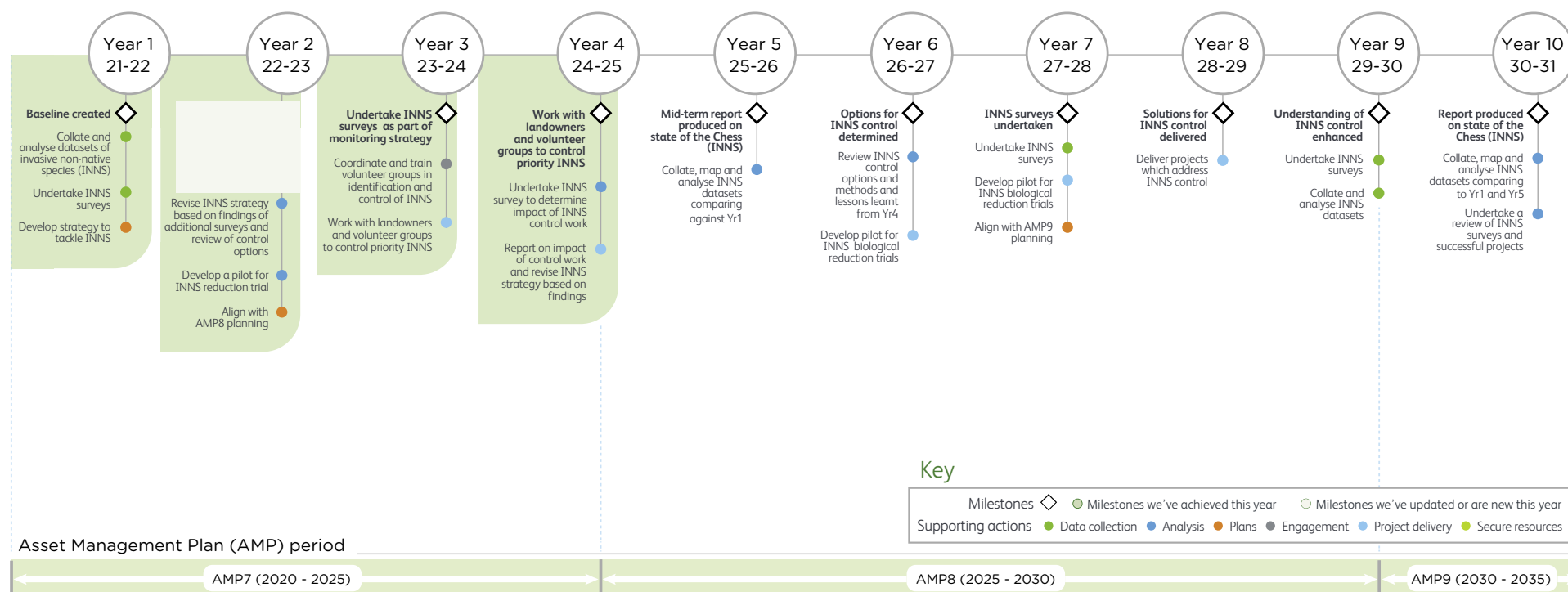
Improving water quality action plan



Managing flow action plan



Control of invasive non-native species action plan



Welcome

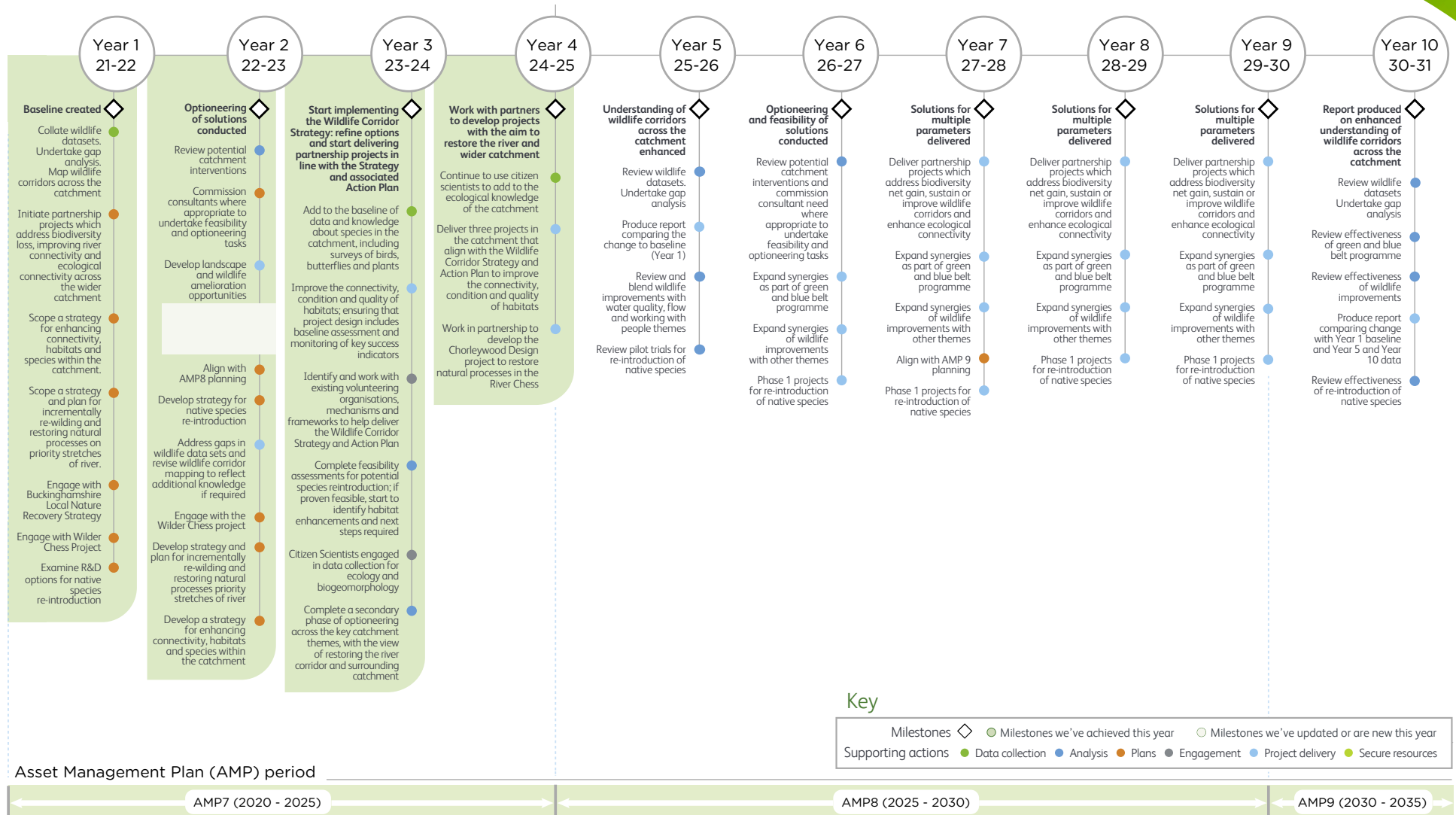
What we're aiming to achieve

A project case study

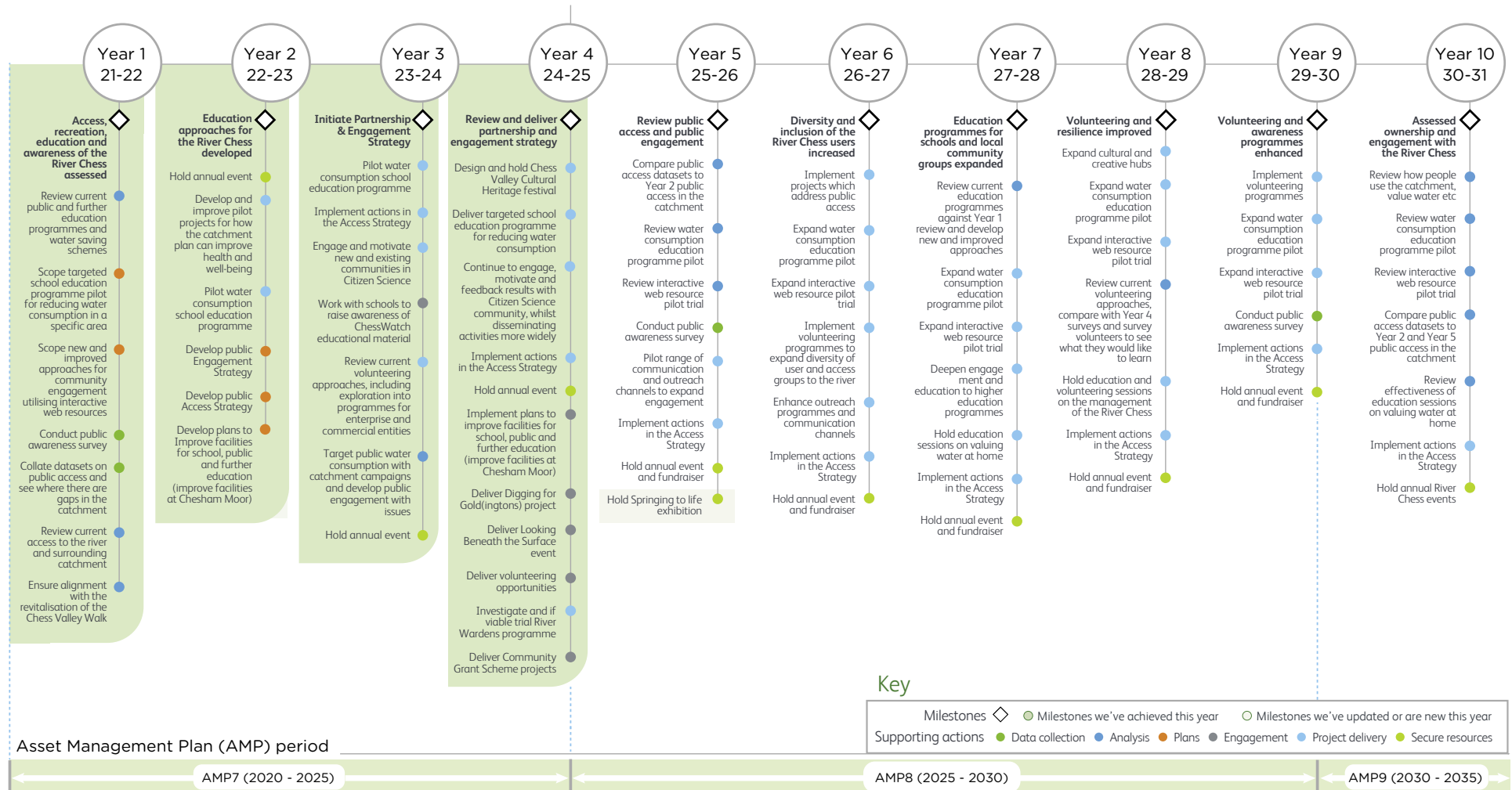
Delivering our shared long-term plan

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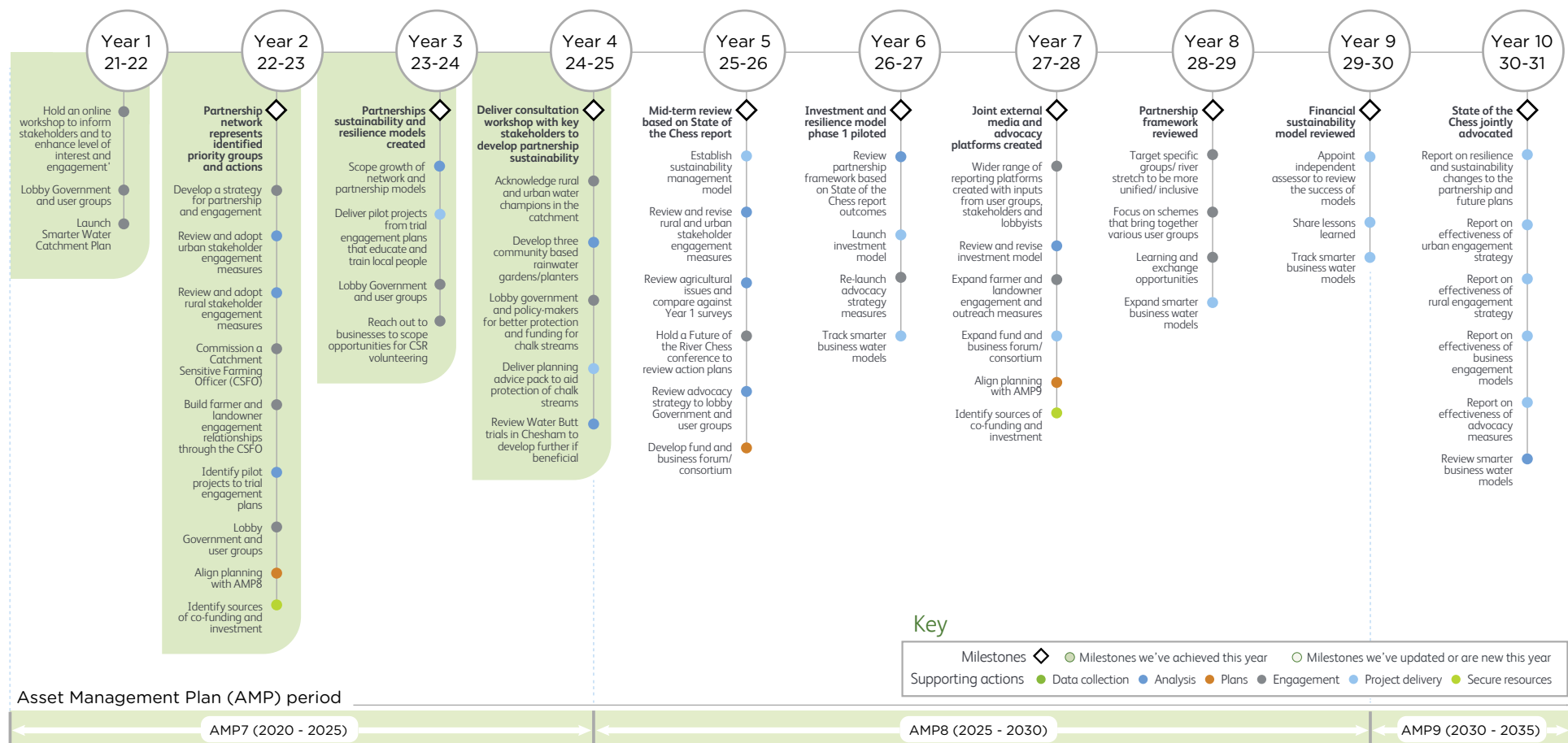
Improving wildlife corridors action plan



Involving people action plan



Working together 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

Affinity Water	Environment Agency
Amersham Birdwatching Club	Hertfordshire County Council
Blackwell Farm	Hertfordshire & Middlesex Wildlife Trust
Buckinghamshire Council	Latimer Park Fly Fishers
Chenies Fly Fishers	Loudwater Residents Association
Chenies Parish Council	Mott MacDonald
Chesham & District Natural History Society	Queen Mary University of London
Chesham Environment Group	Restore Hope
Chesham Renaissance CIC	River Chess Association
Chesham Town Council	Sarratt Parish Council
Chilterns Chalk Streams Project	Sustainable Chesham
Chilterns National Landscape	Three Rivers District Council
Chiltern Society	

Photography

Front cover photos taken by Allen Beechey - Chilterns National Landscape, Paul Jennings - River Chess Association and Restore Hope

Pages 2, 6, 7, 8, 9, 11 photos taken by Allen Beechey, Chilterns National Landscape

Page 2, 5, 10 and 11 photos taken by Thames Water

Page 3 photo taken by Paul Jennings, River Chess Association

Page 4 photos taken by Chilterns National Landscape





**River Chess
Smarter Water
Catchment**

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.

Working in partnership



CHILTERN'S
CHALK STREAMS
PROJECT



Chilterns
National
Landscape



Environment
Agency

AffinityWater



Herts & Middlesex
Wildlife Trust



Queen Mary
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