## Essex Flood Board Anglian Water Update

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## Background

#### Who are we

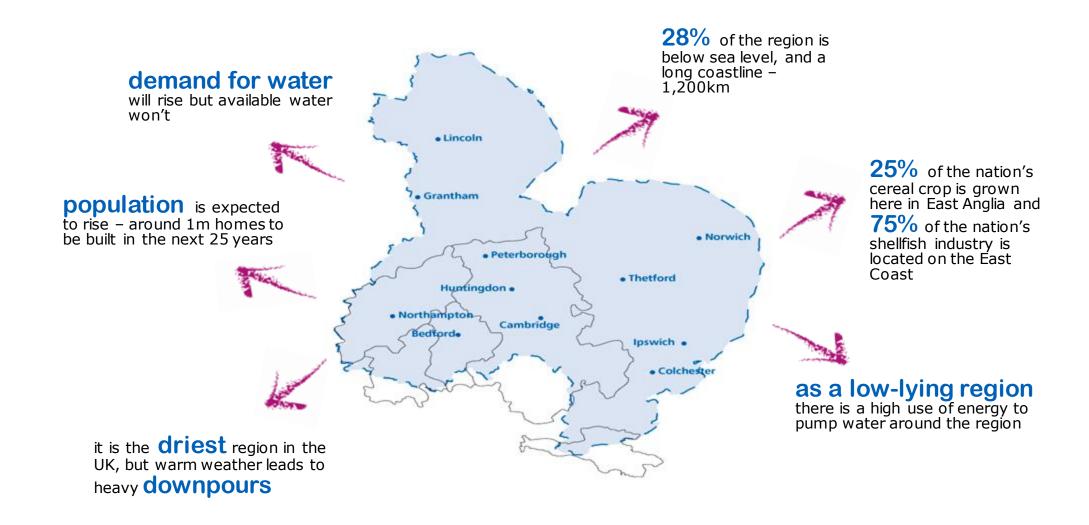
- 4.3 million customers use 1.1 billion litres of water every day – enough to fill 440 Olympic swimming pools.
- 37,232km of water supply pipes.
- 140 water treatment works.
- 5.6 million customers use c. 1 billion litres of used water every day.
- c. 77,000km of sewers
- 1,257 water recycling centres.
- Over 4,000 sewerage pumping stations.







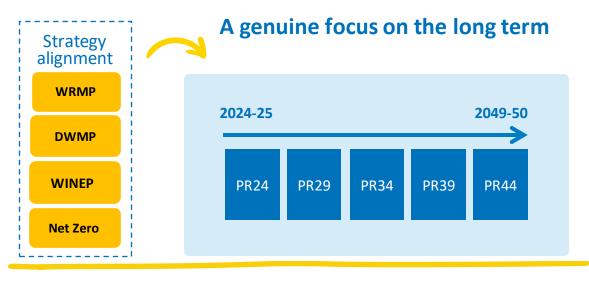
## Our region – it's vulnerable



## **AW** purpose & strategic priorities

'To bring environmental and social prosperity to the region we serve through our commitment to Love Every Drop'





The role of cross-cutting themes





Our purpose and the four strategic ambitions outlined in our SDS drive consistency through our plans.



Our Long Term Delivery Strategy, alongside our other strategic plans, outlines how we will reduce risk over multiple AMPs.



The follow on from our Get River Positive commitments.



Our cross cutting themes lead us to think differently about the way we create solutions:

- Digital using digital assets to get more.
- Innovation using new technologies.
- Place based thinking looking at a catchment as a whole.
- Working with others achieving more together.

## Our journey so far



AMP6 AMP7 AMP8

- Industry leader in partnership working for individual flood and environment schemes
- Recognised for our leading customer engagement
- A shift to focus on long term via our water
   resources management plans

- Increased focus of long term resilience in the development of our surface water management strategy for flooding resilience, DWMP and net zero
  - Embed six capital thinking to recognise our ambition to deliver wider social and environmental benefits



A broadening of our partnership working ambitions. Examples such as the Future Fens: Integrated Adaptation where infrastructure investment seeks to unlock economic growth & local investment as well as benefitting nature and tourism as showcased at the Global COP26 summit

- We seek to fully embrace the opportunities and flexibility provided by a longer term approach to outcomes based regulation
- The delivery of our most ambitious environmental programme to date
- Further expansion of our partnership programme to seek co-funding
- A focus on blue-green instead of grey solutions

#### 2015-2020

Delivery of 40 flooding partnership schemes

#### 2021

Identification of 4 trial catchments for SWM removal for delivery by 2025

#### 2020-2025

Deliver 92 flooding partnership schemes

#### **April 2023**

Final WINEP agreed including A-WINEP

#### **July 2023**

Submit PR24 and Long term delivery strategy to 2050

#### 2018

Delivery of first wetland partnership (AW, NRT, EA)

#### 2020-2021

Identify 26 locations for investigating wetland partnership opportunities

#### 2022

Launch Get River Positive

#### May 2023

Publish DWMP outlining how we will work with partners for long term benefits

#### December 2024

Final determination for 2025-2030 plan

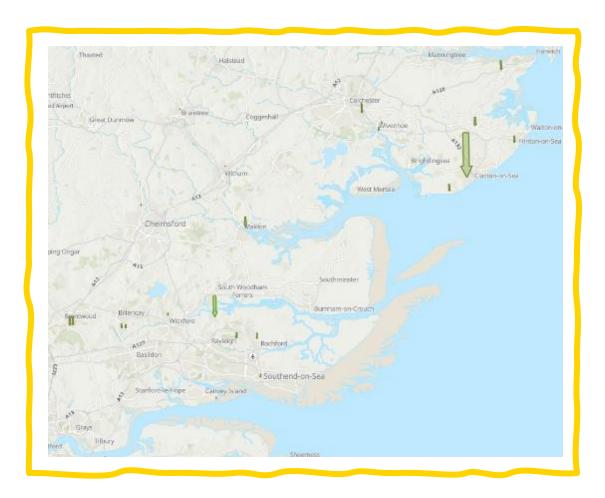
## Quick update on business planning

### WINEP & PR24

#### Building investments for the future – 2025 to 2030 and beyond

- We continue to identify locations where we think there might be opportunities to work together with others.
- We are interested in exploring opportunities to improve river water quality in:
  - Canvey Island
  - Chelmsford
  - Wivenhoe
  - Colchester
  - Maldon
  - Kirby
  - Frinton
  - Gt Wakering
  - Southend

- We are interested in exploring opportunities to reduce flood risk through partnership working in:
  - Benfleet
  - Billericay
  - Clacton on Sea
  - Frating
  - Wickham Bishops
  - Harwich
  - Boxted
  - North Fambridge
  - Manningtree
  - Pitsea
  - Hutton
  - Frinton
  - Wickford
  - Witham



## **Anglian Water's A-WINEP Vision**

10-year investment in partnership development and delivery

We will invest £26m of customer money to unlock additional external match funding and deliver wider environmental & social outcomes.

The Advanced-WINEP is our opportunity to provide consistency to collaborative environmental delivery, facilitating a longterm partnerships approach to enable the delivery of wider environmental gain and social prosperity in our urban and river catchments. It will also provide the template for the sector for a different way of working for PR29 and beyond.



#### **Partnership Centre of Excellence**

We will create a Partnership Centre of Excellence that brings together stakeholders including the water industry, NGOs, and local government to deliver improvements in river and coastal waters through nature first solutions.

This will help to resolve barriers to partnership working and deliver partnership solutions at a larger scale than before to enable both wider environmental and social outcomes and to increase confidence in the approach to inform future WINEP development.



We will also explore where wider environmental outcomes can be delivered outright, through a partnerships grant fund.

This will be available to support emerging partnership opportunities within target catchments, maximising value to customers and the environment.

The grant fund will be managed in accordance with the principles developed as part of Anglian Water's Get River Positive programme.

## Why Do We Need A-WINEP?

## Partnerships require time, effort, leadership and funding in order to be effective

Experience shows that setting up and maintaining strategic partnerships can be challenging without a consistent resource to support the development of projects and alignment of funding streams.

Often partnerships lose momentum or become reactive to short-term funding opportunities, limiting the full benefits that could be achieved.

Taking a longer-term approach will help to navigate this challenge, whilst providing a natural transition between PR24 and PR29.

The existing regulatory framework limits this type of approach. Short term obligation deadlines encourage the use of traditional grey solutions. However, allowing more time to shape partnerships and encourage more sustainable approaches can lead to more nature based solutions being delivered, with the associated greater range of benefits.



#### **Partnerships Approach**

Anglian Water's A-WINEP will provide resources that enable the continuation and expansion of partnership leadership in the Norfolk and Southend area.

The ultimate aspiration is that this would inform thinking across the sector for PR29, become a business as usual approach across the AW region from 2030, and fully embedded by 2035.

#### **Funding Action**

The grant fund would enable partnership quick-wins to be actioned, building trust and demonstrating the art of the possible with tangible delivery.

Greater understanding of the full range of potential benefits would be expected through this funding, with projects forming exemplars for shared learning across the industry.

## **A-WINEP Application and Benefits**

We envisage the A-WINEP approach being applied to our traditional WINEP programme in PR24 and beyond. Working in partnership over 10 years will enable increased delivery of nature-based solutions and wider outcomes that would not be achieved through working in isolation.

#### **Catchment Regeneration**

Water Quality & Morphological Improvement

Two of the major reasons for not achieving good ecological status within river catchments

#### **Traditional Approach**

Nutrient removal only at numeric WRCs to achieve AW's fair share Env. Act target

River restoration delivered through standard contractors on target river stretches

#### A-WINEP

Nutrient removal across the whole catchment, supporting all sectors to achieve environmental targets through existing and emerging nutrient markets

Wider catchment improvement through increased efficiency and partnership funding, delivering wider biodiversity and social benefit

#### Wider Benefits

Increased km enhanced
Local waterbodies improved
Good ecological status
Reduced soil loss
Biodiversity gain

Increased km enhanced
Recreation
Amenity

#### **Urban Regeneration**

Surface Water Management

Action to retrofit green infrastructure, such as sustainable drainage systems, to reduce the impact of storm overflows and reduce flood risk across urban catchments

#### **Traditional Approach**

Grey, end of pipe, solutions primarily benefiting AW infrastructure and delivering specific outputs at target storm overflows

No additional benefits to the wider community or environment

#### **A-WINEP**

Catchment-wide green solutions delivering overflow reduction target

Wider air quality, biodiversity, recreation, amenity and education benefit, as well as additional downstream flood risk reduction

Additional benefits to be measured - e.g. using the BEST tool

## Our Approach to Partnership Development

#### 10-year investment in partnership development and delivery

Taking a partnership approach to WINEP delivery allows us to integrate our environmental investment with wider catchment aspirations held by a diverse and large number of stakeholders. For this to be successful, we believe that a longer time period is needed than the traditional 5 year WINEP cycle, because relationships and strategic partnerships can take time to set up and run successfully.

Having more time will enable us to establish sustainable partnerships that facilitate the delivery of wider environmental outcomes over and above our statutory obligations, for the wider benefit of customers, communities and the environment.

However, we are not starting from scratch. There are many existing partners and partnerships that we work closely with across our A-WINEP areas, and there is a substantial opportunity for continuing the evolution and development of these partnerships and the funding that is available from a range of markets, including public and private investment.

Our partnership funding approach helps us ensure that we provide the best value for customers' money, while maintaining the standards of delivery, sharing the risk when delivering solutions, and providing greater benefits than if we undertook this work in iso lation.

#### We have an ambitious, stretching target: 70% partnership funding

Our experience and evidence shows us that our ambition is achievable:

- Norfolk Water Strategy Programme 95% partnership funding
- Get River Positive programme (confirmed) 70% partnership funding
- Get River Positive programme (committed) 77% partnership funding
- Flooding partnership funding programme ~ 65% partnership funding
  - e.g. Southend City Beach 85% partnership funding
- Catchment management 65% partnership funding

## **Urban Regeneration: Southend example**

#### **Problem**

Old historic combined sewer network with large number of flooding incidents. Improvements required at 11 storm overflows over the catchments to improve water quality. High levels of deprivation and poor socioeconomic and health outcomes in Southend



#### Solution

A place-based catchment approach to surface water management across multiple AMPs.
Green infrastructure should be the first option considered to solve the problem and installed through working in partnership.



#### **Outcomes**

Such an approach could deliver a range of benefits to the community and environment over and above those usually associated with a traditional approach. The costs and outcomes of these alternatives are outlined below

#### **Traditional WINEP options - £169m**

11 storm overflow achieve WINEP obligations by 2030

Localised improved flood resilience to properties downstream of storage tanks

8 Bathing Waters benefit from reduced spills 2025-2030

Low risk

A partnerships approach will align funding mechanisms and deliver far greater environmental outcomes.

A-WINEP options - £247m+ (enabled through partnership co-funding)

All overflows in the Southend catchments achieve WINEP obligations by 2035

Over 20,000 properties have increased flooding resilience (based on 1 in 50)

8 Bathing waters benefit from reduced spills 2025-2035

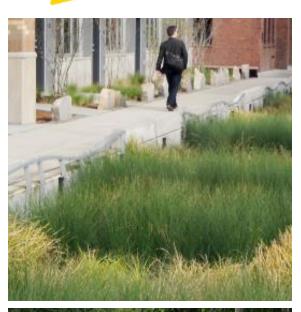
Urban regeneration of Southend enhancing the environment, tourism, health & wellbeing for a left behind community

547 biodiversity net gain units, 100's of volunteering and education opportunities

Embodies DWMP approach: A template for future collaborative catchment working

A wide list of other potential benefits – dependant on the priorities of co-funding partners

## Some examples

















# Thank you for listening







