

# AffinityWater

## AFW10 - Accelerated Infrastructure Projects (AIP)



# Accelerated Infrastructure Projects

## Background

Following the final decisions on approved Accelerated Infrastructure Projects (AIP) in 2023, we have progressed the following schemes:

1. Holywell PFAS
2. Broom Nitrate
3. Kingsdown Nitrate
4. North Stortford Nitrates
5. Smart Metering (This is not covered by this section)

## Works to Date

We have progressed each of these schemes through the internal governance process to ensure they are delivered as set out the in the final decision document. The process consists of an initial Investment Group and then formally approved by the Investment Committee that consists of CEO, CFO and the relevant Sponsor Directors. Project teams have been stood up for each of these and the progress each outlined below.

### Holywell PFAS

The scheme involves the replacement of Granular Activated Carbon (GAC) to remove PFAS for the raw water. We will replace the media in six GAC vessels. We have received a DWI Notice under Regulation 28(4) to complete three vessels by 31<sup>st</sup> March 2024 and three by 31<sup>st</sup> March 2025. We are seeing increasing PFAS concentrations in the raw water and without intervention will breach our internal threshold of 50% of the PCV concentration in 2024-25. Therefore, to protect water quality for customers we are proactively installing GAC within existing site infrastructure.

Our existing supply chain has been engaged and site visits have been conducted to ensure the safe delivery of the GAC media to be used within the vessels onsite. The team are now working on the delivery to site and are on track to deliver the first three vessels by March 24 and the final three vessels by March 25.

Scheme Name Holywell GAC PFAS						
Line Description	Units	2023-24	2024-25	2025-26	Notes	
<b>A</b>	Scheme Key Characteristics					
<b>1</b>	Expenditure per year (submitted)	£m	0.149	0.099	0.198	As submitted for AIP
<b>2</b>	Nr filters media replaced	No.	3	6	12	As submitted for AIP
<b>3</b>	Forecast Expenditure	£m	0.084	0.110	0.204	Forecast to complete
<b>4</b>	Nr filters media replaced	km	3	6	12	Forecast to complete

### Kingsdown/Broome Nitrate

The scheme involves developing 'shovel ready' solutions to build nitrate removal plants on both sites.

For Kingsdown we have received a DWI Notice under Regulation 24(4) to produce a detailed design and construction contract award by 31<sup>st</sup> March 2025 and, to complete construction, installation and commission the chosen solution by 31<sup>st</sup> March 2027. The site has been removed several times from supply due to high nitrates and whilst stops mobilises further nitrates resulting in a much longer out of supply period. This reduces the resilience within our Downsgate Storage Reservoir community increasing the risk to a population of 45k of low pressure or interruptions to supply.

Scheme name Raw Water Deterioration - Kingsdown Nitrate						
Line description	Units	2023-24	2024-25	2025-26	Notes	
<b>A</b>	Scheme Key characteristics					
<b>1</b>	Expenditure per year (submitted)	£m	0.25	0.15	2.3	As submitted for AIP
<b>2</b>	Scheme outputs 3.17Mld DO	MLD	0.00	0.00	0.000	As submitted for AIP
<b>3</b>	Forecast Expenditure	£m	0.15	0.25	2.3	Forecast to Complete

4	Scheme outputs 3.17Mld DO	MLD	0.00	0.00	0.00	Forecast to Complete
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For Broome we have received the same notice, detailed design is to be complete by 30 April 2025 and the final solution commissioned by 30 April 2029. Although not removed from supply for high nitrate it is predicted that we will start to observe concentrations higher than the PCV in 2026. If we were to lose the source due to high nitrates, then a population of 16k are at an increased risk of low pressure and interruption to supply. By commencing at the same time as Kingsdown we will be able to develop designs for both at the same time capitalising on efficiency within the design process and final solution with the same technology employed.

Scheme Name Raw Water Deterioration - Broome Nitrate						
Line Description	Units	2023-24	2024-25	2025-26	Notes	
A	Scheme Key Characteristics					
1	Expenditure per year (submitted)	£m	0.25	0.15	2.3	As submitted for AIP
2	Scheme outputs 2.28Mld DO	MLD	0.00	0.00	0.00	As submitted for AIP
3	Forecast Expenditure	£m	0.15	0.25	2.3	Forecast to Complete
4	Scheme outputs 2.28Mld DO	MLD	0.00	0.00	0.00	Forecast to Complete

Pre-construction information and outline design pack is being created for both sites to engage our delivery partners to:

- Optioneer solutions including risk and value evaluation;
- Produce Contract Strategy to deliver the selected solution
- Commence design for planning permission submission
- Any land purchase to commence required as a result of outline design.

Design will commence in Q3 (2023/24) in readiness to submit planning pre-application in the same period. Result from this will then inform the output of outline design and technology selection for both sites. Full detailed design will commence in Q2 (2024-25) and planning permission for both sites granted by Q3 (2024-25). This will allow mobilisation to site to Kingsdown in April 2025 and once complete follow onto Broome nitrate.

## North Stortford Nitrates

The scheme involves the installation of 2km of trunk main to allow the appropriate blending of high nitrate with the North Stortford supply area. The DWI have issued a Notice under Regulation 28(4) to complete the detailed design and award a construct contract by 30 September 2023 and, construct, install and commission the trunk main by 31 March 2025. In the event of an outage of Stanstead there is no reliable rezone in place and puts a population of 12k at a greater risk of low pressure and/or interruption to supply.

Works have progressed through design which has been accepted. Consents for infrastructure crossings are in place and street works permits are being submitted to commence construction in September 2023. The construction contract was awarded in July 2023 with construction completion prior to March 2025.

Scheme Name Raw Water Deterioration - Stortford Water Quality - Nitrate & Resilience						
Line Description	Units	2023-24	2024-25	2025-26	Notes	
<b>A</b>	Scheme Key Characteristics					
<b>1</b>	Expenditure per year (submitted)	£m	1.000	0.940	0.000	As submitted for AIP
<b>2</b>	Scheme outputs 2km pipeline	km	0.000	2.000	0.000	As submitted for AIP
<b>3</b>	Forecast Expenditure	£m	1.690	0.110	0.000	Forecast to Complete
<b>4</b>	Scheme outputs 2km pipeline	km	0.000	2.000	0.000	Forecast to Complete