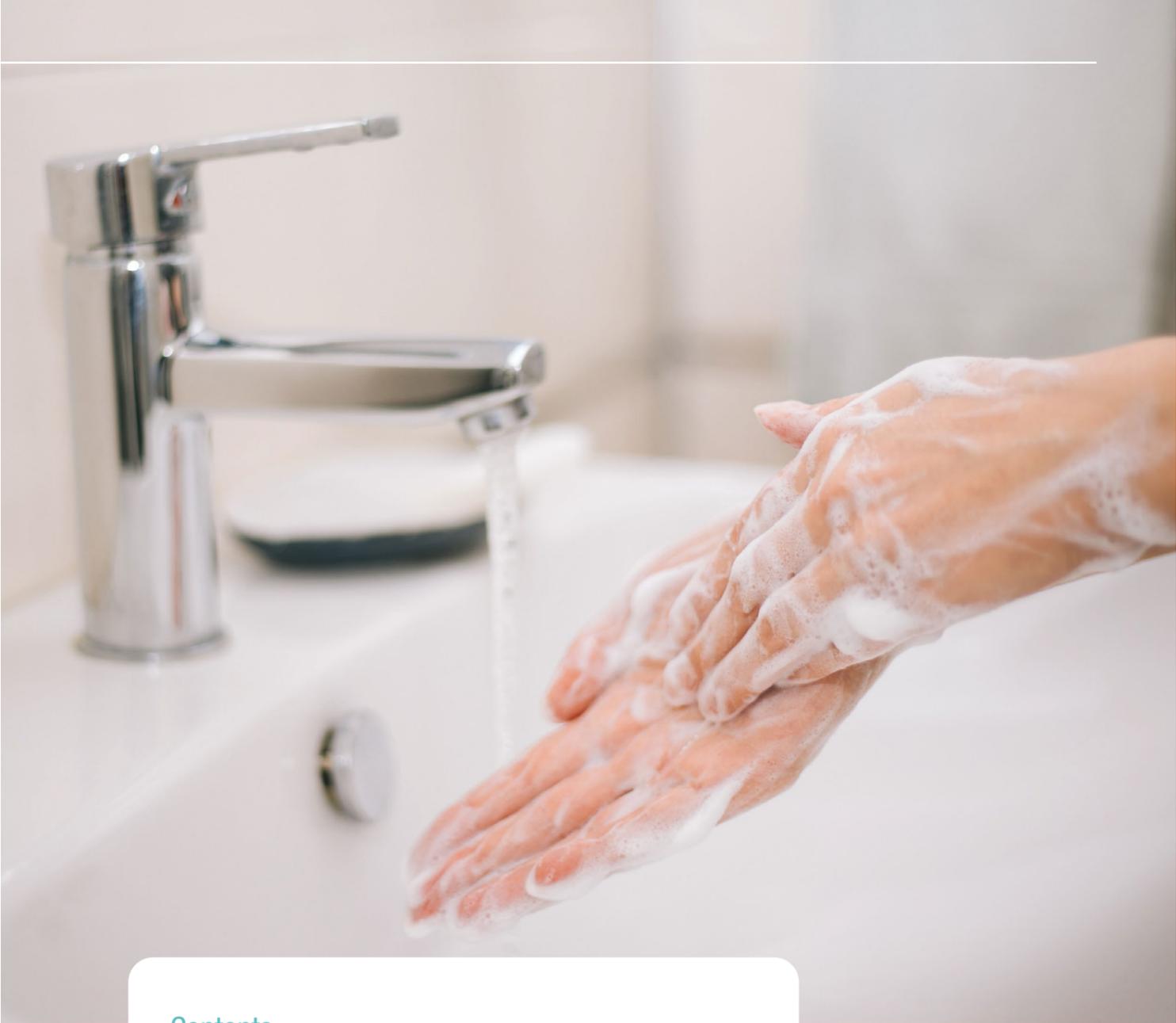


# Developing our 'Best Value' multi-sector regional resilience plan

OUR DECISION MAKING FRAMEWORK  
FEBRUARY 2022





## Contents

What is Water Resources South East?	3
What is a 'Best Value' Plan?	4
How we will assess 'Best Value'	5
Best value objectives, criteria and metrics	6
How we'll develop our Best Value regional plan	10
How we'll decide on our preferred plan	11
Customer and stakeholder engagement	12

## What is Water Resources South East?

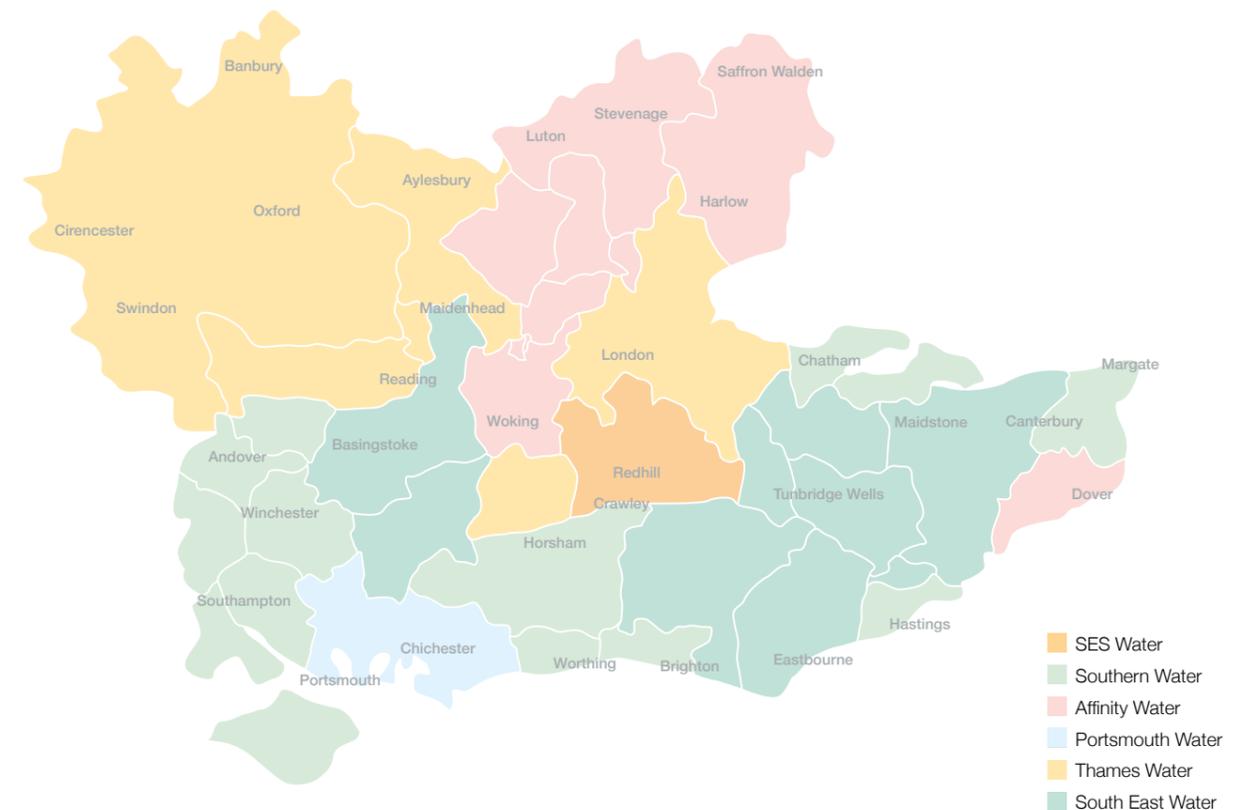
Water Resources South East (WRSE) is the regional group that covers the South East of England. It is an alliance of the six water companies that operate in this area – Affinity Water, Portsmouth Water, South East Water, Southern Water, SES Water and Thames Water – working closely with our advisory members, the water industry regulators, and a range of other stakeholders in the region.

WRSE is developing a multi-sector regional resilience plan to secure water supplies for the South East right up until 2100. It is taking a long-term view of water and considering what is needed in our homes and at work, as well as the water that is required by the environment, to generate electricity, for industry and agriculture, and to support the wellbeing of society. It will be a plan that can adapt depending on what actually happens in the future.

Our regional plan will be used by the six member water companies to derive their individual Water Resources Management Plans (WRMPs). These plans are developed through a statutory process to identify the options that the companies intend to use to make up any shortfall in water supplies over the planning period. The regional plan will also identify activity that could be progressed by other sectors to also meet their future water needs.



Why do we need to do this? Water resources are coming under increasing pressure, particularly in the South East, as we strive to protect and enhance our environment, increase our resilience to droughts and other extreme events, meet the needs of a growing population and adapt to climate change. Ensuring an economic and efficient supply is a legal requirement for companies so is a priority of the regional plan.



## What is a 'Best Value' Plan?

A 'Best Value' water resource plan is one that delivers wider benefits to society and the environment. It considers a range of factors alongside economic cost in the identification of the preferred water resource programme that will form the basis of the plan. The development of a best value plan is promoted by the Environment Agency, Ofwat and Natural Resources Wales in the Water Resources Planning Guideline<sup>1</sup>.

Our regional plan must meet a number of legal and regulatory requirements and policy expectations\* at the most efficient cost possible. However, through engagement with customers and stakeholders, we have identified a range of areas where it could go further. We will develop a number of alternative water resource programmes and measure the additional benefits each will provide alongside the cost to deliver it. This will enable us to compare different programmes and give customers and stakeholders the opportunity to tell us which they prefer.

This means that the water resource programme that forms the basis of our regional plan might not be the cheapest, but it will deliver additional value in the areas that matter most to the people of the region.

Water companies have a statutory duty to develop and maintain an efficient and economical water supply system and ensure arrangements are in place to achieve this. They prepare, publish and maintain a Water Resources Management Plan (WRMP) which explains how this obligation will be met. The Water Resources Planning Guideline sets out the requirements for companies to follow



in producing their WRMPs. Meanwhile, the Environment Agency's National Framework<sup>2</sup> gives details of the indicative scale of the challenge facing future water resource provision in England and requires water companies to work together in regional groups to meet the challenge and develop a cohesive set of water resource plans.

We developed our best value plan objectives, criteria, and metrics with reference to the National Framework and the Water Resources Planning Guideline so our regional plan will meet legal, regulatory and policy expectations.

\*WRSE consulted on a set of regional policies, you can read about them here <https://www.wrse.org.uk/media/injnyemc/wrse-response-to-policies-consultation051020.pdf>



<sup>1</sup>Water Resource Planning Guideline; EA, NRW, Ofwat, February 2021

<sup>2</sup>Meeting our future water needs: a national framework for water resources; Environment Agency, March 2020

## How we will assess 'Best Value'

### Our objectives

We've set four objectives for our regional plan so we can assess how much additional value is delivered against each, enabling us to identify the 'Best Value' water resource programme that will form the basis of our plan. These objectives have been informed by Government and regulatory policy, and developed through engagement with water companies, customers and stakeholders. This included holding a consultation on our draft objectives, criteria and metrics, which we revised in response to feedback we received.



Our Best Value objectives are to:

-  Deliver a secure and wholesome supply of water to customers and other sectors to 2100
-  Deliver environmental improvement and social benefit
-  Increase the resilience of the region's water systems (public water supply system, environmental system and the non-public water supply systems used by other sectors)
-  Be deliverable at a cost that is acceptable to customers

### Value criteria and metrics

Each objective is represented by a set of value criteria, which in turn have an associated metric or metrics that we will use to measure how much additional value it delivers.

Each programme must meet a number of legal and regulatory requirements and policy expectations which include a range of environmental legislation and drinking water quality regulations.

Some of these requirements are picked up in our value criteria, with the metric expected by legislation, regulation or policy included as a constraint. Where there is an opportunity for our plan to go further and deliver additional value, we have included an optimised metric that we will use to compare the performance of the different water resource programmes. We will also use the supporting narrative that describes each programme to explain where we are going beyond regulatory requirements and delivering greater value.

Most of the metric information will first be calculated at the option level as part of the options appraisal process. It will then be brought together to be assessed at the programme level using the best value approach.

The tables on the following pages set out the value criteria and metrics that represent each objective. It includes criteria that are:

**Constraints** – these are criteria that all the water resource programmes must deliver so they are compliant with legal and regulatory requirements and policy expectations.

**Optimised** – these are criteria we will use to develop alternative water resource programmes and help us identify which deliver additional value. We will use these criteria to shortlist the 'Best Value' programmes and consider the differences between them.

## Best value objectives, criteria and metrics

 <b>Deliver a secure and wholesome supply of water to customers and other sectors to 2100</b>					
Value criteria	Definition	How we'll measure it (metric)	Criteria type	Data source	Method statement / document
Meet the supply demand balance	All the water resource programmes that we consider for the regional plan must meet the supply demand balance so there is no water shortfall in any of the water companies' supply areas over the planning period. This is a legal requirement.	Public Water Supply - supply demand balance profile (MI/day)	Constraint	Final supply demand balance for public water supply	Regional planning tables
	The regional plan is also looking to address the future needs of other sectors. We've worked with representatives of sectors that rely heavily on water in our region to understand how much additional water they need the regional plan to deliver to meet their future needs.	Provides additional water needed by other sectors (MI/day)	Constraint	Non-public water supply demand forecast	Multi-sector
Leakage	The South East water companies have committed to reducing leakage by 50% by 2050. All the water resource programmes that we consider for the regional plan will achieve this target.	50% reduction in leakage by each company by 2050 from 2017/18 baseline (%)	Constraint	SE water companies Annual Review 2017/18	Options appraisal
	There are options that would reduce leakage further over the planning period. We will develop programmes that include leakage reduction beyond 50% and use this criterion to assess and compare the performance of the shortlisted programmes.	% leakage reduction above 50%	Optimised	Option level assessment	Options appraisal
Water into supply	All the water resource programmes we consider will include options to reduce water use. At present there is no formal target for water consumption that we can include in our plan so we will develop programmes that include different levels of consumption reduction and use this criterion to assess and compare the performance of shortlisted programmes.  Defra is considering a metric or target to encourage a reduction in the amount of water used. We'll revisit this if it is set to make it a constraint within the plan. In that event, anything beyond that target will be used to demonstrate performance of the shortlisted programmes.	Distribution Input (DI) per property (litres per day)	Optimised	Option level assessment	Options appraisal
Customer preference	We have conducted research into customer priorities and preferences for different option types. This produces a score, and we will use this criterion to assess and compare the performance of shortlisted programmes.  In addition to using this criterion to assess best value, we will engage with customers to help us consider the application of weightings to the different criteria and identify the preferred programme.	Customer preference for option type (score)	Optimised	Customer research	Customer engagement

 <b>Deliver environmental improvement and social benefit</b>					
Value criteria	Definition	How we'll measure it (metric)	Criteria type	Data source	Method statement / document
Strategic Environmental Assessment (SEA)*	Regional plans are non-statutory but we will apply the SEA criteria. The SEA informs the decision-making process through the identification and assessment of the effect a plan or programme will have on the environment. We will use the SEA to calculate the individual scheme scores. This does not replace the SEA process.	Programme benefit (score max)	Optimised	Option level assessment	Environmental assessment
		Programme disbenefit (score min)			
Natural capital	Natural capital can be defined as the elements of nature that directly and indirectly produce value or benefits to people (now or in the future). There is no statutory target to increase natural capital, but it is an aspiration of the UK Government's 25-year Environment Plan. We will calculate the increase in natural capital that the different water resource programmes deliver and use this criterion to assess and compare the performance of different programmes.	Enhancement of Natural Capital Value (£m)	Optimised	Option level assessment	Environmental assessment
Abstraction reduction	Reducing abstraction from sensitive water sources is one element of how the regional plan will deliver environmental improvement. We will use our investment model and technical environmental work to optimise this, considering affordability, the expected benefits that will be derived and the timing of delivery.	Reduction in the volume of water abstracted at identified sites (MI/day) and by when (date)	Constraint	Environment Agency scenarios and water company scenarios	Environmental ambition
Biodiversity	Improving biodiversity is required under a range of different legislation and policy and assessing the biodiversity net gain of our water resource programmes is a requirement of the Water Resources Planning Guideline. It is also an SEA objective. We will develop a net gain score** for each of our different water resource programmes and use this criterion to assess and compare the performance of different programmes.	Net gain score (%)	Optimised	Option level assessment	Environmental assessment
Carbon	The water industry has committed to achieving net zero operational carbon emissions by 2030. There is also an objective to reduce embodied and operational carbon emissions as part of the SEA. We will show how different water resource programmes seek to balance the additional carbon created through a combination of minimising emissions by considering alternative construction techniques and/or materials and by carbon offsetting schemes. The cost of this is included in the total programme cost but we will also use the cost of carbon offsetting to assess and compare the performance of different programmes.	Cost of carbon offsetting (£m)	Optimised	Option level assessment	Environmental assessment

\*The Strategic Environmental Assessment (SEA) is a separate part of the programme appraisal process and includes a number of objectives and metrics. We consulted on the scope of our SEA and its objectives in August 2020. In addition to looking at the overall benefits and disbenefits we will also be undertaking further checks on the in-combination effects of different options working in conjunction with each other both from an environmental perspective and the ability to deliver the options within each programme.

\*\*We will agree an appropriate method of calculating biodiversity net gain through discussions with regulators.

## Best value objectives, criteria and metrics (continued)

### Increase the resilience of the region's water systems

Our multi-sector, regional resilience plan will plan for a wider range of shocks, stresses and events beyond drought and will assess the resilience of the region's main water systems:

- The public water supply system run by water companies
- The non-public water supply system that provides the water to other sectors
- The environmental water system.

We have developed a Resilience Framework\*\*\* so we can show how the resilience of each system is changed by the different water resource programmes. There are three components of our resilience assessment – reliability, adaptability and evolvability – which each have a set of associated metrics. We will produce a score based on the amalgamated metrics for each of these components and use this as a criterion to assess and compare the performance of different water resource programmes.

Value criteria	Definition	How we'll measure it (metric)	Criteria type	Data source	Method statement / document
Drought resilience	Water companies currently plan for a severe drought to occur once in every 200-years. The National Infrastructure Strategy <sup>3</sup> set a requirement for this to increase to once in every 500-years, increasing the level of resilience, this has been endorsed by HM Treasury. All the water resource programmes we produce will achieve this level of resilience. We will use the Best Value planning approach to identify the optimum time we can achieve this increased level of resilience.	Achieve 1 in 500-year drought resilience (date achieved)	Constraint	This is included as a requirement in the National Infrastructure Strategy	
Resilience assessment <b>Reliability</b>	Reliability is the ability to withstand short term shocks without actively changing the performance of the system.	Programme reliability score	Optimised	Resilience assessment	Resilience Framework
Resilience assessment <b>Adaptability</b>	Adaptability is the ability to make a short-term change in performance of the system to accommodate the impact of a shock and recover.	Programme adaptability score	Optimised	Resilience assessment	Resilience Framework
Resilience assessment <b>Evolvability</b>	Evolvability is the ability to modify the system function to cope with long term trends.	Programme evolvability score	Optimised	Resilience assessment	Resilience Framework

\*\*\*We consulted on the Resilience Framework in June 2020. It sets out a method for assessing resilience across the three main water systems – public water supply, non-public water supply and the environment. We have responded to feedback and developed it further through engagement with stakeholders. You can view the final Resilience Framework Method Statement here.

<sup>3</sup>National Infrastructure Strategy, November 2020

### Deliverable at a cost that is acceptable to customers

Value criteria	Definition	How we'll measure it (metric)	Criteria type	Data source	Method statement / document
Programme cost	This represents the total cost of delivering all the options in the water resource programme. It uses the standard HM Treasury rate to calculate the total programme cost. We will use this criterion to assess and compare the performance of the different water resource programmes.	Net Present Value (£m) using the Social Time Preference Rate (STPR)	Optimised	Option level assessment	Option appraisal
Inter-generational equity	This criterion also looks at the total cost of the programme but calculates it using a lower HM Treasury rate that spreads the cost of the programme over the planning period delivering best value for both present and future generations. We will use this criterion to assess and compare the performance.	Net Present Value (£m) using the Long Term Discount Rate (LTDR)	Optimised	Option level assessment	Option appraisal

All WRSE method statements and documents will be published at [wrse.org.uk/library](http://wrse.org.uk/library)

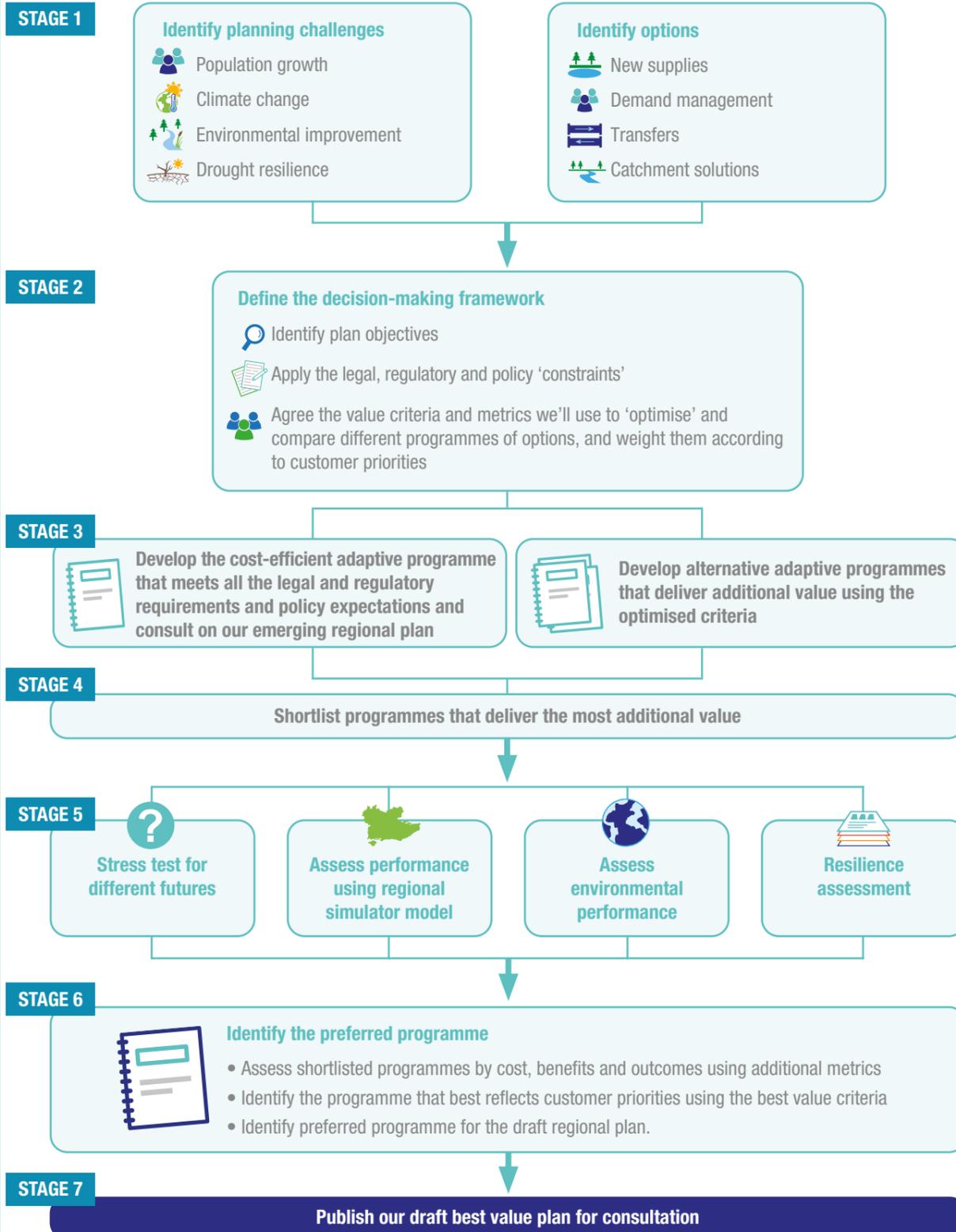
#### How we'll mitigate against double counting

Some of the value criteria are included within other assessments, such as the SEA, that will be carried out in the development of the regional plan. We recognise there is a risk of double counting the benefits of these and we will manage this through the design of the technical process and with both internal and independent assurance. Furthermore, we will carry out a sensitivity analysis to provide confidence that the plans are robust and to understand the impact of different scenarios.



## How we'll develop our Best Value regional plan

We have summarised our Best Value planning approach into seven key stages.



Our Best Value Planning Method Statement provides further detail on each of these stages.

## How we'll decide on our draft regional plan

The WRSE Senior Leadership Team (SLT) will make the final decision on which water resource programme will form the draft regional plan that will be consulted upon. Its decision making will be informed by the technical modelling undertaken by WRSE (further details of which can be found in the Best Value Plan Method Statement); input from the member water companies and the views of customers and stakeholders.

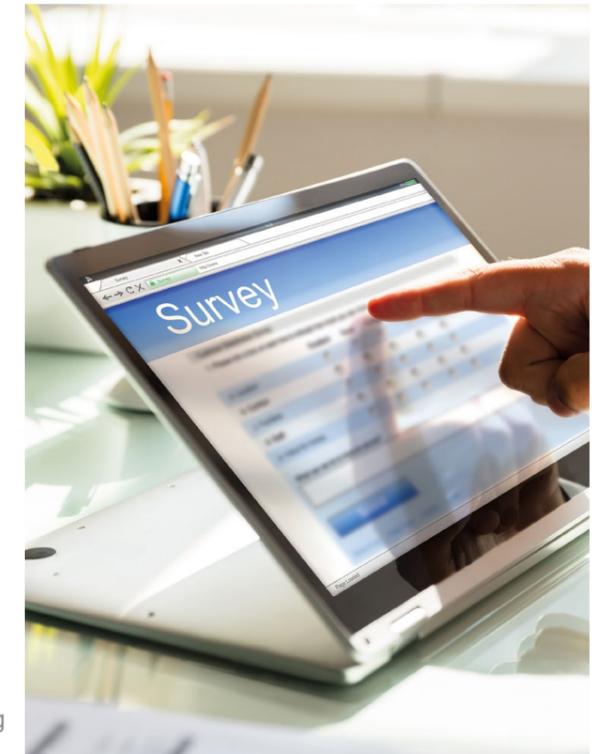
### Who are the Senior Leadership Team:

#### Member companies:

Independent Chair, WRSE  
 CEO, Affinity Water  
 CEO, Portsmouth Water  
 CEO, SES Water  
 CEO, Southern Water  
 CEO, South East Water  
 CEO, Thames Water

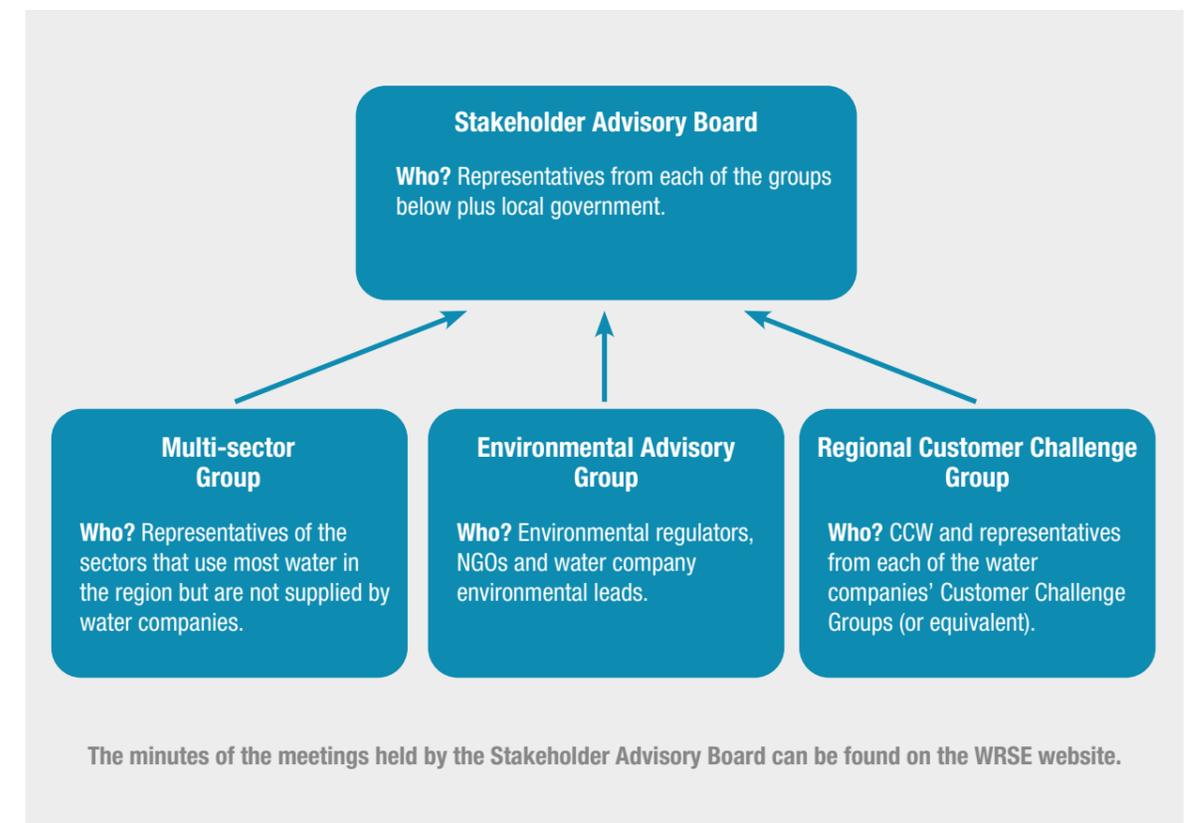
#### Advisory members:

Environment Agency (EA)  
 Defra  
 RAPID (Ofwat, EA and DWI)



### External review and scrutiny

To help us consider the needs of the region's water users we have established four stakeholder groups that are contributing to the development of our plan and scrutinising our work.







## Keep in touch

You can find out more about our work on our website and our dedicated engagement platform. This includes our publications, past consultations and how we have responded. By signing up you will receive regular updates from WRSE and its future events and activities.

[wrse.org.uk](http://wrse.org.uk)

[wrse.uk.engagementhq.com](http://wrse.uk.engagementhq.com)

