This publication was withdrawn on 17 June 2025.

This document has been replaced by the National Framework for Water Resources 2025: water for growth, nature and a resilient future.

Appendix 2: Regional planning

Water resources national framework

16 March 2020

Version 1

We are the Environment Agency. We protect and improve the environment.

We help people and wildlife adapt to climate change and reduce its impacts, including flooding, drought, sea level rise and coastal erosion.

We improve the quality of our water, land and air by tackling pollution. We work with businesses to help them comply with environmental regulations. A healthy and diverse environment enhances people's lives and contributes to economic growth.

We can't do this alone. We work as part of the Defra group (Department for Environment, Food & Rural Affairs), with the rest of government, local councils, businesses, civil society groups and local communities to create a better place for people and wildlife.

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Contents

1. A strategic, multi sector approach to planning future water supplies

The national framework sets out the challenge for water resources over the next generation and sets clear expectations of water companies and regional groups. It also describes the policies and the framework we expect regional plans to work within. It is now for the regional groups to work together to develop ambitious and cohesive plans, based on our national steer to identify the right strategic options to meet the challenges we face.

This appendix defines the scope of regional plans and what they must, should and could do. It is intended for those involved in developing the plans as well as others who want to understand the role of the plans and how they fit with other planning processes.

Regional plans will set out how the supply of water for people, business, industry and agriculture will be managed in the region. The plans will create resilient water supplies for all users, while protecting and enhancing the environment and creating wider social benefits for the next 25 years or more. They will be developed collaboratively by water companies, other large water-using sectors and local organisations with an interest in the water environment, who collectively make up regional water resources planning groups.

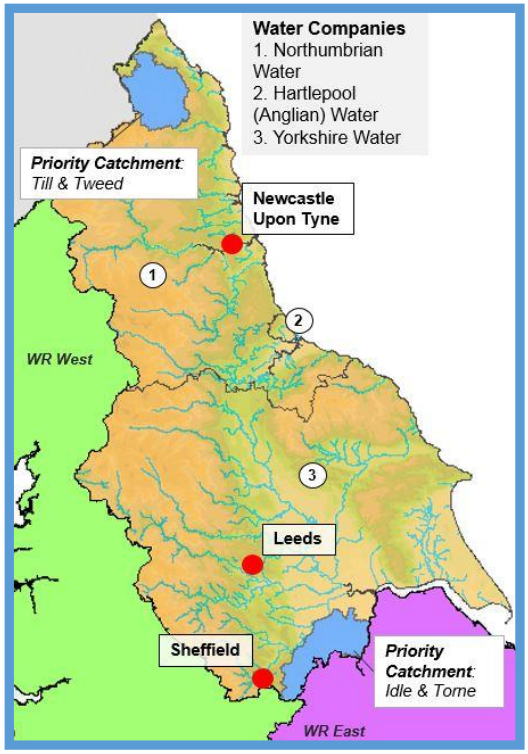
Public water supply solutions identified in regional plans will be implemented through statutory individual water company water resources management plans. This could include multi-sector solutions, which will be delivered in combination with other sectors. Other solutions will be delivered by other sectors and through other plans where appropriate. The regional groups must find the right strategic solution to provide a secure and sustainable supply of water and they must be developed with other sectors, neighbouring regions and support the wider national need as appropriate. Environmental improvement must be central to the decision making.

2. An introduction to the regional groups

There are five regional groups, which are shown on the map of the five regional groups and introduced in the next section.

Figure 1: Map of the five regional groups

2.1. Water Resources North

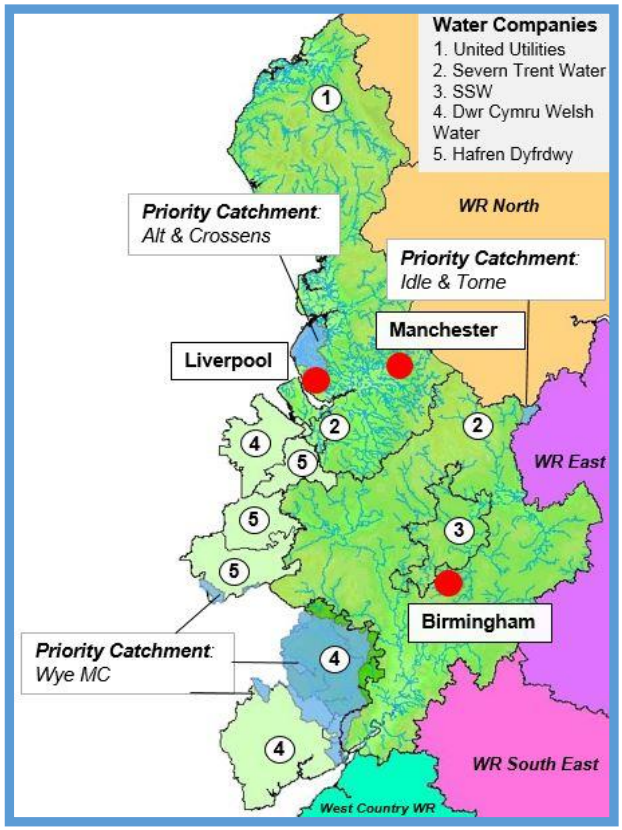


The area covered by Water Resources North is one of England's most diverse, with landscapes providing services for water, nature, food and energy. The Area features the iconic landscapes of the Pennines, Cheviot Hills, Yorkshire Dales, North York Moors and East Coast. It also has some large urban centres including Teesside, Wear and Tyneside which account for a large proportion of the population. It has a border with Scotland and is making strong links to Water Resources West and Water Resources East.

Currently, around 98% of the region's population is supplied by two integrated water resource zones (Northumbrian Water's Kielder resource zone and Yorkshire Water's Grid resource zone). The supply systems are dependent on an environment with many nationally and internationally protected habitats, including peat bogs, upland habitats and Chalk Rivers.

The region appears to be in a good position to support the national need. Integrated resource zones and Kielder Reservoir, northern Europe's largest man-made lake, gives the region security of supply which customers' value. However, Water Resources North still has challenges to overcome from the impact climate change is forecast to have on water availability. Demand is likely to increase from a rising population, economic growth and the legacies of the mining and textile industries, impacting water quality and river systems. It will need to work closely with the power generation sector, industry and those reliant on private water supplies to develop a comprehensive plan.

2.2. Water Resources West



Water Resources West has a unique and strategically important role in regional planning. Bordering both Wales and Scotland it also has borders with all the other regional water resources groups. It is home to almost 18 million people and includes some significant conurbations such as Manchester and Birmingham.

The River Severn, flowing from the Cambrian Mountains in Wales to the Bristol Channel, appears a natural vehicle for moving water from north to south. The Severn is a heavily regulated river and investigations are underway to assess the viability of a possible Severn to Thames transfer.

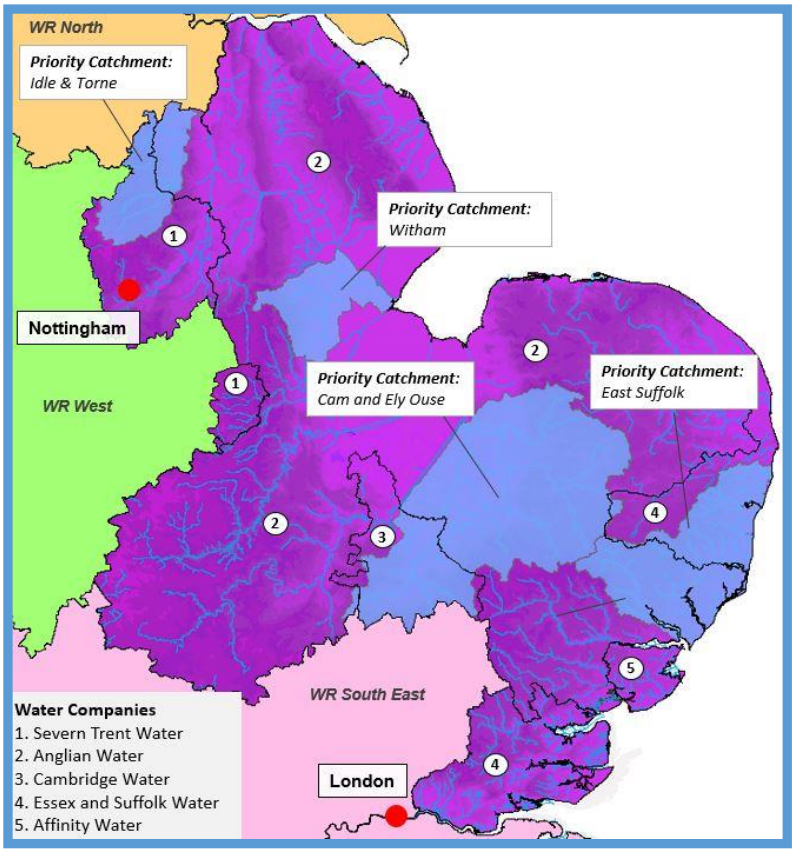
Working with partners in Wales is key to the success of Water Resources West. Many issues need cross-border collaboration and Welsh Government and Natural Resources Wales are important members of the group as are Dŵr Cymru Welsh Water which has resource zones within the region.

Water Resources West includes important habitat and recreation areas such as the Lake District and Peak District national parks. Many of its rivers are important for migratory species such as salmon. Therefore a flourishing water environment is essential and that includes making sure that abstraction from groundwater is sustainable.

Agriculture is particularly important in some areas, both spray irrigation and livestock. It also has one of the largest water using industrial sectors dominated by the chemicals and paper sector. The minerals and food and drink sectors are also significant water users in the region.

2.3. Water Resources East

The East of England is the driest region in the country. It is home to nationally and internationally important sites for wildlife, including Chalk Rivers and streams, unique fenland and wetland habitats and the Broads National Park. The East of England is also home to some of the most productive agricultural land in England and has by far the greatest area of irrigated crops of any region.



The East is another pivotal region with borders to the North, West and South East. Water resources are stretched in the region and there can be competing demands for the same water, especially during droughts.

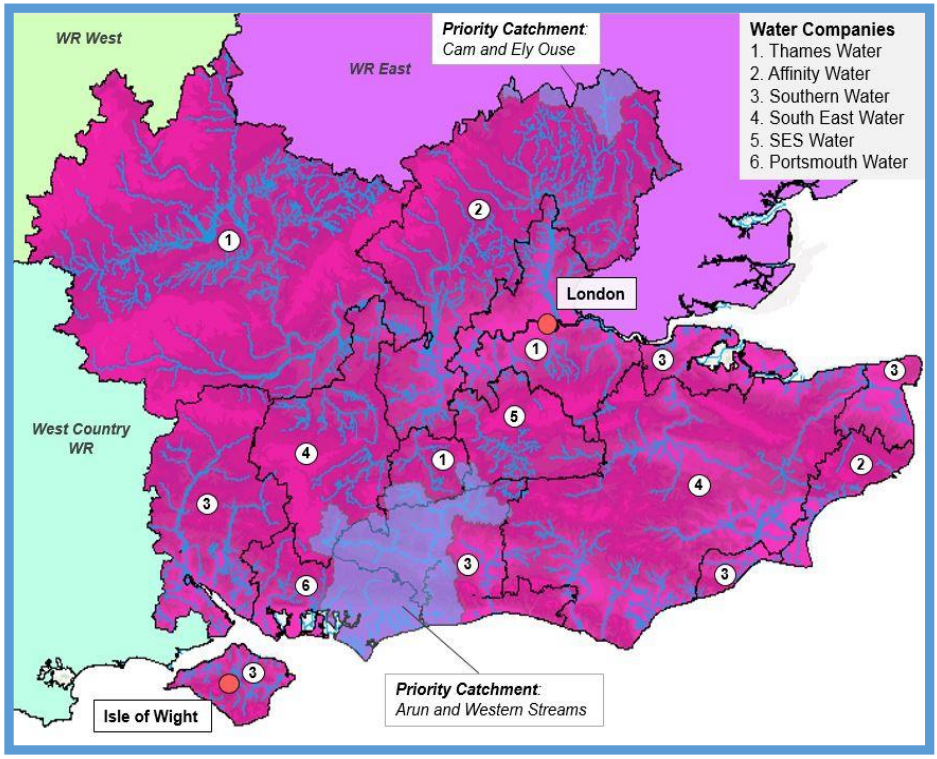
Parts of the region are under pressure from abstraction, leading to damage to rivers, streams and wetlands. With climate change, economic growth and forecasts indicating a rapidly growing population putting further pressure on the environment, competition for resources will increase. Tension between different water users is an increasing risk for the East of England.

The region needs to adapt to the pressures it faces. It needs to continue to build on its strong multi-sector collaboration, finding new and better ways to share water resources and improve resilience to droughts and floods.

2.4. Water Resources South East

In one of the driest parts of the country, the water environment in Water Resources South East is under significant pressure to meet the water needs of a large population, with high average individual water consumption. Water Resources South East is home to 40% of the UK population, with 19 million households and 2 million businesses, which are supplied with over 5 billion litres of water every day. There are a number of nationally and internationally protected habitats, including wetlands and rare Chalk Streams, as well as coastal Special Areas of Conservation.

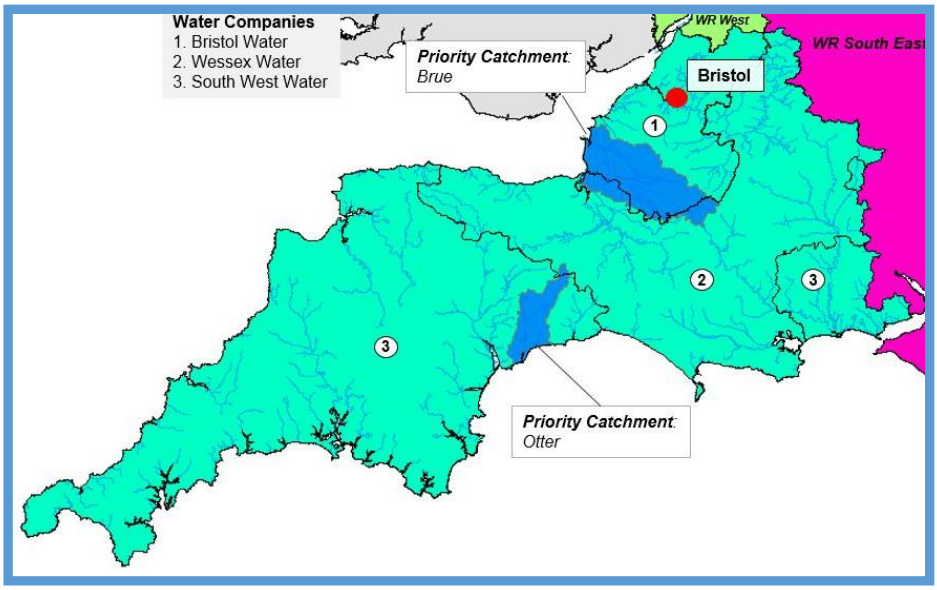
Linking up with other regions is crucial to exploring and developing the best solutions to its water supply deficit. The investigations have already started into the Severn Thames transfer and the transfer from the West Country. These are just two examples of the cross border collaboration needed.



With forecast significant growth in population, large scale planned developments such as the Oxford to Cambridge Arc and the effects of a changing climate, there will be further pressure on the water environment. The group will need to manage the effects of these pressures to deliver a resilient and environmentally sustainable water supply, and work closely with industry, particularly paper and pulp, and agriculture to develop a cohesive plan. The region also includes significant water demands for trickle irrigation which have historically been exempt from abstraction licensing and are now being brought into regulation. This is a growing industry and there's an opportunity to join up with these water users to help support their continued growth and find solutions that benefit them as well as water customers.

2.5. West Country Water Resources

Currently water resources in West Country Water Resources are in a relatively healthy position. Public water supplies are in surplus in the medium term, but may face supply difficulties in the long term as climate change and a growing, and seasonally variable, population add further pressure.



It also faces wider challenges as sectors such as mining and agriculture seek to make sure they have the water they need to operate sustainably and grow. Additionally, agriculture in the region can negatively impact water quality that in turn, can reduce the amount of water available to abstract as well as cause wider environmental impacts from diffuse pollution. Engaging with these sectors also brings opportunity. For example, the minerals sector use and/or move large volumes of water and have the potential to create raw water storage at extraction sites that are no longer in use.

The tourist industry in West Country Water Resources is reliant on a thriving natural environment. This includes national parks and some internationally recognised habitats that support a wide range of species and public recreation activities. This also brings with it the pressures of summer peaks in water demand and waste water treatment.

The region is well placed to contribute to the water needs of Water Resources South East, and also needs to link to Water Resources West to ensure the River Severn regime and habitats are appropriately considered.

3. What must, should and could a regional plan include?

A regional plan needs to identify how best to provide an efficient, sustainable and resilient supply of water for all water users in the region over at least 25 years. It must embed the national framework principles and expectations.

In summary, a regional group must deliver:

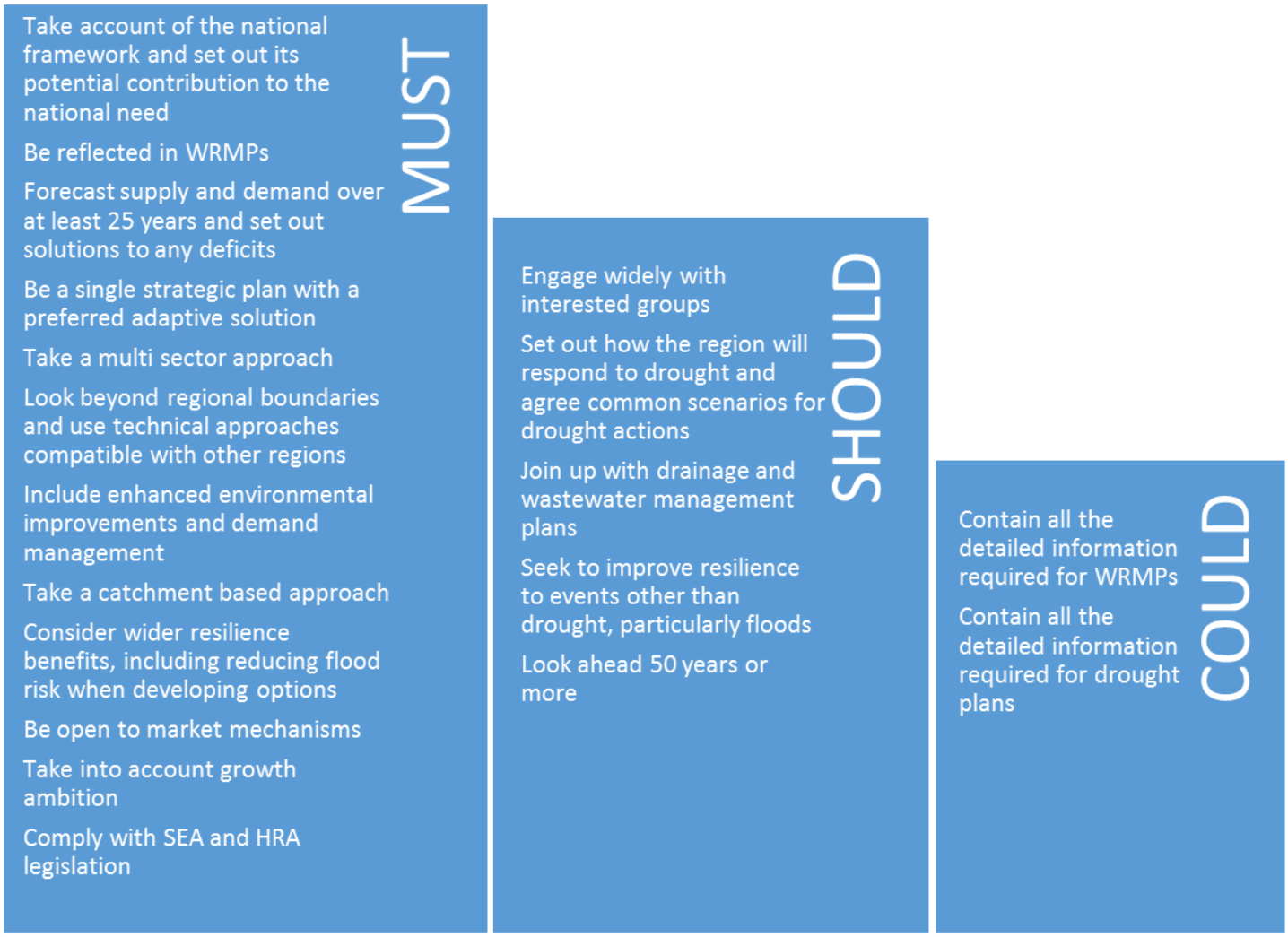
- a resource assessment, that informs a statement of need for the region - this will include scenarios exploring key challenges and sensitivities
- a statement of ambition and agreed regional policies and principles
- a list of options considered to resolve deficits both within a region and to contribute to the national need
- the preferred plan, identifying the best value strategic options to meet multi sector water needs

Each region faces a different set of challenges, so approaches to regional planning need to be flexible, but remain compatible. This is to ensure the plans can work cohesively and deliver the national need. Regional groups will need to engage with the national framework senior steering group, regional coordination group and modelling advisory group, to make sure the plans developed are integrated and coordinated.

We have set out in more detail the actions that must, should and could feature in regional plans and have defined what we mean here:

- must - we expect to see these elements in a regional plan - if they are not included, the plan is unlikely to be fit for purpose
- should - we strongly encourage regional groups to include these actions in regional plans - without them, there is a chance the plans will not be fit for purpose, depending on the pressures faced
- could - these actions may further strengthen a regional plan and should be considered depending on the priorities of the region

Figure 2: Summary of must, should and could actions.



3.1. A regional plan must…

Take account of the national framework

National framework report
Sections: 1.1 - 1.8 and 9

The water resources national framework sets out how much water the nation is likely to need. And the contribution expected from each region to meet water demand across all sectors up to and beyond 2050. It sets out principles and expectations for planning for a secure and sustainable water supply and region-specific ambitions. Regional plans must take account of these principles and expectations.

Be reflected in Water Resources Management Plans (WRMPs)

National framework report
Sections: 2.2 and 10

The national framework and regional plans are now part of the water resources planning cycle.

We expect the public water supply solutions identified in regional plans to be reflected in and implemented through individual water company WRMPs. WRMPs form part of business plans and are funded through Ofwat's price review process.

The regional groups must therefore find the right strategic solution to provide a secure and sustainable supply of water. They must develop their plans in consultation with neighbouring regions, supporting the wider national need as appropriate.

The Environment Agency will challenge WRMPs that are not informed by regional plans.

Given the close link between the regional plans and the WRMPs, we also expect the regional groups to follow the principles of the water resources planning guideline.

Forecast supply and demand over at least 25 years

The regional plan must forecast supply and demand over an appropriate planning period. This needs to suit the challenges and risks each region faces, and must cover at least 25 years.

The forecasts must:

- include the impacts of climate change
- include enhanced demand management and improved efficiency across all sectors
- include enhanced environmental improvements, making sure decisions take future environmental needs into account
- take into account future housing growth ambition, working with local authorities
- include the water demand needs and growth ambitions of relevant other sectors, such as business, industry, navigation, extractive mineral operations, electricity generation and agricultural sectors

The first milestone in the regional planning process is the initial statement of resource position, to be published in March 2020.

Provide one preferred, adaptive solution and set of options to any deficits, setting out its potential contribution to the national need

National framework report

Sections: 1.8 and 9

The regional plan must be a strategic, multi-sectoral plan, setting out its preferred set of options to deliver regional and national objectives. The solution (plan) should be in the form of an adaptive programme of investments and initiatives, including alternative options and timings if needed. Where the decision to choose between different pathways is clearly identified according to defined decisions points and associated evidence from monitoring and metrics. In summary, the plan should develop a strategic set of options that focus on efficiently delivering for customers, other sectors and the environment, which:

- ensure a secure supply of water
- meet public water supply and other sectors demand
- meet challenges for the region including climate change and increased protection for the environment, supporting environmental objectives in the River Basin Management Plan
- are resilient to change, performing well in most scenarios and can be delivered in a way that allows flexibility to adapt to change
- are in line with the UK water industry commitments on carbon reduction to achieve net zero carbon emissions by 2030
- delivers best social, economic and environmental value

A regional plan must consider all feasible options for meeting current or future deficits. This includes exploring new, alternative and innovative options that will be in the public

interest. We expect the group to focus on demand management and larger scale, strategic solutions to meet deficits. Regional plans must consider deficits in other regions as well as its own, to ensure the plans will collectively meet the national need. To ensure consistent assessment, all strategic options that cross borders must have a common planning period.

This will require regional groups to engage with regulators and create close links with other regional water resources planning groups to ensure plans are integrated and coordinated. There are many opportunities and efficiencies to multi-sector working. We expect the regional groups to investigate the potential for future resource options to bring wider benefits to other sectors, the environment or recreation. This could be through, for example, development of shared storage with the agricultural community or additional habitat creation.

The government's 25 Year Environment Plan strongly supports the natural capital approach. Regional groups should look to use this approach in their decision making where appropriate and provide commentary explaining if they choose not to do so. We also expect regional groups to include environmental net gain in their decision making, to achieve measurable improvements for the environment on a regional and local level.

A regional group must test its plan, providing scenarios that explore and assess the key challenges and sensitivities in the region to ensure the plan is resilient across a range of possible futures.

Regional groups should refer to 'A guide to developing the programme business case' 2018, HM Treasury in the development of their plan.

Take a multi-sector approach

To appropriately and effectively manage water resources all significant water users will need to take part in the planning. Meaningful engagement with all the key water using sectors in its region will allow the group to develop a truly multi sector plan. The supply demand balance of a region must include the water demand needs and growth ambitions of relevant other sectors, such as business, industry, navigation, extractive mineral operations, electricity generation and agricultural sectors.

Look beyond regional boundaries and use technical approaches compatible with other regions

Regional groups must make sure planning assumptions are compatible with neighbouring regional groups. This will ensure strategic cross-boundary solutions can be assessed on a consistent basis and allow regional plans to join up to present a nationally cohesive picture.

Include enhanced environmental improvements and demand management

Environmental improvements. Regional groups and water companies need to understand environmental needs in the long term to inform water resources planning and deliver best value investment decisions.

Regional groups must work with regulators and other partners to develop a shared long term destination on environmental ambition. This should ensure no deterioration, address unsustainable abstraction and improve environmental resilience in the face of climate change. The groups must develop a plan setting out actions they will take to reach the destination.

To help develop this long term destination, we have set out our broad ambition based on a range of scenarios. These explore the impacts of different levels of protection for the environment on potential abstraction recovery required. The regional groups will need to refine this information, engaging widely on local priorities, undertaking further local and

regional analysis and exploring the costs and benefits of alternative approaches. This will inform investment decisions and enable regional groups to identify the best solutions to manage water resources in a sustainable way.

Demand management. We expect regional groups to be ambitious on household and non-household demand management. And contribute to a national ambition to cut waste and reduce individual water use. We expect water companies to take a leading role in encouraging behavioural change to reduce demand on the water environment. They need to increase understanding of the true value of water and the water environment across society.

National framework report

Sections: 1.3, 1.6, 1.8, 9.1, 9.2 and 13.4

We also expect regional groups to plan to achieve leakage reductions of 50 per cent on average by 2050. This is in line with the recommendations from the National Infrastructure Commission and the commitment already made by the water industry.

Regional groups will need to monitor demand savings and leakage reductions. They must build clear decision points into their regional plan development. This will allow sufficient time to develop alternative approaches for future water supply if savings and reductions do not follow the expected track.

Take a catchment based approach

Regional groups must embed the integrated catchment based approach to water resources management as they develop their regional plans. The groups must actively work with catchment groups, other partners and the public to identify actions to build the resilience of catchments and enhance our natural capital.

National framework report

Sections: 1.4, 9.4 and 13.6

The groups need to fully support and engage with the priority catchment programme, which is trialling the catchment based approach in 10 catchments across England. In these catchments, we are bringing together abstractors and a range of other partners to seek innovative local solutions to maximise sustainable access to water now and in the future. The results from these trials will inform the updated abstraction licensing strategies from 2020 and we expect the regional groups to embed the lessons learnt from this work in their plans.

Regional groups must also consider setting up their own catchment engagement activities where groups do not already exist. This is particularly important for catchments that will potentially support future strategic schemes and where there are environmental concerns; water availability issues and multiple water company abstractions from the catchment.

Consider wider resilience benefits, including reducing flood risk, when developing options

When developing options to solve a deficit or support the national need, regional groups must consider the benefits they can provide to support wider resilience against pressures. These include (but are not limited to); flooding from all sources, weather extremes (for example heat or cold), pollution and water quality issues, power supply failure and asset failure.

Be open to market mechanisms

Regional groups must fully explore the role of markets to ensure they deliver the best strategic water resource solutions. Competition can reduce the cost of developing and delivering new resources and help deliver strategic and innovative solutions. The potential role of markets needs to be maximised within environmental constraints and subject to safeguards to protect public health, wholesomeness of the water and consumer acceptability.

Following the Cave Review, the Water Act 2014 (WA14) enabled the introduction of competition in upstream resources. It allows for bilateral markets, through which third party holders of water resources (which may include neighbouring water companies) can access the networks and treatment facilities of water companies to trade directly with business retailers. To implement bilateral markets fully, the legislation will need to be commenced by the Secretary of State.

Third parties can already bid water resources into water company water resource management plans through their bidding frameworks. Opportunities are identified in published water resources market information. We expect regional groups to also fully consider third party strategic options within their plans. Water companies will also tender for third parties to build, own, operate and finance large pieces of discrete infrastructure (such as new reservoirs) through direct procurement for customers (DPC) arrangements. We expect regional groups to work with others to identify and progress innovative solutions.

Take into account growth ambition

Regional groups need to understand the economic growth ambitions of the region. This could include extra demand on public water supply or demand affecting other sectors. This must be included in each region's plan so the water needed to meet growth ambitions is planned for.

Comply with SEA and HRA legislation

Regional groups must assess whether the options in the regional plan are subject to Strategic Environmental Assessment and Habitats Regulations Assessment. They must comply with any other statutory requirements and legal directions. The regional groups may wish to refer to:

- UKWIR (2012) Strategic Environmental Assessment and Habitats Regulations Assessment - guidance for water resources management
- Office of the Deputy Prime Minister (2005) A Practical Guide to the Strategic Environmental Assessment Directive

3.2. A regional plan should…

Engage widely with interested groups

Regional water resource planning groups need to develop the regional plans collaboratively. The group is made up of water companies, other large water-using sectors and local organisations with an interest in the water environment.

National framework report

Section: 10 and throughout the report

Regional groups should engage widely, with early engagement and discussion across relevant other sectors as well as other interested groups. For example environmental non-governmental organisations, environmental charities and catchment groups. They should also engage with other partners who may be interested in the outcomes of the plan and the individual water company WRMPs such as devolved government, local authorities and community leaders.

Set out how the region will respond to drought and agree common scenarios for drought actions

Regional groups should work together to make sure drought actions are coordinated at the regional level and across all sectors. The regional plans should ensure individual water company drought plans, which set out the actions they will take before, during and after a drought to maintain a secure supply of water, can work together efficiently at the regional

level. It should explain how shared resources and water transfers will be managed during drought events. This is particularly critical where customers are supplied by different water companies within one region and supply systems are closely linked. To achieve this consistency, the groups will need to use common scenarios, so the companies can coordinate drought actions.

Join up with drainage and wastewater management plans

National framework report

Section: 13.8

The regional plan should ensure it is aligned with other plans and strategies. In particular looking ahead to the Drainage and Wastewater Management Plans (DWMPs), which water and sewerage companies are developing and engaging on now and will publish by the end of 2022. These are the new way to plan for the future of drainage and wastewater and will form the basis for more collaborative and integrated long term planning. This will make sure the systems and networks are robust and resilient to future pressures. Water companies will be working with other organisations that have responsibilities relating to wastewater, drainage, flooding and protection of the environment. Through this collaboration and partnership working, the plans will identify integrated catchment solutions (such as sustainable drainage and natural flood management) to reduce flood risk and improve environmental water quality. Integrated catchment solutions that can benefit both DWMPs and regional plans should therefore be considered. The regional plan should also consider the wastewater and potential pollution impacts of proposed water resources options.

Seek to improve resilience to events other than drought, particularly floods

It is clear the regional plan must look to increase drought resilience. However the groups should also look for opportunities to increase the region's water resource resilience to events other than drought. These include (but are not limited to) flooding from all sources, weather extremes (for example heat or cold), pollution and water quality issues, power supply failure and asset failure.

Look ahead 50 years or more

The regional plan must forecast supply and demand over the chosen planning period. This needs to be appropriate to the challenges and risks the region faces, but must cover at least 25 years. We encourage regional groups to look ahead 50 years or more, to ensure the plans identify the best value strategic solution to meet future pressures.

3.3. A regional plan could…

Contain all the detailed information required for WRMPs

Regional plans must feed directly into WRMPs, which remain the statutory plans which water companies are obliged to produce. If the necessary detail to comply with WRMP guidance and legislation is included in a regional plan then these plans could be one and the same - as long as it meets the legal requirements for WRMPs. Some companies may wish to do this to reduce duplication. However, we are not requiring this as some regional groups may decide not to include this level of detail within the regional plan.

Contain all the detailed information required for drought plans

The regional group can decide to develop a regional drought plan as long as the necessary detail to comply with drought plan guidance and legislation is complied with.

4. Key steps and engagement with stakeholders

4.1. Role of the Environment Agency

The Environment Agency will be actively involved with the regional groups during the development of the regional plans. This will help to identify and resolve any concerns early in the process. The Environment Agency will maintain a close working relationship with each regional group while remaining independent throughout the planning process.

4.2. Stakeholder engagement

There are a number of activities that water companies, regional groups and others will want to engage with and consult on over the next five years. We continue to work with the Consumer Council for Water, RAPID and the water industry to ensure consultations are complementary and joined-up. Then people are clear about why they are being consulted, what the scope is and how it fits with other activities. The regional groups will create their regional plans collaboratively with stakeholders. There is also an opportunity for an informal consultation early in 2022. This would run alongside the parallel pre-consultation on water company water resource management plans. It will be for regional groups to decide how and to what extent they engage with customers at the regional level.

4.3. Timetable

Figure 3: Timetable for regional planning, sets out the timeline regional groups must follow to develop a final regional plan by September 2023, aligned with individual water company WRMPs. The milestones reflect that regional plans should be adaptive, incorporating new information as it becomes available and reflect the timing when decisions are needed.

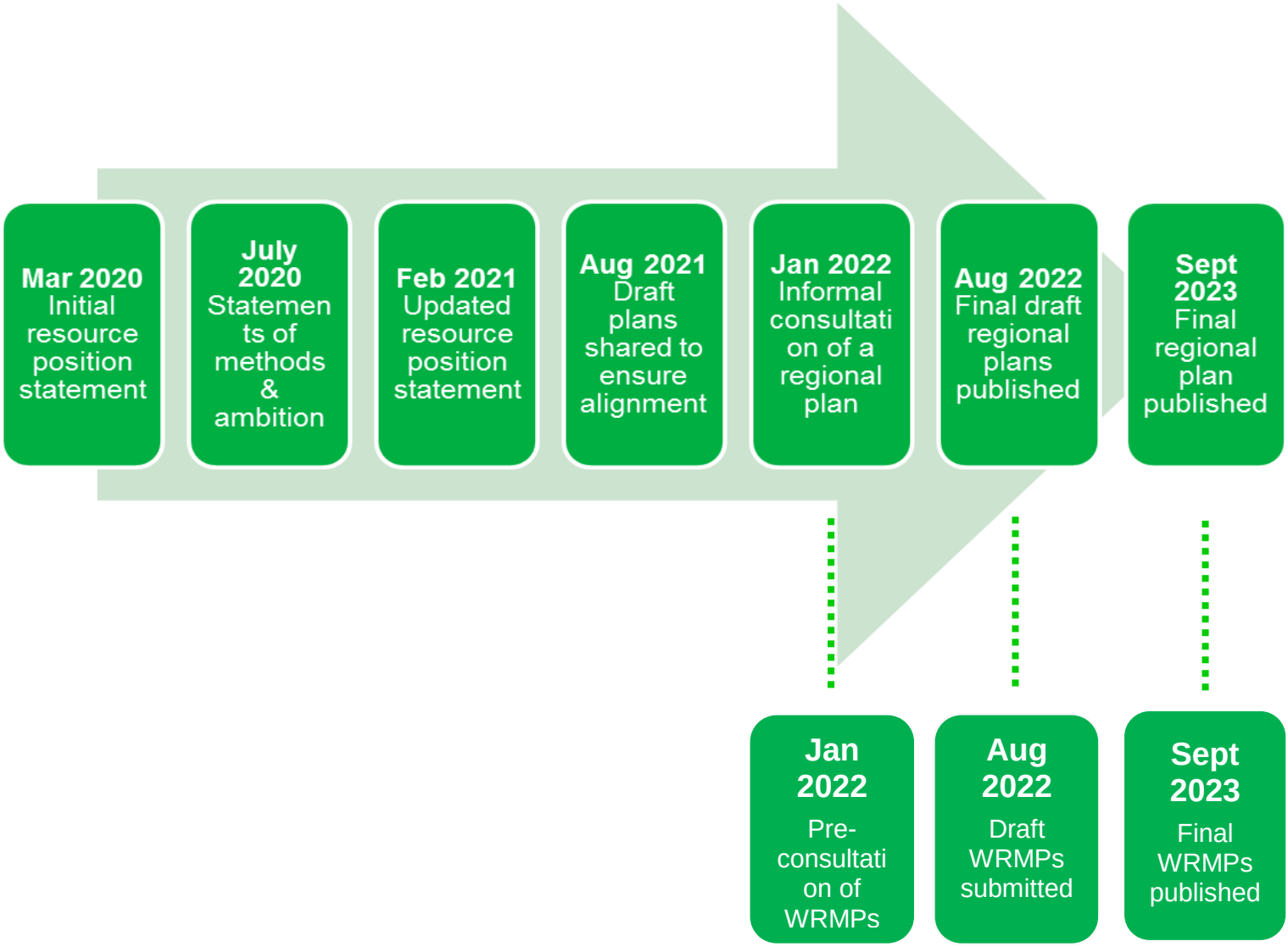
4.4. Legislation

Regional planning may soon have a statutory basis. Defra ran a consultation from January 2019 on ‘Improving our management of water in the environment’. The Environment Bill 2019 to 2020 includes the following proposal:

- the Minister may give a direction to two or more water undertakers to prepare and publish a joint proposal
- a joint proposal is a proposal that identifies measures that may be taken jointly by the undertakers for the purpose of improving the management and development of water resources

We will update this document as necessary to comply with any new legislation.

Figure 3: Timetable for regional planning



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