A policy paper

10 steps to water security

Affinity Water

Preparing for a drier future

It is now widely accepted that urgent action is required to provide water security for England in the coming decades. The National Infrastructure Commission's (NIC) 2018 report 'Preparing for a drier future'[1], sets out the scale of the likely shortfall in water supplies caused by climate change and population growth. It also highlights the cost of delaying action and relying on emergency drought measures.

A series of reports from other organisations, including work by Demos[2] in association with Affinity Water, build on this theme and make broad, high level policy recommendations.

And yet, five years on from the NIC's first report, it is far from clear that enough has been done to give confidence that a clear path to water security exists. Collaboration between regulators has improved with the creation of the Regulators Alliance for Progressing Infrastructure Development (RAPID) and strategic schemes are being developed. Construction of Havant Thicket, the first new reservoir in the south of England since 1991 is underway and multiple other new reservoirs, desalination plants and water recycling plants are also proposed. The new regional water resources groups are a positive addition to planning and the latest Water Resource Management Plans (WRMPs) are with the Department for Environment, Food and Rural Affairs (DEFRA) for sign off.

Gaps remain

However, despite these incremental steps, the publication by the Environment Agency of its summary of WRMPs highlights the major gaps which still remain:

- **Government has yet to deliver promised mandatory water efficiency labelling of white goods** and has not implemented proposed changes to building regulations to drive sustainable water design into new housing. No clear timescale exists for this and yet the assumed benefits of these measures underpin the plans.
- **A 9% reduction in domestic consumption is needed but the plans only promise 6.1%**. Even the reductions planned by companies are uncertain – national government leadership would make water saving a higher priority for the public.
- **The largest of the new supply options** – the South East Strategic Resource Option (SESRO) a substantial new reservoir near Abingdon – **remains at an early planning stage and is the subject of considerable local opposition**. SESRO is critical to achieving supply demand balance in the South East.

1. https://nic.org.uk/studies-reports/national-infrastructure-assessment/national-infrastructure-assessment-1/preparing-for-a-drier-future/
2. https://demos.co.uk/research/flowing-forward-safeguarding-the-uks-water-system/ **3.** The last major water supply reservoir to be built in the UK was Carsington in Derbyshire, which opened in 1991. **4.** https://www.gov.uk/government/publications/a-review-of-englands-draft-regional-and-water-resources-management-plans/a-summary-of-englands-draft-regional-and-water-resources-management-plans

Who's in charge?

Given the national significance of water security and the scale of the challenge in coming years of achieving it, no single agency is responsible for water resource planning and for reaching supply demand balance. Many of the arrangements which surround the planning process are informal and lack a statutory footing and there is little in the way of parliamentary oversight of public accountability for this vital issue:

- Although producing WRMPs is a statutory obligation for water companies, **the regional planning groups have no formal legal process** and there is no standard methodology for their approach, making it **hard to judge their relative robustness**.
- **RAPID**, the regulatory collaboration between Ofwat, the EA and the DWI has **no legal footing or statutory role**.
- There is **no national plan for water security supported by clear milestones and deliverables**, against which government can be held to account.
- In the South East in particular, water **supplies are reliant on bulk supply agreements between companies**, which are commercial arrangements with **no formal oversight**. This can mean that in drought conditions, companies prioritise their own customers at the expense of a fair and coordinated response.

The price review and planning processes in this area also do not align logically: water companies have submitted their draft business and investment plans for the next five years, before their WRMPs have been approved. The regulatory process for water also lacks uncertainty mechanisms to allow new environmental or quality obligations to be met and funded in a timely way. This means that investment to deal with new or emerging priorities can be delayed by up to 10 years.

Local and regional government has no formal role in the water investment planning process, despite the criticality of utility network investment to regional economic development. The impact of water supply constraints is already being seen in Cambridge which is now being used as a test bed for integrated planning and efficiency measures such as water credit trading, the effectiveness of which are yet to emerge.

Outline for a new Water Security Act

The next Parliament should urgently prioritise a new Water Security Act to secure clear public control over water resource planning and a greater level of democratic accountability. The new Act should:

1.

Show leadership

Oblige the Secretary of State (SoS) to lay a plan for achieving supply demand balance before Parliament within two years of taking office. The SoS would be obliged to report to Parliament (perhaps through the Commons Environment, Food and Rural Affairs select committee) every year on progress towards achieving water security.

2.

Create accountability

Create a new single agency with a strategic responsibility for planning and overseeing the delivery of water resilient infrastructure. The new agency would subsume the current work of RAPID and would report to the SoS. The agency would also have an oversight role on bulk supply agreements between water companies to ensure that these operate fairly and in the public interest.

3.

Support investment

Give the SoS the power to create a public interest delivery body at arm's length from government and with private funding to invest in strategic water infrastructure and assemble a National Water Grid from existing and future resource plans.

4.

Raise awareness

Empower DEFRA to run a national water efficiency awareness programme funded through customer bills, educating the public on the need for reduced consumption and encouraging behaviour change.

5

Fund regional groups

Place the regional water resource groups on a statutory footing with fixed funding from water companies and clearly defined responsibilities. Local government would become joint sponsors of the regional groups alongside water companies.

6.

Empower local authorities

Provide additional powers and stronger direction to local authorities on the use of water efficiency measures in the planning process, for example mandating the application of water neutrality on new development. Amend existing legislation to allow the development of greywater recycling schemes in new developments.

7.

Set clear targets

Set mandatory water efficiency targets for public buildings in both national and local government and report to Parliament annually on progress towards the targets. These water efficiency targets should have the same status as government's plans for net zero with the same sense of urgency.

8.

Reform regulation

Reform the price and investment setting process for the water industry so that all the elements – the WRMP, the drainage and waste water management plans, the Water Industry National Environment Programme and the five-year price review align and set down the process sequence in statute.

9.

Enforce better coordination

Oblige local authorities – in regional groups matching water catchments - to set out their priorities for water and waste water investment at the start of the price review process and require water companies and Ofwat to demonstrate that they have taken account of these in business plans and determinations.

10.

Encourage collaboration

Create a mechanism whereby local government can enter into legal partnerships with water companies, bringing together public and private investment to deliver infrastructure benefits which bring social, economic, environmental and resilience benefits.

Why wait?

As primary legislation on this scale will take some time to pass through parliament, there are some immediate measures which can be undertaken under existing powers. This will add impetus and direction to the current resource arrangements and lay the groundwork for future reforms. To this end the Secretary of State should:

Outline expectations

Issue a new and much more directive strategic policy statement to Ofwat setting out Government's clear expectations on the delivery of water security in AMP8 and beyond and obliging the economic regulator to review the extent to which its determinations from PR24 meet those expectations. Ofwat would be obliged to report to parliament every year on its progress.

Allow infrastructure to proceed

Sign off the existing WRMP's which are sat unapproved in DEFRA to ensure that planning and development for major infrastructure can proceed. At the same time, the SoS should direct the regional water resource groups to revisit their plans and assess the impact to water resources, if the optimistic assumptions and benefits of government interventions and domestic demand management are removed.

Review current infrastrcuture

Direct the National Infrastructure Commission to conduct an urgent review of asset condition in strategic water infrastructure – both network distribution and treatment works – so that historic underinvestment can be identified and so that future investment plans have a clear baseline.

Consumption based charging

Conduct an immediate review into water charging with a view to moving towards a fairer consumption-based tariff supported by universal metering by AMP9.

Taken together these measures would show government leadership on a critical national issue

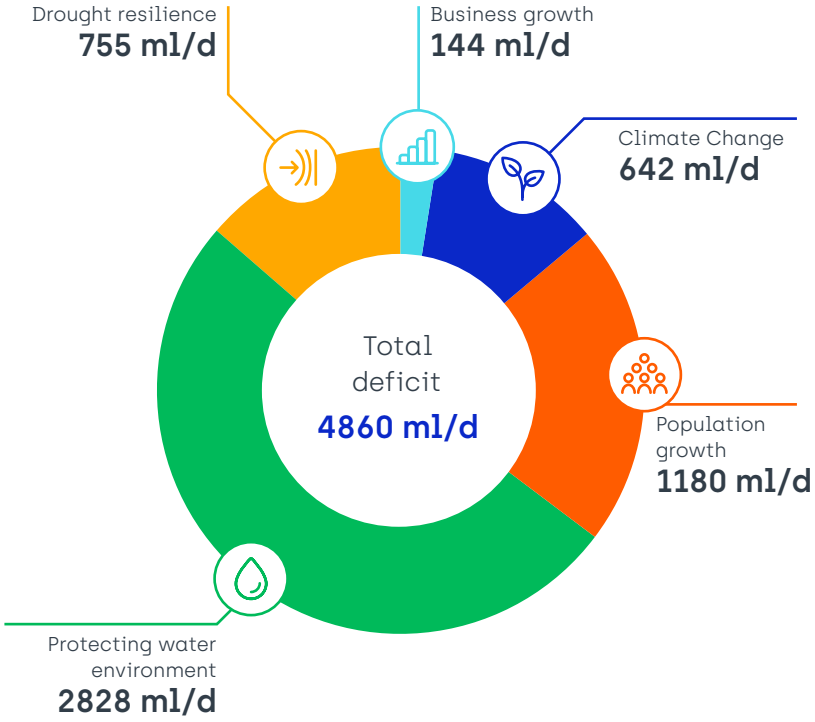
They would bring greater accountability and it would become much clearer what the water security plan is, who is responsible for delivery and what progress is being made. They would set out in law the responsibilities of all the agencies involved and realign the way in which those agencies work together to remove the planning dysfunctionality which currently exists. Local and regional government would have a formal role in the water resources planning process for the first time which recognises how important water resilience is to regional economic and social development.

Questions?

If you would like to discuss the report in further detail, please contact:

publicaffairs@affinitywater.co.uk

Appendix 1
Total public water supply demand deficit broken down by drivers



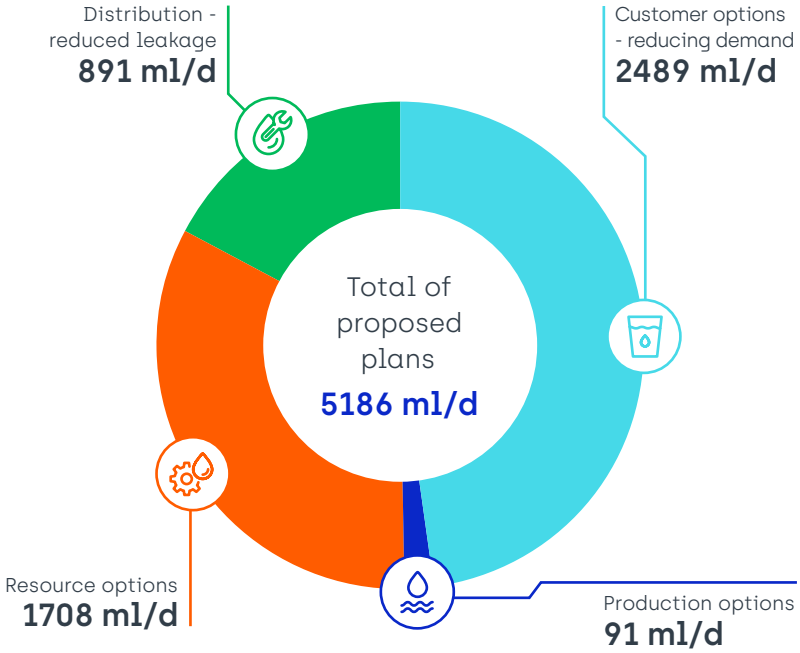
Total deficit is lower than the sum of the drivers (5549mld) because of local supply surpluses which lower the national total.

Protecting water environment means reducing abstraction from rivers – this is an uncertain figure which needs more investigation over the next five years. There may also be limits to the extent to which abstraction can be reduced because of the potential knock on effect for flooding. Less abstraction can lead to higher groundwater which can cause flooding in periods of sustained high rainfall.

Business growth is probably an underestimate given the likely water intensive nature of some decarbonisation sectors such as biogas generation and the growth in data centres which require significant water use.

Water companies are now required to achieve resilience to extreme 1 in 500 year droughts by 2050. The previous planning requirement was for 1 in 100 year resilience.

Water security plans to reduce the deficit



Plans are less than the sum of the drivers – 5186 ml/d vs 5549 ml/d. They assume a benefit of 1000 ml/d from government water efficiency measures yet to be enacted by government and whether they will deliver the benefit is open to question.

The plans rely on reducing customer demand which brings uncertainties

- Household demand for water has increased since the pandemic and there has been no reduction since.
- Within the 2489 ml/d attributed to customers nearly half (1179 ml/d) has no specific measure attached to it
- No successful demand reduction campaign has been delivered in the UK at the scale required.

The resource options (new reservoirs, regional transfers, desalination etc) rely on the planning system moving quicker than has been the case. In particular plans in the south east rely heavily on the delivery of a new reservoir near Abingdon, which is at an early stage in the planning process and is deeply unpopular locally.

Distribution benefits depend on roll out of smart metering in the next ten years. This programme may not be funded by the regulator and may be undeliverable

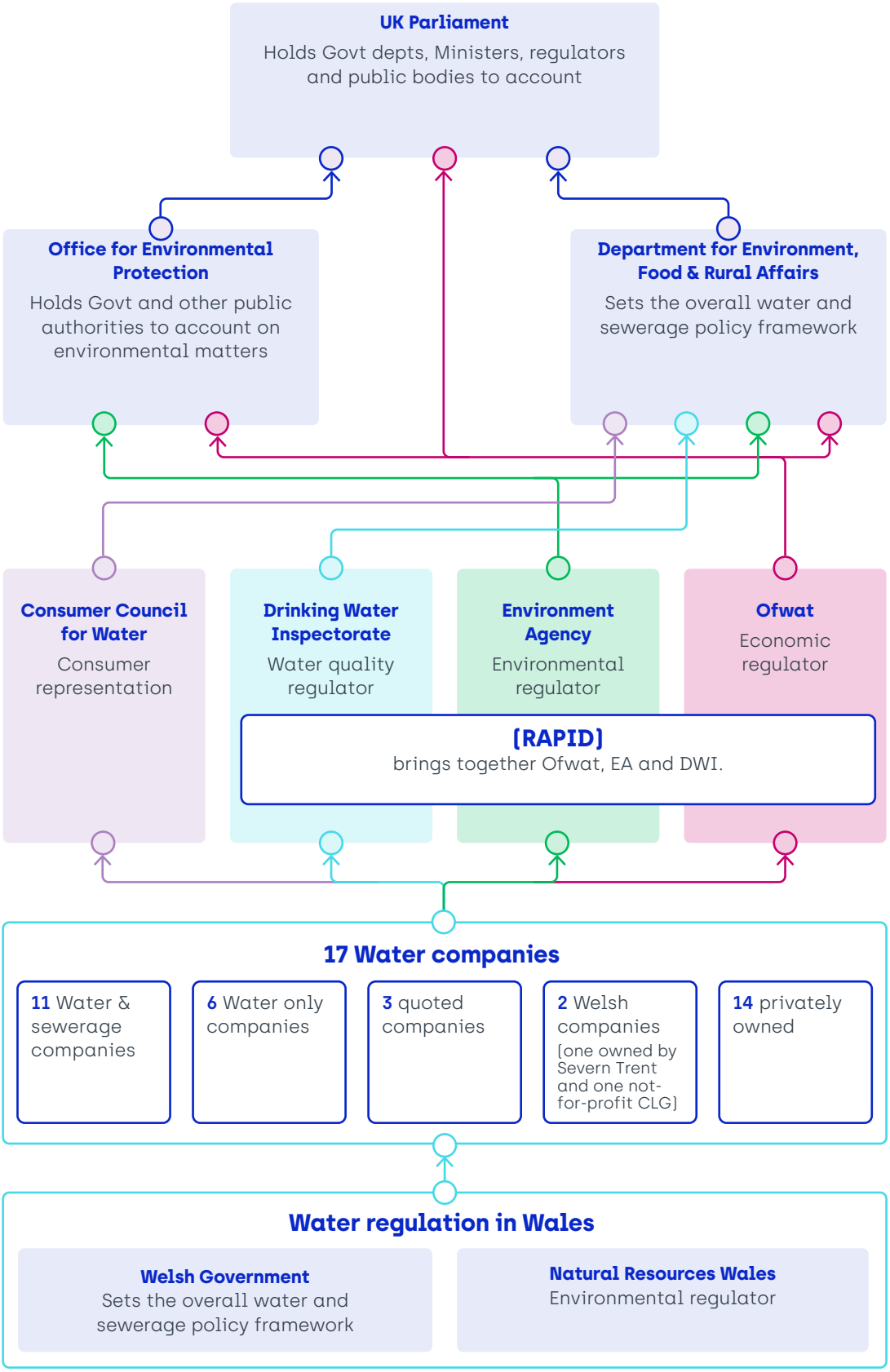
Appendix 2
Who's in charge?

Water companies follow policy and guidance produced by three regulators and one government department.

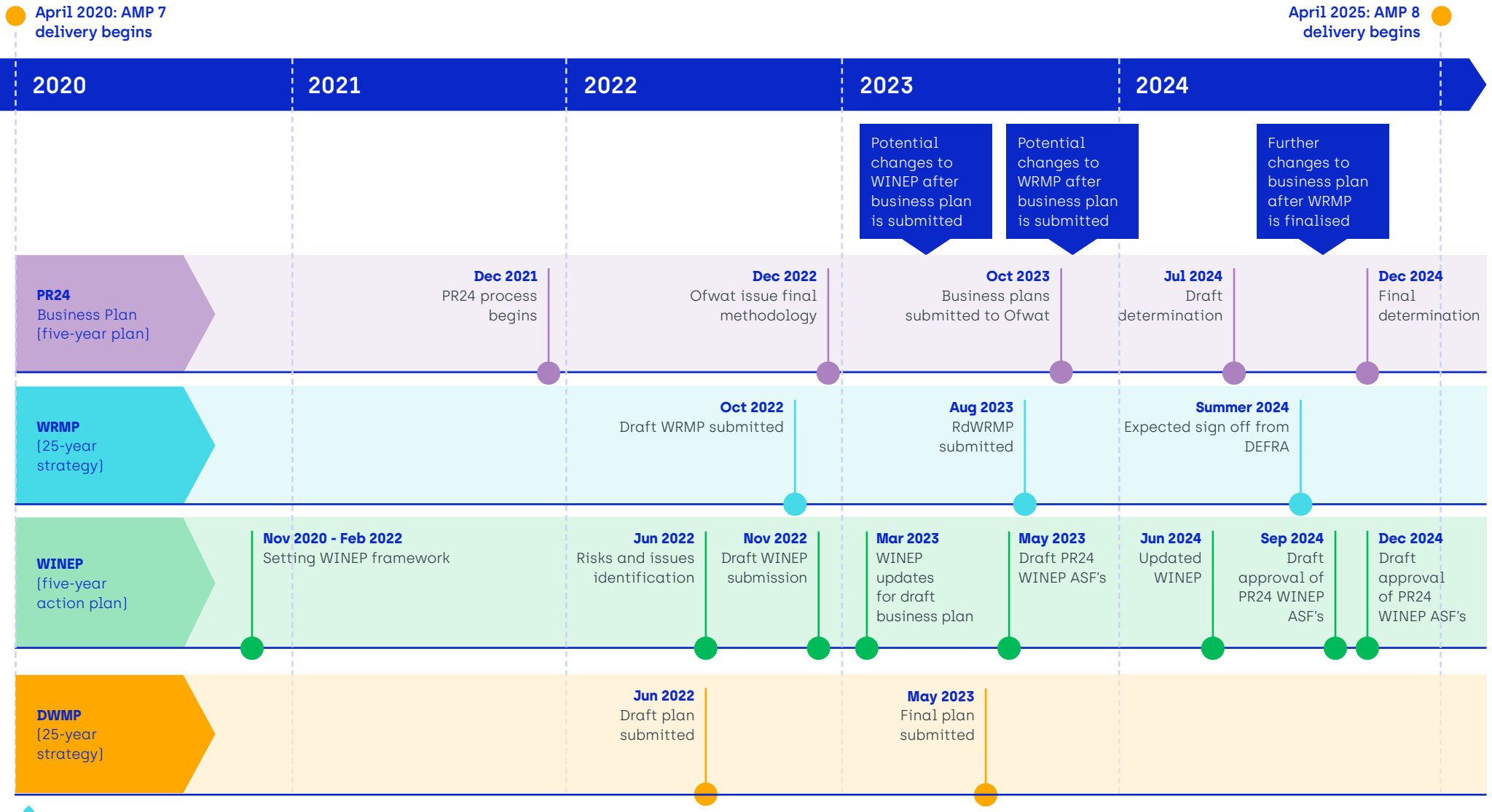
Four misaligned investment processes result in interdependent plans and strategies being produced out of sync. For example, five-year price review cycles can delay investment by 10 years.

There is no legal footing for regional water plans, which means there is no standard way of planning and a lack of parliamentary oversight on the issue.

Currently, there is no role for regional or local government within this structure. A more holistic approach involving communities should be implemented.



Appendix 3
Misaligned regulation



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