

Statement of Response

Water Resource
Management Plan
June 2023



Albion Water Limited

www.albionwater.co.uk

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1 Statement of Response

Following the publication of our Draft Water Resources Management Plan a consultation period ran until 21 March 2023. During this time there were five organisations that responded to our draft plan; Ofwat, Natural England, Environment Agency, Consumer Council for Water, and Argiva.

Responses are reproduced below along with our response to each and what updates have been made to our water resources management plan.

2 Background

Since our last WRMP the ownership of Albion Water has changed from Wessex Water to the Sustainable Drainage Systems Group. Whilst this has caused a change in our leadership team and strategic direction, the delivery of drinking water and sewage services to our customers continues unaffected. However, the new owners of Albion Water, are looking more closely at the work we carry out to make sure we meet our regulatory duties, improve customer service and achieve better environmental outcomes by implementing innovative solutions already deployed by the wider group.

Previous plans contained uncertainties for leakage and consumption figures for our Upper Rissington site in Gloucester, as did our draft Water Resources Management Plan. An audit and rationalisation of data together with a thorough review of our billing and metering information has allowed us to make more certain forecasts.

The revised figures are significantly different to those communicated in the past.



Appendix 1 – Natural England's Recommendations

Representation on Albion Water's draft water resources management plan was provided by Natural England on 13^{th} February 2023

Recommendation	Albion Water's Response
Natural England would encourage Albion Water to commit to meeting the 110Ml/d p/p/day target, where the company is close to meeting these targets already we would encourage the company to go further and set	Thank you for your encouragement. In our dWRMP we reported PCC figures of 158.6 and 118.2 l/p/d for Rissington and Oaklands respectively.
more ambitious targets.	The values provided in our draft plan were based on the best information available at that time. However, as we reported we have spent time and effort refining the information to accurately report the facts and figures expected of us.
	Having completed this task, average PCC for our Rissington site is 117 l/p/d and for Oaklands 95.66 l/p/d.
	As such, our Oaklands site is already achieving the Government targeted PPC of 110 l/p/d expected by 2050 and 120 l/p/d expected by 2030. We will use customer engagement / messaging to help our customer to continue using water efficiently.
	Furthermore, our Rissington site is already on average achieving the Government targeted 120 l/p/d expected by 2030. For this reason we plan to maintain this level of consumption from 2023 through to the start of the planning period (2025) and by 2030 plan to achieve the 110 l/p/d level of consumption the Government has targeted – this is largely expected to be achieved through customer engagement.
Natural England would encourage Albion Water to meet the 120MI/d target by 2030 instead	Our Rissington site is already achieving the Government targeted 120 l/p/d expected by 2030. For this reason we plan to maintain this level of consumption from 2023 through to the start of the planning period (2025).
	Our Oaklands site is already achieving the Government targeted PPC of 120 l/p/d expected by 2030. For this reason we plan to



	maintain the currently level of consumption
	from 2023 through to the start of the planning
	period (2025) and beyond as we don't expect
	customers behaviours to change much.
 It is good to see water meters are in the 	Thank you for your support and
majority of houses, Natural England would	encouragement
encourage the company to install meters across	
their supply areas, especially those which are	All new builds will be fitted with smart water
classified as water stressed. Natural England	meters and where it is opportune (repairs for
would encourage Albion Water to ensure the	example) and cost effective we will install a
new builds are fitted with water meters	smart meter as and when the right
	circumstances allow.
It is positive to see technology being utilised	Thank you for your support and
to monitor leaks across the network. Natural	encouragement; we will continue to develop a
England would encourage Albion Water to	cost beneficial sustainable plan to enable
strongly encourage all customers to use the	customers to use the smart meter app where a
smart meter app where the water meter is	smart meter is installed.
installed.	Smart meter is installed.
mstaneu.	Its our objective for customers to be able to
	see their consumption at least each month.
• Albian Water appear to be taking strict	
Albion Water appear to be taking strict Albion Water appear to be taking strict Albion Water appear to be taking strict	We have had to work through data and
measures to tackle leaking. Natural England are	information issues that were inherited
pleased to see this and welcome the inclusion	following our purchase of the company in
of these strategies in Albion's plan.	2022.
	As a result, we have been able to resolve
	consumption in a more sophisticated manner
	since the publication of our draft plan.
	We are now able to shows the true volume of
	water consumed and the true volume of water
	lost to leakage. Having invested time and
	money, we have already taken action to stem
	this water wastage and begun the journey to
	reduce leakage to acceptable levels.
Albion Water supply each inset area with bulk	Thank you for this. We have checked with both
supply transfers from Thames Water and Essex	incumbents (Thames and Essex and Suffolk)
and Suffolk Water (Northumbrian Water). The	and have recorded their responses in our
environmental impacts associated with these	WRMP:
sources and supply of water should be assessed	WINIVII.
	In terms of the water supply to our Upper
in the donor companies Water Resource	In terms of the water supply to our Upper
Management Plans and are subject to Habitat	Rissington, Gloucester supply; Thames Water
Regulation Assessment (HRA) and Strategic	stated that the source for this supply is in their SWOX Water Resources Zone and all of the
Environmental Assessment (SEA). In order to	
rely on the donor company to assess the	sources for this zone are deemed compliant
environmental impacts Albion Water must	from a SEA and HRA perspective. There is not
satisfy itself that the relevant assessments have	specific SEA and HRA for the small bulk supply
been undertaken with respect to its supply	for Upper Rissington.
abstraction/s.	



	For our drinking water supply to our Oaklands Hamlet, Chigwell supply; Essex and Suffolk stated that they have not conducted any environmental assessment for the existing bulk supply agreement with Thames Water because it is not a new supply option in their WRMP, and has therefore not undergone environmental assessment.
• Natural England will respond to consultations on dWRMPs for Thames Water and Essex and Suffolk Water and we have been working with these companies to ensure environmental impacts of these plans are assessed properly, and that the assessment have influenced development of their final plans.	Understood.
In light of this and the small geographic area of Albion Waters supply area, Natural England agrees that an HRA and SEA is not required for Albion Waters dWRMP	Thank you for your assessment. We have included your conclusions in our WRMP.





Appendix 2 – Environment Agency Recommendations

Representation on Albion Water's draft water resources management plan was provided by the Environment Agency on 14th February 2023

Area of	Issue and evidence	Implications	Information or changes required	Albion Water's Response to Recommendations	Changes to Albion Water's Water Resource Management Plan
			Recommendation 1: Provide details in the plan supplies and that it can me	of the process and timescal	les for the renegotiation of bulk supply agreements. This is to ensure secure will be no deficits in the plan. The renegotiation for the bulk supply agreement
Issue 1: Section 8 – WRPG. Identifying possible options	The company has a identified a deficit at Upper Rissington.	This issue impacts the security of supply at the company site. Bulk supply agreements outline the contractual volumes available.	The company should ensure there are no deficits at its sites.	We agree with this recommendation and have made changes to the water resource management plan having renegotiated the bulk supply agreement.	The previous agreement with Thames Water for a bulk supply of drinking water serving Upper Rissington, Gloucester was made in 2013 and remained unchanged set at 307 cubic metres per day and 112 MI per annum. The actual annual metered volume of drinking water imported in to Upper Rissington during 2020 was 140,572 m³ which increased in 2021 to 155,491 m and 138,663 m³ for 2022. These were in excess of our Maximum Annual Volume of 112,055 m³ agreed with the incumbent water company. First broached 25 th November 2022 the renegotiation of this bulk supply agreement was completed on 28 th June 2023, regularising volumes to 424.66 m³ per day and 155,000 m³ per year across the supply area. There is therefore no longer any technical deficit for our Upper Rissington Supply Zone.
	The company was able to publish its draft plan after detailing that it will be renegotiating the bulk supply agreement for the site at Upper Rissington with the incumbent. This will bring the site and company into surplus by the year 2025-26. The company should commit to keeping the Environment Agency and Ofwat engaged in this process i.e. ensure the plan delivers as expected to return to a surplus.	The company should be proactively reviewing the supply demand balance at sites and should use data to inform decisions on when to act, in terms of likely deficits, and the requisite decisions on measures needed to retain a surplus.	Ahead of the final plan submission, the company should have renegotiated the new volumes.	We agree with this recommendation and have made changes to the water resource management plan having renegotiated the bulk supply agreement.	We are pleased to report that in time for the finalisation of our water resource management plan, the bulk supply of drinking water to Upper Rissington, Gloucester has been brought in to surplus a year and a half in advance of the ear 2025 – 2026. Renegotiations were completed by 6 th June 2023 and the new bulk supply agreement was completed on 28 th June 2023.
	to return to a surplus.		The company should keep the appropriate regulators updated on the renegotiation at Upper Rissington. The	We agree with this recommendation	We have endeavoured to keep both Ofwat and the Environment Agency engaged and informed of the progress throughout the renegotiation process; writing on the 14 th June 2023 informing them that renegotiations were completed by 6 th June 2023.



			company should report back on this in the monthly liaison meetings with the Environment Agency as a minimum.		Furthermore, we confirmed the effective date of the new bulk supply agreement on 28 th June 2023; with both parties having signed and returned the renegotiated agreement.
Issue 2: Section 8 - WRPG Identifying possible options	The process for reviewing bulk supply agreements and the triggers for renegotiating bulk supply volumes are not outlined. This is most likely the only supply 'option' available to the company and therefore the triggers and process for this should be described. It might not be appropriate to assume that in a dry year that additional resources will always be available above the contracted volumes.	Failure to have monitored data, triggers and an agreed process with incumbents could mean sites risk a deficit with delays to securing additional supplies.	The company should be clear on the process and frequency by which it reviews current bulk supply contracts at sites to ensure there are no deficits.	We agree with this recommendation and have made changes to the water resource management plan having shared with the incumbents the opportunities and terms upon which we will seek to increase bulk supply volumes.	See Section 4.3.4 (Upper Rissington) See Section 5.3.4 (Oaklands Hamlet) Whilst the agreement is indefinite, we have shared with the incumbent water company the following triggers so that deficits can be avoided in future. There are three processes which can act to trigger a review of our bulk supply agreements to ensure that there are no deficits: • Prior to the need to draft a WRMP (Every five years). • As part of the annual liaison meeting during which the volumes and capacity (surplus / headroom) shall be discussed and minuted. • When the data from the bulk supply meters is be compared to the volumes invoiced every month. Only when the volume of water consumed be reliably within the five percent of the planned headroom for that period then steps will be taken to modify the agreement to ensure there are no deficits: Should the volume of water consumed be within the ten percent of the planned headroom for that period then steps will be taken to target consumer demand through messaging and customer communications. This will run parallel with a focus on leakage to determine the contribution leakage is making to demand and whether its economical to stem demand through repairs, or water wastage notices. Should the volume of water consumed be within the five percent of the planned headroom for that period then steps will be taken to increase targeted consumer demand through messaging and customer communications to those properties driving up overall demand, in excess of the average demand. Increased focus on leakage to determine the contribution leakage is making to demand and whether its economical to stem demand through repairs, or water wastage notices.



	Only after, the volume of water consumed reliable stays within five percent of the planned headroom, or permanently encroaches within the headroom volume planned will steps then be taken to modify the agreement to ensure there are no deficits, or else agree the appropriate steps to be taken with the incumbent. The process for renegotiation once the criteria above has been met is likely to be six months or less. We agree with this recommendation and have made changes to the water resource management plan having shared with the incumbent water company the following triggers so that deficits can be avoided in future. There are three processes which can act to trigger a review of our bulk supply agreements to ensure that there are no deficits: • Prior to the need to draft a WRMP (Every five years). • As part of the annual liaison meeting during which the volumes and capacity (surplus / headroom) shall be discussed and minuted. • When the data from the bulk supply meters is be compared to the volumes invoiced every month. The following triggers will be applied: Only when volume of water consumed be reliably within the five percent of the planned headroom for that period then steps will be taken to modify the agreement to ensure there are no deficits. Should the volume of water consumed be within the ten percent of the planned headroom for that period then steps will be taken to target consumer demand through messaging and customer communications. This will run parallel with a focus on leakage to determine the contribution leakage is making to demand and whether its economical to stem demand through repairs, or water wastage notices. Should the volume of water consumed be within the five percent of the planned headroom for that period then steps will be taken to increase targeted consumer demand through messaging and customer communications to those properties driving up overall demand, in excess of the average demand. Increased focus on leakage to determine the
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					Only after, the volume of water consumed reliably stays within five percent of the planned headroom, or permanently encroaches within the headroom volume planned will steps then be taken to modify the agreement to ensure there are no deficits, or else agree the appropriate steps to be taken with the incumbent. The process for renegotiation once the criteria above has been met is likely to be six months or less.
	l		I	Ensure the plan is legall	Recommendation 2: ly compliant by adhering to the WRMP Directions.
Issue 3:	The company has not included the suggested table of Directions to highlight which do and do not apply to it as a NAV. It is not clear if the company has addressed all Directions.	This issue impacts compliance with the WRMP Directions. All Directions must be addressed and if they do not apply, it must be stated as so. A table of Directions would help to address this for company.	• The company should include a table to identify which Directions the company has assessed as applicable to its functions as a NAV or describe why they do not align.	We agree with this recommendation and have made changes to the water resource management plan to include a table of all the Directions.	The suggested table of Directions has now been included in Section 2 – Legal Compliance
			• The company must explain why any Directions do not apply to them and explain the assumptions behind this.		Understood.
Issue 4: Direction 3(a) - Options Appraisal	Direction 3(a) has not been complied with regarding options appraisal. As a NAV, the company may not complete a detailed options appraisal. However, this Direction has not been addressed.	This issue impacts compliance with the WRMP Directions. All Directions must be addressed and if they do not apply, it must be stated as so.	The company must address each Direction.	We agree with this recommendation and have made changes to the water resource management plan to include a table of all the Directions.	Refer to Issue 3 (Table of Directions Included)
			The company should present a simple options appraisal consisting of demand management or increasing bulk supply contractual volumes.		We have included a commercial in confidence Annex (1). This includes a simple options appraisal for Rissington, which shows that compulsory metering is not financially viable. In our draft plan, the facts and figures available didn't help us to work out where the demand for water was coming from – it appeared that customers were using much more water than is now understood. At that time it made sense to compulsory meter customers with high consumption, because customer engagement would never have made up the volume reduction needed to return the supply to surplus.



					same time re	esolve w show	the issues wi	th the data. emand is largel	supply agreement and at the yellow agreement and at the yellow agreement and at the yellow agreement and at the
					Similarly, An	nex 2	includes a sim	nple options ap	praisal for our plan for Oaklands
			This should demonstrate to customers the measures available to the company to manage the components of the supply and demand balance and how the measures resolve deficits or contribute to		For Rissingto bulk supply a Between our customers a	on; the agreen r draft re actu ow tha	measures we nent; compuls and final plar ually consumin t the new bul	ere; customer of sory metering; n, we have beeing water efficien	engagement; renegotiating the
	recommendate have made characteristics. The water resonant to the	We agree with this recommendation and have made changes to the water resource management plan to	WRMP updated to include percentages. Upper Rissington (Thames): Section 4.3.6 Restriction Description Water Use Frequency of Occurrence						
				include the average		Level 1	Impending Drought	Restrictions Intensive media	Not more than once every 5 years
			• The company must include the average annual risk to customers expressed as a	annual risk to customers expressed as a percentage		Level 2	Early Stages of Drought	campaign Temporary Use Ban (Enhanced Media Campaign)	Not more than once every 10 years (10%)
Issue 5: Direction 3(b) - Levels of Service	Direction 3(b) has not been complied with regarding Levels of Service.	n complied with compliance with the ways pirections				Level 3	Sever Drought	Non Essential Use Ban (NEUB) (Drought Order and Drought Permits — applied for in a staged manner)	Not more often than once every 20 years (5%)
			percentage.					Emergency Drought Order	Not more often than once every 100 years until 2030 (1%)
						Level 4	Extreme Drought	(Standpipes and rota cuts)	Not more often than once every 200 years until 2032 (0.5%) Not more often than once every 500 years thereafter (0.2%).
					Oaklands Ha	ımlet (E&S): Section	5.3.6	,



					1	Restriction	Build Build	Frequency of	Annual Chance	
						Level 1:	Restriction Description Ask customers to use water wisely. For	Restriction	of Restriction	
						Appeal for restraint	example, watering plants at night and not watering the lawn because grass is resilient to drought.	1 in 5 years	20% probability in any one year	
						Level 2: Temporary Use Ban	Applies mainly to the domestic use of water and stops the use of a hosepipe or sprinkler for any garden watering or	1 in 10 years	10% probability in any one year	
						Level 3: Drought Order Ban	cleaning. Bans what has been applicable to the domestic customer under the Temporary Use Ban, to non-domestic or commercial customers. These bans have economic consequences for businesses and must be	1 in 50 years	2% probability in any one year	
						Level 4: Reduced Supply at Customer Tap	used as sparingly as possible. A temporary reduction or nil supply of water at the customer tap. For example, reduced pressure at the customer tap (and therefore reduced flow), Rota cuts (e.g., 12 hours normal supply, 12 hours no supply; or, Standpipes where supplies to customer's taps are turned off leaving customers to fill containers from an in pavement standpipe tap	2025 to 2039: 1 in 200 years 2040 onwards: 1 in 500 years	2025 to 2039: 0.5% probability in any one year 2040 onwards: 0.2% probability in any one year	
	The Levels of Service tables 3.3.6 and 4.3.6 do not show the average annual risk to customers as a percentage. Furthermore, the Levels of Service must align with the current incumbent values. Incumbent water companies are working towards adjusting Levels of Service to be resilient to a 1 in 500 year drought event by 2039. Though a lesser level might be adopted before this time.	Water companies must express this as a percentage.	The company should contact the incumbent companies to discuss changes to Levels of Service.	We agree with this recommendation and the incumbents were contacted to discuss their current levels of service and our WRMP updated to align accordingly and present annual risk to customers as a percentage.	1		clude percentages which ng incumbent water com		nose availa	ble in the draft
		Additionally, this conflicts with other water company WRMPs. The company's Levels of Service must match the incumbent values.	• If the Levels of Service have changed (or will change in the 25-year planning period), in the draft plan, the company will need to align with each incumbent and set out the annual risk as a percentage and state whether this will change at all across the 25-year period.	We agree with this recommendation and the incumbents were contacted to discuss their current levels of service and our WRMP updated to align accordingly and present annual risk to customers as a percentage.	by the incumb	ent wa	oresented in our WRMP ster companies, having lia evels of service.			•
Issue 6: Direction3(d) – Greenhouse Gas Emissions	Direction 3(d) has not been complied with regarding greenhouse gas emissions.	This issue impacts compliance with the WRMP Directions.	The company must include information on its emissions.	We agree with this recommendation and have now included information about greenhouse gas emissions	Section 9.1 ad	dresses	our Green House Gas (C	O ₂) Emiss	sions	



	The company has not included an assessment of greenhouse gas emissions based on customer water consumption. There is also no information on how the company will work to reduce emissions or how these steps will support delivery of the UK government's net zero greenhouse gas emissions targets and commitments.		The company could include incumbent CO2 emissions per MI/d and derive an estimate based on the DI assumed.	We contacted each incumbent and were not able to determine the greenhouse gas emissions per MI/d and derive an estimate as recommended.	We asked Thames Water for their CO ₂ emissions per cubic metre value in kg/m3 units and they said they don't have such a figure – that they work out the emissions from new sources and put these figures into the WRMP, but not from existing sources. Essex and Suffolk were not able to respond.
	Communicates.	All Directions must be addressed and if they do not apply, it must be stated as so.	The company could also include the emissions from its other activities, such as leakage detection teams etc. or set out why these are not part of their greenhouse gas emissions (e.g. where contractors might	We agree with this recommendation and when considered, our greenhouse gas emissions are going to be low because almost all our activities are contracted out or accounted for by virtue of the emission calculations undertaken	In reality, our contribution to CO ₂ emissions is likely to be small because the incumbent water companies will account for the production, treatment, conveyance and storage of water supplies, and we hire contractors for sampling, testing, leakage detection and repair. We therefore conclude that our contribution is negligible but we will contribute towards the government targets for greenhouse gas emissions by virtue of meeting targets for water consumption.
			account for this). • The company must cover each section of Directions and include information on net zero or why this might not apply to it.	by the incumbent.	Understood
Issue 7: Direction 3(e) - Climate Change	Direction 3(e) has not been complied with regarding the impact of climate change on future forecasting.	This issue impacts compliance with the WRMP Directions.	The company must address this Direction or justify why it might not be relevant.		Understood
	The assumptions the company has made on climate change on supply and demand is unclear. The company has not included consideration/explanation of how supply and demand forecasts might be impacted by climate change.	All Directions must be addressed and if they do not apply, it must be stated as so.	• The company could include a breakdown on how climate change might impact supply and demand forecasts (or evidence why it is not relevant).		Initially, the assumptions (how supply and demand might be impacted) were based on the highest value cited in reports issued by incumbents canvassed. However, since our draft plan we have focused in on data used by Thames Water; who ultimately supply both sites with water. Annex 3 We conclude that contractual arrangements exist to supply a fixed volume of water free of the influence of the impact of climate change. In our Headroom calculation we have included twice the rate Thames Water have estimated the impact on customer consumption might be (1.5%). See Section 7 Headroom



			• The company could demonstrate how the plan is sensitivity tested to ensure there is enough headroom in the current bulk supply agreements to cover any changes due to climate change.		We have run three different scenarios to test the security of supplies; using increased population, increased leakage and also increased consumption. See Section 4.14 Scenario Testing Rissington See Section 5.4 Scenario Testing Oaklands
Issue 8: Direction 3(f) – Metering programme	The company has not clearly outlined its intended metering plan. On Page 18 it states that the company is planning to introduce smart metering to all metered customers. However, it is unclear when this will be or how many customers are currently on basic meters i.e. the proportion of smart meters to other meter types. The company has also not included the cost of its metering implementation plan.	This issue impacts compliance with the WRMP Directions.	The company must be clear on its intended smart metering programme.	Apologies for the confusion; the text has been revised to make clear we only use smart meters. The smart metering programme as such is the compulsory metering programme for a small number of properties that are currently on shared smart metered services.	The number of customers currently metered is described in sections: Rissington (Thames): Section 4.7 Oaklands (E&S): Section 5.7 Whilst we anticipated a smart metering programme, we have since determined it is not cost effective. Annex A Our focus now will be on tackling leakage and customer engagement. Any new smart meters installations will be opportune when circumstances arise that make sense to, for example, replace a broken traditional meter with a new smart meter.
		All Directions must be addressed and if they do not apply, it must be stated as so.	• If meters are not smart the company must detail if they will be upgrading to smart meters, giving information on the plans to introduce smart metering and should include timescales for this.	Apologies that this was not clear in our draft plan. However, both our Upper Rissington and Oaklands Hamlet developments are metered using 3G AMR Concentric 15 mm Smart Meters; where these are installed.	The majority of meters installed across our supply zones are 3G AMR Concentric 15 mm Smart Meters. All the properties in Oaklands are 100% 3G AMR Concentric 15 mm Smart Meters. In Rissington; 181 properties have shared 3G AMR Concentric 15 mm Smart Meters from which we can determine consumption and detect leakage. 40 properties are traditional non-smart meters. All the other properties have 3G AMR Concentric 15 mm Smart Meters Upgrading non-smart meters, together with installing meters to all individual properties (migrating away from shared meters) works out cost ineffective.



			If the company is not going to be implementing smart meters it must address why. The company must	Its our policy only to ever use smart meters.	Whilst we anticipated a smart metering programme, we have since determined it is not cost effective. Annex A
			detail the cost of the implementation of meters.		Annex 1
			The company must address each Section within each Direction. If parts of Directions do not apply the company must state why not.		Understood
Issue 9: Direction 3(g) - Metering Programme	The plan does not include a description of the breakdown of types of meter implementation. This includes total number of smart meters, meters that are charged by reference to volume and those that are not charged by reference to volume, new build metering, compulsory metering, or selective metering.	This issue impacts compliance with the WRMP Directions.	The company must add detail on the breakdown of its meter implementation.		We have broken the data down to satisfy this requirement. See Section 4.7 Upper Rissington See Section 5.7 Oaklands Hamlet
		All Directions must be addressed and if they do not apply, it must be stated as so.		The information has been added to satisfy this requirement	Completed
Issue 10: Direction 3(j) - Metering Programme	Direction 3(j) has not been complied with regarding the cost effectiveness of meter implementation.	This issue impacts compliance with the WRMP Directions.	The company must address this Direction within the plan.		Whilst we anticipated a smart metering programme, we have since determined it is not cost effective. Annex 1
	The company has not discussed the cost effectiveness of implementing meters at Upper Rissington. Furthermore, the company has not referred to the type of meters that will be installed in Upper	All Directions must be addressed and if they do not apply, it must be stated as so.	• The company must decide if this is a relevant Direction and state why if it is not.		Whilst we anticipated a smart metering programme, we have since determined it is not cost effective. Annex 1 We have broken the data down to satisfy this requirement. See Section 4.7 Upper Rissington See Section 5.7 Oaklands Hamlet



	Rissington and of the existing meters. It is unclear which type of meters are to be installed.				
			The company could include detail on the cost of implementing the meters versus money saved.		Our latest cost analysis shows that no savings would be made and that implementing smart metering is not cost effective (Annex A)
Issue 11: Direction 3(k) – Leakage Programme	Direction 3(k) has not been complied with regarding its intended programme for leakage.	This issue impacts compliance with the WRMP Directions.	Anticipated leakage levels for the whole company should be given.	To ensure we comply with this requirement we have added a new section at the end of our plan that focuses on company level leakage.	Section 9.0 Company Level Leakage
	The narrative is unclear. On Page 16 the company states the ambition to deliver a 50% reduction in leakage for Upper Rissington site. On Page 26 it states that the company will reduce leakage by 50% over the planning horizon.	The Directions state that water companies must show a clear programme for leakage.	• The company should state clearly if it is aiming to reduce leakage at both sites by 50% or, if the aim is to reduce the company total leakage levels by 50%.	We apologise that the narrative is unclear. We have two supply sites. Our report is set out with two sections – one for each site. Page 16 referred to our Upper Rissington supply zone and the 50% leakage target was in the context of our plan for this supply zone. Page 26 referred to our Oaklands Hamlet supply zone and the 50% leakage target was in the context of our plan for this site.	Section 9.0 Company Level Leakage
	At Upper Rissington the current losses are approximately 25% of the bulk supply import volume (6.5% at Oaklands). The narrative is unclear if the company will be reducing leakage by 50% at each site or at a companywide level.		The company should state and justify the target leakage level that it is aiming for. For a NAV company we would expect this to be low.		We agree with this in principle; however, for our Oaklands site which is completely new (unlike Rissington) the level of leakage is significant (35%). Our target leakage is based on what we think is achievable on a cost beneficial basis. There are two sections to the report; it was written that the targets were applied at site level. In our updated plan, the targets are site level but mirror the company targets. We have added a section to help explain this: Section 9.0 Company Level Leakage
	Considering the high leakage the company is experiencing we would		The planning data tables should then	We agree with you about this and have brought	Section 9.0 Company Level Leakage



	expect that it is aiming to reduce the current leakage levels further than by 50% as it has leakage significantly higher than its peers as a proportion of distribution input. Detail in the Tackling Leakage section on Page 28 is not a strategic or detailed plan of the measures the company might adopt.		reflect these reductions in leakage.	forward our leakage targets.	
			• The leakage strategy given should include detail on how the company is increasing and adapting to now tackle its leakage levels. This could state what the current actions are and how the company is now going to be increasing its actions.	This information is included as part of the detail for the plans for each supply area	See Tackling Leakage Sections: 4.13 Rissington 5.3 Oaklands
			• The company could include the assumed benefits of certain actions. For example, with compulsory meter implementation this might help to discover leaks and a figure could be provided on the assumed benefit of this.	We appreciate the assumed benefits. However, compulsory metering is no longer cost effective.	All our customers are metered but not all are billed volumetrically. With every customer covered by a metered supply of one kind or another we can measure consumption and monitor leakage. However, latest data shows compulsory metering every home is not cost effective.
Issue 12: Direction 3(n) – Regional Planning	Direction 3(n) has not been complied with regarding the company's relationship to regional planning.	This issue impacts compliance with the WRMP Directions.	The company must address this Direction within the plan.		We have discussed our plans with two regional groups who have concluded that our plans align with their regional plans.
	The company states on Page 7 that it has been involved in regional planning. However, it does not explain in which ways it has been involved or its relationship to the published regional plans	All Directions must be addressed and if they do not apply, it must be stated as so.	• The company must decide if this is a relevant Direction and state why if it is not.		9.2 Regional Water Resources Plan



	or the targets and policies defined in them.				
			The company could provide more detail on its relationship to regional plans and which targets it aligns with and which it does not.		We have emailed the groups to seek advice and information, and further to this have met with two regional groups to ensure our plans align. The feedback is that our plans do align. We will be attending any meetings they hold from now on.
Issue 13: Legal Compliance	The company has not complied with legal compliance on SEA/HRA.	This issue impacts the legal compliance of the plan. The company must either complete SEA/HRA or explain why it will not.	The company should explain the reasons behind why they have not completed SEA/HRA for this plan.	We have not carried out a SEA or HRA because we are too small an organisation without schemes that could impact on the environment and habitats.	We consider that we are too small an organisation, without significant schemes that could impact on the environment and habitats.
	On Page 30 the company states that it does not need to complete an SEA/HRA. There is no explanation of why.			We have provided an explanation in Section 8.0 of our plan.	The explanation is now given in Section 8.0 Natural England supports our view that additional SEA and HRA's to those of the incumbent are not needed.
			-	the quality of the data tables ative for clarity and confide	s and written report, ensuring consistency between figures and alignment of nce in the plan.
Issue 14: Data Issues and Quality Assurance	The company had initial issues with its data tables and there are still some conflicting figures between the written plan and data.	The quality of data issues results in questions around the assurance process of the plan	The company should ensure that data tables and text are both reviewed and are accurate before publishing the final plan.	Understandably, we would have wanted to avoid conflicting figures. However, there is an incredible amount of data entry, transposition in to a spreadsheet that doesn't have any data validating functionality.	We have applied more assurance this time around
Issue 15: Data Issues and Quality Assurance	The number of metered properties does not look representative of the number of properties the company supplies. In Table 2c in the Whole Company Summary tab, the number of metered properties in year 2025-26 is shown as 117,500.00	The data is inconsistent with the written narrative.	The company should review the units in this table and amend the property numbers.	We have corrected this	Thank you for highlighting this error; Table 2C has been updated to report values in the correct units and to the correct number of decimal places
Issue 16:	The number of total appointed areas does not look representative of the	The data is inconsistent with the written narrative.	• The company should review the number in cell F2 so this	We have corrected this	Thank you for highlighting this error; "Cell F2" within "1. BL Appointments by incumbent" has been updated to report the correct number of sites supplied (No. 2)



D. I. I	Latella adeca fatha dha				T
Data Issues and	total number of sites the		represents the number		
Quality	company supplies.		of sites the company		
Assurance			covers.		
	In the BL appointments by incumbent tab, cell F2 states that there are 5 sites the company covers. It might be that the example rows have been hidden and not deleted in this tab.			We have corrected this	Thank you for highlighting this error; there were three anomalous entries within the hidden example rows which have now been deleted
			The company should	The information included	
Issue 17: Data Issues and Quality Assurance	Assumed savings due to leakage control is not included in Table 2e.1: Final plan options, relating to Direction 3(k).	The data is inconsistent with the written narrative. The company has included a reduction in leakage in its written text.	include the work to decrease leakage in this table. This should demonstrate the expected leakage measures in place to sustain low levels of leakage	in the written text has now been included in the planning tables.	We've updated the planning tables to not only show the reduction in the volume of water lost to leakage but correspondingly the amount of water saved each year due to the water saved due to leakage control.
Issue 18: Data Issues and Quality Assurance	USPL and leakage is not reported separately. Data is only given in row 51 for total leakage.	The text is unclear on why the company is not producing the data separately.	 The company should explain why they are not reporting USPL and leakage separately or given any information on if they are considering working towards collecting the data necessary to report the components. When submitting the final plan, the company could include this data separately or, the company should include a description in the plan the way it will work towards getting this data. 	When we purchased Albion Water, the information systems, together with the records we inherited, limited our capacity to determine consumption and leakage. As promised in our draft plan, we've sought to improve this situation to be able to report unaccounted for water in a sophisticated manner, including underground supply pipe loses (USPL). However, for the moment we don't have the data to determine the rate or propensity for the supply pipes to be the cause of water loss any more than a faulty toilet cistern might be.	Section 4.13 Our Plan Upper Rissington Section 5.3 Our Plan Oaklands Hamlet Similarly, underground supply pipe loses (USPL) is a component of customer side losses which we are currently unable to estimate owing to the absence of data collection, which we will start to gather from now on so that we can better estimate the rate / propensity for the supply pipes to be the cause of water loss any more than a faulty toilet cistern might be and report this estimate in the future.
	There is no explanation if			We are collecting	Section 4.13 Our Plan Upper Rissington
	the company will be			consumption and	Section 5.3 Our Plan Oaklands Hamlet
	working towards			metering data monthly	
	Working towards			metering data monthly	1



	reporting these figures			now and asking	We will start to gather this information from now on so that we can better
				customers to investigate	estimate the rate / propensity for the supply pipes to be the cause of water loss
	separately.				estimate the rate / propensity for the supply pipes to be the cause of water loss
				higher than expected	
				consumption. We expect	
				that in future we will be	
				able to report USPL as	
				fraction of overall water	
				loss.	
	In the planning tables the			We have removed these	
	company has reported			values from the planning	
	from the years 2019-20			tables because we do not	
	until 2023-24 that there			have our own sources of	
	will be 1.81-0.91 m3/d			water and have chosen	
	coming from its own		 The company should 	not to include the	
Issue 19:	sources. In Section 2.2 it		update the planning	benefits of a green water	Section 2.2 was correct. We have removed all values from the planning tables
Data Issues and	explains that the	The data is	tables to reflect that the	system because such a	relevant to own sources and our WRMP in general because use of rainwater
Quality	company will not be	inconsistent with the	green water system has	system is unfunded.	harvested green water is unfunded and there is currently no scheme to
Assurance	including the benefits of	written narrative.	not been built if this		implement.
7.050101100	the green water system in		value is incorrect.		- Implementa
	its plan due to the		value is incorrect.		
	scheme being on hold.				
	Therefore, it seems				
	unclear where this water				
	has come from.			M/a day/+ have average	
				We don't have our own	
				water sources and have	
				chosen to break away	
			• If there is water	from including the	
			coming from the	prospect of a future	The figures have been removed from the planning tables because we don't
			company's own sources	rainwater / green water	have any sources of our own yet.
			this should be explained	scheme when such a	have any sources or our own year
			within the text.	scheme hasn't been	
				achieved by previous	
				ownerships and remains	
				unfunded at the moment	
			•	_	eadroom components and describe the assumptions made in the calculation so
				s what this is and clearly de	monstrates how the company is managing its risks.
			 The company should 		
			explain the breakdown		
			components of its		
			target headroom. This		
Issue 20:	The torget bandure	The methode bear	can be through		
Target	The target headroom	The methods here	referencing the		Costion 7. Hoodysous
Headroom	calculation breakdown is	are not explained or	methods used or		Section 7 - Headroom
Assumptions	unclear.	broken down.	including a breakdown		
			of components which		
			then explains the		
			assumptions behind		
			each percent		
	1		cacii percent		I .



	Climate change has been included in target headroom as a buffer detailed as 3% on Page 17, 27 and 30. However, the breakdown or calculation of this has not been explained. The breakdown of 7% for extreme events is also not explained.		Improvement 3: Carry out	improved scenario testing a	We have tried to describe that the Headroom was made up of two constituents; a total of 10 % (which is near the percentage increase of water usage seen in our Rissington Supply Zone during lockdown). The 10% is made up anticipating 3% for climate change (demand perspective) and 7 % from extreme events (that aren't typically as severe as lockdown was). Regional planners suggested that typically incumbents use values in the range of 5 – 8 % so 10 % seems reasonable and justifiable.
			-	•	d provide security of supply.
Issue 21: Scenario Testing	Scenario testing has been completed on page 20. However, a more up to date scenario test could be provided separately for both sites in a period of prolonged dry weather.	Without having a proper scenario test using examples or potential extreme drought options the company does not know if its bulk supply volumes at sites are resilient. This poses a potential risk to supply demand balance.	The company should demonstrate, through a selection of plausible scenarios, whether higher consumption would mean that its current bulk supply agreements will cover demand.	We accepted the previous tests were not that sophisticated	Section 4.14 Rissington Scenario Testing Section 5.4 Oaklands Scenario Testing
	Although the contracts at Upper Rissington are now being increased, scenario testing at Oaklands should also be included to ensure this volume is also enough to cover the company's demand.			We've applied tests to each supply zone irrespective	Section 5.4 Oaklands Scenario Testing
Issue 22: Basis of Planning	When planning, the company should be forecasting metrics based on a dry year annual average (DYAA). Within the text it does not state that this is the case. It is not clear to customers that the WRMP is planning for a dry year annual average.	Unclear narrative in plan therefore not clear planned for the correct 'type' of year forms the basis of plan.	The company could update its text to include information on the basis of water resources planning.	We understand that the level of demand equal to the maximum annual average, which can be met without introducing demand restrictions, is based the continuation of current demand management policies. The DYAA should be expressed as the total demand divided by the number of days in the year (MI/d).	Our plan is not based on the notion of a DYAA and we will need to build up a data set of reliable values over the next period, during which time we plan to have the significant levels of leakage under control.



		Creates uncertainty whether supply demand balance is for an appropriate year.	The company should add in a brief sentence to explain whether the plan is based on DYAA.		Our plan is not based on the notion of a DYAA owing to the absence of reliable data for PCC and leakage; the latter likely to adversely skew any meaningful data.			
	Improvement 4: Demonstrate how the company is planning to achieve government's per capita consumption target of 110 l/h/d by							
			2050 by presenting a strat		ns that is coherent with incumbent water companies.			
Issue 23: Consumption Strategy	The company has met government targets working towards 110l/h/d.	Without a strategy to meet this target the company might struggle to meet the PCC.	• The company should provide a tactical plan on reducing PCC to the government target of 110 l/h/d.	For our Oaklands supply zone, PCC already satisfies government targets. For Rissington the average PCC is not far from satisfying the 110 l/p/d government target which we are planning to achieve through customer engagement	Annex 1 and Annex 2 describe the options open to us for demand management at the two sites. Our Oakland site already satisfies both government targets so our plan is continue to help customers use water efficiently through customer engagement and through making available to them their consumption data each month. For our Rissington site; customers already on average achieve the 120 l/p/d. As regulators have encouraged, we have brought forward targets to achieve the 110 l/p/d by 2030. Since installing smart meters is no longer cost effective; our strategy is to achieve the circa 6 % improvement in average consumption largely through customer engagement.			
	However, there is not a specific plan describing how the company will work to reduce consumption to this level. By 2024-25 the company is aiming to reduce its PCC to 125 l/h/d. Average consumption is currently higher than this target so the company will need to work to reduce this. There will need to be increased efforts in place to decrease customer consumption above the current measures.	Currently the average consumption is higher than this target PCC, meaning there will need to be increased efforts in place to decrease customer consumption above the current measures.		PCC values have changed since our draft plan.	New data makes places PCC for our Rissington site on average 117 l/p/d to achieve the target of 110 l/p/d by 2030; our customer engagement strategy needs to be effective by just over 1% a year accumulatively across the planning period. The increased effort will include regular, social media messaging, website articles, information in bills, access to consumption data monthly.			
Issue 24: Consumption Strategy	The company has not outlined how it will work with incumbent water companies to support messaging to customers on consumption and how this could help reduce PCC.	Failure to align messaging could lead to confusion for customers and reduce the effectiveness of communications. Aligning with incumbent efforts may also enhance	• The company should ensure good communication with incumbents and could consider working together on targets. This good communication will also benefit in the situations of incidents.	We will discuss this approach through our bulk supply meetings together with keeping a watching brief on the messages being pushed out by the incumbents so we can be consistent too.	We will link in with the messaging originating from the incumbents to make sure messaging aligns; much like we did throughout the drought.			



		the impact for the company and therefore improve the supply demand balance.	The company could consider working with or supporting incumbent water company strategies to ensure that customers receive consistent messaging.		We have considered this and will strive to mirror the good work achieved throughout the drought.
Issue 25: Consumption Strategy	The company has not considered the implications of serious water stressed areas. This should be taken into consideration when targeting work on demand management, increasing leakage reduction and PCC.	It is unclear how the company will reflect water stressed areas in planning forecasts.	The company should include detail on how it will increase targeted demand management work within water stressed areas.	We recognise the water stressed nature of the area and have recognised this in our plan by reducing leakage from current levels by 50% by the start of the planning period.	Section 4.9.2 Rissington Leakage Section 5.9.2 Oaklands Leakage PCC reported previously was significantly overestimated.
	The company site in Upper Rissington, which has unmetered properties, lies within an area of water stress within the geography of Thames Water. This means that the company can consider compulsory metering for this site. The company does not include information on how compulsory metering might benefit leakage detection.		The company could include detail on how metering in Upper Rissington will benefit reducing PCC in an area of water stress.	We recognise the water stressed nature of the area and have recognised this in our plan by reducing leakage from current levels by 50% by the start of the planning period.	Section 4.9.2 Rissington Leakage Section 5.9.2 Oaklands Leakage PCC reported previously was significantly overestimated.
			Reflect correspondence from Defra on the legal position with regards water stressed areas.	We have taken steps to include Defra's feedback about compulsory metering in water stressed areas.	Section 4.13 Our Plan now includes reference to correspondence from Defra on the legal position with regards to water stressed areas: Smart metering can be compulsory as confirmed by Defra as being allowed in correspondence subject to a cost effective assessment together with positive customer support.



Issue 26: Clarity within text	It is unclear if there are constraints to the daily or annual supply.	• The company should be clear if there are any constraints to its supply and whether the constraints are 'contractual' and flexible or restricted by infrastructure.	1	This is possible because in our role as a NAV, Albion Water is considered to be a water undertaker for the geographical areas in which it operates. Where a water undertaker is in an area of serious water stress they can propose to charge by reference to metered volume in their WRMP. We've left this information in our WRMP to assist future authors, despite not now planning to compulsory meter properties. Upper Rissington (Section 4.4) Oaklands Hamlet (Section 5.4) The constraints to the daily and annual supply are contractual and actual capacity of the infrastructure does not appear to restrict volumes beyond those agreed.
	The plan states on Page 11, 12, and 24 that the supply is unconstrained at both sites. However, it then states also that there are maximum annual and daily volumes for each site on Page 10 and 23.		We have taken steps to clarify the context of supplies being unconstrained	Upper Rissington (Section 4.4) Oaklands Hamlet (Section 5.4) The constraints to the daily and annual supply are contractual and actual capacity of the infrastructure does not appear to restrict volumes beyond those agreed.





Appendix 3 – Ofwat Recommendations

Representation on Albion Water's draft water resources management plan was provided by Ofwat on 24th March 2023

Recommendation	Albion Water's Response
identify the drivers of the identified supply	We've invested a great deal of time and
demand balance deficit by clarifying baseline	money refining the data and information
positions of the supply demand balance	available to use to better resolve which
components;	components are driving demand – a significant
	proportion of demand is leakage.
consider a wider range of options to address the	We've included our options in Annex 1 and 2
identified deficit that reflect the driver of the	where we have carried out an appraisal of
deficit. Options should be fully scoped to ensure	options.
they are feasible, and preferred options should	
be justified by evidence of costs and benefits;	
set out a demand management plan that	Our customers are doing a great job using
quantifies the benefit of options and activities to	water efficiently; this didn't show through
meet demand ambitions. This includes reducing	when using the data available to us when we
per capita consumption (PCC) to below the	drafted our plan.
target of 110 litres per head per day (I/h/d) by	
2050, and reducing and maintaining low levels of	Our efforts are reducing average PCC within
leakage. This is to give confidence that ambitions	our Rissington supply zone and helping
will be delivered;	customers maintain their low levels of PCC in
	our Oaklands supply zone; whilst at the same
	time dealing with significant leakage.
consider any risks or uncertainty associated with	We've included more detail about the
its bulk supply agreements and include detail of	renegotiation of bulk supply agreements and
the renegotiation of the bulk supply agreements;	we accept that more uncertainty needs to be
	built in to the volumes renegotiated in future.
ensure there is evidence of customer	We've included customer engagement /
participation in the development of the draft	participation in Annex 3
plan. This includes evidence it has been	
advertised and customers encouraged to engage	
in the process, so customers can fully participate	
and inform the final plan development.	

Appendix 4 – Arqiva

Representation on Albion Water's draft water resources management plan was provided by Arqiva on 21st May 2023

Recommendation	Albion Water's Response
We consider that Albion Water's dWRMP is therefore proportionate given its circumstances and supply arrangements.	Acknowledged



We have supported the company's strategy to compulsorily meter those properties at its Rissington site which are currently unmetered, and to move its customers to this basis of charging. We believe this will help the company better manage PCC at the site, which currently shows a disproportionate level of use by unmetered customers.	Thank you for supporting our strategy for compulsory metering.
The company's use of smart meters is welcome, as is the company's innovation of an App which will allow customers ready access to consumption information. Not only will this increase engagement opportunities with customers, it has the potential to encourage further reductions in water use.	Acknowledged
As with all water companies, Albion Water will need to engage with its customers to effect behaviour change to reduce PCC levels to meet long term industry ambitions, especially at Rissington where PCC levels are high compared to those at its Oaklands site. It will also need to engage with non-household customers to promote water efficiency. The company should work with the wider industry to share its experience and any best practice in doing so.	Acknowledged
Universal metering will also help the company achieve its leakage targets.	Acknowledged
We also note the company's ambition to innovate with greater water efficiency through the use of dual supply systems. While this does not form part of the company's formal plan, we encourage the development of such a system in light of its wider benefits for water resources.	Acknowledged
While the company is reliant on bulk supplies at its sites, we are pleased to note that it proposes to look at water efficiency measures, such as increased leakage reduction and customer engagement opportunities before seeking to renegotiate its bulk supply agreements in the event of any future deficit in supply-demand balance.	Acknowledged



We encourage Albion Water to utilise AMI to maximise the benefits of metering to demand reduction.	Thank you for your encouragement
We welcome Albion Water's focus on smart metering and encourage an ambitious approach to the rollout of AMI.	Thank you for your encouragement