

Appendix 3.1.B – Bespoke performance commitment methodology (Ofwat pro forma)

Wessex Water

September 2018



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In this document we show changes made to our May submission by leaving track changes visible.

Outcome A: Affordable bills

Company performance commitment reference: Total bill reduction to customers on social tariffs per 10,000 properties

Short definition

Total bill reduction to customers receiving a social tariff, divided by the number of residential customers, expressed as £ per 10,000 households.

Customer friendly definition: Reducing bills to help customers that can't afford them.

Measurement

Necessary detail on measurement units	£/10,000 households
Frequency of PC measurement and any use of averaging	Annual <u>(financial year)</u>
Single or cumulative target	Single

Mitigation / exceptions

None

Any other information relating to the performance commitment

The aim of the performance commitment is to incentivise the company to further increase the number of residential customers receiving financial support via social tariffs.

Wessex Water was the first company to offer bill reductions to customers on the lowest incomes through win-win tariffs, and the first to offer social tariffs through the changes to legislation. We have well-established partnerships with a network of trusted affordability and vulnerability charities in our region to deliver ever increasing levels of support for vulnerable customers. We now offer three social tariffs, introduced with support from our customer base and stakeholders:

- Assist, which provides large bill discounts to customers on the lowest incomes
- WaterSure Plus, which provides an increased discount to customers with unavoidably high water use
- Pension Credit, which provides an average 20% discount to customers of pensionable age but with no income other than the state pension.

While we lead the industry in this area, we also recognise there are opportunities to further improve and provide support to greater numbers of customers in vulnerable circumstances.

From our experience of providing assistance to customers' for over a decade, we know that to make improvements to customers wellbeing, the offering of support needs to be meaningful. Our social tariffs have therefore been carefully crafted to provide a level of support to specific customer groups. We, and our expert advisors do not believe providing a

small discount to a large number of customers in our region would be a valuable policy objective.

With the above in mind our Performance Commitment for social tariffs has been constructed in a way to incentivise the company to maximise the benefit to vulnerable customers but also provide a meaningful comparison on our performance. The bill reduction per 10,000 customers is therefore the most appropriate metric to use.

Research with customers has shown acceptability of our social tariffs: Assist, WaterSure+, and discounts applied to customers eligible for pension credit. CCWater has reviewed this research.

Our affordability offering is reviewed annually by an independent affordability advisory group (AAG), made up of independent experts from third sector organisations and academia. Two of these experts also sit on the Wessex Water Partnership (the company CCG). This measure has been developed with the assistance of the AAG.

Our annual tracker research shows that affordability remains an issue for one in ten customers and 78% of customers in our strategic vision research said that providing more financial help was important.

Full definition of the performance commitment

The Performance Commitment is defined as: the total bill reduction to customers receiving a social tariff, divided by the number of residential customers, expressed as £ per 10,000 households.

We will calculate the total bill reduction for all customers receiving a social tariff for the year, by taking the average number of customers on our social tariffs, and calculating the difference between the water and/or sewerage bill a customer would have paid under standard charges from the bill under the social tariff they receive. This value is then divided by the average number of residential customers in our region for the year.

Outcome A: Affordable bills

Company performance commitment reference: **Successful Applications for assistance received by the independent advice sector/ third parties**

Short definition

Number of [successful](#) applications for assistance received by the independent advice sector/ third parties that we fund. Funding is based on the number of successful applications that partners make for our affordability schemes.

Customer friendly definition: Working with partners to help people who are in financial difficulty.

Measurement

Necessary detail on measurement units	Number
Frequency of PC measurement and any use of averaging	Annual (financial year)
Single or cumulative target	Single

Mitigation / exceptions

None

Any other information relating to the performance commitment

We want bills to be affordable for all.

This performance commitment aims to prove our commitment to working in effective partnership with the advice sector to increase the number of customers who have access to our financial support schemes.

Through our award-winning Tap programme we offer customers a range of schemes and low rate tariffs to help them afford their ongoing water bills and repay their debt, along with practical support to help reduce their water and energy use. These include our Assist low rate tariff, discount for those on Pension Credit or whose sole income is state pension, our Restart debt repayment scheme and our Home Check service.

Each customer is provided with a tailored solution to meet their own financial circumstances.

TAP forms part of our [Vulnerability Strategy for customers in vulnerable circumstances](#), recently reviewed and endorsed by the Wessex Water Partnership [and our Affordability Advisory Group](#), which is:

- Water use should not be rationed by a customer's ability to pay
- We encourage engagement with customers in financial difficulty
- We build relationships of mutual trust with advice agencies
- We support a holistic approach to debt management
- We offer tailored solutions with flexibility to meet individual's financial circumstances

- We prefer sustainable and affordable level of payment of whatever size to no payment at all.

We also share the Government's aim of supporting those who are 'just about managing'.

We have developed very effective partnerships with the debt advice sector over the last 13 years to deliver our TAP programme. These partners include all Citizens Advice offices across our region as well as StepChange, National Debt Line, Christians Against Poverty and a plethora of local independent debt advice agencies including cultural, faith and niche organisations along with tenant support workers in housing associations.

We fund and signpost to these agencies, as we believe it is essential that customers receive holistic debt advice and budgeting support along with income maximisation. It is never just about water; customers generally have multiple debts to multiple creditors. These trusted third parties are far better able to determine a sustainable offer of payment, however small, based on true ability to pay.

We currently provide funding of around £365k to our debt advice partners each year. The majority of this is for referrals on to our TAP programme. Funding is on a banded system and the agency will receive a set amount based on the total successful applications they have referred in the previous financial year. This model was designed with Citizens Advice at a national level and aims to incentivise an increase in applications to our schemes. The banding system equates to around £105 per successful application.

Debt advice agencies are currently undergoing significant change due to funding pressures. Many are reviewing structures and working practices to remove their heavy reliance on local authority funding.

The funding that Wessex Water provides is a small part of their overall budgets. We will continue to work with and fund all our partner agencies but their capacity and ability to refer to our schemes may be affected by these external pressures which are outside of our control.

This performance commitment has been discussed with the affordability and vulnerability sub group of the Wessex Water Partnership. The Partnership includes members with expertise in the area of financial vulnerability who are incredibly supportive of partnerships and agree that they have been very effective.

We also have an expert [Affordability Advisory Group](#) who oversee our work on affordability, effectiveness of our offering and [our Vulnerability Strategy initiatives to raise awareness and increase uptake of TAP](#). They have also endorsed our partnership working [and overall strategy](#).

Our strategic vision research also showed that customers support innovative approaches to achieve our goals, particularly when this involves preventative and collaborative solutions.

Full definition of the performance commitment

Our performance commitment will be the total number of successful applications received from funded advice agencies measured at the 31st March each year. By successful we mean an application that leads to the customer being accepted onto one or more of our affordability schemes e.g. Assist, [Pension Credit Discount](#) or Restart.

All applications received from agencies are recorded and monitored and a reconciliation is done with each agency both quarterly and at year end to agree the final year end figure.

Outcome A: Affordable bills

Company performance commitment reference: Void sites

Short definition

Percentage of all connected properties that are void.

Voids are properties that are connected to our water or sewerage system but are not billed, due to inoccupancy or other reasons, consistent with Ofwat's definition. Our definition of void premises is in line with our recognition of turnover. This performance commitment covers all properties, both residential and business.

Customer friendly definition: Reducing the number of properties that are receiving our services but not being billed.

Measurement

Necessary detail on measurement units	%
Frequency of PC measurement and any use of averaging	Annual <u>(financial year)</u>
Single or cumulative target	Single

Mitigation / exceptions

None

Any other information relating to the performance commitment

The aim of the performance commitment is to incentivise the company to improve its void performance to maximise the number of connected properties that are billed.

Wessex Water has always kept a keen focus on ensuring as many properties connected to its water and sewerage systems are billed for services that are used, while not inefficiently expending large amounts of resource on chasing a small number of unbilled properties. There will be a natural level of voids as a proportion of properties at any one time are unoccupied or vacant. Ofwat has challenged companies to improve their void performance. The voids performance commitment will incentivise the company to further reduce the number of voids in its area.

Full definition of the performance commitment

The percentage of connected properties that are void is calculated by taking the average monthly number of void properties (residential and business) connected to the water or sewerage system divided by the average number of monthly connected properties to the water or sewerage system.

Our definition of what constitutes a void property mirrors Ofwat's definition set out in the Regulatory Accounting Guidelines: a property which is connected for either a water service only, a wastewater service only or both services but does not receive a charge, as there are no occupants. Void properties do not include properties that do not receive a bill because it would be uneconomic to do so.

The performance commitment should be comparable to the rest of the industry and normalised at least for scale. A percentage of voids metric gives a simple comparison to other companies and the numbers of properties – billed, void and connected are already reported.

Our definition of void premises is in line with our recognition of turnover.

Income related to water and sewerage services is receivable from occupiers of the premises to which services are supplied except where a third party has agreed liability for the charges. Where premises are unoccupied, income is not receivable and no turnover is recognised (the premises is considered void).

Premises that are furnished are considered to be occupied (and therefore not void) except in exceptional circumstances such as death or long-term hospitalisation of the customer. We consider premises undergoing refurbishment or being used for storage to be occupied by the owners of the premises.

If details of the occupier of the premises are unknown, the premises are considered to be unoccupied (and therefore void), no charges are raised and no turnover is recognised except where a third party has agreed liability for the charges. We do not bill properties speculatively in the name of the occupier.

Outcome A: Affordable bills

Company performance commitment reference: Gap sites

Short definition

Number of properties newly billed over the year that were connected to our water supply and/or our sewerage systems more than two financial years previously.

Gap sites are defined as properties that are connected to the water supply or sewerage network, but the company is not aware of, and therefore are unbilled and (potentially) gain a free service. This performance commitment covers all properties, both residential and business.

Customer friendly definition: Reducing the number of properties that are receiving our services that we don't know about.

Measurement

Necessary detail on measurement units	Number
Frequency of PC measurement and any use of averaging	Annual <u>(financial year)</u>
Single or cumulative target	Single

Mitigation / exceptions

None

Any other information relating to the performance commitment

The aim of the performance commitment is to incentivise the company to find gap sites in its area.

We are committed to ensuring the company is aware of all customers connected to its water and sewerage networks. This is important to ensure water quality compliance and network management performance is maximised, and we are able to bill all customers that use our services.

The difficulty in setting a performance commitment for gap sites is the lack of evidence that there are a material number of properties that are connected to our systems that the company is not aware of. For example:

- Our External Liaison team are incentivised to find gap sites as part of their activities and only a very small number are found each year.
- We routinely trace our network looking for unconnected properties that are close to our network and send inspectors where we think there is a chance they are connected – this rarely leads to any positive finds.

We believe that the most appropriate type of performance commitment in this area is reputational. This is because the resulting incentives on us to report connected properties would be misaligned if we were to gain a reward or a penalty for reporting properties that were not connected to our system.

- If we gain a reward we would have an incentive to not report newly connected properties within 2 years of being connected. Gaining a reward for not accurately reporting our data does not seem appropriate.
- If we gain a penalty we would be disincentivised from reporting any gap sites as we would be financially worse off from the effort to find such sites.

Full definition of the performance commitment

We already internally report the number of properties newly connected to our systems that are newly billed, varying by the time at which they were connected. We propose to report the total number of properties that were connected more than two years before the current year. This is the most appropriate proxy to use for reporting gap sites as newly built properties will always be immediately recorded on our system. This captures properties that we reasonably should have brought onto charges before. The definition of the performance commitment therefore is the number of properties newly billed over the year that were connected to our water supply and/or our sewerage systems more than two financial years previously.

The performance commitment covers all properties, both residential and business.

Outcome C: Better relationships with customers and communities

Company performance commitment reference: Numbers of customers added to the Priority Services Register

Short definition

Number of customers who are added to the Priority Services Register in each year (excluding additions received from the energy sector via the national energy data share).

Customer friendly definition: Identifying customers in vulnerable circumstances and understanding their needs.

Measurement

Necessary detail on measurement units	Number
Frequency of PC measurement and any use of averaging	Annual <u>(financial year)</u>
Single or cumulative target	Single

Mitigation / exceptions

None

Any other information relating to the performance commitment

We want to prove our commitment to offering excellent customer care to those who find themselves in vulnerable circumstances.

This performance commitment relates to Priority Services, our scheme which offers extra support to customers with additional needs. ~~such as help during water supply interruptions, a password scheme and receiving bills and other communication in braille, large print or alternative languages.~~

Through ~~our~~ Priority Services ~~scheme~~ we offer a range of free services to customers who have additional needs including those due to age, ill health, a disability, poor literacy or mental illness. This might be additional support through a water supply interruption, additional meter readings to help them monitor their water use, a password to help protect against bogus callers, a nominee service or bills and communication in braille, large print or an alternative language.

We maintain a Priority Services register which we advertise widely both through our own communications and that of our advice partners. Customers can apply to go onto the scheme over the phone, online or by completing a hard copy application form. Our customer facing field staff may also identify a customer who they believe would benefit from Priority Services, so they will also encourage the customer to sign up.

The application form asks the customer to provide relevant information about their additional needs in relation to water services so that we can make sure that it is appropriate for them to be added to the Priority Services register and that we are clear about the additional support they need from us in any aspect of our service. We work

[hard to keep the information we hold about our customers up to date should they no longer need to be on Priority Services or if their needs have changed.](#)

The register is linked to both our billing system and operational contact systems so that we can fulfil the requirements of the customer in all our interactions with them. We can report the number of customers registered for Priority Services and their needs at any point in time along with the number of customers added or removed from the register during any year.

Priority Services is part of our extensive offering to support customers in vulnerable circumstances. We work hard to raise awareness and increase the numbers registered for Priority Services through the four workstreams of our ~~Vulnerability~~ Strategy [for customers in vulnerable circumstances](#).

We were required under the Final Methodology to have at least one bespoke performance commitment addressing support for customers in vulnerable circumstances. As Priority Services is a support scheme entirely linked to this issue, we felt it was very appropriate and suitable for this purpose. It is also straightforward to measure and monitor.

The water industry is currently working with energy representatives to launch full data sharing for Priority Services by April 2020. The intention is for any customer who wishes to register for Priority Services to only need to do that once, either with their water or energy provider, and for that information to then be shared.

The performance commitment will look at the number of customers who are added to the Priority Services Register in each year as a result of Wessex Water's efforts to raise awareness and increase uptake. It excludes any [additions to the register as a result of data being shared with us by the energy sector](#)~~impact of the data sharing~~.

This performance commitment has been discussed with the affordability and vulnerability sub group of the Wessex Water Partnership. They recognise that monitoring the number of customers registering for Priority Services is a good indicator that the company is increasing support to customers in vulnerable circumstances.

Full definition of the performance commitment

Our performance commitment will be the number of customers added to the Priority Services Register in each year as a result of Wessex Water's efforts.

We have a central Priority Services Register. When a customer registers for Priority Services they are added to the register along with their customer details and all of their relevant needs and preferences e.g. Braille bill, password, additional support during a water outage. The entry on the register includes the date of registration. Customers can also be removed from the register if they no longer have additional needs, have moved out of the area or they are deceased. We will sum all of the customers who have been registered for Priority Services during the financial year (1st April to 31st March).

The water industry is due to commence data sharing with energy providers for Priority Services customers by April 2020. We will exclude those customers who register for Priority Services with their energy company whose data is then shared with us as their addition to the register is not a reflection of any effort on our part. We will be able to identify these customers from the data sharing feed.

Outcome C: Better relationships with customers and communities

Company performance commitment reference: Delivering for customers in vulnerable circumstances

Short definition

The accessibility and inclusivity of the company's services to customers, specifically meeting the BS18477 British Standard for inclusive service provision on inclusive services and retaining our Customer Service Excellence Award.

This performance commitment was in place ~~in part~~ for AMP6 but has been renamed ~~and re-defined~~ for AMP7.

Customer friendly definition: Ensuring our services are accessible and available to everyone, especially those in vulnerable circumstances.

Measurement

Necessary detail on measurement units	Binary. Compliance with BS18477 or non-compliance with BS18477 <u>and achievement or non-achievement of the Customer Service Excellence award</u> .
Frequency of PC measurement and any use of averaging	Annual (<u>financial year</u>)
Single or cumulative target	Single

Mitigation / exceptions

None

Any other information relating to the performance commitment

We want to prove our commitment to offering a service that is inclusive and accessible to all ~~of our customers~~ but in particular those who find themselves in vulnerable circumstances.

It is fundamental that we provide excellent customer care and are inclusive and accessible to all ~~of our customers~~, in particular those who find themselves in vulnerable circumstances, be that in the short or long term.

Customers in vulnerable circumstances often find it more challenging to engage with their water company for a variety of reasons such as financial difficulty, age, disability, health conditions, language or learning difficulties, poor mental health or simply a sudden change in circumstance such as bereavement or divorce.

We have a very comprehensive vision, strategy and customer offering in place to support customers in vulnerable circumstances, both in terms of how they can interact with us and direct support we can give during those interactions. We work hard to raise

awareness and increase the numbers on all of our schemes through the four workstreams of our [Vulnerability Strategy for customers in vulnerable circumstances](#).

Our overall offering for customer care is underpinned by our ethos of going the extra mile and ensuring all of our staff have the right skills, training and are fully empowered to support our customers. We are fully multi-channel in terms of contact, underpinned by warm voice answer in our local Contact Centres.

Through Priority Services we offer a range of free services to customers with any additional needs. Customers can register with us and we will take account of their needs in all of our interactions with them. Through our award winning 'Tap' programme and partnerships we offer customers a wide range of schemes and low rate tariffs to enable them to afford their ongoing water charges and repay their debt, alongside practical help to reduce water and energy use.

This performance commitment has been discussed with the affordability and vulnerability sub group of the Wessex Water Partnership.

The Partnership includes members with expertise in the areas of vulnerability and they [particularly](#) recognise that the British Standard is a good measure of inclusive services.

~~Compliance with the British Standard BS18477 is one element of an existing PC for AMP6 (accessible communications). The other element is achievement of the Customer Service Excellence Award. We have removed this element of the PC for AMP7 and renamed it as we wanted to clarify refocus that it is more specifically linked to our support for customers in vulnerable circumstances. As this was a non-financial incentive mechanism for AMP6, we have continued this for AMP7.~~

~~As a business we are looking at gradually moving away from the Customer Service Excellence award and instead focusing on achieving the Institute of Customer Service's Service Mark award across all customer facing departments. We already hold Service Mark with Distinction for our Contact Centre.~~

Full definition of the performance commitment

Our performance commitment will [consist of two elements. The first is to continue to](#) achieve compliance with the British Standard [for Inclusive Service Provision](#), BS18477, each year. The standard is designed to signal that a company is inclusive to all customers, including those who are most vulnerable due to low income and/or particular needs including disability. [It focusses on identifying and responding to consumer vulnerability.](#)

We were one of the first utilities to comply with the standard and we continue to believe it is a good way of publicly showing our service is accessible and inclusive to all.

Compliance is measured by an annual independent audit undertaken by LRQA who provide a statement of our compliance.

[We will also retain the Customer Service Excellence Award, held since 1995, which includes measures of accessibility and inclusivity of our services. There is a formal annual independent assessment undertaken each year before the CSE award can be awarded to any company.](#)

Outcome C: Better relationships with customers and communities

Company performance commitment reference: Number of children/students engaged

Short definition

Number of children/students directly engaged on subjects that will help us achieve our other objectives e.g. water efficiency and sewer misuse. It includes:

- Visits by students/children to our education centres and operational sites
- Visits by Wessex Water’s education team to schools and colleges
- Community projects involving students/children

Customer friendly definition: Engaging children/students to teach them about the water environment.

Measurement

Necessary detail on measurement units	Number
Frequency of PC measurement and any use of averaging	Annual (<u>financial year</u>)
Single or cumulative target	Single

Mitigation / exceptions

None

Any other information relating to the performance commitment

Throughout our ongoing engagement with customers, we see an appetite for more ongoing engagement and education about our activities and the positive impact that changes in customer behaviour can have on the environment and on our services. Our leakage research included a process of co-creation of a package of measures with customers that could help reduce water use and this measure was highly popular. Our offer of a future partnership with customers has also been popular, but this is contingent on our making it easy for customers to play their part.

Full definition of the performance commitment

We will count the number of children/students who have engaged in person with the following:

- Visits by students/children to our education centres and operational sites
- Visits by Wessex Water’s education team to schools and colleges
- Community projects involving students/children

We define children/students as those individuals up to and including 18 years old, who are in education.

For a student to be considered as engaged, a minimum of 20 minutes of engagement will be undertaken. Details of each engagement will be recorded electronically and ‘signed off’ by a teacher from the appropriate institution.

Outcome W: Efficient use of water

Company performance commitment reference: Customer reported leaks fixed within a day

Short definition

Percentage of customer reported leaks fixed by the end of the next working day~~within a day~~ (on water mains – excludes service pipes).

The commitment is to repair a given percentage of customer reported leaks fixed by the end of the next working day~~within a day~~. This is for all significant leaks reported by customers on Wessex owned pipes and fittings. Leaks on customer owned pipework are excluded from the measure. Allowable exclusions include where it is not possible to complete the job by the end of the next working day~~within a day~~ due to traffic management issues, private land access, or other 3rd party constraints or health and safety issues.

Customer friendly definition: Fixing leaks that are reported by customers by the end of the next working day~~within a day~~.

Measurement

Necessary detail on measurement units	%
Frequency of PC measurement and any use of averaging	Annual <u>(financial year)</u>
Single or cumulative target	Single

Mitigation / exceptions

Allowable exclusions, ~~include~~ where it is not possible to complete the job by the end of the next working day~~, within a day~~ ~~include due to~~ traffic management issues, private land access, or other 3rd party constraints or health and safety issues.

Inadequate Wessex Water resources or a main shut risk assessment are not allowable exclusions.

Any other information relating to the performance commitment

The aim of the performance commitment is to incentivise the company to respond to customers' concerns over leakage in a timely manner.

Our leakage research included a process of co-creation of a package of measures with customers that could help reduce water use and this measure was popular.

One of our eight priority areas is developing engaged communities – improving the relationship we have with the people we serve.

Our offer of a future partnership with customers has been popular in our research, but this is contingent on our making it easy for customers to play their part, being seen to play our part and being responsive to customers when they interact with us.

Encouraging customers to report leaks and then fixing them quickly is as much a part of engaging with the people we serve as it is about reducing the volume of water leaked.

Full definition of the performance commitment

Following contact from customers, the start day and time is automatically recorded on our customer relationship management software (RAPID).

The leak will be determined as “significant” if it is visible; the Customer Services Unit script ensures all appropriate jobs are tagged as “visible”.

“By the end of the next working day ~~Within a day~~” is defined as once a job is raised at any time within one day, the leak will be fixed by the end of the next working day.

The end time is when the repair has been completed and main/service has been re-pressurised (not when reinstatement is finished which is usually when a job is closed).

If a customer reported visible leak has a water sample sent to confirm if it is mains water or ground water (i.e. to determine if chlorine is present) then the clock stops ticking when the sample is requested and starts again when the results are back.

This metric only applies to leaks on Wessex Water owned pipes and fittings; customer service pipes are excluded.

The percentage is calculated by taking all leakage jobs, applying the exclusions and then calculating the percentage repaired by the end of next working day.

Outcome W: Efficient use of water

Company performance commitment reference: Volume of water saved by water efficiency engagement

Short definition

Volume of water saved by helping customers reduce the amount of water ~~used per person they use~~ because of ~~our water efficiency~~ engagement programme.

Customer friendly definition: Helping customers reduce the amount of water they use.

Measurement

Necessary detail on measurement units	MI/d
Frequency of PC measurement and any use of averaging	Annual (<u>financial year</u>)
Single or cumulative target	Cumulative

Mitigation / exceptions

None

Any other information relating to the performance commitment

This is a bespoke performance commitment which reflects our commitment to help customers participate in our services to reduce their water use. The target values represent the assumed reduction in demand resulting from our water efficiency engagement programme which includes (but is not limited to) our Home Check service, the provision of water efficiency advice and free devices, and digital engagement services.

This performance commitment is a continuation of the successful water efficiency performance commitment that we introduced for the 2015-20 period. Since 2015 we have expanded our water efficiency services significantly, not least by the launch of our flagship Home Check programme of bespoke behavioural advice and device fitting in customer homes. We are on track to meet our 2020 water savings target, and following support from customer research we plan to deliver an even more ambitious programme in the 2020-25 period.

Customer research to define our future strategy for leakage management and the efficient use of water included a co-creation process, which identified the popularity of a package of measures that helped and empowered customers to reduce their water use and control their bill. The research showed that customers value water efficiency services and they are keen for us to provide more.

Customer's appetite for greater engagement on the efficient use of water is mirrored by our regulators and Government, who are keen to see us support more customer participation and raise awareness of the wider water environment.

Full definition of the performance commitment

To calculate the water savings arising from our water efficiency programme we propose taking the same approach that we are using for our water efficiency performance commitment in the 2015-20 period. Our method of calculation is based on assumed demand reductions associated with various water saving activities. Wherever possible the volumetric savings are based on evidence from customer/device trials and are consistent with savings documented in the UKWIR report 09/WR/25/4. In the absence of reported trial-based data, conservative estimates are made and agreed with our external technical auditor.

Our water efficiency participation programme can be categorised into three areas of activity:

1. Advice and information, including digital engagement services
2. Providing water saving devices to customers, including those fitted by us during Home Check visits and those requested from us by customers and fitted themselves
3. Helping customers to reduce water wastage by helping them identify plumbing leaks in their home

We are always looking for new and innovative ways to help customers participate in water services to help reduce their water use. As such, we will adapt our programme if new options become available – savings associated with new activities that are not documented here will be reviewed with our technical external auditors for inclusion towards this performance commitment.

The impact of these savings is included in our overall forecast of per capita consumption, for which we also have a performance commitment; however, our PCC model also accounts for a small decay in the impact of these savings from year to year, as installed devices reach the end of their useful life or bathrooms/kitchens are refurbished. The PCC model is also influenced by time-based changes in population, properties, occupancy, the uptake of household metering, and underlying water use behaviours, so it is difficult/inappropriate to directly compare the annual savings associated with our water efficiency programme with changes in overall PCC.

When we developed the performance commitment for PR14, we included a limit of 60% for the volume of savings we could claim through the provision of advice and information and also from water efficiency devices installed by the customer. This was to ensure there was a focus on projects such as Home Check where we have a high certainty of product fitting. In PR19 we are moving our water efficiency strategy toward engaging customers with their water use and including behavioural change techniques. We have therefore removed the 60% limit for advice, information and devices fitted by the customer.

Customer participation through water efficiency advice and information

We have a well-established programme of providing water efficiency advice and information to our customers through our school education programme, our water saving web pages and via water saving leaflets.

Our 2020-25 programme will include an enhanced digital engagement service for customers, which will include a ~~water use survey tool~~ 'dashboard' that asks customers information about the water consuming appliances in their home and how often they use them. Personalised advice can then be provided to each customer to encourage them to participate in water saving actions on a regular basis and enable them to compare their water usage with other similar households. For each new user of this digital engagement service we will claim 8 litres per day for the first year and, to capture our ambition to encourage customers to regularly participate in this service, we ascribe a saving of 3 litres per day for returning users

in the second to fifth years after they sign up. These savings are consistent with the UKWIR report 09/WR/25/4.

The savings we ascribe to customer participation through advice and information are calculated using the UKWIR report 09/WR/25/4 and are shown in the table below.

Savings claimed from providing advice and information to our customers.

Savings area	More information	Associated saving (litres per day per service user)
Education advisors	Students receiving talks on water saving	2.5 – 22.1 depending on talk type
Wessex Water's water efficiency webpage activity	Customers receiving water saving advice from our webpages	2.5
Wessex Water's water saving leaflet	Customers receiving water saving advice leaflet	6.9
Digital engagement dashboard	New user, first year	8.0
	Return user, years two to five	3.0

Other advice and information savings may be claimed if bespoke literature is created for new participation initiatives or bespoke talks are given in the 2020-2025 period.

Customer participation in device installation

We have encouraged customers to participate in water saving for many years by providing free and purchasable devices suitable for their homes. In 2015, to encourage greater participation, we launched our free Home Check service to install water saving devices in customer homes. Our performance commitment for water efficiency for 2020-25 will include the continuation of these activities.

The savings we ascribe for installing devices depends on the device type and distribution method. If we have installed the device ourselves (i.e. through Home Check) we can have a 100% certainty rate that the saving will occur, if a customer has taken the device home from an event to install themselves we are more precautionary and assume that not every device will be installed. Savings by device type and distribution/installation method are documented in the table below. These are calculated using the UKWIR report 09/WR/25/4 and the Ofwat June Return 2011 guidance document.

Other water saving device savings may be claimed if new or different products are offered in 2020-2025. Wherever possible the associated savings are based on evidence. In the absence of reliable data, conservative estimates will be made.

Water efficiency savings associated with water efficiency devices

Device	Device installation rates in percentage and resulting water saving (litres per day)
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	Saving (litres per day)	100% - By company or its agent / Customer purchase	70% Customer request	50% - Free device sent to customer	30% Provided at events	10% - Other solicited
Bathbuoy*	28.00	28.00	19.60	14.00	8.40	2.80
Bubble stream*	18.00	18.00	12.60	9.00	5.40	1.80
EcoBeta	47.00	47.00	32.90	23.50	14.10	4.70
'Flowpoint' Shower head	30.00	30.00	21.00	15.00	9.00	3.00
Save-A-Flush (1.2 litre)	12.90	12.90	9.03	6.45	3.87	1.29
Shower Timer	5.00	5.00	3.50	2.50	1.50	0.50
Shower save	30.00	30.00	21.00	15.00	9.00	3.00
Tap aerators	18.00	18.00	12.60	9.00	5.40	1.80
Toothy timer*	12.80	12.80	8.96	6.40	3.84	1.28
Twin-tap insert	18.00	18.00	12.60	9.00	5.40	1.80
Water butt (100l)	1.89	1.89	1.32	0.95	0.57	0.19
Water butt (210l)	3.97	3.97	2.78	1.98	1.19	0.40
Water Gel Crystals	0.50	0.50	0.35	0.25	0.15	0.05

* Some suppliers used by Wessex Water have developed their own water efficiency devices and have conducted their own trials to create an evidence base for their associated saving.

Customer participation in reducing water wastage – helping customers to fix plumbing leaks in their property

Plumbing losses are water that is lost internally from a customer's property that may have been billed as consumption. It does not include supply pipe leakage. Plumbing loss volumes are counted as water efficiency savings where the location of the plumbing loss is confirmed as being internal to the property and where Wessex Water have been instrumental in identifying and/or resolving the issue. We work with our customers to estimate the volume of water lost during the leak so that we can provide a leak allowance for their bill.

Outcome Q: Excellent drinking water quality

Company performance commitment reference: Water quality customer contacts (appearance)

Short definition

Number of times companies were contacted by customers about the appearance of their tap water (per 10,000 people supplied) as per the existing DWI reporting methodology and as reported on Discover Water.

Customer friendly definition: Reducing the number of times customers contact us about the appearance of their tap water.

Measurement

Necessary detail on measurement units	Number/10,000 population
Frequency of PC measurement and any use of averaging	Annual (calendar year)
Single or cumulative target	Single

Mitigation / exceptions

None

Any other information relating to the performance commitment

The aim of the performance commitment is to incentivise the company to respond to customers' dissatisfaction over the appearance of drinking water, and to maintain the assets that deliver water to customers' properties in a stable condition.

This metric is reported by the DWI in the Chief Inspector's report published in July each year and reported on Discover Water.

An increase in contacts about appearance may be an indicator that the asset base is deteriorating more quickly than we are maintaining it. Our research on resilience showed that customers consider that their bills already cover the costs of maintaining assets for the long-term, and it is important that we are held to account for delivering this.

Reporting follows a strict set of DWI reporting guidelines. As with all DWI data the reported figures are based on the calendar year and reported in the following financial year.

Full definition of the performance commitment

The reporting of this data is governed by the following information letter from the DWI http://www.dwi.gov.uk/stakeholders/information-letters/2006/01_2006.pdf.

As per the above reporting guidance, DWI notifiable events are excluded from the annual customer acceptability data return. The DWI's Guidance on the Notification of Events document 2009 and The Water Industry (Supplier's Information) Direction 2017, both available at <http://dwi.defra.gov.uk>. The internal document 'Summary of circumstances that would lead

to notification to the DWI' (DWG001) summarises the circumstances that would lead to notification to the DWI.

Outcome Q: Excellent drinking water quality

Company performance commitment reference: Tackling water quality at home and in the work place

Short definition

Inspections and customer lead pipe replacement aimed at improvement of drinking water quality.

This drinking water quality measure is focussed on customers' home and workplace, public buildings and other premises. The measure monitors progress with water fittings inspections and other activities related to the customer's supply pipe aimed at an improvement in drinking water quality or reduction in risk.

Customer friendly definition: Working with customers to improve the quality of water in their property.

Measurement

Necessary detail on measurement units	Index score
Frequency of PC measurement and any use of averaging	Annual (calendar year)
Single or cumulative target	Cumulative

Mitigation / exceptions

None

Any other information relating to the performance commitment

Drinking water quality has consistently been the highest priority issue raised by our customers in research for our long-term plan (Strategic Direction statement) and business plan. For the business plan, our proposals for drinking water quality were included in the customer acceptability testing.

Throughout our ongoing engagement with customers, we see an appetite for more ongoing engagement and education about our activities and the positive impact that changes in customer behaviour can have on our services. Our offer of a future partnership with customers has also been popular, but this is contingent on our making it easy for customers to play their part. This measure shows how we are going the extra mile to identify and where appropriate help solve water quality issues that are created by assets owned by our customers.

The guidance on long term planning for drinking water quality from the Drinking Water Inspectorate highlights the need to have a comprehensive and ambitious strategy to mitigate point of use issues, and protect wholesomeness for consumers. This performance commitment supports the delivery of this goal. Our proposed strategy for point of use considerations was included in our drinking water quality submission to the DWI in December 2017. The CCG have been briefed on our drinking water strategy for 2020-25.

The reported figures are based on the calendar year and reported in the following financial year to match the Water Regulations Advisory Scheme (WRAS) reporting.

Full definition of the performance commitment

Water fittings inspections and other activities will be allocated a score based on the following table. The annual index score is the aggregate of all the activity scores in a calendar year.

Activity		Score
Water fittings inspections	Household Fluid category 3	2
	Non-Household Fluid category 3	3
	Agriculture Fluid category 5	3
	Non-Household Fluid category 4	3
	Educational Establishments (All fluid categories)	4
	Public Buildings (All fluid categories)	4
	Household Fluid category 5	4
	Non-Household Fluid category 5	5
Replacement of household customer lead service pipe		15
Replacement of non-household customer lead service pipe		20

Fluid categories are defined in the Water Supply (Water Fittings) Regulations 1999 and as included in the Water Regulations Guide published by WRAS second edition.

Activity		Score
Water fittings inspections	Household FC 3	2
-	Non-Household FC 3	3
-	Agriculture FC 5	3
-	Non-Household FC 4	3
-	Educational Establishments (All FC)	4
-	Public Buildings (All FC)	4
-	Household FC 5	4
-	Non-Household FC 5	5
Replacement of household customer lead service pipe	-	15
Replacement of non-household customer lead service pipe	-	20

For the household customer service pipes activity:

- Following a sample exceedance and investigation to confirm the presence of a metallic pipe (e.g. lead, galvanised iron or copper), the customer supply pipe shall be replaced up to the wall of the property or as near as reasonably practicable, with the customer's agreement.
- The work includes sampling, replacement of the pipe and recording of the date and location etc. on our Geographical Information System.

- The customer supply pipe is defined as the pipe from the customer stop tap or meter, which is usually adjacent to the boundary between public and private land, to the wall of the house / property.

Outcome Q: Excellent drinking water quality

Company performance commitment reference: Lead communication pipes replaced (Wessex Water assets)

Short definition

Number of lead communication pipes replaced, including galvanised and other metallic pipes that include lead.

Customer friendly definition: Replacing lead pipes to safeguard water quality.

Measurement

Necessary detail on measurement units	Number
Frequency of PC measurement and any use of averaging	Annual (calendar year)
Single or cumulative target	Cumulative

Mitigation / exceptions

None

Any other information relating to the performance commitment

Drinking water quality has consistently been the highest priority issue raised by our customers in research for our long-term plan, our Strategic Direction Statement (SDS) and business plan. This result was repeated in the qualitative part of our SDS research conducted in 2016. The guidance on long term planning for drinking water quality from the Drinking Water Inspectorate highlights the need to have a comprehensive and ambitious strategy to mitigate the risk of lead failures. Our long-term objective is to remove all lead pipes from our network by 2040; this performance commitment supports the delivery of this goal.

Our proposed strategy for lead was included in our drinking water quality submission to the DWI in December 2017. The CCG have been briefed on our drinking water strategy for 2020-25, including lead.

Our proposals for replacement of lead pipes were included in the customer acceptability testing.

The performance commitment covers replacement of lead communication pipes following sample exceedance as required by the DWI, proactive pipe replacements and pipes replaced during day-to-day repair and maintenance activities.

The reported figures are based on the calendar year and reported in the following financial year.

Full definition of the performance commitment

Number of lead communication pipes replaced, including galvanised and other metallic pipes that include lead.

Replacement from all activities, including:

- following a sample exceedance and investigation to confirm the presence of a metallic pipe, as required by the Drinking Water Inspectorate
- proactive pipe replacements
- pipes replaced during day-to-day repair and maintenance activities, including mains replacement and relining.

The work includes sampling, replacement of the pipe and recording of the date and location etc. on our Geographical Information System.

The communication pipe is defined as the pipe from the distribution main in the street to the customer stop tap or meter, which is usually adjacent to the boundary between public and private land.

Outcome Q: Excellent drinking water quality

Company performance commitment reference: Event risk index (Wessex Water) (ERI WW)

Short definition

The DWI's Event Risk Index (ERI).

ERI is a measure designed to monitor how well companies respond to water quality events and manage the risk to the quality of the drinking water quality that we provide to customers.

Customer friendly definition: Providing excellent quality drinking water at all times.

Measurement

Necessary detail on measurement units	Index
Frequency of PC measurement and any use of averaging	Annual (calendar year)
Single or cumulative target	Single

Mitigation / exceptions

This measure takes into account all water quality related events notified to the DWI.

Any other information relating to the performance commitment

Drinking water quality has consistently been the highest priority issue raised by our customers in research for our long-term plan (Strategic Direction statement) and business plan.

Throughout our ongoing engagement with customers, we see an appetite for them to play their part where their behaviour can have an impact on the environment and on our services. Our offer of a future partnership with customers has also been popular, but this is contingent on us always delivering the basics well.

We have chosen this measure as we believe responding well to water quality events is crucial to this. Our approach is to act quickly to identify and resolve issues and to proactively put measures in place to prevent recurrences. We have a positive, open and honest relationship with our regulator and generally the feedback we receive is that the DWI are satisfied with our response.

We also consider that ERI can be a measure of how well the company is maintaining the health of its assets. It is important that we are held to account for this over the long-term.

ERI is a brand new measure, and as such, the industry is still interpreting the definition and putting the methods in place to track progress. Using the recently published definition, we will aim to calculate the ERI score for each notified event, but it should be noted that our internal calculation is a prediction only. The final assessment is made by the DWI, and the subsequent score given to each event is currently not published until July for the previous calendar year.

Reporting follows a strict set of DWI reporting guidelines. As with all DWI data, the reported figures are based on the calendar year and reported in the following financial year.

Full definition of the performance commitment

The definition of Event Risk Index (ERI) is posted on the Drinking Water Inspectorate's website. The last version dated March 2018 is reproduced [overleaf below](#).

The performance commitment is based on our current notification criteria which have been developed over many years to ensure that we respond appropriately and effectively to any situation where water quality or sufficiency gives rise to a significant risk to public health. Our notification criteria are based on the DWI's Guidance on Notification of Events dated August 2009.

For the purposes of this measure, should the notification criteria change, the ERI score for any additional notifiable events would be excluded from the total ERI score (Wessex Water).



DWI EVENT RISK INDEX (ERI)

Drinking Water Inspectorate
28 March 2018

DWI Event Risk Index (ERI): Definition

A new drinking water quality measure is required to allow companies to move away from the current event response categorisation to a risk based methodology to assess the impacts of events on consumers and to promote proactive risk mitigation.

The Event Risk Index (ERI) is a measure designed to illustrate the risk arising from water quality events, and it aligns with the current risk based approach to regulation of water supplies used by the Drinking Water Inspectorate (DWI). All events are assessed by DWI using the provisions of the Water Industry Act 1991. In doing so, DWI has regard to its published Enforcement Policy, and it also follows the principles of “better regulation” to scrutinise company performance on the basis of their risk of failing to meet the requirements of the Regulations.

This is a new measure developed in consultation with water companies, alongside the Compliance Risk Index (CRI – definition [link](#) here).

The following outlines the broad principles of the ERI measure.

- the seriousness of each drinking water quality event (the Event Category score);
- a measure of the company performance in managing the event (the Inspector Assessment score); and
- the impact of each event – based on a simple measure of the population affected and duration in hours.

The formula for the calculation of the index is as follows:

$$\text{ERI} = \frac{\Sigma(\text{Seriousness} \cdot \text{Assessment} \cdot \text{Impact (population, duration)})}{\text{population served by the company}}$$

i. Seriousness score

This score (derived from the existing DWI Event classification) assesses the relative seriousness of a particular event. The score used will be the highest scoring effect of a particular event. As events are often wide and varied, the list is not intended to be exhaustive of all possibilities but provides broad categories and principles of assessment.

Score	Basis for score (examples)
5	Health Risk: Where consumers actually or potentially suffered harm through the presence of pathogens, toxic chemicals, contamination or undisinfected water in supply.
4	Health Risk Indicator: Where consumers were at a higher than normal risk of harm or suspected illness through the presence of indicator organisms, chemicals, contamination significant to health or a disinfection failure.
3	Aesthetic and Confidence: Where consumers are likely to or did reject the water or where advice limiting the use of the supply was given due to the presence of taste/odour/ discolouration, animalcules, nontoxic chemicals, specific advice to consumers and national media
2	Regulatory Impact: Where regulations were or could have been breached, but the event had no impact on the quality of water supplied to consumers such as a treatment failure, ingress or improper use of materials and local news coverage specific to water quality
1	Non-health Risk Indicator: Where consumers are dissatisfied or inconvenienced due to, for instance, loss of supplies, aeration, pressure or media interest not covered by other categories.
0	Not an event: Event reported but no effect on water quality, sufficiency or consumer confidence

ii. Assessment score

All reported events are assessed to ensure that the wellbeing and interests of consumers were protected by the companies' management of events (including mitigation of the impacts and recovery). A well-managed event with appropriate and speedy mitigation action poses a lower risk to consumers. The DWI also considers the root cause of the event and whether the company's actions led to or increased the likelihood of the event occurring, and whether further remedial action is necessary.

Therefore the DWI Inspector's assessment has been assigned a score for ERI shown below:

DWI Inspector assessment	Score
Prosecution	5
Caution	5
Warning letter	4
Enforcement – legal instrument	4
Legal instrument in place	4
Prosecution considered	4
Recommendations made	3
Suggestions made	2
No recommendations or suggestions made	1

iii. Impact score

This will be based on a simple measure of the population affected and the duration (in hours) consumers are exposed to the risk.

Reporting timescales

Provisional ERI scores will be provided to companies by the end of April each year, covering the previous calendar year (i.e. ERI for 2018 will be reported April 2019). This will include ERI scores for **all events reported in the relevant calendar year**.

There may be a small number of events where investigations are still ongoing at the end of April. For these events an estimation of the individual event scores will be included based on information provided by the company and the likely assessment for each event score.

An updated ERI figure will be reported in the Chief Inspector's Report in July and again at the end of April the following year by which time the majority of events assessments for that year will have been completed.

Special Rules

For some events default duration and population failures will be used as indicated below. The burden of proof rests with the company to identify events falling into these categories.

- **Precautionary advice issued to single premises/premises on same service** (including high lead results):

Domestic premises – population 2.4 per property affected

Public Building – population minimum of 50.

Commercial premises – as stated by company

Duration – default value 72 hours

- **Lab/Data/Sampling Events:** these events generally have little, if any impact on consumers and any increased risk to consumers is impossible to quantify

Population – default value of 1

Duration – default value 72 hours

- **Events associated with a single operational sample (including positive Crypto):**

Duration – 24 hours unless evidence of longer duration, e.g. repeat samples failed, compromised treatment process (i.e. duration is to restoration of wholesome supplies)

Population – population supplied by the asset if SR or WTW outlet

- **Events that are “Not an Event”**

Notified events where there was no impact on water quality, for example works taken out of service because of flooding; PHE report of cryptosporidiosis in community that was not found to be caused by public water supply; events associated with private water supplies.

Relationship with CRI

In some circumstances compliance failures are reported as an event, and therefore may contribute to both CRI and ERI. Most of these will attract an ERI score of 0 on the basis that they are assessed as compliance breaches. There may be circumstances, however, where it is appropriate to score such occurrences under both the CRI and ERI indices, depending on the outcome of the company investigations and DWI assessments.

Outcome F: Minimise sewer flooding

Company performance commitment reference: Customer property sewer flooding (external)

Short definition

Number of external inside property boundary flooding incidents per year, including all incident causes and flooding due to severe weather events per 10,000 sewer connections.

Customer friendly definition: Minimising the number of times sewage floods outside customers' homes (e.g. gardens).

Measurement

Necessary detail on measurement units	Number per 10,000 sewer connections
Frequency of PC measurement and any use of averaging	Annual <u>(financial year)</u>
Single or cumulative target	Single

Mitigation / exceptions

None

Any other information relating to the performance commitment

Our customer research has shown that external sewer flooding was the second highest priority in our MaxDiff ranking exercise in which we asked customers to consider the impact certain events would have on them. We have continued to engage customers through all our quantitative studies.

This bespoke performance commitment will be measured using the Ofwat reporting guidance for sewer flooding¹.

This performance commitment is current a shadow reporting metric (APR Table 3S Section H Line 11) that we are promoting as a bespoke performance commitment.

Full definition of the performance commitment

The measure is the total number of flooding incidents including flooding due to overloaded sewers (hydraulic flooding) and due to flooding other causes (FOC).

A flooding incident in this measure is defined as the number of property curtilages flooded during each flooding event from a public sewer. For example, five properties which suffered two flooding events during a year, would count as ten incidents. Where a property floods both internally and externally during the same event it shall only be recorded as an internal flooding incident and not included in this measure.

¹ <https://www.ofwat.gov.uk/wp-content/uploads/2018/03/Reporting-guidance-sewer-flooding.pdf>

A flooding event is the escape of water from a sewerage system, irrespective of size, as evidenced by standing water, running water or visible deposits of silt or sewage solids.

Incidents caused by an escape from public sewers (whether foul, combined or surface water), including pumping stations, sewage treatment works and other assets under the control of the sewerage undertaker shall be reported. Incidents caused by sewers and laterals transferred under the Transfer of Private Sewers Regulations 2011 and pumping stations transferred in 2016 shall be included.

For the purposes of consistent reporting, flooding caused by the blockage or failure of a gully, shared by two or more properties and connected to a public sewer, or blockage of the gully grating, or the failure of any pipework above ground, shall be excluded. It should be noted that this is not to be taken as an opinion on the legal status of these aspects of drainage apparatus.

Flooding caused by assets which are beyond the undertaker's control is excluded, for example:

Flooding due to surface water run off which has not originated from public sewers:

- Fluvial flooding,
- Coastal flooding,
- Ground water which has not originated from a public sewer,
- Flooding from water mains etc.
- Incidents caused by highway drains,
- Incidents caused by private assets (including drains). The Water UK "Guide to Transfer of Private Sewers Regulations 2011", published on 30th September 2011 shall be applied to assess if the flooding incident should be attributed to the undertaker or a private asset such as a drain.

No incidents should be excluded due to severe weather.

External flooding is defined as flooding within the curtilage of a building normally used for residential, public, community and business purposes. It includes buildings in those curtilages which would not normally be reported as internal flooding. For example:

- buildings where the prime purpose is for storage or installation of domestic appliances and is not accessed from the house by means of an adjoining door to the habitable building;
- detached garages (whether situated inside the boundary of the property and separated from the main building or outside the boundary but with common access as in a garage block);
- linked detached garages (i.e. garages which are attached to a property but separated from it by an external passageway);
- sheds and outbuildings (e.g. stables, kennels, coal houses, outside toilets);
- summer houses.

In the case of golf clubs or facilities similar in type, flooding of the area immediately adjacent to the club house (paths, patios verandas etc.), and therefore the areas used by people accessing only the facilities in the clubhouse, shall be included as external flooding. Each situation needs to be considered on its own merits but it is unlikely that any greens, fairways or rough would be included.

With respect to farms, if there isn't a defined farmhouse and garden boundary akin to a typical domestic property, an appropriate allowance should be made for land that would equate to a garden.

In the case of a flooding event affecting a multiple use area in the same ownership, such as an industrial park, retail park, hospital site, university site etc., it shall be counted as one incident. This includes sections of car parking (possibly termed overflow carparks) that are separated from the main carpark or a facility by a road.

The following areas are excluded from the reported numbers:

- 'highways' – including footpaths, and
- 'public' open space, agricultural land and car parks including overflow carparks.

Where a flooding has occurred, and flooding subsides, any subsequent flooding shall be counted as a separate incident. This shall be regardless of the time between events and if any investigation or follow on work has started or been completed.

Flooding due to third party action shall be included in all cases.

Any flooding due to jetting shall be included, unless the water is fully contained within a toilet bowl.

Damp patches caused by seepage through walls or floors shall be excluded, but any area which has visible standing or running water or which has visible deposits of silt or sewage solids shall be included.

If there is a strong suspicion of potentially fraudulent reports of flooding made with the intention to gain GSS payments or receive increased service, and there is no evidence of flooding, companies should exclude the incidents unless the customer provides substantiation that the flooding occurred. Any proposal for such categorisation must be supported by robust evidence, tested by the company's assurance process, and be fully transparent to customers and regulators.

All reasonable efforts to determine the number of properties affected by a flooding incident will be made.

If there is clear site evidence that a property has flooded, then the incident shall be included despite the absence of a customer report, or a denial by a customer that flooding occurred. Where the customer is not present, companies should leave a calling card stating that they have enquired about a recent incident and encouraging the customer to make contact with the company.

Outcome F: Minimise sewer flooding

Company performance commitment reference: Sewer flooding resilience risk

Short definition

Overall risk of flooding as measured by the sewer flooding risk grid.

Customer friendly definition: Managing the overall risk of sewer flooding.

Measurement

Necessary detail on measurement units	Index
Frequency of PC measurement and any use of averaging	Annual (financial year)
Single or cumulative target	Single

Mitigation / exceptions

None

Any other information relating to the performance commitment

This is a bespoke performance commitment continuing from the innovative measure introduced in PR14. The definitions will be the same, based on the flood risk grid score, which covers reported flooding (inside properties and external flooding including roads) due to inadequate sewer capacity.

We talked to customers about the risk of flooding in our deliberative resilience study where it was highlighted as a high priority area for investment. We have not explicitly discussed this particular measure, but have covered the impact of flooding incidents, which was ranked very highly.

This measure aligns with the 21st Century Drainage Programme, particularly the Capacity Assessment Framework and the Drainage and Wastewater Management Plan framework. We support these new frameworks and will be using their approaches to assist our long-term sewerage planning.

The incentive type has changed from outperformance and underperformance payment at PR14 to reputational underperformance payment only. This is to ensure that every aspect of the sewer flooding programme has financial incentive while protecting our customers from the risk of double-counting of outperformance payments. ~~The move to reputational only is as a result of introducing a bespoke performance commitment for external flooding incidents, resulting in all forms of incidents in AMP7 being covered by a financial incentive based performance commitment. If the sewer flooding risk grid performance commitment retained a financial incentive then there would be a risk of receiving double the reward or penalty for related service performance; incidents due to overloaded sewers (hydraulic incapacity) are included in both the internal and external flooding incident performance commitments.~~

Full definition of the performance commitment

The definition is unchanged from PR14.

The sewer flood risk grid (figure 1) measures the total known flood risk – properties or locations which have been flooded due to inadequate capacity, or are considered to be at risk of flooding due to their proximity to properties or locations that have flooded.

[No properties will be added due to sewer modelling results alone.](#)

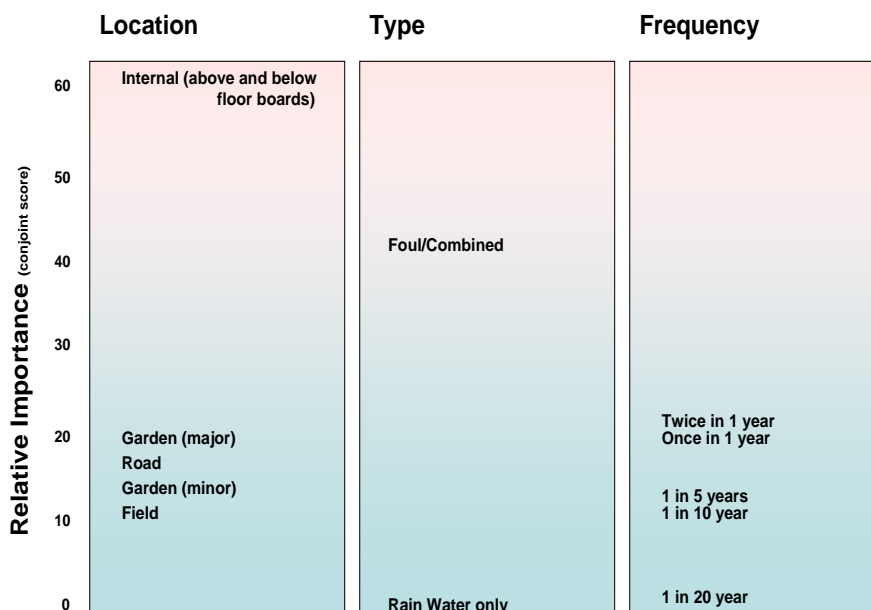
Figure 1: Sewer risk grid

Flooding Risk Matrix: Number of Properties / areas (excludes S105A)			Impact					Nr of Properties /areas above the line of acceptable risk	Total Risk Score	
			Very Low		Very High					
			Fields (Surface water) Minor Garden (s/w) Roads (Surface water)	Major Garden (Surface) Fields (Combined)	Road (Combined) Minor Garden (Combined)	Major Garden (Combined)	Internal			
			2	3	5	6	10			
Probability	Very High	5							0	0
		2:10yr							0	0
		4							0	0
		1:10yr							0	0
		3							0	0
		1:20yr							0	0
	2							0	0	
	1:30yr							0	0	
	1							0	0	
Very Low	1:50yr							0	0	

For each property or location, Wessex Water knows the location and type of the flooding (Impact), and has a record of how often it has reported flooding (Probability). Each property or location is 'entered' into the respective cell within the grid.

The score or weighting of each square has been derived from customer research into their priorities following a conjoint analysis study in 2008 for PR09 (Figure 2). The research involved 403 interviews, lasting 25 minutes, and its aim was to establish a relative scale determining the most urgent factors in a variety of flood scenarios using a conjoint analysis.

Figure 2: Relative importance of impact factors



The research established the customers’ flooding priorities and the scoring of the impacts reflect this, with internal flooding scoring 10 and surface water flooding of fields scoring 2.

Figure 3: Impact scores on flooding risk matrix

	Impact				
	Very Low		Very High		
	Fields (Surface water) Minor Garden (s/w) Roads (Surface water)	Major Garden (Surface) Fields (Combined)	Road (Combined) Minor Garden (Combined)	Major Garden (Combined)	Internal
Conjoint Analysis Score*	8-19	21-48	54-69	61	65-105
Flooding Risk Matrix Score	2	3	5	6	10

*Conjoint Analysis Impact Score = Location Score + Type Score

The conjoint analysis regarding frequency/probability showed little difference in relative weighting and so a linear scale (1 to 5) is used (figure 3).

New additions or movements to the risk grid through incidents

The probability will be assigned as per the flooding register methodology, in order to be consistent with the existing methodology and ensure Wessex Water is still able to report the traditional 2 in 10 year, 1 in 10 year and 1 in 20 year categories.

If a property/location has flooded for the first time and the storm return period is greater than 1 in 10 and less than 1 in 20 it will put into the 1 in 20 probability category. If the storm return period is more frequent than 1 in 10 then the property is put into the 1 in 10 probability category.

If a property with a 1 in 10 year probability at the beginning of the year suffers another

flooding incident during the report year it is transferred to the 2 in 10 year probability (only if a previous incident was less than 10 years ago). If a property with a 1 in 20 year probability suffers another flooding incident it is transferred to the 1 in 10 year probability (only if a previous incident was less than 20 years ago) unless, in both cases, it was caused by a severe storm.

The impact will be assigned based on the incident details and subsequent investigation. If subsequent incidents occur at the same property or location, the property or location will be placed or remain in the highest impact category of an incident that has occurred at that location.

New additions or movements to the risk grid through engineering feedback

When a flooding incident is being assessed through a high level assessment, or a capacity enhancement scheme is being appraised, the engineer will re-examine historical incidents in the area, examine the hydraulics of the sewerage network and the hydraulic model of the system. The engineer, when carrying out a site investigation, may also talk to residents of neighbouring properties or carry out a questionnaire in the area of a known problem in order to confirm the extent of the flooding problem.

From this analysis and investigation, the engineer will determine if the existing properties on the risk grid have been assigned the appropriate impact and probability categories, and may also propose that additional properties or locations in the area should be on the flooding risk grid, and to which categories they should be assigned.

No properties will be added due to sewer modelling alone – properties that haven't flooded will only be added due to their proximity to properties that have flooded.

These changes to the risk grid will need to be agreed with both Environment & Assets & Compliance (E&A&C) and Operations.

Properties or locations moving or being removed from the risk grid

Properties can only be removed from the flooding risk grid or moved to a lower impact and/or probability category through two methods: through better information or as a result of company action.

Movement/removals through better information will arise from the analysis and investigation undertaken by an incapacity problem being appraised (through an appraisal or through a high level assessment). An engineer will determine if the existing properties/locations on the flooding risk grid have been assigned the appropriate impact and probability categories, and may propose that a category assigned should be changed or that the property/location should be removed from the risk grid altogether i.e. the property/location no longer deemed to be at risk of flooding through inadequate hydraulic capacity.

Movement/removals through company action are where the company has undertaken capital works to install a solution to either reduce the impact, or probability, or both. When engineers design capital works, they identify both the resulting impact and probability category that the properties/locations will be moved to as a result of the capital works.

Line of reportable risk

The red line shown on the sewer flood risk grid is the line of reportable risk. The line could also be viewed as an approximate line of equal risk – with the top left hand box and the bottom right hand box both having a value of 10 for a single property or location.

The line is also a reflection of the proposed enhancement of design standards in order to

take account of climate change (e.g. 1 in 50 year for internal flooding).

If a property or location moves to below the line of reportable risk (e.g. through company action) it is no longer counted towards the total risk score. Conversely, if a property or location floods for the first time and is placed above the line of reportable risk it is then counted towards the total risk score.

Total risk score

The total risk score is the number of properties/locations in each cell above the line of reportable risk, multiplied by the appropriate risk score (impact x probability) of each cell. Risk is measured by a unitless number made up of risk scores and numbers of properties.

Properties and areas that lie beneath the line of reportable risk are assumed to have no risk score. For simplicity, we assume that a property or area does not have a risk score until or unless it has an incident which brings it above the line.

The risk scoring approach has the following advantages over the DG5 register methodology:

- Total flood risk is considered rather than just internal property flood risk
- Highest risk DG5 2 in 10 year (A) & 1 in 10 year (B) properties remain highly visible
- The impacts of climate change and urban creep, making the probability of flooding events increase over time, can be accommodated. We do not have a fixed flood return period to design to. Properties at risk of internal flooding from an event up to 1:50 years still remain 'at risk'. Previously properties at risk internally due to events greater than a 1:20 years were removed from the registers
- We are measured against reducing risk rather than just reducing probability
- Schemes that reduce risk, but not below the line of acceptable risk, still have a positive impact on the total risk score – meaning schemes that previously might have not been considered may progress despite not having all risk removed.

Prioritisation can be done simply by considering the benefits (reduced risk score) and the cost of the investment required. The most cost beneficial investments are delivered first.

Outcome F: Minimise sewer flooding

Company performance commitment reference: North Bristol Sewer Scheme - Trym catchment

Short definition

Delivery of additional capacity for the Trym catchment by 2022/23 in line with the agreed PR14 North Bristol Sewerage Strategy.

Customer friendly definition: Delivering one of our major projects – a big new sewer in the north of Bristol.

Measurement

Necessary detail on measurement units	Binary. Scheme delivered or scheme not delivered.
Frequency of PC measurement and any use of averaging	Annual (<u>financial year</u>)
Single or cumulative target	Single

Mitigation / exceptions

None

Any other information relating to the performance commitment

We have an AMP6 performance commitment for the North Bristol Sewerage Strategy that includes a milestone to ensure we have achieved sufficient progress on the design, consultation and construction of the Trym scheme by 2018, such that it can be completed by 2023.

The North Bristol Sewerage Strategy was agreed at PR14 final determination. It included two phases. The first phase, the Frome Valley scheme, will be delivered by 2019. The second phase, the additional capacity for the Trym catchment, will be delivered in 2022/23.

This PC covers completion of the second part of the North Bristol sewerage strategy, which comprises the construction of the Trym relief sewer.

The North Bristol sewerage strategy is an integrated strategy providing multiple benefits including provision of foul sewerage capacity for new development to the north of Bristol, reducing sewer flooding in the Blaise Castle area, minimising the risk of pollution in the Frome and Trym river valleys and reducing spill frequency at CSOs. Thus the strategy meets several of the expectations set out in WISER: reducing sewer flooding, reducing pollutions and providing effective drainage.

We have engaged with customers (specifically campaign groups in Frome). Through this work, customers were engaged in defining the priority of the North Bristol overlap programme as a whole.

We ~~are on track with~~ delivered the PR14 Trym milestone and have ~~just~~ awarded the contract

for the detail design and construction by 2023.

The performance commitment has an underperformance ODI only as it covers the non-delivery of the North Bristol Sewer Scheme so there is no ability for outperformance.

Full definition of the performance commitment

The Trym relief sewer will transfer flows from the existing Frome Valley sewer at the Bristol Golf Club, Almondsbury and discharge into the Bristol trunk sewer at Saltmarsh Drive, Avonmouth. It will also accept ~~all dry weather~~ flows from the existing sewerage network via six intermediate connections at Cribbs Causeway, Filton Airfield and two areas of Henbury.

The proposed sewer will be a deep tunnel providing 30,000m³ of storm storage, mobilised through the use of automatic level controlled penstocks, and designed to ensure no deterioration in the performance of existing overflows, significantly reduce flooding and pollution risks and allow for future growth and climate change.

The performance commitment will be considered met when the following works have been completed:

- ~~5.50km of 2.85m diameter tunnel and 0.90km of 1.8m diameter gravity sewer sewer or larger~~
- ~~Intermediate shafts up to 50m deep with energy dissipation units~~
- Four flow control penstocks, with instrumentation to enable 'real time control'

Our technical auditor (Mott MacDonald) has been engaged on progress to date ~~as well as to ensure~~ing there is clear understanding of what progress ~~is required for delivery needs to be demonstrated by March 2018 in order to achieve the first regulatory output and have confirmed we met the 2018 milestone. Letters of support have also been received from the Council and the Environment Agency.-~~

Trym scheme tender documents for a design and build contract were released in June 2017 and we appointed a contractor in March 2018. Enabling works for the Trym scheme have already been completed as advance works under the Frome Valley scheme.

Outcome R: Resilient services

Company performance commitment reference: Restrictions on water use (hosepipe bans)

Short definition

Number of temporary use (hosepipe) bans imposed on customers to restrict their water use.

This is a continuation of the PR14 bespoke performance commitment which reflects our commitment not to impose temporary water use bans on our customers during the PR19 period.

Customer friendly definition: Ensuring we don't have to enforce a hosepipe ban.

Measurement

Necessary detail on measurement units	Number
Frequency of PC measurement and any use of averaging	Annual <u>(financial year)</u>
Single or cumulative target	Single

Mitigation / exceptions

None

Any other information relating to the performance commitment

Modelling for our Drought Plan and Water Resources Management Plan has shown that our services are resilient to a repeat of any of the drought events experienced in the last 100 years without the need to ask our customers to restrict their water use. Therefore we would not expect to impose temporary use restrictions (hosepipe bans) more than once every 100 years on average. Similarly we would not expect to impose non-essential use bans for commercial customers more than once in every 150 years on average.

This level of drought resilience is amongst the highest for all water companies in the UK and research with customers suggest they find it acceptable.

In our Strategic Direction Statement research, 87% of customers thought that reliable services even in extreme weather was important; it is one of our customers' highest priorities. We subsequently engaged with our customers on hosepipe bans in our deliberative resilience study and then again in our quantitative studies (MaxDiff, Conjoint & online game); although it wasn't highlighted as an area for high investment in the deliberative study it was again highlighted as a customer priority in the quantitative work.

We agree with our customers that we should not be having hosepipe bans and given our long-term track record in this area, we feel it is most appropriate to have underperformance payments only.

Full definition of the performance commitment

A temporary use (hosepipe) ban is defined as per the Flood and Water Management Act 2010, the Water Use (Temporary Bans) Order 2010 and the Drought Direction 2011.

We will meet this performance commitment in any year that we do not need to impose customer restrictions (a hosepipe ban). The penalty will apply for any imposition of a temporary use ban that is a first step towards further restrictions resulting from severe dry weather. This includes non-essential use bans for non-household customers.

The penalty is applicable for each individual temporary use ban that is imposed during the five-year period.

~~The incentive will be applied at the end of the five-year period if no temporary use bans have been imposed.~~

The penalty will apply even if we experience extreme dry weather that is worse than our 1 in 100 stated level of service (equivalent to the dry weather experienced in 1975/76).

This is a stretching performance commitment and reflects our commitment to providing resilient services for our customers, and our confidence in our ability to manage our water resources system to mitigate the risk and impact of extended periods of dry weather.

Outcome E: Protecting and enhancing the environment

Company performance commitment reference: Abstraction Incentive Mechanism (Mere)

Short definition

Volume of water ~~(MI)~~ abstracted from the Mere source and exported from the catchment over the course of the year when river flows are low.

Customer friendly definition: Reducing the amount of water we take from sensitive sites.

Measurement

Necessary detail on measurement units	MI/year
Frequency of PC measurement and any use of averaging	Annual <u>(financial year)</u>
Single or cumulative target	Single

Mitigation / exceptions

This performance commitment will cease to apply if an alternative approach to reduce the impact of abstraction at Mere such as a licence reduction or stream support, is put in place. The alternative approach will be subject to approval of the Wessex Water Partnership.

Any other information relating to the performance commitment

This measure encourages us to reduce abstraction at potentially environmentally sensitive sources during periods of low river flow, where the impact is not certain enough to warrant abstraction licence changes. To identify suitable sites for an AIM measure, we reviewed abstraction licences listed in the WINEP with the Environment Agency and also considered other abstraction licences where we have ongoing community engagement relating to abstraction. This process reconfirmed Mere as a suitable AIM site and identified Stubhampton as a potential candidate site for an AIM measure (see separate performance commitment details for further information).

We introduced an AIM performance commitment for Mere for the 2015-20 period. Since then we've reduced the volume of water abstracted to export from the local catchment by around 40% and undertaken regular community engagement on the subject of abstraction and water conservation. We therefore propose the continuation of the AIM at Mere for the next 5-year period from 2020-25.

Whilst this is a continuation of the AIM performance commitment in 2015-20, we are setting a stretching target:

- We are making a minor change to the trigger for the AIM window for the 2020-25 period, which will have the effect of extending the length of the window for around 28 days per annum. In the 2015-20 period we are using a groundwater level trigger; from 2020 we intend to use the flow in the Shreen Water and the Ashfield Water as this is more appropriate for community engagement due to its visibility to all.
- The trigger levels for the streams are set at around Q_{n44} which means that the flow in the rivers will be below the trigger levels for 45% of the time (on average).

Full definition of the performance commitment

The total volume of water abstracted from Mere source that is exported from the local river catchment to Whitesheet service reservoir when flow in the Shreen Water and/or the Ashfield Water is less than 2 MI/d (measured from 1 April – 31 March).

Flow in the Shreen Water will be monitored daily at the Shreen Water @ ~~Mere~~ gauging station (thin plate weir). Flow in the Ashfield Water will be measured daily at the Ashfield Water gauging station (Burton Flume).

The volume of water exported to Whitesheet will be measured by the flow meter at Mere water treatment works (our meter 'Flow to Whitesheet DF304').

In addition to the specific measurement of river flows and export volumes, we commit to undertake regular community engagement with the Mere Rivers Group to discuss abstraction, water conservation and other relevant matters of mutual interest.

The baseline abstraction for the AIM at Mere is 462 MI per annum abstracted during the AIM period. This is based on the volume of water we abstracted from this source between 2002 and 2012. This period has been used because it is representative of our abstraction for the period prior to AIM and includes some notable dry periods: 2003, 2006 and 2011.

Outcome E: Protecting and enhancing the environment

Company performance commitment reference: Natural capital: improve Sites of Special Scientific Interest (SSSI sites)

Short definition

Percentage of actions delivered to improve SSSI sites on Wessex Water landholding as agreed with Natural England.

Delivery of management actions to enable recovery and improvement to SSSI condition. The actions will be agreed between Natural England and Wessex Water and only apply to land owned by Wessex Water. The landholdings may be managed directly by Wessex Water or leased to farmers or conservation bodies.

Customer friendly definition: Improving habitats for plants and wildlife on the SSSI land we own.

Measurement

Necessary detail on measurement units	%
Frequency of PC measurement and any use of averaging	Annual <u>(financial year)</u>
Single or cumulative target	Cumulative

Mitigation / exceptions

This performance commitment will be measured against an agreed list of site based actions only and not other SSSI management tools such as the Natural England Remedies database. Land <5,000m² has been excluded as part of a long-standing agreement with Natural England covering our SSSI management. Land parcels of this size are too small to alter the overall SSSI condition. They will be managed appropriately but excluded from this target.

Any other information relating to the performance commitment

The Government's Biodiversity 2020 strategy outlines the target to achieve 95% of all SSSIs in unfavourable recovering and favourable condition, of which 50% should achieve favourable status. In order to achieve this, we have put management plans in place to identify the actions required to enable habitat condition to improve. This has included the development of Site Environment Plans on operational sites, and working with tenants to encourage the delivery of Higher Level Stewardship agreements.

There are no ongoing targets for SSSIs beyond 2020. The recent 25 Year Environment Plan does not explicitly refer to SSSIs but sets a lower target for Protected Areas. Also, the key delivery mechanism for SSSI status, agri-environment subsidies, will change following our exit from the European Union. These changes mean that there is the potential nationally for management commitments on SSSI condition to waver in a time of uncertainty. The purpose of this performance commitment is to ensure that Wessex Water continues to manage our SSSIs to enable favourable condition to be achieved on both operational and tenanted land.

This is part of a wider suite of performance commitments, from both AMP6 and AMP7, to enable the company to assess and understand our natural capital provision across the Wessex Water region. Combined with our current performance commitment on assessing our landholding for biodiversity, current Engineering and Construction targets to deliver no net loss of biodiversity, and proposed commitments on partnership working, will enable the establishment of a natural capital 'gain' target for PR24. This will be incorporated into a future performance commitment. The aim is to establish a natural capital improvement target for the landholding which we own, and the wider Wessex Water region.

Natural England and the Wessex Water Catchment Panel have been extensively consulted on the development of this performance commitment.

Our overriding aim is to ensure that all eligible SSSI land is within an appropriate management regime, which can deliver the required conservation status over time. Bespoke actions have been identified and agreed with Natural England, these are over and above any actions identified by the NE Remedies Database. We do not feel that Remedies is the best tool to inform this PC. This PC relates to terrestrial SSSIs within our ownership. Currently Remedies shows 87 actions over 23 SSSIs, of which only 8 actions are on land within our ownership and are shown as underway or complete. This is a lower number of SSSI sites and activities than proposed within the PC.

It is intended that this is a phased programme which corresponds with expiry dates of agri-environment or tenancy agreements. This means that there will be a rolling programme addressing a varying number of sites each year. We would like to develop a consistent engagement process with our tenants and Natural England.

Customer research using our slider tools showed strong support for improved biodiversity, ranking it only below leakage and pollution incidents. This is in line with generally high support from our customers for measures that improved the natural environment.

Full definition of the performance commitment

This Performance Commitment is to deliver 100% of the actions agreed with Natural England. These actions have been identified and assessed to deliver an improvement, over time, to the current SSSI condition.

The company is liaising with Natural England during 2018 to develop a master list of SSSI sites and appropriate actions (based on the 'Proposed Approach' in Table 1, below), to be delivered between 2020 and 2025, to improve SSSI condition.

This master list will be broken down into annual actions relating to specific sites, for each financial year between 2020 and 2025. This will be agreed with Natural England. This will become the basis for the annual performance commitment target.

Wessex Water will deliver the agreed actions for each financial year. An end of year report will be completed, detailing actions undertaken and providing evidence of action. This concise annual report will identify the actions undertaken and the sites improved that year.

The annual report will be shared with Natural England and the Wessex Water Catchment Panel at the end of March. The Catchment Panel will be asked to approve/confirm the action undertaken to sign off the performance commitment as complete.

Condition Assessments will be undertaken by Wessex Water every two years to monitor progress towards the agreed SSSI outcomes. This will be reported back to the Catchment Panel.

Table 1: Categories and Extent of SSSI Landholding

N.B. Parcels under 5,000m² and amounting to less than 1% of the unit area have been excluded. MLG = Major Landowners Group

OPERATIONAL & OTHER LAND

SSSI_NAME	SSSI units	WW Site Name	Extent of WW SSSI ownership, approx.(ha)	Combined unit area ha	% area of combined units	Proposed Approach - to be discussed
Black Hill Heath	2	Black Hill Reservoir	0.84	0.92	91.60	Review the current management plan and any operational constraints. Ensure that risks and remedies identified by NE MLG reports continue to be addressed
Box Mine	1	Fiveways (Hawthorn) Reservoir	0.88	51.23	1.72	SSSI is an old stone mine designated for its bat roosts. Review the current management plan and investigate if there are any options to enhance the setting of the roost for bats. Review Major Landowners Group (MLG) remedies in ownership to confirm relevance and completion.
Bratton Downs	13	Luccombe Springs (BEING SOLD)	3.29	191.67	1.72	There is potential to improve the condition of the site's plantation wood and mature scrub habitats and display the geomorphological

						features, as well as buffering and enhancing the adjoining grassland SSSI (unit 8)
Canford Heath	4	Canford Heath Reservoir	0.36	7.50	4.78	Review the current management plan and any operational constraints
Monkswood Valley	1,2,3,4	Monks Woods, Hunterwick Wood & Hartley Wood	10.04	30.97	32.42	Review management requirements and delivery options. Planning may include ash die-back mitigation actions. Review MLG remedies in ownership to confirm relevance and completion.
Morden Bog and Hyde Heath	30	Blackheath STW	0.81	4.20	19.16	Review management requirements and delivery options. The designated area functions to buffer the SSSI from the waste treatment works.
North Exmoor	9	Hawkcombe Reservoir & Pipes	0.68	7.20	9.40	Review management requirements and delivery options. The status of our leasehold needs to be resolved but there may be potential for co-operative management between Wessex Water and our neighbours.
North Exmoor SSSI	13,25,26	Nutscale Reservoir	6.34	902.55	0.70	Review the current management plan and any operational constraints
Poole Harbour	19,27	Moorland Way SPS	0.44	149.11	0.29	Review management requirements and delivery options.

Poole Harbour SSSI	21,27,28	Lytchett Minster STW	1.21	147.74	0.82	Review management requirements and delivery options within the constraints of the tenancy agreement.
Purbeck Ridge (East)	4,5,6	Ullwell Source	1.19	19.89	5.98	Review the current management plans and any operational constraints.
Quants	3	Leigh Source	0.41	15.05	2.75	Review Forestry Commission agreements for Quants. If the parcel is outside any tenancy, review management requirements and delivery options.
Severn Estuary	2	Bleadon Level STW	5.52	45.88	12.03	Review management requirements and delivery options.
South Dorset Coast	33	Worth Matravers STW	0.20	1.07	18.67	Review the current management plans and any operational constraints.
South Exmoor	23	Haddon Hill Wimbleball Reservoir	3.01	61.22	4.92	Review the current management plan and any operational constraints.
Trill Quarry	1	Thornford STW	1.39	1.40	98.96	Review the current management plan and any operational constraints.
Upton Heath	3, 28	Corfe Hills Reservoir	1.20	4.09	29.30	Review the current management plan and any operational constraints.
White Horse Hill SSSI	5,13	Sutton Poyntz woodland & springhead enclosure	2.10	18.34	11.46	Review the current management plans and any operational constraints.

Total area (relevant) Operational and other land – 39.91ha

CONSERVATION TENANCIES

SSSI_NAME	SSSI units	WW Site Name	Extent of WW SSSI ownership, approx. (ha)	Combined unit area ha	% area of combined units	Proposed Approach - to be discussed
Avon Valley (Bickton to Christchurch)	157, 158, 161	Blashford Lakes	19.07	67.73	28.16	Review land management aims and agreements. Review MLG remedies in ownership to confirm completion.
Black Hill Heath	1	Black Hill Reservoir	0.28	69.62	0.40	Review land management aims and agreements including possible agri-environment options after the Higher Level Stewardship (HLS) agreement ends. Ensure that risks and remedies identified by NE MLG reports continue to be addressed.
Ruttersleigh	4	Mount Fancy Source	13.83			Review land management aims and agreements including possible agri-environment options after the HLS agreement ends. Ensure that risks and remedies identified by NE MLG reports continue to be addressed.
Shapwick Heath	41,43, 46, 48,51, 55, 57,58, 61, 62	Shapwick, Avalon Lake & Ashcott	101.36	228.07	44.44	Review land management aims and agreements.

Upton Heath	2,3	Corfe Hills	2.87	479.2 4	0.60	Review land management aims and agreements.
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Total area Conservation Tenancy - 137.42ha

FORESTRY TENANCIES

Prior's Park & Adcombe Wood	1,3,4	Culmhead Source	36.83	75.1 8	48.99	Confirm no action. Confirm length of lease & any sub-lets. Develop an outline plan for future management on expiry of the leases
Quants	1, 2,3,4, 5	Leigh Source	20.45	54.6 7	37.40	Confirm no action. Confirm length of lease & any sub-lets. Develop an outline plan for future management on expiry of the leases

Total area Forestry Tenancy 57.28ha

AGRICULTURAL TENANCIES

Purbeck Ridge (East)	3,4, 5	Ulwell Source	11.64	54.3 5	21.41	Review land management aims and agreements.
St. Catherine's Valley	2.3.4	Holly Barn Farm, Marshfield	19.26	76.8 7	25.05	Review land management aims and agreements.
St. Catherine's Valley	5	Beek's Farm, Marshfield	21.99	27.8 5	78.96	Review land management aims and agreements including options at the end of the Entry Level

						Scheme (ELS) and HLS agreement.
St. Catherine's Valley	6	Nailey Farm, Marshfield	3.16	18.57	17.01	Review land management aims and agreements.
White Horse Hill	1,10,13	Sutton Poyntz PS & Northdown Reservoir	18.95	23.61	80.29	Review land management aims and agreements. Ensure that risks and remedies identified by NE MLG reports continue to be addressed.

Total area Agricultural Tenancy 75.00ha

Outcome E: Protecting and enhancing the environment

Company performance commitment reference: Greenhouse gas emissions

Short definition

Annual gross greenhouse gas emissions from operational services.

This is a continuation of our current performance commitment with one principal modification. We propose to use total gross emissions (the sum of scope 1, scope 2 and scope 3 emissions), instead of net emissions – which has been the basis of this performance commitment during AMP6.

Customer friendly definition: Reducing the amount of greenhouse gases our activities cause.

Measurement

Necessary detail on measurement units	KtCO ₂ e
Frequency of PC measurement and any use of averaging	Annual (financial year)
Single or cumulative target	Single

Mitigation / exceptions

None – Our figure does not include methane emitted as part of biosolids disposal. This exception is standard practice among the UK sewerage operators following Ofwat's decision on the boundaries for regulatory emissions reporting (from 2009-10 onwards).

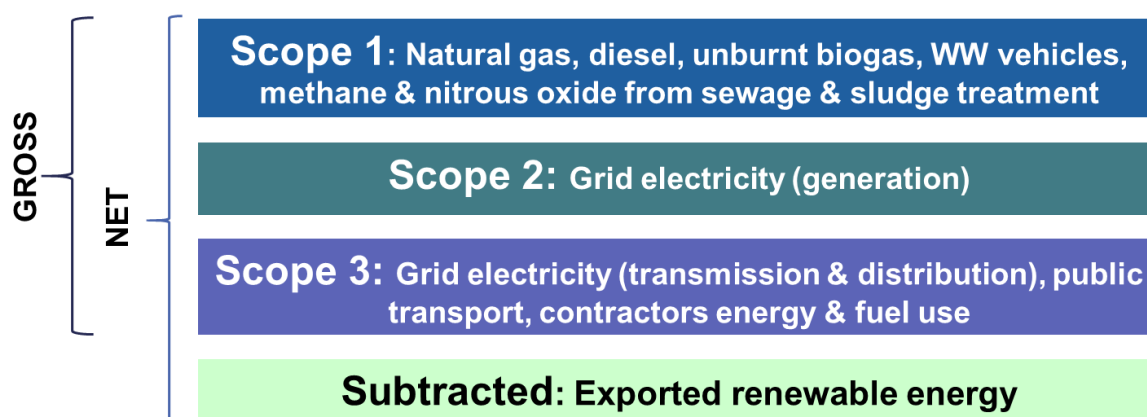
Any other information relating to the performance commitment

The company is committed to becoming carbon neutral by 2040. Our research with customers continues to show that they consider reducing carbon to be important, with three quarters saying that it is important to them, although other priorities ranked higher.

In PR14 this has been a reputational only measure. Whilst this is an important area for us, we don't believe it's appropriate to get an outperformance payment.

Full definition of the performance commitment

Wessex Water has reported its carbon footprint since 1998 – voluntarily in the early years and as part of the annual return to Ofwat since 2009/10. Our net greenhouse gas emissions is one of our AMP6 performance commitments, alongside our renewable energy generation; we are the only water and sewerage company to have both as an AMP6 performance commitment. Greenhouse gas emissions are reported each year in line with national and international reporting guidelines. Broadly, emissions cover the following categories:



Not included: emissions from sludge disposal

As the diagram indicates, reporting net emissions involves subtracting the equivalent emissions of exported renewable energy. For example, exported renewable electricity is 'carbonised' at the average grid electricity emissions factor and then subtracted from the gross figure. Meanwhile, the end-user of that renewable electricity is required to report it as if it were conventional grid electricity. More recently we have seen the introduction of 'green gas certificates' associated with exported biomethane. In this instance, the end user buys certificates associated with the biomethane that they have consumed and can then account for them as zero carbon. This means that the generator (i.e. ourselves) can no longer subtract the carbon equivalence of this gas from its gross emissions.

1a. AMP7 – proposed performance commitments

For AMP7 we propose to include gross emissions (and not renewable energy generation) as one of our environmental performance commitments. The main reason is that it gives our non-regulated business the freedom to sell renewable energy certificates without impinging on a WWSL performance commitment. This also removes an area of forecasting uncertainty i.e. future choices made by the unregulated business about exporting energy in response to available renewable energy subsidies.

In parallel with regulatory reporting we will continue to disclose our net emissions in our annual sustainability indicators report.

1b. Measurement, reporting and forecasting

While we do not use a British Standard or and ISO standard for emissions calculation and reporting, we employ the same methods used by other UK water companies for regulatory reporting. Specifically, emissions are calculated using ~~e-will continue to use the~~ UKWIR's carbon accounting workbook for annual calculation and reporting, which in turn uses the standard conversion factors for company reporting published by BEIS. -Our published emissions figures are audited by the same external auditors as used from other performance commitments.

We ~~also have use~~ our own Excel workbook for forecasting, using standard national emissions factors.

One methodological exception to be noted is in relation to emissions from grid electricity consumption. We propose to use the Department for Business, Energy and Industrial Strategy (BEIS) December 2017 forecast of the carbon intensity of grid electricity for each year of AMP7, rather than the updated *actual* value that is published each year and used in the UKWIR workbook. This represents the government's official published forecast, and by fixing the emissions factor profile for AMP7, we avoid the risk of mis-forecasting an important element that is outside our own control.

1c. Other considerations

This performance commitment has been part of our engagement with customers and other stakeholders (such as our Catchment Panel). While it ranks relatively low in terms of customers' priorities, we consider it to be an important part of our overall environmental performance. As such it contributes to a rounded set of performance commitments.

Outcome E: Protecting and enhancing the environment

Company performance commitment reference: Working with the communities to improve bathing water experience

Short definition

Number of beaches with community projects that have been agreed by the Catchment Panel which improves bathing water experience.

This performance commitment identifies the number of bathing waters within the Wessex Water region where there is a sustainable, active community engagement project or group which is working towards delivering amenity benefits by 2025. Whilst this performance commitment has been established based on the designated bathing waters (EC revised Bathing Water Directive, 2003), the activity relates to the wider beach and not just the area of water covered by the designation.

Customer friendly definition: Supporting or creating community projects at beaches to improve the experience of beach users.

Measurement

Necessary detail on measurement units	Number of beaches
Frequency of PC measurement and any use of averaging	Annual (<u>financial year</u>)
Single or cumulative target	Cumulative

Mitigation / exceptions

None

Any other information relating to the performance commitment

One of our eight priority areas is developing engaged communities – improving the relationship we have with the people we serve.

Our offer of a future partnership with customers has been popular in our research, but this is contingent on our making it easy for customers to play their part, being seen to play our part and being responsive to customers when they interact with us.

In our Strategic Direction research customers also considered bathing waters an area with room for improvement. This measure incentivises us to work with local communities to make improvements to the amenity value of beaches with bathing water. By doing so we will encourage a wider participatory approach, which will have benefits across all our goals where customer behavior and participation can play a part in improving our services and the environment.

This performance commitment seeks to improve the beach amenity, improve public engagement and promote behavior change within school, residential, visitor and business communities. These actions should lead to a greater awareness of and improvements to bathing water quality and the wider beach environment. This performance commitment goes

above and beyond our statutory duties to manage and improve our assets to comply with the requirements of the Bathing Water Directive.

This measure was developed in consultation with our Catchment Panel, which includes local environmental stakeholders and other agencies that impact on the water catchments in our region. The chair of the Catchment Panel sits on the Wessex Water Partnership (our CCG).

There are 49 bathing waters within the Wessex Water region. Bournemouth Manor Steps has been newly designated by Defra for the 2018 bathing season, as notified in March. This number includes one private inland swimming lake (Henleaze Swimming club) and one closed bathing water, Portland Harbour Castle Cove (since 2014). For the purposes of this performance commitment, these two bathing waters have been excluded, meaning that there are 47 bathing waters to be included at the time of writing.

Working with the Litter Free Coast and Sea Steering Groups, Environment Agency, relevant Local Authorities and prior Wessex Water knowledge, including information obtained from Catchment Partnerships, Surfers Against Sewage and the Marine Conservation Society, the main issues impacting each bathing water will be identified and classified. This information will help to inform the engagement projects to be promoted at each individual beach.

Engagement activities could include but are not limited to:

- actions to improve beach cleanliness such as sponsored #2minutebeachclean stations, beach clean groups or voluntary dog patrol groups
- projects engaging with local communities to reduce litter, understand where litter comes from and minimise waste through initiatives such as business accreditation schemes
- awareness campaigns running over the year with local groups such as Parish Councils and clubs, focusing on key issues such as plastics and fats, oils and greases
- working with farmers to reduce levels of run off with high bacteriological loadings, e.g. farmyard manures and slurries

These projects should be self-sustaining and lasting rather than just individual isolated events.

These projects will primarily be delivered through the Litter Free Coast and Sea Partnerships in Dorset and Somerset, but may also include projects and campaigns run through Surfers Against Sewage, Marine Conservation Society, Catchment Partnerships and Wessex Water activities such as Operational teams, Streamclean and customer excellence programmes. Currently the Litter Free Coast and Sea projects cover the minority of bathing waters within the Wessex Water area. This will be expanded to ensure that there is an active issue specific project or partnership at every bathing water by 2025.

Wessex Water will actively steer these projects and undertake specific deliverables, such as Streamclean (misconnection) projects, catchment advisory visits and project initiation, wider PR such as talks and educational visits. Wessex Water will enable and facilitate partnership projects where they do not already exist or where further focus or targeting is required. These will relate to addressing issues impacting bathing waters identified through Bathing Water profiles. Wessex Water will also share learning and best practice from other partnership projects which may include communication techniques and resources such as information packs, videos, links to funding streams etc.

The Wessex Water Catchment Panel will direct and agree the work programme and audit the outcomes annually.

Data will typically be provided through annual reports prepared by the two Litter Free Coast and Sea projects, as detailed below. Data might include:

- Kg litter collected per beach and/or number of beach clean events
- Number of businesses engaged during the bathing season through business accreditation packs, Fats, Oils and Greases (FOG) audits and advisory visits
- Number of campaigns delivered
- Number of topical projects delivered, for example Yellow Fish, Only Rain Down the Drain or Refill stations
- Number of education projects co-designed and delivered and wider community talks or activities
- Level of agricultural engagement through Catchment Sensitive Farming (CSF), WW activities or bespoke initiatives

The activities will cover the entire beach, including beach streams and access points, and will not be limited to the designated bathing water area. It is also noted that many of the contributory activities will be upstream of the beach within local towns, villages and farmland.

Full definition of the performance commitment

The Environment & Catchment Strategy team will identify the number of bathing waters which are classified (and open) within the Wessex Water region each November when published by Defra (Gov.uk website). At the time of writing, there are 49 designated bathing waters in the region, one of which is a private inland swimming lake and one is closed due to a landslide. Therefore, a total of 47 bathing waters has been considered.

This performance commitment is based on the designated bathing waters within our area but not limited to the specific area of designation under the Directive. The PC will encompass the wider beach and activities will be focussed on the 'last mile' before the bathing water. Whilst this PC should deliver improvements to bathing water quality, as a result of the partnership activities, there is no specific bathing water quality improvement targeted, for example moving from sufficient to good standard at specific locations.

Prior to the commencement of this performance commitment the key issues impacting the quality of the bathing water or beach amenity will be identified and recorded. This work will be undertaken in collaboration with the Litter Free Coast and Sea Project Officers and relevant Local Authorities in the first instance, and then checked with the Environment Agency and wider Wessex Water and third-party groups. This will inform the engagement approach and priority projects.

During PR19, 104 bathing water 'ambition' investigations have been identified and included within WINEP3. These investigations are required to identify the actions required to deliver a robust good or excellent classification. The outcomes of these investigations, which report in 2021, will inform additional non-asset interventions which could be delivered to support this performance commitment.

The annual target for numbers of beaches with community engagement projects will be defined at the start of AMP6 and fixed for the period to 2025. The delivery of these targets will be proposed through the Litter Free Coast & Sea Projects in the first instance, and informed by other partnership projects where appropriate. Whilst the target number of bathing waters will be fixed, the method for delivery will be discussed annually. There might be opportunities for outperformance at non-designated beaches or beaches (Bathing waters) which become designated during AMP7, or by delivering projects ahead of schedule.

End of year reports are produced by the Litter Free Coast & Sea (Dorset and Somerset) projects summarising the activities completed and engagement work undertaken through the partnership. These reports will be analysed to record the number of bathing waters where there are sustained/enduring community engagement projects which satisfy this performance commitment.

The Environment & Catchment Strategy Team will liaise with the Litter Free Coast & Sea Project Officers to understand whether there are any further community engagement projects which have been established, and fit the criteria, during the calendar year, which have been led by different organisations or partnerships. If appropriate, these projects will also be recorded against this performance commitment. This consultation will also include contact with internal Wessex Water PR and customer excellence teams, to identify any qualifying projects or campaigns supported, and the Catchment Partnership Co-ordinators. These additional projects will be discussed with the Catchment Panel to ascertain whether Wessex Water can provide any additional support which would enhance the outcomes for the relevant bathing water. Where opportunities for enhancement have been identified with the Catchment Panel, these projects will be included in the programme for subsequent years.

This performance commitment will also include relevant projects working with the agricultural sector to reduce farming contributions which may impact bathing water quality. This engagement could be through third parties such as Catchment Sensitive Farming projects or working with Wessex Water catchment delivery teams.

Only partnership projects agreed by the Catchment Panel will contribute towards the performance commitment, informed by the Engagement Matrix. Wessex Water activities such as educational advice, existing agricultural/catchment management work or existing StreamClean activities will not be counted towards this PC, although may be delivered in combination with partnership projects identified.

The number of qualifying projects delivered during the calendar year will be summarised and presented to the Catchment Partnership for audit. This summary will also include an outline of the projects and engagement proposals for the forthcoming calendar year. Where the activities are focused on the agricultural influences, reports will be sought from the Wessex Water Catchment Delivery Team, relevant CSF leads and other delivery groups.

Moving beyond 2025, it is intended that the relevant projects developed will continue to be sustainable to ensure that there is a lasting improvement in beach amenity.

The Wessex Water Catchment Panel have been extensively engaged in the development of this performance commitment. Discussions have been held with the Litter Free Coast and Sea Projects in Somerset and Dorset to understand the deliverability of this measure.

Outcome E: Protecting and enhancing the environment

Company performance commitment reference: Working with catchment partners to improve natural capital

Short definition

Number of schemes working with catchment partners to improve natural capital on non-Wessex Water landholding (excluding SSSI sites).

This performance commitment is focused on using partnership working to deliver activities resulting in natural capital improvements on land which is not owned by Wessex Water. This includes working through our Catchment Delivery team, Catchment Partnerships and wider environmental delivery partners to facilitate primarily water quality, biodiversity and flood attenuation benefits.

Customer friendly definition: Doing projects with partners that have wider benefits to the natural environment as well as protecting our water supplies and local rivers.

Measurement

Necessary detail on measurement units	Number of schemes
Frequency of PC measurement and any use of averaging	Annual <u>(financial year)</u>
Single or cumulative target	Cumulative

Mitigation / exceptions

A criteria assessment needs to be developed with the Catchment Panel to highlight which non-WINEP partnership projects can be included, and which should be excluded. The criteria could relate to the level of financial support of in-kind funding provided by Wessex Water, for example, where the WW contribution is >25% of the overall project or a specific amount over the life of the project, this can be claimed as a non-WINEP catchment project. The level of financial contribution is still under consideration and being discussed with the Catchment Panel.

Any other information relating to the performance commitment

This performance commitment will cover schemes delivered as part of our operational and discretionary activities. However, the focus will be on those activities above and beyond the requirements of our PR19 Business Plan. The intention is that this will help Wessex Water better understand our contribution to improving the natural capital of our region and will feed into a natural capital improvement target in PR24.

The intention is to work in partnership to identify projects which deliver multiple benefits. At this stage the performance commitment is based on outputs, i.e. number of partnership projects supported, but through common metrics the natural capital benefits delivered will be derived.

It is intended that data collected by partners, using common metrics, will enable us to identify the natural capital benefits delivered by these projects. Natural capital benefits may include: water purification, flood attenuation, carbon sequestration and biodiversity enhancement, for example. These will be delivered through projects such as catchment management and agronomic advice, working with Wildlife Trusts and Rivers Trusts on specific projects and enabling the delivery of a wide range of beneficial projects through the Catchment Partnerships which we host.

Our Strategic Direction research showed that customers support innovative approaches to achieve goals, particularly when this offers preventative, collaborative, environmentally friendly and cost-effective solutions. Our research has also consistently shown high priorities for actions that improve the natural environment.

This performance commitment identifies the number of catchment based, partnership projects delivered during the AMP which will give rise to natural capital benefits. The number of projects delivered will be reported annually and a natural capital benefit assessment will be reported at the end of the AMP.

This performance commitment includes:

- WINEP schemes which are delivered in partnership as detailed in WINEP3, and
- Non-WINEP partnership schemes and projects

Non-WINEP projects fall into the following categories:

- Operational catchment management/delivery schemes, e.g. catchment management schemes initiated in previous Business Plans which are now operational outputs
- Support for Catchment Partnerships, including those hosted by Wessex Water Services Ltd
- Co-funded partnership projects, e.g. B&NES WaterSpace Study, enhancement of Shapwick Heath NNR and Natural Flood Management projects
- Biodiversity Action Plan projects delivered through the Partners Programme, e.g. Dorset Wild Rivers

The Wessex Water Catchment Panel has been extensively engaged in the development of the performance commitment.

Full definition of the performance commitment

The company will consider:

- WINEP schemes which are delivered in partnership as detailed in WINEP3, and
- Non-WINEP- Annual reports produced via partners

A summary of the projects delivered during the year will be prepared for audit by the Catchment Panel every April. This will include the following information for the non-WINEP projects:

- Catchment management annual reports detailing levels of activity, engagement and pollutant trends, e.g. tonnes of nitrogen/phosphorus reduced, area of habitat improved or created for biodiversity
- Catchment Based Approach (CaBA) data returns including the projects delivered and supported, funding sources and outcomes, e.g. length of river improved
- Co-funded project annual reports identifying activities undertaken and levels of engagement, including metrics such as length of river improved, habitat/wetlands created, volunteers engaged, children engaged etc.

- Partners Programme annual reports identifying level of activity and engagement and outcomes, e.g. length of river improved, area of habitat improved/created, volunteer hours etc.

There is an aspiration that the Natural Capital valuation of these projects will be produced at the end of AMP7 using the UKWIR Natural Capital Accounting Tool (under development) or an equivalent.

It is anticipated that this performance commitment will inform the company's approach to Natural Capital Accounting. Post 2025 it is anticipated that there will be a Natural Capital performance commitment, establishing targets on how to grow our Natural Capital Provision across the region through our activities. The detail of this has yet to be developed but ideally it will link with other natural capital tools and metrics used by other organisations such as Local Authorities, Environment Agency and Natural England.

The currently list of projects are included in the following tables::

WINEP Partnership Projects

<u>Scheme</u>	<u>Driver</u>	<u>Measure Type</u>	<u>Completion</u>	<u>Data Source</u>
<u>Name/Name of Investigation/Site</u>	<u>Code</u>		<u>Date</u>	
<u>Name/License name</u>	<u>(Primary)</u>		<u>(DD/MM/YY)</u>	
<u>Shepherd's Shore</u>	<u>DrWPA_ND</u>	<u>Catchment Measure</u>	<u>31/03/2022</u>	<u>Annual Report (Catchment Team)</u>
<u>Ashford Reservoir - catchment scheme total pesticides</u>	<u>DrWPA_ND</u>	<u>Catchment Measure</u>	<u>22/12/2024</u>	<u>Annual Report (Catchment Team)</u>
<u>Briantspuddle DrWPA - catchment scheme nitrate</u>	<u>DrWPA_ND</u>	<u>Catchment Measure</u>	<u>22/12/2024</u>	<u>Annual Report (Catchment Team)</u>
<u>Cherhill DrWPA - catchment scheme nitrate</u>	<u>DrWPA_ND</u>	<u>Catchment Measure</u>	<u>22/12/2024</u>	<u>Annual Report (Catchment Team)</u>

<u>Diversbridge DrWPA - catchment scheme nitrate</u>	<u>DrWPA ND</u>	<u>Catchment Measure</u>	<u>22/12/2024</u>	<u>Annual Report (Catchment Team)</u>
<u>Durleigh Reservoir DrWPA - Catchment scheme River Tone u/s Firepool Locks Pesticides and metaldehyde</u>	<u>DrWPA ND</u>	<u>Catchment Measure</u>	<u>22/12/2024</u>	<u>Annual Report (Catchment Team)</u>
<u>Goodshill DrWPA - catchment scheme nitrate</u>	<u>DrWPA ND</u>	<u>Catchment Measure</u>	<u>22/12/2024</u>	<u>Annual Report (Catchment Team)</u>
<u>Litton Cheney DrWPA - catchment scheme nitrate</u>	<u>DrWPA ND</u>	<u>Catchment Measure</u>	<u>22/12/2024</u>	<u>Annual Report (Catchment Team)</u>
<u>Nailsea partnership project - Improving the quality of the surface water outfall discharging to Tickenham, Nailsea and Kenn Moor SSSI</u>	<u>SSSI IMP</u>	<u>Catchment Measure</u>	<u>31/03/2025</u>	<u>Final report (Environment & Catchment Strategy)</u>
<u>Ubley STW IUDM</u>	<u>SSSI IMP</u>	<u>Catchment Measure</u>	<u>31/03/2025</u>	<u>Final report (Environment & Catchment Strategy)</u>

Non-WINEP Partnership Projects

<u>Category</u>	<u>Project Name</u>	<u>Output</u>
<u>Catchment management/delivery</u>	<p><u>15 no. AMP6 catchment management groundwater schemes for nitrate: Deans Farm, Fonthill Bishop, Bulbridge, Shapwick, Sturminster Marshall, Milborne St Andrew, Eagle Lodge, Empool, Belhuish, Sutton Poyntz, Alton Pancras, Forston, Friar Waddon, Winterbourne Abbas, Hooke.</u></p> <p><u>5 no. catchment management surface water schemes for metaldehyde, pesticides and nutrients, Ashford, Durleigh, Sutton Bingham, Leigh and Luxhay Reservoirs.</u></p> <p><u>1 no catchment management surface water schemes for phosphate: Brinkworth Brook (to 2022)</u></p>	<u>Annual Report summarising engagement and delivery actions submitted to EA</u>
<u>Catchment Partnerships</u>	<p><u>4 no catchment partnerships: Dorset and Bristol Avon Catchment Partnerships- hosted by Wessex Water</u></p> <p><u>Somerset and Hampshire Avon- supported by Wessex Water</u></p>	<u>Annual reports publicised on partnership websites and data returns to CaBA</u>
<u>Co-funded partnership projects</u>	<p><u>These projects may vary depending on issues and funding streams available. Projects due to be supported in PR19 include: B&NES WaterSpace Study, Natural Flood Management feasibility and delivery projects, West of England Nature Partnership and West of England Adaptation and Resilience Framework</u></p> <p><u>June 18: Natural England have promoted a partnership project on Shapwick Heath which could fall within this category, to be delivered from 2020</u></p>	<u>Annual Reports</u>
<u>Partners Programme</u>	<u>Comprising the Large and Small Grant funds. Projects have yet to be decided for PR19</u>	<u>Annual reports and Implementers meeting</u>

Outcome E: Protecting and enhancing the environment

Company performance commitment reference: Satisfactory sludge ~~use/~~ disposal

Short definition

Percentage of sludge disposed that complies with appropriate legislation and regulation, as reported to the Environment Agency.

Wessex Water currently recycles all its sludge to agricultural land, providing nutrient and soil structure benefits to the land to which it is applied. This measure ensures that this activity complies with all necessary regulations and codes of practice and continues to be sustainable.

Customer friendly definition: Safely disposing of the solids that are left at the end of the waste treatment process.

Measurement

Necessary detail on measurement units	%
Frequency of PC measurement and any use of averaging	Annual (calendar year)
Single or cumulative target	Single

Mitigation / exceptions

This PC applies to sewage sludge as defined in the Sludge (Use in Agriculture) Regulations. Thus it includes sludges derived from any Organic Waste which is discharged to sewers or sewage treatment works and becomes part of the Urban Waste Water flow. The PC excludes any Organic Waste delivered directly into a sewage sludge or Organic Waste treatment process.

~~The PC **None**. The reported figure for compliance **excludes any sludge exported to a third party for treatment**, disposal or ~~and recycling~~ disposal to agricultural or non-agricultural outlets **where the third party** holds ~~is~~ authorised by an **the appropriate and relevant environmental permits**, exemption or regulatory position ~~to carry out such treatment and disposal of sludge~~ allowing the sludge to be utilised in this manner.~~

Any other information relating to the performance commitment

The outcome delivery incentive for this measure is underperformance only. This is a result of the stretching target which means that outperformance is not possible.

The reported figures are based on the calendar year and reported in the following financial year.

Full definition of the performance commitment

This PC is defined in accordance with the Environment Agency 'Water & Sewerage Company Environmental Performance Assessment (EPA) Methodology (version 3),

November 2017' – other than as outlined in the above Mitigation/ exceptions. It includes compliance with the Sludge (Use in Agriculture) Regulations and EPR Regulations in so far as they apply to the recycling or disposal of sewage sludge-containing products and residual wastes, and compliance with the Safe Sludge Matrix.

It applies to the permits and exemptions listed below, but this is open to review as this list may become out of date and so has not been recorded in the definition itself:

- Standard Rules SR2010No4 Mobile plant for landspreading.
- Standard rules SR2010No5 Mobile plant for the reclamation, restoration or improvement of land.
- Standard rules SR2010No6 Mobile plant for landspreading of sewage sludge.
- Bespoke mobile plant permits or site based permit which lists sewage sludge or sewage sludge containing materials.
- End of waste opinions for sewage sludge or sewage sludge containing materials.
- Exemptions covering recycling (use) or disposal of sewage sludge or sewage sludge containing materials, including U6 (Use of sludge for the purpose of re-seeding a waste water treatment plant), and S3* (Storage of sludge), but excluding T21** (Recovery of waste at a waste water treatment works)*.

Reporting will be on the basis of tonnes dry solids (tds) sent to any outlets in a compliant manner, when under the control of the sludge producer, reported as a percentage of overall tds sludge production utilised in a compliant manner, i.e.

$(1 - \text{unsatisfactory use or disposal tds utilised} / \text{total raw tds production}) * 100$

The current revised definition was agreed in April 2016 by Water UK, all water and sewerage companies and the Environment Agency. Prior to this, each water company used its own definition of this measure so that direct comparison of company performance was not possible.

Outcome E: Protecting and enhancing the environment

Company performance commitment reference: Reduce frequent spilling overflows (non-WINEP)

Short definition

Number of combined sewer overflows (CSO) improvements achieved in addition to WINEP requirements. ~~Schemes will be hydraulic improvements to reduce the spill frequency of combined sewer overflows.~~

Customer friendly definition: Improving the environment by reducing the number of overflows that frequently spill sewage into rivers and the sea.

Measurement

Necessary detail on measurement units	Number
Frequency of PC measurement and any use of averaging	Annual <u>(financial year)</u>
Single or cumulative target	Single

Mitigation / exceptions

None

Any other information relating to the performance commitment

Research for our Strategic Direction statement has shown that river water quality is a high priority for customers. Our quantitative willingness to pay analyses also show high willingness to pay.

Our customer engagement has routinely rated environmental issues high on our customers list of priorities. In our research on resilience, customers also recognised environmental resilience as an area of high priority for investment, specifically around the scenario we looked at with them, which talked about spills into rivers and onto beaches.

We have also seen this supported by high valuations in our customer research. With this scale of customer support there should be incentives in place to encourage us to continue to deliver improvements that are cost beneficial.

The Environment Agency have been working with the Intermittent Group and the 21st Century Drainage programme to develop a framework for improvements to frequent spilling overflows. This is known as the Storm Overflow Assessment Framework (SOAF).

This performance commitment has been set to allow a mechanism for us to improve the environment by delivering more CSO improvements than the thirteen schemes currently on the WINEP, as encouraged by the Storm Overflow Assessment Framework.

Full definition of the performance commitment

The Storm Overflow Assessment Framework (SOAF) includes a flowchart for assessment of overflow performance, impact and cost benefit analysis to determine whether investment is

required.

The SOAF process is summarised below:

- Using Event Duration Monitoring data at CSOs, calculate the spill frequency (using the 12/24 hour method)
- If spills from a CSO are above 60 in any year, above 50 in two years or above 40 on average over three years, then they are deemed to be a frequent spilling overflow (FSO)
- FSOs require an assessment of the cause of the high frequency
- If the cause of high frequency of spills is due to too much rainfall arriving at the overflows, then the impact on the environment needs to be assessed
- If the overflow is deemed to have an impact on the environment (for example high polluting properties, low dilution, high aesthetics) then a cost benefit analysis is required
- If a ~~hydraulic~~ FSO improvement option is assessed as cost beneficial, then this will lead to investment.

The purpose of this performance commitment is to provide a mechanism to make hydraulic improvements to FSOs within the period 2022 – 2025 ~~that are not included in the WINEP~~.

[We have agreed with the Environment Agency that the governance of agreeing the most cost beneficial improvement and the sign-off procedure will be that of the WINEP frequent spilling overflow schemes. The sign-off of these non-WINEP schemes will be logged on a separate sheet from the WINEP schemes.](#)

We have developed this bespoke performance commitment to show our commitment to the Storm Overflow Assessment Framework and to improve the environment, above and beyond the WINEP, where customers support this.

Outcome E: Protecting and enhancing the environment

Company performance commitment reference: Length of river with improved water quality through WINEP delivery

Short definition

Length of river with improved water quality delivered through the WINEP. The aim of this measure is to monitor our progress in delivering the WINEP.

Customer friendly definition: Delivering the environmental improvements required by the Environment Agency.

Measurement

Necessary detail on measurement units	Km
Frequency of PC measurement and any use of averaging	Annual (financial year)
Single or cumulative target	Cumulative

Mitigation / exceptions

~~We are committed to delivering all the investigations included in the WINEP but they are not included in this measure. None.~~

Any other information relating to the performance commitment

Ofwat's methodology statement requires us to link expenditure for delivery of unconfirmed WINEP requirements to an outcome and a unit cost.

Our proposed approach to protecting customers comprises two parts:

1. A unit cost uncertainty mechanism. In our business plan we will include a unit cost mechanism that can be used to make an adjustment at the end of the period should the schemes not be confirmed. Our understanding is that the amber/uncertain schemes in WINEP will be confirmed or not following a Defra ministerial decision on affordability in 2021, prior to the commencement of the third river basin management plan in January 2022. We envisage that the unit cost mechanism will be a matrix of cost by scheme type and size or a cost curve
2. A performance commitment to monitor delivery of the confirmed schemes within the WINEP – as per this definition.

Our business plan will include cost allowances for all the certain (green) and indicative (amber) schemes ~~(as agreed with the EA)~~, and we propose that this performance commitment includes the total length of river improved from both green and amber schemes. However, should some of the amber schemes not be confirmed, it would be necessary to adjust the targets accordingly; this would be done in full consultation with the EA and the Wessex Water Partnership.

Our customer engagement has been based around lengths of river improved, with our aim to move away from output based measures.

Our proposed strategy for environmental improvements has been presented to our CCG on several occasions.

The Environment Agency are also supportive of us using the information in the WINEP to monitor progress. Delivery of WINEP outputs will continue to be one of the metrics within the Environment Agency's annual Environmental Performance Assessment.

This performance commitment has an underperformance ODI only as it covers the non-delivery of the WINEP so there is no ability for outperformance.

Full definition of the performance commitment

~~The~~Our preference is to make this measure will be back-to-back align with the lengths stated in the WINEP. Thus the PC target will equal the total of the lengths of river improved stated in the WINEP, providing transparency with the lengths quoted by the EA, as far as is possible.

In Column CA of the WINEP spreadsheet, 'Quantitative Km River Length Improved' is stated for the following categories of scheme:

- ~~• Sustainability change~~
- ~~• Land management/ habitat restoration/ physical improvement~~
- ~~• Continuous discharge (from STWs) – with the exception of four schemes.~~
- ~~• Eel screens~~
- ~~• Some adaptive management schemes~~
- ~~• Some land management/habitat restoration/physical improvement schemes.~~
- ~~• Continuous discharge.~~

The lengths of river improved in the WINEP have been estimated by the EA using the guidance note produced by the EA entitled 'Completing the WINEP spreadsheet supplementary guidance: Environmental outcomes' dated 8/11/2017.

Our aim is to deliver all the schemes in the WINEP. However the PC will provide a mechanism to compensate customers should we fail to deliver a WINEP output. Should we fail to deliver a WINEP output, underperformance performance in the year would be calculated by either:

- Using the length stated in the WINEP, if a length is stated, or,
- If a length is not stated, using the appropriate length for the category of scheme from the table below. Other types of scheme, that do not have a length stated in the WINEP, are covered as set out in the table below. The lengths are proxy lengths based on the scale and cost of the relevant projects.

Our incentive rate for this PC uses customers' willingness to pay values based on the length of river improved, providing a direct link between the PC incentive rate and the customer valuations.

Table: Underperformance lengths of river improved (where a length is not included in WINEP)
Water Quality

<u>WINEP section</u>	<u>Type of scheme</u>	<u>Underperformance length (km)</u>
<u>Water Quality</u>	<u>Continuous discharges</u>	
	<u>STW continuous discharges</u>	<u>25.69</u>
	<u>STW flow meter relocation</u>	<u>0.07</u>
	<u>Intermittent discharges</u>	
	<u>EDM installations at CSOs</u>	<u>0.06</u>
	<u>CSO/SSO improvements</u>	<u>8.41</u>
	<u>EDM installations at STWs/SSOs</u>	<u>0.08</u>
	<u>STW FFT increase</u>	<u>18.12</u>
	<u>STW Storm storage</u>	<u>2.82</u>
	<u>STW flow meter investigations</u>	<u>0.01</u>
<u>STW flow meter relocations</u>	<u>0.26</u>	
	<u>Catchment measure</u>	<u>Included in E7</u>
	<u>Land Management / Habitat Restoration / Physical Improvement</u>	<u>6.09</u>
	<u>Catchment investigation</u>	<u>Included in E6</u>
	<u>Investigation</u>	<u>0.52</u>
	<u>Investigation +</u>	
	<u>+ CSO/SSO improvements</u>	<u>4.32</u>
	<u>Investigation and Options Appraisal</u>	<u>1.97</u>
<u>Fisheries, Biodiversity and Geomorphology</u>	<u>Adaptive Management</u>	<u>0.13</u>
	<u>Fish Passage</u>	<u>0.40</u>
	<u>Land Management / Habitat Restoration / Physical Improvement</u>	<u>3.26</u>
	<u>Investigation</u>	<u>0.19</u>
	<u>Investigation and Options Appraisal</u>	<u>2.03</u>
<u>Water Resources</u>	<u>Adaptive Management</u>	<u>0.89</u>
	<u>Land Management / Habitat Restoration / Physical Improvement</u>	<u>Included in E7</u>
	<u>Investigation and Options Appraisal</u>	<u>1.32</u>
	<u>Options Appraisal</u>	<u>0.86</u>

<u>Type of scheme</u>	<u>Length of river with improved quality km</u>
<u>Intermittent discharges</u>	
<u>EDM</u>	<u>0.05</u>
<u>CSO/SSO improvements</u>	<u>0.2</u>
<u>Continuous discharges</u>	
<u>FFT increase</u>	<u>2</u>
<u>Storm storage</u>	<u>0.5</u>

MCERTS relocation	0.05
Water resources (adaptive management, biosecurity etc.)	2
Catchment measures	Included in Working with partners PG
Investigation and Options Appraisal	Excluded
Investigation	Excluded

Key:

E6 - Working with the community to improve bathing water experience

E7 - Working with catchment partners to improve natural capital

~~We propose to use these lengths to monitor progress and to protect customers against non-delivery.~~

Outcome E: Protecting and enhancing the environment

Company performance commitment reference: ~~Length of river with improved water quality~~ Km of river improved (non-WINEP)

Short definition

Length of river with improved water quality ~~by company action outside of the WINEP, ever and above the requirements of the WINEP.~~ Improvements will include additional nutrient removal through out-performance of our STWs, and/or additional catchment management off-setting.

This particularly applies to rivers where stakeholders agree there is a need for further improvement, but no improvement is included in the WINEP.

Customer friendly definition: Improving river quality by reducing the amount of unwanted nutrients.

Measurement

Necessary detail on measurement units	Km
Frequency of PC measurement and any use of averaging	Annual (calendar year)
Single or cumulative target	Single

Mitigation / exceptions

None

Any other information relating to the performance commitment

Our Strategic Direction statement research has shown that rivers are one of the areas that are most likely to be identified as being considered in need of improvement. Our quantitative willingness to pay analyses also showed high willingness to pay.

Our customer engagement has routinely rated environmental issues high on our customers' list of priorities. In our research on resilience, customers also recognised environmental resilience as an area of high priority for investment, specifically around the scenario we looked at with them, which talked about spills into rivers and onto beaches.

We have also seen this supported by high valuations in our customer research. With this scale of customer support there should be incentives in place to encourage us to continue to deliver improvements that are cost beneficial.

Additionally, stakeholders have told us that there is an environmental need to make further improvements in the Hampshire Avon river and also to the rivers discharging into Poole Harbour.

This performance commitment developed through a concern from several stakeholders that further improvements to water quality were required in the Hampshire Avon river. This river has been recognised as a site of European importance for nature conservation, and forms part of a European network of protected sites referred to as **Natura 2000**. It is a **Special**

Area of Conservation (SAC) designated under the Habitats Directive³; and the lower reaches of the SAC also lie within the **Avon Valley Special Protection Area (SPA)** which is classified as a separate site under the Birds Directive. In addition it is a listed **Ramsar** site.

Poole Harbour is also designated as an SSSI and a Special Protection Area (SPA) under the Habitats Regulations 1994, and as a Ramsar site, the harbour is also a Sensitive Area under the UWWTD.

Significant development growth is planned at towns in the Hampshire Avon river catchment area and this will increase the overall volume of treated sewage discharging into the river. Natural England (NE) have expressed concern about any increase in base flows and nutrient (P) loads into the river, and have stated that any development needs to be “nutrient neutral”. However, with the single exception of Warminster STW, EA and NE have not included any STWs in the Hampshire Avon for nutrient improvement in the PR19 WINEP(3).

Local Authorities, developers and special interest groups including, New Forest DC, Wiltshire CC, MoD, the Salisbury and District Angling Club and the Salmon and Trout Conservation UK, have all requested that we consider what more we can do at our STWs discharging into the R. Avon, to help keep development “nutrient neutral” and to further improve the water quality in the R. Avon.

Wessex Water has 1920 STWs discharging into the Hampshire Avon river with nutrient removal processes installed. The discharges from nearly all of these STWs already significantly out-perform the levels stated in their permits. The potential to take measures to improve the performance of our STWs further beyond their current level is limited, and limited and is counteracted by the impact of growth in the catchment area which will increase the loads and flows on to these STWs. Without intervention the discharge of nutrients from these STWs will increase as population increases, although still remaining well within the permit requirements.

We recognise the wider stakeholder support for further improvements, and intend to target such improvements as this permitted requirements will help ensure the ecological functioning of the river, such that it can continue to deliver wider benefits to the public through associated leisure and recreational activities.

Where cost effective, the alternative of using catchment management to reduce nutrient runoff from agricultural land can often be a more sustainable option.

There is no penalty attributed against this performance commitment. This is because Wessex Water will be using best endeavors to achieve stretch targets at the STWs identified, and will be incurring additional operational costs in chemicals, labour and sludge treatment and transport to target these improvements. Should the target of “significant improvement” in river water quality not be met, then although we will have incurred additional costs, we would not be gaining any reward. It would be unreasonable, and involve an element of double-counting, if a further penalty was charged in relation to such improvements.

Full definition of the performance commitment

This performance commitment relates to the length of river water quality improved through removal of additional nutrients by company action, and outside of the WINEP. These actions will include the over-performance- an improvement in the performance of our STWs against their existing discharge performance (average of previous 5 years, 2013-17) and further stretching of the current out-performance- of their discharge permits. They may also, and/or

~~the~~ include implementation of additional catchment management off-setting work in the river catchment. This specifically applies to rivers where stakeholders agree there is a need for further improvement, but no improvement is included in the WINEP.

The achievement of this performance commitment will be determined each year by assessing whether our interventions have resulted in an overall reduction in the measured load of nutrient discharged into the watercourse under consideration. This would include discharges from our STWs (i.e. 19 No. in the Hampshire Avon catchment or 2 No. in Poole Harbour catchment with nutrient removal), as well as reductions in nutrient run-off through our catchment management off-setting activities. The measured discharge load of P or N will be compared with the average discharge load over the last 5 years. (2013-17), taking account of the impact of previously recorded reductions in nutrient run-off from our catchment management off-setting activities. This calculation is shown in Annexe 1 for the Hampshire Avon river and Poole Harbour catchments. The performance commitment will have been met for the watercourse under consideration if there is a net overall reduction in the nutrient load discharged into the catchment. e.g.

The Wessex Water Catchment Panel will assess and decide each year whether or not this PC has been achieved for that year.

The length of river quality improved will be assessed by using the SAGIS-Simcat* river water quality modelling tool based on the actual measured out-performance of STWs in the river catchment under consideration. The SAGIS-Simcat model will be used to set a baseline of river water quality, based on permit conditions in 2019 on 31/03/20. The Environment Agency have confirmed their agreement with this method.

(*This is the recognised industry tool for WQ planning. The industry, in collaboration with EA, Scottish Environment Protection Agency (SEPA) and NE, has developed this model. Wessex Water hold and use an agreed copy of this model, covering the rivers in our region, which has been developed by the Environment Agency).

The calculation of the reduction in the amount of Phosphorus (Hampshire Avon) or Nitrogen (Poole Harbour) run-off from agricultural sources through catchment management measures will be carried out using the “Farmscoper”* software.

(* Farmscoper is an industry standard model, developed by ADAS and used by the EA and Natural England to verify payments to farmers for Catchment Sensitive Farming (CSF).

The calculation will follow the methodology described below: -

1. At the end of each calendar year, the STWs, farms and associated rivers for consideration under this PC, will be identified by Wessex Water and agreed with our Catchment Panel. These will include STWs where there has been the opportunity to “out-perform” the quality of the nutrient in the treated effluent, as compared to the stated permit discharge standard, and farms where catchment management measures have been applied.
It is anticipated that this assessment will focus on the Hampshire Avon river (and its tributaries) and also the rivers flowing into Poole Harbour, – but there may be other

rivers where there exists both the opportunity and stakeholder interest for a level of out-performance.

2. The average annual performance for each STW under consideration, with respect to nutrient removal (Phosphorus or Nitrogen ~~or Nitrogen~~), will be confirmed by Wessex Water from audit sample data.
3. Associated mMeasured flow data for these selected STWs will be obtained from our certified flow meters.
4. Measures carried out on farms to reduce nutrient run-off will be reported by our Catchment Management team.
5. The reduction in nutrient run-off from the measures reported in “4” above will be calculated using the Farmscoper model.
6. The measured flow and average performance data for the year for all STWs discharging into the stretch or stretches of river under consideration, collected under “2.” and “3” above together with the reduction in nutrient run-off calculated in “5” above, will be used to calculate the load of nutrient discharged. This performance commitment will have been met if the total nutrient load discharged into the river from these sources is less than the historical measured nutrient load.

An example of how this has been calculated is shown in Annexe 1 for the Hampshire Avon and Poole Harbour catchments .. In these cases, the historical average load of nutrient discharged is 11.3 tpa Phosphorus for the Hampshire Avon and 127 tpa Nitrogen for Poole Harbour.

7. The measured flow and annual average performance data for all STWs discharging into the stretch or stretches of river under consideration, collected under “2.” and “3.” above, and the reduction in nutrient run-off calculated in “5” above, will be used as a data set to operate an “improved length of river” version of the SAGIS water quality model.
8. The results from the SAGIS model will be used to calculate the length of river where the concentration of nutrient (Phosphorus or Nitrogen) in the river shows “significant improvement”, as compared to the agreed baseline model.

The following assumptions have been made:

1. A key assumption is that the baseline against which the calculation of the length of any “improvement” will be measured will be based on the discharge permit conditions for the STWs in the river(s) under consideration. This includes both the concentration of nutrient (P or N) in mg/L as an annual average standard, and also the permit dry weather flow expressed in m³/d. The baseline will assume an “average daily flow” of 1.25 x the permitted DWF.
2. ~~A second assumption is that a “significant improvement” will be deemed to have occurred~~The calculation will only count lengths where the modelled concentration of nutrient in the river is lower (i.e. better) by 10% or more, compared to the baseline concentration.

~~Annexe 1: Calculation of Hampshire Avon river– Historical measured nutrient loads for Hampshire Avon and Poole Harbour catchments~~

Hampshire Avon annual average phosphorus results

Treatment Works	Existing P mg/L	Permit Discharge Load tpa	Measured Discharge tpa 2013	Measured Discharge tpa 2014	Measured Discharge tpa 2015	Measured Discharge tpa 2016	Measured Discharge tpa 2017
Amesbury STW	1.00	0.83	0.38	0.37	0.37	0.38	0.42
Barford St Martin STW	2.00	0.08	0.08	0.04	0.02	0.02	0.02
Downton STW	1.00	0.55	0.42	0.40	0.37	0.33	0.24
Fordingbridge STW	1.00	1.26	0.65	0.70	0.59	0.46	0.43
Fovant STW	1.00	0.16	0.07	0.09	0.10	0.06	0.04
Hurdcott STW	1.00	0.93	0.76	0.58	0.65	0.67	0.47
Marden STW	2.00	0.17	0.12	0.18	0.05	0.05	0.02
Netheravon STW	1.00	0.68	0.10	0.13	0.11	0.10	0.05
Pewsey STW	1.00	0.73	0.61	0.46	0.48	0.34	0.43
Ratfyn STW	1.00	2.07	0.62	0.43	0.55	0.58	0.61
Ringwood STW	1.00	2.08	1.58	1.02	1.10	1.26	1.07
Salisbury STW	1.00	10.72	5.99	6.42	4.02	5.08	3.78
Shrewton STW	1.00	0.22	0.18	0.15	0.19	0.17	0.16
Tisbury STW	1.00	0.42	0.19	0.22	0.13	0.09	0.06
Upavon STW	1.00	0.19	0.11	0.12	0.04	0.07	0.06
Warminster STW	1.00	2.51	0.99	1.34	0.82	0.51	0.87
Wishford STW	1.00	0.36	0.24	0.26	0.24	0.23	0.18

All Cannings STW	5.00
East Knoyle STW	5.00

0.55	0.19	0.24	0.18	0.22	0.18
0.47	0.06	0.08	0.06	0.07	0.06

25.0	13.3	13.2	10.1	10.7	9.2	tpa
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Five year average discharge = 11.30 tpa

*Discharge loads for 2013-17 for All Cannings and East Knoyle STWs –calculated using an effluent P concentration of 1.0mg/L, representing the AMP6 quality enhancement which takes effect from 31/03/20.

Poole Harbour Catchment annual nitrogen results

Year	Existing N mg/L	Permit Discharged Load tpa	Measured Discharged Load tpa 2013	Measured Discharged Load tpa 2014	Measured Discharged Load tpa 2015	Measured Discharged Load tpa 2016	Measured Discharged Load tpa 2017
Poole STW	10.0	217.6	111.1	155.3	144.4	133.1	122.6
Wareham STW*	15.0	35.8	17.6	21.7	15.9	17.5	14.5

Catchment off-setting**	-40				-38.9	-40	-40
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Discharged Total N tpa	213.5	128.7	177.0	121.4	110.6	97.1	
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Five year average discharge 127.0 tpa

- *Discharge loads for 2013-17 for Wareham STW calculated using an effluent N concentration of 15.0 mg/L, representing the AMP7 quality enhancement, which takes effect from 31/03/21.
- ** AMP6 catchment off-setting measures in lieu of N removal at Dorchester STW assumed to continue at the AMP6 NEP rate of 40 tpa.

Discharge of Nitrogen from our other STWs in Poole Harbour catchment assumed not to change; as we are not proposing any N removal work in AMP7 at these STWs (listed below)

STW	Treatment type
GODMANSTONE	Activated Sludge
BROADMAYNE	Activated Sludge
TOLLER PORCORUM	Activated Sludge
LYTCHETT MINSTER	Activated Sludge
WOOL	Activated Sludge
BLACKHEATH	Biological filter
CORFE CASTLE	Biological filter
EAST STOKE	Biological filter
HARMANS CROSS	Biological filter
MILBORNE ST ANDREW	Biological filter
PIDDLEHINTON	Biological filter
STUDLAND	Biological filter
DORCHESTER	Biological filter
EVERSHOT	RBC/MBR
CERNE ABBAS	Biological filter
HIGHER ANSTY	Biological filter
MAIDEN NEWTON	Biological filter
PUDDLETOWN	Biological filter
SYDLING ST NICHOLAS	Biological filter

Outcome E: Protecting and enhancing the environment

Company performance commitment reference: Abstraction Incentive Mechanism (Stubhampton)

Short definition

Volume of water (Ml) abstracted from the Stubhampton source (boreholes) over the course of the year when river flows are low.

We have set a target to reduce abstraction at Stubhampton when groundwater levels recorded at Ivy Cottage are below 78m AOD (above ordnance datum).

This is a new performance commitment for PR19.

Customer friendly definition: Reducing the amount of water we take from environmentally sensitive sites.

Measurement

Necessary detail on measurement units	Ml/year
Frequency of PC measurement and any use of averaging	Annual (financial year)
Single or cumulative target	Single

Mitigation / exceptions

This performance commitment will cease to apply if an alternative approach to reduce the impact of abstraction at Stubhampton, such as a licence reduction, is put in place. The alternative approach will be subject to approval of the Wessex Water Partnership.

~~Discussion with the River Tarrant Protection Society and the Environment Agency about our proposal to apply AIM at Stubhampton is on-going and we are meeting in May 2018 to discuss this further. It is possible that they will not agree to using AIM to manage abstraction at Stubhampton and will push for a reduction to our abstraction licence; if this happens this performance commitment will not be included.~~

Any other information relating to the performance commitment

This measure encourages us to reduce abstraction at potentially environmentally sensitive sources during periods of low river flow, where the impact is not certain enough to warrant abstraction licence changes. To identify suitable sites for an AIM measure, we reviewed abstraction licences listed in the WINEP with the Environment Agency and also considered other abstraction licences where we have ongoing community engagement relating to abstraction. This review ~~has highlighted our current abstraction from~~ Stubhampton as a good candidate for AIM.

The Stubhampton source (borehole) is located in the upper reach of the River Tarrant Valley. The source draws water from the underlying chalk aquifer, which is drained by the River Tarrant, which is a tributary of the River Stour. The Stubhampton source has been used since the 1950s and in the last 20 years the source has been used close to 85% of full

licence (2.18 Ml/d) ~~all the time~~. The River Tarrant is a winterbourne stream, as such the river can naturally dry during extended dry weather (as experienced in 1976).

The magnitude of flow, or more precisely the periods of no flow, in the River Tarrant has been the subject of local residents' concerns for several years. Concerned parties have formed the River Tarrant Protection Society (RTPS) which has lobbied the EA and Wessex Water that abstraction is adversely impacting the flow and hence ecology of the River Tarrant. The impact of public water supply abstractions upon the River Tarrant is the subject of a current NEP Water Framework Directive (WFD) 'no deterioration' investigation.

The NEP results suggest that our groundwater abstractions from neighbouring catchments do not impact flows along the River Tarrant. Therefore, any river flow change is due to the abstraction at Stubhampton. Hydrological modelling outputs suggest that on average between 1970 to 2016, the historical use of Stubhampton has caused 14 days/year of extra drying (along the winterbourne reach from Gunville to Luton) compared to natural conditions, and 16 days/year if we were to abstract at the full licence.

Conclusions from the ecological assessment indicate that the modelled scale of hydrological impact will not adversely impact the ecology of the River Tarrant. ~~However, these conclusions have yet to be confirmed by the EA, and the RTPS probably remains concerned about the level of impact described and may seek a reduction in abstraction at Stubhampton.~~

Stubhampton ~~was originally~~ is included in the WINEP as a sustainability change ~~although the volume has still to be confirmed.~~ However, because our investigation shows that the impact of abstraction is not environmentally significant but local concern remains, we ~~are~~ proposing to the EA to run an AIM scheme at the source to manage abstraction during low flow periods rather than changing our abstraction licence. Local liaison with the EA and RTPS has confirmed their support for this approach.

We are proposing to set a stretching target for applying AIM at this source, which is commensurate with our long-term strategy to ensure abstractions do not impact the environment. Our target is to reduce abstraction during the AIM window (the period during which groundwater levels at Ivy Cottage are below 78m AOD Ml/d). We estimate that applying AIM at this source using the proposed trigger levels will result in abstraction being reduced around 70% of the time.

Ivy Cottage is a privately-owned borehole that we have monitored during AMP6 with permission of the owner. We have assumed that we will be able to continue to access this site. In the event that this is not possible, an alternative location with an equivalent groundwater trigger level will be agreed in discussion with the EA and RTPS.

Full definition of the performance commitment

The total volume of water abstracted from Stubhampton when groundwater levels measured at Ivy Cottage are lower than 78m AOD (measured from 1 April – 31 March).

The volume of water abstracted at Stubhampton will be measured by the flow meter at Stubhampton water treatment works (Meter DF252').

In addition to the specific measurement of river flows and ~~export abstraction~~ volumes, we commit to undertake regular community engagement with the River Tarrant Protection Society to discuss abstraction, water conservation and other relevant matters of mutual

interest.

The AIM baseline for Stubbampton is 1.81 MI/d abstracted over the AIM period (average abstraction of 479.9 MI for an average of 264 days) as shown in the table below. This is based on our abstraction from this source between April 2011 and March 2018. This period has been used because it is representative of our abstraction for the period prior to AIM and includes the drier than average weather experienced in 2011/12 and 2016/17.

	Historical public water supply (PWS) use in AIM Window	AIM window	Average historic use in AIM window
	MI/a	days	MI/d
2011/12	673.4	366	1.84
2012/13	223.5	129	1.73
2013/14	505.4	262	1.93
2014/15	435.1	236	1.84
2015/16	445.4	249	1.79
2016/17	583.9	321	1.82
2017/18	493.0	288	1.71
Average	479.9	264	1.81